

## Installation and operation instructions for automatic bolt coupling Type 2025

Suitable for industrial trucks, in particular those of the German Post Office authorities and German Federal Railways as well as for tractors, fork lift trucks or trailers.

Permissible cross weight of the towing vehicle 5000 kg  
Permissible cross weight of the trailer 3500 kg\*

\* Suitable to connect up to 5 trailers each of a total weight 3 500 kg.

The versions ...mA are equipped with an additional release handle to close the couplings by hand.

### Fitting onto the vehicle

The coupling is complete mounted and must be fitted with 4 bolts, quality 8.8, DIN 933 and 4 safety nuts, quality 8, DIN 980 onto the vehicle.

### Technical Data:

Type	Flange Design e <sub>1</sub> x e <sub>2</sub>	d <sub>2</sub>	Design	EC Type Approval	Tightening Torque Nm	D-Value kN	Fasten- ing Screws
2025	130 x 30	Dmr 13	oA	e1 00-1058	86	41	M12
2025	130 x 30	Dmr 13	mA	e1 00-1058	86	41	M12
2025	120 x 55	Dmr 15	oA	e1 00-1058	135	41	M14
2025	120 x 55	Dmr 15	mA	e1 00-1058	135	41	M14

Note: Always attend to the screw and nut qualities recommended by the vehicle manufacturers, if differing from the present specifications.

### Application and Operation:

Trailer drawbar eyes according to DIN 8454 (also used for public road traffic). Articulation of the drawbar eye to DIN 8454:

- horizontally: +/- 105°
- vertically: +/- 30°
- rotationally: +/- 30°.

In addition, also drawbar eyes according to DIN 74054 and to ISO 8755 may be connected for switching puposes only, such towing devices, however, are **not allowed to** public road traffic because of the too small pivoting angle of these drawbar eyes.

### Coupling:

To make the coupling push hand lever upwards and back up the towing vehicle. The drawbar eye of the trailer pushes against the release latch fitted on the rear end of the coupling body. Thus the coupling mechanism is released, the coupling bolt slips through the drawbar eye in its lowest end position in the coupling body and is automatically secured by the locking lever. Check that after each coupling process the coupling bolt and hand lever are in their lowest end positions (hand lever must be in horizontal position). Otherwise the whole coupling procedure must be repeated.

### Uncoupling:

To disengage the coupling push hand lever upwards and disconnect the vehicles. The coupling is set ready for its next engagement. If no further coupling procedure shall be done the coupling has to be set in its closed position. For this purpose operate by hand the additional release handle fitted at the opposite end of the hand lever (**for designs equipped with release handle**). For **models without release handle** the coupling is closed by pushing a bar against the release latch fitted in the coupling body.

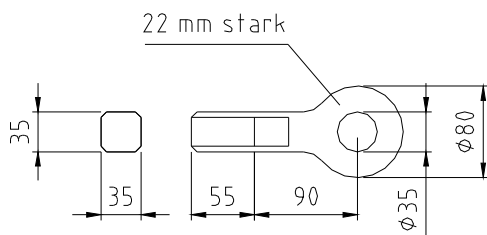
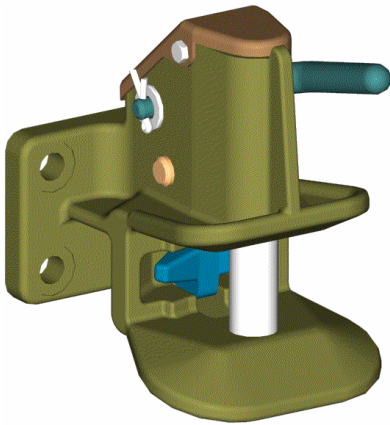
**Caution. Danger:** In no case should the release latch in the coupling body be operated by hand to close the coupling. – **Danger of accident.**

## Maintenance:

The movable parts of the coupling will be subject to less wear when they are always kept well lubricated. In particular after cleaning with high-pressure washers the movable parts of the coupling have to be lubricated. For this purpose remove the end cap and open the coupling.

