

ROCKINGER

Montage- und Betriebsanleitung

DE

Installation and operating instructions

EN

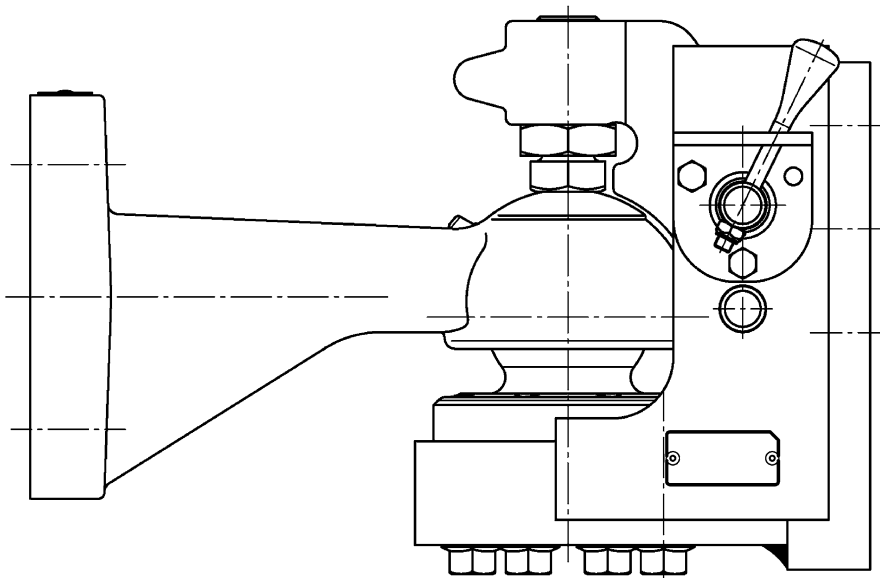
Istruzioni per il montaggio e la manutenzione

IT

Member of JOST-World

RO***KU** 80

Modellreihe
Series
Modelli serie



**Model RO★KU 80
with hole pattern G 6**

ECE (E1) 55R-01 2833



Installation and operating instructions must be carried in the truck



The coupling must be installed by authorised personnel!

Read these instructions carefully before installation!

Official note

When mounting the coupling, please observe Directive ECE R 55-01, Annex 5, Chap. 11 and Annex 7, as well as the applicable national regulations.

Subject to technical changes without prior notice!

Safety instructions 16

1. Mounting	17 – 18
1.1 Before installation	17
1.2 Installation of the towing bracket	17
1.3 Installation of the flange towing eye	17
1.4 Lubrication on initial installation	18
1.5 Check	18

2. Operation	18 – 20
2.1 Hitching	18 – 19
2.2 Unhitching	20

3. Maintenance	21 – 22
3.1 Care / Lubrication	21
3.2 Inspection	21
3.3 Wear dimensions	22

4. Technical data	23 – 24
--------------------------	----------------

5. Checking the screw tightening torque	25
--	-----------

EN





The safety instructions are summarised in a single chapter. In any situation where the user of the trailer coupling is at risk, the safety instructions are repeated in the individual sections and marked with the warning symbol shown here.

When handling hitches, prime movers and trailers the relevant safety regulations in the respective country must be observed (e.g. Berufsgenossenschaft in Germany). Any safety instructions in the operating manual of the tractor vehicle and the trailer remain valid and must be observed.

For operation, maintenance and assembly the safety instructions listed below must be observed. Further safety instructions are then given in the individual case which relate directly to the respective activity.

Safety instructions for operation

- The hitch may only be operated by authorised persons.
- The installation and operating instructions of the respective hitch retain their validity and must be observed.
- Only use the hitch and the towing eye of the trailer if they are in perfect technical condition.
- Only carry out hitching / unhitching operations on firm, level ground.
- During hitching, nobody may stand between the tractor vehicle and the trailer.
- After every hitching operation the correct locked status of the trailer coupling must be checked by means of the control pin or the remote indicator. Only drive the rig in the correctly locked status.
- The remote indicator does not exempt the driver from the obligation to check before driving off. Before driving off, among other things, the coupling status of the mechanical connection device for the tractor vehicle and the trailer must be checked.

