

Translation of the original
Operating Manual



**Flat face threaded male coupling series FS-31 in
 conjunction with flat face threaded female coupling
 series FT-31**

Designation: QRC-FS-31-M-... or QRC-FT-31-F-...

Old article number: FT32-1... and FS32-2-...

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1. Preliminary remarks

Please carefully read the operating instructions for the flat face threaded male couplings series FS-31 in conjunction with flat face threaded female couplings series FT-31 and observe the stated guidelines and specifications before starting up the system.

The coupling series for the individual application always has to be selected by qualified personnel with regard to the operating conditions (pressure, temperature, media).

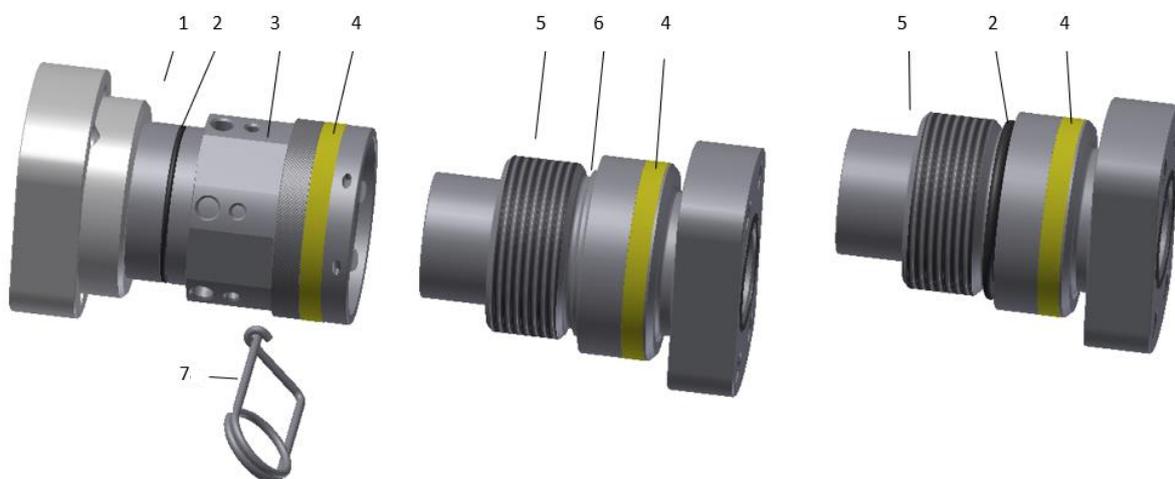
Coupling halves have to be checked for damage and corrosion before initial installation or after prolonged storage.

Safety-relevant warnings are set in **bold type** in this manual.

The flat face threaded couplings QRC-FS-31 and QRC-FT-31 are operated with high internal pressures. Therefore, incorrect maintenance as well as improper use can result in injury, damage or impaired function.

For this reason, compliance with the information in these instructions as well as regular maintenance checks are absolutely mandatory. Replace damaged or worn parts.

2. Definitions



Components of the flat face threaded coupling

1: Female coupling

2: O-ring

3: Threaded sleeve

4: Marking ring (optional)

5: Male coupling

6: Groove for safety pin

7: Safety pin (wire thickness 4 mm)

[Fig. 1] Terms/components

3. Before coupling

Remove dust caps and store in a location protected against the ingress of dust. Carry out a visual check of both coupling halves for cleanliness, damage and completeness.

Use suitable products to clean the coupling halves if they are soiled. Use lint-free cloths and never use products that could corrode the seals or metallic surfaces of the couplings.

Do not allow foreign substances, such as cleaning agents, water or dirt, to enter into the hydraulic system during cleaning. For this reason, never direct high-pressure cleaners directly onto the valves of the coupling halves.

Replace damaged couplings. Replace coupling halves on which individual parts have become detached. Always replace the components in pairs.

4. Connecting the coupling halves

Place the loose part (female coupling QRC-FT-31-F-...) onto the fixed half (male coupling QRC-FS-31-M-...) without canting the threads, then push the threaded sleeve forward and connect by screwing the threaded sleeve onto the thread of the male coupling [fig. 2].

Ensure that the coupling halves are not under pressure during coupling.

At the end of the coupling process, the connecting process becomes increasingly more difficult due to the counteraction of the spring force. If necessary, we recommend using a face spanner [fig. 2]. A pin with suitable diameter or a suitable hook spanner can be used as an alternative if the threaded sleeve has holes.

It should be possible to easily connect the coupling halves with a tool. If this is not the case, check the following:

- Are the connected lines **depressurised**?
- Are the threads of the coupling halves **crossed/not contacting straight**?
- Is there any **damage/contamination**?

For female couplings with a safety pin, insert the safety pin into the holes on the side of the threaded sleeve after completing the coupling process [fig. 3].

