



CATALOGO GENERALE  
*GENERAL CATALOGUE*  
*ALLGEMEINER KATALOG*  
*CATALOGUE GÉNÉRAL*



Assali e sospensioni  
*Axles and suspensions*  
*Achsen und Federaggregate*  
*Essieux et suspensions*



LEONESSA  
GROUP





# FAD ASSALI

Quality Made in Italy





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DIE GESCHICHTE, DIE RÜCKKEHR • *L'HISTOIRE, LE RETOUR*

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LA STORIA,  
IL RITORNO

*HISTORY, COMEBACK  
DIE GESCHICHTE,  
DIE RÜCKKEHR  
L'HISTOIRE, LE RETOUR*



Il 31 agosto 2010, la FAD ASSALI fondata negli anni '60 da Ferdinando Pasotti, venduta alla GKN nel 2000, viene riacquistata dalla figlia Gabriella, attuale Presidente della società, che con grande soddisfazione può dire: "Gli assali FAD tornano a casa".

*On August 31st 2010, FAD ASSALI, founded in the 60s by Mr Ferdinando Pasotti, sold to GKN in 2000, was bought back by his daughter Gabriella, the current President of the company, who can say with great satisfaction: "FAD axles are back home."*

*Am 31. August 2010 wurde FAD ASSALI, die in den 60-er Jahren von Herrn Ferdinando Pasotti gegründet und im Jahre 2000 an GKN verkauft wurde, von seiner Tochter Gabriella, der aktuellen Präsidentin der Gesellschaft, zurück erworben, die voller Stolz sagen kann: "Die FAD Achsen kommen nach Hause zurück".*

*Le 31 Août 2010, FAD ASSALI, fondée dans les années 60 par M. Ferdinando Pasotti, vendue à GKN en 2000, a été rachetée par la fille de M. Pasotti, Gabriella, actuel président de la société, qui peut dire avec une grande satisfaction: les essieux FAD "retournent à la maison".*

**LA LEONESSA**

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NORTH AMERICA INC.

**FAD ASSALI**  
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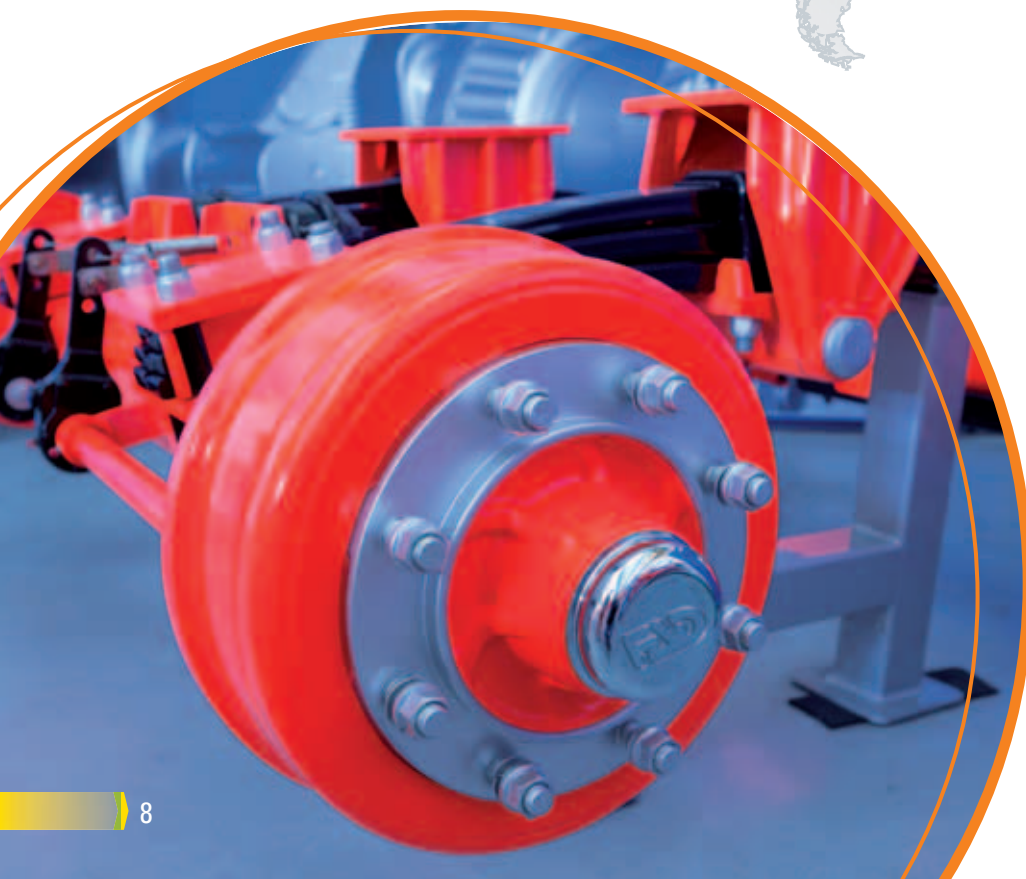
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STEFEN**  
FAST line

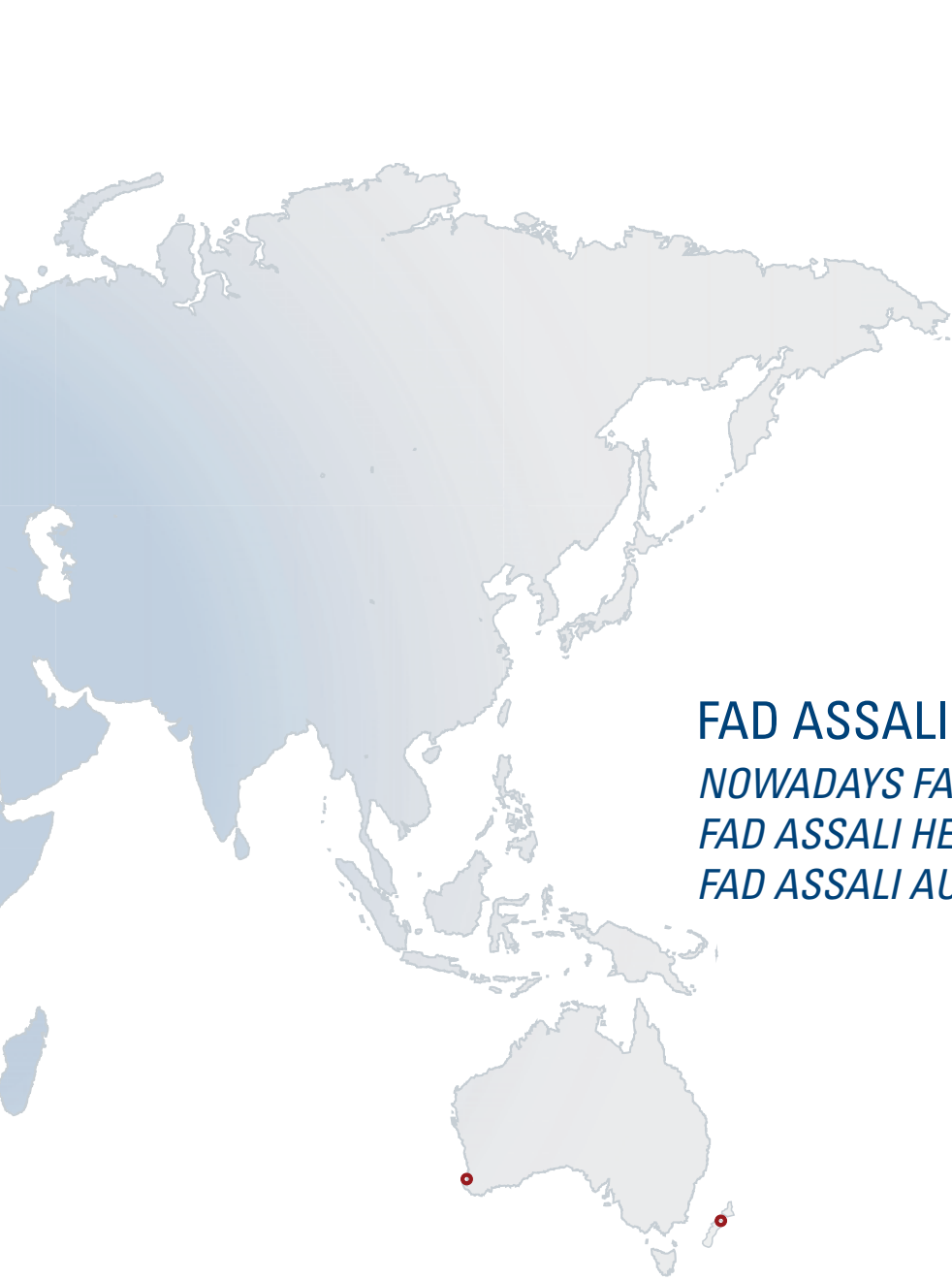
**LEONESSA brevini**  
YANCHENG STEERING BEARINGS CO., LTD

**FV. ENGINEERING**









## FAD ASSALI NOWADAYS NOWADAYS FAD ASSALI FAD ASSALI HEUTE FAD ASSALI AUJOURD'HUI

FAD ASSALI opera nel mercato agricolo ed industriale fornendo assali e sospensioni per veicoli trainati e non. FAD ASSALI gioca un ruolo importante nei propri business grazie al supporto di un team motivato, di elevata tecnologia di base, eccellente qualità e sinergia di gruppo. Sempre alla ricerca di soluzioni innovative pone estrema attenzione alle esigenze dei clienti. Con il ritorno del marchio FAD i clienti ritrovano un player d'eccezione, professionalità e competenza per un mercato giusto e concorrenziale.

*FAD ASSALI acts in agricultural and industrial market, producing axles and suspensions for trailers and other applications. FAD ASSALI plays an important role in its business range thanks to a deeply determined team support, a high technology, excellent quality and group synergy. Always looking for innovative solutions, our company put an exceptional attention to customer's requirements. With FAD brand return, customers discover a strong player, professionalism and proficiency, for a right and competitive market.*

*FAD ASSALI ist im Bereich der Landwirtschafts- und Industriefahrzeuge tätig und liefert Achsen und Federag-*

*gregate für Anhänger und Schleppfahrzeuge. FAD ASSALI spielt im eigenen Geschäftsbereich eine wichtige Rolle, dank der Unterstützung eines motivierten Teams, einer fortschrittlichen Grundtechnologie, einer hervorragenden Qualität und Gruppensynergie. Stets auf der Suche nach innovativen Lösungen, achtet sie besonders auf die Bedürfnisse der Kunden. Mit der Rückkehr der Marke FAD haben die Kunden wieder einen außergewöhnlichen, professionellen und kompetenten Ansprechpartner für einen korrekten und wettbewerbsfähigen Markt gefunden.*

*FAD ASSALI opère sur le marché agricole et industriel en fournissant des essieux et des suspensions pour remorques et autres applications. FAD Assali joue un rôle important dans sa propre entreprise grâce au support d'une équipe motivée et d'une haute technologie de base, mais aussi grâce à une excellente qualité et synergie de groupe. Toujours à la recherche de solutions innovantes, la société porte une extrême attention aux exigences de ses clients. Avec le retour de la marque FAD, les clients retrouvent un joueur d'exception, une professionnalité et une compétence pour un marché juste et concurrentiel.*





# LEONESSA GROUP

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[www.laleonessa.it](http://www.laleonessa.it)

Cuscinetti di base e Ralle di sterzo a sfera  
*Slewing bearings and turntable ball bearings*  
*Spurlager und Kugelkränze*  
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[www.llnainc.com](http://www.llnainc.com)

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[www.fadassali.it](http://www.fadassali.it)

Assali e sospensioni  
*Axles and suspensions*  
*Achsen und Federaggregate*  
*Essieux et suspensions*

**AGRI  
STEFEN**  
FAST line

Assali e sospensioni  
*Axles and suspensions*  
*Achsen und Federaggregate*  
*Essieux et suspensions*

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Cuscinetti di base e sistemi per l'industria  
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*Roulements de base et systèmes pour l'industrie*

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Progettazione, ricerca e sviluppo  
*Engineering, research and development*  
*Engineering-Forschung und Entwicklung*  
*Recherche et Développement technique*



## IL GRUPPO LEONESSA

### LEONESSA GROUP DIE GRUPPE LEONESSA LE GROUPE LEONESSA

Dal 2010 FAD ASSALI è di nuovo parte di Leonessa Group, la grande realtà internazionale di cui proprio FAD è stato il nucleo di partenza nel 1954.

Essere parte di Leonessa Group oggi significa condividere un approccio al cliente fatto di dialogo, di attenzione e di ascolto, per rispondere e anticipare ogni esigenza e offrire sempre un prodotto innovativo e di altissima qualità. Significa avere lo sguardo rivolto al futuro e l'energia di una realtà sempre in movimento, sempre aperta verso nuove idee, nuove tecnologie, nuove sfide.

*Since 2010 FAD ASSALI returned to be part of Leonessa Group, the major international reality of which FAD was the beginning in 1954. Be part of Leonessa group today means share an approach to our customers made of communication, consideration and satisfaction, to face and anticipate every need and always offer an innovative range of products and high quality. It stands to have a sharp look at the future and the power arising from a*

*reality on the move, open to new ideas, new technologies and challenges.*

*Seit 2010 ist FAD ASSALI wieder Teil von Leonessa Group, die große internationale Gesellschaft, von der gerade FAD im Jahre 1954 der Ursprungskern gewesen ist. Teil von Leonessa Group zu sein, bedeutet heute, sich dem Kunden durch Dialog, Aufmerksamkeit und Zuhören zu nähern, um jedem Anspruch gerecht zu werden und die Bedürfnisse zu antizipieren, sowie stets ein innovatives und qualitativ hochwertiges Produkt anzubieten. Es bedeutet auch einen zukunftsorientierten Blick und die Energie eines stets in Bewegung sich befindlichen Unternehmens zu haben, immer für neue Ideen, neue Technologien und neue Herausforderungen offen.*

*Depuis 2010, FAD ASSALI fait à nouveau partie de Leonessa Group, la grande organisation internationale dont FAD est justement le noyau de départ en 1954. Faire partie de Leonessa Group signifie aujourd'hui partager une même approche du client au niveau du dialogue, de l'attention et de l'écoute, afin de répondre et d'anticiper chacune de ses exigences et de lui offrir toujours un produit innovant et de très haute qualité. Cela signifie avoir le regard tourné vers le futur et l'énergie d'une organisation toujours en mouvement, toujours ouverte vers de nouvelles idées, technologies et nouveaux défis.*





# AMBIENTE

## ENVIRONMENT

## UMWELT

## ENVIRONNEMENT

Rispetto dei clienti. Rispetto dell'ambiente. Migliorare i processi e i prodotti è la regola e la preoccupazione che ci accompagna da sempre. A questo modo di operare, che comporta investimenti e un colloquio sempre aperto coi clienti, abbiamo dato una forma ufficiale con le diverse certificazioni ottenute a partire dal 1996 riguardanti l'ISO 9001.

### Certificazione ISO 14001

La certificazione ISO 14001 riconosce la serietà del nostro impegno riguardo all'ambiente. In particolare, la vernice a base d'acqua, ha portato a vantaggio dell'ambiente la riduzione d'emissioni di sostanze inquinanti e di rifiuti pericolosi (es. residui di vernice) garantendo anche un ambiente di lavoro più sano.

Sempre nel rispetto dell'ambiente è stata consolidata la raccolta differenziata all'interno dell'azienda, abbattendo di conseguenza, grazie all'utilizzo di container per lo stoccaggio adatti alla protezione del suolo, la contaminazione dello stesso e delle acque.

FAD ha inoltre sviluppato un proprio trattamento delle acque di prima pioggia, separando così i piccoli residui di produzione dall'acqua che viene successivamente convogliata nella rete pubblica.

Qualità merce: la merce viene analizzata in accettazione attraverso piani di controllo e attraverso l'utilizzo di strumenti tridimensionali che ne attesta la qualità, vengono inoltre effettuati controlli con strumenti per la rilevazione della qualità dei materiali. Per la fase inerente alla verniciatura si utilizza uno spessore digitale e si effettua il test d'aderenza.

*Respect for customers. Respect for the environment. Improve products and processes. These are the rules and the concern that has been with us since the beginning. In this way, which involves investment and an open communication with our customers, we gave a unique way of working with different certifications since 1996 concerning the ISO 9001.*

### ISO 14001 Certification

*ISO 14001 certification recognizes the seriousness of our commitment in respecting the environment. In detail, the water-based paint gave the Environment some benefits as the reduction of polluted materials and waste (eg, paint rests) ensuring a healthy working environment.*

*Always respecting the environment – it's now a consolidated tradition the division of waste, sorted by origin. The ground and water are protected using special containers to store the different materials.*

*FAD also developed a self system for collecting storm water, separating that from the one used in the production and leading it into the public pipes.*

*Quality of the goods: goods are analyzed, once received, by using control plans and three-dimensional tools which guarantee the quality.*

*Furthermore controls are done with tools for the survey of the quality of materials.*

*Concerning the painting phase a digital thickness gauge is used and an adherence test is done.*

Stampato su carta eco-sostenibile certificata FSC  
Printed on environmentally friendly FSC certified paper







*Respekt für die Kunden. Respekt für die Umwelt. Die Prozesse und die Produkte zu verbessern, das sind die Devise und die Sorge, die uns seit jeher begleiten. Dieser Vorgehensweise, welche Investitionen und ein stets offenes Gespräch mit den Kunden verlangt, haben wir mit den verschiedenen, ab dem Jahre 1996 erlangten Zertifizierungen bezüglich ISO 9001 eine offizielle Form gegeben.*

#### **Zertifizierung ISO 14001**

Die Zertifizierung ISO 14001 ist eine Anerkennung der Ernsthaftigkeit unseres Engagements zugunsten der Umwelt. Insbesondere der Wasserlack hat zugunsten der Umwelt zu einer Reduzierung der Emissionen von Schadstoffen und gefährlichen Abfällen (z.B. Lackrückständen) geführt und hat gleichzeitig auch zu einem gesünderen Arbeitsumfeld beigetragen.

Ebenfalls der Umwelt zuliebe wurde auch die Mülltrennung innerhalb der Firma konsolidiert, wobei dank der Verwendung von zum Schutz des Bodens geeigneten Aufbewahrungsbehältern die Verunreinigung des Erdbereichs und der Gewässer entsprechend reduziert wurde.

FAD hat außerdem eine eigene Aufbereitungsanlage für das erste Regenwasser entwickelt, womit die kleinen Produktionsrückstände von dem Wasser getrennt werden, das anschließend dem öffentlichen Abwasserleitungsnetz zugeführt wird.

Qualität der Ware: die Ware wird in der Warenannahme mittels Prüfplänen und dreidimensionalen Geräten analysiert, die deren Qualität bescheinigen; außerdem erfolgen Kontrollen mit Werkzeugen und Geräten zur Erfassung der Qualität der Materialien. Für die Lackierung wird ein digitales Dickenmessgerät benutzt und es wird ein Haftungstest durchgeführt.

*Respect des clients. Respect de l'environnement. L'amélioration des procédés et des produits est la règle et le souci qui nous accompagne depuis toujours. Nous avons donné à cette modalité de travail - qui comporte des investissements et un dialogue toujours ouvert avec les clients - une forme officielle grâce à différentes certifications obtenues à partir de 1996 selon la norme ISO 9001.*

#### **Certification ISO 14001**

La certification ISO 14001 reconnaît notre application dans l'engagement qui nous lie à l'environnement. En particulier, la peinture à l'eau a été bénéfique pour l'environnement grâce à la réduction d'émissions de substances polluantes et de déchets dangereux (par exemple, les résidus de peinture), en garantissant un environnement de travail plus sain.

Toujours en rapport avec l'environnement, une collecte différenciée de déchets a été mise en place au sein de la société, évitant ainsi la contamination du sol et des eaux grâce à l'utilisation de conteneurs pour le stockage adaptés à la protection du sol.

FAD a également développé son propre traitement des eaux de première pluie, séparant ainsi les résidus de petite dimension de production de l'eau qui utilisée dans les systèmes d'alimentation en eau potable.

Qualité des matières premières : les matières premières sont analysées en amont selon des plans de contrôle et grâce à l'utilisation d'instruments tridimensionnels qui en attestent la qualité.

Des contrôles sont également réalisés avec des instruments pour la détection de la qualité des matériaux. En ce qui concerne la phase inhérente à la peinture, on utilise une jauge d'épaisseur numérique et on effectue le test d'adhérence.



#### Certificazione 18 001

Certificazione "Salute e sicurezza sul lavoro". Per Salute e sicurezza sul lavoro s'intendono "Condizioni e fattori che influenzano o possono influenzare la salute e la sicurezza dei lavoratori dipendenti o degli altri lavoratori, i visitatori ed ogni altra persona nell'ambiente di lavoro". Questa certificazione rappresenta uno strumento che consente di gestire in modo organico e sistematico la sicurezza dei lavoratori senza sconvolgere la struttura organizzativa aziendale.

Vedendo oltre, la certificazione si traduce in una volontà dell'azienda di mettere i lavoratori in condizione di operare in un ambiente sicuro e di qualità. L'azienda si impegna in qualcosa che crede restituisca ai lavoratori la consapevolezza di avere un ruolo importante, una dignità, un valore.

*Tre sono i fattori su cui FAD ASSALI basa la sostenibilità del business.*

■ **Ambientale:** La certificazione, primo passo per poter parlare di salvaguardia e attenzione all'ambiente, oggi non può essere ignorato dalle aziende sia che operino in campo nazionale che internazionale. E' il caso di FAD ASSALI che da sempre pone massima attenzione alle tematiche ambientali

■ **Sociale:** Sostenibilità è anche il desiderio e l'impegno di voler mantenere il cuore produttivo in Italia, garantendo continuità ai nostri lavoratori, investendo nell'azienda, attuando misure per migliorare la qualità nei

processi, assicurare forniture Just in time, servizi pre e post vendita immediati.

■ **Industriale:** Il gruppo di appartenenza di FAD ASSALI ha investito e continua ad investire soprattutto in Italia, per la scelta di non attuare la delocalizzazione. Tuttavia la presenza del gruppo in altri paesi è un'esigenza oggi irrinunciabile per poter fornire il mercato locale. Per questo recentemente il gruppo ha investito per la creazione di un nuovo stabilimento in Cina per poter servire il mercato locale.

#### 18001 certification

*"Health and Safety at Work" Certification. Health and safety at work are "conditions and factors that affect or may affect the health and safety of employees or other workers, visitors and any other person in the "working environment". This certification is an organizational tool that allows you to manage in an organic and systematic way the safety of workers without disrupting the company's organizational structure.*

*FAD ASSALI established its business sustainability on three main factors:*

■ **Environmental sustainability:** *The certification, the first step to be able to talk about safeguards and care for the environment today cannot be ignored by companies that operate both nationally and internationally. This is the case of FAD ASSALI, which pays the highest attention to environmental issues.*





■ **Social sustainability:** It's our desire and commitment to keep the heart of production in Italy, ensuring continuity to our employees, investing in the plant by implementing measures to improve the quality of processes, ensure just-in-time deliveries, prompt pre- and post-sale assistance.

■ **Business sustainability:** The group membership of FAD ASSALI has invested and continues to invest mainly in Italy, for the decision not to implement the relocation, but the presence of the group in other countries is a necessity today indispensable to provide the local market. This is why recently the group has invested in the creation of a new plant in China to serve the local market.

nem sicheren und qualitativen Umfeld zu arbeiten. Das Unternehmen strengt sich dabei in Etwas an, wovon es glaubt, dass dies den Arbeitnehmern die Gewissheit gibt, dass sie eine wichtige, würdevolle und werthaltige Rolle einnehmen.

Nachhaltigkeit ihrer Tätigkeit basiert.

■ **Umweltnachhaltigkeit:** Die Zertifizierung, der erste Schritt, um überhaupt von Umweltschutz sprechen zu können, kann heutzutage von den Firmen nicht ignoriert werden, egal ob sie auf nationaler oder internationaler Ebene tätig sind. Dies ist der Fall von FAD ASSALI, die seit jeher besonders auf die Umweltthemen Rücksicht nimmt.

### Zertifizierung 18001

Zertifizierung "Arbeitssicherheit und - Gesundheit" Unter Arbeitssicherheit und - Gesundheit versteht man die "Bedingungen und Faktoren, welche die Gesundheit und die Sicherheit der Arbeitnehmer oder von anderen Arbeitern, von Besuchern, sowie jeglicher anderen Person im Arbeitsumfeld beeinflussen bzw. beeinflussen können". Diese Zertifizierung stellt ein Instrument dar, das es gestattet, die Sicherheit der Arbeitnehmer auf organische und systematische Weise zu verwalten, ohne die organisatorische Firmenstruktur durcheinander zu bringen. Wenn man weiter schaut, wird diese Zertifizierung in den Willen des Unternehmens umgesetzt, die Arbeitnehmer in die Lage zu versetzen, in ei-







■ **Soziale Nachhaltigkeit:** Nachhaltigkeit bedeutet hier auch der Wunsch und die Verpflichtung, das produktive Herzstück in Italien zu belassen, womit unseren Arbeitnehmern eine Kontinuität garantiert wird, indem Maßnahmen eingeführt werden, um die Qualität der Prozesse zu verbessern und die "Just-in-time" Lieferungen, sowie den Vor- und Nachverkaufsservice zu garantieren.

■ **Industrienachhaltigkeit:** Die Gruppe, zu der FAD ASSALI gehört, hat investiert und investiert noch immer vor allem in Italien, wegen der Entscheidung, keine Standortverlagerung vorzunehmen; nichtdestotrotz ist die Anwesenheit der Gruppe in anderen Ländern heutzutage unerlässlich, um den jeweils lokalen Markt beliefern zu können. Deswegen hat die Gruppe kürzlich für den Aufbau eines neuen Werkes in China investiert, um den lokalen Markt bedienen zu können.

#### **Certification 18001**

Certification « Santé et sécurité sur le lieu de travail ». On parle ici des « Conditions et facteurs qui influencent ou peuvent influencer la santé et la sécurité des employés ou des autres travailleurs, visiteurs et de toute autre personne présente sur le lieu de travail ». Cette certification est un outil qui permet de gérer de façon organique et systématique la sécurité des travailleurs sans perturber la structure organisationnelle de l'entreprise. En outre, la certification se traduit par une volonté de l'entreprise de garantir aux travailleurs des conditions de travail dans un environnement sûr et de qualité. L'entreprise s'engage en quelque chose qui, selon elle, donnera aux employés la conscience de jouer un rôle important, une dignité, une valeur.

FAD ASSALI se base sur trois facteurs de développement durable de l'entreprise.

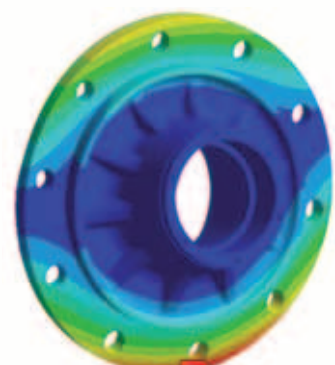
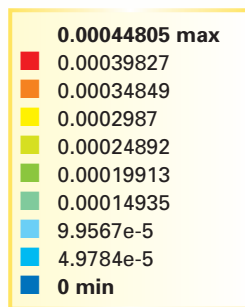
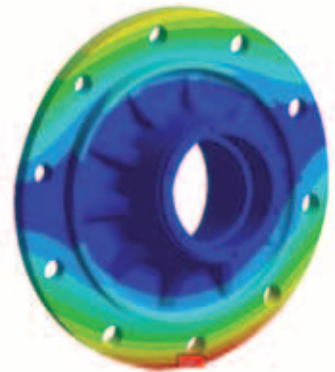
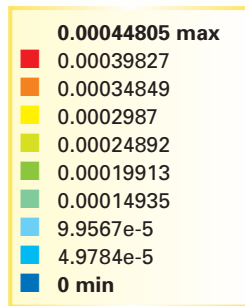
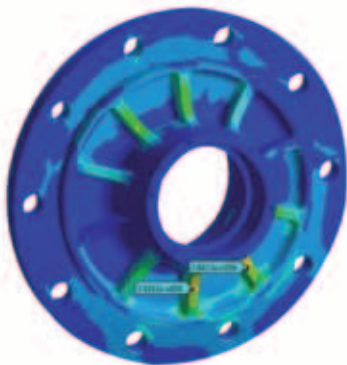
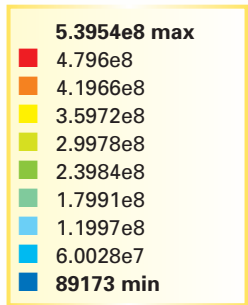
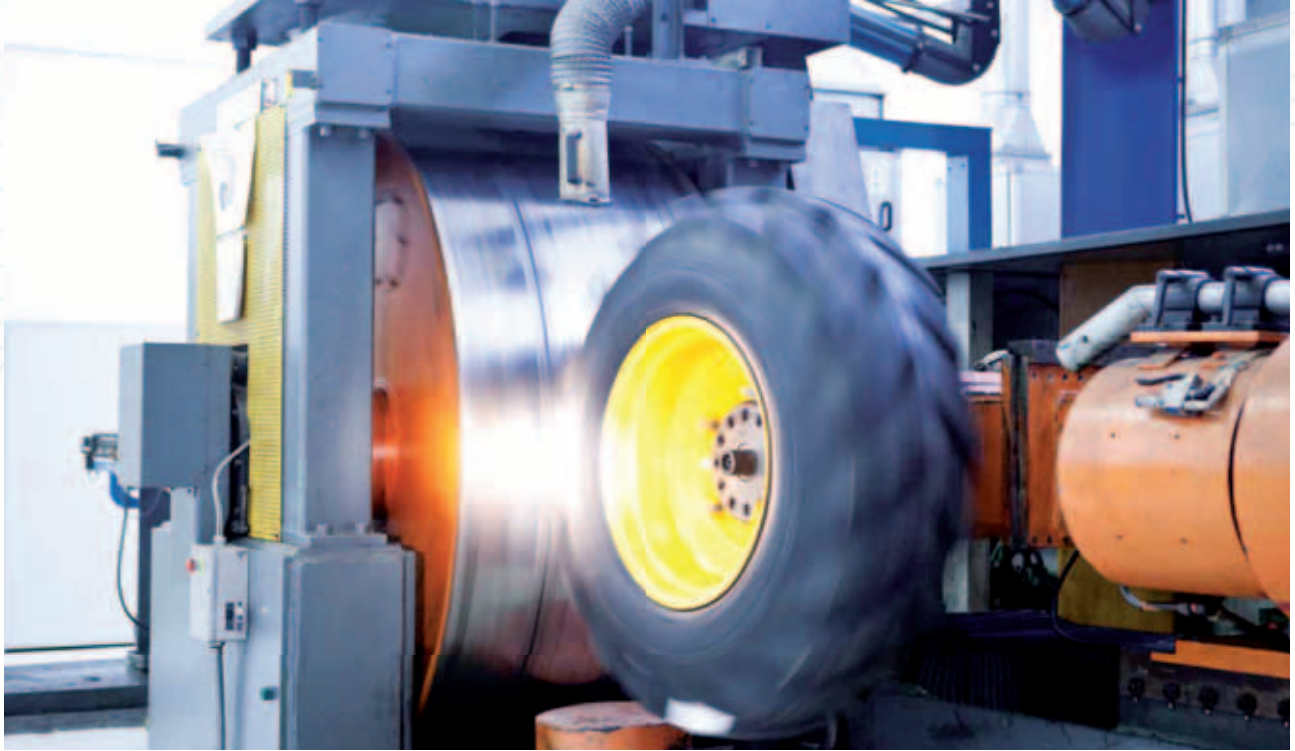
■ **Environnemental:** La certification, premier pas pour pouvoir parler de sauvegarde et de respect de l'environnement, aujourd'hui ne peut pas être ignorée par les entreprises qui opèrent aussi bien au niveau national qu'international. C'est le cas de FAD ASSALI qui depuis toujours porte une attention prioritaire aux thèmes liés à l'environnement.

■ **Social:** La durabilité est également le désir et l'engagement de maintenir le cœur productif en Italie, tout en garantissant une continuité à nos employés, en investissant dans l'entreprise et en mettant en place des mesures pour améliorer la qualité des procédés, assurer les livraisons dans les temps souhaités, les services de prévente et d'après-vente immédiats.

■ **Industriel:** Le groupe d'appartenance de FAD ASSALI a réalisé des investissements et continue d'en réaliser principalement en Italie, conformément à sa décision de ne pas mettre en œuvre une délocalisation. Toutefois, la présence du groupe dans d'autres pays est une exigence aujourd'hui essentielle pour pouvoir satisfaire les exigences du marché local. Pour cette raison, le groupe a récemment investi pour la création d'une nouvelle usine en Chine afin de fournir le marché local.











## TECNOLOGIA, RICERCA E SVILUPPO *TECHNOLOGY, RESEARCH AND DEVELOPMENT*

Il centro propulsore della nostra ricerca è rappresentato da uno staff di tecnici esperti che lavora all'innovazione continua della gamma di prodotti. Ogni prodotto, dall'ideazione, al progetto, alla produzione è realizzato con i più moderni sistemi tecnologici e verificato con test sui prototipi.

La collaborazione attiva con i clienti è l'elemento indispensabile per la progettazione dei nuovi prodotti adeguati all'evoluzione dei macchinari e sempre meglio rispondenti alle specifiche esigenze della clientela.

Tutta la gamma dei freni FAD è certificata e omologata secondo le direttive dei vari Paesi in cui vengono impiegati. La continua ricerca e i test sui banchi prova e sul campo, in collaborazione con i costruttori di veicoli, ci permettono di poter immettere sul mercato degli Assali Frenati che hanno prestazioni superiori alla media e in alcuni casi possono essere considerati i migliori sul mercato.

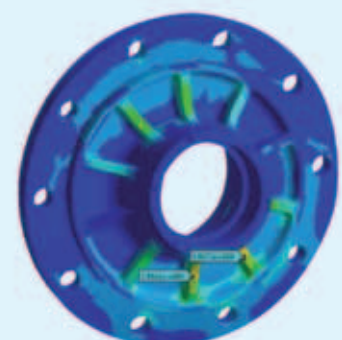
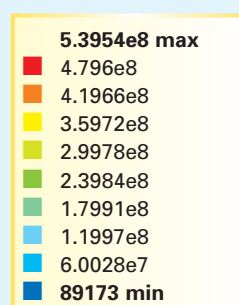
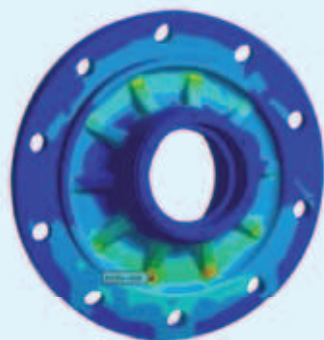
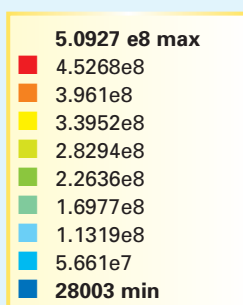
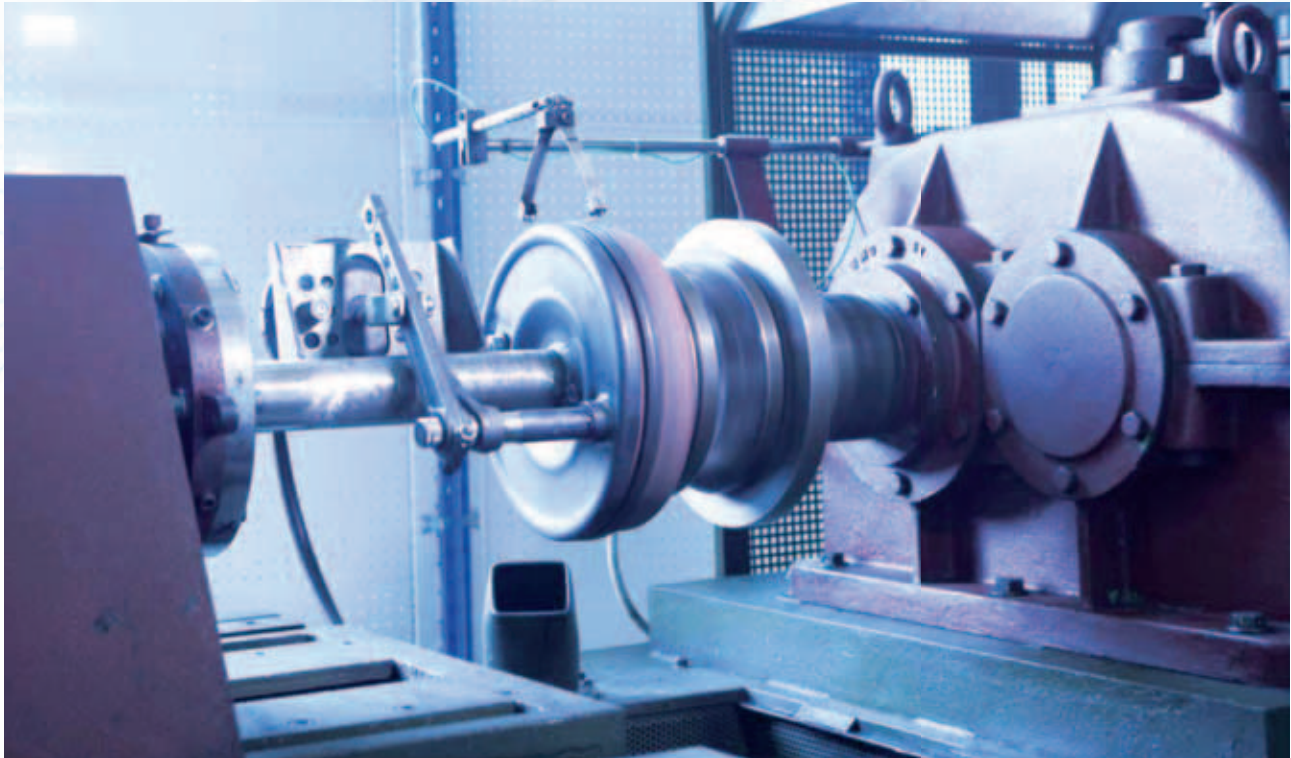
*The driving force of our research is represented by a knowledgeable staff that works at continuous innovation of the product range. Every product, from conception to production, is realized with the most modern technology and verified with tests on prototypes.*

*The active collaboration with our customers is the essential element for the design of new products adapted to evolution of machinery and better meet the specific needs of customers. The entire range of FAD brakes is certified and approved according to the guidelines of the various countries in which they are used. The continuous research and testing on test rigs and in the field, in collaboration with the vehicle manufacturers, allow us to place on the market braked axles that have above-average performance and in some cases can be considered the best on the market.*



**Uno staff di tecnici esperti che lavora all'innovazione continua della gamma di prodotti.**

***A team of experts that works on the continuous product innovations.***



**Ein Team von erfahrenen Technikern,  
das an der ständigen Innovation  
der Produktpalette arbeitet.**



## TECHNOLOGIE, FORSCHUNG UND ENTWICKLUNG

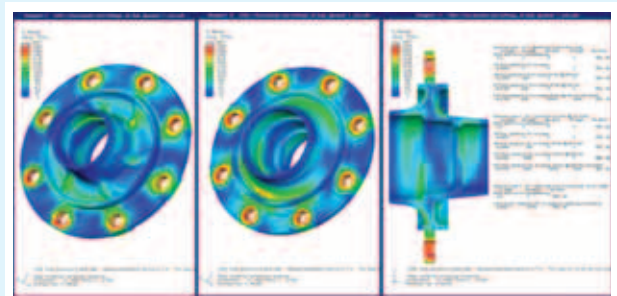
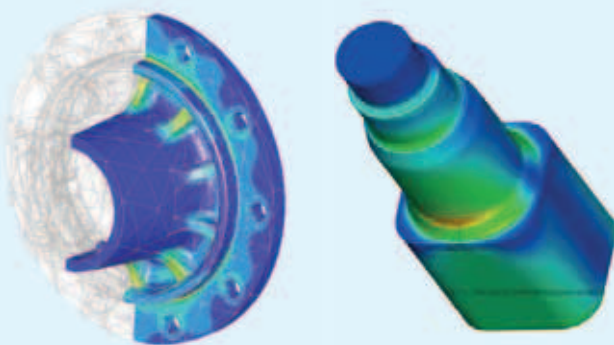
*Ein Team von erfahrenen Technikern bildet das Antriebsherzstück unserer Forschung und arbeitet an der ständigen Innovation unserer Produktpalette. Jedes Produkt ist von der Erfindung, über das Projekt und bis zur Fertigung mit den modernsten technologischen Systemen realisiert und durch Tests an Prototypen geprüft. Die aktive Zusammenarbeit mit den Kunden ist ein wesentlicher Bestandteil für die Konstruktion von neuen Produkten, die der Weiterentwicklung der Maschinen angemessen sind und den spezifischen Ansprüchen der Kundschaft stets zum Besten genügen. Die gesamte Produktreihe der FAD Bremsachsen ist gemäß der Richtlinien der verschiedenen Länder, in denen diese zum Einsatz kommen, zertifiziert und zugelassen. Die ständige Forschung und die Tests an Prüfständen und auf dem Feld, in Zusammenarbeit mit den Fahrzeugherstellern, ermöglichen es uns, Bremsachsen auf den Markt zu bringen, die höhere Leistungen als die durchschnittlichen aufweisen und in einigen Fällen als unter den Besten auf dem Markt betrachtet werden können.*

## TECHNOLOGIE, RECHERCHE ET DÉVELOPPEMENT

*Le centre propulseur de notre recherche est représenté par une équipe de techniciens experts travaillant à l'innovation continue de la gamme de produits. Chaque produit est réalisé, depuis son invention à son projet et à sa production, à l'aide des systèmes technologiques les plus modernes et est contrôlé par des tests effectués sur des prototypes.*

*La collaboration active avec les clients est l'élément indispensable pour le projet de nouveaux produits adaptés à l'évolution des machines et répondant toujours mieux aux exigences spécifiques de la clientèle. Toute la gamme des freins FAD est certifiée et homologuée selon les directives des différents pays dans lesquels ils sont certifiés.*

*La recherche continue et les tests effectués sur les bancs d'essais et sur le terrain, en collaboration avec les constructeurs de véhicules, nous permettent de pouvoir émettre sur le marché des essieux freinés qui offrent des prestations supérieures à la moyenne et dans certains cas, peuvent être considérés comme les meilleurs sur le marché.*



**Une équipe d'experts qui  
travaille à l'innovation continue  
de la gamme de produits.**

## COME SCEGLIERE UN ASSALE



La gamma di prodotti FAD ASSALI, con freni omologati per il mercato europeo, in particolare per quello tedesco e francese, comprende: Assali e semiassi con e senza freno, Assali fissi e sterzanti, Sospensioni e Bogie, Timoni.

### Portate

Le portate indicate in questo catalogo sono le massime specificate per un particolare tipo di assale, calcolate considerando il tipo di mozzo, la trave dell'assale e lo sbalzo massimo. In caso di aumento dello sbalzo, infatti, la portata diminuisce. L'utilizzo degli assali in applicazioni senza sospensioni e/o per trasporto liquidi genera effetti di sovrassollecitazione dinamica che diminuisce le portate dell'assale rispetto a quelle indicate a catalogo. Scegliere l'assale più adatto per un'applicazione significa prendere in considerazione fattori quali:

- le condizioni ambientali (in particolare se il mezzo verrà utilizzato in zone montagnose, polverose o particolarmente fredde);
- la dimensione dei pneumatici utilizzati (specialmente se il raggio è superiore ai 600 mm);
- lo spostamento delle ruote che influisce sulla performance del prodotto stesso.

Questo catalogo fornisce linee guida utili per la scelta di un assale. Qualora aveste particolari esigenze Vi preghiamo di contattare il nostro ufficio tecnico, a Vostra completa disposizione per qualsiasi chiarimento.

Vi consigliamo comunque di leggere con attenzione il paragrafo "Come scegliere un assale" che Vi fornirà tutti i dettagli utili per la scelta di prodotti adeguati alle Vostre applicazioni.

### Come scegliere un assale

Per individuare il tipo di assale da utilizzare bisogna considerare:

- a) La velocità massima del veicolo: 25 km/h, 40 km/h, 60 km/h o 80 km/h;
- b) Il peso totale del rimorchio, da cui si ricava il carico per assale sottraendo al carico totale del rimorchio il peso scaricato sull'occhione;
- c) Il numero di assali per rimorchio e la loro configurazione: monoasse, biasse, tandem o tridem (nelle confi-

gurazioni tandem e tridem si raccomanda l'utilizzo di assali autosterzanti per un corretto lavoro dei cuscinetti, evitando così lo strisciamento dei pneumatici e limitandone l'usura);

- d) Individuato il tipo di assale bisogna quindi verificare che lo sbalzo sia inferiore o uguale a quello indicato nelle tabelle riportate su questo catalogo. In caso lo sbalzo effettivo (quota H) sia superiore, per la scelta del tipo di assale Vi preghiamo di consultare il nostro ufficio tecnico;
- e) Tutte le portate indicate su questo catalogo sono riferite a utilizzo di ruote con spostamento zero.

Se viene richiesto il freno, è necessario individuare il tipo di freno considerando:

- a) La capacità di frenatura richiesta e la velocità massima del rimorchio;
- b) Il sistema di frenatura: pneumatica, idraulica o ad inerzia;
- c) Il diametro del pneumatico utilizzato;
- d) La nazione in cui il rimorchio verrà impiegato, ed eventuali necessità di omologazione.

Una volta selezionato il tipo di assale, ed eventualmente di freno, bisogna specificare:

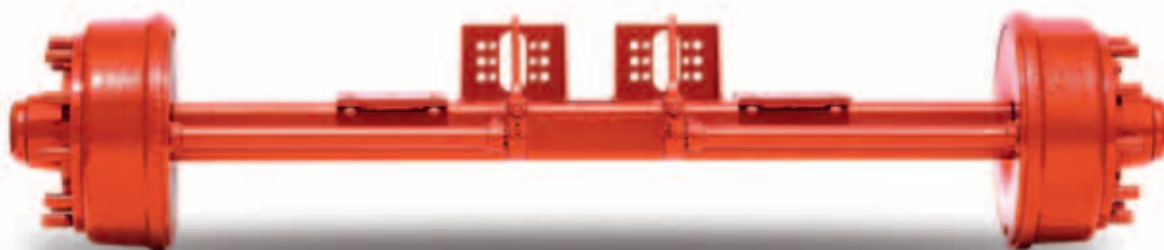
- a) L'attacco richiesto ed eventuale uso con ruote gemellate. Mediante la tabella "Attacchi" si può verificare la disponibilità dell'attacco e del freno desiderati;
- b) Se viene richiesto cavallino (il nostro standard è 1°30');)
- c) La lunghezza della carreggiata (quota C);
- d) In caso di assale frenato, raccomandiamo l'uso delle leve standard FAD ASSALI.

In caso di utilizzo di leve diverse Vi chiediamo di contattare il nostro ufficio tecnico specificando la lunghezza dell'albero camma (quota D) e se l'assale necessita di bilancino, se viene richiesta la verniciatura dell'assale.

Per ogni altra richiesta il nostro ufficio tecnico è a Vostra disposizione.

### Installazione e manutenzione di assali agricoli

Per una corretta installazione e manutenzione dei nostri assali Vi preghiamo di richiedere e consultare il "Manuale di Installazione e Manutenzione Assali Agricoli".





We are glad to introduce you our wide range of products: Braked and un-braked stub-axles and axles, Fixed and steering axles, Suspension sets, Drawbars. Our brakes are certified as suitable for applications all over Europe (in particular for Germany and France).

### Carrying capacities

The Carrying Capacity described in this catalogue is the maximum load specified for a particular axle. This takes into consideration the hub type, the axle cross-section, and the maximum overhang.

The use of axles in applications without suspensions and/or for liquid conveyance causes dynamic over-stress which decreases the axles loading capacities as to those given in the catalogue. There are many factors which contribute to axle performance including:

- Environment (for example, where trailers are used in mountainous areas or in extremely dusty or cold situations),
- The tyres used (especially if the radius is more than 600 mm),
- The wheel offset. The catalogue only describes broad guidelines for axle selection, and for this reason detailed final axle selection should be performed with the help of our technical department.

However, the following section "How to choose an axle" will provide the general information you need to highlight a suitable product for your application.

### How to choose an axle

In order to identify the correct type of axle you require please consider:

- a) The maximum speed of the vehicle: i.e. 25 km/h, 40 km/h, 60 km/h or 80 km/h;
- b) The total loaded weight on the vehicle (obtain the capacity per axle by deducting the weight supported by the towing eye from the total loaded weight);
- c) The number of axles per trailer and their configuration: single, twin axle, or tandem/tridem (for tandem/tridem trailers we recommend steering axles to prevent excessive bearing wear and in order to avoid dragging of the tyres);
- d) Once you have identified the axle, it is important to clarify whether the overhang (H dimension) distance in your application is more or less than the dimension given on our carrying capacity schemes. In case the actual overhang is higher than what pointed out by our schemes, please contact our technical department;
- e) All carrying capacities are based on wheels with zero offset.

If brakes are required, please identify the brake size needed using the brake section of this catalogue considering:

- a) The required braking capacity and the maximum vehicle speed;
- b) If an overrun, pneumatic or hydraulic breaking system is preferred;
- c) The tyre diameter;
- d) The country where the trailer/tank will be used in order to check the need for legislative requirements.

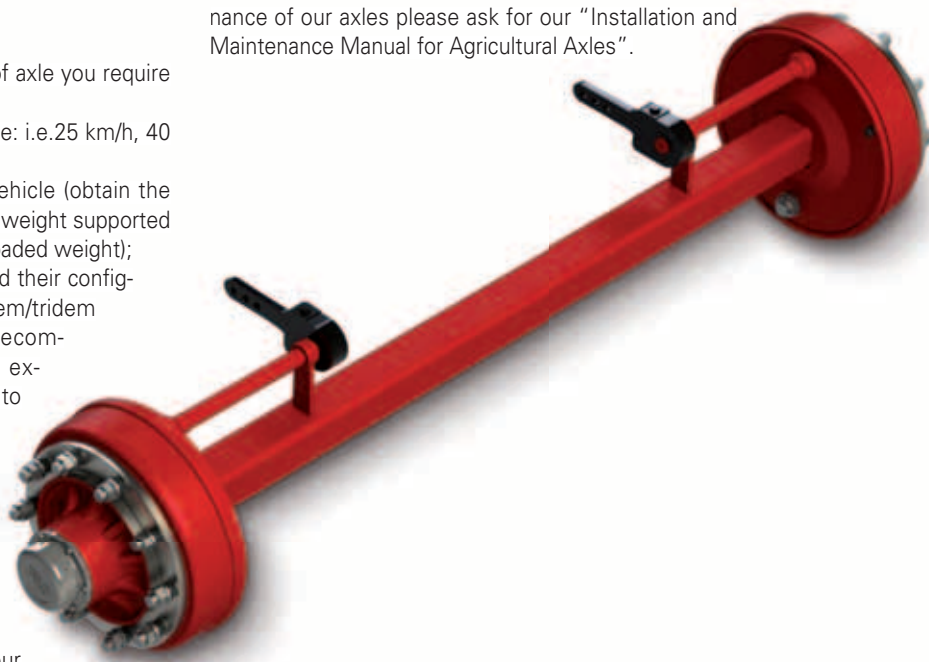
After the required axle type has been determined, you should also specify:

- a) Whether stud fixing and/or twin wheel application is needed (please see the "Fittings" section of this catalogue);
- b) If camber is required (our standard is 1°30');)
- c) The track length (C measure);
- d) If braked axles have been chosen, we recommend our standard brake levers. For different levers, please contact our technical department and point out the length of the camshaft (D dimension) and the need for a compensator;
- e) If you require the axle to be painted.

For any other requirements please contact our technical department.

### Installation and maintenance for agricultural axles

To learn about recommended installation and maintenance of our axles please ask for our "Installation and Maintenance Manual for Agricultural Axles".



## WIE MAN EINE ACHSE WÄHLT

Die Produktpalette von FAD ASSALI, mit für den europäischen, und insbesondere für den deutschen und französischen Markt zugelassenen Bremsen, beinhaltet: Achsen und Halbachsen mit und ohne Bremse, Starr- und Lenkachsen, Feder- und Bogieaggregate, Auf- und Abfahrteinrichtungen.

### Tragfähigkeiten

Die in diesem Katalog angegebenen Tragfähigkeiten sind die maximal für einen besonderen Achsentypp spezifizierten, berechnet unter Berücksichtigung des Radnabentyps, des Trägers der Achse und der maximalen Auskrugung. Wenn sich nämlich die Auskrugung vergrößert, verringert sich die Tragfähigkeit. Die Verwendung der Achsen bei Anwendungen ohne Federaggregate und/oder für den Transport von Flüssigkeiten erzeugt Auswirkungen von dynamischer Überbelastung, welche die Tragfähigkeiten der Achse gegenüber den im Katalog angegebenen verringert. Die für eine Anwendung am besten geeignete Achse zu wählen, bedeutet, Faktoren zu berücksichtigen, wie:

- die Umweltbedingungen (insbesondere wenn das Fahrzeug in bergigen, staubigen oder besonders kalten Gebieten benutzt wird),
- die Größe der verwendeten Reifen (speziell, wenn der Radius größer als 600 mm ist),
- Das Einpresstief der Räder, welche die Leistung des Produktes selbst beeinflussen.

Dieser Katalog liefert nützliche Leitlinien für die Auswahl einer Achse. Sollten Sie besondere Bedürfnisse haben, bitten wir Sie, unser technisches Büro zu kontaktieren, das Ihnen für jegliche Klärung vollkommen zur Verfügung steht. Wir empfehlen Ihnen aber, auf jeden Fall den Paragraphen „Wie man eine Achse wählt“ aufmerksam zu lesen, der Ihnen alle nützlichen Details für die Auswahl von für Ihre Anwendungen geeigneten Produkten geben wird.

### Wie man eine achse wählt

Um den zu verwendenden Achsentypp zu bestimmen, muss man berücksichtigen:

- a) die Höchstgeschwindigkeit des Fahrzeuges: 25 km/h, 40 km/h, 60 km/h oder 80 km/h;
- b) das Gesamtgewicht des Anhängers, aus dem man die Achslast errechnet, indem man vom Gesamtgewicht des Anhängers das auf die Zugöse anfallende Gewicht abzieht;
- c) die Anzahl der Achsen pro Anhänger und deren Konfiguration: einachsig, zweiachsig, tandem oder tridem (bei den Konfigurationen 'tandem' und 'tridem' empfiehlt man die Verwendung von Lenkachsen, damit die Lager korrekt arbeiten, wobei das Schleifen der Reifen verhindert und deren Verschleiß beschränkt wird);
- d) nachdem man den Achsentypp bestimmt hat, muss man prüfen, dass

die Auskrugung kleiner als oder gleich wie der in den in diesem Katalog aufgeführten Tabellen angegeben ist. Sollte die effektive Auskrugung (Maß H) größer sein, bitten wir Sie für die Wahl des Achsentypps, unser technisches Büro zu konsultieren;

- e) alle in diesem Katalog angegebenen Tragfähigkeiten beziehen sich auf die Verwendung von Rädern mit Einpresstief null.

Wenn die Bremse gefordert ist, muss man den Bremse-  
sentypp bestimmen, unter Berücksichtigung:

- a) der geforderten Bremsleistung und der Höchstgeschwindigkeit des Anhängers;
- b) des Bremssystems: pneumatisch, hydraulisch oder mechanisch;
- c) des Durchmessers des verwendeten Reifens;
- d) des Lands, in dem der Anhänger zum Einsatz kommt, und eventueller Zulassungsnotwendigkeiten.

Nachdem der Achsentypp, und eventuell der Bremse-  
sentypp, gewählt wurden, muss spezifiziert werden:

- a) die gewünschte Anhängerkupplung und die eventuelle Benutzung mit Zwillingsrädern. Mittels der Tabelle "Anhängerkupplungen" kann man die Verfügbarkeit der gewünschten Anhängerkupplung und Bremse prüfen;
- b) ob Sturz gefordert wird (unser Standard ist 1°30');
- c) die Länge der Spurweite (Maß C);
- d) Im Falle von Bremsachsen empfehlen wir die Benutzung der Standardhebel von FAD ASSALI.

Bei Verwendung von anderen Hebeln, bitten wir Sie, unser technisches Büro zu kontaktieren und dabei die Länge der Nockenwelle (Maß D) zu spezifizieren und wenn die Achse einen Bremsausgleich benötigt, ob die Lackierung der Achse gewünscht ist. Für jeglichen anderen Wunsch steht Ihnen unser technisches Büro zur Verfügung.

### Installation und wartung von landwirtschaftlichen achsen

Für eine korrekte Installation und Wartung unserer Achsen bitten wir Sie, das "Installations- und Wartungshandbuch für Landwirtschaftliche Achsen" anzufordern und zu konsultieren.





La gamme de produit FAD ASSALI, avec des freins homologués pour le marché européen, en particulier pour le marché allemand et français, comprend : des essieux et arbres de route avec et sans freins, des essieux fixes et directeurs, des suspensions et bogie, gouvernails.

## Capacités de charge

Les capacités de charge indiquées dans ce catalogue sont les charges maximales spécifiques pour un type d'essieu particulier, elles sont calculées en considérant le type de moyeu, la travée de l'essieu et l'écart maximum. Si l'écart augmente, la capacité de charge diminue. L'utilisation des essieux dans les applications sans suspensions et/ou dans le transport de liquides génère des effets de surcharge dynamique qui diminuent les capacités de charge de l'essieu par rapport à celles indiquées dans le catalogue. Choisir l'essieu le mieux adapté pour une application signifie tenir compte de facteurs tels que

- les conditions environnementales (en particulier si le véhicule sera utilisé dans des zones montagneuses, poussiéreuses ou particulièrement froides),
- la dimension des pneumatiques utilisés (spécialement si le rayon est supérieur à 600 mm),
- le déplacement des roues qui influence la performance du produit lui-même.

Ce catalogue fournit les lignes directrices utiles pour le choix d'un essieu. Si vous avez des exigences particulières, nous vous prions de contacter notre bureau technique qui est à votre complète disposition pour tout renseignement.

Nous vous conseillons dans tous les cas de lire attentivement le paragraphe « Comment choisir un essieu » qui vous donnera tous les détails utiles pour le choix de produits adaptés à vos applications.

## Comment choisir un essieu

Pour individualiser un type d'essieu à utiliser, vous devez considérer :

- a) la vitesse maximale du véhicule : 25 km/h, 40 km/h, 60 km/h ou 80 km/h ;
- b) le poids total de la remorque à partir duquel on détermine la charge par essieu en soustrayant à la charge totale de la remorque le poids déchargé sur l'anneau de remorquage ;
- c) le nombre d'essieux par remorque et leur configuration : monoaxe, biaxe, tandem ou tridem (dans les configurations tandem et tridem on recommande l'utilisation des essieux autodirecteurs pour un fonctionnement correct des roulements en évitant ainsi le frottement des pneumatiques et en limitant l'usure) ;

d) une fois le type d'essieu individualisé, il faut vérifier que l'écart est inférieur ou égal à celui indiqué dans les tableaux reportés sur ce catalogue.

Si l'écart effectif (quota H) est supérieur, nous vous prions de consulter notre bureau technique pour le choix du type d'essieu ;

e) toutes les capacités de charge indiquées dans ce catalogue se réfèrent à l'utilisation de roues avec un déplacement nul.

Une fois que le type d'essieu est sélectionné, et éventuellement le type de frein, il est nécessaire de spécifier :

- a) le système de fixation requis et l'éventuelle utilisation avec les roues jumelées. Grâce au tableau « Systèmes de fixation », on peut vérifier la disponibilité du système de fixation et du frein désirés ;
- b) si le carrossage est nécessaire (notre standard est de 1°30) ;
- c) la longueur de la voie (quota C) ;
- d) en cas d'essieu freiné, nous recommandons l'utilisation des leviers standards de FAD ASSALI.

En cas d'utilisation de leviers différents, nous vous prions de contacter notre bureau technique en spécifiant la longueur de l'arbre à cames (quota D) et si l'essieu nécessite de palonnier, si la peinture de l'essieu est requise.

Pour toute autre demande, notre bureau technique est à votre disposition.

## Installation et entretien des essieux agricoles

Pour une installation et une manutention correctes de nos essieux, nous vous prions de demander et de consulter le « Manuel d'installation et d'entretien des essieux agricoles ».

