Zertifiziertes QM-System
DIN EN ISO 9001
Zertifikat-Nr. 01017

Manifold Valves for Multiple Installation for Liquids

KOBOLD

measuring • monitoring • analysing

USR

- Measuring range:
  water 0.04 - 0.4 ... 1-10 l/min
- Accuracy class:
  2.5 acc. to VDI/VDE
- p_{max}: 16 bar; t_{max}: 100 °C
- Connection:
  inlet:
  G 1 (1" NPT with adapter)
  outlet:
  G ¼, G ⅜, ¼" NPT, ⅜" NPT,
  hose connection:
  Ø9, Ø12, Ø15 mm
- Material: nickel plated brass

S2

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Description

The flowmeters model USR for liquids operate on the variable area flowmeters principle, which means that the installation position is vertical and the direction of flow is from bottom to top. The instruments have been designed as simple and thus economical measuring systems. The float for USR is a bomb form float, whereby the indication point is the top of the float. The appliance is available with valve. For centralised flow measurement, for example in cooling systems, we recommend the manifold flowmeters for multiple installation. Up to 24 flowmeters can be assembled in a block provided that maximum flow rate in each unit does not exceed 10 l/min. The ranges and outlet connections of each unit in such a block can be determined separately.

Applications

- Cooling circuits
- Pumps

Technical Details

Installation position:	
inlet:	horizontal
outlet:	vertical from bottom to top
Flow direction:	from left to right or right to left
Accuracy class:	Class 2.5 acc. to VDI/VDE 3513
Max. pressure:	16 bar
Process temperature:	0... +100 °C
Ambient temperature:	0...+60 °C
Protective category:	IP 65
Connections:	
inlet:	G 1 or (1" NPT with adapter)
outlet:	G ¼, G ⅜, ¼" NPT, ⅜" NPT (female) hose connection: Ø9, Ø12, Ø15 mm
Wall mounting clamps:	2x rubber lined clamps, with M8 clamping screws and dowels (universal, dia.: 12 mm, L = 53 mm) / block

Material

Wetted parts:	
Measuring tube:	borosilicate glass
Float stop:	PTFE
Float:	stainless steel
Gasket:	FPM, EPDM, NBR
Block, fitting, valve:	nickel plated brass
Non wetted part:	
Protection tube:	aluminium

Order Details (Example: **USR-2 S 06H L G I2 N 0**)

Model	Unit No.	Size	Ranges water [l/min]	Flow direction[1]	Connection		Gasket	Option
					Inlet	Outlet[2]		
USR-	**2** = 2-fold **3** = 3-fold **4** = 4-fold **M**[3] = multi-fold	**S** = short	**06H** = 0.04-0.4 **08H** = 0.063-0.63 **10H** = 0.10-1.0 **12H** = 0.16-1.6 **14H** = 0.25-2.5 **16H** = 0.4-4,0 **00H**[4] = mixed	**L** = from left **R** = from right	**G** = G 1 **N** = 1"NPT	**I2** = G ¼ **N2** = ¼" NPT **H3** = hose 9 mm **H4** = hose 12 mm **XX**[5] = mixed	**N** = NBR **E** = EPDM **F** = FPM	**0** = without **2** = with wall mounting clamps **Y** = special specify in text
		L = long	**14H** = 0.25-2.5 **16H** = 0.4-4.0 **18H** = 0.63-6.3 **20H** = 1-10 **00H**[4] = mixed			**I3** = G ⅜ **N3** = ⅜" NPT **H4** = hose 12 mm **H5** = hose 15 mm **XX**[5] = mixed		

[1] In case of flow direction »L«, the inlet connection is female, in case of flow direction »R«, the inlet connection is male
[2] All outlet threads are female
[3] Please specify the unit number up to 24 units in clear text, while ordering. The device will be assembled from 2, 3 and 4-fold units
[4] Please specify the different ranges within one block in clear text, while ordering
[5] Please specify the different outlet connections within one block in clear text, while ordering

