



# V. ORLANDI

S I S T E M I   D I   T R A I N O

Programma di produzione • Production programme

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Produktionsprogramm • Programme de production

Edizione **16**  
*Edition*

since 1859



**Nel programma di produzione ed. 16 troverete, rispetto all'edizione precedente, le seguenti novità:**

• Gancio automatico serie E40	"Rivisto"
• Gancio automatico serie GX57	"Rivisto"
• Gancio a sfera serie GS900	"Rivisto"
• Kits apertura meccanica CO017	"Nuovo Prodotto"
• Kits apertura meccanica CO018	"Nuovo Prodotto"
• Kits apertura pneumatica lineare CO020	"Nuovo Prodotto"
• Occhioni	"Rivisto"
• Ralle RS08	"Nuovo Prodotto"
• Ralle RS35	"Nuovo Prodotto"
• Perni e sollevatori	"Rivisto"
• Traverse serie S2000	"Rivisto"
• Traverse serie TE3000	"Rivisto"
• Traverse WPTR	"Nuovo Prodotto"
• Barre paraincastro ribaltabili WPTP	"Nuovo Prodotto"

**In the production programme ed. 16, compared with the previous edition, you will find the following news:**

• Automatic drawbar couplings series E40	"Revised"
• Automatic drawbar couplings series GX57	"Revised"
• Ball hitches series GS900	"Revised"
• Kit CO017 mechanical remote opening	"New Product"
• Kit CO018 mechanical remote opening	"New Product"
• Kit CO020 pneumatic remote opening "linear"	"New Product"
• Drawbar eyes	"Revised"
• Fifth wheels series RS08	"New Product"
• Fifth wheels series RS35	"New Product"
• Kingpins and landing gear	"Revised"
• Towbars series S2000	"Revised"
• Towbars series TE3000	"Revised"
• Towbars series WPTR	"New Product"
• Tilting rear underrun bar WPTP	"New Product"

**In dem Herstellungsprogramm ed. 16, in Vergleich zu der vorherigen Ausgabe, finden Sie die folgenden Neuheiten:**








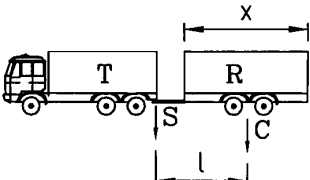
• Vollautomatische Anhängerkupplungen Serie E40	"Durchgesehen"
• Vollautomatische Anhängerkupplungen Serie GX57	"Durchgesehen"
• Kugelkupplungen Serie GS900	"Durchgesehen"
• Kits mechanische Fernbedienung CO017	"Neues Produkt"
• Kits mechanische Fernbedienung CO018	"Neues Produkt"
• Kits pneumatischer Fernbedienung "linear" CO020	"Neues Produkt"
• Zugösen	"Durchgesehen"
• Sattelkupplungen Serie RS08	"Neues Produkt"
• Sattelkupplungen Serie RS35	"Neues Produkt"
• Zugsattelzapfen und Stützvorrichtungen	"Durchgesehen"
• Anhängerböcke Serie S2000	"Durchgesehen"
• Anhängerböcke Serie TE3000	"Durchgesehen"
• Anhängerböcke Serie WPTR	"Neues Produkt"
• Unterfahrschutz klappbar Serie WPTP	"Neues Produkt"

**Dans le programme de production ed. 16, vous trouverez, par rapport à l'édition précédente, les nouveautés suivantes:**

• Crochets d'attelage automatiques série E40	"Revu"
• Crochets d'attelage automatiques série GX57	"Revu"
• Rotules série GS900	"Revu"
• Kits dispositif d'ouverture à distance mécanique CO017	"Nouveau Produit"
• Kits dispositif d'ouverture à distance mécanique CO018	"Nouveau Produit"
• Kits dispositif d'ouverture à distance pneumatique "linear" CO020	"Nouveau Produit"
• Anneaux d'attelage	"Revu"
• Sellettes d'attelage série RS08	"Nouveau Produit"
• Sellettes d'attelage série RS35	"Nouveau Produit"
• Pivots d'attelage et béquilles télescopiques	"Revu"
• Traverses série S2000	"Revu"
• Traverses série TE3000	"Revu"
• Traverses série WPTR	"Nouveau Produit"
• Système anti-encastrement arrière réversible série WPTP	"Nouveau Produit"

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# Ganci di Traino Drawbar couplings - Anhängekupplungen - Crochets d'attelage

## GANCI A PERNO - PIN DRAWBAR COUPLINGS - ANHÄNGEKUPPLUNGEN - CROCHETS D'ATTELAGE




serie series Serie série	omologazione homologation Genehmigung omologation	descrizione description Beschreibung description	per occhioni for drawbar eyes für Zugösen pour anneaux			pagina page Seite page
 <b>E 40</b>	94/20/CE	Ganci di traino automatici rigidi Automatic drawbar couplings Vollautomatische Anhängekupplungen Crochets d'attelage automatiques rigides	Ø 40 mm	✓	✓	6
 <b>EH 45</b>	94/20/CE	Ganci di traino automatici campana snodata Automatic drawbar couplings Vollautomatische Anhängekupplungen mit Vertikalgelenk Crochets d'attelage automatiques	Ø 45 mm	✓		8
 <b>NUOVO LUPO</b>	CUNA NC 138 - 55	Ganci di traino manuali campana snodata Manual drawbar couplings Vollautomatische Anhängekupplungen Crochets d'attelage manuels	Ø 45 mm	✓		10
 <b>E 50</b>	94/20/CE	Ganci di traino automatici rigidi Automatic drawbar couplings Vollautomatische Anhängekupplungen Crochets d'attelage automatiques rigides	Ø 50 mm	✓	✓	12
 <b>EH 50</b>	94/20/CE	Ganci di traino automatici campana snodata Automatic drawbar couplings Vollautomatische Anhängekupplungen mit Vertikalgelenk Crochets d'attelage automatiques	Ø 50 mm	✓		14
 <b>MCX 50</b>	94/20/CE	Ganci di traino automatici modulari Automatic modular drawbar couplings Vollautomatische Modul Anhängekupplungen Crochets d'attelage automatiques modulaires	Ø 50 mm	✓		16
 <b>GX 57</b>	94/20/CE	Ganci di traino automatici rigidi Automatic drawbar couplings Vollautomatische Anhängekupplungen Crochets d'attelage automatiques rigides	Ø 57,5 mm	✓	✓	18
 <b>GA 25</b>	94/20/CE	Ganci di traino automatici per veicoli leggeri Automatic couplings Vollautomatische Anhängekupplungen Crochets d'attelage automatiques pour véhicules légers	Ø 40 mm Ø 35 T Ø 45 T swiss	✓	✓	20
 <b>GA 38</b>	94/20/CE	Ganci di traino automatici per veicoli leggeri Automatic couplings Vollautomatische Anhängekupplungen Crochets d'attelage automatiques pour véhicules légers	Ø 40 mm	✓	✓	22

# Ganci di Traino Drawbar couplings - Anhängekupplungen - Crochets d'attelage




## GANCI A SFERA - BALL HITCHES - KUPPLUNGSKUGELN - ROTULES

serie series Serie serie	omologazione homologation Genehmigung omologation	descrizione description Beschreibung description	per occhioni for drawbar eyes für Zugösen pour anneaux			pagina page Seite page
<b>DE 700-701</b> 	94/20/CE	Ganci a sfera ISO50 per veicoli leggeri Ball hitches ISO50 for light vehicles Kugelkopfkupplungen Rotules fixes	B 50 Ø 76 T	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	24
<b>DE 702</b> 	94/20/CE	Ganci a sfera ISO50 per veicoli leggeri Ball hitches ISO50 for light vehicles Kugelkopfkupplungen Rotules fixes	B 50 Ø 50 mm Ø 40 mm Ø 76 T	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	24
<b>DE 703</b> 	94/20/CE	Ganci a sfera ISO50 per veicoli leggeri Ball hitches ISO50 for light vehicles Kugelkopfkupplungen Rotules fixes	B 50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	25
<b>DEDALO</b> 	94/20/CE	Ganci a sfera ISO50 per veicoli leggeri Ball hitches ISO50 for light vehicles Kugelkopfkupplungen Rotules fixes	B 50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	25

## GANCI AD UNCINO - PINTLE HOOKS - HAKENKUPPLUNGEN - CROCHETS FIXES

<b>UN 76</b> 	ECE R55	Ganci ad uncino Hook couplings Hakenkupplungen Crochets d'attelage	Ø 76 T	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	26
<b>UN 45</b> 	94/20/CE	Ganci ad uncino per veicoli leggeri Hook couplings for light vehicles Hakenkupplungen Crochets fixes	Ø 45 T Ø 76 T	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	28
<b>ULPYO</b> 	CUNA NC 138 - 40	Ganci ad uncino per veicoli leggeri Hook couplings for light vehicles Hakenkupplungen Crochets fixes	Ø 45 T Ø 76 T	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	29

## GANCI SPECIALI - SPECIAL DRAWBAR COUPLINGS - SPEZIALANHÄNGEKUPPLUNGEN - CROCHETS SPÉCIAUX

<b>GS 900</b> 	94/20/CE	Gancio trasporto vetture Car transporter drawbar coupling Autotransporterkupplung Crochet d'attelage pour transport véhicules			<input checked="" type="checkbox"/>	30
<b>TITANO</b> 	CUNA NC 138 - 40	Ganci per traini eccezionali Drawbar couplings for heavy duty Schwerlastanhängekupplung Crochets d'attelage pour transport lourd	Ø 50 mm	<input checked="" type="checkbox"/>		32
<b>GM 10</b> 		Ganci di manovra Towing couplings Abschleppkupplung Attelages de dépannage	Ø 50 mm Ø 40 mm Ø 7 6 T	<input checked="" type="checkbox"/>		33



# E 40

Ganci automatici  
Automatic couplings  
Vollautomatische  
Anhängerkupplungen  
Crochets automatiques

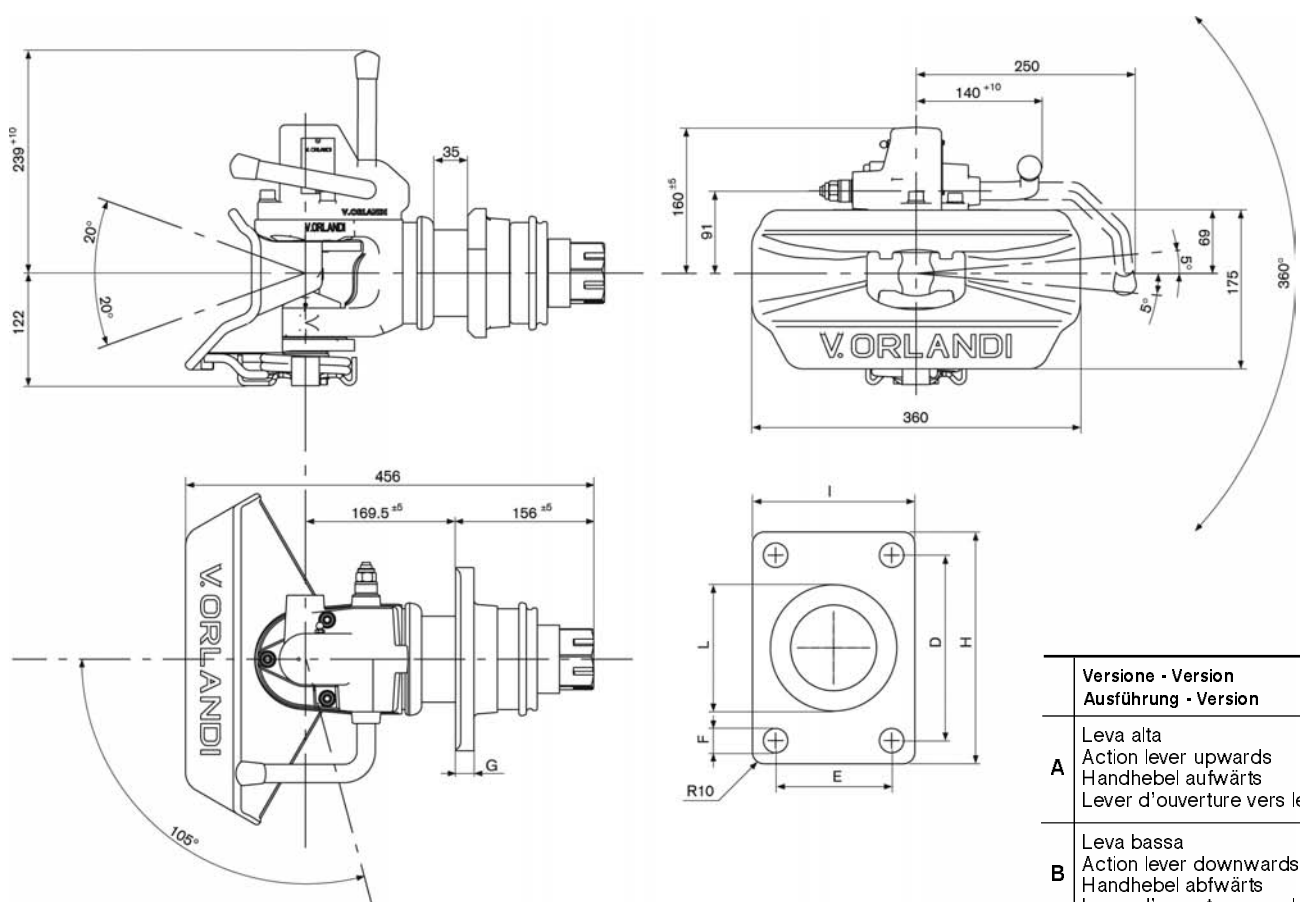
Per occhielli - For drawbar eyes  
Für Zugösen - Pour anneaux

Ø  
**40**

DIN 74054

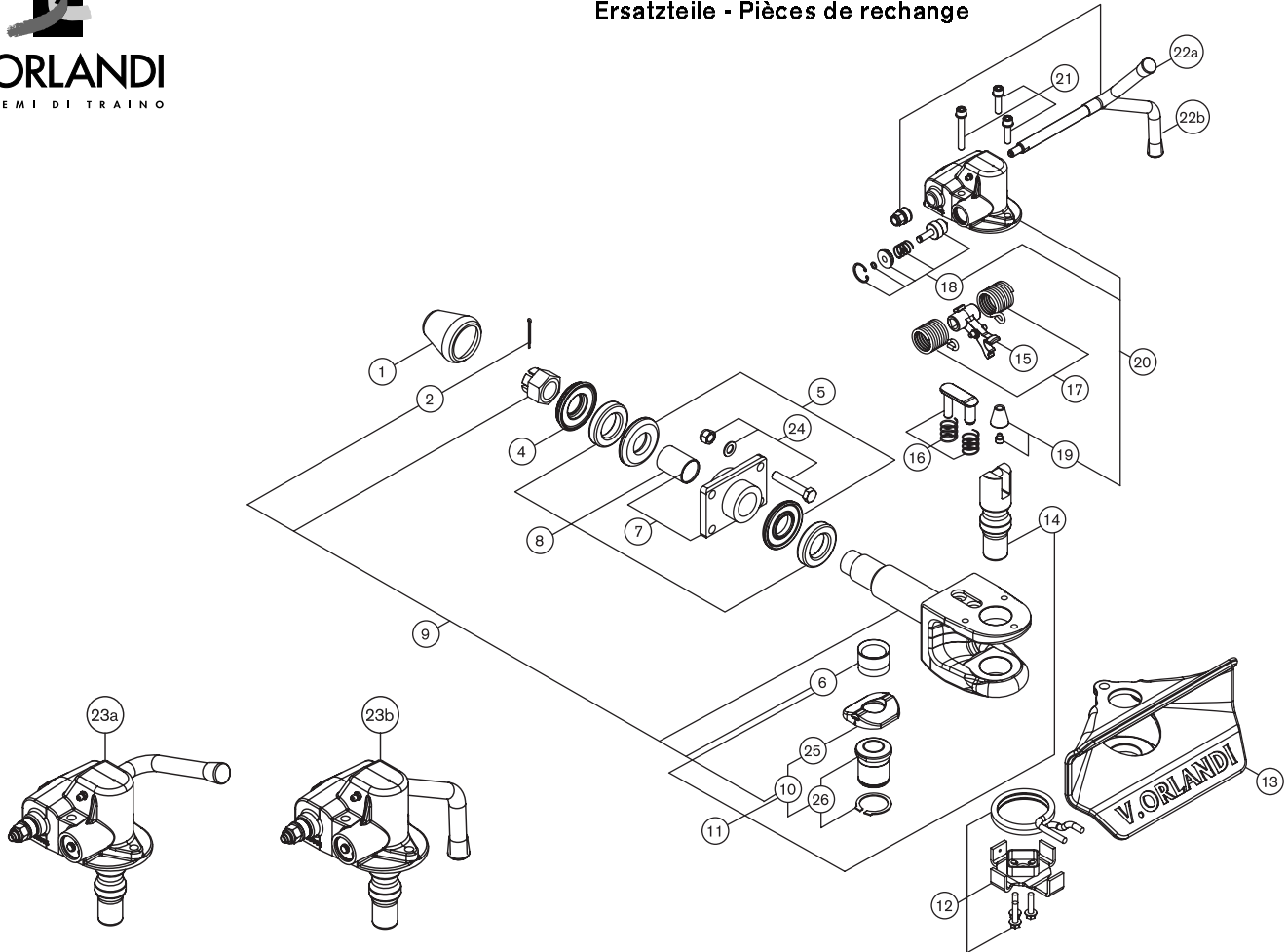
## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Massa S S-Load S-Last Masse S kg	Valore V V-Value V-Wert Valeur V kN	Peso Weight Gewicht Poids kg	94 / 20 / CE	
								Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
E 403	GE403A0 GE403B0	120x55	70	70	700	28	34	S	e11 00-4224
E 404	GE404A0 GE404B0	140x80	110	92	1000	38	35.5	S	e11 00-4228
E 405	GE405A0 GE405B0	160x100	130	95	1000	38	37.5	S	e11 00-5339
E 406	GE406A0 GE406B0	160x100	150	100	1000	42	37.5	S	e11 00-4227



Versione - Version Ausführung - Version	
<b>A</b>	Leva alta Action lever upwards Handhebel aufwärts Lever d'ouverture vers le haut
<b>B</b>	Leva bassa Action lever downwards Handhebel abwärts Lever d'ouverture vers le bas

Tipo - Type Typ - Type	D (mm)	E (mm)	F (mm)	H (mm)	I (mm)	L (mm)
E403	120	55	15	155	90	73.90
E404	140	80	17	180	120	83.90
E405	160	100	21	200	140	93.90
E406	160	100	21	200	140	93.90



POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type			
		E 403	E 404	E 405	E 406
1	RG00034				
2	RG00064				
4		RG00076	RG00175	RG00175	RG00175
5a		RG00216	RG00189	RG00189	RG00189
5b		RG00216	RG00189	RG00189	RG00189
6	RG00149				
7		RG00182	RG00195	RG00192	RG00192
8		RG00217	RG00183	RG00183	RG00183
9	RG00301				
10	RG00302				
11	RG00303				
12	RG00180				
13	RG00304				
14	RG00305				
15	RG00306				
16	RG00307				
17	RG00308				
18	RG00309				
19	RG00310				
20	RG00311				
20s	RG00355				
21	RG00312				
22A	RG00186				
22b	RG00187				
23A	RG00313				
23As	RG00353				
23B	RG00314				
23Bs	RG00354				
24		RG00130	RG00131	RG00132	RG00132
25	RG00315				
26	RG00316				

s: predisposizione al segnalatore di apertura/chiusura - predisposition to open/close remote indicator  
Geelgnet für den Einbau einer Fernanzeige - Able pour l'indicateur à distance d'ouverture du crochet



# EH 45

Ganci automatici  
Automatic couplings  
Vollautomatische  
Anhängerkupplungen  
Crochets automatiques

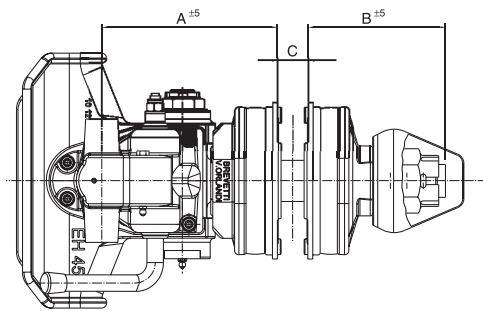
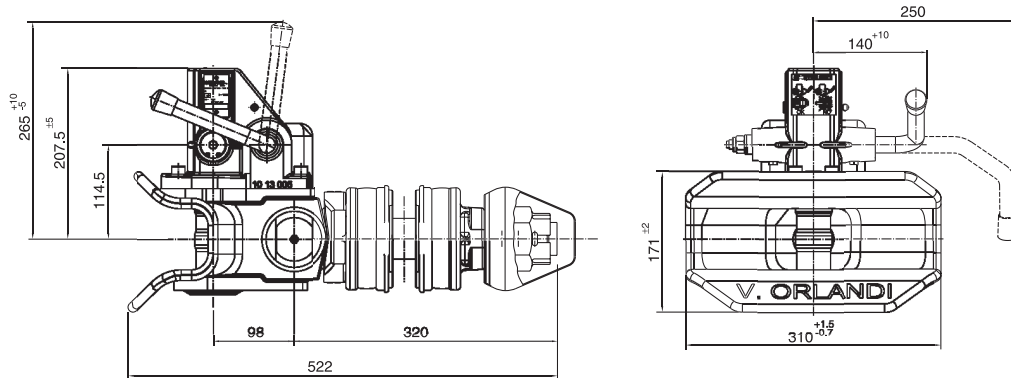
Per occhielli - For drawbar eyes  
Für Zugösen - Pour anneaux

Ø  
**45**

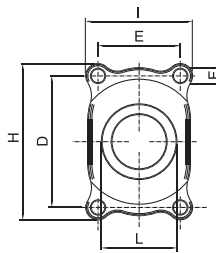
CUNA 438 - 55

## Dati tecnici - Technical data - Technische Daten - Données techniques

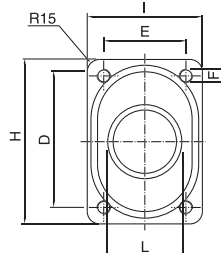
Tipo Type Typ	Versioni Versions Ausführungen	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Peso Weight Gewicht Poids kg	94 / 20 / CE	
					Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
EH 453	EH453A0 EH453B0	120x55	130	36.5	S	e3 00-1557
EH 452	EH452A0 EH452B0	140x80	200	38.5	S	e3 00-1556
EH 451	EH451A0 EH451B0	160x100	200	38.5	S	e3 00-1555
EH 461	EH461A0 EH461B0	160x100	200	41.5		



EH451-EH452-EH453



EH461

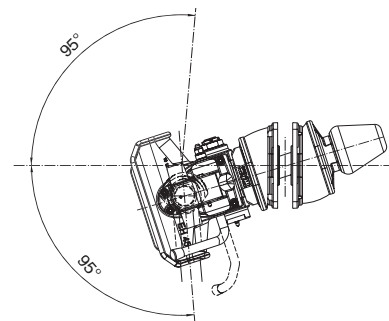
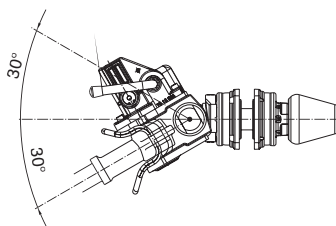
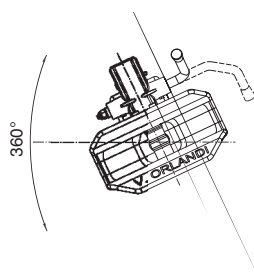


Tipo - Type Typ - Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	H (mm)	I (mm)	L (mm)
EH 453	210	170	35	120	55	∅14	164	118	∅74
EH 452	212	168	35	140	80	∅19	190	130	∅84
EH 451	212	168	35	160	100	∅19	190	130	∅92
EH 461	215	165	35	160	100	M16	200	140	∅93

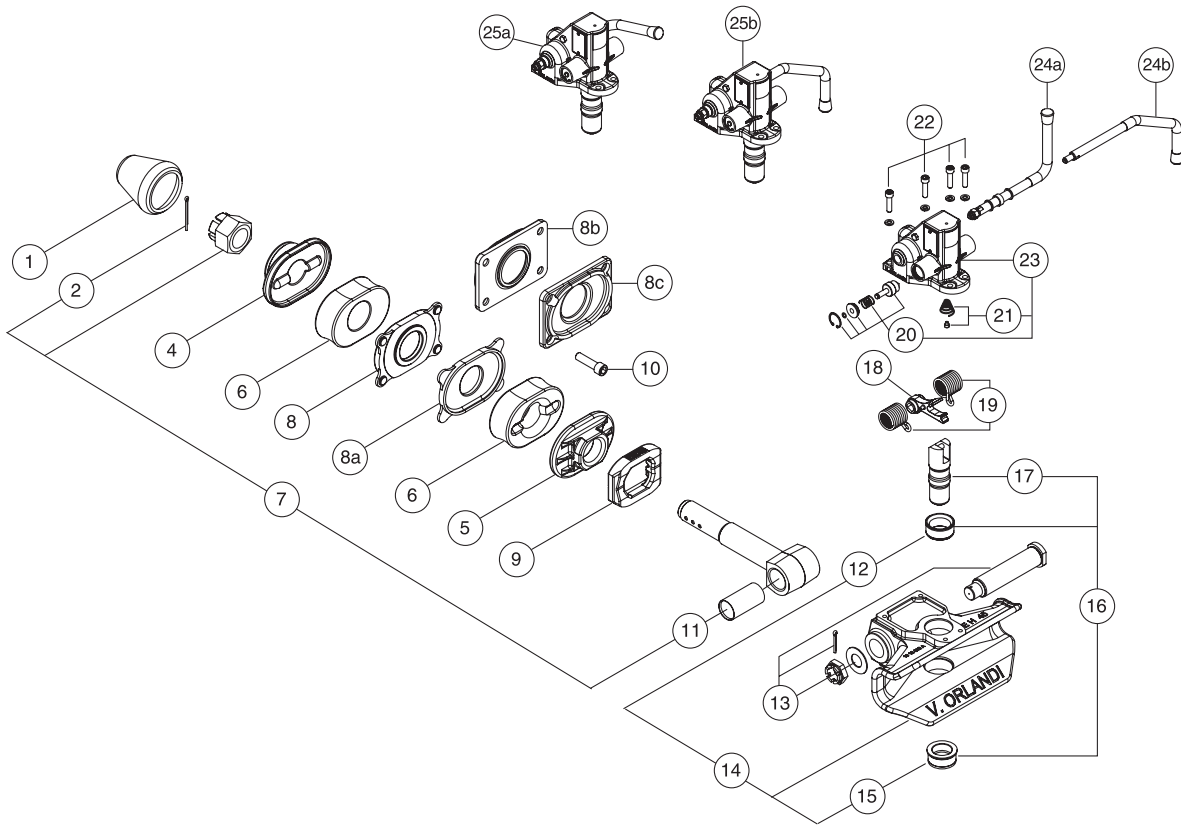
Dimensioni A/B: quote del gancio montato su veicolo  
Dimensions A/B: dimensions of the coupling installed to the vehicle  
Dimensionen A/B: Dimensionen der Kupplung im Fahrzeug  
Dimensions A/B: dimensions du crochet monté sur le véhicule

### Versione - Version Ausführung - Version

- A** Leva alta  
Action lever upwards  
Handhebel aufwärts  
Lever d'ouverture vers le haut
- B** Leva bassa  
Action lever downwards  
Handhebel abwärts  
Lever d'ouverture vers le bas







POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type			
		EH 451	EH 452	EH 453	EH 461
1	RG00034				
2	RG00064				
4		RG00297	RG00297	RG00027	RG00297
5		RG00296	RG00296	RG00028	RG00296
6		RG00241	RG00241	RG00037	RG00241
7	RG00233				
8/8a		RG00030	RG00029	RG00031	
8b					RG00135
8c					RG00134
9	RG00038				
10					RG00209
11	RG00004				
12	RG00293				
13	RG00002				
14	RG00292				
15	RG00294				
16	RG00290				
17	RG00289				
18	RG00291				
19	RG00178				
20	RG00181				
21	RG00091				
22	RG00185				
23	RG00285				
24a	RG00186				
24b	RG00187				
25a	RG00286				
25b	RG00287				



# NUOVO LUPO

Ganci manuali  
Manual couplings  
Manuelle Anhängerkupplungen  
Crochets manuels

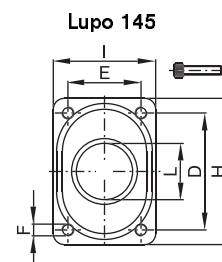
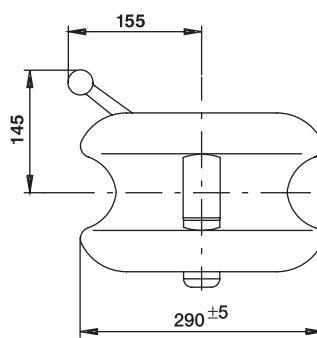
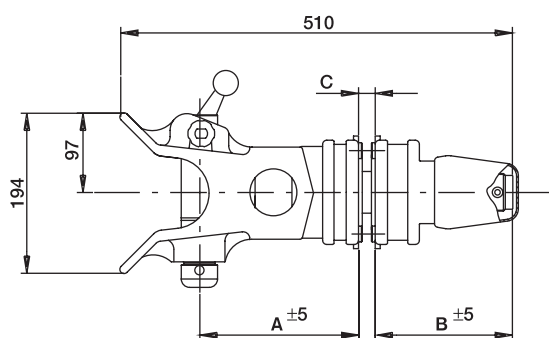
Per occhielli - For drawbar eyes  
Für Zugösen - Pour anneaux

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**45**

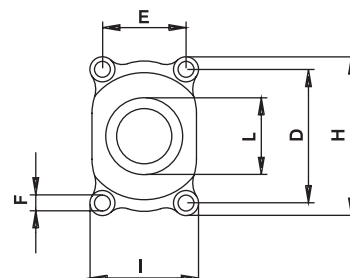
CUNA 438 - 55

## Dati tecnici - Technical data - Technische Daten - Données techniques

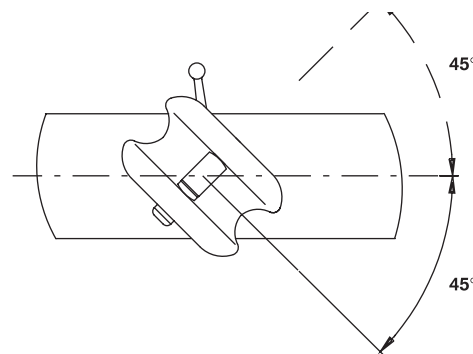
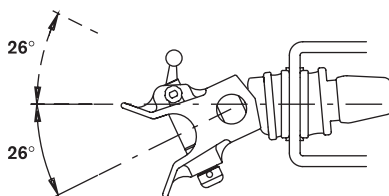
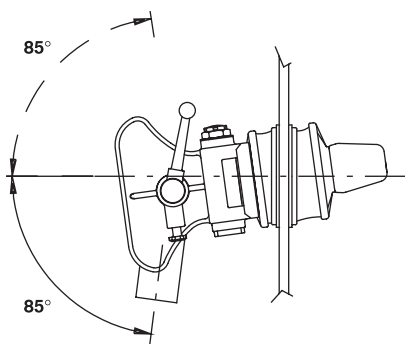
Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Flangia Hole pattern Lochbild Entr'axe mm	Peso rimorchiabile Total trailer weight Anhängelast Poids total de charge t	Peso Weight Gewicht Poids kg	CUNA NC 138-55	
					CAT.	DGM
LUPETTO/3	LU113A0	120x55	16	29	IV	47794
LUPETTO/2	LU112A0	140x80	16	30	IV	47793
LUPO/2	LU102A0	140x80	26	33	V	47105
LUPO/1	LU101A0	160x100	26±42	33	V	47106
LUPO/145	LU145A0	160x100	26±42	34	V	51870



Lupo 145

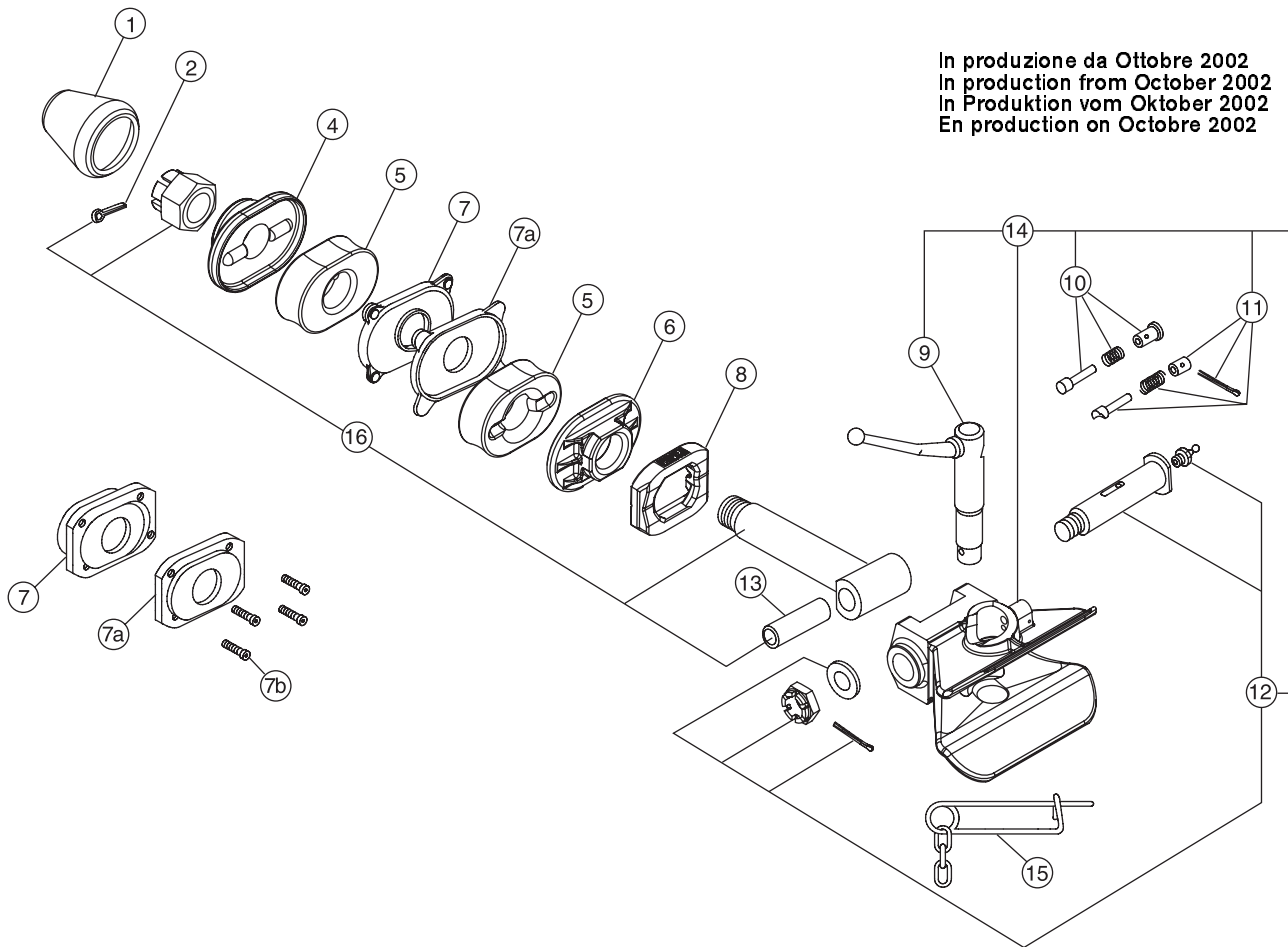


Lupo 1-2 / Lupetto 2-3



Tipo - Type Typ - Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	H (mm)	I (mm)	L (mm)
LUPETTO/3	206	174	35	120	55	14	164	118	74
LUPETTO/2	210	170	35	140	80	15	180	125	84
LUPO/2	210	170	35	140	80	15	180	125	84
LUPO/1	210	170	35	160	100	19	190	130	92
LUPO/145	210	170	35	160	100	M16	200	140	92

In produzione da Ottobre 2002  
In production from October 2002  
In Produktion vom Oktober 2002  
En production on Octobre 2002



POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type				
		LUPO 1	LUPO 2	LUPETTO 2	LUPO T45	LUPETTO 3
1	RG00034					
2	RG00064					
4		RG00297	RG00297	RG00297	RG00297	RG00027
5		RG00241	RG00241	RG00241	RG00241	RG00037
6		RG00296	RG00296	RG00296	RG00296	RG00028
7		RG00030	RG00029	RG00029	RG00135	RG00031
7a		RG00030	RG00029	RG00029	RG00134	RG00031
7b					RG00209	
8	RG00038					
9	RG00048					
10	RG00074					
11	RG00093					
12	RG00002					
13	RG00004					
14		RG00300	RG00318	RG00319	RG00320	RG00321
15	RG00052					
16	RG00233					

1990 183 A



# E 50

Ganci automatici  
Automatic couplings  
Vollautomatische Anhängerkupplungen  
Crochets automatiques

Per occhielli - For drawbar eyes  
Für Zugösen - Pour anneaux

**50**

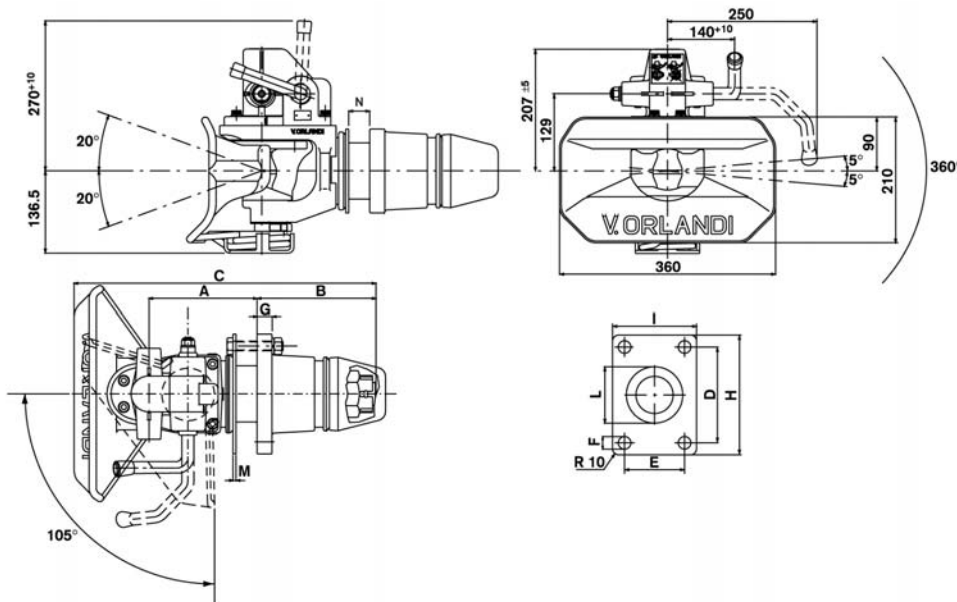
94 / 20 / CE

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Massa S S-Load S-Last Masse S kg	Valore V V-Value V-Wert Valeur V kN	Peso Weight Gewicht Poids kg	94 / 20 / CE	
								Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
E 503	GE503A0 GE503B0	120x55	70	50	650	18	34	C50-3	e11 00-0308
E 504	GE504A0 GE504B0	140x80	100	70	900	25	35.5	C50-4	e11 00-0310
E 505	GE505A0 GE505B0	160x100	130	83	1000	29	37.5	C50-X	e11 00-0309
E 506	GE506A0 GE506B0	160x100	190	120	1000	50	43.5	C50-6	e11 00-0311
E 509	GE509A0 GE509B0	160x100	200	135	1000	75	47.5	C50-X	e11 00-1046
					2500	50			
E 510	GE510A0 GE510B0	160x100	280	140	1000	90	49	C50-X	e11 00-4638

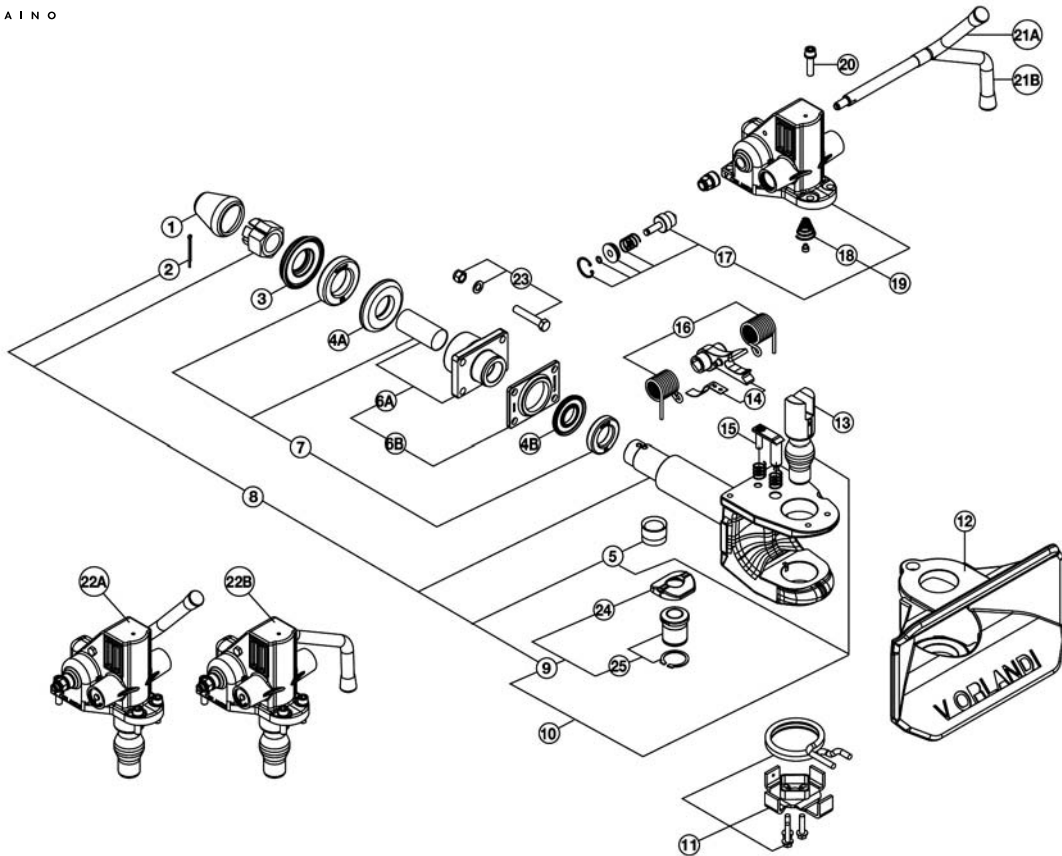
### Versione - Version - Ausführung - Version

A	Leva alta - Action lever upwards - Handhebel aufwärts - Levier d'ouverture vers le haut
B	Leva bassa - Action lever downwards - Handhebel abwärts - Levier d'ouverture vers le bas

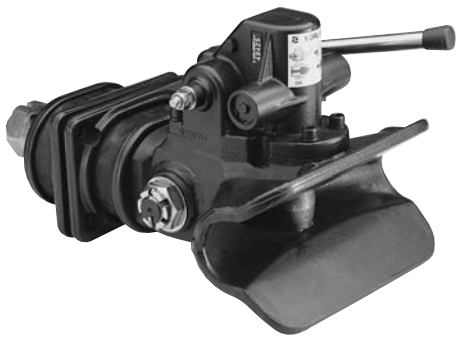


Tipo - Type Typ - Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	L (mm)	M (mm)	N (mm)
E503	182	156	463	120	55	15	20	155	90	73.9		35
E504	182	156	463	140	80	17	20	180	120	83.9		35
E505	182	156	463	160	100	21	20	200	140	93.9		35
E506	182	205	512	160	100	21	25	200	140	93.9	5	35
E509	196	191	512	160	100	21	25	200	140	93.9	20	35
E510	182	205	512	160	100	21	25	200	140	93.9	12	30

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POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type					
		E 503	E 504	E 505	E 506	E 509	E 510
1	RG00034						
2	RG00064						
3		RG00076	RG00175	RG00175	RG00175	RG00175	RG00175
4A		RG00216	RG00189	RG00189			
4B		RG00216	RG00189	RG00189	RG00173	RG00173	RG00173
5	RG00088						
6A		RG00182	RG00195	RG00192			RG00372
6B					RG00174	RG00222	RG00373
7		RG00217	RG00183	RG00183	RG00184	RG00184	RG00374
8		RG00196	RG00196	RG00196	RG00197	RG00197	RG00197
9M	RG00267						
9P	RG00268						
10	RG00199						
11	RG00180						
12		RG00194	RG00194	RG00194	RG00193	RG00193	RG00193
13	RG00190						
14	RG00188						
15	RG00179						
16	RG00178						
17	RG00181						
18	RG00091						
19	RG00191						
20	RG00185						
21A	RG00186						
21B	RG00187						
22A	RG00176						
22B	RG00177						
23		RG00130	RG00131	RG00132	RG00132	RG00132	RG00132
24M	RG00269						
24P	RG00270						
25	RG00271						



# EH 50

Ganci automatici  
Automatic couplings  
Vollautomatische  
Anhängerkupplungen  
Crochets automatiques

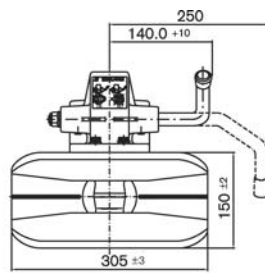
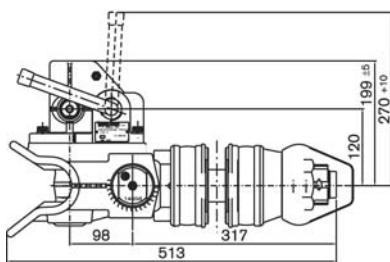
Per occhioli - For drawbar eyes  
Für Zugösen - Pour anneaux

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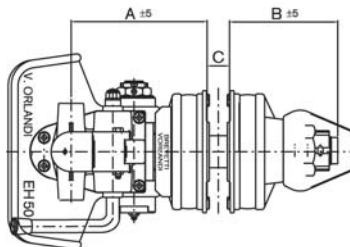
94 / 20 / CE

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Versioni Versions Ausführungen Versions	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Peso Weight Gewicht Poids kg	94 / 20 / CE	
					Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
EH 503	EH 503A0 EH 503B0	120x55	130	37	C50-X	e3 00-0395
EH 502	EH 502A0 EH 502B0	140x80	220	39	C50-X	e3 00-0394
EH 501	EH 501A0 EH 501B0	160x100	220	39	C50-X	e3 00-0393
EH 531	EH 531A0 EH 531B0	160x100	220	41		

