

General installation guide

Multi-couplings in push-technique

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This guide is not subject to updating.

The German version is the original.

1 General installation guide

1.1 About this guide

This guide provides information on installing a multi-coupling in push-technique on a customer structure that does not yet have mounting holes.

All illustrations are symbolic and may differ from the actual product. Colour highlights are for illustrative purposes only.

Installation work may only be carried out by qualified persons in compliance with the relevant accident prevention regulations and in accordance with the state of the art.

Electrical connections may only be made by trained and authorised electricians.

For further details, please refer to the project-specific material, such as drawings and models, or contact our Technical Service.

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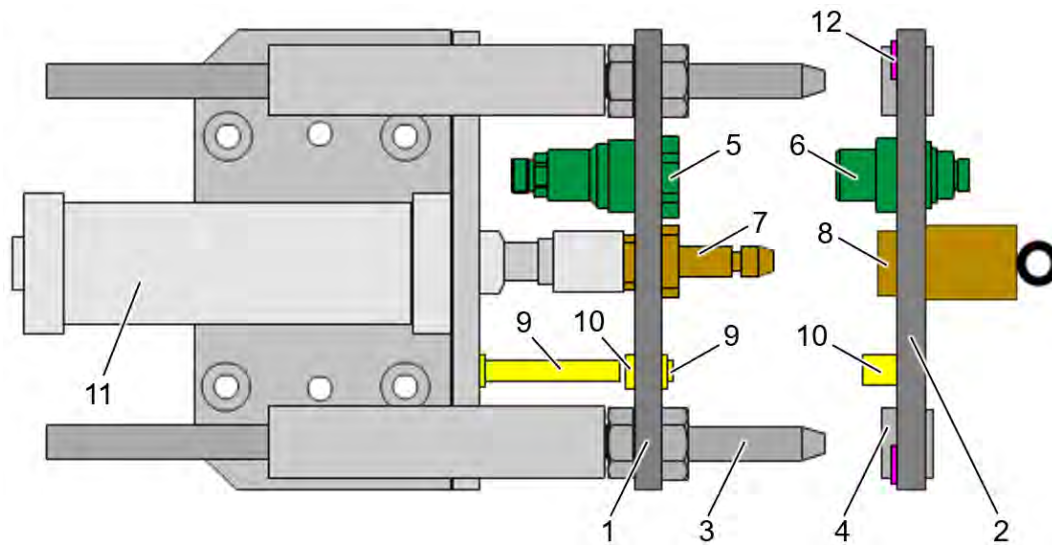
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1.2 Schematic overview of a multi-coupling in push-technique



- | | |
|--|--|
| 1. Free half
<i>Moved towards the fixed half when coupling.</i> | 2. Fixed half
<i>Remains in its position during coupling.</i> |
| 3. Guide bolt | 4. Guide bush |
| 5. Coupling element | 6. Adaptor element |
| 7. Locking bolt | 8. Locking bush |
| 9. Proximity switch | 10. Contactor (fixed stop) |
| 11. Actuation cylinder | 12. Spacer for floating bearing |

1.3 For your safety

	⚠ WARNING Danger from suspended loads. Possible personal injury and property damage. ▶ Use lifting equipment of sufficient capacity. ▶ Use the attachment points provided for lifting (e.g. eye bolts). ▶ Do not work under suspended loads. ▶ Only detach the multi-coupling from the crane once it is securely attached to the customer structure.
	⚠ WARNING Power-operated multicoupling. Risk of crushing fingers, hands and arms between the multicoupling plates. ▶ While working in the danger zone, secure cylinder against unintentional movement.
	⚠ WARNING All parts that are subject to spring force spring out of position with momentum due to the preload of the spring when the respective retaining mechanism is removed. Bruising and crushing of body parts is possible. ▶ It must be secured by hand.
	⚠ WARNING When coated components are heated, e.g. by welding or soldering, hazardous gases may be produced. Personal injury and property damage, e.g. to seals. ▶ Use appropriate protective devices and personal protective equipment when performing this task. ▶ Avoid heating coated components.

1.4 Installation in potentially explosive atmospheres

For a multi-coupling that complies with Directive 2014/34/EU ("EX" in the order number), the following also applies:

- The operator must take suitable measures to ensure that the quick coupling system cannot fall down during installation, operation, maintenance and repair and hit hard objects that could generate impact sparks.
- The quick coupling system must be protected against direct lightning strikes by suitable means, e.g. by a lightning protection system.
- The quick coupling system may only be connected to pipe or hose lines that have an electrostatically dissipative connection to earth potential.
- It must be ensured that the proper earthing of all relevant components of the multi-coupling is checked before installation, during operation and after maintenance or repair work in order to avoid the risk of static charging and sparking in the potentially explosive area.

