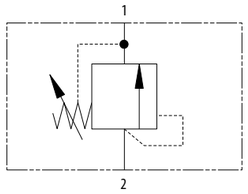
RV8-8 - Relief valve

Poppet, differential area
30 L/min (8 USgpm) • 350 bar (5000 psi)



Operation

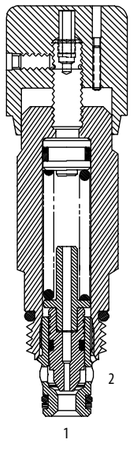
The RV8-8 remains closed until the predetermined setting is reached at port 2.

The force created by the pressure acting on the differential poppet area lifts the poppet off the seat and allows flow from port 2 to port 1.

Features

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

Sectional view



Description

The RV8-8 is a direct acting differential area, poppet type, screw-in cartridge relief valve.

Performance data

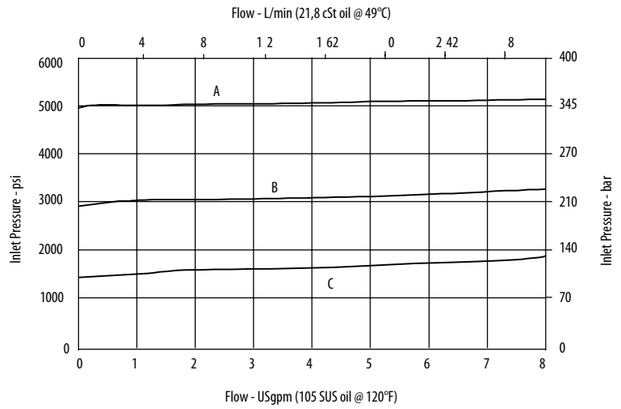
Ratings and specifications

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)	280 bar (4000 psi)
Rated flow	30 L/min (8 USgpm)
Cracking pressure ranges	15: 3,4-100 bar (50-1500 psi) 30: 70-210 bar (1000-3000 psi) 50: 70-350 bar (1000-5000 psi)
Internal leakage, port 2 to port 1	Less than 5 drops/min @ 80% of cracking pressure
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-8-2
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20 etc.
Filtration	Cleanliness code 18/**16/13**
Housing material (standard)	Aluminum or steel
Weight including coil	0,20 kg (0.43 lbs)
Seal kit	02-165874 (Buna-N), 02-165877 (Viton®)

Viton is a registered trademark of E.I. DuPont

Pressure drop

Cartridge only



A - 50 spring
B - 30 spring
C - 15 spring

RV8-8 - Relief valve

Poppet, differential area
30 L/min (8 USgpm) • 350 bar (5000 psi)

Model code

RV8 – 8 (V) – * – (*) – ** – ** / ** – 00

1 2 3 4 5 6 7 8 9

1 Function

RV8- Relief valve

2 Size

8 - 8 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Adjustment

C - Cap
K - Knob
S - Screw

5 Valve housing material

Omit for cartridge only
S - Steel
A - Aluminum

For valve dimensions with manual override option installed see page A-980.

6 Port size

Code	Portsize	Housing number	
		Aluminum Fatigue rated	Steel Fatigue rated
0	Cartridge only		
4T	SAE 4	02-160730	02-160736
6T	SAE 6	02-160731	02-160737
8T	SAE 8	02-160732	02-160738
2G	1/4" BSPP	02-160727	02-160733
3G	3/8" BSPP	02-160728	02-160734

*Light duty housing.
See section J for housing details.

7 Cracking pressure ranges

15 - 3,4-100 bar (50-1500 psi)
30 - 70-210 bar (1000-3000 psi)
50 - 70-350 bar (1000-5000 psi)

8 Pressure setting

Optional - Specify in 100 psi increments. If not specified, set at:

15 - 52 bar (750 psi)
30 - 100 bar (1500 psi)
50 - 175 bar (25000 psi)

9 Special features

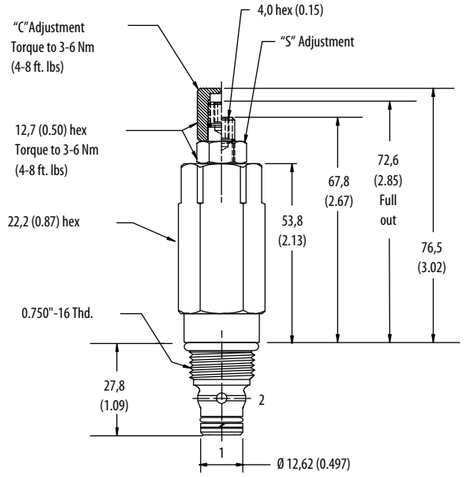
00 - None
(Only required if valve has special features, omitted if "00.")
Note: Use J series, 23 W coils with this solenoid valve.

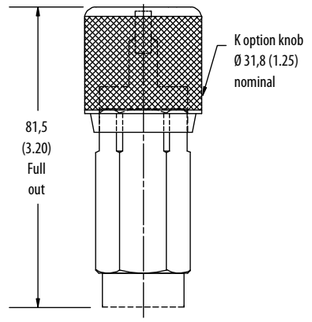
Dimensions

mm (inch)

Torque cartridge in aluminum or steel housing 34-41 Nm (25-30 ft lbs)

Cartridge only





⚠ 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).

⚠ Warning

Maintain 5-8 Nm (4-6 ft lbs) maximum torque on valve tube nut. Over tightening may cause valve failure.