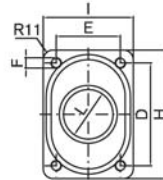
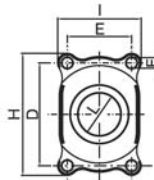


Dimensioni A/B: quote del gancio montato (su veicolo)  
Dimensions A/B: dimensions of the coupling installed to the vehicle  
Dimensionen A/B: Dimensionen der Kupplung im Fahrzeug  
Dimensions A/B: dimensions du crochet monté sur le véhicule



EH 501-EH 502-EH 503

EH 531

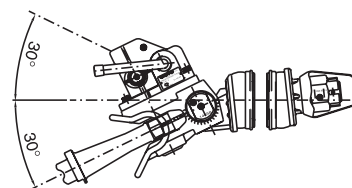
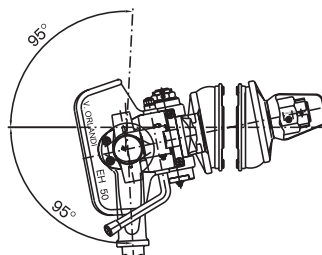
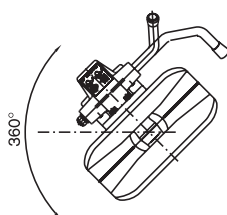


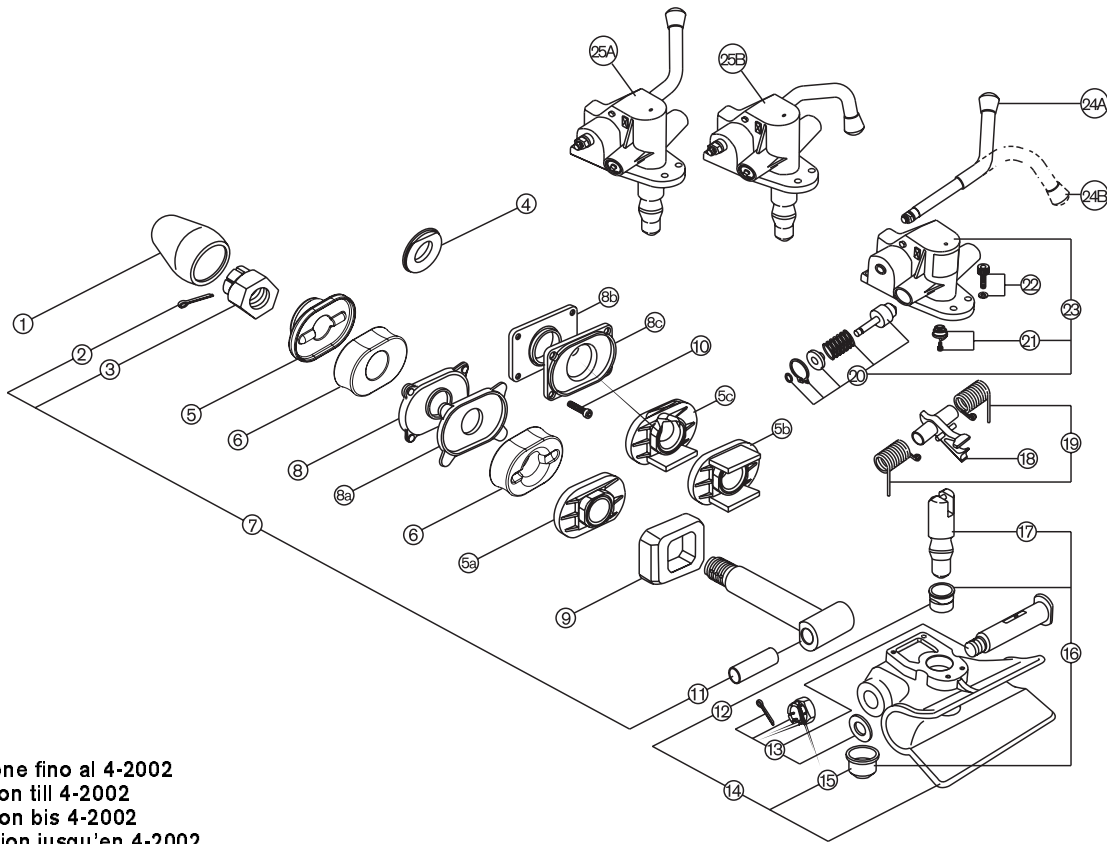
Versione - Version  
Ausführung - Version

**A** Leva alta  
Action lever upwards  
Handhebel aufwärts  
Lever d'ouverture vers le haut

**B** Leva bassa  
Action lever downwards  
Handhebel abwärts  
Lever d'ouverture vers le bas

Tipo - Type Typ - Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	H (mm)	I (mm)	L (mm)
EH 503	210	170	35	120	55	Ø14	164	118	Ø74
EH 502	212	168	35	140	80	Ø19	190	130	Ø84
EH 501	212	168	35	160	100	Ø19	190	130	Ø92
EH 531	215	165	35	160	100	M16	200	140	Ø93





\*In produzione fino al 4-2002  
\*In production till 4-2002  
\*In Produktion bis 4-2002  
\*En production jusqu'en 4-2002

POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type					
		EH 501	EH 531	EH 502	EH 503	EH 501/511* 521*/531*/502*	EH 503*
1	RG00034						
2	RG00064						
3	RG00172						
4						RG00237	RG00237
5		RG00297	RG00297	RG00297	RG00027	RG00042	RG00028
5a		RG00296	RG00296	RG00296	RG00028	RG00042	RG00028
5b						RG00239	
5c						RG00238	
6		RG00241	RG00241	RG00241	RG00037	RG00036	RG00037
7	RG00233						
8/8a		RG00030		RG00029	RG00031		
8b			RG00135			RG00135	
8c			RG00134			RG00134	
9		RG00038	RG00038	RG00038	RG00038		
10			RG00209			RG00209	
11	RG00004						
12	RG00088						
13	RG00002						
14	RG00235						
15	RG00236						
16	RG00232						
17	RG00231						
18	RG00298						RG00188
19	RG00178						
20	RG00181						
21	RG00091						
22	RG00185						
23	RG00191						
24A	RG00186						
24B	RG00187						
25A	RG00229						
25B	RG00230						

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# MCX 50

Ganci automatici  
Automatic couplings  
Vollautomatische  
Anhängerkupplungen  
Crochets automatiques

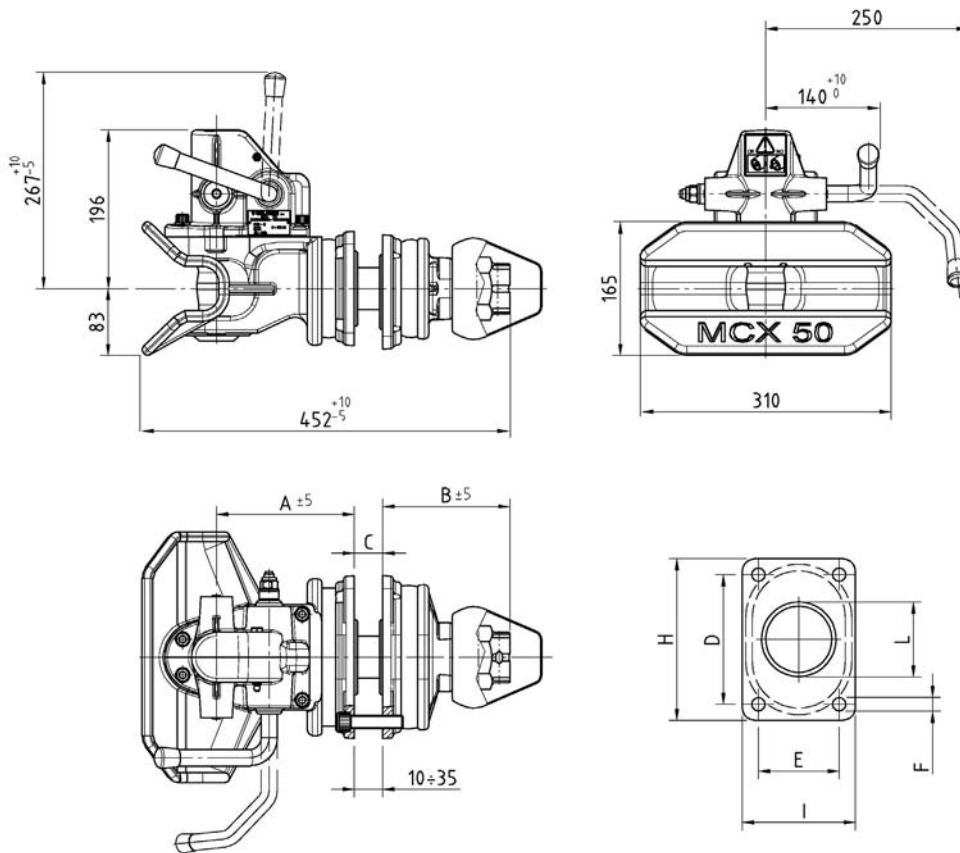
Per occhioli - For drawbar eyes  
Für Zugösen - Pour anneaux

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94 / 20 / CE

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Versioni Versions Ausführungen Versions	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Peso Weight Gewicht Poids kg	94 / 20 / CE	
					Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
MC 511	MC 511A0 MC 511B0	160x100	250	36	C50-X	e3 00-0458



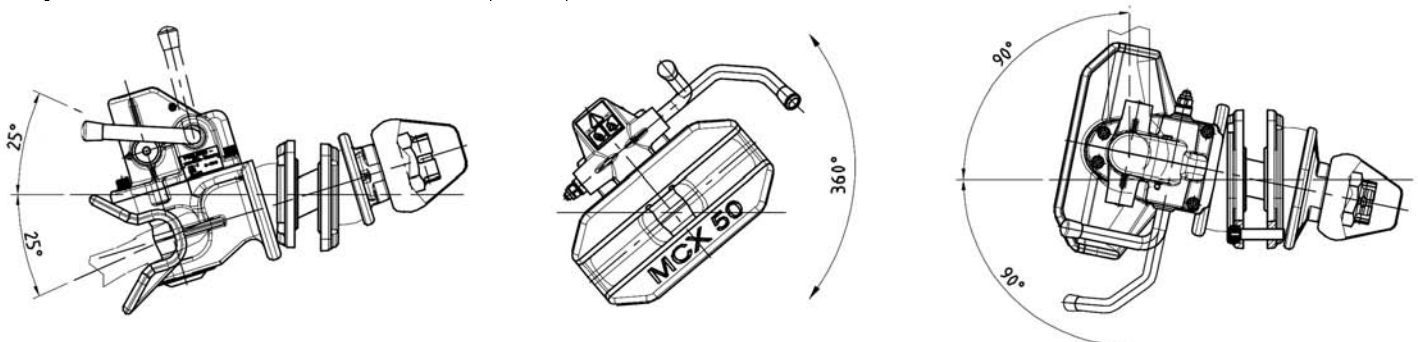
### Versione - Version Ausführung - Version

<b>A</b>	Leva alta Action lever upwards Handhebel aufwärts Lever d'ouverture vers le haut
<b>B</b>	Leva bassa Action lever downwards Handhebel abwärts Lever d'ouverture vers le bas

Dimensioni A/B: quote del gancio montato su veicolo - Dimensions A/B: dimensions of the coupling installed to the vehicle  
Dimensionen A/B: Dimensionen der Kupplung im Fahrzeug - Dimensions A/B: dimensions du crochet monté sur le véhicule

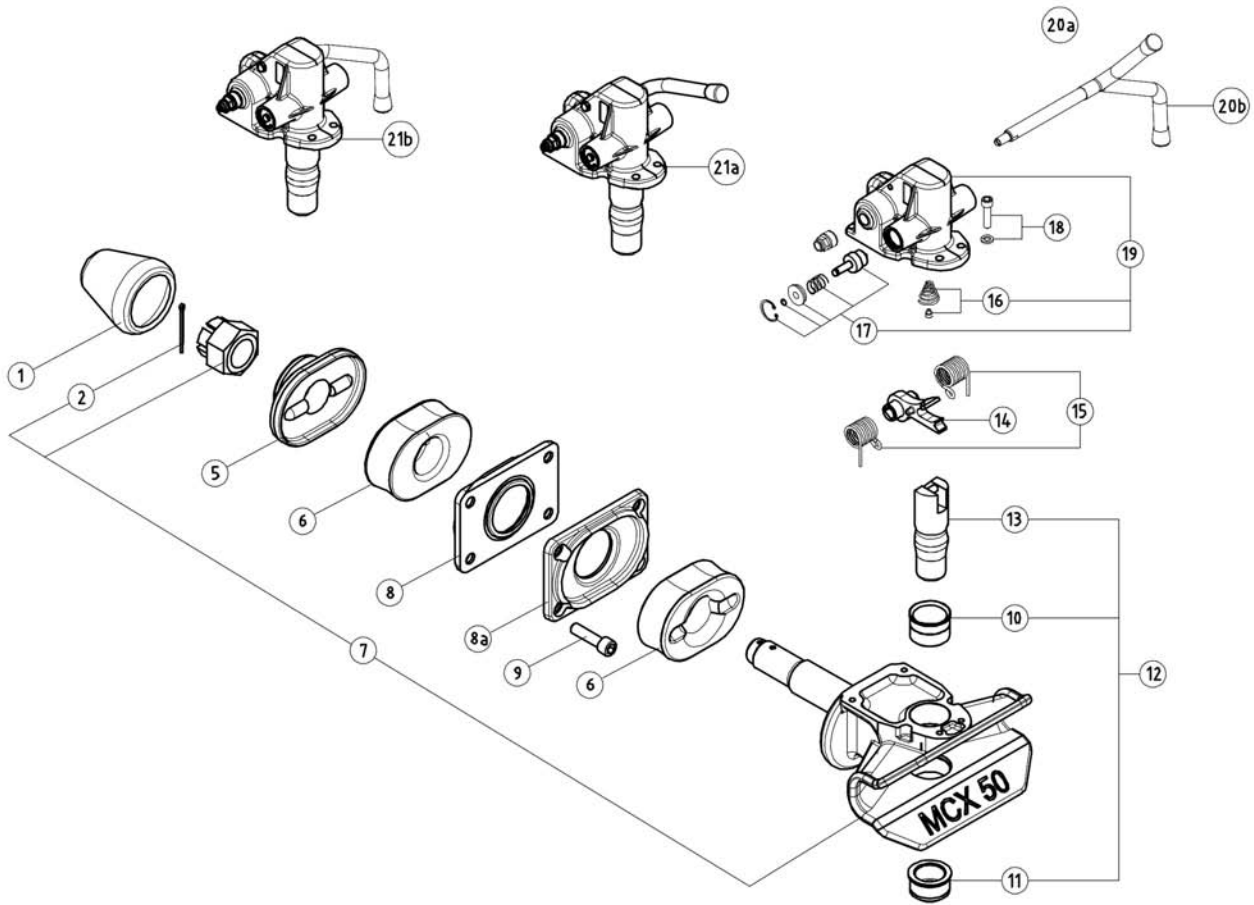
Tipo - Type Typ - Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	H (mm)	I (mm)	L (mm)
MC 511	171	158	35	160	100	∅M16	200	140	∅93

Rotazioni possibili per il modello MCX 50 - Possible turning angles for the model MCX 50  
Mögliche Schwenkwinkel des Modells MCX 50 - Les rotations possibles pour le modèle MCX 50

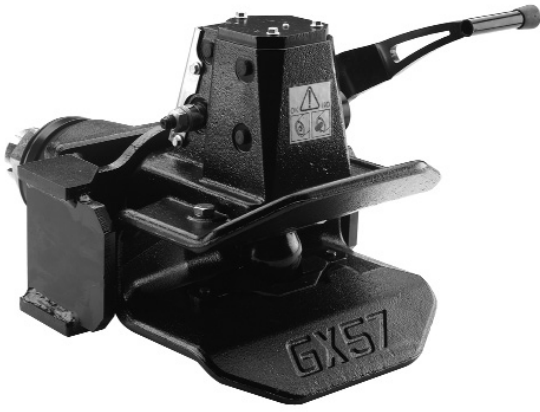


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POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type		
		MC 501 / MC 511		
1	RG00034			
2	RG00064			
5	RG00297			
6	RG00241			
7	RG00242			
8		RG00135		
8a		RG00134		
9	RG00209			
10	RG00088			
11	RG00236			
12	RG00232			
13	RG00231			
14	RG00298			
15	RG00178			
16	RG00091			
17	RG00181			
18	RG00185			
19	RG00191			
20a	RG00186			
20b	RG00187			
21a	RG00229			
21b	RG00230			



# GX 57

Ganci automatici  
Automatic couplings  
Vollautomatische Anhängerkupplungen  
Crochets automatiques

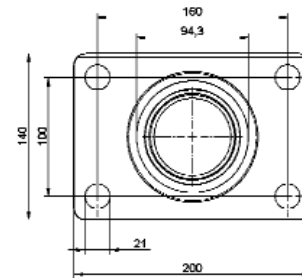
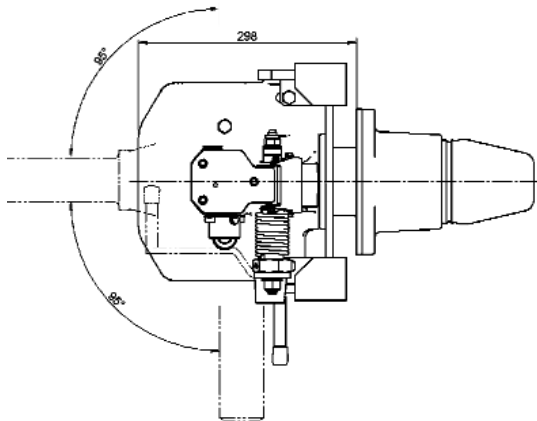
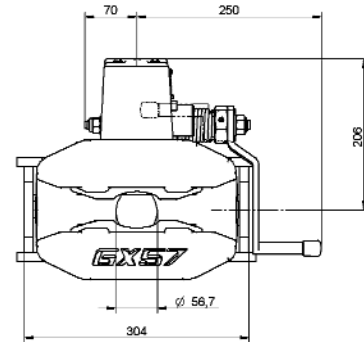
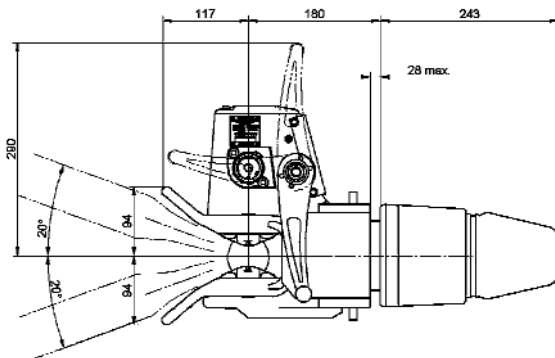
Per occhielli - For drawbar eyes  
Für Zugösen - Pour anneaux

**57,5**

SWEDISH STD

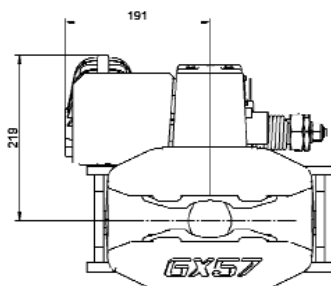
## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Versioni Versions Ausführungen Versions	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Massa S S-Load S-Last Masse S kg	Valore V V-Value V-Wert Valeur V kg	Peso Weight Gewicht Poids kg	94 / 20 / CE	
								Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
GX571	GX571A0	160x100	290	145	1000	95	52	S	e11 00-5177

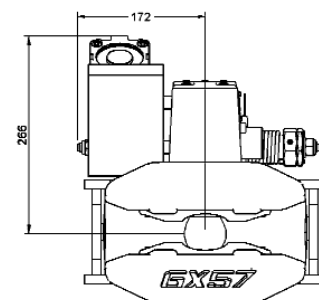


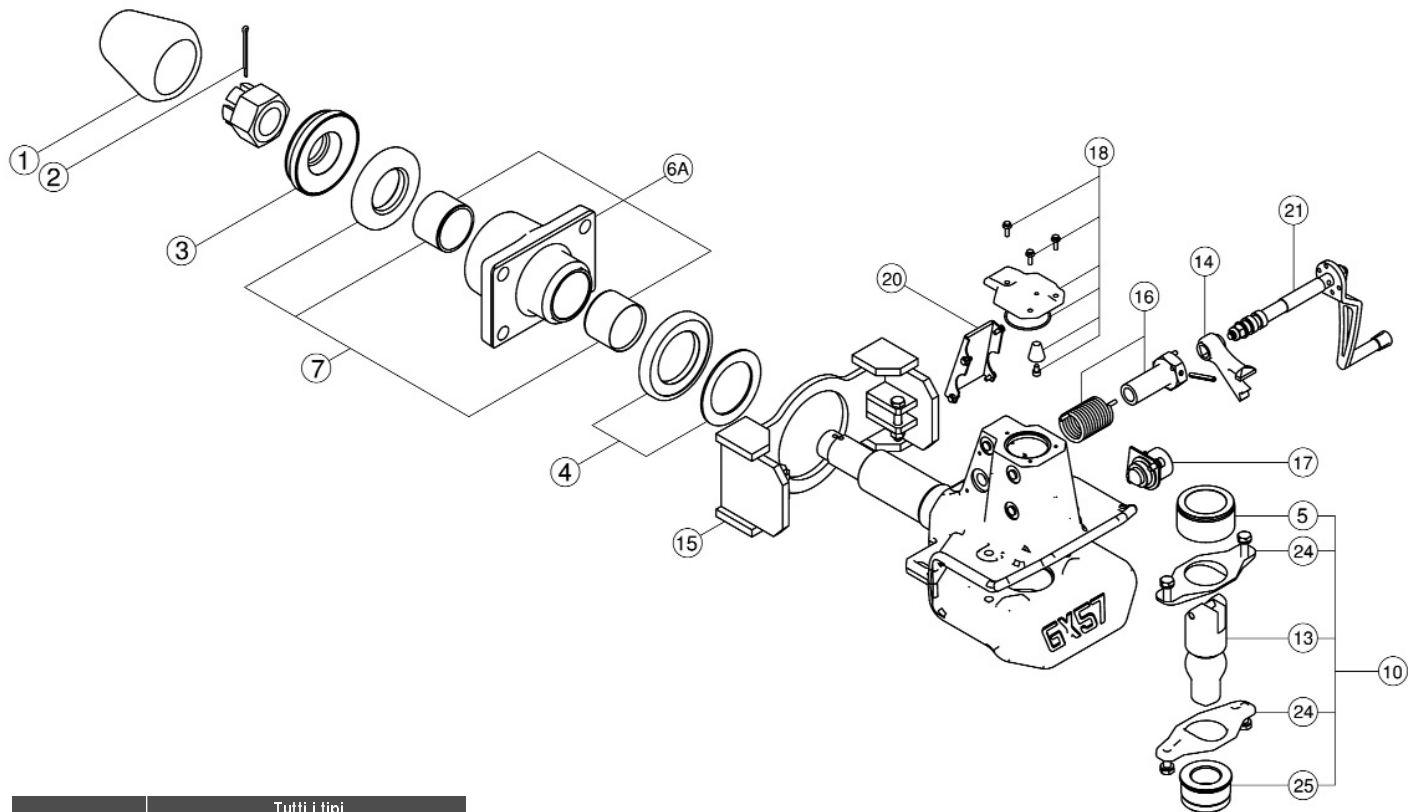
## Versioni - Versions - Ausführungen - Versions

**A7**



**A9**





POS.	Tutti i tipi All types Alle Typen Tous les types
1	RG00034
2	RG00064
3	RG00421
4	RG00443
5	RG00371
6a	RG00444
7	RG00445
10	RG00377
13	RG00378
14	RG00379
15	RG00380
16	RG00381
17	RG00382
18	RG00383
20	RG00384
21	RG00385
24	RG00386
25	RG00387



# GA 25

Ganci automatici  
Automatic couplings  
Vollautomatische  
Anhängerkupplungen  
Crochets automatiques

Per occhioni - For drawbar eyes  
Für Zugösen - Pour anneaux

DIN 8454

DIN 74054

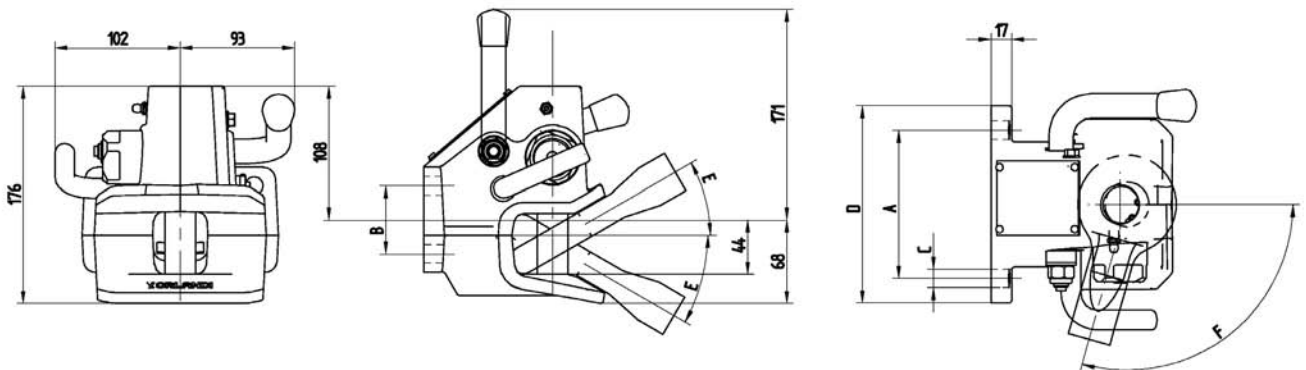
CUNA 438 - 40

SWISS

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	A mm	B mm	C mm	D mm	E				F			
					DIN8454 Drawbar eye (°)	DIN74054 Drawbar eye (°)	CUNA 438-40 Drawbar eye (°)	SWISS Drawbar eye (°)	DIN8454 Drawbar eye (°)	DIN74054 Drawbar eye (°)	CUNA 438-40 Drawbar eye (°)	SWISS Drawbar eye (°)
GA250	120	55	15	160	+/-30	+/-22	+/-20	+/-10	105	95	100	100
GA251	130	30	14	155	+/-30	+/-22	+/-20	+/-10	105	95	100	100
GA252	120	55	15	160	+/-30	+/-22	+/-20	+/-10	105	95	100	100
GA253	130	30	14	155	+/-30	+/-22	+/-20	+/-10	105	95	100	100

Tipo Type Typ Type	Versioni Versions Ausführungen Versions	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Massa S S-Load S-Last Masse S kg	Peso Weight Gewicht Poids kg	94 / 20 / CE	
							Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
GA250	GA250A0	120x55	42	30	250	7,5	S	e3 00-3007
GA251	GA251A0	130x30	42	30	250	7	S	e3 00-3008



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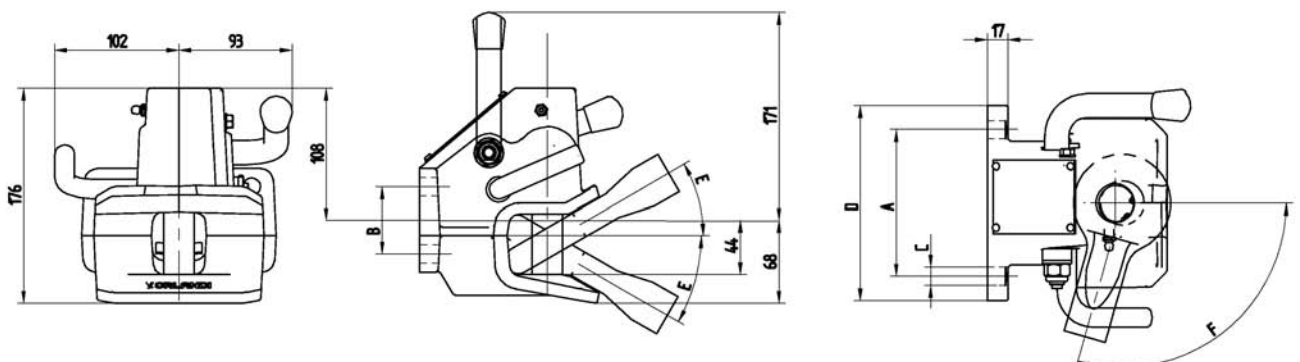
Tipo Type Typ Type	Versioni Versions Ausführungen Versions	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Massa S S-Load S-Last Masse S kg	Peso Weight Gewicht Poids kg	94 / 20 / CE	
							Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
GA252	GA252A0	120x55	42			7	S	e3 00-3007
GA253	GA253A0	130x30	42			6,5	S	e3 00-3008

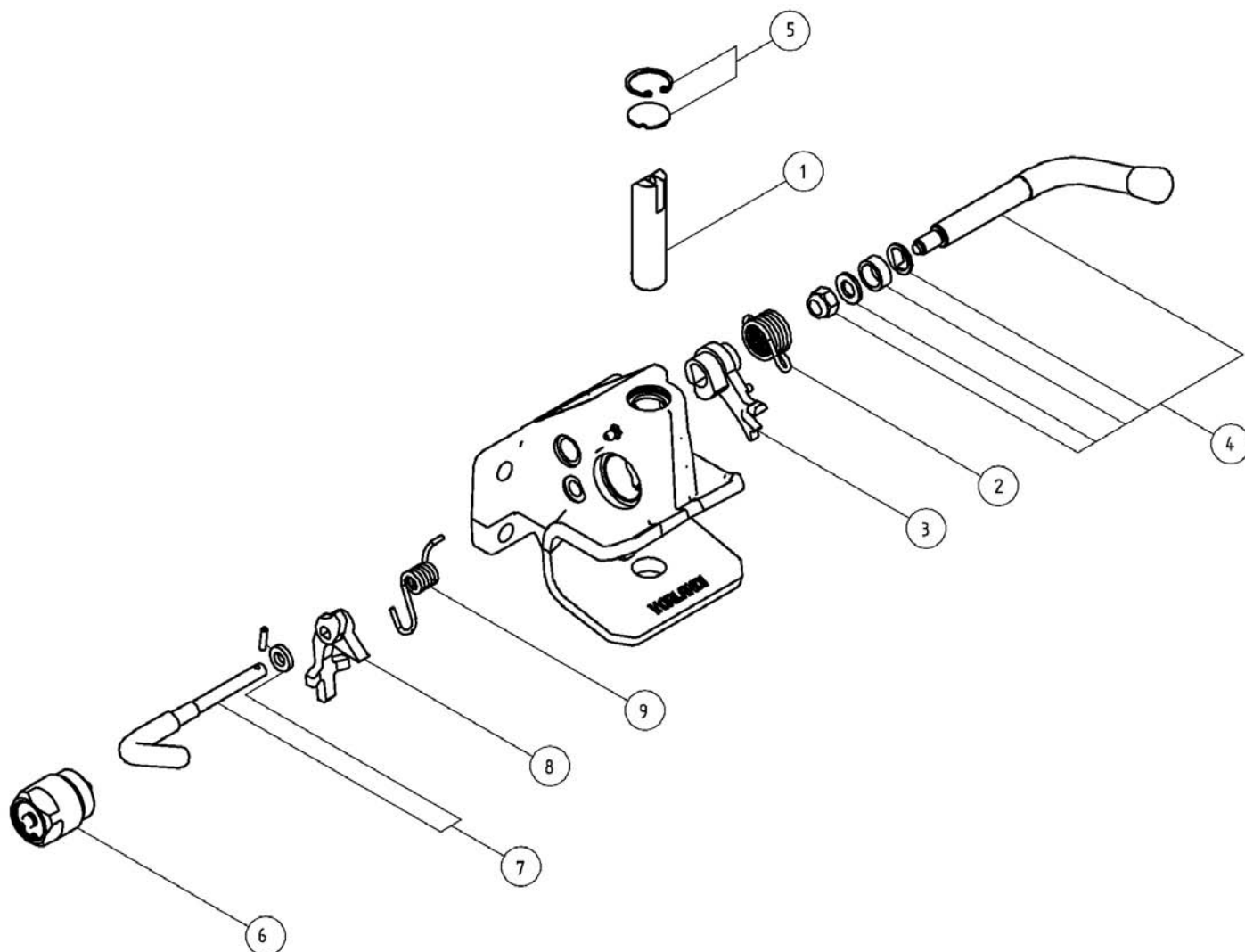
I modelli GA252 e GA253 non sono adatti per impiego su strada pubblica

The models GA252 and GA253 cannot be used on public roads

Die Modelle GA252 und GA253 sind nicht einsetzbar auf öffentlichen Straßen

Les modèles GA252 et GA253 ne sont pas aptes au service sur la route publique





POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type			
		GA 250	GA 251	GA 252	GA 253
1	RG00399				
2	RG00389				
3	RG00390				
4	RG00391				
5		RG00405	RG00405	RG00392	RG00392
6		RG00382	RG00382		
7	RG00393				
8	RG00394				
9	RG00395				



# GA 38

Ganci automatici  
Automatic couplings  
Automatische  
Anhängerkupplungen  
Crochets automatiques

Per occhioni - For drawbar eyes  
Für Zugösen - Pour anneaux

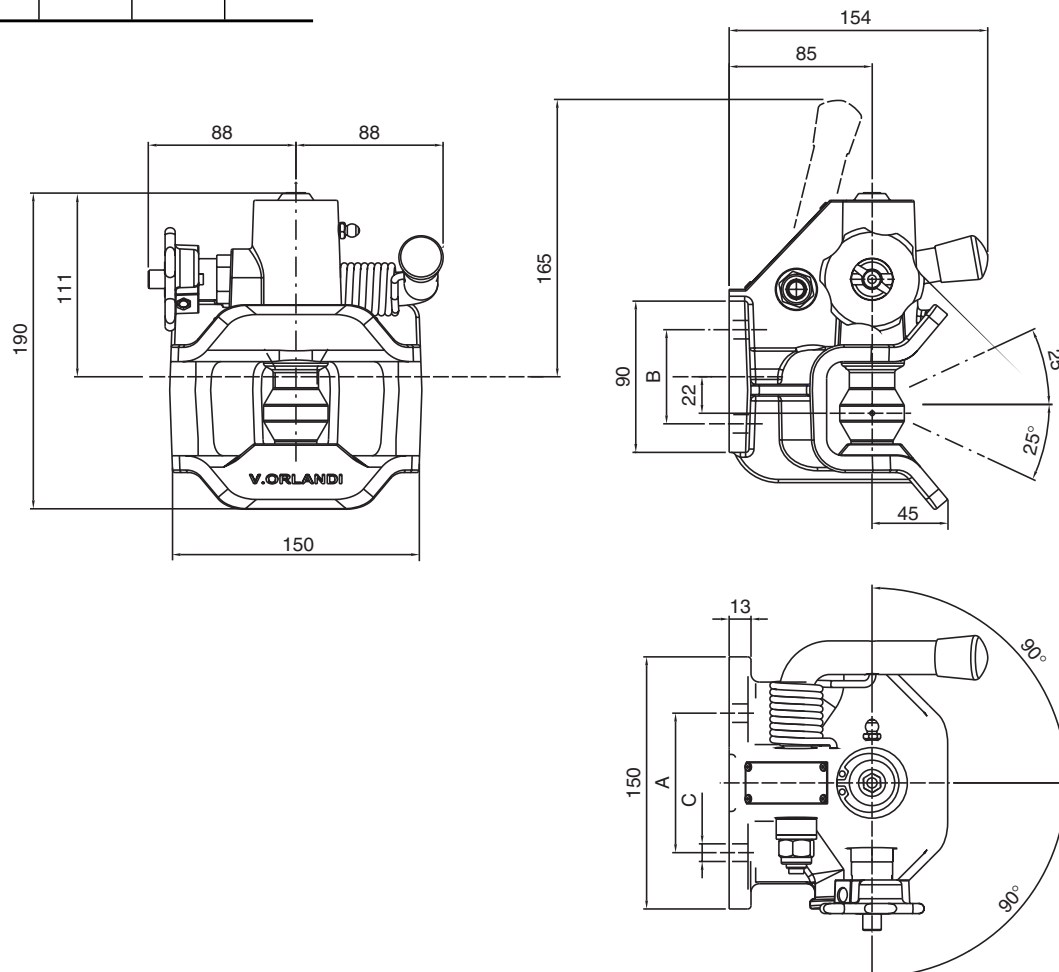
Ø  
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DIN 74054

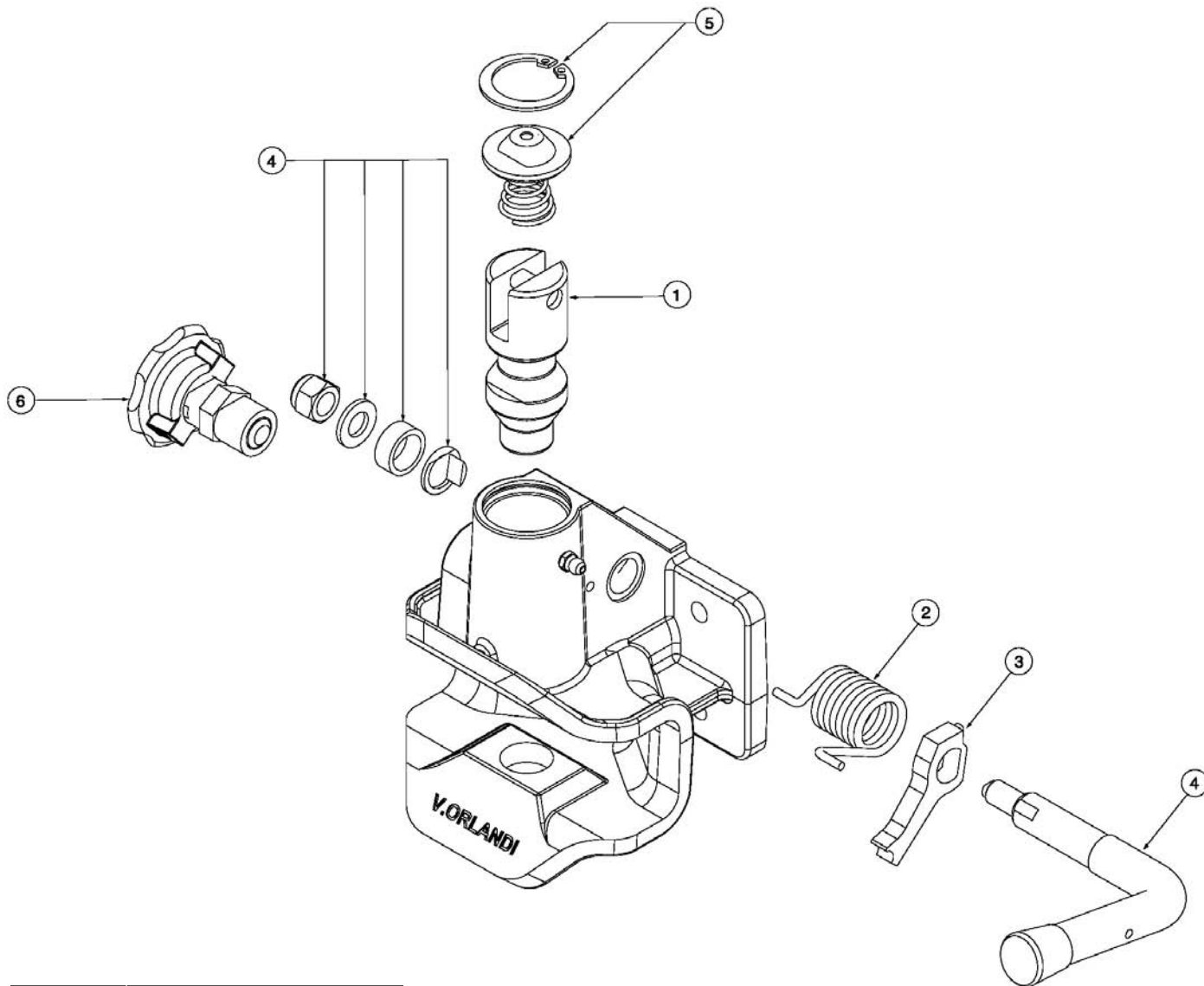
## Dati tecnici - Technical data - Technische Daten - Données techniques

Codice Article number Artikelnummer Numéro d'ordre	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Massa S S-Load S-Last Masse S kg	Valore V V-Value V-Wert Valeur V kN	Peso Weight Gewicht Poids kg	94 / 20 / CE	
							Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
GA380A0	120x55	30	30	350	18	5.8	S	e11 00-3282
GA382A0	83x56	30	30	350	18	5.8	S	e11 00-3281
GA383A0	83x56	22.5	-	250	-	5.8	S	e11 00-1613

Tipo Type Typ Type	A (mm)	B (mm)	C (mm)
<b>GA380</b>	120	55	15
<b>GA382</b>	83	56	10.5
<b>GA383</b>	83	56	10.5



1990 144 B



POS.	Codice Article number Artikelnummer Numéro d'ordre
1	RG00254
2	RG00255
3	RG00256
4	RG00257
5	RG00258
6	RG00335



# DE00700-701

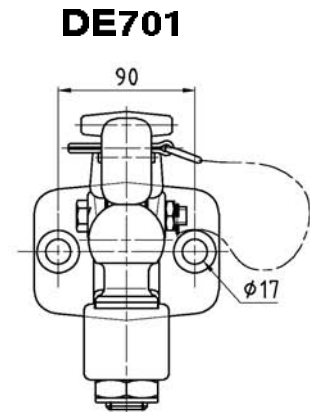
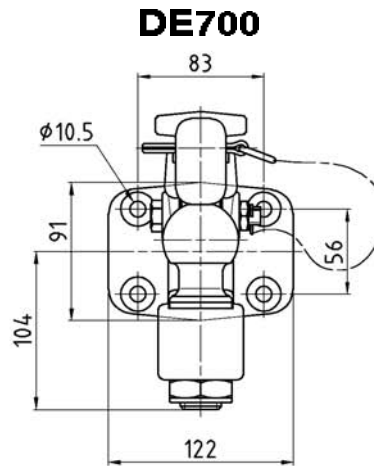
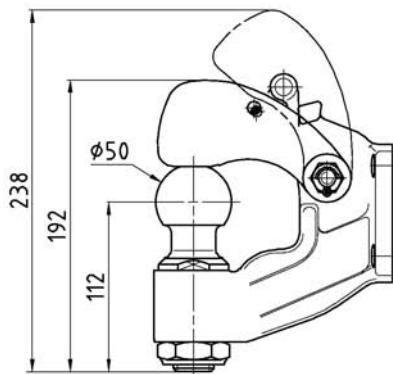
Ganci a sfera  
Ball hitches  
Kupplungskugeln  
Rotules

Per occhioni - For drawbar eyes  
Für Zugösen - Pour anneaux

**B 50** 94 / 20 / CE  
**ø 76 T** ECE - R55

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Versioni Versions Ausführungen Versions	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Massa S S-Load S-Last Masse S kg	Peso Weight Gewicht Poids kg	94 / 20 / CE	
							Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
DE700	DE00700	83x56	31	31	340	5,5	S	e2 00 03043
DE701	DE00701	90	31	31	340	5,5	S	e2 00 03043



1990 228 A



# DE00702

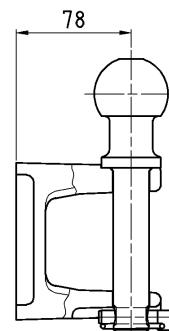
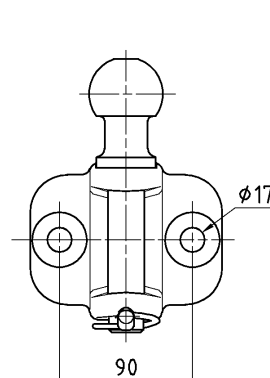
Ganci a sfera  
Ball hitches  
Kupplungskugeln  
Rotules

Per occhioni - For drawbar eyes  
Für Zugösen - Pour anneaux

**B 50, ø 50** 94 / 20 / CE  
**ø 40** DIN 74054  
**ø 76 T** ECE - R55

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Versioni Versions Ausführungen Versions	Flangia Hole pattern Lochbild Entr'axe mm	Valore D/Dc sulla sfera D/Dc-Value on the ball D/Dc-Wert auf der Kugel Valeur D/Dc sur la rotule kN	Valore D/Dc sul gancio Dc-Value on the coupling Dc-Wert auf der Kupplung Valeur D/Dc sur le crochet kN	Massa S S-Load S-Last Masse S kg	Peso Weight Gewicht Poids kg	94 / 20 / CE	
							Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
DE702	DE00702	90	10,3	17,2	120	3,1	S	e2 00 03040







# DE00703

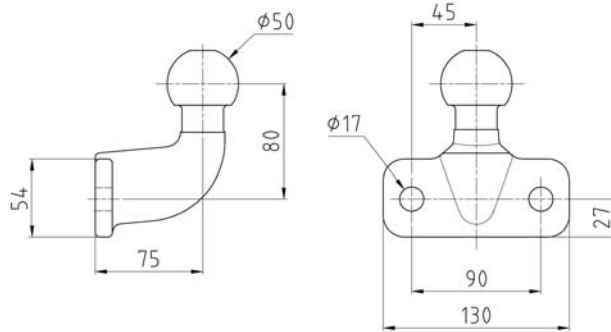
Ganci a sfera  
Ball hitches  
Kupplungskugeln  
Rotules

Per occhioni - For drawbar eyes  
Für Zugösen - Pour anneaux

**B 50** 94 / 20 / CE

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Versioni Versions Ausführungen Versions	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Massa S S-Load S-Last Masse S kg	Peso Weight Gewicht Poids kg	94 / 20 / CE	
							Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
DE703	DE00703	90	17	17	120	2	A50-X	e2 00 03041



# DEDALO

Ganci a sfera  
Ball hitches  
Kupplungskugeln  
Rotules

Per occhioni - For drawbar eyes  
Für Zugösen - Pour anneaux

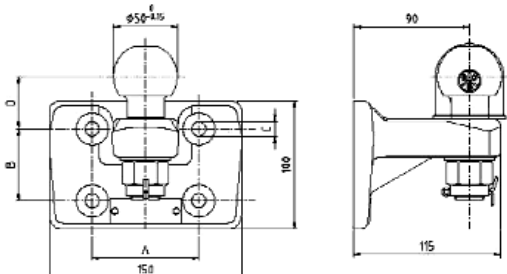
**B 50** 94 / 20 / CE

## Dati tecnici - Technical data - Technische Daten - Données techniques

Codice Article number Artikelnummer Numéro d'ordre	Flangia Hole pattern Lochbild Entr'axe mm	Peso rimorchiabile Total trailer weight Anhängelast Poids total de charge t	Carico statico Static load Statische Stützlast Chargé statique kg	Valore D D-Value D-Wert Valeur D kN	Peso Weight Gewicht Poids kg	Omologazione - Homologation Genehmigung - Homologation		
						ABG	CAT.	DMG
DE00100	83x56	3.5	120	21.5	3.5	M 4745	II	48279
DE00200	100x60	3.5	200		3.5		II	48279
DE00300	120x55	3.5	200		3.5		II	48279
DE00400	85x45	3.5	200		3.5		II	48279

