

## Throttle check valve, for water emulsions and water Type MK

Nominal sizes 10, 16, 25, 32

Series 4X

Maximum operating pressure 420 bar

Maximum flow 580 L/min



H6734

Type .-MK...

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### Features

- For subplate mounting
- For threaded connections
- 2 adjustment elements
  - Hand wheel
  - Spanner flats
- Various opening pressures, optional (see ordering details)

### Ordering details

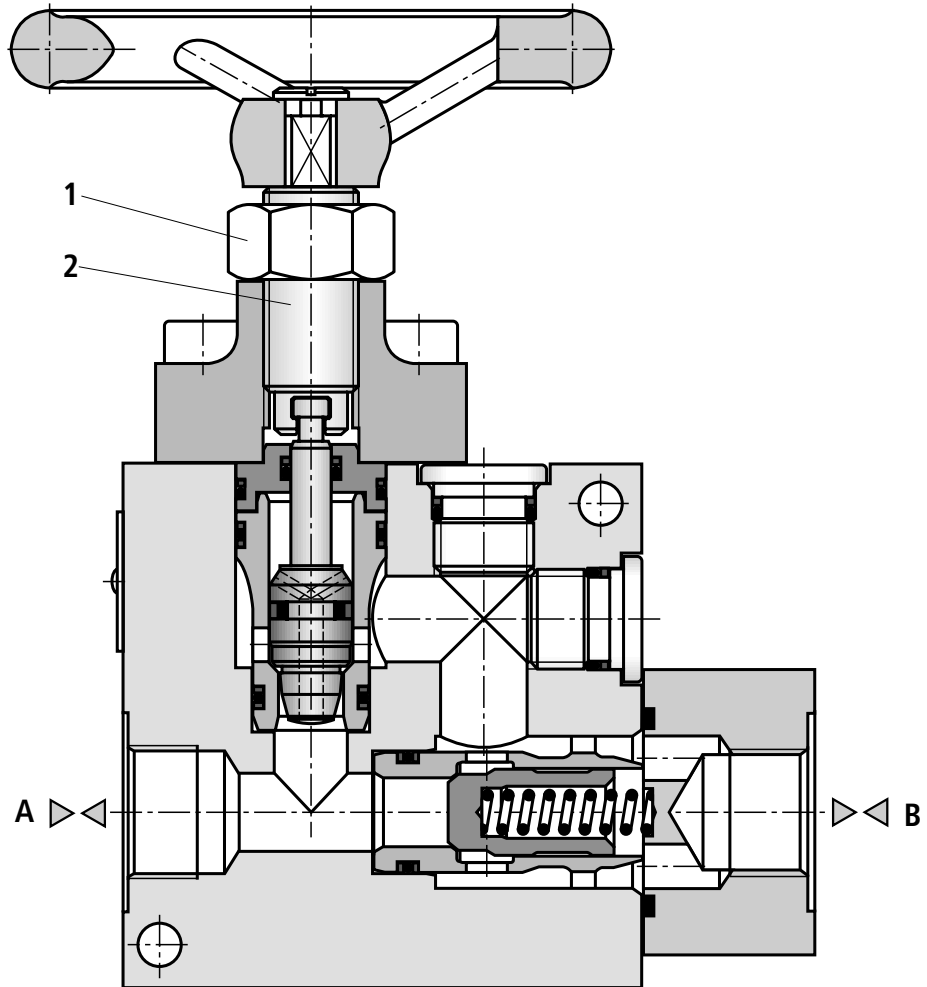
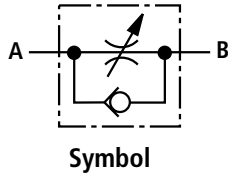
	-MK				-4X/	*
Oil-in-water emulsion	= E					Further details in clear text
Water	= W					
Throttle check valve	= MK					<b>No code =</b> NBR seals suitable for mineral oil (HL, HLP to DIN 51 524) (other seals on request)
Nominal size 10	= 10					<b>⚠ Attention!</b> The compatibility of the seals and pressure fluid has to be taken into account!
Nominal size 16	= 16					
Nominal size 25	= 25					
Nominal size 32	= 32					
Subplate mounting		= P				<b>4X =</b> Series 40 to 49 (40 to 49: unchanged installation and connection dimensions)
Threaded connections		= G				
<b>Adjustment element</b>						<b>0 =</b> Without spring <b>1 =</b> Opening pressure 0.5 bar (standard) <b>2 =</b> Opening pressure 1.5 bar <b>3 =</b> Opening pressure 3 bar
Hand wheel		= 1				
Spanner flats		= 2				

**Function, section, symbol**

The throttle check valves, type MK, are used to limit and isolate a flow in the throttling direction (B to A). In the opposite direction (A to B) there is free flow through the valve.

