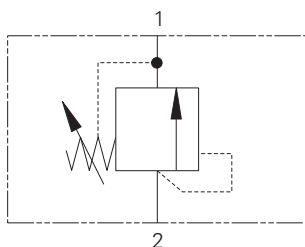


RV3-12 - Relief valve

Poppet, direct acting, differential area
132 L/min (35 USgpm) • 350 bar (5000 psi)



Operation

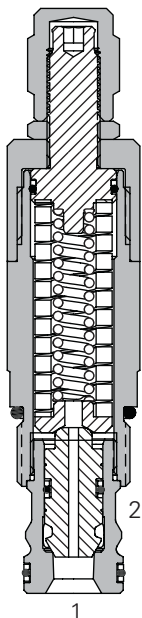
This valve remains closed from port 2 to 1 until the predetermined setting has been reached at port 2.

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 (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	132 L/min (35 USgpm)
Cracking pressure ranges	3,4-275 bar (50-4000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-12-2 or C-12-2U
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20, etc.
Filtration	Cleanliness Code 18/ 16/13
Standard housing materials	Aluminum or steel
Weight cartridge only	0,49 kg (1.08 lbs)
Seal kit	02-165889 (Buna-N) 02-165888 (Viton®)

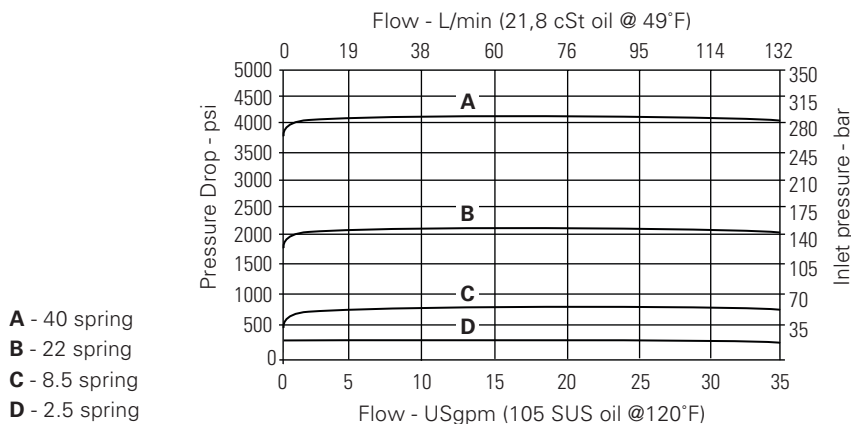
Viton is a registered trademark of E.I. DuPont

Endurance tested to 1 million cycles at full rated flow and pressure.

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 drop curves



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

RV3-12 - Relief valve

Poppet, direct acting, differential area
132 L/min (35 USgpm) • 350 bar (5000 psi)

Model code

RV3 - 12-(V) - * - (*) - * - (U) - **/ ** - ****

1 2 3 4 5 6 7 8 9 10

1 Function

RV3 - Relief valve

2 Size

12 - 12 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Adjustment

C - Cap
K - Knob
F - Factory set
S - Screw

5 Valve housing material

Omit for cartridge only

A - Aluminum
S - Steel

6 Port size

Code **Port size**

Housing number

		C-12-2 Aluminum Fatigue rated	C-12-2U Aluminum Fatigue rated	C-12-2 Steel Fatigue rated	C-12-2U Steel Fatigue rated
4G	1/2" BSPP	02-161118	02-161116	30915-1	30915-2
6G	3/4" BSPP	02-161117	02-161115	02-169665	02-162922
10T	SAE 10	02-160640	02-160641	02-169744	02-169817
12T	SAE 12	02-160644	02-160645	02-169782	02-169790

See section J for housing.

7 Cavity

Blank - Cavity without undercut
U - Cavity with undercut

8 Cracking pressure range

Note: Code based on pressure in psi.
2.5 - 3,4-17 bar (50-250 psi)
8.5 - 13-55 bar (200-850 psi)
22 - 20-150 bar (300-2200 psi)
40 - 40-275 bar (600-4000 psi)

9 Setting pressure

Within ranges in **8**
Blank - Normal factory setting at approximate mid-range.

Optional - 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)

10 Special features

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

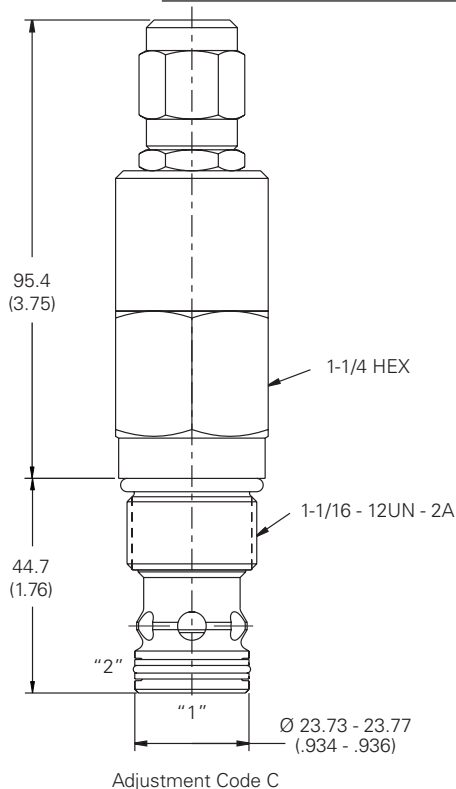
Warning

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).

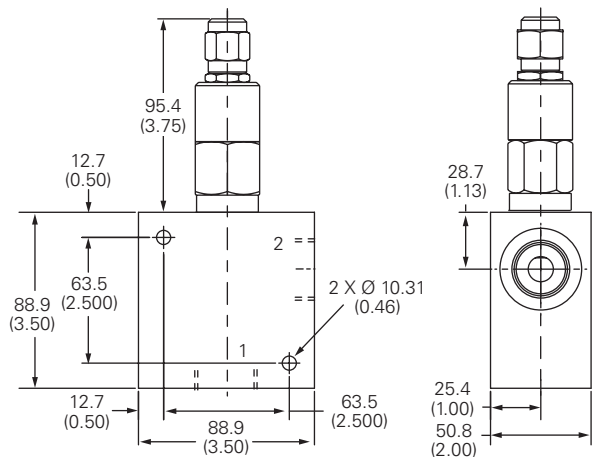
Dimensions

mm (inch)

Cartridge only



Installation drawing (Steel)



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.