No responsibility taken for errors;
subject to change without prior notice.
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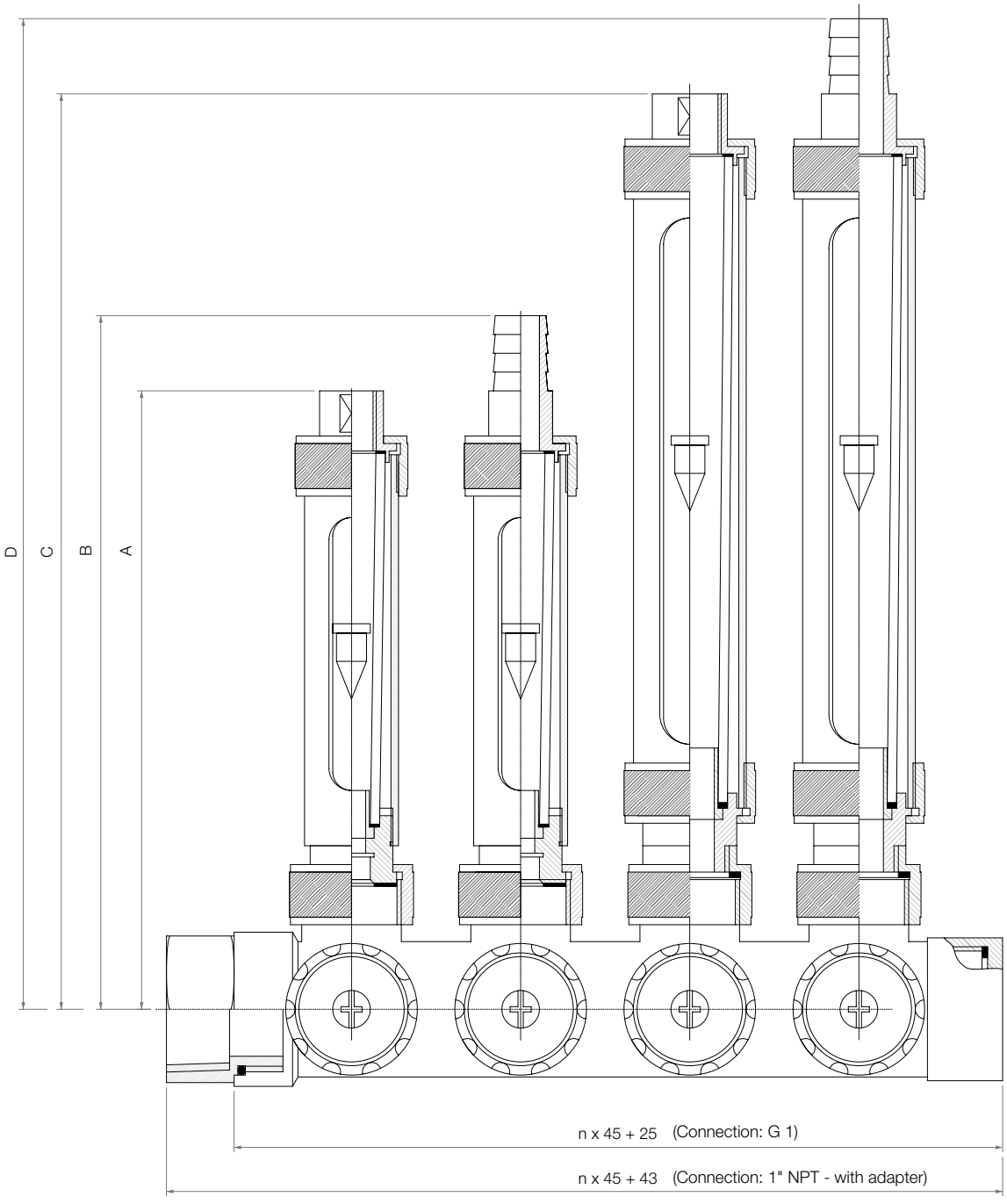
Dimensions [mm]



Size S		Size L	
A	B	C	D
170 mm	190 mm	250 mm	270 mm

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