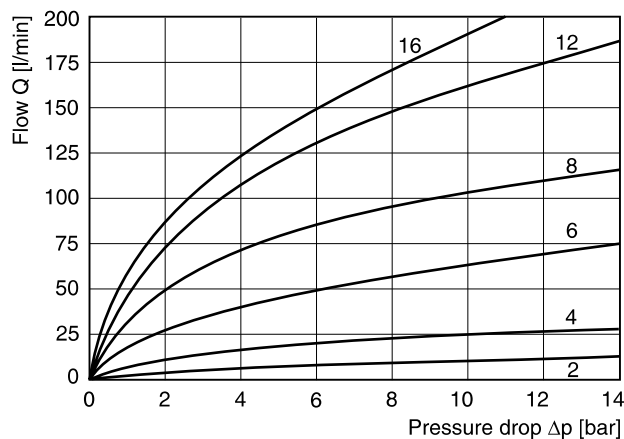
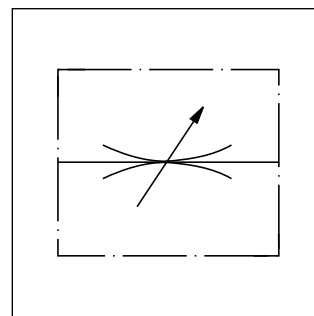
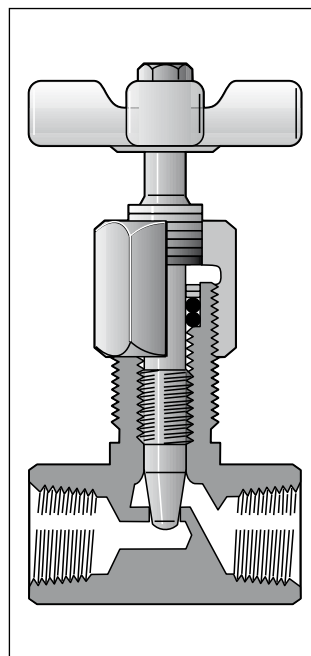


Manatrol needle valve, optional with 30° poppet, V-notch, or rectangular slot. The form of the throttle opening influences the accuracy of the flow setting, which depends on pressure and viscosity. The needle is made of stainless steel and corresponds to a ring gap in the valve body.

Δp/Q curves



All characteristic curves measured with HLP46 at 50 °C.



$$\text{Flow rate } Q \text{ [l/min]} = K_v \cdot \sqrt{\frac{\Delta p}{\gamma}}$$

K_v from the table
 Δp [bar]
 γ [kg/dm³] = specific weight of the medium
 $(\gamma \text{ for mineral oil} = 0.85 - 0.9)$

Ordering code

		Thread type	Needle valve	Size and design	Body	Needle	Seal		
Code	Thread	omit 9	NPTF BSPP					Code	Seal
omit 9	NPTF BSPP							omit V	NBR FPM
		Straight way valve code	Size	Angle valve code				Code	Needle
200	1/8							omit 2 ²⁾	Standard with 30° taper Fine due to V-notch
400	1/4	600	3/8	661				3 ²⁾	Micro-fine due to rect. slot
800	1/2								
1200	3/4	1600	1	—				Code	Body
1600	1							S	Steel
								B ¹⁾	Brass

