



V. ORLANDI

SAF-HOLLAND Group

# V. ORLANDI

TOWING SYSTEMS since 1859

## PRODUCT CATALOGUE

ORIGINAL SPARE PARTS

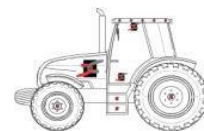
TOWING SYSTEM AGRICULTURE


Edition 2022

Release 08




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# AH31

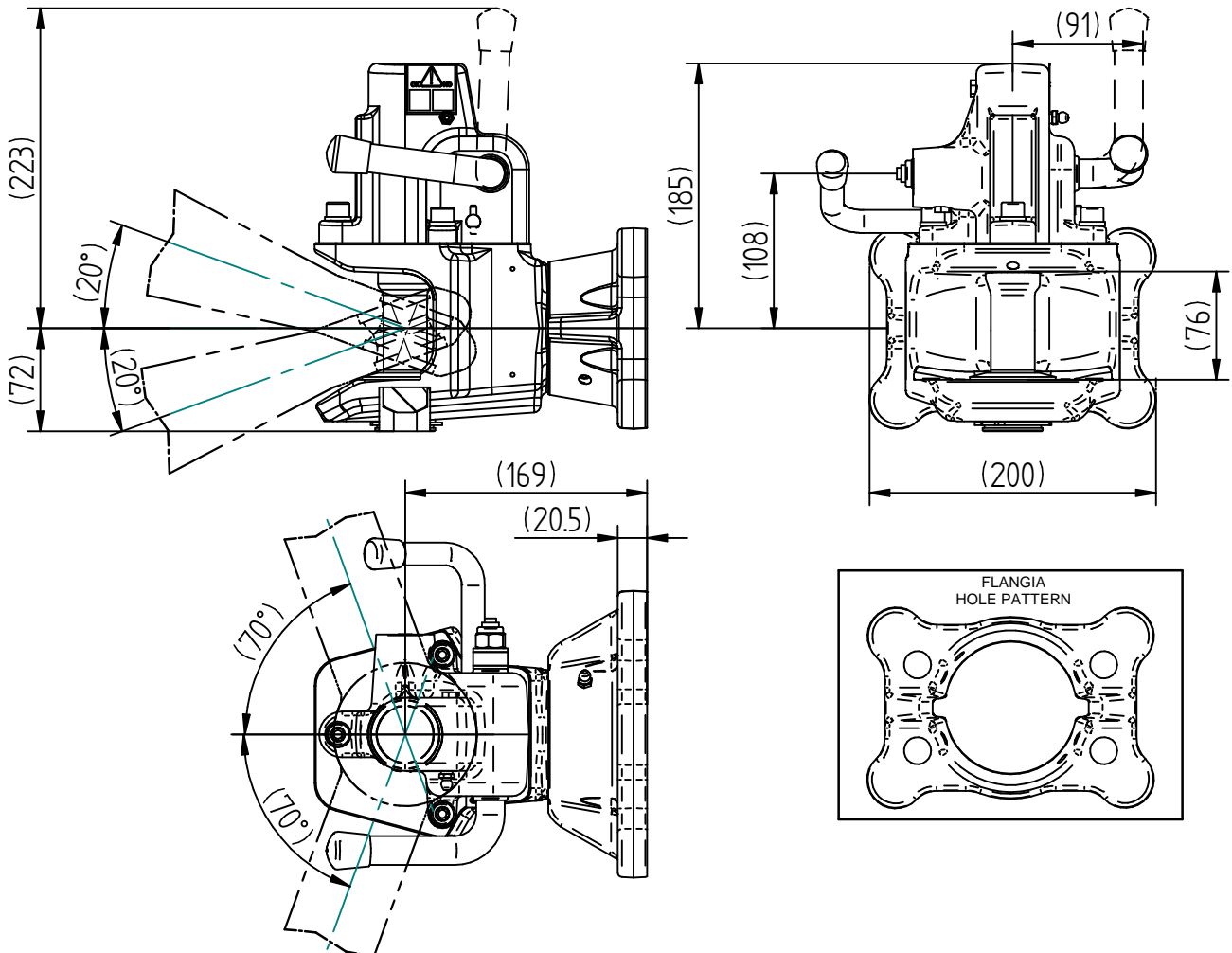


**Gancio automatico serie pesante  
perno cilindrico Ø31**  
**Heavy duty automatic coupling  
cylindrical pin Ø31**

STANDARD DIMENSIONALI dimensional standards	DIN 11028 ; ISO 6489-2 ; 2009/144/CE ; 2016/1788
GIREVOLE swivel	360°
per OCCHIONI non girevoli for no swivel draw-bar eyes	Ø 40 ISO 5692-2 ; ISO 8755 ; DIN 11026 ; DIN 11043 ; DIN 74054

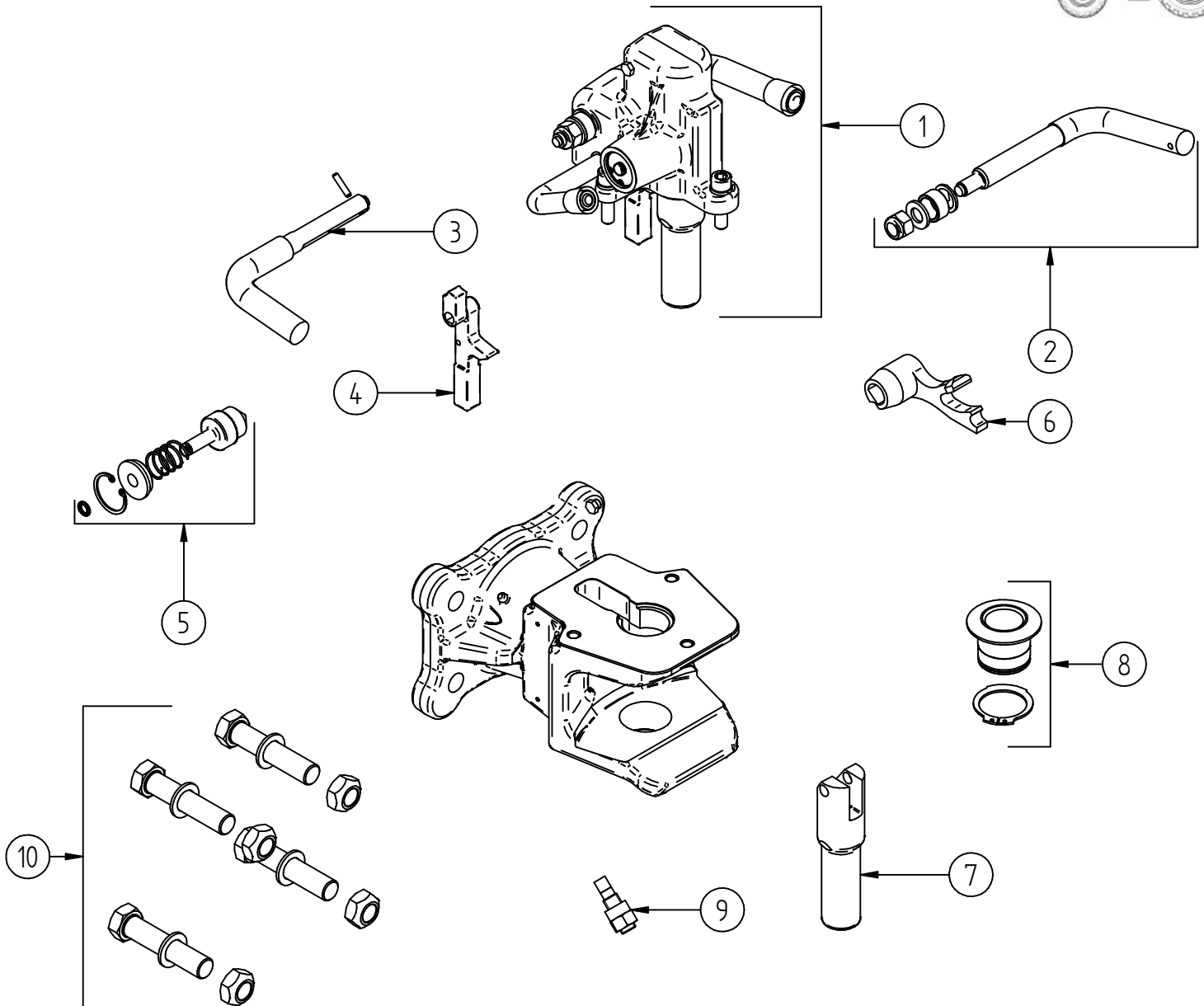
## Dati tecnici - Technical data

Modello - Model	Codice Article number	Flangia Hole pattern (mm)	Viti di fissaggio Fixing screws	Valore D D-Value (kN)	Carico verticale S S-Load (kg)	Omologazione Homologation	Peso Weight (kg)
AH31	AH31 0 B3	120 X 55	M14	60	2000	e5*2015/208*2018/829ND*01005	18
	AH31 0 B1	130 X 60	M18	100	2500	e3*2015/208*2018/829ND*30009	18
	AH31 0 B4	140 X 80	M16	100	2500	e3*2015/208*2018/829ND*30009	18
	AH31 0 B5	160 X 100	M20	100	2500	e3*2015/208*2018/829ND*30009	18



# AH31

## Ricambi - Spare parts



POS.	Tutti i tipi All types	Codice - article number			
		AH 31 0B1	AH 31 0B4	AH 31 0B5	AH 31 0B3
1		RA 00 034	RA 00 034	RA 00 034	RA 00 034
2	RA 00 283				
3	RA 00 282				
4	RA 00 280				
5	RA 00 143				
6	RA 00 091				
7		RA 00 035	RA 00 035	RA 00 035	RA 00 035
8	RA 00 028				
9	RA 00 093				
10		RA 00 040	RA 00 033	RA 00 190	RA 00 133

# AH38

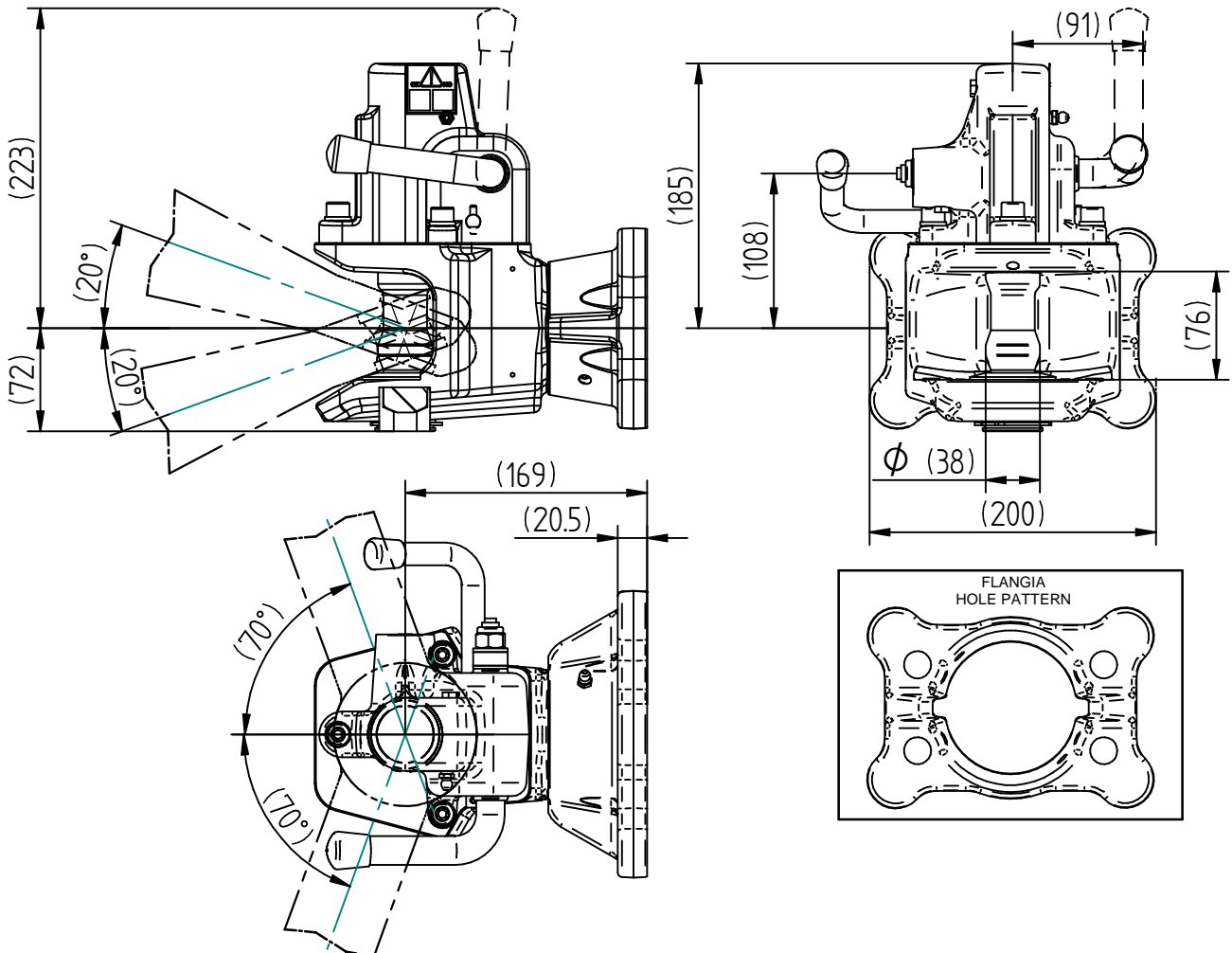


**Gancio automatico serie pesante  
perno a botte Ø38**  
**Heavy duty automatic coupling  
barrel pin Ø38**

<b>STANDARD DIMENSIONALI</b> dimensional standards	DIN 11028 ; ISO 6489-2 ; 2009/144/CE ; 2015/208
<b>GIREVOLE</b> swivel	<b>360°</b>
<b>per OCCHIONI non girevoli</b> for no swivel draw-bar eyes	<b>Ø 40</b> ISO 5692-2 ; ISO 8755 ; DIN 11026 ; DIN 11043 ; DIN 74054

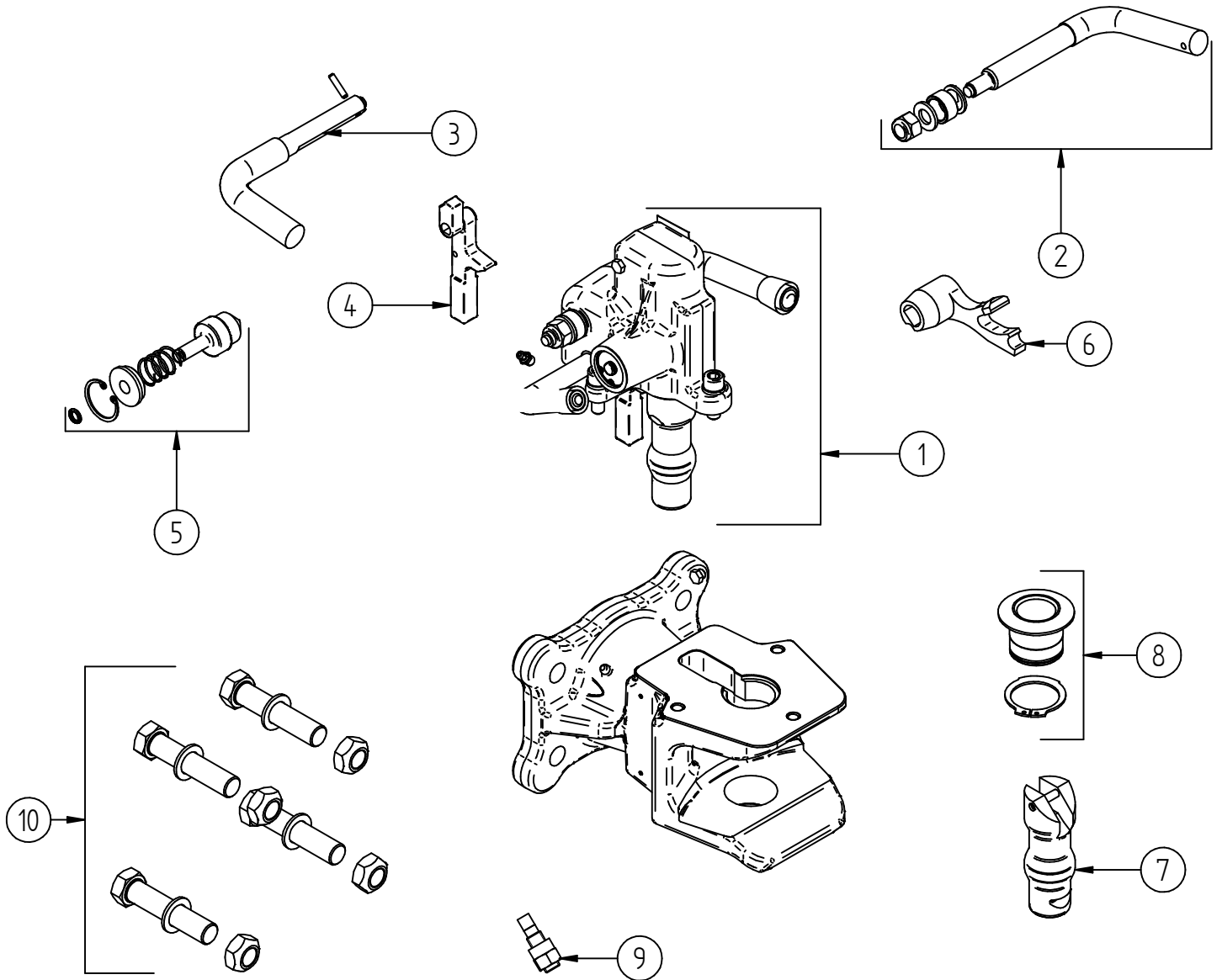
## Dati tecnici - Technical data

Modello - Model	Codice Article number	Flangia Hole pattern (mm)	Viti di fissaggio Fixing screws	Valore D D-Value (kN)	Carico verticale S S-Load (kg)	Omologazione Homologation	Peso Weight (kg)
AH38	AH38 0 A3	120 X 55	M14	60	2000	e5*2015/208*2018/829ND*01005	18
	AH38 0 A1	130 X 60	M18	100	2500	e3*2015/208*2018/829ND*30009	18
	AH38 0 A4	140 X 80	M16	100	2500	e3*2015/208*2018/829ND*30009	18
	AH38 0 A5	160 X 100	M20	100	2500	e3*2015/208*2018/829ND*30009	18



