ENGINEERING
TOMORROW

Installation guide

Electric regulating valves
Type **CCMT 3 – 10 Light**

027R7256

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Refrigerant:
R744
For other refrigerants, contact Danfoss.

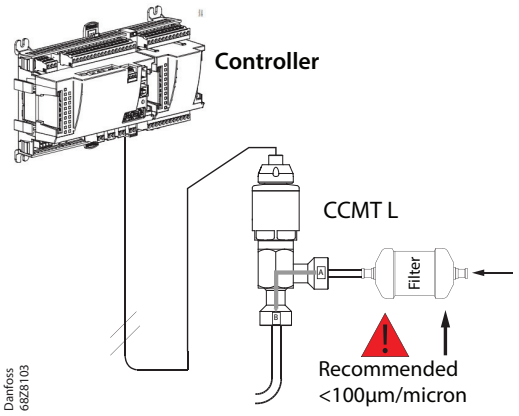
Ambient temperature:
Min. -40 °C / -40 °F
Max. 50 °C / 122 °F

Fluid temperature:
Min. -20 °C / -4 °F on valve inlet
Min. -40 °C / -40 °F on valve outlet
Max. 55 °C / 131 °F on valve inlet / outlet

Stepper motor type: Bipolar
Total full steps: 210
Step rate: 100 stp/s
Phase current: 350 mA RMS
Coil resistance: 15 ohm

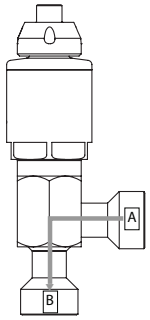
Max working pressure:
Steel Connections : 140 bar / 2030 psig
Bi-metal Connections : 130 bar / 1885 psig
Note! Bimetal Connections :
120 bar / 1740 psig for UL approval.

For more language options and more information on the valve refer to the website.
ccmt.danfoss.com



Note!
- CCMT valves are delivered in open position, ready for brazing.
- Filter with a maximum mesh of 100 µm is recommended to install on the inlet line that can resists particles size above 100 µm.

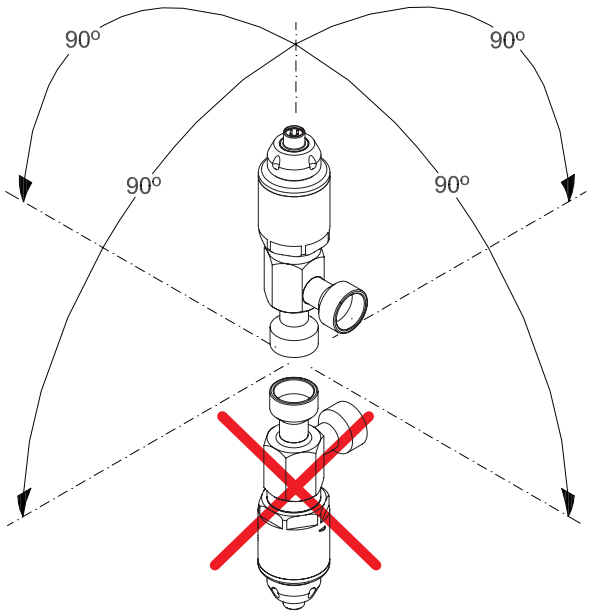
Flow direction



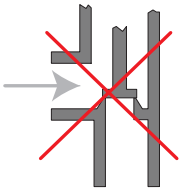
Flow direction: A to B

Warning! Do not connect directly to AC / DC power source.
Connect valve to appropriate controller/driver only.
Do not operate valve while assembling or disassembling.

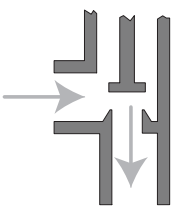
Mounting direction



Warning!
- Do not disassemble the valve before brazing or welding.
- Valve must be open during brazing and welding.