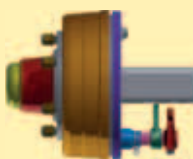


**CODICI DI IDENTIFICAZIONE DEGLI ASSALI AGRICOLI**  
**AGRICULTURAL AXLES - ACHSEN FÜR LANDWIRTSCHAFT - CODE ESSIEUX AGRICOLES**

F 3 0 A 0 0 1

**A** = SEMIASSI SENZA FRENO  
**STUBAXLES WITHOUT BRAKE**  
**ACHSSTUMMEL OHNE BREMSE**  
**DEMIS-ESSIEU SANS FREIN**

**B** = SEMIASSI CON FRENO  
**STUBAXLES WITH BRAKE**  
**ACHSSTUMMEL MIT BREMSE**  
**DEMIS-ESSIEU FREINEE**



**C, W** = MOZZI STERZANTI SENZA FRENO,  
**STEERING HUBS WITHOUT BRAKE,**  
**LENKNABEN OHNE BREMSE**  
**DEMIS ESSIEU PIVOTANT SANS FREIN**

**D, X** = MOZZI STERZANTI CON FRENO  
**STEERING HUBS WITH BRAKE**  
**LENKNABEN MIT BREMSE**  
**DEMIS ESSIEU PIVOTANT FREINEE**



**E** = ASSALE SENZA FRENO  
**AXLE WITHOUT BRAKE**  
**ACHSE OHNE BREMSE**  
**ESSIEU SANS FREIN**

**F** = ASSALE CON FRENO  
**AXLE WITH BRAKE**  
**ACHSE MIT BREMSE**  
**ESSIEU FREINEE**



**MISURA LATO QUADRO O Ø TONDO**  
**Square or Round Size - Vierkant oder Rundmass**  
**Section carré ou rond**

**Oppure - or - oder - ou**

- 01** = MOZZO STERZ., *Steering hub, Lenknabe, Moyeau Pivotant*  
TIPO 1, Type 1, Typ 1
- 02** = MOZZO STERZ., *Steering hub, Lenknabe, Moyeau Pivotant*  
TIPO 2 Type 2, Typ 2
- 03** = MOZZO STERZ., *Steering hub, Lenknabe, Moyeau Pivotant*  
TIPO 3 Type 3, Typ 3
- 04** = MOZZO STERZ., *Steering hub, Lenknabe, Moyeau Pivotant*  
TIPO 4 Type 4, Typ 4
- 05** = MOZZO STERZ., *Steering hub, Lenknabe, Moyeau Pivotant*  
TIPO 5 Type 5, Typ 5

Numero progressivo  
*Progressive Number*  
*Fortschreitende Nummer*  
*Numéro consécutif*

**NUMERO COLONNETTE**  
**PER ASSALE/SEMIASSE SENZA FRENO**  
**NUMBER OF STUDS FOR AXLE**  
**OR ATUBAXLE WITHOUT BRAKE**  
**RADBOLZENNUMMER FÜR ACHSE ODER**  
**ACHSSTUMMEL OHNE BREMSE**  
**NR DE GOUJONS POUR ESSIEU**  
**OU DEMIS ESSIEU SANS FREIN**

**Oppure - or - oder - ou**

**Tipologia freno,**  
**Brake Type, Bremstyp, Type de frein:**

- A** = 140A X 30
- B** = 200A X 40
- C** = 250A X 40
- D** = 250G X 40
- E** = 300G X 60
- G** = 350G X 60
- H** = 350G X 100 I
- J** = 350A X 60
- K** = 300G X 90
- L** = 400G X 80
- N** = 400G X 120
- P** = 300G X 60 R
- Q** = 300G X 90 R
- S** = 290G X 60 I
- T** = 300G X 90 I
- W** = 300A X 60
- RA** = DISCO Ø430,  
Disc, Scheibe, a Disque

## CODICI DI IDENTIFICAZIONE DEGLI ASSALI STERZANTI AGRICOLI

STEERING AXLES FOR AGRICULTURE - LENKACHSEN FÜR LANDWIRTSCHAFT - ESSIEUX AUTO-DIRECTEURS AGRICOLES

H 1 2 B 1 L 0 0 1

**G = ASSALI STERZANTI SENZA FRENO**  
**STEERING AXLES WITHOUT BRAKE**  
**LENKACHSEN OHNE BREMSE**  
**ESSIEUX AUTO-DIRECTEURS SANS FREIN**

**H = ASSALI STERZANTI CON FRENO**  
**STEERING AXLES WITH BRAKE**  
**LENKACHSEN MIT BREMSE**  
**ESSIEUX AUTO-DIRECTEURS AVEC FREIN**



**MISURA LATO QUADRO O Ø TONDO,**  
**Square or Round Size**  
**Vierkant oder Rundmass**  
**Carré ou rond**



**90** = 90 mm  
**10** = 100 mm

**11** = 110 mm  
**12** = 120 mm  
**13** = 130 mm  
**14** = 140 mm  
**15** = 150 mm

**A1, A2** = SE STERZATURA COMANDATA  
**IF FORCED STEERING**  
**WENN ZWANGSLENKUNG**  
**EN CAS DE DIRECTIONEL**

**B1, B2** = SE TUBOLARE RUOTATO A 9°  
**IF TUBULAR ROTATION AT 9°**  
**WENN ROHR UMLAUF UM 9°**  
**EN CAS DE ROTATION A 9°**



**SPESSORI TUBOLARI**  
**TUBULAR THICKNESS - ROHRDICKE**  
**EPAISSEURS TUBES**

**A** = 10.0 mm  
**B** = 12.5 mm  
**C** = 14.0 mm  
**D** = 16.0 mm

Numero progressivo  
 Progressive Number  
 Fortschreitende Nummer  
 Numéro consécutif

**NUMERO COLONNETTE**  
**PER ASSALE SENZA FRENO**  
**NUMBER OF STUDS FOR AXLE WITHOUT**  
**BRAKE, RADBOLZENNUMMER**  
**FÜR ACHSE OHNE BREMSE**  
**N° GOUJONS POUR ESSIEUX SANS FREINS**

Oppure - or - oder - ou

**Tipologia freno**  
**Brake Type, Bremstyp, Type de frein:**

**E** = 300G X 60  
**G** = 350G X 60  
**K** = 300G X 90  
**L** = 400G X 80  
**N** = 4 00G X 120  
**Q** = 300G X 90R  
**S** = 290G X 60 I  
**W** = 300A X 60

**Serie cuscinetti**  
**Bearings, Lagerpaar, Serie Roulements**





**CODICI DI IDENTIFICAZIONE DEGLI ASSALI INDUSTRIALI PER ALTA VELOCITA' (CON CAMMA INDUSTRIALE)**  
**HIGHSPEED AXLES WITH INDUSTRIAL CAMSHAFT - HOCHGESCHWINDIGKEIT AXSEN MIT INDUSTRIELLER NOCKENWELLE**  
**CODE D'IDENTIFICATION DES ESSIEUX INDUSTRIEL (AVEC CAMME EVOLVENTE)**

T 1 8 0 N 1 M 0 0 1 S

**F, T = ASSALI FISSI**  
**FIXED AXLES - STARRE ACHSEN**  
**ESSIEUX FIXES**



**A, S, V = ASSALI STERZANTI,**  
**STEERING AXLES - LENKACHSEN**  
**ESSIEU AUTO ET DIRECTEURS**



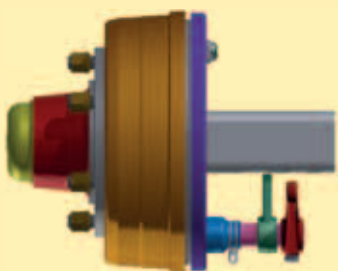
**A** = Sterzante Comandato  
*Forced steering axle*  
*Zwangslenkachse*  
*Essieux directionel*

**B** = Sterzante Versione 9°  
*Steering axle 9° Version*  
*Lenkachse 9° Version*  
*Essieu suiveur 9°*

**0** = Fisso Trave a Sez. Tonda  
*Fixed Axle Beam Round Section*  
*Starre Achse Träger Rundschnitt*  
*Essieu fixe a section ronde*

**1** = Fisso Trave a Sez. Quadra  
*Fixed Axle Beam Square Section*  
*Starre Achse Träger Vierkantschnitt*  
*Essieux fixe a section carree*

**5** = Semiasse Fisso Con Freno,  
*Fixed Stubaxle with brake*  
*Starre Achsstummel mit Bremse*  
*Demmis-essieu avec frein*



**A** = Con Predisposizione ABS, *with Abs*  
*mit Abs - avec ABS*

**S** = Senza Predisposizione ABS, *without ABS*  
*ohne Abs, sans ABS*

Numero progressivo  
*Progressive Number - Fortschreitende Nummer*  
*Numéro consécutif*

**Tipologia freno,**  
**Brake Type, Bremstyp, Type de frein:**

A = 310G X 190 Camma, Camshaft, Nockenwelle 'S'  
G = 300G X 135 Camma, Camshaft, Nockenwelle 'S'  
K = 406G X 120 Camma, Camshaft, Nockenwelle 'S'  
L = 400G X 80 Camma, Camshaft, Nockenwelle '8'  
M = 400G X 120 Camma, Camshaft, Nockenwelle '8'  
Q = 420G X 180 Camma, Camshaft, Nockenwelle 'S'  
S = 420G X 220 Camma, Camshaft, Nockenwelle 'S'  
U = 300G X 150 Camma, Camshaft, Nockenwelle '8'  
V = 500G X 200 KNOTT  
Camma, Camshaft, Nockenwelle 'S'

X = FRENO DISCO PINZA KNORR SK7, Disc Brake  
Caliper Knorr SK7,  
Scheibenbremse Kaliper Knorr SK7

Z = 412G X 160 Camma, Camshaft, Nockenwelle '8'

**Serie cuscinetti**  
**Bearings, Lagerpaar, Serie Roulements**

**MISURA LATO QUADRO**  
**O Ø TONDO**

**Square or Round Size**  
**Vierkant oder Rundmass**  
**Section carree ou ronde**



**10** = 100 mm  
**11** = 110 mm  
**12** = 120 mm  
**13** = 130 mm  
**14** = 140 mm  
**15** = 150 mm  
**18** = 180 mm  
**25** = 125 mm  
**27** = 127 mm  
**80** = 80 mm  
**90** = 90 mm



**SPESSORI TUBOLARI**  
**TUBULAR THICKNESS**  
**ROHRDICKE**  
**EPAISSEUR TUBES**

**Thickness, Rohrdicke, Epaisseur**

**A** = 10.0 mm  
**B** = 12.5 mm  
**C** = 14.0 mm  
**D** = 16.0 mm  
**E** = 18.0 mm  
**F** = 20.0 mm  
**G** = 15.0 mm  
**H** = 25.0 mm  
**I** = 30.0 mm

**Oppure - or - oder - ou**

**N** = Trave piena, *Full beam*,  
*Vollträger, Carre plein*













**FADASSALI**  
Quality Made in Italy

**ATTACCHI**  
*FITTINGS*  
*RADANSCHLÜSSE*  
*SYSTÈMES DE FIXATION*



|                                                    | NC                                                 | 4       |         |         | 5       |         |         |         | 6       | 8       |         | 10      |
|----------------------------------------------------|----------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                    | A                                                  | 58      | 56,5    | 59,5    | 66      | 94      | 101     | 109     | 160     | 220     |         | 280     |
|                                                    | B                                                  | 98      | 100     | 100     | 112     | 140     | 140     | 160     | 205     | 275     |         | 335     |
|                                                    | G                                                  | M12x1,5 | M12x1,5 | M12x1,5 | M14x1,5 | M16x1,5 | M12x1,5 | M16x1,5 | M18x1,5 | M18x1,5 | M20x1,5 | M22x1,5 |
| TIPO ASSALE<br>Axle type<br>Achstyp<br>Type essieu | SEZIONE MM<br>Section<br>Querschnitt<br>Section mm |         |         |         |         |         |         |         |         |         |         |         |
| 301                                                | 30                                                 | X       |         | X       |         |         |         |         |         |         |         |         |
| 351                                                | 35                                                 | X       |         | X       |         |         |         |         |         |         |         |         |
| 401                                                | 40                                                 |         |         |         |         |         |         |         |         |         |         |         |
| 402                                                | 40                                                 |         |         | X       | X       |         |         |         |         |         |         |         |
| 403                                                | 40                                                 |         | X       |         |         |         |         |         |         |         |         |         |
| 451                                                | 45                                                 |         |         |         |         | X       | X       |         | X       |         |         |         |
| 452                                                | 45                                                 |         |         |         | X       |         |         |         |         |         |         |         |
| 453                                                | 45                                                 |         |         |         |         | X       |         |         |         |         |         |         |
| 501                                                | 50                                                 |         |         |         |         | X       | X       |         | X       |         |         |         |
| 502                                                | 50                                                 |         |         |         |         | X       | X       |         | X       |         |         |         |
| 551                                                | 55                                                 |         |         |         |         |         |         | X       | X       |         |         |         |
| 552                                                | 55                                                 |         |         |         |         | X       |         |         | X       |         |         |         |
| 601                                                | 60                                                 |         |         |         |         |         |         |         | X       |         |         |         |
| 602                                                | 60                                                 |         |         |         |         | X       |         |         | X       |         |         |         |
| 603                                                | 60                                                 |         |         |         |         | X       |         |         | X       |         |         |         |
| 651                                                | 65                                                 |         |         |         |         |         |         |         | X       |         |         |         |
| 652                                                | 65                                                 |         |         |         |         |         |         |         | X       |         |         |         |
| 701                                                | 70                                                 |         |         |         |         |         |         |         | G       | G       |         |         |
| 702                                                | 70                                                 |         |         |         |         |         |         |         | G       | G       |         |         |
| 703                                                | 70                                                 |         |         |         |         |         |         |         | G       |         |         |         |
| 704                                                | 70                                                 |         |         |         |         |         |         |         | G       |         |         |         |
| 801                                                | 80                                                 |         |         |         |         |         |         |         | G       | G       | G       |         |
| 802                                                | 80                                                 |         |         |         |         |         |         |         |         | G       | G       |         |
| 806                                                | 80                                                 |         |         |         |         |         |         |         |         | G       | G       |         |
| 807                                                | 80                                                 |         |         |         |         |         |         |         | G       | G       |         |         |
| 902                                                | 90                                                 |         |         |         |         |         |         |         | G       | G       | G       |         |
| 906                                                | 90                                                 |         |         |         |         |         |         |         |         |         | G       | G       |
| 103                                                | 100                                                |         |         |         |         |         |         |         |         |         | G       | G       |
| 104                                                | 100                                                |         |         |         |         |         |         |         |         |         | G       | G       |
| 114                                                | 110                                                |         |         |         |         |         |         |         |         |         |         | G       |
| 116                                                | 110                                                |         |         |         |         |         |         |         |         |         |         | G       |
| Tub12B3                                            | 120 x 12,5                                         |         |         |         |         |         |         |         |         |         | G       | G       |
| Tub<br>13C3-13C6                                   | 130 x 14                                           |         |         |         |         |         |         |         |         |         |         | G       |
| Tub 14C1<br>14C4-15C1                              | 140 x 14<br>150 x 14                               |         |         |         |         |         |         |         |         |         |         | G       |

|  | NC | 4       |         |         |         | 5       |         |         |         | 6       |         | 8       |         | 10      |         |
|-----------------------------------------------------------------------------------|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                   | A  | 62      | 58      | 56      | 59      | 93      | 101     | 109     | 149     | 160     |         | 220     |         | 176     | 280     |
|                                                                                   | B  | 95      | 98      | 100     | 100     | 140     | 140     | 140     | 203     | 205     |         | 275     |         | 225     | 235     |
|                                                                                   | G  | M12x1,5 | M12x1,5 | M12x1,5 | M12x1,5 | M16x1,5 | M16x1,5 | M12x1,5 | M16x1,5 | M18x1,5 | M20x1,5 | M20x1,5 | M22x1,5 | M22x1,5 | M22x1,5 |
| <b>FRENO</b><br><b>Brake</b><br><b>Bremse</b><br><b>Frein</b>                     |    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 140A x 30                                                                         |    | X       | X       | X       | X       |         |         |         |         |         |         |         |         |         |         |
| 200A x 40                                                                         |    |         |         |         |         |         | X       |         |         |         |         |         |         |         |         |
| 250A x 40                                                                         |    |         |         |         |         | X       |         |         |         | X       |         |         |         |         |         |
| 250 x 60                                                                          |    |         |         |         |         |         |         | X       |         | X       |         |         |         |         |         |
| 300A x 60                                                                         |    |         |         |         |         |         |         |         | X       | X       | X       |         |         |         |         |
| 300G x 60                                                                         |    |         |         |         |         |         |         |         | X       | X       | X       | X       | X       |         |         |
| 300 x 135                                                                         |    |         |         |         |         |         |         |         |         |         |         |         | X       | X       |         |
| 300 x 150                                                                         |    |         |         |         |         |         |         |         |         | X       |         | X       |         |         |         |
| 300 x 90                                                                          |    |         |         |         |         |         |         |         |         | X       | X       | X       | X       |         |         |
| 310 x 190                                                                         |    |         |         |         |         |         |         |         |         |         |         |         |         | X       |         |
| 350 x 100                                                                         |    |         |         |         |         |         |         |         |         | X       |         | X       | X       |         |         |
| 350 x 60                                                                          |    |         |         |         |         |         |         |         |         | X       | X       | X       | X       |         |         |
| 400 x 120                                                                         |    |         |         |         |         |         |         |         |         |         |         | X       | X       |         | X       |
| 400 x 80                                                                          |    |         |         |         |         |         |         |         |         |         | X       | X       | X       |         | X       |
| 406 x 120                                                                         |    |         |         |         |         |         |         |         |         |         |         |         |         |         | X       |
| 412 x 160                                                                         |    |         |         |         |         |         |         |         |         |         |         |         |         |         | X       |
| 420 x 180                                                                         |    |         |         |         |         |         |         |         |         |         |         |         |         |         | X       |
| 500 x 200                                                                         |    |         |         |         |         |         |         |         |         |         |         |         |         |         | X       |

A = Acciaio monoblocco  
G = A richiesta attacco per ruote gemellate  
X = Disponibile

A = Monoblockstahl  
G = auf Anfrage Radanschluss für Zwillingräder  
X = Verfügbar

A = Monobloc Steel  
G = Optional fitting for twin wheels  
X = Disponible

A = Acier monobloc  
G = Sur demande perçage pour roues jumelées  
X = à disposition





## Serraggi dadi assali

AXLE WHEEL NUT TORQUE  
 ANSCHRAUBDREHMOMENTE  
 SERRAGE ÉCROUS

|                                                                              | FILETTATURA<br>Thread<br>Gewinde<br>Filetage | DISCHI BUGNATI<br>Dished discs<br>Radschüssel<br>Disques convexes | DISCHI PIANI<br>Flat discs<br>Glatte Radschüssel St.37<br>Disques plats | DISCHI PIANI<br>Flat discs<br>Glatte Radschüssel St.52<br>Voiles planes |                                                                                     |
|------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Dadi con collare sferico,<br>dadi conici.<br>Viti con collare sferico.       |                                              |                                                                   | VITE<br>Screw - Schraube - Vis<br>Class 8.8                             | VITE<br>Screw - Schraube - Vis<br>Class 10.9                            |  |
| Nuts with spherical collar,<br>conical nuts Screws<br>with spherical collar. |                                              |                                                                   | N.m                                                                     |                                                                         |                                                                                     |
| Kugelbundmuttern,<br>Kegelmuttern.<br>Kugelbundschrauben.                    | M12X1.5                                      | 90                                                                | -                                                                       | -                                                                       |                                                                                     |
|                                                                              | M14X1.5                                      | 160                                                               | 160                                                                     | 220                                                                     |                                                                                     |
| Écrous à collet sphérique,<br>écrous coniques.<br>Vis à collet sphérique.    | M16X1.5                                      | 230                                                               | 230                                                                     | 330                                                                     |                                                                                     |
|                                                                              | M18X1.5                                      | 310                                                               | 330                                                                     | 460                                                                     |                                                                                     |
|                                                                              | M20X1.5                                      | -                                                                 | 490                                                                     | 630                                                                     |                                                                                     |
|                                                                              | M22X1.5                                      | -                                                                 | 630                                                                     | 740                                                                     |                                                                                     |

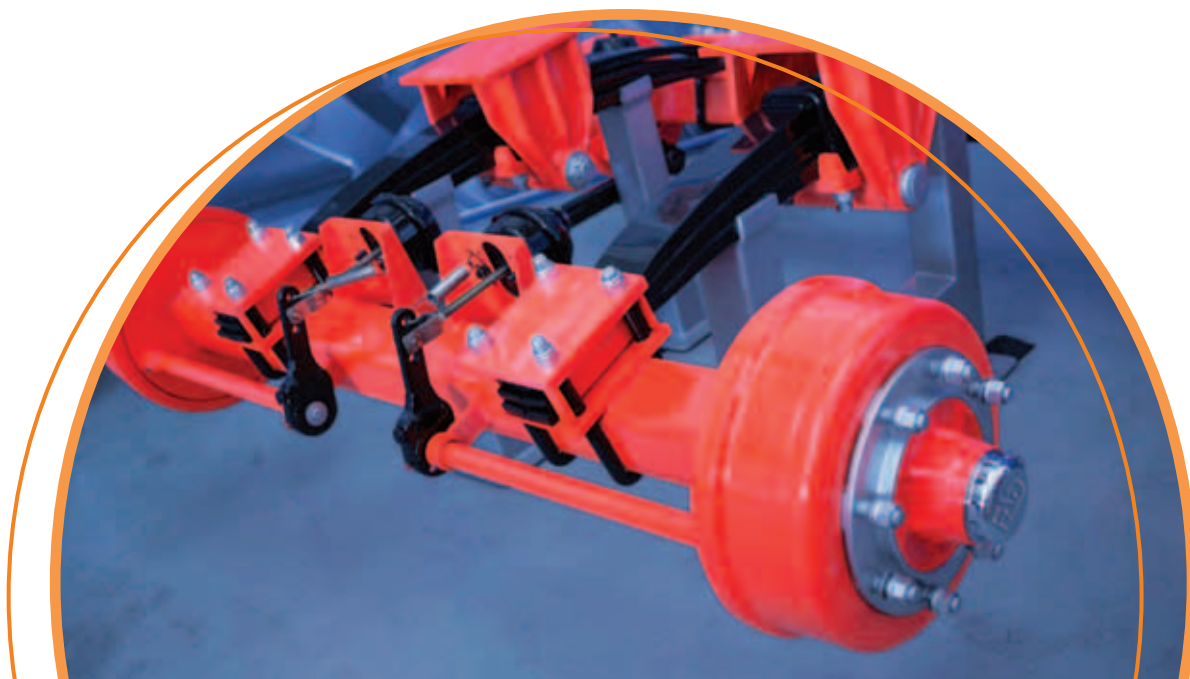
|                                                           | FILETTATURA<br>Thread<br>Gewinde<br>Filetage | DISCHI BUGNATI<br>Dished discs<br>Radschüssel<br>Disques convexes | DISCHI PIANI<br>Flat discs<br>Glatte Radschüssel St.37<br>Disques plats | DISCHI PIANI<br>Flat discs<br>Glatte Radschüssel St.52<br>Voiles planes |                                                                                       |
|-----------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Dadi con collare piano<br>e rondella sferica.             |                                              |                                                                   | VITE<br>Screw - Schraube - Vis<br>Class 8.8                             | VITE<br>Screw - Schraube - Vis<br>Class 10.9                            |  |
| Flat collar Nut<br>with spherical washer.                 |                                              |                                                                   | N.m                                                                     |                                                                         |                                                                                       |
| Flachbundmuttern mit<br>kugelförmiger<br>Unterlegscheibe. | M12X1.5                                      | 65                                                                | 80                                                                      | 100                                                                     |                                                                                       |
|                                                           | M14X1.5                                      | 100                                                               | 120                                                                     | 170                                                                     |                                                                                       |
| Écrous à collet plat et<br>rondelle sphérique.            | M16X1.5                                      | 140                                                               | 190                                                                     | 260                                                                     |                                                                                       |
|                                                           | M18X1.5                                      | 210                                                               | 270                                                                     | 360                                                                     |                                                                                       |
|                                                           | M20X1.5                                      | -                                                                 | 360                                                                     | 450                                                                     |                                                                                       |
|                                                           | M22X1.5                                      | -                                                                 | 460                                                                     | 550                                                                     |                                                                                       |

|                                                             | FILETTATURA<br>Thread<br>Gewinde<br>Filetage | DISCHI BUGNATI<br>Dished discs<br>Radschüssel<br>Disques convexes | DISCHI PIANI<br>Flat discs<br>Glatte Radschüssel St.37<br>Disques plats | DISCHI PIANI<br>Flat discs<br>Glatte Radschüssel St.52<br>Voiles planes |                                                                                       |
|-------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Dadi piani con rondella<br>piana girevole.                  |                                              |                                                                   | VITE<br>Screw - Schraube - Vis<br>Class 8.8                             | VITE<br>Screw - Schraube - Vis<br>Class 10.9                            |  |
| Flat Nut with flat seat<br>captive washer.                  |                                              |                                                                   | N.m                                                                     |                                                                         |                                                                                       |
| Flache Muttern mit<br>drehbarer<br>flacher Unterlegscheibe. | M18X1.5                                      |                                                                   | 260                                                                     | 360                                                                     |                                                                                       |
| Écrous plats avec rondelle<br>plate tournante.              | M20X1.5                                      |                                                                   | 350                                                                     | 500                                                                     |                                                                                       |
|                                                             | M22X1.5                                      |                                                                   | 450                                                                     | 650                                                                     |                                                                                       |

## Coppia di serraggio viti e cavallotti

RECOMMENDED TORQUE FOR U-BOLTS  
ANZIEHMOMENTE SCHRAUBE UND FEDERBÜGEL  
COUPLE DE SERRAGE VIS ET CRAMPILLONS

| DADO<br>Nut<br>Mutter<br>Écrous | COPPIA DI SERRAGGIO<br>Torque<br>Anziehmomente<br>Couple de serrage<br>[Nm] | APPLICAZIONE<br>Application<br>Anwendung<br>Application                                                    |
|---------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| M18x1.5                         | 375                                                                         | Cavallotti e viti bogie<br>U-BOLT<br>Federbügel und Schrauben für<br>Bogieaggregate<br>Brides et vis bogie |
| M20x1.5                         | 385                                                                         | Cavallotti e viti bogie<br>U-BOLT<br>Federbügel und Schrauben für<br>Bogieaggregate<br>Brides et vis bogie |
| M22x2,5                         | 475                                                                         | Cavallotti e viti bogie<br>U-BOLT<br>Federbügel und Schrauben für<br>Bogieaggregate<br>Brides et vis bogie |
| M24x2                           | 650                                                                         | Cavallotti e viti bogie<br>U-BOLT<br>Federbügel und Schrauben für<br>Bogieaggregate<br>Brides et vis bogie |
| M27x2                           | 950                                                                         | Cavallotti e viti bogie<br>U-BOLT<br>Federbügel und Schrauben für<br>Bogieaggregate<br>Brides et vis bogie |





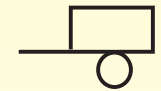
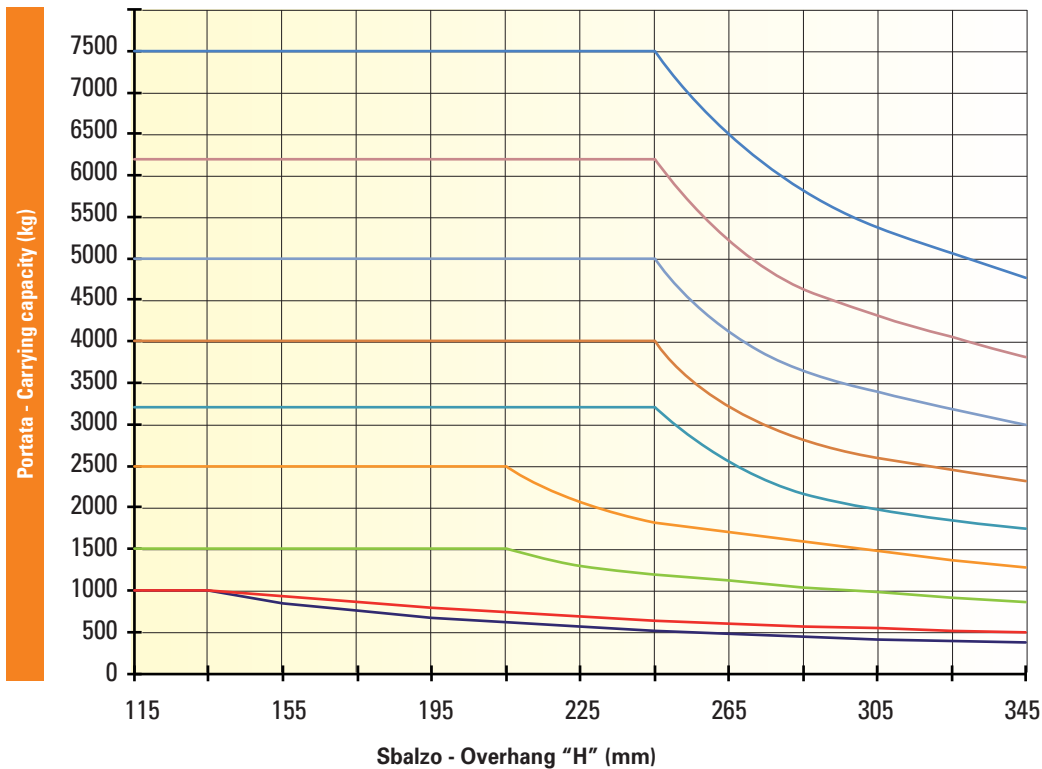


Andamento portate dei quadri pieni FAD al variare dello sbalzo configurazione Monoasse

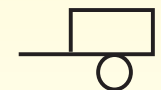
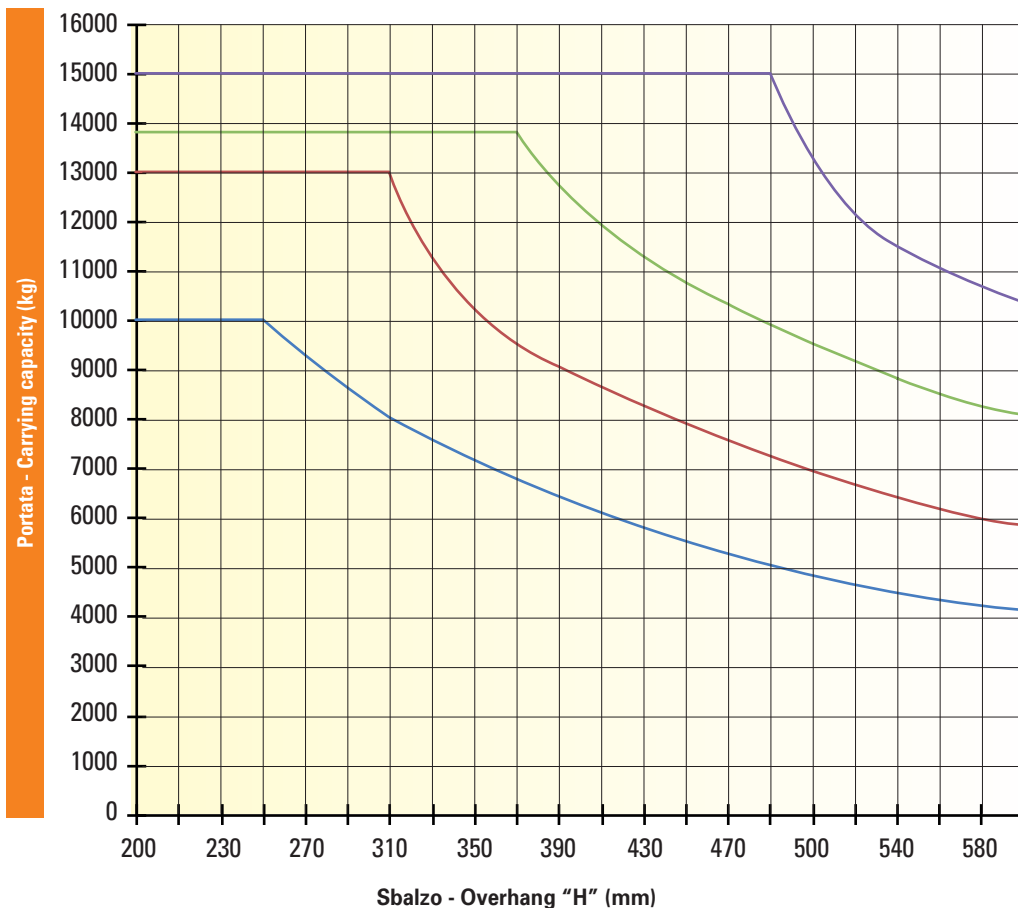
Verlauf der Tragfähigkeiten FAD Vierkant beim Verändern der Auskragung Einachsen-Konfiguration

FAD solid beams carrying capacity performance on varying overhang Single trailers configuration

Évolution des capacités de charge des tubes carrés pleins FAD en fonction du bosselage de la configuration monoaxe



- 30x30
- 35x35
- 40x40
- 45x45
- 50x50
- 55x55
- 60x60
- 65x65
- 70x70



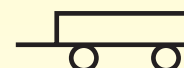
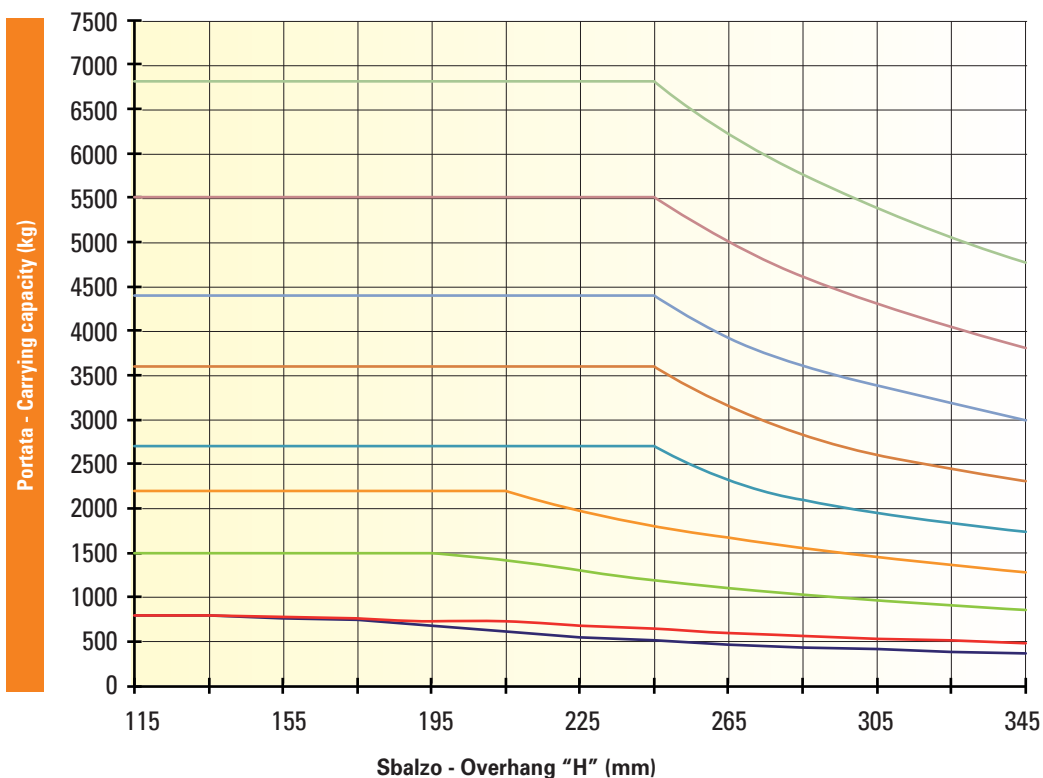
- 80x80
- 90x90
- 100x100
- 110x110

Andamento portate dei quadri pieni FAD al variare dello sbalzo  
configurazione Biasse

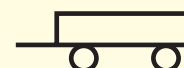
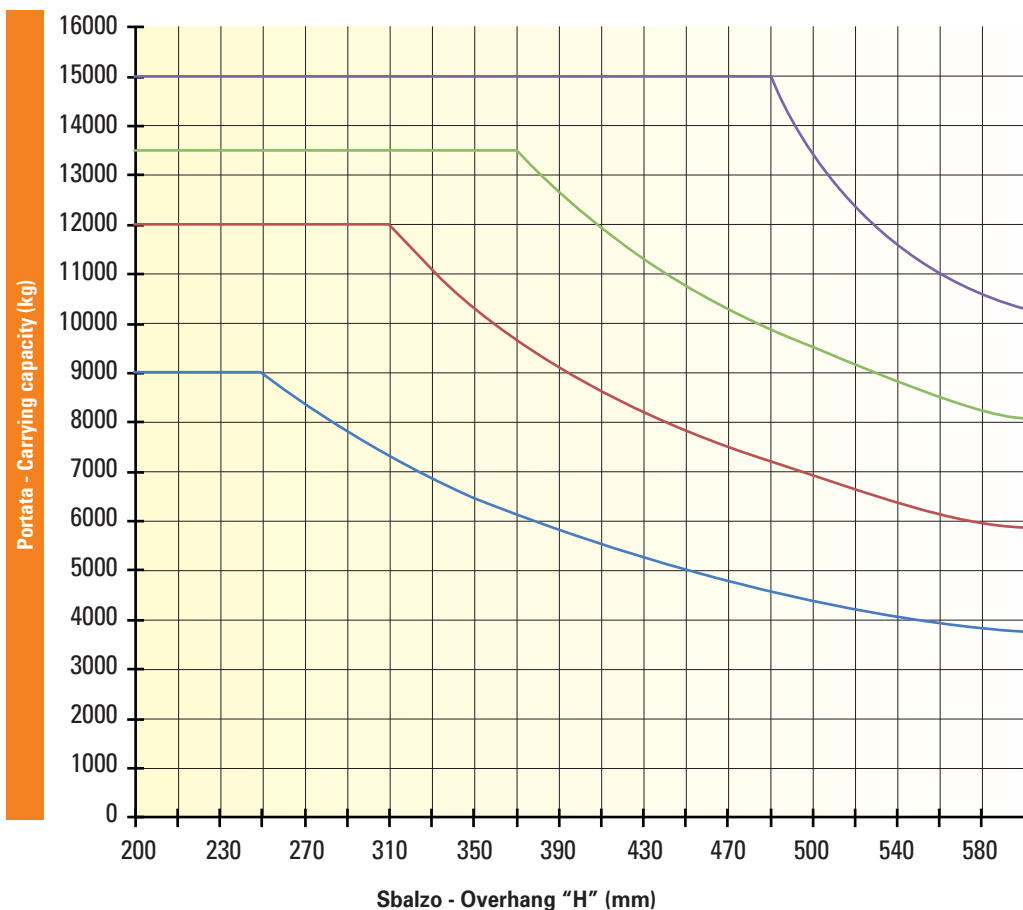
FAD solid beams carrying capacity performance on varying overhang  
- Two axles trailers configuration

Verlauf der Tragfähigkeiten FAD Vierkant beim Verändern der Auskragung  
- Zweiachsen-Konfiguration

Évolution des capacités de charge des tubes carrés pleins FAD  
en fonction du bosselage de la configuration remorque a deux essieux



- 30x30
- 35x35
- 40x40
- 45x45
- 50x50
- 55x55
- 60x60
- 65x65
- 70x70



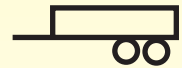
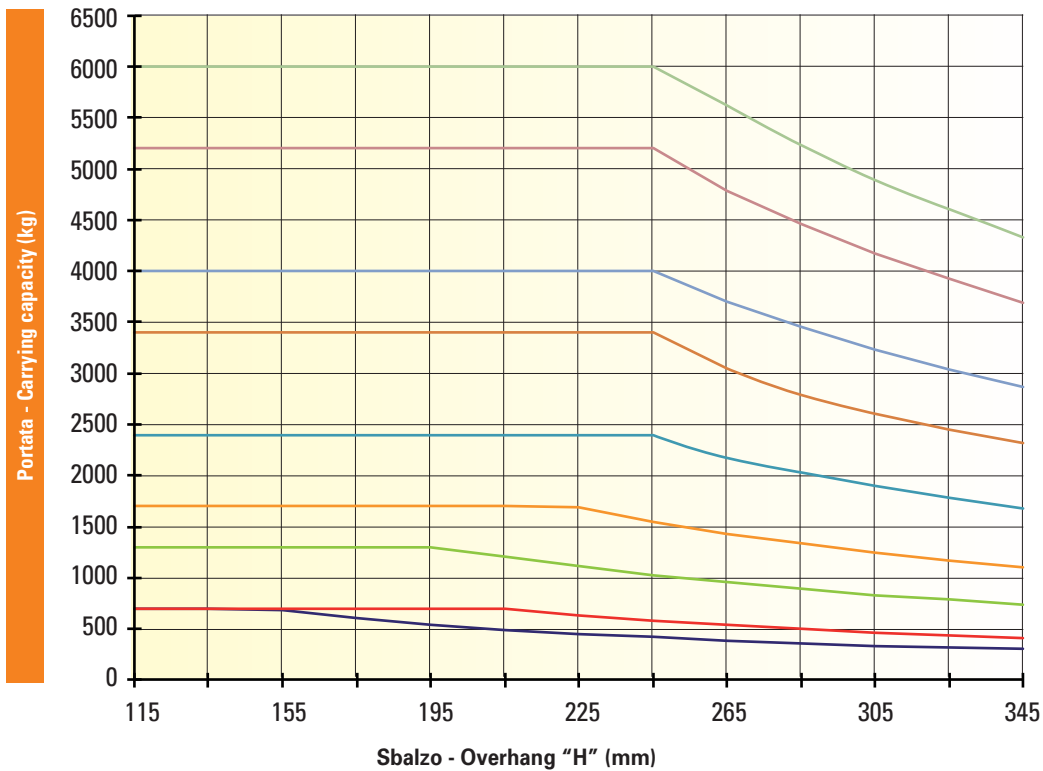
- 80x80
- 90x90
- 100x100
- 110x110

Andamento portate quadri 30-110 vs. sbalzo Tandem

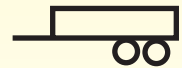
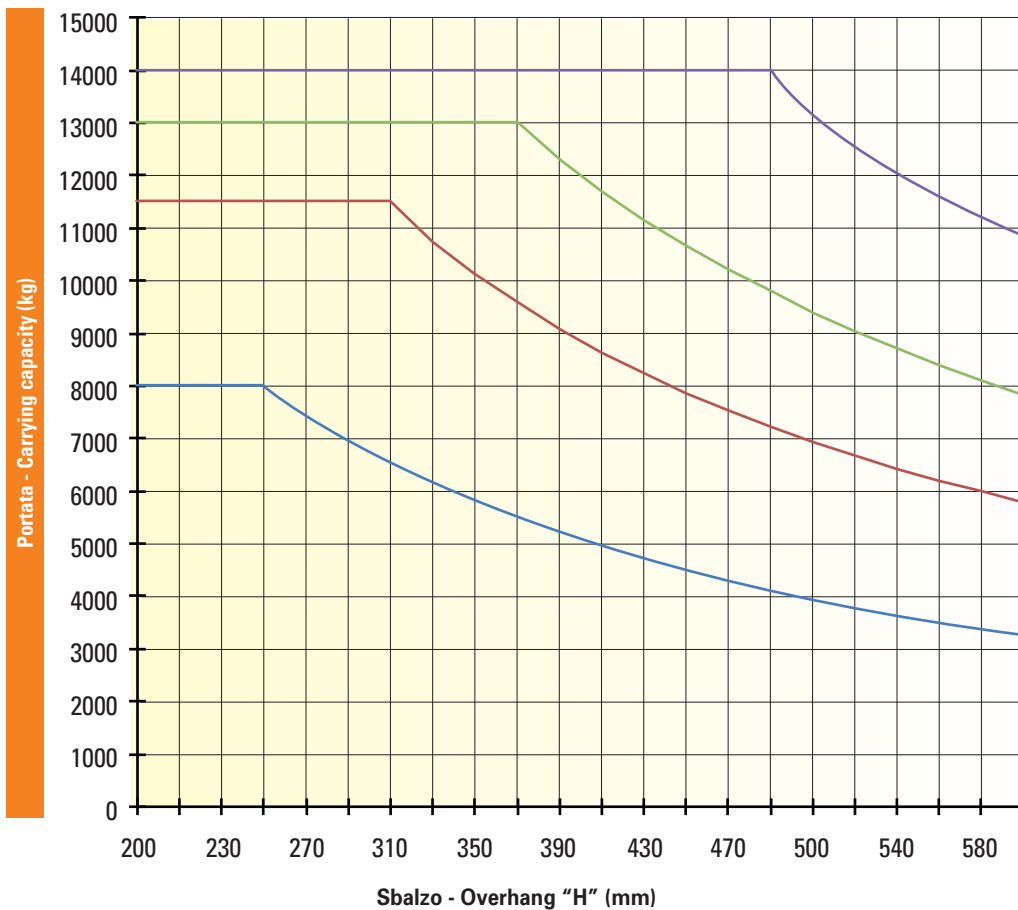
FAD 30-110 beams carrying capacity performance  
vs. Tandem overhang

Verlauf der Tragfähigkeiten Vierkant 30-110 gegen Tandem-Überhang

Évolution des capacités de charge 30-110 en fonction du bosselage  
de la configuration tandem



- 30x30
- 35x35
- 40x40
- 45x45
- 50x50
- 55x55
- 60x60
- 65x65
- 70x70



- 80x80
- 90x90
- 100x100
- 110x110

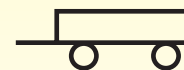
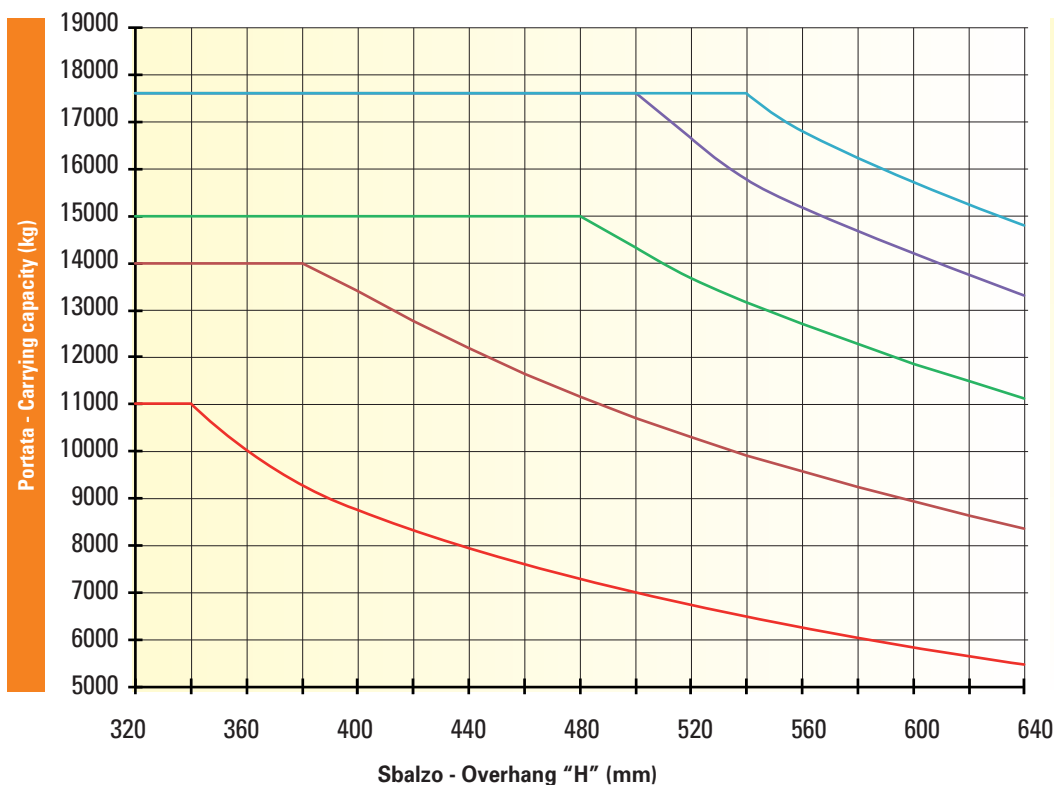


Andamento portate tubolari 110-150 vs. Sbalzo Biasse

FAD 110-150 tubular beams carrying capacity performance vs. Two axes trailers overhang

Verlauf der Tragfähigkeiten Rohre 110-150 gegen Zweiachsen-Auskragung

Évolution des capacités de charge des boudins 110-150 en fonction du bosselage remorque a deux essieux



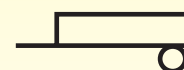
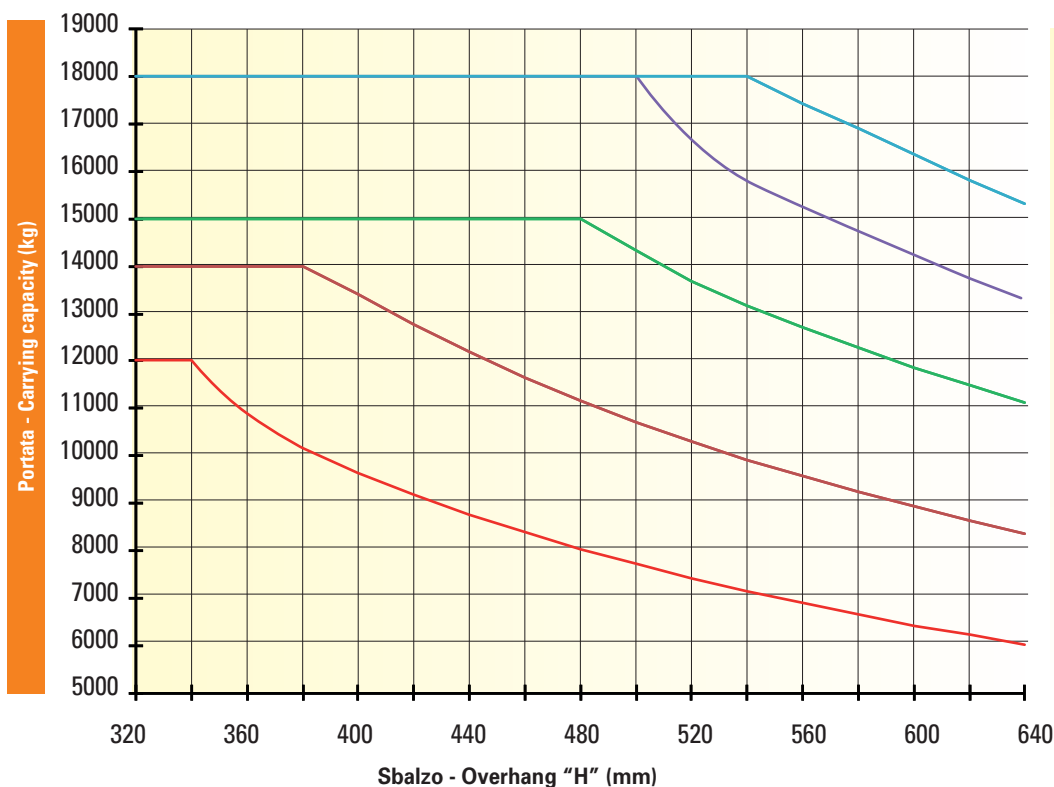
- 110x110
- 120x120
- 130x130
- 140x140
- 150x150

Andamento portate tubolari 110-150 vs. sbalzo Monoasse

FAD 110-150 tubular beams carrying capacity performance vs. Single trailers overhang

Verlauf der Tragfähigkeiten Rohre 110-150 gegen Einachsen-Auskragung

Évolution des capacités de charge des boudins 110-150 en fonction du bosselage monoaxe



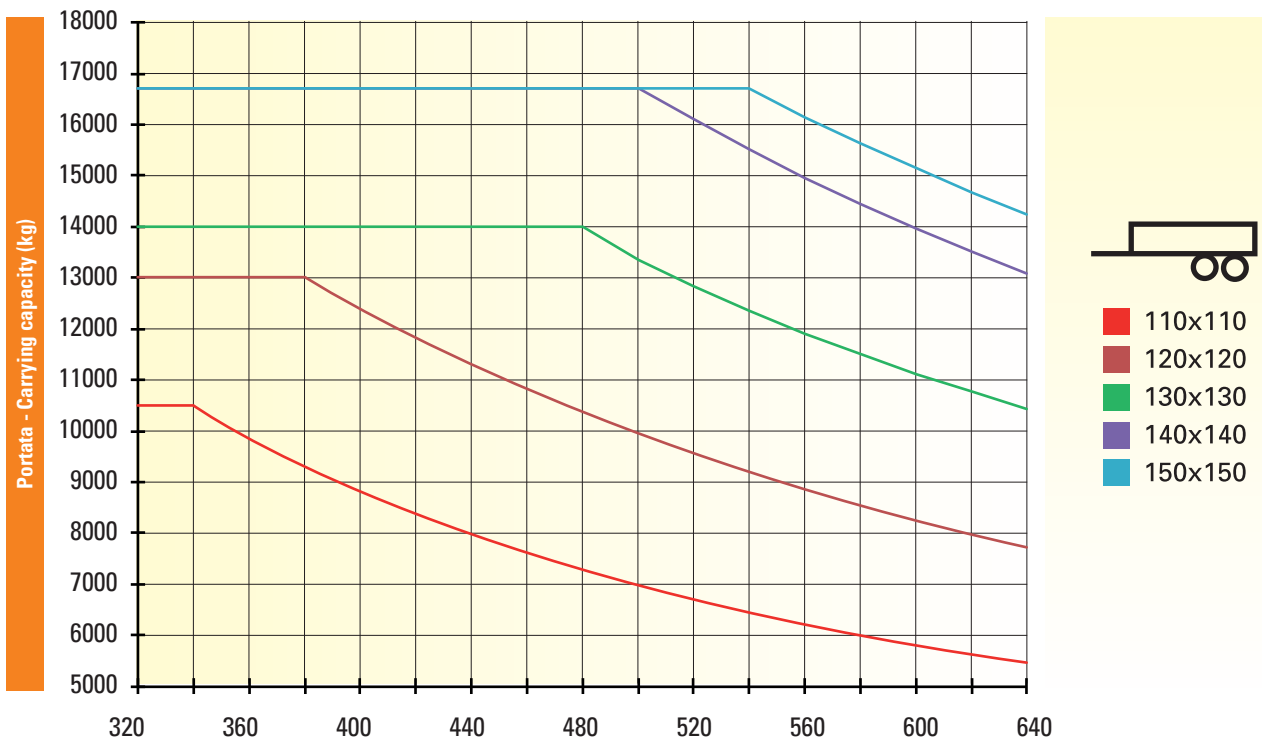
- 110x110
- 120x120
- 130x130
- 140x140
- 150x150

Andamento portate tubolari 110-150 vs. sbalzo Tandem

FAD 110-150 tubular beams carrying capacity  
performance vs. Tandem overhang

Verlauf der Tragfähigkeiten Rohre 110-150 gegen Tandem-Auskragung

Évolution des capacités de charge des boudins 110-150  
en fonction du bosselage tandem









**FAD ASSALI**  
Quality Made in Italy

**FRENI**  
*BRAKES*  
*BREMSEN*  
*FREINS*

## Freni omologati TÜV

TÜV APPROVED BRAKES  
 TÜV ZUGELASSENE BREMSSEN  
 FREINS HOMOLOGUÉS TÜV

| TIPO<br>Type<br>Type<br>Typ    |        |          | DIMENSIONI<br>Dimensions<br>Masse<br>Dimensions | TIPO OMOLOGAZIONE<br>Homologation type<br>Zulassung Typ<br>Type d'homologation | CAPACITÀ PER ASSE<br>Capacity for axle<br>Bremslast pro Achse<br>Capacité pour essieu |            | RAGGIO DELLA RUOTA<br>Wheel radius<br>Rad radius<br>Rayon de rue |        | VELOCITÀ<br>Speed<br>Geschwindigkeit<br>Vitesse | NUMERO VERBALE<br>Test report no.<br>Prüfprotokoll-Nr. |
|--------------------------------|--------|----------|-------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------|------------------------------------------------------------------|--------|-------------------------------------------------|--------------------------------------------------------|
| Ref.                           | ID1    | ID2      |                                                 |                                                                                | Kg                                                                                    | ID3<br>daN | R min.                                                           | R max. | km/h                                            | ID4                                                    |
| FRENO - Brake - Bremse - Frein |        |          |                                                 |                                                                                |                                                                                       |            |                                                                  |        |                                                 |                                                        |
| X                              | X26    | 25061B   | 250X60                                          | EU 2015/68                                                                     | 2707                                                                                  | 2653       | 304                                                              | 380    | 40                                              | 361-022-16                                             |
| W                              | W4     | 3060A    | 300AX60                                         | EU 2015/68                                                                     | 4082                                                                                  | 4000       | 364                                                              | 455    | 40                                              | 361-062-17                                             |
| W                              | W5     | 3060A    | 300AX60                                         | EU 2015/68                                                                     | 5000                                                                                  | 4905       | 328                                                              | 410    | 30                                              |                                                        |
| E                              | 300X60 | 30062A   | 300GX60                                         | EU 2015/68                                                                     | 3332                                                                                  | 3265       | 364                                                              | 455    | 40                                              | 361-029-16                                             |
| K                              | 300X90 | 30094A   | 300X90                                          | EU 2015/68                                                                     |                                                                                       |            |                                                                  |        | 30                                              |                                                        |
| K                              | 300X90 | 30094A   | 300X90                                          | ECE R13                                                                        | 5206                                                                                  | 5102       | 395,2                                                            | 494    | 105                                             | 361-026-16                                             |
| DD                             | DD8    | AS135    | 300X135                                         | ECE R13                                                                        | 8165                                                                                  | 8001       | 311                                                              | 389    | 105                                             | 361-016-15                                             |
| U                              | U9     | 3015E    | 300X150                                         | ECE R13                                                                        | 9184                                                                                  | 9000       | 325,6                                                            | 407    | 105                                             | 361-046-10                                             |
| AA                             | AL     | DB3119   | 310X190                                         | ECE R13                                                                        | 11011                                                                                 | 10791      | 315                                                              | 394    | 105                                             | 361-075-13                                             |
| G                              | G55    | 35063A   | 350X60                                          | EU 2015/68                                                                     | 5500                                                                                  | 5395       | 400                                                              | 500    | 30                                              |                                                        |
| G                              | G5     | 35063A   | 350X60                                          | EU 2015/68                                                                     | 5000                                                                                  | 4587       | 400                                                              | 500    | 105                                             |                                                        |
| Y                              | Y6     | 3509     | 350X90                                          | EU 2015/68                                                                     |                                                                                       |            |                                                                  |        | 30                                              |                                                        |
| Y                              | Y6     | 3509     | 350X90                                          | EU 2015/68                                                                     | 6122                                                                                  | 6000       | 395                                                              | 494    | 40                                              | 361-009-18                                             |
| L                              | 400X80 | 40083C   | 400X80                                          | ECE R13                                                                        | 7143                                                                                  | 7000       | 472                                                              | 590    | 105                                             | 361-008-16                                             |
| M                              | M101   | 40122E   | 400X120                                         | ECE R13                                                                        | 10204                                                                                 | 10000      | 438                                                              | 547    | 105                                             | 361-044-17                                             |
| KK                             | KK9    | 4012S    | 406X120                                         | ECE R13                                                                        | 9009                                                                                  | 8829       | 446,4                                                            | 558    | 105                                             | 361-002-15                                             |
| Z                              | Z125   | 41163E   | 412X160                                         | ECE R13                                                                        | 12742                                                                                 | 12500      | 465                                                              | 581    | 105                                             | 361-125-11                                             |
| QQ                             | QQ     | 420X180A | 420X180                                         | ECE R13                                                                        | 11011                                                                                 | 10791      | 432                                                              | 540    | 105                                             | 361-074-13                                             |
| V                              | V14    | 5020     | 500X200                                         | ECE R13                                                                        | 14286                                                                                 | 14000      | 600                                                              | 750    | 105                                             | 361-015-16                                             |

| REF | TIPO<br>Type<br>Type<br>Type   | DIMENSIONI<br>Dimensions<br>Masse<br>Dimensions | CAPACITÀ DEL FRENO PER ASSE<br>Brake capacity for axle<br>Bremsfähigkeit pro Achse<br>Capacité du frein pour essieu |                |           | RUOTA<br>Wheel<br>Rad<br>Rue |             | OMOLOGAZIONE<br>Approval<br>Zulassung<br>Homologation |            |
|-----|--------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------|-----------|------------------------------|-------------|-------------------------------------------------------|------------|
|     | FRENO - Brake - Bremse - Frein |                                                 | 25 KM/H<br>Kg                                                                                                       | 40 KM/H<br>Kg  | CEE<br>Kg | R min<br>mm                  | R max<br>mm | TÜV                                                   | CEE 98/12  |
| W   | 3060A                          | 300AX60                                         | 6000                                                                                                                | 4000           |           | 325                          | 470         | 361-048-12                                            |            |
| W   | 3060B                          | 300AX60                                         | 5000                                                                                                                |                |           | 325                          | 470         | 361-050-12                                            |            |
| E   | 3006/2B                        | 300GX60                                         | 5000                                                                                                                | 3000           |           | 325                          | 470         | 361-049-12                                            |            |
| E   | 3006/2A                        | 300GX60                                         | 6000                                                                                                                | 4000           |           | 325                          | 470         | 361-052-12                                            |            |
|     |                                |                                                 |                                                                                                                     |                |           | 325                          | 470         | 361-054-12                                            |            |
| K   | 3009/3A<br>3009/4A             | 300X90                                          | 8000                                                                                                                | 6000           | 3200      | 325                          | 470         | 361-051-12                                            |            |
|     |                                |                                                 |                                                                                                                     |                |           | 325                          | 470         | 361-053-12                                            | 361-055-92 |
| K   | 3009/3B                        | 300X90                                          | 8000                                                                                                                | 5000           |           | 330                          | 500         | 361-041-12                                            |            |
|     |                                |                                                 |                                                                                                                     |                |           | 330                          | 500         | 361-0078-02                                           | 361-056-92 |
| K   | 3009/3I                        | 300X90I                                         |                                                                                                                     | 5000           |           | 330                          | 500         | 361-055-12                                            |            |
| T   | 3009/I                         | 300X90I                                         |                                                                                                                     | 5000           |           | 330                          | 500         | 361-056-12                                            |            |
| GG  | AS135                          | 300X135                                         |                                                                                                                     | 8000           | 8000      | 450                          |             | 361-0089-02                                           |            |
| U   | 3015E                          | 300X150                                         | 15500                                                                                                               | 10500          | 9000      | 400                          | 700         | 361-097-11                                            | 361-093-11 |
|     |                                |                                                 |                                                                                                                     |                |           | 389                          |             |                                                       |            |
| G   | 3506/3A                        | 350X60                                          | 8000                                                                                                                | 5000           |           | 300                          | 600         | 361-048-10                                            |            |
| G   | 3506/2B<br>3506/3B             | 350X60                                          | 7200                                                                                                                | 3300           |           | 300                          | 600         | 361-047-10                                            | 361-046-10 |
|     |                                |                                                 |                                                                                                                     |                |           | 407                          |             |                                                       |            |
| L   | 4008/1A<br>4008/3C             | 400X80                                          | 10000                                                                                                               | 7000           | 7000      | 330                          | 500         | 361-064-13                                            |            |
|     |                                |                                                 |                                                                                                                     |                |           | 375                          | 500         | 361-065-13                                            |            |
| L   | 4008/1B                        | 400X80                                          | 9000                                                                                                                |                |           | 330                          | 500         | 361-066-13                                            |            |
| N   | 4012/A                         | 400X120                                         | 13000                                                                                                               | 10000          | 9000      | 375                          | 500         | 361-067-13                                            |            |
|     |                                |                                                 |                                                                                                                     |                |           | 420                          | 630         | 361-060-13                                            |            |
| M   | 4012/2E                        | 400X120                                         | 18000                                                                                                               | 12000<br>5950  | 10000     | 420                          | 630         | 361-030-07                                            | 361-003-92 |
|     |                                |                                                 |                                                                                                                     |                |           | 504                          | 630         |                                                       |            |
| KK  | 4012S                          | 406X120                                         |                                                                                                                     | 9000           | 9000      | 590                          |             | 361-061-13                                            |            |
| Z   | 4116/2E                        | 412X160                                         | 20000                                                                                                               |                |           | 420                          | 630         | 361-062-13                                            |            |
| Z   | 4116/3E                        | 412X160                                         |                                                                                                                     | 15400<br>10000 |           | 420                          | 630         | 361-063-13                                            | 361-004-92 |
|     |                                |                                                 |                                                                                                                     |                |           | 630                          |             |                                                       |            |
| FR  | AT 4220                        | 420X200                                         |                                                                                                                     |                |           | 410                          | 547         | 361-0079-12                                           |            |
|     |                                |                                                 |                                                                                                                     |                |           | 440                          | 710         | AL 170,0                                              |            |
|     |                                |                                                 |                                                                                                                     |                |           | 770                          | 973         | 361-0123-12                                           | 361-013-12 |
|     |                                |                                                 |                                                                                                                     |                |           | 545                          |             |                                                       |            |
|     |                                |                                                 |                                                                                                                     |                |           | 400                          | 700         | 361-098-11                                            | 361-094-11 |
|     |                                |                                                 |                                                                                                                     |                |           | 558                          |             |                                                       |            |
|     |                                |                                                 |                                                                                                                     |                |           | 470                          | 860         | AL 268                                                |            |
|     |                                |                                                 |                                                                                                                     |                |           | 470                          | 860         | AL 270                                                |            |
|     |                                |                                                 |                                                                                                                     |                |           | 770                          | 973         | 361-123-11                                            |            |
|     |                                |                                                 |                                                                                                                     |                |           | 581                          |             |                                                       | 361-125-11 |
|     |                                |                                                 |                                                                                                                     |                |           | 522                          |             |                                                       | TDB 0739   |

## Freni omologati Cemagref (NF U 16-051) azionamento idraulico

CEMAGREF APPROVED BRAKES HYDRAULIC BRAKING  
CEMAGREF GENEHMIGTE BREMSSEN MIT HYDRAULISCHER STEUERUNG  
FREINS HOMOLOGUÉS CEMAGREF À COMMANDE HYDRAULIQUE

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | DIMENSIONI<br>Dimensions<br>Masse<br>Dimensions | CAPACITÀ DI CARICO<br>Carrying Capacity<br>Traglast<br>Capacité de charge | RUOTA<br>Wheel<br>Rad<br>Roue |            | OMOLOGAZIONE<br>Approval<br>Zulassung<br>Homologation |
|--------------------------------------------------------------------------|-----------------------------|-------------------------------------------------|---------------------------------------------------------------------------|-------------------------------|------------|-------------------------------------------------------|
| FRENO - Brake - Bremse - Frein                                           |                             |                                                 | Kg                                                                        | R min (mm)                    | R max (mm) |                                                       |
| W                                                                        | 3060FB                      | 300AX60                                         | 12554<br>7532                                                             | 330                           | 550        | 8926                                                  |
| E                                                                        | 3006FB                      | 300X60                                          | 13295<br>7977                                                             | 330                           | 550        | 8927                                                  |
| K                                                                        | 3009FB                      | 300X90                                          | 16903<br>9297                                                             | 330                           | 600        | 8928                                                  |
|                                                                          | 300GX90                     |                                                 | 17299<br>6962                                                             | 330                           | 820        | 12705                                                 |
| U                                                                        | 3015EF                      | 300X150                                         | 22402<br>11201                                                            | 300                           | 600        | 12/06419                                              |
| G                                                                        | 3506/FB                     | 350X60                                          | 19432<br>11335                                                            | 350                           | 600        | 8930                                                  |
| L                                                                        | 4008 FB                     | 400X80                                          | 24601<br>14760                                                            | 420                           | 700        | 8931                                                  |
|                                                                          | 400GX80                     |                                                 | 21399<br>12839                                                            | 420                           | 700        | 11583                                                 |
| N                                                                        | 400GX120                    | 400X120                                         | 25119<br>11722                                                            | 420                           | 900        | 16815                                                 |
|                                                                          | 4012/2 EF                   |                                                 | 32756<br>15286                                                            | 420                           | 900        | 11910                                                 |
| Z                                                                        | 4116/3EF                    | 412X160                                         | 34884<br>18217                                                            | 470                           | 941        | 12/06418                                              |

## Freni omologati Cemagref (NF U 16-051) azionamento pneumatico

CEMAGREF APPROVED BRAKES PNEUMATIC BRAKING  
CEMAGREF GENEHMIGTE BREMSSEN LUFTSTEUERUNG  
FREINS HOMOLOGUÉS CEMAGREF À COMMANDE PNEUMATIQUE

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | DIMENSIONI<br>Dimensions<br>Masse<br>Dimensions | CAPACITÀ DI CARICO<br>Carrying Capacity<br>Traglast<br>Capacité de charge | RUOTA<br>Wheel<br>Rad<br>Roue |            | OMOLOGAZIONE<br>Approval<br>Zulassung<br>Homologation |
|--------------------------------------------------------------------------|-----------------------------|-------------------------------------------------|---------------------------------------------------------------------------|-------------------------------|------------|-------------------------------------------------------|
| FRENO - Brake - Bremse - Frein                                           |                             |                                                 | Kg                                                                        | R min (mm)                    | R max (mm) |                                                       |
| W                                                                        | 3060FB                      | 300AX60                                         | 14456<br>8674                                                             | 330                           | 550        | 8926                                                  |
| E                                                                        | 3006FB                      | 300X60                                          | 15593<br>9356                                                             | 330                           | 550        | 8927                                                  |
| K                                                                        | 3009FB                      | 300X90                                          | 19839<br>10941                                                            | 330                           | 600        | 8928                                                  |
|                                                                          | 300GX90                     |                                                 | 19816<br>7974                                                             | 330                           | 820        | 12705                                                 |
| U                                                                        | 3015EF                      | 300X150                                         | 30293<br>15146                                                            | 300                           | 600        | 12/06419                                              |
| G                                                                        | 3506/FB                     | 350X60                                          | 22251<br>12980                                                            | 350                           | 600        | 8930                                                  |
| L                                                                        | 4008 FB                     | 400X80                                          | 27999<br>16799                                                            | 420                           | 700        | 8931                                                  |
|                                                                          | 400GX80                     |                                                 | 24772<br>14863                                                            | 420                           | 700        | 11583                                                 |
| N                                                                        | 400GX120                    | 400X120                                         | 29344<br>13694                                                            | 420                           | 900        | 16815                                                 |
|                                                                          | 4012/2 EF                   |                                                 | 39393<br>18384                                                            | 420                           | 900        | 11910                                                 |
| Z                                                                        | 4116/3EF                    | 412X160                                         | 42192<br>22034                                                            | 470                           | 941        | 12/06418                                              |

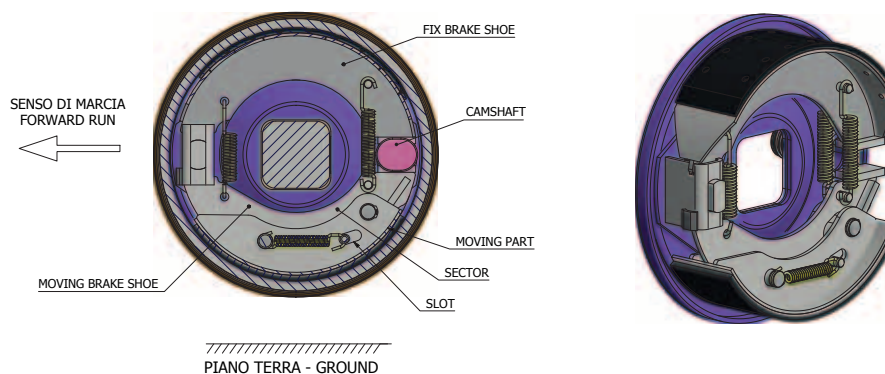


## Freni KBA per rimorchi agricoli con frenatura ad inerzia con retromarcia automatica

KBA APPROVED BRAKES FOR AGRICULTURAL TRAILERS WITH OVERRUN BRAKING DEVICE WITH AUTOMATIC REVERSE SYSTEM

KBA ZUGELASSENE BREMSEN FÜR LANDWIRTSCHAFTLICHE ANHÄNGER MIT RÜCKFAHRAUTOMATIK

FREINS HOMOLOGUES KBA POUR LES REMORQUES AGRICOLES AVEC FREINAGE A INERTIE ET AVEC MARCHÉ ARRIÈRE AUTOMATIQUE



| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | DIMENSIONI<br>Dimensions<br>Masse<br>Dimensions | CAPACITÀ DEL FRENO PER ASSALE<br>Brake capacity for axle<br>Bremsfähigkeit pro Achse<br>Capacité du frein pour essieu |               |                 | RUOTA<br>Wheel<br>Rad<br>Roue |              | COEFFICIENTE<br>Coefficient<br>Kengrosse<br>Coefficient | OMOLOGAZIONE<br>Approval<br>Zulassung<br>Homologation |
|--------------------------------------------------------------------------|-----------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------|-----------------|-------------------------------|--------------|---------------------------------------------------------|-------------------------------------------------------|
| FRENO Brake Bremse Frein                                                 |                             |                                                 | 25 KM/H<br>Kg                                                                                                         | 40 KM/H<br>Kg | ≥ 25 KM/H<br>Kg | R min.<br>mm                  | R max.<br>mm | <b>p</b>                                                | KBA                                                   |
| P                                                                        | 3006R                       | 300X60                                          | 6000                                                                                                                  | 4000          | 3000            | 280                           | 500          | 2,037                                                   | F4303                                                 |
|                                                                          |                             |                                                 |                                                                                                                       |               |                 | 280                           | 500          | 1,943                                                   |                                                       |
|                                                                          |                             |                                                 |                                                                                                                       |               |                 | 330                           | 500          | 2,047                                                   |                                                       |
| Q                                                                        | 3009R                       | 300X90                                          | 8000                                                                                                                  | 5000          | 4000            | 330                           | 555          | 2,321                                                   | F4307                                                 |
|                                                                          |                             |                                                 |                                                                                                                       |               |                 | 330                           | 555          | 2,321                                                   |                                                       |
|                                                                          |                             |                                                 |                                                                                                                       |               |                 | 330                           | 500          | 2                                                       |                                                       |
|                                                                          | 3009RA                      | 300X90                                          | 4000                                                                                                                  | 5000          |                 | 450                           | 600          | 2                                                       | F4306                                                 |
|                                                                          |                             |                                                 |                                                                                                                       |               |                 | 450                           | 600          | 1,988                                                   |                                                       |

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | DIMENSIONI<br>Dimensions<br>Masse<br>Dimensions | CAPACITÀ DEL FRENO<br>PER ASSALE<br>Brake capacity for axle<br>Bremsfähigkeit pro Achse<br>Capacité du frein pour essieu | RUOTA<br>Wheel<br>Rad<br>Roue |              | COEFFICIENTE<br>Coefficient<br>Kengrosse<br>Coefficient | OMOLOGAZIONE<br>Approval<br>Zulassung<br>Homologation |
|--------------------------------------------------------------------------|-----------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------|---------------------------------------------------------|-------------------------------------------------------|
| FRENO Brake Bremse Frein                                                 |                             |                                                 | 40 KM/H<br>Kg                                                                                                            | R min.<br>mm                  | R max.<br>mm | <b>p</b>                                                | 2015/68                                               |
| P                                                                        | 3006R                       | 300X60                                          | 4000                                                                                                                     | 280                           | 500          | 1,7                                                     | 361-054-16                                            |
| Q                                                                        | 3009RA                      | 300X90                                          | 5000                                                                                                                     | 510                           | 600          |                                                         | WIP*                                                  |
|                                                                          | 3009RA                      | 300X90                                          | 5000                                                                                                                     | 450                           | 510          |                                                         | WIP*                                                  |
|                                                                          | 3009RA                      | 300X90                                          | 5000                                                                                                                     | 380                           | 450          |                                                         | WIP*                                                  |

\* Work in progress

## Freni non omologati

BRAKES WITHOUT APPROVAL

BREMSE OHNE ZULASSUNG

FREINS SANS HOMOLOGATION

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | DIMENSIONI<br>Dimensions<br>Masse<br>Dimensions | CAPACITÀ DEL FRENO PER ASSALE<br>Brake capacity for axle<br>Bremsfähigkeit pro Achse<br>Capacité du frein pour essieu |               | RUOTA<br>Wheel<br>Rad<br>Roue |
|--------------------------------------------------------------------------|-----------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------|
| FRENO - Brake - Bremse - Frein                                           |                             |                                                 | 25 km/h<br>Kg                                                                                                         | 40 km/h<br>Kg | R max.<br>mm                  |
| A                                                                        | 140AX30                     | 140X30                                          | 1000                                                                                                                  |               | 290                           |
| B                                                                        | 200AX40                     | 200X40                                          | 2000                                                                                                                  |               | 330                           |
| C                                                                        | 250AX40                     | 250X40                                          | 2700                                                                                                                  |               | 350                           |
| H                                                                        | 350X100I                    | 350X100                                         |                                                                                                                       | 7000          | 450                           |
| S                                                                        | 290X60I                     | 290X60                                          |                                                                                                                       | 4000          | 470                           |

## Freni a disco

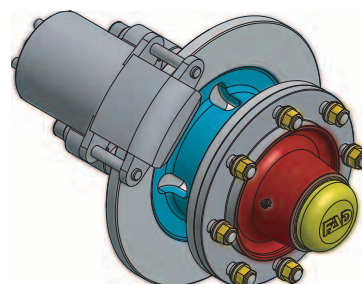
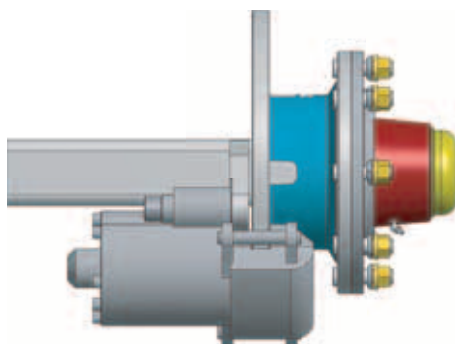
DISC BRAKES  
SCHEIBENBREMSSEN  
FREINS A DISQUE

Il freno a disco Fad (17"-22,5") utilizza la pinza brevettata e approvata TÜV Catai Bestbrakes. Essa consiste in un sistema innovativo che consente di avere un freno di servizio e un freno di stazionamento. La pinza può operare con aria o olio o fluido frenante.