# AH38

## Ricambi - Spare parts




POS.	Tutti i tipi All types	Codice - article number			
		AH 38 0A1	AH 38 0A4	AH 38 0A5	AH 38 0A3
1		RA 00 007	RA 00 007	RA 00 007	RA 00 007
2	RA 00 283				
3	RA 00 282				
4	RA 00 280				
5	RA 00 143				
6	RA 00 091				
7		RA 00 029	RA 00 029	RA 00 029	RA 00 029
8	RA 00 028				
9	RA 00 093				
10		RA 00 040	RA 00 033	RA 00 190	RA 00 133



# AH40

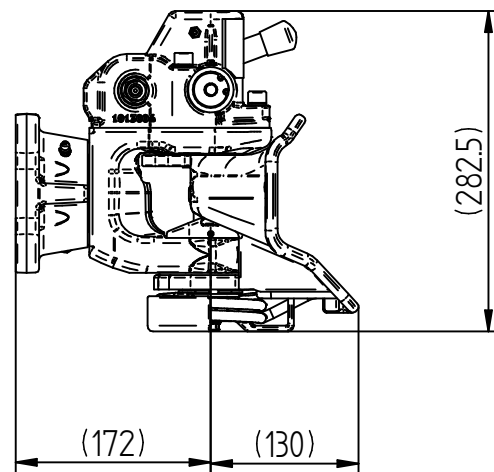
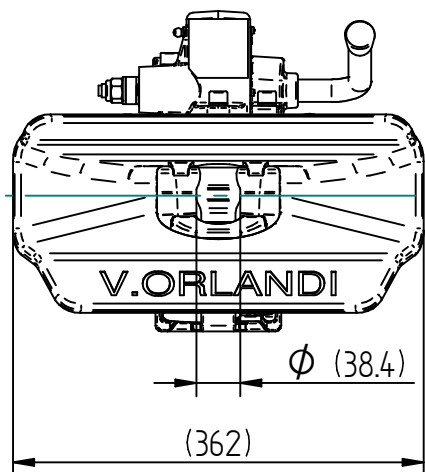


**Gancio automatico serie pesante  
perno a botte Ø40**  
**Heavy duty automatic coupling  
barrel pin Ø40**

STANDARD DIMENSIONALI dimensional standards	ECE R55-01
GIREVOLE swivel	 <b>360°</b>
per OCCHIONI non girevoli for no swivel draw-bar eyes	<b>Ø 40</b> ISO 5692-2 ; ISO 8755 ; DIN 11026 ; DIN 11043 ; DIN 74054

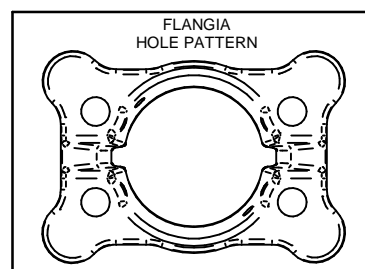
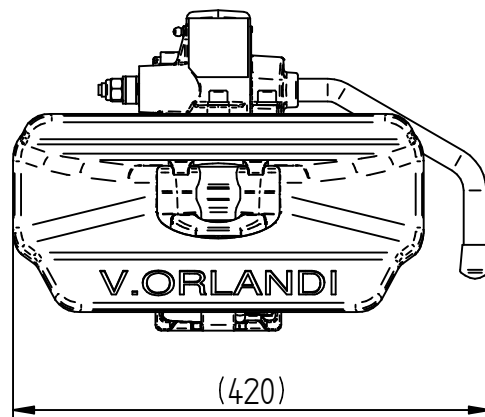
Dati tecnici - Technical data								
Modello - Model	Codice Article number	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	Valore D D-Value kN	Valore Dc Dc-Value kN	Carico verticale S S-Load (kg)	Omologazione Homologation ECE R55-01	Peso Weight kg
AH40	AH 40 003	120x55	M14	70	70	700	E11*55R-01*11077	29
	AH 4B 003	120x55	M14	70	70	700	E11*55R-01*11077	
	AH 40 004	140x80	M16	110	92	1000	E11*55R-01*11110	
	AH 4B 004	140x80	M16	110	92	1000	E11*55R-01*11110	

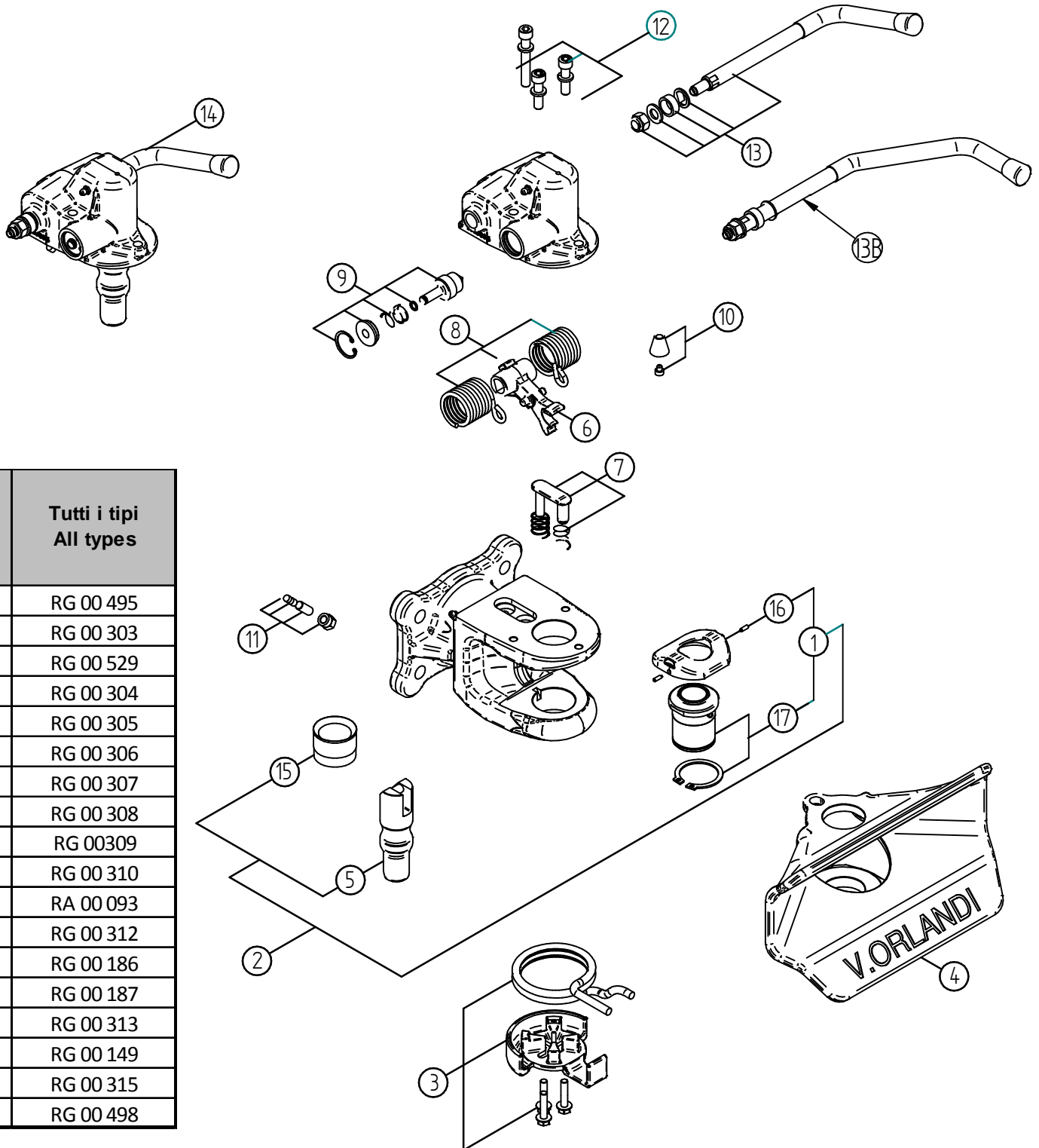
## AH40



## AH4B

Leva bassa  
Action lever downwards





Pos.	Tutti i tipi All types
1	RG 00 495
2	RG 00 303
3	RG 00 529
4	RG 00 304
5	RG 00 305
6	RG 00 306
7	RG 00 307
8	RG 00 308
9	RG 00309
10	RG 00 310
11	RA 00 093
12	RG 00 312
13	RG 00 186
13B	RG 00 187
14	RG 00 313
15	RG 00 149
16	RG 00 315
17	RG 00 498



# MH31



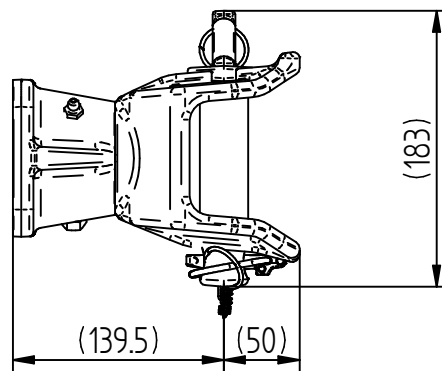
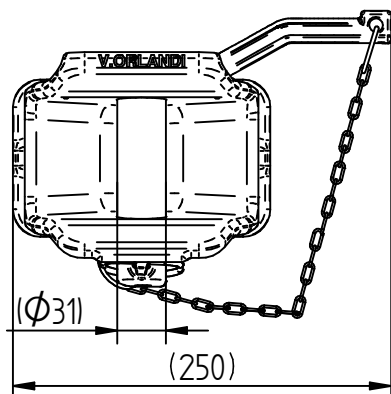
**Gancio manuale - perno cilindrico Ø31**  
**Manual coupling - cylindrical pin Ø31**

STANDARD DIMENSIONALI dimensional standards	DIN 11028 ; ISO 6489-2 ; 2009/144/CE ; 2015/208
GIREVOLE swivel	360°
per OCCHIONI non girevoli for no swivel draw-bar eyes	<b>Ø 40/50</b> ISO 5692 ; ISO 8755 ; ISO 20019 ; DIN 11026 ; DIN 11043 ; DIN 74054 ; DIN 74053

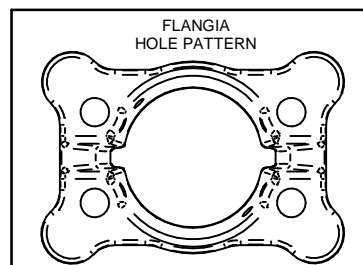
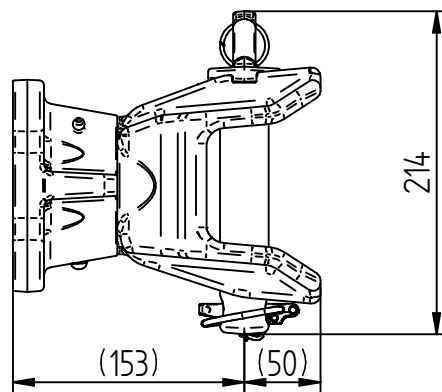
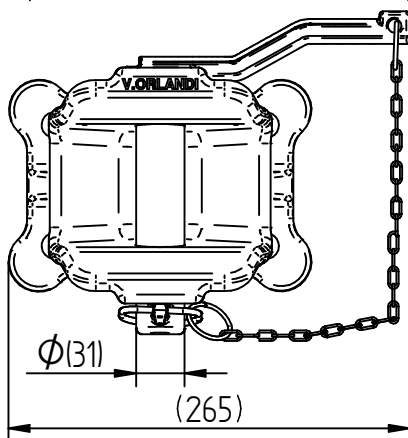
### Dati tecnici - Technical data

Modello - Model	Codice Article number	Flangia Hole pattern (mm)	Viti di fissaggio Fixing screws	Valore D D-Value (kN)	Carico verticale S S-Load (kg)	Omologazione Homologation	Peso Weight (kg)
MH31	MH31 0 F3	120 X 55	M14	60	2000	e3*2015/208*2018/829ND*30087	9,5
	MH31 0 F1	130 X 60	M18	60	2000	e3*2015/208*2018/829ND*30087	
MH31H Heavy Duty	MH31 0 E1	130 X 60	M18	100	2500	e3*2015/208*2018/829ND*30010	14,5
	MH31 0 E4	140 X 80	M16	100	2500	e3*2015/208*2018/829ND*30010	
	MH31 0 E5	160 X 100	M20	100	2500	e3*2015/208*2018/829ND*30010	

## MH 31



## MH 31H Heavy Duty



# MH 31 - MH31H

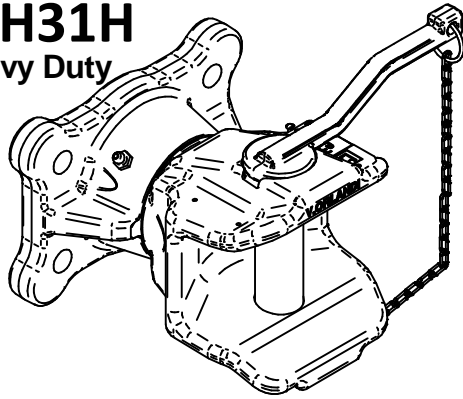
Heavy Duty

Ricambi - Spare parts

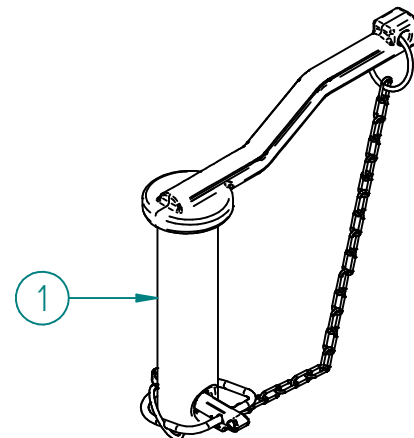
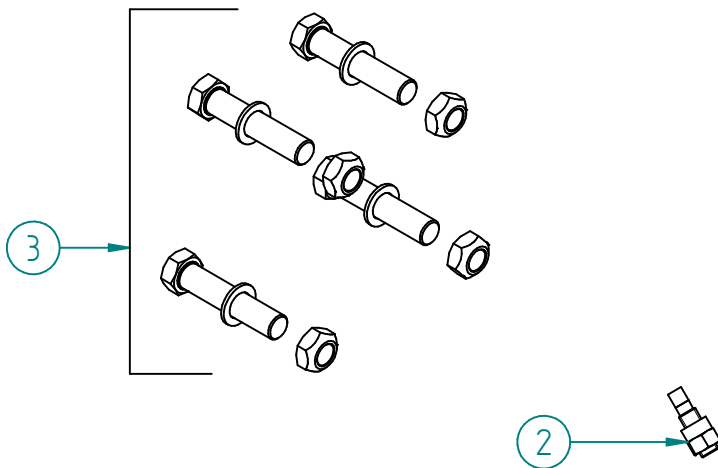
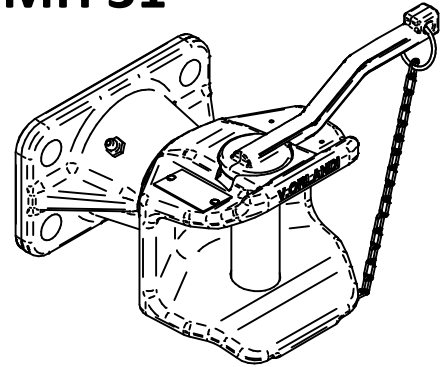


