

05 - Supplemento
Catalogo - Ergänzung
Katalog - Complementar
Catálogo - Catalogue - Catálogo -



SIMBOLI - SYMBOLS - SYMBOLE - SYMBOLES - SIMBOLOS

	Diametro ruota Wheel diameter Raddurchmesser Diamètre de la roue Diámetro de la rueda		Interasse fori di fissaggio Bolt hole spacing Lochabstand Entr'axe des trous de fixation Distancia entre centros
	Larghezza del battistrada Tyre width Reifenbreite Largeur du bandage Ancho de bandaje		Diametro bullone di fissaggio Fixing bolt diameter Durchmesser der Befestigungsschraube Diamètre des boulons de fixation Diametro perno de fijacion
	Larghezza totale Track width Gesamtbreite Largeur totale Ancho total		Dimensioni perno di fissaggio Dimensions of fixing stem Zapfen-Größe Dimensions de la tige Dimensiones del perno
	Diametro del nucleo Wheel centre diameter Radkörperdurchmesser Diamètre du corps de roue Diámetro del núcleo		Larghezza forcella Fork width Gabelbreite Largeur de la fourche Ancho de la horquilla
	Diametro sede cuscinetti Bearing seat diameter Kugellagersitzdurchmesser Diamètre siège du roulement à billes Diámetro alojamiento cojinetas		Diametro bullone assale Diameter of axle hole Achsen schraubendurchmesser Diamètre du boulon de l'essieu Diametro de la tuerca del eje
	Profondità sedi cuscinetti Bearing seat depth Kugellagersitz-Tiefe Profondeur siège du roulement à billes Profundidad alojamiento cojinetas		Supporto girevole a piastra Top-plate swivel fork assembly Lenkgehäuse mit Platte Chape pivotante à platine Soporte giratorio con platina
	Scartamento esterno cuscinetti Outer faces bearings distance Aussen Lagerabstand Ecartement extérieur des roulements Largo externo entre cojinetas		Supporto fisso a piastra Top-plate fixed fork Bockgehäuse mit Platte Chape fixe à platine Soporte fijo con platina
	Larghezza mozzo Hub width Nabenlänge Longueur du moyeu Largo del cubo		Supporto girevole a foro passante Swivel bolt hole fork assembly Lenkgehäuse mit Rückenloch Chape pivotante à trou central Soporte giratorio con taladro pasador
	Diametro mozzo Hub diameter Nabdurchmesser Diamètre du moyeu Diámetro del cubo		Supporto girevole a perno Swivel stem fork assembly Lenkgehäuse mit Zapfen Chape pivotante à tige Soporte giratorio con perno
	Diametro foro Bore diameter Achslochdurchmesser Diamètre de l'alésage Diámetro del agujero		Freno e/o bloccaggio totale Total braking and/or locking device Totalfeststeller Blocage total Freno integral
	Altezza totale Overall height Gesamtbauhöhe Hauteur totale Altura total		Freno e/o bloccaggio totale anteriore Trailing total braking and/or locking device Totalfeststeller nachlaufend Blocage total avant Freno integral anterior
	Corsa massima del bilanciere Maximum equalizer's deflection Höchster Federlauf Course maximal du balancier Desplazamiento máximo del balancín		Freno e/o bloccaggio totale posteriore Leading total braking and/or locking device Totalfeststeller vorlaufend Blocage total arrière Freno integral posterior
	Pre carico della molla Pre tension loading Vorspannkraft Precharge de ressort Precarga del resorte		Portata Load capacity Tragfähigkeit Capacité de charge Carga
	Disassamento Offset Ausladung Déport Desplazamiento		Cuscinetti a sfere Ball bearings Präzision Rillenkugellager Roulements à billes Cojinetas a bolas
	Raggio di ingombro Swept radius Umlaufradius Rayon d'encombrement Radio de viraje		Cuscinetto a rullini Roller bearing Rollenkugellager Roulement à rouleaux Cojinetes a rodillos
	Dimensioni esterne della piastra Top plate outer dimensions Platte-Außenmaße Dimensions extérieures de la platine Dimensiones exteriores de la platin		Foro passante o boccola Plain bore Gleitlager Alésage lisse Agujero liso

	BG →280 □ 10		EG →700 □ 12		AS →1000 □ 16		ZS →2400 □ 22
	FN →80 □ 30	Il catalogo completo è disponibile nel nostro sito: The complete catalogue is available in our web-site: Der komplette Katalog steht in unserer Web-Site zur Verfügung: Notre catalogue complet est disponible sur notre site web: El catálogo completo es disponible en nuestro sitio: www.lagspa.eu/web/downloads					
	Inox40 □ 5		Inox20 □ 4		G80 □ 5		E70 □ 6
LB-P-N-A-AS	DG-LB-P-N-A-AS-FS-FN	P-Z-ZS	P-Z-ZS-Q	D-DG-B-BG-LB-E-EG-P-N-A-AS-T-Z-ZS-FS-FN			
	P60 □ 6		M40 □ 7		M22 □ 8		M34 □ 7
E-EG-P-A-AS-T-Z-ZS-Q	LB-E-EG-P-N-A-AS-T-Z-ZS	E-Z-ZS					
Art.	Serie	Art.	Serie	Art.	Serie	Art.	Serie
100 - 599 1000 - 1099 1340 - 1399 1400 - 1450 1460 - 1499 1500 - 1799 2000 - 2099 4000 - 4099	R Q - QD E Z ZS R E - EG P - PE	4350 - 4399 4400 - 4449 4500 - 4599 6000 - 6099 6100 - 6199 7000 - 7899 8000 - 8399 9000 - 9099	R P A Q P Z T N	9900 - 9969 12000 - 12999 13000 - 15999 16000 - 16999 17000 - 18999 19000 - 20999 21000 - 22999 23000 - 24999	R B - BG D - DG E - EG P A N Z	25000 - 26999 27740 - 27999 28000 - 28999 30000 - 32999 33000 - 33999 35000 - 36999 37000 - 37999	T FN FS LB P AS ZS

Questo supplemento integra il catalogo 05 con prodotti non necessariamente in pronta disponibilità (serie BG, EG e ZS). La serie AS è qui ampliata con le ultime misure aggiunte (Ø250 e 300 mm) e viene reintrodotta la serie FN.

This supplement integrates catalogue 05 with optional ranges (BG, EG & ZS). It shows the AS with added sizes (Ø250 & 300 mm) and the FN series is also displayed here.

Dieser Anhang gilt als Ergänzung zum Katalog 05 und zeigt Produkte, die nicht serienmäßig verfügbar sind (Serien BG, EG und ZS). Die Serie AS wird mit den Größen (Ø250 und 300 mm) erweitert; die Serie FN wird in diesem Anhang wieder aktuell.

Ce supplément au catalogue 05 intègre des produits pas forcément disponibles sur stock (séries BG, EG et ZS). La série AS s'étend avec des nouveaux diamètres (Ø250 et 300 mm) et la série FN est réintroduite.

Este suplemento integra el catálogo 05 con productos que no están necesariamente disponibles en almacén (serie BG, EG y ZS). La serie AS se extiende aquí con las últimas medidas añadidas (Ø250 y 300 mm) y la serie FN ha sido reintroducida.

IT



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EN



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DE



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FR



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ES



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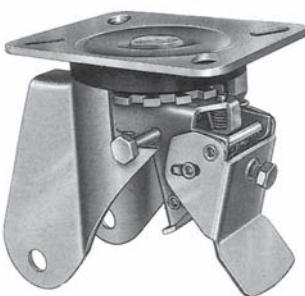
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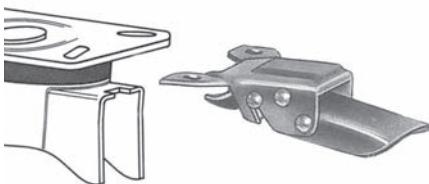
P60 - M40 - M22
INOX40 - INOX20

FR

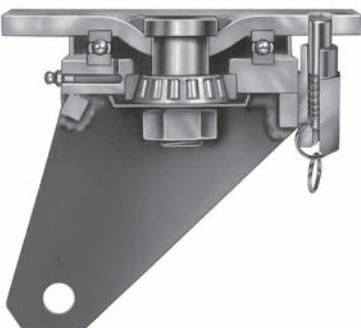
E70 - P60 - M40

FV

E70 - P60 - M40 - M22



G80 - E70



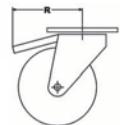
FRENO ANTERIORE A PEDALE - Blocca contemporaneamente la rotazione della ruota e del supporto. È applicato ai supporti girevoli **Inox40**, **Inox20** (molla in acciaio inox AISI 301) e **P60**, **M40**, **M22**. Nei supporti **P60**, **M40** e **Inox40** il freno è regolabile. Per articoli con freno aggiungere FR al codice.

TRAILING FOOT BRAKE - Locks wheel and swivel simultaneously. It is fitted to swivel castors **Inox40**, **Inox20** (AISI 301 stainless steel spring) and **P60**, **M40**, **M22**. The brake on castors **P60**, **M40** and **Inox40** is adjustable. To order items with brake add FR to part number.

FUSS-FESTSTELLER IN NACHLAUF - Blockiert Räd und Lenkung gleichzeitig. Ausführung für Lenkgehäuse **Inox40**, **Inox20** (Feder aus Edelstahl AISI 301) und **P60**, **M40**, **M22**. Die Ausführung für **P60**, **M40** und **Inox40** Gehäuse ist nachstellbar. Für Rollen mit Totalfeststeller FR zur Bestell-Nr beifügen.

FREIN AVANT A PEDALE - Bloque en même temps la roue et le pivotement. Appliqué aux châssis pivotantes **Inox40**, **Inox20** (ressort en acier inox AISI 301) et **P60**, **M40**, **M22**. Le frein des châssis **P60**, **M40** et **Inox40** est réglable. Pour articles avec frein ajouter FR au code.

FRENO ANTERIOR DE PIÉ - Bloquea simultáneamente el soporte y la rueda. Aplicado a los soportes giratorios **Inox40**, **Inox20** (muelle en acero inox AISI 301) y **P60**, **M40**, **M22**. En los soportes **P60**, **M40** y **Inox40** el freno es ajustable. Para artículos con freno añadir FR al código.



M22 - Inox20:	\varnothing 80-125/40 \varnothing 100-160/50 \varnothing 160-200/60	108 mm 140 mm 168 mm	Kg. 0,110 Kg. 0,180 Kg. 0,280
P60 - M40 - Inox40:	\varnothing 100-160/50 \varnothing 125-250/60	140 mm 170 mm	Kg. 0,270 Kg. 0,470

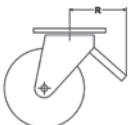
FRENO POSTERIORE A PEDALE - Blocca contemporaneamente la rotazione della ruota e del supporto. Leveraggio a snodo senza molle. È munito di vite di regolazione. Per articoli con freno aggiungere FV al codice.

LEADING FOOT BRAKE - Locks wheel and swivel simultaneously. Leverage without springs. Is adjustable by means of a screw. To order items with brake add FV to part number.

FUSS-FESTSTELLER IN VORLAUF - Blockiert Räd und Lenkung gleichzeitig. Hebelfunktion ohne Feder. Mit Einstellschraube. Für Rollen mit Totalfeststeller FV zur Bestell-Nr beifügen.

FREIN ARRIER A PEDALE - Bloque en même temps la roue et le pivotement. Système de leviers sans ressort. Equipé d'une vis de réglage. Pour articles avec frein ajouter FV au code.

FRENO POSTERIOR DE PIÉ - Bloquea simultáneamente el soporte y la rueda. Sistema de levas sin muelle. Dotado de tornillo de regulación. Para artículos con freno añadir FV al código.



E70:	\varnothing 150-200/60	150 mm	Kg. 0,500
P60 - M40:	\varnothing 125-250/60	150 mm	Kg. 0,500

BLOCCAGGIO DIREZIONALE - Blocca la rotazione del supporto nella direzione del senso di marcia.

DIRECTIONAL LOCK - Locks the swivel in the direction of motion.

RICHTUNGSFESTSTELLER - Lenksperre in Laufrichtung.

BLOCAGE DIRECTIONNEL - Bloque le pivotement dans la direction de marche.

BLOQUEO DIRECCIONAL - Bloquea el rodamiento del soporte en la dirección de marcha.

		Art. N.	AxB	b	 R
M22:	\varnothing 100-160/50L	P3920	102x83	60	Kg. 0,390
	\varnothing 100-160/50	P3925	135x110	80	Kg. 0,390
	\varnothing 160-200/60	P3985	135x110	80	Kg. 0,390
M40 - P60:	\varnothing 80-125/50L	P3920	105x85	60	Kg. 0,390
	\varnothing 125-160/50	P3925	135x110	80	Kg. 0,390
	\varnothing 125-250/60	P3940	135x110	80	Kg. 0,390
E70:	\varnothing 150-200/60	P3945	135x110	80	Kg. 0,390

BLOCCAGGIO DIREZIONALE A DUE POSIZIONI - Si aziona manualmente, blocca la rotazione del supporto in due punti a 180°. Aggiungere B2 al codice.

DIRECTIONAL LOCK - Manually operated, locks the swivelling of the castor in two points at 180°. Add B2 to partnumber.

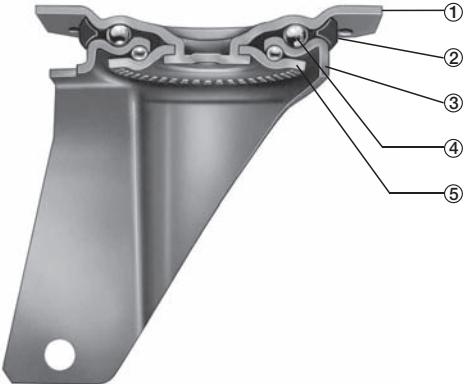
RICHTUNGSFESTSTELLER - Hand betätigt, blockiert die Lenkung der Gehäuse auf zwei Punkte zu 180°. Beifugen B2 zur Bestellnummer.

BLOCAGE DIRECTIONNEL - Actionné manuellement, arrête le pivotement de la chape sur deux points à 180°. Ajouter B2 à la référence produit.

BLOQUEO DIRECCIONAL - Accionado manualmente, bloquea el girar de la horquilla en dos puntos a 180°. Añadir B2 al codigo.

G80: \varnothing 125-150/105, \varnothing 200/126, \varnothing 250/153, \varnothing 250/100+100, \varnothing 300/153, \varnothing 300/132+132, \varnothing 400/132+132

E70: \varnothing 300/153

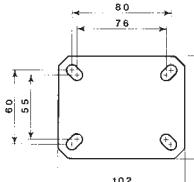


SUPPORTI MEDI INOX20 A PIASTRA

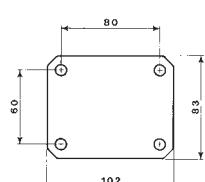
- Finitura: lucidatura
- 1) Piastra d'attacco con perno preformato in lamiera inox AISI 304 stampata.
- 2) Anello parapolvere in materiale termoplastico (termoplastico cristallino nei supporti per alte temperature, max. +270°)
- 3) Corpo girevole in lamiera inox AISI 304 stampata.
- 4) Sfere di acciaio inox AISI 420
- 5) Anello tenuta sfere in lamiera inox AISI 304 stampata.

MITTELLAST GEHÄUSE INOX20 MIT EINBAUPLATTE

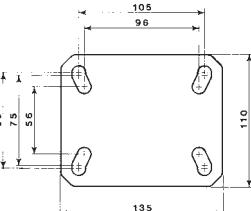
- Finish: poliert.
- 1) Einbauplatte aus gepresstem AISI 304 Edelstahlblech mit vorgeformtem Zapfen.
- 2) Staubring aus thermoplastischem Kunststoff (kristallin thermoplastischer Kunststoff für hohe Temperaturen, max. 270°C).
- 3) Lenkgabel aus gepresstem AISI 304 Edelstahlblech.
- 4) Kugeln aus AISI 420 Edelstahl.
- 5) Kugelkranzhalter aus gepresstem AISI 304 Edelstahlblech.