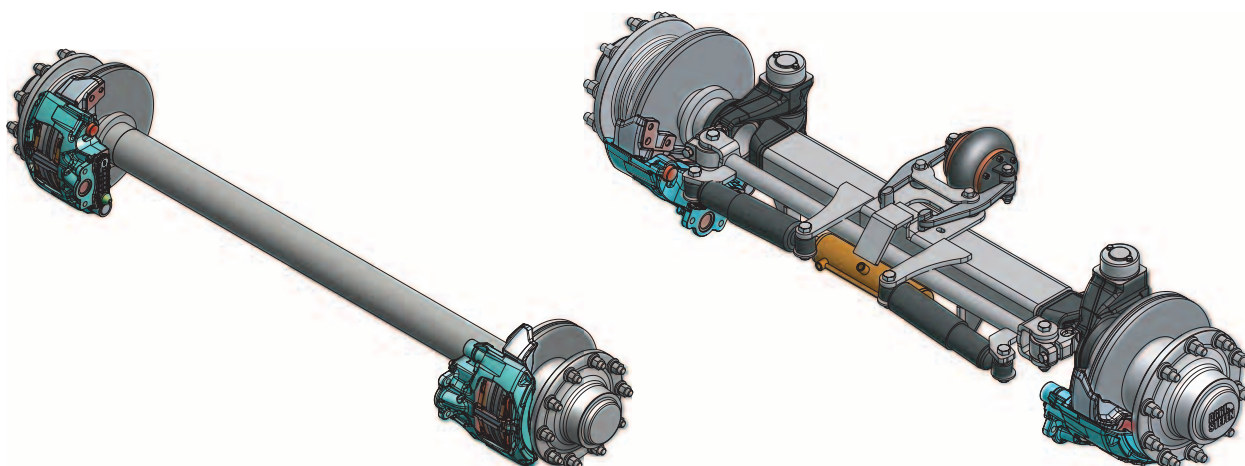
*The Fad disc brake (17"-22,5") use the patented and TÜV approved Catai Best Brakes caliper. It consist in an innovative system that allows to have a service and a parking brake. The caliper can operate with air or oil or brake fluid.*

*FAD Scheibenbremse (17"-22,5") verwendet die patentierte und TÜV-geprüft Bremssattel von Fa. Catai Bestbrakes. Es besteht in der innovativen System, das eine Betriebsbremse und Feststellbremse zur Verfügung stellt. Die Bremszange kann mit Luft oder Öl oder Bremsflüssigkeit betätigt werden.*

*Le frein à disque de Fad (17"-22,5") utilise les étriers de frein breveté et approuvé TÜV de Catai Bestbrakes. Il se compose d'un système innovant qui permet d'obtenir un frein de service et un frein de stationnement. L'étrier peut fonctionner à air ou huile ou liquide de frein.*



| QUADRO<br>Square<br>Vierkant<br>Carré | DIAMETRO CERCHIO<br>Rim Size<br>Felgendurchmesser<br>Dimension de la jante | ATTACCO<br>Pcd<br>Anschluss<br>Trous | TIPO<br>Type<br>Typ<br>Type | DIMENSIONI<br>Dimensions<br>Masse<br>Dimensions | CAPACITÀ DEL FRENO PER ASSALE<br>Brake capacity for axle<br>Bremsfähigkeit pro Achse<br>Capacité du frein pour essieu | RUOTA<br>Wheel<br>Rad<br>Roue | OMOLOGAZIONE<br>Approval<br>Zulassung<br>Homologation |
|---------------------------------------|----------------------------------------------------------------------------|--------------------------------------|-----------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------|
|                                       |                                                                            |                                      |                             |                                                 | Kg                                                                                                                    | R max<br>(mm)                 |                                                       |
| 80                                    | 17"                                                                        | 6 FORI M18                           | RA5                         | 325X23                                          | 5408                                                                                                                  | 461                           | 361-031-16                                            |
| 90                                    | 22,5"                                                                      | 8 FORI M20                           | RA6                         | 430X23                                          | 6100                                                                                                                  | 495                           | TDB 879                                               |
| 140X14                                | 22,5"                                                                      | 10 FORI M22                          | SN7                         | 430X23                                          | 9000                                                                                                                  | —                             | —                                                     |









**FAD ASSALI**  
Quality Made in Italy

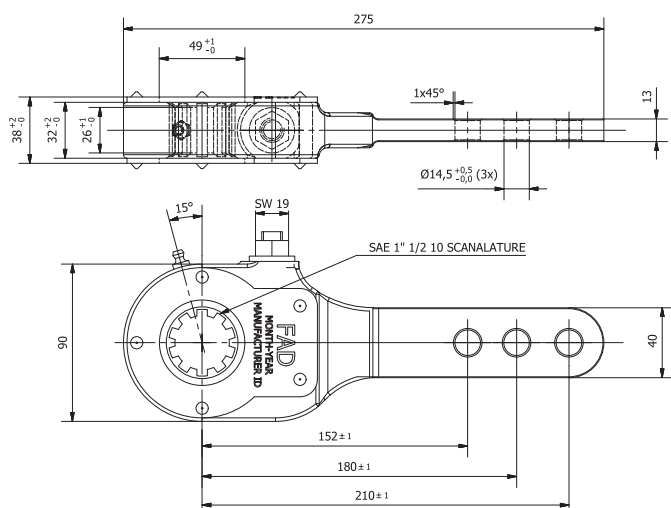
ACCESSORI  
ACCESSORIES  
ZUBEHÖR  
ACCESSOIRES

## Leve freno

BRAKE LEVERS  
BREMSHEBEL  
LEVIERS DE FREIN

| LETTERA FRENO<br><i>Brake ID Letter<br/>Bremse<br/>Identifikationsnummer<br/>Lettre d'identification<br/>frein</i> | TIPO<br><i>Type<br/>Typ<br/>Type</i> | DIMENSIONI<br><i>Dimensions<br/>Masse<br/>Dimensions</i> | COPPIA<br>CAMMA MAX<br><i>max. torque<br/>max<br/>Drehmoment<br/>couple maximal</i> | RUOTA MIN.<br><i>Smallest<br/>wheel<br/>Mind. Felgen<br/>Roue<br/>minimum</i> | Ø EST.<br>TAMBURO<br><i>Out. drum<br/>Auss.<br/>Trommel Ext.<br/>tambour</i> | LEVA FRENO COMPATIBILE<br><i>Compatible brake lever<br/>Kompatible Bremshebel<br/>Levier de frein compatible</i> |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Freno                                                                                                              |                                      |                                                          | [Nm]                                                                                | [pollici]                                                                     | [mm]                                                                         | [mm]                                                                                                             |
| X                                                                                                                  | -                                    | 250X60                                                   | 600                                                                                 | 13                                                                            | 280                                                                          | 100 – 150 – 180 – 210                                                                                            |
| W                                                                                                                  | 3060A                                | 300AX60                                                  | 655                                                                                 | 15                                                                            | 338                                                                          | 100 – 150 – 180 – 210                                                                                            |
| W                                                                                                                  | 3060B                                | 300AX60                                                  | 655                                                                                 | 15                                                                            | 338                                                                          | 110 – 120 – 150 – 180 – 210<br>152 – 180 - 210                                                                   |
| E                                                                                                                  | 3006/2A                              | 300GX60                                                  | 655                                                                                 | 15                                                                            | 338                                                                          | 110 – 120 – 150 – 180 – 210<br>152 – 180 - 210                                                                   |
| E                                                                                                                  | 3006/2B                              | 300GX60                                                  | 655                                                                                 | 15                                                                            | 338                                                                          | 110 – 120 – 150 – 180 – 210<br>152 – 180 - 210                                                                   |
| K                                                                                                                  | 3009/3A                              | 300X90                                                   | 900                                                                                 | 15                                                                            | 338                                                                          | 110 – 120 – 150 – 180 – 210<br>152 – 180 - 210                                                                   |
| K                                                                                                                  | 3009/4A                              | 300X90                                                   | 900                                                                                 | 15                                                                            | 338                                                                          | 110 – 120 – 150 – 180 – 210<br>152 – 180 - 210                                                                   |
| K                                                                                                                  | 3009/3B                              | 300X90                                                   | 900                                                                                 | 15                                                                            | 338                                                                          | 110 – 120 – 150 – 180 – 210<br>152 – 180 - 210                                                                   |
| H                                                                                                                  | 3009/I                               | 300X90                                                   | 900                                                                                 | 15                                                                            | 338                                                                          | 110 – 120 – 150 – 180 – 210<br>152 – 180 - 210                                                                   |
| U                                                                                                                  | 3015E                                | 300X150                                                  | 1453                                                                                | 15                                                                            | 338                                                                          | 152 – 180 – 210 – 235<br>120 – 135 – 150 – 165 – 180 – 250                                                       |
| G                                                                                                                  | 3506/3A                              | 350X60                                                   | 1350                                                                                | 18                                                                            | 383                                                                          | 110 – 120 – 150 – 180 – 210<br>152 – 180 - 210                                                                   |
| G                                                                                                                  | 3506/2-3B                            | 350X60                                                   | 1350                                                                                | 18                                                                            | 383                                                                          | 110 – 120 – 150 – 180 – 210<br>152 – 180 - 210                                                                   |
| L                                                                                                                  | 4008/1A                              | 400X80                                                   | 1100                                                                                | 19.5                                                                          | 437                                                                          | 152 – 180 – 210 – 235<br>120 – 135 – 150 – 165 – 180 – 250                                                       |
| L                                                                                                                  | 4008/1B                              | 400X80                                                   | 1100                                                                                | 19.5                                                                          | 437                                                                          | 152 – 180 – 210 – 235<br>120 – 135 – 150 – 165 – 180 – 250                                                       |
| N                                                                                                                  | 4012-A/1A                            | 400X120                                                  | 2015                                                                                | 19.5                                                                          | 437                                                                          | 152 – 180 – 210 – 235<br>120 – 135 – 150 – 165 – 180 – 250                                                       |
| M                                                                                                                  | 4012/2E                              | 400X120                                                  | 2015                                                                                | 19.5                                                                          | 437                                                                          | 152 – 180 – 210 – 235<br>120 – 135 – 150 – 165 – 180 – 250                                                       |
| Z                                                                                                                  | 4116/3E                              | 412X160                                                  | 2224                                                                                | 20.5                                                                          | 466                                                                          | 152 – 180 – 210 – 235<br>120 – 135 – 150 – 165 – 180 – 250                                                       |
| FRENI CAMMA A "S" - S CAME SHAFT - S NOCKENWELLE - CAME DE FREIN A S                                               |                                      |                                                          |                                                                                     |                                                                               |                                                                              |                                                                                                                  |
| LETTERA FRENO<br><i>Brake ID Letter<br/>Bremse<br/>Identifikationsnummer<br/>Lettre d'identification<br/>frein</i> | TIPO<br><i>Type<br/>Typ<br/>Type</i> | DIMENSIONI<br><i>Dimensions<br/>Masse<br/>Dimensions</i> | COPPIA<br>CAMMA MAX<br><i>max. torque<br/>max<br/>Drehmoment<br/>couple maximal</i> | RUOTA MIN.<br><i>Smallest<br/>wheel<br/>Mind. Felgen<br/>Roue<br/>minimum</i> | Ø EST.<br>TAMBURO<br><i>Out. drum<br/>Auss.<br/>Trommel Ext.<br/>tambour</i> | LEVA FRENO COMPATIBILE<br><i>Compatible brake lever<br/>Kompatible Bremshebel<br/>Levier de frein compatible</i> |
| Freno                                                                                                              |                                      |                                                          | [Nm]                                                                                | [pollici]                                                                     | [mm]                                                                         | [mm]                                                                                                             |
| DD                                                                                                                 | AS135                                | 300X135                                                  | 1269                                                                                | 15                                                                            | 341                                                                          | 152 – 180 – 210<br>120 – 135 – 150 – 165 – 180 – 250                                                             |
| AA                                                                                                                 | DB3119                               | 310X190                                                  | 1271                                                                                | 15                                                                            | 360                                                                          | 152 – 180 – 210 – 250<br>120 – 135 – 150 – 165 – 180 – 250                                                       |
| KK                                                                                                                 | 4012S                                | 406X120                                                  | 1696                                                                                | 19.5                                                                          | 460                                                                          | 152 – 180 – 210<br>120 – 135 – 150 – 165 – 180 – 250                                                             |
| QQ                                                                                                                 | 420x180A                             | 420X180                                                  | 1928                                                                                | 20.5                                                                          | 472                                                                          | 152 – 180 – 210<br>120 – 135 – 150 – 165 – 180 – 250                                                             |
| V                                                                                                                  | 5020                                 | 500X200                                                  | 1663                                                                                | 26                                                                            | 564                                                                          | 152 – 180 – 210<br>120 – 135 – 150 – 165 – 180 – 250                                                             |

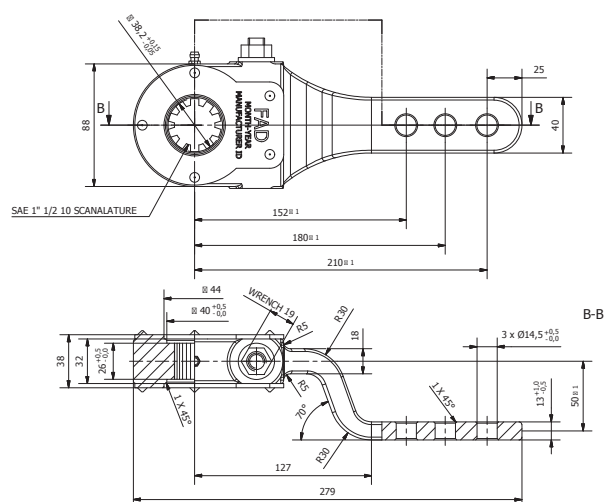
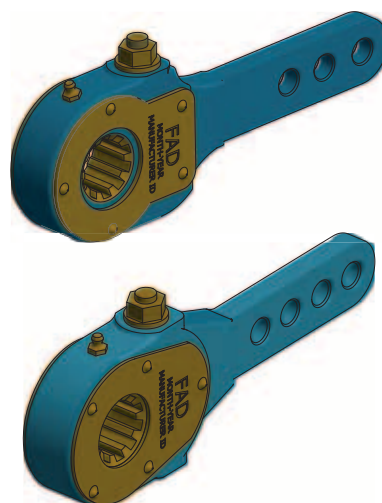
**F** = LEVE FISSE - Fixed lever - Bremshebel - Levier fixe      **R** = LEVA REGISTRABILE - Adjust. Lever - Gestängesteller - Levier réglable  
**A** = LEVA AUTOREGISTRABILE Self-adjust. Lever - Automatische Gestängesteller - Levier autoréglable



Disponibile anche in 4 fori  
*Also available in 4 holes*

Auch mit 4 Loch verfügbar  
Disponible également en 4 trous

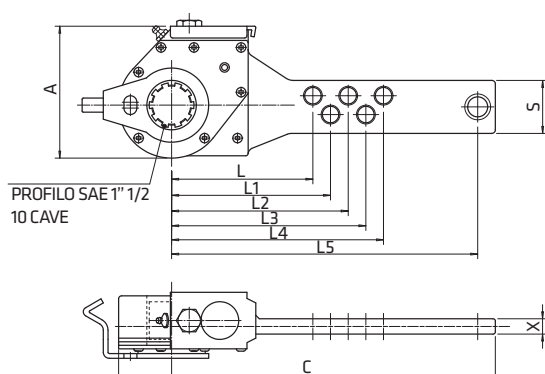
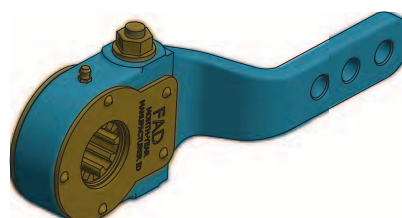
**R** = Leva registrabile  
Adjustable lever  
Gestängesteller  
Levier réglable



Disponibile anche in 4 fori  
*Also available in 4 holes*

Auch mit 4 Loch verfügbar  
Disponible également en 4 trous

**A** = Leva registrabile  
Adjustable lever  
Gestängesteller  
Levier réglable



**R** = Leva autoregistrabile  
Self-adjustable lever  
Automatische Gestängesteller  
Levier Autoréglable

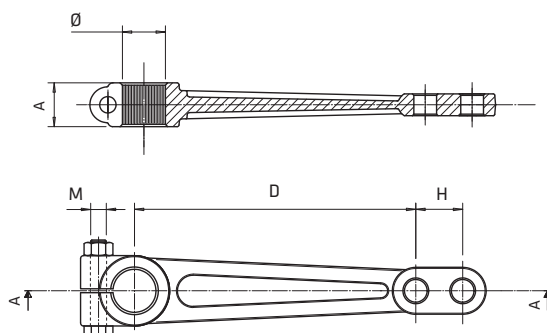




|                                                                                                     |     | 140Ax30 | 200Ax40 | 250Ax40 |     | 250x40 | 300Ax60 |     | 300x60            | 300x90            | 350x60            | 300x135           | 400x80            | 400x120           | 420x180                                                             |                                                                     |
|-----------------------------------------------------------------------------------------------------|-----|---------|---------|---------|-----|--------|---------|-----|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------------------------------------------------------|---------------------------------------------------------------------|
| LEVE FISSE<br>Fixed lever<br>Bremshebel<br>Lever fixe                                               | D   | 140     | 110     | 110     | 150 | 150    | 150     | 210 | 150               | 210               | 180               | 180               | 180               | 180               | LEVE REGISTR.<br>Adjust. Lever<br>Gestängesteller<br>Lever réglable | LEVE REGISTR.<br>Adjust. Lever<br>Gestängesteller<br>Lever réglable |
| LEVE FISSE<br>Fixed lever<br>Bremshebel<br>Lever fixe                                               | H   |         | 30      | 30      | 30  | 30     | 30      | 30  | 30                | 30                | 30                | 30                | 30                | 30                | LEVE REGISTR.<br>Adjust. Lever<br>Gestängesteller<br>Lever réglable | LEVE REGISTR.<br>Adjust. Lever<br>Gestängesteller<br>Lever réglable |
| LEVE REGISTR.<br>Adjust. Lever<br>Gestängesteller<br>Lever réglable                                 |     |         |         |         |     |        |         |     | Dis. Draw. Zeich. | Dis. Draw. Zeich. | Dis. Draw. Zeich. | Dis. Draw. Zeich. | Dis. Draw. Zeich. | Dis. Draw. Zeich. | Dis. Draw. Zeich.                                                   | Dis. Draw. Zeich.                                                   |
|                                                                                                     | L   | L1      | L2      | L3      | L4  | L5     | S       | C   | X                 |                   |                   |                   |                   |                   |                                                                     |                                                                     |
| LEVE<br>AUTOREGISTR.<br>Self-adjust. Lever<br>Automatische<br>Gestängesteller<br>Lever autoréglable | 120 | 135     | 150     | 165     | 180 | 250    | 45      | 320 | 13                |                   |                   |                   |                   |                   |                                                                     |                                                                     |

## Leve freno

BRAKE LEVERS  
BREMSHEBEL  
LEVIERS FREIN

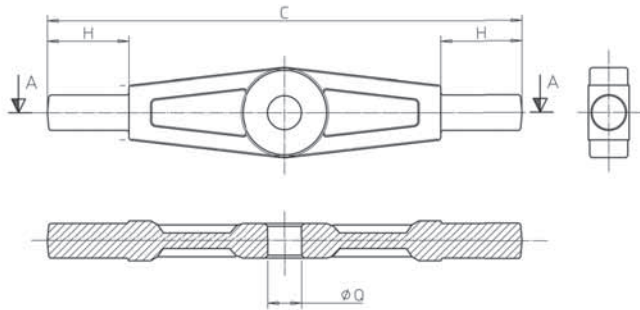


Leva standard  
Standard lever  
Lever standard  
Standard Hebel

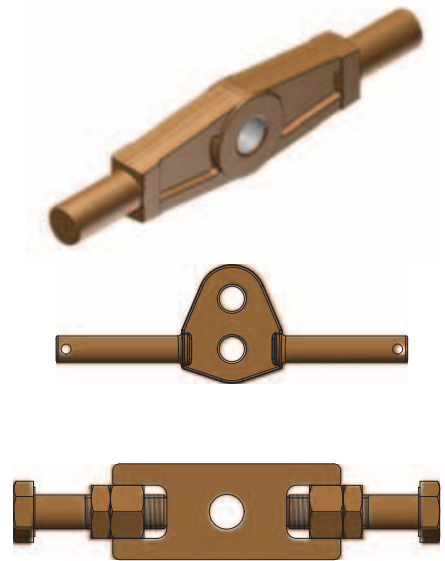


## Bilancini

COMPENSATORS  
BREMSAUSGLEICHE  
PALONNIERS

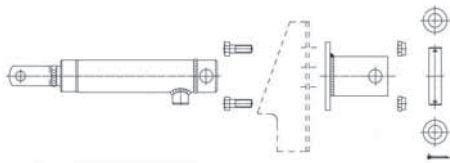
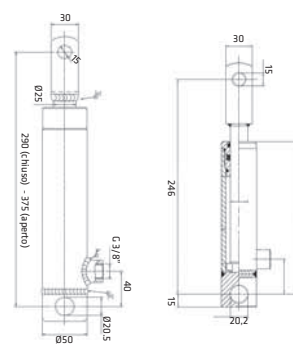
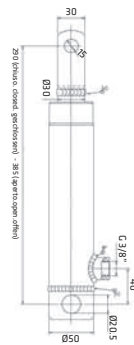


**C** = 115    **H** = 30 - 33    **Foro** = 12,5-14,5



## Cilindri idraulici

HYDRAULIC CYLINDERS  
HYDRAULIKZYLINDER  
VÉRINS HYDRAULIQUES

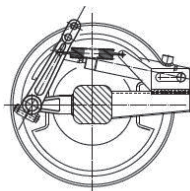
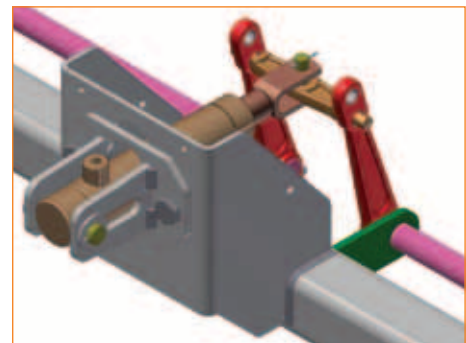


Adattatore per supporto  
brake chamber FAD

Adaptor for FAD  
brake chamber support

Adapter für FAD  
brake chamber Halterung

Adaptateur pour support  
brake chamber FAD

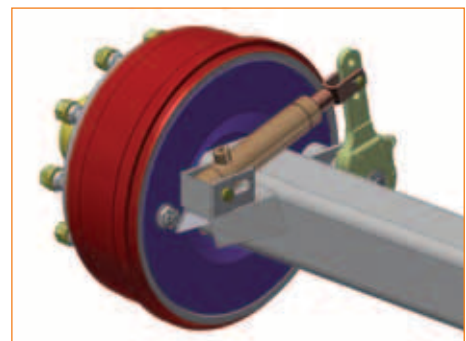


Esempio fissaggio  
cilindro idraulico

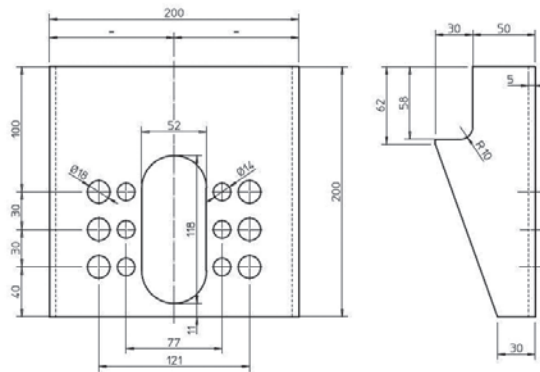
Example of hydraulic  
cylinder fixed on the axle

Befestigungsbeispiel  
Hydraulikzylinder

Exemple de fixation  
vérin hydraulique

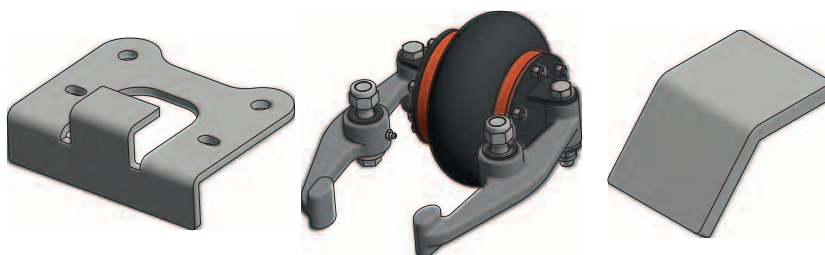


BRAKE CHAMBER SUPPORT  
MEMBRAN ZYLINDER HALTERUNG  
SUPPORTS VÉRINS PNEUMATIQUES

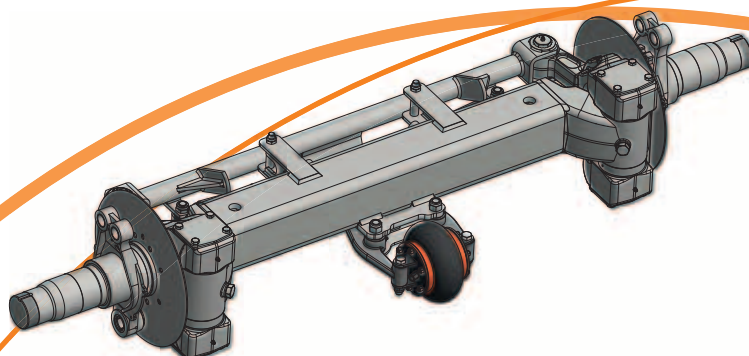


Plaque pour vérin hydraulique à membrane<sup>a</sup>  
Pour plus d'informations notre bureau technique  
est à votre disposition.

STEERING AIR BELLOW  
LUFTBALG  
CORRECTEUR DE DIRECTION



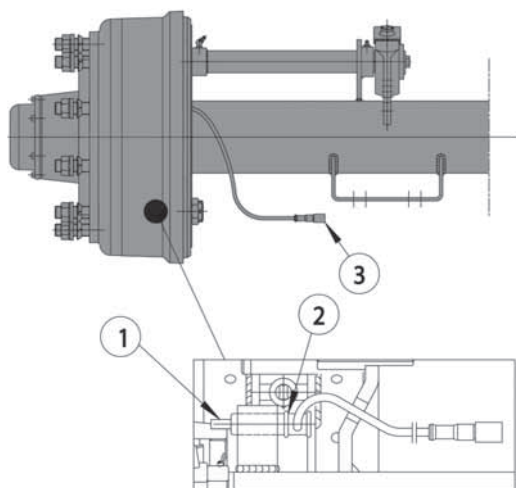
*Kit correcteur de direction standard  
avec fixations pour corps axial*





## Predisposizione per sistema ABS

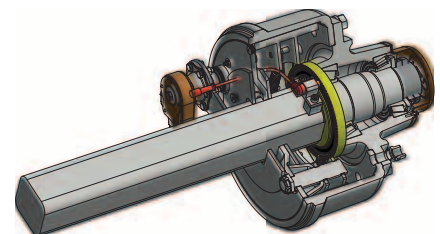
ABS SYSTEM CONFIGURATION  
VORBEREITUNG FÜR ABS SYSTEM  
PREDISPOSITION POUR SYSTEME ABS



①  
Sensore  
Sensor  
Sensor  
Capteur

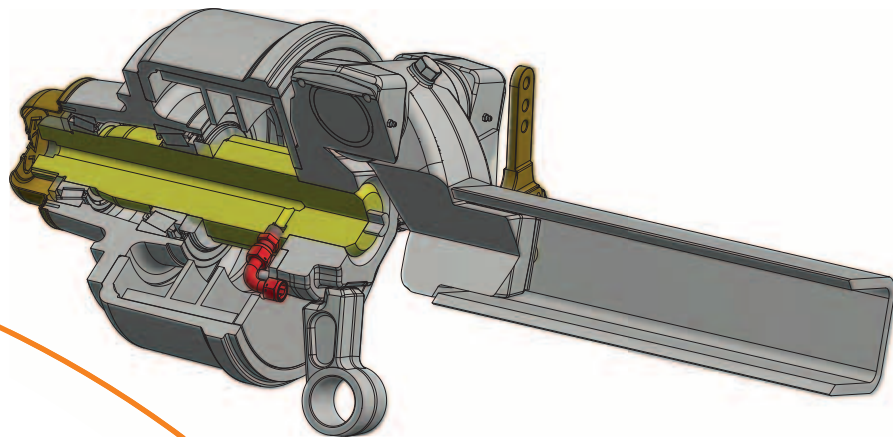
②  
Ruota fonica  
Toothed wheel  
Polrad

③  
Spina di  
collegamento  
centralina  
Connector  
Verbinder  
Connecteur



## Predisposizione per sistema RDS: gonfiaggio e sgonfiaggio pneumatico

RDS SYSTEM CONFIGURATION: TIRE INFLATING AND DEFLATING  
VORBEREITUNG FÜR RDS SYSTEM: REIFENDRUCKLUFT ANLAGE  
PREDISPOSITION POUR SYSTEME RDS: INFLATION ET DEFLATION DU PNEU









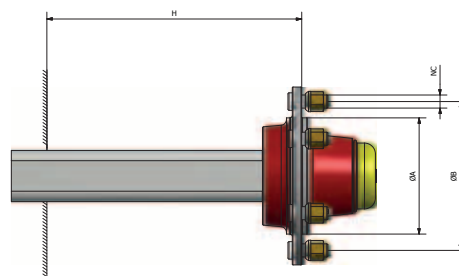
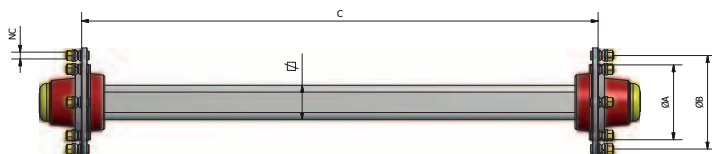
**FAD ASSALI**  
Quality Made in Italy

**ASSALI FISSI**  
*FIXED AXLES*  
*STARRE ACHSEN*  
*ESSIEUX FIXES*



## Portate assali e semiassi fissi

CARRYING CAPACITIES FOR FIXED AXLES AND STUBAXLES  
 TRAGLASTEN FÜR STARRE-UND HALBACHSEN  
 CAPACITE DE CHARGES POUR ESSIEUX ET DEMI-ESSIEUX FIXES



| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TUBOLARE O QUADRO<br>Tub. or Square<br>Rohr oder Vierkant<br>Tub. ou carré (mm) | TIPO<br>Type<br>Typ |  |         |         |         |  |         |         |         |  |         |         |         | SBALZO<br>Overhang "H"<br>Auskrägung<br>Bosselage |
|--------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------------------------------|---------|---------|---------|-----------------------------------------------------------------------------------|---------|---------|---------|-------------------------------------------------------------------------------------|---------|---------|---------|---------------------------------------------------|
|                                                                          |                                                                                 |                     | 25 Km/H                                                                           | 40 Km/H | 60 Km/H | 80 Km/H | 25 Km/H                                                                           | 40 Km/H | 60 Km/H | 80 Km/H | 25 Km/H                                                                             | 40 Km/H | 60 Km/H | 80 Km/H | mm                                                |
| <b>E<br/>F</b>                                                           | 30                                                                              | 301                 | 800                                                                               | 700     | 600     | 550     | 1000                                                                              | 850     | 750     | 700     | 700                                                                                 | 600     | 550     | 500     | 135                                               |
|                                                                          | 35                                                                              | 351                 | 800                                                                               | 700     | 600     | 550     | 1000                                                                              | 850     | 750     | 700     | 700                                                                                 | 600     | 550     | 500     | 205                                               |
|                                                                          | 40                                                                              | 401                 | 1500                                                                              | 1300    | 1150    | 1100    | 1700                                                                              | 1500    | 1300    | 1200    | 1300                                                                                | 1050    | 950     | 850     | 205                                               |
|                                                                          | 40                                                                              | 403                 | 900                                                                               | 750     | 650     | 600     | 1100                                                                              | 900     | 800     | 750     | 800                                                                                 | 350     | 600     | 550     | 220                                               |
|                                                                          | 45                                                                              | 451                 | 2200                                                                              | 1900    | 1700    | 1600    | 2500                                                                              | 2200    | 1950    | 1800    | 1700                                                                                | 1500    | 1080    | 1200    | 205                                               |
|                                                                          | 45                                                                              | 452                 | 1800                                                                              | 1600    | 1400    | 1300    | 2000                                                                              | 1800    | 1550    | 1400    | 1500                                                                                | 1200    | 1050    | 1000    | 250                                               |
|                                                                          | 45                                                                              | 453                 | 1500                                                                              | 1300    |         |         | 1700                                                                              | 1500    |         |         | 1300                                                                                | 1050    |         |         | 270                                               |
|                                                                          | 50                                                                              | 501                 | 2700                                                                              | 2200    | 1900    | 1800    | 3200                                                                              | 2700    | 2400    | 2200    | 2400                                                                                | 2000    | 1600    | 1400    | 250                                               |
|                                                                          | 50                                                                              | 502                 | 2400                                                                              | 2000    | 1800    | 1700    | 2700                                                                              | 2400    | 2100    | 1900    | 1800                                                                                | 1600    | 1400    | 1300    | 260                                               |
|                                                                          | 55                                                                              | 551                 | 3600                                                                              | 3200    | 2900    | 2700    | 4000                                                                              | 3500    | 3100    | 2900    | 3400                                                                                | 2800    | 2400    | 2200    | 250                                               |
|                                                                          | 55                                                                              | 552                 | 3100                                                                              | 3500    | 2100    | 2000    | 3400                                                                              | 2800    | 2500    | 2300    | 2600                                                                                | 2200    | 1700    | 1500    | 240                                               |
|                                                                          | 60                                                                              | 601                 | 4400                                                                              | 3800    | 3500    | 3300    | 5000                                                                              | 4400    | 4000    | 3800    | 4000                                                                                | 3400    | 3000    | 2800    | 250                                               |
|                                                                          | 60                                                                              | 602                 | 3800                                                                              | 3400    | 3100    | 2900    | 4400                                                                              | 3800    | 3500    | 3300    | 3600                                                                                | 3000    | 2600    | 2400    | 280                                               |
|                                                                          | 60                                                                              | 603                 | 3200                                                                              | 2600    |         |         | 3600                                                                              | 3000    |         |         | 2800                                                                                | 2400    |         |         | 300                                               |
|                                                                          | 65                                                                              | 651                 | 5300                                                                              | 4700    | 4300    | 4000    | 6000                                                                              | 5300    | 4800    | 4500    | 5000                                                                                | 4000    | 3600    | 3400    | 250                                               |
|                                                                          | 65                                                                              | 652                 | 4600                                                                              | 4000    | 3700    | 3500    | 5200                                                                              | 4600    | 4200    | 4000    | 4200                                                                                | 3600    | 3100    | 2900    | 280                                               |
|                                                                          | 70                                                                              | 701                 | 6800                                                                              | 6000    | 5500    | 5200    | 7500                                                                              | 6600    | 6100    | 5800    | 6000                                                                                | 5000    | 4400    | 4100    | 250                                               |
|                                                                          | 70                                                                              | 704                 | 4600                                                                              | 4000    | 3700    | 3500    | 5200                                                                              | 4600    | 4200    | 4000    | 4200                                                                                | 3600    | 3100    | 2900    | 320                                               |
|                                                                          | 80                                                                              | 801                 | 8500                                                                              | 7200    | 6600    | 6200    | 9000                                                                              | 8000    | 7400    | 7000    | 7500                                                                                | 6200    | 5700    | 5400    | 310                                               |
|                                                                          | 80                                                                              | 802                 | 7200                                                                              | 6300    | 5800    | 5500    | 8000                                                                              | 7000    | 6500    | 6200    | 6500                                                                                | 5500    | 4800    | 4500    | 350                                               |
| <b>E<br/>F*</b>                                                          | 80                                                                              | 806                 | 9000                                                                              | 8000    |         |         | 10000                                                                             | 9000    |         |         | 8000                                                                                | 6500    |         |         | 250                                               |
|                                                                          | 80                                                                              | 807                 | 6000                                                                              | 5300    |         |         | 6800                                                                              | 6000    |         |         | 5500                                                                                | 4500    |         |         | 350                                               |
|                                                                          | 90                                                                              | 901                 | 10000                                                                             | 9000    | 8000    | 7500    | 11000                                                                             | 10000   | 9000    | 8500    | 9500                                                                                | 8000    | 7000    | 6500    | 350                                               |
|                                                                          | 90                                                                              | 902                 | 9000                                                                              | 8000    | 7400    | 7000    | 10000                                                                             | 9000    | 8000    | 7500    | 8500                                                                                | 7000    | 6200    | 5800    | 390                                               |
|                                                                          | 90                                                                              | 906                 | 11000                                                                             | 10000   | 8500    | 8000    | 12000                                                                             | 11000   | 9500    | 9000    | 10500                                                                               | 9000    | 7500    | 7000    | 300                                               |
|                                                                          | 100                                                                             | 103                 | 12000                                                                             | 11000   | 9700    | 9000    | 13000                                                                             | 12000   | 10700   | 10000   | 12000                                                                               | 10000   | 8400    | 7500    | 365                                               |
|                                                                          | 100                                                                             | 104                 | 13500                                                                             | 12000   | 10600   | 9600    | 13800                                                                             | 12800   | 10700   | 10000   | 13000                                                                               | 11000   | 9500    | 8000    | 365                                               |
|                                                                          | 110                                                                             | 114                 | 15000                                                                             | 13000   | 11000   | 10000   | 15000                                                                             | 14000   | 12000   | 11000   | 14000                                                                               | 12000   | 10000   | 9000    | 480                                               |
|                                                                          | 110                                                                             | 116                 | 15000                                                                             | 13000   | 11000   | 10000   | 15000                                                                             | 14000   | 12000   | 11000   | 14000                                                                               | 12000   | 10000   | 9000    | 480                                               |
|                                                                          | T120                                                                            | 12B2                |                                                                                   |         | 9700    | 9000    |                                                                                   |         | 10700   | 10000   |                                                                                     |         | 8400    | 7500    | 410                                               |
| <b>T<br/>F*</b>                                                          | T120                                                                            | 12B3                | 12000                                                                             | 11000   |         |         | 13000                                                                             | 12000   |         |         | 12000                                                                               | 10000   |         |         | 410                                               |
|                                                                          | T120                                                                            | 12B4                | 14000                                                                             | 12000   |         |         | 14000                                                                             | 13000   |         |         | 13000                                                                               | 11000   |         |         | 390                                               |
|                                                                          | T130                                                                            | 13C3                | 15000                                                                             | 13000   | 11000   | 10000   | 15000                                                                             | 14000   | 12000   | 11000   | 14000                                                                               | 12000   | 10000   | 9000    | 480                                               |
|                                                                          | T130                                                                            | 13C6                | 15000                                                                             | 13000   | 11000   | 10000   | 15000                                                                             | 14000   | 12000   | 11000   | 14000                                                                               | 12000   | 10000   | 9000    | 480                                               |
|                                                                          | T140                                                                            | 14C1                | 17600                                                                             | 15000   |         |         | 18000                                                                             | 15500   |         |         | 16700                                                                               | 14600   |         |         | 500                                               |
|                                                                          | T150                                                                            | 15C1                | 17600                                                                             | 15000   |         |         | 18000                                                                             | 15500   |         |         | 16700                                                                               | 14600   |         |         | 540                                               |
|                                                                          |                                                                                 |                     |                                                                                   |         | 13700   | 12500   |                                                                                   |         | 14300   | 13000   |                                                                                     |         | 13200   | 11900   | 520                                               |
|                                                                          | T127                                                                            | 27F5T               | 14000                                                                             | 12000   |         |         | 14000                                                                             | 13000   |         |         | 13000                                                                               | 11000   |         |         |                                                   |
|                                                                          | T127                                                                            | 27F6T               | 12000                                                                             | 11000   | 9500    | 8500    | 13000                                                                             | 12000   | 10500   | 9500    | 12000                                                                               | 10000   | 8200    | 7000    | 410                                               |

\* = assali fissi Agristefen - Agristefen fixed axles - Agristefen starre achsen - essieux fixes Agristefen

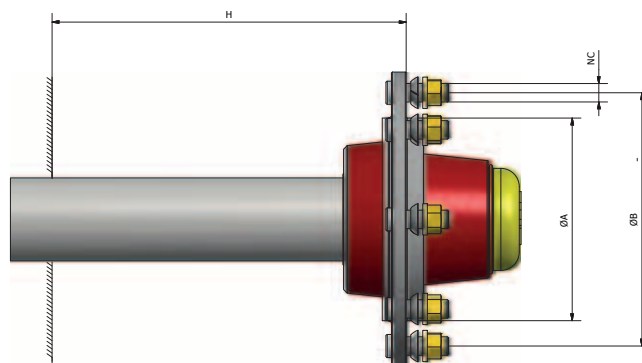
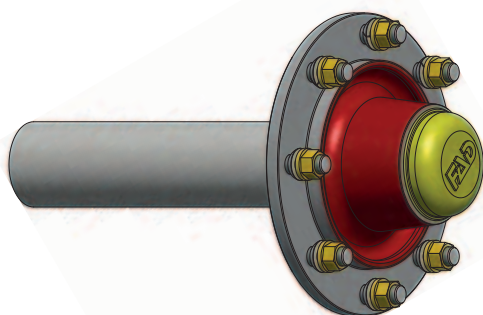
**Per semiassi a sezione quadrata le portate sono pari alla metà dell'assale dello stesso tipo**  
**For stubaxles with square section carrying capacities are to be considered the half of the axle of the same type**  
**Für Achsstummel mit Vierkant Abschnitt sind die Traglasten die Hälfte der Achse des gleichen typs**  
**Pour demi-essieux avec section carrée les capacités de charges sont la moitié de l'essieu du même typ**

## Portate semiassi tondo

CARRYING CAPACITIES FOR ROUND FIXED STUBAXLES

TRAGLASTEN FÜR RUNDE HALBACHSEN

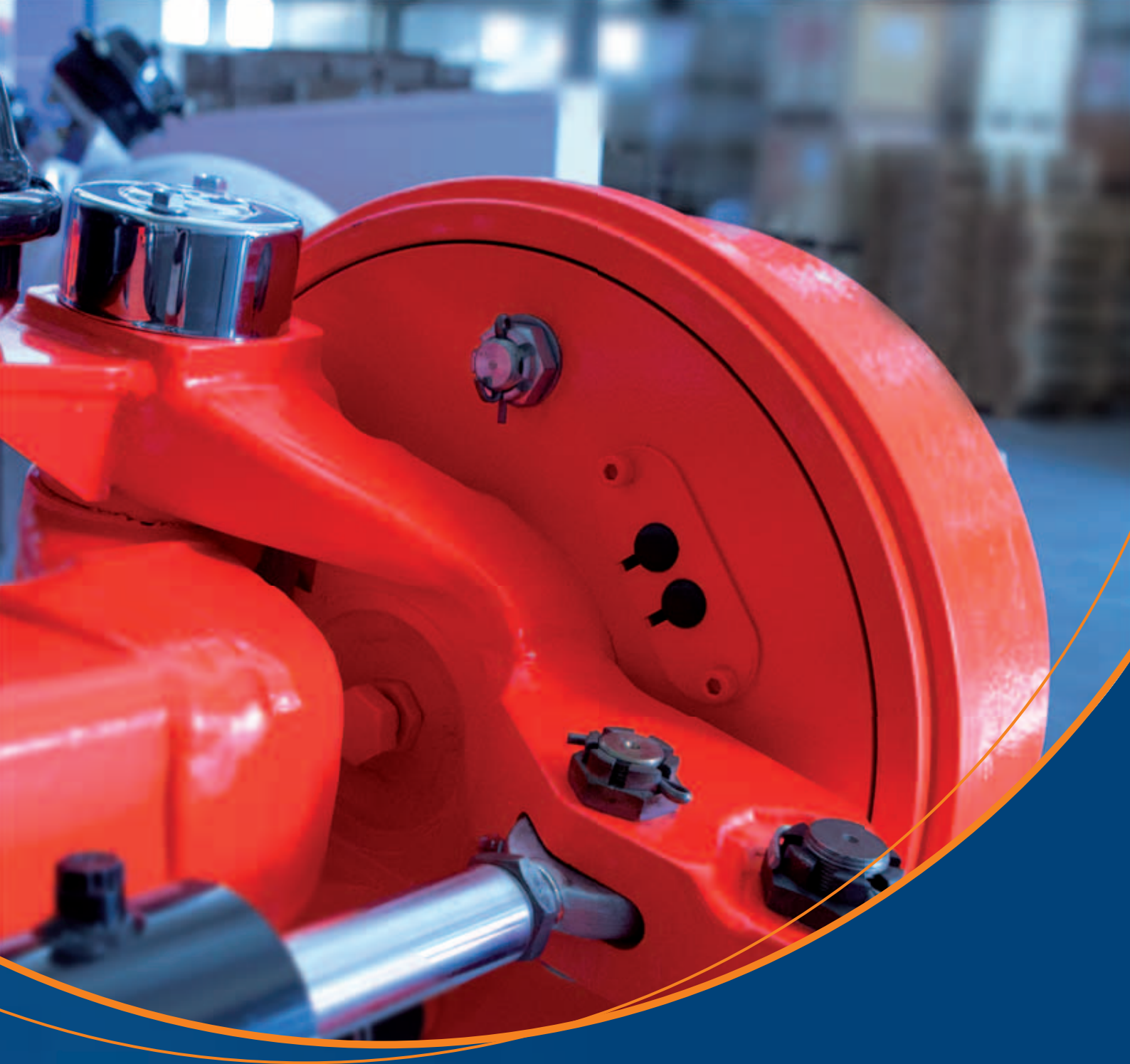
CAPACITE DE CHARGES POUR DEMI-ESSIEUX RONDS



| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TUBOLARE<br>O QUADRO<br>Tub. or Square<br>Rohr oder<br>Vierkant<br>Tub. ou carré<br>Mm | TIPO<br>Type<br>Typ<br>Type |  |         |         |         |  |         |         |         |  |         |         |         | SBALZO<br>Overhang "H"<br>Auskragung<br>Bosselage |
|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------|---------|---------|---------|-----------------------------------------------------------------------------------|---------|---------|---------|-------------------------------------------------------------------------------------|---------|---------|---------|---------------------------------------------------|
|                                                                          |                                                                                        |                             | 25 Km/h                                                                           | 40 Km/h | 60 Km/h | 80 Km/h | 25 Km/h                                                                           | 40 Km/h | 60 Km/h | 80 Km/h | 25 Km/h                                                                             | 40 Km/h | 60 Km/h | 80 Km/h | mm                                                |
| <b>A</b>                                                                 | 30                                                                                     | 301T                        | 400                                                                               | 350     | 300     | 275     | 500                                                                               | 425     | 375     | 350     | 350                                                                                 | 300     | 275     | 250     | 85                                                |
|                                                                          | 30                                                                                     | 303T                        | 275                                                                               | 250     |         |         | 350                                                                               | 300     |         |         | 250                                                                                 | 200     |         |         | 85                                                |
|                                                                          | 35                                                                                     | 351T                        | 400                                                                               | 350     | 300     | 275     | 500                                                                               | 425     | 375     | 350     | 350                                                                                 | 300     | 275     | 250     | 125                                               |
|                                                                          | 40                                                                                     | 401T                        | 750                                                                               | 650     | 575     | 550     | 850                                                                               | 750     | 650     | 600     | 650                                                                                 | 525     | 475     | 425     | 110                                               |
|                                                                          | 40                                                                                     | 402T                        | 650                                                                               | 550     | 500     | 475     | 750                                                                               | 650     | 575     | 550     | 550                                                                                 | 450     | 400     | 375     | 130                                               |
|                                                                          | 40                                                                                     | 403T                        | 450                                                                               | 375     | 325     | 300     | 550                                                                               | 450     | 400     | 375     | 400                                                                                 | 325     | 300     | 275     | 170                                               |
|                                                                          | 40                                                                                     | 404T                        | 900                                                                               | 800     |         |         | 1000                                                                              | 900     |         |         | 750                                                                                 | 600     |         |         | 90                                                |
|                                                                          | 45                                                                                     | 452T                        | 900                                                                               | 800     | 700     | 650     | 1000                                                                              | 900     | 775     | 700     | 750                                                                                 | 600     | 525     | 500     | 135                                               |
|                                                                          | 50                                                                                     | 501T                        | 1350                                                                              | 1100    |         |         | 1600                                                                              | 1350    |         |         | 1200                                                                                | 1000    |         |         | 160                                               |
|                                                                          | 50                                                                                     | 502T                        | 1200                                                                              | 1000    | 900     | 850     | 1350                                                                              | 1200    | 1050    | 950     | 900                                                                                 | 800     | 700     | 650     | 135                                               |
|                                                                          | 55                                                                                     | 552T                        | 1550                                                                              | 1250    | 1050    | 1000    | 1700                                                                              | 1400    | 1250    | 1150    | 1300                                                                                | 1100    | 850     | 750     | 145                                               |
|                                                                          | 60                                                                                     | 601T                        | 1900                                                                              | 1700    |         |         | 2200                                                                              | 1900    |         |         | 1800                                                                                | 1500    |         |         | 160                                               |
|                                                                          | 60                                                                                     | 602T                        | 1900                                                                              | 1700    | 1550    | 1450    | 2200                                                                              | 1900    | 1750    | 1650    | 1800                                                                                | 1500    | 1300    | 1200    | 145                                               |
|                                                                          | 60                                                                                     | 603T                        | 1550                                                                              | 1250    |         |         | 1700                                                                              | 1400    |         |         | 1300                                                                                | 1100    |         |         | 160                                               |
|                                                                          | 65                                                                                     | 652T                        | 2300                                                                              | 2000    | 1850    | 1750    | 2600                                                                              | 2300    | 2100    | 2000    | 2100                                                                                | 1800    | 1550    | 1450    | 160                                               |
|                                                                          | 70                                                                                     | 703T                        | 2750                                                                              | 2400    | 2200    | 2050    | 3100                                                                              | 2700    | 2450    | 2300    | 2500                                                                                | 2050    | 1850    | 1750    | 170                                               |
|                                                                          | 80                                                                                     | 802T                        | 3600                                                                              | 3150    | 2900    | 2750    | 4000                                                                              | 3500    | 3250    | 3100    | 3250                                                                                | 2750    | 2400    | 2250    | 190                                               |
|                                                                          | 80                                                                                     | 803T                        | 3400                                                                              | 3000    | 2750    | 2600    | 3750                                                                              | 3300    | 3050    | 2900    | 3000                                                                                | 2500    | 2200    | 2050    | 205                                               |
|                                                                          | 80                                                                                     | 807T                        | 3000                                                                              | 2650    |         |         | 3400                                                                              | 3000    |         |         | 275                                                                                 | 2250    |         |         | 205                                               |
|                                                                          | 90                                                                                     | 901T                        | 5000                                                                              | 4500    | 4000    | 3750    | 5500                                                                              | 5000    | 4500    | 4250    | 4750                                                                                | 4000    | 3500    | 3250    | 200                                               |
|                                                                          | 90                                                                                     | 902T                        | 4500                                                                              | 4000    | 3700    | 3500    | 5000                                                                              | 4500    | 4000    | 3750    | 4250                                                                                | 3500    | 3100    | 2900    | 220                                               |
| <b>B</b>                                                                 | 100                                                                                    | 101T                        |                                                                                   |         | 4850    | 4500    |                                                                                   |         | 5350    | 5000    |                                                                                     |         | 4200    | 3750    | 230                                               |
|                                                                          | 100                                                                                    | 102T                        |                                                                                   |         | 4350    | 4000    |                                                                                   |         | 4850    | 4500    |                                                                                     |         | 3750    | 3500    | 250                                               |
|                                                                          | 100                                                                                    | 103T                        | 6000                                                                              | 5500    | 4850    | 4500    | 6500                                                                              | 6000    | 5350    | 5000    | 6000                                                                                | 5000    | 4200    | 3750    | 230                                               |







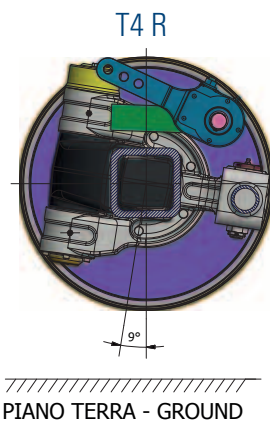
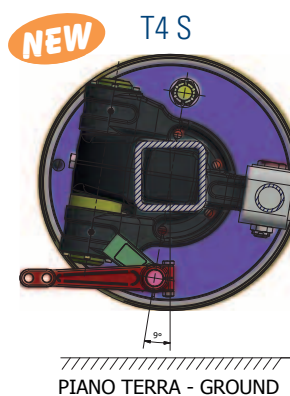
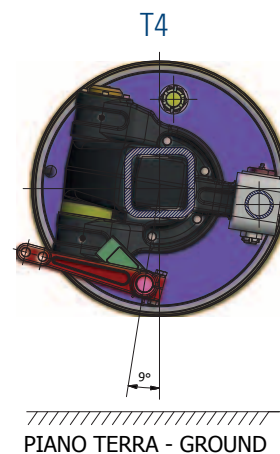
**FAD ASSALI**  
Quality Made in Italy

**ASSALI STERZANTI**  
*STEERING AXLES*  
*LENKACHSEN*  
*ESSIEUX SUIVEURS-DIRECTEURS*

## Assali autosterzanti e comandati self-forced

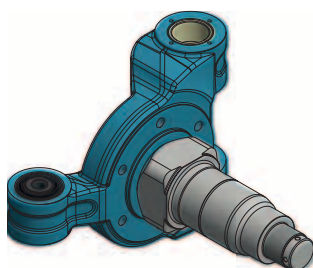
STEERING AXLES  
NACHLAUF UND ZWANGSLENKACHSEN  
ESSIEUX SUIVEURS ET DIRECTEURS

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO CERNIERA<br>Hinge Type<br>Gelenktyp<br>Type de charnière |  |
|--------------------------------------------------------------------------|---------------------------------------------------------------|--|
| G                                                                        | T4                                                            |  |
| H                                                                        | T4                                                            |  |
| HA-VA<br>comandato<br>forced - zwangs                                    | T4                                                            |  |
|                                                                          | T5                                                            |  |
| HB-VB<br>9°                                                              | T4                                                            |  |
|                                                                          | T4R                                                           |  |
| UNIVERSAL<br>15°÷23°                                                     | T4R                                                           |  |
|                                                                          | T8                                                            |  |
|                                                                          | T5                                                            |  |
| A-S                                                                      | T4R                                                           |  |
|                                                                          | T8                                                            |  |
|                                                                          | T5                                                            |  |
|                                                                          | T8D                                                           |  |
| A-S-V 5                                                                  | all                                                           |  |
| H0                                                                       | 0°                                                            |  |

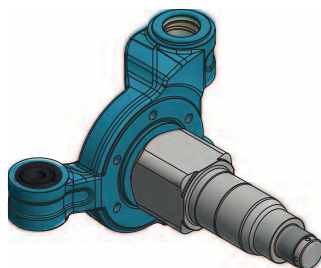


## Portate assali sterzanti

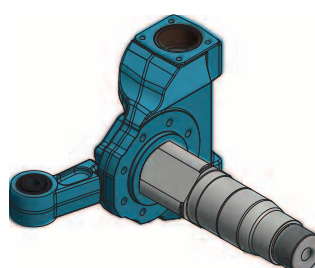
CARRYING CAPACITIES FOR STEERING AXLES  
 TRAGLASTEN FÜR LENKACHSEN  
 CAPACITE DE CHARGES POUR ESSIEUX SUIVEURS-DIRECTEURS



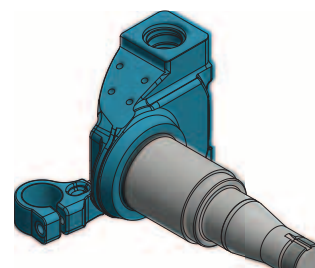
T4 / T4S



T4R



T5



T8

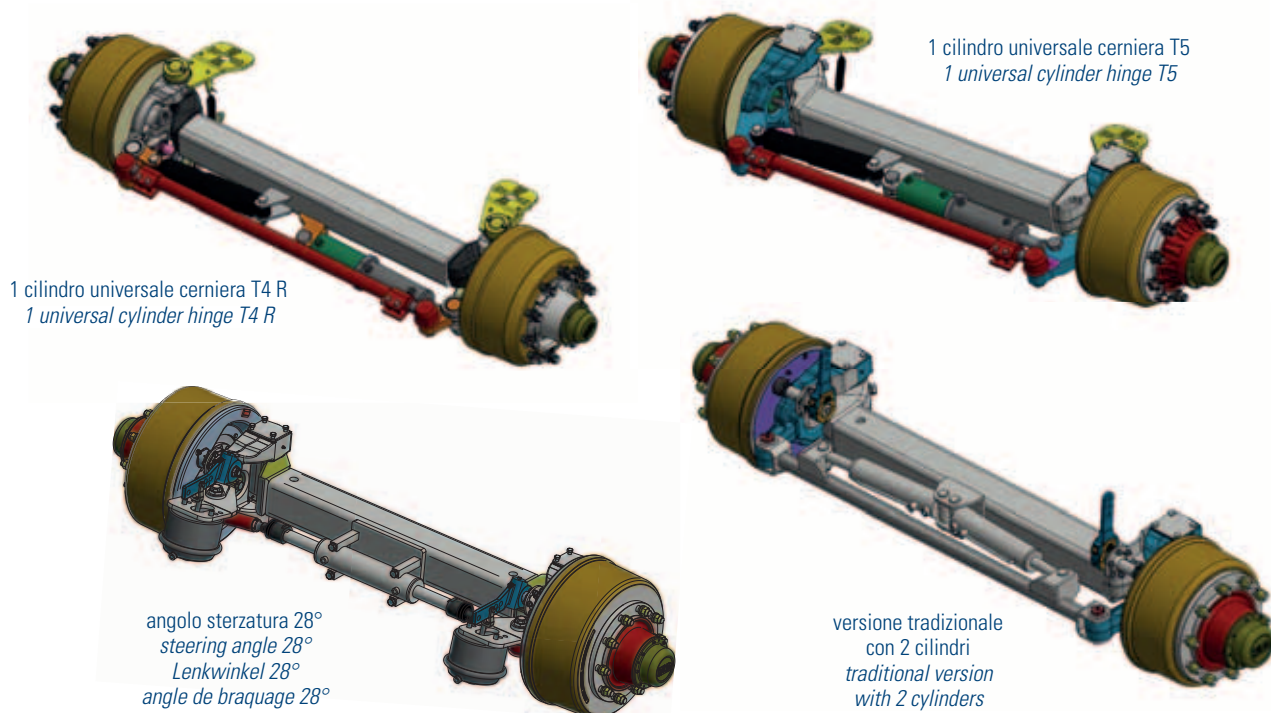
| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO CERNIERA<br>Hinge Type<br>Gelenktyp<br>Type de charnière | PORTATA MAS-<br>SIMA<br>Max load<br>Max geschw<br>Ccharge max | TUBOLARE O QUADRO<br>Tub. or Square<br>Rohr oder Vierkant<br>Tub. ou carré<br>(mm) | FRENO max 3<br>Brake<br>Bremse<br>Frein               |  |
|--------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------|--|
| G<br>H<br>V<br>A*                                                        | T4S<br>T4R                                                    | DA 7.000<br>A 10.000                                          | TUBOLARE<br>110-120-130                                                            | Rendering<br>cerniera con<br>gruppo perno<br>del fuso |  |
|                                                                          | T8                                                            | DA 10.000<br>A 13.000                                         | TUBOLARE<br>130 E 140                                                              | Rendering<br>cerniera con<br>gruppo perno<br>del fuso |  |
|                                                                          | T5                                                            | DA 13.000<br>A 15.000                                         | TUBOLARE<br>140 E 150                                                              | Rendering<br>cerniera con<br>gruppo perno<br>del fuso |  |

\* = Assali Sterzanti Serie Fastline - Fastline Steering Axles - Fastline Lenkachsen - Fastline Essieux



## Assali a sterzata comandata

FORCED STEERING AXLES  
ZWANGSLENKACHSEN  
ESSIEUX DIRECTEUR



| COMPONENTI<br>Components<br>Komponenten<br>Composants                                                                                                                 | TANDEM | TRIDEM |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|
| Cilindro di comando - Driving cylinder - Steuerzylinder - Cylindre de commande                                                                                        | 1      | 2      |
| Cilindro di comando assale (già montato) - Axle driving cylinder (already mounted)<br>Lenkzylinder (bereits montiert) - Cylindre de commande de l'essieu (déjà monté) | 1 o 2  | 2 o 4  |
| Accumulatori a membrana - Hydraulic diaphragm accumulator<br>Membran-Akkumulatoren - Accumulateurs a membrane                                                         | 2      | 4      |
| Rubinetti alta pressione - High pressure valve - Hochdruckhähne - Robinets haute pression                                                                             | 2      | 4      |

Per ulteriori informazioni il nostro ufficio tecnico è a Vostra disposizione.

For further information please contact our Technical Department. - Für weitere Informationen steht Ihnen unser technisches Büro zur Verfügung.

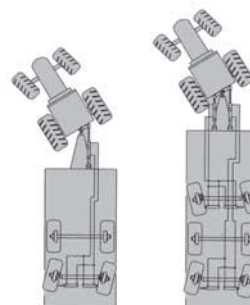
Pour de plus amples informations, notre bureau technique est à votre disposition.

Tutta la gamma di assali autosterzanti FAD ASSALI può essere anche a sterzata comandata. Questo sistema consente un notevole miglioramento della manovrabilità e un rientro veloce delle ruote dopo la sterzata. Il sistema è funzionante anche in retromarcia.

Toute la gamme des essieux auto-suiveurs FAD ASSALI peut devenir directel. Ce système permet une amélioration sensible de la manœuvrabilité et un retour rapide des roues après la direction. Le système fonctionne également en marche arrière.