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Flangia Hole pattern Lochbild Entr'axe mm	Peso rimorchiabile Total trailer weight Anhängelast Poids total de charge t	Carico statico Static load Statische Stützlast Chargé statique kg	Valore D D-Value D-Wert Valeur D kN	Peso Weight Gewicht Poids kg	Omologazione - Homologation Genehmigung - Homologation	
							94/20/CE	
GS 500	DE00500	83x56	3.5	250	22.5	3.5	e11 00 - 0533	
GS 501	DE00600	120x55	3.5	330	28	3.5	e3 00 - 1541	

Tipo - Type Typ - Type	A (mm)	B (mm)	C (mm)	D (mm)
DE00100	83	56	11	41
DE00200	100	60	15	39
DE00300	120	55	15	41,5
DE00400	85	45	15	46,5
GS 500	83	56	11	41
GS 501	120	55	15	41,5





# UN 76

Ganci ad uncino  
Pintle hooks  
Hakenkupplungen  
Crochets d'attelage

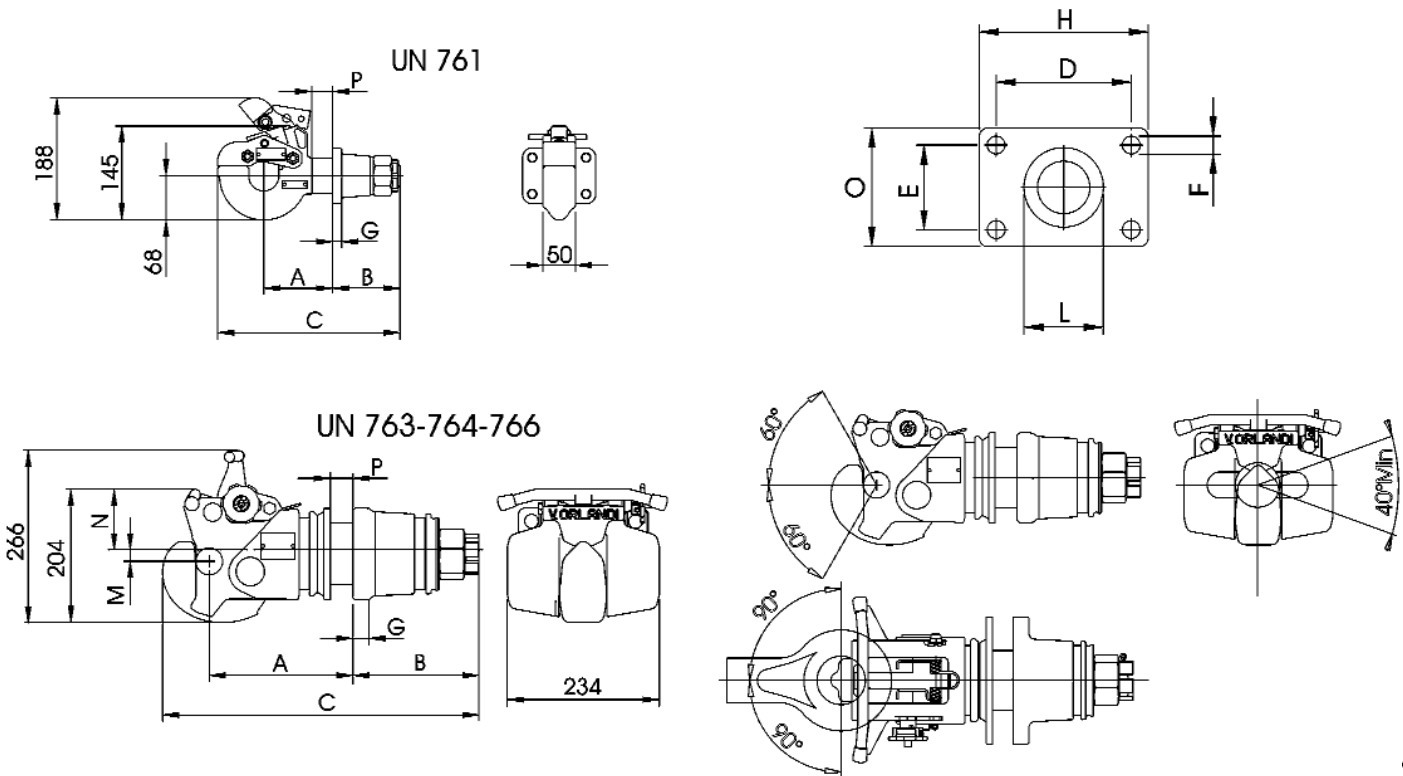
Per occhioni - For drawbar eyes  
Für Zugösen - Pour anneaux

**76 T**

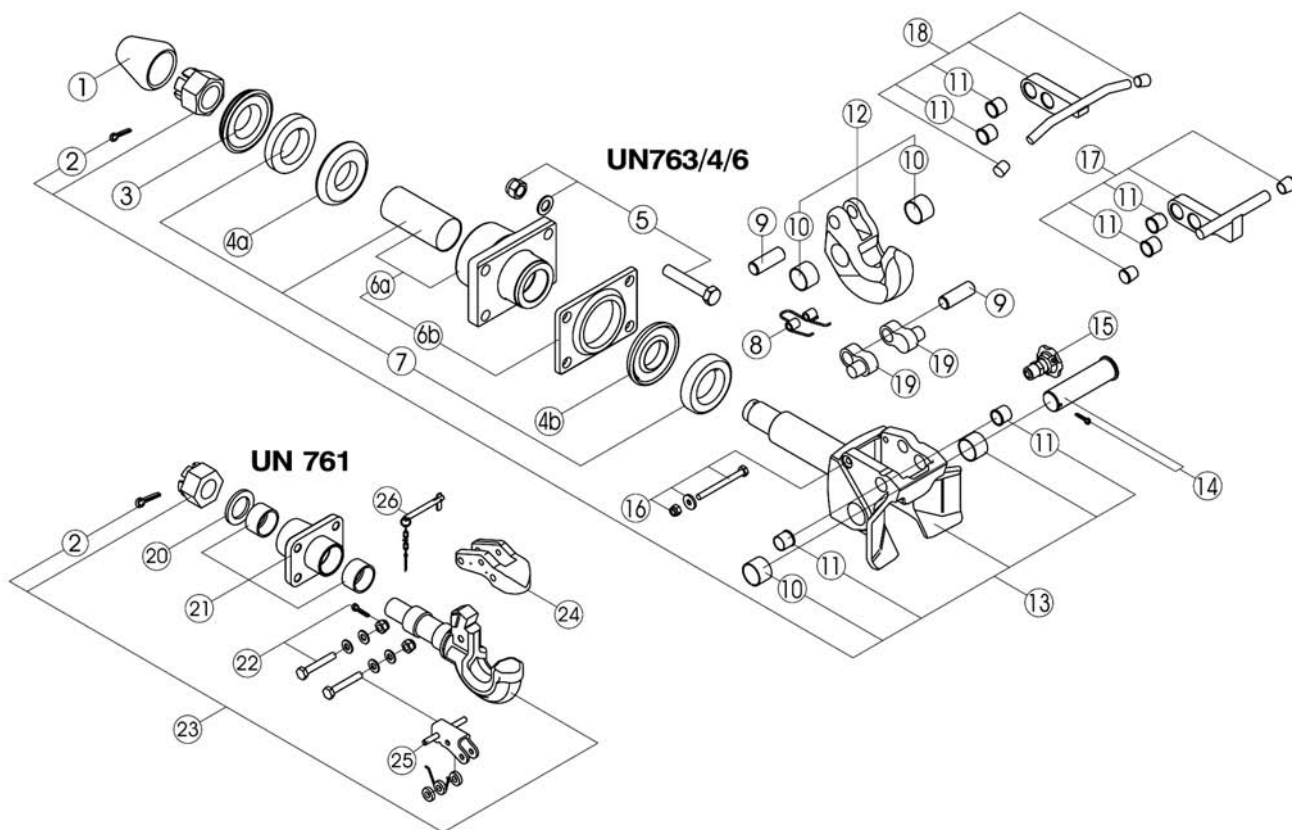
ECE - R55

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Massa S S-Load S-Last Masse S kg	Valore V V-Value V-Wert Valeur V kN	Peso Weight Gewicht Poids kg	94 / 20 / CE	
								Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
UN 761	UN76100	83x56	27	21	350	15	8	K3	E3-3005
UN 763	UN76300	120x55	70	54	700	18	37	KA1	E3-3004
UN 764	UN76400	140x80	100	70	900	25	37	KA2	E3-3003
UN 766	UN76600	160x100	190	103	1500	50	46	KA3	E3-3002



Tipo - Type Typ - Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	L (mm)	M (mm)	N (mm)	O (mm)	P max (mm)
UN 761	106	104	281	83	56	12,5	14	112,5	65	--	--	86	30
UN 763	200	156	450	120	55	15	20	155	73,90	16	95	90	35
UN 764	200	156	450	140	80	17	20	180	83,90	16	95	120	35
UN 766	215	212	471,5	160	100	21	25	200	93,90	16	95	140	35



POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type			
		UN 763 00A	UN 764 00A	UN 766 00A	UN 761 00A
1	RG00034				
2	RG00064				RG000369
3		RG00076	RG00175	RG00175	
4a		RG00216	RG00189		
4b		RG00216	RG00189	RG00173	
5		RG00130	RG00131	RG00132	
6a		RG00182	RG00195	RG00352	
6b				RG00222	
7		RG00217	RG00183	RG00184	
8	RG00339				
9	RG00331				
10	RG00332				
11	RG00333				
12	RG00341				
13		RG00342	RG00342	RG00343	
14	RG00334				
15	RG00335				
16	RG00336				
17(*)	RG00344				
18	RG00345				
19	RG00337				
20					RG00011
21					RG00346
22					RG00347
23					RG00348
24					RG00349
25					RG00350
26					RG00351

(\*) In produzione fino al 2002  
In production till 2002  
In Produktion bis 2002  
En production jusq' en 2002

# UN 45



Ganci ad uncino  
Pintle hooks  
Hakenkupplungen  
Crochets fixes

Per occhioni - For drawbar eyes  
Für Zugösen - Pour anneaux

Ø 76 T

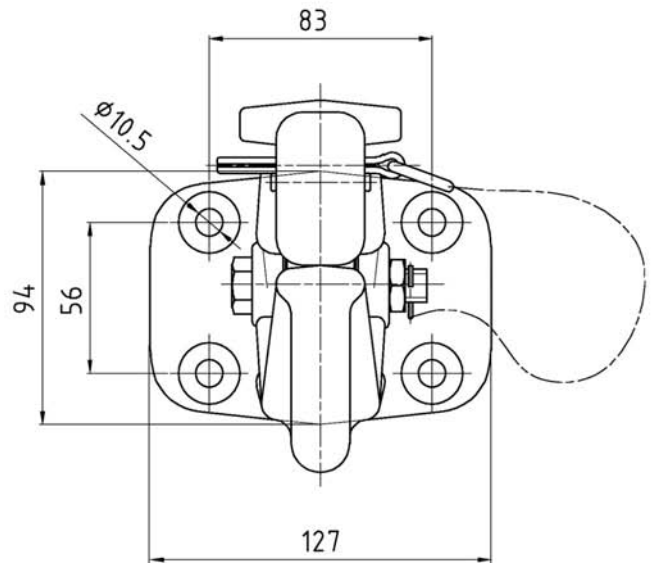
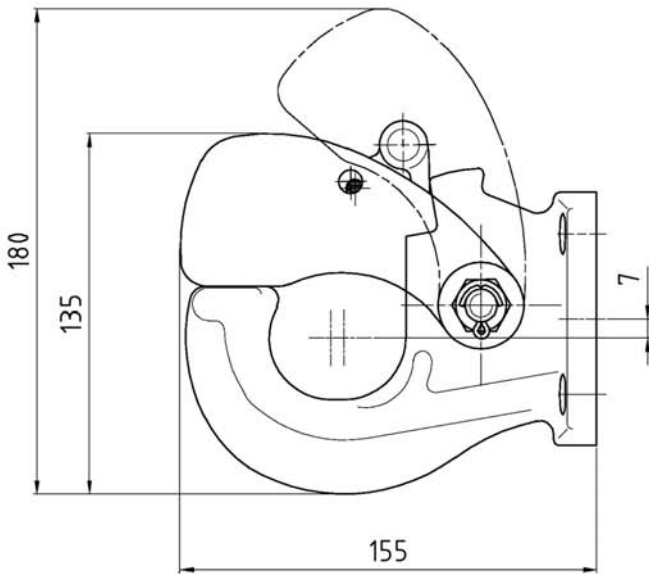
ECE - R55

Ø 45 T

CUNA NC 138-4

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Flangia Hole pattern Lochbild Entr'axe mm	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Massa S S-Load S-Last Masse S kg	Peso Weight Gewicht Poids kg	94 / 20 / CE	
							Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
UN 450	UN45000	83x56	31	31	340	3,8	S	e2 00 03042



1990 069 C

# ULPYO

Ganci ad uncino  
 Pintle hooks  
 Hakenkupplungen  
 Crochets fixes



Per occhielli - For drawbar eyes  
 Für Zugösen - Pour anneaux

ø 76 T

ECE - R55

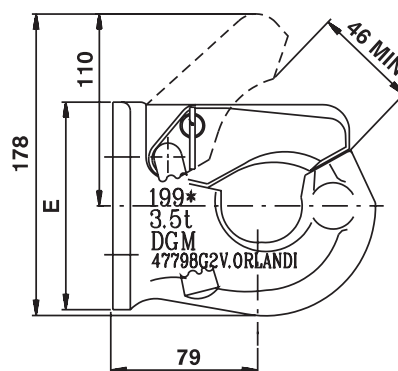
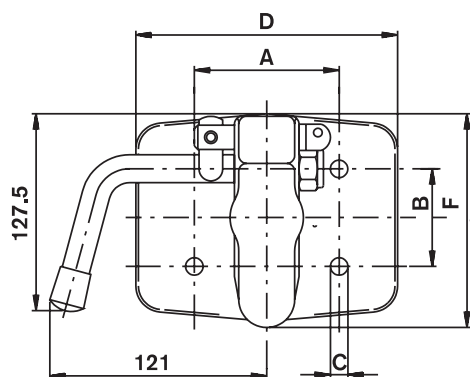
ø 45 T

CUNA NC 138-4

## Dati tecnici - Technical data - Technische Daten - Données techniques

Codice Article number Artikelnummer Numéro d'ordre	Flangia Hole pattern Lochbild Entr'axe mm	Peso rimorchiabile Total trailer weight Anhängelast Poids total de charge t	Carico statico Static load Statische Stützlast Chargé statique kg	Peso Weight Gewicht Poids kg	CUNA NC 138-40	
					CAT.	DGM
UN00100	83x56	3.5	200	5.5	II	47798
UN00200	68x70	3.5	200	5.5	II	47798
UN00300	100x60	3.5	200	5.5	II	47798
UN00400	120x55	3.5	200	5.5	II	47798
UN00500	85x45	3.5	200	5.5	II	47798

Tipo - Type Typ - Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
UN00100	83	56	11	150	119	122.5
UN00200	68	70	13	100	106	121
UN00300	100	60	15	150	119	122.5
UN00400	120	55	15	150	119	122.5
UN00500	85	45	15	150	119	122.5



1990 069 C

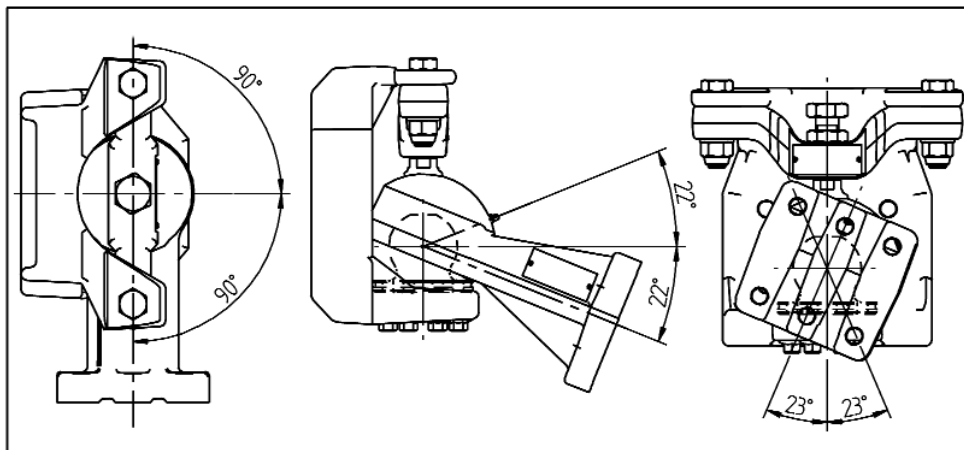
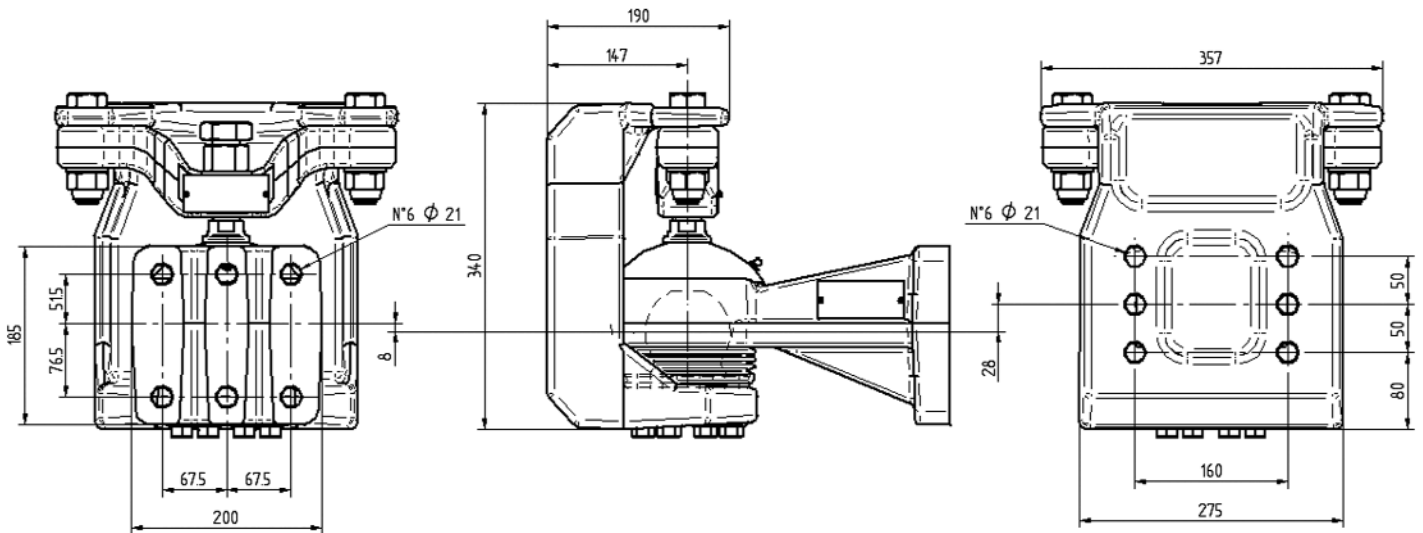


# GS 900

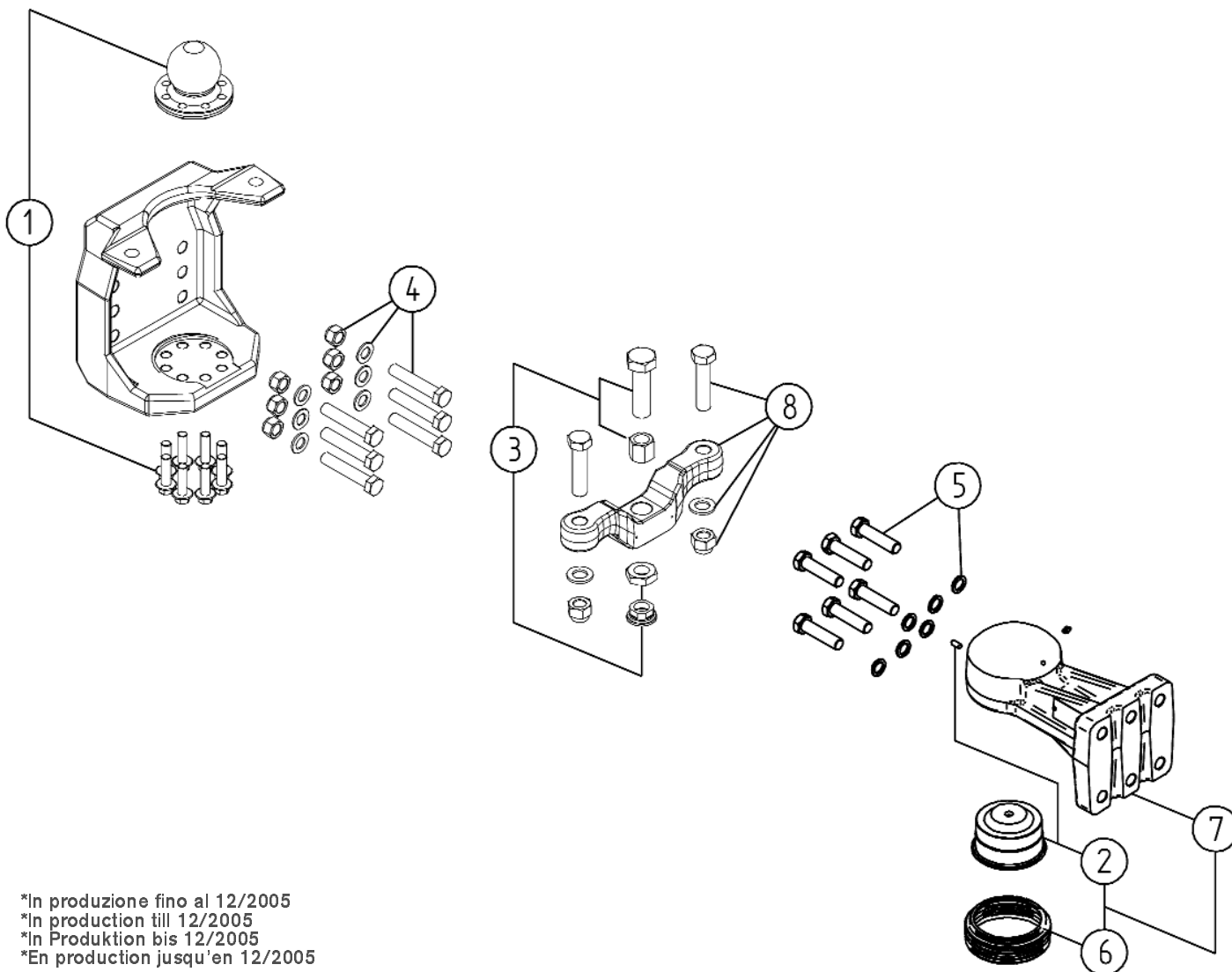
Gancio trasporto vetture  
 Car transporter drawbar coupling  
 Autotransporterkupplung  
 Crochet d'attelage pour transport véhicules

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ	Codice Article number Artikelnummer Numéro d'ordre	94 / 20 / CE						ECE-R55					
		Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Valore V V-Value V-Wert Valeur V kN	Valore S S-Value S-Wert Valeur S kg	Peso Weight Gewicht Poids Kg	Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Valore V V-Value V-Wert Valeur V kN	Valore S S-Value S-Wert Valeur S kg	Peso Weight Gewicht Poids Kg	Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
GS 900	GS91000	120	90	1000	86	S	e11 00 - 4172	145	110 90	1000 2500	86	T	E11-01 3791

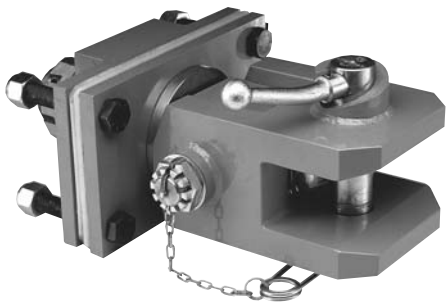


1990 223 B



\*In produzione fino al 12/2005  
\*In production till 12/2005  
\*In Produktion bis 12/2005  
\*En production jusqu'en 12/2005

POS.	Codice Article number Artikelnummer Numéro d'ordre	Tipo - Type - Typ - Type	
		GS91000	GS90000*
1	RG00322		
2	RG00323		
3		RG00419	RG00324
4	RG00325		
5	RG00326		
6	RG00327		
7		RG00439	RG00328
8		RG00420	RG00330



# TITANO

Gancio per traini eccezionali  
 Trailer coupling for heavy weight transport  
 Anhängerkupplung für Schwertransport  
 Crochet d'attelage pour transport lourd

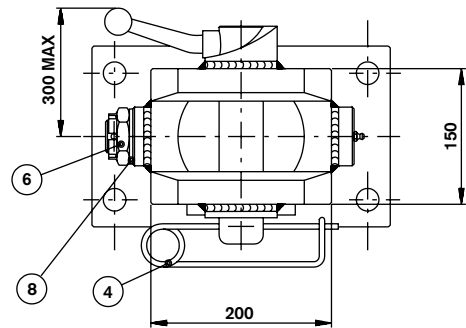
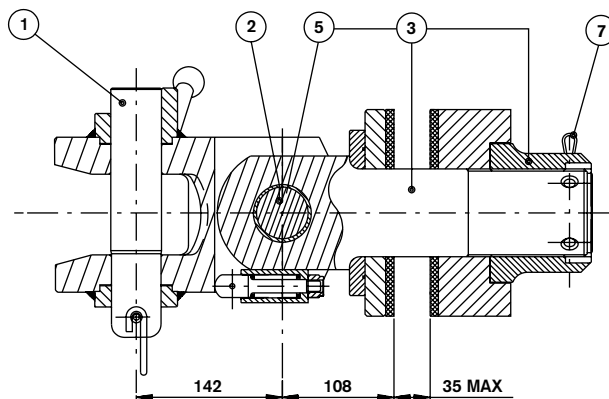
Per occhioli - For drawbar eyes  
 Für Zugösen - Pour anneaux

Ø 50

CUNA NC 438-55

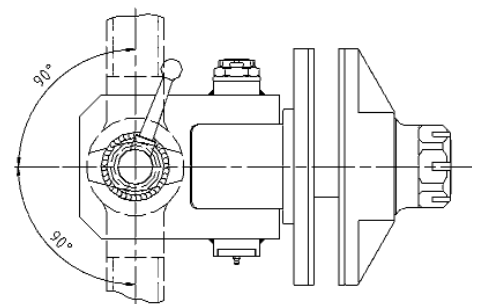
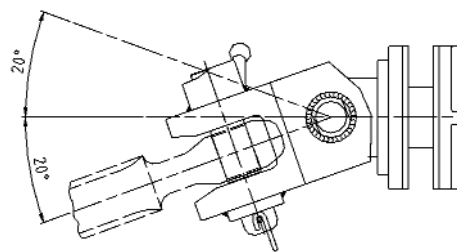
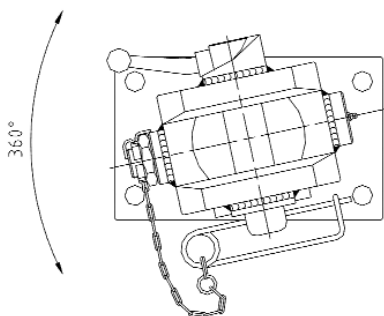
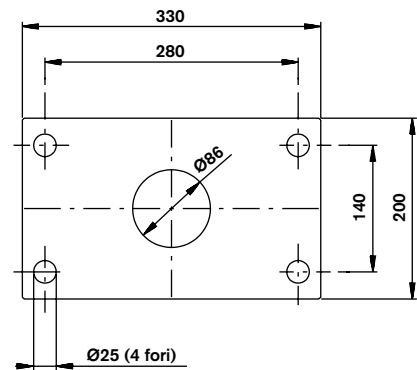
## Dati tecnici - Technical data - Technische Daten - Données techniques

Codice Article number Artikelnummer Numéro d'ordre	Flangia Hole pattern Lochbild Entr'axe mm	Peso rimorchiabile Total trailer weight Anhängelast Poids total de charge t	Peso Weight Gewicht Poids kg	CAT.	DGM
TI00100	280x140	250	110	VII	48876



## Ricambi - Spare parts Ersatzteile - Pieces de rechange

Pos.	Codice Article number Artikelnummer Numéro d'ordre
1	RG00017
2	RG00032
3	RG00033
4	RG00052
5	RG00121
6	RG00062
7	RG00065
8	RG00067



1990 070 B





# GM 10

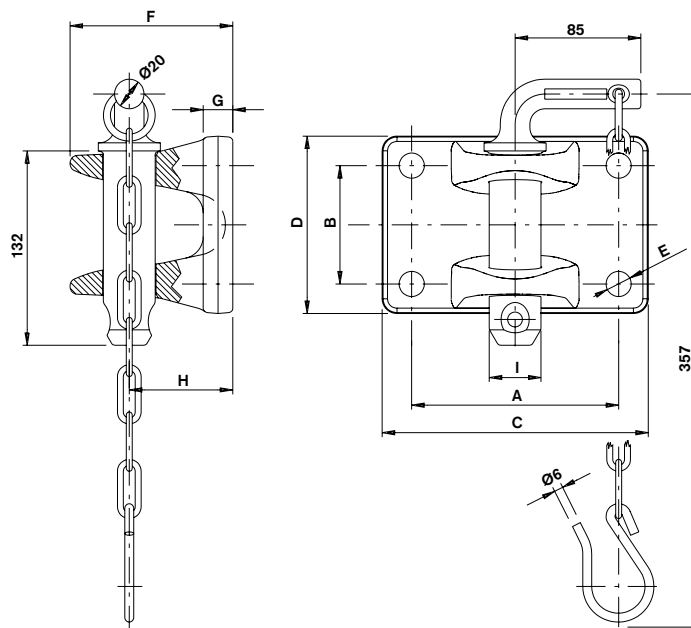
Ganci di manovra  
Towing couplings  
Abschleppkupplungen  
Attelages de depannage

Per occhielli - For drawbar eyes  
Für Zugösen - Pour anneaux

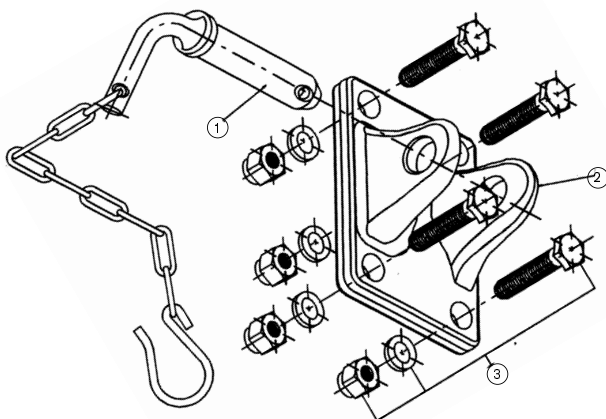
ø 50	94 / 20 / CE
ø 40	DIN 74054
ø 76 T	ECE - R55

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ	Codice Article number Artikelnummer Numéro d'ordre	Peso rimorchiabile Total trailer weight Anhängelast Poids total de charge t	Peso motrice Total weight of towing vehicle Gewicht des Zugfahrzeuges Poids véhicule trainant t	Peso Weight Gewicht Poids kg
GM103	GM10300	25	50	4.2
GM104	GM10400	35	70	6
GM105	GM10500	50	120	7



Tipo - Type Typ - Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)
GM103	120	55	155	90	ø15	102	15	70	ø35
GM104	140	80	180	120	ø17	110	20	70	ø35
GM105	160	100	200	140	ø21	110	20	70	ø35



## Ricambi - Spare parts Ersatzteile - Pieces de rechange

	GM 103	GM 104	GM 105
Pos. 1	RG00219	RG00219	RG00219
Pos. 3	RG00130	RG00131	RG00132

Tutti i ganci di manovra sono forniti senza targhetta di omologazione. Dimensioni principali e capacità di traino in accordo con le direttive 1999/58/CE e 96/64/CE.

Alle Anhängerkupplungen werden ohne Typenschild geliefert. Die wesentlichen Maße und Anhängelasten entsprechen den Direktiven 1999/58/CE und 96/64/CE.



All towing couplings are delivered without a type plate. Main dimensions and towing capacity in compliance with directives 1999/58/CE and 96/64/CE.

Tous les attelages sont livrés sans plaque d'identification. Les dimensions principales et capacités de traction sont en accord avec les directives 1999/58/CE et 96/64/CE.

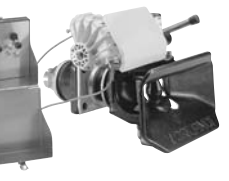
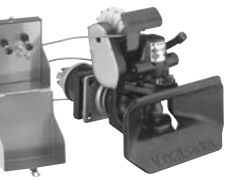



# Kits Complementari Complementary Kits - Aufrüstsätze - Kits complementaires


## KIT APERTURA MECCANICA - MECHANICAL REMOTE OPENING MECHANISCHE FERNBEDIENUNG - DISPOSITIF D'OUVERTURE À DISTANCE MECANIQUE

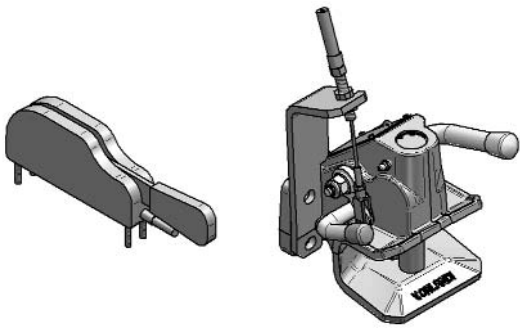
	Codice Article number Artikelnummer Numéro d'ordre	descrizione description Beschreibung description	applicabile ai ganci serie applicable to couplings series anwendbar auf Kupplungen Serie applicable sur les crochets série	pagina page Seite page
	CO017	Apertura meccanica a distanza Mechanical remote opening Mechanische Fernbedienung Ouverture mecanique à distance	GA250 - GA252	36
	CO018	Apertura meccanica a distanza Mechanical remote opening Mechanische Fernbedienung Ouverture mecanique à distance	E 50 - EH 50 - EH 45 MCX 50	37

## KIT APERTURA PNEUMATICA - PNEUMATIC REMOTE OPENING PNEUMATISCHE FERNBEDIENUNG - DISPOSITIF D'OUVERTURE À DISTANCE PNEUMATIQUE

	CO01400	Apertura pneumatica Pneumatic remote opening Pneumatische Fernbedienung Dispositif d'ouverture à distance pneumatique	E 50 - EH 50 - EH 45 MCX 50	38
	CO01500	Apertura pneumatica "Kompakt" Pneumatic remote opening "Kompakt" Pneumatische Fernbedienung "Kompakt" Dispositif d'ouverture à distance pneumatique "Kompakt"	E 50 - EH 50 - EH 45 MCX 50	40
	CO020	Apertura pneumatica "Lineare" Pneumatic remote opening "Linear" Pneumatische Fernbedienung "Linear" Dispositif d'ouverture à distance pneumatique "Linear"	E 50 - EH 50 - EH 45 MCX 50	42

## KIT SEGNALAZIONE IN CABINA - REMOTE INDICATORS - FERNANZEIGEN - INDICATEURS A DISTANCE

	CO01600	Segnalazione apertura/chiusura + segnalazione limite di sterzata Open-close remote indicator + steering angle remote indicator Fernanzeige + Schwenkwinkelwarnanzeige Indicateur a distance d'ouverture du crochet + indicateur a distance de limite de braquage	E 50 - E 40	44
	CO01601	Segnalazione apertura/chiusura Open-close remote indicator Fernanzeige Indicateur a distance d'ouverture du crochet	E 50 - E 40 - EH 50 EH 45 - MCX 50	44
	CO01602	Segnalazione limite di sterzata Steering angle remote indicator Schwenkwinkelwarnanzeige Indicateur a distance de limite de braquage	E 50 - E 40	44

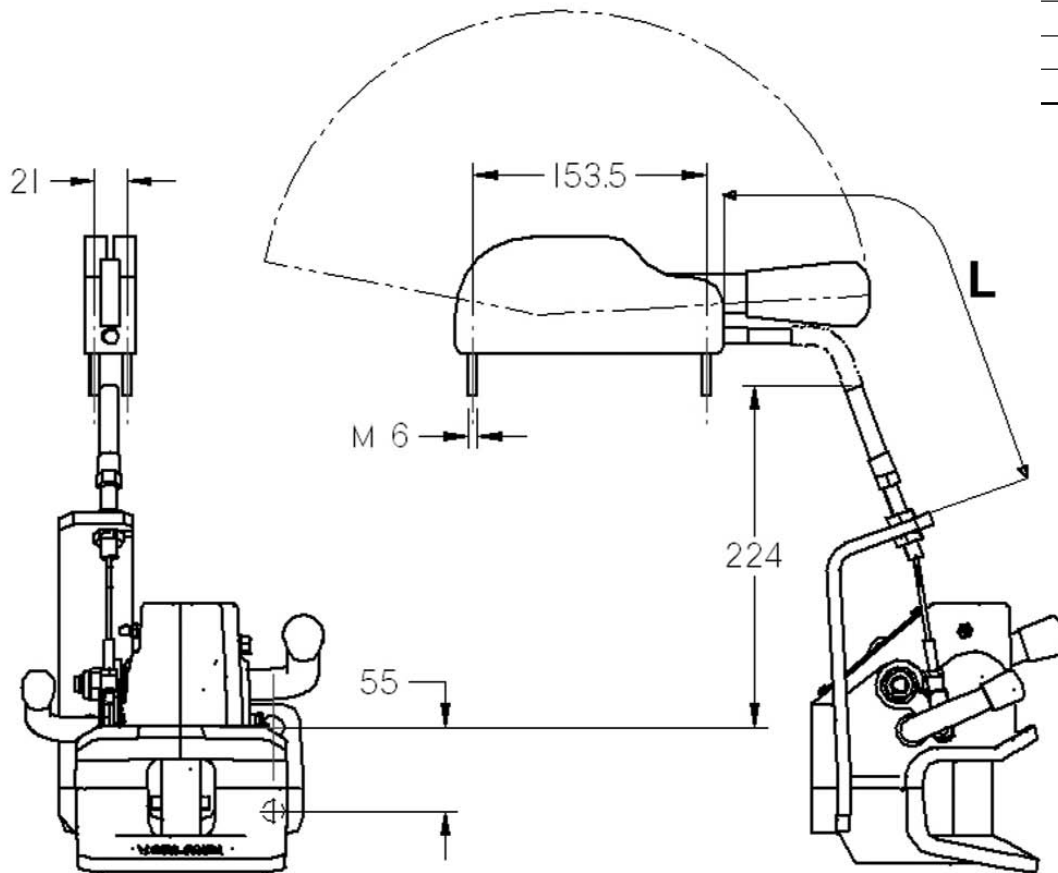


# Kit CO017

Apertura meccanica a distanza per GA250/252  
 Mechanical remote opening for GA250/252  
 Mechanische Fernbedienung für GA250/252  
 Ouverture mecanique à distance pour GA250/252

Dimensioni principali - Main dimensions - Hauptsächliche Dimensionen - Dimensions principaux

COD.	L (mm)
CO01700	2500
CO01701	1500
CO01702	2000
CO01703	3000



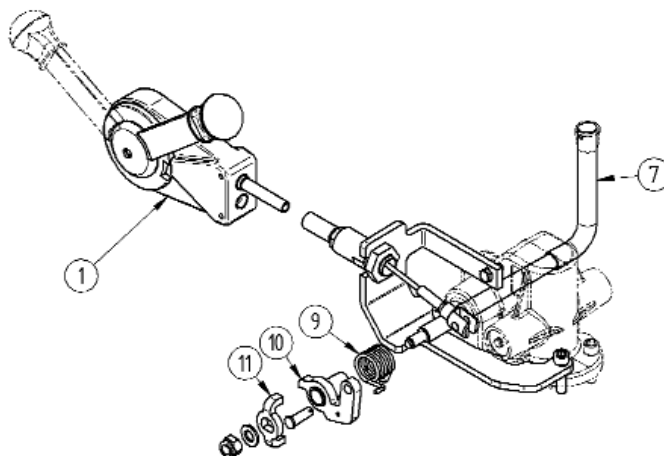
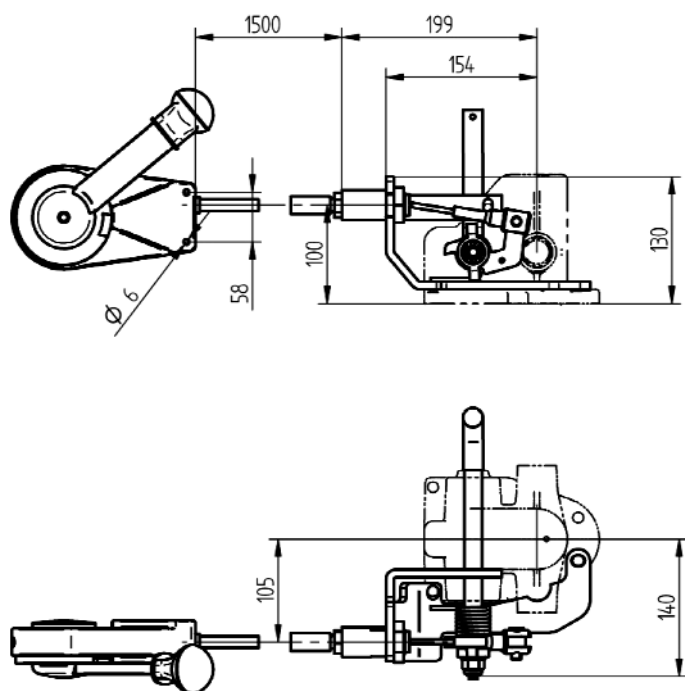
1990 300 A



# Kit CO018

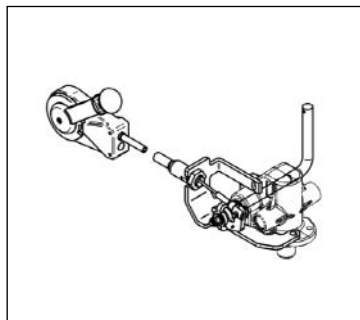
Apertura meccanica a distanza  
 Mechanical remote opening  
 Mechanische Fernbedienung  
 Ouverture mecanique à distance

Dimensioni principali - Main dimensions - Hauptsächliche Dimensionen - Dimensions principaux



## Ricambi - Spare parts Ersatzteile - Pieces de rechange

Pos.	Cod.
1	RG00410
7	RG00406
9	RG00407
10	RG00408
11	RG00409

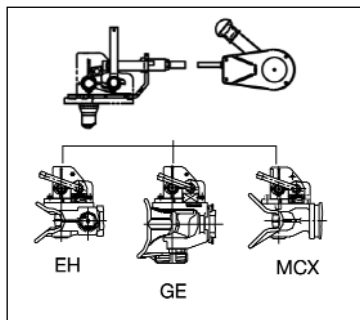


Il sistema di apertura meccanica a distanza è di facile utilizzo e di semplice manutenzione. Studiato per lavorare con cavo in trazione garantisce estrema affidabilità del sistema.

The system of mechanical remote opening is easy to be used and maintained. Designed to operate with a tensioned cable, it guarantees extreme system reliability.

Das mechanischer Fernbedienung mit ist von leicht zu bedienen und wartungsfreundlich. Es ist für die Arbeit mit gespanntem Kabel konzipiert und garantiert eine extreme Systemzuverlässigkeit.

Le système d'ouverture mecanique à distance est simple à utiliser et à entretenir. Concu pour travailler avec un câble en traction, il assure une fiabilité extreme du système.



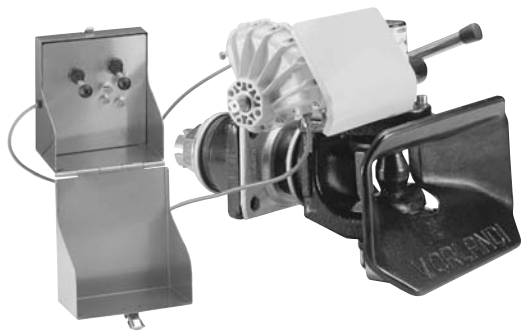
**Tutti i ganci automatici V.Orlandi possono essere forniti già equipaggiati con il dispositivo di apertura meccanica nelle seguenti versioni: "A2/B2/A5/B5"**  
 Nota: le sopracitate versioni includono anche il segnalatore in cabina CO01601.

Every automatic coupling made by V.Orlandi can be supplied complete with the mechanical remote opening available in the following versions: "A2/B2/A5/B5"  
 Note: above-mentioned versions include the remote indicator CO01601.

**Alle automatische Anhängerkupplungen von V.Orlandi können mit der mechanischer Fernbedienung ausgerüstet werden. Die Versionen sind: "A2/B2/A5/B5"**  
 Bemerkung: Die obigen Versionen beinhalten die Fernanzeige CO01601.

Chaque crochet d'attelage automatique V.Orlandi peut être livré complet de commande d'ouverture à distance mecanique dans le versions suivantes: "A2/B2/A5/B5"  
 Note: les versions mentionées au dessus comprennent ausse le indicateur à distance CO01601.

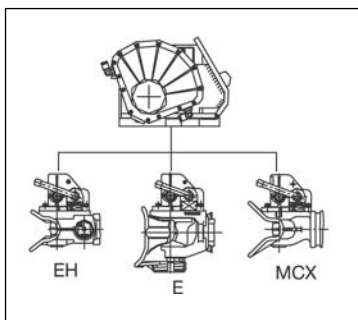
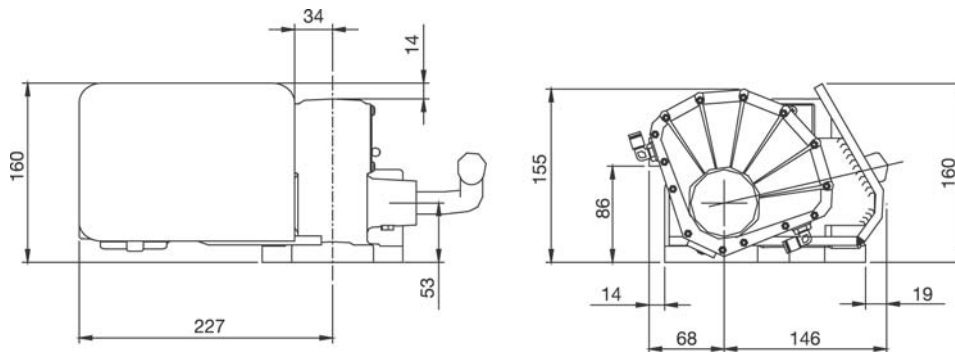
1990277A



# Kit CO01400

Apertura pneumatica  
 Pneumatic remote opening  
 Pneumatische Fernbedienung  
 Dispositif d'ouverture à distance pneumatique

## Dimensioni principali - Main dimensions - Hauptsächliche Dimensionen - Dimensions principaux



**Tutti i ganci automatici V.Orlandi possono essere forniti già equipaggiati con il dispositivo di apertura pneumatica "laterale" nelle seguenti versioni:**  
 "C7/D7" = kit sinistro  
 "A7/B7" = kit destro

Nota: le sopracitate versioni includono anche il segnalatore in cabina CO01601.