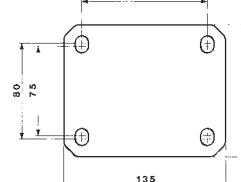
Ø 80/40-125/40



Ø 100/50L-150/50L



Ø 125/50-150/50



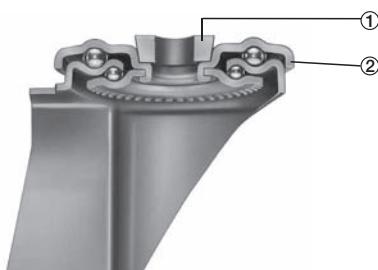
Ø 175/60-200/60

MEDIUM DUTY TOP PLATE CASTORS INOX20

- Finish: polished.
- 1) Top plate with forged central pin in pressed stainless steel-sheet AISI 304.
- 2) Thermoplastic dust protection ring (crystalline thermoplastic for high temperature castors, max. 270°C).
- 3) Swivel fork in pressed stainless steel-sheet AISI 304.
- 4) Stainless steel balls AISI 420.
- 5) Balls retaining ring in pressed stainless steel sheet AISI 304.

SOPORTES MEDIOS INOX20 A PLATINA

- Acabado: pulido.
- 1) Platina de anclaje con perno central preformado en chapa inox AISI 304 estampada.
- 2) Anillo anti-polvo en material termoplástico (plástico cristalino en los soportes para altas temperaturas, max. 270°C).
- 3) Horquilla giratoria en chapa inox AISI 304 estampada.
- 4) Bolas en acero inox AISI 420.
- 5) Disco porta-bolas en chapa inox AISI 304 estampada.



SUPPORTI INOX20 A FORO PASSANTE

- 1) Boccolla di riduzione del foro passante in acciaio inox AISI 430.
- 2) Piastra porta sfere in lamiera inox AISI 304.

STAINLESS STEEL INOX20 BOLT HOLE CASTORS

- 1) Bolt hole reduction bush in stainless steel AISI 430.
- 2) Stainless steel AISI 304 balls retaining plate.

ROSTFREIES GEHÄUSE INOX20 MIT RÜCKENLOCH

- 1) Reduktionshülse zum Rückenloch aus Edelstahl AISI 430.
- 2) Kugelkranzhalter aus gepresstem Edelstahl AISI 304.

CHAPES INOX20 A TROU CENTRAL

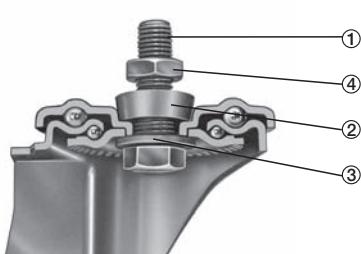
- 1) Bague de réduction du trou central en acier inox AISI 430.
- 2) Disque porte-billes en tôle inox AISI 304 estampée.

SOPORTES INOX20 CON TALADRO LISO PASADOR

- 1) Casquillo de reducción por taladro en acero AISI 430.
- 2) Platina porta-bolas en chapa de acero inox AISI 304.

80	40	HB=10-12
100		
125		
100	50	HD=12-14
125		
150		
160		
160	60	HE=12 HF=16
180		
200		

80	40	YA=M10x25 YB=M12x25
100		
125		
100	50	YC=M12x30 YD=M14x30
125		
150		
160		
160	60	YE=M12x30 YF=M16x30
180		
200		



SUPPORTI INOX20 A PERNO FILETTATO

- 1) Perno filettato in acciaio inox AISI 304.
- 2) Boccolla di riduzione del foro in acciaio inox AISI 430.
- 3) Rondella inox AISI 304. 4) Dado inox AISI 304.

THREADED STEM STAINLESS STEEL INOX20 CASTORS

- 1) Threaded stainless steel stem AISI 304.
- 2) Stainless steel AISI 430 bolt hole reduction bush.
- 3) Stainless steel washer AISI 304. 4) Stainless steel nut AISI 304.

ROSTFREIES GEHÄUSE INOX20 MIT GEWINDESTIFT

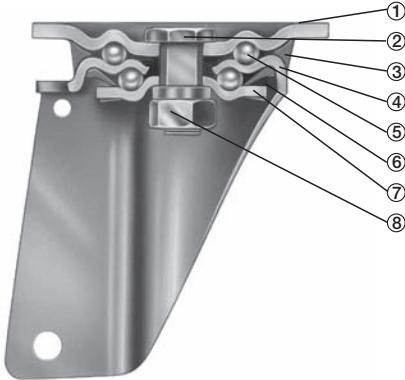
- 1) Rostfreie Gewindestift aus Edelstahl AISI 304.
- 2) Reduktionshülse zum Rückenloch aus Edelstahl AISI 430.
- 3) Rostfreie Scheibe AISI 304. 4) Lostfreie Mutter AISI 304.

CHAPES INOX20 A TIGE FILETEE

- 1) Tige filetée en acier inox AISI 304.
- 2) Bague de reducción du trou central en acier inox AISI 430.
- 3) Rondelle inox AISI 304. 4) Ecrou inox AISI 304.

SOPORTES INOX20 CON ESPIGA ROSCADA

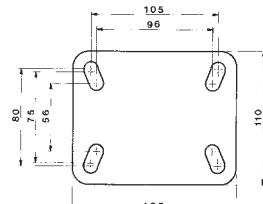
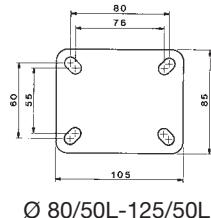
- 1) Espiga roscada inox AISI 304.
- 2) Casquillo de reducción por el taladro en inox AISI 430.
- 3) Arandela inox AISI 304. 4) Tuerca inox AISI 304.

**SUPPORTI PESANTI INOX40**

- Finitura: lucidatura.
- 1) Piastra d'attacco in lamiera inox AISI 304 stampata.
- 2) Perno centrale inox AISI 303 ribadito alla piastra.
- 3) Anello parapolvere in materiale termoplastico (water resistant).
- 4) Corpo girevole in lamiera inox AISI 304 stampata.
- 5) Sfere di acciaio inox AISI 420.
- 6) Guarnizione di tenuta in materiale termoplastico (water proof).
- 7) Anello tenuta sfere in lamiera inox AISI 304 stampata.
- 8) Dado autobloccante inox.

CHAPES LOURDES INOX40

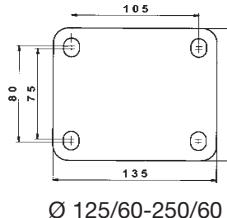
- Finition: polie.
- 1) Platine de fixation en tôle inox AISI 304 emboutie.
- 2) Pivot central inox AISI 303 rivé à la platine.
- 3) Anneau pare-poudre en matière thermoplastique (résistante à l'eau).
- 4) Fourche pivotante en tôle inox AISI 304 emboutie.
- 5) Billes en acier inox AISI 420.
- 6) Joint étanche en matière thermoplastique.
- 7) Anneau porte-billes en tôle inox AISI 304 emboutie.
- 8) Ecrou de sûreté inox.

**HEAVY DUTY CASTORS INOX40**

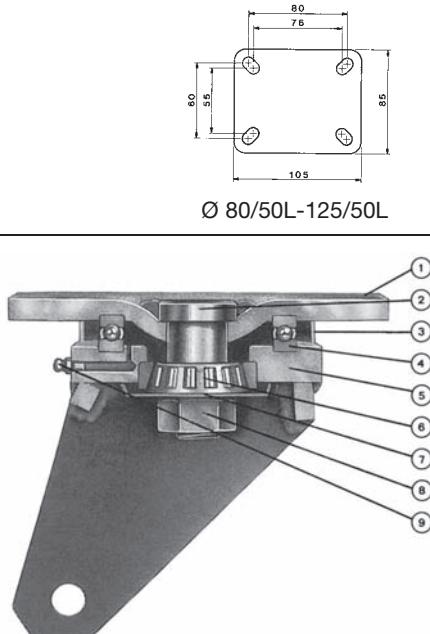
- Finish: polished.
- 1) Top plate in pressed stainless steel sheet AISI 304.
- 2) Stainless steel kingpin AISI 303 riveted to the top plate.
- 3) Thermoplastic dust protection ring (water resistant).
- 4) Swivel fork in pressed stainless steel-sheet AISI 304.
- 5) Stainless steel balls AISI 420.
- 6) Thermoplastic dust seal (water proof).
- 7) Balls retaining ring in pressed stainless steel-sheet AISI 304.
- 8) Self-locking stainless steel nut.

SOPORTES PESADOS INOX40

- Acabado: pulido
- 1) Plataforma de anclaje en chapa inox AISI 304 estampada.
- 2) Perno central en inox AISI 303 remachado a la platina.
- 3) Anillo anti polvo en material termoplástico (water resistant).
- 4) Horquilla giratoria en chapa inox AISI 304 estampada.
- 5) Bolas en acero inox AISI 420.
- 6) Junta estanca en material termoplástico.
- 7) Disco porta-bolas en chapa inox AISI 304 estampada.
- 8) Tuerca autobloqueante inox.

**SCHWERLAST GEHÄUSE INOX40**

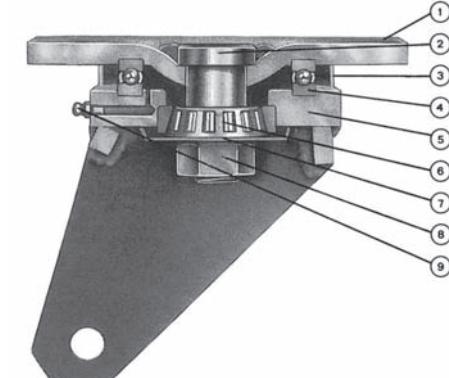
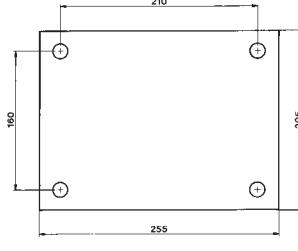
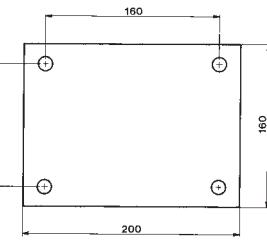
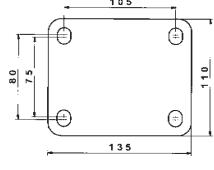
- Finish: poliert.
- 1) Einbauplatte aus gepresstem AISI 304 Edelstahlblech.
- 2) Auf der Platte eingenieteter Königsbolzen aus AISI 303 Edelstahl.
- 3) Wasserabweisender Staubring aus thermoplastischem Kunststoff.
- 4) Lenkgabel aus gepresstem AISI 304 Edelstahlblech.
- 5) Kugeln aus AISI 420 Edelstahl.
- 6) Wasser- und Staubabdichtungsring aus thermoplastischem Kunststoff.
- 7) Kugelkranzhalter aus gepresstem AISI 304 Edelstahlblech.
- 8) Selbstsichernde Edelstahl-Mutter.

**EXTRASCHWERLAST GEHÄUSE FÜR ZWILLINGSRÄDER G80**

- Finish: lackiert.
- 1) Einbauplatte aus dickem Stahlblech.
- 2) Königsbolzen.
- 3) Staubring.
- 4) Axial Kugellager*.
- 5) Lenkgabel aus dicker Stahlschweiß-Konstruktion.
- 6) Kegelrollenlager.
- 7) Staubdeckel aus gepresstem Stahlblech.
- 8) Gesicherte Mutter.
- 9) Schmiernippel.

* Ø 400x132+132: Cuscinetto assiale sostituito da cuscinetto a rulli conici - Axial ball bearing replaced by taper roller bearing - Axial Kugellager durch Kegelrollenlager ersetzt - Roulement axial à billes remplacé par un roulement à rouleaux coniques - Cojinete axial reemplazado por cojinete a rodillos cónicos.

	AxB
Ø250/100+100	255x245
Ø300/132+132	255x310
Ø400/132+132	255x340

**SUPPORTI EXTRA PESANTI PER RUOTE GEMELLEATE G80**

- Finitura: verniciatura.
- 1) Piastra d'attacco in acciaio di grosso spessore.
- 2) Perno centrale.
- 3) Anello parapolvere.
- 4) Cuscinetto assiale a sfere*.
- 5) Corpo girevole in lamiera d'acciaio di grosso spessore saldata.
- 6) Cuscinetto a rulli conici.
- 7) Disco parapolvere in lamiera d'acciaio stampata.
- 8) Dado con bloccaggio.
- 9) Ingrassatore.

CHAPES EXTRA-LOURDES POUR ROUES JUMELÉES G80

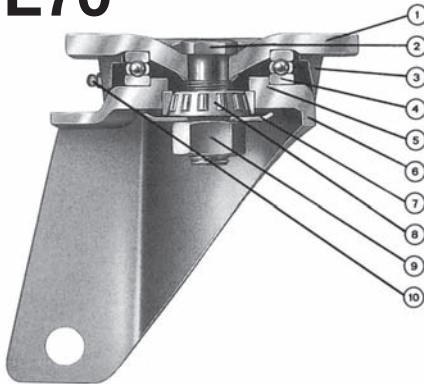
- Finition: peinte.
- 1) Platine de fixation en tôle d'acier de forte épaisseur.
- 2) Pivot central.
- 3) Anneau pare-poudre.
- 4) Roulement axial à billes*.
- 5) Fourche pivotante en tôle d'acier de forte épaisseur, soudée.
- 6) Roulement à rouleaux coniques.
- 7) Disque pare-poudre en tôle d'acier emboutie.
- 8) Ecrou avec blocage.
- 9) Graisseur.

EXTRA HEAVY DUTY CASTORS FOR TWIN WHEELS G80

- Finish: painted.
- 1) Top plate in heavy gauge pressed steel sheet.
- 2) Kingpin.
- 3) Dust protection ring.
- 4) Axial ball bearing*.
- 5) Fabricated swivel fork in heavy gauge steel-sheet.
- 6) Tapered roller bearing.
- 7) Dust cover disc in pressed steel-sheet.
- 8) Locked nut.
- 9) Grease nipple.

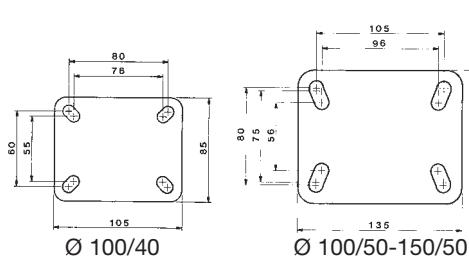
SOPORTES EXTRAPESADOS PARA RUEDAS GEMELAS G80

- Acabado: pintado.
- 1) Platina de anclaje en chapa de grande espesor.
- 2) Perno central.
- 3) Anillo anti-polvo.
- 4) Cojinete axial a bolas*.
- 5) Horquilla giratoria en chapa de acero de grande espesor, soldada.
- 6) Cojinete de rodillos conicos.
- 7) Disco anti-polvo en chapa de acero estampada.
- 8) Tuerca con bloqueo.
- 9) Engrasador.

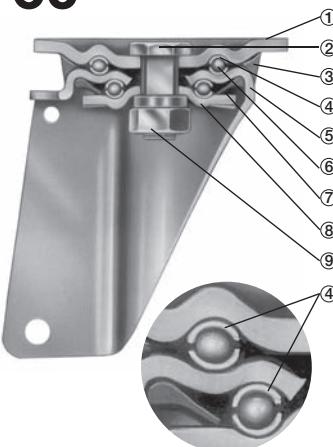


EXTRASCHWERLAST GEHÄUSE E70

- Finish: lackiert.
- 1) Dicke Einbauplatte.
- 2) Königsbolzen.
- 3) Staubring aus thermoplastischem Kunststoff.
- 4) Axial Kugellager.
- 5) Kugellagerhalterung aus nachgedrehtem und zum Lenkgabel geschweißtem Stahl.
- 6) Lenkgabel aus gepresstem Stahlblech.
- 7) Staubdeckel aus gepresstem Stahlblech.
- 8) Kegelrollenlager.
- 9) Gesicherte Mutter.
- 10) Schmiernippel.