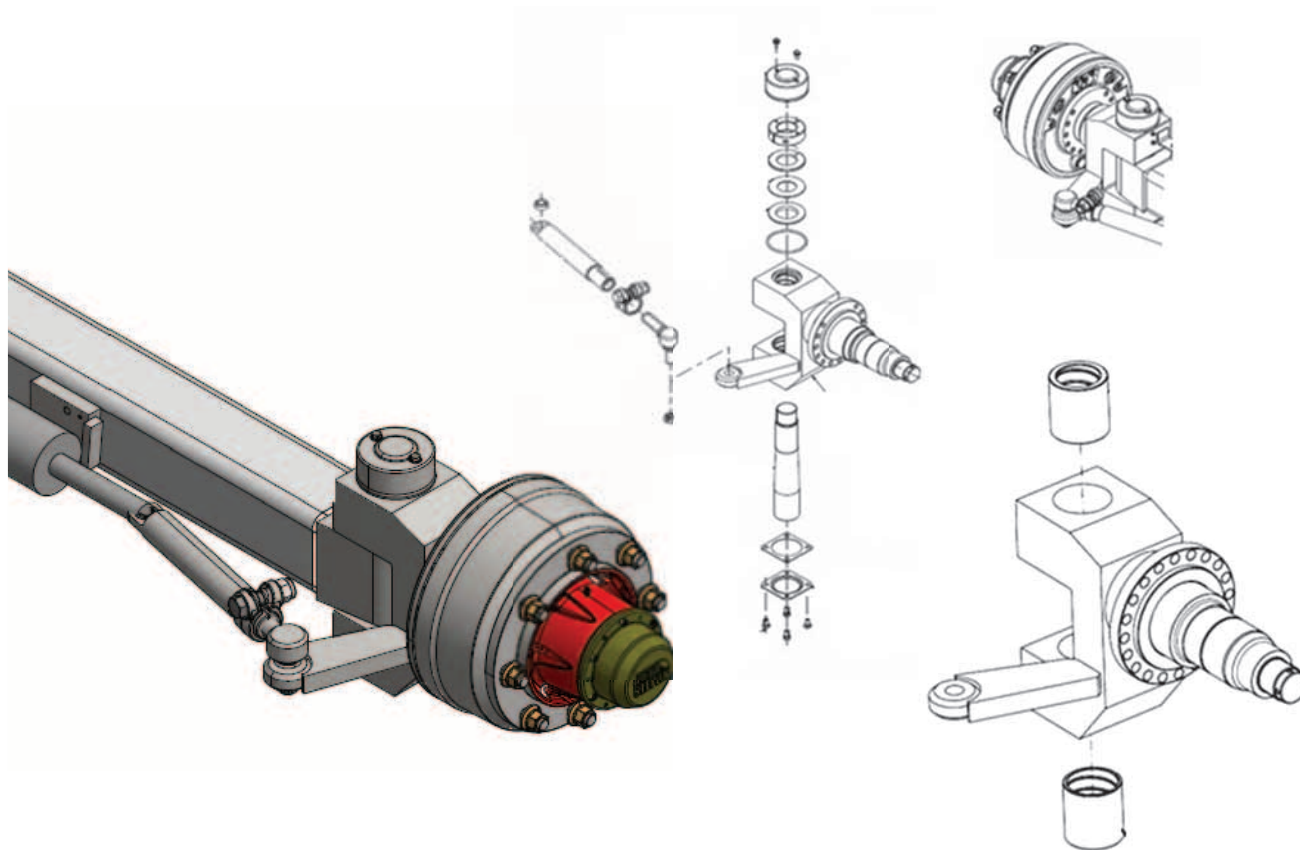
The whole range of FAD ASSALI self-steering axles can become forced hydraulic steering. This system allows a quick return of the wheels after steering and also works with autoreverse brakes.

Die gesamte Produktpalette der Lenkachsen von FAD Assali kann lenkgesteuert werden. Dieses System gestattet eine erhebliche Verbesserung der Lenkbarkeit und eine schnelle Rückstellung der Räder nach der Lenkung. Das System funktioniert auch im Rückwärtsgang.



## Portate assali sterzanti 0°

CARRYING CAPACITIES FOR STEERING AXLES 0°  
TRAGLASTEN FÜR LENKACHSEN 0°  
CAPACITÉ DE CHARGES POUR ESSIEUX SUIVEURS-DIRECTEURS 0°



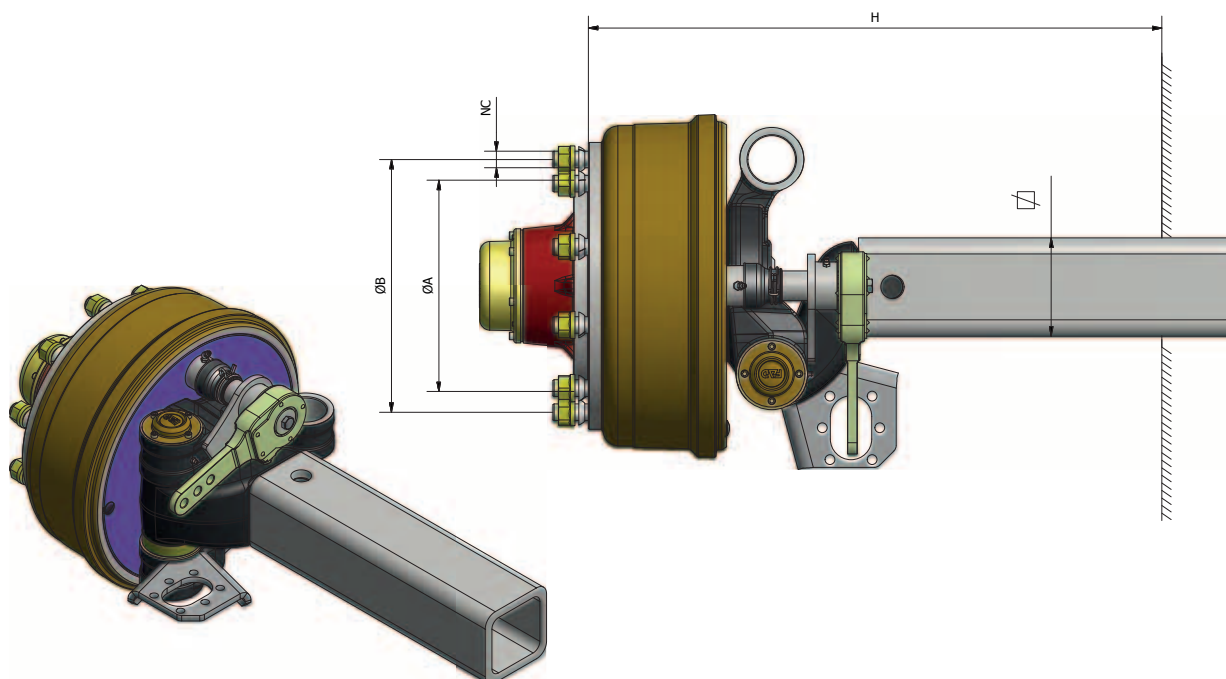
| CAPACITÀ<br>Capacity (ton)<br>Achslast<br>Capacité<br>60÷40 Km/H | CARREGGIATA<br>Track length (mm)<br>Spur<br>Voie | TUBO CORPO<br>ASSALE<br>Beam axle Rohr<br>Achskörper<br>Tube corps essieu | COLONNETTE<br>FISSAGGIO<br>Wheel studs (mm)<br>Befestigungsradschrauben<br>Goujons de fixation | DISTANZA BATTUTA<br>CENTRO LEVA<br>Distance hub face/<br>center slack adjuster<br>(mm)<br>Hebelabstand<br>Distance levier | INTERASSE<br>COLONNETTE<br>P.C.D. (mm)<br>Lochkreis<br>Entraxe goujons | DIAMETRO<br>CALETTAMENTO<br>Pilot hole<br>diameter (mm)<br>Zentralloch<br>Alesage |
|------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                                                  | A                                                | B                                                                         | C                                                                                              | D                                                                                                                         | E                                                                      | F                                                                                 |
| 8-10                                                             | 1950-2050                                        | Ø 127                                                                     | N.10 M22 x 1,5                                                                                 | 346                                                                                                                       | 335                                                                    | 281                                                                               |
| 8-10                                                             | 1950-2050                                        | T.120                                                                     | N.10 M22 x 1,5                                                                                 | 346                                                                                                                       | 335                                                                    | 281                                                                               |
| 8-10                                                             | 1950-2050                                        | T.120                                                                     | N.10 M22 x 1,5                                                                                 | 346                                                                                                                       | 335                                                                    | 281                                                                               |
| 10-13                                                            | 1950-2050                                        | T.130                                                                     | N.10 M22 x 1,5                                                                                 | 346                                                                                                                       | 335                                                                    | 281                                                                               |
| 10-13                                                            | 1950-2050                                        | T.140                                                                     | N.10 M22 x 1,5                                                                                 | 346                                                                                                                       | 335                                                                    | 281                                                                               |

| CAPACITÀ<br>Capacity (ton)<br>Achslast<br>Capacité<br>60÷40 Km/H | CARREGGIATA<br>Track length (mm)<br>Spur<br>Voie | TUBO CORPO<br>ASSALE<br>Beam axle Rohr<br>Achskörper<br>Tube corps essieu | COLONNETTE<br>FISSAGGIO<br>Wheel studs (mm)<br>Befestigungsradschrauben<br>Goujons de fixation | DISTANZA BATTUTA<br>CENTRO LEVA<br>Distance hub face/<br>center slack adjuster<br>(mm)<br>Hebelabstand<br>Distance levier | INTERASSE<br>COLONNETTE<br>P.C.D. (mm)<br>Lochkreis<br>Entraxe goujons | DIAMETRO<br>CALETTAMENTO<br>Pilot hole<br>diameter (mm)<br>Zentralloch<br>Alesage |
|------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                                                  | A                                                | B                                                                         | C                                                                                              | D                                                                                                                         | E                                                                      | F                                                                                 |
| 12-16                                                            | 1980-2100                                        | Ø 127                                                                     | N.10 M22 x 1,5                                                                                 | 410                                                                                                                       | 335                                                                    | 280                                                                               |
| 12-16                                                            | 1980-2100                                        | T.130                                                                     | N.10 M22 x 1,5                                                                                 | 410                                                                                                                       | 335                                                                    | 280                                                                               |
| 12-16                                                            | 1980-2100                                        | T.140                                                                     | N.10 M22 x 1,5                                                                                 | 410                                                                                                                       | 335                                                                    | 280                                                                               |
| 12-16                                                            | 1980-2100                                        | T.150                                                                     | N.10 M22 x 1,5                                                                                 | 410                                                                                                                       | 335                                                                    | 280                                                                               |

## Semiassi autosterzanti

SELF STEERING STUB-AXLES  
NACHLAUF HALBACHSEN  
DEMMIS ESSIEUX AUTODIRECTEURS



Cerniera - Hinge - Lenkschenkel - Charnière

t4 - t5

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TUB. O QUADRO<br>Tub. or square<br>Rohr oder Vierkant<br>Tub. ou carré |         |         | SBALZO<br>Overhang "H"<br>Auskragung<br>Bosselage |
|--------------------------------------------------------------------------|------------------------------------------------------------------------|---------|---------|---------------------------------------------------|
|                                                                          |                                                                        | 25 Km/H | 40 Km/H |                                                   |
| C/D 04 A2                                                                | T110                                                                   | 3750    | 3100    | 480                                               |
| C/D 04 A1                                                                | T120                                                                   | 4500    | 3750    | 460                                               |
| C/D 04 B3                                                                | T120                                                                   | 5250    | 4500    | 470                                               |
| C/D 04 B4                                                                | T120                                                                   | 5500    | 4750    | 440                                               |
| C/D 04-05 C3                                                             | T130                                                                   | 6000    | 5000    | 540                                               |
| C/D 04-05 C6                                                             | T130                                                                   | 6000    | 5000    | 540                                               |
| C/D 04-05 C1                                                             | T140                                                                   | 8350    | 7300    | 500                                               |
| C/D 04-05 C4                                                             | T140                                                                   | 7000    | 6000    | 550                                               |

Cerniera - Hinge - Lenkschenkel - Charnière

t8

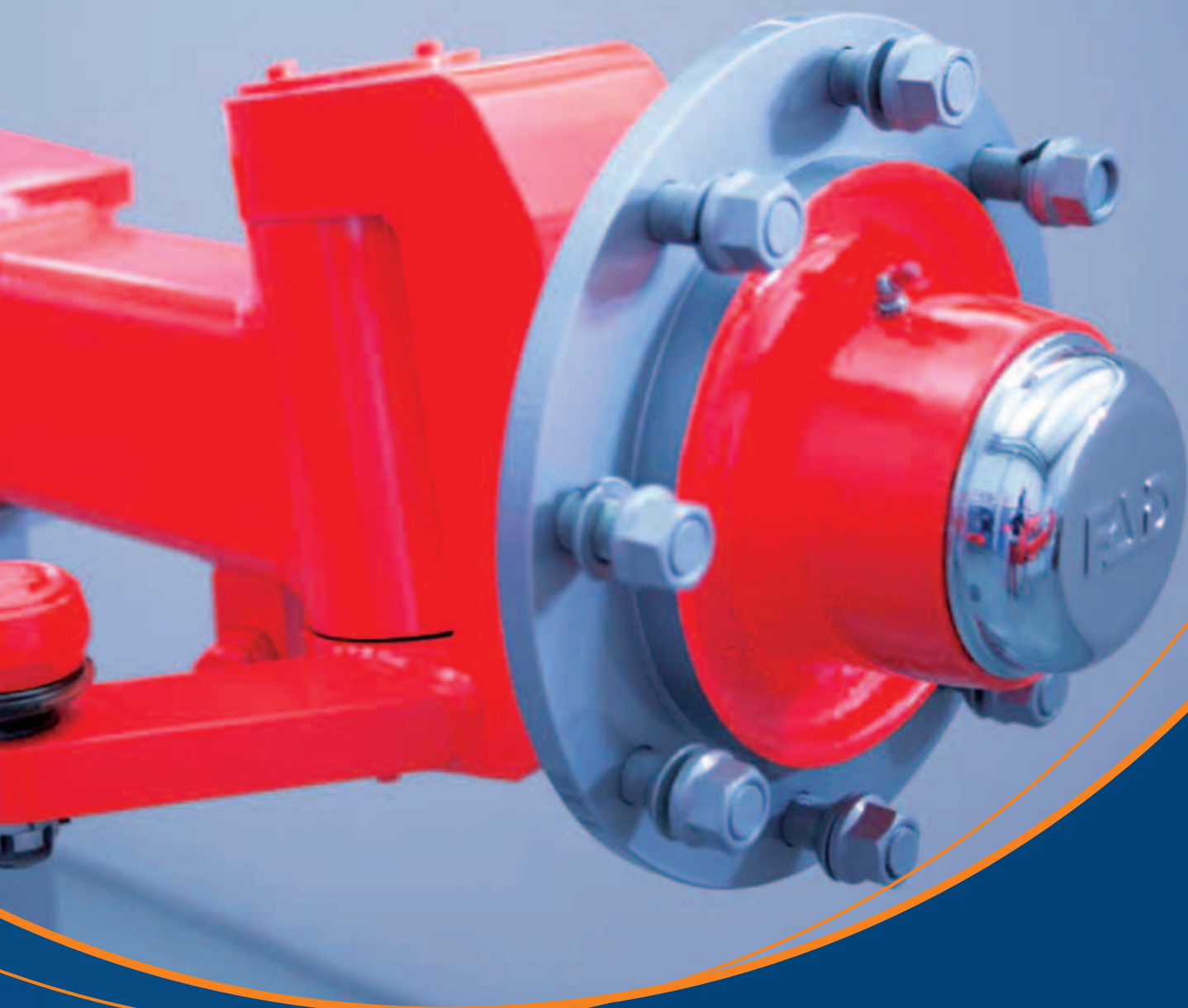
| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TUB. O QUADRO<br>Tub. or square<br>Rohr oder Vierkant<br>Tub. ou carré |         |         | SBALZO<br>Overhang "H"<br>Auskragung<br>Bosselage |
|--------------------------------------------------------------------------|------------------------------------------------------------------------|---------|---------|---------------------------------------------------|
|                                                                          |                                                                        | 25 Km/H | 40 Km/H |                                                   |
| V5 13C3                                                                  | T130                                                                   | 7000    | 6000    | 480                                               |
| V5 13C6                                                                  | T130                                                                   | 7000    | 6000    | 480                                               |
| V5 14C1                                                                  | T140                                                                   | 7500    | 6500    | 500                                               |
| V5 14C4                                                                  | T140                                                                   | 7000    | 6000    | 500                                               |











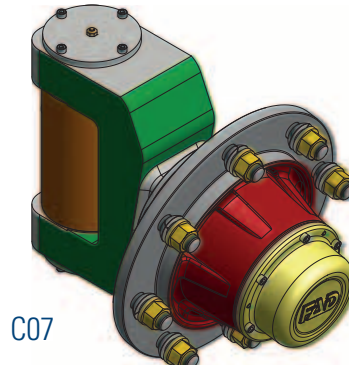
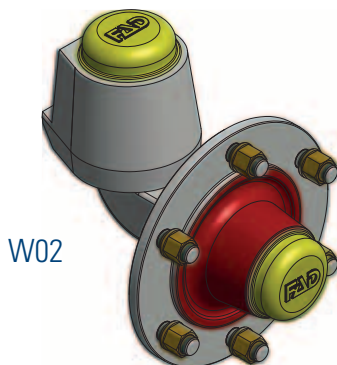
**FAD ASSALI**  
Quality Made in Italy

**MOZZI STERZANTI**  
*STEERING HUBS*  
*LENKSTUMMEL*  
*MOYEUX SUIVEURS-DIRECTEURS*

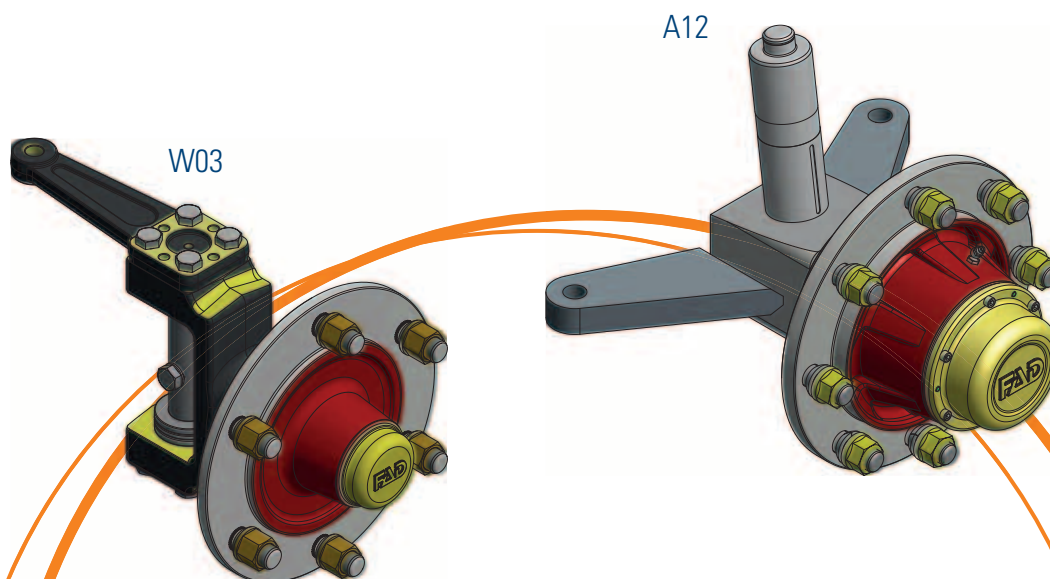


## Portate mozzi sterzanti

CARRYING CAPACITIES FOR STEERING HUBS  
TRAGLASTEN FÜR LENKSTUMMEL  
CAPACITE DE CHARGES POUR MOYEUX SUIVEURS - DIRECTEURS

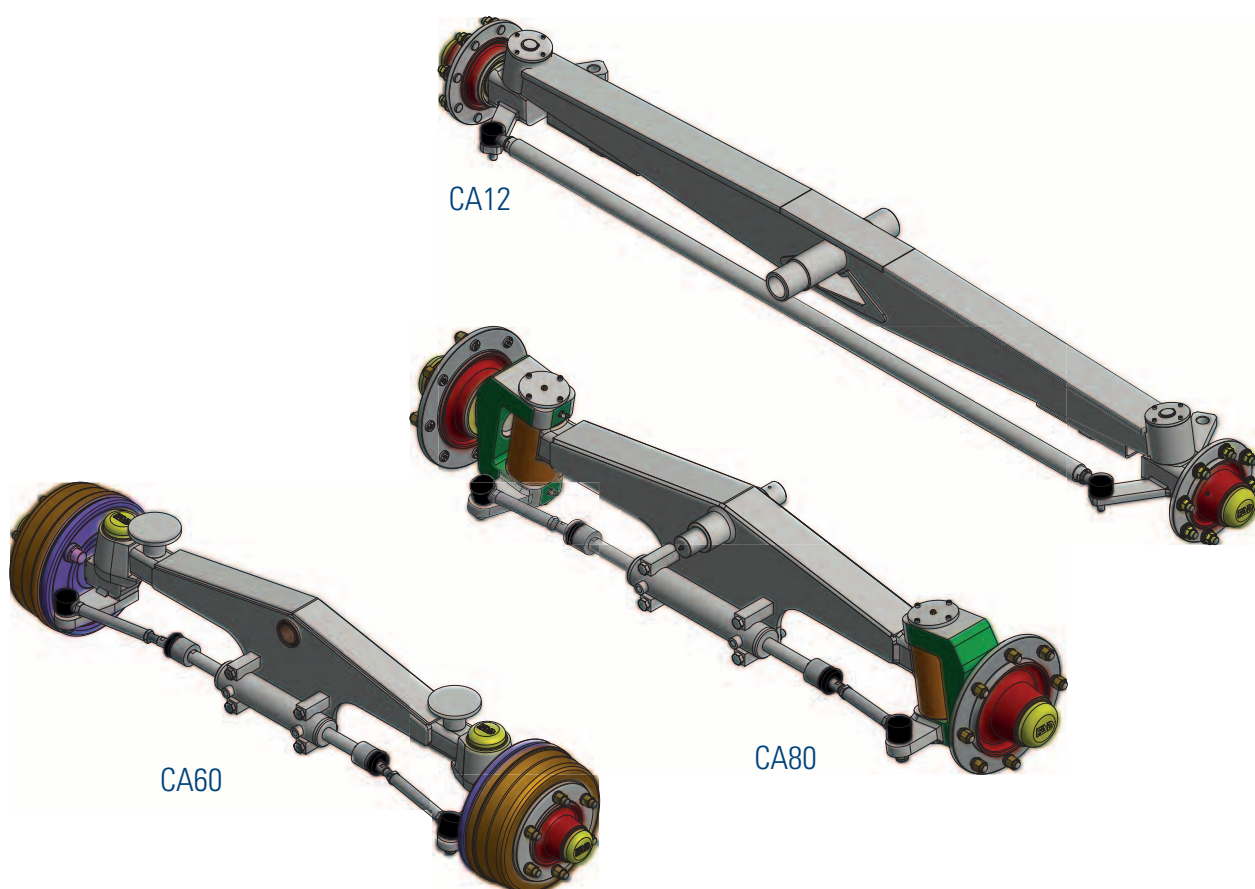
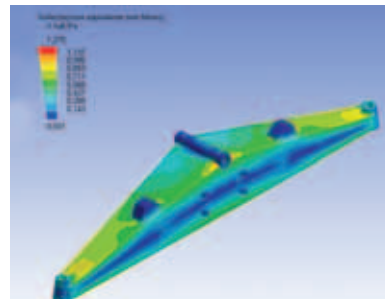
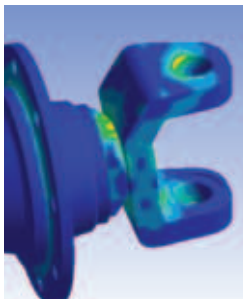
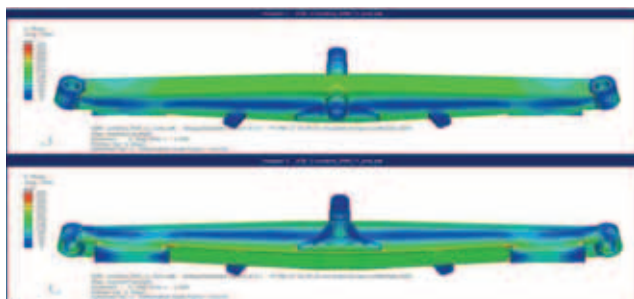


| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type |                           |         |                         |         |
|--------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------------------|---------|
|                                                                          |                             | PORTATE PER SEMIASSE<br>Carrying capacities for stubaxle<br>Achslast pro stummel<br>Charge par demi-essieu |         | PORTATE PER SEMIASSE<br>Carrying capacities for stubaxle<br>Achslast pro stummel<br>Charge par demi-essieu |         |
|                                                                          |                             | 25 Km/H                                                                                                    | 40 Km/H | 25 Km/H                                                                                                    | 40 Km/H |
| <b>C<br/>D<br/>W<br/>X</b>                                               | W02                         |                                                                                                            |         | 2000                                                                                                       | 1800    |
|                                                                          | W03                         |                                                                                                            |         | 1500                                                                                                       | 1300    |
|                                                                          | A12                         |                                                                                                            |         |                                                                                                            | 3500    |
|                                                                          | A12                         |                                                                                                            |         |                                                                                                            | 4100    |
|                                                                          | C07                         | 4500                                                                                                       |         |                                                                                                            |         |



## Assali posteriori sterzanti a carreggiata variabile o fissa

REAR STEERING AXLES WITH FIXED AND ADJUSTABLE TRACK  
HINTERE LENKACHSEN MIT VARIABLELER ODER FESTER SPURWEITE  
ESSIEUX POSTERIEURS DIRECTEURS A VOIE VARIABLE OU FIXE



| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | PESO<br>Weight<br>Aprox<br>Poids<br>Eigeng. | PORTATA<br>Carrying capacity<br>Tragfähigkeit<br>Capacité de charge | CARREGGIATA<br>Track<br>Spurweite<br>Voie | ANGOLO DI STERZO<br>Steering angle<br>Lenkeinschlag<br>Angle de braquage |
|--------------------------------------------------------------------------|-----------------------------|---------------------------------------------|---------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------|
|                                                                          |                             | Kg                                          | Kg                                                                  | mm                                        |                                                                          |
| CA                                                                       | 127                         | 320                                         | 7500                                                                | 2800-3300                                 | 43°-30°                                                                  |
|                                                                          | 129                         | 340                                         | 9000                                                                | 2800-3300                                 | 43°-30°                                                                  |
|                                                                          | 122                         | 515                                         | 13500                                                               | 2800-3300                                 | 43°-30°                                                                  |
|                                                                          | 121                         | 390                                         | 12000                                                               | 2800-3300                                 | 43°-30°                                                                  |
|                                                                          | 60                          | 198                                         | 3600                                                                | 1600                                      | 45°-35°                                                                  |
|                                                                          | 80                          | 228                                         | 6000                                                                | 1600                                      | 46°-43°                                                                  |

## Assali a carreggiata variabile

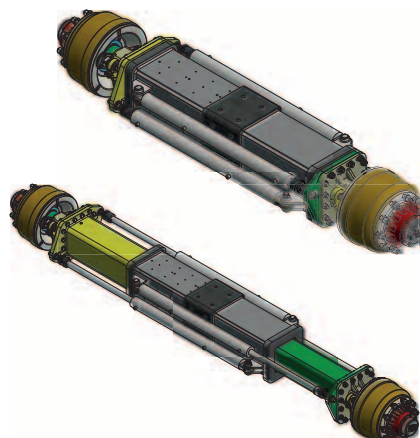
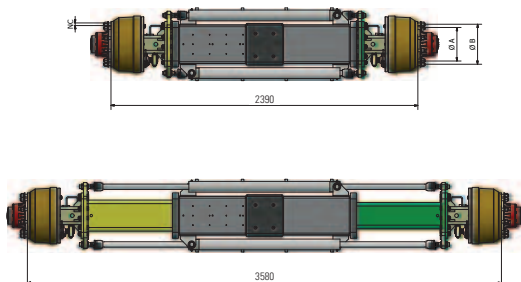
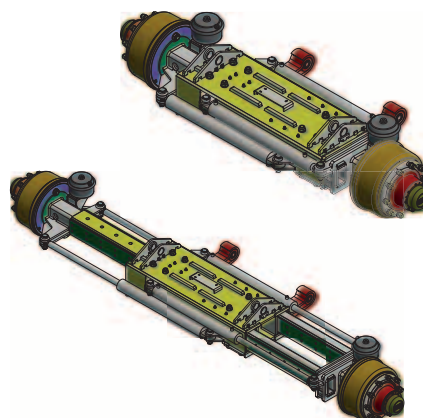
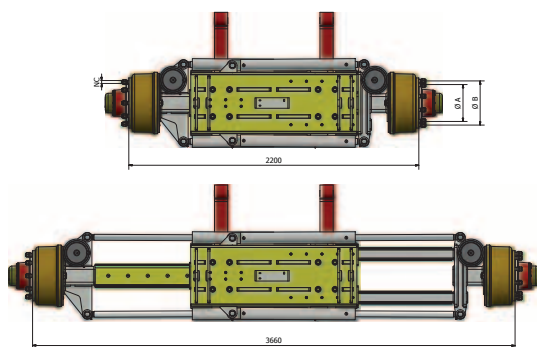
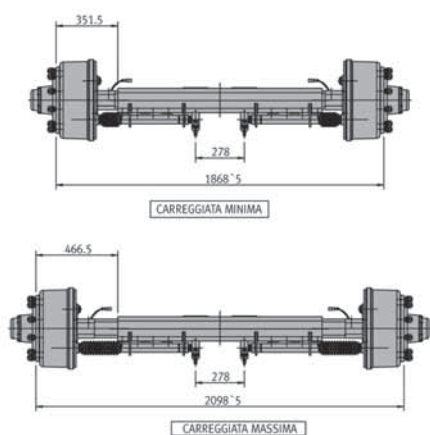
SLIDING AXLES  
SCHIEBEBARE ACHSEN  
ESSIEUX COULISSANT

Risultato di ricerche e sviluppo in collaborazione con i nostri clienti gli assali a carreggiata variabile coprono portate di 7, 10 e 18 Ton hanno estensioni che vanno da 300 mm a 1500 mm.

Resulting from R&D in cooperation with our customers the sliding axles cover carrying capacities from 7, 10 and 18 Tons and are extendible from 300mm up to 1500 mm.

Entwickelt in Zusammenarbeit mit unsere Kunden unsere Schiebbare Achsen tragen 7, 10 und 18 Tonnen und haben eine Schiebbarkeit von 300mm bis 1500 mm.

Résultant du développement avec nos clients les essieux coulissants ont des charge par essieu de 7, 10 et 18 Tonnes est ont un écartement de 300 jusque a 1500mm.





## Assali con assistenza motore idraulico

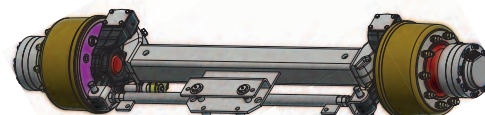
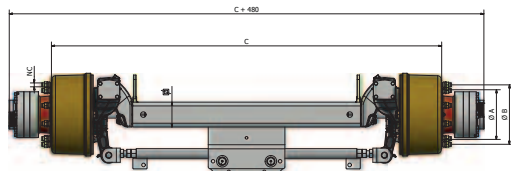
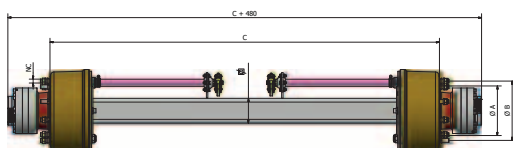
POWERED AXLES WITH HYDROBASE  
GESTEUERTEN ACHSEN  
ESSIEUX AVEC ASSISTANCE HYDRAULIQUE

La particolarità di questi assali con idrobase è la leggerezza, solo 160 KG in più e 160 KG in meno di assale comune con motore idraulico e la capacità di libera rotazione, freewheeling. Quando non è in pressione l'assale e il freno funzionano come comuni assali trainati. Portate assali e frenanti fino a 20.000Kg. Potenza fino a 41kW (55HP).

*Particularity of this axles with the Hydrobase is the lightness, only 160 Kg more for the Hydrobase and 160 Kg less than the hydraulic motor used on common hydraulic axles and the freewheeling. The axles and its brake when not under oil pressure work as common trailered axle with carrying and braking capacity up to 20000Kgs. Power up to 41kW (55HP).*

*Die Besonderheit dieser Achsen mit Hydrobase ist Leichtigkeit, nur 160 KG mehr und 160 KG weniger als eine Achse mit Hydraulikmotor und seine Freilauf. Wann die Achse nicht unter Druck gesetzt ist wird der Achse und seine Bremse als jeder Schleppachsen verwendet werden. Achslast und Bremslast bis zu 20.000 KG. Leistung bis zu 41kW (55PS).*

*La particularité de ces essieux avec Hydrobase est la légèreté, seulement 160 kg en plus et 160 kg en moins d'un essieu traditionnelle avec moteur hydraulique et le liberté de rotation freewheeling. L'essieu et son frein sans pression seront utilisés comme un commun essieu trainée avec charge et capacité de freinage jusque a 20.000 Kg. Puissance de 41 kW (55HP).*



## Assali con freno 500x200

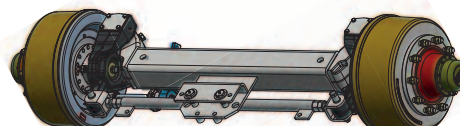
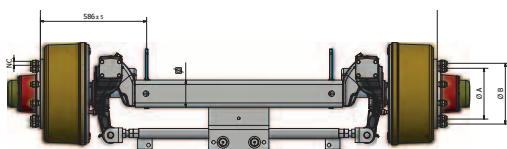
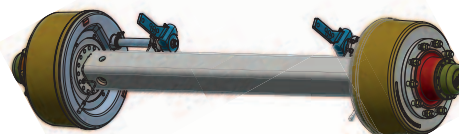
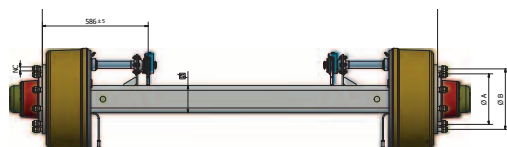
AXLES WITH BRAKE 500X200  
BREMSACHSEN MIT BREMSE 500X200  
ESSIEUX AVEC FREIN 500X200

Freno 500x200 con performance di carico frenante eccezionali per veicoli con dimensioni pneumatici oltre agli standard e per approvazioni secondo le ultime prescrizioni EU.

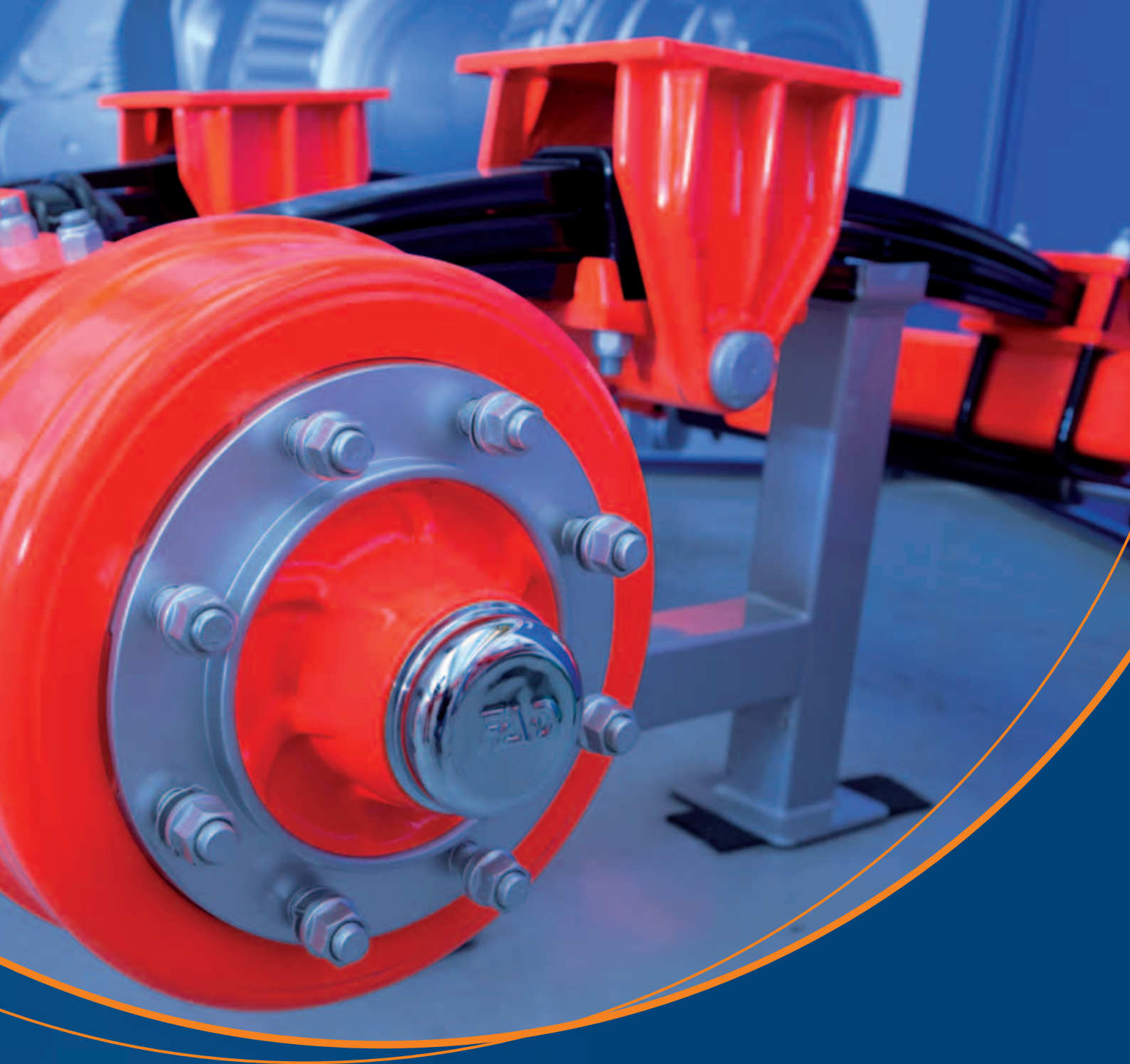
*Brake 500x200 with the highest brake performances for vehicles with exceptional tire dimension and for vehicle approvals upon the last Eu Regulation.*

*500x200 Bremse mit außergewöhnlichen Bremslast Leistung für Fahrzeuge mit außergewöhnlichen Reifen und Fahrzeug Zulassungen nach den neuesten EU Anforderungen.*

*Frein 500x200 avec des performance de freinage exceptionnelles pour véhicules avec de dimension de pneu exceptionnel est pour la réception des véhicules selon les dernière prescription EU.*







**FAD ASSALI**  
Quality Made in Italy

**BOGIE E SOSPENSIONI**  
*BOGIES AND SUSPENSION SETS*  
*BOGIE-UND FEDERAGGREGATE*  
*BOGIE ET SUSPENSIONS*

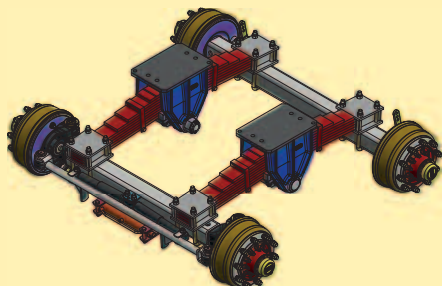


## CODICI DI IDENTIFICAZIONE DEI BOGIE

BOGIES ID NUMBER - BOGIE ARTIKELNUMMER - IDENTIFICATION DES BOGIES

Z 8 2 C 0 0 1

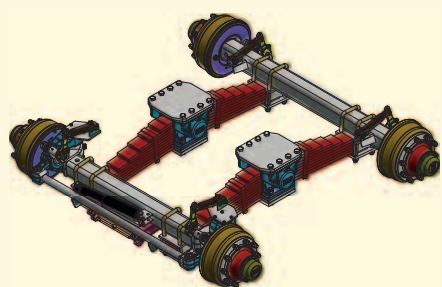
**Z = BOGIE**



Numero progressivo  
Progressive Number  
Fortschreitende Nummer  
Numéro consécutif

**A** = Gruppo balestra e supporto centrale  
Spring set and central support  
Federpaket und Mittelbock  
Groupe central et lames

**C** = Assieme completo  
Complete assemblies  
Komplette Bogie  
Bogie complet

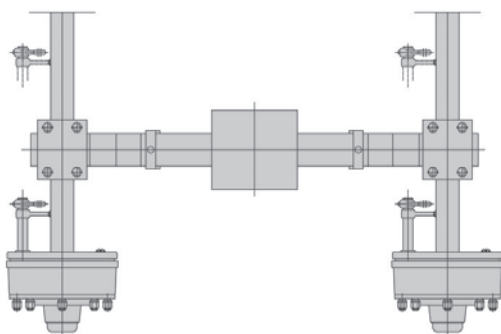


**71** = Bilanciere - Walking - Beam - Tag

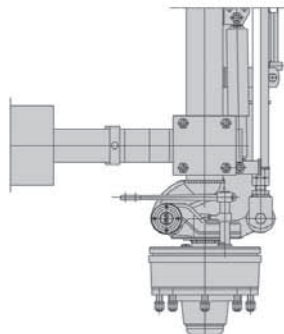
**81** = Bogie con assali : fisso + fisso  
Bogies with fixed axles  
Bogies mit starren Achsen  
Bogies avec essieux fixe

**82** = Bogie con assali: Fisso + autosterz.  
With fixed and steering  
Mit Starre und Lenkachse  
Avec fixe et suiveur

**83** = Gruppo balestra + Supporto centrale  
Without axles  
Ohne Achsen  
Sans essieux



**81:** Con due assali fissi  
With two fixed axles  
Mit zwei Starrachsen  
Avec deux essieux fixes



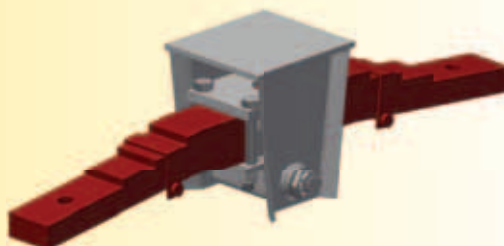
**82:** Con autosterzante  
With one steering axle  
Mit Nachlauf Lenkachse  
Avec essieux auto-suiveurs

## Bogie con balestre Cantilever

BOGIES WITH CANTILEVER SPRINGS  
BOGIE MIT CANTILEVER-BLATTFEDERN  
BOGIE AVEC RESSORTS MULTILAMES

TIPO 1  
*Type 1*  
*Typ 1*  
*Type 1*

**8 - 10 ton.**



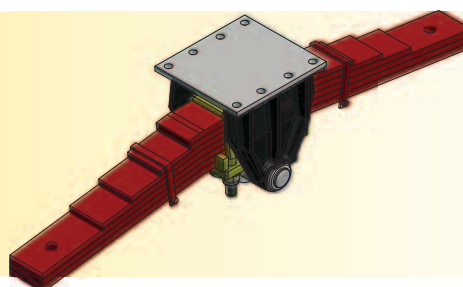
TIPO 2  
*Type 2*  
*Typ 2*  
*Type 2*

**12 - 16 ton.**



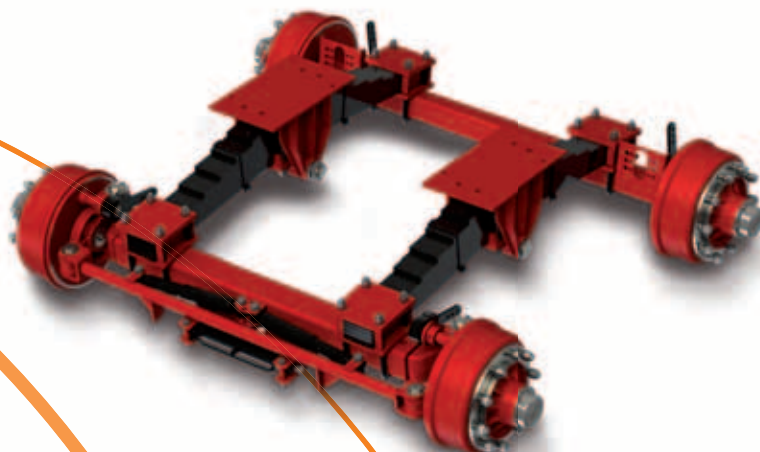
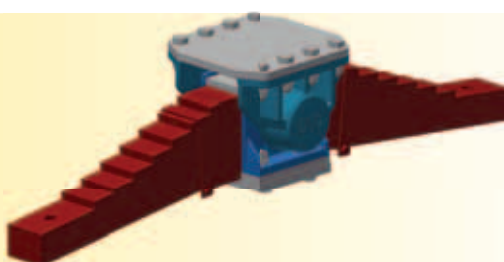
TIPO 3  
*Type 3*  
*Typ 3*  
*Type 3*

**18 - 21 ton.**



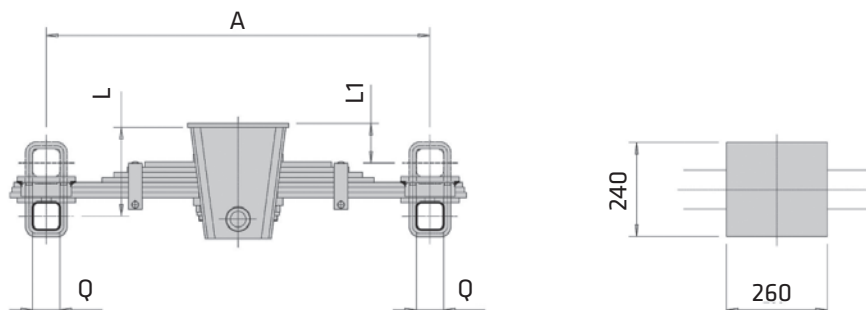
TIPO 4  
*Type 4*  
*Typ 4*  
*Type 4*

**21 - 24 ton.**



## Bogie con balestre Cantilever

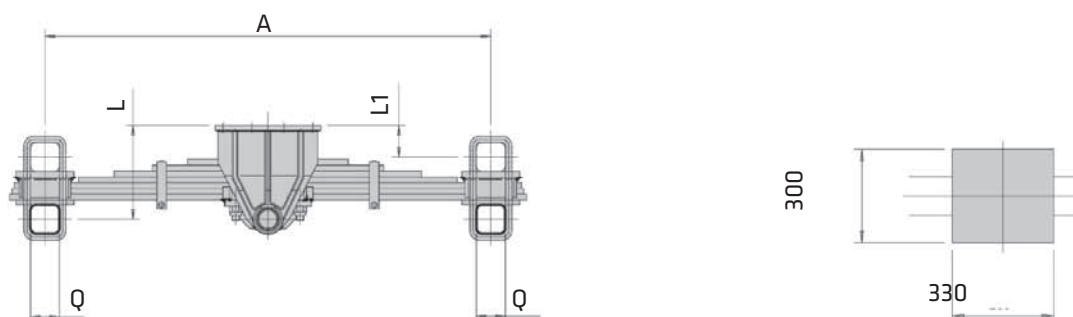
BOGIES WITH CANTILEVER SPRINGS  
BOGIE MIT CANTILEVER-BLATTFEDERN  
BOGIE AVEC RESSORTS MULTILAMES



Tipo 1 - Type 1 - Typ 1 - Type 1

**8 - 10 ton.**

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | PORTATA<br>Capacity (kg)<br>Tragfähigkeit<br>Capacité de charge | A (mm) | BALESTRA<br>Springs<br>Blattfeder<br>Ressort |
|--------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------|--------|----------------------------------------------|
| <b>Z8</b>                                                                | <b>1</b>                    | 8000                                                            | 1000   | 7x100x13                                     |
|                                                                          |                             | 10000                                                           | 1000   | 6x100x15                                     |
|                                                                          |                             |                                                                 | 1000   | 5x100x18                                     |
|                                                                          |                             |                                                                 | 1200   | 6x100x18                                     |



Tipo 2 - Type 2 - Typ 2 - Type 2

**12 - 16 ton.**

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | PORTATA<br>Capacity (kg)<br>Tragfähigkeit<br>Capacité de charge | A (mm) | BALESTRA<br>Springs<br>Blattfeder<br>Ressort |
|--------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------|--------|----------------------------------------------|
| <b>Z8</b>                                                                | <b>2</b>                    | 12000                                                           | 1000   | 5x100x18                                     |
|                                                                          |                             |                                                                 | 1200   | 6x100x18                                     |
|                                                                          |                             |                                                                 | 1370   | 7x120x18                                     |
|                                                                          |                             | 14000                                                           | 1000   | 6x100x18                                     |
|                                                                          |                             |                                                                 | 1200   | 7x100x18                                     |
|                                                                          |                             |                                                                 | 1200   | 6x120x18                                     |
|                                                                          |                             |                                                                 | 1370   | 7x120x18                                     |
|                                                                          |                             |                                                                 | 1470   | 9x120x18                                     |
|                                                                          |                             | 16000                                                           | 1200   | 7x120x18                                     |
|                                                                          |                             |                                                                 | 1370   | 8x100x18                                     |
|                                                                          |                             |                                                                 | 1470   | 9x120x18                                     |
|                                                                          |                             |                                                                 | 1520   | 8x120x20                                     |
|                                                                          |                             |                                                                 | 1850   | 9x120x20                                     |

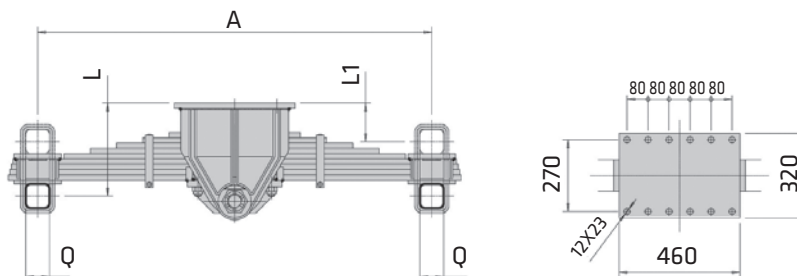
Le quote L-L1 così come Q vengono fornite con la richiesta del disegno al nostro UT

The quote L-L1 are given upon drawing request to our Tech Dept - Die L-L1 und Q Massen werden auf den Zeichnungen angezeichnet und sind an unsere Techn. Abt anzufragen - Le côtes L-L1 et Q sont partie du dessin final à demander à notre bureau technique



## Bogie con balestre Cantilever

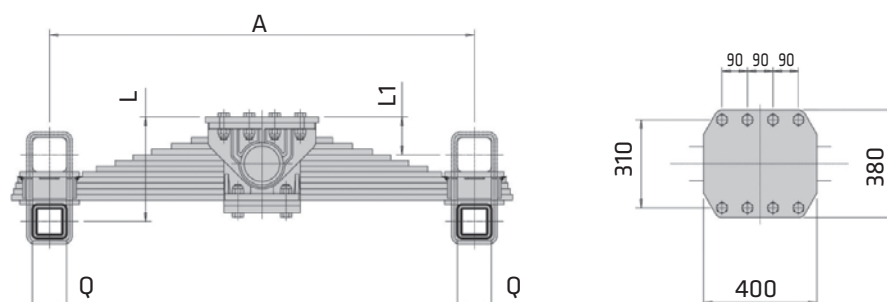
BOGIES WITH CANTILEVER SPRINGS  
BOGIE MIT CANTILEVER-BLATTFEDERN  
BOGIE AVEC RESSORTS MULTILAMES



Tipo 3 - Type 3 - Typ 3 - Type 3

18 - 21 ton.

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | PORTATA<br>Carrying capacity kgs<br>Tragfähigkeit<br>Capacité de charge | A (mm) | BALESTRA<br>Springs<br>Blattfeder<br>Ressort                                              |
|--------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------|
| Z8                                                                       | 3                           | 18000                                                                   | 1370   | 7x120x20                                                                                  |
|                                                                          |                             |                                                                         | 1370   | 8x120x18                                                                                  |
|                                                                          |                             |                                                                         | 1470   | 8x120x20                                                                                  |
|                                                                          |                             |                                                                         | 1470   | 9x120x18                                                                                  |
|                                                                          |                             |                                                                         | 1520   | 8x120x20                                                                                  |
|                                                                          |                             |                                                                         | 1700   | 11x120x20                                                                                 |
|                                                                          |                             | 21000                                                                   | 1850   | 9x120x20                                                                                  |
|                                                                          |                             |                                                                         | 1370   | 9x120x20                                                                                  |
|                                                                          |                             |                                                                         | 1500   | 9x120x0                                                                                   |
|                                                                          |                             |                                                                         | 1700   | 11x120x20                                                                                 |
|                                                                          |                             |                                                                         | 1800   | 10x120x24                                                                                 |
|                                                                          |                             |                                                                         | 1850   | 11x120x20                                                                                 |
|                                                                          |                             | 28000                                                                   | 1500   | 13x18x100                                                                                 |
|                                                                          |                             | 30000                                                                   | 1550   | 17x120 Spessori variabili<br>Variable thicknesses<br>Variable Dicken Épaisseurs variables |



Tipo 4 - Type 4 - Typ 4 - Type 4

21 - 24 ton.

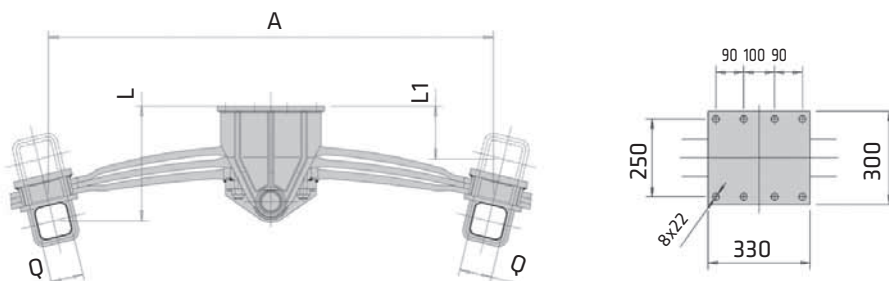
| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | PORTATA<br>Carrying capacity kgs<br>Tragfähigkeit<br>Capacité de charge | A (mm) | BALESTRA<br>Springs<br>Blattfeder<br>Ressort |
|--------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------|--------|----------------------------------------------|
| Z8                                                                       | 4                           | 21000                                                                   | 1370   | 9x120x20                                     |
|                                                                          |                             |                                                                         | 1500   | 9x120x20                                     |
|                                                                          |                             |                                                                         | 1700   | 11x120x20                                    |
|                                                                          |                             |                                                                         | 1800   | 10x120x24                                    |
|                                                                          |                             |                                                                         | 1850   | 11x120x20                                    |
|                                                                          |                             | 24000                                                                   | 1500   | 11x120x20                                    |
|                                                                          |                             |                                                                         | 1700   | 11x120x20                                    |
|                                                                          |                             |                                                                         | 1800   | 10x120x24                                    |

Le quote L-L1 così come Q vengono fornite con la richiesta del disegno al nostro UT

The quote L-L1 are given upon drawing request to our Tech Dept - Die L-L1 und Q Massen werden auf den Zeichnungen angezeichnet und sind an unsere Techn. Abt anzufragen - Le côtes L-L1 et Q sont partie du dessin final à demander à notre bureau technique

## Bogie con balestre paraboliche

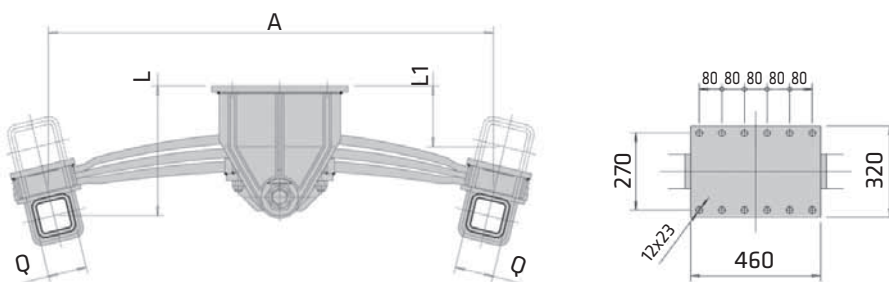
BOGIES WITH PARABOLIC SPRINGS  
BOGIE MIT PARABELBLATTFEDERN  
BOGIE AVEC RESSORTS PARABOLIQUES



Tipo 2 - Type 2 - Typ 2 - Type 2

**12 - 16 ton.**

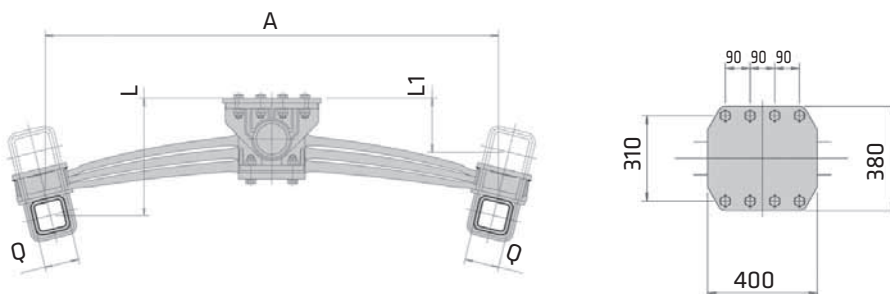
| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | Portata<br>Carrying capacity kgs<br>Tragfähigkeit<br>Capacité de charge | A (mm) | BALESTRA<br>Springs<br>Blattfeder<br>Ressort |
|--------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------|--------|----------------------------------------------|
| <b>Z8</b>                                                                | <b>2</b>                    | 1600                                                                    | 1370   | 3x100x33                                     |



Tipo 3 - Type 3 - Typ 3 - Type 3

**18 - 21 ton.**

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | Portata<br>Carrying capacity kgs<br>Tragfähigkeit<br>Capacité de charge | A (mm) | BALESTRA<br>Springs<br>Blattfeder<br>Ressort |
|--------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------|--------|----------------------------------------------|
| <b>Z8</b>                                                                | <b>3</b>                    | 21000                                                                   | 1500   | 3x100x40                                     |



Tipo 4 - Type 4 - Typ 4 - Type 4

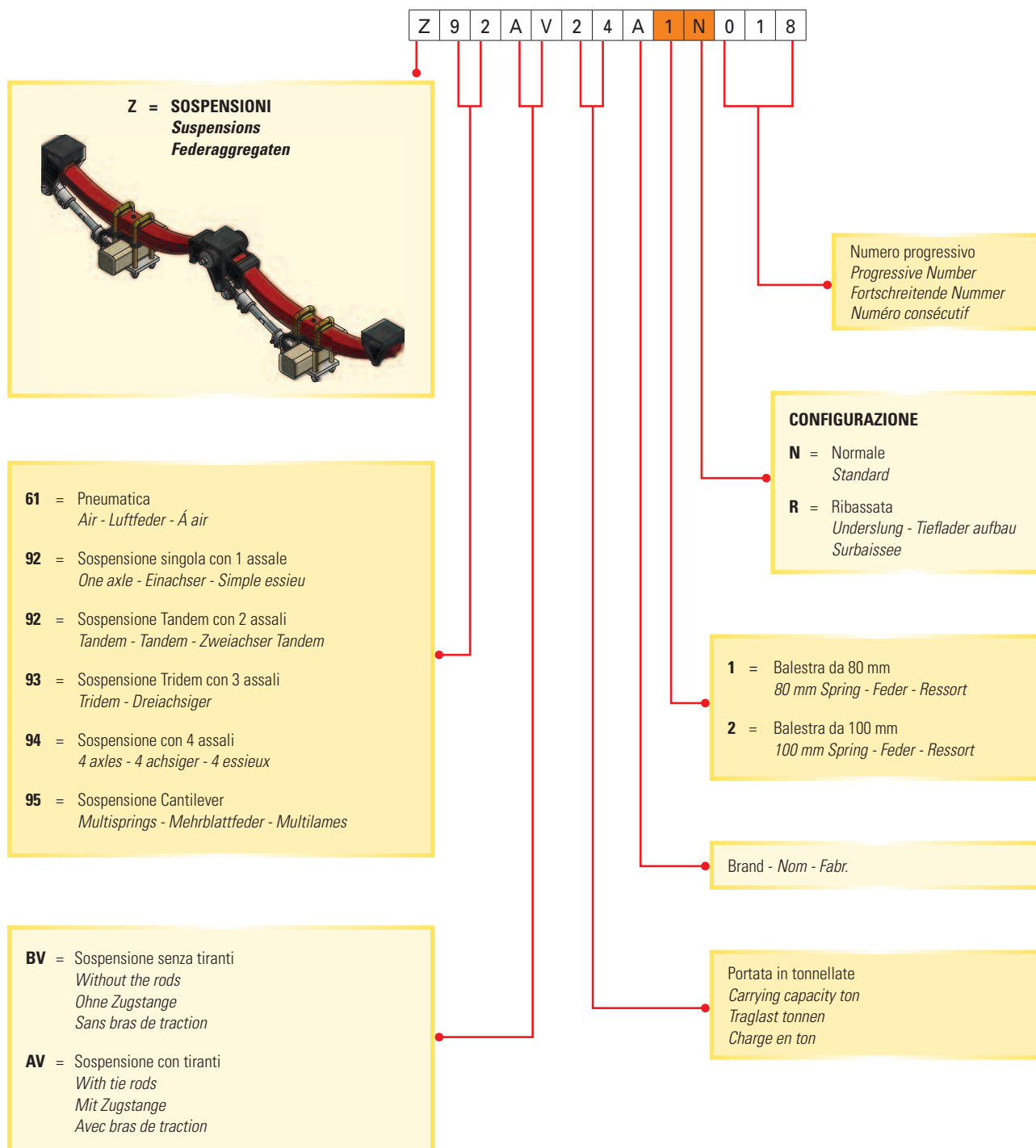
**21 - 24 ton.**

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | Portata<br>Carrying capacity kgs<br>Tragfähigkeit<br>Capacité de charge | A (mm)       | BALESTRA<br>Springs<br>Blattfeder<br>Ressort |
|--------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------|--------------|----------------------------------------------|
| <b>Z8</b>                                                                | <b>4</b>                    | 24000                                                                   | 1500<br>1870 | 3x100x43<br>3x100x50                         |

Le quote L-L1 così come Q vengono fornite con la richiesta del disegno al nostro UT  
The quote L-L1 are given upon drawing request to our Tech Dept - Die L-L1 und Q Massen werden auf den Zeichnungen angezeichnet  
und sind an unsere Techn. Abt anzufragen - Le côtes L-L1 et Q sont partie du dessin final à demander à notre bureau technique

## CODICI DI IDENTIFICAZIONE SOSPENSIONI

SUSPENSIONS CODES - FEDERAGGREGATEN ARTIKELNUMMER - CODES SUSPENSIONS

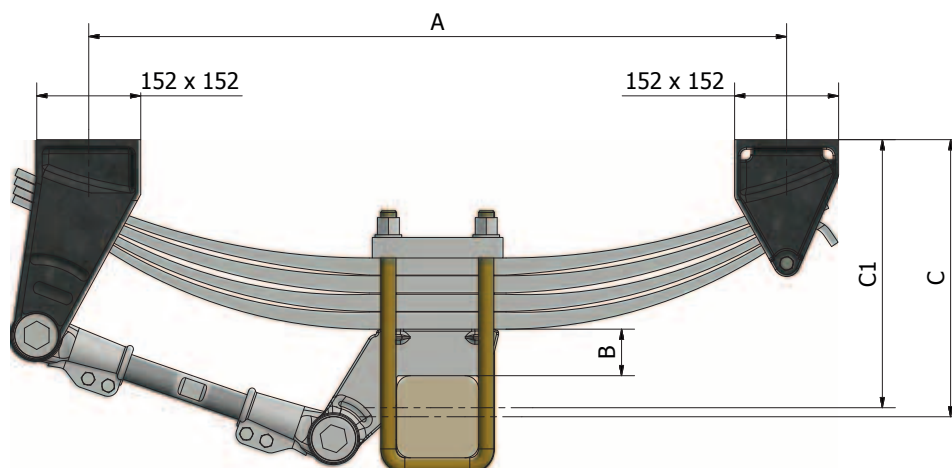


\* I campi contrassegnati con il colore arancione possono non essere presenti per alcuni codici:  
Fields marked with the orange color may not be present for some codes  
Felder mit der orangenen Farbe gekennzeichnet sind, dürfen nicht für einige Artikelnummer vorhanden sein  
Les champs marqués avec la couleur orange ne peuvent pas être présents pour certains codes



## Sospensioni meccaniche con tiranti

MECHANICAL SUSPENSIONS WITH TIE RODS  
 MECHANISCHE FEDERAGGREGATE MIT PENDELSTANGE  
 SUSPENSIONS MÉCANIQUES AVEC BRAS DE TRACTION

