“DUAL” VALVE FOR USE ON ONE OR TWO PIPES

Art.3381KSX

Description

DUAL angled, chrome-plated single/double pipe thermostatic valve with reversible water inlet and metal probe L = 15 cm. Fitting interaxis of 38 mm. (with control handwheel on the left)

Function

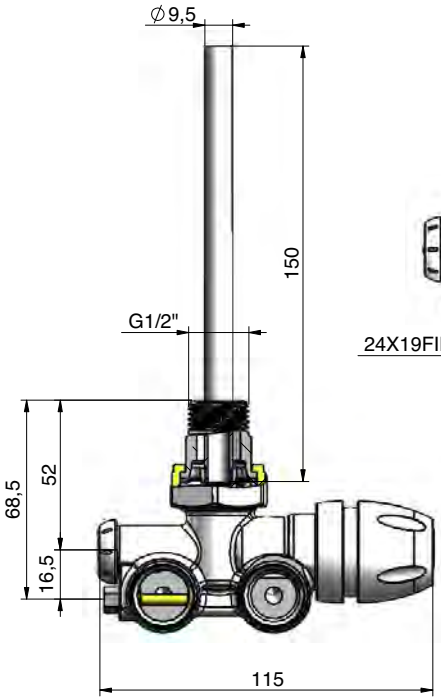
DUAL thermostatic valves for single and double-pipe systems are used as shut-off and regulation devices for heating bodies in heating systems. The 3381K valves are available in the configuration with ½" fitting to the heating body and with 24X19fil fitting to the system. The valves are also equipped with a probe to separate the inlet flow from the return flow in the heating body. The probe makes it possible to bring the heat transfer fluid to the furthest area of the heating body with respect to its entrance, thus improving heat exchange.

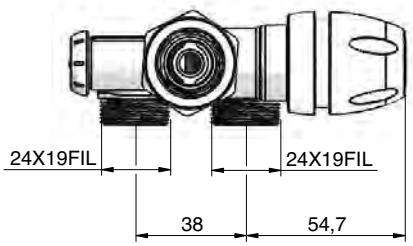
Mechanical features :

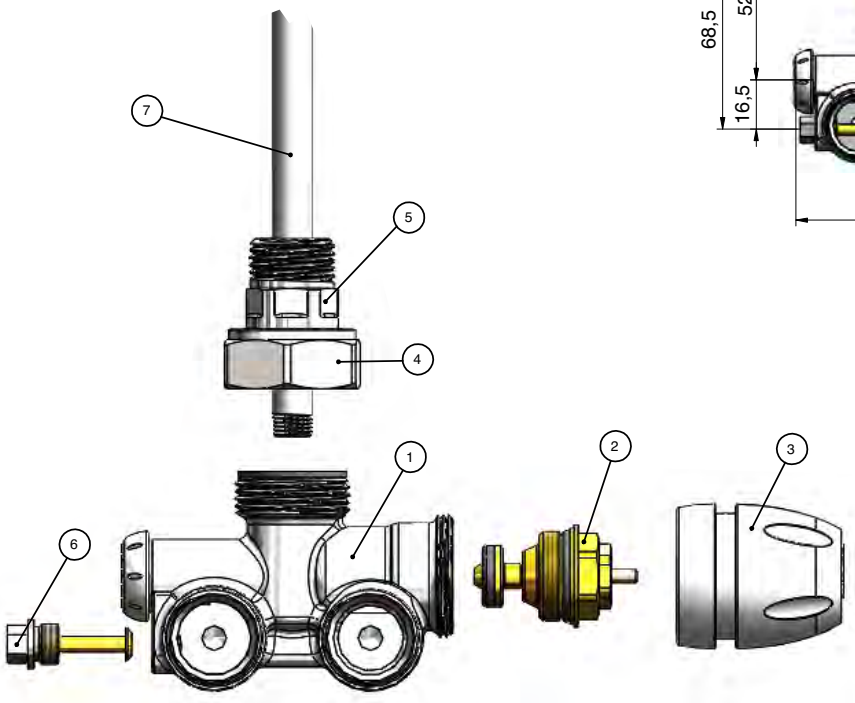
Max working pressure:	1 MPa (10bar)
Max working temperature	95°C
Use:	water (glycol <30%)

Physical features :

① Body	CW617N brass
② Internal element	CW617N brass and EPDM gaskets
③ Manual handwheel	RAL9010 White ABS
④⑤ Tail nut	CW617N brass
⑥ Lockshield	CW617N brass
⑦ Metal probe	Steel







Operational diagram

The "Dual" valve can be used as a single-pipe valve or as a double-pipe valve by simply adjusting the by-pass screw (to control opening or complete closure of the by-pass passage). The valve is supplied in the configuration that provides for connection of the delivery to the fitting on the side of the lockshield as shown in Fig. 1 and Fig. 2. (This solution is recommended for better water circulation in the system). In the single-pipe configuration, it is also possible to feed the valve using the fitting on the side of the thermostatic valve, while making sure that the flow direction insert is reversed, as shown in Fig. 3 and Fig. 4.