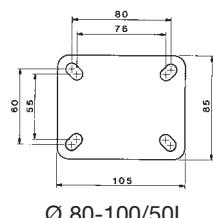


P60



SCHWERLAST GEHÄUSE P60

- Finish: elektro-verzinkt, weiß
- 1) Einbauplatte aus gepresstem Stahlblech
- 2) Auf der Platte eingenieteter Königsbolzen
- 3) Wasserabweisender Staubring aus thermo plastischem Kunststoff
- 4) Kugelbahnen aus gehärtetem Stahlblech
- 5) Lenkgabel aus gepresstem Stahlblech
- 6) Gehärtete Stahlkugeln
- 7) Wasser- und Staubabdichtungsring aus thermoplastischem Kunststoff
- 8) Kugelhalterung aus gepresstem Stahlblech
- 9) Selbstsichernde Mutter

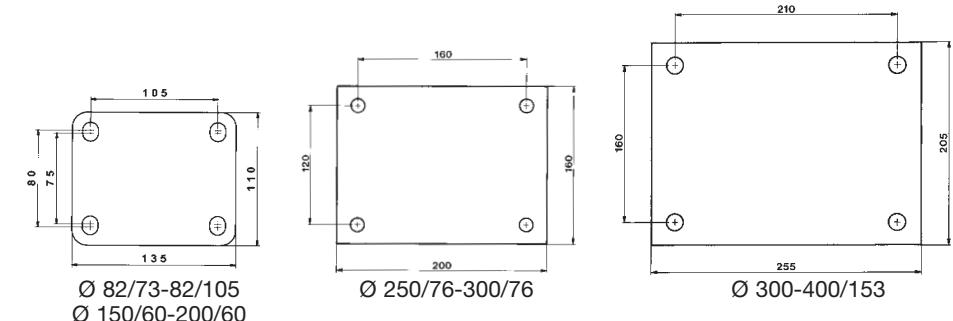


SUPPORTI EXTRA PESANTI E70

- Finitura: verniciatura
- 1) Piastra d'attacco in acciaio di grosso spessore
- 2) Perno centrale
- 3) Anello parapolvere in materiale termoplastico
- 4) Cuscinetto assiale a sfere
- 5) Anello porta cuscinetti in acciaio lavorato e saldato al corpo girevole
- 6) Corpo girevole in lamiera d'acciaio stampata
- 7) Disco parapolvere in lamiera d'acciaio stampata
- 8) Cuscinetto a rulli conici
- 9) Dado con bloccaggio
- 10) Ingrassatore

CHAPES EXTRA-LOURDES E70

- Finition: peinte
- 1) Platine de fixation de forte épaisseur.
- 2) Pivot central.
- 3) Anneau pare-poudre en matière thermoplastique.
- 4) Roulement axial à billes.
- 5) Anneau porte-roulement en acier usiné et soudé à la fourche pivotante.
- 6) Fourche pivotante en tôle d'acier emboutie.
- 7) Disque pare-poudre en tôle d'acier emboutie.
- 8) Roulement à rouleaux coniques.
- 9) Ecrou avec blocage.
- 10) Graisseur.



EXTRA HEAVY DUTY CASTORS E70

- Finish: painted.
- 1) Heavy gauge top plate.
- 2) Kingpin.
- 3) Thermoplastic dust protection ring.
- 4) Axial ball bearing.
- 5) Bearing supporting steel ring, machined and welded to the swivel fork.
- 6) Swivel fork in pressed steel-sheet.
- 7) Dust cover disc in pressed steel.
- 8) Tapered roller bearing.
- 9) Locked nut.
- 10) Grease nipple.

SOPORTES EXTRA PESADOS E70

- Acabado: pintado.
- 1) Platina de anclaje de acero de grande espesor.
- 2) Perno central.
- 3) Anillo anti-polvo en material termoplástico.
- 4) Cojinete axial a bolas.
- 5) Anillo porta-cojinete en acero mecanizado y soldado a la horquilla giratoria.
- 6) Horquilla giratoria en chapa de acero estampada.
- 7) Disco anti-polvo en chapa de acero estampada.
- 8) Cojinete de rodillos conicos.
- 9) Tuerca con bloqueo.
- 10) Engrasador.

SUPPORTI PESANTI P60

- Finitura: zincatura elettrolitica bianca
- 1) Piastra d'attacco in lamiera d'acciaio stampata
- 2) Perno centrale ribadito alla piastra
- 3) Anello parapolvere in materiale termoplastico (water resistant)
- 4) Ralle contenimento sfere in acciaio temperato
- 5) Corpo girevole in lamiera d'acciaio stampata
- 6) Sfere d'acciaio temperato
- 7) Guarnizione di tenuta in materiale termoplastico (water proof)
- 8) Anello tenuta sfere in lamiera d'acciaio stampata
- 9) Dado autobloccante

CHAPES LOURDES P60

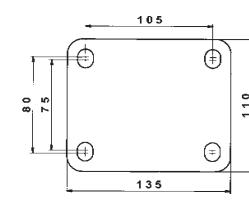
- Finition: électrozingué, blanc
- 1) Platine de fixation en tôle d'acier emboutie
- 2) Pivot central rivé à la platine
- 3) Anneau pare-poudre en matière thermoplastique (résistant à l'eau)
- 4) Cuvettes porte-billes en acier trempé
- 5) Fourche pivotante en tôle d'acier emboutie
- 6) Billes en acier trempé
- 7) Joint étanche en matière thermoplastique
- 8) Anneau porte billes en tôle d'acier emboutie
- 9) Ecrou de sûreté

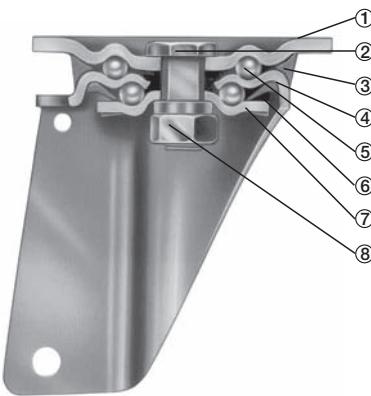
HEAVY DUTY CASTORS P60

- Finish: electro-zinc plated, white.
- 1) Top plate in pressed steel-sheet.
- 2) Kingpin riveted to the top-plate.
- 3) Thermoplastic dust protection ring (water resistant).
- 4) Hardened steel ball races.
- 5) Swivel fork in pressed steel sheet.
- 6) Hardened steel balls.
- 7) Thermoplastic dust seal (water proof).
- 8) Balls retaining ring in pressed steel-sheet.
- 9) Self-locking nut.

SOPORTES PESADOS P60

- Acabado: eléctro-cincado, blanco.
- 1) Platina de anclaje en chapa de acero estampada.
- 2) Perno central remachado a la platina.
- 3) Anillo anti-polvo en material termoplástico (water-resistant).
- 4) Pistas de rodadura en acero templado.
- 5) Horquilla giratoria en chapa de acero estampada.
- 6) Bolas en acero templado.
- 7) Junta estanca en material termoplástico.
- 8) Disco porta bolitas en chapa de acero estampada.
- 9) Tuerca autobloqueante.

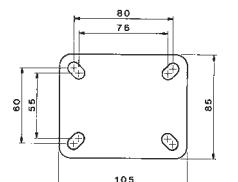


**SUPPORTI MEDIO-PESANTI M40**

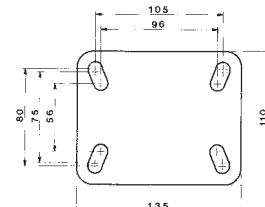
- Finitura: zincatura elettrolitica bianca
- 1) Piastra d'attacco in lamiera d'acciaio stampata
- 2) Perno centrale ribadito alla piastra
- 3) Anello parapolvere in materiale termoplastico (water resistant)
- 4) Corpo girevole in lamiera d'acciaio stampata
- 5) Sfere d'acciaio temperato
- 6) Guarnizione di tenuta in materiale termoplastico (water proof)
- 7) Anello tenuta sfere in lamiera d'acciaio stampata
- 8) Dado autobloccante

MITTEL-SCHWER LAST GEHÄUSE M40

- Finish: elektro-verzinkt, weiß.
- 1) Einbauplatte aus gepresstem Stahlblech.
- 2) Auf der Platte eingenieteter Königsbolzen.
- 3) Wasserabweisender Staubring aus thermoplastischem Kunststoff.
- 4) Lenkgabel aus gepresstem Stahlblech.
- 5) Gehärtete Stahlkugeln.
- 6) Wasser- und Staubabdichtungsring aus thermoplastischem Kunststoff.
- 7) Kugelkranzhalter aus gepresstem Stahlblech.
- 8) Selbstsichernde Mutter.



Ø 80-100/50L-125/50L



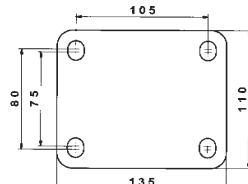
Ø 80-100/50-160/50

MEDIUM-HEAVY DUTY CASTORS M40

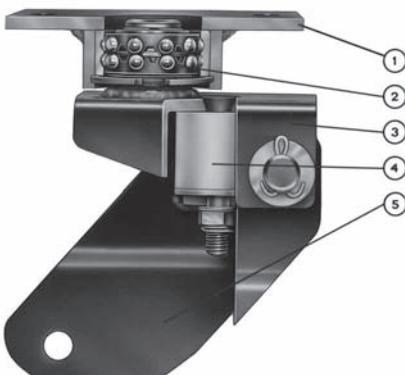
- Finish: electro-zinc plated, white.
- 1) Top plate in pressed steel-sheet.
- 2) Kingpin riveted to the top-plate.
- 3) Thermoplastic dust protection ring (water resistant).
- 4) Swivel fork in pressed steel-sheet.
- 5) Hardened steel balls.
- 6) Thermoplastic dust seal (water proof).
- 7) Balls retaining ring in pressed steel-sheet.
- 8) Self-locking nut.

SOPORTES MEDIO-PESADOS M40

- Acabado: eléctro-cincado, blanco.
- 1) Platina de anclaje en chapa de acero estampada.
- 2) Perno central remachado a la platina.
- 3) Anillo anti-polvo en material termoplástico (water-resistant).
- 4) Horquilla giratoria en chapa de acero estampada.
- 5) Bolas en acero templado.
- 6) Junta estanca en material termoplástico.
- 7) Disco porta bolas en chapa de acero estampada.
- 8) Tuerca autobloqueante.



Ø 125/60-250/60

**SUPPORTI MEDI MOLLEGGIATI M34**

- Finitura: verniciatura in cataforesi nera
- 1) Piastra d'attacco in lamiera d'acciaio con sede cuscinetto
- 2) Cuscinetto obliquo a due corone di sfere
- 3) Corpo girevole in lamiera d'acciaio
- 4) Molla in poliuretano
- 5) Bilanciere oscillante su boccole di bronzo

CHAPES MOYENNES COMPENSEES M34

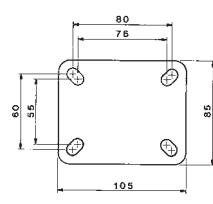
- Finition: peinte en cataphorèse noir.
- 1) Platine de fixation en tôle d'acier avec cage à roulement.
- 2) Roulement oblique avec double couronne des billes.
- 3) Fourche pivotante en tôle d'acier emboutie et soudée.
- 4) Ressort en polyuréthane.
- 5) Balancier oscillant sur bagues en bronze.

MEDIUM DUTY SPRING CASTORS M34

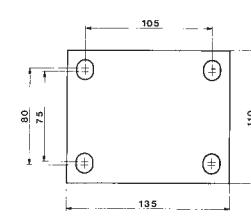
- Finish: electro-painted, black
- 1) Steel-sheet top plate with bearing seat.
- 2) Oblique bearing with double row of balls.
- 3) Swivel fork in steel-sheet.
- 4) Polyurethane buffer spring.
- 5) Equaliser swinging on bronze bushes

MITTELLAST GEFEDERTE GEHÄUSE M34

- Finish: Epoxy elektrolackiert, schwarz.
- 1) Einbauplatte aus Stahlblech mit Lagersitz.
- 2) Schräges Kugellager mit doppeltem Kugelkranz.
- 3) Lenkgabel aus gepresstem Stahlblech.
- 4) Polyurethan-Feder.
- 5) Schwinghebel auf Bronzebuchsen.



Ø 100-125



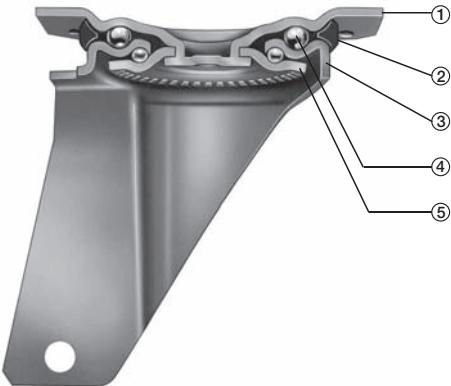
Ø 100-200

SOPORTES MEDIOS CON AMORTIGUADORES M34

- Acabado: pintado en cataforesis negra.
- 1) Platina de anclaje en chapa de acero con alojamiento cojinete.
- 2) Cojinete oblicuo con dos coronas de bolas.
- 3) Horquilla giratoria en chapa de acero.
- 4) Resorte en poliuretano.
- 5) Balancín oscilante encima de casquillos en bronce.

M22

LAG

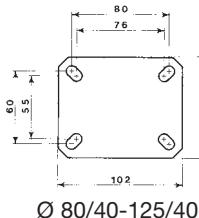


SUPPORTI MEDI M22 A PIASTRA

- Finitura: zincatura elettrolitica bianca
- 1) Piastra d'attacco con perno preformato in lamiera d'acciaio stampata
- 2) Anello parapolvere in materiale termoplastico (termoplastico cristallino nei supporti per alte temperature, max. 270°C)
- 3) Corpo girevole in lamiera d'acciaio stampata
- 4) Sfere d'acciaio temperato
- 5) Anello tenuta sfere in lamiera d'acciaio stampata

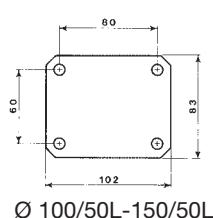
MITTELLAST GEHÄUSE M22 MIT EINBAUPLATTE

- Finish: elektro-verzinkt, weiß
- 1) Einbauplatte aus gepresstem Stahlblech mit vorgeformtem Zapfen.
- 2) Staubring aus thermoplastischem Kunststoff (kristallin-thermoplastischer Kunststoff für hohe Temperaturen, max. 270°C).
- 3) Lenkgabel aus gepresstem Stahlblech.
- 4) Gehärtete Stahlkugeln.
- 5) Kugelhalterring aus gepresstem Stahlblech.



CHAPES MOYENNES M22 A PLATINE

- Finition: électrozingué, blanc.
- 1) Platine de fixation avec pivot central préformé en tôle d'acier emboutie.
- 2) Anneau pare-poudre en matière thermoplastique (thermoplastique cristalline dans les chapes pour hautes températures, max. 270 °C).
- 3) Fourche pivotante en tôle d'acier emboutie.
- 4) Billes en acier trempé.
- 5) Anneau porte-billes en tôle d'acier emboutie.



SUPPORTI MEDI M22 A FORO PASSANTE

- 1) Boccola di riduzione del foro passante.
- 2) Piastra porta sfere in lamiera d'acciaio stampata.

MEDIUM DUTY BOLT HOLE M22 CASTORS

- 1) Bolt hole reduction bush.
- 2) Pressed steel balls retaining plate.

MITTELLAST GEHÄUSE M22 MIT RÜCKENLOCH

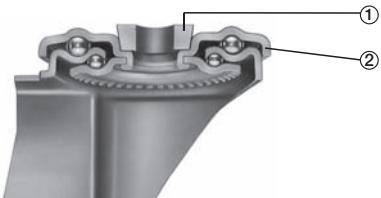
- 1) Reduktionshülse zum Rückenloch.
- 2) Kugelkranzhalter aus gepresstem Stahlblech.

CHAPES MOYENNES M22 A TROU CENTRAL

- 1) Bague de réduction du trou central.
- 2) Disque porte-billes en tôle d'acier estampée.

