

Climate
Control

IMI Heimeier

One-pipe valve with immersion pipe



Thermostatic valves with radiator connection systems
For one-pipe heating systems

One-pipe valve with immersion pipe

One-pipe valve with immersion pipe for radiators with lateral single point connection. Centre-to-centre distance of pipe connections 58 mm.



Key features

Universal connection possibilities for plastic, copper, precision steel or multi-layer pipes

No return circulation thanks to integrated gravity brakes in the single pipe valve

Especially low flow resistance

Body made of nickel-plated corrosion-free gunmetal

Technical description

Applications area:

One-pipe heating systems

Function:

Control
Shut-off

Dimensions:

DN 15

Pressure class:

PN 10

Temperature:

Max. working temperature: 120°C, with protection cap or actuator 100°C.
Min. working temperature: -10°C.

Materials:

Valve body: Corrosion resistant Gunmetal.
O-rings: EPDM rubber
Valve disc: EPDM rubber
Return spring: Stainless steel
Valve insert: Brass
Spindle: Niro-steel spindle with double O-ring sealing. The outer O-ring can be replaced under pressure.

Surface treatment:

Valve body and fittings are nickel-plated.

Marking:

THE and flow direction arrow.
Blue protection cap.

Pipe connection:

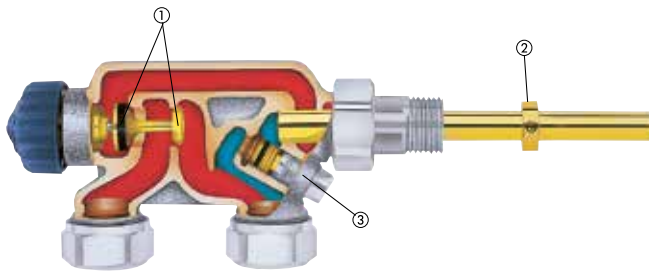
G3/4 male thread for compression fittings for plastic, copper, precision steel or multi-layer pipe.

Connection to thermostatic head and actuator:

IMI Heimeier M30x1,5

Construction

One-pipe valve with immersion pipe



1. Regulating cone
2. Diaphragm plate
3. Return / Shut-off

Application

One-pipe valve with immersion pipe for radiators with lateral single point connection. The valves consists of a one-pipe valve lower part, immersion pipe with diaphragm plate.

An almost completely consistent mass flow rate in the circular pipe is guaranteed by the special regulating cone.

When working at full capacity, the radiator is set at 35% of the mass flow rate in circuit.

Supply and return can be shut-off, as a result of which the radiator is detachable without emptying the unit. The by-pass remains open, independent of the shut-off, so that circuit operation is not interrupted.

Note: The immersion pipe must be previously cut to the right length for radiators with a short immersion depth.

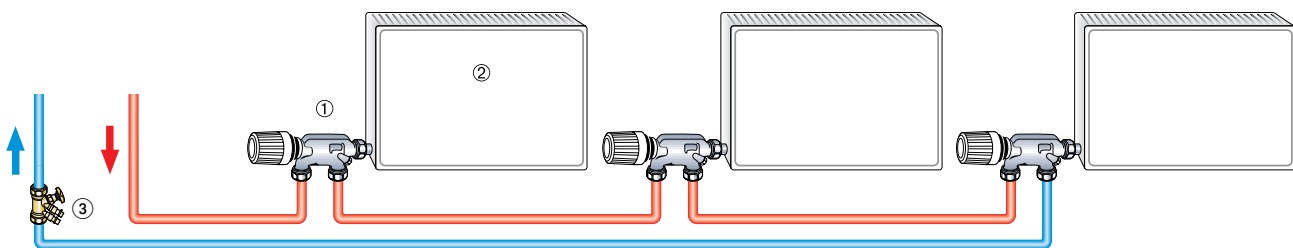
With the immersion pipe, the diaphragm plate is installed in the middle of the first element. When using plate and special radiators, a two chamber connection with a bore hole of \varnothing 11 mm must exist or the radiator connection must be installed in such a way so that the long immersion pipe can be fed in without a diaphragm plate.

Distributor and separation elements as well as the immersion pipe length are to be built according to the specifications of the respective radiator manufacturer.

The radiator can be easily disassembled by separating the immersion pipe in the screw connection.

The flow direction marked on the one-pipe valve should be followed, since the flow through the radiator is not optimal with a switched connection.