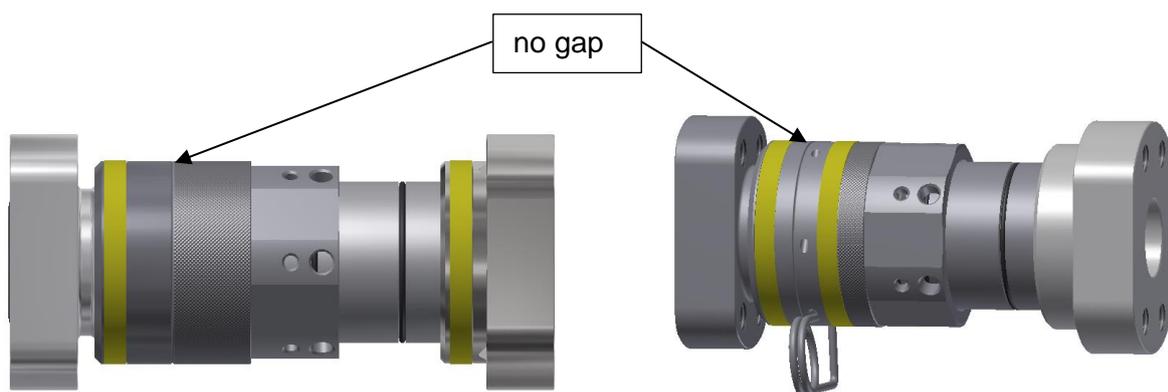


[Fig. 2] Coupling process. Left: positioning the female coupling. Right: Push the threaded sleeve forward and use a tool to tighten to the stop.

5. Checking the connection

It is essential that the male and female couplings are screwed all the way to the stop during the coupling process [fig. 3]. This position is reached when the torque required for screwing increases abruptly and if the threaded sleeve of the female coupling/loose half sits on the base body of the male coupling/fixed half without a gap. The O-ring on the male coupling in the threaded undercut of the flat face threaded coupling is then no longer visible.

Check correct installation to the stop by positioning the tool once again.



[Fig. 3] Condition: coupled fully to the stop. Left: Version without safety pin. Right: Version with safety pin.

Incomplete connection of the coupling halves can result in the male and female couplings (fixed part and loose part) separating during operation. Among other things, this can destroy the seals and cause leaks on the coupling.

6. During operation

Before each start-up and regularly during extended work phases, check whether the coupling halves are still fully connected and whether any damage is visible on them. If the coupling halves are no longer connected correctly, re-establish the correct connection (chapters 2 – 4).

Damaged couplings must be replaced.

7. Separating the connection

The operating temperature of the coupling can be above 100 °C/212 °F. For this reason, ensure that it has cooled down sufficiently after operation before touching. If in doubt, wear suitable gloves.

Before separating the connection, ensure that the line to be disconnected is not in operation, i.e. that neither pressure nor media flow are present in the line.

Use the above tools to separate the halves. Excessive release torque can indicate a high pressure in the connection. **If this is the case, depressurise the line before disconnecting.**

After the coupling halves have been separated, use appropriate products to clean them (see also chapter 2), use dust caps to prevent them from becoming soiled and store them so that they are protected against damage, e.g. from impact by other objects.

8. Replacing the seal

Only the seal pack in the flat face threaded male coupling (QRC-FS-31-M-...) can be replaced and is available as a spare part (see below).

Lightly oil seals before installation. To replace the seal pack, use a blunt object to press the plunger far enough into the male coupling until the seal pack or the groove are fully visible. Then remove the damaged seal (fig. 4, left). Take care not to damage the seal faces in the groove. Then insert the two O-rings (fig. 4, centre) and then the profile ring into the groove (fig. 4, right). Take care not to damage the profile ring, e.g. by folding.



[Fig. 4] Dismantling, assembly of the seal pack

9. Spare parts and accessories

Article	STAUFF ordering designation
Seal kit for flat face threaded male coupling	QRC-FT-31-MSK-BT
Marking ring, black	MR-QRC-84.8x1.4x10-K-BK
Marking ring, blue	MR-QRC-84.8x1.4x10-K-BU
Marking ring, green	MR-QRC-84.8x1.4x10-K-GN
Marking ring, grey	MR-QRC-84.8x1.4x10-K-GY
Marking ring, orange	MR-QRC-84.8x1.4x10-K-OE
Marking ring, purple	MR-QRC-84.8x1.4x10-K-PU
Marking ring, red	MR-QRC-84.8x1.4x10-K-RD
Marking ring, yellow	MR-QRC-84.8x1.4x10-K-YE

Important: Any disassembly of the individual coupling halves (male/female couplings) will invalidate the warranty!!!

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