SOPORTES MEDIOS M22 CON TALADRO LISO PASADOR

- 1) Casquillo de reducción por el taladro.
- 2) Platina porta-bolas en chapa de acero estampada.



SUPPORTI MEDI M22 A PERNO LISCIO

- 1) Perno liscio zincato. 2) Boccola di riduzione del foro.
- 3) Rondella zincata. 4) Dado autobloccante zincato.

SOLID STEM MEDIUM DUTY M22 CASTORS

- 1) Solid stem, zincplated. 2) Bolt hole reduction bush.
- 3) Zincplated washer. 4) Zincplated self locking nut.

MITTELLAST GEHÄUSE M22 MIT ZAPFEN

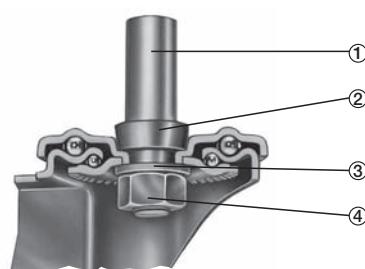
- 1) Zapfen, verzinkt. 2) Reduktionshülse zum Rückenloch.
- 3) Scheibe, verzinkt. 4) Selbstsichernde Mutter, verzinkt.

CHAPES MOYENNES M22 A TIGE

- 1) Tige zinguée. 2) Bague de reduction du trou central.
- 3) Rondelle zinguée. 4) Ecrou de sûreté, zinguée.

SOPORTES MEDIOS M22 CON PERNO LISO

- 1) Perno liso cincado. 2) Casquillo de reducción por el taladro.
- 3) Arandela cincada. 4) Tuerca autobloqueante cincada.



SUPPORTI MEDI M22 A PERNO FILETTATO

- 1) Perno filettato zincato. 2) Boccola di riduzione del foro.
- 3) Rondella zincata. 4) Dado zincato.

THREADED STEM MEDIUM DUTY M22 CASTORS

- 1) Threaded stem, zincplated. 2) Bolt hole reduction bush.
- 3) Zincplated washer. 4) Zincplated nut.

MITTELLAST GEHÄUSE M22 MIT GEWINDESTIFT

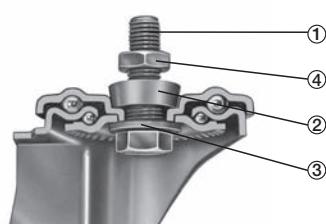
- 1) Gewinde, verzinkt. 2) Reduktionshülse zum Rückenloch.
- 3) Scheibe, verzinkt. 4) Mutter, verzinkt.

CHAPES MOYENNES M22 A TIGE FILETÉE

- 1) Tige filetée, zinguée. 2) Bague de reduction du trou central.
- 3) Rondelle zinguée. 4) Ecrou zingué.

SOPORTES MEDIOS M22 CON ESPIGA ROSCADA

- 1) Espiga rosada cincada. 2) Casquillo de reducción por el taladro.
- 3) Arandela cincada. 4) Tuerca cincada.

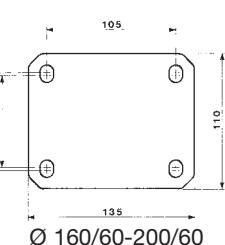
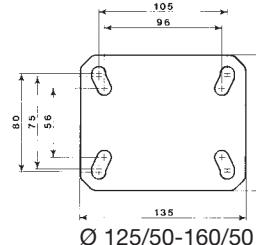


MEDIUM DUTY TOP-PLATE CASTORS M22

- Finish: electro-zinc plated, white.
- 1) Top plate with forged central pin in pressed steel-sheet.
- 2) Thermoplastic dust protection ring (crystalline thermoplastic for high temperature castors, max. 270°C).
- 3) Swivel fork in pressed steel-sheet.
- 4) Hardened steel balls.
- 5) Balls retaining ring in pressed steel-sheet.

SOPORTES MEDIOS M22 A PLATINA

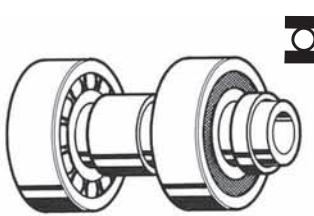
- Acabado: eléctro-cincado, blanco.
- 1) Platina de anclaje con perno central preformado en chapa de acero estampada.
- 2) Anillo anti-polvo en material termoplástico (termoplástico cristalino en los soportes para altas temperaturas, max. 270°C).
- 3) Horquilla giratoria en chapa de acero estampada.
- 4) Bolas en acero templado.
- 5) Disco porta bolas en chapa de acero estampada.



		STANDARD	HT
80	40	FB=10-12	GB=10-12
100	50	FD=12-14	GD=12-14
125	60	FE=12 FG=16-18	GE=12 GG=16-18

		STANDARD	HT
80	40	DA=20x50 DB=22x50	EA=20x50 EB=22x50
100	50	DC=20x50 DD=22x50 DE=27x60	EC=20x50 ED=22x50 EE=27x60
125	60	DF=27x60	EF=27x60

		STANDARD	HT
80	40	VA=M10x25 VB=M12x25	ZA=M10x25 ZB=M12x25
100	50	VC=M12x30 VD=M14x30	ZC=M12x30 ZD=M14x30
125	60	VE=M12x30 VF=M16x30	ZE=M12x30 ZF=M16x30

ORGANI DI ROTOLAMENTO - BEARINGS - LAGERUNG - ORGANS DE ROULEMENT - ORGANOS DE RODAMIENTO

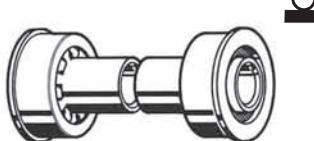
Cuscinetti a sfere schermati da un lato e bussola di riduzione in tubo di acciaio trafileato con distanziatori in acciaio zincato: per usi continui ai massimi carichi.

Shielded precision ball bearings, with reduction bush of drawn steel tube and spacers of zincplated steel: for continuous applications at highest loads.

Präzisions-Rillenkugellager, einseitig abgeschirmt, mit Reduktionshülse aus gezogenem Stahl und Distanzröhren aus verzinktem Stahl: für Dauerbetrieb unter Höchstbelastung.

Roulements à billes protégés sur un côté, entretoise de réduction en tube d'acier traillé, et bague entreroulements en acier zingué: pour usage continu aux charges plus élevées.

Cojinetes a bolas de precisión protegidos por el lado exterior, casquillo de reducción en tubo de acero trefilado y separadores internos y externos en acero cincado: para usos continuos a las máximas cargas.



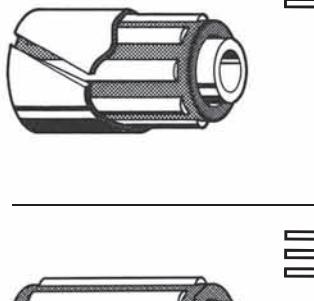
Cuscinetti a sfere schermati di costruzione speciale per le ruote BETA: per usi con frequente movimentazione ai massimi carichi consentiti delle ruote.

Shielded ball bearings of special design for wheels series BETA: for frequent usage at maximum wheel loading.

Abgeschirmte Rillenkugellager im Sonderkonstruktion für BETA Räder: für häufigen Lauf unter höchstmöglicher Belastung der Räder.

Roulements à billes de construction speciale pour les roues BETA: pour usage fréquent aux charges plus élevées admis par les roues.

Cojinete a bolas de construcción especial para las ruedas BETA: para usos frecuentes a las máximas cargas permitidas para esta rueda.



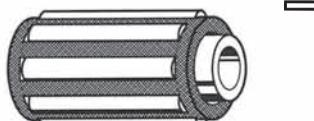
Cuscinetto a rullini temperati e rettificati, con pista di rotolamento in acciaio temperato e bussola in tubo di acciaio temperato: per usi continui ai massimi carichi.

Hardened and rectified roller bearing, with hardened steel sleeve and bush of hardened steel tube: for continuous applications at highest loads.

Rollenkorblager, gehärtet und geschliffen, mit gehärteter Laufbuchse und gehärteter Reduktionshülse: für Dauerbetrieb unter Höchstbelastung.

Roulement à rouleaux trempés et rectifiés, avec piste de roulement en acier trempé et entretoise en tube d'acier trempé: pour usage continu aux charges plus élevées.

Cojinete a rodillos templados y rectificados con pista de rodadura en acero templado y casquillo de reducción en tubo de acero templado: para usos continuos a las máximas cargas.



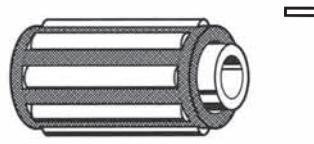
Cuscinetto a rullini standard e bussola in tubo di acciaio: per impiego in ambienti normali.

Standard roller bearing and steel bush: for applications in normal environments.

Rollenkorblager, standard, und Reduktionshülse aus Stahlrohr: für Betrieb unter normalen Bedingungen.

Roulement à rouleaux standard et entretoise en tube acier: pour usage dans un milieu normal.

Cojinete a rodillos standard y casquillo de reducción en tubo de acero: para usos en ambientes normales.



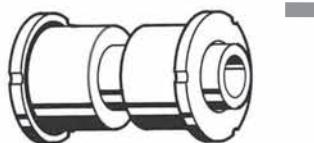
I Cuscinetto a rullini Inox AISI 304 e bussola in acciaio inox AISI 304: per impiego in presenza di sostanze corrosive.

N O Stainless steel roller bearing AISI 304 and stainless steel bush AISI 304: for applications in corrosive environments.

X Rollenkorblager, rostfrei, aus Edelstahl AISI 304 mit Reduktionshülse aus Edelstahl AISI 304: für Betrieb bei Korrosionsmitteln.

Roulement à rouleaux Inox AISI 304 et entretoise en acier inox AISI 304: pour usage en présence de substances corrosives.

Cojinete a rodillos Inox AISI 304 y casquillo de reducción en acero inox AISI 304: para usos en ambientes corrosivos.



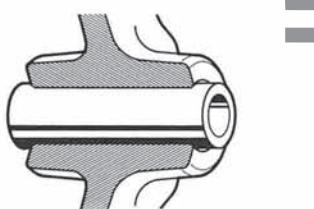
Boccole in poliammide 6 autolubrificante e bussola di riduzione in tubo di acciaio o acciaio inox AISI 304: per usi intermittenuti.

Self-lubricating polyamide 6 bushes and steel or stainless steel AISI 304 reduction bush: for intermittent use.

Buchsens aus Polyamid 6, selbstschmierend, und Reduktionshülse aus Stahl oder Edelstahl AISI 304: für zeitbegrenzten Betrieb.

Bagues en Polyamide 6 autolubrifiante et entretoise en acier ou acier inox AISI 304: pour usage intermittent.

Buje en poliamida 6 autolubricante y casquillo de reducción en tubo de acero o acero inox AISI 304: para usos intermitentes.



Foro passante e bussola di riduzione in tubo di acciaio o acciaio inox AISI 304: per usi intermittenuti.

Plain bore and reduction bush obtained from a steel tube or inox AISI 304: for intermittent use.

Gleitlager und Reduktionshülse aus Stahl oder aus Edelstahl AISI 304: für zeitbegrenzten Betrieb.

Alésage lisse et entretoise de réduction en tube acier ou acier inox AISI 304: pour usage intermittent.

Agujero liso y casquillo de reducción en tubo de acero o acero inox AISI 304: para usos intermitentes.

**DISCHI IN LAMIERA D'ACCIAIO +
ANELLO IN GOMMA GRIGIA ELASTICA**

- Anello in gomma grigia elastica antitraccia, durezza 75 ± 5 Shore A.
- Dischi in lamiera d'acciaio stampata, saldati: zincatura elettrolitica bianca.
- Elevata scorrevolezza e resistenza all'abrasione.
- Temperatura di impiego: $-20^{\circ}\text{C} / +60^{\circ}\text{C}$.
- Mozzo con: cuscinetti a sfere schermati; cuscinetto a rullini standard; boccole in nylon (poliammide 6).


**STEEL-DISCS + ELASTIC GREY
RUBBER RING**

- Non marking elastic grey rubber ring, hardness 75 ± 5 Shore A.
- Pressed and welded steel-discs: electro-zinc plated, white.
- Excellent smooth running; high abrasion resistance.
- Temperature range: $-20^{\circ}\text{C} / +60^{\circ}\text{C}$ ($-4^{\circ}\text{F} / +140^{\circ}\text{F}$).
- Hub with: shielded ball bearings; standard roller bearing; nylon (polyamide 6) friction bearing.

**STAHLBLECHFELGE +
GRAUER ELASTIK-VOLLGUMMIRING**

- Spurfreier grauer Elastik-Vollgummiring, Härte 75 ± 5 Shore A.
- Gepresste, geschweißte und weiß-elektroverzinkte Stahlblechscheibe.
- Geringer Rollwiderstand, abriebfest.
- Arbeitstemperatur: $-20^{\circ}\text{C} / +60^{\circ}\text{C}$
- Lagerung: abgeschirmte Rillenkugellager; Standard Rollenkorblager; Nylon (Polyamid 6)-Lagerbuchse.

**FLASQUES EN TÔLE D'ACIER +
ANNEAU EN CAOUTCHOUC GRIS ÉLASTIQUE**

- Anneau en caoutchouc gris élastique, non tachant, dureté 75 ± 5 Shore A.
- Flasques estampées, soudées et électro-zinguées, blanc.
- Elevé coefficient de roulement et résistance à l'abrasion.
- Température d'emploi: $-20^{\circ}\text{C} / +60^{\circ}\text{C}$ ($-4^{\circ}\text{F} / +140^{\circ}\text{F}$).
- Moyeu avec: roulements à billes protégés; roulement à rouleaux standard; bagues en nylon (polyamide 6).

**DISCOS EN CHAPA DE ACERO +
ARO DE GOMA GRIS ELÁSTICA**

- Aro de goma gris elástica, anti-marca, dureza 75 ± 5 Shore A.
- Discos en chapa de acero moldeada y soldadas: electro-cincado, blanco.
- Elevada facilidad de rodadura y resistencia a la abrasión.
- Temperatura de empleo: $-20^{\circ}\text{C} / +60^{\circ}\text{C}$ ($-4^{\circ}\text{F} / +140^{\circ}\text{F}$).
- Cubo con: cojinetes a bolas protegidos; rodamiento a ruedas standard; bujes en nylon (poliamida 6).

