

## 2.3 Sequence valves with check valve type VR

Pre-load valves, also called sequence valves are a type of pressure control valve. They generate a largely constant pressure drop between the inlet and outlet on the valve. In the opposite direction the flow can pass freely. In the normal position the valve has minor leakage.

The sequence valve type VR is available as a screw-in valve and in a housing version for in-line installation.

The primary application area is in return lines for oscillation damping, mainly in lifting equipment, lifting platforms, handling systems and in lifting gantries as fall protection.

**Features and benefits:**

- Compact screw-in valve

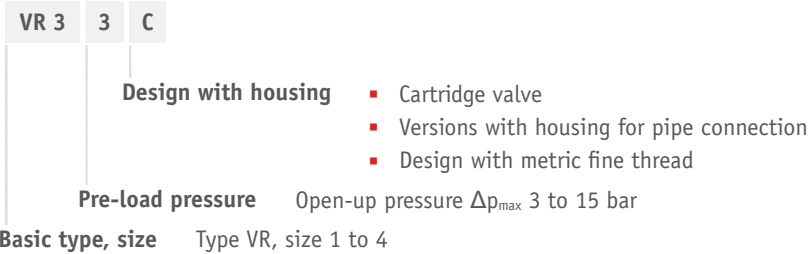
**Intended applications:**

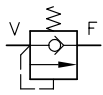
- Lifting equipment
- Lifting platforms
- Handling technology



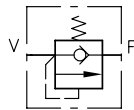
<b>Nomenclature:</b>	Sequence valve
<b>Design:</b>	Screw-in valve Combination with housing for pipe connection
<b>Adjustment:</b>	Fixed (non-adjustable)
<b>p<sub>max</sub>:</b>	315 bar
<b>Δp<sub>max</sub>:</b>	15 bar
<b>Q<sub>max</sub>:</b>	120 l/min

### Design and order coding example



**Function**
**VR**


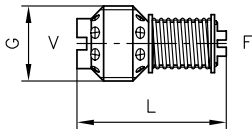
Screw-in valve



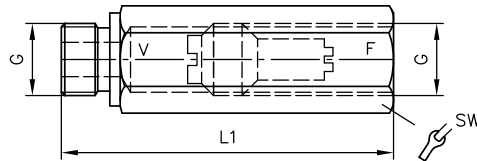
Version with housing for pipe connection

**General parameters and dimensions**
**VR 3 3 C**

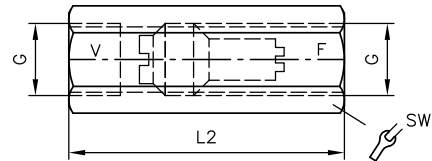
Insert valve


**VR 4 9 E**

Version with housing


**VR 1 15 G**

Version with housing



	$Q_{\max}$ [lpm]	$\Delta p_{\max}$ [bar] <sup>1)</sup>	Dimensions [mm]					m [g] <sup>2)</sup>
			G (BSPP)	L	L1	L2	SW = a/f	
<b>VR 1</b>	15	3, 5, 7, 9, 12, 15	G 1/4 (A)	31	78	66	SW 19	15/120
<b>VR 2</b>	40	3, 5, 7, 9, 12, 15	G 3/8 (A)	36	82	70	SW 22	25/160
<b>VR 3</b>	65	3, 5, 7, 9, 12	G 1/2 (A)	42	96	80	SW 27	40/270
<b>VR 4</b>	120	3, 5, 7, 9, 12	G 3/4 (A)	54	106	100	SW 32	80/400

- 1) The selected pre-load pressure e.g. opening pressure cannot be altered  
 2) Individual valve/design with housing

**Associated technical data sheets:**

- Pre-load check valve type VR: [D 7340](#)

**Similar products:**

- Pressure-limiting valves type MV, SV etc.: [Page 162](#)
- Miniature pressure-limiting valves type MVG etc.: [Page 162](#)
- Pilot-controlled pressure control valves type DV: [Page 168](#)
- Pressure-limiting valves type CMV: [Page 166](#)