Safety instructions for maintenance

- For maintenance work, only use the prescribed lubricants.
- Maintenance work may only be carried out by qualified personnel.

Safety instructions for installation

- Installation may only be carried out by authorised workshops.
- Installation must be carried out in compliance with the relevant accident prevention regulations and the technical regulations for mechanical equipment.
- Only original components may be used.
- Instructions and installation guidelines of the vehicle manufacturer must be observed, e.g. type of fastening, clearances etc.
- All screwed connections must be tightened with the prescribed tightening torque.
- Work may only be carried out on the trailer coupling when it is closed.

Risk of injuries!

The installation of the hitch on the prime mover must be carried out in accordance with Annex 5 and 7 of Directive ECE R55-01 and must be checked accordingly. As applicable, the relevant licensing regulations in the respective country must be observed.

The mechanical remote control and the mechanical remote indicator are equipment with safety components. **This is why the installation must be documented.**



The hitch, the remote control and the remote indicator are connection devices which require model approval and are subject to the highest safety requirements.

Alterations of any kind shall cause the warranty to lapse and invalidate the type approval, which in turn invalidates the vehicle operation permit.

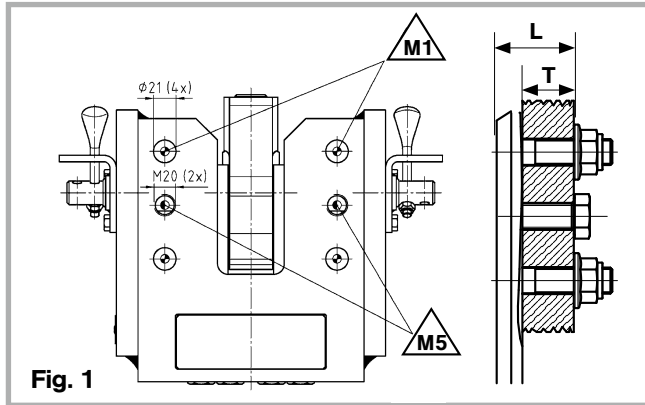


Fig. 1

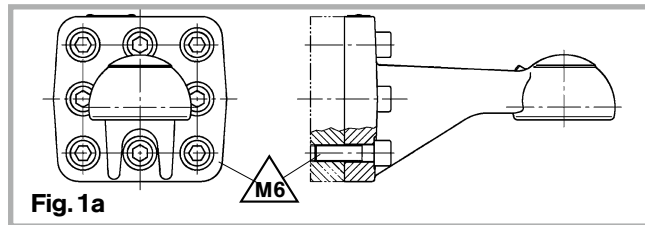


Fig. 1a

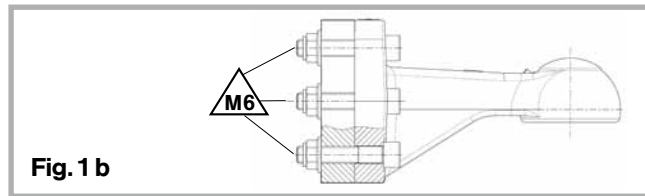


Fig. 1b

1.1 Before installation

Observe the mounting instructions of the vehicle manufacturer.

