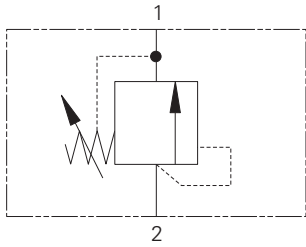


RV3-16 - Relief Valve

Poppet, direct acting, differential area
 30-303 L/min (8-80 USgpm) • 350 bar (5000 psi)



Operation

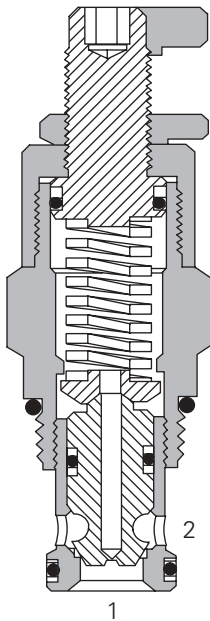
This valve remains closed from port 2 to 1 until the predetermined setting has been reached at port 2.

The pressure acts on the differential area between the seat and the seal diameter on the poppet.

Features

Hardened and ground working parts. Low leakage poppet design. High flow rate for a compact cartridge.

Sectional View



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	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	30-303 L/min (8-80 USgpm)
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	565810 Buna-N 889609 Viton®

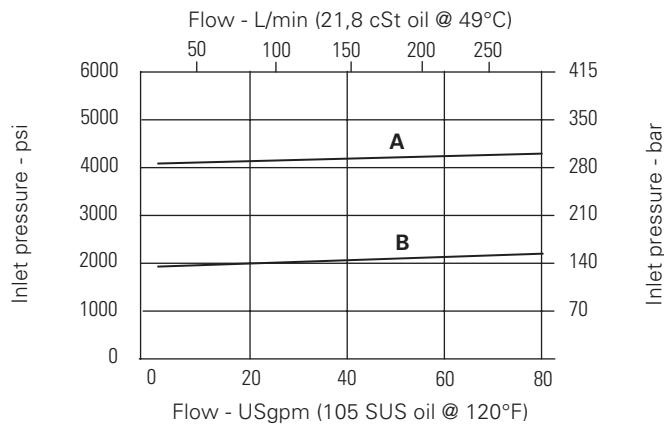
Viton is a registered trademark of E.I. DuPont

Description

This is a fast, direct acting differential area screw-in cartridge relief valve. The valve is ideal for the protection against shock pressures that can damage actuators.

Pressure Override Curves

Cartridge only

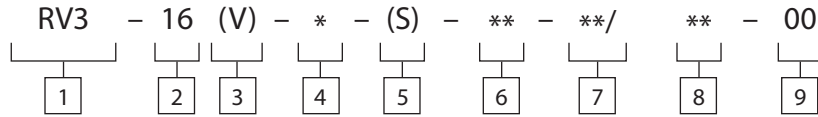


- A - 50 spring
- B - 35 spring

RV3-16 - Relief Valve

Poppet, direct acting, differential area
30-303 L/min (8-80 USgpm) • 350 bar (5000 psi)

Model Code



1 Function
RV3 - Relief valve

2 Size
16 - 16 size

3 Seal Material
Blank - Buna-N
V - Viton®

4 Adjustment
C - Cap
K - Knob
S - Screw

5 Valve Housing Material
Blank - Aluminum
S - Steel

6 Port Size
0 - Cartridge only

Code Port Size Housing Number

Code	Port Size	Aluminum Light duty	Aluminum Fatigue rated	Steel Fatigue rated
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.
5 - 3,5-35 bar (50-500 psi)
13 - 35-90 bar (500-1300 psi)
35 - 83-240 bar (1200-3500 psi)
50 - 140-350 bar (2000-5000 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)

9 Special Features
00 - None
(Only required if valve has special features, omitted if "00.")
SS - 316 Stainless Steel external components

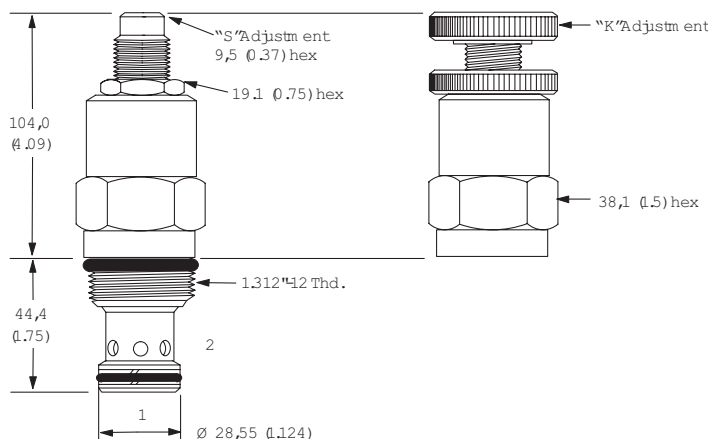


WARNING
Aluminum housings can be used for pressures up to 210 bar (3000 psi). Steel housings must be used for operating pressures above 210 bar (3000 psi).

Dimensions

mm (inch)

Cartridge Only



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

Installation Drawing (Steel)