The flow is adjusted by firstly loosening the lock nut (1) and then by rotating the spindle (2).

Clockwise rotation → throttling.



Type -.MK ...

**Technical data** (for applications outside these parameters, please consult us!)

**General**

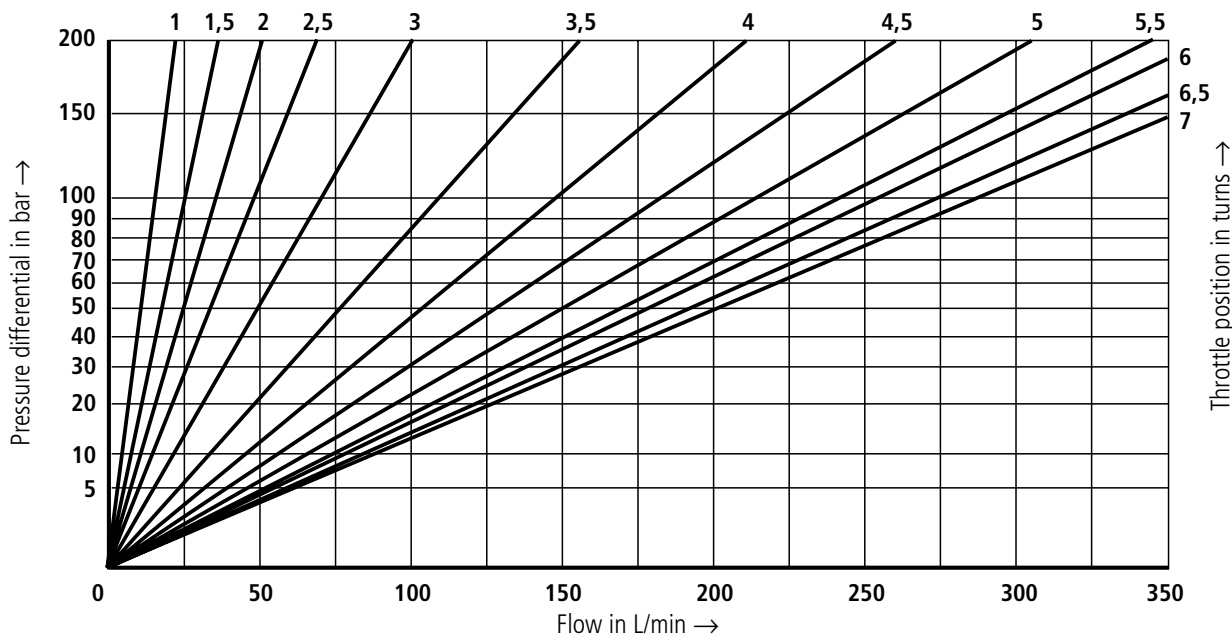
Installation		Optional
Ambient temperature	°C	- 30 to + 50