	D	80	100	125	150	160	200
	E	25	30	37,5	40	40	50

	CUSCINETTI A SFERE - BALL BEARINGS - RILLENKUGELLAGER - ROULEMENTS À BILLES - COJINETES A BOLAS
Art. N.	- 12008G 12012G 12022G 12026G 12036G
	- 8 8 10 10 12
	- 41 41 51 51 61
	- 90 145 200 210 280

	CUSCINETTO A RULLINI - ROLLER BEARING - ROLLENKORBLAGER - ROULEMENT À ROULEAUX - COJINETE A RODILLOS
Art. N.	12054G 12058G 12062G 12072G 12076G 12086G
	12 12 12 15 15 20
	40 40 40 50 50 60
	70 90 145 200 210 280

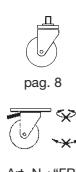
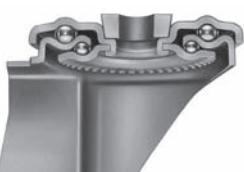
	BOCCOLA DI NYLON - NYLON FRICTION BEARING - NYLON BUCHSE - PALIER EN NYLON - BUJE DE NYLÓN
Art. N.	12104G 12108G 12112G 12122G 12126G 12136G
	12 12 12 15 15 20
	40 40 40 50 50 60
	70 90 145 200 210 280

LAG

A RICHIESTA - ON DEMAND - NACH ANFRAGE - SUR DEMANDE - SOBRE SOLICITUD

BETA-G + M22

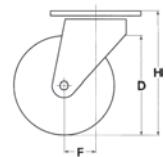
MEDI - MEDIUM - MITTELLAST - MOYENNES - MEDIOS

BG

	D	80	100	125	150	150	160	200	
	E	25	30	37,5	40	40	40	50	

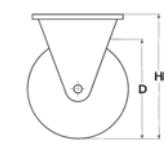
SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

	Art. N.	-	12208G	12212G	12221G	12222G	12226G	12236G	
	d	-	8	8	10	10	10	12	
	Art. N.	12254G	12258G	12262G	12271G	12272G	12276G	12286G	
	d	12	12	12	15	15	15	20	
	Art. N.	12304G	12308G	12312G	12321G	12322G	12326G	12336G	
	d	12	12	12	15	15	15	20	

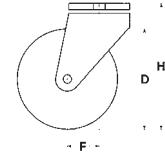


SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

	Art. N.	-	12408G	12412G	12421G	12422G	12426G	12436G	
	d	-	8	8	10	10	10	12	
	Art. N.	12454G	12458G	12462G	12471G	12472G	12476G	12486G	
	d	12	12	12	15	15	15	20	
	Art. N.	12504G	12508G	12512G	12521G	12522G	12526G	12536G	
	d	12	12	12	15	15	15	20	

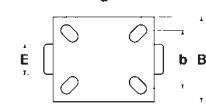
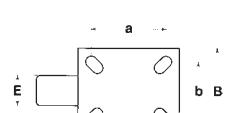
SUPPORTI GIREVOLI A FORO - SWIVEL BOLT HOLE CASTORS - RÜCKENLOCH LENKROLLEN
ROULETTES PIVOTANTES A Oeil - CONJUNTOS GIRATORIOS CON TALADRO PASADOR

	Art. N.	-	12608GFB	12612GFB	-	12622GFD	12626GFD	12636GFE 12636GFG	
	d	-	8	8	-	10	10	12	
	Art. N.	12654GFB	12658GFB	12662GFB	-	12672GFD	12676GFD	12686GFE 12686GFG	
	d	12	12	12	-	15	15	20	
	Art. N.	12704GFB	12708GFB	12712GFB	-	12722GFD	12726GFD	12736GFE 12736GFG	
	d	12	12	12	-	15	15	20	



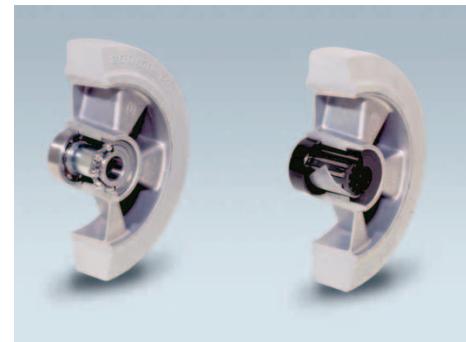
DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	106	128	154	181	181	191	240	
	AxB	102x83	102x83	102x83	102x83	135x110	135x110	135x110	
	axb	80x60	80x60	80x60	80x60	105x80	105x80	105x80	
	g	8	8	8	8	10	10	10	
	F	FB=10-12			FD=12-14			FE=12-14 / FG=16-18	
	U	33	37	40	51	51	51	59	
	FR	40	40	40	50	50	50	60	
	Kg.	70	90	120	200	200	200	280	



ALLUMINIO + GOMMA ELASTICA GRIGIA

- Rivestimento in gomma elastica grigia antimacchia, durezza 70 ± 5 Shore A.
- Nucleo in lega di alluminio pressofuso.
- Elevata scorrevolezza, silenziosità, resistenza all'abrasione, ammortizza gli urti.
- Temperatura di impiego: $-20^{\circ}\text{C} / +70^{\circ}\text{C}$.
- Mozzo con: cuscinetti a sfere di precisione, schermati.

**ALUMINIUM + ELASTIC GREY RUBBER**

- Non marking elastic grey rubber coating, hardness 70 ± 5 Shore A.
- Core in die-cast aluminium alloy.
- Excellent smooth and silent running; high abrasion resistance; shocks absorbing.
- Temperature range: $-20^{\circ}\text{C} / +70^{\circ}\text{C}$ ($-4^{\circ}\text{F} / +158^{\circ}\text{F}$).
- Hub with: shielded precision ball bearings.

ALUMINIUM + GRAUER ELASTIK GUMMI

- Spurfreier grauer Elastik-Gummibeschichtung, Härte 70 ± 5 Shore A.
- Radkern aus Spritzguss-Aluminiumlegierung.
- Sehr geringer Rollwiderstand, geräuschloser Lauf; hohe Stossfestigkeit; abriebfest.
- Arbeitstemperatur: $-20^{\circ}\text{C} / +70^{\circ}\text{C}$.
- Lagerung: abgeschirmte Präzisions-Rillenkugellager.

ALUMINIUM + CAOUTCHOUC GRIS ÉLASTIQUE

- Bandage en caoutchouc élastique gris vulcanisé, non tachant, dureté 70 ± 5 Shore A.
- Corps en alliage d'aluminium moulé sous pression.
- Très silencieuse, faible résistance au roulement, haute résistance à l'abrasion, amortissant des chocs.
- Température d'emploi: $-20^{\circ}\text{C} / +70^{\circ}\text{C}$ ($-4^{\circ}\text{F} / +158^{\circ}\text{F}$).
- Moyeu avec: roulements à billes de précision protégés.

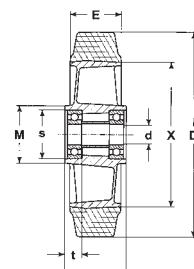
ALUMINIO + GOMA GRIS ELÁSTICA

- Revestimiento en goma gris elástica anti-marca, vulcanizada, dureza 70 ± 5 Shore A.
- Núcleo en fundición de aluminio vaciado a presión.
- Elevada facilidad de rodadura, silenciosidad, resistencia a los golpes y a la abrasión.
- Temperatura de empleo: $-20^{\circ}\text{C} / +70^{\circ}\text{C}$ ($-4^{\circ}\text{F} / +158^{\circ}\text{F}$).
- Buje con: cojinetes a bolas de precisión, protegidos.

	D	100	125	125	160	180	200	230	250	250	300	300
	E	40	40	50	50	50	50	50	50	60	60	60

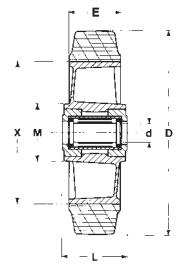
**CUSCINETTI A SFERE DI PRECISIONE - PRECISION BALL BEARINGS - PRÄZISIONS-RILLENKUGELLAGER
ROULEMENTS À BILLES DE PRÉCISION - COJINETES A BOLAS DE PRECISIÓN**

Art. N.	2000G	2003G	2002G■	2005G	2007G	2009G	2011G	2016G	2013G	2018G	2015G	
	X	66	86	60	100	140	140	170	184	190	228	238
	d	15	15	20	20*	20*	20*	20*	20*	25	30	
	s	35	35	47	47	47	47	47	47	52	62	
	t	12,2	12,2	17	17	17	17	17	17	17	17	
	V	38	38	44	54	54	54	54	54	56	74	
	L	40	40	50	60	60	60	60	60	60	75	
	M	43	43	57	55	55	55	56	58	62	73	
	Kg	150	180	220	300	350	450	500	530	600	700	



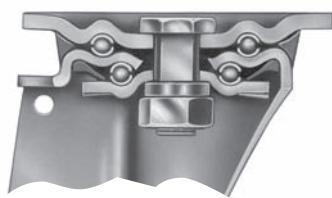
CUSCINETTO A RULLINI - ROLLER BEARING - ROLLENKORBLAGER - ROULEMENT À ROULEAUX - COJINETE A RODILLOS

Art. N.	2050G	2053G	2052G■	2055G	2057G	2059G	2061G	2066G	2063G	-	-	
	X	66	86	60	100	140	140	170	184	190	-	-
	d	15	15	20	20*	20*	20*	20*	20*	-	-	
	L	40	40	50	60	60	60	60	60	-	-	
	M	43	43	57	55	55	55	56	58	-	-	
	Kg	150	180	220	300	350	450	500	530	600	-	-



* A richiesta foro Ø 25 - Bore Ø 25 on request - Achslochdurchmessere Ø 25 auf Anfrage - Alésage Ø 25 sur demande - Aguero Ø 25 sobre demanda.

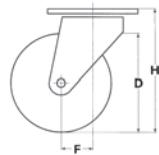
■ Nucleo in acciaio - Steel wheel centre - Stahlradkörper - Corps de roue en acier - Núcleo en acero.



	D	100	100	125	125	160	180	200	230	250	
	E	40	40	40	50	50	50	50	50	50	

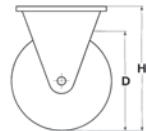
SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

	Art. N.	16853G	16854G	16859G	16861G ■	16869G	16870G	16871G	16874G	16875G	
	d	15	15	15	20	20	20	20	20	20	
	Art. N.	16878G	16879G	16884G	16886G ■	16893G	16895G	16896G	16899G	16900G	
	d	15	15	15	20	20	20	20	20	20	



SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

	Art. N.	16928G	16929G	16934G	16936G	16943G	16945G	16946G	16949G	16950G	
	d	15	15	15	20	20	20	20	20	20	
	Art. N.	16953G	16954G	16959G	16961G	16968G	16970G	16971G	16974G	16975G	
	d	15	15	15	20	20	20	20	20	20	



DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	138	139	164	164	208	240	250	295	305	
	AxB	105x85	135x110								
	axb	80x60	105x80								
	g	8	10	10	10	12	12	12	12	12	
	F	42	42	42	42	64	66	66	71	71	
	U	50	50	50	50	60	60	60	60	60	
	FR	FR	FR	FR	FR	FR/FV	FR/FV	FR/FV	FR/FV	FR/FV	
	Kg	150	150	180	220	300	350	450	500	530	

■ Nucleo in acciaio - Steel wheel centre - Stahlradkörper - Corps de roue en acier - Núcleo en acero.

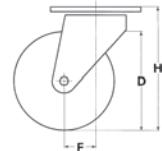
MEDIO PESANTI - MEDIUM HEAVY - MITTEL SCHWERLAST - MI-LOURDES - MEDIO PESADOS



	D	100	100	125	125	125	160	180	200	230	250	
	E	40	40	40	40	50	50	50	50	50	50	

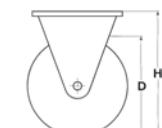
SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

	Art. N.	16603G	16604G	16608G	16609G	16611G ■	16618G	16620G	16621G	16623G	16624G	
	d	15	15	15	15	20	20	20	20	20	20	
	Art. N.	16628G	16629G	16633G	16634G	16636G ■	16643G	16645G	16646G	16648G	16649G	
	d	15	15	15	15	20	20	20	20	20	20	



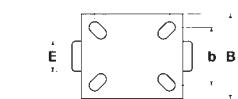
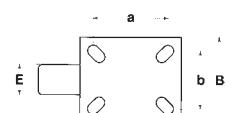
SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

	Art. N.	16678G	16679G	16683G	16684G	16686G ■	16693G	16695G	16696G	16698G	16699G	
	d	15	15	15	15	20	20	20	20	20	20	
	Art. N.	16703G	16704G	16708G	16709G	16711G ■	16718G	16720G	16721G	16723G	16724G	
	d	15	15	15	15	20	20	20	20	20	20	



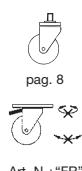
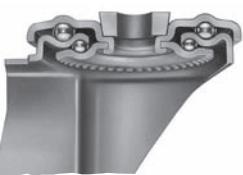
DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	137	137	163	163	163	207	239	249	294	304	
	AxB	105x85	135x110	105x80	135x110							
	axb	80x60	105x80	80x60	105x80							
	g	8	10	8	10	10	12	12	12	12	12	
	F	41	41	41	41	41	62	65	65	69	69	
	U	50	50	50	50	50	60	60	60	60	60	
	FR	FR	FR	FR	FR	FR	FR/FV	FR/FV	FR/FV	FR/FV	FR/FV	
	Kg	150	150	180	180	220	300	350	450	450	450	



ELASTIC-G + M22

MEDI - MEDIUM - MITTELLAST - MOYENNES - MEDIOS



	D	100	125	125	125	160	180	200	
	E	40	40	50	50	50	50	50	

SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

	Art. N.	16302G	16303G	16304G	16305G	16309G	16313G	16316G	
	d	15	15	20	20	20	20	20	
	Art. N.	16327G	16328G	16329G	16330G	16334G	16338G	16341G	
	d	15	15	20	20	20	20	20	

SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

	Art. N.	16352G	16353G	16354G ■	16355G ■	16359G	16363G	16366G	
	d	15	15	20	20	20	20	20	
	Art. N.	16377G	16378G	16379G ■	16380G ■	16384G	16388G	16391G	
	d	15	15	20	20	20	20	20	

SUPPORTI GIREVOLI A FORO - SWIVEL BOLT HOLE CASTORS - RÜCKENLOCH LENKROLLEN
ROULETTES PIVOTANTES A Oeil - CONJUNTOS GIRATORIOS CON TALADRO PASADOR

	Art. N.	16402GFB	16403GFB	-	16405GFD ■	16409GFE	16413GFE	16416GFE	
	Art. N.	-	-	-	-	16409GFG	16413GFG	16416GFG	
	d	15	15	-	20	20	20	20	
	Art. N.	16427GFB	16428GFB	-	16430GFD ■	16434GFE	16438GFE	16441GFE	
	Art. N.	-	-	-	-	16434GFG	16438GFG	16441GFG	
	d	15	15	-	20	20	20	20	

DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	128	154	160	160	196	218	240	
	AxB	102x83	102x83	102x83	135x110	135x110	135x110	135x110	
	axb	80x60	80x60	80x60	105x80	105x80	105x80	105x80	
	g	8	8	8	10	10	10	10	
	g	FB=10-12			FD=12-14			FE=12-14 / FG=16-18	
	F	37	40	49	49	56	57	59	
	U	40	40	50	50	60	60	60	
	FR	FR	FR	FR	FR	FR	FR	FR	
	Kg	120	120	200	200	300	300	300	

Attacco a perno filettato o liscio a richiesta - Threaded or solid stem on request - Gewindestift oder Zapfen auf Anfrage - Tige filetée ou lisse sur demande - Espiga roscada o lisa sobre demanda.

■ Nucleo in acciaio - Steel wheel centre - Stahlradkörper - Corps de roue en acier - Núcleo en acero.

POLIAMMIDE 6 + POLIURETANO COLATO SOFFICE

- Rivestimento in poliuretano colato soffice, durezza 87±3 Shore A.
- Nucleo in poliammide 6 di prima scelta.
- Elevata portata, scorrevolezza, silenziosità; resistenza agli urti, all'abrasione e alle sostanze corrosive; facilità di pulizia.
- Temperatura di impiego: -30°C / +80°C.
- Mozzo con: cuscinetti a sfere di precisione, schermati; cuscinetto a rullini standard o inox.

**POLYAMIDE 6 + SOFT CAST POLYURETHANE**

- Coated in cast polyurethane hardness 87±3 Shore A.
- Wheel centre in high quality polyamide 6.
- High load capacity; smooth and noiseless running. Hygienic and high resistance to corrosion, abrasion and shocks.
- Temperature range: -30°C / +80°C (-22°F / +176°F).
- Hub with: shielded precision ball bearings; standard or stainless steel roller bearing.

POLYAMIDE 6 + POLYURETHANE SOUPLE COULÉ

- Bandage en polyuréthane coulé, dureté 87±3 Shore A.
- Corps en polyamide 6 premier choix.
- Très silencieuse, élevée résistance aux charges, très élevée résistance aux chocs, à l'usure et à la corrosion.
- Température d'emploi: -30°C / +80°C (-22°F / +176°F).
- Moyeu avec: roulements à billes de précision, protégés; roulement à rouleaux standard ou inox.

POLYAMID 6 + WEICHEM POLYURETHAN (GEGOSSEN)

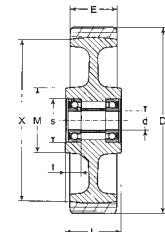
- Bandage aus Guss-Polyurethan, Härte 87±3 Shore A.
- Radkörper aus Polyamid 6 - 1. Wahl.
- Hohe Tragkraft, geräuscharmer Lauf; hohe Stoßfestigkeit; abrieb- und korrosionsfest.
- Arbeitstemperatur: -30°C / +80°C.
- Lagerung: abgeschirmte Präzisions-Rillenkugellager; Standard oder rostfreier Rollenkorbträger.

