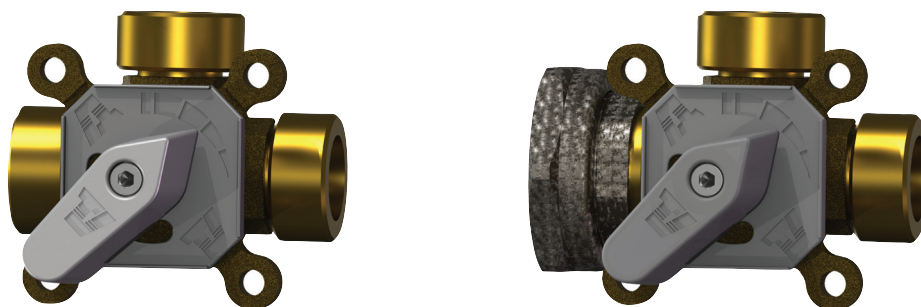


Mixing valves TV 3S

3-way mixing valve



TV 3S are 3-way brass mixing valves for control of heating or cooling applications.

The valves are fitted with a wheel for manual mixing but can easily – and with advantage – be motorised, e.g. with our Thermomatic controls.

All of the connection examples can be reversed.

The scale is graded on both sides, and can also be reversed. All important parts can easily be replaced.

Our mixing valves can be supplied with the following connections and Kvs values.

Connections:

R15 / ½" Rp and G
R20 / ¾" Rp and G
R25 / 1" Rp and G
Cu22
Cu28

Kvs values:

2,5 / 4 / 6 / 8 / 10

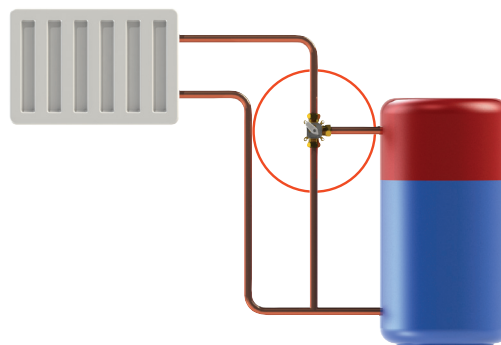
Pump flange R40 / 1 ½" Rp can be pre-fitted on special order. It is also possible to combine different connection dimensions.

Technical data

| | |
|-------------------------------|---|
| Turning angle: | 90° |
| Pressure class: | PN 10 |
| Media temperature: | max. (continual) +110°C max. (temporary) +130°C min. 0°C |
| Torque (at nominal pressure): | < 3 Nm |
| Operating pressure: | 1 MPa (10 bar) |
| Connections: | Rp (internal thread), EN 10226-1 G (external thread), ISO 228/1 Cu (compression fit), EN 1254-2 |

Materials

| | |
|--------------------------|-------------------|
| Valve housing and slide: | Brass, CW 614N |
| Axis and bearing: | Brass, CW 614N |
| O-rings: | EPDM Peroxide 281 |



Dimensioning

Heating system (radiators or underfloor heating):

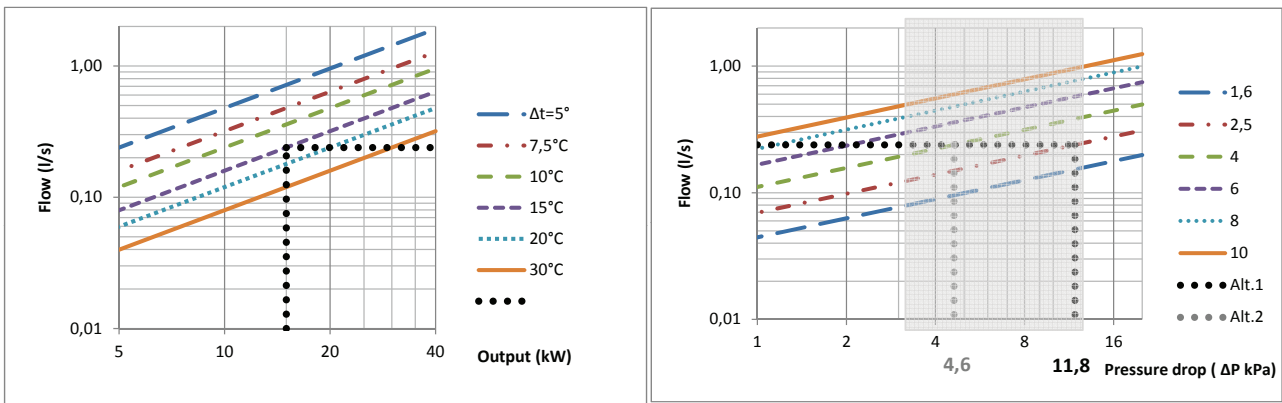
Start in the left diagram below; Assume the output needs of the system (eg. 15 kW) and go vertically to Δt (= temperature difference between supply temperature and return temperature, eg. 15°C). Continue horizontally to the shaded area (pressure drop 3–15 kPa) in the right diagram and choose the smaller alternative (eg. Kvs 2,5). Choose primarily the alternative with lowest Kvs-value.

Kvs (capacity value) = m³/h by 1 bar

Temperature difference (supply-return):

Radiator system = 15°C (eg. 60–45°C)

Underfloor heating = 5°C (eg. 35–30°C)



| Cu | A | B | C | D |
|-----|----|----|----|----|
| 22 | 41 | 80 | 60 | |
| 28 | 41 | 82 | 60 | |
| IT | | | | |
| R15 | 42 | 84 | 60 | |
| R20 | 42 | 84 | 60 | |
| R25 | 42 | 84 | 60 | |
| ET | | | | |
| R25 | 40 | 80 | 60 | 44 |

Cu = Compression fitting

IT = Internal thread

ET = External thread

