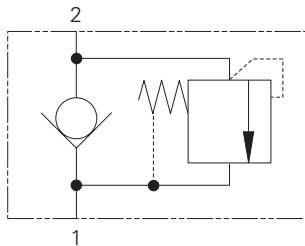


RV4-10 - Relief valve

Poppet, thermal relief with reverse flow check
 1 L/min (0.25 USgpm) relief/45 L/min (12 USgpm) check • 350 bar (5000 psi)



Operation

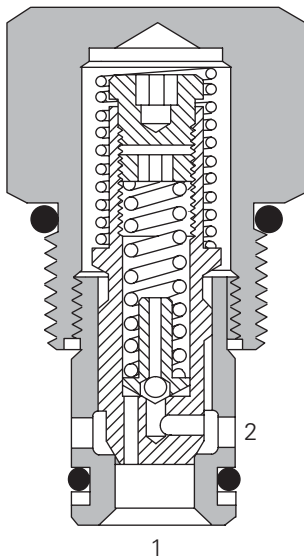
As a check valve the valve remains closed until the pressure at port 1 exceeds the 1.24 bar (18 psi) cracking pressure. The valve will hold pressure in port 2 until the setting of the thermal relief is reached.

Flow will then take place from port 2 to 1. This flow should be limited to that produced due to the thermal expansion of the oil in port 2.

Features

Very low leakage from port 1 to 2. Hardened and ground working parts. Good re-seat. Compact solution in a single 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)
Rated flow – check valve	45 L/min (12 USgpm)
– relief valve	1 L/min (0.25 USgpm)
Relief cracking pressure ranges	28 - 350 bar (400 - 5000 psi)
Check valve cracking pressure	1,24 bar (18 psi)
Reseat pressure	More than 90% of cracking pressure
Internal leakage, port 2 to port 1	0.3 mL/min (5 drops/min) at cracking pressure
Cavity	C-10-2
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	0,11 kg (0.25 lbs)
Seal kits	565803 Buna-N 566086 Viton®

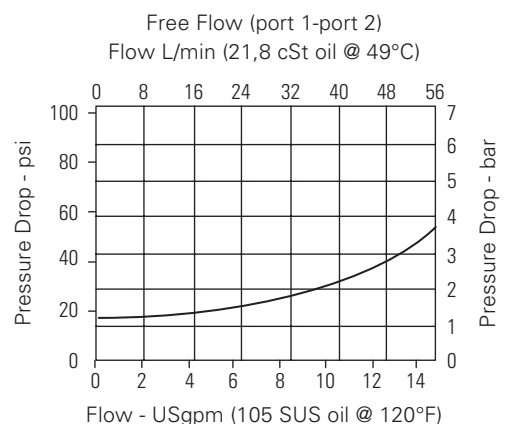
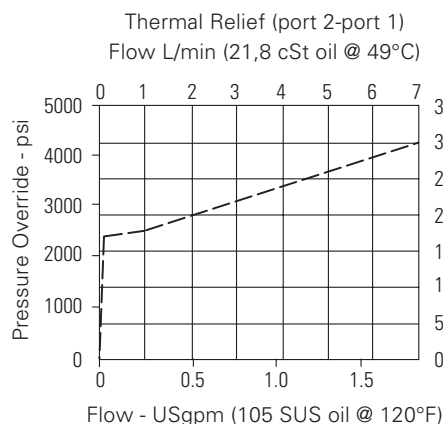
Viton is a registered trademark of E.I. DuPont

Description

This is a check valve with a built in thermal relief. It is ideal for protecting actuators from damage when ambient temperatures cause the locked in oil pressure to increase. The thermal relief is limited to 4 L/min (1 USgpm) and should not be over-flowed.

Pressure override & free flow curves

Cartridge only

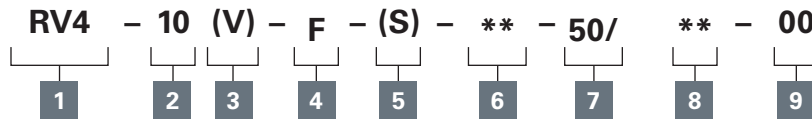


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

RV4-10 - Relief valve

Poppet, thermal relief with reverse flow check
1 L/min (0.25 USgpm) relief/45 L/min (12 USgpm) check • 350 bar (5000 psi)

Model code



1 Function

RV - Check valve with thermal relief

2 Size

10 - 10 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Adjustment

F - Factory Set

5 Valve housing material

Blank - Aluminum
S - Steel

6 Port size

Code	Port size	Housing number		
		Aluminum light duty	Aluminum fatigue rated	Steel fatigue rated
0	Cartridge only			
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 section J for housing.

7 Cracking pressure range

Note: Code based on pressure in psi.

50 - 28-350 bar (400-5000 psi)

8 Setting pressure

Within ranges in **7**
User must specify settings in 7 bar (100 psi) steps, Coded as in the following examples:

10 - 70 bar (1000 psi)

25 - 175 bar (2500 psi)

9 Special features

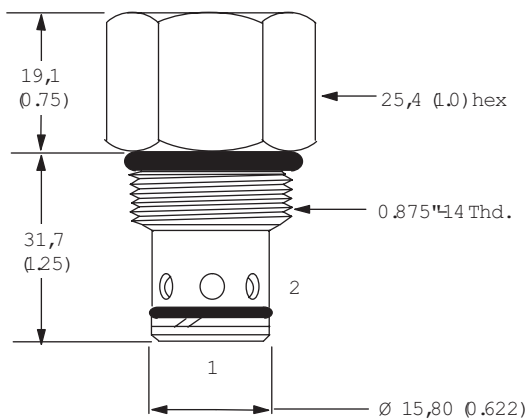
00 - None
(Only required if valve has special features, omitted if "00.")

Dimensions

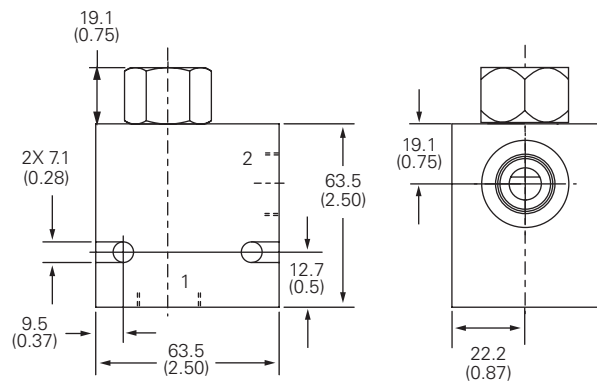
mm (inch)

Torque cartridge in housing
A - 47-54 Nm (35-40 ft. lbs)
S - 68-75 Nm (50-55 ft. lbs)

Cartridge only



Installation drawing (Steel)



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).

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