1.2 Installation of the towing bracket

- The towing bracket (see fig. 1) should be bolted for RO★908H61001 / RO★908H62 001 in front of the cross member with 4 flange bolts M 20 x 1.5 x 85 lg – 10.9* for coupling RO★908H61501 / RO★908H62 501 with 4 flange bolts M 20 x 1.5 x 110 lg – 10.9* 4 flange lock nuts M 20 x 1.5 – 10 (lock nuts with metal stop) **M1** of 600 Nm.**

When additionally using (Optional) the two M20 screw threads screws of quality 8.8 must be used with a tightening torque **M5** of 380 Nm.** $L_{max} = T + 40$

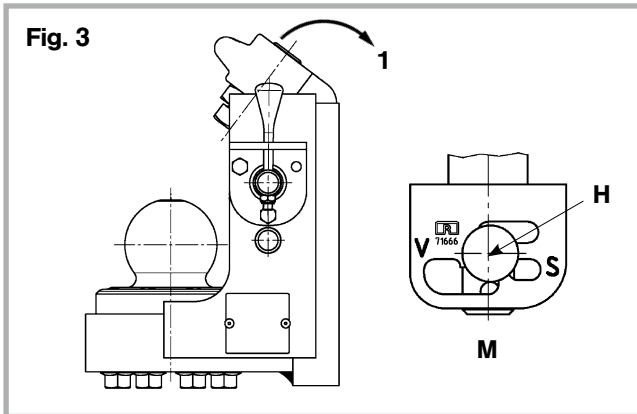
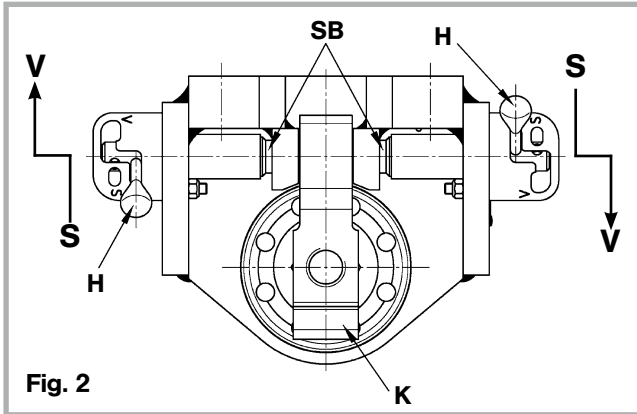
1.3 Installation of the flange towing eye

- The flanged towing eye is bolted to the trailer drawing bar with 8 allen hex bolts M 20 x 70 lg – 10.9 (see fig. 1a) or optional with 8 allen hex bolts M 20 x L – 10.9 and 8 flange nuts M 20 – 10 (fig. 1b; not included in the scope of delivery) (dacromet-coated+TTF). The tightening torque **M6** should be 560 Nm.**

Tightening torques must be recorded in chapter 5.

* Cross member thickness see table page 24

** Tightening torque (friction coefficient $\mu=0,14$) for screws use a torque meter to fix according to DIN ISO 6789, class A or B.



1.4 Lubrication on initial installation

Individually lubricate ball and towing eye with **calcium saponified multi purpose EP3 grease** prior to initial coupling. Once coupled and secured grease must be applied to the towing eye via the lubrication nipple SN (see fig. 6) until grease emerges from around the adjusting screw for the towing eye (see also 3.1).

We recommend JOST High Performance Lubricant (Item number SKE 005670 000).

1.5 Checking

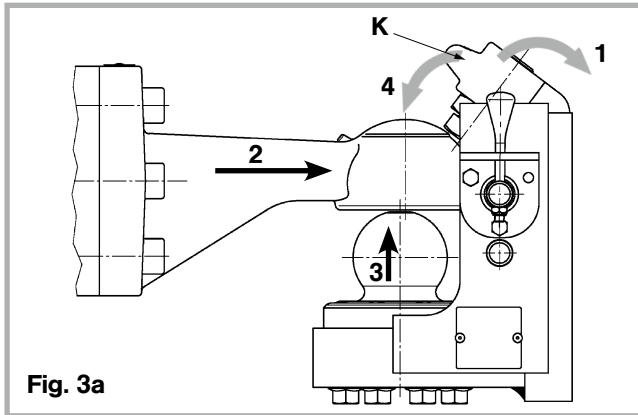
After the first installation of the towing hitch system, the fastening screws of the drawbar eye, the towing bracket and the ball flange must be checked and if necessary tightened after inspection plan Chapter 5!

