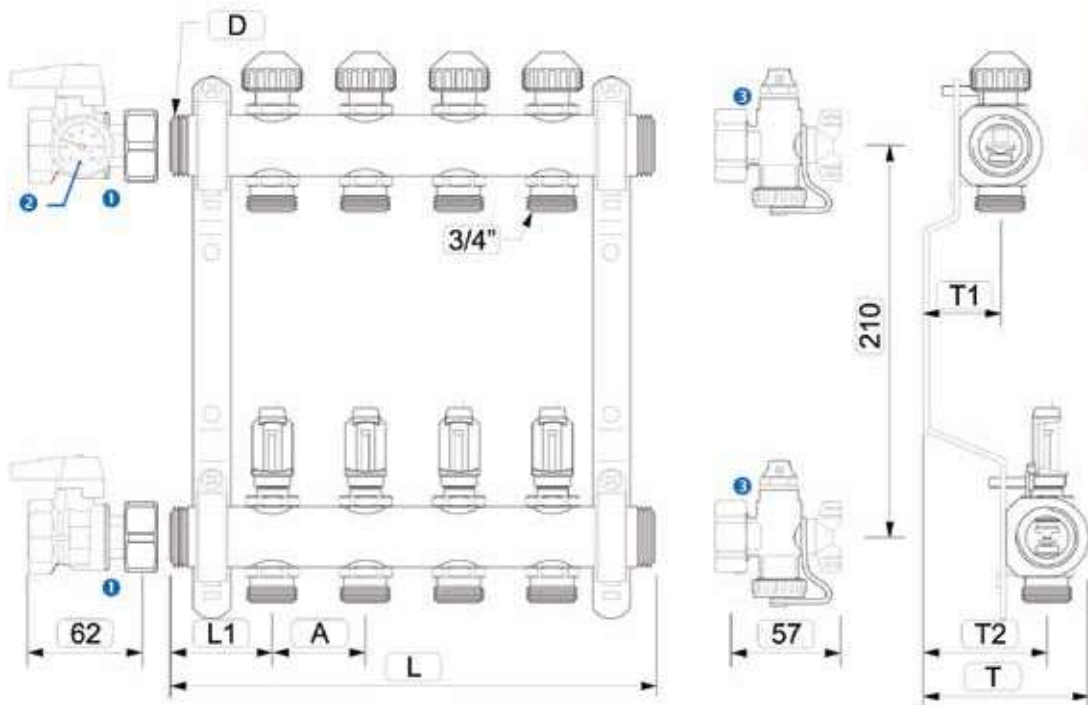


WATTS MANIFOLD

HEATING CIRCUIT MANIFOLD HKV 2013A



1 / 2 / 3 Contained not always in the scope of supply.

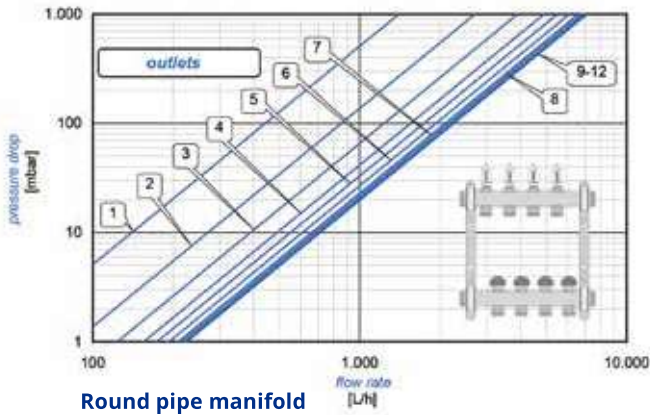
Due to different type the supply pipe could be on the top. Manifold pipes optionally made of brass or stainless steel. Non off-set position of the outlets.