In the two-pipe configuration with manual knob, it is also possible to supply the valve using the fitting on the side of the thermostatic valve, while making sure that the flow diverter has been rotated as shown in Fig. 3 and Fig. 4, while in the two-pipe configuration with thermostatic head, it is also possible to supply the valve using the fitting on the side of the thermostatic valve but in this case there must be a differential pressure between inlet and outlet lower than 0.5 bar. The knob can be replaced with a thermostatic head with a sensitive liquid element (Art. 9553) by simply unscrewing the first and screwing on the second.

Operation with lockshield side input

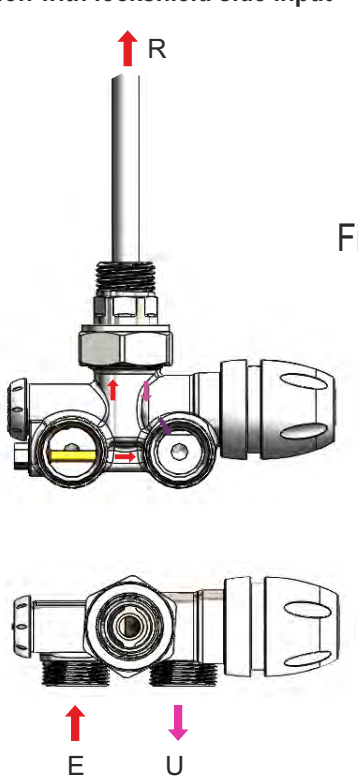
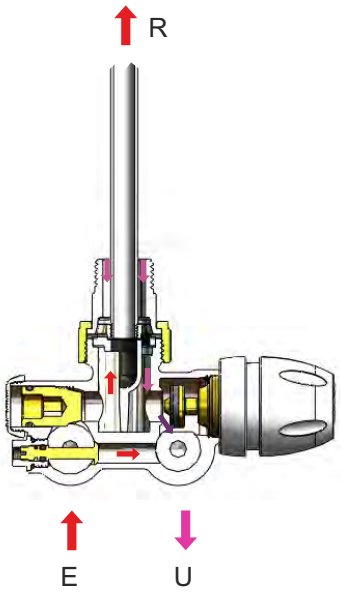


