

User Manual

Flange coupling FK/FKB





Contents

[EN] User Manual flange coupling FK / FKB

1. General Instructions and Symbols
2. Safety Instructions and Personal Protection Equipment
3. Intended Use
4. Transport
5. Descriptions
6. Preparation
7. Assembling
8. Dismantling
9. Cleaning and Lubrication
3. Cleaning and Eudincation



1. General Instructions Symbols

[EN]

The installation instructions must be read carefully before installing and commissioning the TAS Schaefer flange coupling.

Notes and danger warnings are marked separately and must be observed.

Meaning of the symbols in these installation instructions:



Immediate danger with a high level of risk which, if is not avoided, will lead to death or severe injury.

ATTENTION

A danger with a low level of risk which, if it is not avoided, may lead to a minor or slight injury.

WARNING

A possible threat of danger with a medium level of risk which, if it is not avoided, may lead to death or a severe injury.

NOTE

A possibly dangerous situation which may lead to damage to material or the environment.

These Installation instructions apply on condition that the flange coupling is correctly selected for its intended use. The selection and design are not the subject of these assembly instructions. For an appropriate review of the selection, our engineering department is at your disposal.

These assembly instructions must be kept in a safe place and must be handed over if the flange coupling is passed on, either individually or as part of the machine.

All information and notes in these instructions have been made to the best of our knowledge, taking into account our experience and knowledge to date.

The original version was written in German Language and checked by TAS SCHAEFER. Reproduction is not permitted without the written consent of TAS SCHAEFER.



2. Safety Instructions and Personal Protection Equipment

Safety instructions

[EN]

The TAS Schaefer flange coupling may only be mounted or dismounted if:

- the operating instructions have been carefully read and understood in advance,
- this is done with great care by specialists or trained personnel,*
- you are authorized by the company to do so.

*Trained personnel were informed in advance about the required protective equipment and protective measures.

The personnel in charge have been informed about the tasks assigned to them and possible hazards in case of misconduct and have been trained if necessary.

Personnel undergoing training, instruction or general education may only work under the constant supervision of an experienced person.

ATTENTION

Installation and removal may only be carried out when the machine has been brought to a standstill and secured against being switched on again.

NOTE

Dangers occur through moving parts as a result of the combination of the machine and flange coupling. Further measures for the minimizing of risks must be undertaken by the operator.

Repair work may only be carried out by TAS SCHAEFER or after consultation with TAS SCHAEFER.

If a malfunction is suspected, the machine in which the flange coupling is installed must be taken out of operation immediately and TAS SCHAEFER or an authorized TAS SCHAEFER representative informed.

All contact data may be found on our homepage:

www.tas-schaefer.de

or on Phone:

+49 (0) 2335 9781-0



2. Safety Instructions and Personal Protection Equipment

Personal Protection Equipment

[EN]



Use gloves

- Wear chemical-resistant gloves
- Contact with lubricants poses a hazard during assembly and disassembly. Therefore, the substance-related safety data sheets must also be observed. These are available from us on request
- Danger from sharp corners and edges during operation.
- The flange coupling can heat up considerably due to external heat sources. During assembly/disassembly work, surfaces could possibly be hot as a result.



Use eye protection

- Wear full-vision glasses (basket glasses).
- During assembly/disassembly work, there is a risk of contact with lubricants! The substancerelated safety data sheets must be observed. These are available from us on request.



- Suitable foot protection must be worn (safety shoes).
- During assembly/disassembly work, there is a risk of injury due to parts falling and settling.



Use head protection

During assembly/disassembly work, there is a risk of injury due to lifting and lowering of the parts as well as a risk of impact of the head on protruding machine parts. Suitable head protection must be worn.



3. Intended Use

Intended Use and time limits

[EN]

Intended Use

The force transmission of the TAS Schaefer flange coupling is effected via frictional connection of the functional surfaces between shaft and attachment part.

- Observe the technical data according to the product catalog or customer drawing.
- The standard products can be used in the range from -30°C to +150°C.
 For different specifications, please contact us.
- For special products, please refer to the separate specifications.
- Information on yield strengths, tolerances and surface finishes can be found in the catalog.
- Standard products can be used in non-corrosive, liquid or gaseous environments. Please refer to separate or adjusted specifications in case of special and customized products.