## MH31H

Heavy Duty



## MH 31



POS.	Tutti i tipi All types	Codice - Article number				
		MH 31 0F1	MH 31 0F3	MH 31 0E1	MH 31 0E4	MH 31 0E5
1		RA 00 215	RA 00 215	RA 00 214	RA 00 214	RA 00 214
2	RA 00 093					
3		RA 00 040	RA 00 133	RA 00 040	RA 00 033	RA 00 190



# MH JH



**Gancio manuale - perno cilindrico**

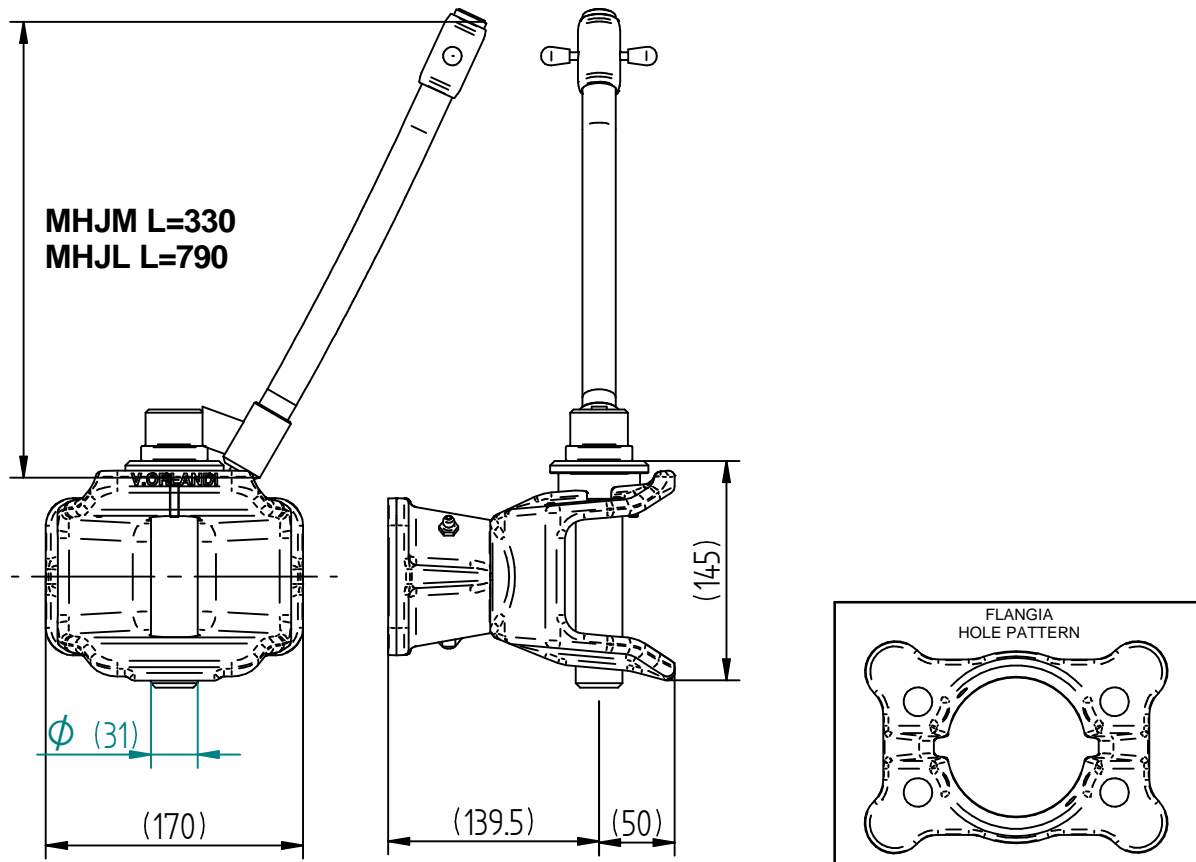
**Ø31**

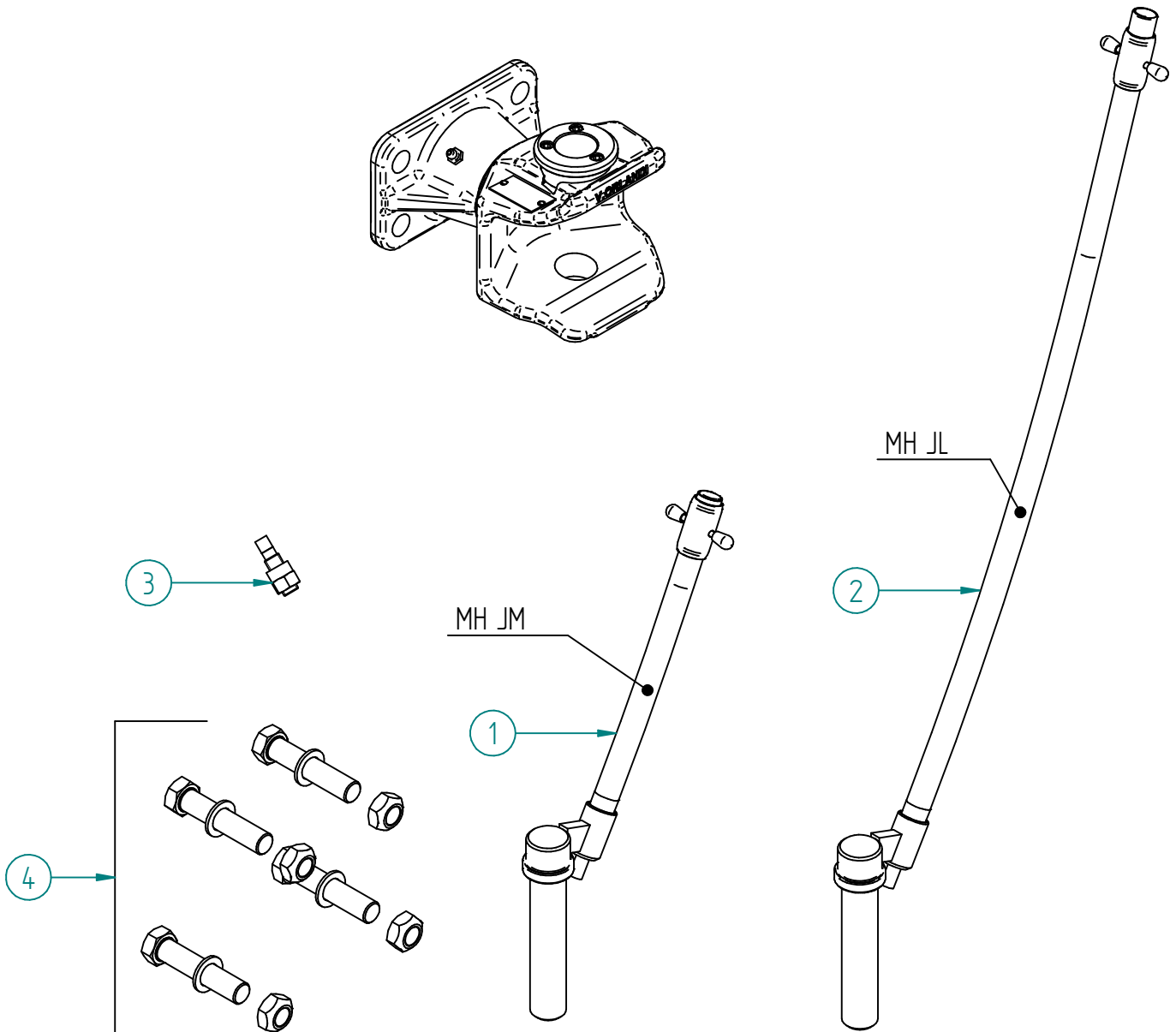
**Manual coupling -cylindrical pin**

**Ø31**

STANDARD DIMENSIONALI dimensional standards	DIN 11028 ; ISO 6489-2 ; 2009/144/CE ; 2015/208
GIREVOLE swivel	<b>360°</b>
per OCCHIONI non girevoli for no swivel draw-bar eyes	<b>Ø 40/50</b> ISO 5692-2 ; ISO 8755 ; DIN 11026 ; DIN 11043 ; DIN 74054

Dati tecnici - Technical data								
Model	Codice Article number	Flangia Hole pattern (mm)	Viti di fissaggio Fixing screws	Lunghezza perno (mm)	Valore D D-Value (kN)	Carico verticale S S-Load (kg)	Omologazione Homologation	Peso Weight (kg)
MHJH	MHJM0F1	130 X 60	M18	330	60	2000	e3*2015/208*2018/829ND*30087	9,5
	MHJM0F3	120X55	M14	330			e3*2015/208*2018/829ND*30087	
	MHJL0F1	130 X 60	M18	790	60	2000	e3*2015/208*2018/829ND*30087	9,5
	MHJL0F3	120X55	M14	790			e3*2015/208*2018/829ND*30087	






POS.	Tutti i tipi All types	Codice - Article number			
		MH JM 0 F1	MH JM 0 F3	MH JL 0 F1	MH JL 0 F3
1		RA 00 070	RA 00 070		
2				RA 00 063	RA 00 063
3	RA 00 093				
4		RA 00 040	RA 00 133	RA 00 040	RA 00 133



# AH28

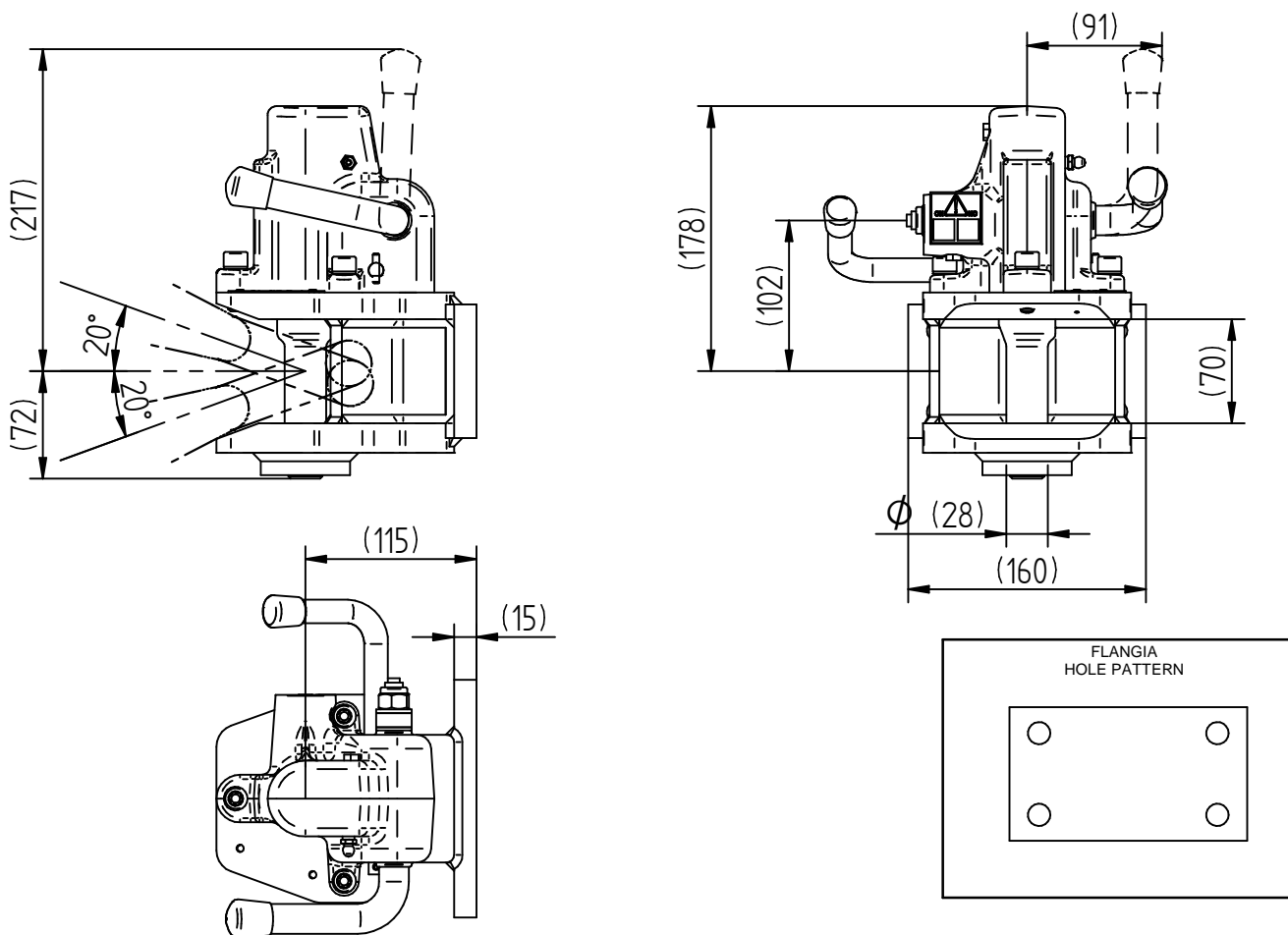
**Gancio automatico  
perno cilindrico Ø28**  
**Automatic coupling  
cylindrical pin Ø28**

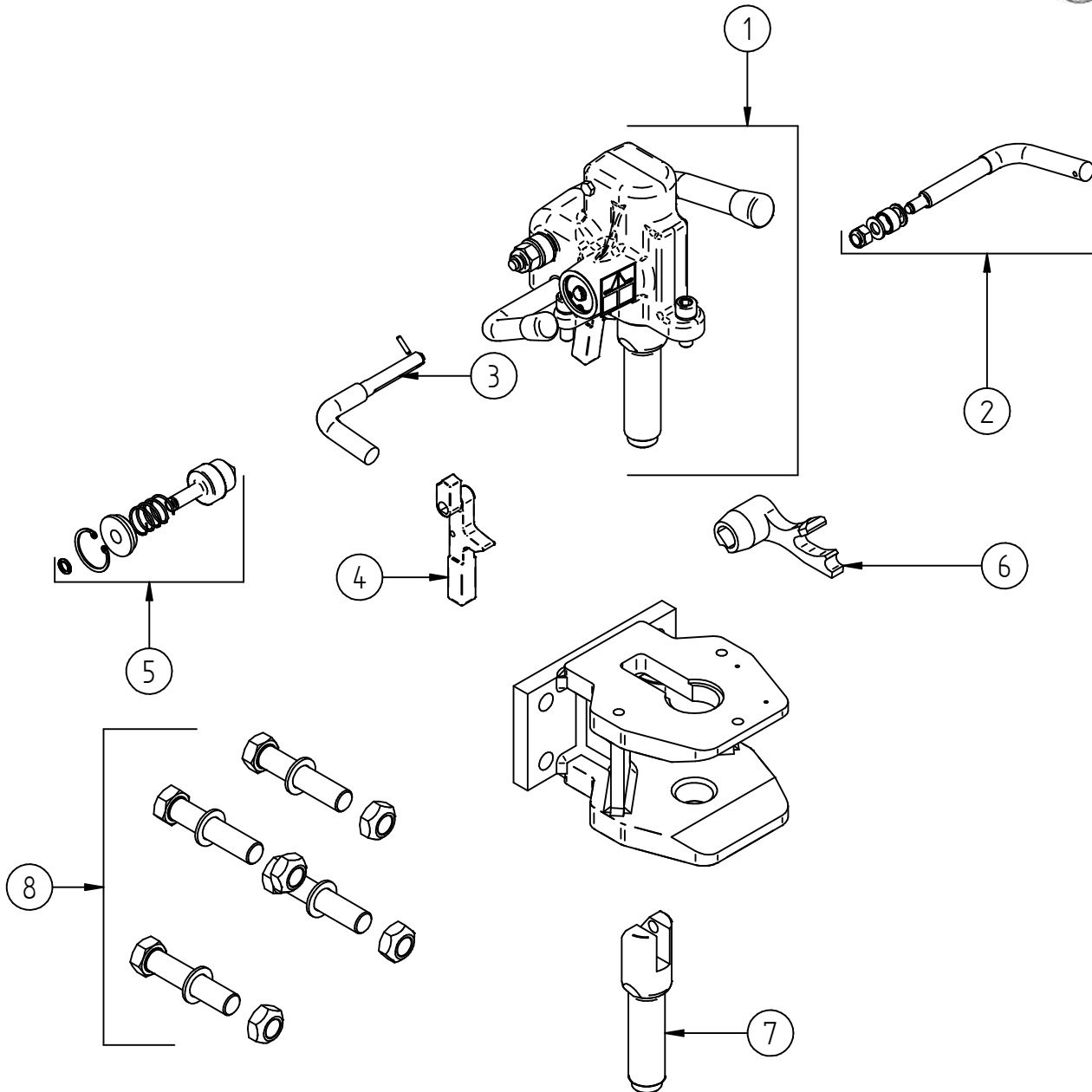


STANDARD DIMENSIONALI dimensional standards	<b>CUNA 338.02 cat. C ; ISO 6489-5 shape x ; 2013/8/CEE;2015/208</b>
<b>NON GIREVOLE</b> non-swivel	
<b>per OCCHIONI</b> for draw-bar eyes	CUNA 438.06 cat. E3 ; ISO 5692-3 shape X

