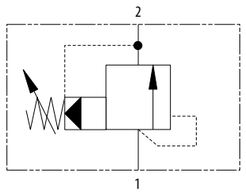
RV5-16 - Relief valve

Spool, pilot operated
300 L/min (80 USgpm) • 350 bar (5000 psi)



Operation

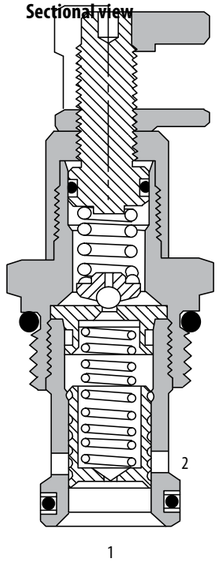
When the inlet pressure exceeds the setting of the valve, the pilot section opens, causing a small flow across the orifice in the main spool.

The subsequent pressure drop moves the spool against a light spring opening a ring of radial holes in the sleeve, allowing relief flow to tank.

Features

High accuracy of pilot operated design. Hardened working parts give long, reliable, trouble-free life. Cartridge construction for installation into your own manifold.

Sectional view



Description

To limit pressure in a system. Good for continuous duty and accurate pressure control with constant or varying flows.

Performance data

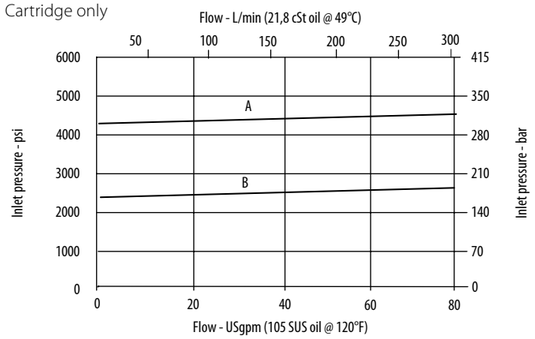
Ratings and specifications

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49° C (120° F)	
Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	300 L/min (80 USgpm)
Internal leakage, port 1 to port 2	164 cc/min (10cu in/min@350 bar (5000 psi)
Cavity	C-16--2
Standard housing materials	Aluminum or steel
Temperature range	-40° to 120˚C (-40° to 248˚F)
Fluids	All general purpose hydraulic fluids such as: MIL--H--5606, SAE 10, SAE 20, etc.
Filtration	Cleanliness Code 18/**16/13**
Weight cartridge only	0,71 kg (1.57 lbs)
Seal kits	889631 Buna--N 889635 Viton®

Viton is a registered trademark of E.I. DuPont

Pressure override curves

Cartridge only



RV5-16 - Relief valve

Spool, pilot operated
300 L/min (80 USgpm) • 350 bar (5000 psi)

Model Code

RV5 – 16 (V) – * – (S) – ** – **/ ** – 00

1 2 3 4 5 6 7 8 9

1 Function

RV5 - Relief valve

2 Size

16 - 16 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Adjustment

S - Screw
C - Cap
K - Knob

5 Valve housing material

Blank - Aluminum
S - Steel

6 Port size

Code	Portsize	Housing number		
		Aluminium light duty	Aluminium fatigue rated	Steel fatigue rated
0	Cartridge only			
6B	3/4" BSPP	02--175463	--	--
4G	1/2" BSPP	--	876716	02--175106
6G	3/4" BSPP	--	876718	02--175107
10H	SAE 10	--	876717	--
12H	SAE 12	--	866113	--
10T	SAE 10	--	--	02--175104
12T	SAE 12	566149	--	02--175105

See section J for housing.

7 Cracking pressure range

Note: Code based on pressure in psi.
30 - 34-210 bar (500-3000 psi)
60 - 70-415 bar (1000-6000 psi)

8 Setting pressure

Within ranges in 7
Blank - Normal factory setting at approximate mid-range. User requested settings in 3,45 bar (50 psi) steps, Coded as in the following examples:

10 - 70 bar (1000 psi)
10.5 - 72,4 bar (1050 psi)

Torque cartridge in housing
A - 108-122 Nm (80-90 ft. lbs)
S - 136-149 Nm (100-110 ft. lbs)

9 Special features

00 - None
(Only required if valve has special features, omitted if "00.")

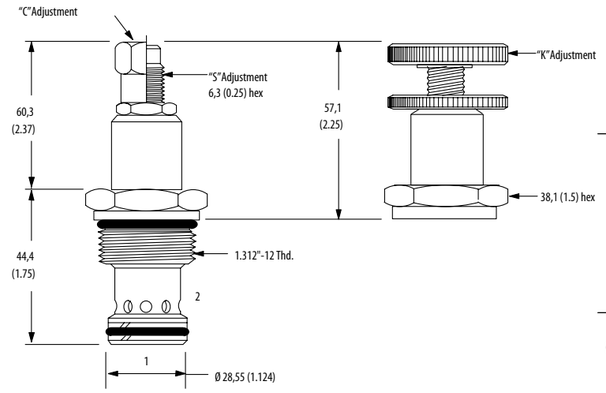
⚠ Warning

Aluminum housings can be used for pressures up to 210 bar (3000 psi). Steel housings must be used for operating pressures above 210 bar (3000 psi).

Dimensions

mm (inch)

Cartridge only



Installation drawing (Steel)