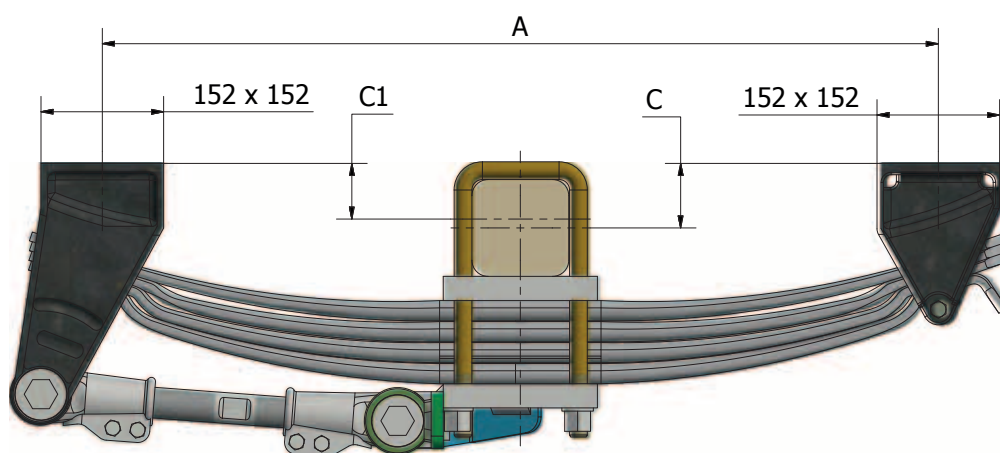
**AGRI  
STEFEN**  
 FAST line


Monoasse - Single axle - Einachsrig - Monoaxe

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base<br>Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n°<br>Anzahl Blätter<br>N° de feuilles | ALTEZZA PIASTRA<br>BALESTRA<br>Spring seat height<br>Sitzhöhe<br>Hauteur siège ressort | TUBOLARE<br>O QUADRO<br>Tub. or Square<br>Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA<br>SCARICO<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | ALTEZZA<br>CARICO<br>Height loaded<br>Ladehöhe<br>Hauteur charge |
|--------------|-----------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------|
|              | (Kg)                                                            | A (mm)                                                          |                                                            | B (mm)                                                                                 | (mm)                                                                          | C (mm)                                                                 | C1 (mm)                                                          |
| Z91AV0035A   | 8000                                                            | 826                                                             | 3                                                          | 26                                                                                     | 100                                                                           | 329                                                                    | 302                                                              |
| Z91AV0033A   |                                                                 |                                                                 |                                                            |                                                                                        | 120                                                                           | 339                                                                    | 312                                                              |
| Z91AV0034A   |                                                                 |                                                                 |                                                            |                                                                                        | 130                                                                           | 344                                                                    | 317                                                              |
| Z91AV0036A   | 8000                                                            | 826                                                             | 3                                                          | 68                                                                                     | 100                                                                           | 371                                                                    | 344                                                              |
| Z91AV0029A   |                                                                 |                                                                 |                                                            |                                                                                        | 120                                                                           | 381                                                                    | 354                                                              |
| Z91AV0040A   |                                                                 |                                                                 |                                                            |                                                                                        | 130                                                                           | 386                                                                    | 359                                                              |
| Z91AV0041A   | 10000                                                           | 826                                                             | 4                                                          | 26                                                                                     | 100                                                                           | 329                                                                    | 302                                                              |
| Z91AV0031A   |                                                                 |                                                                 |                                                            |                                                                                        | 120                                                                           | 339                                                                    | 312                                                              |
| Z91AV0032A   |                                                                 |                                                                 |                                                            |                                                                                        | 130                                                                           | 344                                                                    | 317                                                              |
| Z91AV0048A   | 10000                                                           | 826                                                             | 4                                                          | 68                                                                                     | 100                                                                           | 371                                                                    | 344                                                              |
| Z91AV0077A   |                                                                 |                                                                 |                                                            |                                                                                        | 120                                                                           | 381                                                                    | 354                                                              |
| Z91AV0078A   |                                                                 |                                                                 |                                                            |                                                                                        | 130                                                                           | 386                                                                    | 359                                                              |
| Z91AV0079A   | 8000                                                            | 1036                                                            | 3                                                          | 26                                                                                     | 100                                                                           | 348                                                                    | 301                                                              |
| Z91AV0080A   |                                                                 |                                                                 |                                                            |                                                                                        | 120                                                                           | 358                                                                    | 311                                                              |
| Z91AV0081A   |                                                                 |                                                                 |                                                            |                                                                                        | 130                                                                           | 363                                                                    | 316                                                              |
| Z91AV0082A   | 10000                                                           | 1036                                                            | 4                                                          | 68                                                                                     | 100                                                                           | 390                                                                    | 343                                                              |
| Z91AV0083A   |                                                                 |                                                                 |                                                            |                                                                                        | 120                                                                           | 400                                                                    | 353                                                              |
| Z91AV0084A   |                                                                 |                                                                 |                                                            |                                                                                        | 130                                                                           | 405                                                                    | 358                                                              |
| Z91AV0085A   | 12000                                                           | 1036                                                            | 4                                                          | 26                                                                                     | 100                                                                           | 353                                                                    | 306                                                              |
| Z91AV0073A   |                                                                 |                                                                 |                                                            |                                                                                        | 120                                                                           | 363                                                                    | 316                                                              |
| Z91AV0086A   |                                                                 |                                                                 |                                                            |                                                                                        | 130                                                                           | 368                                                                    | 321                                                              |
| Z91AV0089A   | 12000                                                           | 1036                                                            | 4                                                          | 68                                                                                     | 100                                                                           | 395                                                                    | 348                                                              |
| Z91AV0088A   |                                                                 |                                                                 |                                                            |                                                                                        | 120                                                                           | 405                                                                    | 358                                                              |
| Z91AV0087A   |                                                                 |                                                                 |                                                            |                                                                                        | 130                                                                           | 410                                                                    | 363                                                              |
| Z93AV173-175 | 12000                                                           | 1030                                                            | 4x100                                                      | 30<br>60                                                                               | 120                                                                           | 395                                                                    | 363                                                              |
| Z93AV176-178 |                                                                 |                                                                 |                                                            |                                                                                        | 130                                                                           | 425                                                                    | 393                                                              |
| Z93AV179-181 |                                                                 |                                                                 |                                                            |                                                                                        | 150                                                                           | 455                                                                    | 423                                                              |
| Z93AV182-184 |                                                                 |                                                                 |                                                            |                                                                                        |                                                                               |                                                                        |                                                                  |

## Sospensioni meccaniche con tiranti

MECHANICAL SUSPENSIONS WITH TIE RODS  
MECHANISCHE FEDERAGGREGATE MIT PENDELSTANGE  
SUSPENSIONS MÉCANIQUES AVEC BRAS DE TRACTION



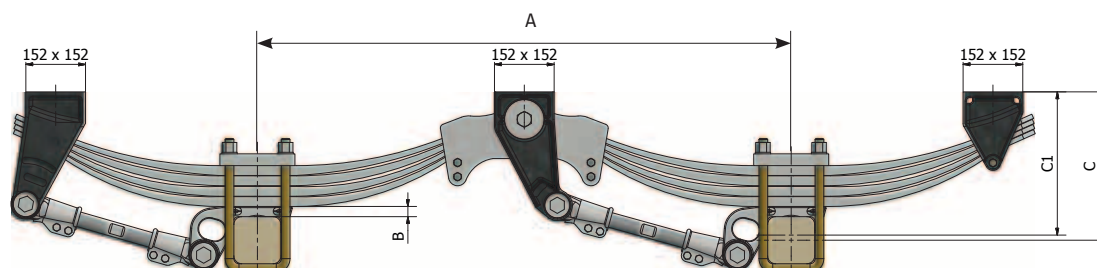
Monoasse - Single axle - Einachsrig - Monoaxe

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de<br>charge | PASSO A<br>Wheel "A" base<br>Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n°<br>Anzahl Blätter<br>N° de feuilles | TUBOLARE<br>O QUADRO<br>Tub. or Square<br>Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA SCARICO<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | ALTEZZA CARICO<br>Height loaded<br>Ladehöhe<br>Hauteur charge |
|--------------|--------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|
|              | (Kg)                                                               | A (mm)                                                          |                                                            | (mm)                                                                          | C (mm)                                                              | C1 (mm)                                                       |
| Z91AV0092A   | 8000                                                               | 826                                                             | 3                                                          | 100                                                                           | 42                                                                  | 15                                                            |
| Z91AV0093A   |                                                                    |                                                                 |                                                            | 120                                                                           | 52                                                                  | 25                                                            |
| Z91AV0094A   |                                                                    |                                                                 |                                                            | 130                                                                           | 57                                                                  | 30                                                            |
| Z91AV0098A   | 10000                                                              | 826                                                             | 3                                                          | 100                                                                           | 42                                                                  | 15                                                            |
| Z91AV0099A   |                                                                    |                                                                 |                                                            | 120                                                                           | 52                                                                  | 25                                                            |
| Z91AV0100A   |                                                                    |                                                                 |                                                            | 130                                                                           | 57                                                                  | 30                                                            |
| Z91AV0095A   | 10000                                                              | 1036                                                            | 4                                                          | 100                                                                           | 90                                                                  | 42                                                            |
| Z91AV0096A   |                                                                    |                                                                 |                                                            | 120                                                                           | 100                                                                 | 52                                                            |
| Z91AV0097A   |                                                                    |                                                                 |                                                            | 130                                                                           | 105                                                                 | 57                                                            |
| Z91AV0101A   | 10000                                                              | 1036                                                            | 4                                                          | 100                                                                           | 90                                                                  | 42                                                            |
| Z91AV0102A   |                                                                    |                                                                 |                                                            | 120                                                                           | 100                                                                 | 52                                                            |
| Z91AV0103A   |                                                                    |                                                                 |                                                            | 130                                                                           | 105                                                                 | 57                                                            |

## Sospensioni meccaniche con tiranti

MECHANICAL SUSPENSIONS WITH TIE RODS  
 MECHANISCHE FEDERAGGREGATE MIT PENDELSTANGE  
 SUSPENSIONS MÉCANIQUES AVEC BRAS DE TRACTION

**AGRI  
STEFEN**  
**FAST line**



Assetto standard - Standard structure - Standardtrimm - Position standard haute

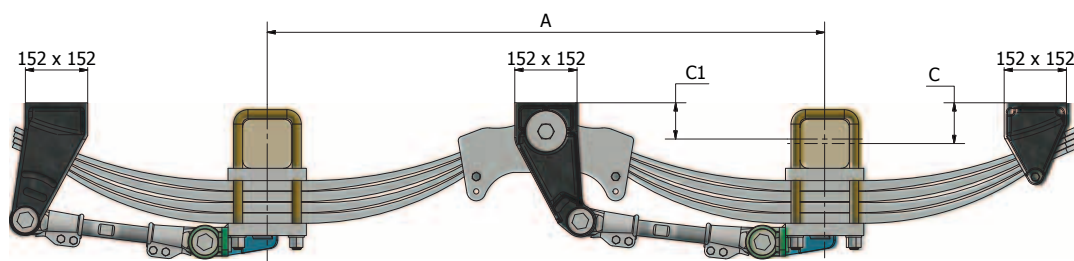
| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base<br>Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n°<br>Anzahl Blätter<br>N° de feuilles | ALTEZZA SCARICO<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | ALTEZZA CARICO<br>Height loaded<br>Ladehöhe<br>Hauteur charge |
|--------------|-----------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|
|              | (Kg)                                                            | A (mm)                                                          |                                                            | C (mm)                                                              | C1 (mm)                                                       |
| Z93M241      | 24000                                                           | 1310                                                            | 3                                                          | 381                                                                 | 354                                                           |
| Z93M242      |                                                                 |                                                                 | 3                                                          | 381                                                                 | 354                                                           |
| Z93M301      |                                                                 |                                                                 | 4                                                          | 381                                                                 | 354                                                           |
| Z93M302      | 30000                                                           | 1360                                                            | 3                                                          | 400                                                                 | 353                                                           |
| Z93M303      |                                                                 | 1525                                                            | 3                                                          | 400                                                                 | 353                                                           |
| Z93M361      |                                                                 | 1360                                                            | 4                                                          | 405                                                                 | 358                                                           |
| Z93M362      | 36000                                                           | 1525                                                            | 4                                                          | 405                                                                 | 358                                                           |

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base<br>Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n°<br>Anzahl Blätter<br>N° de feuilles | TUBOLARE<br>O QUADRO<br>Tub. or Square<br>Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA SCARICO<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | ALTEZZA CARICO<br>Height loaded<br>Ladehöhe<br>Hauteur charge |
|--------------|-----------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|
|              | (Kg)                                                            | A (mm)                                                          |                                                            | (mm)                                                                          | C (mm)                                                              | C1 (mm)                                                       |
| Z92AV0125A   | 16000                                                           | 1145                                                            | 3                                                          | 100                                                                           | 66                                                                  | 40                                                            |
| Z92AV0126A   |                                                                 |                                                                 |                                                            | 120                                                                           | 76                                                                  | 50                                                            |
| Z92AV0127A   |                                                                 |                                                                 |                                                            | 130                                                                           | 81                                                                  | 55                                                            |
| Z92AV0128A   | 16000                                                           | 1310                                                            | 3                                                          | 100                                                                           | 66                                                                  | 40                                                            |
| Z92AV0129A   |                                                                 |                                                                 |                                                            | 120                                                                           | 76                                                                  | 50                                                            |
| Z92AV0130A   |                                                                 |                                                                 |                                                            | 130                                                                           | 81                                                                  | 55                                                            |
| Z92AV0131A   | 20000                                                           | 1360                                                            | 3                                                          | 100                                                                           | 90                                                                  | 42                                                            |
| Z92AV0132A   |                                                                 |                                                                 |                                                            | 120                                                                           | 100                                                                 | 52                                                            |
| Z92AV0133A   |                                                                 |                                                                 |                                                            | 130                                                                           | 105                                                                 | 57                                                            |
| Z92AV0137A   | 20000                                                           | 1360                                                            | 4                                                          | 100                                                                           | 90                                                                  | 42                                                            |
| Z92AV0138A   |                                                                 |                                                                 |                                                            | 120                                                                           | 100                                                                 | 52                                                            |
| Z92AV0139A   |                                                                 |                                                                 |                                                            | 130                                                                           | 105                                                                 | 57                                                            |
| Z92AV0134A   | 19000                                                           | 1525                                                            | 3                                                          | 100                                                                           | 90                                                                  | 42                                                            |
| Z92AV0135A   |                                                                 |                                                                 |                                                            | 120                                                                           | 100                                                                 | 52                                                            |
| Z92AV0136A   |                                                                 |                                                                 |                                                            | 130                                                                           | 105                                                                 | 57                                                            |
| Z92AV0140A   | 19000                                                           | 1525                                                            | 4                                                          | 100                                                                           | 90                                                                  | 42                                                            |
| Z92AV0141A   |                                                                 |                                                                 |                                                            | 120                                                                           | 100                                                                 | 52                                                            |
| Z92AV0142A   |                                                                 |                                                                 |                                                            | 130                                                                           | 105                                                                 | 57                                                            |



## Sospensioni meccaniche con tiranti

MECHANICAL SUSPENSIONS WITH TIE RODS  
MECHANISCHE FEDERAGGREGATE MIT PENDELSTANGE  
SUSPENSIONS MÉCANIQUES AVEC BRAS DE TRACTION



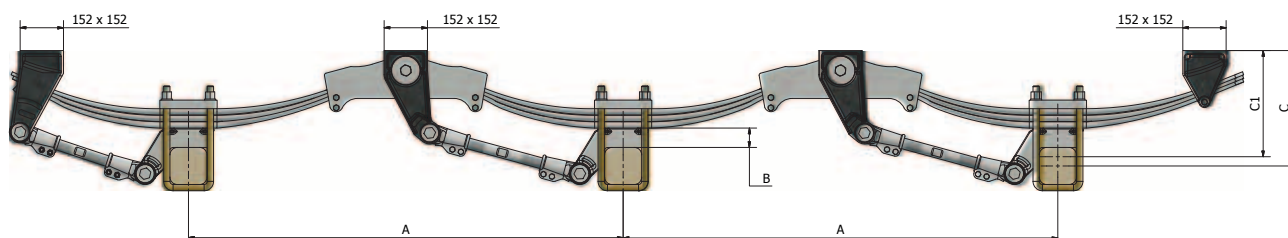
Assetto ribassato - Underslung structure - Tieflader Aufbau - Position surbaissé

| ID NUMBER  | PORTATA<br>Capacity (Kg) - Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base - Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n° - Anzahl Blätter<br>N° de feuilles | TUBOLARE O QUADRO<br>Tub. or Square - Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA SCARICO<br>Height unloaded - Entladehöhe<br>Hauteur a vide | ALTEZZA CARICO<br>Height loaded - Ladehöhe<br>Hauteur charge |
|------------|----------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------|
|            | (Kg)                                                           | A (mm)                                                         |                                                           | (mm)                                                                      | C (mm)                                                             | C1 (mm)                                                      |
| Z92AV0076A |                                                                |                                                                |                                                           | 100                                                                       | 329                                                                | 302                                                          |
| Z92AV0007A | 16000                                                          | 1145                                                           | 3                                                         | 120                                                                       | 339                                                                | 312                                                          |
| Z92AV0089A |                                                                |                                                                |                                                           | 130                                                                       | 344                                                                | 317                                                          |
| Z92AV0090A |                                                                |                                                                |                                                           | 100                                                                       | 371                                                                | 344                                                          |
| Z92AV0004A | 16000                                                          | 1145                                                           | 3                                                         | 120                                                                       | 381                                                                | 354                                                          |
| Z92AV0091A |                                                                |                                                                |                                                           | 130                                                                       | 386                                                                | 359                                                          |
| Z92AV0092A |                                                                |                                                                |                                                           | 100                                                                       | 329                                                                | 302                                                          |
| Z92AV0093A | 16000                                                          | 1145                                                           | 4                                                         | 120                                                                       | 339                                                                | 312                                                          |
| Z92AV0094A |                                                                |                                                                |                                                           | 130                                                                       | 344                                                                | 317                                                          |
| Z92AV0063A |                                                                |                                                                |                                                           | 100                                                                       | 371                                                                | 344                                                          |
| Z92AV0095A | 16000                                                          | 1145                                                           | 4                                                         | 120                                                                       | 381                                                                | 354                                                          |
| Z92AV0096A |                                                                |                                                                |                                                           | 130                                                                       | 386                                                                | 359                                                          |
| Z92AV0097A |                                                                |                                                                |                                                           | 100                                                                       | 329                                                                | 302                                                          |
| Z92AV0075A | 16000                                                          | 1200                                                           | 3                                                         | 120                                                                       | 339                                                                | 312                                                          |
| Z92AV0027A |                                                                |                                                                |                                                           | 130                                                                       | 344                                                                | 317                                                          |
| Z92AV0098A |                                                                |                                                                |                                                           | 100                                                                       | 371                                                                | 344                                                          |
| Z92AV0026A | 16000                                                          | 1200                                                           | 3                                                         | 120                                                                       | 381                                                                | 354                                                          |
| Z92AV0099A |                                                                |                                                                |                                                           | 130                                                                       | 386                                                                | 359                                                          |
| Z92AV0100A |                                                                |                                                                |                                                           | 100                                                                       | 329                                                                | 302                                                          |
| Z92AV0101A | 16000                                                          | 1310                                                           | 3                                                         | 120                                                                       | 339                                                                | 312                                                          |
| Z92AV0102A |                                                                |                                                                |                                                           | 130                                                                       | 344                                                                | 317                                                          |
| Z92AV0103A |                                                                |                                                                |                                                           | 100                                                                       | 371                                                                | 344                                                          |
| Z92AV0043A | 16000                                                          | 1310                                                           | 3                                                         | 120                                                                       | 381                                                                | 354                                                          |
| Z92AV0029A |                                                                |                                                                |                                                           | 130                                                                       | 386                                                                | 359                                                          |
| Z92AV0104A |                                                                |                                                                |                                                           | 100                                                                       | 329                                                                | 302                                                          |
| Z92AV0105A | 20000                                                          | 1310                                                           | 4                                                         | 120                                                                       | 339                                                                | 312                                                          |
| Z92AV0031A |                                                                |                                                                |                                                           | 130                                                                       | 344                                                                | 317                                                          |

| ID NUMBER             | PORTATA<br>Capacity (Kg) - Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base - Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n° - Anzahl Blätter<br>N° de feuilles | TUBOLARE O QUADRO<br>Tub. or Square - Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA SCARICO<br>Height unloaded - Entladehöhe<br>Hauteur a vide | ALTEZZA CARICO<br>Height loaded - Ladehöhe<br>Hauteur charge |
|-----------------------|----------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------|
|                       | (Kg)                                                           | A (mm)                                                         |                                                           | (mm)                                                                      | C (mm)                                                             | C1 (mm)                                                      |
| Z92AV0106A            |                                                                |                                                                |                                                           | 100                                                                       | 371                                                                | 344                                                          |
| Z92AV0030A            | 20000                                                          | 1310                                                           | 4                                                         | 120                                                                       | 381                                                                | 354                                                          |
| Z92AV0107A            |                                                                |                                                                |                                                           | 130                                                                       | 386                                                                | 359                                                          |
| Z92AV0108A            |                                                                |                                                                |                                                           | 100                                                                       | 348                                                                | 301                                                          |
| Z92AV0070A            | 20000                                                          | 1360                                                           | 3                                                         | 120                                                                       | 358                                                                | 311                                                          |
| Z92AV0109A            |                                                                |                                                                |                                                           | 130                                                                       | 363                                                                | 316                                                          |
| Z92AV0110A            |                                                                |                                                                |                                                           | 100                                                                       | 390                                                                | 343                                                          |
| Z92AV0032A            | 20000                                                          | 1360                                                           | 3                                                         | 120                                                                       | 400                                                                | 353                                                          |
| Z92AV0033A            |                                                                |                                                                |                                                           | 130                                                                       | 405                                                                | 358                                                          |
| Z92AV0111A            |                                                                |                                                                |                                                           | 100                                                                       | 348                                                                | 301                                                          |
| Z92AV0034A            | 20000                                                          | 1525                                                           | 3                                                         | 120                                                                       | 358                                                                | 311                                                          |
| Z92AV0035A            |                                                                |                                                                |                                                           | 130                                                                       | 363                                                                | 316                                                          |
| Z92AV0112A            |                                                                |                                                                |                                                           | 100                                                                       | 390                                                                | 343                                                          |
| Z92AV0047A            | 20000                                                          | 1525                                                           | 3                                                         | 120                                                                       | 400                                                                | 353                                                          |
| Z92AV0113A            |                                                                |                                                                |                                                           | 130                                                                       | 405                                                                | 358                                                          |
| Z92AV0060A            |                                                                |                                                                |                                                           | 100                                                                       | 353                                                                | 306                                                          |
| Z92AV0078A            | 24000                                                          | 1360                                                           | 4                                                         | 120                                                                       | 363                                                                | 316                                                          |
| Z92AV0114A            |                                                                |                                                                |                                                           | 130                                                                       | 368                                                                | 321                                                          |
| Z92AV0115A            |                                                                |                                                                |                                                           | 100                                                                       | 395                                                                | 348                                                          |
| Z92AV0062A            | 24000                                                          | 1360                                                           | 4                                                         | 120                                                                       | 405                                                                | 358                                                          |
| Z92AV0036A            |                                                                |                                                                |                                                           | 130                                                                       | 410                                                                | 363                                                          |
| Z92AV0116A            |                                                                |                                                                |                                                           | 100                                                                       | 353                                                                | 306                                                          |
| Z92AV0049A            | 24000                                                          | 1525                                                           | 4                                                         | 120                                                                       | 363                                                                | 316                                                          |
| Z92AV0117A            |                                                                |                                                                |                                                           | 130                                                                       | 368                                                                | 321                                                          |
| Z92AV0118A            |                                                                |                                                                |                                                           | 100                                                                       | 395                                                                | 348                                                          |
| Z92AV0119A            | 24000                                                          | 1525                                                           | 4                                                         | 120                                                                       | 405                                                                | 358                                                          |
| Z92AV0037A            |                                                                |                                                                |                                                           | 130                                                                       | 410                                                                | 363                                                          |
| Z92AV0214/215/222/223 |                                                                | 1360                                                           |                                                           | 110                                                                       |                                                                    |                                                              |
| Z92AV0216/217/224/225 | 24000                                                          |                                                                | 4x                                                        | 120                                                                       | 395                                                                | 363                                                          |
| Z92AV0218/219/226/227 |                                                                | 1525                                                           | 100                                                       | 130                                                                       | 425                                                                | 393                                                          |
| Z92AV0220/221/228/229 |                                                                |                                                                |                                                           | 150                                                                       |                                                                    |                                                              |

## Sospensioni meccaniche con tiranti

MECHANICAL SUSPENSIONS WITH TIE RODS  
MECHANISCHE FEDERAGGREGATE MIT PENDELSTANGE  
SUSPENSIONS MÉCANIQUES AVEC BRAS DE TRACTION



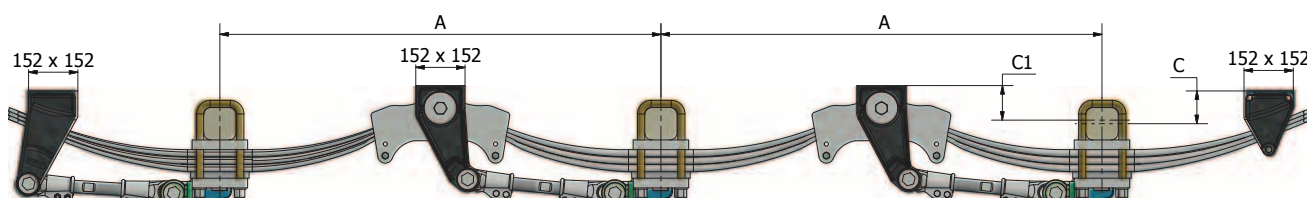
Assetto standard - Standard structure - Standardtrimm - Position standard haute

| ID NUMBER  | PORTATA<br>Capacity (Kg) - Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base - Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n° - Anzahl Blätter<br>N° de feuilles | ALTEZZA PIASTRA BALESTRA<br>Spring seat height - Sitzhöhe<br>Hauteur siège ressort | TUBOLARE O QUADRO<br>Tub. or Square - Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA SCARICO<br>Height unloaded - Entladehöhe<br>Hauteur a vide | ALTEZZA CARICO<br>Height loaded - Ladehöhe<br>Hauteur charge |
|------------|----------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------|
|            | (Kg)                                                           | A (mm)                                                         |                                                           | B (mm)                                                                             | (mm)                                                                      | C (mm)                                                             | C1 (mm)                                                      |
| Z93AV0062A |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 329                                                                | 302                                                          |
| Z93AV0063A | 24000                                                          | 1200                                                           | 3                                                         | 26                                                                                 | 120                                                                       | 339                                                                | 312                                                          |
| Z93AV0064A |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 344                                                                | 317                                                          |
| Z93AV0065A |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 371                                                                | 344                                                          |
| Z93AV0008A | 24000                                                          | 1200                                                           | 3                                                         | 68                                                                                 | 120                                                                       | 381                                                                | 354                                                          |
| Z93AV0066A |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 386                                                                | 359                                                          |
| Z93AV0067A |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 329                                                                | 302                                                          |
| Z93AV0068A | 24000                                                          | 1310                                                           | 3                                                         | 26                                                                                 | 120                                                                       | 339                                                                | 312                                                          |
| Z93AV0069A |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 344                                                                | 317                                                          |
| Z93AV0070A |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 371                                                                | 344                                                          |
| Z93AV0011A | 24000                                                          | 1310                                                           | 3                                                         | 68                                                                                 | 120                                                                       | 381                                                                | 354                                                          |
| Z93AV0071A |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 386                                                                | 359                                                          |
| Z93AV0072A |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 329                                                                | 302                                                          |
| Z93AV0012A | 30000                                                          | 1310                                                           | 4                                                         | 26                                                                                 | 120                                                                       | 339                                                                | 312                                                          |
| Z93AV0033A |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 344                                                                | 317                                                          |
| Z93AV0021A |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 371                                                                | 344                                                          |
| Z93AV0047A | 30000                                                          | 1310                                                           | 4                                                         | 68                                                                                 | 120                                                                       | 381                                                                | 354                                                          |
| Z93AV0013A |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 386                                                                | 359                                                          |
| Z93AV0073A |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 348                                                                | 301                                                          |
| Z93AV0074A | 30000                                                          | 1360                                                           | 3                                                         | 26                                                                                 | 120                                                                       | 358                                                                | 311                                                          |
| Z93AV0020A |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 363                                                                | 316                                                          |

| ID NUMBER                | PORTATA<br>Capacity (Kg) - Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base - Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n° - Anzahl Blätter<br>N° de feuilles | ALTEZZA PIASTRA BALESTRA<br>Spring seat height - Sitzhöhe<br>Hauteur siège ressort | TUBOLARE O QUADRO<br>Tub. or Square - Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA SCARICO<br>Height unloaded - Entladehöhe<br>Hauteur a vide | ALTEZZA CARICO<br>Height loaded - Ladehöhe<br>Hauteur charge |
|--------------------------|----------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------|
|                          | (Kg)                                                           | A (mm)                                                         |                                                           | B (mm)                                                                             | (mm)                                                                      | C (mm)                                                             | C1 (mm)                                                      |
| Z93AV0075A               |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 390                                                                | 343                                                          |
| Z93AV0014A               | 30000                                                          | 1360                                                           | 3                                                         | 68                                                                                 | 120                                                                       | 400                                                                | 353                                                          |
| Z93AV0015A               |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 405                                                                | 358                                                          |
| Z93AV0076A               |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 348                                                                | 301                                                          |
| Z93AV0077A               | 30000                                                          | 1525                                                           | 3                                                         | 26                                                                                 | 120                                                                       | 358                                                                | 311                                                          |
| Z93AV0078A               |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 363                                                                | 316                                                          |
| Z93AV0027A               |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 390                                                                | 343                                                          |
| Z93AV0016A               | 30000                                                          | 1525                                                           | 3                                                         | 68                                                                                 | 120                                                                       | 400                                                                | 353                                                          |
| Z93AV0017A               |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 405                                                                | 358                                                          |
| Z93AV0079A               |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 353                                                                | 306                                                          |
| Z93AV0080A               | 36000                                                          | 1360                                                           | 4                                                         | 26                                                                                 | 120                                                                       | 363                                                                | 316                                                          |
| Z93AV0081A               |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 368                                                                | 321                                                          |
| Z93AV0028A               |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 395                                                                | 348                                                          |
| Z93AV0043A               | 36000                                                          | 1360                                                           | 4                                                         | 68                                                                                 | 120                                                                       | 405                                                                | 358                                                          |
| Z93AV0018A               |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 410                                                                | 363                                                          |
| Z93AV0082A               |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 353                                                                | 306                                                          |
| Z93AV0083A               | 36000                                                          | 1525                                                           | 4                                                         | 26                                                                                 | 120                                                                       | 363                                                                | 316                                                          |
| Z93AV0084A               |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 368                                                                | 321                                                          |
| Z93AV0085A               |                                                                |                                                                |                                                           |                                                                                    | 100                                                                       | 395                                                                | 348                                                          |
| Z93AV0029A               | 36000                                                          | 1525                                                           | 4                                                         | 68                                                                                 | 120                                                                       | 405                                                                | 358                                                          |
| Z93AV0019A               |                                                                |                                                                |                                                           |                                                                                    | 130                                                                       | 410                                                                | 363                                                          |
| Z93AV170A/171<br>178/179 | 36000                                                          | 1360                                                           | 4x<br>100                                                 | 0                                                                                  | 110                                                                       | 395                                                                | 363                                                          |
| Z93AV172A/173<br>180/181 |                                                                | 1525                                                           |                                                           | 30                                                                                 | 130                                                                       | 425                                                                | 393                                                          |

## Sospensioni meccaniche con tiranti

MECHANICAL SUSPENSIONS WITH TIE RODS  
MECHANISCHE FEDERAGGREGATE MIT PENDELSTANGE  
SUSPENSIONS MÉCANIQUES AVEC BRAS DE TRACTION



Assetto ribassato - Underslung structure - Tieflader Aufbau - Position surbaissé

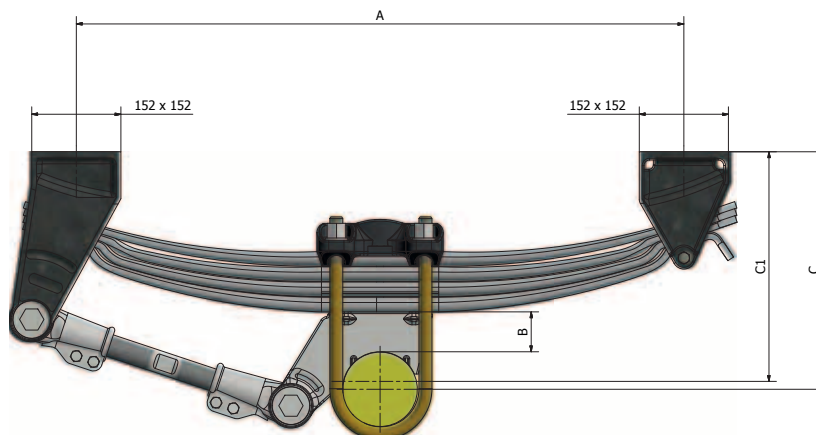
| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de<br>charge | PASSO A<br>Wheel "A" base<br>Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n°<br>Anzahl Blätter<br>N° de feuilles | TUBOLARE<br>O QUADRO<br>Tub. or Square<br>Rohr oder Viereck<br>Tub. ou carré | ALTEZZA<br>SCARICO<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | ALTEZZA<br>CARICO<br>Height loaded<br>Ladehöhe<br>Hauteur charge |
|--------------|--------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------|
|              | (Kg)                                                               | A (mm)                                                          |                                                            | (mm)                                                                         | C (mm)                                                                 | C1 (mm)                                                          |
| Z93AV0091A   | 24000                                                              | 1145                                                            | 3                                                          | 100                                                                          | 76                                                                     | 48                                                               |
| Z93AV0092A   |                                                                    |                                                                 |                                                            | 120                                                                          | 86                                                                     | 58                                                               |
| Z93AV0093A   |                                                                    |                                                                 |                                                            | 130                                                                          | 91                                                                     | 63                                                               |
| Z93AV0094A   | 24000                                                              | 1145                                                            | 4                                                          | 100                                                                          | 101                                                                    | 71                                                               |
| Z93AV0095A   |                                                                    |                                                                 |                                                            | 120                                                                          | 111                                                                    | 81                                                               |
| Z93AV0096A   |                                                                    |                                                                 |                                                            | 130                                                                          | 116                                                                    | 86                                                               |
| Z93AV0097A   | 24000                                                              | 1310                                                            | 3                                                          | 100                                                                          | 76                                                                     | 48                                                               |
| Z93AV0098A   |                                                                    |                                                                 |                                                            | 120                                                                          | 86                                                                     | 58                                                               |
| Z93AV0099A   |                                                                    |                                                                 |                                                            | 130                                                                          | 91                                                                     | 63                                                               |
| Z93AV0100A   | 24000                                                              | 1310                                                            | 4                                                          | 100                                                                          | 101                                                                    | 71                                                               |
| Z93AV0101A   |                                                                    |                                                                 |                                                            | 120                                                                          | 111                                                                    | 81                                                               |
| Z93AV0102A   |                                                                    |                                                                 |                                                            | 130                                                                          | 116                                                                    | 86                                                               |
| Z93AV0103A   | 30000                                                              | 1360                                                            | 3                                                          | 100                                                                          | 76                                                                     | 48                                                               |
| Z93AV0104A   |                                                                    |                                                                 |                                                            | 120                                                                          | 86                                                                     | 58                                                               |
| Z93AV0105A   |                                                                    |                                                                 |                                                            | 130                                                                          | 81                                                                     | 63                                                               |
| Z93AV0106A   | 36000                                                              | 1360                                                            | 4                                                          | 100                                                                          | 101                                                                    | 71                                                               |
| Z93AV0107A   |                                                                    |                                                                 |                                                            | 120                                                                          | 111                                                                    | 81                                                               |
| Z93AV0108A   |                                                                    |                                                                 |                                                            | 130                                                                          | 116                                                                    | 86                                                               |
| Z93AV0109A   | 30000                                                              | 1525                                                            | 3                                                          | 100                                                                          | 76                                                                     | 48                                                               |
| Z93AV0110A   |                                                                    |                                                                 |                                                            | 120                                                                          | 86                                                                     | 58                                                               |
| Z93AV0111A   |                                                                    |                                                                 |                                                            | 130                                                                          | 91                                                                     | 63                                                               |
| Z93AV0112A   | 36000                                                              | 1360                                                            | 4                                                          | 100                                                                          | 101                                                                    | 71                                                               |
| Z93AV0113A   |                                                                    |                                                                 |                                                            | 120                                                                          | 111                                                                    | 81                                                               |
| Z93AV0114A   |                                                                    |                                                                 |                                                            | 130                                                                          | 112                                                                    | 85                                                               |



## Sospensioni meccaniche con tiranti a sezione tonda

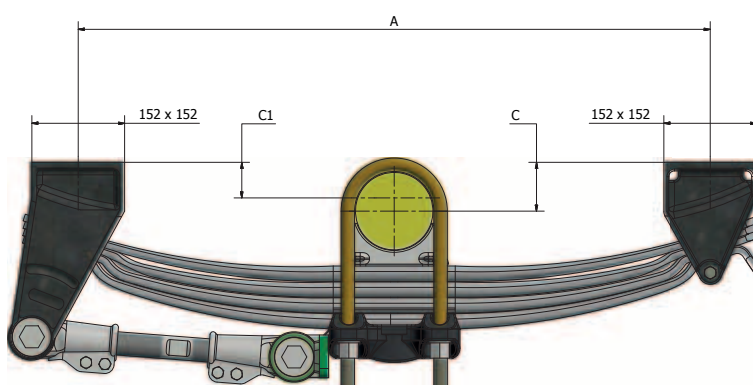
MECHANICAL SUSPENSIONS WITH TIE RODS WITH ROUND BEAM  
MECHANISCHE FEDERAGGREGATE MIT PENDELSTANGE FÜR RUNDKANT  
SUSPENSIONS MÉCANIQUES AVEC BRAS DE TRACTION POUR SECTION RONDE

**AGRI  
STEFEN**  
FAST line



Standard

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base<br>Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n°<br>Anzahl Blätter<br>N° de feuilles | ALTEZZA PIASTRA<br>BALESTRA<br>Spring seat height<br>Sitzhöhe<br>Hauteur siège ressort | TUBOLARE<br>O QUADRO<br>Tub. or Square<br>Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA<br>SCARICO<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | ALTEZZA<br>CARICO<br>Height loaded<br>Ladehöhe<br>Hauteur charge |
|--------------|-----------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------|
|              | (Kg)                                                            | A (mm)                                                          |                                                            | B (mm)                                                                                 | (mm)                                                                          | C (mm)                                                                 | C1 (mm)                                                          |
| Z91AV0042A   | 8000                                                            | 826                                                             | 3                                                          | 26                                                                                     | 127                                                                           | 339                                                                    | 312                                                              |
| Z91AV0076A   | 8000                                                            | 826                                                             | 3                                                          | 68                                                                                     | 127                                                                           | 381                                                                    | 354                                                              |
| Z91AV0043A   | 10000                                                           | 826                                                             | 4                                                          | 26                                                                                     | 127                                                                           | 339                                                                    | 312                                                              |
| Z91AV0070A   | 10000                                                           | 826                                                             | 4                                                          | 68                                                                                     | 127                                                                           | 381                                                                    | 354                                                              |
| Z91AV0044A   | 10000                                                           | 1036                                                            | 3                                                          | 26                                                                                     | 127                                                                           | 358                                                                    | 311                                                              |
| Z91AV0075A   | 10000                                                           | 1036                                                            | 3                                                          | 68                                                                                     | 127                                                                           | 400                                                                    | 353                                                              |
| Z91AV0045A   | 12000                                                           | 1036                                                            | 4                                                          | 26                                                                                     | 127                                                                           | 363                                                                    | 316                                                              |
| Z91AV0074A   | 12000                                                           | 1036                                                            | 4                                                          | 68                                                                                     | 127                                                                           | 405                                                                    | 358                                                              |

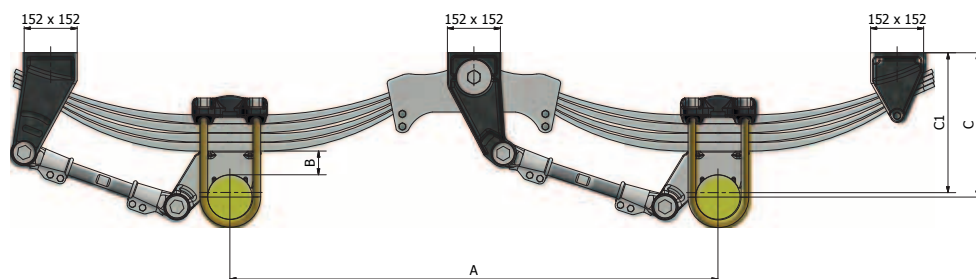


Tiefelader

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base<br>Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n°<br>Anzahl Blätter<br>N° de feuilles | TUBOLARE<br>O QUADRO<br>Tub. or Square<br>Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA<br>SCARICO<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | ALTEZZA<br>CARICO<br>Height loaded<br>Ladehöhe<br>Hauteur charge |
|--------------|-----------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------|
|              | (Kg)                                                            | A (mm)                                                          |                                                            | (mm)                                                                          | C (mm)                                                                 | C1 (mm)                                                          |
| Z91AV090A    | 8000                                                            | 826                                                             | 3                                                          | 127                                                                           | 52                                                                     | 25                                                               |
| Z91AV099A    | 10000                                                           | 826                                                             | 4                                                          | 127                                                                           | 52                                                                     | 25                                                               |
| Z91AV091A    | 10000                                                           | 1036                                                            | 3                                                          | 127                                                                           | 100                                                                    | 52                                                               |
| Z91AV100A    | 10000                                                           | 1036                                                            | 4                                                          | 127                                                                           | 100                                                                    | 52                                                               |

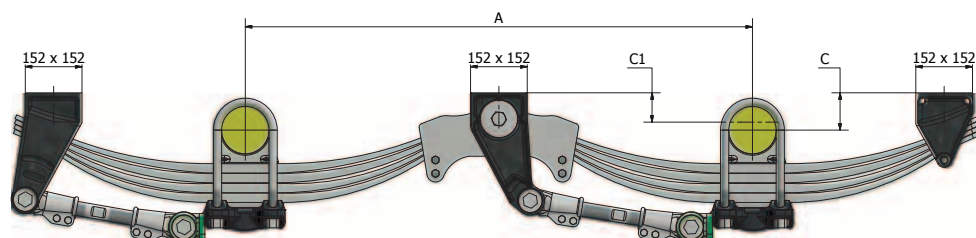
## Sospensioni meccaniche con tiranti a sezione tonda

MECHANICAL SUSPENSIONS WITH TIE RODS WITH ROUND BEAM  
MECHANISCHE FEDERAGGREGATE MIT PENDELSTANGE FÜR RUNDKANT  
SUSPENSIONS MÉCANIQUES AVEC BRAS DE TRACTION POUR SECTION RONDE



Standard

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base<br>Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n°<br>Anzahl Blätter<br>N° de feuilles | ALTEZZA PIASTRA<br>BALESTRA<br>Spring seat height<br>Sitzhöhe<br>Hauteur siège ressort | TUBOLARE<br>O QUADRO<br>Tub. or Square<br>Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA<br>SCARICO<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | ALTEZZA<br>CARICO<br>Height loaded<br>Ladehöhe<br>Hauteur charge |
|--------------|-----------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------|
|              | (Kg)                                                            | A (mm)                                                          |                                                            | B (mm)                                                                                 | (mm)                                                                          | C (mm)                                                                 | C1 (mm)                                                          |
| Z92AV0003A   | 16000                                                           | 1145                                                            | 3                                                          | 26                                                                                     | 127                                                                           | 339                                                                    | 312                                                              |
| Z92AV0059A   | 16000                                                           | 1145                                                            | 3                                                          | 68                                                                                     | 127                                                                           | 381                                                                    | 354                                                              |
| Z92AV0082A   | 16000                                                           | 1145                                                            | 4                                                          | 26                                                                                     | 127                                                                           | 339                                                                    | 312                                                              |
| Z92AV0083A   | 16000                                                           | 1145                                                            | 4                                                          | 68                                                                                     | 127                                                                           | 381                                                                    | 354                                                              |
| Z92AV0052A   | 16000                                                           | 1200                                                            | 3                                                          | 26                                                                                     | 127                                                                           | 339                                                                    | 312                                                              |
| Z92AV0053A   | 16000                                                           | 1200                                                            | 3                                                          | 68                                                                                     | 127                                                                           | 381                                                                    | 354                                                              |
| Z92AV0044A   | 16000                                                           | 1310                                                            | 3                                                          | 26                                                                                     | 127                                                                           | 339                                                                    | 312                                                              |
| Z92AV0084A   | 16000                                                           | 1310                                                            | 3                                                          | 68                                                                                     | 127                                                                           | 381                                                                    | 354                                                              |
| Z92AV0054A   | 20000                                                           | 1310                                                            | 4                                                          | 26                                                                                     | 127                                                                           | 339                                                                    | 312                                                              |
| Z92AV0073A   | 20000                                                           | 1310                                                            | 4                                                          | 68                                                                                     | 127                                                                           | 381                                                                    | 354                                                              |
| Z92AV0085A   | 20000                                                           | 1360                                                            | 3                                                          | 26                                                                                     | 127                                                                           | 358                                                                    | 311                                                              |
| Z92AV0086A   | 20000                                                           | 1360                                                            | 3                                                          | 68                                                                                     | 127                                                                           | 400                                                                    | 353                                                              |
| Z92AV0056A   | 20000                                                           | 1525                                                            | 3                                                          | 26                                                                                     | 127                                                                           | 358                                                                    | 311                                                              |
| Z92AV0087A   | 20000                                                           | 1525                                                            | 3                                                          | 68                                                                                     | 127                                                                           | 400                                                                    | 353                                                              |
| Z92AV0057A   | 24000                                                           | 1360                                                            | 4                                                          | 26                                                                                     | 127                                                                           | 363                                                                    | 316                                                              |
| Z92AV0088A   | 24000                                                           | 1360                                                            | 4                                                          | 68                                                                                     | 127                                                                           | 405                                                                    | 358                                                              |
| Z92AV0074A   | 24000                                                           | 1525                                                            | 4                                                          | 26                                                                                     | 127                                                                           | 363                                                                    | 316                                                              |
| Z92AV0058A   | 24000                                                           | 1525                                                            | 4                                                          | 68                                                                                     | 127                                                                           | 405                                                                    | 358                                                              |

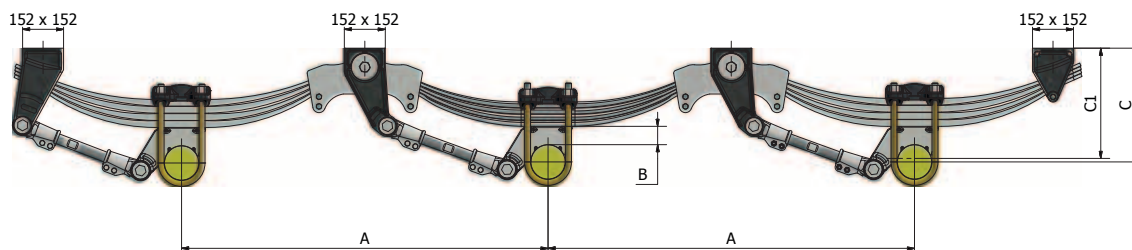


Tiefelader

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base<br>Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n°<br>Anzahl Blätter<br>N° de feuilles | TUBOLARE<br>O QUADRO<br>Tub. or Square<br>Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA<br>SCARICO<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | ALTEZZA<br>CARICO<br>Height loaded<br>Ladehöhe<br>Hauteur charge |
|--------------|-----------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------|
|              | (Kg)                                                            | A (mm)                                                          |                                                            | (mm)                                                                          | C (mm)                                                                 | C1 (mm)                                                          |
| Z91AV0120A   | 16000                                                           | 1145                                                            | 3                                                          | 127                                                                           | 52                                                                     | 25                                                               |
| Z91AV0121A   | 20000                                                           | 1360                                                            | 3                                                          | 127                                                                           | 100                                                                    | 52                                                               |
| Z91AV0122A   | 20000                                                           | 1360                                                            | 4                                                          | 127                                                                           | 100                                                                    | 52                                                               |
| Z91AV0123A   | 20000                                                           | 1525                                                            | 3                                                          | 127                                                                           | 100                                                                    | 52                                                               |
| Z91AV0124A   | 20000                                                           | 1525                                                            | 3                                                          | 127                                                                           | 100                                                                    | 52                                                               |

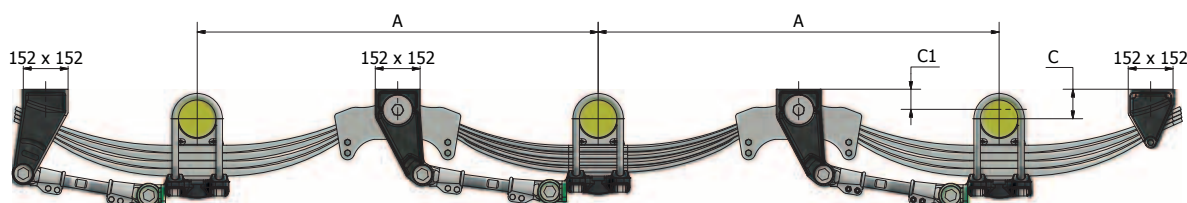
## Sospensioni meccaniche con tiranti a sezione tonda

MECHANICAL SUSPENSIONS WITH TIE RODS WITH ROUND BEAM  
 MECHANISCHE FEDERAGGREGATE MIT PENDELSTANGE FÜR RUNDKANT  
 SUSPENSIONS MÉCANIQUES AVEC BRAS DE TRACTION POUR SECTION RONDE

**AGRI  
STEFEN**  
 FAST line


Standard

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base<br>Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n°<br>Anzahl Blätter<br>N° de feuilles | ALTEZZA PIASTRA<br>BALESTRA<br>Spring seat height<br>Sitzhöhe<br>Hauteur siège ressort | TUBOLARE<br>O QUADRO<br>Tub. or Square<br>Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA<br>SCARICO<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | ALTEZZA<br>CARICO<br>Height loaded<br>Ladehöhe<br>Hauteur charge |
|--------------|-----------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------|
|              | (Kg)                                                            | A (mm)                                                          |                                                            | B (mm)                                                                                 | (mm)                                                                          | C (mm)                                                                 | C1 (mm)                                                          |
| Z93AV0031A   | 24000                                                           | 1200                                                            | 3                                                          | 26                                                                                     | 127                                                                           | 339                                                                    | 312                                                              |
| Z93AV0055A   | 24000                                                           | 1200                                                            | 3                                                          | 68                                                                                     | 127                                                                           | 381                                                                    | 354                                                              |
| Z93AV0032A   | 24000                                                           | 1310                                                            | 3                                                          | 26                                                                                     | 127                                                                           | 339                                                                    | 312                                                              |
| Z93AV0056A   | 24000                                                           | 1310                                                            | 3                                                          | 68                                                                                     | 127                                                                           | 381                                                                    | 354                                                              |
| Z93AV0057A   | 30000                                                           | 1310                                                            | 4                                                          | 26                                                                                     | 127                                                                           | 339                                                                    | 312                                                              |
| Z93AV0058A   | 30000                                                           | 1310                                                            | 4                                                          | 68                                                                                     | 127                                                                           | 381                                                                    | 354                                                              |
| Z93AV0045A   | 30000                                                           | 1360                                                            | 3                                                          | 26                                                                                     | 127                                                                           | 358                                                                    | 311                                                              |
| Z93AV0059A   | 30000                                                           | 1360                                                            | 3                                                          | 68                                                                                     | 127                                                                           | 400                                                                    | 353                                                              |
| Z93AV0060A   | 30000                                                           | 1525                                                            | 3                                                          | 26                                                                                     | 127                                                                           | 358                                                                    | 311                                                              |
| Z93AV0061A   | 30000                                                           | 1360                                                            | 3                                                          | 68                                                                                     | 127                                                                           | 400                                                                    | 353                                                              |
| Z93AV0044A   | 36000                                                           | 1360                                                            | 4                                                          | 26                                                                                     | 127                                                                           | 363                                                                    | 316                                                              |
| Z93AV0036A   | 36000                                                           | 1360                                                            | 4                                                          | 68                                                                                     | 127                                                                           | 405                                                                    | 358                                                              |
| Z93AV0042A   | 36000                                                           | 1525                                                            | 4                                                          | 26                                                                                     | 127                                                                           | 363                                                                    | 316                                                              |
| Z93AV0037A   | 36000                                                           | 1525                                                            | 4                                                          | 68                                                                                     | 127                                                                           | 405                                                                    | 358                                                              |



Tieflader

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | PASSO A<br>Wheel "A" base<br>Achsabstand "A"<br>Empattement "A" | N° FOGLIE<br>Leaves n°<br>Anzahl Blätter<br>N° de feuilles | TUBOLARE<br>O QUADRO<br>Tub. or Square<br>Rohr oder Vierkant<br>Tub. ou carré | ALTEZZA<br>SCARICO<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | ALTEZZA<br>CARICO<br>Height loaded<br>Ladehöhe<br>Hauteur charge |
|--------------|-----------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------|
|              | (Kg)                                                            | A (mm)                                                          |                                                            | (mm)                                                                          | C (mm)                                                                 | C1 (mm)                                                          |
| Z93AV0086A   | 24000                                                           | 1145                                                            | 3                                                          | 127                                                                           | 52                                                                     | 26                                                               |
| Z93AV0087A   | 24000                                                           | 1310                                                            | 3                                                          | 127                                                                           | 100                                                                    | 64                                                               |
| Z93AV0088A   | 24000                                                           | 1310                                                            | 4                                                          | 127                                                                           | 100                                                                    | 64                                                               |
| Z93AV0089A   | 30000                                                           | 1360                                                            | 3                                                          | 127                                                                           | 100                                                                    | 64                                                               |
| Z93AV0132A   | 30000                                                           | 1360                                                            | 4                                                          | 127                                                                           | 100                                                                    | 26                                                               |
| Z93AV0090A   | 30000                                                           | 1360                                                            | 4                                                          | 127                                                                           | 100                                                                    | 64                                                               |







## Sospensioni Apeiron

APEIRON SOSPENSION  
LUFTFEDERUNGEN APEIRON  
SUSPENSION APEIRON

**AGRI  
STEFEN**  
*FAST* line

L'«Origine» delle future sospensioni ad aria  
*The «Origin» of the next generation of air suspension*  
*Der Ursprung der nächsten Generation von Luftaggregaten*  
*L'origine des futures suspensions pneumatiques*

**NEW**

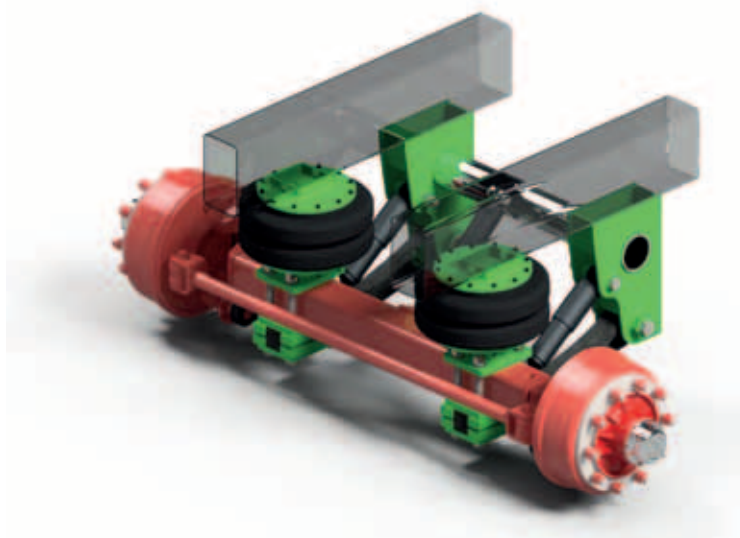
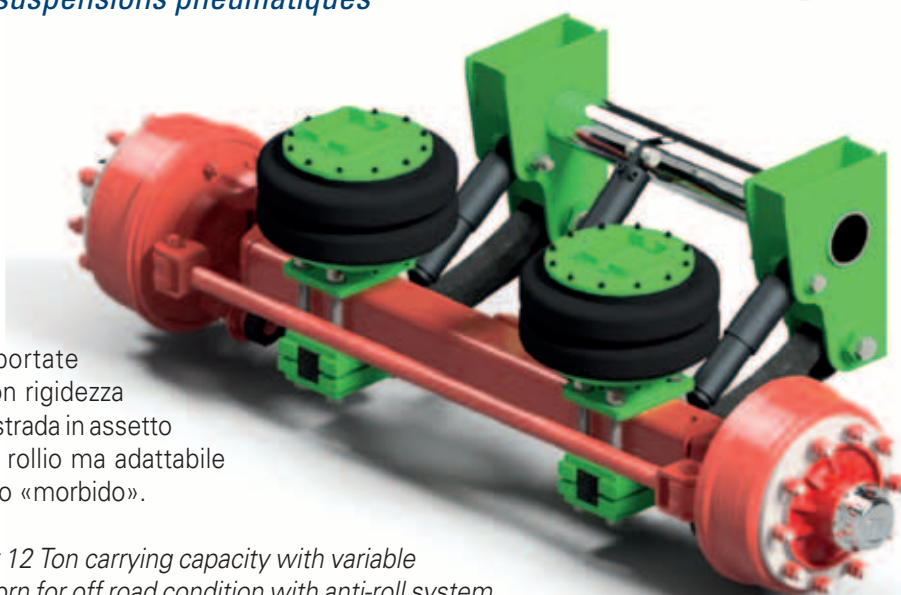
Richiesta Brevetto  
*Patent Pending*  
*Patent Anmeldung*  
*Demande de brevet*

La Sospensione  
elettro-pneumatica per portate  
fino a 12 ton per asse, con rigidità  
variabile studiata per fuori strada in assetto  
«rigido» con sistema anti rollio ma adattabile  
anche per strade in assetto «morbido».

*Electric-Air suspension for 12 Ton carrying capacity with variable  
trim setting; «rigid trim» born for off road condition with anti-roll system  
and «soft trim» setting for road condition.*

*Das elektronische Federaggregat bis 12 Tonnen Tragfähigkeit mit wechselhafter Festigkeit: studiert für off-  
road steife Ausrüstung mit Schlingersystem passend auch zu zarter Ausrüstung auf Strassen*

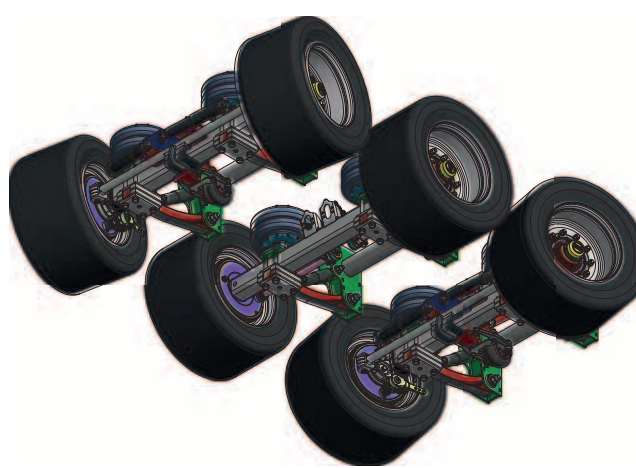
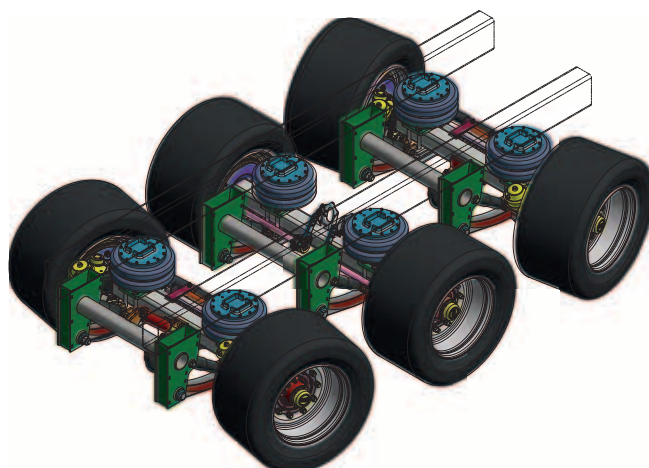
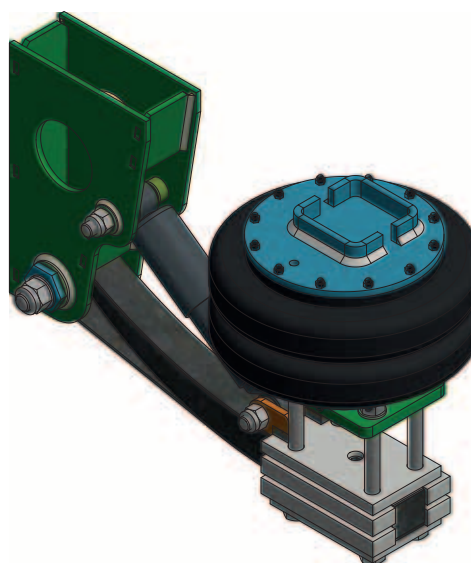
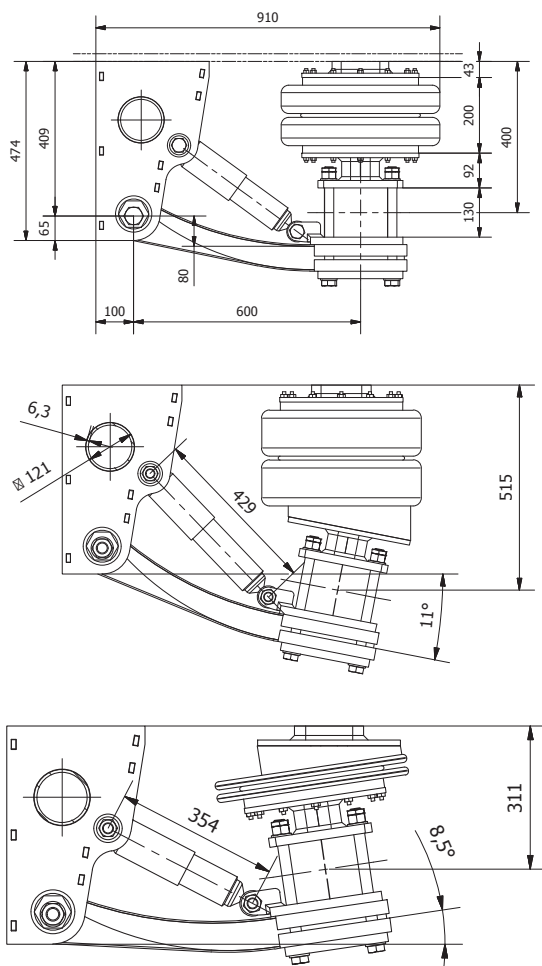
*La suspension électropneumatique pour capacité jusqu'à 12 tonnes avec rigidité variable: conçu pour le  
comportement tout-terrain en attitude rigide avec système anti-roulis mais adaptable aussi pour routes en  
assiette souple.*



## Sospensioni Apeiron

APEIRON SOSPENSION  
LUFTFEDERUNGEN APEIRON  
SUSPENSION APEIRON

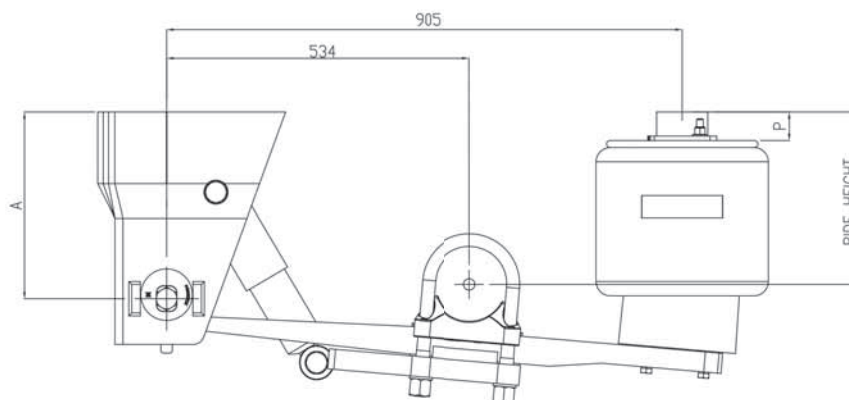
**AGRI-  
STEFEN**  
FAST line





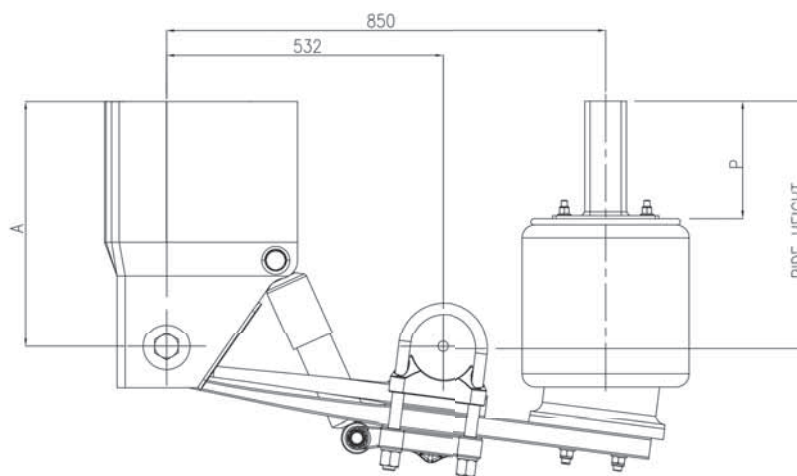
## Sospensioni ad aria

AIR SOSPENSION  
LUFTFEDERUNGEN  
SUSPENSIONS PNEUMATIQUE



Sospensione pneumatica 9 Ton - Pneumatic suspension 9 Ton - 9 Tonnen Luftfederungen - Suspension à air 9 Ton

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | ALTEZZA DI MARCIA<br>Ride height<br>Hauteur de marche<br>Fahrhöhe | A   | P  |
|--------------------------------------------------------------------------|-------------------------------------------------------------------|-----|----|
| Z61AV0140A                                                               | 250                                                               | 275 | 8  |
| Z61AV0141A                                                               | 275                                                               | 300 | 25 |
| Z61AV0142A                                                               | 300                                                               | 325 | 30 |

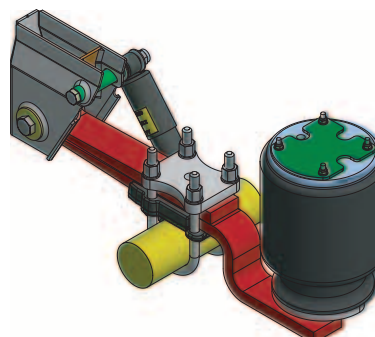
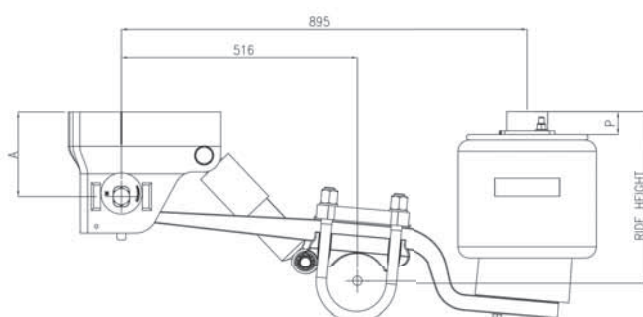


Sospensione pneumatica 11 Ton - Pneumatic suspension 11 Ton - 11 Tonnen Luftfederungen - Suspension à air 11 Ton

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | ALTEZZA DI MARCIA<br>Ride height<br>Hauteur de marche<br>Fahrhöhe | A   | P   |
|--------------------------------------------------------------------------|-------------------------------------------------------------------|-----|-----|
| Z61AV0131A                                                               | 250                                                               | 250 | 6   |
| Z61AV0132A                                                               | 300                                                               | 300 | 50  |
| Z61AV0133A                                                               | 350                                                               | 350 | 100 |
| Z61AV0134A                                                               | 400                                                               | 400 | 150 |
| Z61AV0135A                                                               | 450                                                               | 450 | 200 |

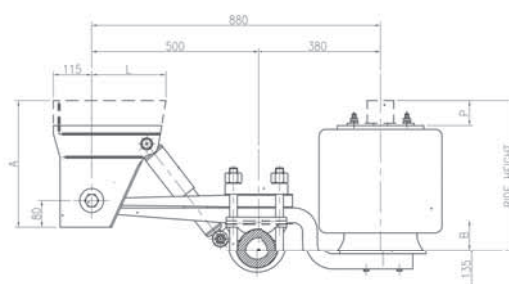
## Sospensioni ad aria

AIR SUSPENSION  
LUFTFEDERUNGEN  
SUSPENSIONS PNEUMATIQUE



Sospensione pneumatica 9 Ton - Pneumatic suspension 9 Ton - 9 Tonnen Luftfederungen - Suspension à air 9 Ton