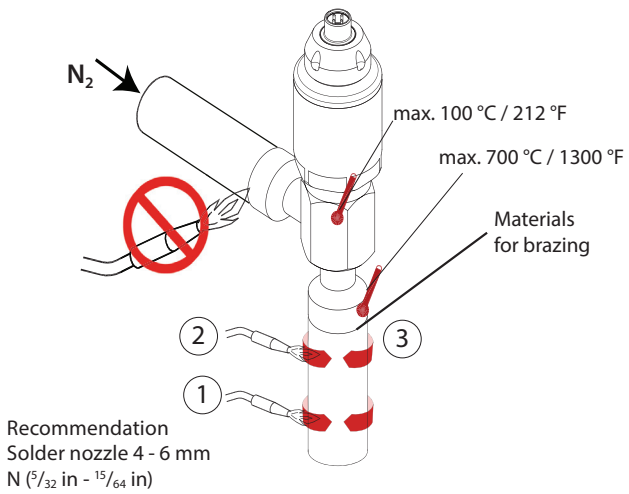


Fully closed



Open

Brazing



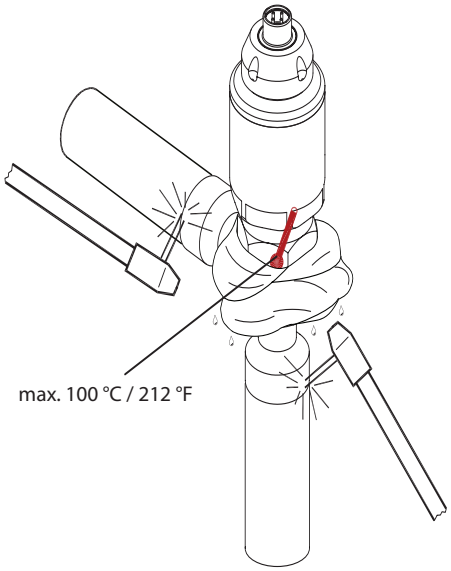
Materials used for brazing:
- Flus: Metalli tenacity No. 5 Powder or Braze Tec special h paste.
- Filler: Silver-Flo 55 (BS:AG 14/ DIN L-Ag55 Sn) or Silver-Flo 56 (AWS B Ag-7).

Warning

Filler metals containing Phosphor i.e. BS: CP 1/ DIN L-Ag 15P or BS: CP 3/ DIN L-Ag P7 must not be used.

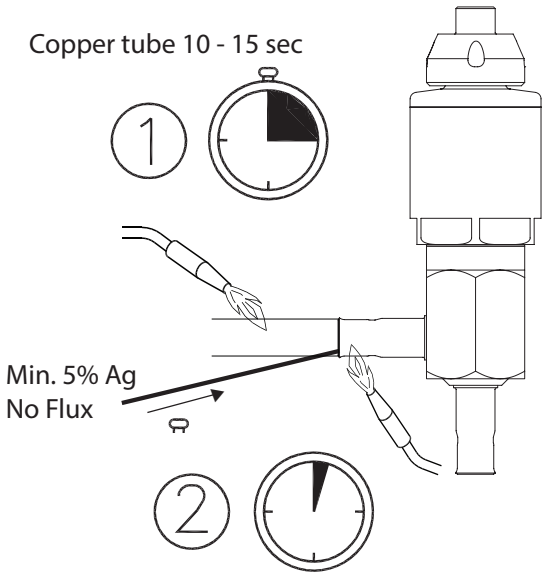
Note: N2 gas from opposite side of soldering point.

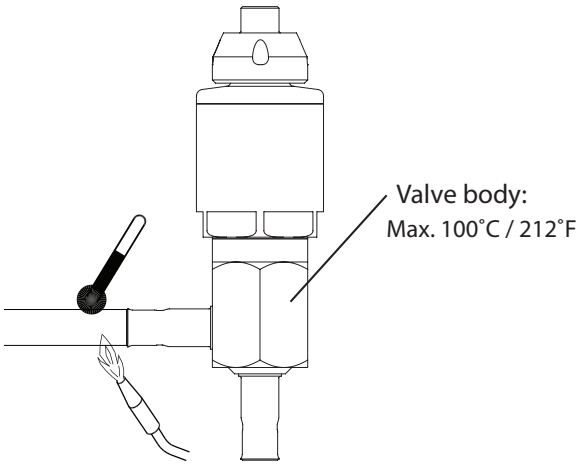
Welding



Recommendation for TIG welding
- Power approximately 60A.
- Use Shield gas charge - Argon.
- Material for welding - approximately 2 mm thick stainless steel alloy.