### Dati tecnici - Technical data

Modello - Model	Codice Article number	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	categoria class	massa rimorchiabile trailer mass t	carico verticale static load daN	Omologazione Homologation	Peso Weight kg
AH28	AH28 0 G1	130 X 60	M18	C	6	1500	e3*2015/208*2018/829NS*10033	13
	AH28 0 G3	120 X 55	M14					
	AH28 0 G4	140 X 80	M16					






POS.	Tutti i tipi All types	Codice - Article number		
		AH28 0 G1	AH28 0 G3	AH28 0 G4
1	RA 00 188			
2	RA 00 141			
3	RA 00 282			
4	RA 00 280			
5	RA 00 143			
6	RA 00 091			
7	RA 00 189			
8		RA 00 040	RA 00 133	RA 00 241

# MH18

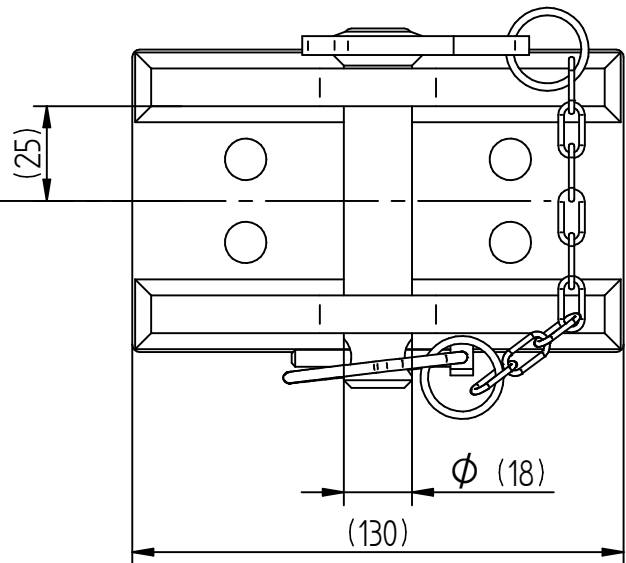
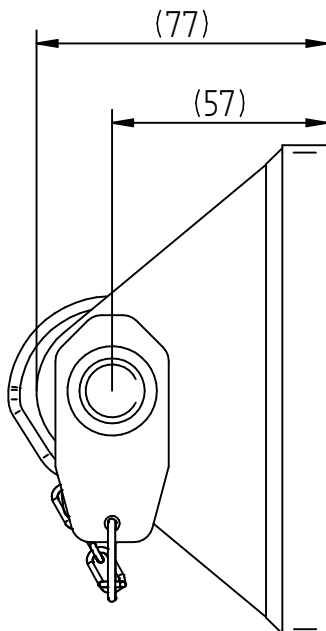
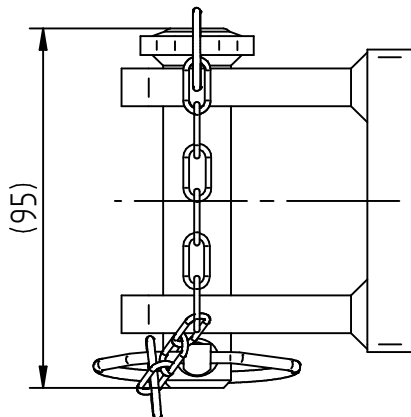


**Gancio manuale  
perno cilindrico Ø18  
Manual coupling  
cylindrical pin Ø18**

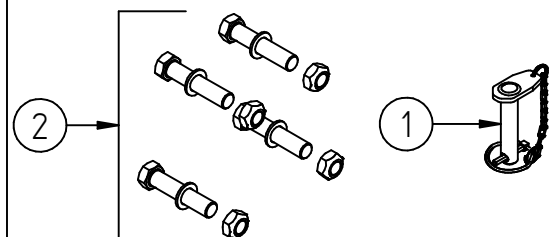
STANDARD DIMENSIONALI dimensional standards	CUNA 338.02 cat. A1 ; ISO 6489-5 shape w ; 2013/8/CEE;2015/208
NON GIREVOLE non-swivel	
per OCCHIONI for draw-bar eyes	CUNA 438.06 cat. E1 ; ISO 5692-3 shape W

## Dati tecnici - Technical data

Modello - Model	Codice Article number	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	massa rimorchiabile trailer mass t	carico verticale static load daN	Omologazione Homologation	Peso Weight kg
MH18	MH18 0 RX	70 X 22	M10	3	250	e3*2015/208*2018/829NS*10015	2



## Ricambi - Spare parts




POS.	Tutti i tipi All types
1	RA 00 286
2	RA 00 284

# MH28

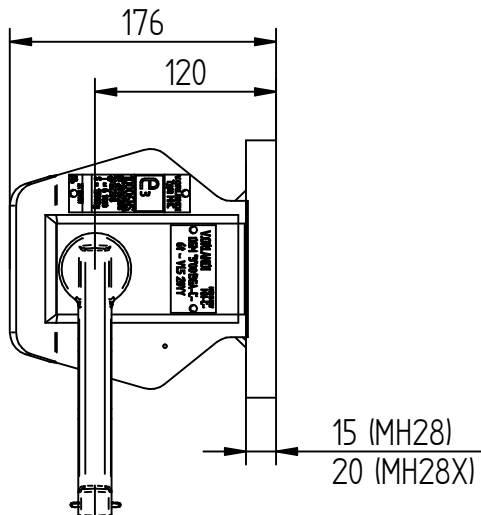
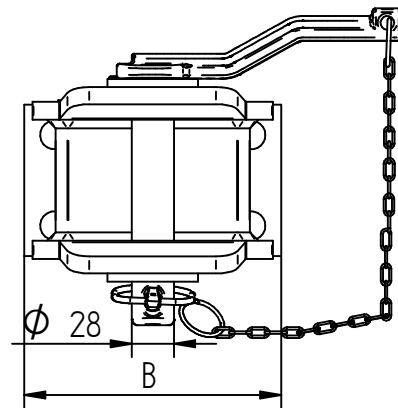
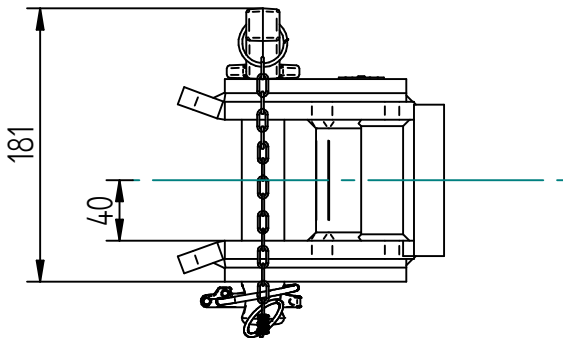


**Gancio manuale  
perno cilindrico Ø28  
Manual coupling  
cylindrical pin Ø28**

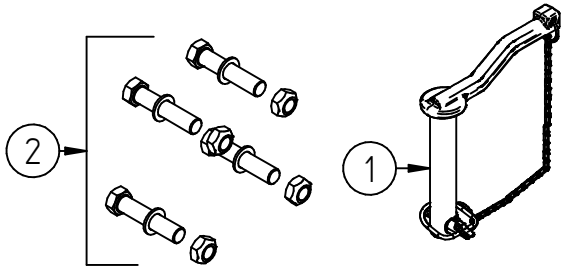
STANDARD DIMENSIONALI dimensional standards	<b>CUNA 338.02 cat. C ; ISO 6489-5 shape x ; 2015/208</b>
<b>NON GIREVOLE</b> non-swivel	
<b>per OCCHIONI</b> for draw-bar eyes	CUNA 438.06 cat. E3 ; ISO 5692-3 shape X

Dati tecnici - Technical data									
Modello - Model	Codice Article number	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	Dimensione "B" "B" dimension	Tipo / Clevis Type ISO6849-5	massa rimorchiabile trailer mass t	carico verticale static load daN	Omologazione Homologation	Peso Weight kg
MH28	MH28 O G1	130 X 60	M18	170	X	12	2000	e3*2015/208*2018/829NS*10013	9,8
	MH28 O G3	120 X 55	M14	155		6	1500	e3*2015/208*2018/829NS*10006	
	MH28 O G4	140 X 80	M16	180		12	2000	e3*2015/208*2018/829NS*10013	
	MH28 O G5	160x100	M20	200		12	2000	e3*2015/208*2018/829NS*10013	

Dati tecnici - Technical data									
Modello - Model	Codice Article number	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	Dimensione "B" "B" dimension	Tipo / Clevis Type ISO6849-5	Valore D D-Value (kN)	Carico verticale S S-Load (kg)	Omologazione Homologation	Peso Weight kg
MH28X	MH2X O G1	130 X 60	M18	170	X	50	1500	e3*2015/208*2018/829ND*10025	10,3
	MH2X O G4	140 X 80	M16	180		50	1500	e3*2015/208*2018/829ND*10025	
	MH2X O G5	160x100	M20	200		50	1500	e3*2015/208*2018/829ND*10025	



**Ricambi - Spare parts**




POS.	Tutti i tipi All types	Codice - Article number			
		MH 28 OG1	MH 28 OG3	MH 28 OG4	MH 28 OG5
1	RA 00 001				
2		RA 00 040	RA 00 133	RA 00 241	RA 00 190



# MH28M

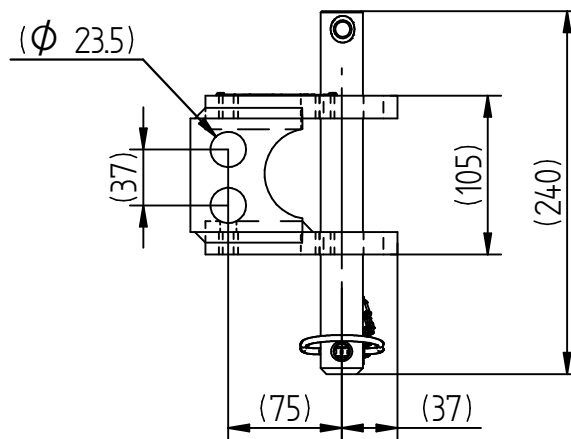
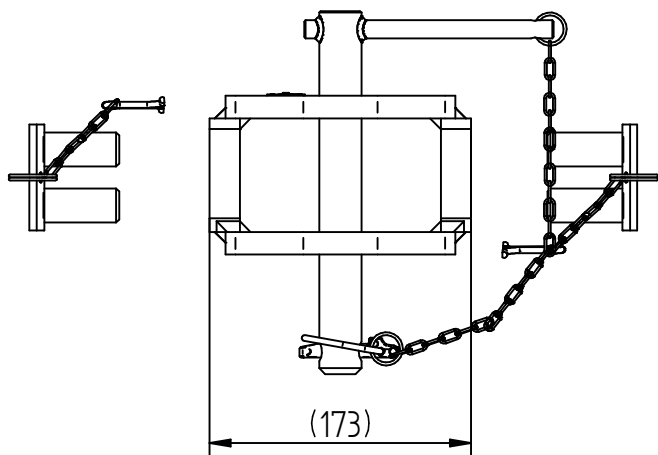


**Gancio manuale Matriosca  
perno cilindrico Ø28  
Manual coupling Matriosca  
cylindrical pin Ø28**

STANDARD DIMENSIONALI dimensional standards	CUNA 338.02 cat. C ; ISO 6489-5 shape x ; <b>2015/208</b>
NON GIREVOLE non-swivel	
per OCCHIONI for draw-bar eyes	CUNA 438.06 cat. E3 ; ISO 5692-3 shape X

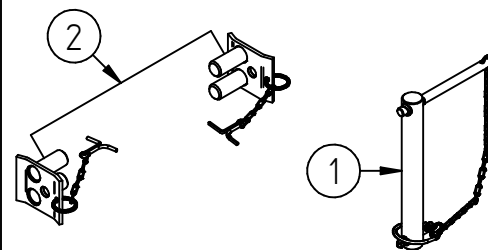
## Dati tecnici - Technical data

Modello - Model	Codice Article number	Valore Maximum Horizontal Load D- value	carico verticale static load daN	Omologazione Homologation	Peso Weight kg
MH 28-M	MH 28 MG9	51,2	1848	e3*2015/208*2018/829ND*10021	6,5



