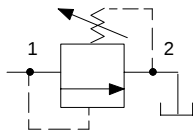


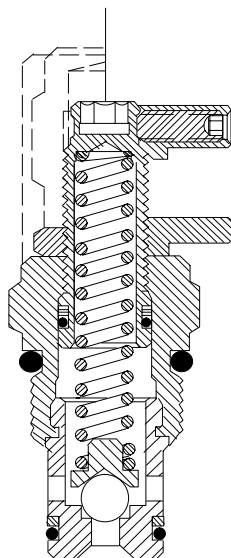
RV6-10

Relief valve

Functional Symbol



Sectional View



Description

The RV6-10 is a direct acting, ball type screw-in cartridge relief valve.

Operation

This valve remains closed from port 1 to port 2 until the predetermined setting has been reached at port 1. The poppet then unseats, allowing flow out port 2.

Ratings and specifications

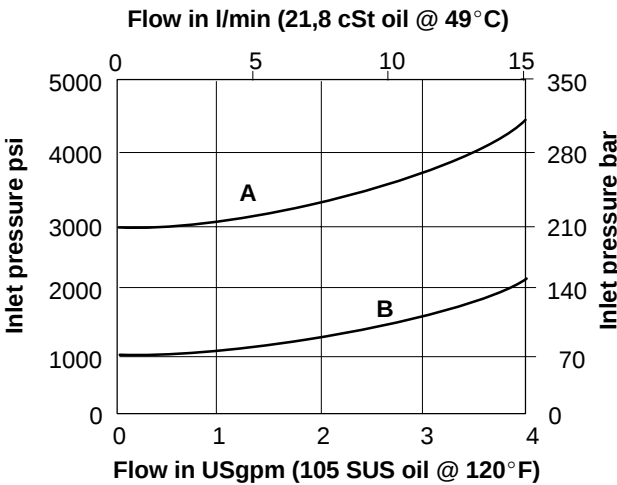
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated flow	15 l/min (4 USgpm)
Cavity	C-10-2 (See page 72)
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	0,22 kg. (0.48 lbs.)
Seal kits	565803 Buna-N 566086 Viton®

Viton is a registered trademark of E.I.DuPont

Pressure Override Curves

Cartridge only
Tank pressure = 0



A – 50 spring
B – 25 spring

RV6 - 10 (V) - * - (S) ** - ** / **

1
2
3
4
5
6
7
8

1 Function

RV6 – Relief Valve

2 Size

10 – 10 Size

3 Seals

Blank – Buna–N
V – Viton

4 Adjustment

C – Cap
K – Knob
S – Screw
T – Tamper-proof

5 Housing material

Blank – Aluminum
S – Steel

6 Port size

O – Cartridge only

Code	Port size	Housing number		
		Aluminum Light duty	Aluminum Fatigue rated	Steel Fatigue rated
3B	3/8" BSPP	02–175462	_____	_____
2G	1/4" BSPP	_____	876702	02–175102
3G	3/8" BSPP	_____	876703	02–175103
6H	SAE 6	_____	876700	_____
8H	SAE 8		876701	_____
6T	SAE 6	566151	_____	02–175100
8T	SAE 8	_____	_____	02–175101

See pages 75 and 78 for housings

7 Cracking pressure range

25 – 3,4–175 bar (50–2500 psi)
50 – 140–350 bar (2000–5000 psi)



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)

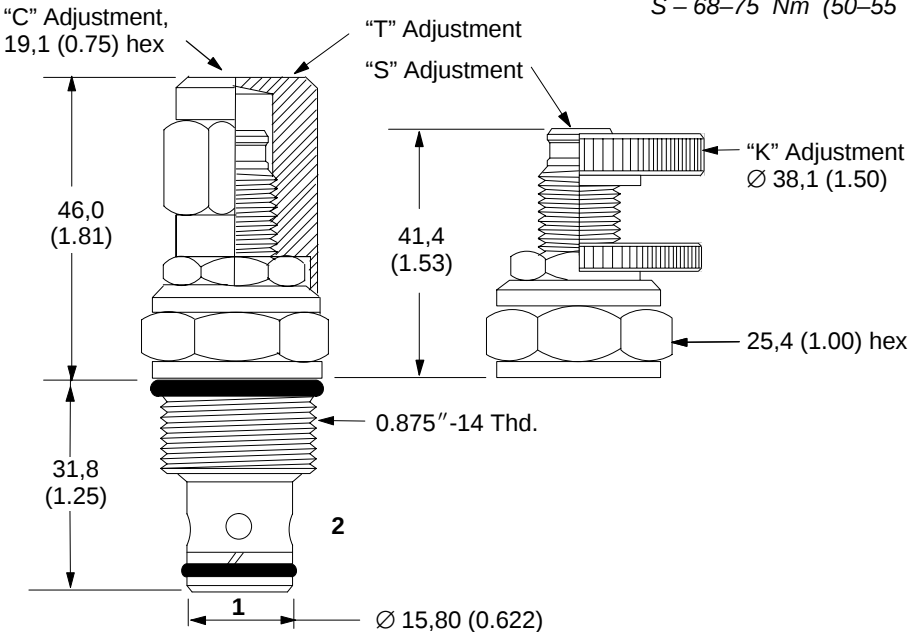
8 Factory set reduced pressure

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)

Dimensions

mm (inch)



Torque cartridge in housing
A – 47–54 Nm (35–40 lbf ft)
S – 68–75 Nm (50–55 lbf ft)