**Every automatic coupling made by V.Orlandi can be supplied complete with the pneumatic remote opening available in the following versions :**

C7/D7 = left side  
 A7/B7 = right side

Note: above-mentioned versions include the remote indicator CO01601.

**Alle automatische Anhängerkupplungen von V.Orlandi können mit der pneumatischen Fernbedienung ausgerüstet werden.**

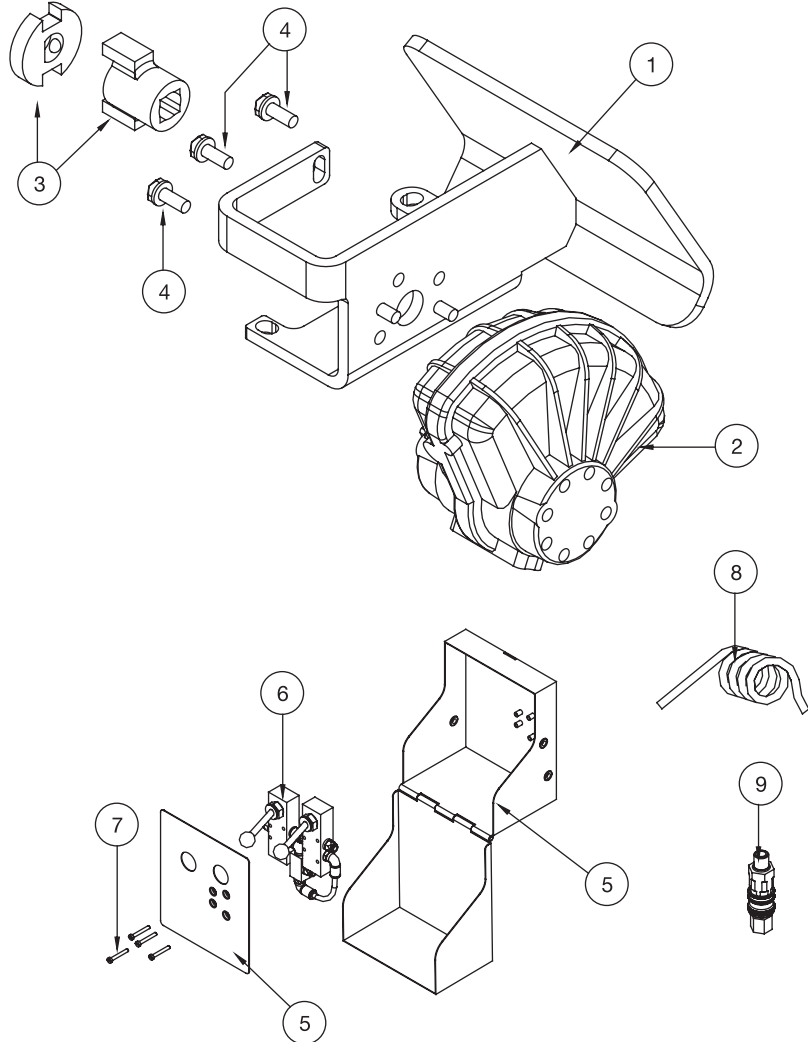
Die Versionen sind:  
 C7/D7 = linke Seite  
 A7/B7 = rechte Seite

Bemerkung: Die obigen Versionen beinhalten die Fernanzeige CO01601.

**Chaque crochet d'attelage automatique V.Orlandi peut être livré complet de commande d'ouverture à distance pneumatique dans le versions suivantes:**

C7/D7 = à gauche  
 A7/B7 = à droite

Note : les versions mentionnées au dessus comprennent aussi le indicateur à distance CO01601.



POS.	Codice Article number Artikelnummer Numéro d'ordre
1 *	LH - RG00253 RH - RG00279
2	RG00244
3	RG00245
4	RG00247
5	RG00282
6	RG00283
7	RG00284
8	RG00251
9	RG00252

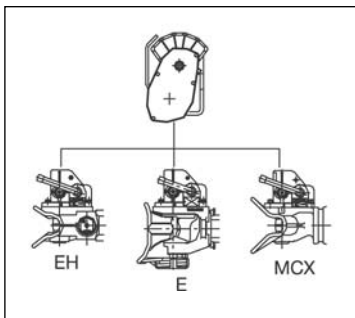
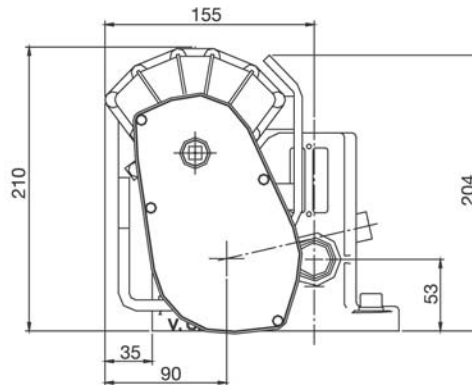
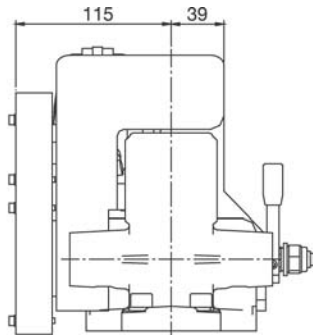
\* LH: montaggio a sinistra - left hand mounting - Montage auf der linken Seite - montage avec la main gauche  
RH: montaggio a destra - right hand mounting - Montage auf der rechten Seite - montage avec la main droit



# Kit CO01500

Apertura pneumatica "Kompakt"  
 Pneumatic remote opening "Kompakt"  
 Pneumatischer Fernbedienung "Kompakt"  
 Dispositif d'ouverture à distance  
 pneumatique "Kompakt"

Dimensioni principali - Main dimensions - Hauptsächliche Dimensionen - Dimensions principaux



**Tutti i ganci automatici V.Orlandi possono essere forniti già equipaggiati con il dispositivo di apertura pneumatica "Kompakt" nelle seguenti versioni:**  
 "C8" = kit sinistro  
 "A8" = kit destro

Nota: le sopracitate versioni includono anche il segnalatore in cabina CO01601.

**Every automatic coupling made by V.Orlandi can be supplied complete with the pneumatic remote opening "Kompakt" available in the following versions:**

**C8 = left side  
 A8 = right side**

Note: above-mentioned versions include the remote indicator CO01601.

**Alle automatische Anhängerkupplungen von V.Orlandi können mit der pneumatischen Fernbedienung "Kompakt" ausgerüstet werden. Die Versionen sind:**

**C8 = linke Seite  
 A8 = rechte Seite**

Bemerkung: Die obigen Versionen beinhalten die Fernanzeige CO01601.

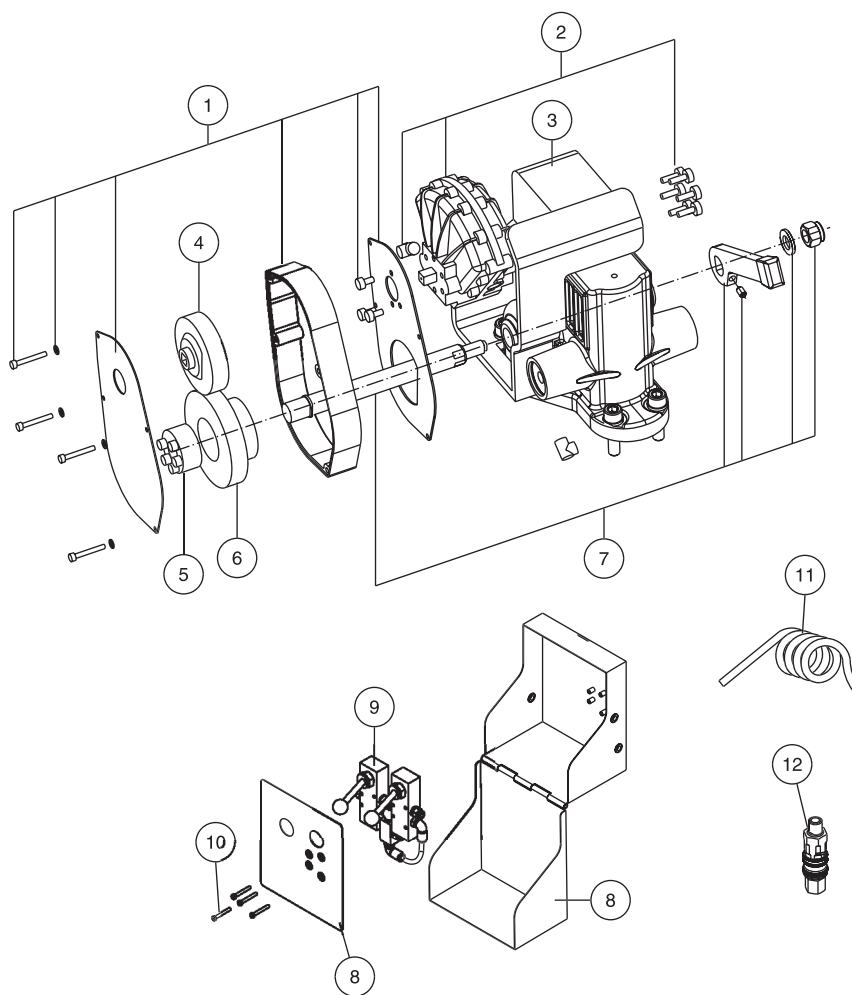
**Chaque crochet d'attelage automatique V.Orlandi peut être livré complet de commande d'ouverture à distance pneumatique "Kompakt" dans les versions suivantes:**

**C8 = à gauche  
 A8 = à droite**

Note : les versions mentionnées au dessus comprennent aussi le indicateur à distance CO01601.

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POS.	Codice Article number Artikelnummer Numéro d'ordre
1	RG00272
2	RG00273
3 *	LH - RG00274
	RH - RG00280
4	RG00275
5	RG00276
6	RG00277
7	RG00281
8	RG00282
9	RG00283
10	RG00284
11	RG00251
12	RG00252

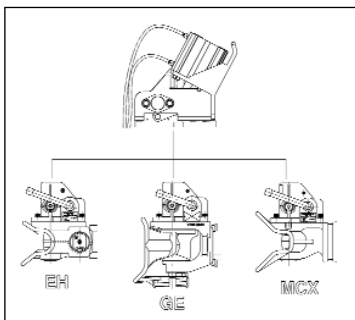
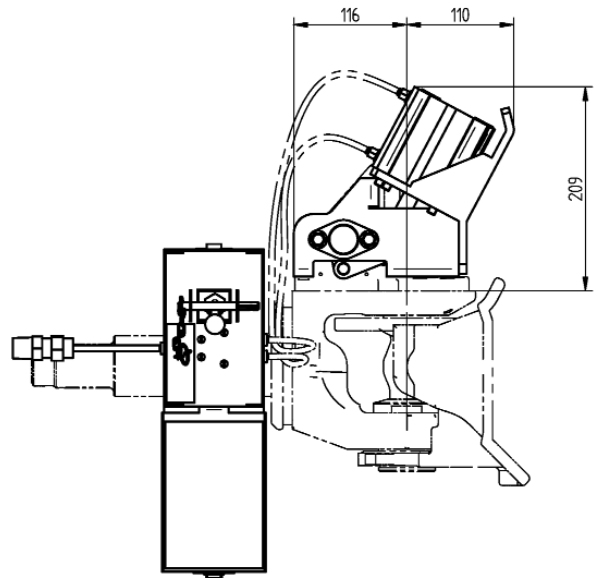
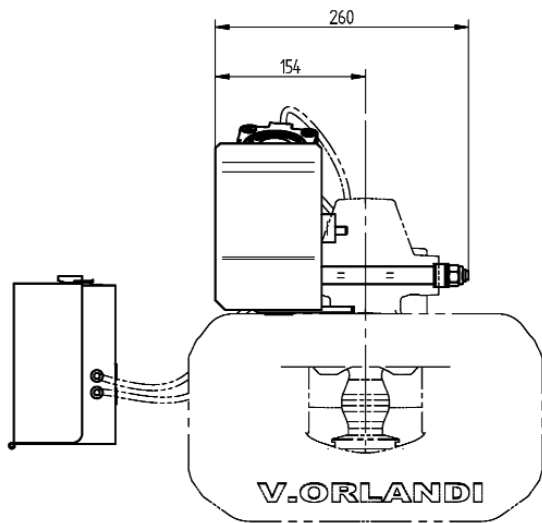
\* LH: montaggio a sinistra - left hand mounting - Montage auf der linken Seite - montage avec la main gauche  
RH: montaggio a destra - right hand mounting - Montage auf der rechten Seite - montage avec la main droit



# Kit CO020

Apertura pneumatica "Lineare"  
 Pneumatic remote opening "Linear"  
 Pneumatischer Fernbedienung "Linear"  
 Dispositif d'ouverture à distance  
 pneumatique "Linear"

Dimensioni principali - Main dimensions - Hauptsächliche Dimensionen - Dimensions principaux



**Tutti i ganci automatici V.Orlandi possono essere forniti già equipaggiati con il dispositivo di apertura pneumatica "lineare" nelle seguenti versioni:**

"C9" = kit sinistro  
 "A9" = kit destro

Nota: le sopracitate versioni includono anche il segnalatore in cabina CO01601.

**Every automatic coupling made by V.Orlandi can be supplied complete with the pneumatic remote opening available in the following versions:**

C9 = left side  
 A9 = right side

Note: above-mentioned versions include the remote indicator CO01601.

**Alle automatische Anhängerkupplungen von V.Orlandi können mit der pneumatischen Fernbedienung ausgerüstet werden.**

Die Versionen sind:

C9 = linke Seite

A9 = rechte Seite

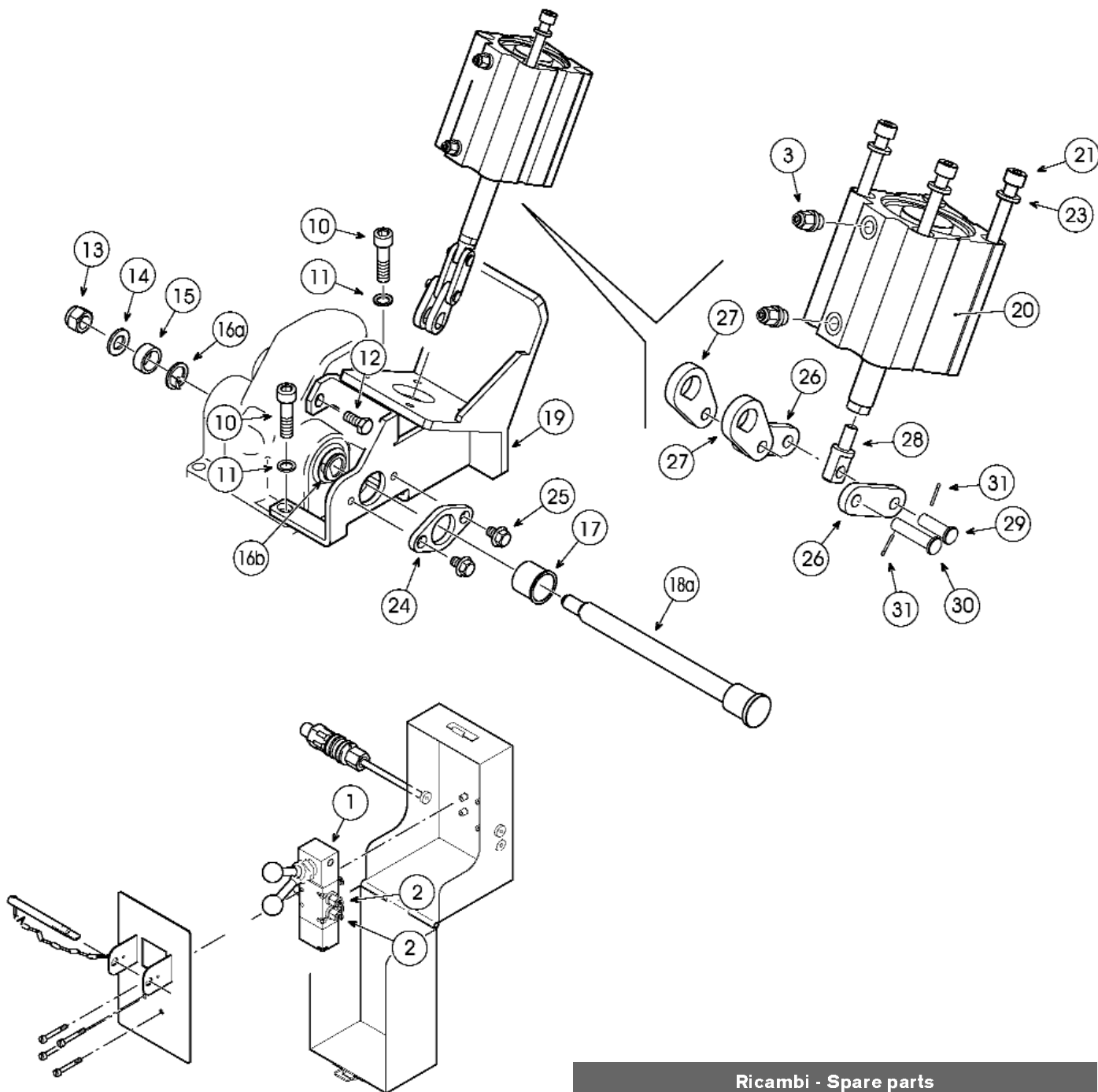
Bemerkung: Die obigen Versionen beinhalten die Fernanzeige CO01601.

**Chaque crochet d'attelage automatique V.Orlandi peut être livré complet de commande d'ouverture à distance pneumatique dans les versions suivantes:**

C9 = à gauche

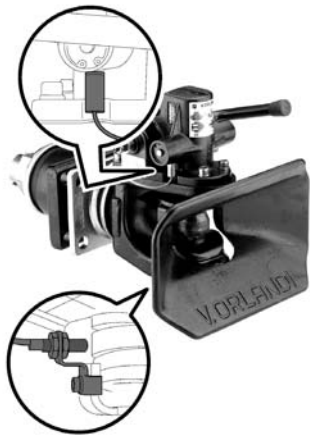
A9 = à droite

Note : les versions mentionnées au dessus comprennent aussi le indicateur à distance CO01601.



**Ricambi - Spare parts  
Ersatzteile - Pièces de rechange**




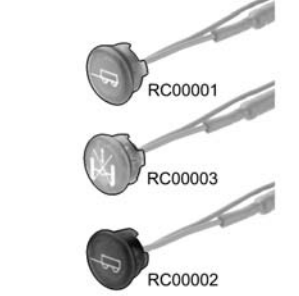







Pos.	Cod.
3(2x), 20, 21(4x), 23(4x), 28	RG00411
26(2x), 27(2x), 28, 29, 30, 31(2x)	RG00412
13, 14, 15, 16(2x), 18, 22, 24, 25(2x)	RG00413
10(2x), 11(2x), 12, 19	RG00414
1, 2(3x)	RG00415



# Kits

## CO01600 - CO01601 - CO01602

Kits di segnalazione  
Remote indicators  
Fernanzeigen  
Indicateurs a distance





<p><b>CO01600</b></p>	<p>Segnalazione apertura/chiusura in cabina + segnalazione limite di sterzata in cabina</p> <p>Open-close remote indicator + steering angle remote indicator</p> <p>Fernanzeige + Schwenkwinkelwarnanzeige</p> <p>Indicateur a distance d'ouverture du crochet + indicateur a distance de limite de braquage</p>	 <p>RC00004</p>	 <p>RC00005</p> <p>RC00007</p>
<p>Applicabile ai ganci serie</p> <p>Applicable to couplings of series</p> <p>Anwendbar auf Kupplungen der Serien</p> <p>Applicable sur les series des crochets</p>	<p>E 50</p> <p>E 40</p>	 <p>RC00006</p>	 <p>RC00001</p> <p>RC00003</p> <p>RC00002</p>
<p><b>CO01601</b></p>	<p>Segnalazione apertura/chiusura in cabina</p> <p>Open-close remote indicator</p> <p>Fernanzeige</p> <p>Indicateur a distance d'ouverture du crochet</p>	 <p>RC00006</p>	 <p>RC00004</p>
<p>Applicabile ai ganci serie</p> <p>Applicable to couplings of series</p> <p>Anwendbar auf Kupplungen der Serien</p> <p>Applicable sur les series des crochets</p>	<p>E 50</p> <p>E 40</p> <p>EH 50</p> <p>MCX 50</p>	 <p>RC00001</p>	 <p>RC00002</p>
<p><b>CO01602</b></p>	<p>Segnalazione limite di sterzata in cabina</p> <p>Steering angle remote indicator</p> <p>Schwenkwinkelwarnanzeige</p> <p>Indicateur a distance de limite de braquage</p>	 <p>RC00006</p>	 <p>RC00005</p> <p>RC00007</p>
<p>Applicabile ai ganci serie</p> <p>Applicable to couplings of series</p> <p>Anwendbar auf Kupplungen der Serien</p> <p>Applicable sur les series des crochets</p>	<p>E 50</p> <p>E 40</p>	 <p>RC00003</p>	

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# Occhioni Drawbar eyes - Zugösen - Anneaux d'attelage

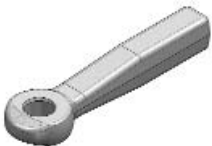

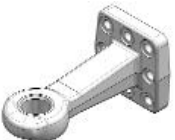
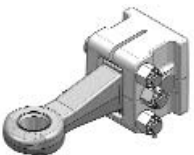
Ø 40 mm

	serie series Serie série	descrizione description Beschreibung description			pagina page Seite page
	OC40W	Occhioni a saldare Weldable drawbar eyes Einschweißzugösen Anneaux a souder	✓		48
	OC40R	Occhioni sfilabili Removable drawbar eyes Zugösen mit Schraubende Anneaux a ecrou	✓	✓	48
	OC40F	Occhioni flangiati Flanged drawbar eyes Flanschzugösen Anneaux brides	✓	✓	48

Ø 45 mm






	OC45R	Occhioni sfilabili Removable drawbar eyes Zugösen mit Schraubende Anneaux a ecrou	✓		49
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Ø 50 mm




	OC50W	Occhioni a saldare Weldable drawbar eyes Einschweißzugösen Anneaux a souder	✓		50
	OC50R	Occhioni sfilabili Removable drawbar eyes Zugösen mit Schraubende Anneaux a ecrou	✓		51
	OC50F	Occhioni flangiati Flanged drawbar eyes Flanschzugösen Anneaux brides	✓	✓	51
	OC50FSE	Occhioni speciali Special drawbar eyes Spezial Zugösen Anneaux spéciaux	✓	✓	52

# Occhioni Drawbar eyes - Zugösen - Anneaux d'attelage


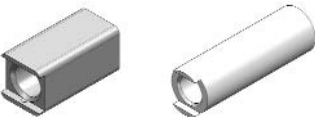

Ø 57,5 mm

	serie series Serie série	descrizione description Beschreibung description			pagina page Seite page
	OC57W	Occhioni a saldare Weldable drawbar eyes Einschweißzugösen Anneaux a souder	✓	✓	53
	OC57R	Occhioni sfilabili Removable drawbar eyes Zugösen mit Schraubende Anneaux a ecrou	✓	✓	53
	OC57F	Occhioni flangiati Flanged drawbar eyes Flanschzugösen Anneaux brides	✓	✓	53

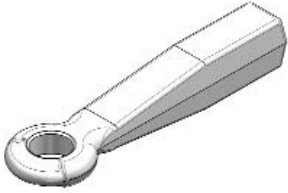
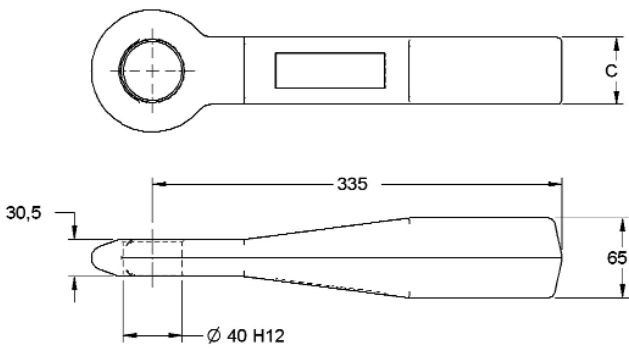
Ø 45 mm - Ø 76 mm TORICO - TOROIDAL - RING ZUGÖSEN - TORIQUES

	OC45T	Occhioni sfilabili Removable drawbar eyes Zugösen mit Schraubende Anneaux a ecrou	✓		54
	OC76W	Occhioni a saldare Weldable drawbar eyes Einschweißzugösen Anneaux a souder	✓		54
	OC76T-R	Occhioni sfilabili Removable drawbar eyes Zugösen mit Schraubende Anneaux a ecrou	✓		54

## ACCESSORI - ACCESSORIES - ZUBEHÖR - ACCESSOIRES

	serie series Serie série	descrizione description Beschreibung description	pagina page Seite page
	PS	Piastre a saldare Weld in plates Anschweißplatten Plaques a souder	55
	RO	Manicotti Weldable brackets Zugösenläger Manchons	55
	RO	Ricambi Spare parts Ersatzteile Pièce de rechange	56

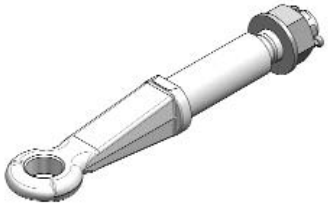
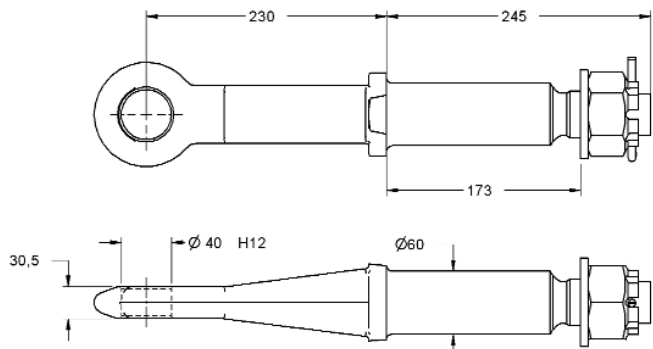
Occhioni a saldare  
Weldable drawbar eyes  
Einschweißzugösen  
Anneaux a souder

**DIN 74054**

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	C mm	Valore D D-Value D-Wert Valeur D kN	Omologazione Homologation Genehmigung Homologation
<b>40W</b>	OC40W02	56	120	94/20/CE
<b>40W/P</b>	OC40W04	60	120	94/20/CE

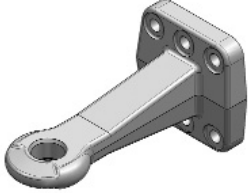
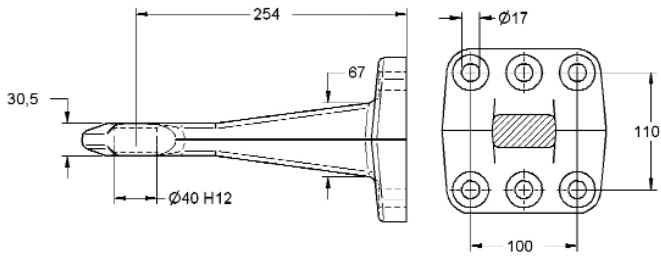
Occhioni sfilabili  
Removable drawbar eyes  
Zugösen mit Schraubende  
Anneaux a ecrou

**DIN 74054**

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Valore S S-Value S-Wert Valeur S kN	Valore V V-Value V-Wert Valeur V kN	Omologazione Homologation Genehmigung Homologation
<b>40R02</b>	OC40R02	125	74	1000	23	94/20/CE

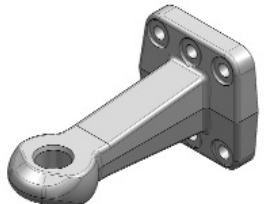
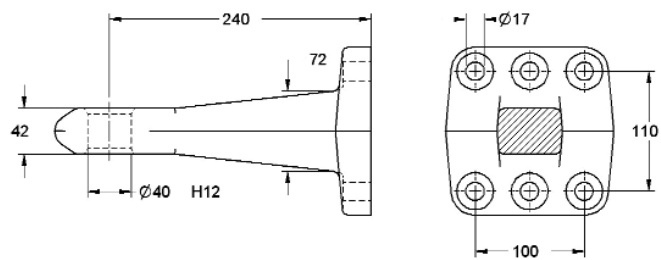
Occhioni flangiati  
Flanged drawbar eyes  
Flanschzugösen  
Anneaux brides

**DIN 74054**

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Valore S S-Value S-Wert Valeur S kN	Valore V V-Value V-Wert Valeur V kN	Omologazione Homologation Genehmigung Homologation
<b>40F6</b>	OC40F60	125	100	1000	36	94/20/CE

Occhioni flangiati LOF  
LOF Flanged drawbar eyes  
Flanschzugösen LOF  
Anneaux brides LOF

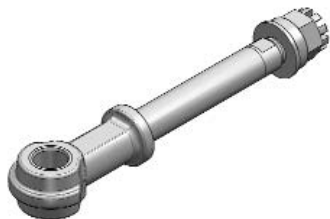



**DIN 11026**

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Valore S S-Value S-Wert Valeur S kN	Valore V V-Value V-Wert Valeur V kN	Omologazione Homologation Genehmigung Homologation
<b>40F6 LOF</b>	OC40F61	130	120	2000	49	94/20/CE

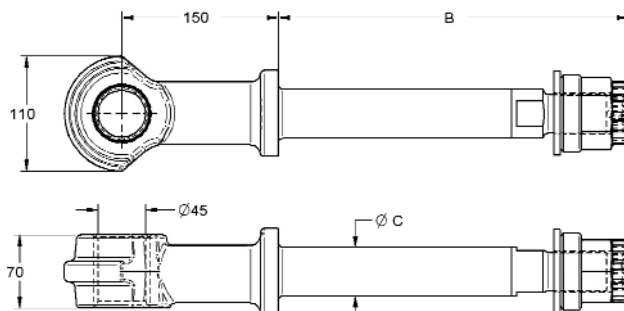


Occhioni sfilabili  
Removable  
drawbar eyes  
Zugösen  
mit Schraubende  
Anneaux a ecrou

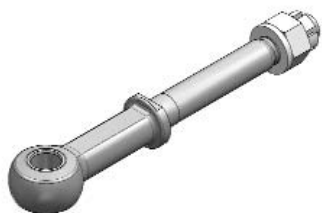


### CUNA 438/55

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	B mm	C mm	Peso rimorchiabile Total traile weight Anhängelast Poids total de charge †	Omologazione Homologation Genehmigung Homologation
LUPO-LB	OC45R01	310	49	26 ÷ 42	CUNA-V
LUPO-LC	OC45R02	328	47	26 ÷ 42	CUNA-V
LUPO-LP	OC45R03	315	47	26 ÷ 42	CUNA-V
LUPO-LV	OC45R04	328	47	26 ÷ 42	CUNA-V

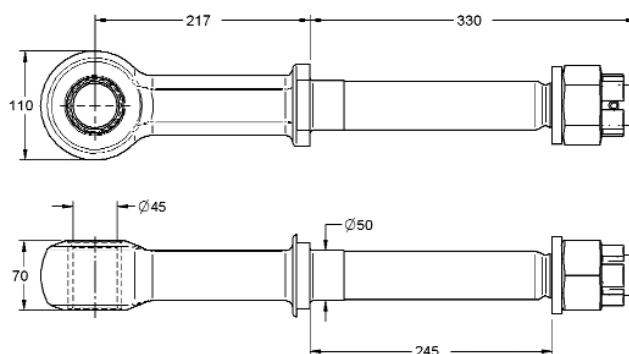


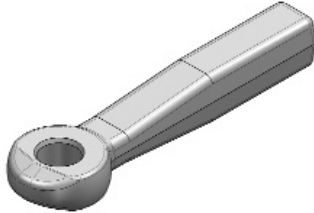
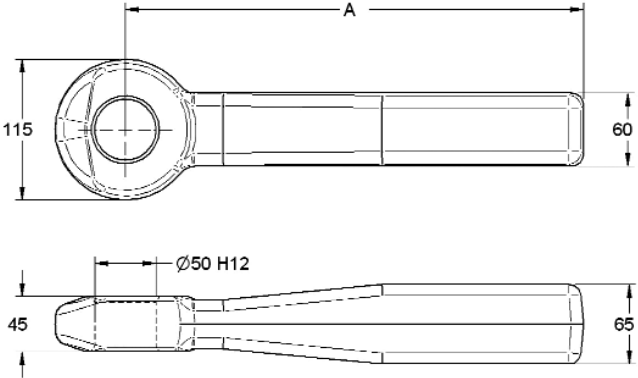
Occhioni sfilabili  
Removable  
drawbar eyes  
Zugösen  
mit Schraubende  
Anneaux a ecrou

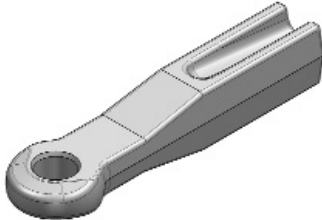
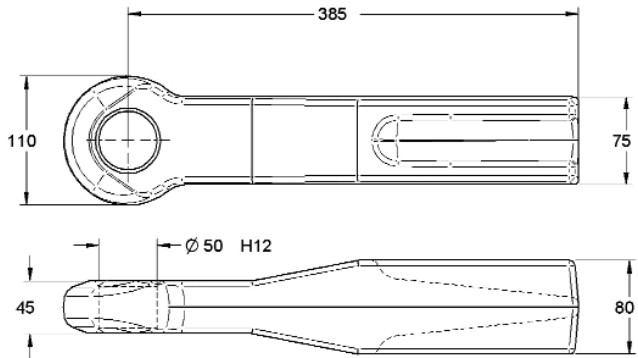



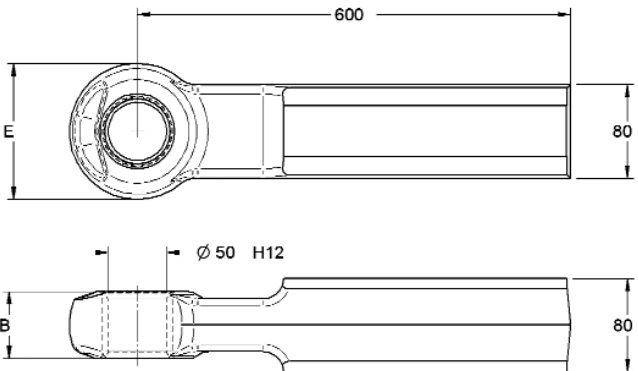
### CUNA 438/55

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Omologazione Homologation Genehmigung Homologation
45R1E	OC45R07	250	94/20/CE

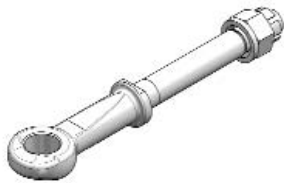


Occhioni a saldare Weldable drawbar eyes Einschweißzugösen Anneaux a souder						
<b>94/20/CE • DIN 74053-1</b>						
Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	A mm	Valore D D-Value D-Wert Valeur D kN	Omologazione Homologation Genehmigung Homologation		
<b>50W/L</b>	OC50W01	380	190	94/20/CE CRN		
<b>50W</b>	OC50W02	565	190	94/20/CE		

Occhioni a saldare Weldable drawbar eyes Einschweißzugösen Anneaux a souder <b>"Heavy duty"</b>						
Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Omologazione Homologation Genehmigung Homologation			
<b>50W-HD</b>	OC50W05	315	94/20/CE CRN			

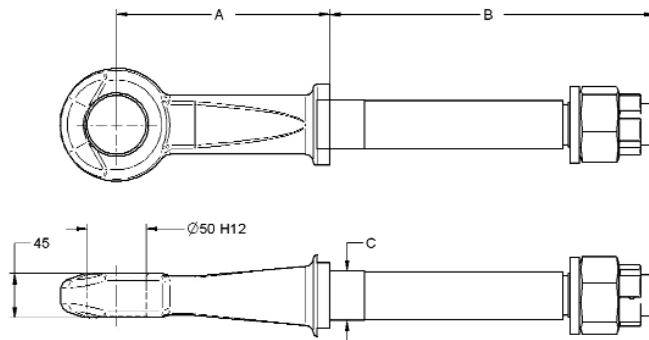
Occhioni a saldare Weldable drawbar eyes Einschweißzugösen Anneaux a souder <b>"Heavy duty"</b>						
<b>CUNA 438/55</b>						
Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	B mm	E mm	Peso rimorchiabile Total trailer weight Anhängelast Poids total de charge t	Omologazione Homologation Genehmigung Homologation	
<b>TITANO VI</b>	OC50W03	57	116	120	CUNA VI	
<b>TITANO VII</b>	OC50W04	67	136	250	CUNA VII	

Occhioni sfilabili  
Removable drawbar eyes  
Zugösen mit Schraubende  
Anneaux a ecrou

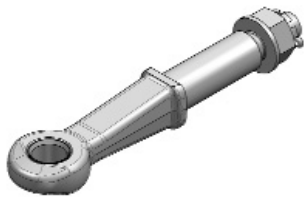


**CUNA 438/55**

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	A mm	B mm	C mm	Peso rimorchiabile Total traile weight Anhängelast Poids total de charge t	Omologazione Homologation Genehmigung Homologation
EURVO-A	OC50R01	205	310	35/42	26 ÷ 42	CUNA-V
EURVO L-B	OC50R02	217	310	49	26 ÷ 42	CUNA-V
EURVO L-C	OC50R03	210	328	47	26 ÷ 42	CUNA-V
EURVO L-P	OC50R04	212	315	47	26 ÷ 42	CUNA-V
EURVO L-V	OC50R05	210	328	47	26 ÷ 42	CUNA-V

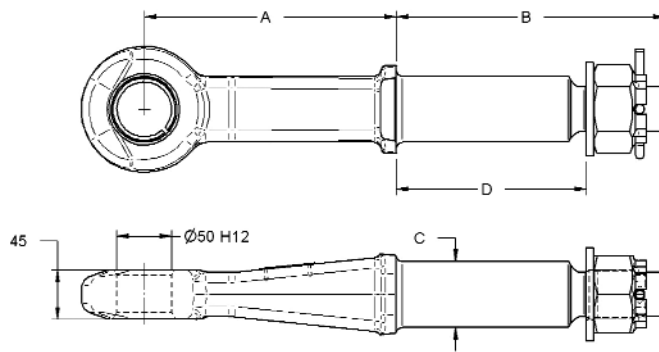


Occhioni sfilabili  
Removable drawbar eyes  
Zugösen mit Schraubende  
Anneaux a ecrou

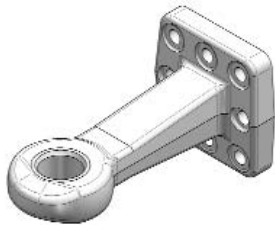


**94/20/CE • DIN 74053-1**

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	A mm	B mm	C mm	D mm	Valore D D-Value D-Wert Valeur D kN	Omologazione Homologation Genehmigung Homologation
50R1E	OC50R09	217	345	49	245	250	94/20/CE
50R10	OC50R10	230	245	60	173	250	94/20/CE

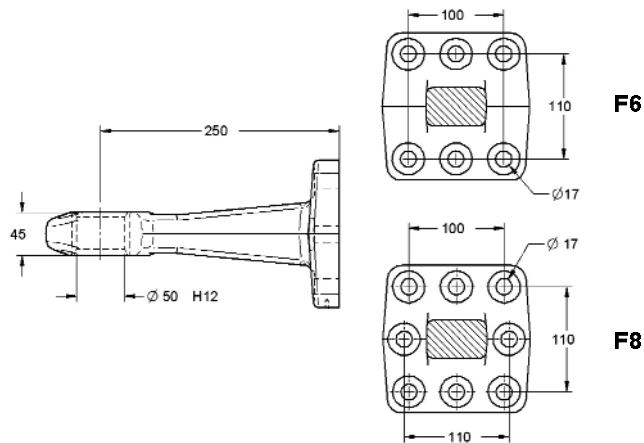


Occhioni flangiati  
Flanged drawbar eyes  
Flanschzugösen  
Anneaux brides

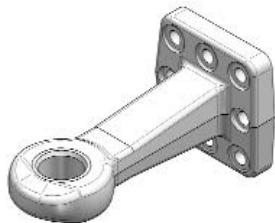


**94/20/CE • DIN 74053-1**

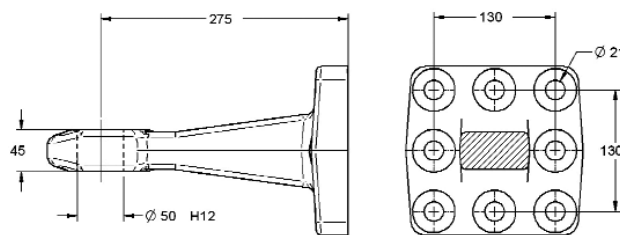
Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Valore S S-Value S-Wert Valeur S kg	Valore V V-Value V-Wert Valeur V kN	Peso rimorchiabile Total traile weight Anhängelast Poids total de charge t	Omologazione Homologation Genehmigung Homologation
50F6	OC50F60	120	-	1000	-	12	DIN
50F8	OC50F8	190	120	1000	50	-	94/20/CE
51F8	OC51F8E	200	140	1000 2500	75 50	-	94/20/CE



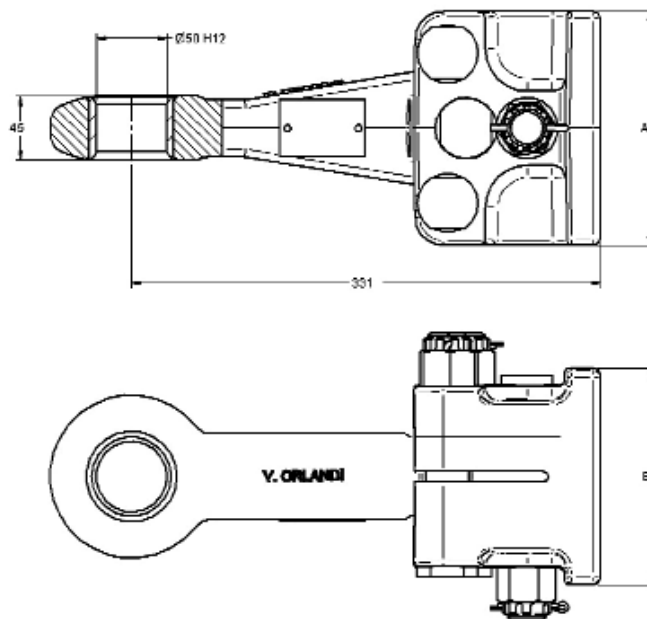
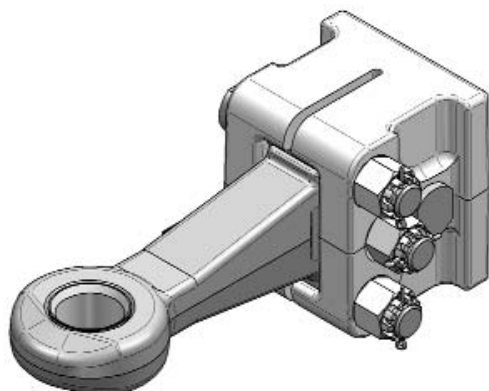
Occhioni flangiati  
Flanged drawbar eyes  
Flanschzugösen  
Anneaux brides  
**"Heavy duty"**



Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Valore S S-Value S-Wert Valeur S kg	Valore V V-Value V-Wert Valeur V kN	Omologazione Homologation Genehmigung Homologation
52F8	OC52F8E	200	135	1000	90	94/20/CE



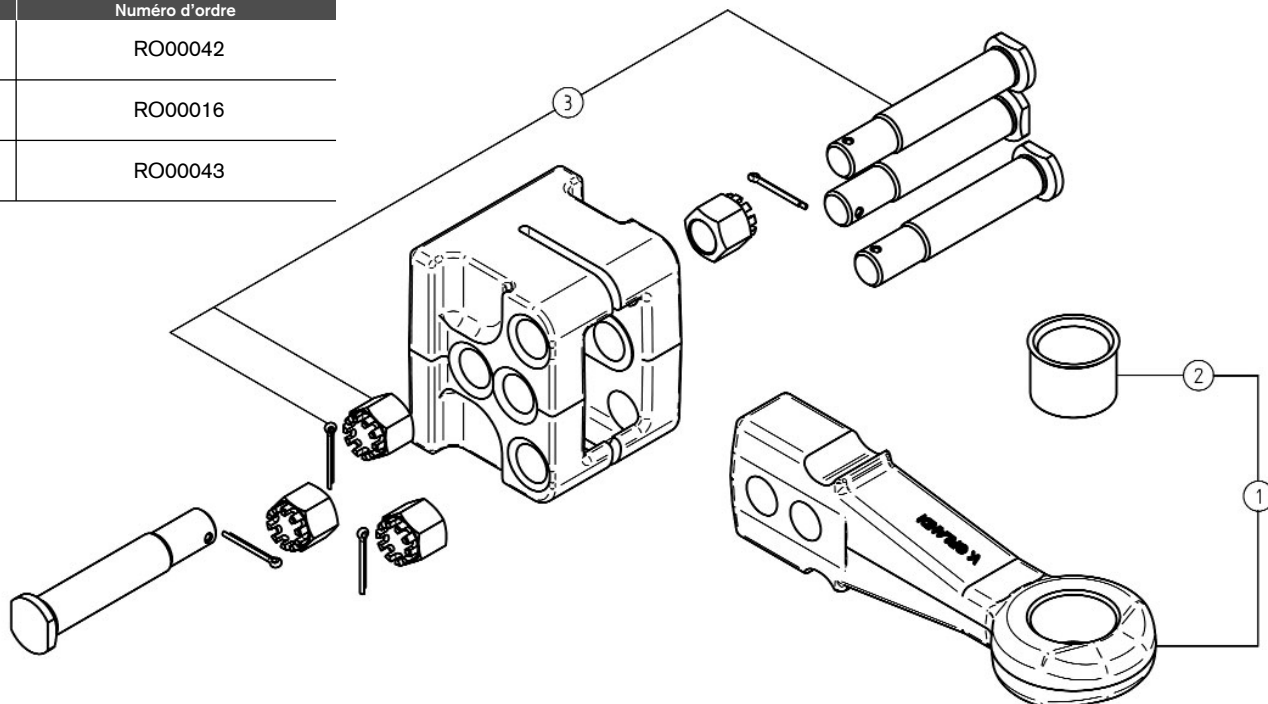
Occhioni flangiati speciali  
Special flanged drawbar eyes  
Spezial Flanschzugösen  
Anneaux brides spéciaux