**Hydraulic**

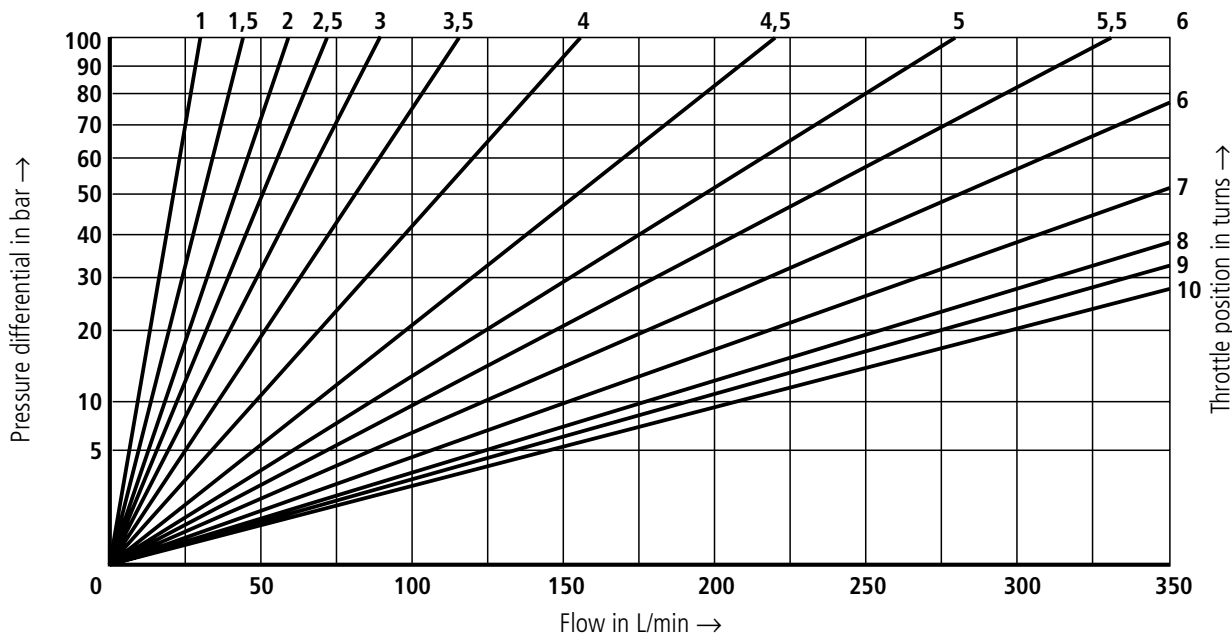
Maximum operating pressure	bar	420			
Pressure fluid		Oil-in-water emulsion; water			
Pressure fluid temperature range	°C	5 to 55			
Viscosity range	mm <sup>2</sup> /s	0.6 to 1.6			
Maximum flow	NS	10	16	25	32
	L/min	60	150	350	580
Degree of fluid contamination		Maximum permissible degree of contamination of the pressure fluid is to NAS 1638 class 9. We, therefore recommend a filter with a minimum retention rate of $\beta_{10} \geq 75$ .			

**Characteristic curves** (measured at  $\nu = 0.8 \text{ mm}^2/\text{s}$  and  $\vartheta = 40 \text{ }^\circ\text{C}$ )