Sample application



1. One-pipe valve with immersion pipe
2. Radiator
3. TA STAD balancing valve

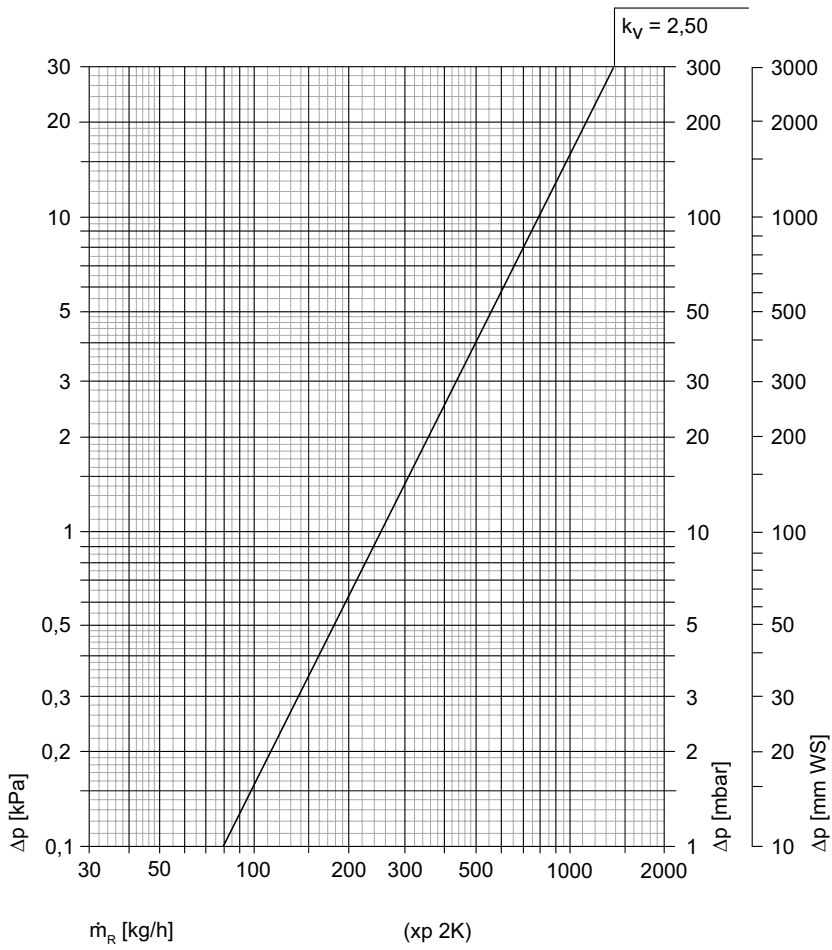
Notes

– To avoid damage and the formation of scale deposit in the hot-water heating system, the composition of the heat transfer medium should be in accordance with the VDI guideline 2035. For industrial and long-distance energy systems, see the applicable codes VdTÜV and 1466/AGFW FW 510. A heat transfer medium containing mineral oils, or any type of lubricant containing mineral oil can have extremely negative effects and usually lead to the disintegration of EPDM seals. When using nitrite-free frost and corrosion resistance solutions with an ethylene glycol base, pay close attention to the details outlined in the manufacturers' documentation, particularly concerning concentration and specific additives.

– Flush the system before changing thermostatic valves in heavy polluted existing systems.

– The thermostatic valve bodies can be used with all IMI Heimeier thermostatic heads and IMI TA thermal actuators or motorized. The optimal tuning of the components guarantees maximum safety. When using actuators from other manufacturers, make sure that the pressure power is appropriate for thermostatic valve bodies with soft sealing valve discs.

Technical data

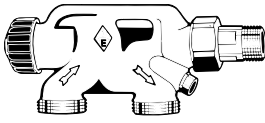


Equivalent pipe lengths [m]

Kv	12 x 1	14 x 1	15 x 1	16 x 1	18 x 1
2,50	0,8	2,2	3,3	5,0	9,6

Copper pipe
 $t = 80\text{ °C}$ (176 °F)
 $v = 0,5\text{ m/s}$

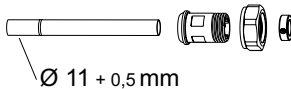
Articles – One-pipe valve with immersion pipe



Valve body of a one-pipe valve

With blue protection cap
Nickel-plated gunmetal

	EAN	Article No
	4024052215515	3871-02.000



Immersion pipe with diaphragm plate

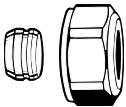
Mounting the immersion pipe:

Screw off the screw nipple from the one-pipe valve and completely screw on the immersion pipe with the long side in the nipple of the cone side (bead). The immersion pipe must end flush on the cone side of the screw nipple. With the immersion pipe, the diaphragm plate is installed in the middle of the first element.

	EAN	Article No
Thread reach 250 mm	4024052216017	3871-27.132

Compression fitting for plastic, copper, precision steel or multi-layer pipes see Accessories.

Accessories



Compression fitting

for copper or precision steel pipe according to DIN EN 1057/10305-1/2. Connection external thread G3/4 according to DIN EN 16313 (Eurocone). Metal-to-metal joint. Brass nickel-plated. With a pipe wall thickness of 0.8-1 mm insert supporting sleeves. Heed pipe manufacturer's technical advice.

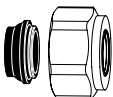
Ø Pipe	EAN	Article No
12	4024052214211	3831-12.351
14	4024052214310	3831-14.351
15	4024052214617	3831-15.351
16	4024052214914	3831-16.351
18	4024052215218	3831-18.351



Supporting sleeves

for copper or precision steel pipe with a wall thickness of 1 mm.

