Quench Pot

Etanorm-R KWP

Manual				



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1 Supplementary Operating Manual

1.1 General

This supplementary operating manual accompanies the installation/operating manual. All information contained in the installation/operating manual must be observed.

Table 1: Relevant operating manuals

	Reference number of the operating/installation manual
Etanorm-R	1222.8
KWP	2361.8

1.2 Application

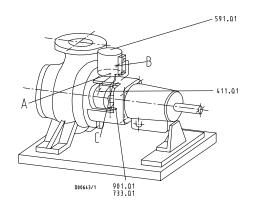
The quench system supplies mechanical seals with non-pressurised external quench liquid.

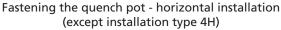
1.3 Quench pot arrangement

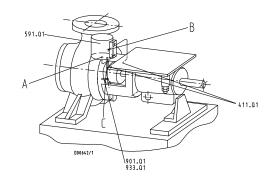
Arrange the quench pot as follows.

- The quench liquid feed line must be laid with a continuously rising slope towards the quench pot.
- The quench pot must not be arranged any higher than 1 m above the connection hole quench "ON" 411.Q1.
- The quench pot is supported by the piping; no separate fastening is required for the quench pot.

Horizontal installation







Fastening the quench pot - installation type 4H Mounting the motor support plate

А	Quench pot discharge
В	Quench pot return
С	Quench pot overflow

- 1. For installation type 4H only: Mount the motor support plate.
- 2. Guide the overflow tube of the quench pot (C) into the pump lantern. Fasten it to the lantern with pipe clamps.

Table 2: Scope of supply

Part No.	Description	Quantity
411.Q1	Joint ring	2
411.Q2	Joint ring	3
519.Q1	Quench pot	1



Part No.	Description	Quantity
710.Q1	Tube	1
720.Q1	Tube	1
731.Q1	Pipe union	2
731.Q2	Pipe union	3
733.Q1	Pipe clamp	1
901.Q1	Hexagon head bolt	1

Vertical installation

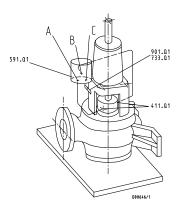


Fig. 1: Fastening the quench pot - vertical installation

Α	Quench pot discharge
В	Quench pot return
С	Quench pot overflow

Guide the overflow tube of the quench pot (C) into a drain and fasten it with pipe clamps.

Table 3: Scope of supply

Part No.	Description	Quantity
411.Q1	Joint ring	1
411.Q2	Joint ring	3
519.Q1	Quench pot	1
710.Q1	Tube	1
720.Q1	Tube	1
731.Q1	Pipe union	1
731.Q2	Pipe union	3
733.Q1	Pipe clamp	1
901.Q1	Hexagon head bolt	1

1.4 Quench liquid requirements



CAUTION

Quench liquid freezing or vaporising

Insufficient lubrication of the mechanical seal!

Mechanical seal failure!

- ▶ Protect the entire supply system against freezing.
- ▶ Prevent vaporisation of the quench liquid.

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When selecting the quench liquid observe the following:

- Compatibility with the fluid handled / pump
- Sufficient resistance of materials, especially elastomers

Fill volume Approx. 2.6 litres

Temperature limits Table 4: Temperature limits

Material	Temperature [°C]	
PP	≤ 90 °C	
PVDF	≤ 140 °C	

Viscosity The viscosity of the quench fill liquid must not exceed 5 mm²/s (approx. 5 cSt).

1.5 Commissioning/start-up

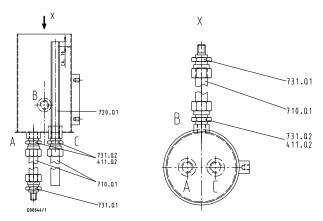


Fig. 2: Filling the quench pot

Α	Quench pot discharge
В	Quench pot return
С	Quench pot overflow
411.Q2	Joint ring
710.Q1	Tube
720.Q1	Tube
731.Q1	Pipe union
731.Q2	Pipe union

Fill the quench pot up to approx. 10 mm below the overflow tube. Close the quench pot with the quench pot cover.

1.6 Supervision of operation

During operation, observe and check the following:

- The liquid level in the quench pot must not fall below 1/4 of the tank volume. Check the liquid level regularly.
- Check that the liquid is clean. Define replacement intervals.