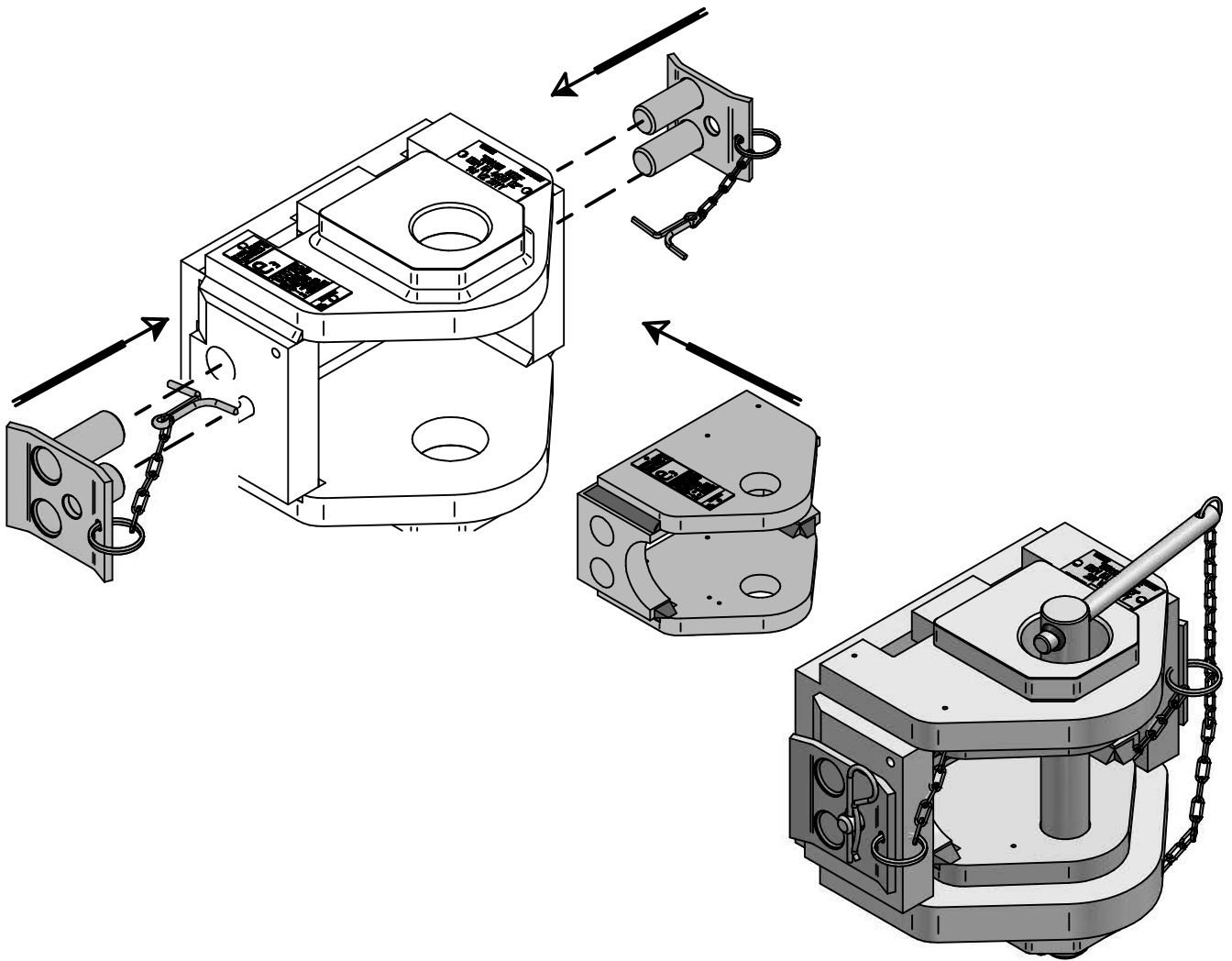
## SISTEMA MATRIOSCA

### Ricambi - Spare parts



POS.	Tutti i tipi All types	Part No MH 28 MG9
1	RA 00 056	
2	RA 00 359	

# Esempi di Applicazione del sistema Matriosca






# MH43M

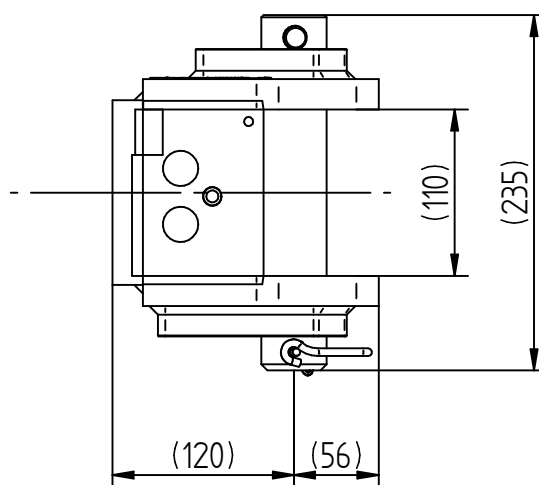
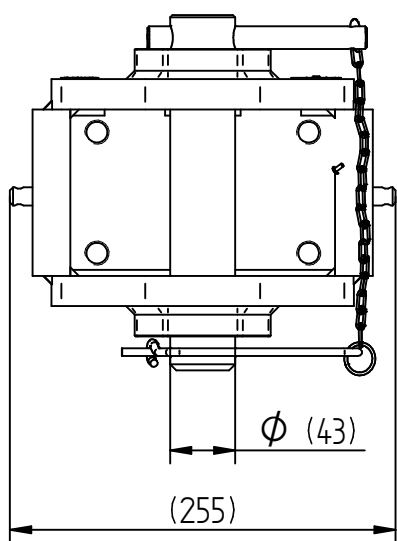


**Gancio manuale  
perno cilindrico Ø43  
Manual coupling  
cylindrical pin Ø43**

STANDARD DIMENSIONALI dimensional standards	CUNA 338.02 cat. D2 ; ISO 6489-5 shape y ; 2015/208
NON GIREVOLE non-swivel	
per OCCHIONI for draw-bar eyes	CUNA 438.06 cat. F2 ; ISO 5692-3 shape Y

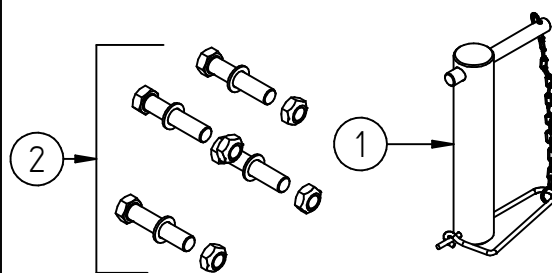
## Dati tecnici - Technical data

Modello Model	Codice Article number	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	Tipo / Clevis Type ISO6849- 5	massa rimorchiabile trailer mass t	carico verticale static load daN	Omologazione Homologation	Peso Weight kg
MH43M	MH43 0 L4	140 X 80	M16	Y	14	2000	e3*2015/208*2018/829NS*10001	15,5
MHD2-L4	MHD2 0 L4		M16		20		e3*2015/208*2018/829NS*10027	
	MHD2 0 LC		M20		20			



**COMPATIBILE CON  
SISTEMA MATRIOSCA  
SUITABLE WITH  
MATRIOSCA SYSTEM**

## Ricambi - Spare parts




POS.	Tutti i tipi All types	Codice - Article number
1	RA 00 023	
2	RA 00 033	

# MH50M

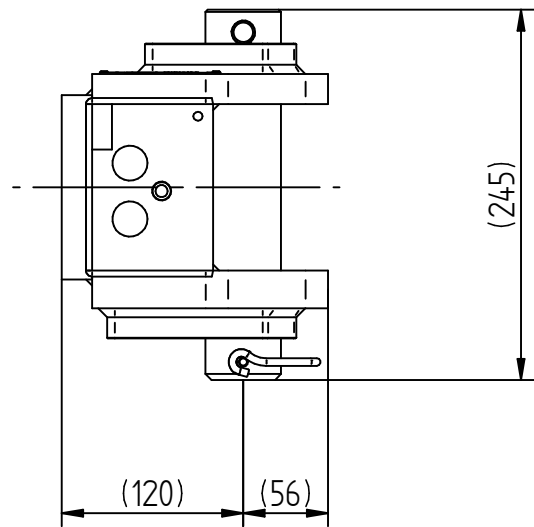
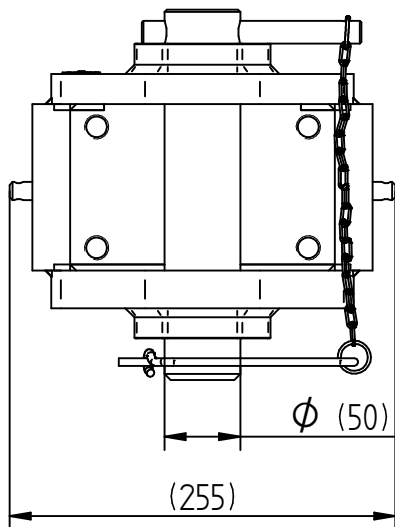


**Gancio manuale  
perno cilindrico Ø50**  
**Manual coupling  
cylindrical pin Ø50**

STANDARD DIMENSIONALI dimensional standards	CUNA 338.02 cat. D3 ; ISO 6489-5 shape z; 2015/208
NON GIREVOLE non-swivel	 0°
per OCCHIONI for draw-bar eyes	CUNA 438.06 cat. F3 ; ISO 5692-3 shape Z

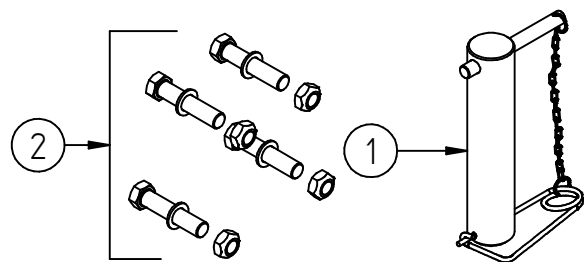
## Dati tecnici - Technical data

Modello Model	Codice Article number	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	massa rimorchiabile trailer mass t	carico verticale static load daN	Omologazione Homologation	Peso Weight kg
MH50M	MH50 0 M4	140 X 80	M16	20	2500	e3*2015/208*2018/829NS*10002	19,5

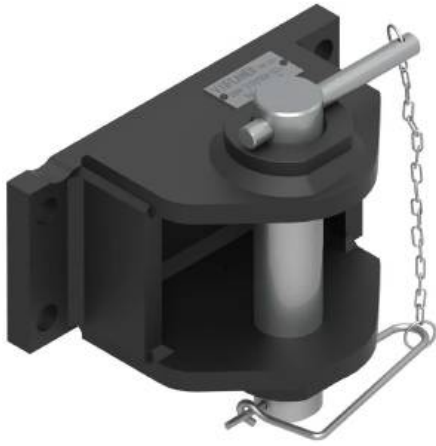


**COMPATIBILE CON  
SISTEMA MARIOSCA  
SUITABLE WITH  
MARIOSCA SYSTEM**

### Ricambi - Spare parts




POS.	Tutti i tipi All types	Codice - Article number
1	RA 00 024	
2	RA 00 033	



# MH43

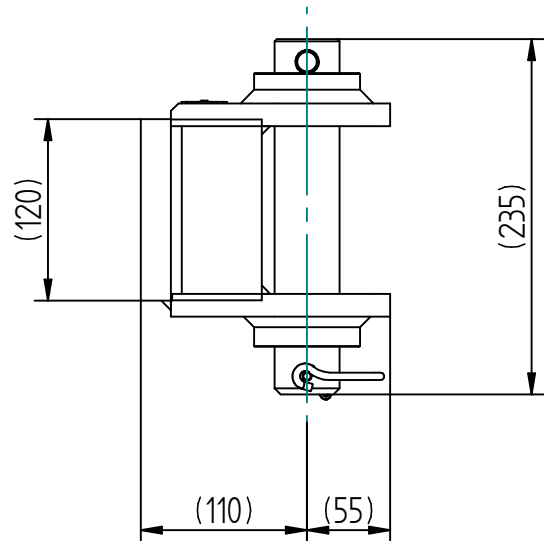
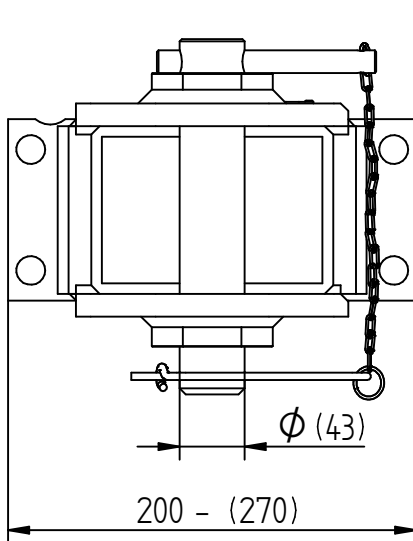
**Gancio manuale  
perno cilindrico Ø43**  
**Manual coupling  
cylindrical pin Ø43**



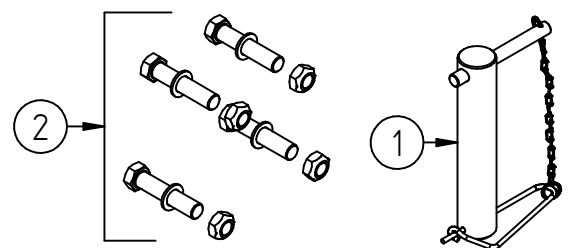
STANDARD DIMENSIONALI dimensional standards	CUNA 338.02 cat. D2 ; ISO 6489-5 shape y ; 2015/208
NON GIREVOLE non-swivel	
per OCCHIONI for draw-bar eyes	CUNA 438.06 cat. F2 ; ISO 5692-3 shape Y

## Dati tecnici - Technical data

Modello Model	Codice Article number	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	massa rimorchiabile trailer mass t	carico verticale static load daN	Omologazione Homologation	Peso Weight kg
MH43	MH43 011	130 X 60	M18	14	2000	e3*2015/208*2018/829NS*30072	13
	MH43 012	240 X 80	M18	20	3000	e3*2015/208*2018/829NS*10012	15,5



## Ricambi - Spare parts



POS.	Tutti i tipi All types	Codice - Article number	
		MH43 011	MH43 012
1	RA 00 023		
2	RA 00 040		



# MH50

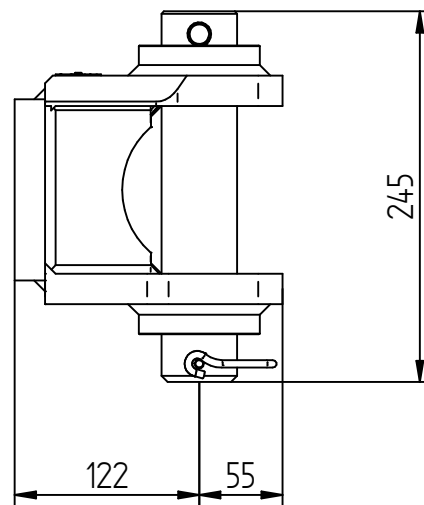
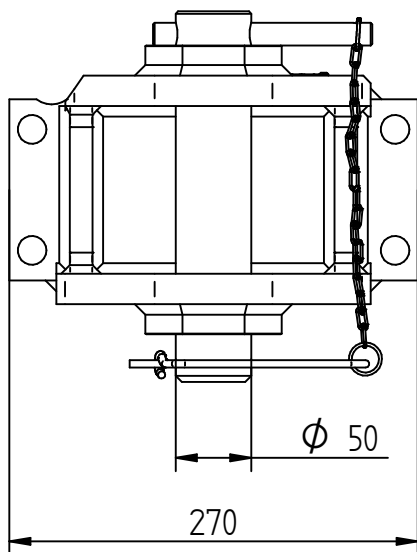


**Gancio manuale  
perno cilindrico Ø50**  
**Manual coupling  
cylindrical pin Ø50**

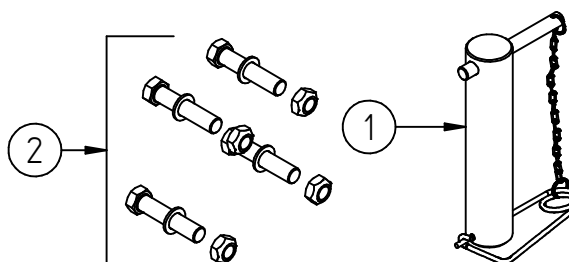
STANDARD DIMENSIONALI dimensional standards	CUNA 338.02 cat. D3 ; ISO 6489-5 shape z; 2015/208
NON GIREVOLE non-swivel	0°
per OCCHIONI for draw-bar eyes	CUNA 438.06 cat. F3 ; ISO 5692-3 shape Z

## Dati tecnici - Technical data

Modello Model	Codice Article number	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	massa rimorchiabile trailer mass t	carico verticale static load daN	Omologazione Homologation	Peso Weight kg
MH50	MH50 0 K2	240 X 80	M18	30	3000	e3*2015/208*2018/829NS*10014	19,5



## Ricambi - Spare parts



POS.	Tutti i tipi All types	Part No MH 00 0K2
1	RA 00 024	
2	RA 00 040	

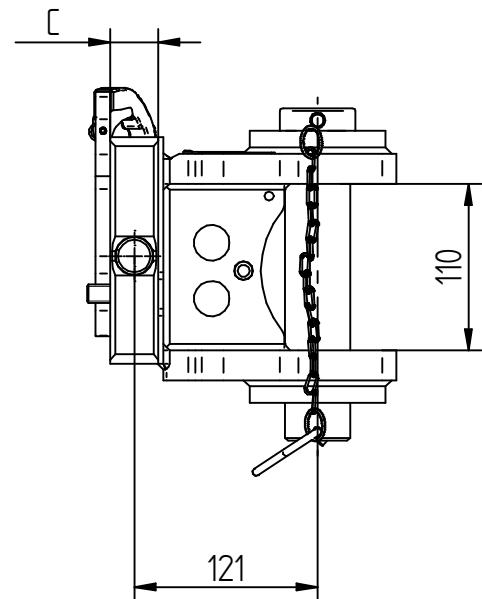
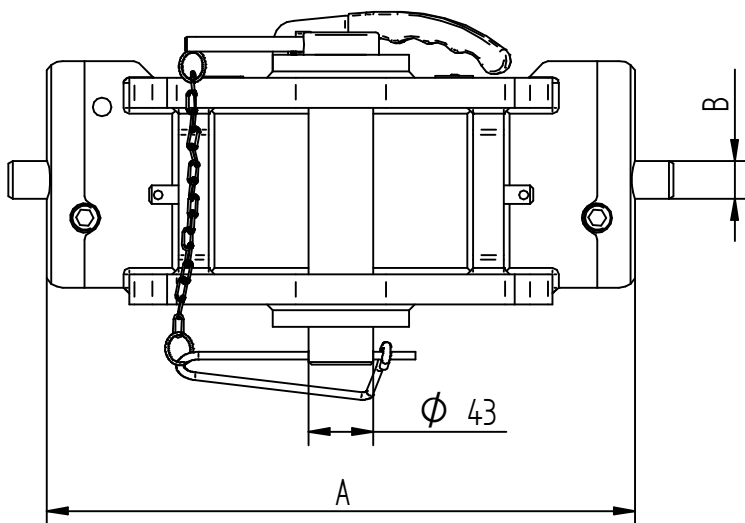
# MH4E