Fig.1



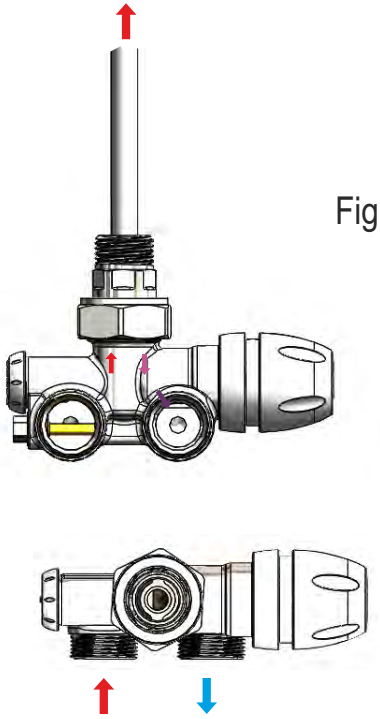


Fig.2

Operation with inverted flow input

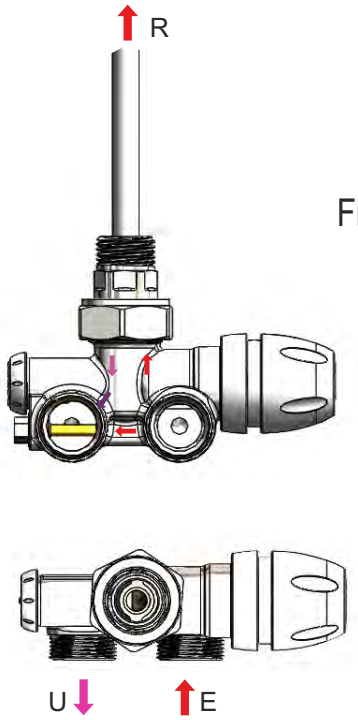
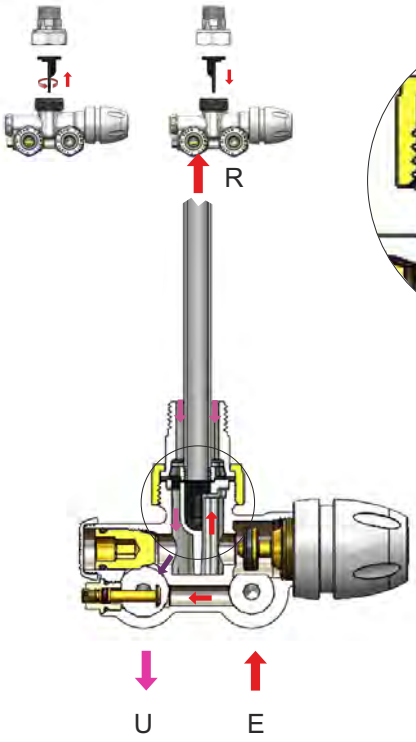
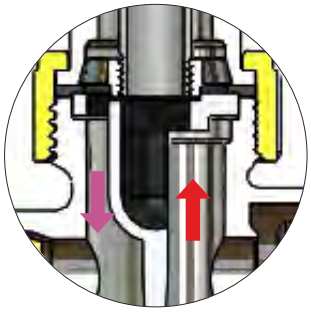


Fig.3





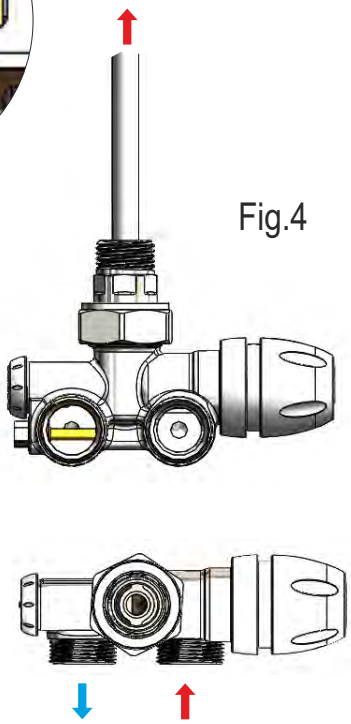
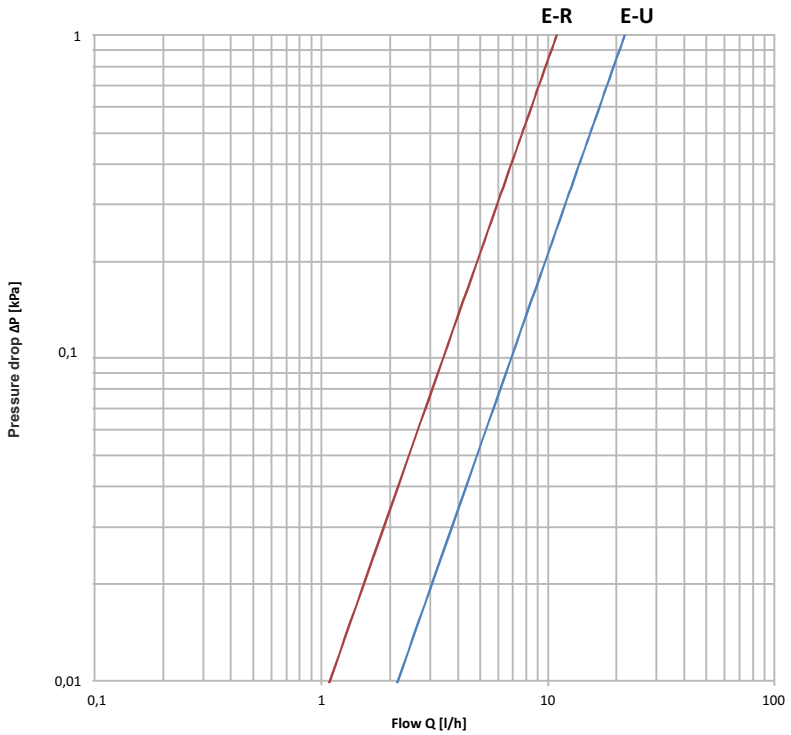


