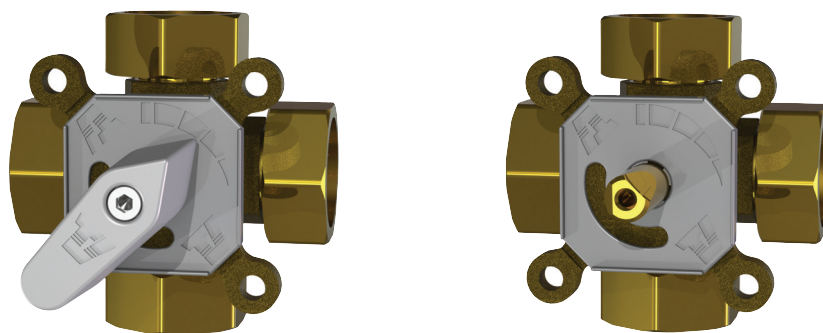


# Mixing valves TV 4S

## 4-way mixing valve



TV 4S are 4-way brass mixing valves intended for control of heating applications.

TV 4S are used to preheat the return flow to the heat source in order to reduce the risk of condensation. The valves are fitted with a wheel for manual mixing but can easily – and with advantage – be motorised, e.g. with our Thermomatic controls.

The scale is graded on both sides.

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

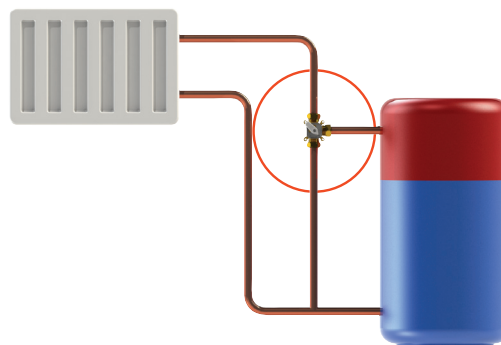
Pump flange R40 / 1 ½" Rp can be pre-fitted on special order. It is also possible to combine different connection dimensions.

## 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):

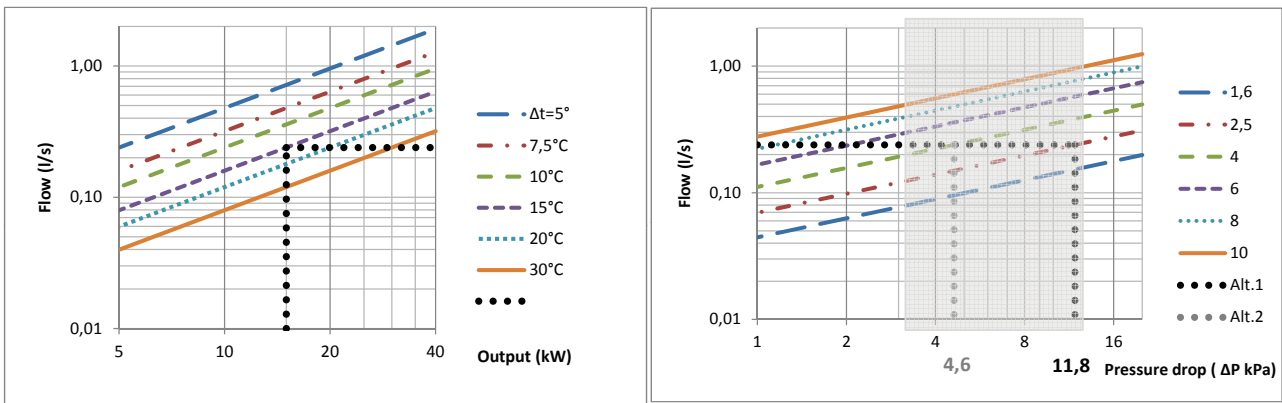
Start in the left diagram below; Assume the output needs of the system (eg. 15 kW) and go vertically to  $\Delta t$  (= temperature difference between supply temperature and return temperature, eg. 15°C). Continue horizontally to the shaded area (pressure drop 3–15 kPa) in the right diagram and choose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

Kvs (capacity value) = m<sup>3</sup>/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