### Type 2025 oA

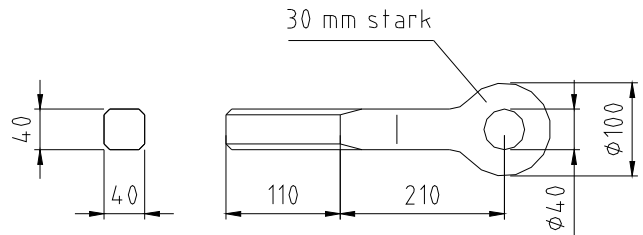
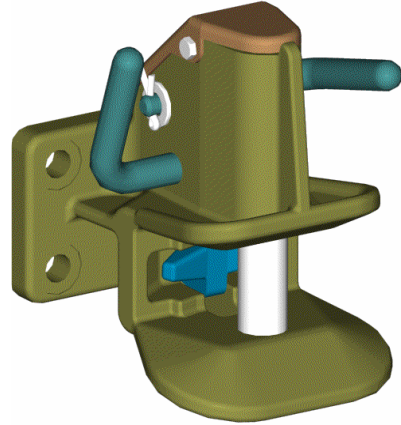
design without release handle



Drawbar eye acc. to DIN 8454

### Type 2025 mA

design equipped with release handle to close the coupling by hand



Drawbar eye acc. to DIN 74054 and  
drawbar eye acc. to ISO 8755

## Important Instruction:

When fitting (or replacing) the trailer coupling please attend to the relevant statutory regulations and particular information from the vehicle manufacturers.

The fitting of the trailer coupling is to be done in accordance with the regulations defined in supplement I, no. 5.10 following the requirements laid down in supplement VII of the directive 94/20 EC.

**Mounting of the drawbar coupling on the vehicle type has to be made in accordance with the requirements defined in annex VII of the directive 94/20 EC as described below**

### **Easy and safe coupling operation**

Drawbar couplings must be mounted on the vehicle type in such a manner that they are easy and safe to operate.

In addition to the function of opening (and closing, if applicable) this also includes checking the position of the indicator for the closed and secured position of the coupling pin and thus, of the drawbar coupling itself (by sight and touch).

In the area in which the person operating the coupling must stand, there must be no points of possible danger such as sharp edges, corners, etc. inherent in the design or they must be protected so that injury is unlikely.

The way of escape from this area must not be restricted or barred on either side by any attached objects.

### **Accessibility of the drawbar coupling**

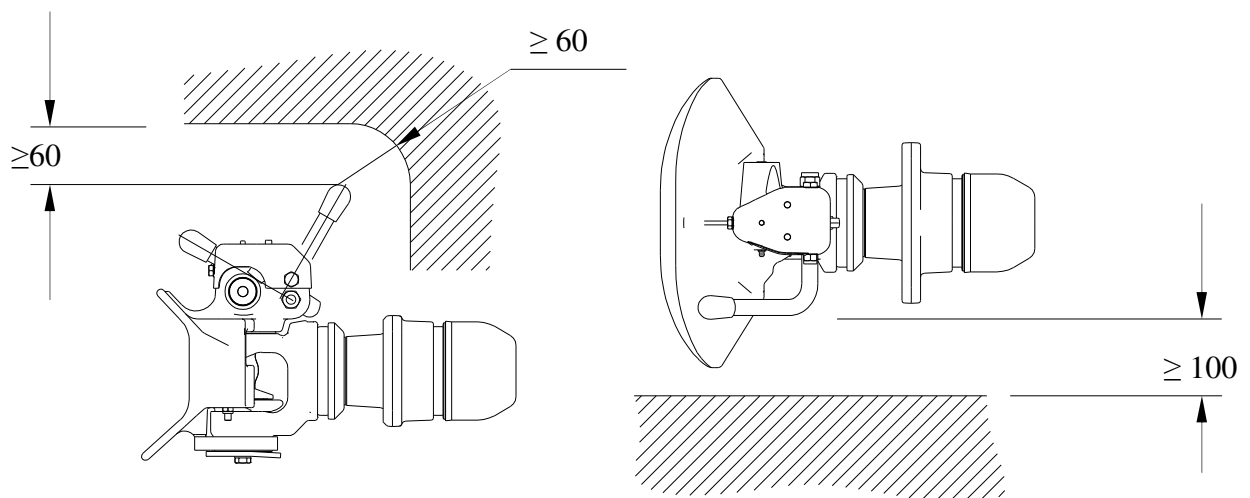
The distance between the centre of the coupling pin and the rear edge of the vehicle body- work must not exceed 420 mm.

However, the distance of 420 mm may be exceeded if technical necessity can be demonstrated:

1. a distance of up to 650 mm for vehicles with tipping bodies or rear-mounted equipment;
2. a distance of up to 1 320 mm if the unobstructed height is at least 1 150 mm;
3. car transporters with at least two loading levels when the trailer vehicle is not separated from the towing vehicle in normal transport operation, provided easy and safe actuation of the drawbar coupling is not adversely affected.

### **Clearance for the hand lever of 60 mm and 100 mm, respectively**

In order to permit safe operation of drawbar couplings there must be adequate free space around the hand lever. The dimensions of clearance given below are regarded as sufficient.



If one or more of these rules regarding easy and safe operation, accessibility or clearance for the hand lever cannot be met, a coupling with a remote control device must be used.