



STV/STR is a series of 2 and 3-way control valves intended for use in HVAC- applications.

- * Size DN15 up to DN50
- * Kv value 0.63...39
- * Differential pressure 0.25...1.6 MPa
- * Pressure rating PN16
- * Fluid temperature -5...185°C
- * Changeable 2/3-ways without dismantling

Function

Valve series STV/STR are intended for use together with actuator type AQT1000A-1R or AQM2000A-1R. The valve can control cold and hot water, glycol blended water and steam. The 3-way valve is intended for use as a mixing valve.

N.B. For certain anti-freeze media, except glycol, a special packing-box should be used.
(Please contact Regin for more information)

Function

2-way valve:

Open when the stem is in the bottom position.
Closed when the stem is in the top position.

3-way valve:

Open between port 2 and port 1 when the stem is in the bottom position (*closed between port 3 and 1*).
Open between port 3 and port 1 when the stem is in the upper position (*closed between port 2 and 1*).

Can be rebuilt

The valves can without dismantling be changed from two-ways to three-ways or vice-versa.

Actuator

The valves are intended for use together with following actuators:

- AQT... (3-point)
- AQM... (0...10 V)

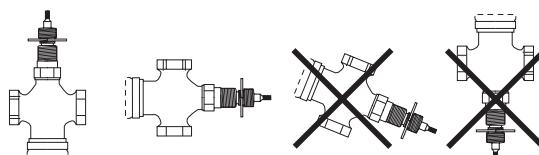
See leaflet 7-400 (AQT/AQM) for detailed information.

Installation

The 2-way valve is to be mounted with port 2 at the intake and port 1 at the return (flow direction 2 in 1 out) to make sure that the cone will be watertight and prevent noise when closing.

The 3-way valve is of mixing type and should be mounted at the mixing point.

Make sure to mount the 3-way valve so that correct flow directions are obtained.



Material

The valves have body and cone in gun metal and the stem is made of stainless steel. The valves have a self adjusting teflon packing box and a Viton O-ring.

Control of refrigerants

The valves can be used together with different refrigerants. In this case a special type of packing-box should be mounted.

Please contact Regin for more information.

Models

| 2-way | Connection | Kv | Max diff.press | 3-way | Connection | Kv | Max diff.press |
|-------------------|-------------------|-----------|-----------------------|-------------------|-------------------|-----------|-----------------------|
| STV15-0,63 | DN15 | Kv 0.63 | 1.6 MPa | STR15-0,63 | DN15 | Kv 0.63 | 1.6 MPa |
| STV15-1,0 | DN15 | Kv 1.0 | 1.6 MPa | STR15-1,0 | DN15 | Kv 1.0 | 1.6 MPa |
| STV15-1,6 | DN15 | Kv 1.6 | 1.6 MPa | STR15-1,6 | DN15 | Kv 1.6 | 1.6 MPa |
| STV15-2,1 | DN15 | Kv 2.1 | 1.6 MPa | STR15-2,1 | DN15 | Kv 2.1 | 1.6 MPa |
| STV15-2,7 | DN15 | Kv 2.7 | 1.6 MPa | STR15-2,7 | DN15 | Kv 2.7 | 1.6 MPa |
| STV20-4,2 | DN20 | Kv 4.2 | 1.6 MPa | STR20-4,2 | DN20 | Kv 4.2 | 1.6 MPa |
| STV20-5,6 | DN20 | Kv 5.6 | 1.6 MPa | STR20-5,6 | DN20 | Kv 5.6 | 1.6 MPa |
| STV25-10 | DN25 | Kv 10 | 1.0 MPa | STR25-10 | DN25 | Kv 10 | 1.0 MPa |
| STV32-16 | DN32 | Kv 16 | 0.6 MPa | STR32-16 | DN32 | Kv 16 | 0.6 MPa |
| STV40-27 | DN40 | Kv 27 | 0.4 MPa | STR40-27 | DN40 | Kv 27 | 0.4 MPa |
| STV50-39 | DN50 | Kv 39 | 0.25 MPa | STR50-39 | DN50 | Kv 39 | 0.25 MPa |

Technical data

| | | | | |
|----------------------|-----------------------------------------|-------------|--------------------------------------------------------------------|-------------------------|
| Flow characteristics | Square | Material | Body | Rg5 (gun metal SS 5204) |
| Media temperature | -5...+185°C | Cone | Cone | Rg5 (gun metal SS 5204) |
| Media | Hot, cold, glycol mixed water or steam. | Stem | Stainless steel | Self-adjusting teflon |
| Connection | Metric female threaded | Packing box | O-ring | Viton |
| Stroke | 15 mm | Thread | The valves have female threaded connections according to ISO 228/1 | |
| Max leakage | 0,1 % av kv | | | |
| Pressure rating | PN16 | | | |
| Rangeability | 50:1 | | | |