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | ALTEZZA DI MARCIA<br>Ride height<br>Hauteur de marche<br>Fahrhöhe | A   | P  |
|--------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------|-----|----|
| Z61AV0136A                                                               | 9000                                                            | 310                                                               | 120 | 0  |
| Z61AV0137A                                                               |                                                                 | 325                                                               | 135 | 0  |
| Z61AV0138A                                                               |                                                                 | 350                                                               | 160 | 25 |
| Z61AV0139A                                                               |                                                                 | 375                                                               | 185 | 50 |

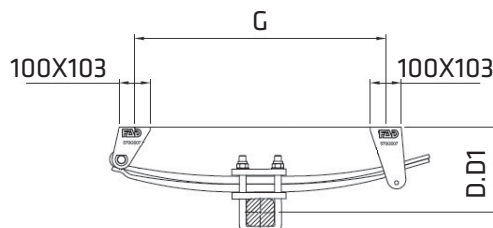


Sospensione pneumatica 12 Ton - Pneumatic suspension 12 Ton - 12 Tonnen Luftfederungen - Suspension à air 12 Ton

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | ALTEZZA DI MARCIA<br>Ride height<br>Hauteur de marche<br>Fahrhöhe | A   | P   |
|--------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------|-----|-----|
| Z61AV0109A                                                               | 12000                                                           | 375                                                               | 305 | 6   |
| Z61AV0110A                                                               |                                                                 | 400                                                               | 330 | 6   |
| Z61AV0125A                                                               |                                                                 | 425                                                               | 355 | 25  |
| Z61AV0126A                                                               |                                                                 | 450                                                               | 380 | 50  |
| Z61AV0127A                                                               |                                                                 | 475                                                               | 405 | 75  |
| Z61AV0128A                                                               |                                                                 | 500                                                               | 430 | 100 |
| Z61AV0129A                                                               |                                                                 | 525                                                               | 455 | 125 |
| Z61AV0130A                                                               |                                                                 | 550                                                               | 480 | 150 |

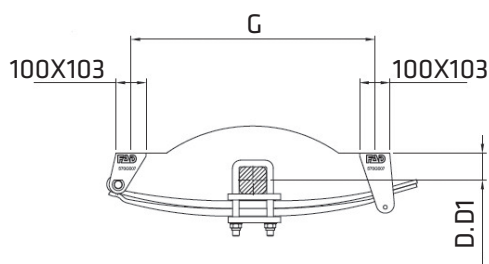
## Sospensioni meccaniche senza tiranti

MECHANICAL SUSPENSIONS WITHOUT TIE RODS  
MECHANISCHE FEDERAGGREGATE OHNE ZUGSTANGE  
SUSPENSIONS MÉCANIQUES SANS BRAS DE TRACTION



Assetto standard - Standard structure - Standardtrimm - Position standard haute

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de<br>charge | G   | Q. ASSALE<br>Axle Sq.<br>Vierkant<br>Carrè | D<br>ALTEZZA SCARICO<br>(mm)<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | D1<br>ALTEZZA CARICO<br>(mm)<br>Height loaded<br>Ladehöhe<br>Hauteur en charge | BALESTRA<br>(mm)<br>Spring<br>Feder<br>Ressort |
|--------------|--------------------------------------------------------------------|-----|--------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------|
| Z91E0601     | 6000                                                               | 600 | 70                                         | 269                                                                              | 251                                                                            | 80                                             |
| Z91E0602     |                                                                    |     | 80                                         | 274                                                                              | 256                                                                            |                                                |
| Z91E0603     |                                                                    |     | 90                                         | 279                                                                              | 261                                                                            |                                                |
| Z91E0604     |                                                                    | 810 | 70                                         | 279                                                                              | 252                                                                            |                                                |
| Z91E0605     |                                                                    |     | 80                                         | 284                                                                              | 257                                                                            |                                                |
| Z91E0606     |                                                                    |     | 90                                         | 289                                                                              | 262                                                                            |                                                |
| Z91E0701     | 7000                                                               | 600 | 70                                         | 269                                                                              | 248                                                                            |                                                |
| Z91E0702     |                                                                    |     | 80                                         | 274                                                                              | 253                                                                            |                                                |
| Z91E0703     |                                                                    |     | 90                                         | 279                                                                              | 258                                                                            |                                                |
| Z91E0704     |                                                                    | 810 | 70                                         | 279                                                                              | 247                                                                            |                                                |
| Z91E0705     |                                                                    |     | 80                                         | 284                                                                              | 252                                                                            |                                                |
| Z91E0706     |                                                                    |     | 90                                         | 289                                                                              | 257                                                                            |                                                |
| Z91E0801     | 8000                                                               | 810 | 70                                         | 279                                                                              | 243                                                                            |                                                |
| Z91E0802     |                                                                    |     | 80                                         | 284                                                                              | 248                                                                            |                                                |
| Z91E0803     |                                                                    |     | 90                                         | 289                                                                              | 253                                                                            |                                                |



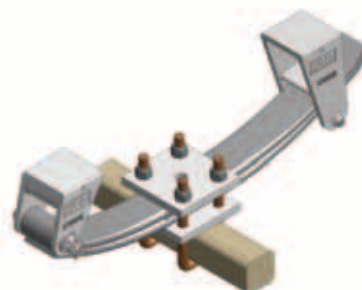
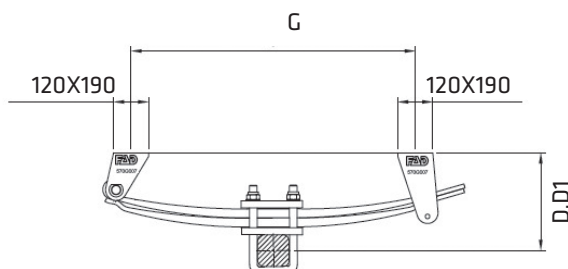
Assetto ribassato - Underslung structure - Tieflader Aufbau - Position surbaissé

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de<br>charge | G   | Q. ASSALE<br>Axle Sq.<br>Vierkant<br>Carrè | D<br>ALTEZZA SCARICO<br>(mm)<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | D1<br>ALTEZZA CARICO<br>(mm)<br>Height loaded<br>Ladehöhe<br>Hauteur en charge | BALESTRA<br>(mm)<br>Spring<br>Feder<br>Ressort |
|--------------|--------------------------------------------------------------------|-----|--------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------|
| Z91E0601R    | 6000                                                               | 600 | 70                                         | 125                                                                              | 107                                                                            | 80                                             |
| Z91E0602R    |                                                                    |     | 80                                         | 120                                                                              | 102                                                                            |                                                |
| Z91E0603R    |                                                                    |     | 90                                         | 115                                                                              | 97                                                                             |                                                |
| Z91E0604R    |                                                                    | 810 | 70                                         | 125                                                                              | 98                                                                             |                                                |
| Z91E0605R    |                                                                    |     | 80                                         | 120                                                                              | 93                                                                             |                                                |
| Z91E0606R    |                                                                    |     | 90                                         | 115                                                                              | 88                                                                             |                                                |
| Z91E0701R    | 7000                                                               | 600 | 70                                         | 125                                                                              | 104                                                                            |                                                |
| Z91E0702R    |                                                                    |     | 80                                         | 120                                                                              | 99                                                                             |                                                |
| Z91E0703R    |                                                                    |     | 90                                         | 115                                                                              | 94                                                                             |                                                |
| Z91E0704R    |                                                                    | 810 | 70                                         | 125                                                                              | 93                                                                             |                                                |
| Z91E0705R    |                                                                    |     | 80                                         | 120                                                                              | 88                                                                             |                                                |
| Z91E0706R    |                                                                    |     | 90                                         | 115                                                                              | 83                                                                             |                                                |
| Z91E0801R    | 8000                                                               | 810 | 70                                         | 125                                                                              | 89                                                                             |                                                |
| Z91E0802R    |                                                                    |     | 80                                         | 120                                                                              | 84                                                                             |                                                |
| Z91E0803R    |                                                                    |     | 90                                         | 115                                                                              | 79                                                                             |                                                |



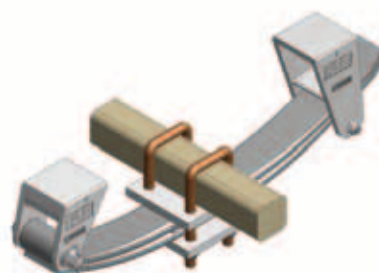
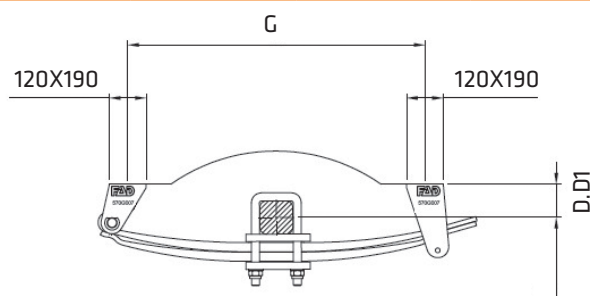
## Sospensioni meccaniche senza tiranti

MECHANICAL SUSPENSIONS WITHOUT TIE RODS  
MECHANISCHE FEDERAGGREGATE OHNE ZUGSTANGE  
SUSPENSIONS MÉCANIQUES SANS BRAS DE TRACTION



Assetto standard - Standard structure - Standardtrimm - Position standard haute

| ID<br>NUMBER | C<br>PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de<br>charge | G   | Q. ASSALE<br>Axle Sq.<br>Vierkant<br>Carrè | D<br>ALTEZZA SCARICO<br>(mm)<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | D1<br>ALTEZZA CARICO<br>(mm)<br>Height loaded<br>Ladehöhe<br>Hauteur en charge | BALESTRA<br>(mm)<br>Spring<br>Feder<br>Ressort |
|--------------|-------------------------------------------------------------------------|-----|--------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------|
| Z91E0804     | 8000                                                                    | 870 | 90                                         | 353                                                                              | 333                                                                            | 100                                            |
| Z91E0805     |                                                                         |     | 100                                        | 358                                                                              | 338                                                                            |                                                |
| Z91E0806     |                                                                         |     | 110                                        | 363                                                                              | 343                                                                            |                                                |
| Z91E0807     |                                                                         |     | 120                                        | 368                                                                              | 348                                                                            |                                                |
| Z91E0901     | 9000                                                                    | 870 | 90                                         | 353                                                                              | 330                                                                            |                                                |
| Z91E0902     |                                                                         |     | 100                                        | 358                                                                              | 335                                                                            |                                                |
| Z91E0903     |                                                                         |     | 110                                        | 363                                                                              | 340                                                                            |                                                |
| Z91E0904     |                                                                         |     | 120                                        | 368                                                                              | 345                                                                            |                                                |
| Z91E1001     | 10500                                                                   | 870 | 90                                         | 353                                                                              | 326                                                                            |                                                |
| Z91E1002     |                                                                         |     | 100                                        | 358                                                                              | 331                                                                            |                                                |
| Z91E1003     |                                                                         |     | 110                                        | 363                                                                              | 336                                                                            |                                                |
| Z91E1004     |                                                                         |     | 120                                        | 368                                                                              | 341                                                                            |                                                |



Assetto ribassato - Underslung structure - Tieflader Aufbau - Position surbaissé

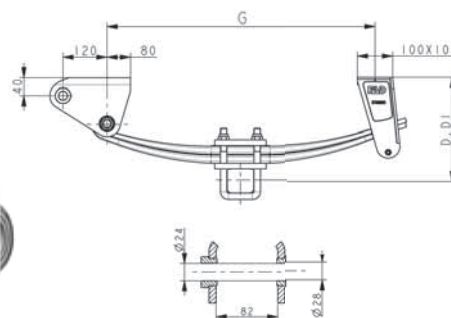
| ID<br>NUMBER | C<br>PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de<br>charge | G   | Q. ASSALE<br>Axle Sq.<br>Vierkant<br>Carrè | D<br>ALTEZZA SCARICO<br>(mm)<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | D1<br>ALTEZZA CARICO<br>(mm)<br>Height loaded<br>Ladehöhe<br>Hauteur en charge | BALESTRA<br>(mm)<br>Spring<br>Feder<br>Ressort |
|--------------|-------------------------------------------------------------------------|-----|--------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------|
| Z91E0804R    | 8000                                                                    | 870 | 90                                         | 163                                                                              | 143                                                                            | 100                                            |
| Z91E0805R    |                                                                         |     | 100                                        | 158                                                                              | 138                                                                            |                                                |
| Z91E0806R    |                                                                         |     | 110                                        | 153                                                                              | 133                                                                            |                                                |
| Z91E0807R    |                                                                         |     | 120                                        | 148                                                                              | 128                                                                            |                                                |
| Z91E0901R    | 9000                                                                    | 870 | 90                                         | 163                                                                              | 140                                                                            |                                                |
| Z91E0902R    |                                                                         |     | 100                                        | 158                                                                              | 135                                                                            |                                                |
| Z91E0903R    |                                                                         |     | 110                                        | 153                                                                              | 130                                                                            |                                                |
| Z91E0904R    |                                                                         |     | 120                                        | 148                                                                              | 125                                                                            |                                                |
| Z91E1001R    | 10500                                                                   | 870 | 90                                         | 163                                                                              | 136                                                                            |                                                |
| Z91E1002R    |                                                                         |     | 100                                        | 158                                                                              | 131                                                                            |                                                |
| Z91E1003R    |                                                                         |     | 110                                        | 153                                                                              | 126                                                                            |                                                |
| Z91E1004R    |                                                                         |     | 120                                        | 148                                                                              | 121                                                                            |                                                |

## Sospensioni meccaniche senza tiranti

MECHANICAL SUSPENSIONS WITHOUT TIE RODS  
 MECHANISCHE FEDERAGGREGATE OHNE ZUGSTANGE  
 SUSPENSIONS MÉCANIQUES SANS BRAS DE TRACTION

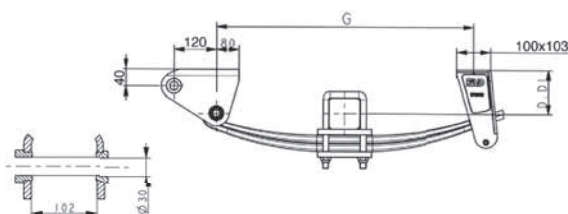
544FE005K

- 1 INGR MBX1 25 L=13,5 mm
- 2 RONDELLA D. 29X5X2,8 ZINC. BIANCA
- 3 DADO M 27X3X27 DIN982 AUTOB.
- 4 PERNO ATT. TIMONE SOSF. ECO 10.5 T



Assetto standard - Standard structure - Standardtrimm - Position standard haute

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | G   | Q. ASSALE<br>Axle Sq.<br>Vierkant<br>Carré | D<br>ALTEZZA SCARICO<br>(mm)<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | D1<br>ALTEZZA CARICO<br>(mm)<br>Height loaded<br>Ladehöhe<br>Hauteur en charge | BALESTRA<br>(mm)<br>Spring<br>Feder<br>Ressort |
|--------------|-----------------------------------------------------------------|-----|--------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------|
| Z91E0601T    | 6000                                                            | 645 | 70                                         | 269                                                                              | 251                                                                            | 80                                             |
| Z91E0602T    |                                                                 |     | 80                                         | 274                                                                              | 256                                                                            |                                                |
| Z91E0603T    |                                                                 |     | 90                                         | 279                                                                              | 261                                                                            |                                                |
| Z91E0604T    |                                                                 | 855 | 70                                         | 279                                                                              | 252                                                                            |                                                |
| Z91E0605T    |                                                                 |     | 80                                         | 284                                                                              | 257                                                                            |                                                |
| Z91E0606T    |                                                                 |     | 90                                         | 289                                                                              | 262                                                                            |                                                |
| Z91E0701T    | 7000                                                            | 645 | 70                                         | 269                                                                              | 248                                                                            |                                                |
| Z91E0702T    |                                                                 |     | 80                                         | 274                                                                              | 253                                                                            |                                                |
| Z91E0703T    |                                                                 |     | 90                                         | 279                                                                              | 258                                                                            |                                                |
| Z91E0704T    |                                                                 | 855 | 70                                         | 279                                                                              | 247                                                                            |                                                |
| Z91E0705T    |                                                                 |     | 80                                         | 284                                                                              | 252                                                                            |                                                |
| Z91E0706T    |                                                                 |     | 90                                         | 289                                                                              | 257                                                                            |                                                |
| Z91E0801T    | 8000                                                            | 855 | 70                                         | 279                                                                              | 243                                                                            |                                                |
| Z91E0802T    |                                                                 |     | 80                                         | 284                                                                              | 248                                                                            |                                                |
| Z91E0803T    |                                                                 |     | 90                                         | 289                                                                              | 253                                                                            |                                                |

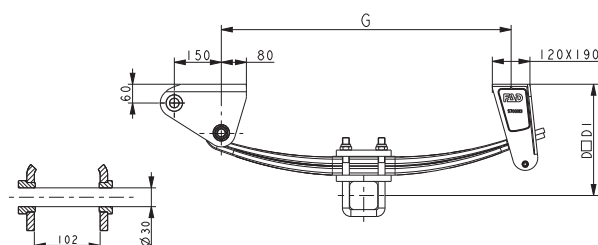


Assetto ribassato - Underslung structure - Tieflader Aufbau - Position surbaissé

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | G   | Q. ASSALE<br>Axle Sq.<br>Vierkant<br>Carré | D<br>ALTEZZA SCARICO<br>(mm)<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | D1<br>ALTEZZA CARICO<br>(mm)<br>Height loaded<br>Ladehöhe<br>Hauteur en charge | BALESTRA<br>(mm)<br>Spring<br>Feder<br>Ressort |
|--------------|-----------------------------------------------------------------|-----|--------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------|
| Z91E0601TR   | 6000                                                            | 645 | 70                                         | 125                                                                              | 107                                                                            | 80                                             |
| Z91E0602TR   |                                                                 |     | 80                                         | 120                                                                              | 102                                                                            |                                                |
| Z91E0603TR   |                                                                 |     | 90                                         | 115                                                                              | 97                                                                             |                                                |
| Z91E0604TR   |                                                                 | 855 | 70                                         | 125                                                                              | 98                                                                             |                                                |
| Z91E0605TR   |                                                                 |     | 80                                         | 120                                                                              | 93                                                                             |                                                |
| Z91E0606TR   |                                                                 |     | 90                                         | 115                                                                              | 88                                                                             |                                                |
| Z91E0701TR   | 7000                                                            | 645 | 70                                         | 125                                                                              | 104                                                                            |                                                |
| Z91E0702TR   |                                                                 |     | 80                                         | 120                                                                              | 99                                                                             |                                                |
| Z91E0703TR   |                                                                 |     | 90                                         | 115                                                                              | 94                                                                             |                                                |
| Z91E0704TR   |                                                                 | 855 | 70                                         | 125                                                                              | 93                                                                             |                                                |
| Z91E0705TR   |                                                                 |     | 80                                         | 120                                                                              | 88                                                                             |                                                |
| Z91E0706TR   |                                                                 |     | 90                                         | 115                                                                              | 83                                                                             |                                                |
| Z91E0801TR   | 8000                                                            | 855 | 70                                         | 125                                                                              | 89                                                                             |                                                |
| Z91E0802TR   |                                                                 |     | 80                                         | 120                                                                              | 84                                                                             |                                                |
| Z91E0803TR   |                                                                 |     | 90                                         | 115                                                                              | 79                                                                             |                                                |

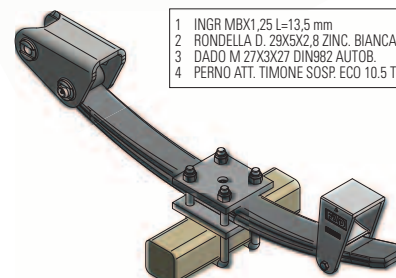
## Sospensioni meccaniche senza tiranti

MECHANICAL SUSPENSIONS WITHOUT TIE RODS  
MECHANISCHE FEDERAGGREGATE OHNE ZUGSTANGE  
SUSPENSIONS MÉCANIQUES SANS BRAS DE TRACTION



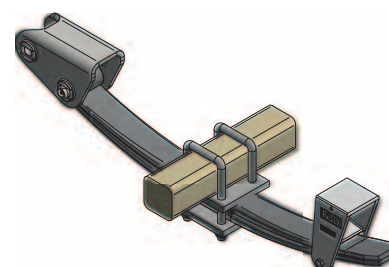
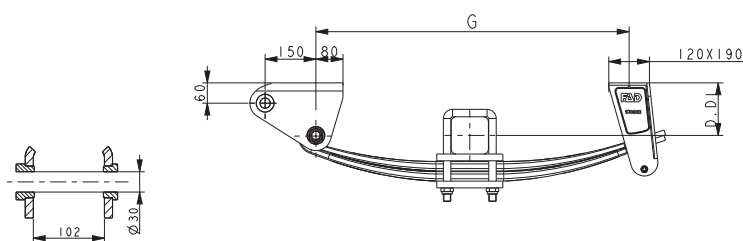
544FE004K

- 1 INGR M8X1,25 L=13,5 mm
- 2 RONDELLA D. 29X5X2,8 ZINC. BIANCA
- 3 DADO M 27X3X27 DIN982 AUTOB.
- 4 PERNO ATT. TIMONE SOSPECO 10.5 T



Assetto standard - Standard structure - Standardtrimm - Position standard haute

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | G   | Q. ASSALE<br>Axle Sq.<br>Vierkant<br>Carrè | D<br>ALTEZZA SCARICO<br>(mm)<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | D1<br>ALTEZZA CARICO<br>(mm)<br>Height loaded<br>Ladehöhe<br>Hauteur en charge | BALESTRA<br>(mm)<br>Spring<br>Feder<br>Ressort |
|--------------|-----------------------------------------------------------------|-----|--------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------|
| Z91E0804T    | 8000                                                            | 925 | 90                                         | 353                                                                              | 333                                                                            | 100                                            |
| Z91E0805T    |                                                                 |     | 100                                        | 358                                                                              | 338                                                                            |                                                |
| Z91E0806T    |                                                                 |     | 110                                        | 363                                                                              | 343                                                                            |                                                |
| Z91E0807T    |                                                                 |     | 120                                        | 368                                                                              | 348                                                                            |                                                |
| Z91E0901T    | 9000                                                            |     | 90                                         | 353                                                                              | 330                                                                            |                                                |
| Z91E0902T    |                                                                 |     | 100                                        | 358                                                                              | 335                                                                            |                                                |
| Z91E0903T    |                                                                 |     | 110                                        | 363                                                                              | 340                                                                            |                                                |
| Z91E0904T    |                                                                 |     | 120                                        | 368                                                                              | 345                                                                            |                                                |
| Z91E1001T    | 10500                                                           |     | 90                                         | 353                                                                              | 326                                                                            |                                                |
| Z91E1002T    |                                                                 |     | 100                                        | 358                                                                              | 331                                                                            |                                                |
| Z91E1003T    |                                                                 |     | 110                                        | 363                                                                              | 336                                                                            |                                                |
| Z91E1004T    |                                                                 |     | 120                                        | 368                                                                              | 341                                                                            |                                                |



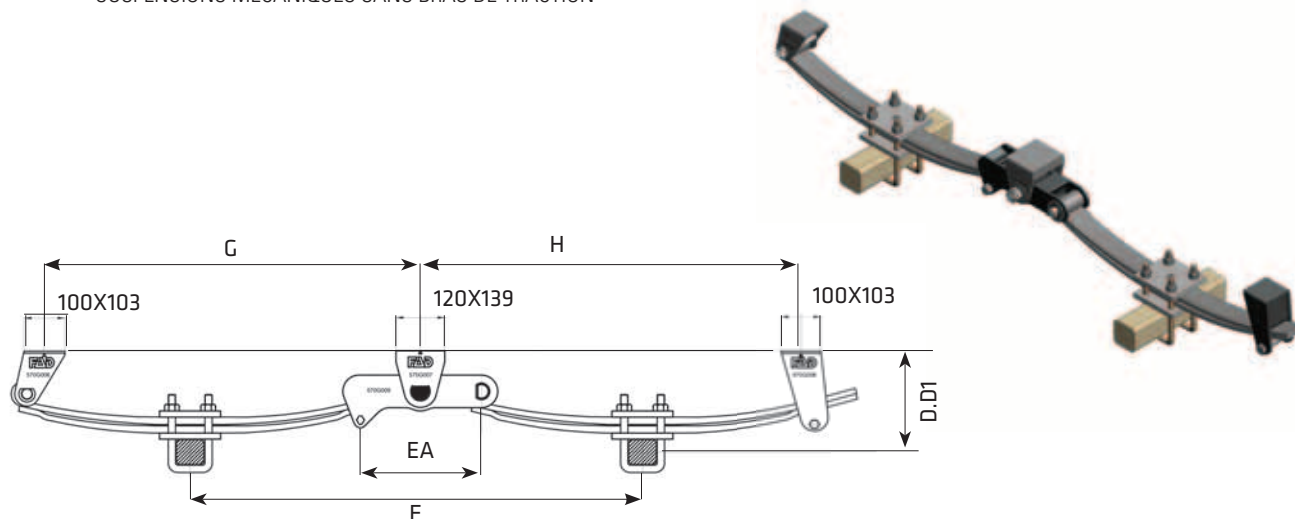
Assetto ribassato - Underslung structure - Tieflader Aufbau - Position surbaissé

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | G   | Q. ASSALE<br>Axle Sq.<br>Vierkant<br>Carrè | D<br>ALTEZZA SCARICO<br>(mm)<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | D1<br>ALTEZZA CARICO<br>(mm)<br>Height loaded<br>Ladehöhe<br>Hauteur en charge | BALESTRA<br>(mm)<br>Spring<br>Feder<br>Ressort |
|--------------|-----------------------------------------------------------------|-----|--------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------|
| Z91E0804TR   | 8000                                                            | 925 | 90                                         | 163                                                                              | 143                                                                            | 100                                            |
| Z91E0805TR   |                                                                 |     | 100                                        | 158                                                                              | 138                                                                            |                                                |
| Z91E0806TR   |                                                                 |     | 110                                        | 153                                                                              | 133                                                                            |                                                |
| Z91E0807TR   |                                                                 |     | 120                                        | 148                                                                              | 128                                                                            |                                                |
| Z91E0901TR   | 9000                                                            |     | 90                                         | 163                                                                              | 140                                                                            |                                                |
| Z91E0902TR   |                                                                 |     | 100                                        | 158                                                                              | 135                                                                            |                                                |
| Z91E0903TR   |                                                                 |     | 110                                        | 153                                                                              | 130                                                                            |                                                |
| Z91E0904TR   |                                                                 |     | 120                                        | 148                                                                              | 125                                                                            |                                                |
| Z91E1001TR   | 10500                                                           |     | 90                                         | 163                                                                              | 136                                                                            |                                                |
| Z91E1002TR   |                                                                 |     | 100                                        | 158                                                                              | 131                                                                            |                                                |
| Z91E1003TR   |                                                                 |     | 110                                        | 153                                                                              | 126                                                                            |                                                |
| Z91E1004TR   |                                                                 |     | 120                                        | 148                                                                              | 121                                                                            |                                                |



## Sospensioni meccaniche senza tiranti

MECHANICAL SUSPENSIONS WITHOUT TIE RODS  
 MECHANISCHE FEDERAGGREGATE OHNE ZUGSTANGE  
 SUSPENSIONS MÉCANIQUES SANS BRAS DE TRACTION

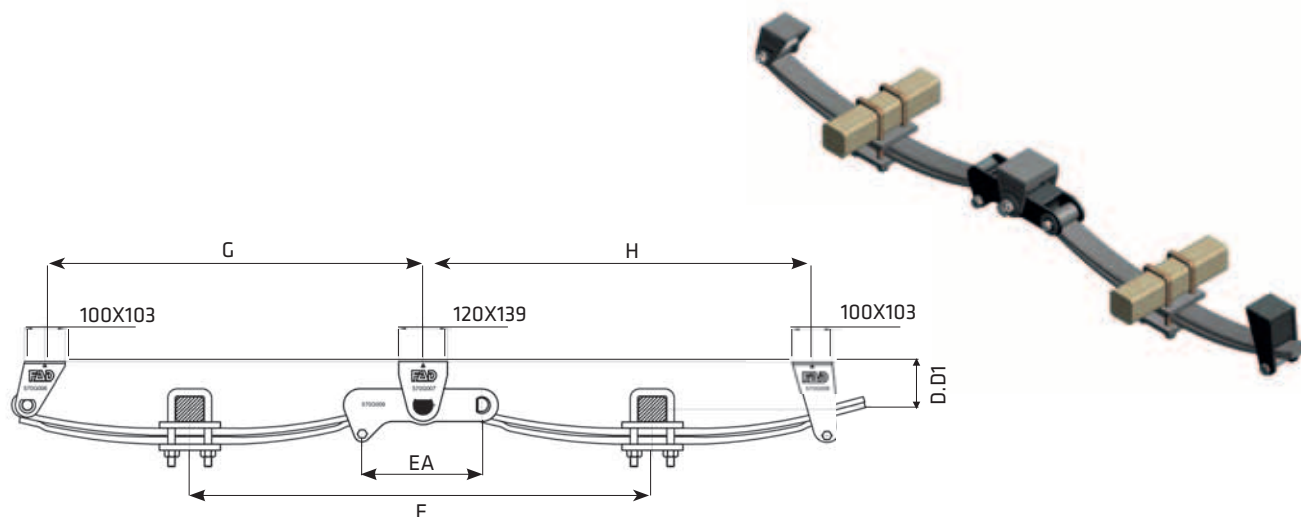


Assetto standard - Standard structure - Standardtrimm - Position standard haute

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | E    | G    | H    | Q. ASSALE<br>Axle Sq.<br>Vierkant<br>Carrè | D<br>ALTEZZA SCARICO<br>(mm)<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | D1<br>ALTEZZA CARICO<br>(mm)<br>Height loaded<br>Ladehöhe<br>Hauteur en charge | EA   | BALESTRA<br>(mm)<br>Spring<br>Feder<br>Ressort |     |    |     |     |
|--------------|-----------------------------------------------------------------|------|------|------|--------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------|------------------------------------------------|-----|----|-----|-----|
| Z92E1001     | 10000                                                           | 990  | 797  | 805  | 70                                         | 269                                                                              | 254                                                                            | 310  | 80                                             |     |    |     |     |
| Z92E1002     |                                                                 |      |      |      | 80                                         | 274                                                                              | 259                                                                            |      |                                                |     |    |     |     |
| Z92E1003     |                                                                 |      |      |      | 80                                         | 279                                                                              | 264                                                                            |      |                                                |     |    |     |     |
| Z92E1004     |                                                                 | 1200 | 1007 | 1015 | 70                                         | 279                                                                              | 256                                                                            |      |                                                |     |    |     |     |
| Z92E1005     |                                                                 |      |      |      | 80                                         | 284                                                                              | 261                                                                            |      |                                                |     |    |     |     |
| Z92E1006     |                                                                 |      |      |      | 90                                         | 289                                                                              | 266                                                                            |      |                                                |     |    |     |     |
| Z92E1201     | 12000                                                           | 990  | 797  | 805  | 70                                         | 269                                                                              | 251                                                                            | 470  |                                                |     |    |     |     |
| Z92E1202     |                                                                 |      |      |      | 80                                         | 274                                                                              | 256                                                                            |      |                                                |     |    |     |     |
| Z92E1203     |                                                                 |      |      |      | 90                                         | 279                                                                              | 261                                                                            |      |                                                |     |    |     |     |
| Z92E1204     |                                                                 | 1200 | 1007 | 1015 | 70                                         | 279                                                                              | 252                                                                            |      |                                                |     |    |     |     |
| Z92E1205     |                                                                 |      |      |      | 80                                         | 284                                                                              | 257                                                                            |      |                                                |     |    |     |     |
| Z92E1206     |                                                                 |      |      |      | 90                                         | 289                                                                              | 262                                                                            |      |                                                |     |    |     |     |
| Z92E1207     | 14000                                                           | 1350 | 1077 | 1085 | 70                                         | 279                                                                              | 252                                                                            | 470  |                                                |     |    |     |     |
| Z92E1208     |                                                                 |      |      |      | 80                                         | 284                                                                              | 257                                                                            |      |                                                |     |    |     |     |
| Z92E1209     |                                                                 |      |      |      | 90                                         | 289                                                                              | 262                                                                            |      |                                                |     |    |     |     |
| Z92E1401     |                                                                 | 990  | 797  | 805  | 70                                         | 269                                                                              | 248                                                                            |      |                                                | 310 |    |     |     |
| Z92E1402     |                                                                 |      |      |      | 80                                         | 274                                                                              | 253                                                                            |      |                                                |     |    |     |     |
| Z92E1403     |                                                                 |      |      |      | 90                                         | 279                                                                              | 258                                                                            |      |                                                |     |    |     |     |
| Z92E1404     | 1200                                                            | 1007 | 1015 | 80   | 284                                        | 252                                                                              | 470                                                                            |      |                                                |     |    |     |     |
| Z92E1405     |                                                                 |      |      | 90   | 289                                        | 257                                                                              |                                                                                |      |                                                |     |    |     |     |
| Z92E1406     |                                                                 |      |      | 80   | 284                                        | 252                                                                              |                                                                                |      |                                                |     |    |     |     |
| Z92E1407     | 16000                                                           | 1350 | 1077 | 1085 | 90                                         | 289                                                                              |                                                                                | 257  |                                                | 470 |    |     |     |
| Z92E1601     |                                                                 |      |      |      | 1200                                       | 1007                                                                             |                                                                                | 1015 |                                                |     | 80 | 284 | 248 |
| Z92E1602     |                                                                 |      |      |      |                                            |                                                                                  |                                                                                |      |                                                |     | 90 | 289 | 253 |
| Z92E1603     |                                                                 | 100  | 293  | 257  |                                            |                                                                                  |                                                                                |      |                                                |     |    |     |     |
| Z92E1604     |                                                                 | 1350 | 1077 | 1085 | 80                                         | 284                                                                              | 248                                                                            | 470  |                                                |     |    |     |     |
| Z92E1605     |                                                                 |      |      |      | 90                                         | 289                                                                              | 253                                                                            |      |                                                |     |    |     |     |
| Z92E1606     | 100                                                             |      |      |      | 293                                        | 257                                                                              |                                                                                |      |                                                |     |    |     |     |

## Sospensioni meccaniche senza tiranti

MECHANICAL SUSPENSIONS WITHOUT TIE RODS  
MECHANISCHE FEDERAGGREGATE OHNE ZUGSTANGE  
SUSPENSIONS MÉCANIQUES SANS BRAS DE TRACTION

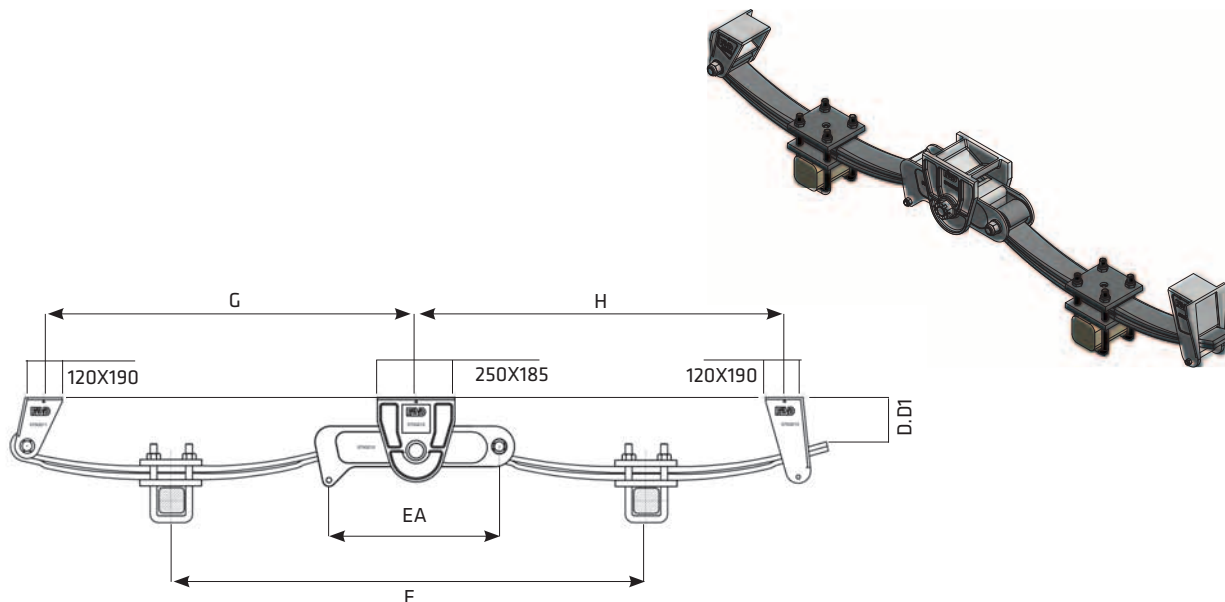


Assetto ribassato - Underslung structure - Tieflader Aufbau - Position surbaissé

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | E    | G    | H    | Q. ASSALE<br>Axle Sq.<br>Vierkant<br>Carré | D<br>ALTEZZA SCARICO<br>(mm)<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | D1<br>ALTEZZA CARICO<br>(mm)<br>Height loaded<br>Ladehöhe<br>Hauteur en charge | EA  | BALESTRA<br>(mm)<br>Spring<br>Feder<br>Ressort |     |
|--------------|-----------------------------------------------------------------|------|------|------|--------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----|------------------------------------------------|-----|
| Z92E1001R    | 10000                                                           | 990  | 797  | 805  | 70                                         | 125                                                                              | 110                                                                            | 310 | 80                                             |     |
| Z92E1002R    |                                                                 |      |      |      | 80                                         | 120                                                                              | 105                                                                            |     |                                                |     |
| Z92E1003R    |                                                                 |      |      |      | 80                                         | 115                                                                              | 100                                                                            |     |                                                |     |
| Z92E1004R    |                                                                 |      |      |      | 70                                         | 125                                                                              | 102                                                                            |     |                                                |     |
| Z92E1005R    |                                                                 | 1200 | 1007 | 1015 | 80                                         | 120                                                                              | 97                                                                             |     |                                                |     |
| Z92E1006R    |                                                                 |      |      |      | 90                                         | 115                                                                              | 92                                                                             |     |                                                |     |
| Z92E1201R    | 12000                                                           | 990  | 797  | 805  | 70                                         | 125                                                                              | 107                                                                            |     |                                                | 470 |
| Z92E1202R    |                                                                 |      |      |      | 80                                         | 120                                                                              | 102                                                                            |     |                                                |     |
| Z92E1203R    |                                                                 |      |      |      | 90                                         | 115                                                                              | 97                                                                             |     |                                                |     |
| Z92E1204R    |                                                                 |      |      |      | 70                                         | 125                                                                              | 98                                                                             |     |                                                |     |
| Z92E1205R    |                                                                 | 1200 | 1007 | 1015 | 80                                         | 120                                                                              | 93                                                                             |     |                                                |     |
| Z92E1206R    |                                                                 |      |      |      | 90                                         | 115                                                                              | 88                                                                             |     |                                                |     |
| Z92E1207R    |                                                                 |      |      |      | 70                                         | 125                                                                              | 98                                                                             |     |                                                |     |
| Z92E1208R    | 1350                                                            | 1077 | 1085 | 80   | 120                                        | 93                                                                               | 470                                                                            |     |                                                |     |
| Z92E1209R    |                                                                 |      |      | 90   | 115                                        | 88                                                                               |                                                                                |     |                                                |     |
| Z92E1401R    | 14000                                                           | 990  | 797  | 805  | 70                                         | 125                                                                              | 104                                                                            | 310 |                                                |     |
| Z92E1402R    |                                                                 |      |      |      | 80                                         | 120                                                                              | 99                                                                             |     |                                                |     |
| Z92E1403R    |                                                                 |      |      |      | 90                                         | 115                                                                              | 94                                                                             |     |                                                |     |
| Z92E1404R    |                                                                 | 1200 | 1007 | 1015 | 80                                         | 120                                                                              | 88                                                                             |     |                                                |     |
| Z92E1405R    |                                                                 |      |      |      | 90                                         | 115                                                                              | 83                                                                             |     |                                                |     |
| Z92E1406R    |                                                                 |      |      |      | 80                                         | 120                                                                              | 88                                                                             |     |                                                |     |
| Z92E1407R    |                                                                 | 1350 | 1077 | 1085 | 90                                         | 115                                                                              | 83                                                                             | 470 |                                                |     |
| Z92E1601R    | 16000                                                           |      |      |      | 80                                         | 120                                                                              | 84                                                                             |     |                                                |     |
| Z92E1602R    | 16000                                                           | 1200 | 1007 | 1015 | 90                                         | 115                                                                              | 79                                                                             | 310 |                                                |     |
| Z92E1603R    |                                                                 |      |      |      | 100                                        | 110                                                                              | 74                                                                             |     |                                                |     |
| Z92E1604R    |                                                                 |      |      |      | 80                                         | 120                                                                              | 84                                                                             |     |                                                |     |
| Z92E1605R    |                                                                 | 1350 | 1077 | 1085 | 90                                         | 115                                                                              | 79                                                                             | 470 |                                                |     |
| Z92E1606R    |                                                                 |      |      |      | 100                                        | 110                                                                              | 74                                                                             |     |                                                |     |

## Sospensioni meccaniche senza tiranti

MECHANICAL SUSPENSIONS WITHOUT TIE RODS  
MECHANISCHE FEDERAGGREGATE OHNE ZUGSTANGE  
SUSPENSIONS MÉCANIQUES SANS BRAS DE TRACTION



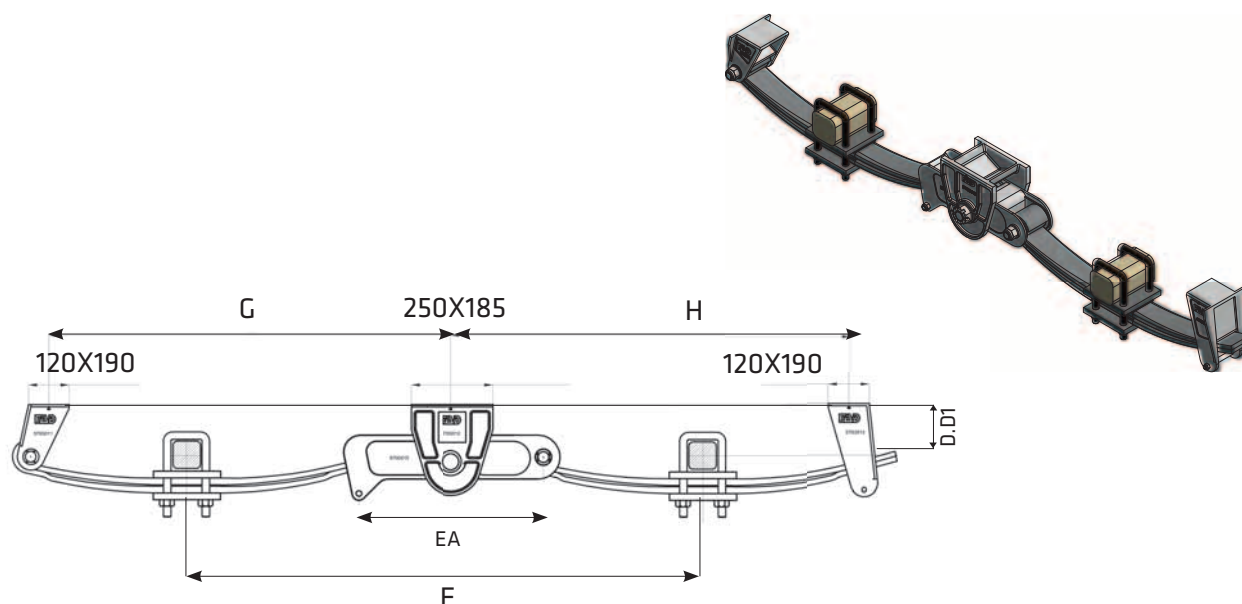
Assetto standard - Standard structure - Standardtrimm - Position standard haute

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | E    | G    | H    | Q. ASSALE<br>Axle Sq.<br>Vierkant<br>Carrè | D<br>ALTEZZA SCARICO<br>(mm)<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | D1<br>ALTEZZA CARICO<br>(mm)<br>Height loaded<br>Ladehöhe<br>Hauteur en charge | EA  | BALESTRA<br>(mm)<br>Spring<br>Feder<br>Ressort |
|--------------|-----------------------------------------------------------------|------|------|------|--------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----|------------------------------------------------|
| Z92E1607     | 16000                                                           | 1350 | 1087 | 1100 | 90                                         | 344                                                                              | 327                                                                            | 420 | 100                                            |
| Z92E1608     |                                                                 |      |      |      | 100                                        | 349                                                                              | 332                                                                            |     |                                                |
| Z92E1609     |                                                                 |      |      |      | 110                                        | 354                                                                              | 337                                                                            |     |                                                |
| Z92E1610     |                                                                 |      |      |      | 120                                        | 359                                                                              | 342                                                                            |     |                                                |
| Z92E1611     |                                                                 | 1480 | 1152 | 1165 | 90                                         | 344                                                                              | 327                                                                            | 550 |                                                |
| Z92E1612     |                                                                 |      |      |      | 100                                        | 349                                                                              | 332                                                                            |     |                                                |
| Z92E1613     |                                                                 |      |      |      | 110                                        | 354                                                                              | 337                                                                            |     |                                                |
| Z92E1614     |                                                                 |      |      |      | 120                                        | 359                                                                              | 342                                                                            |     |                                                |
| Z92E2101     | 21000                                                           | 1350 | 1087 | 1100 | 90                                         | 350                                                                              | 323                                                                            | 420 |                                                |
| Z92E2102     |                                                                 |      |      |      | 100                                        | 355                                                                              | 328                                                                            |     |                                                |
| Z92E2103     |                                                                 |      |      |      | 110                                        | 360                                                                              | 333                                                                            |     |                                                |
| Z92E2104     |                                                                 |      |      |      | 120                                        | 365                                                                              | 338                                                                            |     |                                                |
| Z92E2105     |                                                                 |      |      |      | 130                                        | 370                                                                              | 343                                                                            |     |                                                |
| Z92E2106     |                                                                 | 1480 | 1152 | 1165 | 90                                         | 350                                                                              | 323                                                                            | 550 |                                                |
| Z92E2107     |                                                                 |      |      |      | 100                                        | 355                                                                              | 328                                                                            |     |                                                |
| Z92E2108     |                                                                 |      |      |      | 110                                        | 360                                                                              | 333                                                                            |     |                                                |
| Z92E2109     |                                                                 |      |      |      | 120                                        | 365                                                                              | 338                                                                            |     |                                                |
| Z92E2110     |                                                                 |      |      |      | 130                                        | 370                                                                              | 343                                                                            |     |                                                |



## Sospensioni meccaniche senza tiranti

MECHANICAL SUSPENSIONS WITHOUT TIE RODS  
MECHANISCHE FEDERAGGREGATE OHNE ZUGSTANGE  
SUSPENSIONS MÉCANIQUES SANS BRAS DE TRACTION



Assetto ribassato - Underslung structure - Tieflader Aufbau - Position surbaissé

| ID<br>NUMBER | PORTATA<br>Capacity (Kg)<br>Tragfähigkeit<br>Capacité de charge | E    | G    | H    | Q. ASSALE<br>Axle Sq.<br>Vierkant<br>Carrè | D<br>ALTEZZA SCARICO<br>(mm)<br>Height unloaded<br>Entladehöhe<br>Hauteur a vide | D1<br>ALTEZZA CARICO<br>(mm)<br>Height loaded<br>Ladehöhe<br>Hauteur en charge | EA  | BALESTRA<br>(mm)<br>Spring<br>Feder<br>Ressort |
|--------------|-----------------------------------------------------------------|------|------|------|--------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----|------------------------------------------------|
| Z92E1607R    | 16000                                                           | 1350 | 1087 | 1100 | 90                                         | 160                                                                              | 143                                                                            | 420 | 100                                            |
| Z92E1608R    |                                                                 |      |      |      | 100                                        | 155                                                                              | 138                                                                            |     |                                                |
| Z92E1609R    |                                                                 |      |      |      | 110                                        | 150                                                                              | 133                                                                            |     |                                                |
| Z92E1610R    |                                                                 |      |      |      | 120                                        | 145                                                                              | 128                                                                            |     |                                                |
| Z92E1611R    |                                                                 | 90   | 160  | 143  | 550                                        |                                                                                  |                                                                                |     |                                                |
| Z92E1612R    |                                                                 | 100  | 155  | 138  |                                            |                                                                                  |                                                                                |     |                                                |
| Z92E1613R    |                                                                 | 110  | 150  | 133  |                                            |                                                                                  |                                                                                |     |                                                |
| Z92E1614R    |                                                                 | 120  | 145  | 128  |                                            |                                                                                  |                                                                                |     |                                                |
| Z92E2101R    | 21000                                                           | 1350 | 1087 | 1100 | 90                                         | 160                                                                              | 133                                                                            | 420 |                                                |
| Z92E2102R    |                                                                 |      |      |      | 100                                        | 155                                                                              | 128                                                                            |     |                                                |
| Z92E2103R    |                                                                 |      |      |      | 110                                        | 150                                                                              | 123                                                                            |     |                                                |
| Z92E2104R    |                                                                 |      |      |      | 120                                        | 145                                                                              | 118                                                                            |     |                                                |
| Z92E2105R    |                                                                 |      |      |      | 130                                        | 140                                                                              | 113                                                                            |     |                                                |
| Z92E2106R    |                                                                 | 90   | 160  | 133  | 550                                        |                                                                                  |                                                                                |     |                                                |
| Z92E2107R    |                                                                 | 100  | 155  | 128  |                                            |                                                                                  |                                                                                |     |                                                |
| Z92E2108R    |                                                                 | 110  | 150  | 123  |                                            |                                                                                  |                                                                                |     |                                                |
| Z92E2109R    |                                                                 | 120  | 145  | 118  |                                            |                                                                                  |                                                                                |     |                                                |
| Z92E2110R    |                                                                 | 130  | 140  | 113  |                                            |                                                                                  |                                                                                |     |                                                |





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**SOSPENSIONI SIDRA®**  
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La soluzione d'avanguardia  
per qualsiasi applicazione pesante  
sia su strada che nel campo.

*The breakthrough solution  
for any highly demanding,  
on the road and in the field.*

### Vantaggi

**Stabilità dinamica:** il sistema SIDRA® di FAD ASSALI è stato concepito con lo scopo di migliorare le prestazioni del rimorchio, assicurando un'esperienza unica di guida. Grazie ad una serie di cilindri idraulici indipendenti ma interconnessi, il sistema si adatta istantaneamente alle asperità del terreno su cui viaggia il veicolo.

**Riduzione dei consumi:** il ridotto livello di sforzi trasmessi al trattore dal rimorchio consente un movimento più uniforme del veicolo e del rimorchio sul terreno. La minore potenza richiesta al motore del trattore permette di contenere ulteriormente i consumi di carburante fornendo, nel contempo, un superiore comfort di guida.

**Facilità d'installazione:** uno dei benefici aggiuntivi del nostro sistema risiede nella sua facilità d'installazione. Sono infatti sufficienti solo pochi bulloni per assicurare il fissaggio del sistema SIDRA® al telaio del rimorchio, garantendo una migliore efficienza dell'intero processo di assemblaggio. In alternativa il sistema può essere direttamente saldato al telaio del rimorchio stesso.

**Massima flessibilità:** il sistema SIDRA® è disponibile in moduli fissi, autosterzanti o a sterzata comandata, che possono essere abbinati a formare configurazioni mono-asse, tandem o tridem. Oltre a versioni personalizzate per veicoli speciali SIDRA®, è disponibile in diverse carreggiate, variabili a seconda del tipo di applicazione e del pneumatico utilizzato.

**Immagazzinamento:** I moduli vengono pallettizzati in verticale in modo da occupare il minor spazio possibile, vantaggio sia per il trasporto che per lo stoccaggio dal cliente.

### Plus

**Dynamic stability:** the FAD ASSALI SIDRA® system is designed with the advantage of improved trailer handling characteristics, resulting in a unique driving experience, regardless of whether you are moving on or off-road.

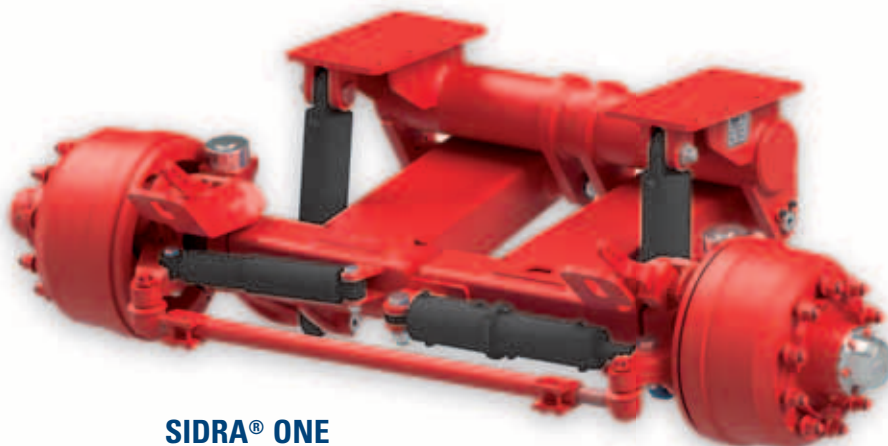
*Thanks to the independent, interconnected set of hydraulic cylinders, the system is able to adapt instantaneously to the unevenness of the ground the vehicle is travelling onto.*

**Reduced fuel consumption:** the limited amount of stresses transmitted to the tractor through the coupling allow for a smoother movement of the whole vehicle in the field. Less power is required from the tractor engine resulting in a reduced fuel consumption rate and a better driving feel.

**Ease of installation:** one of the additional benefits of the system lies in its ease of installation. Just a few bolts are needed for the fixing onto the machine frame, ensuring a time- and cost-saving assembly process onto the final vehicle. Alternatively, the system can be easily welded into place.

**Maximum flexibility:** all SIDRA® modules are equipped with either fixed or steering stub-axles and self - or forced steering systems, which can be easily combined for a single, tandem or tridem axle configuration trailer. Also available upon request are different track widths, which can be varied on demand according to the type of application and tyre used, and customised versions for special trailers.

**Storage:** Modules are palletized vertically so to occupy the least space possible, advantage both for transport and for storage by the customer.



**SIDRA® ONE**

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Die fortschrittliche Lösung  
für jegliche Nutzfahrzeuganwendung sowohl  
auf der Straße als auch auf den Feldern.

### Vorteile

**Dynamische Stabilität:** Das System SIDRA® von FAD ASSALI wurde mit dem Ziel konzipiert, die Leistungen des Anhängers zu verbessern, um ein einzigartiges Fahrerlebnis zu garantieren. Dank einer Reihe von unabhängigen aber verbundenen Hydraulikzylindern passt sich das System den Unebenheiten des Bodens augenblicklich an, auf dem das Fahrzeug fährt.

**Senkung des Verbrauchs:** Die vom Anhänger dem Traktor übertragenen geringeren Kräfte gestatten eine gleichmäßigere Bewegung des Fahrzeugs und des Anhängers auf dem Boden. Die dem Motor des Traktors abverlangte geringere Leistung gestattet es, den Spritverbrauch weiterhin zu senken und bietet gleichzeitig einen höheren Fahrkomfort.

**Einfache Installation:** Eines der zusätzlichen Vorteile unseres Systems besteht in seiner einfachen Installation. Es genügen nämlich nur wenige Schraubenbolzen, um die Befestigung des Systems SIDRA® am Rahmen des Anhängers zu sichern, womit eine bessere Effizienz des gesamten Anbauprozesses gewährleistet ist. Alternativ kann das System direkt am Rahmen des Anhängers selbst angeschweißt werden.

**Maximale Flexibilität:** Das System SIDRA® ist in festen Modulen, eigenlenkend oder mit gesteuerter Lenkung, verfügbar, welche gekoppelt werden können, um einachsige, Tandem- oder Tridem-Konfigurationen zu bilden. Außer den personalisierten Versionen für Spezialfahrzeuge SIDRA® ist dieses System in verschiedenen Spurweiten verfügbar, variabel je nach Anwendungstyp und nach verwendetem Reifentyp.

**Lagerung:** Die Module werden senkrecht verpackt, damit sie so wenig Platz wie möglich einnehmen, was ein Vorteil sowohl für den Transport als auch für die Lagerung beim Kunden darstellt

La solution d'avant-garde pour toute application  
lourde aussi bien sur la route que dans les champs.

### Avantages

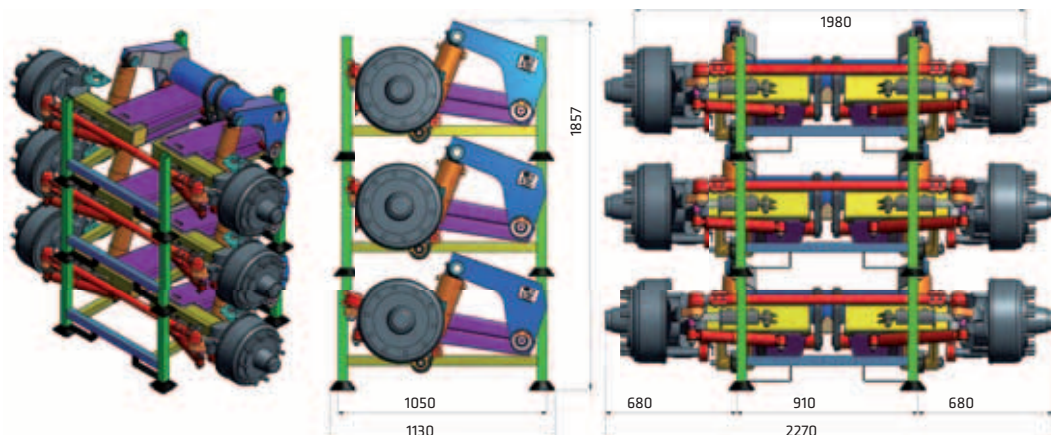
**Stabilité dynamique:** le système SIDRA® de FAD ASSALI a été conçu dans le but d'améliorer les prestations de remorquage, en assurant une expérience unique de conduite. Grâce à une série de cylindres hydrauliques indépendants mais connectés entre eux, le système s'adapte instantanément aux aspérités du terrain sur lequel voyage le véhicule.

**Réduction de la consommation:** le niveau réduit des efforts transmis au tracteur par la remorque permet un mouvement plus uniforme du véhicule et de la remorque sur le terrain. La puissance mineure requise au moteur du tracteur permet de contenir ultérieurement la consommation de carburant en fournissant par la même occasion, un confort de conduite supérieur.

**Facilité d'installation:** un des bénéfices supplémentaires de notre système réside dans sa facilité d'installation. Peu de boulons sont en effet nécessaires pour assurer la fixation du système SIDRA® au châssis de la remorque, en garantissant une meilleure efficacité du procédé complet d'assemblage. Dans l'alternative, le système peut être directement soudé au châssis de la remorque.

**Flexibilité maximale:** le système SIDRA® est disponible en modules fixes, autodirecteurs ou à guidage forcée, pouvant être associés entre eux pour former des configurations monoaxe, tandem ou tridem. En plus des versions personnalisées pour véhicules spéciaux, SIDRA® est disponible dans différentes voies, variables en fonction du type d'application et du pneumatique utilisé.

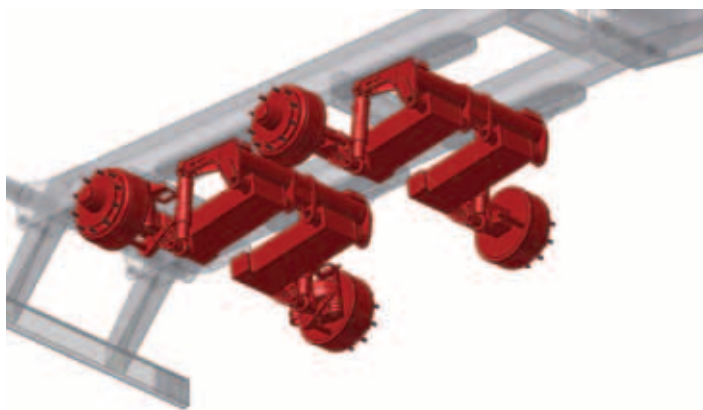
**Stockage:** Les modules sont emballés en position verticale de façon à occuper le moins de place possible, ce qui constitue un avantage aussi bien pour le transport que pour le stockage du client.



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| TIPO<br>Type<br>Typ<br>Type                                                                                                                                 | 9000                                                                                     | 9000S                                                                                    | 12000                                                                                    | 12000S                                                                                   | 14000                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Portata massima @40 km/h (kg)<br>Max loading capacity @40 km/h (kg)<br>Maximale Tragfähigkeit bei 40 km/h (kg)<br>Capacité de charge maximale @40 km/h (kg) | 9000                                                                                     | 9000                                                                                     | 12000                                                                                    | 12000                                                                                    | 14000                                                                                    |
| Larghezza carreggiata<br>Track length (mm)<br>Spur Breite<br>Largeur voie                                                                                   | 1950/1980                                                                                | 1950/1980                                                                                | 1980/2150                                                                                | 1900/1980                                                                                | 2100                                                                                     |
| Altezza nominale (mm)<br>Nominal height (mm)<br>Nominal-höhe (mm)<br>Hauteur nominale (mm)                                                                  | 355                                                                                      | 355                                                                                      | 400                                                                                      | 400                                                                                      | 450                                                                                      |
| Massima escursione (mm)<br>Maximum amplitude (mm)<br>Maximaler Ausschlag (mm)<br>Déplacement maximal (mm)                                                   | ±110                                                                                     | ±110                                                                                     | ±125                                                                                     | ±125                                                                                     | ±140                                                                                     |
| Larghezza massima pneumatico (mm)<br>Max tyre width (mm)<br>Maximale Reifenbreite<br>Largeur maximale pneu                                                  | 600                                                                                      | 600                                                                                      | 700                                                                                      | 700                                                                                      | 750                                                                                      |
| Tipo freno e camma<br>Brake and camshaft type<br>Bremsen-und Nockentyp<br>Type frein et came                                                                | 400Gx80 "0"                                                                              | 400Gx120 "8"                                                                             | 400Gx120 "8"                                                                             | 420x180 "S"                                                                              | 412Gx160 "8"                                                                             |
| Mozzo<br>Hub type<br>Radnabe<br>Moyeu                                                                                                                       | 32214-32217                                                                              | 32214-32217                                                                              | 33213-32218                                                                              | 33213-32218                                                                              | 32218-32221                                                                              |
| Peso del modulo (kg)<br>Module weight (kg)<br>Gewicht des Moduls (kg)<br>Poids du module (kg)                                                               | Fisso 480 / Fixed<br>Sterzante 580<br>/ Steering<br>Starre / Lenkend<br>Fixe / Directeur | Fisso 530 / Fixed<br>Sterzante 660<br>/ Steering<br>Starre / Lenkend<br>Fixe / Directeur | Fisso 600 / Fixed<br>Sterzante 750<br>/ Steering<br>Starre / Lenkend<br>Fixe / Directeur | Fisso 600 / Fixed<br>Sterzante 850<br>/ Steering<br>Starre / Lenkend<br>Fixe / Directeur | Fisso 800 / Fixed<br>Sterzante 920<br>/ Steering<br>Starre / Lenkend<br>Fixe / Directeur |



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### Sospensione Sidra®

Sistema di sospensione idraulica composta da una struttura autoportante, semiassi frenati e circuito idraulico. Disponibile con capacità di carico fino a 14000 kg/modulo.

- Semiassi frenati con mozzo in acciaio omologati fino a 105 km/h in accordo alla EEC 71/320.
- Accessori fornibili su richiesta:
- Kit per il sollevamento del primo asse
- Bloccaggio sterzata in retromarcia
- Sistema ABS e RDS
- Accumulatori a azoto
- Valvole di bloccaggio

### Sidra® Suspension

A complete suspension system consisting of a self-loading structure, braked stub-axles and hydraulic circuit. Available for load carrying capacities up to 14000 kg/module.

- Braked steel hubs stubaxles homologated according to the EEC 71/320 regulation up to 105 km/h
- Additional accessories available upon request:
- Front axle lifting kit
- Steering reverse motion locking system
- ABS and RDS options
- Nitrogen accumulators
- Locking valves

### Aufhängung Sidra®

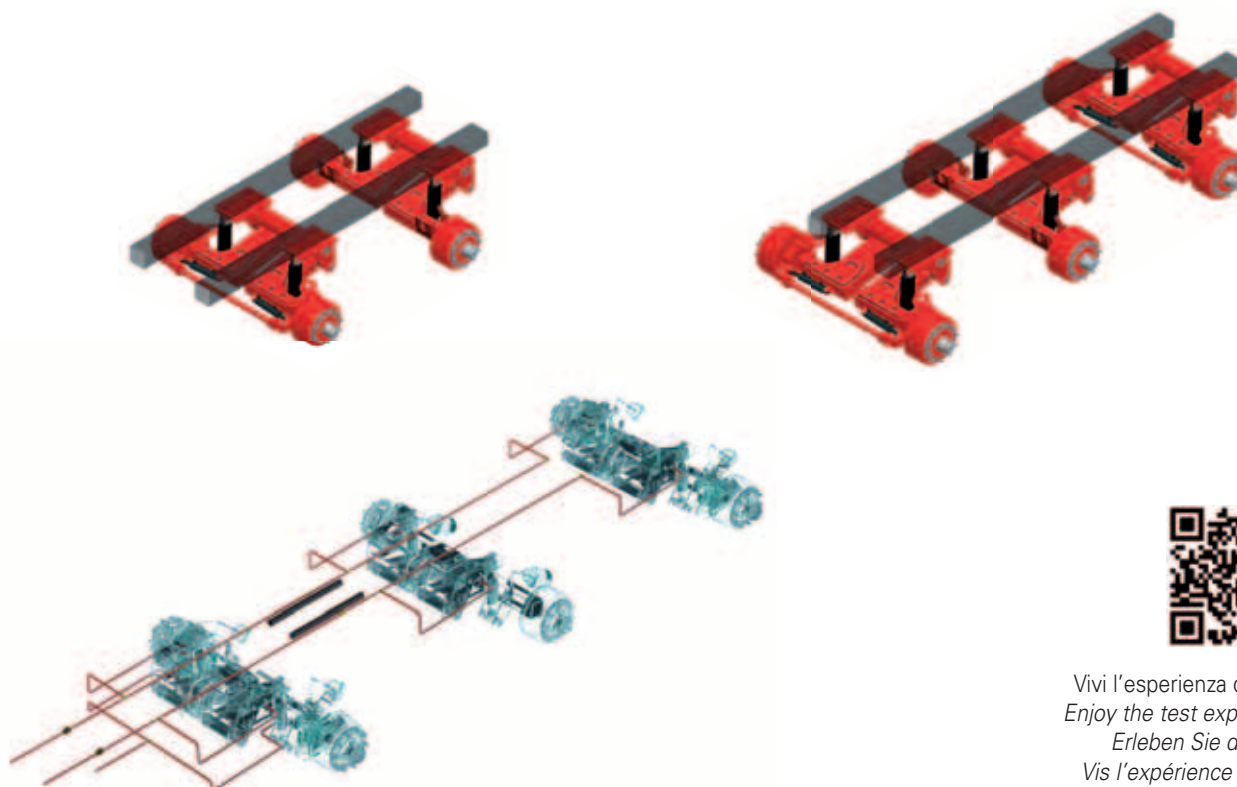
Federsystem bestehend aus einer selbsttragenden Struktur, bremsenden Achswellen und Hydraulikkreislauf. Verfügbar mit Traglast bis 14000 kg/Modul.