POLIAMIDA 6 + POLIURETANO COLADO BLANDO

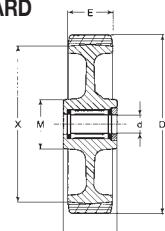
- Revestimiento en Poliuretano colado, dureza 87±3 Shore A.
- Núcleo en Poliamida 6 de primera calidad.
- Muy silenciosa, resistencia elevada a las cargas y muy elevada a los golpes, a la abrasión y substancias corrosivas.
- Temperatura de empleo: -30°C / +80°C (-22°F / +176°F).
- Buje con: cojinetes a bolas protegidos; cojinete a rodillos standard o inox.

	D	100	100	125	150	175	200	200	250	250	300
	E	30	40	40	40	40	50	50	50	50	60

CUSCINETTI A SFERE DI PRECISIONE - PRECISION BALL BEARINGS - PRÄZISIONS-RILLENKUGELLAGER ROULEMENTS À BILLES DE PRÉCISION - COJINETES A BOLAS DE PRECISION											
Art. N.	35004	35008	35016	35020	35028	35031	35032	35040	35041	35048	
	X	80	80	100	125	150	175	175	200	200	250
	d	15	15	15	15	20	20	25	20	25	25
	s	35	35	35	35	47	47	47	47	52	
	t	12,2	12,2	12,2	12,2	17	17	17	17	17	
	V	38	38	38	48	44	54	50	54	50	56
	L	40	40	40	50	50	60	60	60	60	
	M	47	47	48	50	63	69	69	63	63	82
	Kg	200	250	300	400	500	600	600	700	700	1000

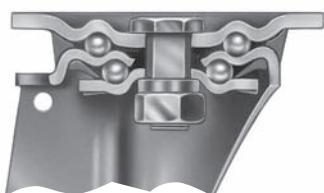


CUSCINETTO A RULLINI STANDARD O INOX - STANDARD OR STAINLESS STEEL ROLLER BEARING - ROLLENKORBLAGER STANDARD ODER ROSTFREI - ROULEMENT À ROULEAUX STANDARD OU INOX - COJINETE A RODILLOS STANDARD O INOX								STANDARD INOX		
Art. N.	35054	35058	35066	35071	35078▼	35081	35082	35090▼	35090x▼	
	35054x	35058x	35066x	35071x	35078x▼	35081x	35082x	35090x▼		
	d	15	15	15	20	20	20	25	20	
	L	40	40	40	50	50	60	60	60	
	M	37	47	48	43	49	55	55	57	
	Kg	200	250	300	400	500	600	600	700	



LAG**ADINYL SOFT + INOX40**

INOX - STAINLESS - ROSTFREI - INOX - INOX

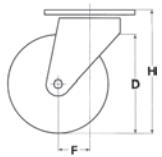


Art. N.+ "FR"

	D	100	100	125	125	150	175	200	
	E	40	40	40	40	40	40	50	

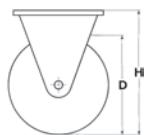
SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

Art. N.	35506	35507	35514	35515	35521	35524	35527	
	d	15	15	15	15	20	20	20



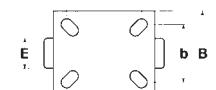
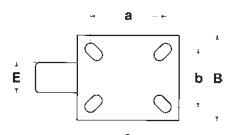
SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

Art. N.	35606	35607	35614	35615	35621	35624▼	35627	
	d	15	15	15	15	20	20	20

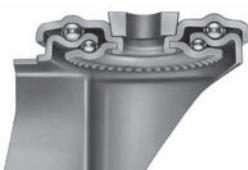


DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	137	137	162	162	192	236	248	
	AxB	105x85	135x110	105x85	135x110	135x110	135x110	135x110	
	axb	80x60	105x80	80x60	105x80	105x80	105x80	105x80	
	g	8	10	8	10	10	12	12	
	F	42	42	42	42	49	60	60	
	U	50	50	50	50	50	60	60	
	FR	FR	FR	FR	FR	FR	FR	FR	
	Kg.	250	250	300	300	370	500	600	



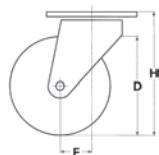
INOX - STAINLESS - ROSTFREI - INOX - INOX



	D	100	100	125	125	150	150	175	200	
	E	30	40	40	40	40	40	40	50	

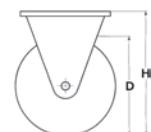
SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

	Art. N.	35203	35206	35214	35215	35220	35221	35224▼	35227	INOX
	d	15	15	15	15	20	20	20	20	

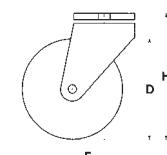


SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

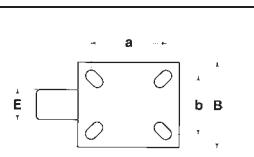
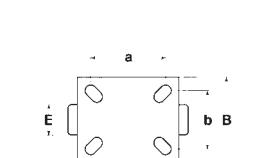
	Art. N.	35303	35306	35314	35315	35320	35321	35324▼	35327	INOX
	d	15	15	15	15	20	20	20	20	

SUPPORTI GIREVOLI A FORO - SWIVEL BOLT HOLE CASTORS - RÜCKENLOCH LENKROLLEN
ROULETTES PIVOTANTES A Oeil - CONJUNTOS GIRATORIOS CON TALADRO PASADOR

	Art. N.	35403HB	35406HD	-	35415HD	-	35421HD	35424HE▼	35427HE	INOX
	Art. N.	-	-	-	-	-	-	35424HF▼	35427HF	
	d	15	15	-	15	-	20	20	20	



DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	128	129	160	160	181	181	216	240	
	AxB	102x83	102x83	102x83	135x110	102x83	135x110	135x110	135x110	
	axb	80x60	80x60	80x60	105x80	80x60	105x80	105x80	105x80	
	g	8	8	8	10	8	10	10	10	
	g	HB=10-12			HD=12-14			HE=12-14 / HF=16-18		
	F	37	46	49	49	51	51	57	59	
	U	40	50	50	50	50	50	60	60	
	FR	FR	FR	FR	FR	FR	FR	FR	FR	
	Kg	150	250	250	250	250	250	370	370	

Attacco a perno filettato a richiesta - Threaded stem on request - Gewindestift auf Anfrage - Tige filetée sur demande - Espiga roscada sobre demanda.

▼ A richiesta - On demand - Nach Anfrage - Sur demande - Sobre solicitud.

LAG**ADINYL SOFT + P60**

PESANTI - HEAVY - SCHWERLAST - LOURDES - PESADOS



	D	100	100	125	150	175	200	250	
	E	40	40	40	40	40	50	50	

SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

	Art. N.	36206	36207	36215	36221	36224▼	36227	36231▼	
	d	15	15	15	15	20	20	20	
	Art. N.	36239	36240	36248	36254	36257▼	36260	36264▼	
	d	15	15	15	20	20	20	20	

SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

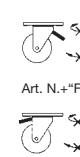
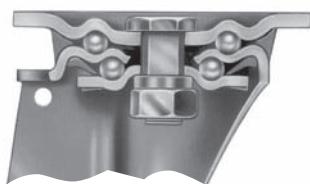
	Art. N.	36306	36307	36315	36321	36324▼	36327	36331▼	
	d	15	15	15	15	20	20	20	
	Art. N.	36339	36340	36348	36354	36357▼	36360	36364▼	
	d	15	15	15	20	20	20	20	

DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	138	139	164	195	238	250	305	
	AxB	105x85	135x110	135x110	135x110	135x110	135x110	135x110	
	axb	80x60	105x80	105x80	105x80	105x80	105x80	105x80	
	g	8	10	10	10	12	12	12	
	F	42	42	42	50	66	66	71	
	U	50	50	50	50	60	60	60	
	FR	FR	FR	FR	FR/FV	FR/FV	FR/FV	FR/FV	
	Kg	250	250	300	400	500	600	700	

▼ A richiesta - On demand - Nach Anfrage - Sur demande - Sobre solicitud.

MEDI - MEDIUM - MITTELLAST - MOYENNES - MEDIOS



	D	100	100	125	125	150	175	200	250	
	E	40	40	40	40	40	40	50	50	

SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

	Art. N.	36006	36007	36014	36015	36021	36024▼	36027	36031▼	
	d	15	15	15	15	15	20	20	20	
	Art. N.	36039	36040	36047	36048	36054	36057▼	36060	36064▼	
	d	15	15	15	15	20	20	20	20	

SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

	Art. N.	36106	36107	36114	36115	36121	36124▼	36127	36131▼	
	d	15	15	15	15	15	20	20	20	
	Art. N.	36139	36140	36147	36148	36154	36157▼	36160	36164▼	
	d	15	15	15	15	20	20	20	20	

DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	137	137	163	163	194	237	249	304	
	AxB	105x85	135x110	105x85	135x110	135x110	135x110	135x110	135x110	
	axb	80x60	105x80	80x60	105x80	105x80	105x80	105x80	105x80	
	g	8	10	8	10	10	12	12	12	
	F	41	41	41	41	48	65	65	69	
	U	50	50	50	50	50	60	60	60	
	FR	FR	FR	FR	FR	FR/FV	FR/FV	FR/FV	FR/FV	
	Kg	250	250	300	300	300	450	450	450	

▼ A richiesta - On demand - Nach Anfrage - Sur demande - Sobre solicitud.

LAG**ADINYL SOFT + M22**

MEDI - MEDIUM - MITTELLAST - MOYENNES - MEDIOS



	D	100	100	125	125	150	150	175	200	
	E	30	40	40	40	40	40	40	50	

SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

	Art. N.	36403	36406	36414	36415	36420	36421	36424▼	36427	
	d	15	15	15	15	15	15	20	20	
	Art. N.	36436	36439	36447	36448	36453	36454	36457▼	36460	
	d	15	15	15	15	20	20	20	20	

SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

	Art. N.	36503	36506	36514	36515	36520	36521	36524▼	36527	
	d	15	15	15	15	15	15	20	20	
	Art. N.	36536	36539	36547	36548	36553	36554	36557▼	36560	
	d	15	15	15	15	20	20	20	20	

SUPPORTI GIREVOLI A FORO - SWIVEL BOLT HOLE CASTORS - RÜCKENLOCH LENKROLLEN
ROULETTES PIVOTANTES A OEIL - CONJUNTOS GIRATORIOS CON TALADRO PASADOR

	Art. N.	36603FB	36606FD	-	36615FD	-	36621FD	36624FE▼	36627FE	
	Art. N.	-	-	-	-	-	-	36624FG▼	36627FG	
	d	15	15	-	15	-	15	20	20	
	Art. N.	36636FB	36639FD	-	36648FD	-	36654FD	36657FE▼	36660FE	
	Art. N.	-	-	-	-	-	-	36657FG▼	36660FG	
	d	15	15	-	15	-	20	20	20	

DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

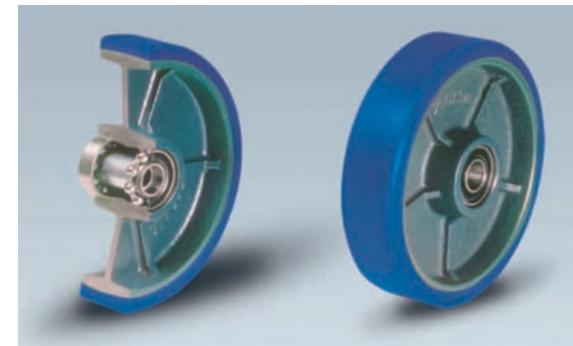
	H	128	129	160	160	181	181	216	240	
	AxB	102x83	102x83	102x83	135x110	102x83	135x110	135x110	135x110	
	axb	80x60	80x60	80x60	105x80	80x60	105x80	105x80	105x80	
	g	8	8	8	10	8	10	10	10	
	FB	FB=10-12			FD=12-14			FE=12-14 / FG=16-18		
	F	37	46	49	49	51	51	57	59	
	U	40	50	50	50	50	50	60	60	
	FR	FR	FR	FR	FR	FR	FR	FR	FR	
	Kg	120	200	200	200	200	200	300	300	

Attacco a perno filettato o liscio a richiesta - Threaded or solid stem on request - Gewindestift oder Zapfen auf Anfrage - Tige filetée ou lisse sur demande - Espiga roscada o lisa sobre demanda.

▼ A richiesta - On demand - Nach Anfrage - Sur demande - Sobre solicitud.

GHISA + POLIURETANO COLATO SOFFICE

- Rivestimento in poliuretano colato soffice, durezza 87 ± 3 Shore A.
- Nucleo in ghisa, verniciato.
- Elevate portate, scorrevolezza, silenziosità, massima resistenza agli urti; elevata resistenza all'abrasione, alle sostanze corrosive, alla lacerazione, agli oli e ai grassi.
- Temperatura di impiego: $-30^{\circ}\text{C} / +80^{\circ}\text{C}$.
- Mozzo con cuscinetti a sfere di precisione, schermati.

**CAST IRON + SOFT CAST POLYURETHANE**

- Cast soft polyurethane coating, hardness 87 ± 3 Shore A.
- Core in cast iron painted
- High load capacity, smooth and noiseless running; high resistance to abrasion, wear and tear, oils and greases; shocks absorbing.
- Temperature range: $-30^{\circ}\text{C} / +80^{\circ}\text{C}$ ($-22^{\circ}\text{F} / +176^{\circ}\text{F}$).
- Hub with: shielded precision ball bearings.

**GUSSEISEN + WEICHEM POLYURETHAN
(GEGOSSEN)**

- Beschichtung aus weichem Guss-Polyurethan, Härte 87 ± 3 Shore A.
- Radkern aus lackiertem Gusseisen
- Hohe Tragkraft, geräuscharmer Lauf, hohe Stoßfestigkeit, abrieb- und Reißfestigkeit; gegen Fette und Öle beständig, stossaufnehmend.
- Arbeitstemperatur: $-30^{\circ}\text{C} / +80^{\circ}\text{C}$.
- Lagerung: abgeschirmte Präzisions-Rillenkugellager.

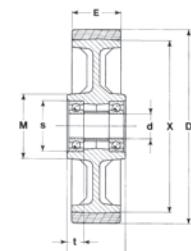
FONTE + POLYURETHANE SOUPLE COULÉ

- Bandage en polyuréthane souple coulé, dureté 87 ± 3 Shore A.
- Corps en fonte, peinte.
- Pour charges élevées; très silencieuse; faible résistance au roulement; très élevée résistance à l'usure, aux déchirures, aux huiles et aux graisses; amortissant les chocs.
- Température d'emploi: $-30^{\circ}\text{C} / +80^{\circ}\text{C}$ ($-22^{\circ}\text{F} / +176^{\circ}\text{F}$).
- Moyeu avec: roulements à billes de précision protégés.

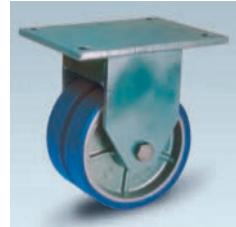
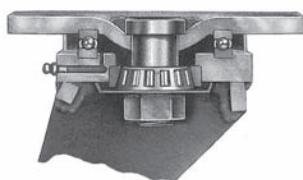
HIERRO FUNDIDO + POLIURETANO COLADO BLANDO

- Revestimiento en Poliuretano colado, dureza 87 ± 3 Shore A.
- Núcleo en hierro fundido, pintado.
- Resistencia elevada a las cargas y a los golpes; muy silenciosa; elevada resistencia a la abrasión, al desgarramiento, a los aceites y grasas; facilidad de rodadura.
- Temperatura de empleo: $-30^{\circ}\text{C} / +80^{\circ}\text{C}$ ($-22^{\circ}\text{F} / +176^{\circ}\text{F}$).
- Buje con: cojinetes a bolas protegidos.

