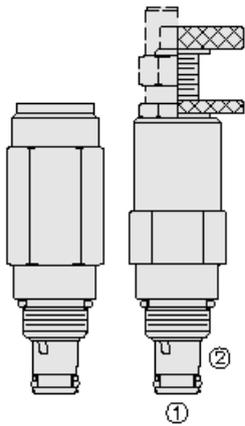
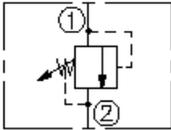




Overview



Symbol



Description

RV08-29X is a screw in, cartridge style, direct acting, poppet type, hydraulic relief valve intended for control of pressure in low flow that control pilot operating valves.

Operation

RV08-29X blocks flow from port 1 to port 2 until sufficient pressure is present at port 1 to force the spring opposed poppet from its seat.

Features

- Adjustments cannot be backed out of the valve.
- Variety of pressure adjustment options including non-adjustable factory preset..
- Hardened poppet and cage for long life.
- Optional spring ranges to 241 bar (3500 psi).
- Smooth response to pressure surges.
- Industry common cavity.
- Compact size.

Notes

Supersession: Existing and new applications.

[RVD58-20](#) is our best-in-class relief valve and can functionally replace this valve in most applications. We strongly encourage you to consider this newer alternative.

Considerations:

- Comparable pressure and flow ratings
- Comparable response rate
- Better pressure rise characteristics
- Smaller size
- No dynamic seal
- Competitive cost
- VC08-2B cavity variation is required. Some manifolds may allow drop-in replacement.
- Assistance is available to evaluate your application

Ratings

Pressure Ratings

Pressure rating	241 bar (3500 psi)
Proof pressure	482.6 bar (7000 psi)
Burst pressure	896.3 bar (16000 psi)
Relief pressure defined	Pressure evident at 0.95 lpm (0.25 gpm)
Reseat pressure	Nominal 80% of crack pressure

Flow Ratings

Flow rating	1.9 lpm (0.5 gpm)	- Note: At max pressure
Maximum internal leakage	3 ml/min (0.18 in ³ /min)	- Note: Max to 80% of nominal setting

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
	-54 to 107 °C (-65 to 225 °F)	- Note: With urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

Operating Parameters

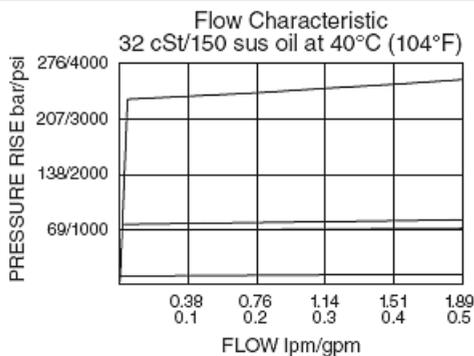
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



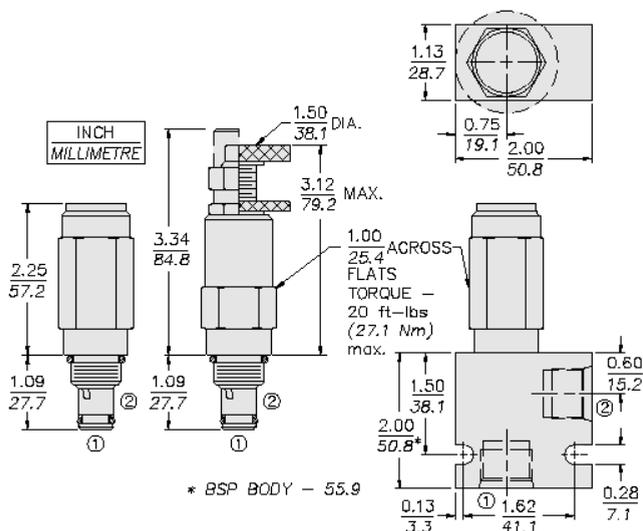
Properties

Unit weight	0.024 kg (0.52 lb)	- Note: RV08-29A
	0.29 kg (0.64 lb)	- Note: RV08-29C RV08-29L
	0.26 kg (0.57 lb)	- Note: RV08-29B
	0.22 kg (0.48 lb)	- Note: RV08-29F RV08-29H
Internal wetted surface area	145 cm ² (22.4 in ²)	- Note: RV08-29A RV08-29B RV08-29C RV08-29L
	135 cm ² (21.0 in ²)	- Note: RV08-29F RV08-29H

Performance



Dimensions



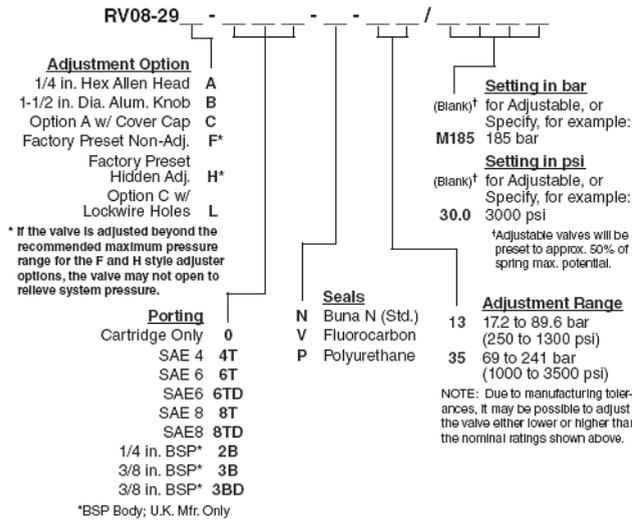
Installation Specifications

Cavity	VC08-2
Cartridge installation torque	25.8 to 28.5 N-m (19 to 21 ft-lb)
H style plug torque	34 to 36.7 N-m (25 to 27 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK08-2X-B	- Note: X=seal options
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Order Code



Model Options

RV08-29F-H-J-R/S

F Adjustment Option

CODE	DESCRIPTION
A	1/4" Hex Allen Head
B	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob
C	1/4" Hex Allen Head with Cover Cap
F	Factory Preset Non-Adjustable
H	Factory Preset Hidden Adjustment
L	1/4" Hex Allen Head with Cover Cap and Lockwire Holes

H Line Body

CODE	DESCRIPTION
0	No Body
4T	Aluminum SAE 4
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
2B	Aluminum BSPP 1/4" (2)
3B	Aluminum BSPP 3/8" (3)
3BD	Ductile Iron BSPP 3/8" (3)

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane
U	PPDI Urethane

R Spring

CODE	DESCRIPTION
13	17.2 to 89.6 bar (250 to 1300 psi) Spring Range



CODE	DESCRIPTION
35	68.9 to 241.3 bar (1000 to 3500 psi) Spring Range

S Setting

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