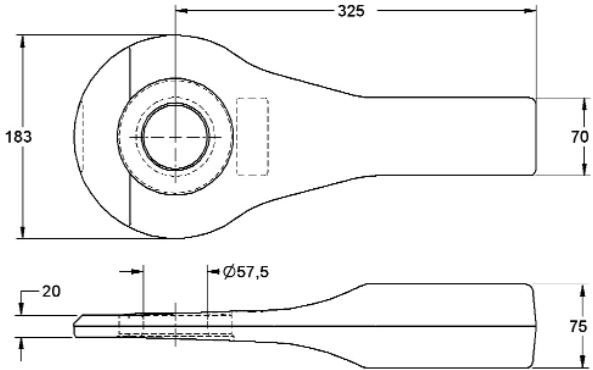


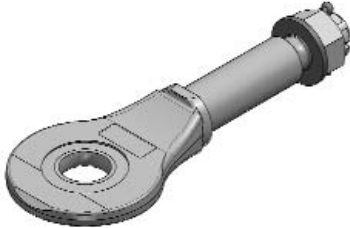
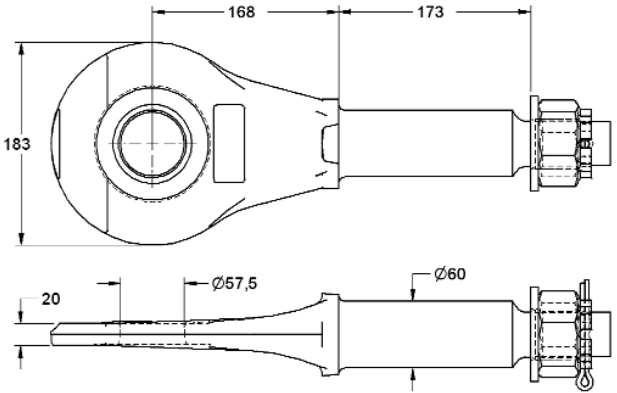
Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Valore S S-Value S-Wert Valeur S kg	Valore V V-Value V-Wert Valeur V kN	A mm	B mm	Omologazione Homologation Genehmigung Homologation
<b>50FS0</b>	OC50FS0	200	140	1000	90	165	150	94/20/CE
<b>50FS1</b>	OC50FS1					200	200	94/20/CE

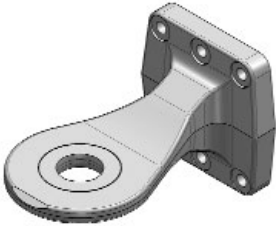
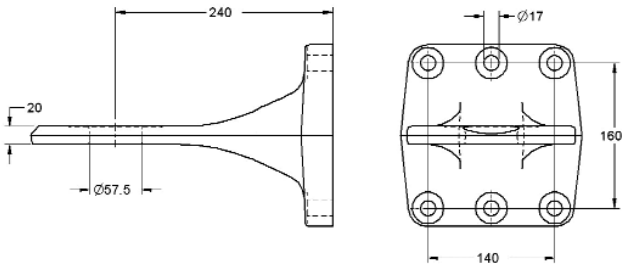
Ricambi • Spare parts  
Ersatzteile • Pièces de rechange

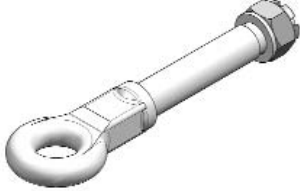
POS.	Codice Article number Artikelnummer Numéro d'ordre
1	RO00042
2	RO00016
3	RO00043

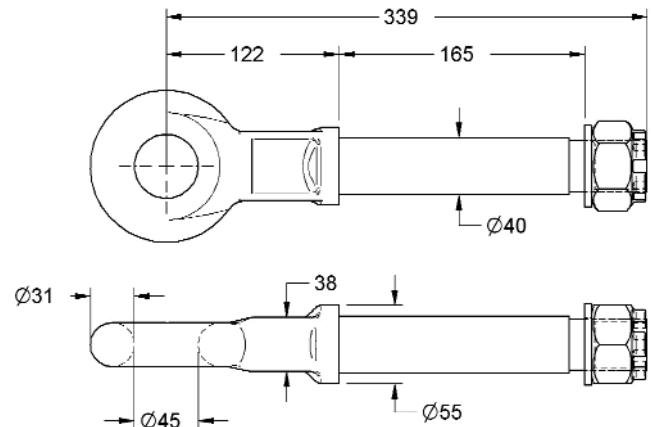


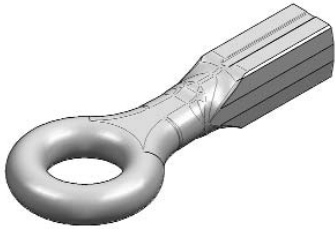
<p>Occhioni a saldare Weldable drawbar eyes Einschweißzugösen Anneaux a souder</p>						
SWEDISH STD						
Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Valore S S-Value S-Wert Valeur S kN	Valore V V-Value V-Wert Valeur V kN	Omologazione Homologation Genehmigung Homologation
57W01	OC57W01	190	90	1000	30	94/20/CE

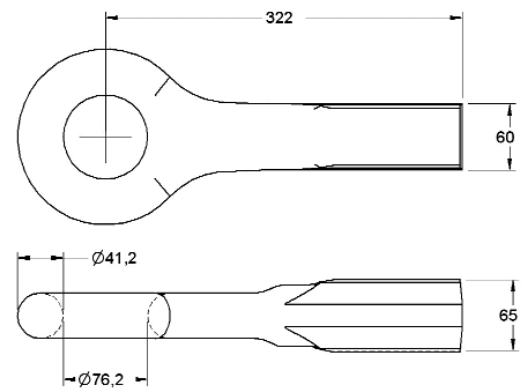
<p>Occhioni sfilabili Removable drawbar eyes Zugösen mit Schraubende Anneaux a ecrou</p>						
SWEDISH STD						
Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Valore S S-Value S-Wert Valeur S kN	Valore V V-Value V-Wert Valeur V kN	Omologazione Homologation Genehmigung Homologation
57R10	OC57R10	190	120	1000	40	94/20/CE


<p>Occhioni flangiati Flanged drawbar eyes Flanschzugösen Anneaux brides</p>						
SWEDISH STD						
Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Valore S S-Value S-Wert Valeur S kN	Valore V V-Value V-Wert Valeur V kN	Omologazione Homologation Genehmigung Homologation
57F	OC57F60	190	130	1000 2000	80 50	94/20/CE

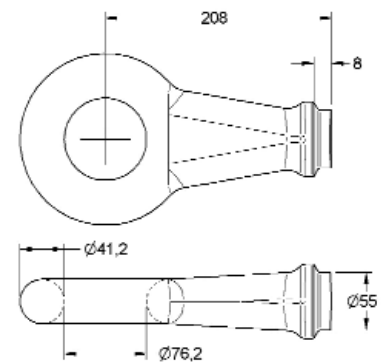
<p>Occhioni sfilabili Removable drawbar eyes Zugösen mit Schraubende Anneaux a ecrou</p> 			
<b>CUNA 438/40</b>			
<p>Tipo Type Typ Type</p>	<p>Codice Article number Artikelnummer Numéro d'ordre</p>	<p>Peso rimorchiabile Total traile weight Anhängelast Poids total de charge t</p>	<p>Omologazione Homologation Genehmigung Homologation</p>
<b>45T01</b>	<b>OC45T01</b>	<b>3,5</b>	<b>CUNA II</b>

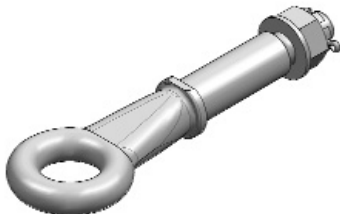


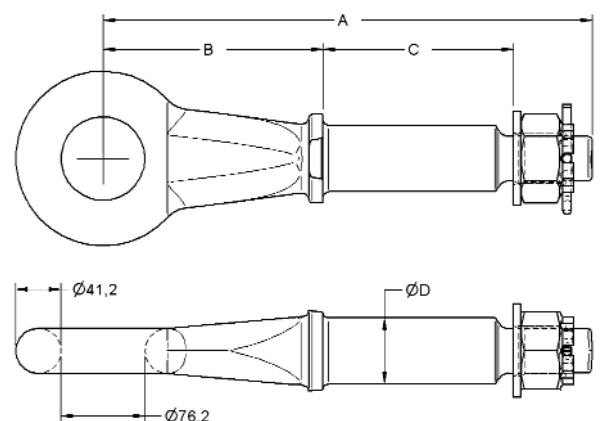
<p>Occhioni a saldare Weldable drawbar eyes Einschweißzugösen Anneaux a souder</p> 			
<b>CUNA 438/55 • ECE R55</b>			
<p>Tipo Type Typ Type</p>	<p>Codice Article number Artikelnummer Numéro d'ordre</p>	<p>Valore D D-Value D-Wert Valeur D kN</p>	
<b>76W01</b>	<b>OC76W01</b>	<b>120</b>	



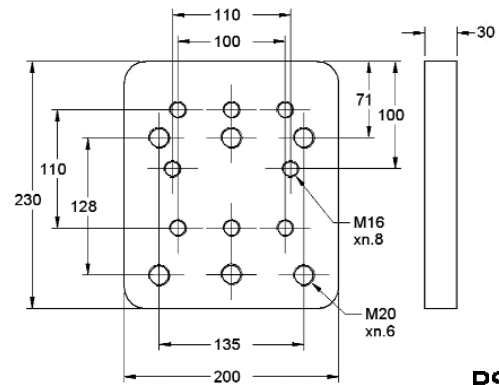
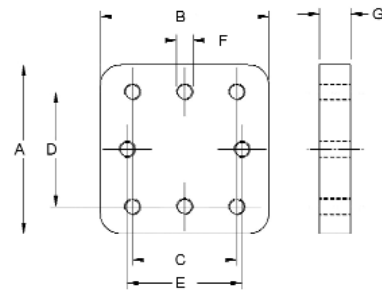
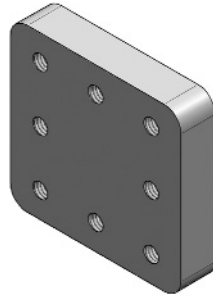
<p>Occhioni a saldare Weldable drawbar eyes Einschweißzugösen Anneaux a souder</p> 			
<b>CUNA 438/55 • ECE R55</b>			
<p>Tipo Type Typ Type</p>	<p>Codice Article number Artikelnummer Numéro d'ordre</p>	<p>Peso rimorchiabile Total traile weight Anhängelast Poids total de charge t</p>	
<b>76T04</b>	<b>OC76T04</b>	<b>26</b>	



<p>Occhioni sfilabili Removable drawbar eyes Zugösen mit Schraubende Anneaux a ecrou</p> 									
<b>CUNA 438/06 • ECE R55</b>									
<p>Tipo Type Typ Type</p>	<p>Codice Article number Artikelnummer Numéro d'ordre</p>	<p>A mm</p>	<p>B mm</p>	<p>C mm</p>	<p>D mm</p>	<p>Peso rimorchiabile Total traile weight Anhängelast Poids total de charge t</p>	<p>Valore D D-Value D-Wert Valeur D kN</p>	<p>Valore S S-Value S-Wert Valeur S kg</p>	<p>Omologazione Homologation Genehmigung Homologation</p>
<b>76T02</b>	<b>OC76T02</b>	<b>463</b>	<b>180</b>	<b>210</b>	<b>48</b>	<b>20</b>	<b>-</b>	<b>2500</b>	<b>CUNA F3</b>
<b>76R10</b>	<b>OC76R10</b>	<b>445</b>	<b>200</b>	<b>173</b>	<b>60</b>	<b>12</b>	<b>120</b>	<b>1000</b>	<b>-</b>



Piastre a saldare  
Weld in plates  
Anschweißplatten  
Plaques a souder

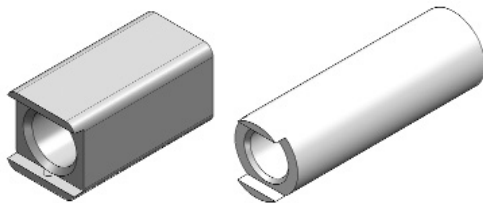


**PS004**

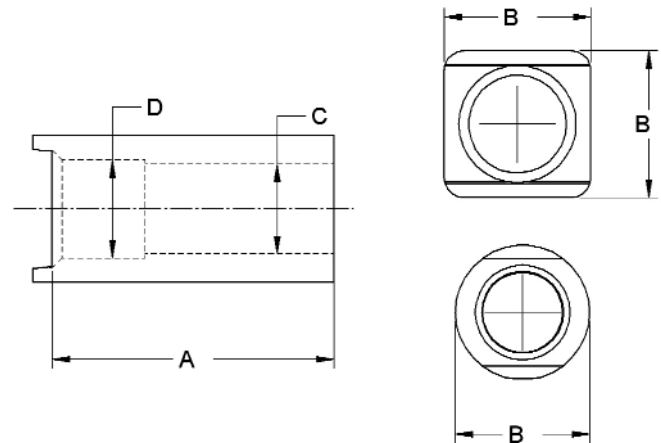
\* Speciale per trasporto vetture per occhielli flangiati standard e GS900  
Special type for car transport for standard flanged drawbar eyes and GS900  
Spezial version für Autotransporter für standard Flanschzugösen und GS900  
Type spéciale pour autotransport pour anneaux bridé standard et GS900

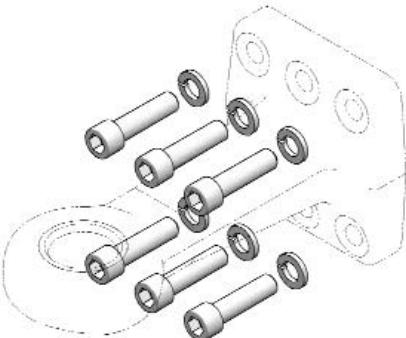
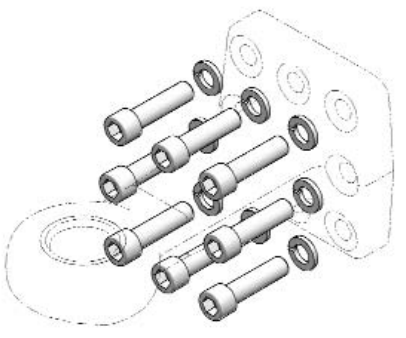
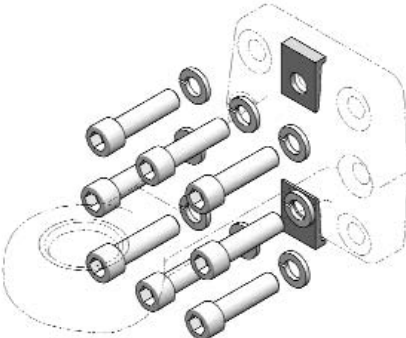
Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	
PS001	PS00100	162	162	100	110	110	M16	30	
PS002	PS00200	200	200						
PS003	PS00300	160	240						
PS004	PS00400	vedi disegno - see drawing							-
PS005	PS00500	190	200	130	130	130	M20	40	
PS006	PS00600	210	210	140	160	-	M16	40	



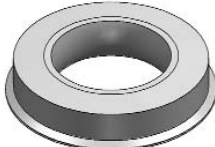
Manicotti  
Weldable brackets  
Zugösenlager  
Manchons



Codice Article number Artikelnummer Numéro d'ordre	A (mm)	B (mm)	C (mm)	D (mm)	Occhio applicabile Applicable drawbar eye Anwendbare Zugösen Anneaux d'attelage applicable
RO00036	245	○ 80	49,2	50,2	50R09-45R07
RO00038	245	□ 90x90	49,2	50,2	50R09-45R07
RO00039	165	○ 60	41	-	45T01
RO00001	210	○ 89	49	-	76T02
RO00014	258	○ 76	47,3	-	50R05-45R04
RO00041	173	□ 90x90	60	-	50R10-40R02-57R10-76R10




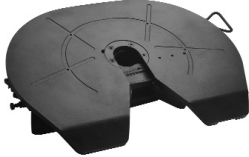


VITI - SCREWS - SCHRAUBEN - VIS		
	Per Occhione tipo For Drawbar eye type Für Zügöse Typ Pour Anneau type	Codice Kit Kit Code Bausatz Code Code Kit
	40F60	RO00025
	40F61	
	50F60	
	57F	RO00055
	Per Occhione tipo For Drawbar eye type Für Zügöse Typ Pour Anneau type	Codice Kit Kit Code Bausatz Code Code Kit
	50F8	RO00026
	51F8	
		52F8
	Per Occhione tipo For Drawbar eye type Für Zügöse Typ Pour Anneau type	Codice Kit Kit Code Bausatz Code Code Kit
	51F8	RO00035  In produzione fino al 2005 In production till 2005 In Produktion bis 2005 En production jusqu'en 2005

BUSSOLA - BUSH - BUCHSE - BAGUE					
					
Per Occhione tipo For Drawbar eye type Für Zügöse Typ Pour Anneau type	Codice Bussola Bush Code Buchse Code Code Bague	Per Occhione tipo For Drawbar eye type Für Zügöse Typ Pour Anneau type	Codice Bussola Bush Code Buchse Code Code Bague	Per Occhione tipo For Drawbar eye type Für Zügöse Typ Pour Anneau type	Codice Bussola Bush Code Buchse Code Code Bague
40W-R	RO00017	OC40F	RO00024	OC57	RO00054
50R	RO00004	45R	RO00003		
		50F/51F/52F	RO00016		
50W01/02/05		50R	RO000T4		
		50W01/02/05	RO00005		
		50W03	RO00005		
		50W04	RO00002		



# Ralle Fifth wheels - Sattelkupplungen - Sellettes d'attelage

	serie series Serie série	omologazione homologation Genehmigung homologation	descrizione description Beschreibung description	perni di articolazione kingpins Zugsattelzapfen pivots d'attelage	pagina page Seite page
	RP10 AT GT	94 / 20 / CE	Ralla su tamponi - Appoggi ISO Fifth wheel with rubber bearings - ISO pedestal Sattelkupplung mit Gummigelenklagerung - ISO Lagerböcke Sellette d'attelage avec tampons en caoutchouc - Paliers ISO	<b>2"</b>	58
	RP10 AP GP AS GS	94 / 20 / CE	Ralla su perni - Appoggi ISO / a saldare Fifth wheel with pivot bearings - ISO / weldable pedestal Sattelkupplung mit Bolzenlagerung - ISO / schweißbare Lagerböcke Sellette d'attelage avec articulation à boulons - Paliers ISO / à souder	<b>2"</b>	60
	RVO2/E	94 / 20 / CE	Ralla su tamponi - Appoggi ISO Fifth wheel with rubber bearings - ISO pedestal Sattelkupplung mit Gummigelenklagerung - ISO Lagerböcke Sellette d'attelage avec tampons en caoutchouc - Paliers ISO	<b>2"</b>	62
	RS08 AP GP	94 / 20 / CE	Ralla su perni - Appoggi ISO Fifth wheel with pivot bearings - ISO pedestal Sattelkupplung mit Bolzenlagerung - ISO Lagerböcke Sellette d'attelage avec articulation à boulons - Paliers ISO	<b>2"</b>	64
	RS35GP	94 / 20 / CE	Ralla su perni - Appoggi ISO Fifth wheel with pivot bearings - ISO pedestal Sattelkupplung mit Bolzenlagerung - ISO Lagerböcke Sellette d'attelage avec articulation à boulons - Paliers ISO	<b>3,5"</b>	66



# RP10 - AT/GT

Ralla su tamponi - Appoggi ISO  
 Fifth wheel with rubber bearings - ISO pedestal  
 Sattelkupplung mit Gummigelagerung - ISO Lagerböcke  
 Sellette d'attelage avec tampons en caoutchouc - Paliers ISO

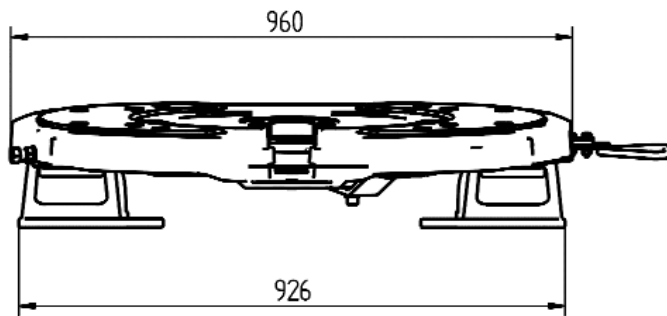
<b>2"</b>	Omologazione - Homologation	<b>94 / 20 / CE</b>
	Genehmigung - Homologation	

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ	Codice Article number Artikelnummer Numéro d'ordre	Altezza H H-Height H-Bauhöhe Hauteur H mm	Valore D D-Value D-Wert Valeur D kN	Carico verticale U Vertical load U Sattellast U Charge vertical U Ton	Peso Weight Gewicht Poids kg	94 / 20 / CE	
						Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
RP10- <b>A</b> T-150	F2T1A20	150	152	20	149	G50-X	e11/00-4649
RP10- <b>A</b> T-185	F2T1A30	185	152	20	152	G50-X	e11/00-4649
RP10- <b>G</b> T-150	F2T1G20	150	152	20	149	G50-X	e11/00-4649
RP10- <b>G</b> T-185	F2T1G30	185	152	20	152	G50-X	e11/00-4649

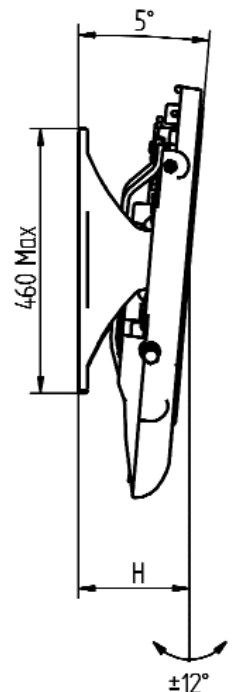
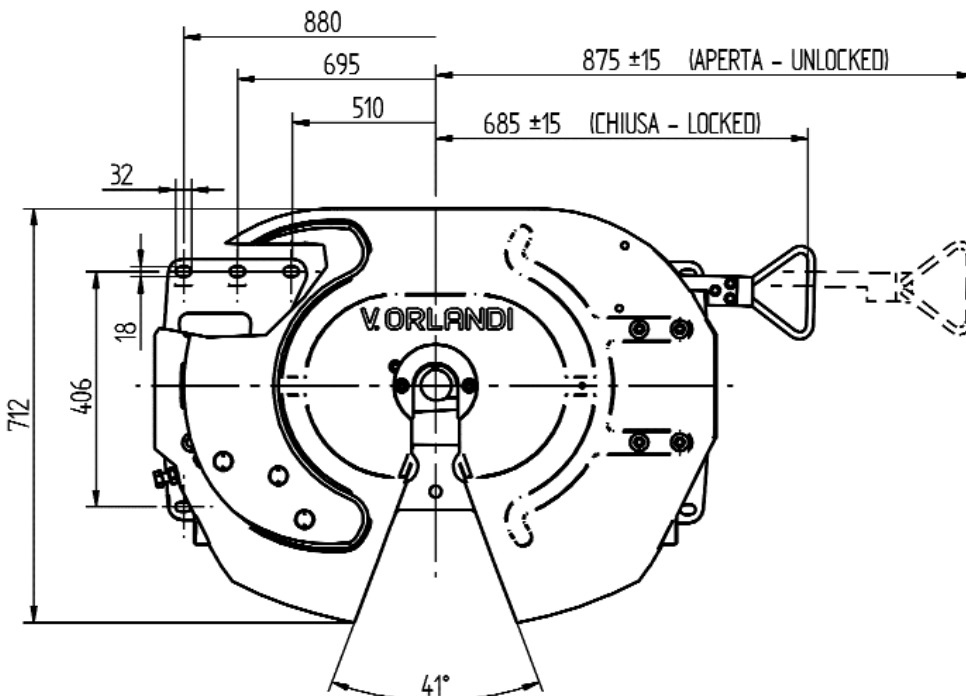
**A** = Piatto autolubrificante / Autolube plate

**G** = Ralle con lubrificazione standard / Standard greasing plate

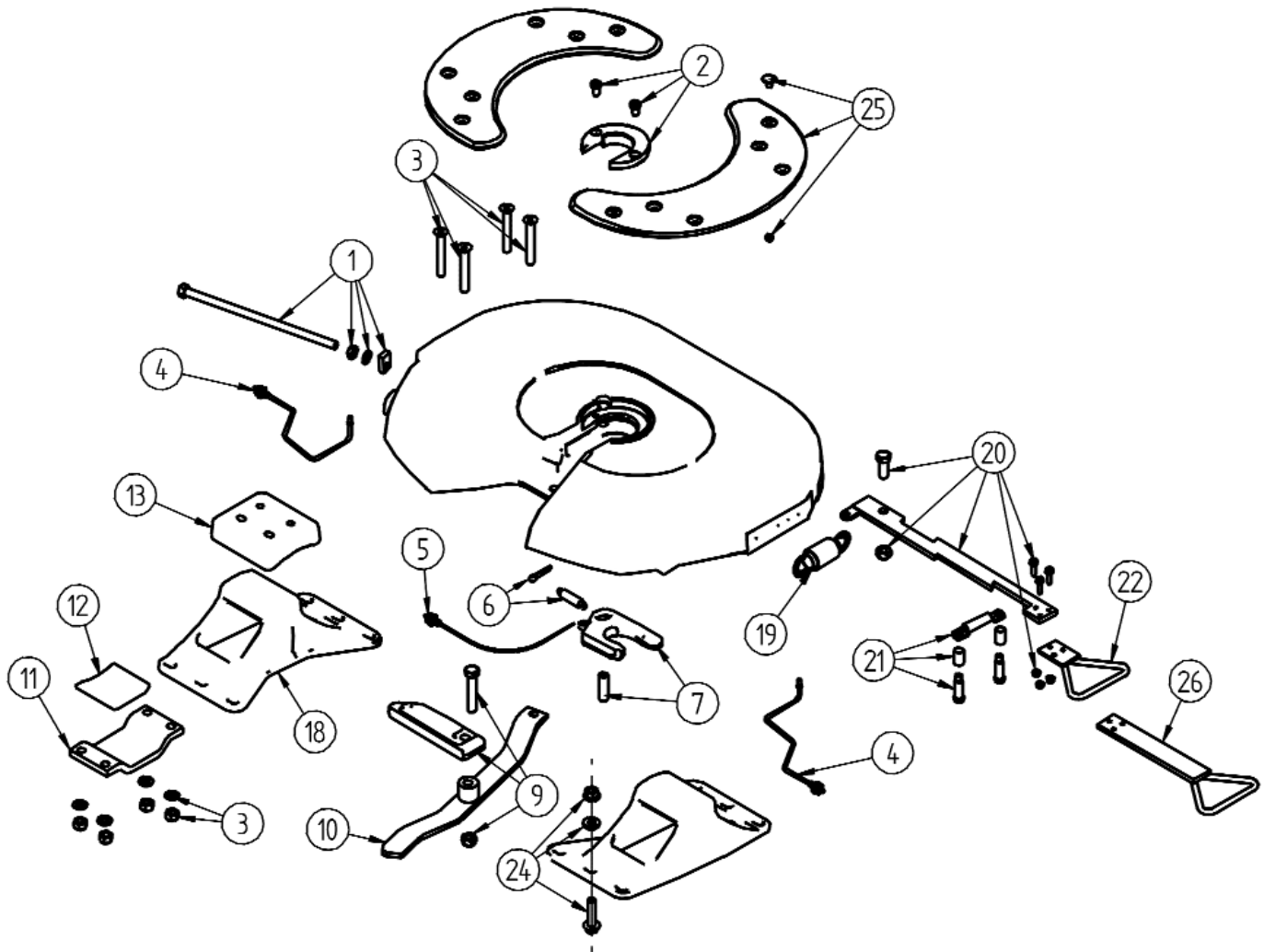


## Kit complementari - Complementary kits Aufrüstsätze - Kits complémentaires

RR 00 083	Prolunga leva di apertura Extension for action lever Verlängerung für Handhebel Prolonge pour levier d'ouverture
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1990 218 B



POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type			
		F2T1A20	F2T1A30	F2T1G20	F2T1G30
1	RR00054				
2	RR00055				
3	RR00019				
4				RR00056	RR00056
5	RR00057				
6	RR00058				
7	RR00059				
9	RR00060				
10	RR00061				
11	RR00007				
12	RR00006				
13	RR00005				
18		RR00072	RR00073	RR00072	RR00073
19	RR00037				
20	RR00078				
21	RR00048				
22	RR00079				
25		RR00081	RR00081		
KIT					
24	RR00050				
26	RR00083				
2-6-7	RR00082				
3-12-13	RR00031				



# RP10 - AP/GP/AS/GS

Ralla su perni  
Fifth wheel with pivot bearings  
Sattelkupplung mit Bolzenlagerung  
Sellette d'attelage avec articulation à boulons

2"

Omologazione - Homologation  
Genehmigung - Homologation

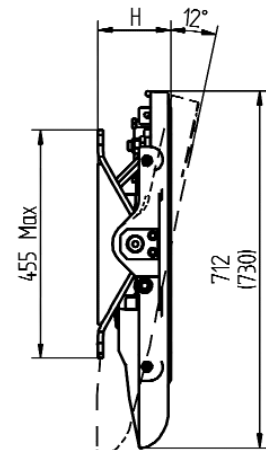
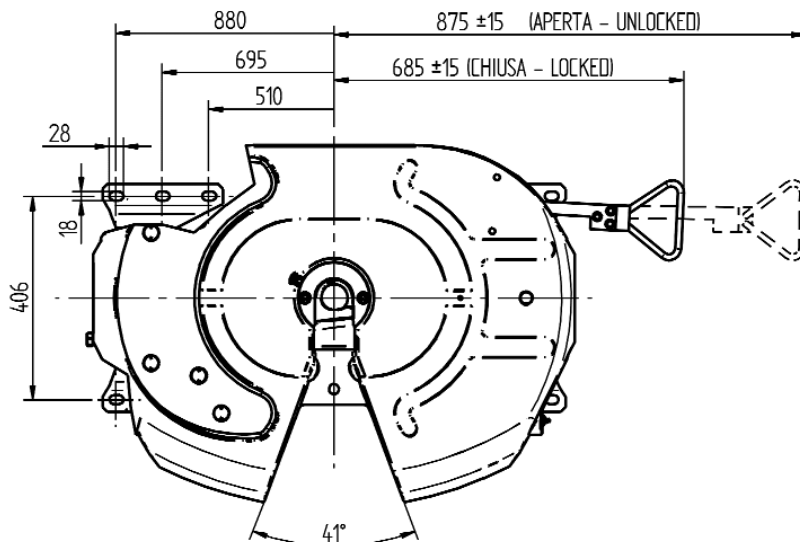
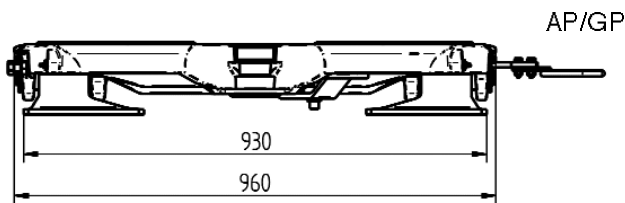
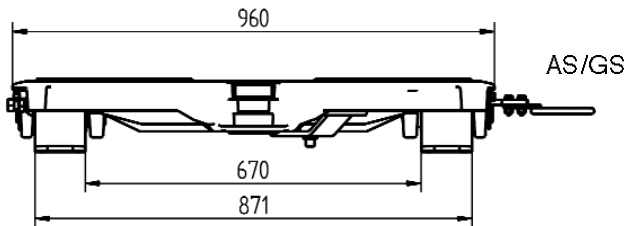
94 / 20 / CE

## Dati tecnici - Technical data - Technische Daten - Données techniques

	Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Altezza H H-Height H-Bauhöhe Hauteur H mm	Valore D D-Value D-Wert Valeur D kN	Carico verticale U Vertical load U Sattelast U Charge vertical U Ton	Peso Weight Gewicht Poids kg	94 / 20 / CE	
							Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
APPOGGIO ISO ISO PEDESTAL	RP10- <b>A</b> P-140	F2P1A10	140	152	20	139	G50-X	e11/00-4649
	RP10- <b>A</b> P-150	F2P1A20	150	152	20	141	G50-X	e11/00-4649
	RP10- <b>A</b> P-185	F2P1A30	185	152	20	143	G50-X	e11/00-4649
	RP10- <b>G</b> P-140	F2P1G10	140	152	20	139	G50-X	e11/00-4649
	RP10- <b>G</b> P-150	F2P1G20	150	152	20	141	G50-X	e11/00-4649
	RP10- <b>G</b> P-185	F2P1G30	185	152	20	143	G50-X	e11/00-4649
APPOGGIO SALDARE WELDABLE PEDESTAL	RP10- <b>A</b> S-140	F2S1A10	140	152	14	139	G50-X	CRN
	RP10- <b>A</b> S-150	F2S1A20	150	152	14	141	G50-X	CRN
	RP10- <b>A</b> S-185	F2S1A30	185	152	14	143	G50-X	CRN
	RP10- <b>G</b> S-140	F2S1G10	140	152	14	139	G50-X	CRN
	RP10- <b>G</b> S-150	F2S1G20	150	152	14	141	G50-X	CRN
	RP10- <b>G</b> S-185	F2S1G30	185	152	14	143	G50-X	CRN

**A** = Piatto autolubrificante / Autolube plate

**G** = Ralle con lubrificazione standard / Standard greasing plate

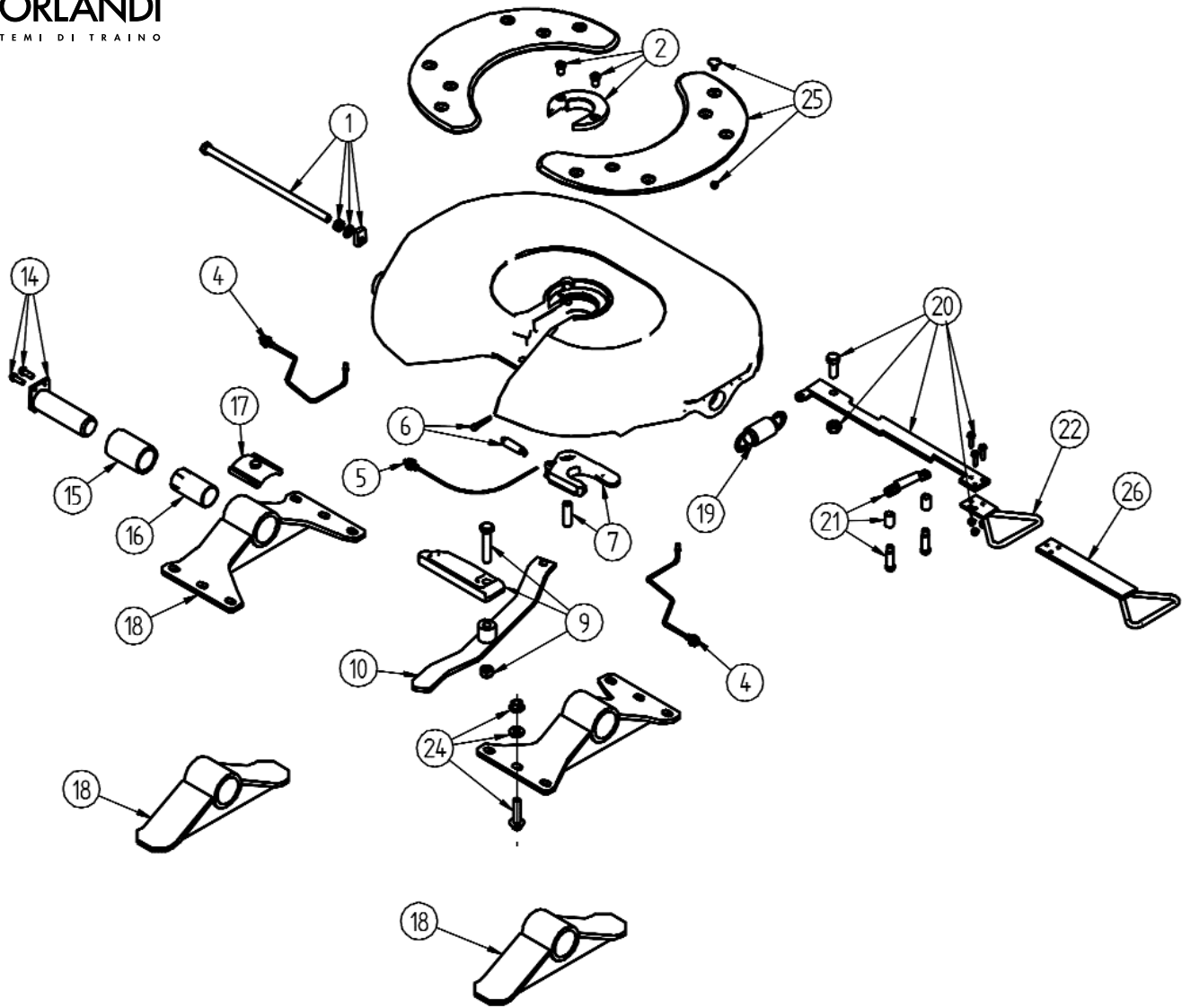


## Kit complementari - Complementary kits Aufrüstsätze - Kits complémentaires

RR 00 083

Prolunga leva di apertura  
Extension for action lever  
Verlängerung für Handhebel  
Prolonge pour levier d'ouverture

1990 218 B



POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type											
		F2P1A10	F2P1A20	F2P1A30	F2P1G10	F2P1G20	F2P1G30	F2S1A10	F2S1A20	F2S1A30	F2S1G10	F2S1G20	F2S1G30
1	RR00054												
2	RR00055												
4					RR00056	RR00056	RR00056				RR00056	RR00056	RR00056
5	RR00057												
6	RR00058												
7	RR00059												
9	RR00060												
10	RR00061												
14	RR00062												
15	RR00063												
16	RR00064												
17	RR00065												
18		RR00069	RR00070	RR00071	RR00069	RR00070	RR00071	RR00066	RR00067	RR00068	RR00066	RR00067	RR00068
19	RR00037												
20	RR00078												
21	RR00048												
22	RR00079												
25		RR00081	RR00081	RR00081				RR00081	RR00081	RR00081			
KIT													
24		RR00050	RR00050	RR00050	RR00050	RR00050	RR00050						
26	RR00083												
2-6-7	RR00082												
15-16-17	RR00084												



# RVO2/E

Ralla  
Fifth wheel  
Sattelkupplung  
Sellette d'attelage

<b>2"</b>	Omologazione - Homologation	<b>94 / 20 / CE</b>
	Genehmigung - Homologation	

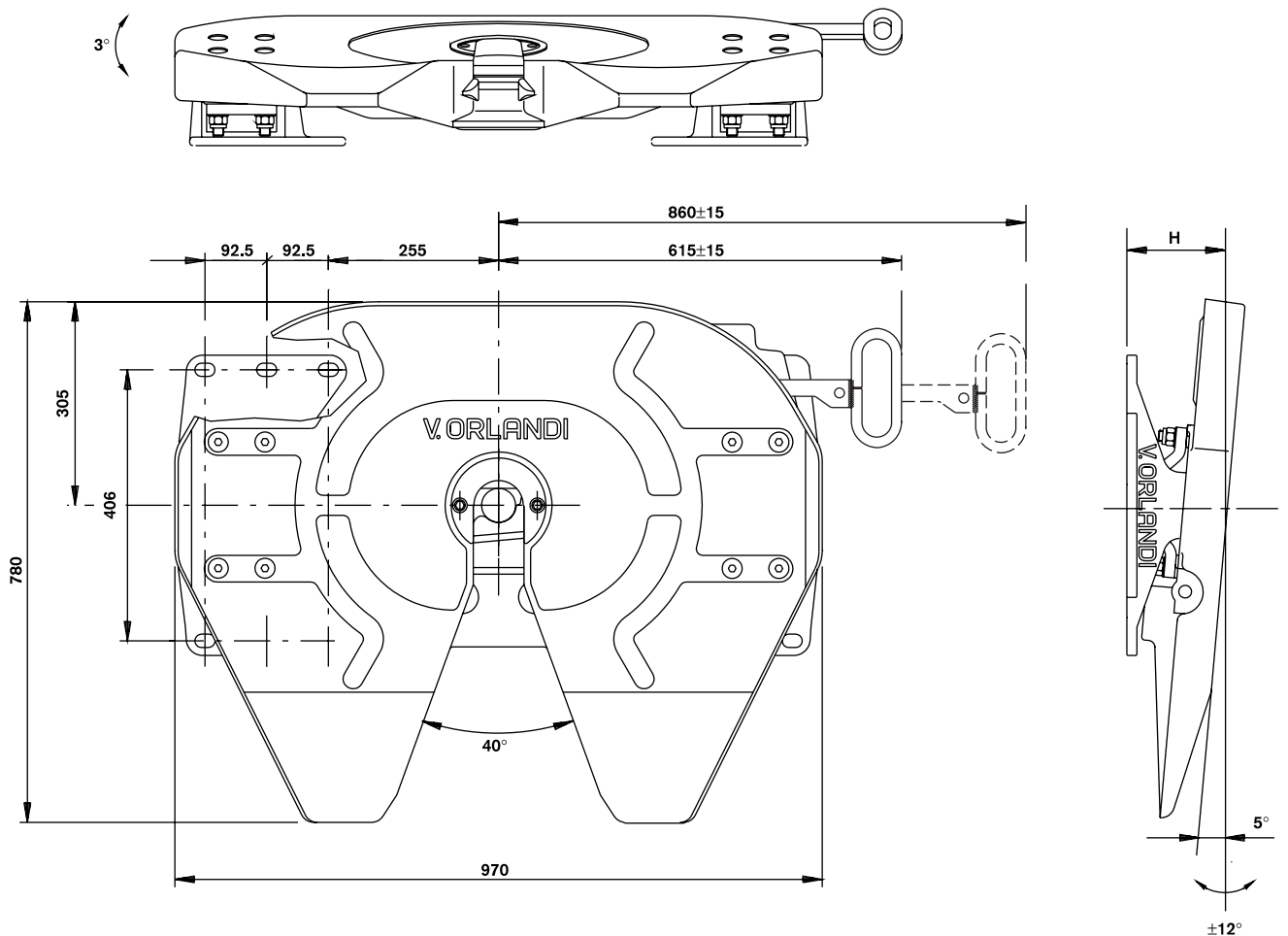
## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ	Codice Article number Artikelnummer Numéro d'ordre	Altezza H H-Height H-Bauhöhe Hauteur H mm	Valore D D-Value D-Wert Valeur D kN	Carico verticale U Vertical load U Sattellast U Charge vertical U kg	Peso Weight Gewicht Poids kg	94 / 20 / CE		ECE R 55
						Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation	Omologazione Homologation Genehmigung Homologation
RVO2/E-150	F2E0200	150	150 (*)	22000	148	G50-X	e11/00-0472	E11/00-002
RVO2/E-185	F2E0300	185	150 (*)	22000	150	G50-X	e11/00-0472	E11/00-002

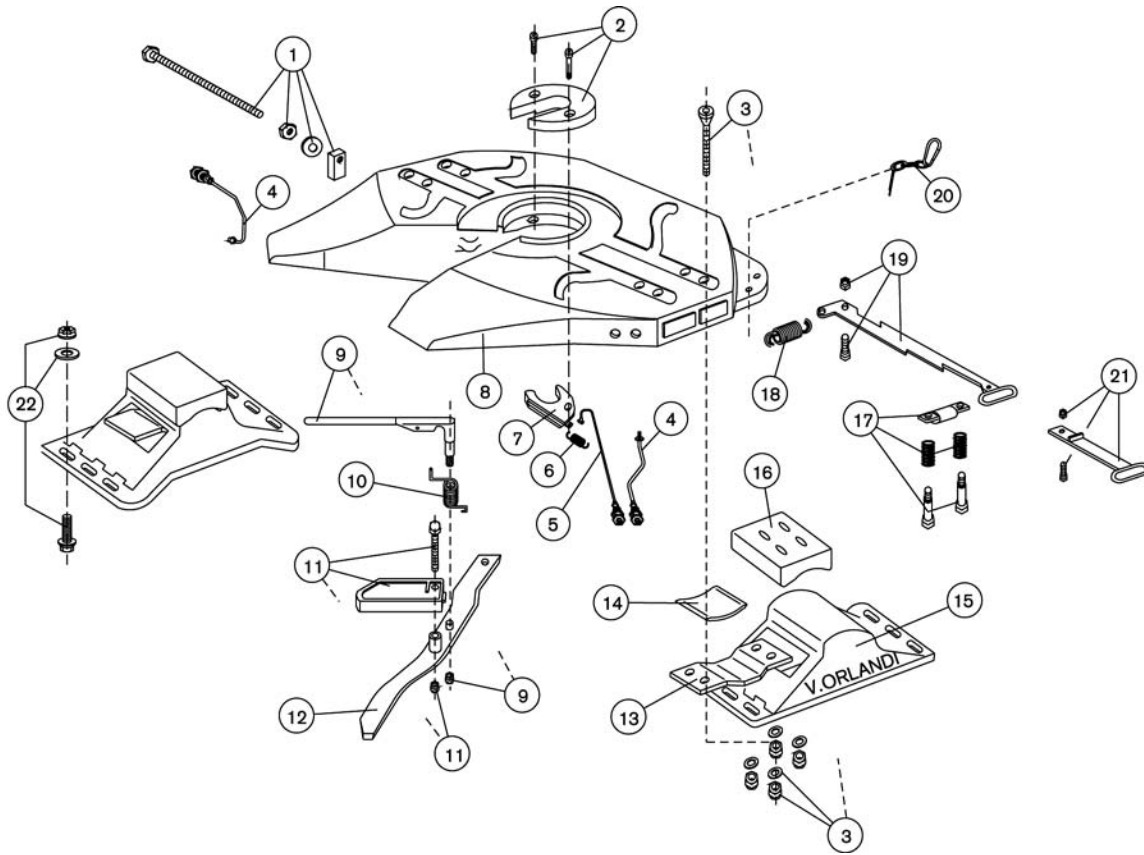
(\*) D=170 per semirimorchi senza cuneo guida - D=170 for semitrailers without steering wedge  
D=170 für Auflieger ohne Lenkkeil - D=170 pour semi-remorques sans la cale de guidage

### Kit complementari - Complementary kits Aufrüstsätze - Kits complémentaires

RR00053	Prolunga leve di apertura Extension for action lever Verlängerung für Handhebel Prolonge pour levier d'ouverture
RR00015	Moschettone Safety clip Karabinerhaken Mousqueton