Bold letters =
Short-term availability

¹⁾ Not for models MV 1200/1600 and design „61“

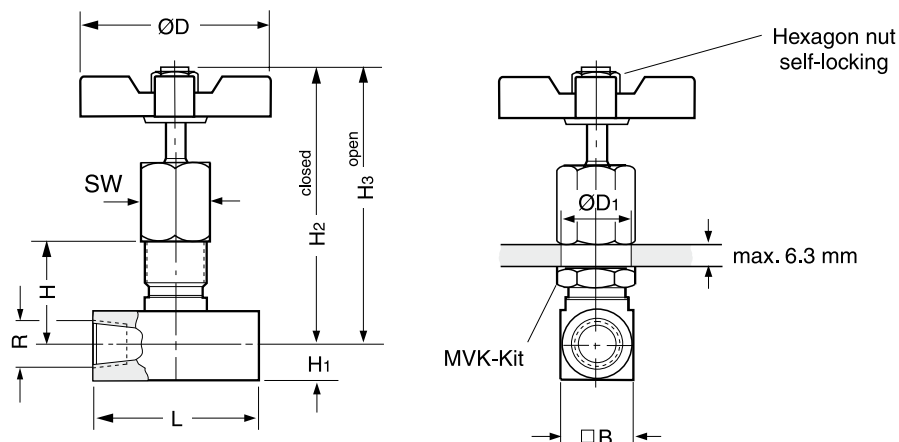
²⁾ Only for size 400

Technical data

Size	Max. pressure [bar]		Flow [l/min] Δp 10 bar	Max. cross.sect. [cm ²] Δp 10 bar	Kv factor valve open	Weight [kg]
	steel	brass				
200	350	140	11	0.07	3.5	0.13
400	350	140	25	0.14	6.3	0.31
600	350	140	65	0.37	18.5	0.54
800	350	140	105	0.55	27.5	0.95
1200	350	—	160	0.90	45.7	1.58
1600	210	—	190	1.10	54.6	1.9
Size and needle type						
200-2			7			
200-3			2			
400-2			11			

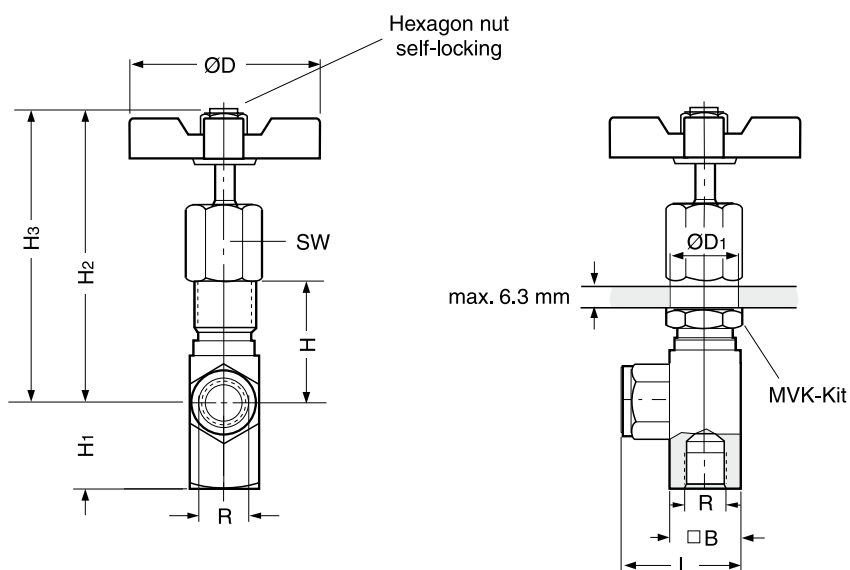
MV-9MV UK.indd CM 18.02.15

MV*00 valve with connecting thread in-line



Size	R*	H	H3	H2	H1	B	ØD1	L	ØD	SW	MVK sets
2	1/8	24	69	64	8	16	15	38	45	15.7	MVK 2
4	1/4	33	86	81	10.5	21	20	51	51	22.1	MVK 4
6	3/8	38	108	100	13	26	23	64	64	25.4	MVK 6
8	1/2	51	130	117	16	32	29	67	83	31.8	MVK 8
12	3/4	54	142	128	19	38	36	83	98	41.2	MVK 12
16	1	60	147	133	22.5	45	36	108	98	41.2	MVK 16

MV*61 angle valve with connections at 90° angle



Size	R*	H	H3	H2	H1	B	ØD1	L	ØD	SW
2	1/8	27	72	67	20.6	16	15	27	45	15.7
4	1/4	36	90	85	27.7	21	20	38	51	22.1
6	3/8	42	111	103	34.8	26	23	45	64	25.4
8	1/2	55	134	121	42.7	32	29	53	83	31.8
12	3/4	59	147	133	41.1	38	36	64	98	41.2

* Pipe thread G or NPTF