**Nominal size 10**

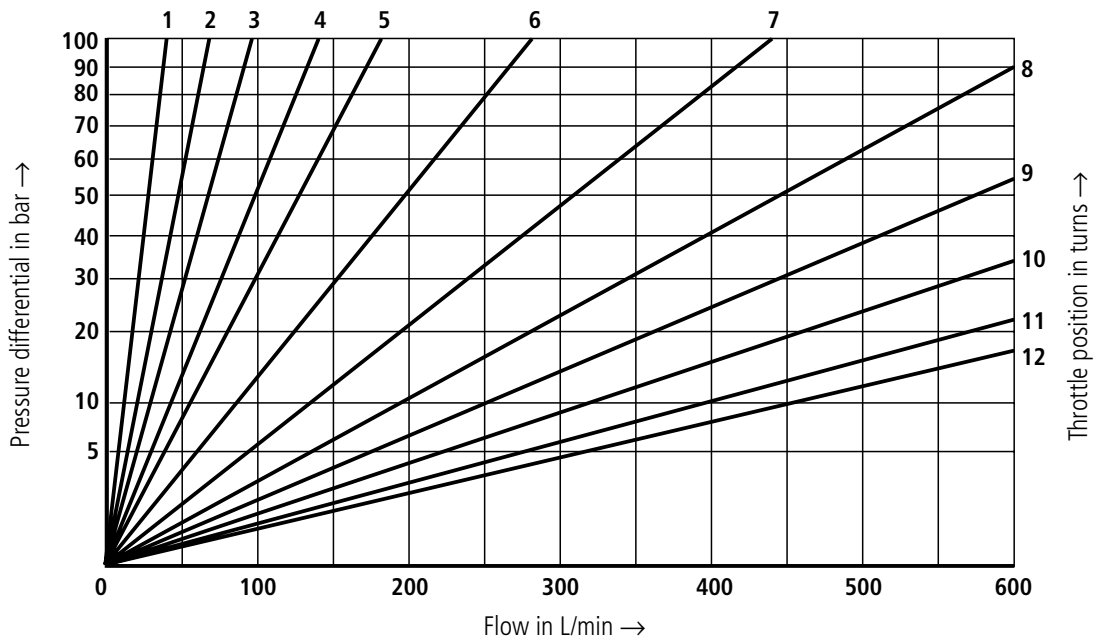


**Nominal size 16**

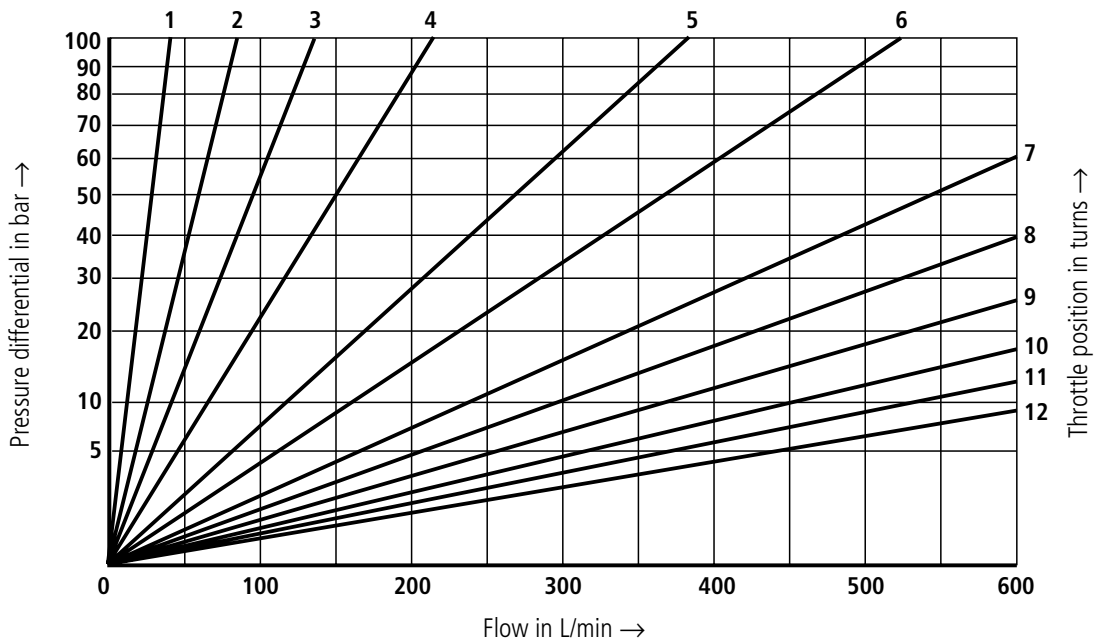


**Characteristic curves** (measured at  $\nu = 0.8 \text{ mm}^2/\text{s}$  and  $\vartheta = 40 \text{ }^\circ\text{C}$ )