1990 062 B



POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type							
		F2E0200	F2E0201	F2E0202	F2E0203	F2E0300	F2E0301	F2E0302	F2E0303
1	RR00047								
2	RR00036								
3	RR00019								
4	RR00039								
5	RR00038								
6	RR00044								
7	RR00035								
8	non a ricambio								
9	RR00033								
10	RR00045								
11	RR00034								
12	RR00040								
13	RR00007								
14	RR00006								
15		RR00001	RR00001	RR00001	RR00001	RR00026	RR00026	RR00026	RR00026
16	RR00005								
17	RR00048								
18	RR00037								
19	RR00043								
20				RR00015	RR00015			RR00015	RR00015
21			RR00053		RR00053		RR00053		RR00053
<b>KIT</b>									
20	RR00015								
21	RR00053								
22	RR00050								
2-6-7	RR00041								
3-14-16	RR00031								
2-3-6-7-9-10-	RR00042								
11-14-16-18									



# RS08 - AP/GP

Ralla su perni - Appoggi ISO  
 Fifth wheel with pivot bearings - ISO pedestal  
 Sattelkupplung mit Bolzenlagerung - ISO Lagerböcke  
 Sellette d'attelage avec articulation à boulons - Paliers ISO

<b>2"</b>	Omologazione - Homologation Genehmigung - Homologation	94 / 20 / CE
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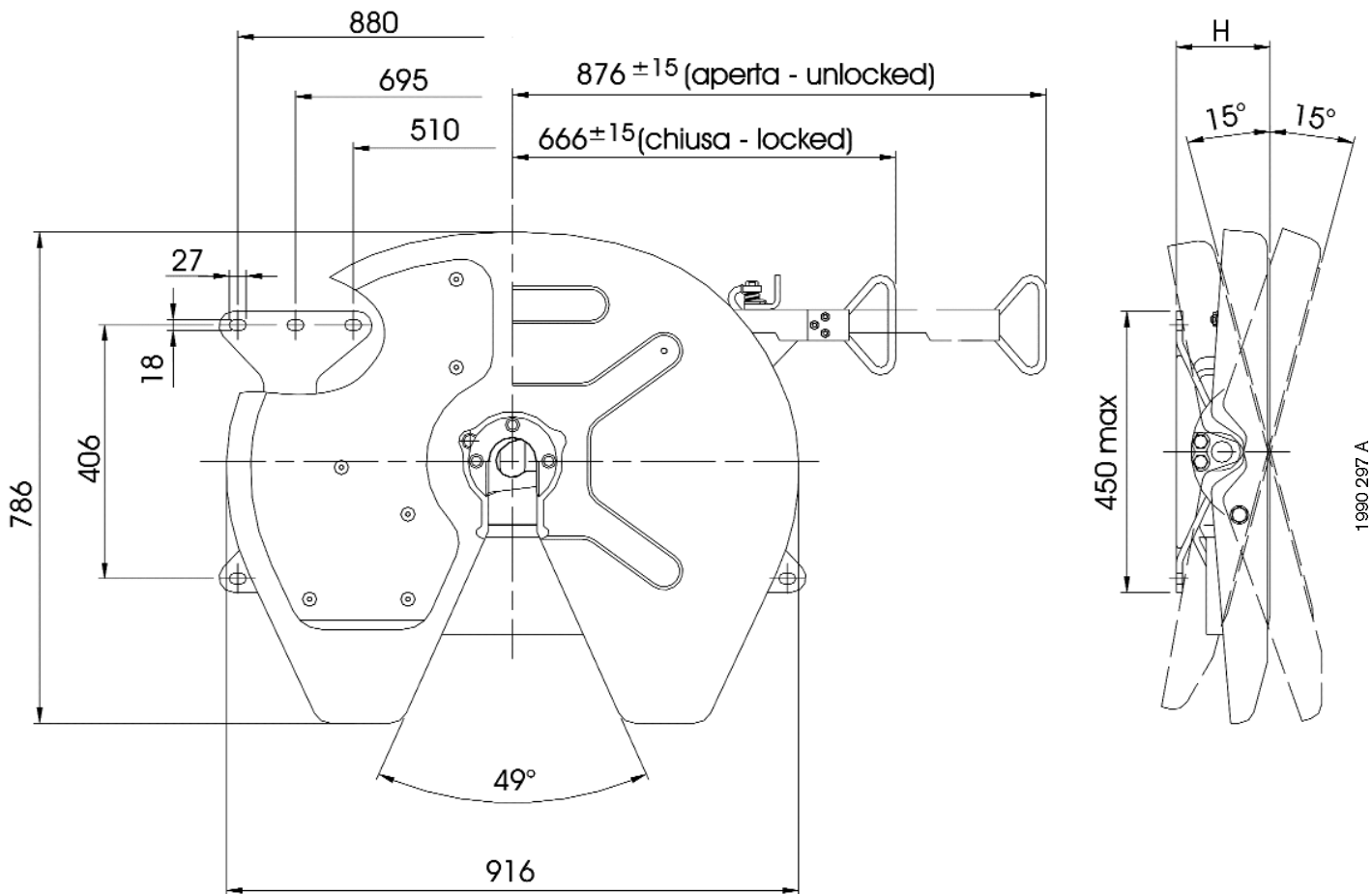
## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ	Codice Article number Artikelnummer Numéro d'ordre	Altezza H H-Height H-Bauhöhe Hauteur H mm	Valore D D-Value D-Wert Valeur D kN	Carico verticale U Vertical load U Sattellast U Charge vertical U Ton	Peso Weight Gewicht Poids kg	94 / 20 / CE	
						Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
RS08- <b>A</b> P-150	FSP1A10	150	152	20	130	G50-X	e11/00-5489
RS08- <b>A</b> P-185	FSP1A30	185	152	20	132	G50-X	e11/00-5489
RS08- <b>G</b> P-150	FSP1G10	150	152	20	128	G50-X	e11/00-5489
RS08- <b>G</b> P-185	FSP1G30	185	152	20	130	G50-X	e11/00-5489

**A** = Piatto autolubrificante / Autolube plate  
**G** = Ralle con lubrificazione standard / Standard greasing plate

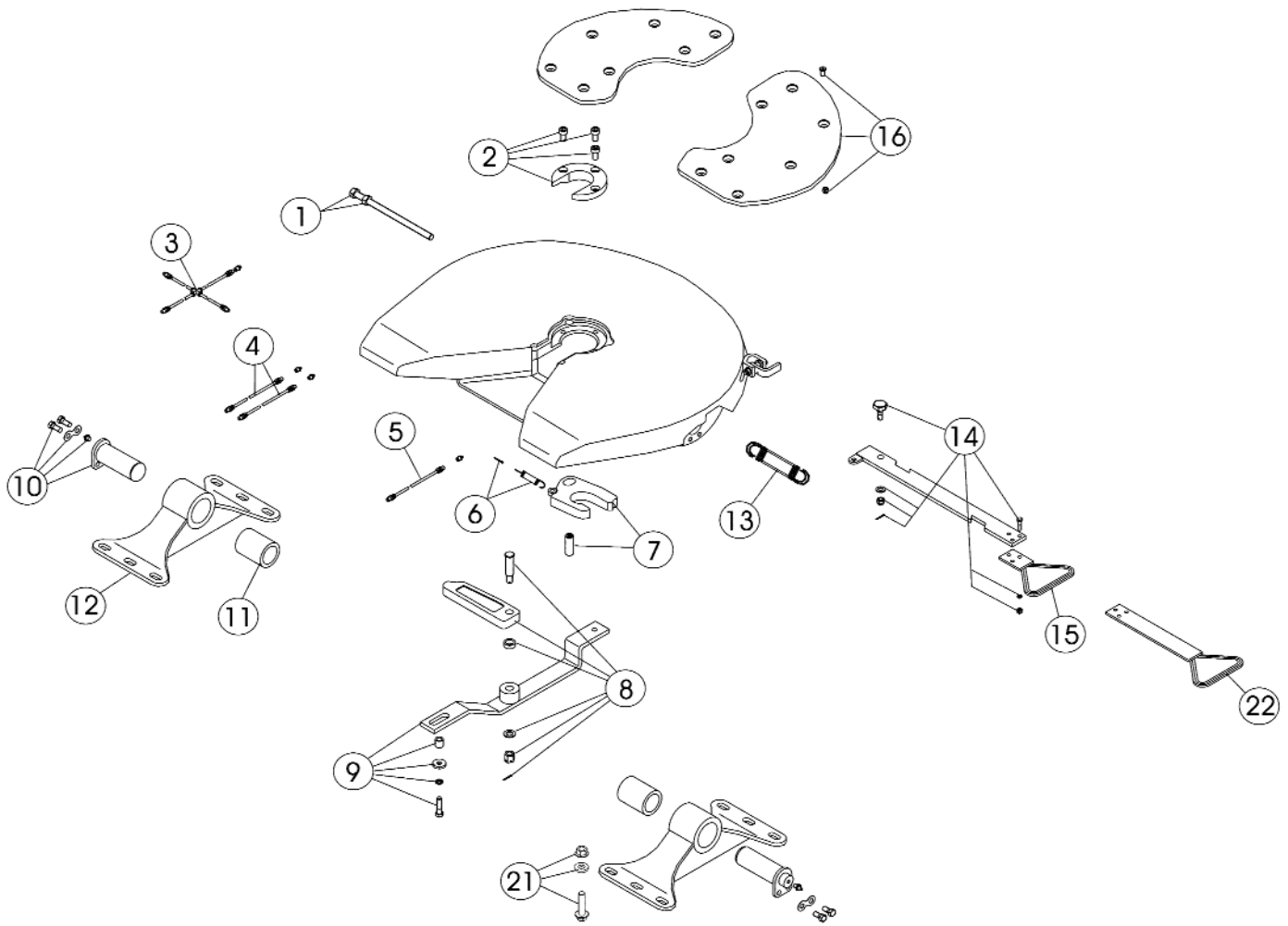
### Kit complementari - Complementary kits Aufrüstsätze - Kits complémentaires

RR 00 083	Prolunga leva di apertura Extension for action lever Verlängerung für Handhebel Prolonge pour levier d'ouverture
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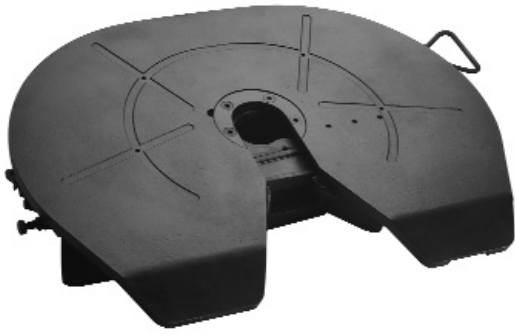


1990 297 A





POS.	Tutti i tipi All types Alle typen Tous les types	Tipo - Type - Typ - Type			
		FSP1A10	FSP1A30	FSP1G10	FSP1G30
1	RR00085				
2	RR00086				
3	RR00094				
4	RR00102				
5	RR00087				
6	RR00088				
7	RR00089				
8	RR00090				
9	RR00091				
10	RR00092				
11	RR00093				
12		RR00095	RR00097	RR00095	RR00097
13	RR00098				
14	RR00099				
15	RR00079				
16		RR00100	RR00100		
KIT					
21	RR00050				
22	RR00083				
23 (2-6-7)	RR00101				



# RS35-GP

Ralla su perni - Appoggi ISO  
 Fifth wheel with pivot bearings - ISO pedestal  
 Sattelkupplung mit Bolzenlagerung - ISO Lagerböcke  
 Sellette d'attelage avec articulation à boulons - Paliers ISO

**3,5''**

Omologazione - Homologation  
 Genehmigung - Homologation

94 / 20 / CE

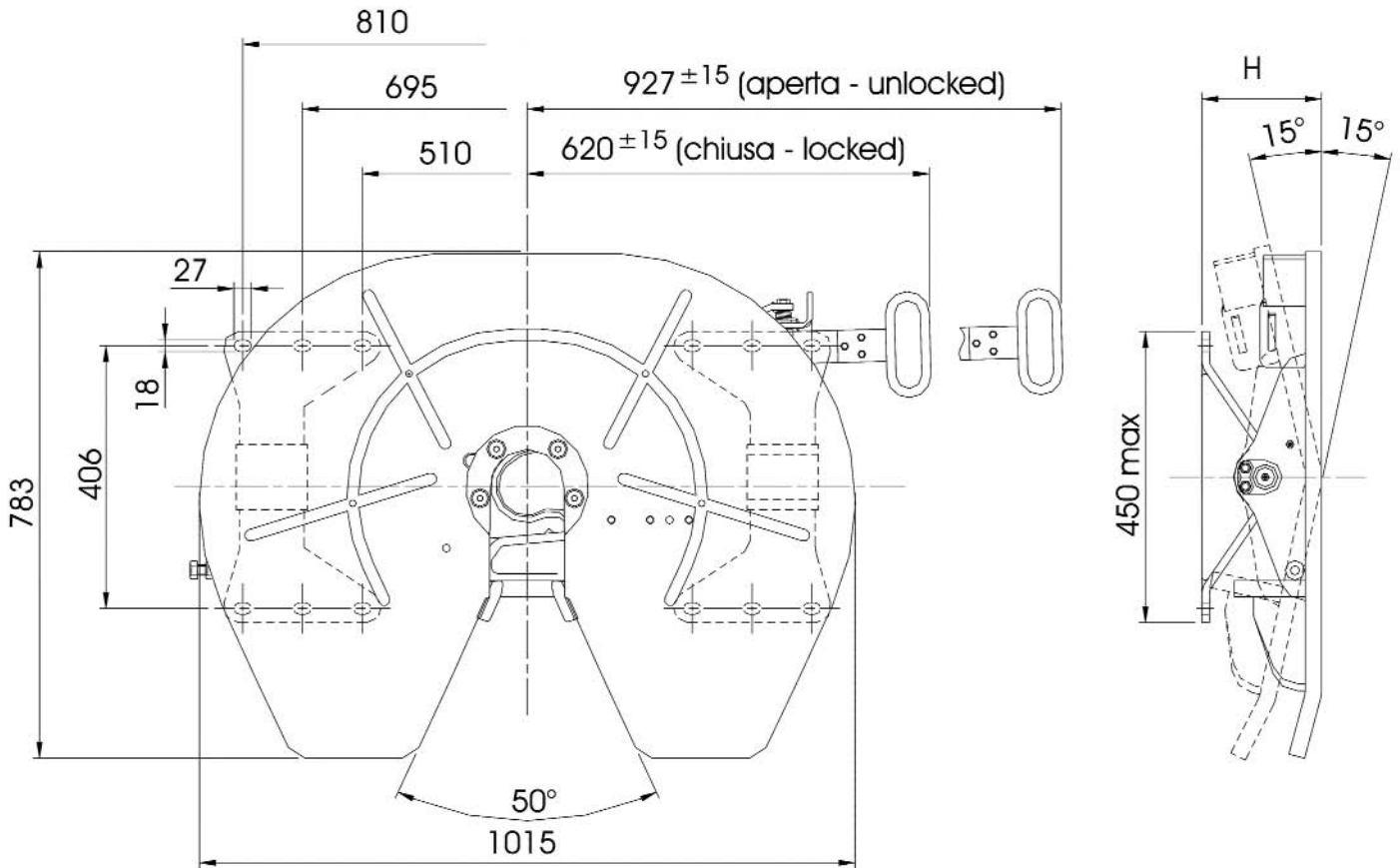
## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Codice Article number Artikelnummer Numéro d'ordre	Altezza H H-Height H-Bauhöhe Hauteur H mm	Valore D D-Value D-Wert Valeur D kN	Carico verticale U Vertical load U Sattellast U Charge vertical U Ton	Peso Weight Gewicht Poids kg	94 / 20 / CE	
						Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
RS35-GP-185	F3P1G30	185	240	36	212	G50-X	e11/00-5994

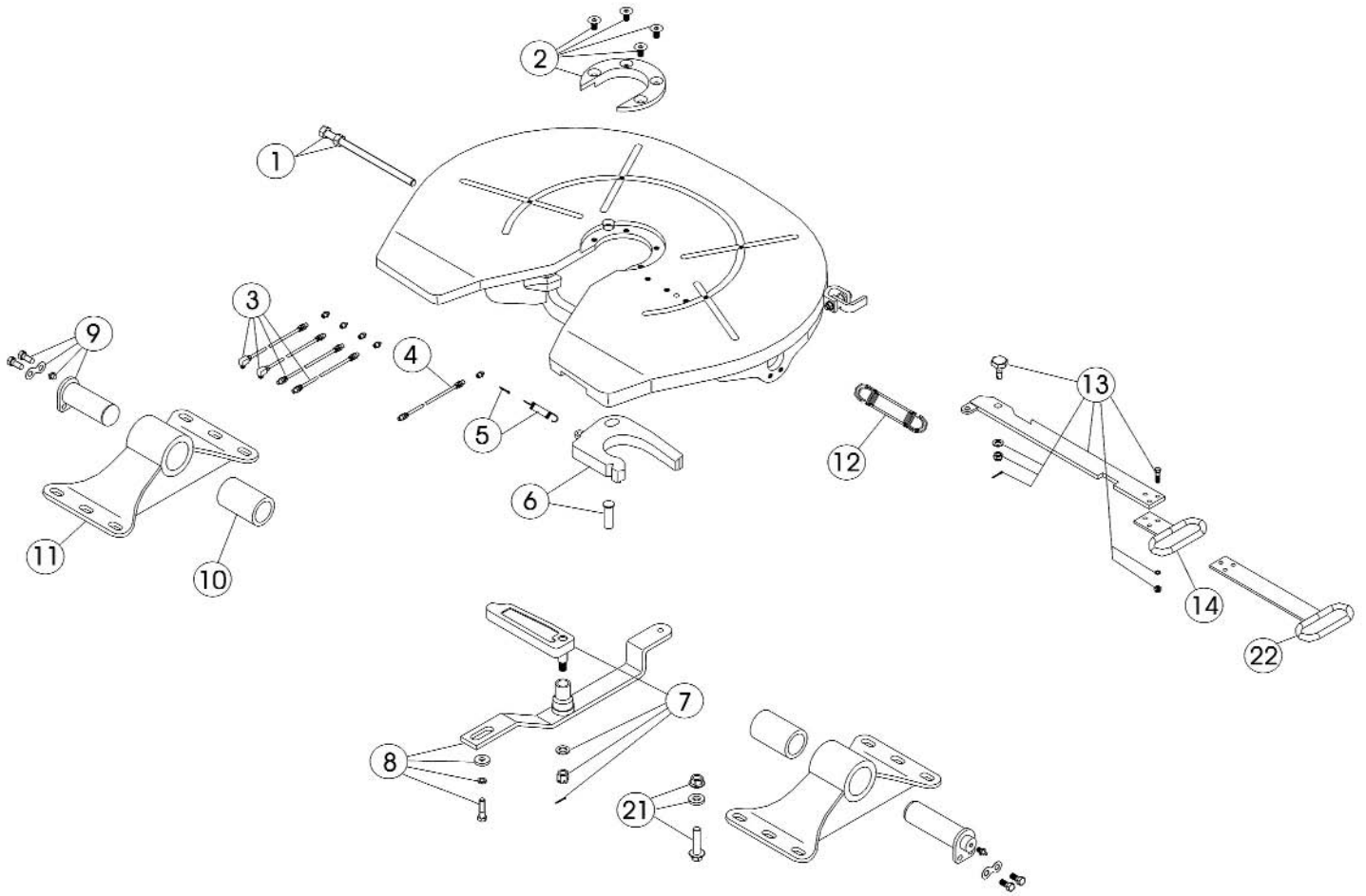
## Kit complementari - Complementary kits Aufrüstsätze - Kits complémentaires

RR 00 083

Prorlunga leva di apertura  
 Extension for action lever  
 Verlängerung für Handhebel  
 Prolonge pour levier d'ouverture



1990 299 A




POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type
		F2T1G30
1	RR00103	
2	RR00104	
3	RR00105	
4	RR00106	
5	RR00107	
6	RR00108	
7	RR00109	
8	RR00110	
9	RR00111	
10	RR00112	
11		RR00113
12	RR00114	
13	RR00115	
14	RR00079	
KIT		
21	RR00050	
22	RR00083	
23 (2-5-6)	RR00116	





# Perni di articolazione e sollevatori telescopici

Kingpins and landing gear - Zugsattelzapfen und Stützvorrichtungen - Pivots d'attelage et Béquilles télescopiques

## PERNI DI ARTICOLAZIONE - KINGPIN - ZUGSATTELZAPFEN - PIVOTS D'ATTELAGE

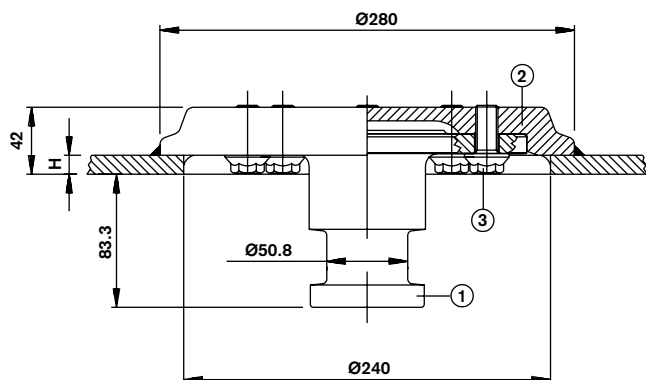
	serie series Serie série	omologazione homologation Genehmigung homologation	descrizione description Beschreibung description	perno di articolazione kingpin Zugsattelzapfen pivot d'attelage Ø	pagina page Seite page
	K2 V	94 / 20 / CE	Perni di articolazione Kingpins Zugsattelzapfen Pivots d'attelage	<b>2"</b>	70
	K2 C	94 / 20 / CE	Perni di articolazione Kingpins Zugsattelzapfen Pivots d'attelage	<b>2"</b>	71
	K2 W	94 / 20 / CE	Perni di articolazione Kingpins Zugsattelzapfen Pivots d'attelage	<b>2"</b>	71
	K3 V		Perni di articolazione Kingpins Zugsattelzapfen Pivots d'attelage	<b>3,5"</b>	72
	K3 C		Perni di articolazione Kingpins Zugsattelzapfen Pivots d'attelage	<b>3,5"</b>	72
	K3 W		Perni di articolazione Kingpins Zugsattelzapfen Pivots d'attelage	<b>3,5"</b>	73

## SOLLEVATORI TELESCOPICI - LANDING GEAR - STÜTZVORRICHTUNGEN - BÉQUILLES TÉLÉSCOPIQUES

	serie series Serie série	descrizione description Beschreibung description	pagina page Seite page
	LG 3000	Sollevatori telescopici Landing gear Stützvorrichtungen Béquilles télescopiques	74
	LGH 3000 LGI 3000	Sollevatori telescopici per rimorchi ad asse rigido centrale Landing gear for central axle trailers Stützvorrichtungen für Zentralachsenanhänger Béquilles télescopiques la remorque aux essieux centrales	76
	LG 3000 HD	Sollevatori telescopici "Heavy Duty" "Heavy Duty" landing gear Stützvorrichtungen "Heavy Duty" Béquilles télescopiques "Heavy Duty"	78

**Dati tecnici - Technical data - Technische Daten - Données techniques**

H mm	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	94 / 20 / CE	
			Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
8	K2V0100	108	H50-X	e1 00-0260
10	K2V0200			
12	K2V0300			

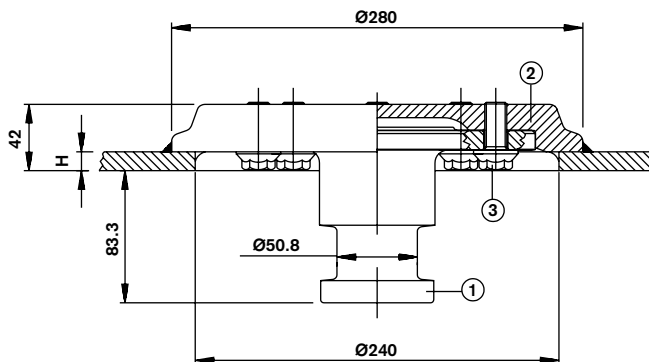


**Ricambi - Spare parts  
Ersatzteile - Pieces de rechange**

Pos.	Codice Article number Artikelnummer Numéro d'ordre	
1	RK00001	
2	8 mm	RK00002
	10 mm	RK00003
	12 mm	RK00004
3	RK00005	

**Dati tecnici - Technical data - Technische Daten - Données techniques**

H mm	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	94 / 20 / CE	
			Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
8	K2VE100	165	H50-X	e1 00-0261
10	K2VE200			
12	K2VE300			

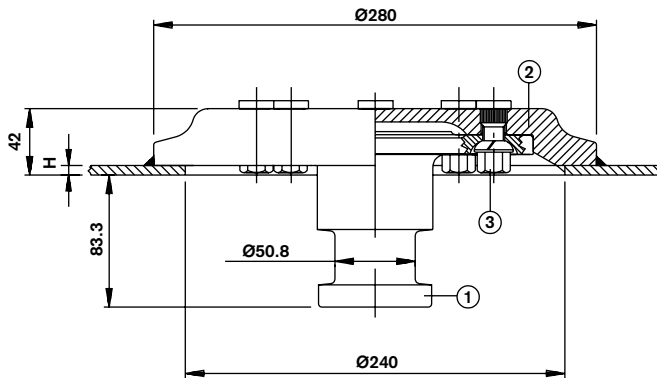


**Ricambi - Spare parts  
Ersatzteile - Pieces de rechange**

Pos.	Codice Article number Artikelnummer Numéro d'ordre	
1	RK00006	
2	8 mm	RK00002
	10 mm	RK00003
	12 mm	RK00004
3	RK00005	

**Dati tecnici - Technical data - Technische Daten - Données techniques**

H mm	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	94 / 20 / CE	
			Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
8	K2CO100	108	H50-X	e1 00-0262
10	K2CO200			
12	K2CO300			



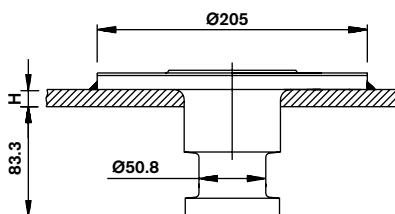
**Ricambi - Spare parts  
Ersatzteile - Pieces de rechange**

Pos.		Codice Article number Artikelnummer Numéro d'ordre
1		RK00007
2	8 mm	RK00008
	10 mm	RK00009
	12 mm	RK00010
3		RK00011

# K2 W

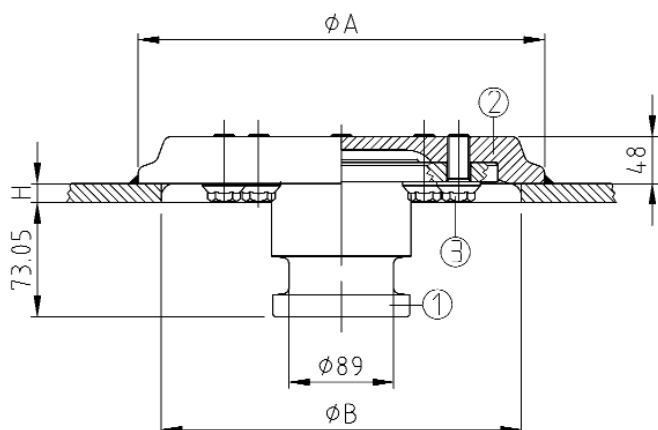
**Dati tecnici - Technical data - Technische Daten - Données techniques**

H mm	Codice Article number Artikelnummer Numéro d'ordre	Peso semirimorchio Semitrailer weight Auflegergewicht Poids de semi-remorque t
6	K2WO100	45
8	K2WO200	
10	K2WO300	
12	K2WO400	



**Dati tecnici - Technical data - Technische Daten - Données techniques**

H mm	A mm	B mm	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN
12	260	220	K3V0100	165
16	300	265	K3V0200	280



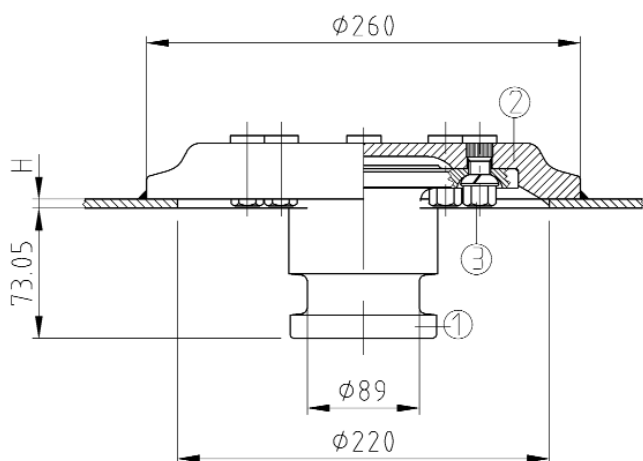
**Ricambi - Spare parts  
Ersatzteile - Pieces de rechange**

Pos.	Codice Article number Artikelnummer Numéro d'ordre	
	12 mm	16 mm
1	RK00015	RK00022
2	RK00016	RK00017
3	RK00018	RK00023

# K3 C

**Dati tecnici - Technical data - Technische Daten - Données techniques**

H mm	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN
12	K3C0100	165

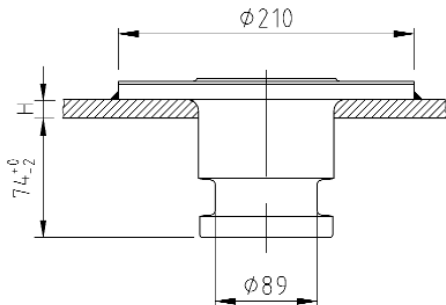


**Ricambi - Spare parts  
Ersatzteile - Pieces de rechange**

Pos.	Codice Article number Artikelnummer Numéro d'ordre
	1
2	RK00020
3	RK00021



**Dati tecnici - Technical data - Technische Daten - Données techniques**



H mm	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN
8	K3WO100	250
10	K3WO200	
12	K3WO300	
16	K3WO400	

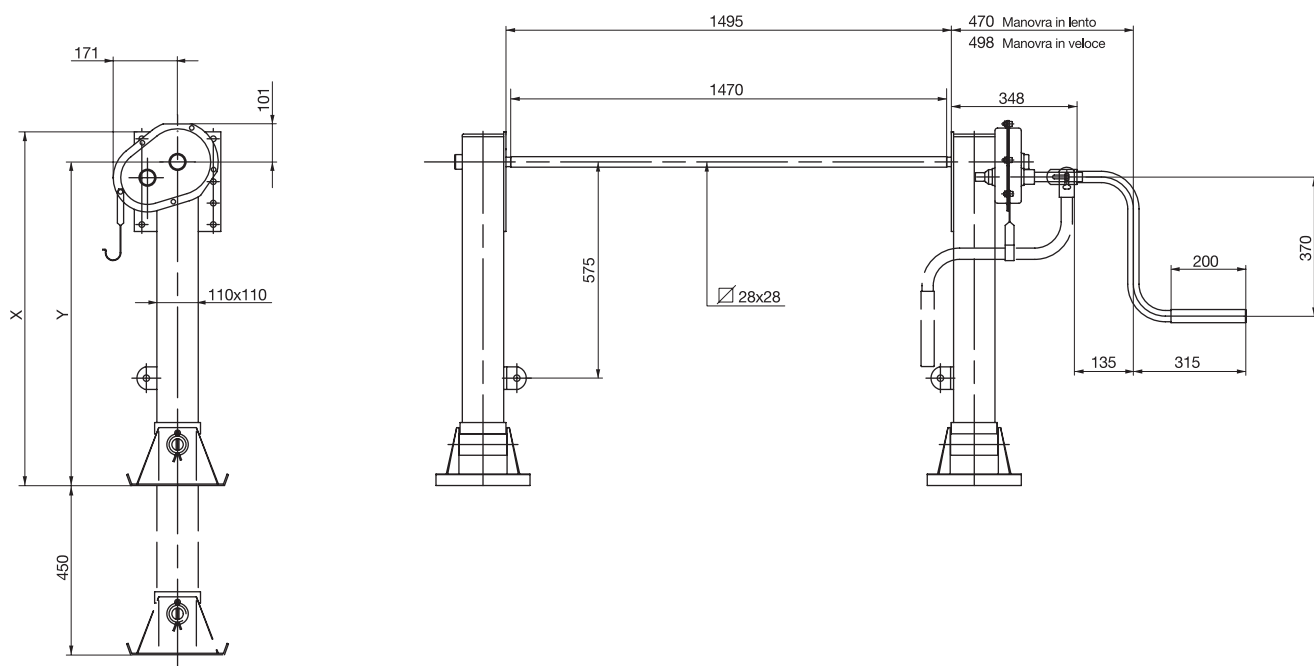


# LG 3000

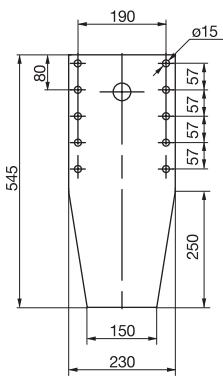
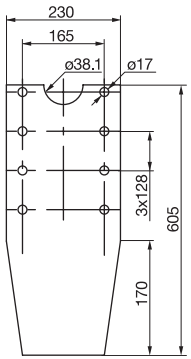
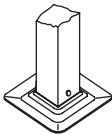
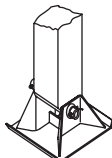
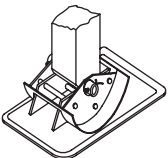

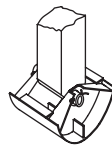
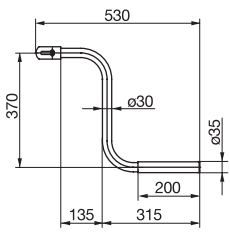
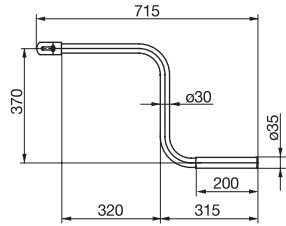
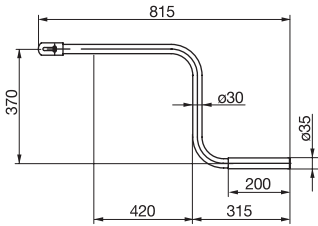
Sollevatori telescopici  
Landing gear  
Stützvorrichtungen  
Béquilles télescopiques

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Carico sollevabile per set Lifting capacity / set Hublast / Set Charge soulevable par jeu t	Carico statico per set Static load / set Stützlast / Set Charge statique par jeu t	Velocità di sollevamento/giro Lift by one turn of handle Hubleistung pro Kurbelumdrehung Vitesse de élèvement		Forza manuale di sollevamento Crank force of handle Kurbeldruck Force manuelle de élèvement		Peso Weight Gewicht Poids Kg
			Marcia ridotta Low gear Lastgang À vitesse réduite	Marcia veloce High gear Schnellgang À grande vitesse	fino a 20t up to 20t bis zu 20 t jusqu'à 20 t	fino a 24t up to 24t bis zu 24 t jusqu'à 24 t	
LG3000/A	24	50	1 mm	10,6 mm	29 kg	35 kg	95



Tipo - Type Typ - Type	Appoggi - Foot groups Fußgruppen - Appuis	X (mm)	Y (mm)
LG3000/A	A	950	870
	B	940	860
	C	960	880
	D	945	865
	E	940	860

<b>Piastre di fissaggio - Mounting plates</b> <b>Montageplatten - Plaque du fixation</b>	<b>Appoggi - Foot groups</b> <b>Fußgruppen - Appuis</b>	<b>Manovelle - Crank handles</b> <b>Kurbel - Manivelles</b>
<p><b>2. Standard rinforzata</b></p>  <p><b>5. Viberti</b></p> 	<p><b>A</b></p>  <p><b>B</b></p>  <p><b>C</b></p>  <p><b>D</b></p>  <p><b>E</b></p> 	<p><b>M1 Standard</b></p>  <p><b>M2</b></p>  <p><b>M3</b></p> 

**Ex: Codice d'ordine / Set-Orden number / Set-Bestellnummer / Set-Numéro d'ordre**

Sollevatore tipo LG3000/A, piastra fissaggio 5, appoggio C, manovella M1

Type landing gear LG3000/A, mounting plate 5, foot group C, crank handle M1

Stützvorrichtungen LG3000/A, Montageplatten 5, Fußgruppen C, Kurbel M1

Béquilles télescopiques type LG3000/A, plaque du fixation 5, appuis C, manivelle M1

**LGA 5CM1**

**Il set è composto da:**

- 1 sollevatore dx con riduttore
- 1 sollevatore sx
- 1 manovella
- 1 asta di trasmissione
- 1 reggimanovella

**Each set contains:**

- 1 right side leg with gear box
- 1 left side leg
- 1 crank handle
- 1 cross shaft
- 1 handle hanger

**1 Set Stützvorrichtungen**

**enthält:**

- 1 Stützbein rechts mit Getriebe
- 1 Stützbein links
- 1 Kurbel
- 1 Verbindungswelle
- 1 Kurbelhalterung

**Le kit est composé par:**

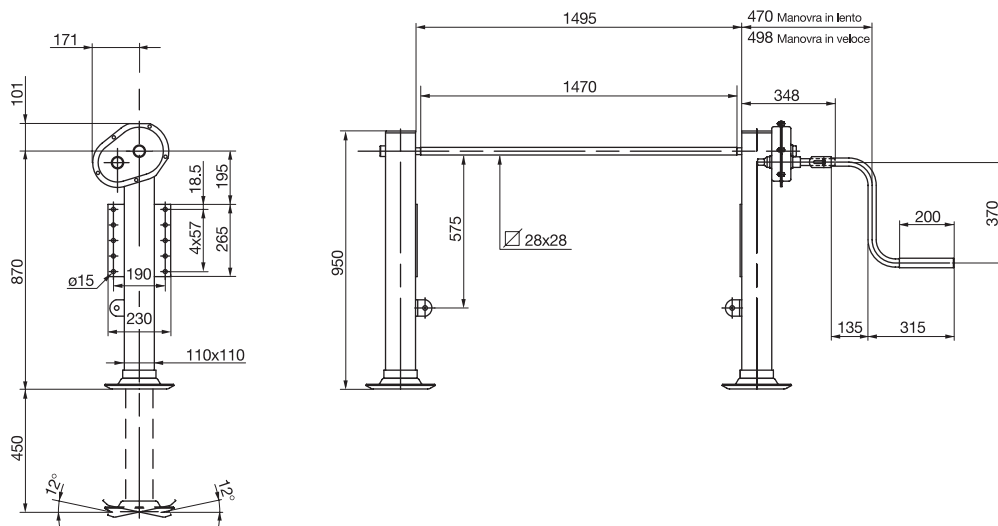
- 1 béquille droite avec réducteur
- 1 béquille gauche
- 1 manivelle
- 1 tige de transmission
- 1 porte-manivelle

# LGH 3000

Sollevatori telescopici per rimorchi ad asse rigido centrale  
Landing gear for central axle trailers  
Stützvorrichtungen für Zentralachshanhänger  
Béquilles télescopiques pour la remorque aux essieux centrales

## Dati tecnici - Technical data - Technische Daten - Données techniques

Codice Article number Artikelnummer Numéro d'ordre	Carico sollevabile per set Lifting capacity / set Hublast / Set Charge soulevable par jeu t	Carico statico per set Static load / set Stützlast / Set Charge statique par jeu t	Velocità di sollevamento/giro Lift by one turn of handle Hubleistung pro Kurbelumdrehung Vitesse de élèvement		Forza manuale di sollevamento Crank force of handle Kurbeldruck Force manuelle de élèvement		Peso Weight Gewicht Poids kg
			Marcia ridotta Low gear Lastgang À vitesse réduite	Marcia veloce High gear Schnellgang À grande vitesse	fino a 20t up to 20t bis zu 20 t jusqu'à 20 t	fino a 24t up to 24t bis zu 24 t jusqu'à 24 t	
LGH1AM1	24	50	1 mm	10,6 mm	29 kg	35 kg	90

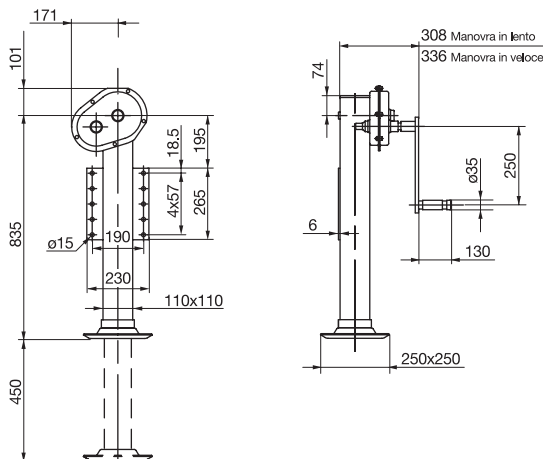


Subject to technical changes without prior notice

# LGI 3000

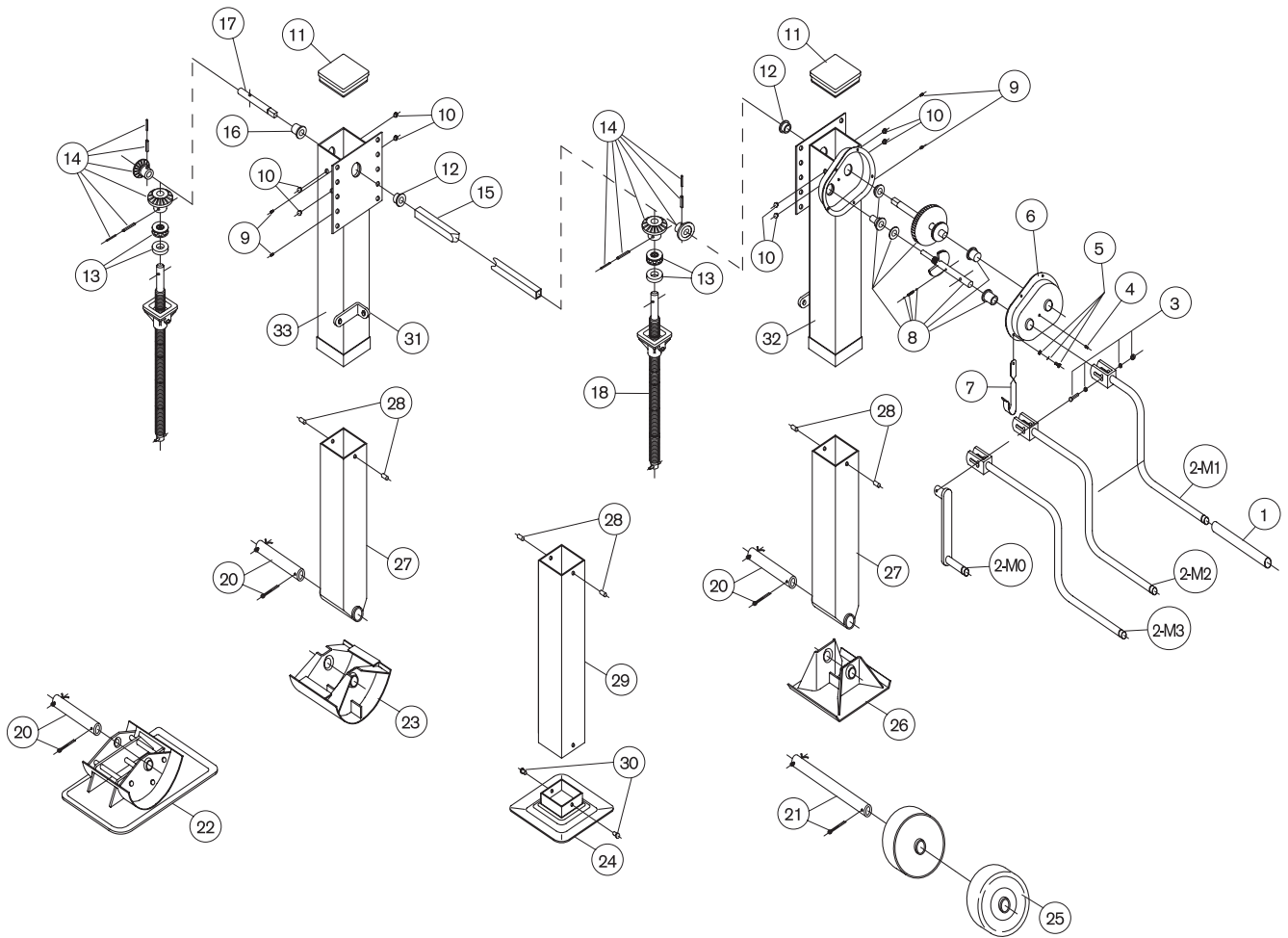
Sollevatori telescopici per rimorchi ad asse rigido centrale  
Landing gear for central axle trailers  
Stützvorrichtungen für Zentralachshanhänger  
Béquilles télescopiques pour la remorque aux essieux centrales

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## Dati tecnici - Technical data - Technische Daten - Données techniques

Codice Article number Artikelnummer Numéro d'ordre	Carico sollevabile Lifting capacity Hublast Charge soulevable t	Velocità di sollevamento/giro Lift by one turn of handle Hubleistung pro Kurbelumdrehung Vitesse de élèvement		Peso Weight Gewicht Poids kg
		Marcia ridotta Low gear Lastgang À vitesse réduite	Marcia veloce High gear Schnellgang À grande vitesse	
LGI1AM0	10	1 mm	10,6 mm	50



	Tutti i tipi All types Alle Typen Tous les types
1	RS00043
2-M0	RS00044
2-M1	RS00045
2-M2	RS00046
2-M3	RS00047
3	RS00048
4	RS00049
5	RS00050
6	RS00051
7	RS00052
8	RS00053
9	RS00054

	Tutti i tipi All types Alle Typen Tous les types
10	RS00055
11	RS00056
12	RS00057
13	RS00058
14	RS00059
15	RS00060
16	RS00061
17	RS00062
18	RS00063
19	RS00064
20	RS00065
21	RS00066

	Tutti i tipi All types Alle Typen Tous les types
22	RS00067
23	RS00068
24	RS00069
25	RS00070
26	RS00071
27	RS00072
28	RS00074
29	RS00075
30	RS00077
31	RS00078
32	RS00079
33	RS00080