Product range

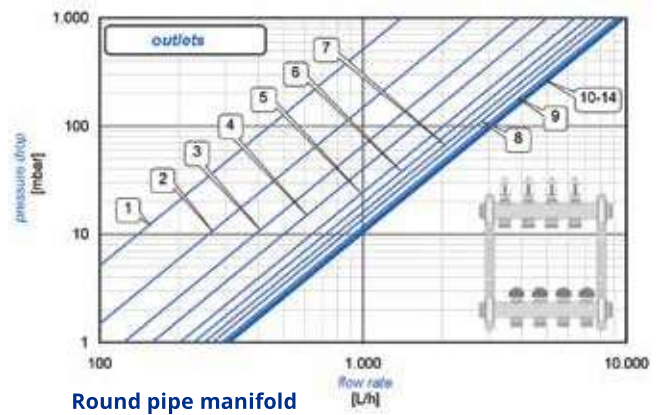
Outlets	L [mm]	L1 [mm]	A [mm]	Pipe material	Ø Pipe	T1 [mm]	T2 [mm]	T [mm]
2	160	55	50	Brass/ Stainless Steel	1"	37 29 ¹⁾	62 47 ¹⁾	83 68 ¹⁾
3	210							
4	260							
5	310							
6	360							
7	410							
8	460							
9	510							
10	560							
11	610							
12	660							
13	---							
14	---							

¹⁾ With slim brackets (article code 4225002)

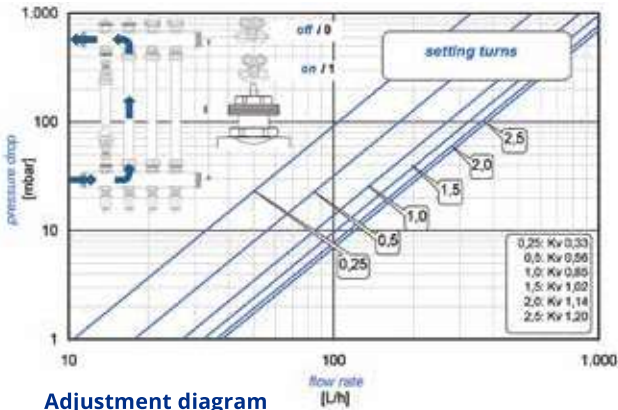
TOTAL PRESSURE DROP



Round pipe manifold
Ø Rohr 1" _0-6 l/min



Round pipe manifold
Ø Rohr 1 1/4" _0-6 l/min



Adjustment diagram

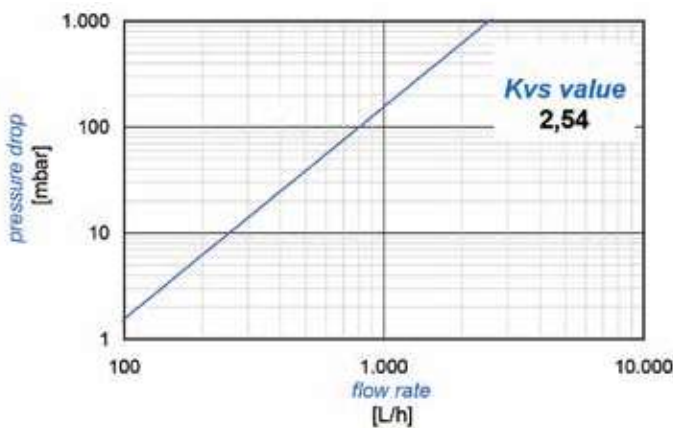
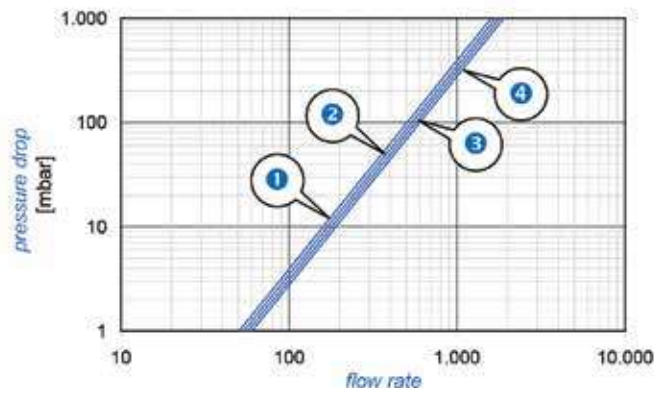
The adjustment diagram already considers the single pressure losses of the flow meter, the flow control valve as well as 2 pieces of compression fittings.

