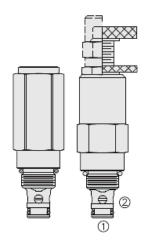


Overview



Symbol

Description

RV58-20X is a screw-in, cartridge style, direct acting, poppet type, hydraulic relief valve intended for lower flow circuits, requiring low internal leakage.

Operation

The RV58-20X 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

- Rated for higher operating pressure of 345 bar (5000 psi).
- Bi-directional pressure option available.
- Adjustments cannot be backed out of the valve.
- · Adjustments prohibit springs from going solid.
- · Variety of adjustment options available.
- · Rapid response to pressure changes.
- · 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 344.7 bar (5000 psi) 517.1 bar (7500 psi) Proof pressure 1294.4 bar (18774 psi) Burst pressure Pressure evident at Relief pressure defined 0.95 lpm (0.25 gpm)

Nominal 80% of crack pressure Reseat pressure

Flow Ratings

22.7 lpm (6 gpm) Flow rating

0.25 ml/min (5 drops/min) - Note: Max to 75% of nominal setting Maximum internal leakage

Temperature Ratings

- Note: With buna N seals -40 to 100 °C (-40 to 212 °F) Operating fluid temperature -26 to 204 °C (-15 to 400 °F) - Note: With fluorocarbon seals

-54 to 107 °C (-65 to 225 °F) - Note: With polyurethane seals with urethane seals

-40 to 70 °C (-40 to 160 °F) Storage temperature

-40 to 70 °C (-40 to 160 °F) Ambient temperature

Other Ratings

RV58-20X-type 111 clear zinc plating per ASTM b633. Grv10-20x-960 hr salt Corrosion protection

spray per AŚTM 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 18/16/13 per ISO 4406

level

Properties

Unit weight 0.23 kg (0.50 lb) - Note: RV58-20A RV58-20H

0.26 kg (0.57 lb) - Note: RV58-20B

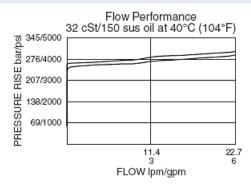
0.28 kg (0.61 lb) - Note: RV58-20C RV58-20L

0.23 kg (0.51 lb) - Note: RV58-20F

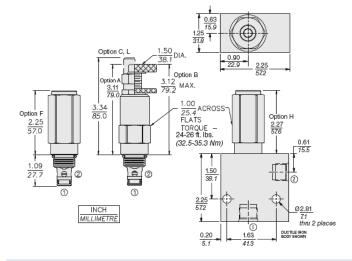
Internal wetted surface area 112.3 cm² (17.42 in²) - Note: RV58-20A RV58-20B RV58-20C RV58-20L

131.7 cm² (20.41 in²) - Note: RV58-20F RV58-20H

Performance



Dimensions



Installation Specifications

Cavity VC08-2

Cartridge installation torque 32.5 to 35.3 N-m (24 to 26 ft-lb)

Maximum allowable torque 40.7 N-m (30 ft-lb)

H style plug torque 10.8 to 13.6 N-m (8 to 10 ft-lb) - **Note**: N V P U

31 to 34 N-m (23 to 25 ft-lb) - Note: PC

Orientation restriction None

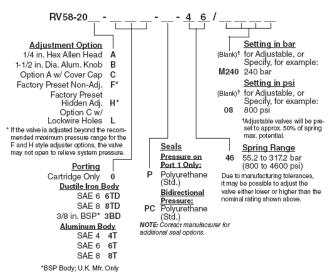
Accessories

Seal kit SK08-2X-B - Note: X=seal option SK08-2X-M - Note: X=seal option

Order Code

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Model Options

RV58-20F-H-J-R/S

F Adjustment Option

CODE	DESCRIPTION
Α	1/4" Hex Allen Head
В	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob
С	1/4" Hex Allen Head with Cover Cap
F	Factory Preset Non-Adjustable
Н	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
Р	Polyurethane

R Spring

CODE	DESCRIPTION
46	55.2 to 317.2 bar (800 to 4600 psi) Spring Range

S Setting

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