D	100	125	150	200	250
E	40	40	40	50	50
CUSCINETTI A SFERE DI PRECISIONE - PRECISION BALL BEARINGS - PRÄZISIONS-RILLENKUGELLAGER ROULEMENTS À BILLES DE PRÉCISION - COJINETES A BOLAS DE PRECISIÓN					
Art. N.	37007	37010	37016	37030	37035
X	82	101	131	177	225
d	20	20	20	20	25
s	47	47	47	47	52
t	14,1	17	17	17	17
V	40	44	44	54	56
L	40	50	50	60	60
M	60	59	60	61	68
Kg	350	400	500	1000	1200



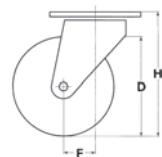
GEMELLATI - TWIN WHEELS - ZWILLINGSRÄDER - ROUES JUMELÉES - RUEDAS GEMELAS



	D	100	125	150	200	250	
	E	40+40	40+40	40+40	50+50	50+50	

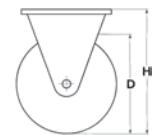
SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

	Art. N.	37605	37609	37613	37619	37622	
	d	20	20	20	20	25	



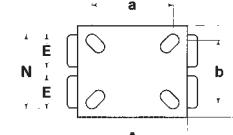
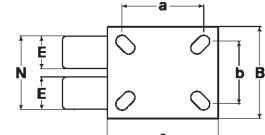
SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

	Art. N.	37655	37659	37663	37699	37672	
	d	20	20	20	20	25	

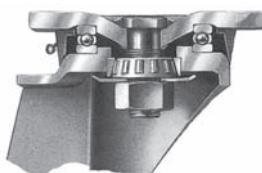


DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	147	197	210	270	323	
	AxB	135x110	200x160	200x160	255x205	255x205	
	axb	105x80	160x120	160x120	210x160	210x160	
	g	12	14	14	16	16	
	F	55	60	60	70	82	
	U	105	105	105	126	153	
	N	90	92	91	111	122	
	Kg	700	800	1000	1000	2400	



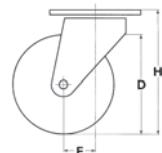
EXTRA PESANTI - EXTRA HEAVY - EXTRA SCHWERLAST - EXTRA LOURDES - EXTRA PESADOS



	D	100	125	150	200	250	
	E	40	40	40	50	50	

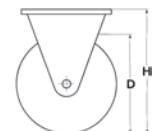
SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

	Art. N.	37505	37509	37513	37519	37522	
	d	20	20	20	20	25	



SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

	Art. N.	37555	37559	37563	37569	37572	
	d	20	20	20	20	25	



DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	160	172	195	251	307	
	AxB	135x110	135x110	135x110	135x110	200x160	
	axb	105x80	105x80	105x80	105x80	160x120	
	g	10	10	10	12	14	
	F	50	50	55	70	85	
	U	50	50	50	60	76	
	N	-	-	-	FV	-	
	Kg	700	400	500	1000	1200	

LAG

A RICHIESTA - ON DEMAND - NACH ANFRAGE - SUR DEMANDE - SOBRE SOLICITUD

ZETA SOFT + P60

PESANTI - HEAVY - SCHWERLAST - LOURDES - PESADOS



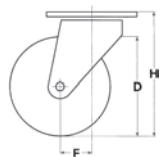
Art. N. "FV"

Art. N. "FR"

	D	100	100	125	150	200	250	
	E	40	40	40	40	50	50	

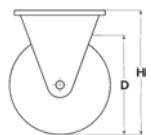
SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

	Art. N.	37404	37405	37409	37413	37419	37422	
	d	20	20	20	20	20	25	



SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

	Art. N.	37454	37455	37459	37463	37469	37472	
	d	20	20	20	20	20	25	



DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	138	139	164	190	250	249	
	AxB	105x85	135x110	135x110	135x110	135x110	135x110	
	axb	80x60	105x80	105x80	105x80	105x80	105x80	
	g	8	10	10	10	12	12	
	F	42	42	42	50	66	65	
	U	50	50	50	50	60	60	
	Kg	FR	FR	FR	FR	FR/FV	FR/FV	
	Kg	350	350	400	450	850	800	

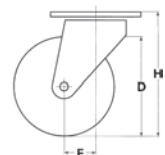
MEDIO PESANTI - MEDIUM HEAVY - MITTEL SCHWERLAST - MI-LOURDES - MEDIO PESADOS



	D	100	100	125	125	150	200	250	
	E	40	40	40	40	40	50	50	

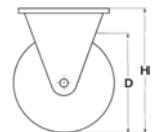
SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

Art. N.	37304	37305	37308	37309	37313	37319	37322	
	d	20	20	20	20	20	25	



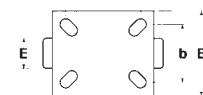
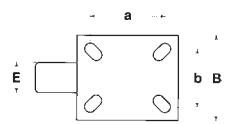
SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

Art. N.	37354	37355	37358	37359	37363	37369	37372	
	d	20	20	20	20	20	25	

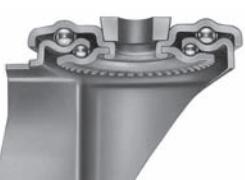


DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	137	137	163	163	194	249	304	
	105x85	135x110	105x85	135x110	135x110	135x110	135x110	
	80x60	105x80	80x60	105x80	105x80	105x80	105x80	
	8	10	8	10	10	12	12	
	41	41	41	41	48	65	69	
	50	50	50	50	50	60	60	
	FR	FR	FR	FR	FR	FR/FV	FR/FV	
	300	300	300	300	300	450	450	



MEDI - MEDIUM - MITTELLAST - MOYENNES - MEDIOS



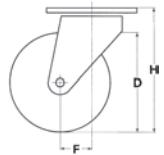
pag. 8

Art. N.+ "FR"

	D	100	125	125	150	150	200	
	E	40	40	40	40	40	50	

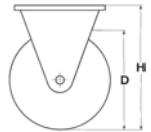
SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

Art. N.	37104	37108	37109	37112	37113	37119	
	d	20	20	20	20	20	

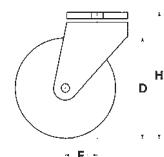


SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

Art. N.	37154	37158	37159	37162	37163	37169	
	d	20	20	20	20	20	

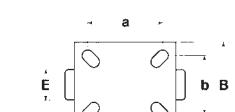
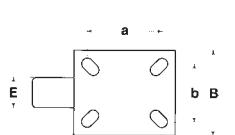
SUPPORTI GIREVOLI A FORO - SWIVEL BOLT HOLE CASTORS - RÜCKENLOCH LENKROLLEN
ROULETTES PIVOTANTES A Oeil - CONJUNTOS GIRATORIOS CON TALADRO PASADOR

Art. N.	37204FD	-	37209FD	-	37213FD	37219FE 37219FG	
	d	20	-	20	-	20	



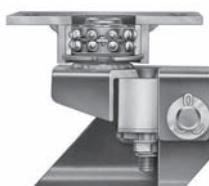
DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	129	160	160	181	181	240	
	AxB	102X83	102X83	135X110	102X83	135X110	135x110	
	axb	80x60	80x60	105x80	80x60	105x80	105x80	
	g	8	8	10	8	10	10	
	FD	FD=12-14			FE=12-14 / FG=16-18			
	F	46	49	49	51	51	59	
	U	50	50	50	50	50	60	
	FR	FR	FR	FR	FR	FR	FR	
	Kg	200	200	200	200	200	300	



ZETA SOFT + M34

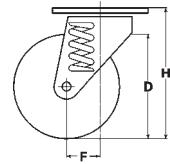
SUPPORTI MOLLEGGIATI - SPRUNG CASTORS - GEFEDERTE GEHÄUSE - CHAPES COMPENSÉES - SOPORTES CON AMORTIGUADORES



	D	100	100	100	125	125	150	200	
	E	40	40	40	40	40	40	40	

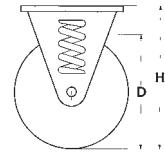
SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

	Art. N.	1460B	1460A	1461A	1464A	1465A	1468A	1470A	
	d	20	20	20	20	20	20	20	



SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

	Art. N.	1475B	1475A	1476A	1479A	1480A	1483A	1485A	
	d	20	20	20	20	20	20	20	



La portata nominale di questi supporti è stata assegnata pari al carico necessario a raggiungere $\frac{3}{4}$ della freccia della molla. Assicurarsi che durante l'impiego non si raggiunga mai il fine corsa del bilanciere. L'utilizzo con carichi inferiori al precarico non causa alcun molleggio.

The nominal load capacity of these forks has been set at $\frac{3}{4}$ of the spring's maximum deflection. The application must not cause the equalizer to reach upper limit. Application with loads smaller than that of the pre-tensioning will not cause deflection of the equalizer.

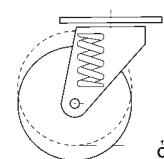
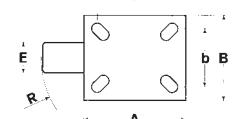
Die Tragfähigkeit dieser Gehäusen ist bis $\frac{3}{4}$ des höchsten Federlaufes gelegt. Bei der Anwendung soll der Schwunghebel bis zum höchsten Federlauf nicht ankommen. Die Anwendung mit Belastungen unter dem Federvordruck wird keine Federung im Schwunghebel verursachen.

La charge admissible de ces chapes est fixée à $\frac{3}{4}$ de la course maximale du ressort. S'assurer qu'à l'utilisation le balancier ne dépasse pas la course maximale du ressort. L'utilisation avec une charge inférieure à la pré-charge du ressort ne donne lieu à aucune suspension.

La capacidad de carga de estos soportes ha sido fijada a la par de la carga necesaria a alcanzar los $\frac{3}{4}$ del desplazamiento máximo del resorte. Asegurarse que durante el empleo nunca se alcance el fin de carrera del balancín. El empleo con cargas inferiores a la precarga no produce alguna suspensión.

DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	171	171	171	207	207	233	274	
	AxB	105x85	105x85	135x110	105x85	135x110	135x110	135x110	
	axb	80x60	80x60	105x80	80x60	105x80	105x80	105x80	
	g	10	10	12	10	12	12	12	
	F	30	30	30	32	32	43	57	
	U	50	50	50	50	50	50	60	
	R	93	93	93	113	113	140	182	
	daN	40	50	50	90	90	90	85	
	C	25	25	25	25	25	28	32	
	Kg	130	170	170	200	200	220	260	



RECOMMENDATIONS AND WARNINGS

In compliance with EEC directive No. 85/374 on manufacturer's liability, the user is obliged to observe all the recommendations specified by manufacturers regarding the installation, use and maintenance of their products.

STORAGE

Before installation, the wheels and castors must be stored in well-ventilated rooms without excessive humidity and within a temperature range of -10°C to +35°C. They must under no circumstances be exposed to sunlight for long periods of time.

USE

The wheels and castors are interchangeable parts which are normally used on manually-propelled equipment, trucks and trolleys for indoor material handling requirements. When the wheels or castors are to be put to a different use from that for which they were originally intended, prior agreement between the customer and supplier is essential (identifying which product is best suited for the application). On any single item of equipment always use wheels and castors of the same type and with the same specifications, bearings and tread.

All the locking or braking devices illustrated in this catalogue (improperly called "brakes") must only be used on horizontal floors. The braking force on floors which are not horizontal (which anyhow must not have a gradient greater than 3%) the braking force may not be sufficient to hold the total mass of the truck, trolley or equipment: suitable tests should be carried out before use. Never use these devices to reduce the speed of moving equipment or make it come to an immediate halt.

CAPACITY

The load capacities of wheels and castors for industrial applications shown in this catalogue apply to normal conditions of use, unless otherwise stated. Namely:

- maximum speed of movement 4 km/h
- floor hard, compact and in good condition
- height of obstacles no greater than 5% of diameter (for wheels with tread hardness Shore A < 90) or no greater than 2.5% of diameter (for wheels with treads hardness Shore A ≥ 90)
- ambient temperature between +15°C and +28°C
- non-continuous manual movement.

Unless otherwise specified the load capacities up to about 2000 kg are verified according to EN 12527 and EN 12532 while the remaining are defined with finite elements analysis (FEA). The load capacities of items within series Q and QD, as related to special applications, are set according to internal procedures. Load ratings are given in accordance with the ETRTO standard for polyurethane tread idle wheels with load capacities exceeding 2000 kg, drive wheels and press-on-bands.

Internal procedures are used to determine load capacities for wheels with polyamide 6 hubs (unsuitable for long distances under load) as well as for forks and transpallet rollers (no applicable standards).

FITTING

The user must always check the strength of the mechanical parts (axles, bolts, bushes, etc.) used for assembling wheels, ensuring they are suitable for the type of fitting and the maximum load to which they will be subjected. When using swivel fork assemblies it is essential for them to be fitted perfectly perpendicular to the floor. Fixed castors must be vertical and perfectly aligned so that the wheel is under all circumstances orientated in the direction of travel. Castors with top plate mounting are designed to be fitted using four bolts with washers and nuts. The mounting interface of the equipment on which they are to be fitted must be rigid and the top plate must be in contact with it along its entire surface. Under no circumstances weld the top plate to the equipment. The solid stem castors require tubular structures with tight tolerances to ensure the solid stem is rigidly held inside the mounting hole.

MAINTENANCE

The user is responsible for maintenance of the product. Use of the product in more corrosive environments than normal, close to the sea, with loads exceeding the rated capacity, with overloads, at high speeds or on floors with surface damage can lead to early deterioration of the wheels and castors and even cause their failure. Draw up an effective maintenance schedule which includes the following:

Inspection of the trolley

Check:

- that the structure is stable and that the wheels and fork assemblies are fitted correctly;
- for any damage to the frame due to loads in excess of the rated capacity or to violent falls of the loads carried;
- that the surface on which the castors are mounted is perfectly flat.

If there are any faults restore the truck, trolley or equipment to its original condition, changing the wheels and castors if necessary. Make sure all the mounting means, such as bolts, nuts, washers etc. are tightened correctly, changing them if they are no longer effective.

Inspection of the wheels

Check the visible tread wear: flat areas indicate that foreign bodies (string, cord, threads, etc.) are preventing the wheel from turning freely on its axis. If necessary, fit thread guards to slow down the accumulation of this type of material around the hub. Change wheels and castors with excessive play or stiff rotation. Change wheels with cut or irregularly worn tread. Change wheels with cracked or dry elastomer coating and polyamide wheels with flat treads. Change wheels with rubber tyres that have stretched or show signs of swelling or softening. Check the electrical conductivity of the conductive wheels at regular intervals and clean the tread frequently to make sure it is free of any impurities which could insulate it from the floor. Remove larger foreign bodies which have penetrated the tread or made their way between the wheels of twin fork assemblies. Make sure the wheel axle is tight.

Inspection of the fork assemblies

Check that the fork swivels correctly, that the centre nut is tight, that the bearing races are in fair condition and that there are no foreign bodies and corrosion inside the swivel head. The plate bearings must be in fair condition, without excessive play. Replace the castor if wear or deformation detected is such to be of prejudice to the performance of the castor. Check that the arms on the fixed fork assemblies are not bent and are perpendicular to the floor.

Check efficiency of breaking and blocking devices.

Lubrication

The swivel bearings and wheel bearings must be lubricated at regular intervals to ensure a long service life, reduce tractive force and improve the smooth operation of the assembly as a whole. Use appropriate lubricants for the application, paying particular attention to ensure they are suited to the work temperature. Our products are normally supplied pre-greased and it is generally sufficient to lubricate them every six months. When working in corrosive environments or in high temperatures, lubricate at least once a month. If the trucks/trolleys are washed frequently, it is advisable to lubricate them every time after washing. Never use chemically corrosive detergents.

NUCLEO IN MATERIALE TERMOPLASTICO + ANELLO IN GOMMA PER ALTE TEMPERATURE

- Anello in gomma antitraccia, durezza 75 ± 3 Shore A.
- Nucleo in composto speciale termoresistente.
- Elevata silenziosità, buona scorrevolezza.
- Temperatura di impiego: $-40^{\circ}\text{C} / +250^{\circ}\text{C}$.
- Mozzo con: foro passante.
- Per movimentazioni manuali su pavimenti in ottimo stato.
- Portate valutate secondo EN 12527 e EN 12532 senza applicare ostacoli.