SINGLE PRESSURE LOSSES

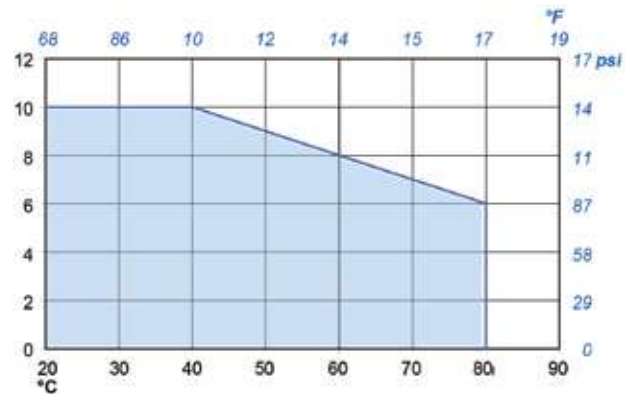
Flowmeter

Anzeigebereich Flow range	Kvs-Wert Kvs-value	Linie Line
0 – 4 l/min	1,6	1
0 – 6 l/min	1,7	2
0 – 2 GPM	1,8	3
0 – 4 GPM *)	1,9	4

x) = not available / on special request only



Return control valve



Pressure and temperature limits

The parameters pressure and temperature must be within the limits shown.

Technical Data	
Max. operating temperature:	80 °C
Min. operating temperature:	-10 °C ¹⁾
Max. operating pressure:	6 bar
Max. test pressure (24 h, < 30 °C):	10 bar ^{2), 3)}
Flow ranges of the flowmeter:	0 – 3 (4) l/min 0 – 4 (6) l/min 0 – 2 GPM

Materials	
Housing:	Brass Ms58; CW614N
Pipes:	Brass pipe Ms63; CW508L Stainless steel pipe; 1.4301
Plastic:	Impact- and temperature resistant
Gaskets:	EPDM-Elastomers or AFM 34
Brackets:	Steel, galvanised

- 1) When using appropriate antifreeze compounds! A condensation water formation has to be considered.
- 2) Max. 24 h at a max. water temperature of 30 °C and max. ambient temperature of 40 °C. Not valid for pressure testing with gases (air)!
- 3) When test pressure > 5 bar, the control valves in the return branch shall be closed by means of protective caps.

Application

The heating circuit manifold is used for distribution and regulation of the volume of the various heating circuits in low temperature heating and cooling systems (e.g. floor or wall heating / cooling). The manifold is made up of precision-matched components with flat-seal connections. Volume control is effected using a square venting key on the control valve. The adjusted flow can be read off directly by the flow meter with integrated shut-off device. By the particularly low pressure loss the manifold is suitable for applications with high flow rates (e.g. for concrete core activation or as manifold for cooling surfaces).

Design/Mode of operation

In the manufacturing process of the manifold a pressure as well as a function test is performed. The closing point of the valve inserts in the return pipe amounts to 11.8 mm. Thermal actuators must possess a suitable adaptation therefor.

The insulation cladding made of EPP, available as accessories, is used as thermal insulation both for heating and cooling applications. If the manifold is used for cooling purposes, this reduces the water condensation on it.

Installation

The highly compact design with flat seals throughout ensures safe and easy mounting even where space is extremely limited. The unit fits to a manifold cabinet installed in a wall with thickness of 90 mm.

The manifold can be connected either from the left or the right. The flat-seal male thread ensures easy mounting of the various accessories such as ball valves, rinsing and filling device etc. These are available in the Watts Industries product range along with other modular accessories (e.g. shunt units, heat meter installation sets, manifold extension, balancing and bypass valve sets. etc.).