Time limits

A time limit for the use of the flange coupling cannot be defined. The following notes must be observed:

- Relubrication of the contact surfaces is required after a long period of use.
- In case of contamination, surfaces of the flange coupling must be cleaned and re-oiled.
- Before reassembly, the clamping screws must be renewed.



4. Transport

[EN]

The transport activities may only be carried out by trained/instructed persons

WARNING

Swinging or falling flange coupling and components. Use or wear appropriate load-carrying equipment, head protection and safety shoes





ATTENTION

Only engage trained/ instructed personnel for the fastening of loads.

Do not remain under swinging loads.

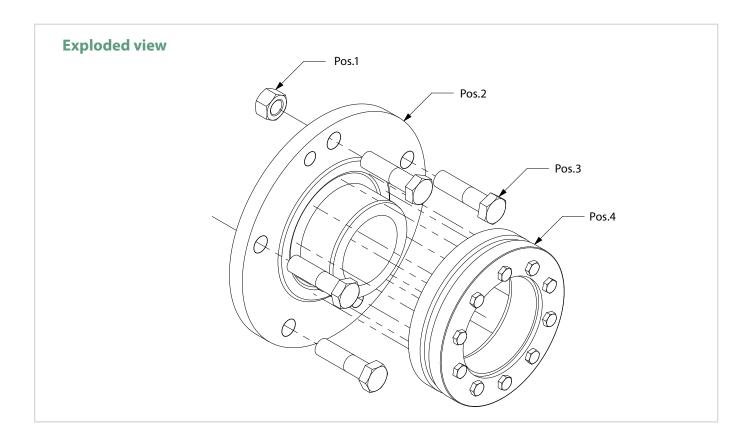
Attachment points

To mount the flange coupling between shaft and hub, a lifting strap or other suitable lifting gear is recommended.



5. Descriptions

[EN]



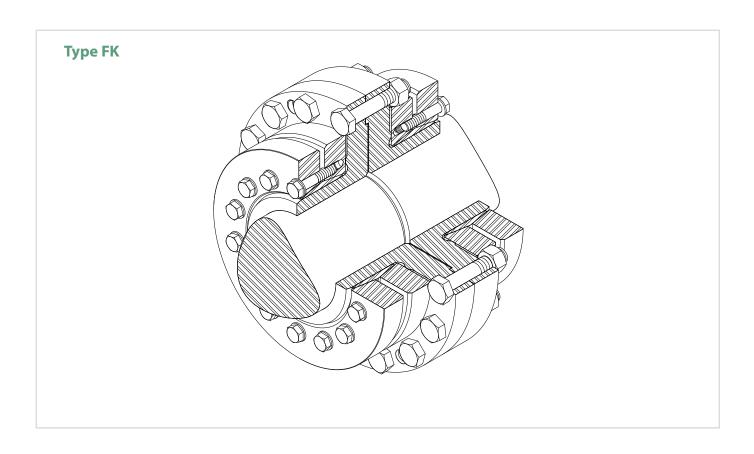
Übersicht Bauteile:

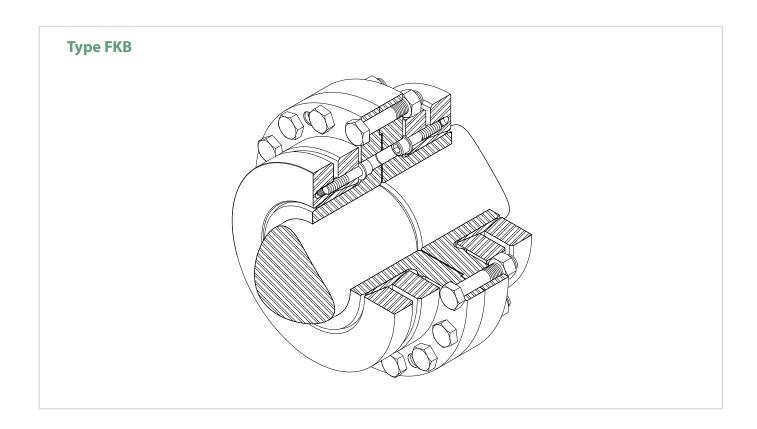
Pos.1	Hexagon nut
Pos.2	Half flange coupling (part 1)
Pos.3	Connecting screws
Pos.4	Shrink disc