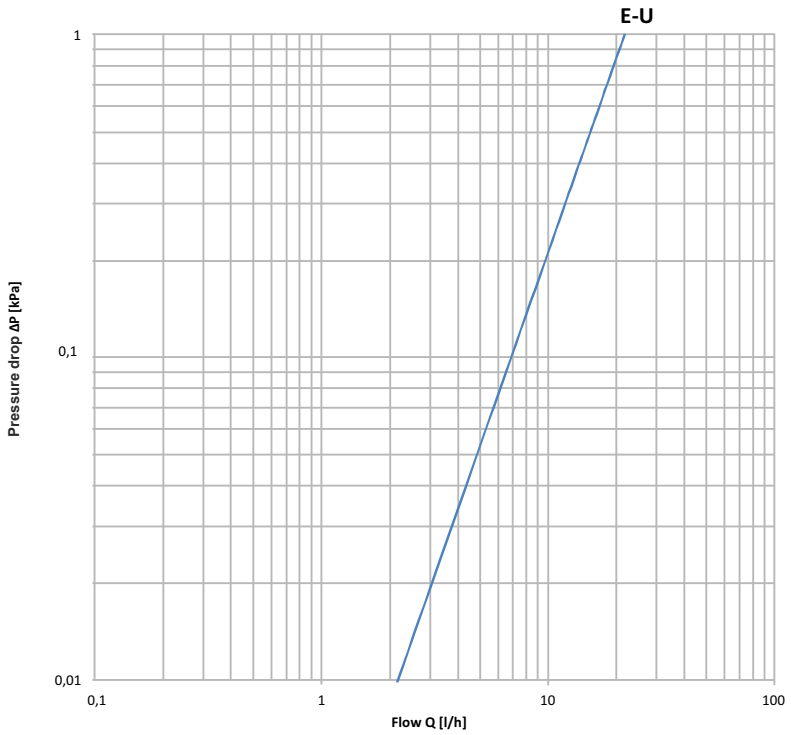
Fig.4

PRESSURE DROP DIAGRAM



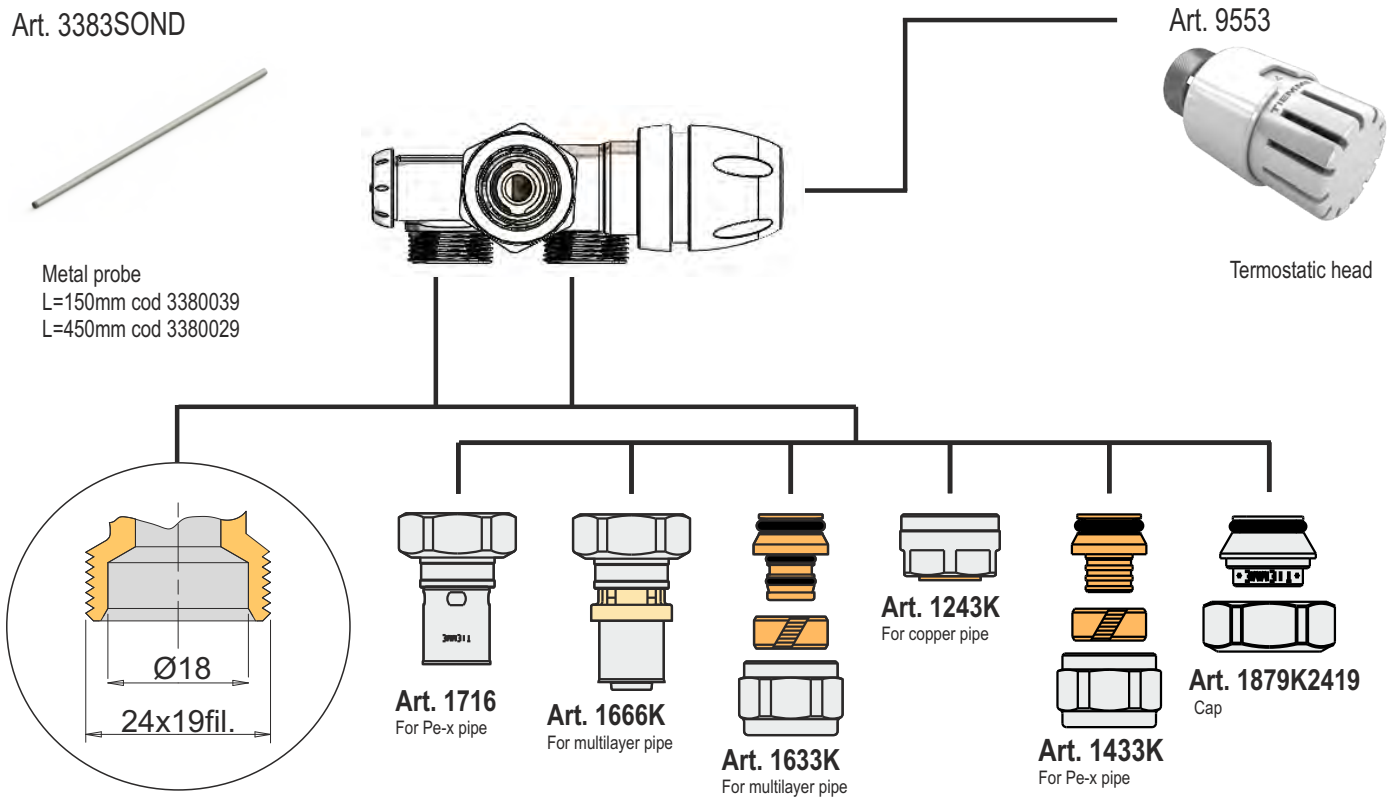
Test performed with lockshield 50% open and valve with no thermostatic head.
E-R pathway: pressure drop between valve inlet (E) and inlet to the heating body (R).
The heating body receives 50% of the flow entering E
E-U pathway: pressure drop at the valve system fittings.
With passage E-R: Kvs = 0.65 m3/h
With passage E-U: Kvs = 1.30 m3/h