**Gancio manuale  
perno cilindrico Ø43**  
**Manual coupling  
cylindrical pin Ø43**

STANDARD DIMENSIONALI dimensional standards	CUNA 338.02 ; ISO 6489-5 shape y ; 2015/208
NON GIREVOLE non-swivel	0°
per OCCHIONI for draw-bar eyes	CUNA 438.06 cat. F3 ; ISO 5692-3 shape Y

Dati tecnici - Technical data						
Modello Model	Codice Article number	Dimensione dimension "A" - "B" - "C" mm	Valore Maximum Horizontal Load D- value	carico verticale static load daN	Omologazione Homologation	Peso Weight kg
MH4E	MH4E E L6	390-25-32	106	3000	e1*2015/208*2018/829ND*00691	29
	MH4E D L6	335-22-30	106	3000	e1*2015/208*2018/829ND*00691	27
	MH4E B L6	330-25-32	106	3000	e1*2015/208*2018/829ND*00691	27



**COMPATIBILE CON  
SISTEMA MARIOSCA  
SUITABLE WITH  
MARIOSCA SYSTEM**

**Ricambi - Spare parts**


POS.	Tutti i tipi All types	Codice - Article number		
		MH 4E EL6	MH 4E DL6	MH 4E BL6
1	RA 00 384			
2		RA 00 567	RA 00 539	RA 00 566
3		RA 00 568	RA 00 568	RA 00 568



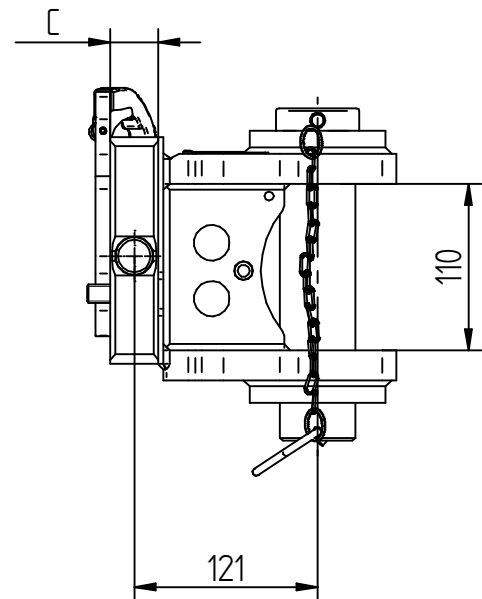
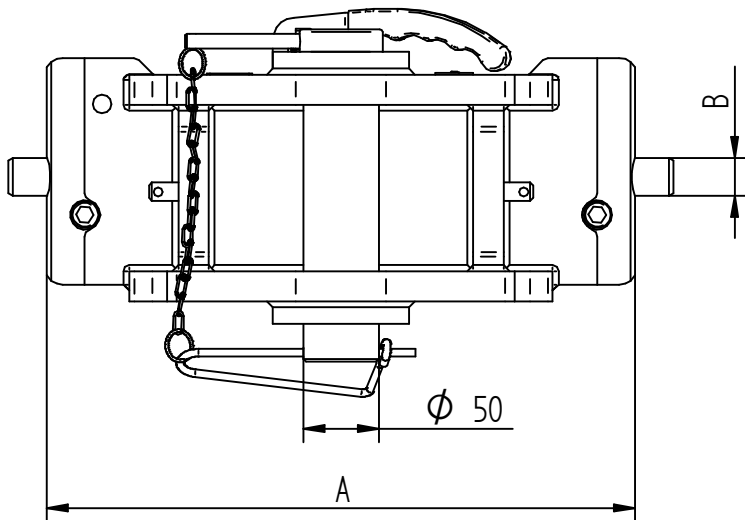
# MH5E

**Gancio manuale  
perno cilindrico  $\phi 50$   
Manual coupling  
cylindrical pin  $\phi 50$**



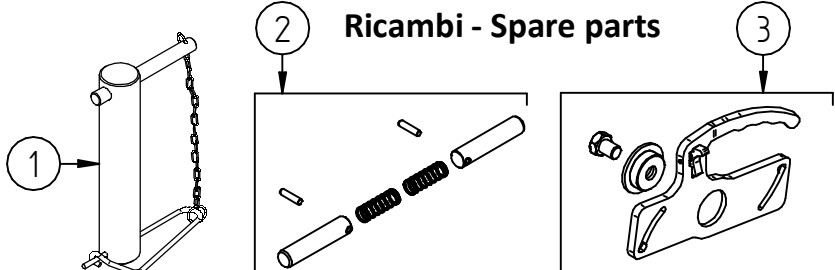
STANDARD DIMENSIONALI dimensional standards	CUNA 338.02 ; ISO 6489-5 shape z; 2015/208
NON GIREVOLE non-swivel	
per OCCHIONI for draw-bar eyes	CUNA 438.06 cat. F3 ; ISO 5692-3 shape Z

Dati tecnici - Technical data						
Modello Model	Codice Article number	Dimensione dimension "A" - "B" - "C" mm	Valore Maximum Horizontal Load D- value	carico verticale static load daN	Omologazione Homologation	Peso Weight kg
MH5E	MH5E E M6	390-25-32	106	3000	e1*2015/208*2018/829ND*00690	29
	MH5E D M6	335-22-30	106	3000	e1*2015/208*2018/829ND*00690	27
	MH5E B M6	330-25-32	106	3000	e1*2015/208*2018/829ND*00690	27



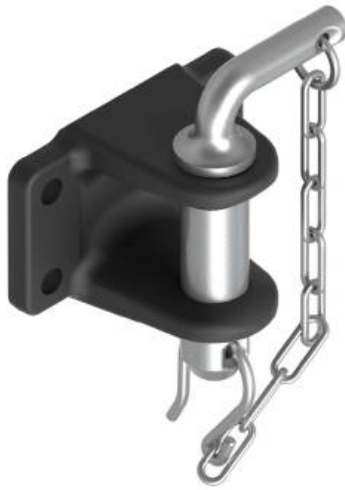
**COMPATIBILE CON  
SISTEMA MARIOSCA  
SUITABLE WITH  
MARIOSCA SYSTEM**

**Ricambi - Spare parts**



POS.	Tutti i tipi All types	Codice - Article number		
		MH 5E EM6	MH 5E DM6	MH 5E BM6
1	RA 00 385			
2		RA 00 567	RA 00 539	RA 00 566
3		RA 00 568	RA 00 568	RA 00 568






# GM10

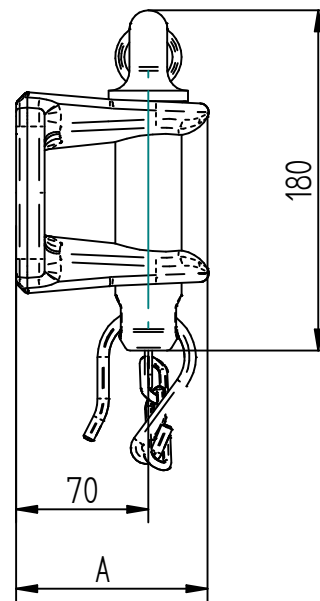
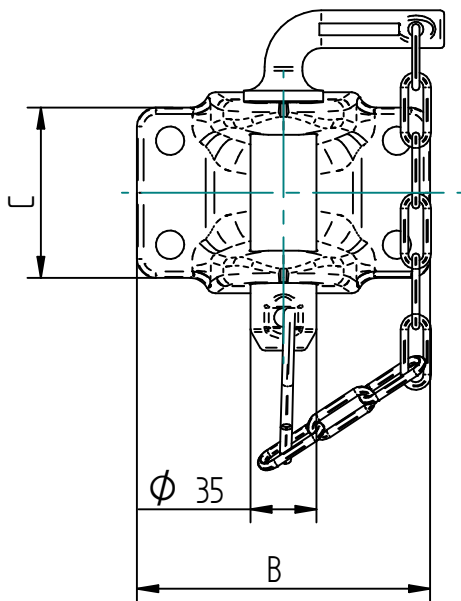
**Gancio di manovra  
perno cilindrico  
Manual coupling  
cylindrical pin**



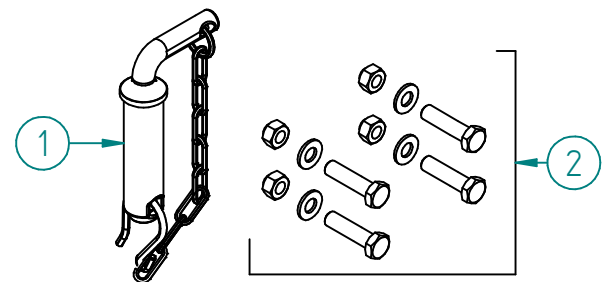
STANDARD DIMENSIONALI dimensional standards	2015/208 ANNEX XXIX
NON GIREVOLE non-swivel	
per OCCHIONI for draw-bar eyes	94/20/CE ; DIN 74054; ECE R55-01

## Dati tecnici - Technical data

Modello - Model	Codice Article number	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	Dimensione "A" "A" dimension mm	Dimensione "B" "B" dimension mm	Dimensione "C" "C" dimension mm	massa rimorchiabile trailer mass t	peso motrice total weight of towing vehicle t	Peso Weight kg
GM10	GM 103 00	120X55	M14	102	155	90	25	50	4,2
	GM 104 00	140X80	M16	110	180	120	35	70	6
	GM 105 00	160X100	M20	110	200	140	50	120	7



## Ricambi - Spare parts




POS.	Codice - Article number		
	GM 103 00	GM 104 00	GM 105 00
1	RG 00 219	RG 00 219	RG 00 219
2	RG 00 130	RG 00 131	RG 00 132



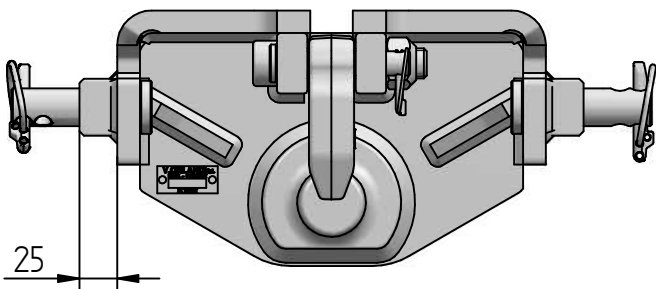
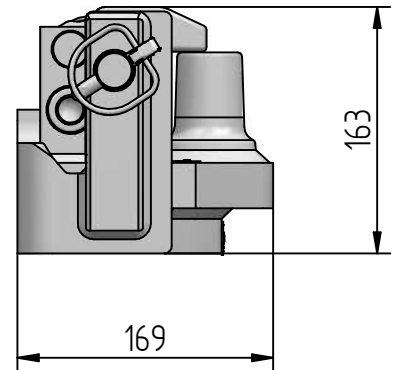
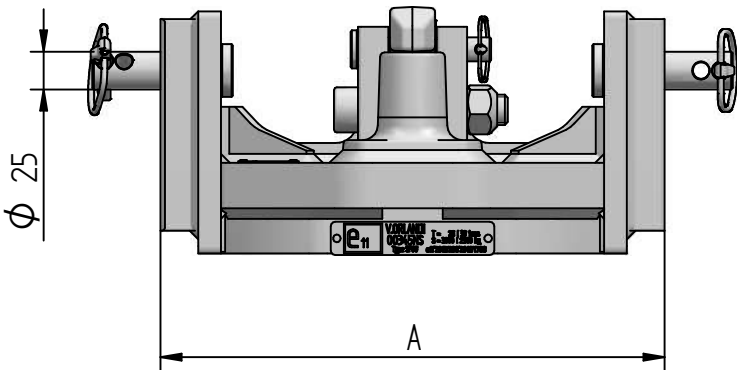
# SPO0

Supporto scorrevole con piton fixe  
Lift piton fixe support

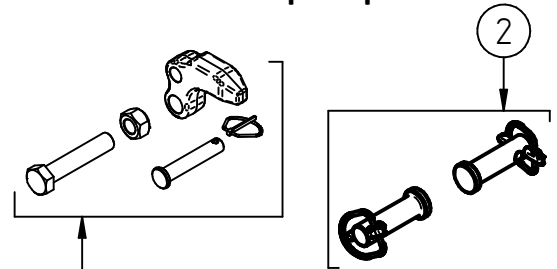


STANDARD DIMENSIONALI dimensional standards	ISO 6489-4 ; 2013/8/CEE; 2015/208
NON GIREVOLE non-swivel	
per OCCHIONI for draw-bar eyes	Ø50 ISO 5692-1 ; ISO20019

Dati tecnici - Technical data						
Modello - Model	Codice Article number	Dimensione "A" "A" dimension mm	Carico Verticale Static Load daN	Peso rimorchiabile Total trailer weight t	Omologazione Homologation	Peso Weight kg
SPO0	SP 00 101	333-25-38	3000	20	e3*2015/208*2018/829NS*30100	20
			2500	30		
	SP 00 201	320-25-38	3000	20	e3*2015/208*2018/829NS*30100	20
			2500	30		
	SP 00 301	310-25-38	3000	20	e3*2015/208*2018/829NS*30100	20
			2500	30		



**Ricambi - Spare parts**



POS.	Tutti i tipi All types
1	RA 00 065
2	RA 00 271



# SP45

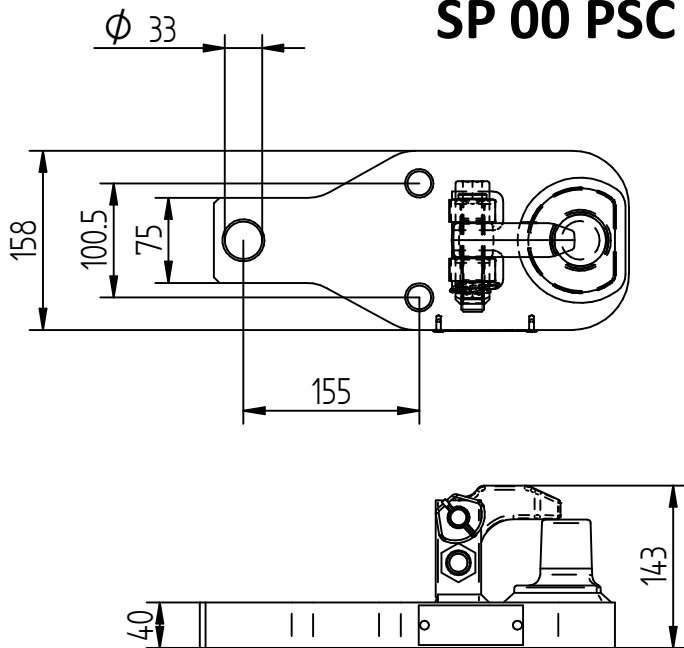
Supporto con piton fixe  
Piton fixe support



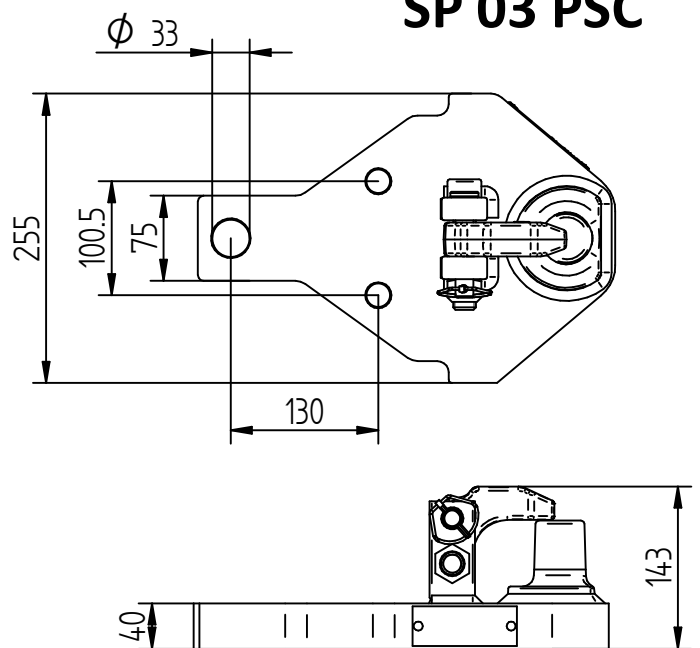
STANDARD DIMENSIONALI dimensional standards	ISO 6489-4 ; 2013/8/CEE; 2015/208
NON GIREVOLE non-swivel	0°
per OCCHIONI for draw-bar eyes	Ø50 ISO 5692-1 ; ISO20019