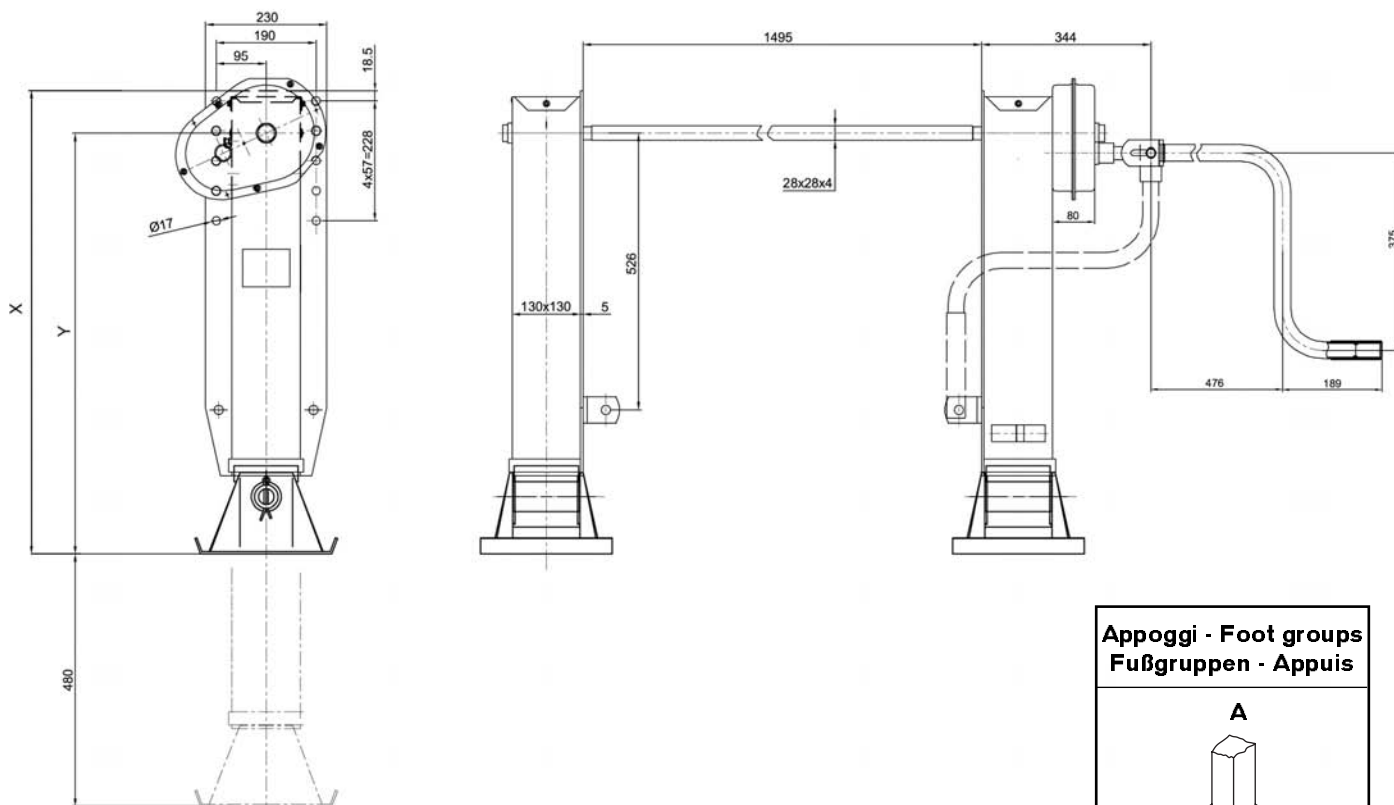


# LG 3000 HD

Sollevatori telescopici "Heavy Duty"  
 "Heavy Duty" landing gear  
 Stützvorrichtungen "Heavy Duty"  
 Béquilles télescopiques "Heavy Duty"

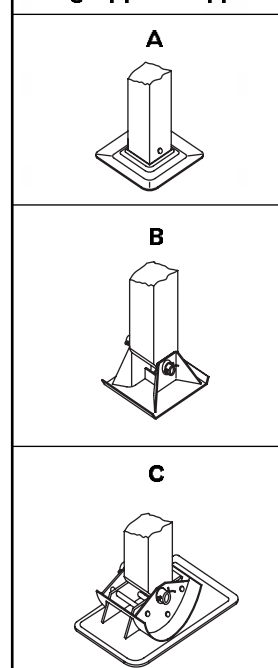
## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Carico sollevabile per set Lifting capacity / set Hublast / Set Charge soulevable par jeu t	Carico statico per set Static load / set Stützlast / Set Charge statique par jeu t	Velocità di sollevamento/giro Lift by one turn of handle Hubleistung pro Kurbelumdrehung Vitesse de élèvement		Forza manuale di sollevamento Crank force of handle Kurbeldruck Force manuelle de élèvement		Peso Weight Gewicht Poids kg
			Marcia ridotta Low gear Lastgang À vitesse réduite	Marcia veloce High gear Schnelgang À grande vitesse	fino a 20t up to 20t bis zu 20 t jusqu'à 20 t	fino a 24t up to 24t bis zu 24 t jusqu'à 24 t	
LG300HD	24	80	1 mm	11 mm	14 kg	17 kg	92



Tipo - Type Typ - Type	Appoggi - Foot groups Fußgruppen - Appuis	X (mm)	Y (mm)
LG3000/HD	A	919	829
	B	943	853
	C	963	873

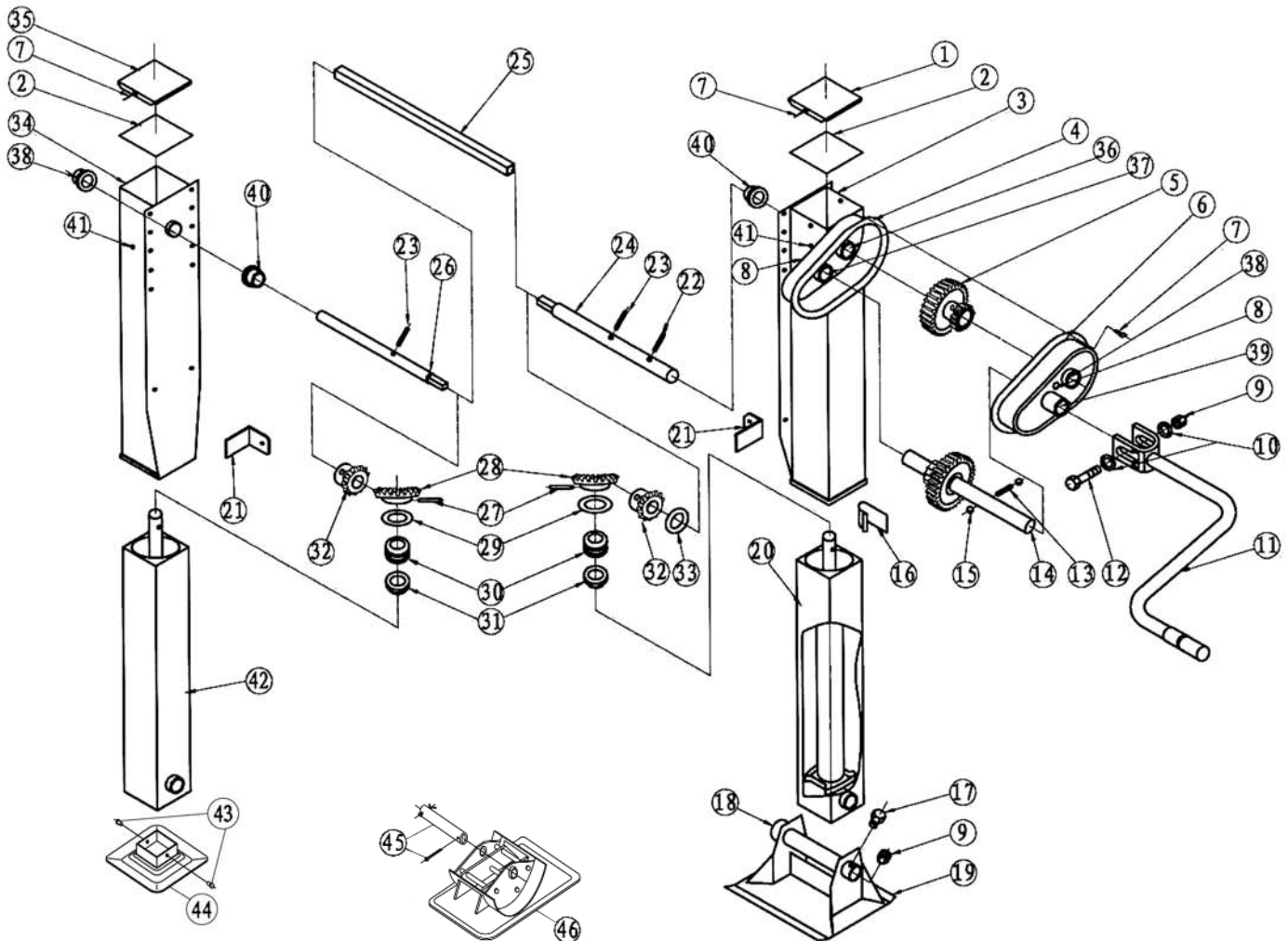
### Appoggi - Foot groups Fußgruppen - Appuis



Ex: Codice d'ordine / Set-Orden number / Set-Bestellnummer / Set-Numéro d'ordre

Sollevatore tipo LG3000/HD, appoggio A  
 Type landing gear LG3000/HD, foot group A  
 Stützvorrichtungen LG3000/HD, Fußgruppen A  
 Béquilles télescopiques type LG3000/HD, appuis A

**L H D 1**      **A M 1**



	Tutti i tipi All types Alle Typen Tous les types
1	RS00081
2	RS00082
3	RS00083
4	RS00084
5	RS00085
6	RS00086
7	RS00087
8	RS00088
9	RS00089
10	RS00090
11	RS00091
12	RS00092
13	RS00093

	Tutti i tipi All types Alle Typen Tous les types
14	RS00094
15	RS00095
16	RS00096
17	RS00097
18	RS00098
19	RS00099
20	RS00100
21	RS00101
22	RS00102
23	RS00103
24	RS00104
25	RS00105
26	RS00106

	Tutti i tipi All types Alle Typen Tous les types
27	RS00107
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31	RS00111
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37	RS00117
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41	RS00121
42	RS00122
43	RS00123
44	RS00124
45	RS00125
46	RS00126

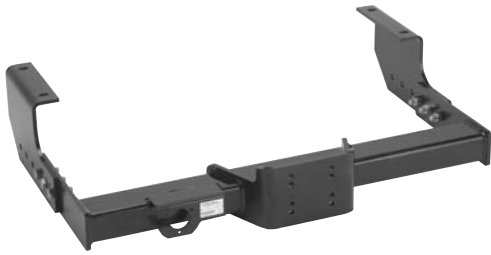




# Traverse

## Towbars - Anhängböcke - Traverse

serie series Serie serie	omologazione homologation Genehmigung omologation	descrizione description Beschreibung description			pagina page Seite page
<b>S 2000</b> 	94/20/CE	Traversa per IVECO Daily City Camion Towbar for IVECO Daily City Camion Anhängbock für IVECO Daily City Camion Traverse pour IVECO Daily City Camion	✓	✓	82
<b>TE 2500</b> 	94/20/CE	Traversa per FIAT DUCATO Towbar for FIAT DUCATO Anhängbock für FIAT DUCATO Traverse pour FIAT DUCATO	✓	✓	84
<b>TE 3000</b> 	94/20/CE	Traversa per IVECO Eurocargo Towbar for IVECO Eurocargo Anhängbock für IVECO Eurocargo Traverse pour IVECO Eurocargo	✓	✓	85
<b>WPTR</b> 	94/20/CE	Traversa per motrice con gancio ribassato Towbar rack for vehicles featuring an underslung drawbar coupling Anhängbock für Motorwagen mit Tiefkupplung Barre de remorquage pour véhicule avec attelage court	✓	✓	86
<b>WPTP</b> 	94/20/CE	Paraincastro posteriore ribaltabile Tilting rear underrun bar Unterfahrschutz, klappbar Système anti-encastrement arrière réversible		✓	87
<b>CANTER</b> 	94/20/CE	Traversa per MITSUBISHI Canter Towbar for MITSUBISHI Canter Anhängbock für MITSUBISHI Canter Traverse pour MITSUBISHI Canter	✓	✓	88



# S 2000

Traversa per veicoli IVECO Daily City Camion  
Towbar for IVECO Daily City Camion  
Anhängelock für IVECO Daily City Camion  
Traverse pour véhicules IVECO Daily City Camion

## TRAVERSE DI TRAINO - TOW BARS - SCHLUSSQUERTRÄGER - TRAVERSES D'ATTELAGES

Per equipaggiare un veicolo con le traverse, non bisogna ne modificare ne smontare la pedana posteriore. I kit sono stati concepiti in maniera modulare, il montaggio sui tipi diversi di veicoli è garantito dal posizionamento delle staffe laterali. I kit comprendono:

- un corpo centrale
- 2 flange laterali
- viteria completa per il fissaggio

For vehicle equipment with tow bars, removal or alteration of the black footboard is not required. The kits have been modular design-engineered so that kit assembly onto the various types of vehicles is guaranteed by simply setting the position of the side bracket flasks. The kits contain:

- one central body unit (tow bar)
- 2 side flanges
- complete set of screws needed for assembly

Bei der Nachrüstung eines Schlussquerträger ist es nicht notwendig das Trittbrett zu demontieren oder abzuändern. der Kit wird mit verstellbaren Teilen geliefert. Diese erlauben die Montage bei verschiedenen Fahrzeugtypen, lediglich die Positionierung der seitlichen Platten ist unterschiedlich. Der Schlussquerträger Kit beinhaltet:

- 1 Schlussquerträger
- 2 seitliche Platten
- diverses Befestigungsmaterial

Pour équiper un véhicule avec les traverses, il ne faut ni modifier ni démonter le marchepied postérieur. Le kits ont été conçus de façon modulaire, le montage sur les différents types de véhicules est garanti par le positionnement des étriers latéraux. Le kits comprennent:

- un corps central (traverse)
- 2 brides latérales
- une visserie complète pour la fixation

TRAVERSE TOW BAR SCHLUSSQUERTRÄGER TRAVERSES	DAILY 29L-35S		DAILY 35C-50C		DAILY 60C-65C
	passo 3000 • sbazo 840 pitch 3000 • overhang 840 Radstand 3000 • Überhanglänge 840 empattement 3000 • porte-à-faux 840	tutte le altre versioni all further versions Alle anderen Ausführungen toutes les autres versions	passo 3000 • sbazo 840 pitch 3000 • overhang 840 Radstand 3000 • Überhanglänge 840 empattement 3000 • porte-à-faux 840	tutte le altre versioni all further versions Alle anderen Ausführungen toutes les autres versions	tutte le versioni all versions Alle Ausführungen toutes les versions
furgoni - vans Kastenwagen - fourgons	TO02381	TO02381	TO02583	TO02583	TO02583
camion - trucks Pritsche - camions	TO02381	TO02381	TO02582	TO02582	TO02582

RINFORZI STIFFENERS RAHMENVERSTÄRKUNG RENFORTS	DAILY 29L-35S		DAILY 35C-50C		DAILY 60C-65C
	passo 3000 • sbazo 840 pitch 3000 • overhang 840 Radstand 3000 • Überhanglänge 840 empattement 3000 • porte-à-faux 840	tutte le altre versioni all further versions Alle anderen Ausführungen toutes les autres versions	passo 3000 • sbazo 840 pitch 3000 • overhang 840 Radstand 3000 • Überhanglänge 840 empattement 3000 • porte-à-faux 840	tutte le altre versioni all further versions Alle anderen Ausführungen toutes les autres versions	tutte le versioni all versions Alle Ausführungen toutes les versions
Per i veicoli non equipaggiati di serie con rinforzi Iveco utilizzare i rinforzi Orlandi. For vehicles that are not built in-series with Iveco stiffener elements, use the Orlandi stiffeners. Für alle Fahrzeuge, die nicht serienmäßig mit Verstärkungen ausgestattet sind Pour les véhicules non équipés de série avec les renforts Iveco utiliser les renforts Orlandi	IVECO	TO00132	TO00134	TO00133	TO00135

Nota: per tutti i veicoli Daily S2000, equipaggiati con traverse di traino, devono essere montati obbligatoriamente i rinforzi del telaio.  
Note: for all Daily S2000 vehicles fitted with tow bars, assembly of frame stiffener elements is strictly mandatory.  
Hinweis: Für alle Daily S2000, die mit einem Schlussquerträger ausgestattet sind, ist der Einbau der Rahmenverstärkung vorgeschrieben.  
Remarque: pour tous les véhicules Daily S2000, équipés avec des traverses d'attelage, les renforts du châssis doivent être montés obligatoirement.



furgoni - vans - Kastenwagen - fourgons



camion - trucks - Pritsche - camions

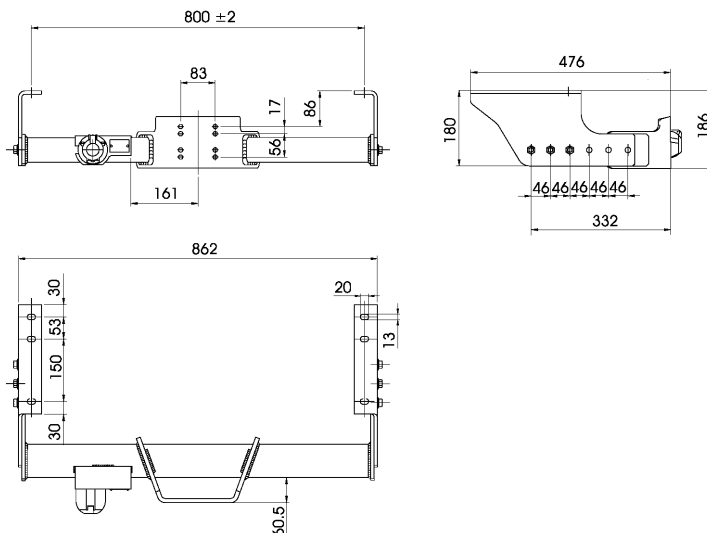
### Dati tecnici - Technical data - Technische Daten - Données techniques

Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore S S-Value S-Wert Valeur S kg	Peso rimorchiabile Total trailer weight Anhängelast Poids total de charge t	Peso Weight Gewicht Poids kg	94/20/CE	
					Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
TO02381	18	200	3,5	25	F	e11 00-1409
TO02582	22,5	250	3,5	27	F	e3 00-1543
TO02583	22,5	250	3,5	26	F	e3 00-1543

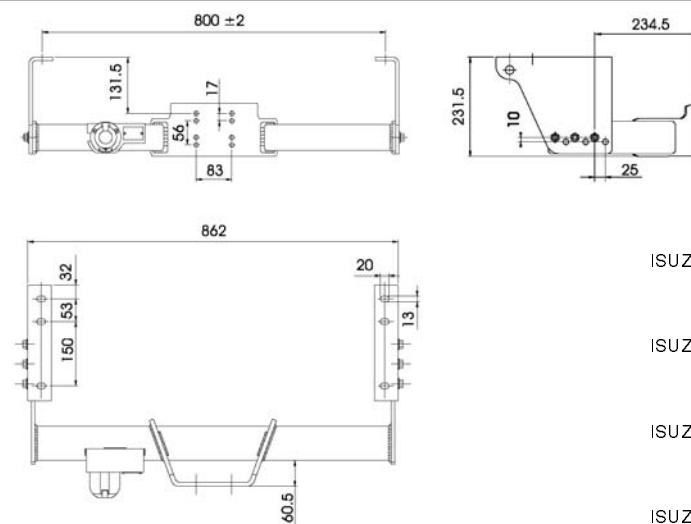
# S 2000

Traversa per veicoli IVECO Daily City Camion  
 Towbar for IVECO Daily City Camion  
 Anhängerbock für IVECO Daily City Camion  
 Traverse pour véhicules IVECO Daily City Camion

## TO02381



## TO02582



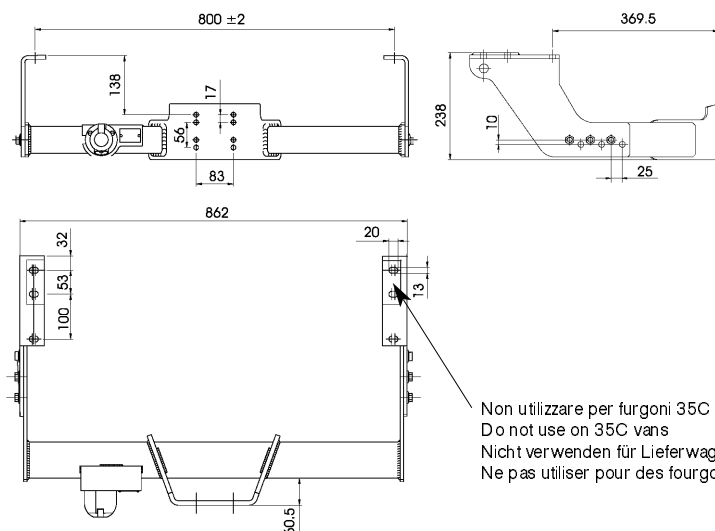
Applicabile anche ai veicoli:  
 IVECO: DAILY MODEL YEARS '98  
 ISUZU: NKR55, NPR55, NPR69, NPR70, NQR70

Applicable also to vehicles:  
 IVECO: DAILY MODEL YEARS '98  
 ISUZU: NKR55, NPR55, NPR69, NPR70, NQR70

Anwendbar auch auf Fahrzeuge:  
 IVECO: DAILY MODEL YEARS '98  
 ISUZU: NKR55, NPR55, NPR69, NPR70, NQR70

Applicable sur véhicules:  
 IVECO: DAILY MODEL YEARS '98  
 ISUZU: NKR55, NPR55, NPR69, NPR70, NQR70

## TO02583





# TE 2500

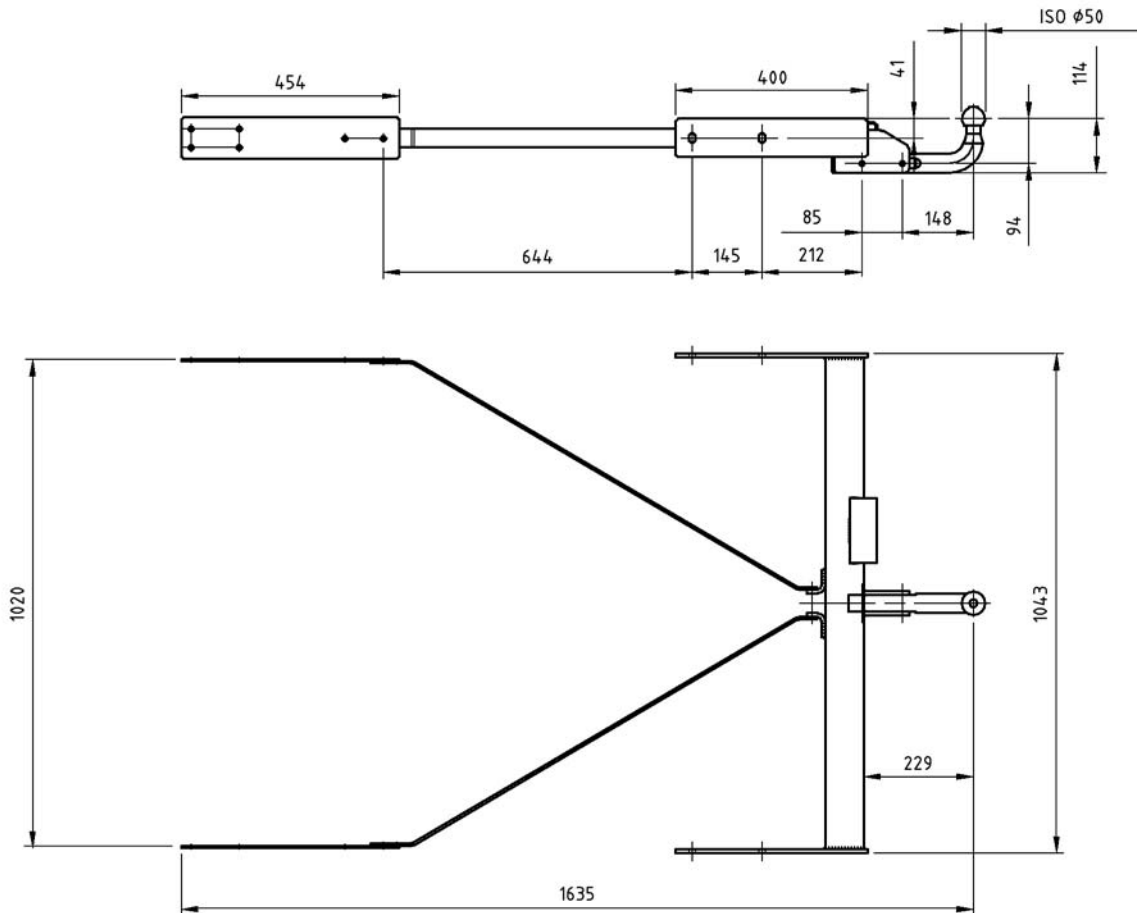
**Traversa per FIAT DUCATO**  
**Towbar for FIAT DUCATO**  
**Anhängebock für FIAT DUCATO**  
**Traverse pour FIAT DUCATO**

Omologazione - Homologation  
 Genehmigung - Homologation

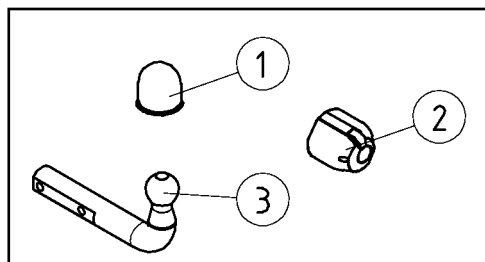
94 / 20 / CE

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Tipo veicolo Vehicle type Fahrzeugtyp Type véhicule	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore S S-Value S-Wert Valeur S kg	Peso Weight Gewicht Poids kg	94/20/CE	
						Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
TE2500	FIAT DUCATO	TO00900	10,5	120	36	A50-X	e11 00-4062



## Ricambi - Spare parts - Ersatzteile - Pieces de rechange



Pos.	Codice Article number Artikelnummer Numéro d'ordre
1	RG00266
2	RG00357
3	RG00358

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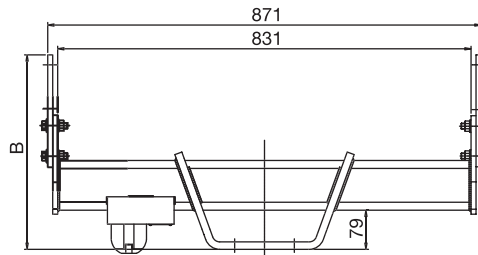
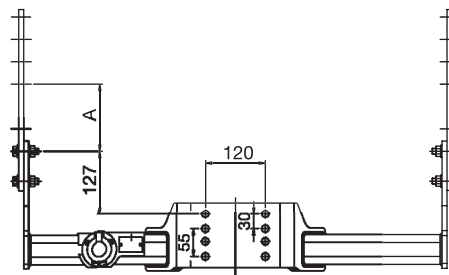
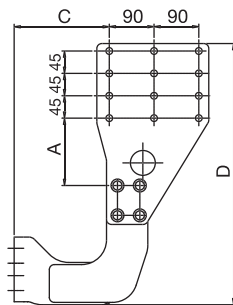
# TE 3000

**Traversa di traino per IVECO Eurocargo**  
**Trailer towbar for IVECO Eurocargo**  
**Anhängebocke fuer IVECO Eurocargo**  
**Traverse d'attelage pour IVECO Eurocargo**

Omologazione - Homologation Genehmigung - Homologation	94 / 20 / CE
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## Dati tecnici - Technical data - Technische Daten - Données techniques

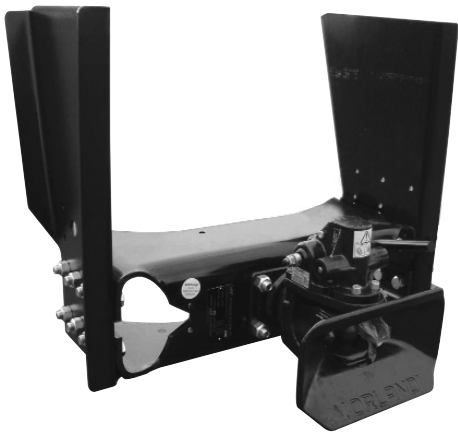
Tipo Type Typ Type	Tipo veicolo Vehicle type Fahrzeugtyp Type véhicule	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore S S-Value S-Wert Valeur S kg	Peso Weight Gewicht Poids kg	94/20/CE	
						Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
<b>TE3000 - T1</b>	IVECO Eurocargo N75-N100-N110 paraincastro tubolare IVECO Eurocargo N75-N100-N110 tubular protection bar	TO00710	28	330	33.5	F	e3 00-1542
<b>TE3000 - B1</b>	IVECO Eurocargo N75-N100 paraincastro lama IVECO Eurocargo N75-N100 flat protection bar	TO00720	28	330	36	F	e3 00-1542
<b>TE3000 - B2</b>	IVECO Eurocargo N75-N100-N110 paraincastro lama optional 6153 (con traversa posteriore) IVECO Eurocargo N75-N100-N110 flat protection bar optional 6153 (with rear towbar)	TO00730	28	330	36.5	F	e3 00-1542
<b>TE3000 - B3</b>	IVECO Eurocargo N100-N110 paraincastro lama con traversa per biga IVECO Eurocargo N100-N110 flat protection bar with towbar for central axle trailers	TO00740	28	330	35	F	e3 00-1542
<b>TE3000 - T1 EURO 4</b>	IVECO Eurocargo 80-90-100 paraincastro tubolare EURO 4 IVECO Eurocargo 80-90-100 tubular trailer bar EURO 4	TO00750	28	330	33,5	F	e3 00-1542
<b>TE3000 - B1 EURO 4</b>	IVECO Eurocargo 80-90-100 paraincastro lama EURO 4 IVECO Eurocargo 80-90-100 blade trailer bar EURO 4	TO00760	28	330	36	F	e3 00-1542



Tipo - Type - Typ - Type	A (mm)	B (mm)	C (mm)	D (mm)
TE3000 - T1	135	391	212	525
TE3000 - B1	101	402	191	442
TE3000 - B2	162	408	212	507
TE3000 - B3	131	408	212	476
TE3000 - T1 EURO 4	86	520	330	429
TE3000 - B1 EURO 4	73	553	358	418

<b>Gancio applicabile</b> <b>Applicable coupling</b> <b>Anwendbare Kupplung</b> <b>L'attelage applicable</b>	Serie Dedalo, Ulpyo, serie GA38 con flangiatura 120x55 Series Dedalo, Ulpyo, series GA38 with hole-pattern 120x55 Serie Dedalo, Ulpyo, serie GA38 mit Flanschmaß 120x55 Serie Dedalo, Ulpyo, serie GA38 avec entr'axe 120x55
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1990 157 B



# WPTR

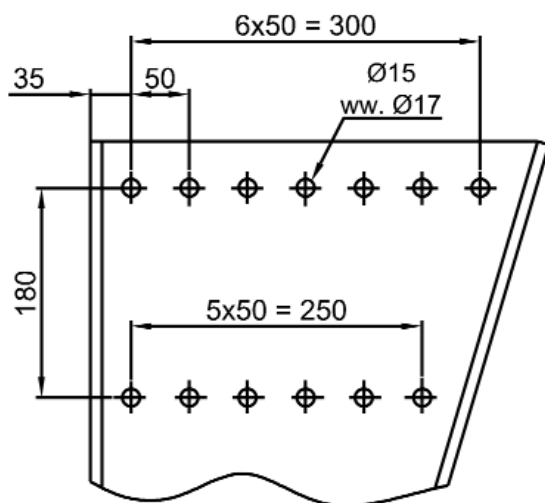
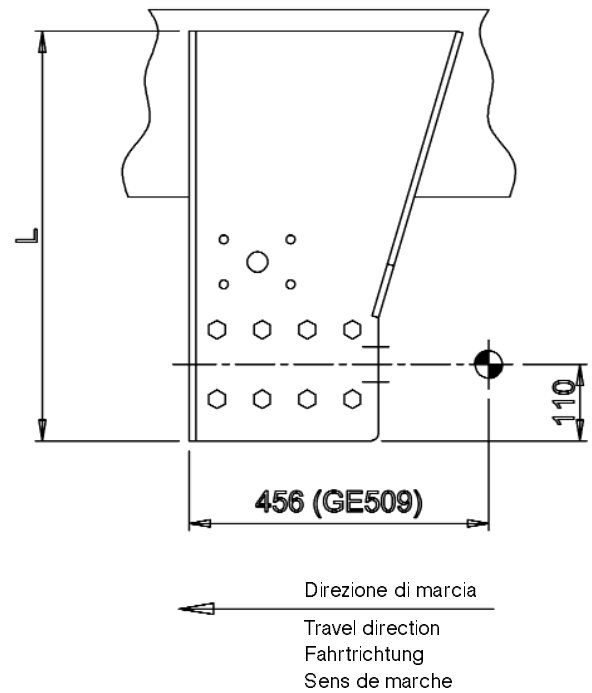
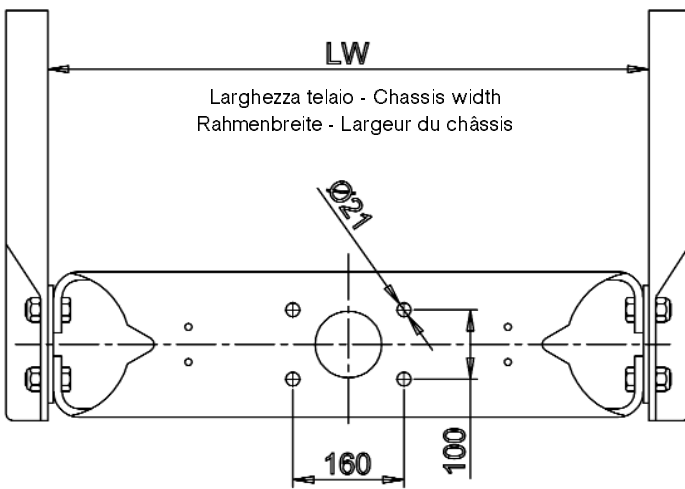
**Traversa per motrice con gancio ribassato**  
**Towbar rack for vehicles featuring**  
**an underslung drawbar coupling**  
**Anhängebock für Motorwagen mit Tiefkupplung**  
**Barre de remorquage pour véhicule avec**  
**attelage court**

Omologazione - Homologation  
 Genehmigung - Homologation

94 / 20 / CE

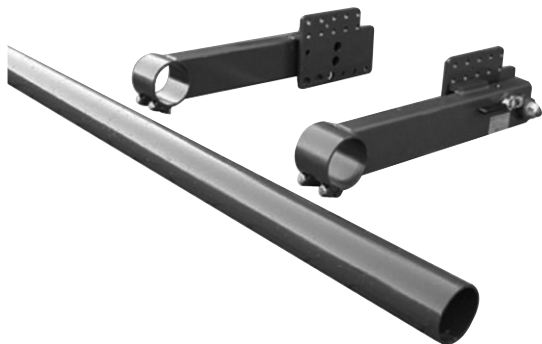
## Dati tecnici - Technical data - Technische Daten - Données techniques

Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore Dc Dc-Value Dc-Wert Valeur Dc kN	Valore S S-Value S-Wert Valeur S kg	Valore V V-Value V-Wert Valeur V kg	Omologazione Homologation Genehmigung Homologation
WPT	190	130	1000	75	94/20/CE



Codice Article number Artikelnummer Numéro d'ordre	LW (mm)	L (mm)	Adatta per veicolo tipo Suitable for vehicles type Geeignet für Fahrzeuge vom Typ Adaptée aux véhicules type
WPTR01	770	750	IVECO
WPTRV01	850	850	VOLVO
WPTRR01	802	750	RENAULT

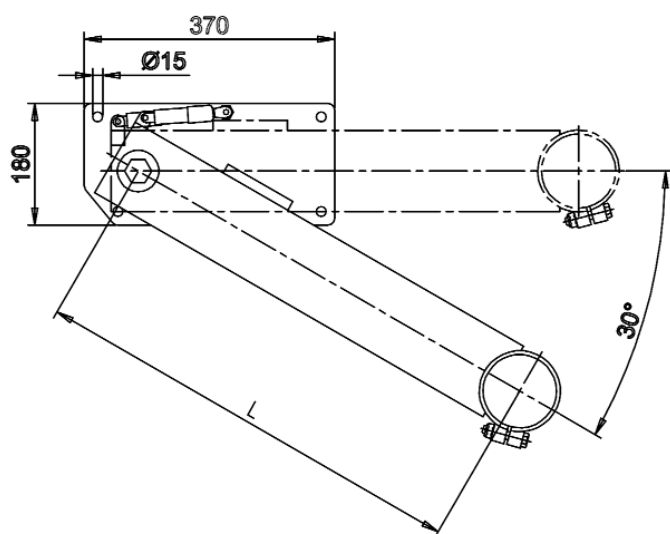
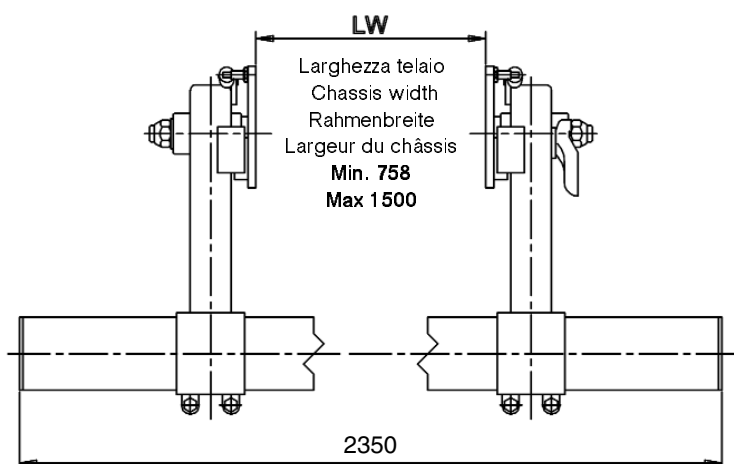
# WPTP



**Paraincastro posteriore ribaltabile**  
**Tilting rear underrun bar**  
**Unterfahrerschutz, klappbar**  
**Système anti-encastrement arrière réversible**

Omologazione - Homologation  
 Genehmigung - Homologation

94 / 20 / CE

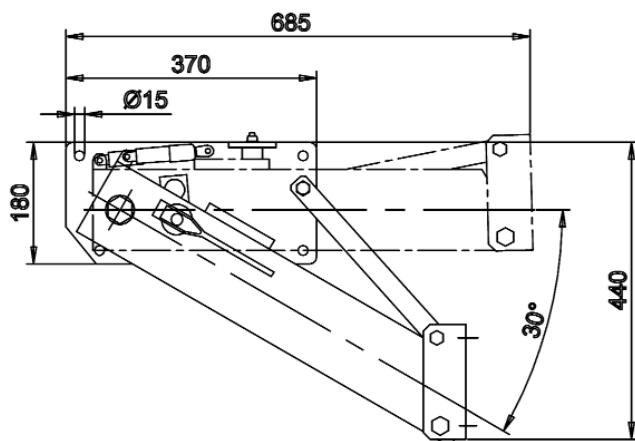


## Cod. WPTP101

Esecuzione tubolare  
 Tubular option  
 Ausf. Rundrohr geklemmt  
 Exécution tubulaire

Direzione di marcia

Travel direction  
 Fahrtrichtung  
 Sens de marche



## Cod. WPTP001

Esecuzione parallelogramma  
 Parallelogram option  
 Ausf. Parallelogramm  
 Exécution parallélogramme

Direzione di marcia

Travel direction  
 Fahrtrichtung  
 Sens de marche



# CANTER

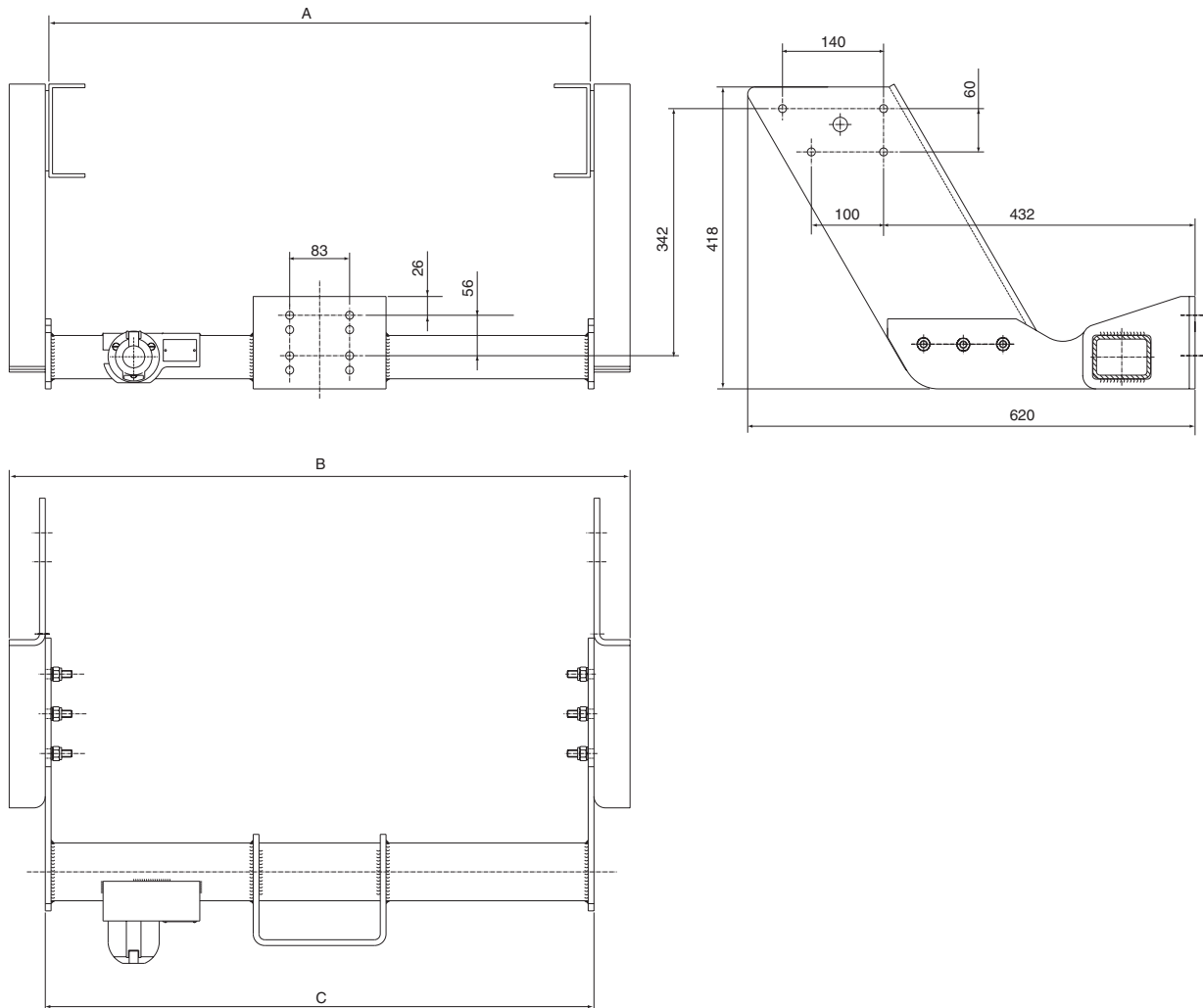
Traversa  
Towbar  
Anhängelock  
Traverse

Omologazione - Homologation  
Genehmigung - Homologation

94 / 20 / CE

## Dati tecnici - Technical data - Technische Daten - Données techniques

Tipo Type Typ Type	Tipo veicolo Vehicle type Fahrzeugtyp Type véhicule	Codice Article number Artikelnummer Numéro d'ordre	Valore D D-Value D-Wert Valeur D kN	Valore S S-Value S-Wert Valeur S kg	Peso rimorchiabile Total trailer weight Anhängelast Poids total de charge t	Peso Weight Gewicht Poids kg	94/20/CE	
							Classe Class Klasse Classe	Omologazione Homologation Genehmigung Homologation
CANTER 531	Mitsubishi FE531 B Mitsubishi FE531 E	TO00610	15	150	2.5	29.5	F	e11 00-1546
CANTER 631	Mitsubishi FE631 B Mitsubishi FE631 E Mitsubishi FE631 W Mitsubishi FB634	TO00620	15	150	2.5	30	F	e11 00-1546



Tipo veicolo Vehicle type Fahrzeugtyp Type véhicule	A (mm)	B (mm)	C (mm)
CANTER 531	700	810	710
CANTER 631	750	860	760

**Gancio applicabile**  
Applicable coupling  
Anwendbare Kupplung  
L'attelage applicable







Serie Dedalo, Ulpyo, serie GA38 con flangiatura 83x56  
Serie Dedalo, Ulpyo, series GA38 with hole-pattern 83x56  
Serie Dedalo, Ulpyo, serie GA38 mit Flanschmaß 83x56  
Serie Dedalo, Ulpyo, serie GA38 avec entr'axe 83x56

**Piastra supporto**  
Support plate  
Stützplatte  
Plaque de support

TO00104



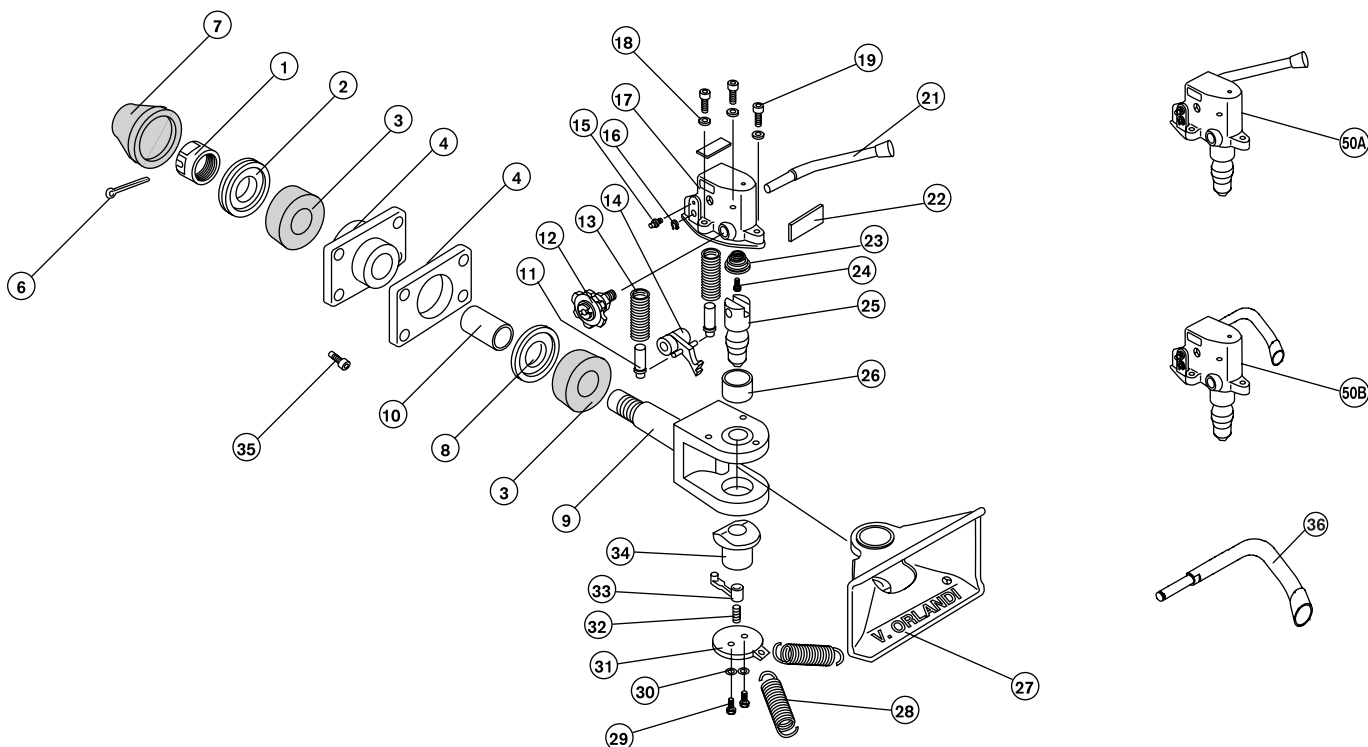
# Fuori produzione Out of production - Nicht mehr in Produktion - Hors production

serie series Serie série	descrizione description Beschreibung description	fuori produzione dal out of production from Nicht mehr in produktion vom hors production on	pagina page Seite page
<b>GT 40</b> 	Ganci di traino automatici rigidi Automatic drawbar couplings Automatische Anhängerkupplungen Crochets d'attelage automatiques rigides	<b>2004</b>	<b>90</b>
<b>GT 50</b> 	Ganci di traino automatici rigidi Automatic drawbar couplings Automatische Anhängerkupplungen Crochets d'attelage automatiques rigides	<b>1996</b>	<b>91</b>
<b>LUPO</b> 	Ganci di traino manuali campana snodata Manual drawbar couplings Manuelle Anhängerkupplungen Crochets d'attelage manuels	<b>2002</b>	<b>92</b>
<b>EURVO FIN-AS-AT</b> 	Ganci di traino automatici campana snodata Automatic drawbar couplings Automatische Anhängerkupplungen mit Vertikalgelenk Crochets d'attelage automatiques	<b>1999</b>	<b>93</b>
<b>EURVO</b> 	Ganci di traino automatici campana snodata Automatic drawbar couplings Automatische Anhängerkupplungen mit Vertikalgelenk Crochets d'attelage automatiques	<b>1999</b>	<b>94</b>
<b>RVO2</b> 	Ralla su tamponi - Appoggi ISO Fifth wheel with rubber bearings - ISO pedestal Sattelkupplung mit Gummigelenklagerung - ISO Lagerböcke Sellette d'attelage avec tampons en caoutchouc - Paliers ISO	<b>1996</b>	<b>95</b>