- Bremshalbachsen mit Radnabe aus Stahl, zugelassen bis 105 km/h in Übereinstimmung mit der EG-Richtlinie 71/320.
- Auf Anfrage lieferbares Komponenten:
- Satz zur Anhebung der ersten Achse
- Blockierung der Lenkung im Rückwärtsgang
- ABS- und RDS-System
- Stickstoff-Akkumulatoren
- Sperrventile

### Suspension Sidra®

Système de suspension hydraulique composée d'une structure de support autoporteur, des demi-essieux freinés et d'un circuit hydraulique. Disponible avec une capacité de charge jusqu'à 14000 kg/module.

- Demi-essieux freinés avec moyeu en acier homologués jusqu'à 105 km/h conformément à la directive CEE 71/320.
- Accessoires livrés sur demande :
- Kit pour le soulèvement du premier axe
- Blocage du braquage en marche arrière
- Système ABS et RDS
- Accumulateurs d'azote
- Vannes de blocage



Vivi l'esperienza del Test  
Enjoy the test experience  
Erleben Sie den Test  
Vis l'expérience du Test

## Sospensioni Syka®

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La sospensione idraulica **"Syka Free"** è un modulo idraulico composto da due unità separate indipendenti che vengono applicate (avvitate o saldate) sotto i due longheroni del telaio indipendentemente dal posizionamento dei longheroni stessi (larghezza telaio) ed accolgono un assale (fisso, autosterzante, pilotato, motorizzato) di qualsiasi carreggiata che andrà fissato alle piastre di appoggio forate "syka" con adeguati tiranti di varie dimensioni (per quadri o tondi da mm. 100, 110, 120, 130, 140, 150) anche di nostra fornitura. I modelli prodotti sono due:

■ **Syka free 9000** per carichi fino a kg 9000 A 40 km/h

■ **Syka free 12000** per carichi fino a kg 12000 A 40 km/h

Le libertà applicative di questo prodotto ci hanno permesso di aggregare **"free"** al suo nome **"Syka"** che proprio per le caratteristiche di stabilità, adattabilità e facilità di montaggio supera di gran lunga tutte le tecnologie del secolo scorso: sospensioni a balestre, sospensioni ad aria, sospensioni idrauliche condizionate da cilindri applicati a fianco telaio o sotto telaio ma collegate e quindi vincolate alla larghezza del telaio stesso. Solamente **"Sidra"**, che potete osservare in questo catalogo, può competere con **"syka free"**, soprattutto su terreni molto accidentati.

The hydraulic suspension **"Syka Free"** is an hydraulic module made by two independent and separated units, which are mounted (screwed or welded) under the two sides of

the frame independently of the positioning of the sides themselves (width of the frame). Moreover, they hold an axle (fixed, self-steering, forced steering, motorized) of any track, which has to be fixed to the support and bored plates **"Syka"** with adequate tie rods of various dimensions (for squares or rounds of mm. 100, 110, 120, 130, 140, 150) also supplied by us. The models produced are two:

■ **Syka Free 9000** for loads up to kg. 9000 at 40 km/h

■ **Syka Free 12000** for loads up to kg. 12000 at 40 km/h

The multiple application way of this product allows us to **"Free"** to its name **"Syka"**. Because of its own characteristics of stability, adaptability and easiness in assembling, it exceeds so far all technologies of the last century: spring sus-

pensions, air suspensions, hydraulic suspensions. Only **"Sidra"**, which you can find in this catalogue, can compete with **"Syka Free"**, overall working on very rough grounds.

Die hydraulische Federung **"Syka Free"** ist ein Hydraulikmodul durch zwei getrennte und unabhängige Einheiten hergestellt, die verschraubt oder verschweißt unter den Rahmens werden kann. Außerdem, haltet sie eine Achse (feste, selbstlenkend, Zwangslenkung, motorisiert) einer beliebigen Spurweite, die auf die Unterstützung und gebohrte Platten **"Syka"** mit ausreichender Zugstangen unterschiedlicher Dimensionen fixiert werden muss (für vierkant oder Runden mm. 100, 110, 120, 130, 140, 150). Die Modelle, die produziert werden, sind zwei:

■ **Syka Free 9000** für Lasten bis zu kg. 9000 bei 40 km/h

■ **Syka Free 12000** für Lasten bis zu kg. 12000 bei 40 km/h

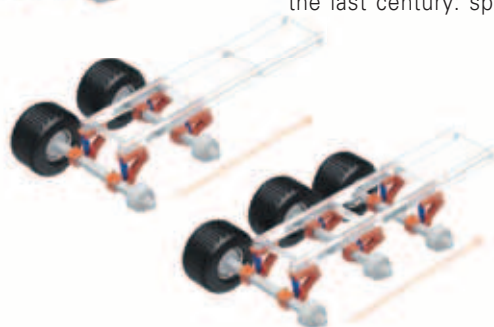
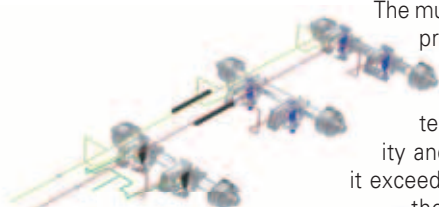
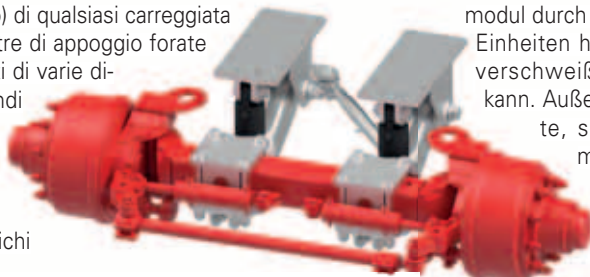
Die Anwendungsmöglichkeiten dieses Produkts ermöglicht es uns **"Free"** zu seinem Namen **"Syka"** kategorie. Aufgrund seiner eigenen Eigenschaften der Stabilität, Anpassungsfähigkeit und Einfachheit bei der Montage, übersteigt es bisher alle Technologien des letzten Jahrhunderts: Blattfedern, Luftfedern, hydraulische Federungen. Nur **"Sidra"**, die Sie auf dieser Katalog finden, können, besonders sehr unebenem Gelände arbeiten.

La suspension hydraulique **"Syka Free"** est un module hydraulique composé de deux éléments séparés et indépendants qui sont appliqués (boulonnées ou soudées) sous les deux longerons du châssis quel que soit le positionnement des longerons (largeur de châssis) et accueillent un essieu (fixe, suiveur, braquement forcé, motorisé) de toute chaussée qui sera fixée sur les plaques de support perforées **"Syka"** avec des tirants appropriés de différentes tailles (pour carré ou rond de mm. 100, 110, 120, 130, 140, 150) aussi fourni par nous. Les modèles produits sont deux :

■ **Syka Free 9000** pour des charges jusqu'à KG 9.000 à 40 Km/h

■ **Syka Free 12000** pour des charges jusqu'à KG 12.000 à 40 Km/h

La liberté d'application de ce produit nous ont permis d'agréger **"Free"** à son nom **"Syka"** en raison des caractéristiques de la stabilité, l'adaptabilité et la facilité d'installation dépasse de loin toutes les dernières technologies du siècle dernier : suspensions avec ressorts à lames standards ou paraboliques, suspensions à l'air, suspension hydraulique conditionnés par appliquée des cylindres sur la partie gauche ou sous le châssis mais connectées, et ensuite lié à la largeur de châssis. Seulement **"Sidra"**, que vous pouvez observer dans les pages de ce catalogue, peut rivaliser avec **"Syka Free"**, en particulier sur un terrain très accidenté.



## Bilancieri

WALKING BEAM  
TAG TANDEM AGGREGATE  
BALANCIERS

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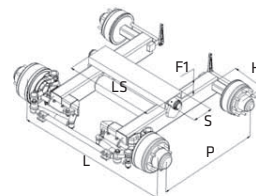
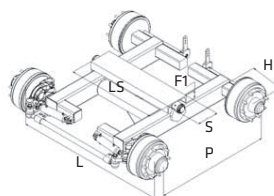
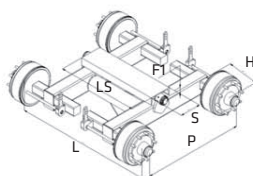
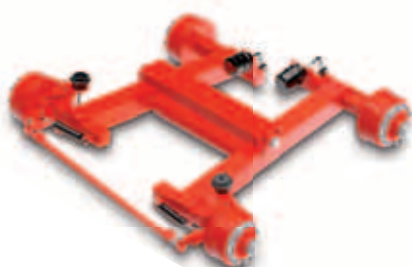


Disponibile con 4 semiassi fissi, 2 fissi e 2 autosterzanti e con 2 fissi e 2 con sterzata comandata. Disponibili anche senza freni. Realizzabili anche con portate differenti da quelle riportate in tabella.

Available with 4 stubaxles: 2 fixed and 2. Self-Steering stubaxles or 2 forced steering stubaxles. Also available without brakes. Also available with different carrying capacities from those shown.

Verfügbar mit 4 starren Halbachsen, 2 starren und 2 Lenkachsen und mit 2 starren und 2 mit Zwangslenkung. Verfügbar auch ohne Bremsen. Realisierbar mit unterschiedlichen Tragfähigkeiten als die in der Tabelle angegebenen.

Disponible avec 4 demi-essieux fixes, dont 2 demi-essieux fixes et 2 autodirecteurs, ou avec 2 fixes et 2 avec guidage forcé. Disponibles aussi sans freins. Réalisés également avec des capacités de charge différentes de celles reportées sur le tableau.



| PORTATA 40 KM/H<br>Carrying capacity<br>Tragfähigkeit 40 km/h<br>Capacité de charge 40 km/h |    | 20000                                                                                     | 15000                                                                                     | 8000                                                                                      |
|---------------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Passo<br>Wheel base<br>Achsabstand<br>Empattement                                           | p  | A richiesta<br>On Demand<br>Auf Anfrage<br>Sur demande                                    | A richiesta<br>On Demand<br>Auf Anfrage<br>Sur demande                                    | A richiesta<br>On Demand<br>Auf Anfrage<br>Sur demande                                    |
| Larghezza<br>width<br>Breite<br>Largeur                                                     | l  | A richiesta<br>On Demand<br>Auf Anfrage<br>Sur demande                                    | A richiesta<br>On Demand<br>Auf Anfrage<br>Sur demande                                    | A richiesta<br>On Demand<br>Auf Anfrage<br>Sur demande                                    |
| Sbalzo<br>Overhang<br>Überhang<br>Bosselage                                                 | h  | In base al pneumatico<br>According to the tire<br>Druckluftbetrieb<br>En fonction du pneu | In base al pneumatico<br>According to the tire<br>Druckluftbetrieb<br>En fonction du pneu | In base al pneumatico<br>According to the tire<br>Druckluftbetrieb<br>En fonction du pneu |
| Fulcro<br>Pivot<br>Drehzapfen<br>Axe de rotation                                            | f1 | 70                                                                                        | 70                                                                                        | 65                                                                                        |
| Supporto<br>Support<br>Halierung<br>Support                                                 | s  | 260                                                                                       | 240                                                                                       | 220                                                                                       |
| Supporto<br>Support<br>Halierung<br>Support                                                 | ls | Ls = l-2h                                                                                 | Ls = l-2h                                                                                 | Ls = l-2h                                                                                 |
| Freno<br>Brake<br>Bremsen<br>Frein                                                          |    | 400Gx80 400gx120                                                                          | 350Gx60 400gx80                                                                           | 300Gx60                                                                                   |
| Numero colonnette<br>Number of studs<br>Anzahl Radschrauben<br>Numéro goujons               |    | 10 M22x1.5                                                                                | 10 M22x1.5 / 8 M18x1.5                                                                    | 6 M18x1.5                                                                                 |







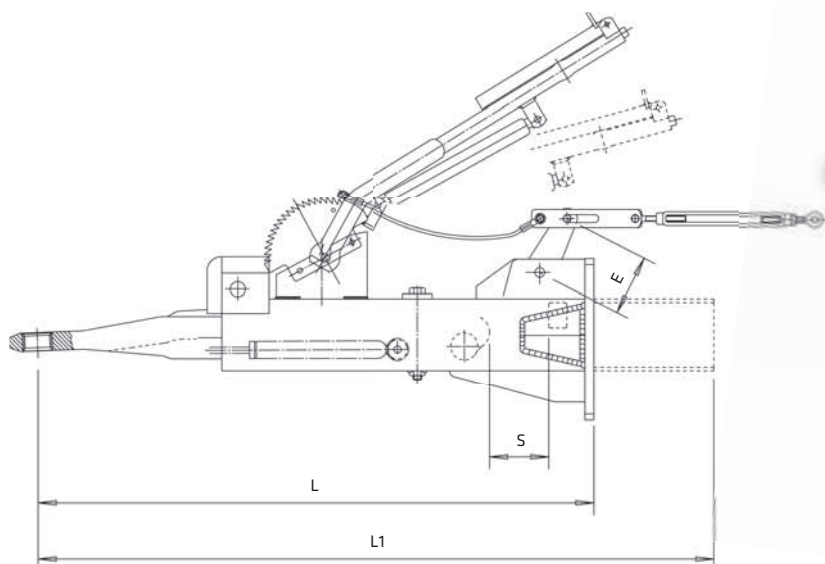
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*DRAWBARS*  
*AUFLAUFEINRICHTUNGEN*  
**TIMONS**



## Timoni per veicoli monoasse o tandem per retromarcia automatica

DRAWBARS FOR ONE AXLES OR TANDEM TRAILERS FOR OVERRUN BRAKE DEVICE  
AUF LAUF EINRICHTUNGEN FÜR EINACHS UND TANDEM FAHRZEUGE FÜR RÜCKFAHRAUTOMATIK  
TIMONS POR REMORQUES A UN ESSIEU OU TANDEM AVEC SYSTEME DE FREINAGE A INERTIE



| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | DESCRIZIONE<br>Description<br>Beschreibung<br>Description | PESO TOTALE RIMORCHIO<br>Total weight of the trailer<br>Gewicht des Anhängers<br>Poids total en charge<br>remorque |           | CARICO OCCHIONE<br>Towing Eye Capacity<br>Stützlast<br>Charge sur l'anneau<br>de remorquage |           | OCCHIONE<br>Stroke<br>Hub der<br>Zugöse<br>Course | L   | L1   | E      | OMOLOGAZIONE<br>Approval<br>Zulassung<br>Homologation |       |            |    |              |     |         |
|--------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------|-----------|---------------------------------------------------|-----|------|--------|-------------------------------------------------------|-------|------------|----|--------------|-----|---------|
|                                                                          |                             |                                                           | ≤ 25 Km/h                                                                                                          | ≥ 25 Km/h | ≤ 25 Km/h                                                                                   | ≥ 25 Km/h |                                                   |     |      |        | S (mm)                                                | mm    | mm         | mm | 167/<br>2013 | KBA | 2015/68 |
|                                                                          |                             |                                                           | Kg                                                                                                                 |           | Kg                                                                                          |           |                                                   |     |      |        |                                                       |       |            |    |              |     |         |
| QT                                                                       | OI 50 M<br>TA 50            | RC2                                                       | 3500-5000                                                                                                          |           | 1350                                                                                        |           | 90                                                | 930 | 1065 | 50-110 | 00288                                                 | FM009 | 361-053-16 |    |              |     |         |
| QT-QS                                                                    | OI 80<br>TA 80              | RB2                                                       | 4500-8000                                                                                                          |           | 1600                                                                                        |           | 90                                                | 930 | 1065 | 50-110 | 00375                                                 | FM005 |            |    |              |     |         |
|                                                                          |                             | RC2                                                       |                                                                                                                    |           | 1000                                                                                        |           |                                                   |     |      |        |                                                       |       | 361-046-17 |    |              |     |         |

**DIMENSIONI PIASTRA D'ATTACCO**  
Plate dimension - Abmessungen der Anschlussplatte - Dimensions plaque de fixation

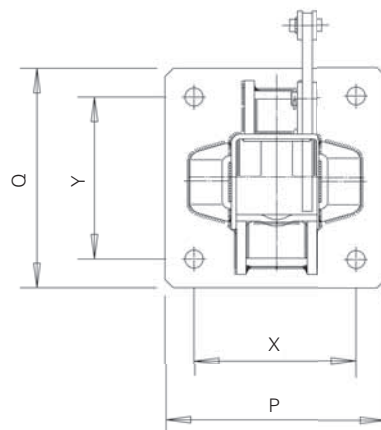
| P (mm) |     | Q (mm) |     | X (mm) |     | Y (mm) |     | D (mm) |     |
|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|
| min    | max | min    | max | min    | max | min    | max | min    | max |
| 220    | 260 | 250    | 290 | 120    | 220 | 145    | 250 | 21     | 25  |

I sistemi ad inerzia FAD Assali non possono essere combinati con sistemi di altri produttori. In caso di combinazioni con sistemi di altri produttori decadrà il diritto e la validità della garanzia.

FAD Assali inertial device cannot be combined with inertial device from other manufacturers. In case of combination with components from different brands than FAD Assali the warranty will not be considered valid.

FAD Auflaufbremsanlagen (Radbremsen, Zugdeichseln) dürfen nicht mit ähnlichen Anlagen anderer Hersteller kombiniert werden. Bei Kombinationen mit Produkten anderer Hersteller werden das Recht und die Gültigkeit der Garantie verfallen.

Les systèmes inertiels de FAD ne peuvent pas être combinés avec des systèmes d'autres fabricants. En cas de combinaison avec des produits d'autres fabricants se décomposera le droit et la validité de la garantie.

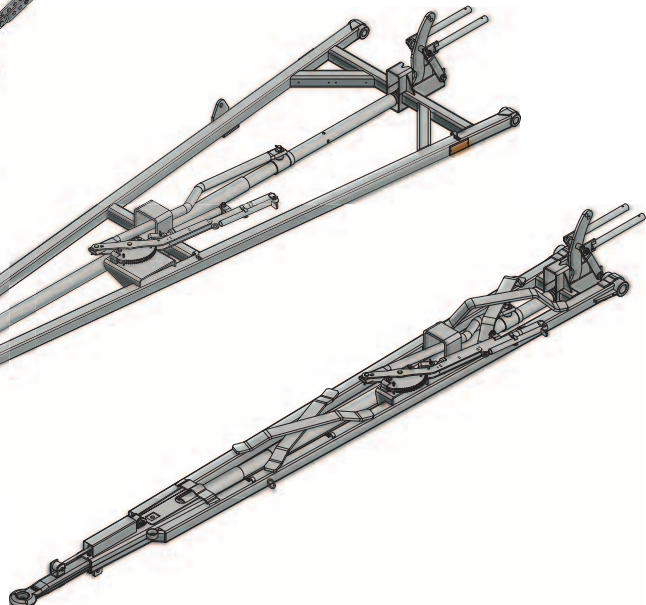
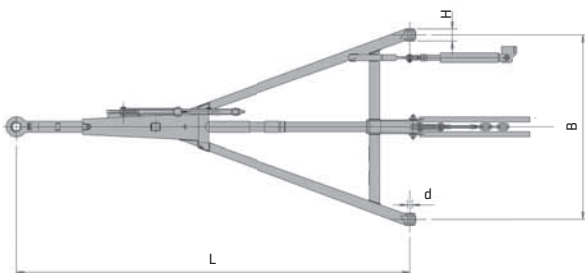




## Timoni per rimorchi dueassi per retromarcia automatica

TWO AXLES TRAILERS DRAWBARS FOR OVERRUN BRAKE DEVICES  
 AUFLAUFEINRICHTUNG FÜR ZWEIACHSIGE FAHRZEUGE FÜR RÜCKFAHRAUTOMATIK  
 TIMONS POUR REMORQUES À DEUX ESSIEUX POUR SYSTÈME DE FREINAGE À INERTIE

| LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | TIPO<br>Type<br>Typ<br>Type | PESO TOTALE<br>RIMORCHIO<br>Total weight of the trailer<br>Gewicht des Anhängers<br>Poids total en charge<br>remorque |           | CORSA<br>OCCHIONE<br>Stroke<br>Hub der<br>Zugöse<br>Course<br>anneau | FORZA<br>DI<br>TRAINO | L         | B        | E      | D              | H                | OMOLOGAZIONE<br>Approval<br>Zulassung<br>Homologation |                                   |            |
|--------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------|-----------------------|-----------|----------|--------|----------------|------------------|-------------------------------------------------------|-----------------------------------|------------|
|                                                                          |                             | ≤ 25 Km/h                                                                                                             | ≤ 40 Km/h | S (mm)                                                               | D (Kn)                | mm        | mm       | mm     | mm             | mm               | KBA                                                   | VCA                               | 167-2013   |
|                                                                          |                             | Kg                                                                                                                    |           |                                                                      |                       |           |          |        |                |                  |                                                       |                                   |            |
| QP                                                                       | ZFA 80<br>ZC 80<br>ZA 55    |                                                                                                                       | 3000-5500 | 120                                                                  | 63                    | 1800-2400 | 300-1400 | 50-130 | 20-60          | 50-100           |                                                       |                                   | 361-019-18 |
| QP                                                                       | ZFA 80                      | 4500-8000                                                                                                             |           | 120                                                                  | 63                    | 1800-4200 | 300-1400 | 50-130 | 20-60<br>18-30 | 50-100<br>60-100 | FM006                                                 | 55R-019516<br>11-01345<br>-CX-GBM |            |
|                                                                          | ZC 80<br>ZA 80              |                                                                                                                       | 4500-8000 |                                                                      |                       |           |          |        |                |                  |                                                       | 55R-019513<br>11-01391<br>-CX-GBM | 361-047-17 |



I sistemi ad inerzia FAD Assali non possono essere combinati con sistemi di altri produttori. In caso di combinazioni con sistemi di altri produttori decadrà il diritto e la validità della garanzia.

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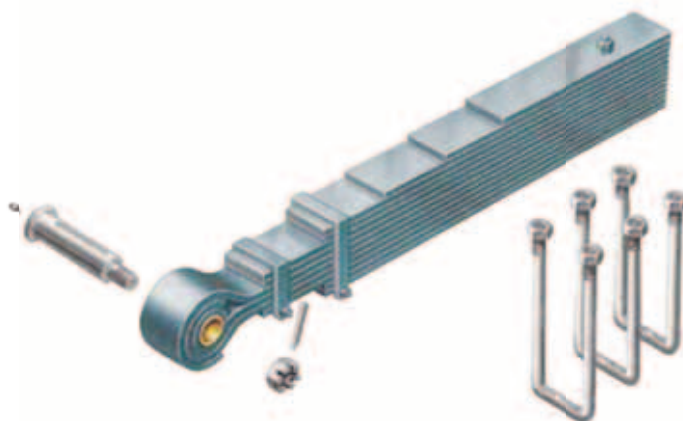
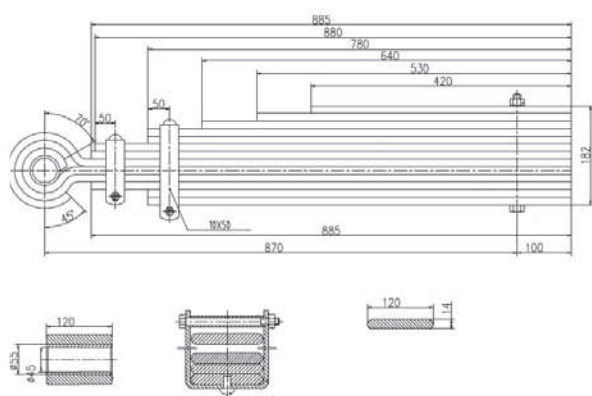
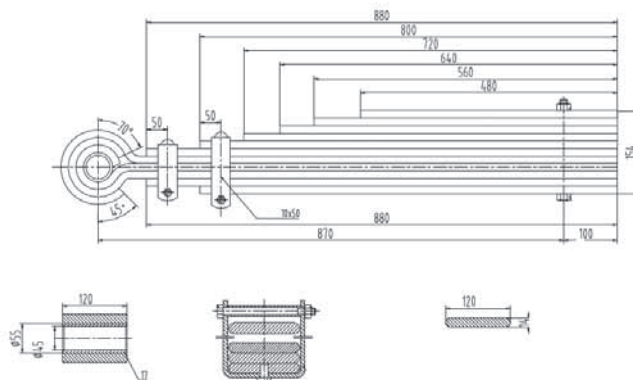
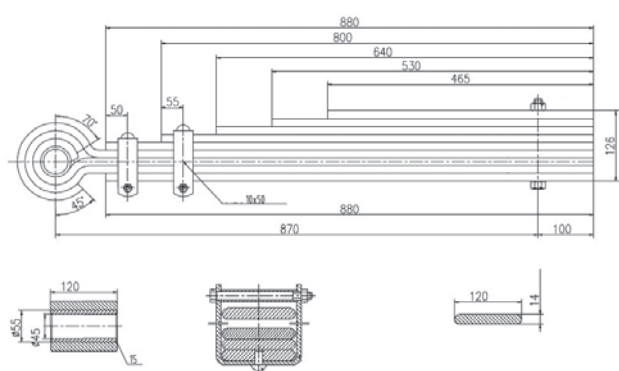
Les systèmes inertiels de FAD ne peuvent pas être combinés avec des systèmes d'autres fabricants. En cas de combinaison avec des produits d'autres fabricants se décomposera le droit et la validité de la garantie.





## Balestre timoni

SPRUNG DRAWBARS  
BLATTFEDERN FÜR DEICHSELN  
RESSORTS DE FLECHE



| CODICE PARTE<br>Part nr<br>Teilecode<br>Référence | PORTATA<br>Carrying capacity<br>Tragfähigkeit<br>Capacité | NR FOGLIE<br>Leaves nr<br>Anzahl Blätter<br>N° de feuilles | DESCRIZIONE<br>Description<br>Beschreibung<br>Description                                                                                                                         |
|---------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9TSPRING002K1                                     | 2200                                                      | 9                                                          | Kit Balestra 120x14 9 foglie per timone<br>Kit Spring 120x14 9 leaves for draw bar<br>Kit Blattfeder 120x14 9 Blätter pro Auflaufeinrichtung<br>Kit Ressort 120x14 9 feuilles     |
| 9TSPRING003K1                                     | 2700                                                      | 11                                                         | Kit Balestra 120x14 11 foglie per timone<br>Kit Spring 120x14 11 leaves for draw bar<br>Kit Blattfeder 120x14 11 Blätter pro Auflaufeinrichtung<br>Kit Ressort 120x14 11 feuilles |
| 9TSPRING001K1                                     | 3200                                                      | 13                                                         | Kit Balestra 120x14 13 foglie per timone<br>Kit Spring 120x14 13 leaves for draw bar<br>Kit Blattfeder 120x14 13 Blätter pro Auflaufeinrichtung<br>Ressort 120x14 13 feuilles     |
| 9TSPRING004K1                                     | 4000                                                      |                                                            |                                                                                                                                                                                   |







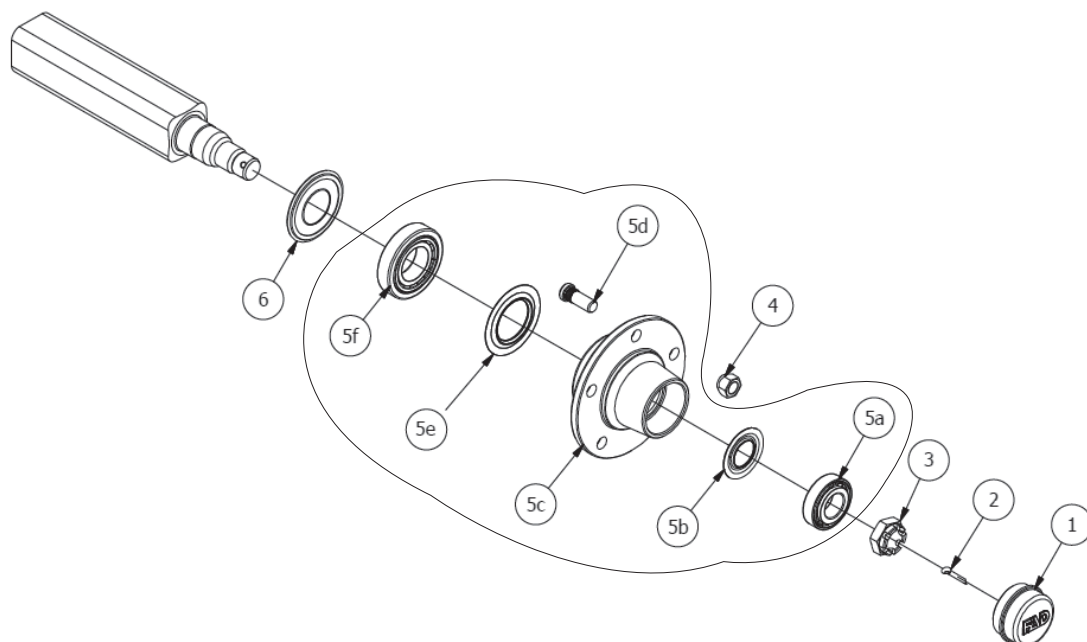
**FAD ASSALI**  
Quality Made in Italy

**PARTI DI RICAMBIO**  
*SPARE PARTS*  
*ERSATZTEILE*  
*PIÈCES DETACHEES*



## Lista ricambi per assali e semiassi non frenati

SPARE PART LIST FOR AXLES AND STUB AXLES WITHOUT BRAKE  
 ERSATZTEILLISTE FÜR UNGEBREMSTE ACHSEN UND HALBACHSEN  
 LISTE PIÈCES DETACHEES POUR ESSIEUX ET DEMI-ESSIEUX NON FREINÉS



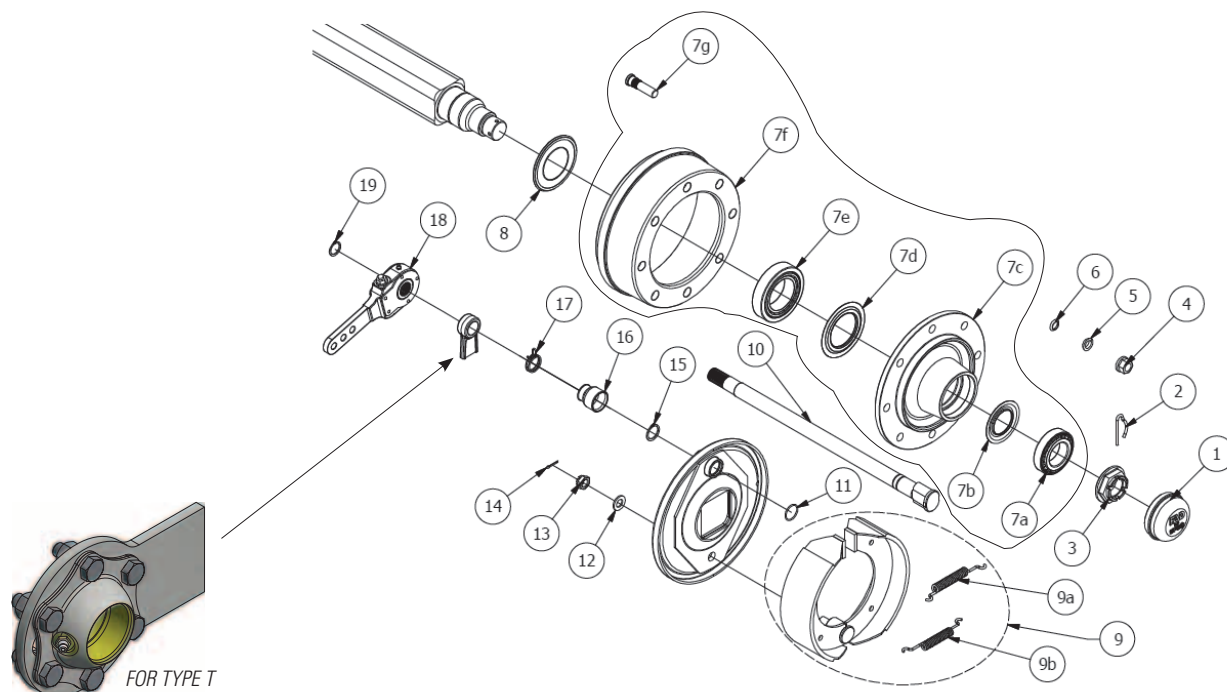
|                                        | POSIZIONE<br><i>Position</i><br><i>Position</i><br><i>Position</i> | DESCRIZIONE<br><i>Description</i><br><i>Beschreibung</i><br><i>Dénomination</i> |
|----------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------|
|                                        | 1                                                                  | Calotta - Cap - Radkappe - Capuchon                                             |
|                                        | 2                                                                  | Copiglia - Split pin - Splinte - Goupille                                       |
|                                        | 3                                                                  | Dado intagli - Crown nut - Kronemutter - Ecrou couronne                         |
|                                        | 4                                                                  | Dado colonnetta - Wheel nut - Radmutter - Ecrou goujon                          |
| Unità<br><i>Unit</i><br><i>Einheit</i> | 5a                                                                 | Cuscinetto esterno - External bearing - Roulement exterieur - Aussenlager       |
|                                        | 5b                                                                 | Anello paragrasso - Grease ring - Dichtungsring - Bague d'étanchéité            |
|                                        | 5c                                                                 | Mozzo - Hub - Radnabe - Moyeu                                                   |
|                                        | 5d                                                                 | Colonna - Wheelstud - Radbolzen - Goujon                                        |
|                                        | 5e                                                                 | Anello paragrasso - Grease ring - Dichtungsring - Bague d'étanchéité            |
|                                        | 5f                                                                 | Cuscinetto Interno - Inner bearing - Innenlager - Roulement interieur           |
|                                        | 6                                                                  | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'étancheite          |

**Per ottenere una corretta lista ricambi comunicare sempre il codice del semiasse o assale presente sulla targhetta**  
**To obtain a correct spare parts list always please report the stub axle or axle part number present on the axle plate**  
**Um eine korrekte Ersatzteile Liste zu kriegen sind immer die Halbachse oder Achse Artikelnummer vorhanden auf der Achsplatte mitzuteilen**  
**Pour obtenir la liste correcte des pièces de rechange toujours inclure le code de l'essieu présent sur la plaque de l'essieu**



## Lista ricambi per assali e semiassi frenati

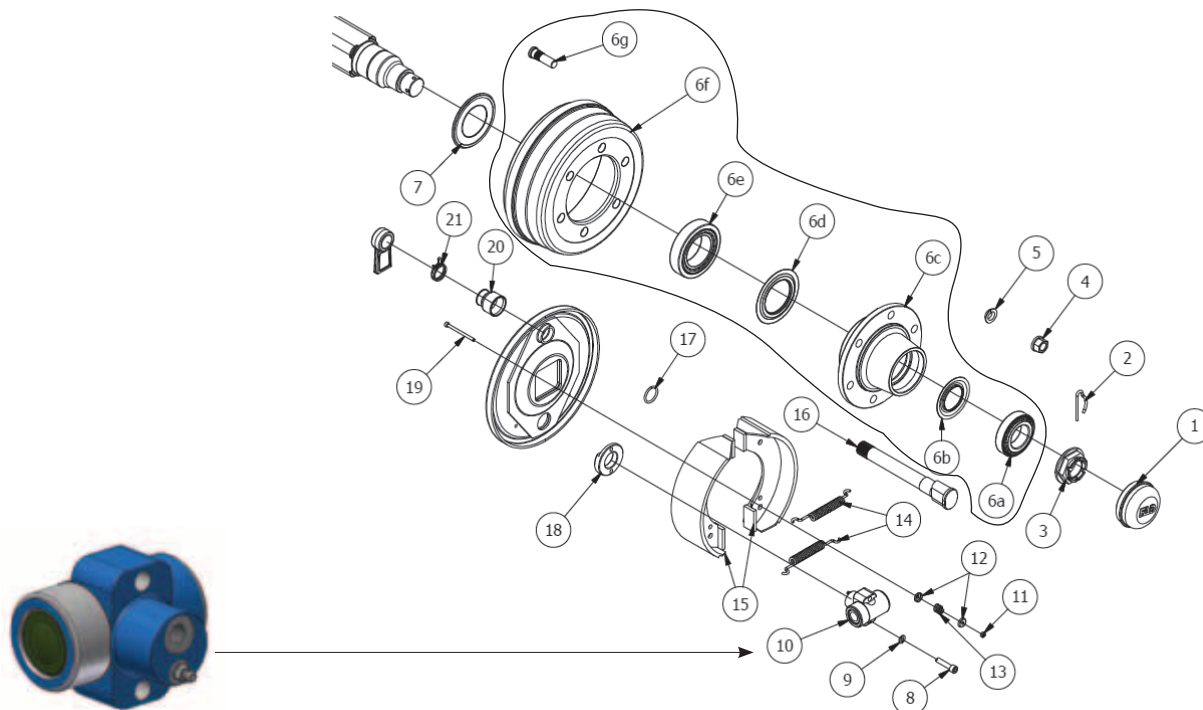
SPARE PART LIST FOR AXLES AND STUB AXLES WITH BRAKE  
ERSATZTEILLISTE FÜR GEBREMSTE ACHSEN UND ACHSWELLEN  
LISTE PIÈCES DE RECHANGE POUR ESSIEUX ET DEMI-ESSIEUX FREINÉS



|                          | POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                             |
|--------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------|
|                          | 1                                             | Calotta - Cap - Kappe - Capuchon                                                       |
|                          | 2                                             | Copiglia - Split pin - Splinte - Goupille                                              |
|                          | 3                                             | Dado intagli - Crown nut - Kronenmutter - Ecrou coronne                                |
|                          | 4                                             | Dado colonnetta - Wheel nut - Radmutter - Ecrou goujon                                 |
|                          | 5                                             | Rondella - Washer - Scheibe - Rondelle                                                 |
|                          | 6                                             | Rondella - Washer - Scheibe - Rondelle                                                 |
| Unità<br>Unit<br>Einheit | 7a                                            | Cuscinetto esterno - External bearing - Aussenlager - Roulement extérieur              |
|                          | 7b                                            | Anello paragrasso - Grease ring - Dichtungsring - Bague d'étanchéité                   |
|                          | 7c                                            | Mozzo - Hub - Nabe - Moyeu                                                             |
|                          | 7d                                            | Anello paragrasso - Grease ring - Dichtungsring - Bague d'étanchéité                   |
|                          | 7e                                            | Cuscinetto Interno - Inner bearing - Innenlager - Roulement intérieur                  |
|                          | 7f                                            | Tamburo - Drum - Trommel - Tambour                                                     |
|                          | 7g                                            | Colonna - Wheelstud - Radbolzen - Goujon                                               |
|                          | 8                                             | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'étanchéité                 |
|                          | 9                                             | Massa freno completa - Brakeshoes assembled - Bremsbacke Komplet - Garnitures complète |
|                          | 9a                                            | Molla superiore - Upper spring - Oberfeder - Ressort superieure                        |
|                          | 9b                                            | Molla inferiore - Lower spring - Unterfeder - Ressort inferieure                       |
|                          | 10                                            | Albero camma - Cam shaft - Nockenwelle - Arbre à cames                                 |
|                          | 11                                            | O.Ring                                                                                 |
|                          | 12                                            | Rondella - Washer - Scheibe - Rondelle                                                 |
|                          | 13                                            | Dado intagli - Crown nut - Kronenmutter - Ecrou coronne                                |
|                          | 14                                            | Copiglia - Split pin - Splinte - Goupille                                              |
|                          | 15                                            | Anello elastico seeger - Seeger ring - Seegerring - Anneau élastique seeger            |
|                          | 16                                            | Boccola - Bush - Buchse - Buisson                                                      |
|                          | 17                                            | Molla - Spring - Feder - Ressort                                                       |
|                          | 18                                            | Leva freno - Brake lever - Bremshebel - Levier du frein                                |
|                          | 19                                            | Anello elastico seeger - Seeger ring - Seegerring - Anneau élastique seeger            |

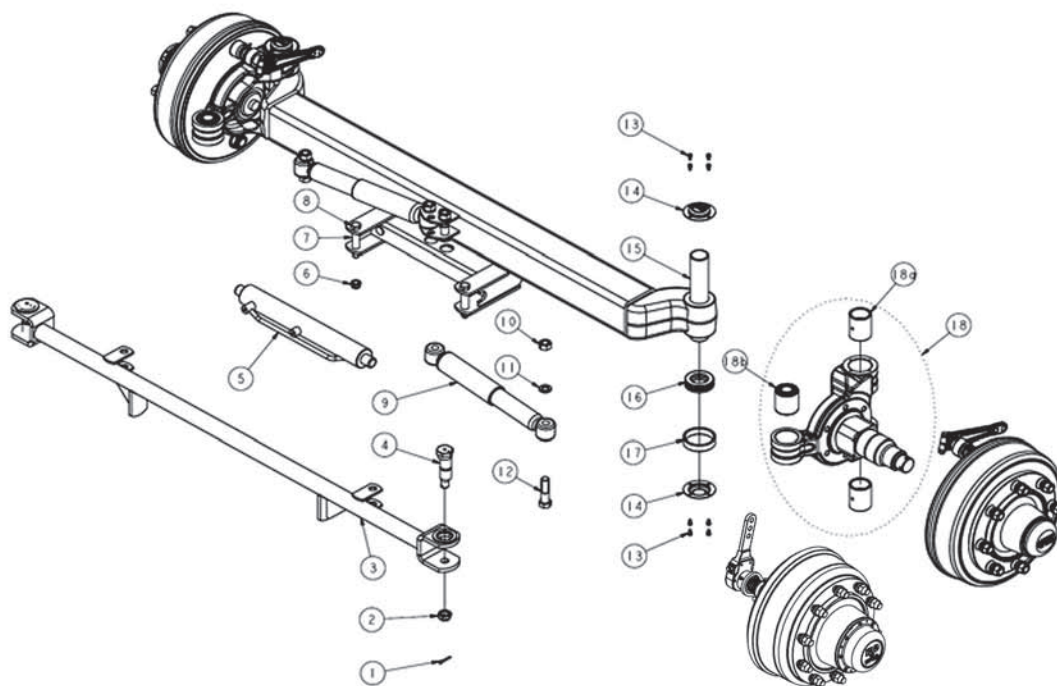
## Freni idraulici

HYDRAULIC BRAKES  
 HYDRAULISCHE BREMSSEN  
 FREINS HYDRAULIQUES



|                          | POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                              |
|--------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------|
| Unità<br>Unit<br>Einheit | 1                                             | Calotta - Cap - Kappe - Chapeau                                                         |
|                          | 2                                             | Spina elastica - Spring pin - Splinte - Goupille                                        |
|                          | 3                                             | Dado intagli - Crown nut - Kronenmutter - Ecrou coronne                                 |
|                          | 4                                             | Dado colonnetta - Wheel nut - Radmutter - Ecrou goujon                                  |
|                          | 5                                             | Rondella - Washer - Scheibe - Rondelle                                                  |
|                          | 6a                                            | Cuscinetto esterno - External bearing - Aussenlager - Roulement extérieur               |
|                          | 6b                                            | Anello paragrasso - Grease ring - Dichtungsring - Bague d'étanchéité                    |
|                          | 6c                                            | Mozzo - Hub - Nabe - Moyeu                                                              |
|                          | 6d                                            | Anello paragrasso - Grease ring - Dichtungsring - Bague d'étanchéité                    |
|                          | 6e                                            | Cuscinetto Interno - Inner bearing - Innenlager - Roulement intérieur                   |
|                          | 6f                                            | Tamburo - Drum - Trommel - Tambour                                                      |
|                          | 6g                                            | Colonna - Wheelstud - Radbolzen - Goujon                                                |
|                          | 7                                             | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'étanchéité                  |
|                          | 8                                             | Vite - Screw - Schraube - Vis                                                           |
|                          | 9                                             | Rondella - Washer - Scheibe - Rondelle                                                  |
|                          | 10                                            | Cilindro - Cylinder - Zylinder - Cylindre                                               |
|                          | 11                                            | Dado - Nut - Mutter - Ecrou                                                             |
|                          | 12                                            | Supporto - bracket - Halterung - Soutien                                                |
|                          | 13                                            | Molla - Spring - Feder - Ressort                                                        |
|                          | 14                                            | Molla - Spring - Feder - Ressort                                                        |
|                          | 15                                            | Massa freno completa - Brakeshoes assembled - Bremsmasse Komplett - Garnitures complète |
|                          | 16                                            | Albero camma - Cam shaft - Nockenwelle - Arbre à cames                                  |
|                          | 17                                            | Anello di arresto camma - Cameshaft ring - Ring für Nockenwelle - Anneau de came        |
|                          | 18                                            | Supporto - Bracket - Halterung - Soutien                                                |
|                          | 19                                            | Vite - Screw - Schraube - Vis                                                           |
|                          | 20                                            | Cuffia - Rubber Cap - Kappe - Capuchon                                                  |
|                          | 21                                            | Molla - Spring - Feder - Ressort                                                        |

## Lista ricambi per assali e semiassi sterzanti con freno

SPARE PART LIST FOR AXLES AND STUB AXLES WITH BRAKE  
ERSATZTEILELISTE FÜR LENKACHSEN UND STUMMEL MIT BREMSTROMMEL  
FICHE PIÈCES DE RECHANGE POUR ESSIEUX ET DEMI-ESSIEUX PIVOTANTS AVEC FREINTIPO GHV  
TYPE (11A - 12A/B - 13C)

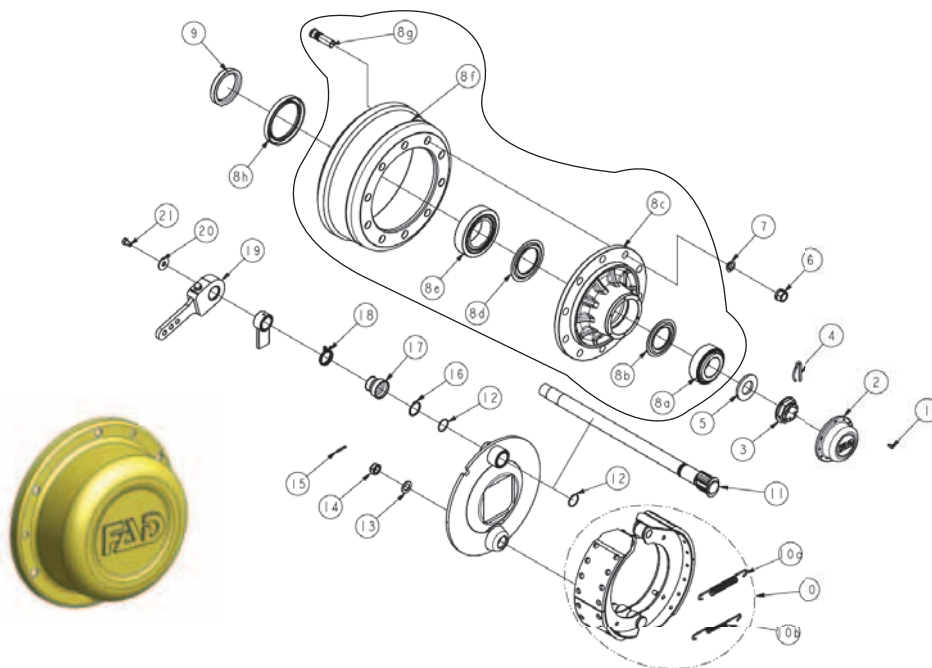
|                          | LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                                                          |
|--------------------------|--------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
|                          | 310F003                                                                  | 1                                             | Copiglia - Split pin - Splinte - Goupille                                                                           |
|                          | 328F003                                                                  | 2                                             | Dado intagli - Crown nut - Kronemutter M22X1.5 - Ecrou couronne                                                     |
|                          | 352A1514T15                                                              | 3                                             | Barra di sterzata - Steering bar - Lenkstange - Barre de braquement                                                 |
|                          | 344F022                                                                  | 4                                             | Pemo eccentrico regolaz. Convergenza - Eccentric regulat. Pivot<br>Exzentriche Regulierungbolzen - Pivot de reglage |
|                          | 356A027                                                                  | 5                                             | Cilindro - Cylinder - Zylinder - Cylindre                                                                           |
|                          | 340F059                                                                  | 6                                             | Dado - nut - mutter M16 UNI 7474 - Ecrou                                                                            |
|                          | 333F025                                                                  | 7                                             | Tubo guida vite cilindro - Cylinder screw guide - Metalrohr für sperre - Guide vis cylindre                         |
|                          | 335F049                                                                  | 8                                             | Vite - Screw - Schraube M16X100 - Vis                                                                               |
|                          | 354F001                                                                  | 9                                             | Ammortizzatore - Shock absorber - Stossdämpfer - Amortisseur                                                        |
|                          | 340F011                                                                  | 10                                            | Dado - Nut - Mutter M20 UNI 5588 - Ecrou                                                                            |
|                          | 329F073                                                                  | 11                                            | Rondella - Washer - Scheibe - Rondelle                                                                              |
|                          | 335F007                                                                  | 12                                            | Vite - Screw - Schraube M20X80 - Vis                                                                                |
|                          | 335F005                                                                  | 13                                            | Vite - Screw - Schraube M6X10 - Vis                                                                                 |
|                          | 307F052                                                                  | 14                                            | Calotta - Cap - Radkappe - Capuchon                                                                                 |
|                          | 344F002                                                                  | 15                                            | Perno per cerniera - Hinge pin - Gelenkzapfen - Pivot pour charniere                                                |
|                          | 311F061                                                                  | 16                                            | Cuscinetto - Bearing - Lager - Palier                                                                               |
|                          | 324F025                                                                  | 17                                            | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'étanchéité                                              |
| Unità<br>Unit<br>Einheit | 347A012R7                                                                | 18                                            | Cerniera - Hinge - Gelenk - Charniere                                                                               |
|                          | 349F001                                                                  | 18a                                           | Bronzina per cerniera - Bushing - Lagerschale für Gelenk - Coussinet pour charniere                                 |
|                          | 353A002                                                                  | 18b                                           | Giunto elastico - Elastic joint - Silentblock - Joint élastique                                                     |



## Freni assali sterzanti

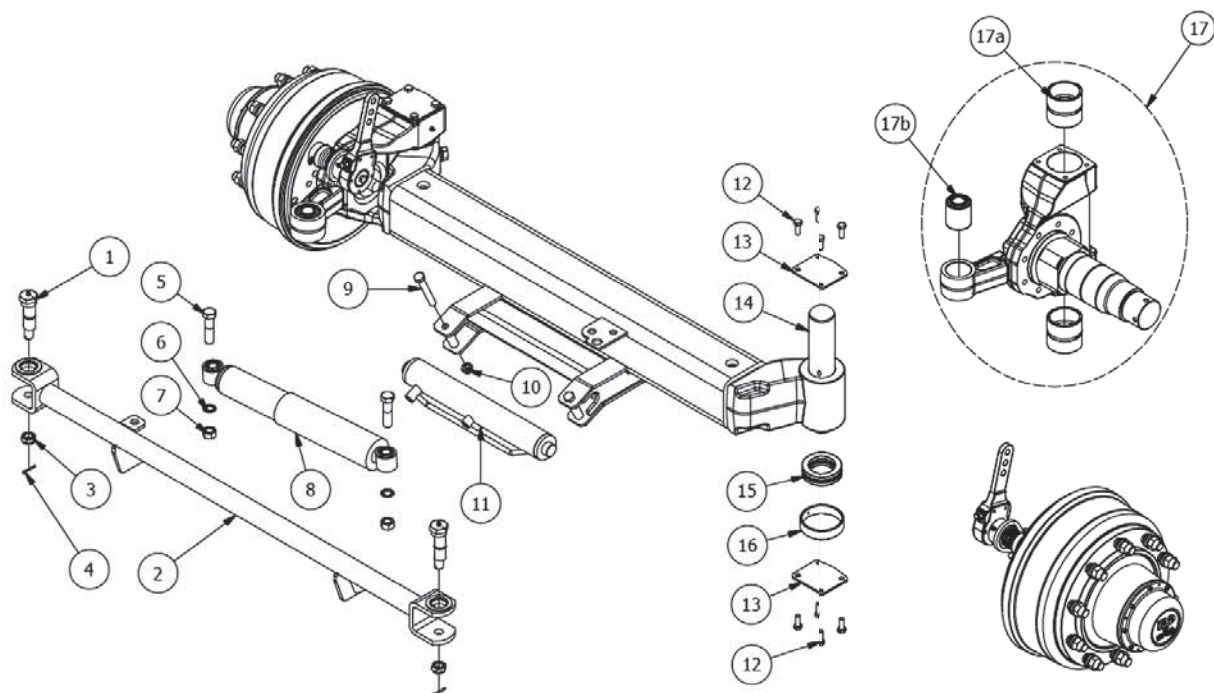
BRAKES FOR STEERING AXLES  
 BREMSEN FÜR LENKACHSEN  
 FREINS POUR ESSIEUX AUTO DIRECTEURS

TIPO GHV  
 TYPE (11A - 12A/B - 13C)



|                                        | POSIZIONE<br><i>Position</i><br><i>Position</i><br><i>Position</i> | DESCRIZIONE<br><i>Description</i><br><i>Beschreibung</i><br><i>Dénomination</i>         |
|----------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|                                        | 1                                                                  | Vite - Screw - Schraube - Vis                                                           |
|                                        | 2                                                                  | Calotta - Cap - Radkappe - Capuchon                                                     |
|                                        | 3                                                                  | Copiglia - Split pin - Splinte - Goupille                                               |
|                                        | 4                                                                  | Dado intagli - Crown nut - Kronemutter - Ecrou couronne                                 |
|                                        | 5                                                                  | Rondella - Washer - Scheibe - Rondelle                                                  |
|                                        | 6                                                                  | Dado colonnetta - Wheel nut - Radbolzen - Ecrou goujon                                  |
|                                        | 7                                                                  | Rondella - Washer - Scheibe - Rondelle                                                  |
| Unità<br><i>Unit</i><br><i>Einheit</i> | 8a                                                                 | Cuscinetto esterno - External bearing - Aussenlager - Roulement extérieur               |
|                                        | 8b                                                                 | Anello paragrasso - Grease ring - Dichtungsring - Bague d'étanchéité                    |
|                                        | 8c                                                                 | Mozzo - Hub - Radnabe - Moyeu                                                           |
|                                        | 8d                                                                 | Anello paragrasso - Grease ring - Dichtungsring - Bague d'étanchéité                    |
|                                        | 8e                                                                 | Cuscinetto Interno - Inner bearing - Innenlager - Roulement intérieur                   |
|                                        | 8f                                                                 | Tamburo - Drum - Trommel - Tambour                                                      |
|                                        | 8g                                                                 | Colonna - Wheelstud - Radbolzen - Goujon                                                |
|                                        | 8h                                                                 | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'étanchéité                  |
|                                        | 9                                                                  | Anello di spallamento - Shoulder ring - Schulterring - Anneau d'épaulement              |
| Unità<br><i>Unit</i><br><i>Einheit</i> | 10                                                                 | Massa freno completa - Brakeshoes assembled - Bremsmasse Komplett - Garnitures complète |
|                                        | 10a                                                                | Molla superiore - Upper spring - Oberfeder - Ressort supérieur                          |
|                                        | 10b                                                                | Molla inferiore - Lower spring - Unterfeder - Ressort inférieure                        |
|                                        | 11                                                                 | Albero camma - Cam shaft - Nockenwelle - Arbre à cames                                  |
|                                        | 12                                                                 | O-Ring                                                                                  |
|                                        | 13                                                                 | Rondella - Washer - Scheibe - Rondelle                                                  |
|                                        | 14                                                                 | Dado intagli - Crown nut - Kronemutter - Ecrou couronne                                 |
|                                        | 15                                                                 | Copiglia - Split pin - Splinte - Goupille                                               |
|                                        | 16                                                                 | Anello elastico seeger - Seeger ring - Seegerring - Anneau élastique seeger             |
|                                        | 17                                                                 | Cuffia - Rubber Cap - Kappe - Capuchon                                                  |
|                                        | 18                                                                 | Molla - Spring - Feder - Ressort                                                        |
|                                        | 19                                                                 | Leva freno - Brake lever - Bremshebel - Levier du frein                                 |
|                                        | 20                                                                 | Anello elastico seeger - Seeger ring - Seegerring - Anneau élastique seeger             |

## Lista ricambi per assali e semiassi sterzanti con freno

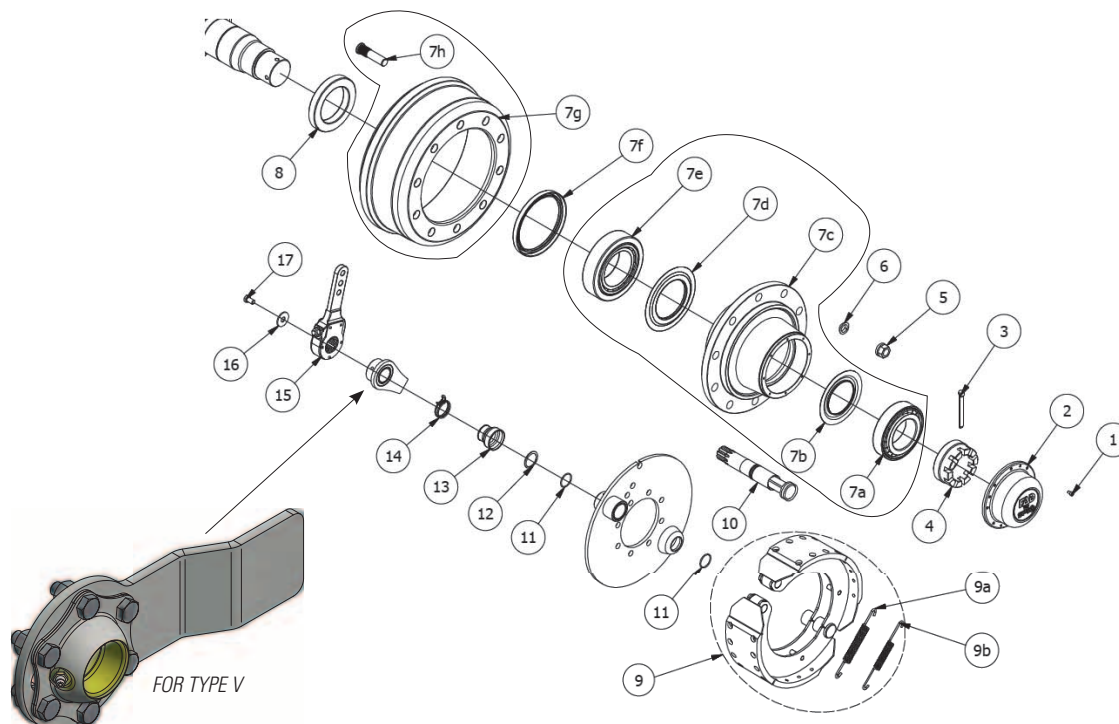
SPARE PART LIST FOR AXLES AND STUB AXLES WITH BRAKE  
ERSATZTEILELISTE FÜR LENKACHSEN UND STUMMEL MIT BREMSTROMMEL  
FICHE PIÈCES DE RECHANGE POUR ESSIEUX ET DEMI-ESSIEUX PIVOTANTS AVEC FREINTIPO GHV  
TYPE (14C - 15C)

|                          | LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination             |
|--------------------------|--------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------|
|                          | 344F022                                                                  | 1                                             | Perno per cerniera - Hinge pin - Gelenkzapfen - Pivot pour carniere    |
|                          | 352A1450T10                                                              | 2                                             | Barra di sterzata - Steering bar - Lenkstange - Barre de braquement    |
|                          | 328F003                                                                  | 3                                             | Dado intagli - Crown nut - Kronemutter M22X1.5 - Ecrou couronne        |
|                          | 310F003                                                                  | 4                                             | Copiglia - Split pin - Splinte - Goupille                              |
|                          | 335F007                                                                  | 5                                             | Vite - Screw - Schraube M 20X 80 - Vis                                 |
|                          | 329F073                                                                  | 6                                             | Rondella - Washer - Scheibe J.20 - Rondelle                            |
|                          | 340F011                                                                  | 7                                             | Dado - nut - mutter M20 UNI 5588 - Ecrou                               |
|                          | 354F004                                                                  | 8                                             | Ammortizzatore - Shock absorber - Stoßdämpfer - Amortisseur            |
|                          | 335F110                                                                  | 9                                             | Vite - Screw - Schraube M16X 110 - Vis                                 |
|                          | 340F059                                                                  | 10                                            | Dado - Nut - Mutter M16 UNI 7474 - Ecrou                               |
|                          | 356A010                                                                  | 11                                            | Cilindro - Cylinder - Zylinder - Cylindre                              |
|                          | 335F010                                                                  | 12                                            | Vite - Screw - Schraube M12X30 - Vis                                   |
|                          | 307F123                                                                  | 13                                            | Calotta - Cap - Radkappe - Capuchon                                    |
|                          | 344F021                                                                  | 14                                            | Perno per cerniera - Hinge pin - Gelenkzapfen - Pivot pour carniere    |
|                          | 311F122                                                                  | 15                                            | Cuscinetto - Bearing - Lager - Palier                                  |
|                          | 324F109                                                                  | 16                                            | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'etancheite |
| Unità<br>Unit<br>Einheit | 347A009R1                                                                | 17                                            | Cerniera - Hinge - Gelenk - Charniere                                  |
|                          | 349F0151                                                                 | 17a                                           | Boccola - Bush - Busch - Bague                                         |
|                          | 353A002                                                                  | 17b                                           | Giunto elastico - Elastic joint - Silentblock - Joint élastique        |

## Freni assali sterzanti

BRAKES FOR STEERING AXLES  
 BREMSEN FÜR LENKACHSEN  
 FREINS POUR ESSIEUX AUTO DIRECTEURS

TIPO GHV  
 TYPE (14C - 15C)



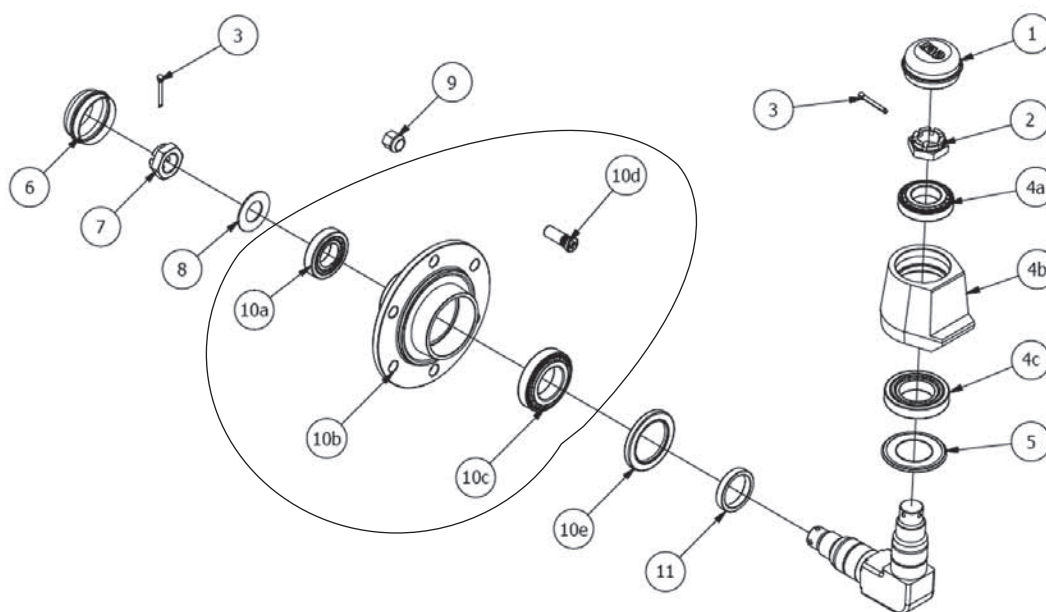
|                          | LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                              |
|--------------------------|--------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------|
|                          | 335F005                                                                  | 1                                             | Vite - Screw - Schraube M 6 X 10 5931 8.8 UNI - Vis                                     |
|                          | 307A001S                                                                 | 2                                             | Calotta - Cap - Radkappe - Capuchon                                                     |
|                          | 310F017                                                                  | 3                                             | Copiglia - Split pin - Splinte - Goupille                                               |
|                          | 328F022                                                                  | 4                                             | Dado intagli - Crown nut - Kronemutter M80X2X54 - Ecrou couronne                        |
|                          | 312F025                                                                  | 5                                             | Dado colonnetta - Wheel nut - Radmutter M22X1.5 DIN 74361 - Ecrou goujon                |
|                          | 329F091                                                                  | 6                                             | Rondella - Washer - Scheibe D.22.5X34X8Z - Rondelle                                     |
| Unità<br>Unit<br>Einheit | 311F123                                                                  | 7a                                            | Cuscinetto esterno - External bearing - Aussenlager - Roulement exterieur               |
|                          | 342F015                                                                  | 7b                                            | Anello paragrasso - Grease ring - Dichtungsring - Bague d'étanchéité                    |
|                          | 323174T                                                                  | 7c                                            | Mozzo - Hub - Radnabe - Moyeu                                                           |
|                          | 342F016                                                                  | 7d                                            | Anello paragrasso - Grease ring - Dichtungsring - Bague d'étanchéité                    |
|                          | 311F124                                                                  | 7e                                            | Cuscinetto Interno - Inner bearing - Innenlager - Roulement interieur                   |
|                          | 331F051                                                                  | 7g                                            | Tamburo - Drum - Trommel - Tambour                                                      |
|                          | 309FM07                                                                  | 7h                                            | Colonneta - Wheelstud - Radbolzen M22 X 1,5 X 90 10.9 CLASSE - Goujon                   |
|                          | 311F124                                                                  | 7f                                            | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'étancheite                  |
|                          | 302F034                                                                  | 8                                             | Anello di spallamento - Shoulder ring - Schulterring - Anneau d'épaulement              |
| Unità<br>Unit<br>Einheit | 316A092C                                                                 | 9                                             | Massa freno completa - Brakeshoes assembled<br>Bremsmasse Komplet - Garnitures complète |
|                          | 322F031                                                                  | 9a                                            | Molla superiore - Upper spring - Oberfeder - Ressort superieur                          |
|                          | 322F032                                                                  | 9b                                            | Molla inferiore - Lower spring - Unterfeder - Ressort inferieure                        |
|                          | 501F604                                                                  | 10                                            | Albero camma - Cam shaft - Nockenwelle - Arbre à cames                                  |
|                          | 341F079                                                                  | 11                                            | O.Ring                                                                                  |
|                          | 341F067                                                                  | 12                                            | Collare - Collar - Kragen- Collier                                                      |
|                          | 349F033                                                                  | 13                                            | Manicotto in gomma - Rubber sleeve - Gummihülse - Manchon en caoutchouc                 |
|                          | 322F047                                                                  | 14                                            | Molla - Spring - Feder - Ressort                                                        |
|                          | 320F019                                                                  | 15                                            | Leva freno - Brake lever - Bremshebel - Levier du frein                                 |
|                          | 329F036                                                                  | 16                                            | Rondella - Washer - Scheibe D.15X42X3 - Rondelle                                        |
|                          | 335F033                                                                  | 17                                            | Vite - Screw - Schraube M 12 X 20 5739 UNI - Vis                                        |