Dati tecnici - Technical data						
Modello - Model	Codice Article number	Flangia Hole pattern mm	Valore D D-Value kN	Massa S S-Load kg	Omologazione Homologation	Peso Weight kg
SP45	SP 00 PSC	-	70	2500	e3*2015/208*2018/829ND*30088	17,5
	SP 03 PSC	-	70	2500	e3*2015/208*2018/829ND*30088	22

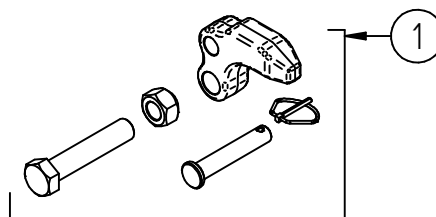
## SP 00 PSC



## SP 03 PSC



### Ricambi - Spare parts




POS.	Tutti i tipi All types
1	RA 00 065

# GP45

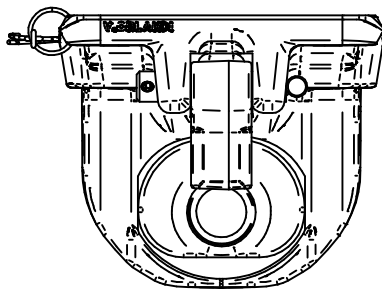
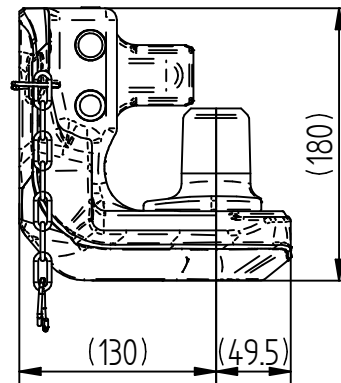
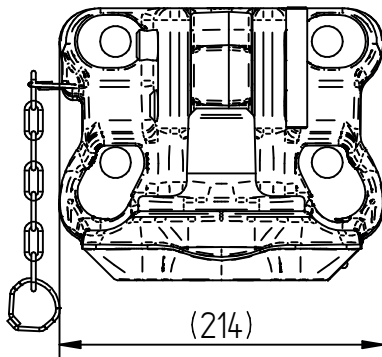


**Gancio flangiabile con piton fixe**  
**Flanged trailer coupling clevis type with piton fixe**

<b>STANDARD DIMENSIONALI</b> dimensional standards	ISO 6489-4 ; 2013/8/CEE;2015/208
<b>NON GIREVOLE</b> non-swivel	
<b>per OCCHIONI</b> for draw-bar eyes	<b>Ø50</b> ISO 5692-1 ; ISO20019

## Dati tecnici - Technical data

Modello - Model	Codice Article number	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	Valore D D-Value kN	Massa S S-Load kg	Omologazione Homologation	Peso Weight kg
GP45	GP 45 004	140X80	M16	89,3	2000	e1*2015/208*2018/829ND*00333	15
	GP 45 00C	140X80	M20	89,3	3000	e1*2015/208*2018/829ND*00333	15




# GS80



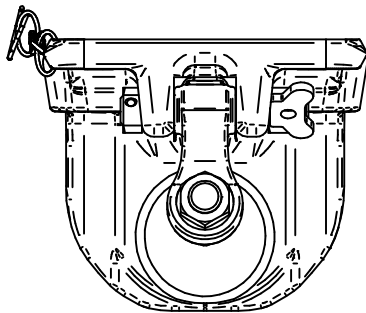
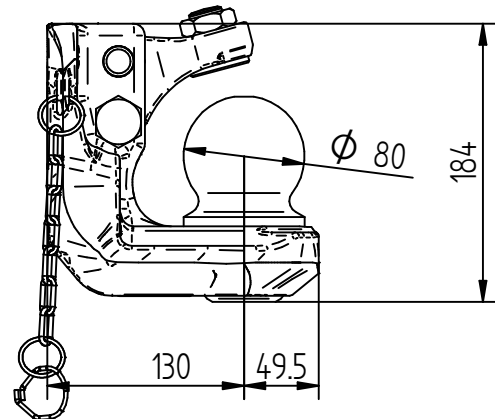
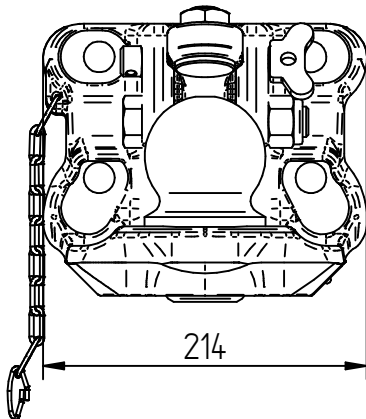
**Gancio a sfera flangiabile**  
**Flanged Sphere trailer coupling**  
**clevis type**



<b>STANDARD DIMENSIONALI</b> dimensional standards	ISO 24347; 2013/8/CEE;2015/208
<b>NON GIREVOLE</b> non-swivel	
<b>per OCCHIONI</b> for draw-bar eyes	<b>Ø80</b> ISO 24347

## Dati tecnici - Technical data

Modello - Model	Codice Article number	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	Valore D D-Value kN	Massa S S-Load kg	Omologazione Homologation	Peso Weight kg
GS80	GS 81 004	140X80	M16	83,9	2000	e1*2015/208*2018/829ND*00190	18
	GS 80 004	140X80	M20	83,9	3000		18
				97,1	2500		18



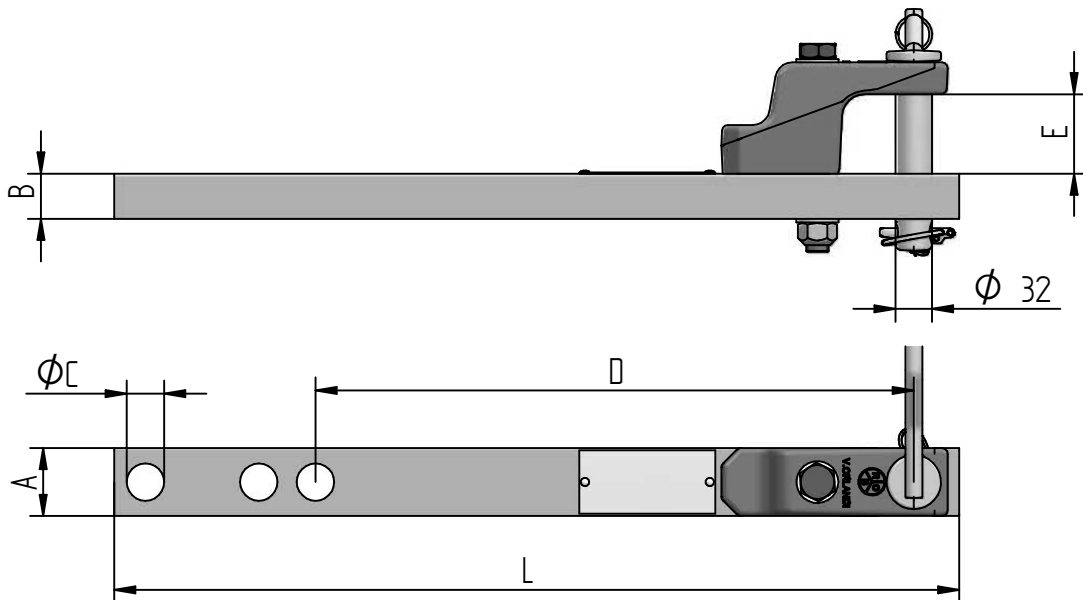
# BT



**Barra di traino CEE**  
**perno cilindrico Ø 32 mm**  
**CEE drawbar**  
**cylindrical pin Ø 32 mm**

STANDARD DIMENSIONALI dimensional standards	ISO 6489-3 ; 2009/144/CEE; 2015/208
GIREVOLE swivel	0°
per OCCHIONI for draw-bar eyes	<b>Ø 40/50</b> ISO 5692-2 ; ISO 8755 ; DIN 11026 ; DIN 11043 ; DIN 74054

Dati tecnici - Technical data				
Modello - Model	Codice Article number	massa rimorchiabile trailer mass t	carico verticale static load daN	Omologazione Homologation
BT	BT 11 SDE	6	500	e3*2015/208*2018/829NS*10008
	KY 50 SDB	6	500	e3*2015/208*2018/829NS*30071
	KB 27 SDE	12	800	e3*2015/208*2018/892*30090NS
	KB 28 SDF	13,5	1815	e11*1569 (EG30)
	KB 00 SDP	32	2000	e3*2015/208*2018/829NS*30089
	BT 13 SDE	32	2000	e5*2015/208*2018/829NS*01006
	SL 52 SDA	32	2000	e11*2124 (SL03DB)



DATI DIMENSIONALI - DIMENSIONAL DATA						
codice - code	A (mm)	B (mm)	L (mm)	ØC (mm)	D (mm)	E (mm)
BT 11 SDE	50	22	520	21	266	70
KY 50 SDB	50	25	700	21	215	70
KB 27 SDE	60	40	745	33	528	70
KB 28 SDF	70	40	1206	30,5	963	80
KB 00 SDP	80	40	546	33	470	65
BT 13 SDE	80	40	735	33	660	65
SL 52 SDA	80	40	1145	39	504	65

**Ricambi - Spare parts**

POS.	Tutti i tipi All types
1	RA 00 214

# LB 40

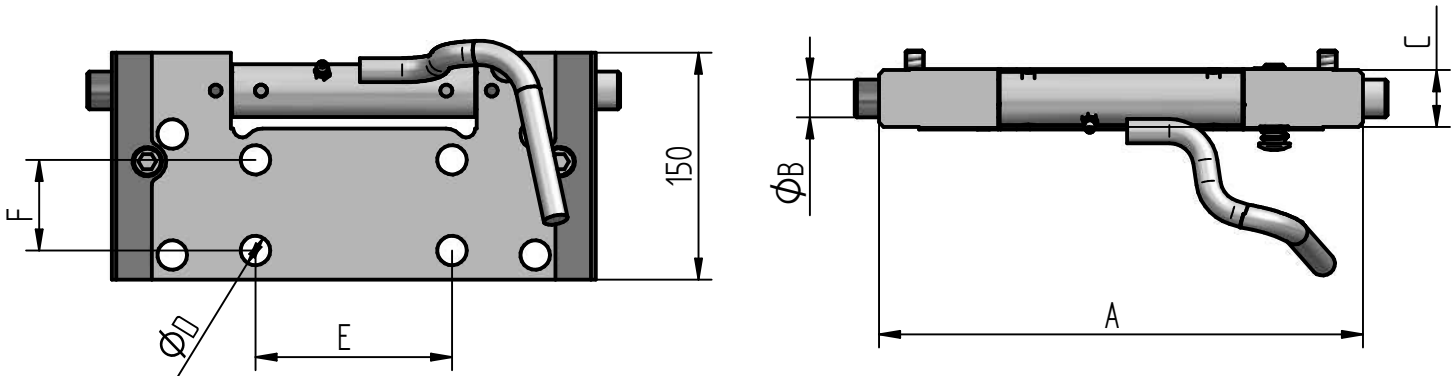


slitta scorrevole flangiata  
Flanged lift bearing

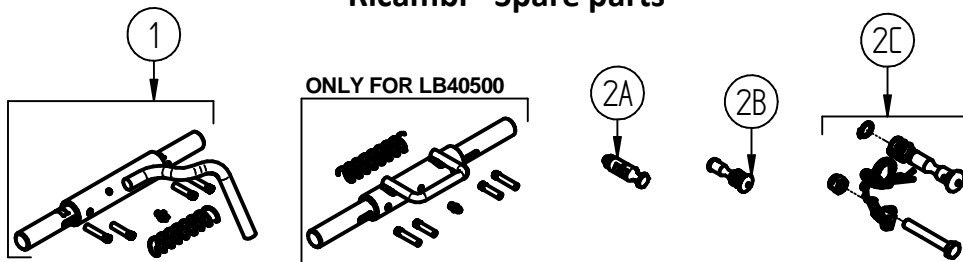
Hole Pattern **130x60 + 240x80**

STANDARD DIMENSIONALI dimensional standards	
GIREVOLE swivel	

Dati tecnici - Technical data					
Modello - Model	Codice Article number	Dimensione "A" "A x B x C" dimension mm	Flangia Hole pattern mm "E x F"	Viti di fissaggio Fixing screws "D"	Peso Weight kg
<b>LB 40</b>	LB 40 500	260-25-38	130 X 60 and 240 X 80	M18	10,3
	LB 40 300	310-25-38		M18	12,8
	LB 40 200	320-25-38		M18	13,2
	LB 40 100	333-25-38		M18	13,5



## Ricambi - Spare parts



POS.	Tutti i tipi All types	Codice - Article number			
		LB 40 100	LB 40 200	LB 40 300	LB 40 500
1		RA 00 041	RA 00 042	RA 00 043	RA 00 045
2A	RA 00 002 (UP TO 2016)				
2B	RA 00 270 (UP TO 2018)				
2C		RA 00 471	RA 00 471	RA 00 471	RA 00 505

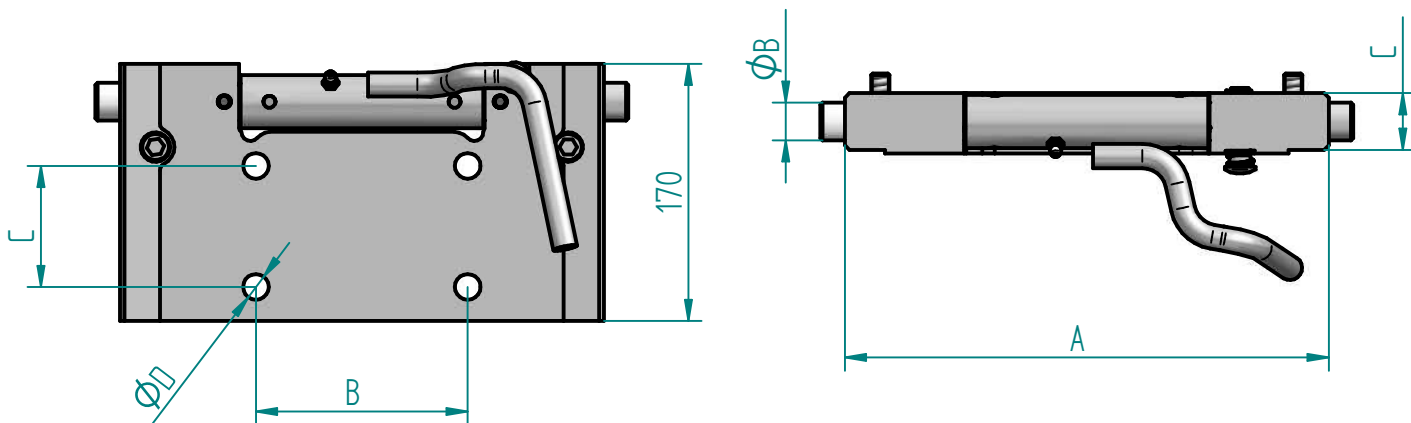
# LB 41



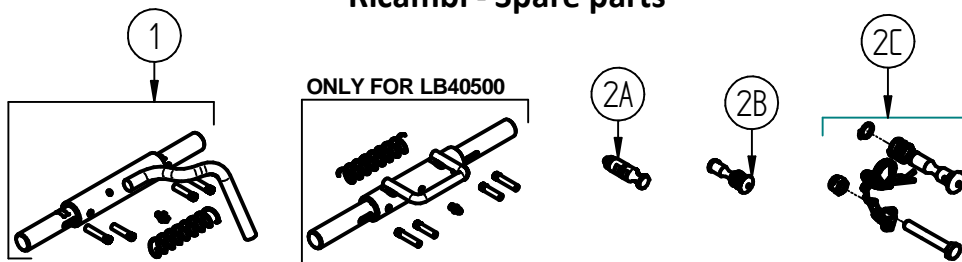
slitta scorrevole flangiata  
 Flanged lift bearing  
 Hole Pattern 140x80 (M16)