- The vertical play of the drawbar eye opposite to the down holder must be set to **S = 0,5 + 0,3 mm** (see fig. 6)

2.1 Hitching

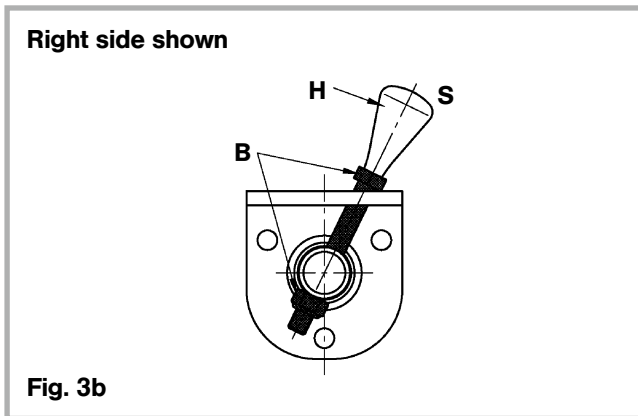
- Turn both securing bolts with the handle **H** from locking position **S** to position **V** and pull (see fig. 2).
- Pull the lever **K** on the handle upwards to the stop (**1** in fig. 3). The two locking bolts then swing from position **V** to position **M**.
- Move the towing truck back until the flanged towing eye moves over the ball to the stops provided in the towing bracket (**2** in fig. 3a).
- Then lift the towing vehicle via the pneumatic suspension until the towing eye socket is completely over the ball (**3** in fig. 3a).
- Pull the lever with the handle downwards until both locking bolts **SB** swing from position **M** to position **S** (**4** in fig. 3a).

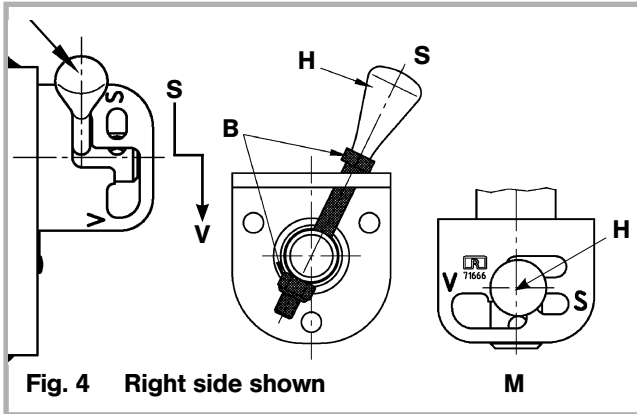
In this position "S" the lever is doubly secured. (see fig. 3a+3b).



For security purposes the two locking bolts must be secured in this position against unauthorised opening with with bolt and nut at each side (B fig. 3b).

- Connect the supply lines.
- Set the support foot on the trailer in position.

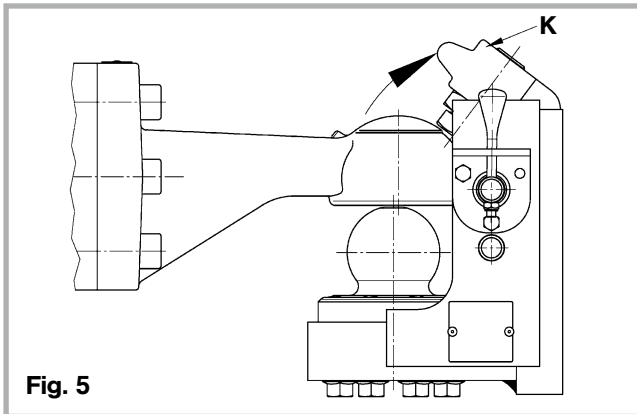




2.2 Unhitching

- Remove the locking devices **B** on the securing bolts.
 - Engage the support foot on the trailer.
 - Disconnect the supply lines.
- Turn both locking bolts with the handle **H** from the locking position **S** to the position **V** and pull (see fig. 4).
- Pull the lever **K** on the handle upwards to the stop. The two locking bolts swing from position **V** to position **M**.
- Lower the towing vehicle via the pneumatic suspension until the flanged towing eye is above the ball.
- Then drive the drawing vehicle away from the trailer.