**Nominal size 25**

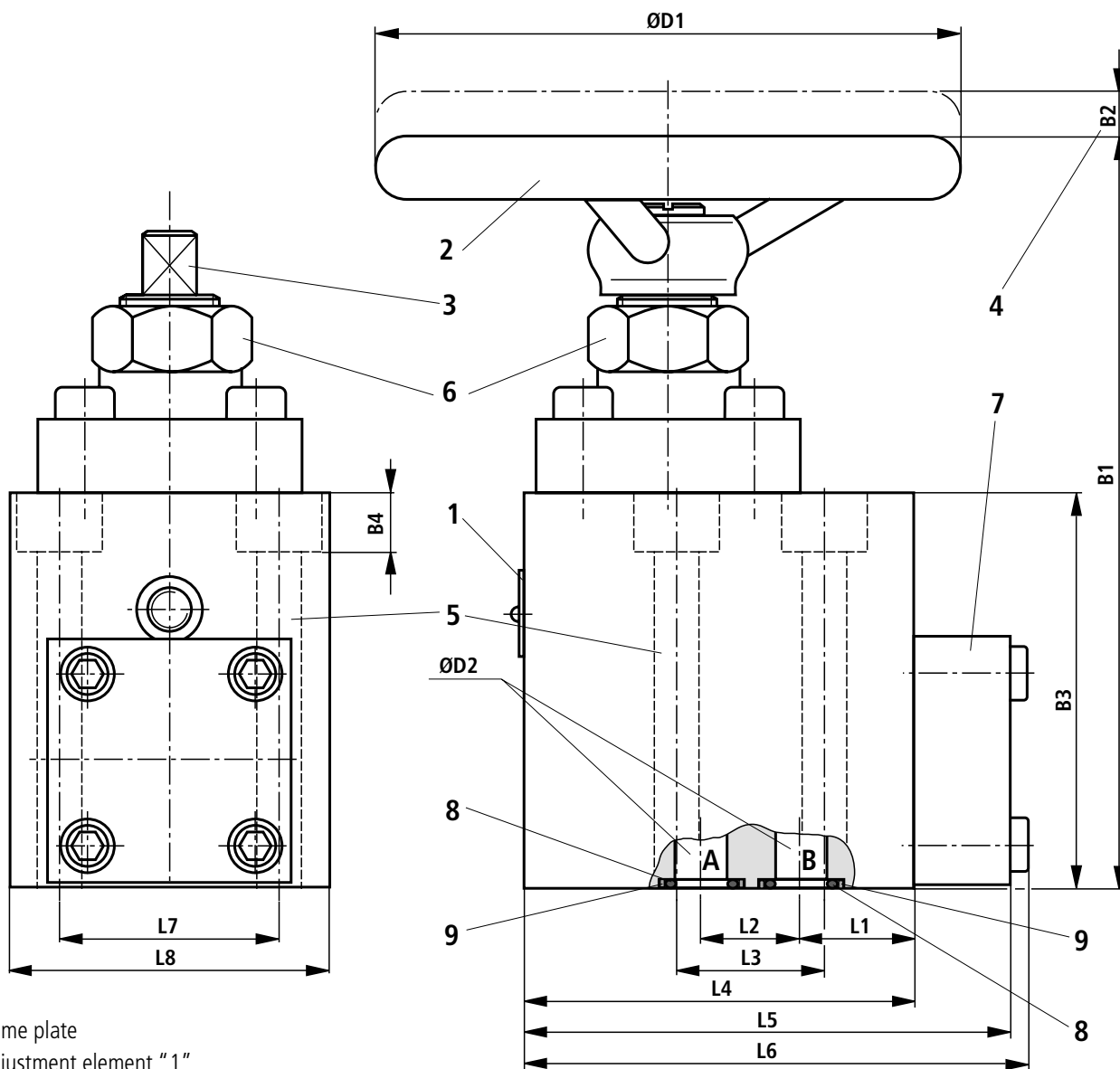


**Nominal size 32**



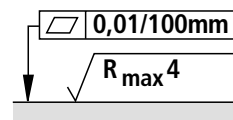
**Unit dimensions:** for subplate mounting

(Dimensions in mm)



- 1 Name plate
- 2 Adjustment element "1"
- 3 Adjustment element "2"
- 4 Stroke (see dimension table below)
- 5 Valve fixing holes
- 6 Lock nut (see dimension table below)
- 7 Check valve
- 8 2 x O-rings (see table below)
- 9 2 x back-up rings (see table below)

