

Sequence valves with check valve type VR

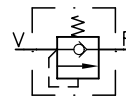
Pressure valves influence the pressure within a hydraulic system. The type illustrated below is a sequence valve which generates a constant pressure difference between inlet and outlet of the flow. The flow in opposite direction (reflow) is unhindered via a by-pass check valve. This valve shows minor leakage like other spool valves in flow direction V → F. They are widely used as e.g. drop safety device for fork lift trucks, safeguarding the lifting cylinder during lowering to prevent continued travel if the fork accidentally gets caught (accident protection) or preventing undesired oscillations by increasing the back pressure when used as sequence valve in return pipes.



Nomenclature:	Sequence valve
Design:	Screw-in valve Combination with housing for pipe connection
Adjustability:	Fixed (non-adjustable)
P_{max}:	315 bar
Δp_{max}:	15 bar
Q_{max}:	120 lpm

Basic types and general parameters

Basic type and size	Flow Q _{max} (lpm)	Pre-load pressure Δp _{max} (bar) ¹⁾	Symbol
VR 1	15	3, 5, 7, 9, 12, 15	Screw-in valve
VR 2	40	3, 5, 7, 9, 12, 15	Version with housing for pipe connection
VR 3	65	3, 5, 7, 9, 12	
VR 4	120	3, 5, 7, 9, 12	



¹⁾ The selected pre-load pressure e.g. opening pressure cannot be altered

Order examples

VR 3 3 C

Sequence valve size 3, opening pressure 3 bar, screw-in valve (coding C)

VR 4 9 E

Sequence valve size 4, opening pressure 9 bar, version with housing (coding E)

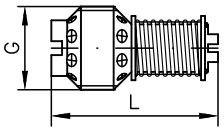
VR 1 15 G

Sequence valve size 1, opening pressure 15 bar, version with housing (coding G)

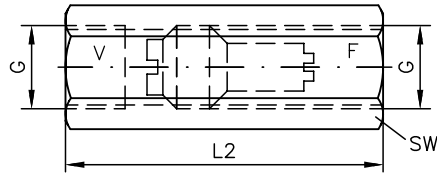
Dimensions

(see order examples)

Screw-in valve "C"

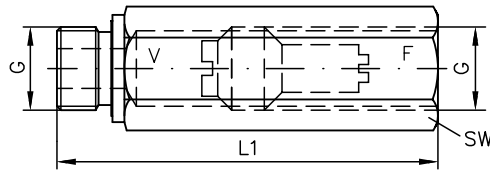


Version with housing "G"



SW = a/f

Version with housing "E"



All dimensions in mm, subject to change without notice!

Basic type and size	G (BSPP)	L	L1	L2	SW	m (g) ²⁾
VR 1	G 1/4 (A)	31	78	66	a/f 19	15/120
VR 2	G 3/8 (A)	36	82	70	a/f 22	25/160
VR 3	G 1/2 (A)	42	96	80	a/f 27	40/270
VR 4	G 3/4 (A)	54	106	100	a/f 32	80/400

²⁾ Individual valve / design with housing

Additional information

- Sequence valves type VR D 7340 • See also section "Devices for special applications"
- Pressure limiting valves type MV, SV etc. D 7000/1 (Industrial trucks, Screw-in valves and installation kits)
- Miniature pressure limiting valves MVG etc. D 3726
- Piloted pressure valves type DV D 4350 For page and section of the devices additionally listed,
- Pressure limiting valves type CMV, CSV D 7710 MV see type index