## Scheda ricambi mozzi autosterzanti

SPARE PARTS FOR STEERING HUBS  
ERSATZTEILLISTE FÜR LENKSTUMMEL  
LISTE PIÈCES DETACHEES MOYEUX AUTODIRECTEURS

TIPO - TYPE  
W02

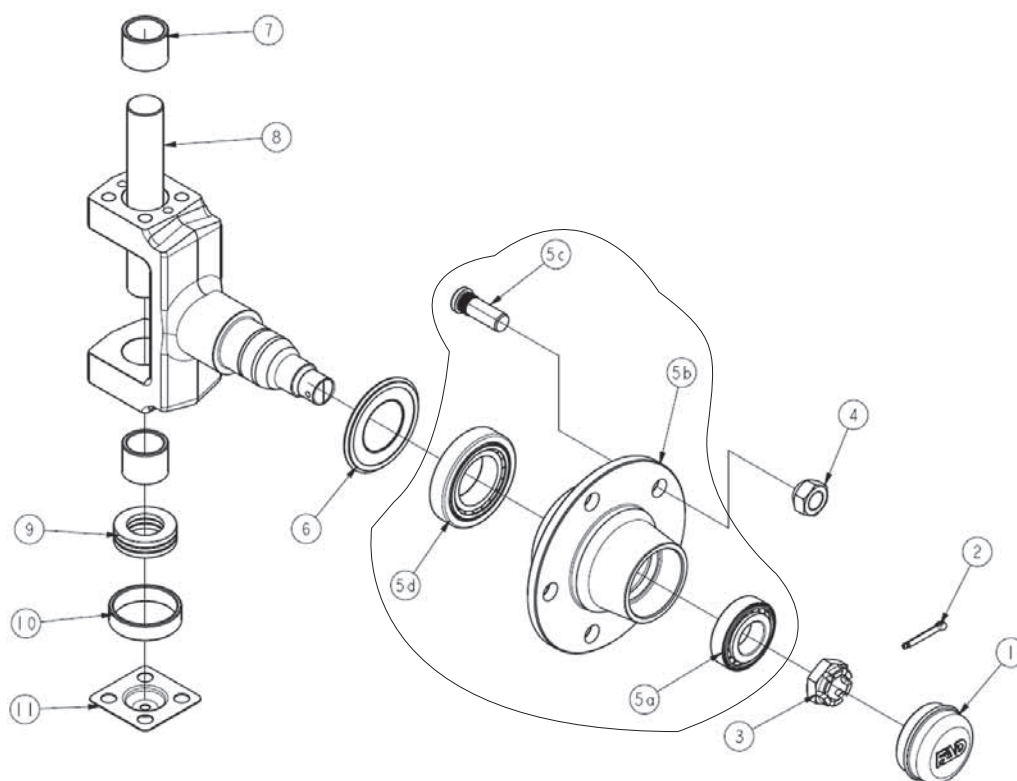


|                          | LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                 |
|--------------------------|--------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------|
|                          | 307F048                                                                  | 1                                             | Calotta - Cap - Kappe - Capuchon                                           |
|                          | 328F006                                                                  | 2                                             | Dado intagli - Crown nut - Kronenmutter M36X2 - Ecrou coronne              |
|                          | 310F005                                                                  | 3                                             | Copiglia - Split pin - Splinte - Goupille                                  |
|                          | 311F033                                                                  | 4a                                            | Cuscinetto esterno - External bearing - Aussenlager - Roulement exterieur  |
|                          | 346F001                                                                  | 4b                                            | Mozzo - Hub - Nabe - Moyeu                                                 |
|                          | 311F037                                                                  | 4c                                            | Cuscinetto Interno - Inner bearing - Innenlager - Roulement interieur      |
|                          | 324F002                                                                  | 5                                             | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'étanchéité     |
|                          | 307F047                                                                  | 6                                             | Calotta - Cap - Kappe - Capuchon                                           |
|                          | 328F005                                                                  | 7                                             | Dado intagli - Crown nut - Kronenmutter M33X2 - Ecrou coronne              |
|                          | 329F0571                                                                 | 8                                             | Rondella - Washer - Scheibe D.35X67X2.5 - Rondelle                         |
|                          | 312F010                                                                  | 9                                             | Dado colonnetta - Wheel nut - Radmutter M18X1.5 - Ecrou goujon             |
| Unità<br>Unit<br>Einheit | 311F031                                                                  | 10a                                           | Cuscinetto esterno - External bearing - Aussenlager - Roulement exterieur  |
|                          | 323089TI                                                                 | 10b                                           | Mozzo - Hub - Nabe - Moyeu                                                 |
|                          | 311F037                                                                  | 10c                                           | Cuscinetto Interno - Inner bearing - Innenlager - Roulement interieur      |
|                          | 309F004                                                                  | 10d                                           | Bullone - Bolt - Bolzen M18X1.5X49 - Goujon                                |
|                          | 324F108                                                                  | 10e                                           | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'étanchéité     |
|                          | 302F026                                                                  | 11                                            | Anello di spallamento - Shoulder ring - Schulterring - Anneau d'épaulement |

## Scheda ricambi mozzi autosterzanti

SPARE PARTS FOR STEERING HUBS  
ERSATZTEILLISTE FÜR LENKSTUMMEL  
LISTE PIÈCES DETACHÉES MOYEUX AUTODIRECTEURS

TIPO - TYPE  
W03

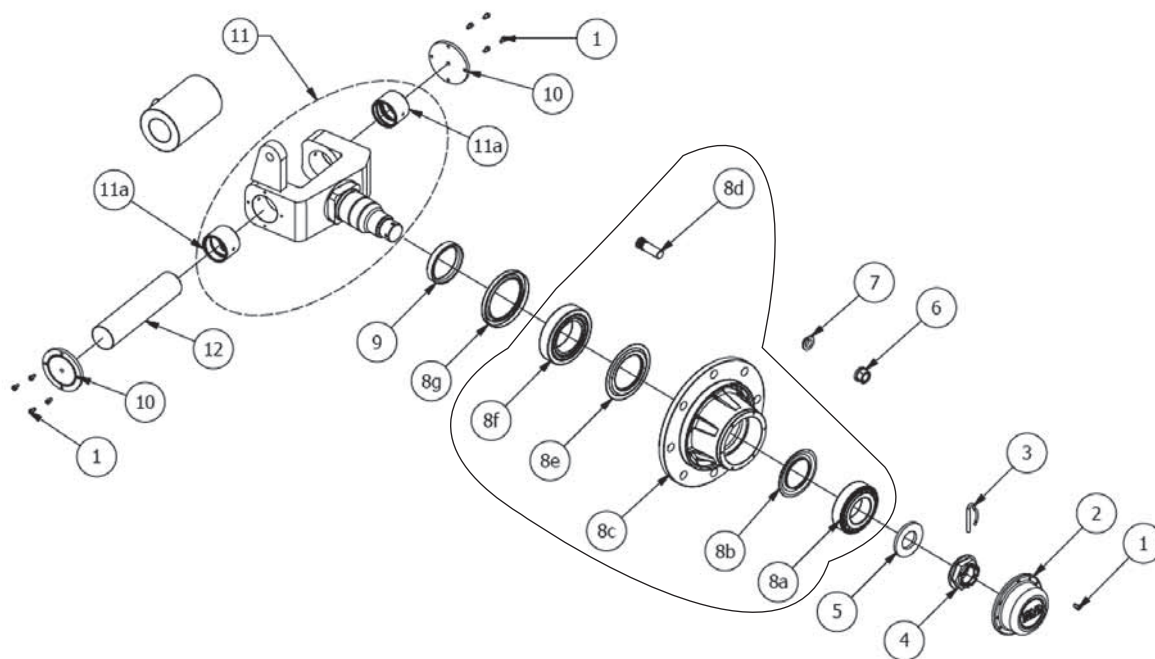


|                          | LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                          |
|--------------------------|--------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------|
|                          | 307F045                                                                  | 1                                             | Calotta - Cap - kappe - Capuchon                                                    |
|                          | 310F004                                                                  | 2                                             | Copiglia - Split pin - Splinte - Goupille                                           |
|                          | 328F010                                                                  | 3                                             | Dado intagli - Crown nut - Kronemutter M24X1.5 - Ecrou couronne                     |
|                          | 312F003                                                                  | 4                                             | Dado colonnetta - Wheel nut - Radmutter M16X1.5 - Ecrou goujon                      |
| Unità<br>Unit<br>Einheit | 311F028                                                                  | 5a                                            | Cuscinetto esterno - External bearing - Aussenlager - Roulement exterieur           |
|                          | 323051T                                                                  | 5b                                            | Mozzo - Hub - Radnabe - Moyeu                                                       |
|                          | 309F008                                                                  | 5c                                            | Colonneta - Wheelstud - Radbolzen M16X1.5X45 - Goujon                               |
|                          | 311F033                                                                  | 5d                                            | Cuscinetto Interno - Inner bearing - Innenlager - Roulement interieur               |
|                          | 324F007                                                                  | 6                                             | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'étanchéité              |
|                          | 349F004                                                                  | 7                                             | Bronzina per cerniera - Bushing - Lagerschale für Gelenk - Coussinet pour charniere |
|                          | 344F003                                                                  | 8                                             | Perno per cerniera - Hinge pin - Gelenkzapfen - Pivot pour charniere                |
|                          | 311F062                                                                  | 9                                             | Cuscinetto - Bearing - Lager - Palier                                               |
|                          | 324F024                                                                  | 10                                            | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'étanchéité              |
|                          | 307F013                                                                  | 11                                            | Calotta - Cap - Kappe - Capuchon                                                    |

## Scheda ricambi mozzi autosterzanti

SPARE PARTS FOR STEERING HUBS  
ERSATZTEILLISTE FÜR LENKSTUMMEL  
LISTE PIÈCES DETACHEES MOYEUX AUTODIRECTEURS

TIPO - TYPE  
C07



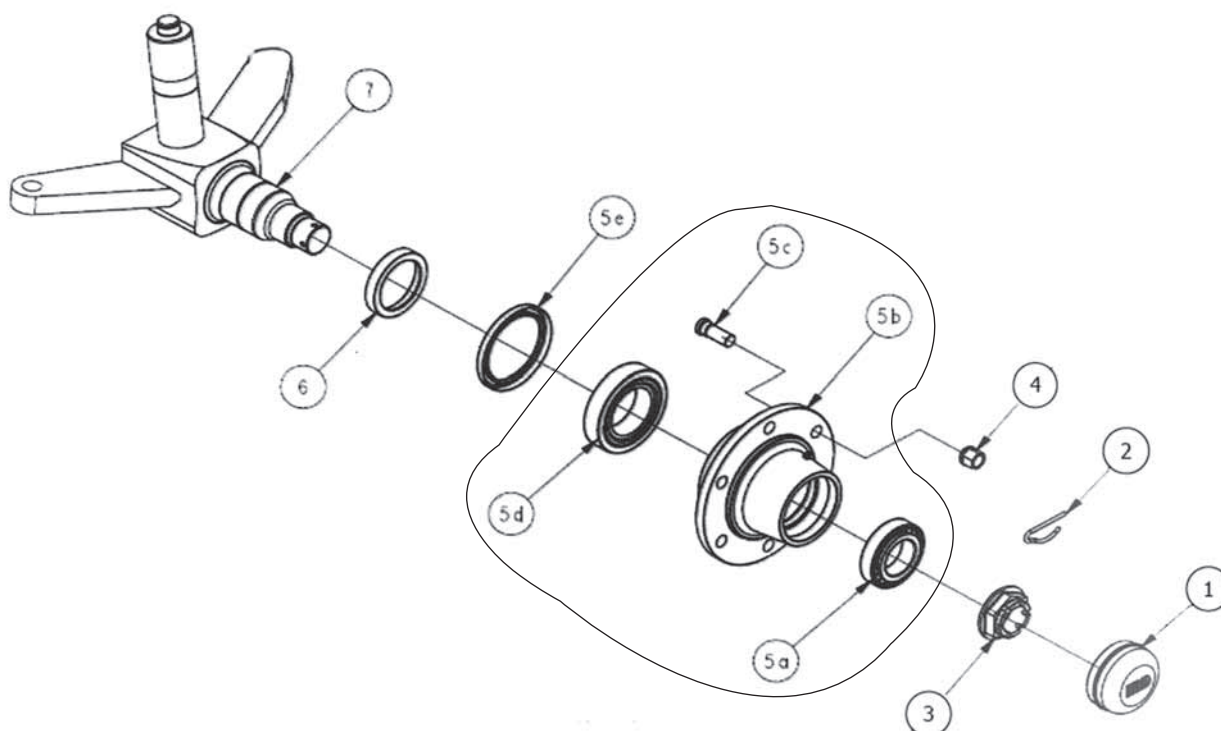
|                          | LETTERA<br>ID Letter<br>Identifikationsnummer<br>Lettre d'identification | POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                 |
|--------------------------|--------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------|
|                          | 335F005                                                                  | 1                                             | Vite - Screw - Schraube M 6 X 10 5931 8.8 UNI - Vis                        |
|                          | 307A002                                                                  | 2                                             | Calotta - Cap - Kappe - Capuchon                                           |
|                          | 344F054                                                                  | 3                                             | Copiglia - Split pin - Splinte - Goupille                                  |
|                          | 328F014                                                                  | 4                                             | Dado intagli - Crown nut - Kronenmutter M45X2 - Ecrou coronne              |
|                          | 329F009                                                                  | 5                                             | Rondella - Washer - Scheibe D.45X85X7 - Rondelle                           |
|                          | 312F023                                                                  | 6                                             | Dado colonnetta - Wheel nut - Radmutter M20X1.5 - Ecrou goujon             |
|                          | 329F083                                                                  | 7                                             | Rondella - Washer - Scheibe D.20.5X34X8Z DIN 74361 - Rondelle              |
| Unità<br>Unit<br>Einheit | 311F125                                                                  | 8a                                            | Cuscinetto esterno - External bearing - Aussenlager - Roulement exterieur  |
|                          | 342F010                                                                  | 8b                                            | Anello paragrasso - Grease ring - Dichtungsring - Bague d'étanchéité       |
|                          | 323278T                                                                  | 8c                                            | Mozzo - Hub - Nabe - Moyeu                                                 |
|                          | 309F010                                                                  | 8d                                            | Colonnetta - Wheelstud - Radbolzen M20 X 1,5 X 62 10.9 CLASSE - Goujon     |
|                          | 342F013                                                                  | 8e                                            | Anello paragrasso - Grease ring - Dichtungsring - Bague d'étanchéité       |
|                          | 311F126                                                                  | 8f                                            | Cuscinetto Interno - Inner bearing - Innenlager - Roulement interieur      |
|                          | 324F016                                                                  | 8g                                            | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'étancheite     |
|                          | 302F0211                                                                 | 9                                             | Anello di spallamento - Shoulder ring - Schulterring - Anneau d'épaulement |
|                          | 355F653                                                                  | 10                                            | Calotta - Cap - Kappe - Capuchon                                           |
| Unità<br>Unit<br>Einheit | 347A035DR2-SR02                                                          | 11                                            | Cerniera - Hinge - Scharnier - Charnière                                   |
|                          | 349F043                                                                  | 11a                                           | Boccola - Bush - Busch - Bague                                             |
|                          | 344F068                                                                  | 12                                            | Perno - Pin - Stift - Goupille                                             |



## Lista ricambi mozzi autosterzanti

SPARE PARTS FOR STEERING HUBS  
ERSATZTEILLISTE FÜR LENKSTUMMEL  
LISTE PIÈCES DETACHÉES MOYEUX AUTODIRECTEURS

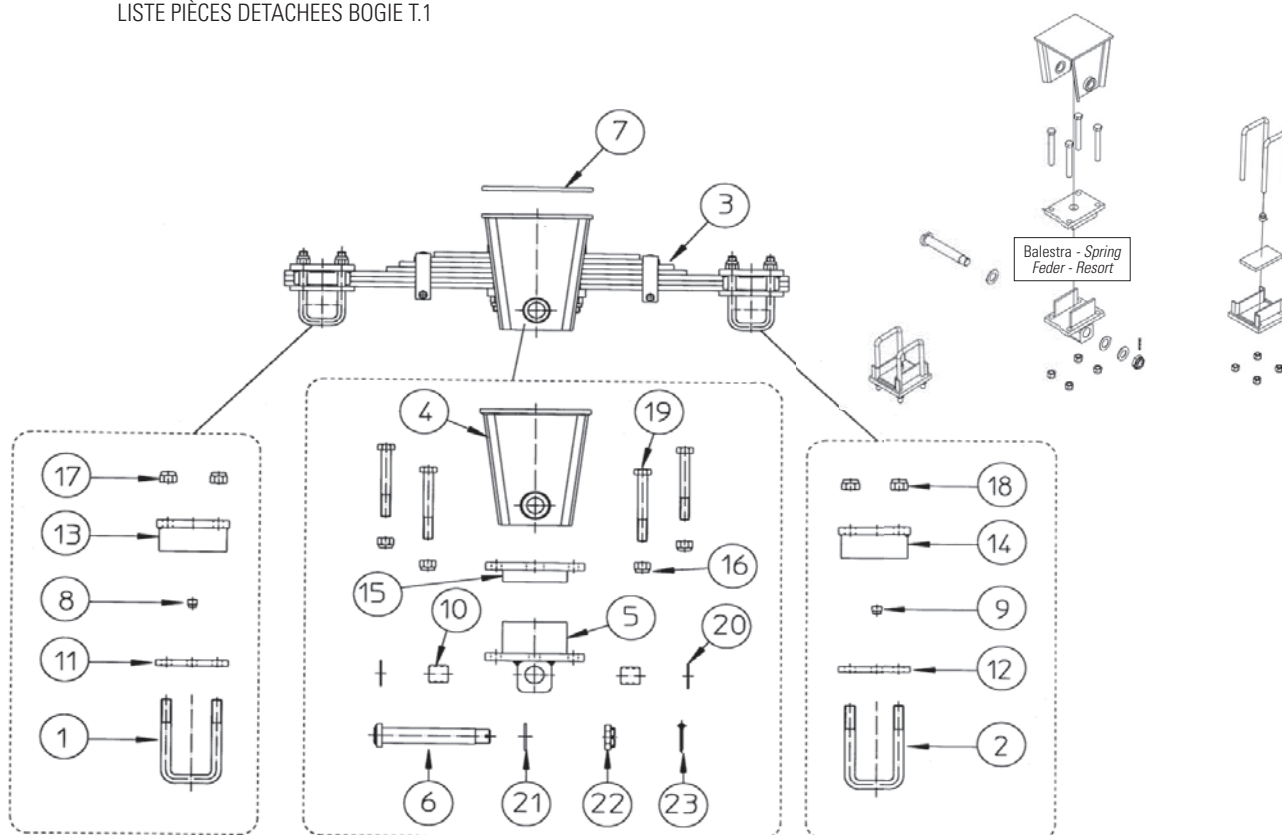
TIPO - TYPE  
A12



|                                        | POSIZIONE<br><i>Position</i><br><i>Position</i><br><i>Position</i> | DESCRIZIONE<br><i>Description</i><br><i>Beschreibung</i><br><i>Dénomination</i> |
|----------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------|
|                                        | 1                                                                  | Calotta - Cap - Radkappe - Capuchon                                             |
|                                        | 2                                                                  | Copiglia - Split pin - Splinte - Goupille                                       |
|                                        | 3                                                                  | Dado intagli - Crown nut - Kronemutter - Erou couronne                          |
|                                        | 4                                                                  | Dado colonnetta - Wheel nut - Radmutter - Erou goujon                           |
| Unità<br><i>Unit</i><br><i>Einheit</i> | 5a                                                                 | Cuscinetto esterno - External bearing - Roulement exterieur - Aussenlager       |
|                                        | 5b                                                                 | Mozzo - Hub - Radnabe - Moyeu                                                   |
|                                        | 5c                                                                 | Colonna - Wheelstud - Radbolzen - Goujon                                        |
|                                        | 5d                                                                 | Cuscinetto Interno - Inner bearing - Innenlager - Roulement interieur           |
|                                        | 5e                                                                 | Anello di tenuta - Retaining ring - Dichtungsring - Bague d'étanchéité          |
|                                        | 6                                                                  | Anello di spallamento - Shoulder ring - Schulterring - Anneu d'Appui            |

## Scheda ricambi bogie t.1

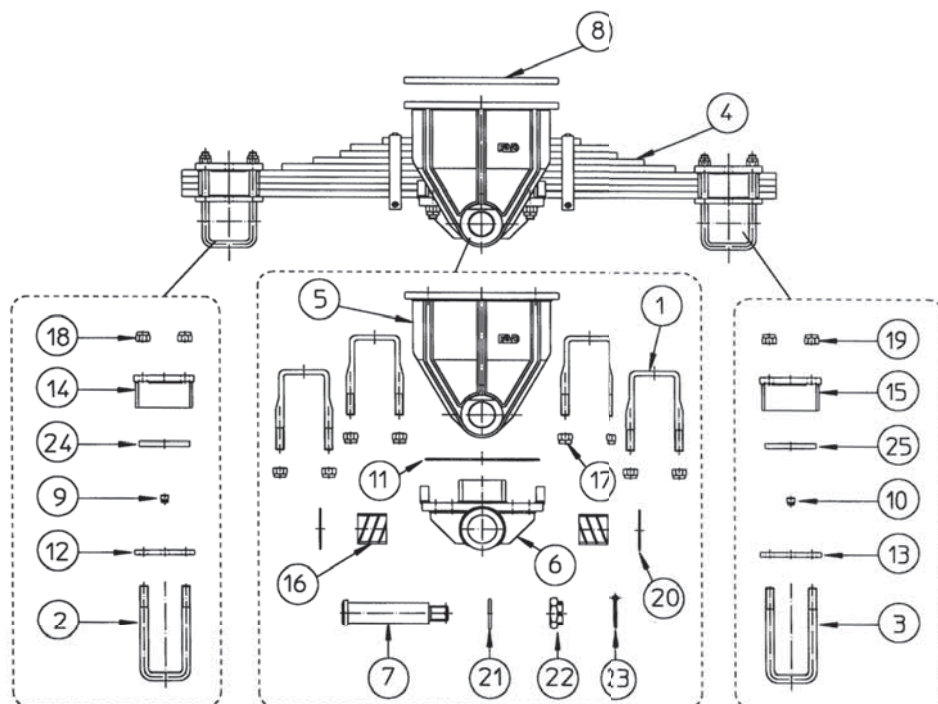
SPARE PARTS LIST FOR BOGIE T.1  
ERSATZTEILLISTE FÜR BOGIE T.1  
LISTE PIÈCES DETACHEES BOGIE T.1



| POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                                                      |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 1                                             | Cavallotto assale anteriore - Front axle u-bolt - Federbügel Vorderachse - Bride essieu avant                   |
| 2                                             | Cavallotto assale posteriore - Rear axle u-bolt - Federbügel Hinterachse - Bride essieu arrière                 |
| 3                                             | Balestra bogie - Bogie spring - Blattfeder Bogie - Ressort bogie                                                |
| 4                                             | Fianco supporto - Support side - Federbockseite - Côté support                                                  |
| 5                                             | Supporto oscillante completo - Swinging support - Schwinghalterung komplett - Support oscillant complet         |
| 6                                             | Piastra distanziale balestra - Distancing spring plate - Distanzplatte Blattfeder - Plaque entretoise ressort   |
| 7                                             | Piastra di fissaggio sup. - Upper fixing plate - Obere Befestigungsplatte - Plaque de fixation supérieure       |
| 8                                             | Piastra di fissaggio inferiore - Lower fixing plate - Untere Befestigungsplatte - Plaque de fixation inférieure |
| 9                                             | Contropiastra - Counter plate - Gegenplatte - Contre-plaque                                                     |
| 10                                            | Perno riferimento anteriore - Front center pin - Vorderer Zentrierbolzen - Pivot référence avant                |
| 11                                            | Perno riferimento post. - Rear center pin - Hinterer Zentrierbolzen - Pivot référence arrière                   |
| 12                                            | Piastra assale ant. - Front axle plate - Platte für Vorderachse - Plaque essieu avant                           |
| 13                                            | Piastra assale post. - Rear axle plate - Platte für Hinterachse - Plaque essieu arrière                         |
| 14                                            | Piastra balestra ant. - Front spring plate - Platte für vordere Blattfeder - Plaque ressort avant               |
| 15                                            | Piastra balestra post. - Rear spring plate - Platte für hintere Blattfeder - Plaque ressort arrière             |
| 16                                            | Boccola supp. oscillante - Swinging supp. bush - Buchse für Schwinghalterung - Bague support oscillant          |
| 17                                            | Dado bloccaggio - Locking nut - Gegenmutter - Erou de blocage                                                   |
| 18                                            | Dadi fissaggio ant. - Front nut - Vordere Klemmmuttern - Erou fixation avant                                    |
| 19                                            | Dadi fissaggio post. - Rear nut - Hintere Klemmmuttern - Erou fixation arrière                                  |
| 20                                            | Vite di fissaggio super. - Upper fixing screw - Obere Befestigungsschraube - Vis de fixation supérieur          |
| 21                                            | Vite di fissaggio infer. - Lower fixing screw - Untere Befestigungsschraube - Vis de fixation inférieur         |
| 22                                            | Tampone in gomma ant. - Front rubber buffer - Vorderer Gummipuffer - Tampon en gomme avant                      |
| 23                                            | Tampone in gomma post. - Rear rubber buffer - Hinterer Gummipuffer - Tampon en gomme arrière                    |

## Scheda ricambi bogie t.3

SPARE PARTS LIST FOR BOGIE T.3  
 ERSATZTEILLISTE FÜR BOGIE T.3  
 LISTE PIÈCES DETACHEES BOGIE T.3

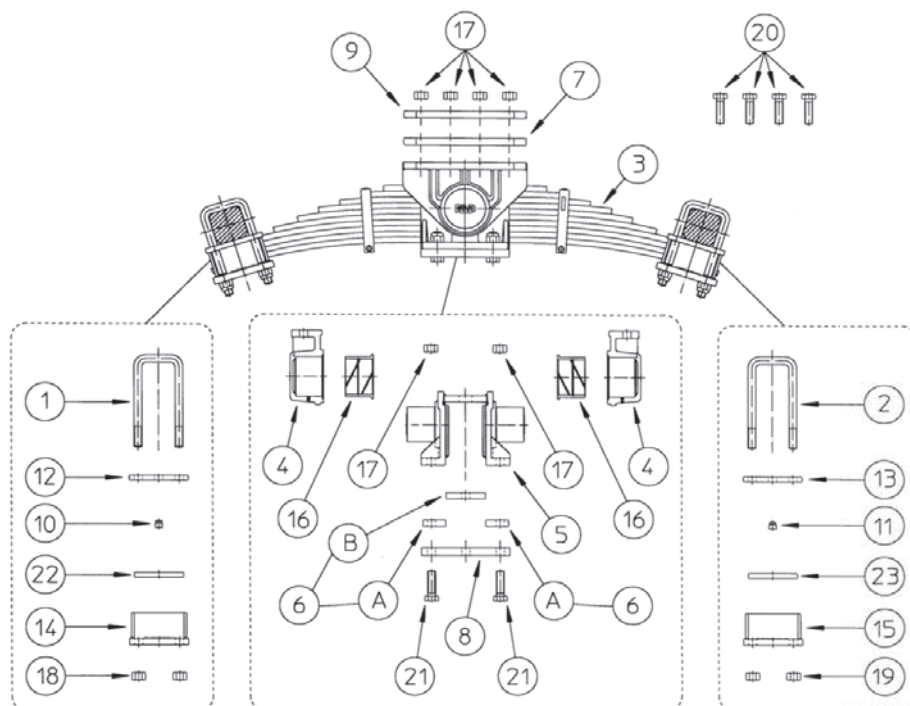


| POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                                                   |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 1                                             | Cavallotto fissaggio balestra - Spring fixing u-bolt - Federbügel - Bride fixation ressort                   |
| 2                                             | Cavallotto assale anteriore - Front axle u-bolt - Federbügel Vorderachse - Bride essieu avant                |
| 3                                             | Cavallotto assale posteriore - Rear axle u-bolt - Federbügel Hinterachse - Bride essieu arriere              |
| 4                                             | Balestra bogie - Bogie spring - Blattfeder Bogie - Ressort bogie                                             |
| 5                                             | Supporto laterale completo - Side support - Seitliche Halterung komplett - Support latéral complet           |
| 6                                             | Supporto oscillante completo - Swinging support - Schwinghalterung komplett - Support oscillant complet      |
| 7                                             | Perno bogie completo - Bogie pin - Bolzen komplett - Pivot bogie complete                                    |
| 8                                             | Contropiastra - Counter plate - Gegenplatte - Contre-plaque                                                  |
| 9                                             | Perno riferimento anteriore - Front center pin - Vorderer Zentrierbolzen - Pivot référence avant             |
| 10                                            | Perno riferimento post. - Rear center pin - Hinterer Zentrierbolzen - Pivot référence arriere                |
| 11                                            | Piastra distanziale balestra - Distancing sprig plate - Distanzplatte Blattfeder - Plaque entretoise ressort |
| 12                                            | Piastra assale ant. - Front axle plate - Platte für Vorderachse - Plaque essieu avant                        |
| 13                                            | Piastra assale post. - Rear axle plate - Platte für Hinterachse - Plaque essieu arriere                      |
| 14                                            | Piastra balestra ant. - Front spring plate - Platte für vordere Blattfeder - Plaque ressort avant            |
| 15                                            | Piastra balestra post. - Rear spring plate - Platte für hintere Blattfeder - Plaque ressort arriere          |
| 16                                            | Boccola supp. oscillante - Swinging supp. bush - Buchse für Schwinghalterung - Bague support oscillant       |
| 17                                            | Dado bloccaggio - Locking nut - Gegenmutter - Ecrou de blocage                                               |
| 18                                            | Dadi fissaggio ant. - Front nut - Vordere Klemmmuttern - Ecrou fixation avant                                |
| 19                                            | Dadi fissaggio post. - Rear nut - Hintere Klemmmuttern - Ecrou fixation arriere                              |
| 20                                            | Rondella rasamento perno - Washer - Bolzen-Passscheibe - Rondelle serrage pivot                              |
| 21                                            | Rondella distanziale - Washing spacer - Distanzscheibe - Rondelle entretoise                                 |
| 22                                            | Dado ad intagli - Crown nut - Kronemutter - Ecrou couronne                                                   |
| 23                                            | Copiglia - Split pin - Splint - Goupille                                                                     |
| 24                                            | Tampone in gomma ant. - Front rubber buffer - Vorderer Gummipuffer - Tampon en gomme avant                   |
| 25                                            | Tampone in gomma post. - Rear rubber buffer - Hinterer Gummipuffer - Tampon en gomme arriere                 |



## Scheda ricambi bogie t.4

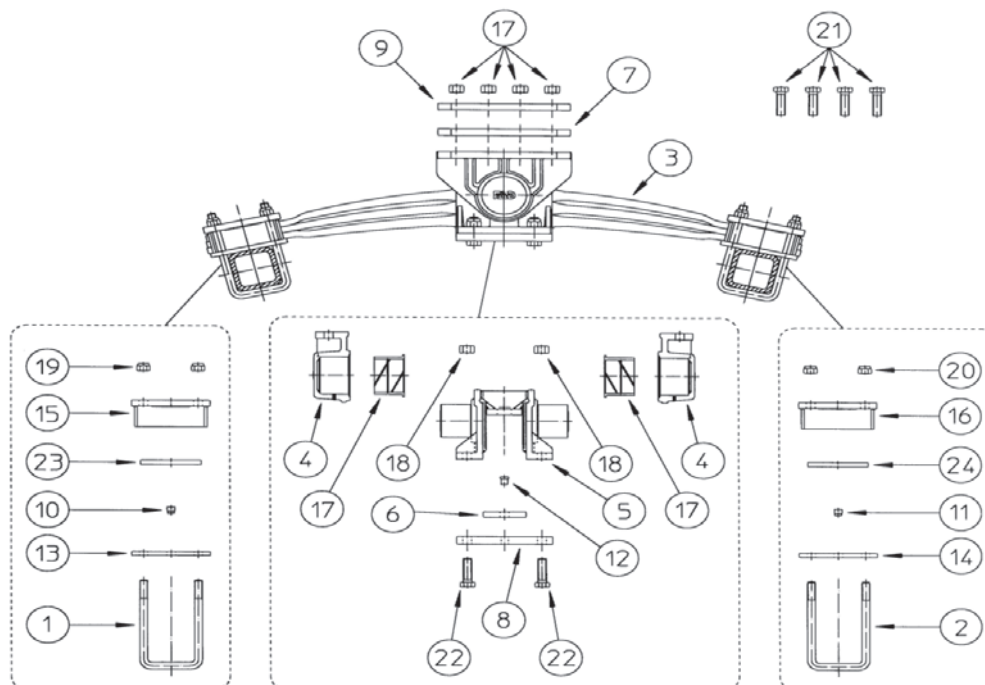
SPARE PARTS LIST FOR BOGIE T.4  
ERSATZTEILLISTE FÜR BOGIE T.4  
LISTE PIÈCES DETACHEES BOGIE T.4



| POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                                                      |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 1                                             | Cavallotto assale anteriore - Front axle u-bolt - Federbügel Vorderachse - Bride essieu avant                   |
| 2                                             | Cavallotto assale posteriore - Rear axle u-bolt - Federbügel Hinterachse - Bride essieu arriere                 |
| 3                                             | Balestra bogie - Bogie spring - Blattfeder Bogie - Ressort bogie                                                |
| 4                                             | Fianco supporto - Support side - Federbockseite - Côté support                                                  |
| 5                                             | Supporto oscillante completo - Swinging support - Schwinghalterung komplett - Support oscillant complet         |
| 6                                             | Piastra distanziale balestra - Distancing sprig plate - Distanzplatte Blattfeder - Plaque entretoise ressort    |
| 7                                             | Piastra di fissaggio sup. - Upper fixing plate - Obere Befestigungsplatte - Plaque de fixation supérieure       |
| 8                                             | Piastra di fissaggio inferiore - Lower fixing plate - Untere Befestigungsplatte - Plaque de fixation inférieure |
| 9                                             | Contropiastra - Counter plate - Gegenplatte - Contre-plaque                                                     |
| 10                                            | Perno riferimento anteriore - Front center pin - Vorderer Zentrierbolzen - Pivot référence avant                |
| 11                                            | Perno riferimento post. - Rear center pin - Hinterer Zentrierbolzen - Pivot référence arriere                   |
| 12                                            | Piastra assale ant. - Front axle plate - Platte für Vorderachse - Plaque essieu avant                           |
| 13                                            | Piastra assale post. - Rear axle plate - Platte für Hinterachse - Plaque essieu arriere                         |
| 14                                            | Piastra balestra ant. - Front spring plate - Platte für vordere Blattfeder - Plaque ressort avant               |
| 15                                            | Piastra balestra post. - Rear spring plate - Platte für hintere Blattfeder - Plaque ressort arriere             |
| 16                                            | Boccola supp. oscillante - Swinging supp. bush - Buchse für Schwinghalterung - Bague support oscillant          |
| 17                                            | Dado bloccaggio - Locking nut - Gegenmutter - Ecrou de blocage                                                  |
| 18                                            | Dadi fissaggio ant. - Front nut - Vordere Klemmmuttern - Ecrou fixation avant                                   |
| 19                                            | Dadi fissaggio post. - Rear nut - Hintere Klemmmuttern - Ecrou fixation arriere                                 |
| 20                                            | Vite di fissaggio super. - Upper fixing screw - Obere Befestigungsschraube - Vis de fixation supérieur          |
| 21                                            | Vite di fissaggio infer. - Lower fixing screw - Untere Befestigungsschraube - Vis de fixation inférieur         |
| 22                                            | Tampone in gomma ant. - Front rubber buffer - Vorderer Gummipuffer - Tampon en gomme avant                      |
| 23                                            | Tampone in gomma post. - Rear rubber buffer - Hinterer Gummipuffer - Tampon en gomme arriere                    |

## Scheda ricambi bogie t.4

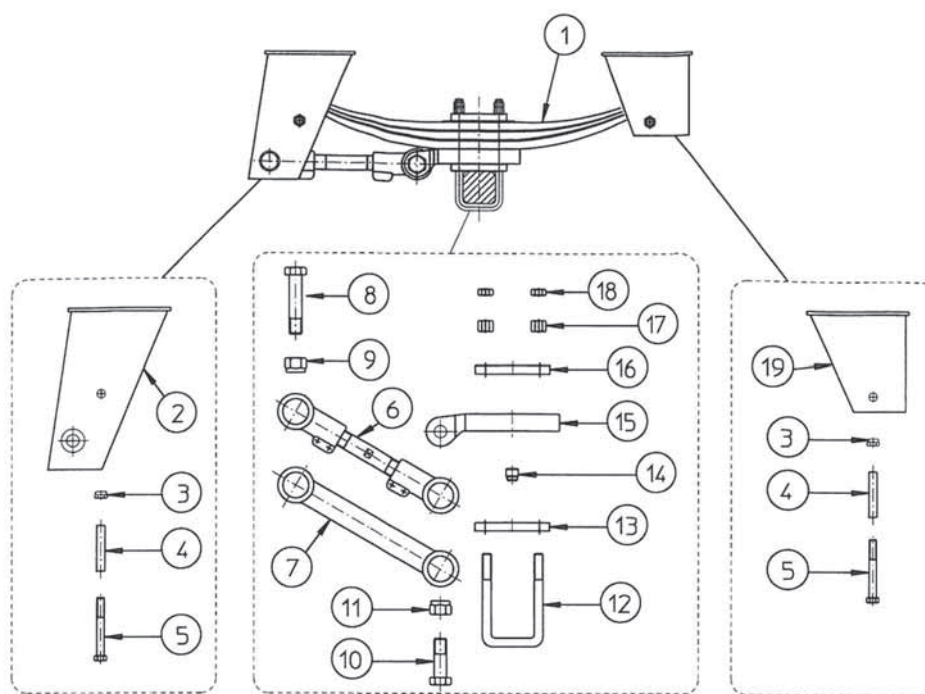
SPARE PARTS LIST FOR BOGIE T.4  
 ERSATZTEILLISTE FÜR BOGIE T.4  
 LISTE PIÈCES DETACHEES BOGIE T.4



| POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                                                      |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 1                                             | Cavallotto assale anteriore - Front axle u-bolt - Federbügel Vorderachse - Bride essieu avant                   |
| 2                                             | Cavallotto assale posteriore - Rear axle u-bolt - Federbügel Hinterachse - Bride essieu arriere                 |
| 3                                             | Balestra bogie - Bogie spring - Blattfeder Bogie - Ressort bogie                                                |
| 4                                             | Fianco supporto - Support side - Federbockseite - Côté support                                                  |
| 5                                             | Supporto oscillante completo - Swinging support - Schwinghalterung komplett - Support oscillant complet         |
| 6                                             | Piastra distanziale balestra - Distancing sprig plate - Distanzplatte Blattfeder - Plaque entretoise ressort    |
| 7                                             | Piastra di fissaggio sup. - Upper fixing plate - Obere Befestigungsplatte - Plaque de fixation supérieure       |
| 8                                             | Piastra di fissaggio inferiore - Lower fixing plate - Untere Befestigungsplatte - Plaque de fixation inférieure |
| 9                                             | Contropiastra - Counter plate - Gegenplatte - Contre-plaque                                                     |
| 10                                            | Perno riferimento anteriore - Front center pin - Vorderer Zentrierbolzen - Pivot référence avant                |
| 11                                            | Perno riferimento post. - Rear center pin - Hinterer Zentrierbolzen - Pivot référence arriere                   |
| 12                                            | Perno riferimento balestra - Plate center pin - Zentrierstück platte - Pivot référence ressort                  |
| 13                                            | Piastra assale ant. - Front axle plate - Platte für Vorderachse - Plaque essieu avant                           |
| 14                                            | Piastra assale post. - Rear axle plate - Platte für Hinterachse - Plaque essieu arriere                         |
| 15                                            | Piastra balestra ant. - Front spring plate - Platte für vordere Blattfeder - Plaque ressort avant               |
| 16                                            | Piastra balestra post. - Rear spring plate - Platte für hintere Blattfeder - Plaque ressort arriere             |
| 17                                            | Boccola supp. oscillante - Swinging supp. bush - Buchse für Schwinghalterung - Bague support oscillant          |
| 18                                            | Dado bloccaggio - Locking nut - Gegenmutter - Ecrou de blocage                                                  |
| 19                                            | Dadi fissaggio ant. - Front nut - Vordere Klemmmuttern - Ecrou fixation avant                                   |
| 20                                            | Dadi fissaggio post. - Rear nut - Hintere Klemmmuttern - Ecrou fixation arriere                                 |
| 21                                            | Vite di fissaggio super. - Upper fixing screw - Obere Befestigungsschraube - Vis de fixation supérieur          |
| 22                                            | Vite di fissaggio infer. - Lower fixing screw - Untere Befestigungsschraube - Vis de fixation inférieur         |
| 23                                            | Tampone in gomma ant. - Front rubber buffer - Vorderer Gummipuffer - Tampon en gomme avant                      |
| 24                                            | Tampone in gomma post. - Rear rubber buffer - Hinterer Gummipuffer - Tampon en gomme arriere                    |

## Ricambi sospensioni meccaniche con tiranti

SPARE PARTS FOR MECHANICAL SUSPENSION WITH TIE RODS  
ERSATZTEILE FÜR MECHANISCHE FEDERAGGREGATE  
PIÈCES DE RECHANGES SUSPENSIONS MÉCANIQUES AVEC BRAS DE TRACTION

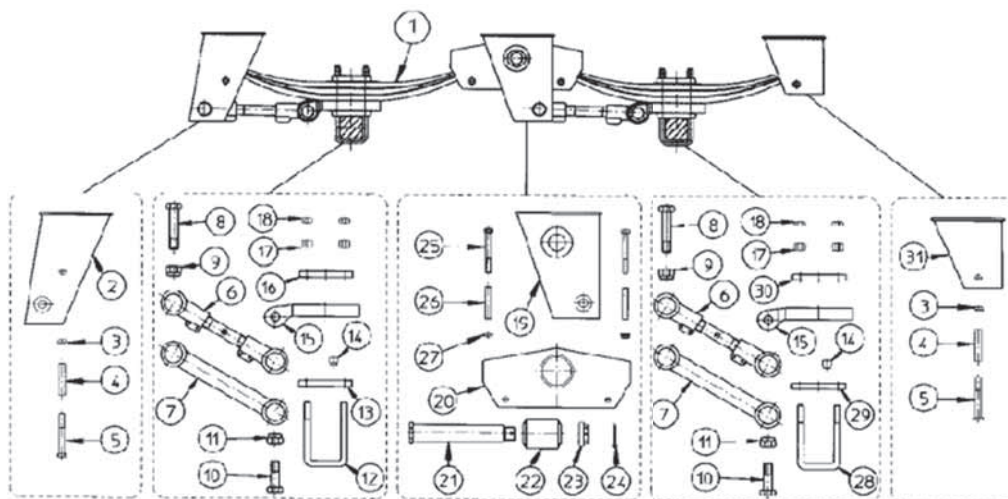


| POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                                                                                       |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                             | Balestra parabolica - Parabolic spring - Parabel-Blattfeder - Ressort parabolique                                                                |
| 2                                             | Supporto balestra anteriore - Front spring support - Vordere Blattfederhalterung - Support ressort avant                                         |
| 3                                             | Dado bloccaggio perno - Pin nut - Sicherungsmutter - Ecrou de blocage pivot                                                                      |
| 4                                             | Tubo distanziale - Tube - Hülse - Tube entretoise                                                                                                |
| 5                                             | Vite bloccaggio - Locking screw - Sicherungsschraube - Vis de blocage                                                                            |
| 6                                             | Tirante registrabile - Adjustable tie rods - Gewindestange einstellbar - Bras de traction enregistable                                           |
| 7                                             | Tirante fisso - Fixed tie rods - Gewindebolzen - Bras de traction fixe                                                                           |
| 8                                             | Vite per tirante supporto anteriore - Tie rod screw<br>Schraube für Zugstange vordere Halterung - Vis pour bras de traction support antérieur    |
| 9                                             | Dado bloccaggio - Locking nut - Sicherungsmutter - Ecrou de blocage                                                                              |
| 10                                            | Vite per tirante piastra con forcella - Screw for plate<br>Schraube für Zugstange Platte mit Gabel - Vis pour bras de traction plaque avec chape |
| 11                                            | Dado bloccaggio - Locking nut - Sicherungsmutter - Ecrou de blocage                                                                              |
| 12                                            | Cavallotto assale - U-Bolt - Federbügel - Bride essieu                                                                                           |
| 13                                            | Piastra bloccaggio assale - Locking plate - Fixierplatte - Plaque blocage essieu                                                                 |
| 14                                            | Perno centraggio - Pin - Zentrierbolzen - Pivot centrage                                                                                         |
| 15                                            | Piastra balestra con forcella - Spring plate - Federplatte mit Bügel - Plaque ressort avec chape                                                 |
| 16                                            | Piastra fissaggio - Fixing plate - Fixierplatte - Plaque de fixation                                                                             |
| 17                                            | Dado cavallotto alto - High u-bolt nut - Mutter Federbügel oben - Ecrou bride haut                                                               |
| 18                                            | Dado cavallotto basso - Low u-bolt nut - Mutter Federbügel unten - Ecrou bride bas                                                               |
| 19                                            | Supporto balestra posteriore - Rear spring support - Hinterfederbock - Support ressort arriere                                                   |



## Scheda ricambi per sospensione meccanica

SPARE PARTS LIST FOR MECHANICAL SUSPENSION  
 ERSATZTEILLISTE FÜR MECHANISCHE FEDERAGGREGATE  
 LISTE PIÈCES DETACHEES POUR SUSPENSION MÉCANIQUE



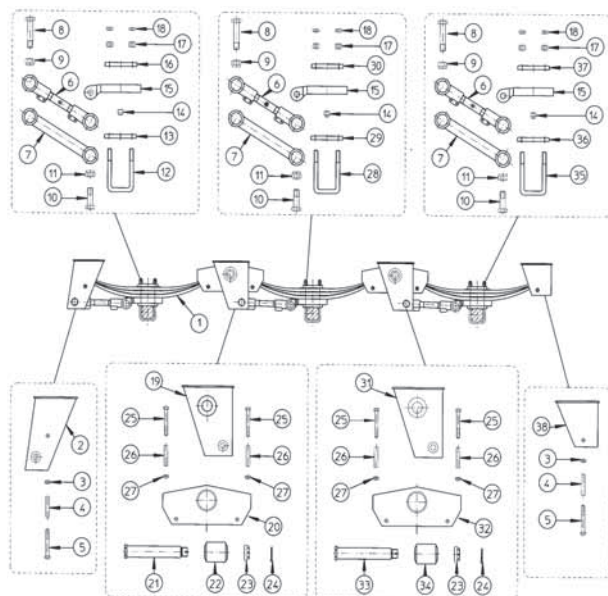
| POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                                                                            |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 1                                             | Balestra parabolica - <i>Parabolic spring</i> - <i>Parabel-Blattfeder</i> - <i>Ressort parabolique</i>                                |
| 2                                             | Supporto balestra anteriore - <i>Front spring support</i> - <i>Vordere Blattfederhalterung</i> - <i>Support ressort avant</i>         |
| 3                                             | Dado bloccaggio perno - <i>Pin nut</i> - <i>Sicherungsmutter</i> - <i>Ecrou de blocage pivot</i>                                      |
| 4                                             | Tubo distanziale - <i>Tube</i> - <i>Hülse</i> - <i>Tube entretoise</i>                                                                |
| 5                                             | Vite bloccaggio - <i>Locking screw</i> - <i>Sicherungsschraube</i> - <i>Vis de blocage</i>                                            |
| 6                                             | Tirante registrabile - <i>Adjustable tie rods</i> - <i>Gewindestange einstellbar</i> - <i>Bras de traction enregistable</i>           |
| 7                                             | Tirante fisso - <i>Fixed tire rods</i> - <i>Gewindebolzen</i> - <i>Bras de traction fixe</i>                                          |
| 8                                             | Vite per tirante supporto - <i>Tie rod screw</i> - <i>Schraube für Zugstange Halterung</i> - <i>Vis pour bras de traction support</i> |
| 9                                             | Dado bloccaggio - <i>Locking nut</i> - <i>Sicherungsmutter</i> - <i>Ecrou de blocage</i>                                              |
| 10                                            | Vite per tirante piastra con forcella - <i>Screw for plate</i> - <i>Schraube</i> - <i>Vis pour plaque</i>                             |
| 11                                            | Dado bloccaggio - <i>Locking nut</i> - <i>Sicherungsmutter</i> - <i>Ecrou de blocage</i>                                              |
| 12                                            | Cavallotto assale - <i>U-Bolt</i> - <i>Federbügel</i> - <i>Bride essieu</i>                                                           |
| 13                                            | Piastra fissaggio assale - <i>Fixing plate</i> - <i>Fixierplatte</i> - <i>Plaque de fixation essieu</i>                               |
| 14                                            | Perno centraggio - <i>Pin</i> - <i>Zentrierbolzen</i> - <i>Pivot centrage</i>                                                         |
| 15                                            | Piastra balestra con forcella - <i>Sprin plate</i> - <i>Federplatte mit Bügel</i> - <i>Plaque ressort avec chape</i>                  |
| 16                                            | Piastra fissaggio - <i>Fixing plate</i> - <i>Fixierplatte</i> - <i>Plaque de fixation</i>                                             |
| 17                                            | Dado cavallotto alto - <i>High u-bolt nut</i> - <i>Mutter Federbügel oben</i> - <i>Ecrou bride haut</i>                               |
| 18                                            | Dado cavallotto basso - <i>Low u-bolt nut</i> - <i>Mutter Federbügel unten</i> - <i>Ecrou bride bas</i>                               |
| 19                                            | Supporto bilanciante - <i>Compensator support</i> - <i>Haltebock</i> - <i>Support culbuteur</i>                                       |
| 20                                            | Bilanciante - <i>Compensator</i> - <i>Ausgleich</i> - <i>Culbuteur</i>                                                                |
| 21                                            | Perno bilanciante - <i>Compensator pin</i> - <i>Bolzen</i> - <i>Pivot culbuteur</i>                                                   |
| 22                                            | Silent block - <i>Elastic joint</i> - <i>Silent block</i> - <i>Silent block</i>                                                       |
| 23                                            | Dado intagli - <i>Crown nut</i> - <i>Kronenmutter</i> - <i>Ecrou couronne</i>                                                         |
| 24                                            | Copiglia - <i>Split pin</i> - <i>Splint</i> - <i>Goupille</i>                                                                         |
| 25                                            | Vite bloccaggio - <i>Locking screw</i> - <i>Sicherungsschraube</i> - <i>Vis de blocage</i>                                            |
| 26                                            | Tubo distanziale - <i>Tube</i> - <i>Hülse</i> - <i>Tube entretoise</i>                                                                |
| 27                                            | Dado bloccaggio - <i>Locking nut</i> - <i>Sicherungsmutter</i> - <i>Ecrou de blocage</i>                                              |
| 28                                            | Cavallotto assale - <i>U-Bolt</i> - <i>Federbügel</i> - <i>Bride essieu</i>                                                           |
| 29                                            | Piastra fissaggio assale - <i>Fixing plate</i> - <i>Befestigungsplatte</i> - <i>Plaque de fixation essieu</i>                         |
| 30                                            | Piastra fissaggio - <i>Fixing plate</i> - <i>Fixierplatte</i> - <i>Plaque de fixation</i>                                             |
| 31                                            | Supporto balestra posteriore - <i>Rear spring support</i> - <i>Hinterfederbock</i> - <i>Support ressort arriere</i>                   |

## Ricambi sospensioni meccaniche con tiranti

SPARE PARTS FOR MECHANICAL SUSPENSION WITH TIE RODS

ERSATZTEILE FÜR MECHANISCHE FEDERAGGREGATE

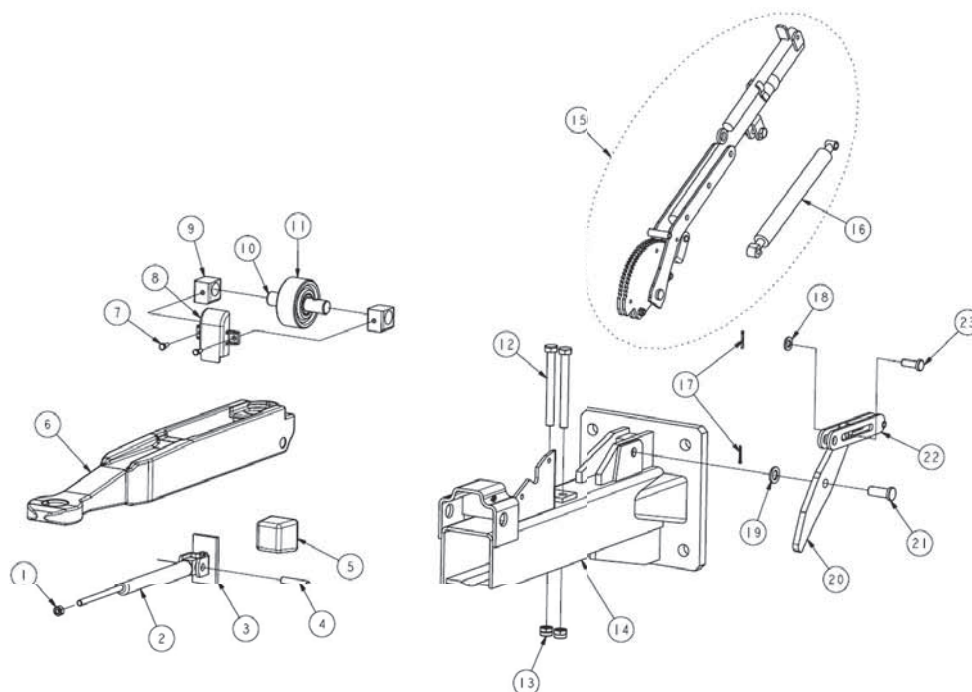
LISTE PIÈCES DETACHEES SUSPENSIONS MÉCANIQUES AVEC BRAS DE TRACTION



| POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                                                       |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| 1                                             | Balestra parabolica - Parabolic spring - Parabel-Blattfeder - Ressort parabolique                                |
| 2                                             | Supporto balestra anteriore - Front spring support - Vordere Blattfederhalterung - Support ressort avant         |
| 3                                             | Dado bloccaggio perno - Pin nut - Sicherungsmutter - Ecrou de blocage pivot                                      |
| 4                                             | Tubo distanziale - Tube - Hülse - Tube entretoise                                                                |
| 5                                             | Vite bloccaggio - Locking screw - Sicherungsschraube - Vis de blocage                                            |
| 6                                             | Tirante registrabile - Adjustable tie rods - Gewindestange einstellbar - Bras de traction enregistable           |
| 7                                             | Tirante fisso - Fixed tie rods - Gewindebolzen - Bras de traction fixe                                           |
| 8                                             | Vite per tirante supporto - Tie rod screw - Schraube für Zugstange Halterung - Vis pour bras de traction support |
| 9                                             | Dado bloccaggio - Locking nut - Sicherungsmutter - Ecrou de blocage                                              |
| 10                                            | Vite per tirante piastra con forcella - Screw for plate - Schraube - Vis pour plaque                             |
| 11                                            | Dado bloccaggio - Locking nut - Sicherungsmutter - Ecrou de blocage                                              |
| 12                                            | Cavallotto assale - U-Bolt - Federbügel - Bride essieu                                                           |
| 13                                            | Piastra fissaggio assale - Fixing plate - Fixierplatte - Plaque de fixation essieu                               |
| 14                                            | Perno centraggio - Pin - Zentrierbolzen - Pivot centrage                                                         |
| 15                                            | Piastra balestra con forcella - Spring plate - Federplatte mit Bügel - Plaque ressort avec chape                 |
| 16                                            | Piastra fissaggio - Fixing plate - Fixierplatte - Plaque de fixation                                             |
| 17                                            | Dado cavallotto alto - High u-bolt nut - Mutter Federbügel oben - Ecrou bride haut                               |
| 18                                            | Dado cavallotto basso - Low u-bolt nut - Mutter Federbügel unten - Ecrou bride bas                               |
| 19                                            | Supporto bilanciante - Compensator support - Haltebock - Support culbuteur                                       |
| 20                                            | Bilanciante - Compensator - Ausgleich - Culbuteur                                                                |
| 21                                            | Perno bilanciante - Compensator pin - Bolzen - Pivot culbuteur                                                   |
| 22                                            | Silent block - Elastic joint - Silent block - Silent block                                                       |
| 23                                            | Dado intagli - Crown nut - Kronenmutter - Ecrou couronne                                                         |
| 24                                            | Copiglia - Split pin - Splint - Goupille                                                                         |
| 25                                            | Vite bloccaggio - Locking screw - Sicherungsschraube - Vis de blocage                                            |
| 26                                            | Tubo distanziale - Tube - Hülse - Tube entretoise                                                                |
| 27                                            | Dado bloccaggio - Locking nut - Sicherungsmutter - Écrou de blocage                                              |
| 28                                            | Cavallotto assale - U-Bolt - Federbügel - Bride essieu                                                           |
| 29                                            | Piastra fissaggio assale - Fixing plate - Fixierplatte - Plaque de fixation essieu                               |
| 30                                            | Piastra fissaggio - Fixing plate - Befestigungsplatte - Plaque de fixation                                       |
| 31                                            | Supporto bilanciante - Compensator support - Haltebock - Support culbuteur                                       |
| 32                                            | Bilanciante - Compensator - Ausgleich - Culbuteur                                                                |
| 33                                            | Perno bilanciante - Compensator pin - Bolzen - Pivot culbuteur                                                   |
| 34                                            | Silent block - Elastic joint - Silent block - Silent block                                                       |
| 35                                            | Cavallotto assale - U-Bolt - Federbügel - Bride essieu                                                           |
| 36                                            | Piastra fissaggio assale - Fixing plate - Befestigungsplatte - Plaque de fixation essieu                         |
| 37                                            | Piastra fissaggio - Fixing plate - Fixierplatte - Plaque de fixation                                             |
| 38                                            | Supporto balestra posteriore - Rear spring support - Hinterfederbock - Support ressort arriere                   |

## Lista ricambi per timoni per rimorchi monoasse e tandem

SPARE PART LIST FOR DRAW BARS FOR SINGLE AXLE AND TANDEM TRAILERS  
 ERSATZTEILELISTE FÜR ZUGGERÄTE FÜR EINACHSER UND TANDEM FAHRZEUGE  
 LISTE PIÈCES DÉTACHÉES POUR TIMONS POUR REMORQUES MONOAXES ET TANDEM



|                                        | POSIZIONE<br><i>Position</i><br><i>Position</i><br><i>Position</i> | DESCRIZIONE<br><i>Description</i><br><i>Beschreibung</i><br><i>Dénomination</i>                  |
|----------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
|                                        | 1                                                                  | Dado - Nut - Mutter M10X1 UNI 5588 - Erou                                                        |
|                                        | 2                                                                  | Ammortizzatore idraulico - Hydraulic damper - Stossdämpfer - Amortisseur                         |
|                                        | 3                                                                  | Supporto ammortizzatore - Damper support - Stossdämpferplatte - Support amortisseur              |
|                                        | 4                                                                  | Perno - Pivot - Bolzen                                                                           |
|                                        | 5                                                                  | Tampone in gomma - Rubber shock absorber - Gummi feder - Tampon en caoutchouc                    |
|                                        | 6                                                                  | Occhione - Towing eye - Zughoese - Anneau d'atelage                                              |
|                                        | 7                                                                  | Vite- Bolt - Schraube M8X16 5931 UNI - Vis                                                       |
|                                        | 8                                                                  | Calotta di protezione - Protection cap - Schutzkappe - Calotte de protection                     |
|                                        | 9                                                                  | Supporto cuscinetto - Bearing support - Stützrolle Halterung - Support Rouleau                   |
|                                        | 10                                                                 | Perno cuscinetto anteriore - Pivot front bearing - Bolzen für Stützrolle - Pivot                 |
|                                        | 11                                                                 | Rullo di appoggio - Roller - Stützrolle - Rouleau d'appui                                        |
|                                        | 12                                                                 | Perno - Pin - Bolzen M14 X140 TE 5737 8.8 UNI - DIN 931 - Pivot                                  |
|                                        | 13                                                                 | Dado - Nut - Mutter M14 UNI 7474 - DIN 985 - Erou                                                |
|                                        | 14                                                                 | Corpo - Body - Koerper - Corp                                                                    |
| Unità<br><i>Unit</i><br><i>Einheit</i> | 15                                                                 | Gruppo leva di stazionamento - Hand brake lever - Feststellhebel - Levier frein de stationnement |
|                                        | 16                                                                 | Molla a gas - Gas spring - Gasfeder - Ressort à gas                                              |
|                                        | 17                                                                 | Copiglia - Slit pin - Splinte - Goupille                                                         |
|                                        | 18                                                                 | Rondella - Washer - Scheibe D.13X24X2.5 - Rondelle                                               |
|                                        | 19                                                                 | Rondella - Washer - Scheibe D.17X30X3 - Rondelle                                                 |
|                                        | 20                                                                 | Leva di comando - Lever - Umlenkhebel - Levier de commande                                       |
|                                        | 21                                                                 | Perno - Pin - Bolzen D.16X43                                                                     |
|                                        | 22                                                                 | Giunto collegamento tiranteria - Coupling - Verbindung - Junction                                |
|                                        | 23                                                                 | Perno - Pin - Bolzen D.12X34                                                                     |

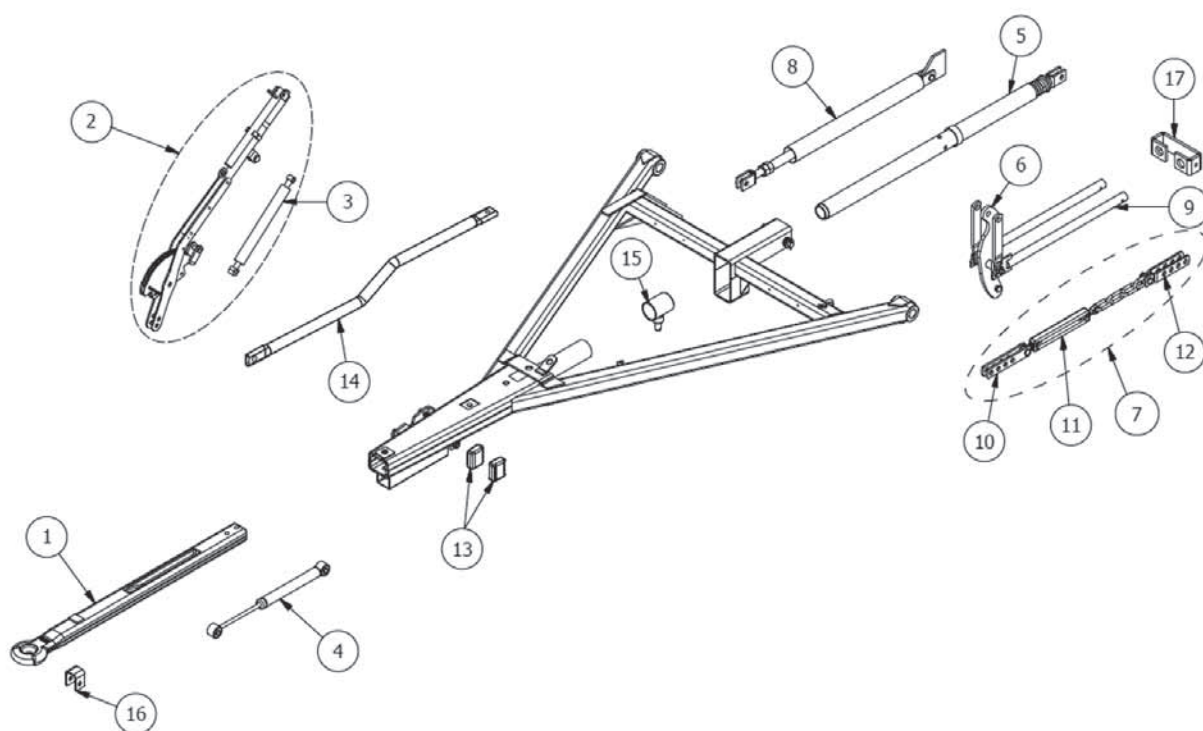


## Lista ricambi per timoni con ammortizzatore idraulico per rimorchi a due assi

SPARE PART LIST FOR TWO AXLE TRAILER DRAW BARS WITH HYDRAULIC DAMPER

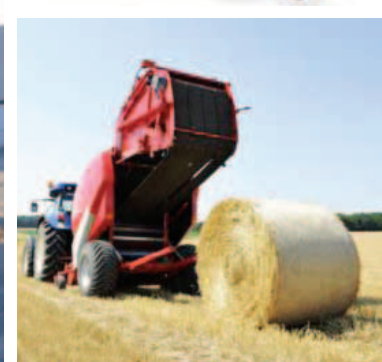
ERSATZTEILLISTE FÜR AUFLAUFEINRICHTUNGEN MIT HYDRAULISCHEM STOSSDÄMPFER FÜR ZWEIACHSER-ANHÄNGER

LISTE PIÈCE DETACHEES TIMONS POUR REMORQUES À DEUX ESSIEUX AVEC AMORTISSEUR HYDRAULIQUE



|                          | POSIZIONE<br>Position<br>Position<br>Position | DESCRIZIONE<br>Description<br>Beschreibung<br>Dénomination                                                            |
|--------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
|                          | 1                                             | Occhione - Towing eye - Zughoese - Anneau d'atelage                                                                   |
| Unità<br>Unit<br>Einheit | 2                                             | Gruppo leva di stazionamento - Hand brake lever - Handbremshebel - Levier frein de stationnement                      |
|                          | 3                                             | Molla a gas - Gas spring - Gasfeder - Ressort a gas                                                                   |
|                          | 4                                             | Ammortizzatore idraulico - Hydraulic damper - Stossdämpfer - Amortisseur                                              |
|                          | 5                                             | Barra di pressione - Bar - Druckgestange - Barre                                                                      |
|                          | 6                                             | Leva di comando - Lever - Umlenkhebel - Levier de commande                                                            |
| Unità<br>Unit<br>Einheit | 7                                             | Gruppo tiranteria - Linkage set - Uebertragungseinrichtung - Set tiranterie                                           |
|                          | 10                                            | Piastra di attacco tirante - Slab of pilling attack - Platte des Ziehens des angriffs - Plaque de j'attaque tirant    |
|                          | 11                                            | Tirante - Adjustable screw - Spannschloss - Tirant                                                                    |
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