**Valve fixing screws**  
(see dimension table below)  
must be ordered separately.



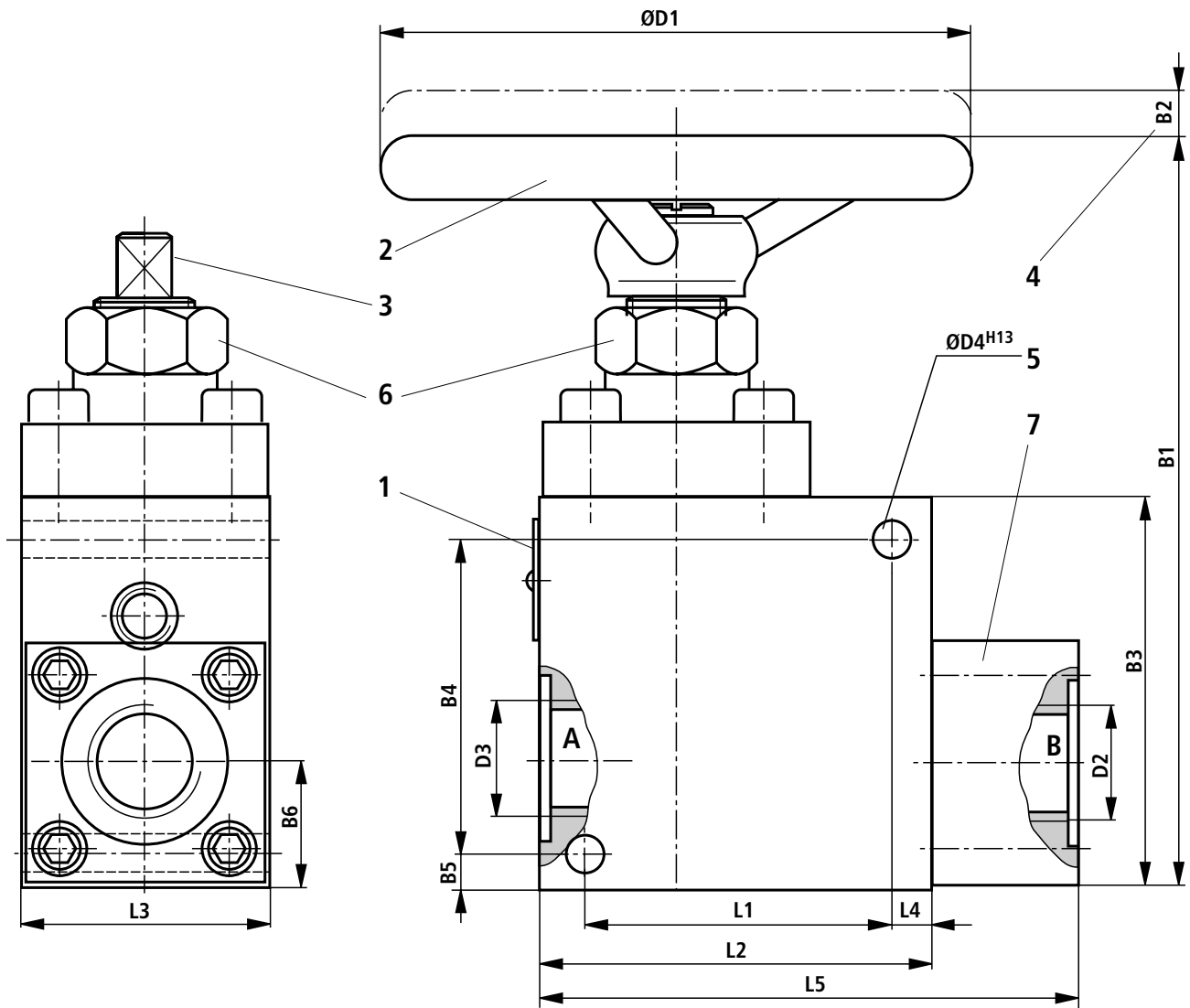
Required surface finish of mating piece

NS	L1	L2	L3	L4	L5	L6	L7	L8	B1	B2	B3	B4	ØD1	ØD2	Pos.6
10	30	20	30	85	105	113	46	66	184	11	92	18	125	10	30 A/F
16	34	30	40	110	135	145	65	87	203	16	110	20	125	16	30 A/F
25	44	40	50	140	170	186	85	113	270	20	140	25	200	25	36 A/F
32	52	50	60	165	195	211	100	135	295	22	165	21.5	200	32	36 A/F

NS	Material No. seal kit NBR seals	4 off valve fixing screws DIN 912-10.9	M <sub>A</sub> in Nm	Dimensions	
				O-ring	Back-up ring
10	00310948	M10 x 90	75	12.37 x 2.62	17.1/18.2 x 2.4
16	00310949	M12 x 110	130	17.12 x 2.62	21.8/23.2 x 2.4
25	00310954	M16 x 130	310	26.57 x 3.53	33.2/34.6 x 3.1
32	00310955	M20 x 170	620	37.69 x 3.53	44.2/46.1 x 3.1

**Unit dimensions:** for threaded connections

(Dimensions in mm)



- 1 Name plate
- 2 Adjustment element "1"
- 3 Adjustment element "2"
- 4 Stroke (see dimension table below)
- 5 Valve fixing holes
- 6 Lock nut (see dimension table below)
- 7 Check valve

NS	Material No. – seal kit NBR seals
10	00310948
16	00310949
25	00310954
32	00310955

NS	L1	L2	L3	L4	L5	B1	B2	B3	B4	B5	B6	ØD1	D2	D3	ØD4 <sup>H13</sup>	Pos. 6
10	69	85	57	8	115	184	11	92	76	8	29	125	G 1/2	6.6	30 A/F	
16	92	110	67	9	145	203	16	110	92	9	37	125	G 3/4	9	30 A/F	
25	120	140	95	10	185	270	20	140	120	10	46	200	G 1 1/4	11	36 A/F	
32	135	165	104	15	215	295	22	165	135	15	53	200	G 1 1/2	14	36 A/F	

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