The coupling is now ready for another hitching procedure.



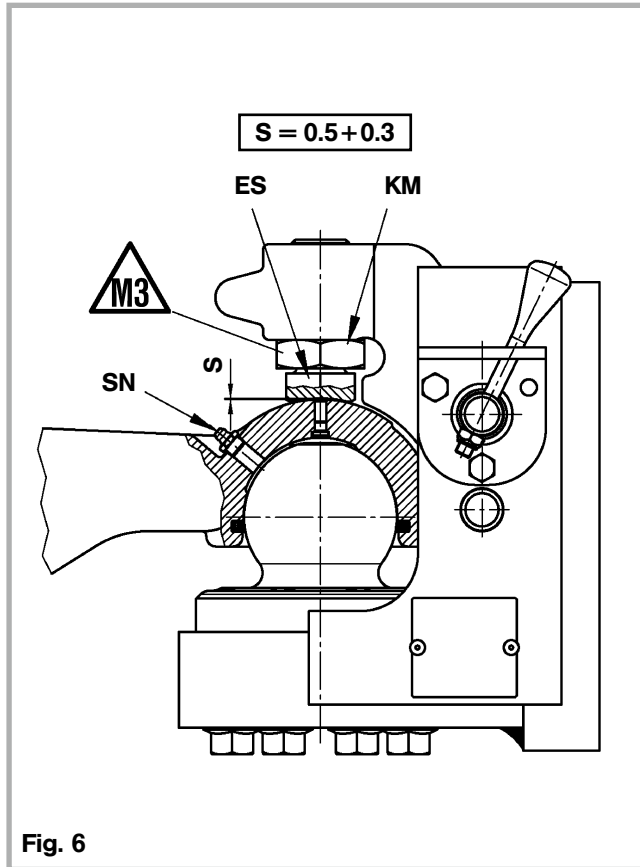


Fig. 6

3.1 Care / Lubrication

- Lubricate the towing eye at the lubrication nipple **SN** with **calcium saponified multi-purpose grease EP3** until grease emerges from around the adjusting screw for the towing eye. We recommend JOST High Performance Lubricant (Item number SKE 005670 000).
- The integrated "O"-Ring protects the surface of the ball against dirt.
- The patented internal contour has lubricant pockets reliefs to lubricate the contact surfaces every time the towing eye turns on the ball.

After cleaning the coupling with a water jet cleaner, the coupler eye and the lubrication nipple SN must be re-lubricated, until grease exits between the adjusting screw ES and the towing eye. The other bearing points must also be lubricated with a lubrication spray, for example with ROCKINGER lubrication spray ROE 96047.

- At every inspection all bearing points must be lubricated – at least after 120 000 km (see also **Service Checklist** on the Internet).

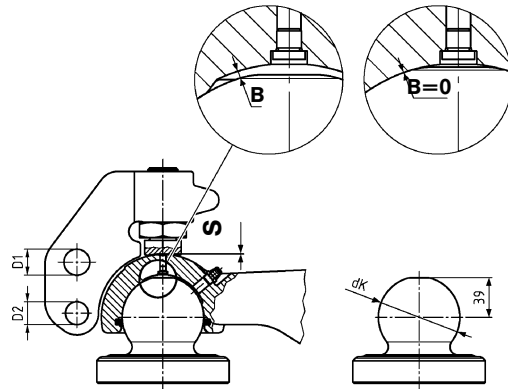
3.2 Inspection

- **After initial installation of the ball coupling system, the fastening bolts of the towing eye, the towing bracket and the ball flange must be inspected and, if required, tightened.**
- The radial clearance between the ball socket and the ball should be set to $S = 0,5 + 0,3$ mm.
- The clearance can be adjusted with the aid of adjustment screw **ES**
 - To do this, adjust the adjustment screw until there is no gap between the lever and the bearing points.
 - Then turn back the adjustment screw approx. 1/2 of a turn and secure it with lock nut **KM** $\triangle M3$ of 300 Nm.**

** Tightening torque (friction coefficient $\mu=0,14$) for screws use a torque meter to fix according to DIN ISO 6789, class A or B.