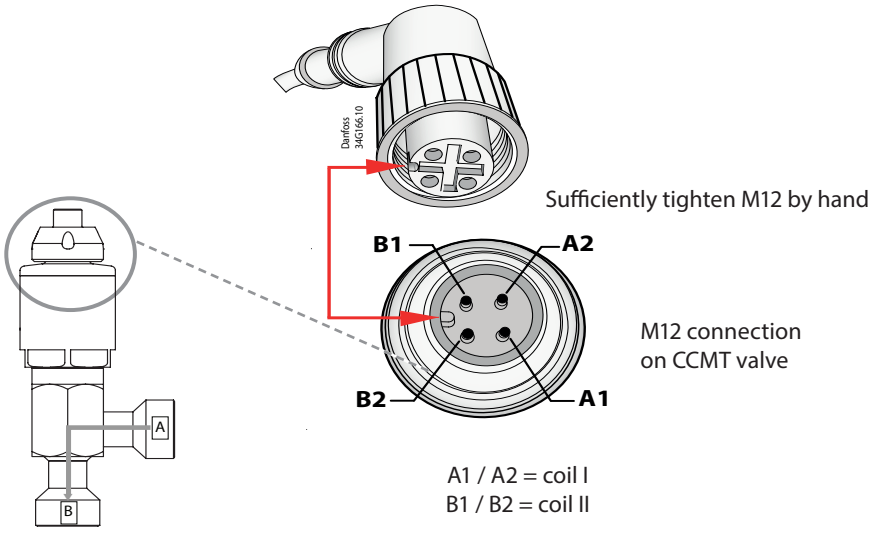
Bi-Metal Brazing





Valve connection: Max. 700˚C / 1300˚F

Electrical connections

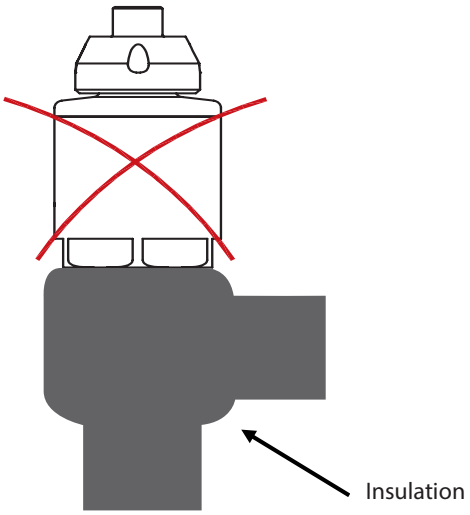


Insulation

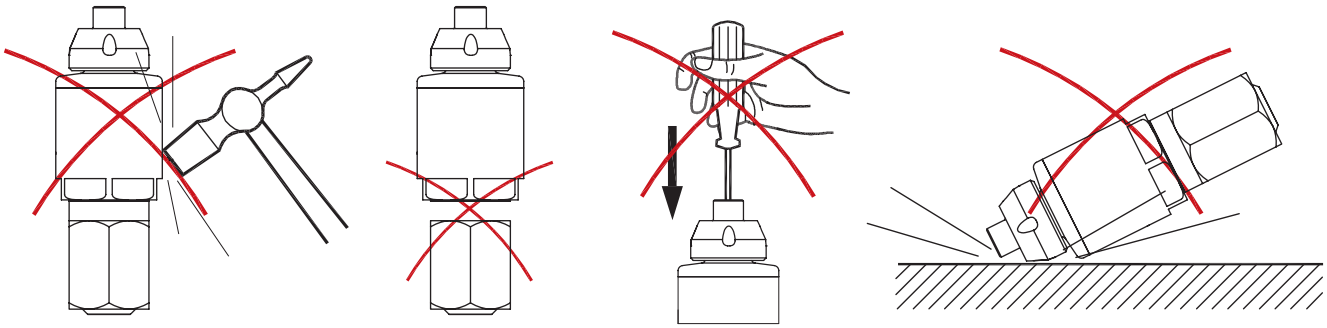
When used with duty cycle in a range from 20% to 50% or with Danfoss AK-XM 208C stepper driver:

- Insulation is not to be used on valve motor
- Insulation is acceptable on the valve body only

Note: operation with duty cycle above 50% is not possible irrespective of insulation method.



Warning



Service only