1.5 Preparing for installation

- Check the assignment between the free half and the fixed half before removing the quick coupling system from the packaging.

The following information is provided on WALTHER-PRÄZISION packaging:

- **Order number**
- **Ident number**

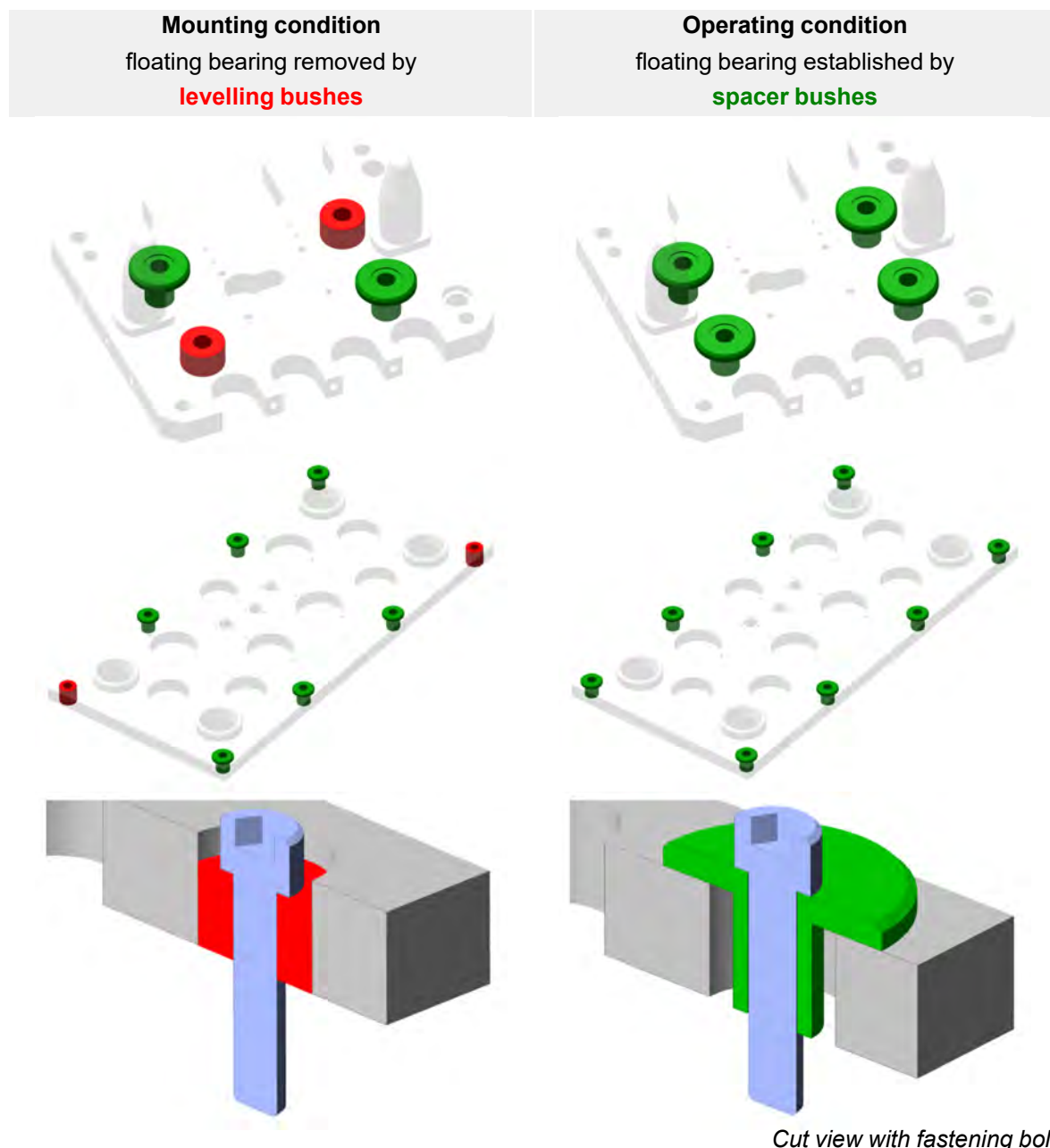
When assigning the fixed and free halves, ensure that the halves match.