EN

3.3 Wear dimensions



RO★908H61xxx
(Welded version)

RO★908H62xxx
(Forged version)

Wear dimensions

dk	∅ 79,0	
B	= 0	Replace towing eye = 0
S	0,5+0,3 mm Readjust with adjustment screw ES	
D1	∅ 26,5	∅ 28,5
D2	∅ 23,5	∅ 23,5
D10	∅ 26,5	-
D20	∅ 23,5	∅ 23
d10	∅ 23,8	∅ 26,2
d20	∅ 21,0	∅ 21

∅-datas in mm

RO★908H61xxx (Welded version)

RO★908H62xxx (Forged version)

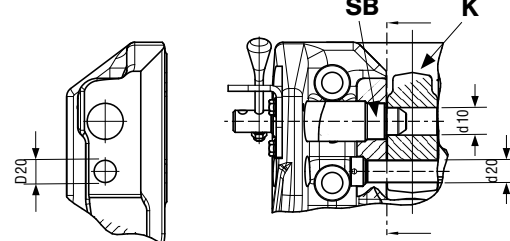
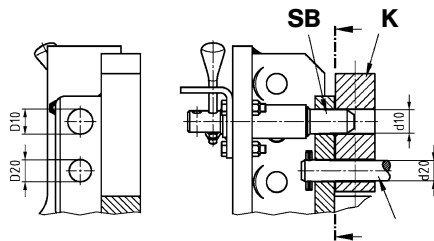
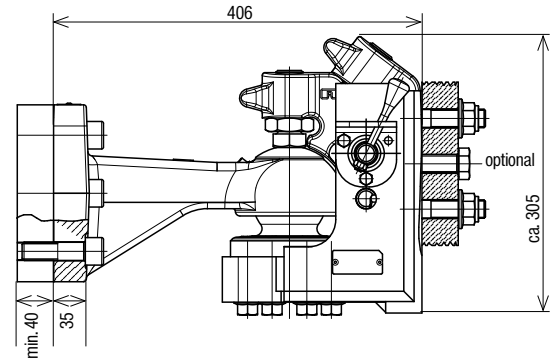
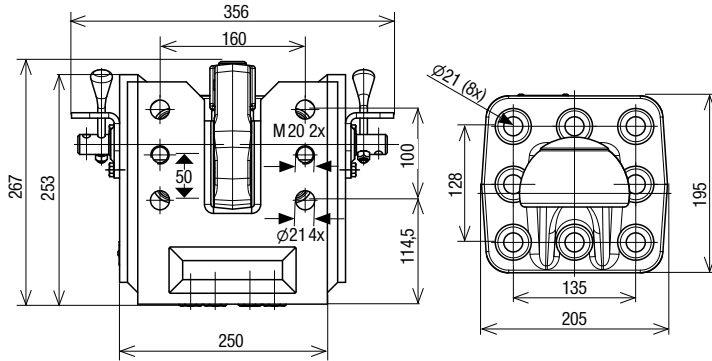


Fig. 7

RO★908H61xxx (Welded version)



RO★908H62xxx (Forged version)

