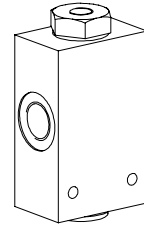


**Non-return valve
hydraulic pilot
for installation in pipes**

- $Q_{max} = 100 \text{ l/min}$
- $p_{max} = 315 \text{ bar}$


DESCRIPTION

Hydraulic piloted operated check valve with two tapped mounting holes for fixation. Valve body has a phosphated surface. The threaded bush and plug or oil blacking.

FUNCTION

In the free flow direction (1 → 2), the volume flow opens the seat cone against a spring. In the reverse direction (2 → 1), the spring holds the valve closed. If pressure builds up in connection x, this shifts the pilot control piston and opens the check valve. The required pilot control pressure is dependent on the pilot ratio.

APPLICATION

Pilot operated check valve are used to hold pressurised hydraulic cylinders, in for example lifting or tensioning devices, without any leakage. The hydraulic cylinder can only be moved into the closed direction if the valve has been opened via connection x. The directional valves required for cylinder control should have both service ports connected to the tank, to ensure operational safety when idle.

CONTENT

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TYPE CODE

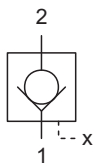
			ERV	<input type="text"/>	#	<input type="text"/>
Non-return valve piloted						
Threaded connection	G1/2"	<input type="text" value="1012"/>				
	G3/4"	<input type="text" value="1534"/>				
Design-Index (Subject to change)						

GENERAL SPECIFICATIONS

Description	Non-return valve hydraulic pilot	
Construction	Threaded body	
Mounting	Installation in pipes, mounting panels (see dimensions)	
Connection type	Connection x:	G1/4"
	Connections 1 and 2:	ERV1012 = G1/2" ERV1534 = G3/4"
Ambient temperature	-20...+50°C	
Mounting position	any	
Weight	m = 1,6 kg (ERV1012) m = 3,5 kg (ERV1534)	

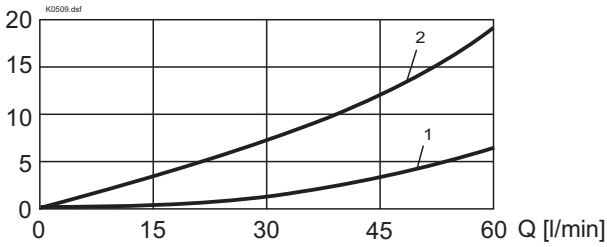
HYDRAULIC SPECIFICATIONS

Fluid	Mineral oil, other fluid on request
Contamination efficiency	ISO 4406:1999, class 20/18/14...21/19/15 (Required filtration grade $\beta_{10...25} \geq 75$) refer to data sheet 1.0-50/2
Viscosity range	12mm ² /s...320mm ² /s
Fluid temperature	-20...+70°C
Peak pressure	$p_{max} = 315 \text{ bar}$
Opening pressure	$p_o = 2,4 \text{ bar (ERV1012)}$ $p_o = 1,6 \text{ bar (ERV1534)}$
Unblocking ratio	$i = 1:4 \text{ (ERV1012)}$ $i = 1:3,48 \text{ (ERV1534)}$
Max. volume flow	$Q_{max} = 60 \text{ l/min (ERV1012)}$ $Q_{max} = 100 \text{ l/min (ERV1534)}$

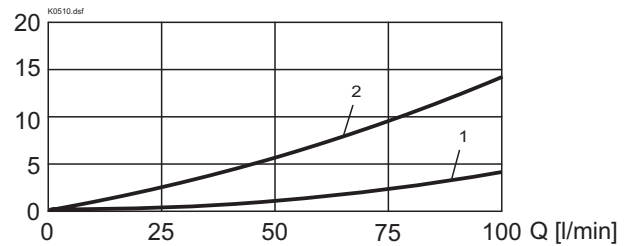
SYMBOLS


CHARACTERISTICS Oil viscosity $\nu = 30 \text{ mm}^2/\text{s}$
 $\Delta p = f(Q)$ Pressure loss - volume flow - curve
 ERV1012

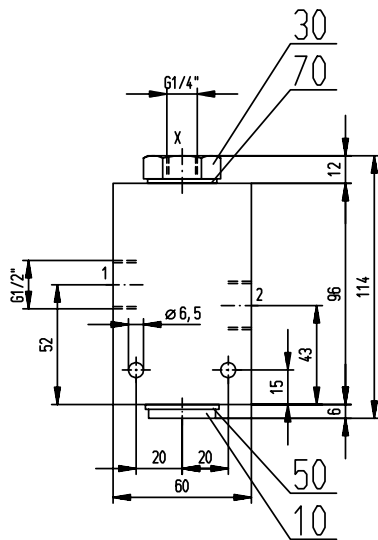
- 1 Flow direction 1 → 2
-
- 2 Flow direction 2 → 1

 Δp [bar]

 $\Delta p = f(Q)$ Pressure loss - volume flow - curve
 ERV1534

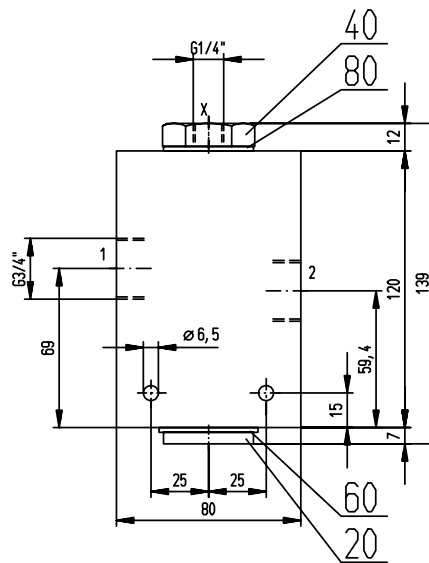
- 1 Flow direction 1 → 2
-
- 2 Flow direction 2 → 1

 Δp [bar]

DIMENSIONS

ERV1012



ERV1534


PARTS LIST

Position	Article	Description
10	239.2001	Plug M24x1,5
20	239.2002	Plug G1"
30	32.7608	Threaded bush
40	32.7604	Threaded bush
50	49.2242	Bonded seal ID 24,7x32x2
60	49.2342	Bonded seal ID 34,3x43x2
70	49.2222	Bonded seal ID 22,7x30x2
80	49.2312	Bonded seal ID 31x39x2

Technical explanation see data sheet 1.0-100E