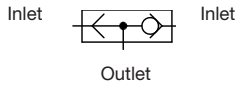
Shuttle valves type WV and WVC

Valves for pipe connection
screw-in valves

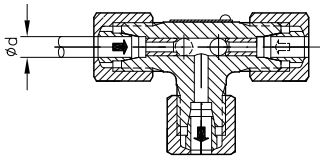
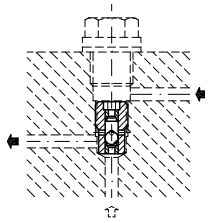
Pressure p_{max} = 700 bar
Flow Q_{max} = 125 lpm

1. General information

The shuttle valve is a stop valve with two blockable inlets and one outlet. The inlet side with the higher pressure is connected to the outlet and the other inlet is blocked (DIN ISO 1219-1). The function is automatic.



2. Available versions, main data

Connection manner	Coding	∅d [1] (mm)	Pressure p_{max} (bar) [2]	Flow Q_{max} (lpm)	Mass (weight) approx. (kg)	Schematic sectional drawing
For pipe connection	**WV 6-S**	6	700	6	120	
	WV 8-S	8		15	170	
	WV 10-S	10	500	25	230	
	WV 12-S	12		40	290	
	WV 14-S	14		60	320	
	WV 16-S	16		100	390	
	WV 18-L	18	315	125	350	
Screw-in valve	**WVC 1**	---	315	6	7	
	WVC 11 with PTFE threaded seal	---				

[1] Precesion tube, seamless, DIN 2391 and 1629, Sheet 4
[2] mechanical joint properly mounted

3. Additional data

Design	Seated ball valve
Installation position	Any, freely suspended in the pipe system (WV..) or screwed into a manifold (WVC..)
Pipe connection	In the case of WV, via cutting ring fittings. The manufacturer's assembly instructions must be observed. e.g. ERMETO
Static overload capacity	> 2 x p_{max} Burst pressure: WV 6 ... WV 10 > 2000 bar, WV 12 ... WV 16 > 1600 bar, WV 18 > 1000 bar
Pressure fluid	Hydraulic oil conforming DIN 51524 part 1 to 3: ISO VG 10 to 68 conforming DIN 51519. Viscosity limits: min. approx. 4, max. approx. 1500 mm²/sec; opt. operation: WV 6-S and WVC.. approx. 10 ... 300 mm²/sec WV 8-S to WV 16-S approx. 10 ... 500 mm²/sec A greater increase in the flow resistance can be expected for viscosities exceeding 300 mm²/sec in the case of WV 6-(8)S and WVC.. and at viscosities over 500 mm²/sec in the case of WV 8-S and WV 10- S. Also suitable for biological degradable pressure fluids types HEPG (Polyalkylenglycol) and HEES (Synth. Ester) at service temperatures up to approx. +70°C.
Temperature	Ambient: approx. -40 ... +80°C; Fluid: -25 ... +80°C, Note the viscosity range! Permissible temperature during start: -40°C (Note start-viscosity!), as long as the service temperature is at least 20K higher for the following operation. Biological degradable pressure fluids: Note manufacturer's specifications. By consideration of the compatibility with seal material not over +70°C.

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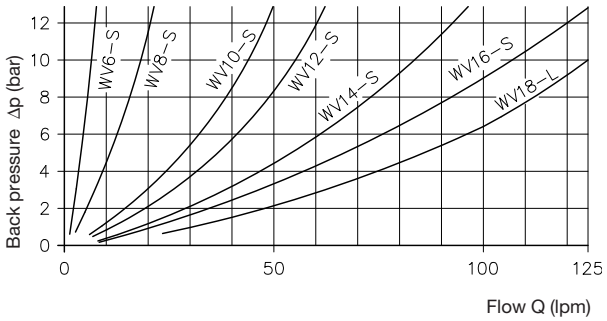
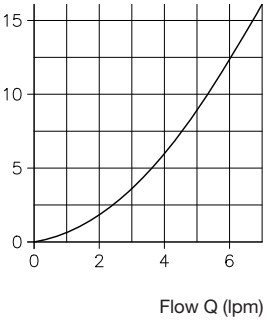
Δp-Q curve

Oil viscosity during the measurement 65 mm²/sec

Type WV 6-S to WV 16-S



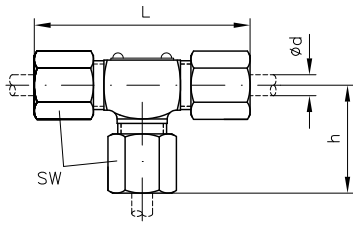
Type WVC 1 and WVC 11



4. Unit dimensions

All dimensions are in mm and subject to change without notice !

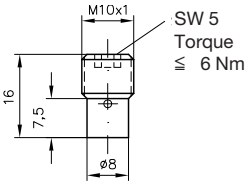
Type WV 6-S to WV 18-L



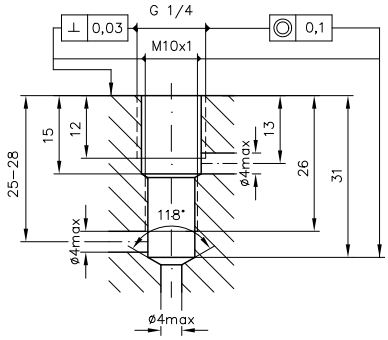
SW = a/f

Type	L	h	Ød	SW
WV 6-S	62	31	6	17
WV 8-S	64	32	8	19
WV 10-S	68	34	10	22
WV 12-S	76	38	12	24
WV 14-S	80	40	14	27
WV 16-S	86	43	16	30
WV 18-L	80	40	18	32

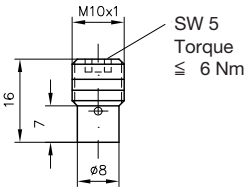
Type WVC 1



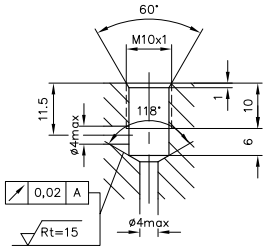
For mounting hole of customer furnished manifolds, see schematic drawing in sect. 2.



Type WVC 11

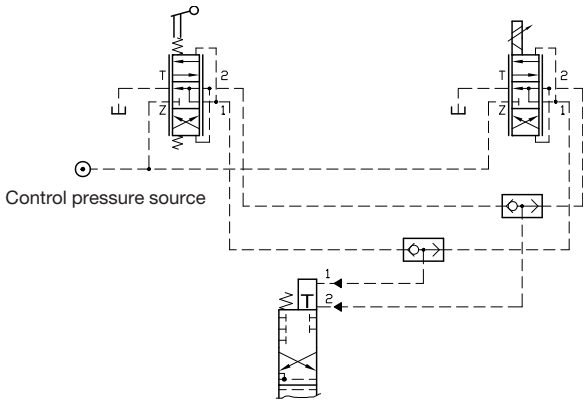


Mounting hole



5. Application example

Combined remote control of prop. directional spool valves (e.g. type PSL and PSV acc. to D 7700 ++) via pressure reducing valves type FB and KFB acc. to D 6600.



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