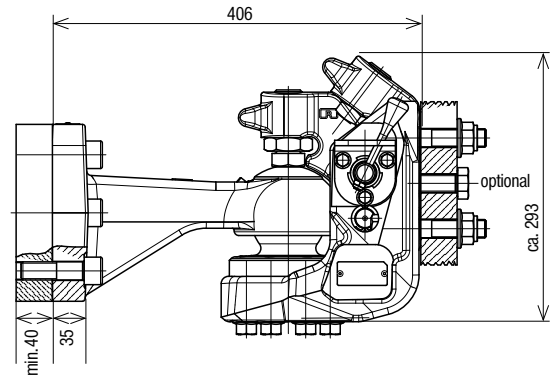
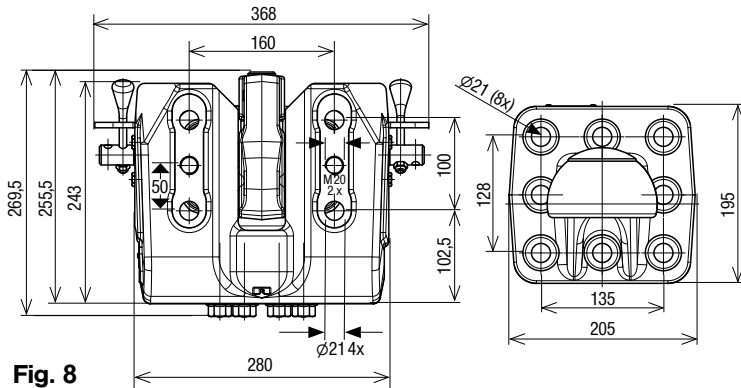


Fig. 8

EN

4. Technical Data

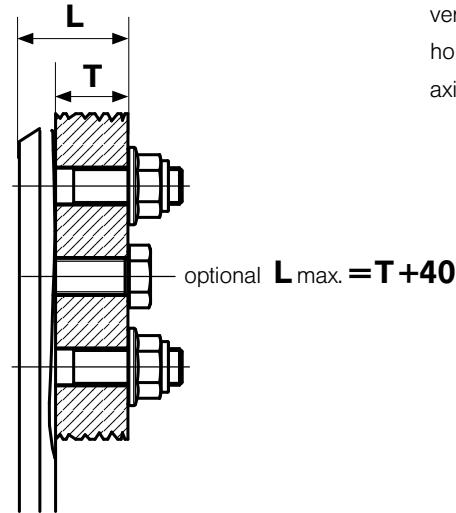
RO★KU 80

Article number	Order no.	Hole pattern (mm)	Permissible D value (kN)	Permissible Dc value (kN)	Permissible stat. vertical load (kg)	Permissible V value (kN)	Weight (kg)
RO★908H61001	E1 55 R-01 2833	160x100	140	140	1000	90	71,6
RO★908H62001					2500	75	70,8
RO★908H61501	E1 55 R-01 2833	160x100	140	140	1000	90	71,9
RO★908H62501					2500	75	71,0

EN

Towing eye pivoting angle:
 vertical ± 20 degree
 horizontal ± 90 degree
 axial rotation ± 25 degree

	Tractor with drawbar trailer T (mm)		Tractor with rigid trailer T (mm)	
	min.	max.	min.	max.
RO★908H61001	-	16	-	16
RO★908H62001	-	18	-	18
RO★908H61501	14	40	14	40
RO★908H62501	16	40	16	40



Tightening torque **M1 + M2 + M5 + M6** (see chapter 4)

Truck – km	Intervall	Date	Workshop stamp	Signature by technician
	First installation			
	Installation km + 500 km			
	Installation km + 1.500 km			
	Installation km + 15.000 km			
	Installation km + 60.000 km			
	Installation km + 120.000 km			
	Installation km + 180.000 km			
	Installation km + 240.000 km			



ROCKINGER

JOST-Werke Deutschland GmbH · Siemensstr. 2, D-63263 Neu-Isenburg · Telefon +49 (0) 61 02 2 95 -0 · Fax +49 (0) 61 02 2 95 -298 · www.jost-world.com

MUB 016027 M 16 (REV--) 01/2018 (PG)