STANDARD DIMENSIONALI dimensional standards	
GIREVOLE swivel	

Dati tecnici - Technical data					
Modello - Modell	Codice Article number	Dimensione "A x B x C" mm	Flangia Hole pattern "E x F" mm	Viti di fissaggio Fixing screws "D"	Peso Weight kg
LB 41	LB 41 500	260-25-38	140 X 80	M16	11
	LB 41 300	310-25-38	140 X 80	M16	13,8
	LB 41 200	320-25-38	140 X 80	M16	14,3
	LB 41 100	333-25-38	140 X 80	M16	15



## Ricambi - Spare parts



POS.	Tutti i tipi All types	Codice - Article number			
		LB 40 100	LB 40 200	LB 40 300	LB 40 500
1		RA 00 041	RA 00 042	RA 00 043	RA 00 045
2A	RA 00 002 (UP TO 2016)				
2B	RA 00 270 (UP TO 2018)				
2C		RA 00 471	RA 00 471	RA 00 471	RA 00 505



# LB 42

slitta scorrevole flangiata

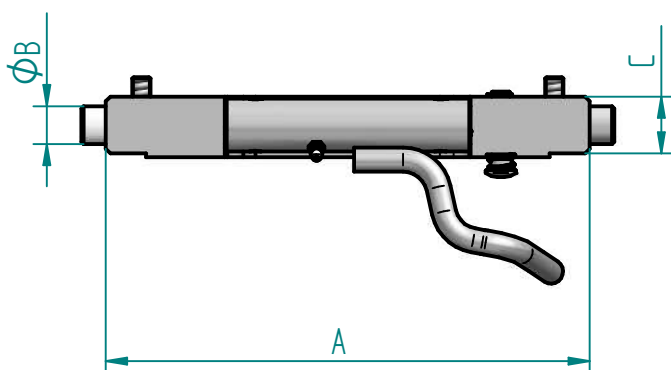
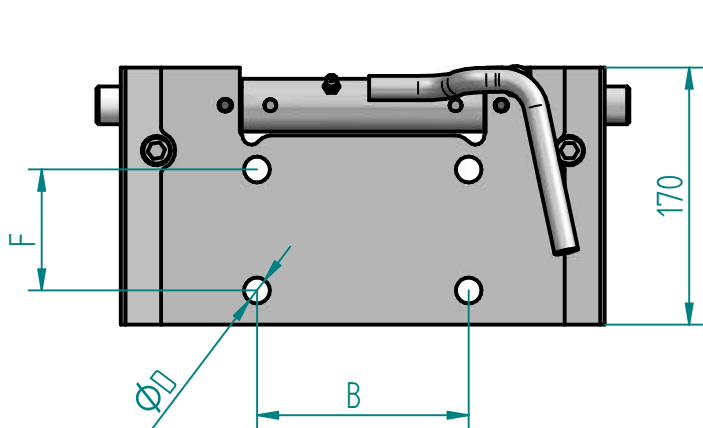
Flanged lift bearing

Hole Pattern 140x80 (M20)

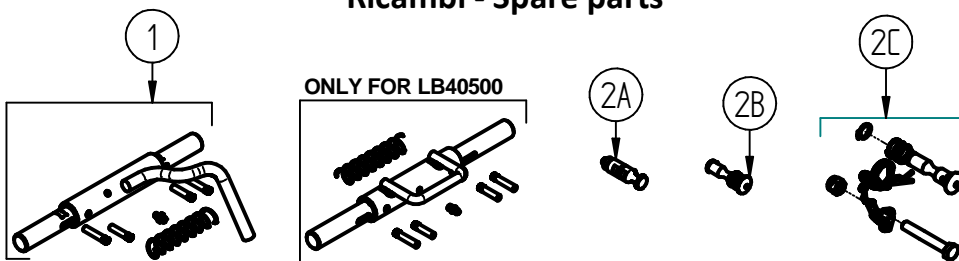


STANDARD DIMENSIONALI dimensional standards	
GIREVOLE swivel	

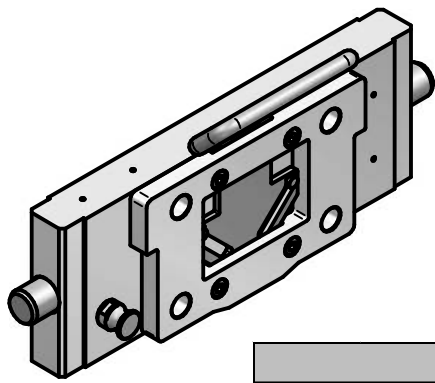
Dati tecnici - Technical data					
Modello - Modell	Codice Article number	Larghezza Width "A x B x C" [mm]	Flangia Hole pattern "E x F" [mm]	Viti di fissaggio Fixing screws "D"	Peso Weight kg
LB 42	LB 42 300	310-25-38	140 X 80	M20	13,9
	LB 42 200	320-25-38	140 X 80	M20	14,4
	LB 42 100	333-25-38	140 X 80	M20	15,1



## Ricambi - Spare parts



POS.	Tutti i tipi All types	Codice - Article number			
		LB 40 100	LB 40 200	LB 40 300	LB 40 500
1		RA 00 041	RA 00 042	RA 00 043	RA 00 045
2A	RA 00 002 (UP TO 2016)				
2B	RA 00 270 (UP TO 2018)				
2C		RA 00 471	RA 00 471	RA 00 471	RA 00 505

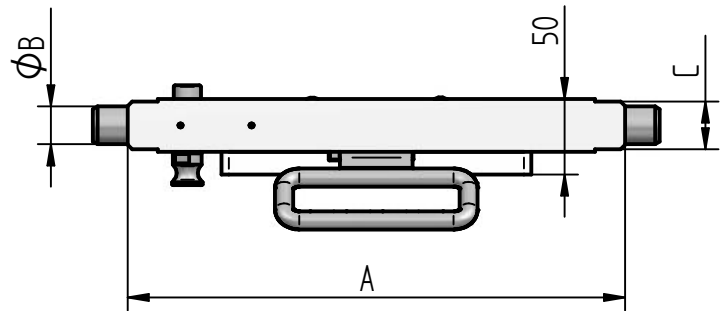
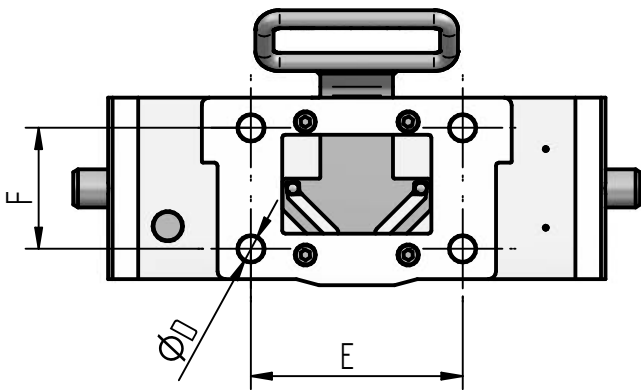


# LB 32

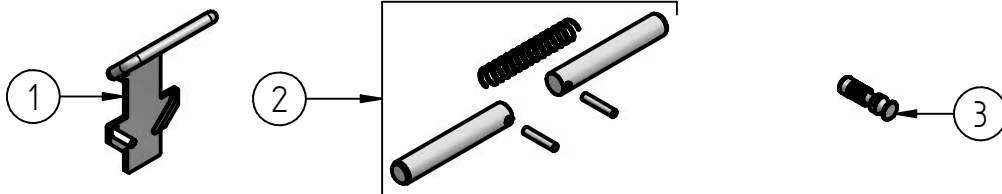
slitta scorrevole flangiata  
Flanged lift bearing

Hole pattern 140x80 (M16 or M20)

Dati tecnici - Technical data				
Tipo Type	Codice Article number	Dimensione "A x B x C" mm	Foratura Hole pattern "E x F" mm	Viti di fissaggio Fixing Screw "D"
LB 32	LB 32 F04	241-22-30	140 X 80	M16
	LB 32 G04	311-22-30	140 X 80	M16
	LB 3B G04	311-22-30	140 X 80	M20
	LB 32 B04	330-25-32	140 X 80	M16
	LB 3B B04	330-25-32	140 X 80	M20
	LB 3C D00	335-22-30	140 X 80 / 240 x 80	M20/M18
	LB 00 E04	390-25-32	140 X 80 / 240 x 80	M16/M18
	LB 0B E04	390-25-32	140 X 80 / 240 x 80	M20/M18



## Ricambi - Spare parts




POS.	Tutti i tipi All types	Codice - Article number						
		LB 32 B04	LB 32 G04	LB 32 F04	LB 3B B04	LB 3B G04	LB 3C D00	LB00/LB0B
1	RA 00 135							
2	RA 00 232	RA 00 232	RA 00 234	RA 00 233	RA 00 232	RA 00 324	RA 00 268	RA 00360
3	RA 00 217							

# LB 5S

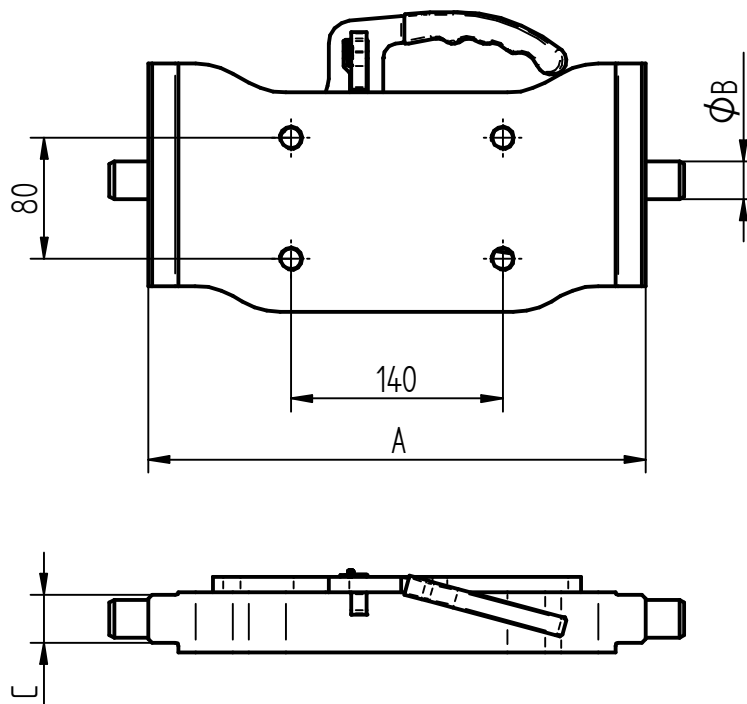


slitta scorrevole flangiata  
Flanged lift bearing



STANDARD DIMENSIONALI dimensional standards	
GIREVOLE swivel	

Dati tecnici - Technical data							
Modello - Modell	Codice Article number	Dimensione Dimension "A" - "B" - "C" mm	Flangia Hole pattern mm	Viti di fissaggio Fixing screws	Valore D D Value [kN]	Valore S S Value [kg]	Peso Weight kg
LB 5S	LB 5S B04	330-25-32	140 X 80	M16	100	3000	16
	LB 5S B0C	330-25-32	140 X 80	M20			16
	LB 5S D04	335-22-30	140 X 80	M16			16
	LB 5S D0C	335-22-30	140 X 80	M20			16
	LB 5S E04	390-25-32	140 X 80	M16			18,5
	LB 5S E0C	390-25-32	140 X 80	M20			18,5



## Technical parameters of towing systems

**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

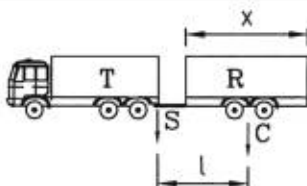
a) **T** = 18 ton; **R** = 26 ton       $D = \frac{9.81 \times (18 \times 26)}{18 + 26} = 104.3 \text{ kN}$

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.

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

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:

$$R = 20 \text{ ton} \quad C = 19 \text{ ton} \quad S = 1 \text{ ton} \quad X = 7.2 \text{ m} \quad L = 6 \text{ m}$$

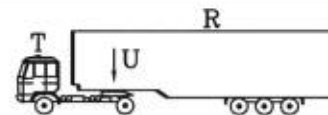
For the determination of the Dc-value the weight of the towing vehicle is calculated as follows:

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

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



$$D = g \times \frac{0.6 \times T \times R}{T + R - U}$$

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:

$$T = 7 + U = 7 + 14 = 21 \text{ ton} \quad \text{and therefore}$$

$$D = g \times \frac{0.6 \times 21 \times 36}{21 + 36 - 14} = 101 \text{ kN}$$

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.

# NOTE



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# SAFHolland

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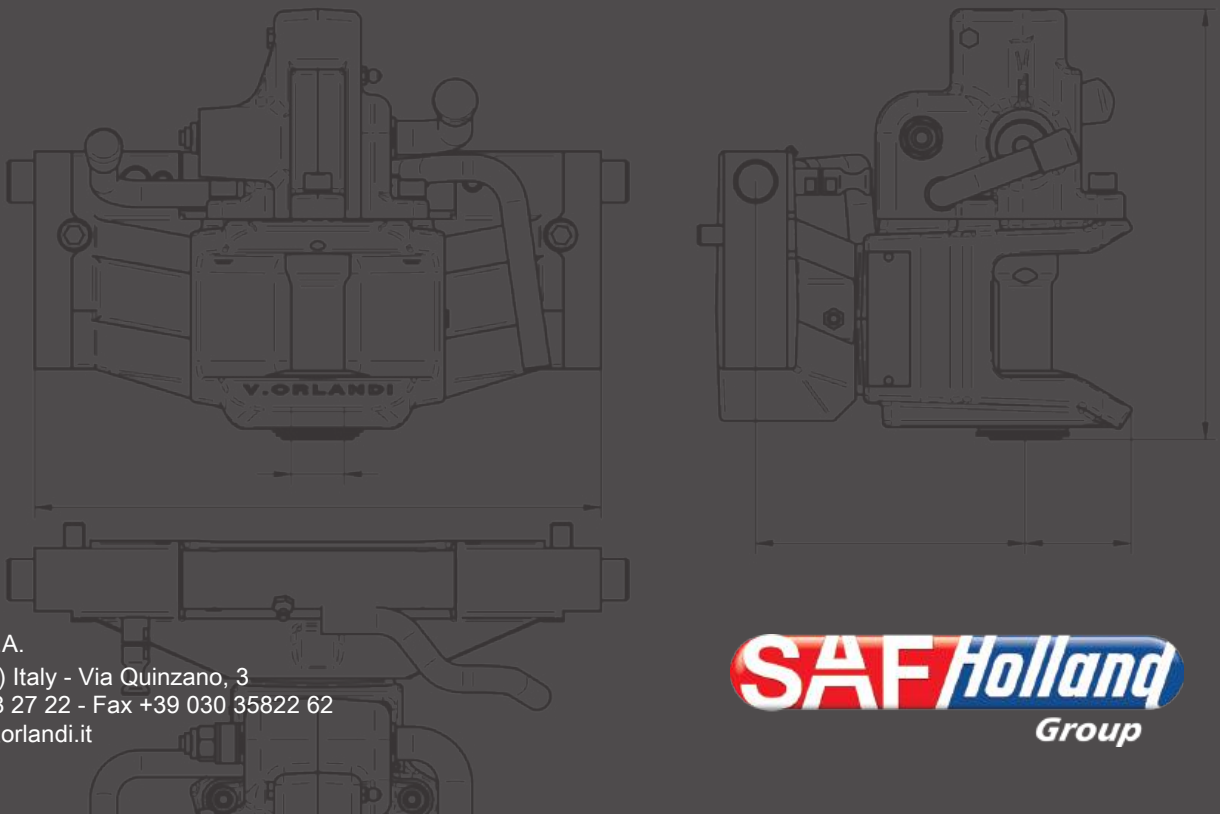


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V.ORLANDI S.p.A.  
25020 Flero (BS) Italy - Via Quinzano, 3  
Tel. +39 030 358 27 22 - Fax +39 030 35822 62  
E-mail: [orlandi@orlandi.it](mailto:orlandi@orlandi.it)