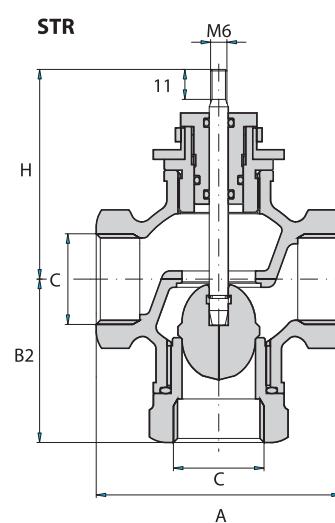
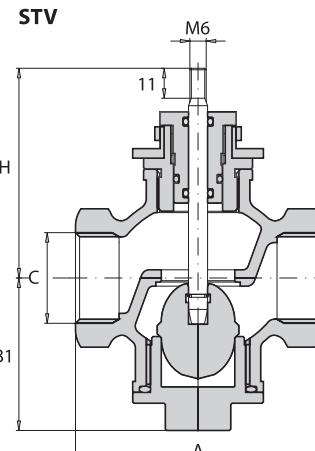
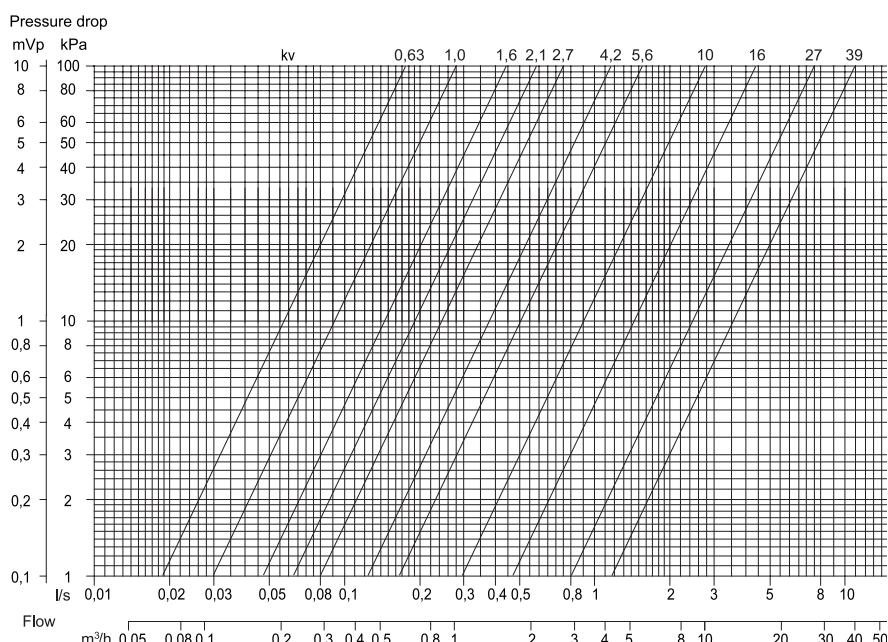
Dimensions pressure drop diagram

| | A | B1 | B2 | C | H | Weight |
|-----------------------|----------|-----------|-----------|----------|----------|---------------|
| STV/STR15-0,63 | 70 | 52 | 57 | G ½" | 71 | 1.3 Kg |
| STV/STR15-1,0 | 70 | 52 | 57 | G ½" | 71 | 1.3 Kg |
| STV/STR15-1,6 | 70 | 52 | 57 | G ½" | 71 | 1.3 Kg |
| STV/STR15-2,1 | 70 | 52 | 57 | G ½" | 71 | 1.3 Kg |
| STV/STR15-2,7 | 70 | 52 | 57 | G ½" | 71 | 1.3 Kg |
| STV/STR20-4,2 | 80 | 54 | 60 | G ¾" | 77 | 1.5 Kg |
| STV/STR20-5,6 | 80 | 54 | 60 | G ¾" | 71 | 1.5 Kg |
| STV/STR25-10 | 90 | 56 | 60 | G 1" | 77 | 1.7 Kg |
| STV/STR32-16 | 115 | 59 | 70 | G 1¼" | 79 | 2.3 Kg |
| STV/STR40-27 | 130 | 68 | 76 | G 1½" | 87 | 3.3 Kg |
| STV/STR50-39 | 160 | 68 | 80 | G 2" | 93 | 5.0 Kg |

N.B. B1 measurements are valid for STV-models

Measurements in mm

B2 measurements are valid for STR-models



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