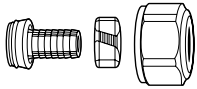
Ø Pipe	L	EAN	Article No
12	25,0	4024052127016	1300-12.170
15	26,0	4024052127917	1300-15.170
16	26,3	4024052128419	1300-16.170
18	26,8	4024052128815	1300-18.170



Compression fitting

for copper or precision steel pipe according to DIN EN 1057/10305-1/2 and stainless steel pipe. Connection external thread G3/4 according to DIN EN 16313 (Eurocone). Soft sealed, max. 95°C. Nickel-plated brass.

Ø Pipe	EAN	Article No
15	4024052515851	1313-15.351
18	4024052516056	1313-18.351


Compression fitting

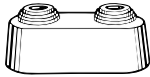
for plastic pipe according to DIN 4726, ISO 10508.
 PE-X: DIN 16892/16893, EN ISO 15875;
 PB: DIN 16968/16969.
 Connection external thread G3/4 according to DIN EN 16313 (Eurocone).
 Nickel plated brass.

Ø Pipe	EAN	Article No
12x1,1	4024052136018	1315-12.351
14x2	4024052134618	1311-14.351
16x1,5	4024052136117	1315-16.351
16x2	4024052134816	1311-16.351
17x2	4024052134915	1311-17.351
18x2	4024052135110	1311-18.351
20x2	4024052135318	1311-20.351


Compression fitting

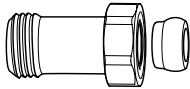
for Alu/PEX multi-layer pipe according to DIN 16836.
 Connection external thread G3/4 according to DIN EN 16313 (Eurocone).
 Nickel-plated brass.

Ø Pipe	EAN	Article No
16x2	4024052137312	1331-16.351
18x2	4024052137411	1331-18.351


Double rosette

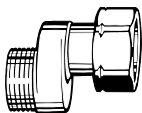
white plastic, can be divided in the centre, for various pipe diameters, distance between center points 58 mm, total height max. 31 mm.

EAN	Article No
4024052213214	3831-00.093


Length adjustment fitting

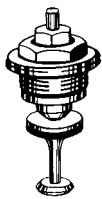
For connecting to plastic, copper, precision steel or multi-layer pipes.
 For valves with external thread connection G3/4.
 Brass nickel-plated.

	L	EAN	Article No
G3/4 x G3/4	25	4024052298310	9713-02.354
G3/4 x G3/4	50	4024052298419	9714-02.354


S-connection

For compensating different pipe distances, e. g. when replacing old one-pipe valves.
 Note flow direction!
 Brass, nickel-plated.

	Axial distance [mm]	Total length [mm]	EAN	Article No
G3/4 x G3/4	11,5	43	4024052139217	1351-02.362


Thermostatic insert for one-pipe valve

Substitute insert.
 Line of product since June 1981.

EAN	Article No
4024052213511	3831-02.299



Thermostatic insert for one-pipe valve with immersion pipe

Modified insert, line of products up to May 1981. Replacement insert for modifying a microthermal single pipe valve (immersion pipe line) into a thermostatic model.

Use only in connection with thermostatic head with remote sensor or control.

EAN	Article No
4024052101115	0037-02.300

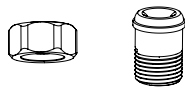
Attention: microthermal one-pipe manual valves in universal production are to be retrofitted according to the principle of the E-Z System to thermostatic valves. To do this, the angle clamp compression fitting in the radiator supply pipe is to be replaced with a flow through thermostatic valve body with bend nipple (art. no. 2244-02.000). The microthermal manual insert is to be replaced with the above-mentioned special insert (art. no. 4300-02.002). For further information, please contact the factory.



Special insert

for replacing the manual regulator top part with the one-pipe manual regulator valve in the universal production line. Water division 50/50.

EAN	Article No
4024052227112	4300-02.002

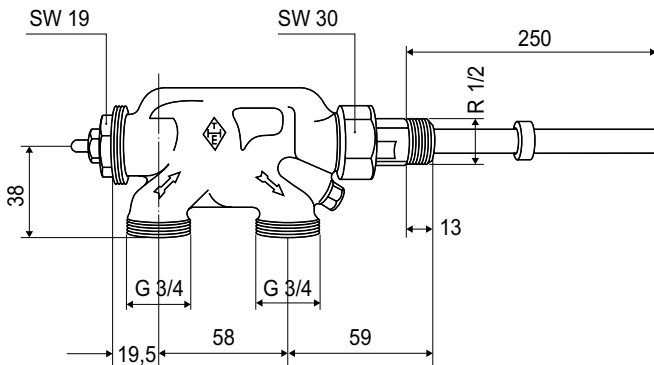


Union threading for the circular pipeline

	EAN	Article No
Union nut	4024052111114	0121-02.011
Screw nipple R1/2	4024052111015	0121-02.010

Dimensions

One-pipe valve with immersion pipe



1 mm = 0,0394 inch



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