THERMOPLASTIC CORE + HIGH TEMPERATURE RUBBER RING

- Non marking rubber ring for high temperature applications; hardness 75 ± 3 Shore A.
- Core in special thermo resistant compound.
- Silent and smooth running.
- Temperature range: $-40^{\circ}\text{C} / +250^{\circ}\text{C}$ ($-40^{\circ}\text{F} / +482^{\circ}\text{F}$).
- Hub with: plain bore.
- For manual applications over floors in perfect conditions.
- Load ratings according to EN 12532 and EN 12527 without obstacles.

THERMOPLASTISCHER KERN + HITZEBESTÄNDIGER GUMMIRING

- Hitzebeständiger spurloser Gummiring, Härte 75 ± 3 Shore A.
- Radkern aus hitzebeständigem sonder Kunststoff.
- Geräuschloser und leichter Lauf.
- Arbeitstemperatur: $-40^{\circ}\text{C} / +250^{\circ}\text{C}$.
- Lagerung: Gleitlager.
- Für Handbewegung auf Boden in sehr gutem Zustand.
- Tragfähigkeit nach EN 12532 und EN 12527 ohne Hindernisse festgestellt.

CORPS THERMORÉSISTANT + ANNEAU CAOUTCHOUC POUR HAUTES TEMPÉRATURES

- Anneau en caoutchouc, non tachant, pour hautes températures, dureté 75 ± 3 Shore A.
- Corps en composé spécial thermorésistant.
- Très silencieuse, très faible résistance au roulement.
- Température d'emploi: $-40^{\circ}\text{C} / + 250^{\circ}\text{C}$ ($-40^{\circ}\text{F} / +482^{\circ}\text{F}$).
- Moyeu avec: alésage lisse.
- Pour utilisation manuelle sur sols en très bon état.
- Charges admissibles définies selon EN 12532 et EN 12527 sans obstacles.

NUCLEO TERMORESISTENTE + ARO DE GOMA PARA TEMPERATURAS ELEVADAS

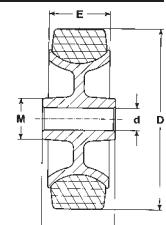
- Aro de goma anti-marca para temperaturas elevadas, dureza 73 ± 3 Shore A.
- Núcleo en compuesto especial termoresistente.
- Silenciosidad elevada, buena facilidad de rodadura.
- Temperatura de empleo : $-40^{\circ}\text{C} / + 250^{\circ}\text{C}$ ($-40^{\circ}\text{F} / +482^{\circ}\text{F}$).
- Cubo con: agujero liso.
- Para desplazamientos manuales sobre pavimentaciones óptimas.
- Capacidades de carga estimadas conforme a EN 12532 y EN 12527 sin poner obstáculos.

	D	100
	E	30



FORO PASSANTE - PLAIN BORE - GLEITLAGER - ALÉSAGE LISSE - AGUJERO LISO

	Art. N.	27856
	d	12
	L	40
	M	22,5
	Kg.	80



LAG**FN + INOX 20**

INOX - STAINLESS - ROSTFREI - INOX - INOX

**FN + M22**

MEDI - MEDIUM - MITTELLAST - MOYENNES - MEDIOS

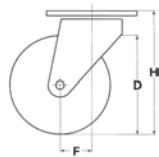


	D	100	100	
	E	30	30	

SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS

Art. N.	27866	27746	
	d	12	12
Art. N.	27876	27756	
	d	12	12

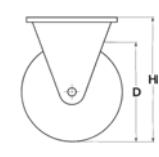
SUPPORTI GIREVOLI - SWIVEL CASTORS - LENKROLLEN - ROULETTES PIVOTANTES - CONJUNTOS GIRATORIOS



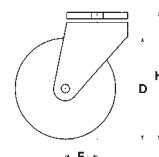
SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

Art. N.	27886	27766	
	d	12	12
Art. N.	27896	27776	
	d	12	12

SUPPORTI FISSI - FIXED CASTORS - BOCKROLLEN - ROULETTES FIXES - CONJUNTOS FIJOS

SUPPORTI GIREVOLI A FORO - SWIVEL BOLT HOLE CASTORS - RÜCKENLOCH LENKROLLEN
ROULETTES PIVOTANTES A OEIL - CONJUNTOS GIRATORIOS CON TALADRO PASADOR

Art. N.	27906HB	27786GB	
	d	12	12
Art. N.	27916HB	27796GB	
	d	12	12



DATI TECNICI - TECHNICAL DATA - TECHNISCHE DATEN - DONNÉES TECHNIQUES - DATOS TECNICOS

	H	128	128	
	AxB	102x83	102x83	
	axb	80x60	80x60	
	g	8	8	
	HB	HB=10-12	GB=10-12	
	F	37	37	
	U	40	40	
	Kg.	80	80	

Non idoneo per impiego con freno - Not suitable for use with brake - Für Feststeller-Anwendung nicht geeignet - Pas indiqué pour l'application du frein - No apto para uso con freno. / ♦ Con bussola speciale a basso attrito - With special low friction reduction bush - Mit sonder niedriger Reibungsreduktionshülse - Avec entretoise à basse friction - Con casquillo especial de basa fricción.

GENERAL INFORMATION

Designers need to take a number of different factors into account to achieve the best possible results: a wheel that fully meets the real demands of the workplace drastically reduces overall material handling costs. In order to assess whether a product satisfies the requirements it is essential to examine the following factors in detail: maximum load, floor (condition and type), rolling resistance, speed, temperature and any other working conditions.

MAXIMUM LOAD

This is the load to be carried plus the weight of the truck or trolley. In the case of a four-wheeled truck or trolley, one can only be sure that three of the wheels will be in contact with ground at any given moment, so the maximum load on each wheel is calculated by dividing the maximum total load by 3, using the following formula:

$$Q = (P_u + P_a) : n \quad \text{where: } n = \text{Minimum number of wheels always in contact with the ground}$$

P_u = useful load
 P_a = weight of truck/trolley
 Q = Maximum load on each castor (theoretical)

One also needs to take into account the possibility of uneven load distribution by adopting a safety margin that ensures that the effective load never exceeds the theoretical load even in the event of overloads. Select a wheel or castor that has the same or a higher capacity than the maximum theoretical load calculated using the formula above. The actual load capacity of the wheels with PA6 (nylon) hub will be reduced at 50% of the nominal admissible load when used at temperatures above 60°C (140°F).

FLOOR

It is preferable to choose wheels with an elastic rubber or soft polyurethane tread for floors with a rough surface (grating, porphyry, asphalt, etc.) or which are in poor condition; while wheels with a hard tread can be used on hard and compact floors (cement etc.). Relatively fragile floors (tiles, ceramic etc.) require the use of suitable rubber or polyurethane tyre wheels chosen according to the load being transported and the amount of protection required.

ROLLING RESISTANCE

The rolling resistance decreases with the increase of the hardness of the tyre and/or diameter of the wheel. The type and condition of the floor also influences the rolling resistance, with the best results being obtained on hard and compact surfaces that are in excellent condition. Smooth running can be improved still further by using wheels with ball bearings instead of the more economical solutions adopting roller or plain bearings. Manually operated trolleys should use large diameter wheels with suitable bearings to avoid excessive operator effort (especially if they have to be moved for some distance) even though it will result in higher load capacity than the maximum load calculated using the system described above.

Rolling resistance is always greater at the start: it can be as high as 60-80% greater after a long stop under load.

SPEED

The speed at which the truck or trolley moves strongly influences the wheel or castor load capacity. All the values shown in this catalogue are for a maximum speed of 4 km/h and manually propelled applications. Higher speeds will reduce the load capacity, thus making it necessary to choose wheels with a higher load capacity. If the trucks are being moved by mechanical means, it will be necessary to choose an appropriate type of fork assembly (with hardened precision bearings) and ensure that it is positioned for maximum vehicle stability as well as optimum load distribution. Choosing the appropriate swivel assembly will also avoid the shimmy problems encountered at higher speeds.

TEMPERATURE

For applications at temperatures outside the normal range (+15°C to 28°C) be sure that the chosen wheel or castor can meet the required working conditions. In the case of cold-storage rooms, for example, where the trucks/trolleys are likely to remain stationary for long periods at temperatures as low as -40°C, you will need to use specially lubricated monolithic wheels. Low temperatures can stiffen normal elastomers and damage the bonding of the tyre on the core. In the case of trucks or trolleys which need to stand in ovens for long periods at temperatures from +80°C to +270°C it is necessary to use appropriate wheels or castors suitable for this application.

ADVERSE CONDITIONS

Holes, tracks, steps, gate guides, unlevelled hoist doors and similar obstacles make it advisable to use elastic rubber or soft polyurethane tyre wheel with the largest possible diameter. Swarf, glass fragments, foundry slag and sundry residues require steel or cast iron wheels or wheels with a polyurethane coatings. If oil, grease, humidity or specific corrosive chemicals are present in the work environment, monolithic nylon or polyurethane coated nylon wheels (for greater protection of the floor and lower noise levels) should be chosen.

The information concerning the resistance of the materials to the most common chemicals have to be considered as indicative only, since the resistance to these chemicals depends from various factors such as their concentration, the temperature, the humidity, the length of contact, etc. The mixture of two or more chemicals may cause different effects from those given for the single substance. If in doubt please contact our technical department.

The information presented herein is the result of our experience and is provided purely by way of example, such that we decline all responsibility regarding the consequences of its application. Please contact our technical service concerning any special application.

The dimensions, descriptions, specifications and illustrations herein are indicative and subject to variations without notice. The fact that products are illustrated herein does not necessarily imply they are available from stock nor does it place us under any obligation to supply them. Tests carried out refer to the original products with original accessories: the replacement of one of the components with others of different manufacture might prevent the same results from being achieved and will automatically invalidate any guarantee.

See also RECOMMENDATIONS & WARNINGS at page 29.

POLIURETANO & VULKOLLAN				POLYURETHANE & VULKOLLAN	POLYURETHAN & VULKOLLAN	POLYURÉTHANE & VULKOLLAN	POLIURETANO & VULKOLLAN
POLIURETANO TERMOPLASTICO				THERMOPLASTIC POLYURETHANE	THERMOPLASTICHER POLYURETHAN	POLYURÉTHANE THERMOPLASTIQUE	POLIURETANO TERMOPLASTICO
		GOMMA	RUBBER	GUMMI	CAOUTCHOUC	GOMA	
		POLIAMMIDE	POLYAMIDE	POLYAMID	POLYAMIDE	POLIAMIDA	
		COMPATIBILITÀ CHIMICA	CHEMICAL COMPATIBILITY	CHEMISCHE BESTAENDIGKEIT	COMPATIBILITÉ CHIMIQUE	COMPATIBILIDAD QUÍMICA	
--	--	+	++	Acetato di etile	Ethyl acetate	Äthylacetat	Acetate d'ethyle
--	--	++	++	Acetone	Acetone	Acétone	Acetona
--	-	++	--	Acido acetico	Acetic acid	Essigsäure	Acide acétique
--	--	+	--	Acido acetico glaciale	Acetic acid glacial	Eisessigsäure	Acide acétique glacial
+	--	+	--	Acido cloridrico	Hydrochloric acid	Salzsäure	Acide chlorhydrique
--	--	+	--	Acido cloridrico conc.	Hydrochloric acid conc.	Salzsäure Konz.	Acide chlorhydrique conc.
--	/	--	--	Acido cromico	Chromic acid	Chromsäure	Acide chromique
+	+	+	--	Acido formico	Formic acid	Ameisensäure	Acide formique
/	-	++	--	Acido fosforico	Phosphoric acid	Phosphorsäure	Acide phosphorique
/	-	++	-	Acido lattico	Lactic acid	Milchsäure	Acide lactique
-	--	-	--	Acido nitrico	Nitric acid	Salpetersäure	Acide nitrique
-	--	-	--	Acido solforico	Sulphuric acid	Schwefelsäure	Acide sulfurique
++	++	++	++	Acqua	Water	Wasser	Eau
--	/	--	+	Acqua di cloro	Chlorine water	Chlorwasser	Eau chlorée
++	-	+	--	Acqua ossigenata	Hydrogen peroxide	Wasserstoffsuperoxyd	Eau oxygénée
--	--	--	--	Acqua regia	Aqua regia	Königswasser	Eau régale
+	+	++	++	Alcol etilico	Ethyl alcohol	Äthylalkohol	Alcool ethylique
-	--	++	++	Alcol metilico	Methyl alcohol	Methylalkohol	Alcool methylque
--	/	++	++	Aldeide formica	Formaldehyde	Formalddehyd	Formaldéhyde
--	/	+	+	Anilina	Aniline	Anilin	Aniline
+	--	--	--	Benzina	Gasoline	Benzin	Essence
--	/	--	--	Bromo	Bromine	Brom	Brome
++	+	++	++	Carbonato di sodio	Sodium carbonate	Natriumcarbonat	Carbonate de sodium
--	--	--	--	Cloro	Chlorine	Chlor	Chlore
--	--	--	+	Cloro benzene	Chlorobenzene	Chlorbenzol	Chlorebenzéne
--	--	--	--	Cloroformio	Chloroform	Chloroform	Chloroforme
--	--	--	+	Cloruro di metilene	Methylene dichloride	Methylenchlorid	Chlorure de méthylène
+	/	++	⊕	Cloruro di nichel	Nickel chloride	Nickelchlorid	Chlorure de nickel
⊕	/	+	++	Cloruro di sodio	Sodium chloride	Natriumchlorid	Chlorure de sodium
--	/	--	++	Cloruro di vinile	Vinyl chloride	Vinylchlorid	Chlorure de vinyle
--	--	--	--	Cresolo	Cresols	Kresole	Crésol
--	--	++	++	Dimetilformammide	Dimethylformamide	Dimethylformamid	Diméthylformamide
+	+	--	++	Esano	Hexane	Hexan	Hexano
/	+	/	++	Etere di petrolio	Petroleum ether	Erdöläther	Éther de pétrole
⊕	++	⊕	--	Glicole etilenico	Ethylene glycol	Äthylenglykol	Eter de petróleo
--	/	++	+	Idrossido di potassio	Potassium hydroxide	Kaliumhydroxyd	Hydroxyde de potassium
+	--	+	++	Idrossido di sodio	Sodium hydroxide	Natriumhydroxyd	Hydroxyde de sodium
--	-	++	++	Ipoclorito di sodio	Sodium hypochlorite	Natriumhypochlorit	Hypochlorite de sodium
++	++	++	++	Latte	Milk	Milch	Lait
--	--	--	++	Metiletilchetone	Methylethylketone	Methyläthylketon	Méthyle éthyle cétone
⊕	+	++	++	Nitrato di sodio	Sodium nitrate	Natriumnitrat	Nitrate de sodium
++	++	--	++	Oli minerali	Mineral oils	Mineralöle	Huiles minéral
++	/	--	++	Oli vegetali	Vegetable oils	Pflanzlicheöle	Huiles végétales
++	--	--	++	Olio di paraffina	Paraffin oil	Paraffinöl	Huile de paraffine
+	⊕	--	++	Olio diesel (nafta)	Diesel oil	Dieseöl	Huile diesel
++	/	--	--	Ozono	Ozone	Ozon	Ozone
+	/	--	++	Petrolio	Petrol	Erdöl	Pétrole
++	/	+	++	Solfato di rame	Copper sulphate	Kupfersulfat	Sulfate de cuivre
--	--	--	++	Trementina	Turpentine	Terpentin	Térénenthine
--	--	--	+	Tricloroetilene (trielina)	Trichloroethylene	Trichloräthylen	Trichloréthylène
⊕	⊕	+	+	Vapore	Steam	Dampf	Vapeur
		++	Resistente	Resistant	Beständig	Résistant	Resistente
		+	Discretamente resistente	Fairly resistant	Fair beständig	Moyennement résistant	Discretamente resistente
		⊕	Probabilmente resistente	Probably resistant	Wahrscheinlich beständig	Probablement résistant	Probabilmente resistente
		-	Discretamente attaccato	Fairly attached	Wahrscheinlich angegriffen	Moyennement attaqué	Discretamente apegato
		--	Non resistente	Not resistant	Nicht beständig	Non-résistant	No resistente
		/	Nessun dato	No data available	Keine Information	Pas de données	No datos



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