- Check the quick coupling system for transport damage.
- Ensure that the pipe network into which the quick coupling system is being installed has been adequately cleaned, flushed or blown out.
- Remove transport locks, such as transport lock bolts or pipe clamps, unless they are necessary during installation, e.g. to secure the actuation cylinder against unintentional movement.

1.6 Removing / establishing floating bearing

Prior to installation works, establish the **mounting condition** (without floating bearing):
Replace two spacer bushes (green) located diagonally opposite each other with levelling bushes (red).

The multi-coupling plates can only be aligned precisely without clearance.



Prior to commissioning, establish the **operating condition** (with floating bearing):
Replace the levelling bushes (red) with spacer bushes (green).

The coupling halves can only be coupled easily and without wear if there is sufficient clearance.

1.7 Fastening the multi-coupling to the customer structure



NOTE

If fasteners are supplied by WALTHER-PRÄZISION, these must be used.
If the multi-coupling has a bracket for mounting, larger gaps between the bracket and the customer structure in the area of the mounting holes can be filled, e.g. by inserting shims.

The following procedure is only a rough guide and may vary depending on local conditions.

Therefore, the removal or establishment of the floating bearing has not been taken into account in this procedure. See the chapter “Removing / establishing floating bearing” for more information.

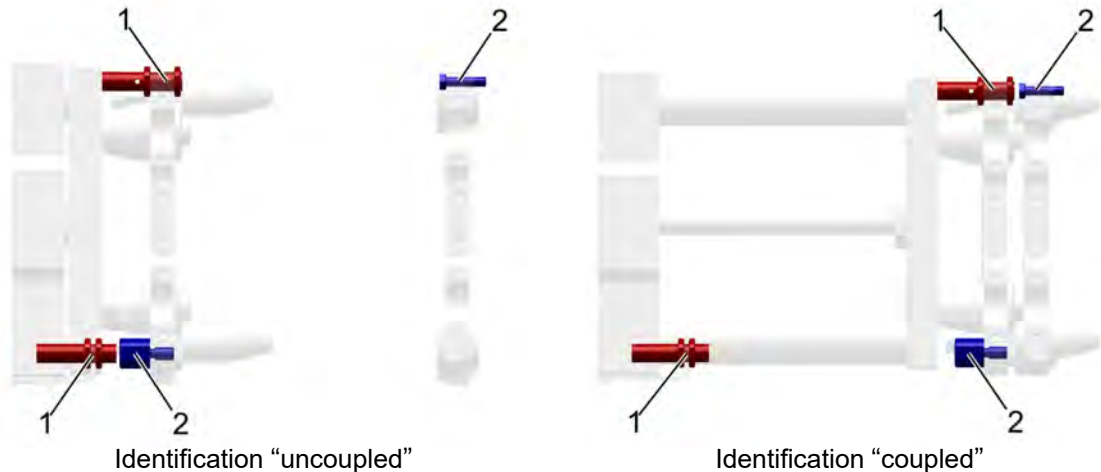
- Connect one free half to one fixed half and hold them together with clamps (e.g. screw clamps) until they are firmly pressed together (remove any built-in elements if necessary).
- Bring customer structures into working position.
- Secure the free half and the fixed half to the respective customer structure so that they do not slip during the subsequent uncoupling.
- Remove clamping devices, separate customer structures with the halves attached to them and thus decouple them.
- Mark attachment points on customer structures.
- Remove the free half and the fixed half from the customer structures.
- Drill the necessary holes in the customer structures (no pin holes yet!).
- Screw the multi-coupling halves onto their respective customer structures (do not tighten yet), align them for easy and wear-free coupling, and tighten the screws.
- Align and attach any remaining free or fixed halves to their already attached counterparts as described.
- If there are pin holes, additionally pin the multi-coupling plates if necessary.

1.8 Set proximity switches

Set the switching distance of any proximity switches on the finally attached multi-coupling (with floating bearing!).

To do this, turn the lock nuts of the proximity switches (1) accordingly.

The fixed stop (2) acting as a contact switch must not be loosened or adjusted.



1.9 Connecting built-in elements

- Any radial loads that occur as a result of long and heavy connecting hoses are to be cushioned by appropriate support equipment.
- Lay all connections of the quick coupling system (cables, hoses and pipes) in such a way that they do not create any hazards (tripping, falling).
- The screw connections on the customer connection side must be state of the art.
- Only use sealants that are compatible with the media being handled.
- Only use open-end wrenches of the appropriate size; do not use pipe wrenches or adjustable wrenches.
- To screw the unit to the customer connection, only use the connection-side hexagons or spanner flats of the built-in elements!