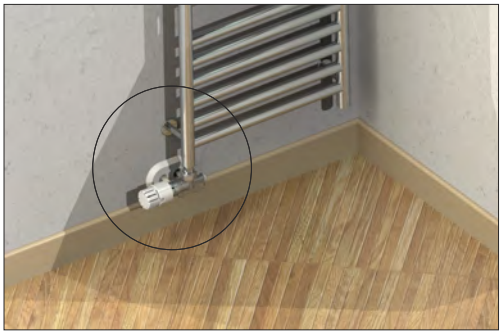
PRESSURE DROP DIAGRAM

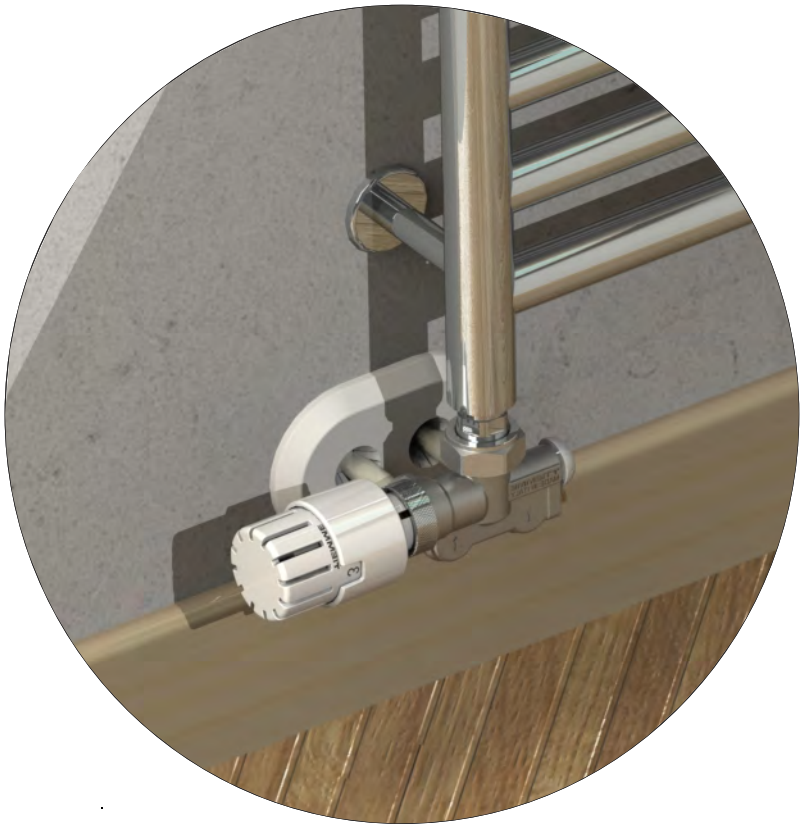


Test carried out with valve with no thermostatic head
Thermostatic group closed
Lockshield open
Valve tested in by-pass: pressure drop at the valve system fittings.
All the heat transfer fluid entering E exits from U
With passage E-U: Kvs = 1.30 m3/h

Fitting guide:







Typical diagram for fitting 3381K valves

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