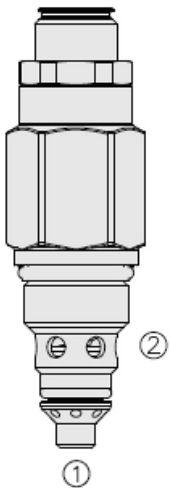




Overview



Overview

The RVD58-20 is a screw-in, cartridge style, direct acting poppet type relief valve intended for use as a pressure limiting device for common hydraulic circuit protection.

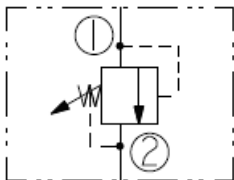
Operation

The RVD58-20 blocks flow from port 1 to port 2 until sufficient pressure is present at port 1 to force the poppet off its seat. The cartridge offers fast response to load changes in circuits requiring low hysteresis, low pressure rise, and low internal leakage.

Features

- Compact and economical
- Dynamic response to pressure surges
- Hardened poppet and cage for long life
- Optional spring ranges to 350 bar (5076 psi)
- EEmbossed QR code provides serial number
- High durometer Buna and Fluorocarbon seals
- Optional cap

Symbol



Ratings

Pressure Ratings

Pressure rating	350 bar (5076 psi)	- Note: At port 1
	207 bar (3000 psi)	- Note: At port 2
Proof pressure	413 bar (5990 psi)	- Note: Port 1
Burst pressure	1379 bar (20,000 psi)	- Note: Port 1
Crack pressure defined	pressure evident at at 0.95 lpm (0.25 gpm)	
Reseat pressure	Nominal 90% of crack pressure	

Flow Ratings

Flow rating	37.9 lpm (10 gpm)	- Note: Port 1 to 2 at maximum pressure
Maximum internal leakage	0.25 ml/min (5 drops)	- Note: at maximum pressure

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- Note: With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- Note: With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- Note: With polyurethane seals
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	
Storage temperature	-40 to 70 °C (-40 to 160 °F)	

Environmental Ratings

Corrosion protection	230 H salt spray per ASTM B117
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Operating Parameters

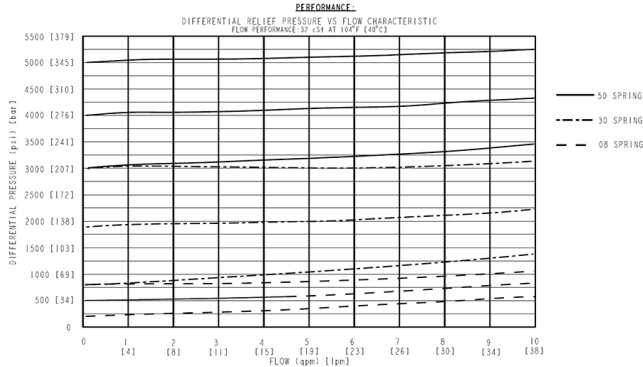
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



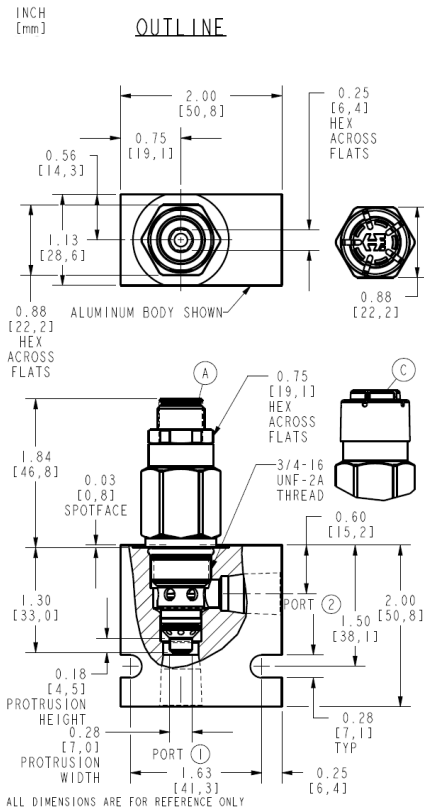
Properties

Unit weight	0.13 kg (0.28 lb)	
Internal wetted surface area	89 cm ² (113.8 in ²)	
Pressure change per adjuster turn	37 bar (536 psi)	- Note: Spring code 30
	65.5 bar (949 psi)	- Note: Spring code 50
	9.5 bar (138 psi)	- Note: Spring code 80

Performance



Dimensions



Installation Specifications

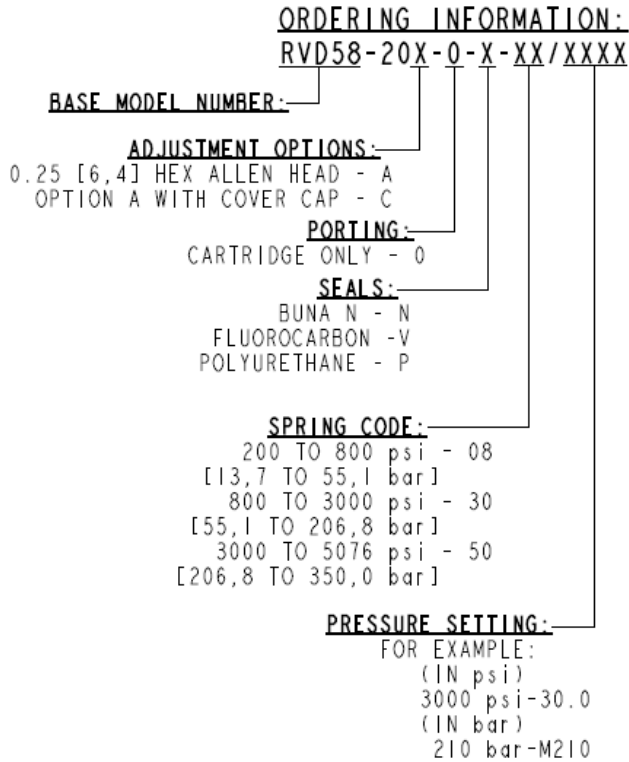
Cavity	VC08-2B
Cartridge installation torque	44.7 to 50.2 N-m (33 to 37 ft-lb)
Adjuster torque	17.6 N-m (13 ft-lb) - Note: Maximum torque to apply when backing out adjuster
Adjuster locknut torque	13.6 ±1 N-m (10 ±1 ft-lb)
Orientation restriction	None



Accessories

Seal kit	SK08-2HN-O	- Note: Nitrile
	SK08-2HV-O	- Note: Fluorocarbon
	SK08-2P-O	- Note: Polyurethane
Black Tamper-proof Cap	Part No. 4618450	

Order Code



Model Options

RVD58-20F-H-J-R/S

F Adjustment Option

CODE	DESCRIPTION
A	1/4 in Allen Head

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8
8TD	Ductile Iron SAE 8
3B	Aluminum BSPP 3/8" (3)
3BD	Ductile Iron BSPP 3/8" (3)

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane

R Spring



CODE	DESCRIPTION
8	14 to 55 bar (200 to 800 psi) Spring Range
30	55 to 207 bar (800 to 3000 psi) Spring Range
50	207 to 350 bar (3000 to 5075 psi) Spring Range

S Setting

CODE	DESCRIPTION
MXXX	Spring Setting in XXX bar
XX	Spring Setting in XX psi (x 100)