5. Descriptions

[EN]



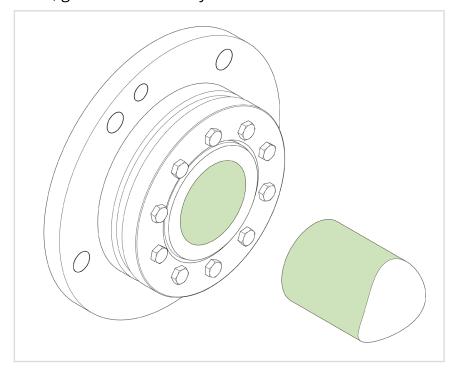




6. Preparation

[EN]

The surface of the shaft and the flange bore must be be clean, grease-free and dry.



NOTE

The flange coupling is delivered ready for installation.

NOTE

Use clean rags and solvents



Use eye protection



Use gloves



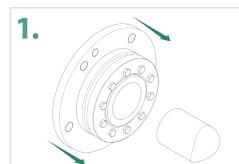
7. Assembling

Assembly 1. to 5.

[EN]

NOTE

The clamping screws must not be tightened if the machine shaft is not installed.



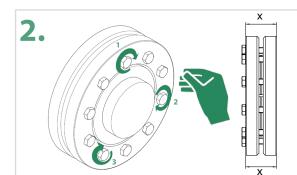
Mount the flange coupling half onto the shaft.



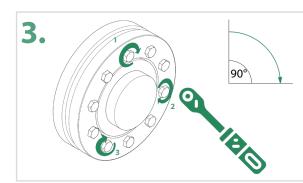
Use foot protection



Use head protection



Hand-tighten 3-4 screws. Make sure that the discs are aligned parallel to each other. (x)



Tighten the 3-4 hand-tightened screws a quarter turn each.



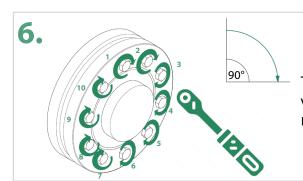
Subsequently apply all other screws to the discs by hand.



7. Assembling

Assembly 6. to 9.

[EN]



Tighten all screws a quarter turn at a time in several cycles until the specified tightening torque is reached.



Then tighten the screws to the specified tightening torque in a further 2-3 cycles.



The contact surfaces of the flanges must be cleaned, grease-free and dry.



Use eye protection



Use gloves

NOTE

Use clean rags and solvents.



Connect the flanges with each other.

NOTE

The flange coupling cannot compensate shaft misalignment.

NOTE

Observe the maximum tightening torque of the screws.

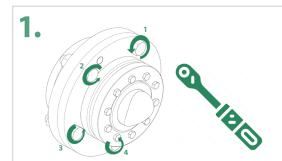
NOTE

For safety tighten the screws in 2 more turns to the max. tightening torque.



8. Dismantling

[EN]



Completely loosen the flange screws in turn.





Loosen the screws of the shrink disc one after the other in several turns. Use a maximum of a quarter turn.



Use foot protection

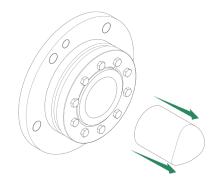


Use head protection

WARNING

The separate clamping screws must not be completely removed under any circumstances.





After the shrink disc has been completely loosened, the coupling half can be removed from the shaft.



Use foot protection



Use head protection

NOTE

Before reassembly, the clamping screws must be replaced.



9. Cleaning and Lubrication

[EN]



Before reuse, disassemble the flange coupling, clean it and check the perfect condition of the components. If necessary, rework the components.



Use gloves

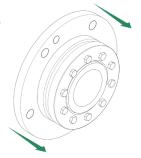


Use head protection



Use foot protection

2.



Remove the shrink disc from the flange.



Use foot protection



Use head protection

3.



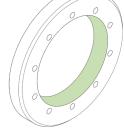
Lubricant with a high MoS₂ content must again be applied to the taper surfaces of the pressure rings and the inner ring.



Use eye protection



Use gloves



(We recommend Molykote G-Rapid Plus Paste or comparable).

NOTE

Apply lubricant thinly with a roller.



9. Cleaning and Lubrication

[EN]



5.

After that the shrink disc can be reinserted.