Fuori produzione dal 2004  
 Out of production from 2004  
 Nicht mehr in Produktion vom 2004  
 Hors production on 2004

# GT 40

Ricambi - Spare parts  
 Ersatzteile - Pièces de rechange



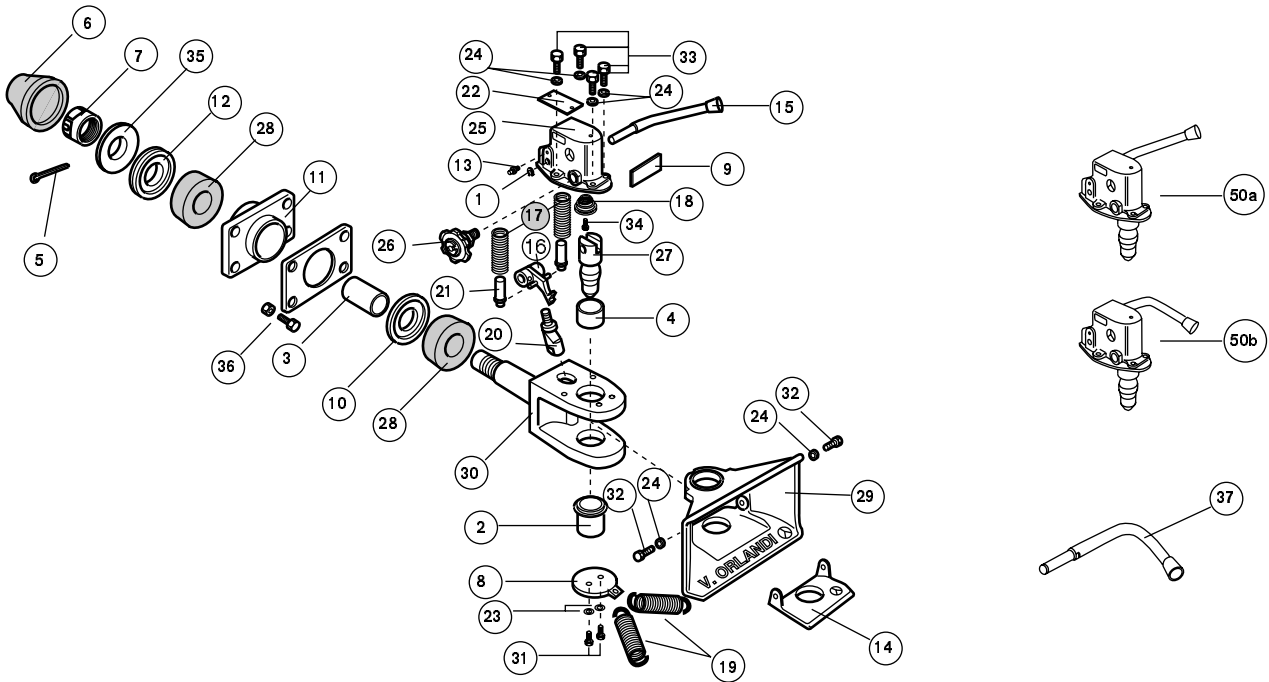
POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type			
		GT400	GT401	GT402	GT403
1	RG00101				
2		RG00076	RG00076	RG00076	RG00105
3		RG00084	RG00084	RG00084	RG00102
4+10		RG00155	RG00154	RG00157	RG00100
6	RG00064				
7	RG00034				
8		RG00156	RG00156	RG00156	RG00158
9+1,6,26,34	RG00144				
10	RG00103				
11	RG00092				
12	RG00148				
13	RG00082				
14	RG00160				
15	RG00008				
17	RG00147				
19+18	RG00153				
21+16	RG00128				
22	RG00047				
23+24	RG00091				
25	RG00145				
26	RG00149				
27	RG00146				
28	RG00122				
31+29,30	RG00152				
33+32	RG00151				
34	RG00150				
35		RG00132	RG00132	RG00131	RG00130
36+16	RG00129				
50A	RG00167				
50B	RG00168				
<b>KITS</b>					
25+26,34	RG00164				
3+3,10		RG00165	RG00165	RG00165	RG00166

1990 101 A

Fuori produzione  
Out of production  
Nicht mehr in Produktion  
Hors production

# GT 50

Ricambi - Spare parts  
Ersatzteile - Pièces de rechange



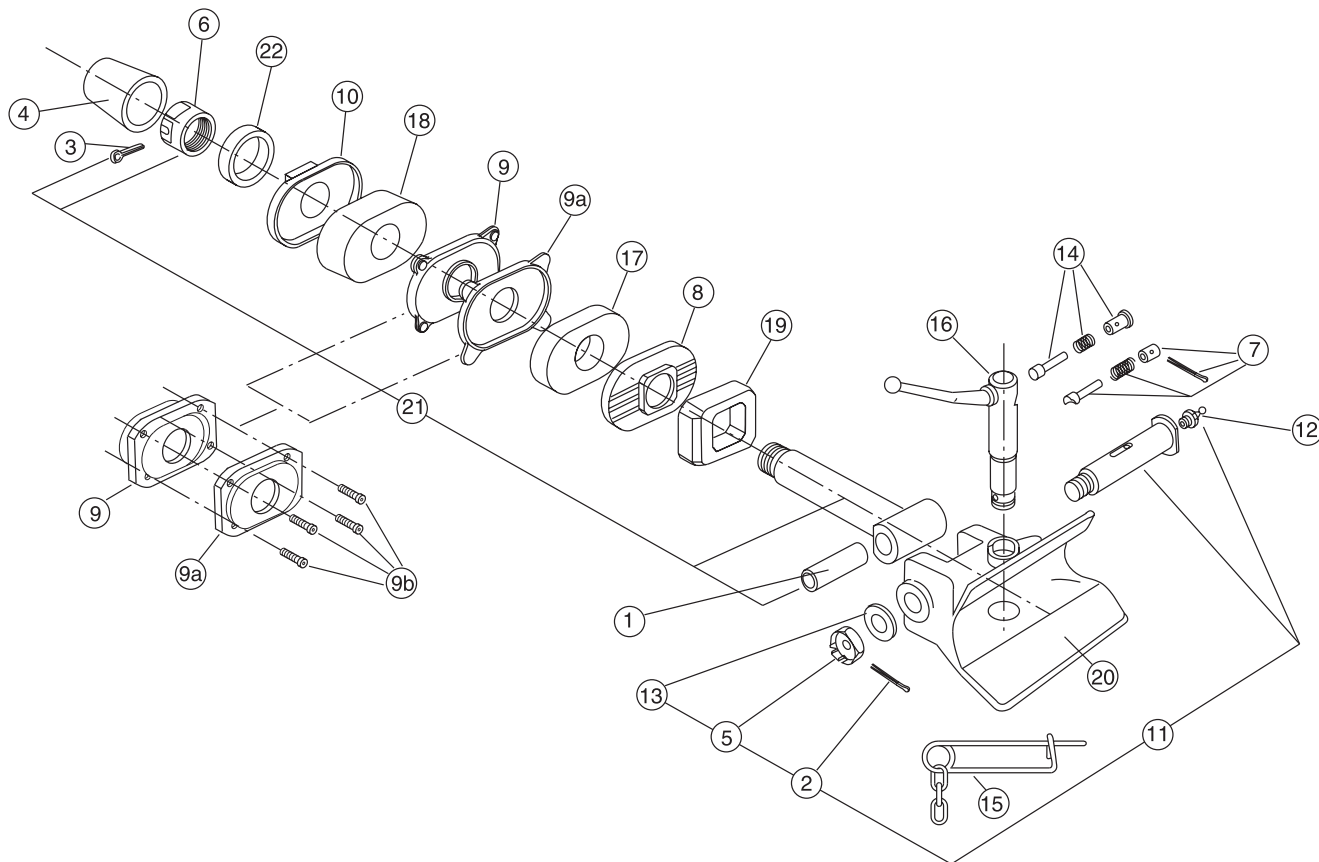
POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type			
		GT 500	GT 501	GT 502	GT 503
2	RG00087				
3		RG00109	RG00090	RG00090	RG00103
4	RG00088				
5	RG00064				
6	RG00034				
7	RG00101				
8+23,31	RG00123				
9	RG00047				
10		RG00111	RG00085	RG00085	RG00104
11+3		RG00108	RG00075	RG00089	RG00100
12		RG00112	RG00076	RG00076	RG00105
13	RG00008				
14	RG00096				
15+1	RG00128				
16	RG00160				
17	RG00082				
18+34	RG00091				
19	RG00122				
20	RG00083				
21	RG00092				
25	RG00124				
26	RG00148				
27	RG00081				
28		RG00110	RG00084	RG00084	RG00102
29		RG00113	RG00211	RG00212	RG00213
30+2,4,5,7		RG00107	RG00126	RG00126	RG00127
32+24	RG00057				
33+24	RG00058				
35		-----	-----	-----	RO00010
36		RG00132	RG00132	RG00131	RG00130
37+1	RG00129				
50 A	RG00117				
50 B	RG00118				

In produzione fino al 1994 In production till 1994 In Produktion bis 1994 En production jusqu'en 1994	
POS.	Tutti i tipi - All types Alle Typen - Tous les types
8+23,31	RG00077
16	RG00086
19	RG00078
25	RG00097
27	RG00080
50 A	RG00133
50+30,2,4,5	RG00198

**Fuori produzione dal 10/2002**  
**Out of production from 10/2002**  
**Nicht mehr in Produktion vom 10/2002**  
**Hors production on 10/2002**

**LUPO**

**Ricambi - Spare parts**  
**Ersatzteile - Pièces de rechange**



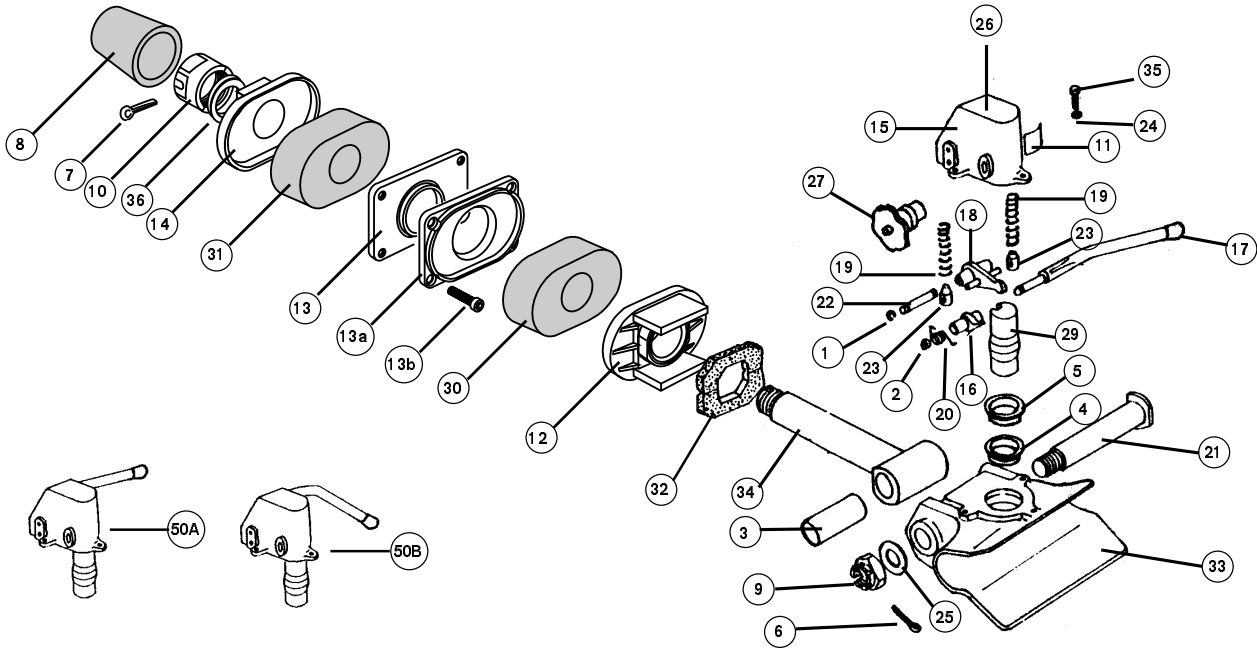
POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type								
		LUPO/1-A	LUPO/1-C	LUPO T45	LUPOT45/1	LUPO/2-A	LUPO/2-C	LUPETTO/2	LUPETTO/3	LUPO*
1	RG00004									
2	RG00063									
3	RG00064									
4	RG00034									
5	RG00061									
6	RG00233									
7	RG00093									
8		RG00042	RG00042	RG00042	RG00042	RG00042	RG00042	RG00042	RG00028	RG00042
9		RG00030	RG00030	RG00135	RG00135	RG00029	RG00029	RG00029	RG00031	
9 a		RG00030	RG00030	RG00134	RG00134	RG00029	RG00029	RG00029	RG00031	
9 b		-----	-----	RG00209	-----	-----	-----	RG00029	-----	-----
10		RG00025	RG00025	RG00025	RG00025	RG00025	RG00025	RG00025	RG00027	RG00025
11(12,2,5,13)	RG00002									
12	RG00009									
13	RG00066									
14		RG00074	RG00074	RG00074	-----	RG00074	RG00074	RG00074	RG00074	-----
15		-----	-----	-----	RG00052	-----	-----	-----	-----	RG00052
16	RG00048									
17		RG00035	RG00039	RG00039	RG00035	RG00035	RG00039	RG00039	RG00040	RG00035
18		RG00035	RG00241	RG00036	RG00035	RG00035	RG00036	RG00036	RG00037	RG00035
19		RG00038	RG00038	RG00038	RG00038	RG00038	RG00038	RG00038	RG00116	RG00115
20		RG00043	RG00043	RG00136	RG00136	RG00045	RG00045	RG00051	RG00019	
21(1,3,6)	RG00233	RG00233	RG00233	RG00233	RG00233	RG00233	RG00233	RG00233	RG00011	RG00233
22		RO00010	-----	-----	RG00010	RO00010	-----	-----	-----	-----

1990 103 C

**Fuori produzione**  
**Out of production**  
**Nicht mehr in Produktion**  
**Hors production**

# EURVO FIN-AS-AT

Ricambi - Spare parts  
 Ersatzteile - Pièces de rechange



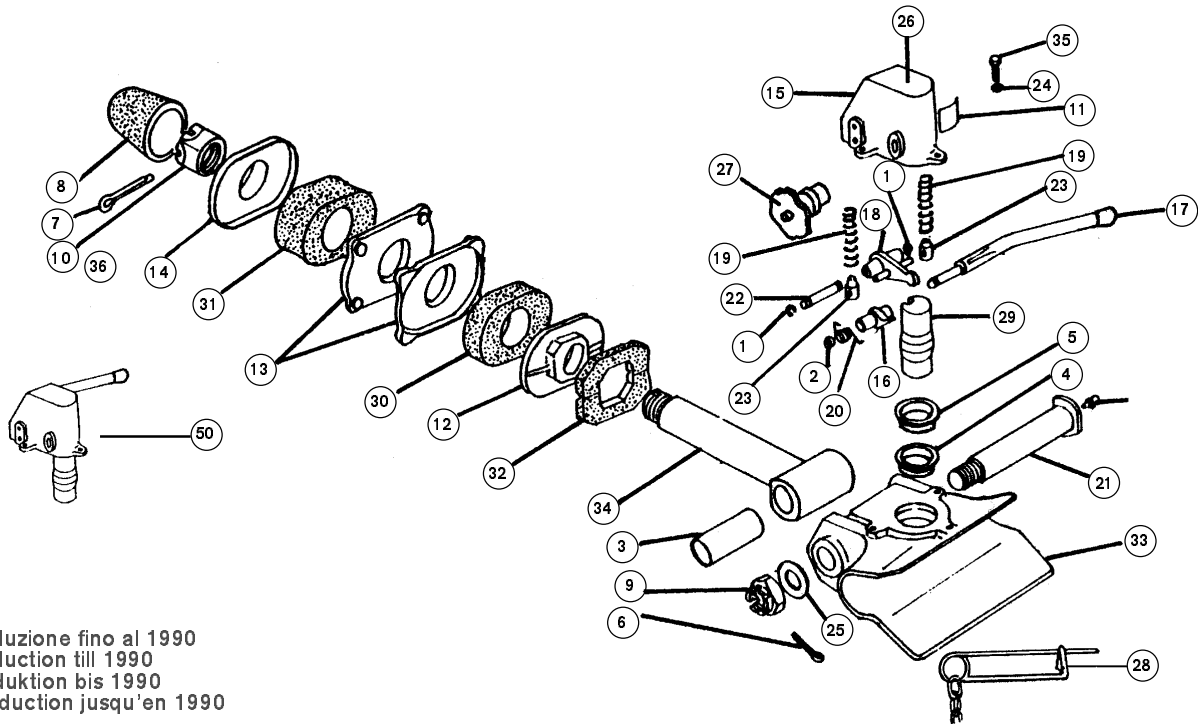
POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type			
		EURVO-FIN/1	EURVO-FIN/2	EURVO AS	EURVO AT
3	RG00004				
4	RG00071				
5	RG00007				
6	RG00063				
7	RG00064				
8	RG00034				
9	RG00061				
10	RG00059				
11	RG00047				
12		RG00169	RG00170	RG00042	RG00206
13		RG00135	RG00135	RG00135	RG00135
13a		RG00134	RG00134	RG00134	RG00134
13b		RG00209	RG00209	RG00209	RG00209
14	RG00025				
15	RG00009				
16	RG00014				
17+2	RG00018				
18	RG00013				
19	RG00054				
20	RG00053				
21+6,9,25	RG00002				
22+1	RG00016				
23	RG00015				
25	RG00066				
26	RG00073				
27	RG00148				
29	RG00072				
30		RG00035	RG00039	RG00035	RG00036
31		RG00035	RG00036	RG00035	RG00036
32		-----	-----	RG00038	-----
33		RG00020	RG00020	RG00020	RG00205
34+3,7,10		RG00010	RG00041	RG00010	RG00010
35+24	RG00056				
36		-----	-----	RO00010	-----
50 A		RG00119	RG00119	-----	-----
50 B		-----	-----	RG00218	RG00218

1990 102 A

Fuori produzione  
Out of production  
Nicht mehr in Produktion  
Hors production

**EURVO**

Ricambi - Spare parts  
Ersatzteile - Pièces de rechange



\*In produzione fino al 1990  
\*In production till 1990  
\*In Produktion bis 1990  
\*En production jusqu'en 1990

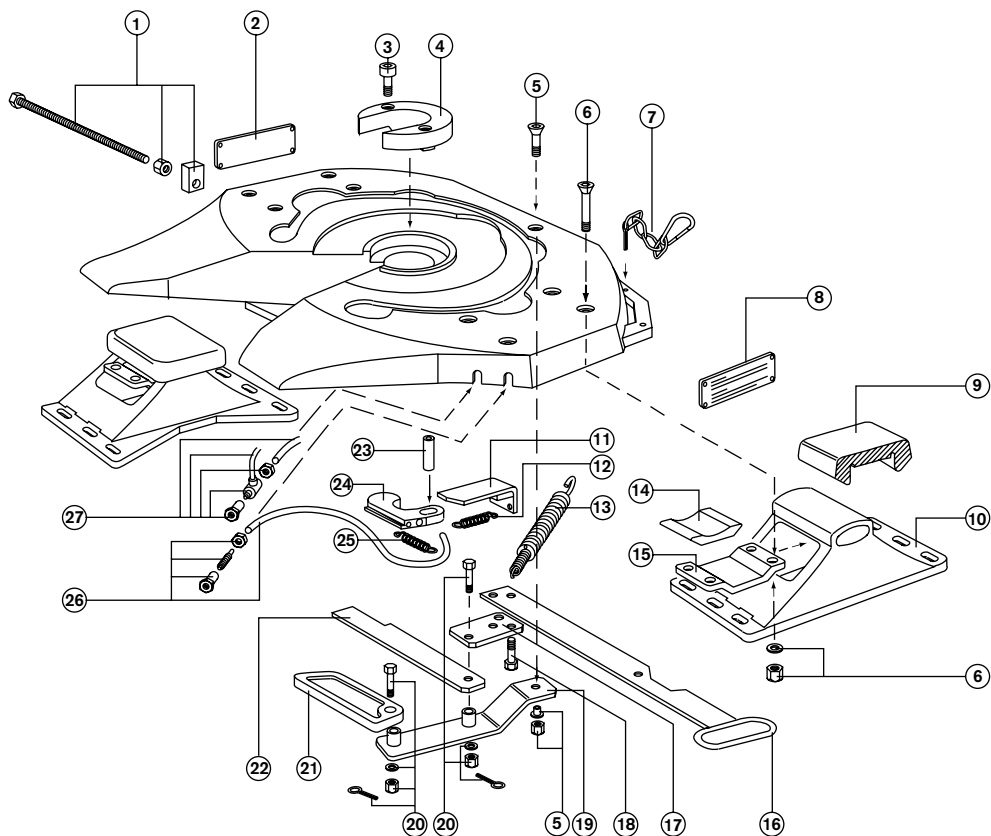
POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type					
		EURVO/1-A	EURVO/1-G	EURVO/2-A	EURVO/2-G	EURVO/3-G	EURVO*
3	RG00004						
4		RG00071	RG00071	RG00071	RG00071	RG00071	RG00006
5	RG00007						
6	RG00063						
7	RG00064						
8	RG00034						
9	RG00061						
10	RG00059						
11	RG00047						
12		RG00042	RG00042	RG00042	RG00042	RG00028	RG00042
13		RG00030	RG00030	RG00029	RG00029	RG00031	
14		RG00025	RG00025	RG00025	RG00025	RG00027	RG00025
15	RG00009						
16	RG00014						
17+2	RG00018						
18	RG00013						
19	RG00054						
20	RG00053						
21+6,9,25	RG00002						
22+1	RG00016						
23	RG00015						
25	RG00066						
26	RG00073						
27	RG00148						
28		-----	-----	-----	-----	-----	RG00055
29		RG00072	RG00072	RG00072	RG00072	RG00072	RG00012
30		RG00035	RG00039	RG00035	RG00039	RG00040	RG00035
31		RG00035	RG00036	RG00035	RG00036	RG00037	RG00035
32		RG00038	RG00038	RG00038	RG00038	RG00116	RG00115
33		RG00020	RG00020	RG00021	RG00021	RG00022	
34+3,7,10		RG00010	RG00041	RG00010	RG00041	RG00011	RG00010
35+24	RG00056						
36		RO00010	-----	RO00010	-----	-----	-----
50		RG00119	RG00119	RG00119	RG00119	RG00119	RG00114

1990 109 A

Fuori produzione  
Out of production  
Nicht mehr in Produktion  
Hors production

# RVO2

Ricambi - Spare parts  
Ersatzteile - Pièces de rechange



POS.	Tutti i tipi All types Alle Typen Tous les types	Tipo - Type - Typ - Type	
		H 150	H 185
1	RR00017		
3	RR00013		
4	RR00004		
5	RR00018		
6	RR00019		
7	RR00015		
9	RR00005		
10		RR00001	RR00026
11	RR00008		
12	RR00012		
13	RR00037		
14	RR00006		
15	RR00007		
16	RR00011		
17	RR00025		
18	RR00021		
19	RR00010		
20	RR00022		
21	RR00002		
22	RR00009		
23	RR00014		
24	RR00003		
25	RR00016		
26	RR00023		
27	RR00024		
<b>KITS</b>			
4+3	RR00029		
4+3,23,24,25	RR00030		
9+6,14	RR00031		
4+3,6,9,11,12,13,14,20,21, 22, 23,24, 25	RR00032		

1990 106 A

**Valore D:** è definito come il carico teorico di riferimento per la determinazione della forza teorica orizzontale dinamica che il veicolo trainante ed il rimorchio si scambiano;

**Valore Dc:** è definito come il carico teorico di riferimento per la determinazione della forza teorica orizzontale dinamica che il veicolo trainante ed il rimorchio ad asse rigido centrale si scambiano;

**Valore V:** è definito come il carico teorico di riferimento per la determinazione della forza teorica verticale dinamica che il veicolo trainante ed il rimorchio ad asse rigido centrale con massa maggiore di 3.5 ton si scambiano;

**Valore S:** è il carico verticale statico che il rimorchio ad asse centrale trasmette al gancio in condizioni statiche;

**Valore U:** è il carico verticale trasmesso dal semirimorchio alla ralla.

## 1 - Ganci di traino ed occhioni

### 1.1 - Rimorchi tradizionali

Fig. 1



In questo caso il parametro tecnico caratteristico è il seguente:

$$D = g \times \frac{T \times R}{T + R}$$

dove:

**g** = accelerazione di gravità che si assume pari a 9.81 m/s<sup>2</sup>;

**T** = rappresenta la massa massima tecnicamente ammissibile, espressa in ton del veicolo trainante;

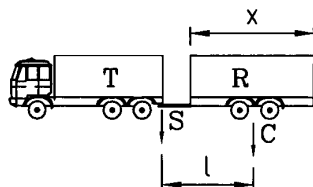
**R** = rappresenta la massa massima tecnicamente ammissibile del rimorchio espressa in ton.

#### Esempi di calcolo

- a) **T** = 18 ton; **R** = 26 ton       $D = \frac{9.81 \times (18 \times 26)}{18 + 26} = 104.3 \text{ kN}$
- b) **T** = 14 ton; **R** = 42 ton       $D = \frac{9.81 \times (14 \times 42)}{14 + 42} = 103.1 \text{ kN}$
- c) **T** = 30 ton; **R** = 50 ton       $D = \frac{9.81 \times (30 \times 50)}{30 + 50} = 183.9 \text{ kN}$

### 1.2 - Rimorchi ad asse rigido centrale

Fig. 2



In questo caso i parametri tecnici caratteristici sono i seguenti:

$$Dc = g \times \frac{T \times C}{T + C}$$

dove:

**T** = rappresenta la massa massima tecnicamente ammissibile, espressa in ton del veicolo trainante comprendente il carico verticale statico che viene trasmesso al gancio dall'occhione;

**C** = rappresenta la somma, espressa in ton, dei carichi assiali massimi che il rimorchio trasmette al terreno.

$$V = a \times \frac{X^2}{l} \times C$$

dove:

**x** = lunghezza dell'area caricabile espressa in metri;

**l** = distanza tra il centro dell'occhione del timone ed il centro dell'assieme di assi del rimorchio espressa in metri;

**V** = è il carico verticale dinamico espresso in kN;

**C** = rappresenta la somma, espressa in ton, dei carichi assiali massimi che il rimorchio trasmette al terreno;

**a** =  $1,8 \frac{m}{s^2}$  per veicoli dotati di sospensioni pneumatiche o assimilabili a queste;

**a** =  $2,4 \frac{m}{s^2}$  per veicoli con altro tipo di sospensione.

$$S = R - C$$

**R** = rappresenta la massa massima tecnicamente ammissibile del rimorchio espressa in ton.

#### Esempio di calcolo

Veicolo trainante isolato con massa = 20 ton e sospensioni pneumatiche.

Rimorchio ad asse rigido centrale con:

**R** = 20 ton    **C** = 19 ton    **S** = 1 ton    **X** = 7.2 m    **L** = 6 m

Per il calcolo del valore Dc si dovrà considerare la massa della motrice pari a:

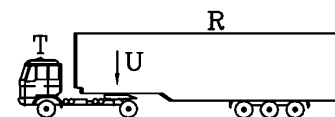
**T** = 20 + **S** = 20 + 1 = 21 ton

e quindi

$$Dc = \frac{9.81 \times (21 \times 19)}{21 + 19} = 98 \text{ kN} \quad V = 1.8 \times \left(\frac{7.2}{6}\right)^2 \times 19 = 49.2 \text{ kN}$$

## 2 - Ralle per semirimorchio e perni di articolazione

Fig. 3



$$D = g \times \frac{0,6 \times T \times R}{T + R - U}$$

dove:

**T** = è la massa del trattore che comprende il carico verticale trasmesso sulla ralla;

**R** = è la massa del semirimorchio;

**U** = è la parte di massa del semirimorchio che grava direttamente sulla ralla.

#### Esempio di calcolo

Trattore isolato con massa = 7 ton

Rimorchio con: **R** = 36 ton e **U** = 14 ton

Per il calcolo del valore D si dovrà considerare la massa del trattore pari a

$$T = 7 + U = 7 + 14 = 21 \text{ ton} \text{ e quindi: } D = g \times \frac{0,6 \times 21 \times 36}{21 + 36 - 14} = 101 \text{ kN}$$

**I sistemi di traino omologati in accordo alla direttiva 94/20/CE devono riportare sulla targhetta i valori caratteristici (D, Dc, S, V e U) per i quali sono stati omologati.**



**D-value:** Theoretical load for the determination of the theoretical horizontal dynamic force between towing vehicle and steering axle trailer;

**Dc-value:** Theoretical load for the determination of the theoretical horizontal dynamic force between towing vehicle and central axle trailer;

**V-value:** Theoretical load for the determination of the theoretical vertical dynamic force between towing vehicle and central axle trailer of more than 3,5 tons weight;

**S-value:** Static vertical load transmitted to the coupling by central axle trailer in static conditions;

**U-value:** Vertical load transmitted to the fifth wheel by the semitrailer.

## 1 - Trailer couplings and drawbar eyes

### 1.1 - Steering axle trailers

Fig. 1



In this case the technical parameter is following:

$$D = g \times \frac{T \times R}{T + R}$$

where:

**g** = Gravitational acceleration; 9.81 m/s<sup>2</sup>;

**T** = Technically admissible maximum weight of towing vehicle in tons;

**R** = Technically admissible maximum weight of trailer in tons.

Examples of calculation

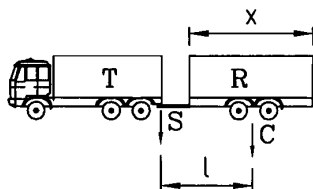
a) **T** = 18 ton; **R** = 26 ton       $D = \frac{9,81 \times (18 \times 26)}{18 + 26} = 104,3 \text{ kN}$

b) **T** = 14 ton; **R** = 42 ton       $D = \frac{9,81 \times (14 \times 42)}{14 + 42} = 103,1 \text{ kN}$

c) **T** = 30 ton; **R** = 50 ton       $D = \frac{9,81 \times (30 \times 50)}{30 + 50} = 183,9 \text{ kN}$

### 1.2 - Central axle trailers

Fig. 2



In this case the technical parameter is following:

$$Dc = g \times \frac{T \times C}{T + C}$$

where:

**T** = Technically admissible maximum load of the towing vehicle in tons, including the static vertical load transmitted to the coupling by the drawbar eye;

**C** = Sum of the maximum axle loads transmitted to the ground by the trailer in tons.

## Technical parameters of towing systems

$$V = a \times \frac{X^2}{l^2} \times C$$

where:

**x** = Length of the loading area in meters;

**l** = distance between the center of the hole of the drawbar eye and the center of the axles of the trailer in meters;

**V** = Dynamic vertical load in kN;

**C** = Sum of the maximum axial loads transmitted to the ground by the trailer in tons;

**a** =  $1,8 \frac{m}{s^2}$  for vehicles with air suspensions or with a comparable suspension type;

**a** =  $2,4 \frac{m}{s^2}$  for vehicle with other types of suspensions.

**S** = **R** - **C**

**R** = Technically admissible maximum weight of the trailer in tons.

Example of calculation

Towing vehicle with 20 tons weight and with air suspensions.  
Central axle trailer with:

**R** = 20 ton    **C** = 19 ton    **S** = 1 ton    **X** = 7.2 m    **L** = 6 m

For the determination of the Dc-value the weight of the towing vehicle is calculated as follows:

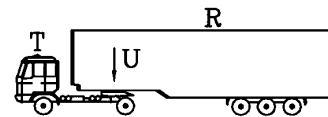
**T** = 20 + **S** = 20 + 1 = 21 ton

and therefore

$$Dc = \frac{9,81 \times (21 \times 19)}{21 + 19} = 98 \text{ kN} \quad V = 1,8 \times \left(\frac{7,2}{6}\right)^2 \times 19 = 49,2 \text{ kN}$$

## 2 - Fifth wheels and kingpins

Fig. 3



$$D = g \times \frac{0,6 \times T \times R}{T + R - U}$$

where:

**T** = Weight of the towing vehicle including the vertical load on the fifth wheel;

**R** = Weight of the semitrailer;

**U** = That part of the semitrailer weight which is directly transmitted to the fifth wheel.

Example of calculation

Towing vehicle alone, weight 7 tons

Trailer with **R** = 36 tons and **U** = 14 tons

For the determination of the D-value the weight of the towing vehicle is calculated as follows:

**T** = 7 + **U** = 7 + 14 = 21 ton      and therefore

$$D = g \times \frac{0,6 \times 21 \times 36}{21 + 36 - 14} = 101 \text{ kN}$$

**The towing systems homologated according to the directive 94/20/EC have to bear in the homologation plate the characteristic values (D, Dc, S, V and U) according to which they have been approved.**

**D-Wert:** Theoretische Deichselkraft, basierend auf einem rechnerischen Bezugswert von Zugfahrzeug und Drehschemelanhängern;

**Dc-Wert:** Theoretische Deichselkraft, basierend auf einem rechnerischen Bezugswert von Zugfahrzeug und Zentralachsanhänger;

**V-Wert:** Theoretische vertikale Belastung durch Zentralachsanhänger von mehr als 3,5 t. zulässigem Gesamtgewicht abhängig von der Hinterachsfederung des Zugfahrzeuges;

**S-Wert:** Statische vertikale Belastung, durch den Zentralachsanhänger auf den Kuppelpunkt;

**U-Wert:** Vertikale Belastung vom Auflieger auf die Sattelkupplung.

## 1 - Anhängerkupplungen und Zugösen

### 1.1 - Drehschemelanhängen

Fig. 1



In diesem Fall sind die technischen Kennwerte wie folgt:

$$D = g \times \frac{T \times R}{T + R}$$

wobei:

**g** = Erdbeschleunigung: 9.81 m/s<sup>2</sup>;

**T** = Maximales zulässiges Gesamtgewicht des Zugfahrzeuges in t;

**R** = Maximales zulässiges Gesamtgewicht des Drehschemelanhängers in t.

#### Kalkulationsbeispiele

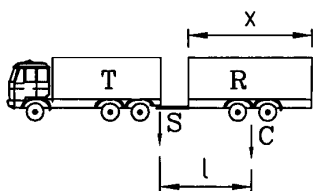
a) **T** = 18 ton; **R** = 26 ton       $D = \frac{9.81 \times (18 \times 26)}{18 + 26} = 104.3 \text{ kN}$

b) **T** = 14 ton; **R** = 42 ton       $D = \frac{9.81 \times (14 \times 42)}{14 + 42} = 103.1 \text{ kN}$

c) **T** = 30 ton; **R** = 50 ton       $D = \frac{9.81 \times (30 \times 50)}{30 + 50} = 183.9 \text{ kN}$

### 1.2 - Zentralachsanhänger

Fig. 2



In diesem Fall sind die technischen Kennwerte wie folgt:

$$Dc = g \times \frac{T \times C}{T + C}$$

wobei:

**T** = Zulässiges Gesamtgewicht des Zugfahrzeuges inklusive statische Stützlast, die von der Zugöse auf die Kupplung wirkt, in t;

**C** = Summe der maximalen Achslasten, die vom Anhänger übertragen werden, in t.

$$V = a \times \frac{x^2}{l^2} \times C$$

wobei:

**x** = Länge der Ladefläche in m;

**l** = Distanz zwischen dem Mittelpunkt der Zugöse und dem der Anhängerachsen, in m;

**V** = Dynamische Vertikallast in kN;

**C** = Summe der maximalen Achslasten, die vom Anhänger übertragen werden, in t;

**a** = 1,8  $\frac{m}{s^2}$  für Fahrzeuge mit Luftfederung oder einer vergleichbaren Federung;

**a** = 2,4  $\frac{m}{s^2}$  für Fahrzeuge mit anderer Federung.

$$S = R \cdot C$$

**R** = Maximales, technisch zulässiges Gesamtgewicht des Anhängers in t.

#### Kalkulationsbeispiel

Zugfahrzeug mit 20 t zulässigem Gesamtgewicht mit Luftfederung.

Zentralachsanhänger mit:

**R** = 20 ton    **C** = 19 ton    **S** = 1 ton    **X** = 7.2 m    **L** = 6 m

Um den Dc-Wert zu errechnen wird das Gesamtgewicht des Zugfahrzeuges wie folgt ermittelt:

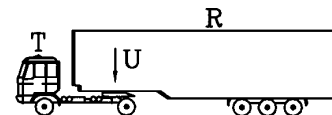
**T** = 20 + **S** = 20 + 1 = 21 ton

Daraus folgt

$$Dc = \frac{9.81 \times (21 \times 19)}{21 + 19} = 98 \text{ kN} \quad V = 1.8 \times \left(\frac{7.2}{6}\right)^2 \times 19 = 49.2 \text{ kN}$$

## 2 - Sattelkupplungen und Zugsattelzapfen

Fig. 3



$$D = g \times \frac{0,6 \times T \times R}{T + R - U}$$

wobei:

**T** = Gesamtgewicht des Zugfahrzeuges zuzüglich Vertikallast auf die Sattelkupplung;

**R** = Gesamtgewicht des Aufliegers;

**U** = Anteil des Aufliegengewichtes, das direkt auf die Sattelkupplung übertragen wird.

#### Kalkulationsbeispiel

Zugfahrzeuggewicht = 7 ton

Auflieger mit **R** = 36 ton und **U** = 14 ton

Um den D-Wert zu errechnen, wird das Gewicht des Zugfahrzeuges berücksichtigt:

**T** = 7 + **U** = 7 + 14 = 21 ton      und deshalb ist:

$$D = g \times \frac{0,6 \times 21 \times 36}{21 + 36 - 14} = 101 \text{ kN}$$

**Die Kupplungssysteme, die nach 94/20/EG homologiert sind, müssen im Typenschild die charakteristischen Werte (D, Dc, S, V und U) tragen, nach denen sie geprüft sind.**

**Valeur D:** La charge théorique de référence pour déterminer la force théorique horizontale dynamique que le véhicule trainant ainsi que la remorque s'échangent;

**Valeur Dc:** La charge théorique de référence pour déterminer la force théorique horizontale dynamique que le véhicule trainant ainsi que la remorque aux essieux centrales s'échangent;

**Valeur V:** La charge théorique de référence pour déterminer la force théorique verticale dynamique que le véhicule trainant ainsi que la remorque aux essieux centrales et avec une masse supérieure à 3,5 tonnes s'échangent;

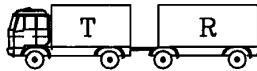
**Valeur S:** La charge verticale statique que la remorque aux essieux centrales transmet au crochet dans des conditions statiques;

**Valeur U:** La charge verticale transmise par la semi-remorque à la sellette.

## 1 - Les crochets et les anneaux d'attelages

### 1.1 - Les remorques traditionnelles

Fig. 1



Dans ce cas, le paramètre technique est le suivant:

$$D = g \times \frac{T \times R}{T + R}$$

là où:

**g** = l'accélération de la gravité: 9.81 m/s<sup>2</sup>;

**T** = La masse maximum techniquement admissible, exprimée en tonnes du véhicule trainant;

**R** = La masse maximum techniquement admissible de la remorque, exprimée en tonnes.

Exemples de calcul:

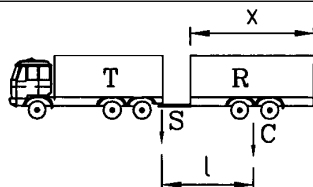
a) T = 18 ton; R = 26 ton  $D = \frac{9,81 \times (18 \times 26)}{18 + 26} = 104,3 \text{ kN}$

b) T = 14 ton; R = 42 ton  $D = \frac{9,81 \times (14 \times 42)}{14 + 42} = 103,1 \text{ kN}$

c) T = 30 ton; R = 50 ton  $D = \frac{9,81 \times (30 \times 50)}{30 + 50} = 183,9 \text{ kN}$

### 1.2 - Les remorques aux essieux centrales

Fig. 2



Dans ce cas les paramètres techniques sont les suivants:

$$Dc = g \times \frac{T \times C}{T + C}$$

là où:

**T** = La masse maximum techniquement admissible, exprimée en tonnes, du véhicule trainant avec y compris la charge du véhicule statique qui est transmise au crochet par l'anneau de remorquage;

**C** = La somme exprimée en tonnes, charges axiales maximum que la remorque transmet au terrain.

$$V = a \times \frac{x^2}{l} \times C$$

là où:

**x** = La longueur de l'aire chargeable exprimée en mètres;

**l** = La distance entre le centre de l'anneau de remorquage du gouvernail et le centre de l'ensemble des essieux de la remorque exprimée en mètres;

**V** = La charge verticale dynamique exprimée en kN;

**C** = La somme, exprimée en tonnes, des charges axiales maximum que la remorque transmet au train;

$$a = 1,8 \frac{m}{s^2} \text{ pour les véhicules avec suspensions pneumatiques;}$$

$$a = 2,4 \frac{m}{s^2} \text{ pour les véhicules ayant un autre type de suspensions.}$$

$$S = R - C$$

**R** = La masse maximum techniquement admissible pour la remorque et elle est exprimée en tonnes.

Un exemple de calcul

Le véhicule trainant indépendant avec une masse égale à 20 tonnes et des suspensions pneumatiques.

Une remorque aux essieux centrales et avec:

$$R = 20 \text{ ton} \quad C = 19 \text{ ton} \quad S = 1 \text{ ton} \quad X = 7,2 \text{ m} \quad L = 6 \text{ m}$$

Pour calculer la valeur Dc, il faudra considérer la masse de la motrice égale à:

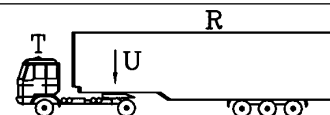
$$T = 20 + S = 20 + 1 = 21 \text{ ton}$$

et donc

$$Dc = \frac{9,81 \times (21 \times 19)}{21 + 19} = 98 \text{ kN} \quad V = 1,8 \times \left(\frac{7,2}{6}\right)^2 \times 19 = 49,2 \text{ kN}$$

## 2 - Les sellettes et les pivots d'attelage

Fig. 3



$$D = g \times \frac{0,6 \times T \times R}{T + R - U}$$

là où:

**T** = La masse du tracteur qui comprend la charge verticale transmise sur la sellette;

**R** = La masse de la semi-remorque;

**U** = La partie de la masse de la semi-remorque qui pèse directement sur la sellette.

Un exemple de calcul

Tracteur avec masse 7 tonnes

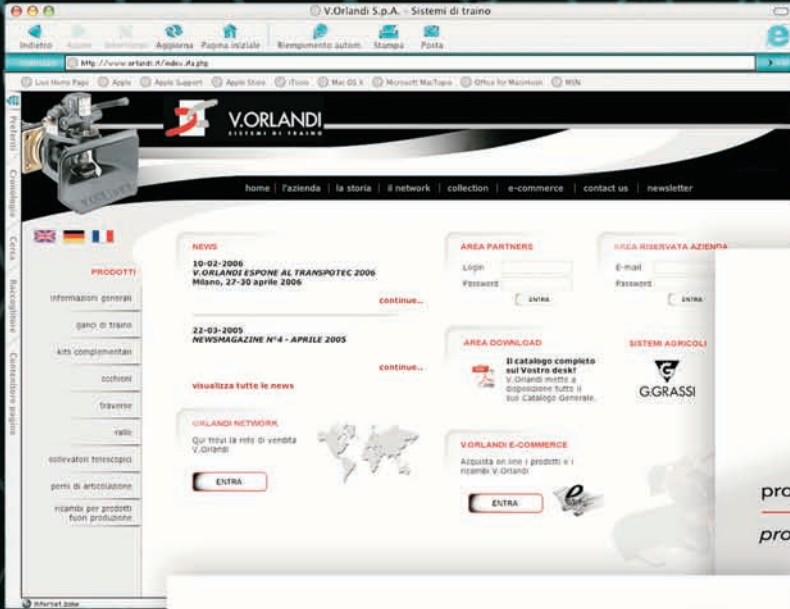
Semi-remorque avec: R = 36 tonnes et U = 14 tonnes

Pour effectuer le calcul de la valeur D il faudra considérer la masse du tracteur égale à:

$$T = 7 + U = 7 + 14 = 21 \text{ ton} \text{ et donc: } D = g \times \frac{0,6 \times 21 \times 36}{21 + 36 - 14} = 101 \text{ kN}$$

**Les systèmes d'attelage homologués en accord avec les directives 94/20/CE doivent reporter sur la plaque les valeurs caractéristiques (D, Dc, S, V et U) pour lesquels ils ont été homologués.**

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