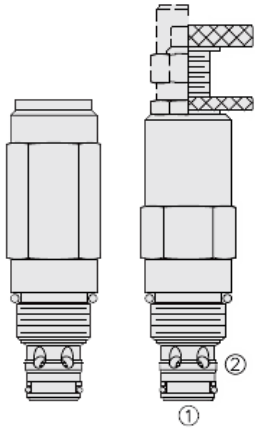




Overview



Description

RV50-26X is a screw in, cartridge style, pilot operated (two stage), spool type hydraulic relief valve, intended for use as a pressure limiting device in demanding hydraulic circuits which require fast response and low hysteresis.

Operation

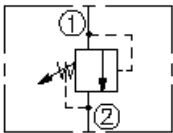
The RV50-26X blocks flow from port 1 to port 2 until sufficient pressure is present at port 1 to force the piloting relief off its seat, allowing the main (second stage) spool to shift, opening port 1 to port 2.

note: this valve cannot be used in cross-over relief applications.

Features

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Hardened spool and cage for long life.
- Rapid, smooth response to pressure changes.
- Industry-common size.

Symbol



Ratings

Pressure Ratings

Pressure rating	344.7 bar (5000 psi)	
Proof pressure	517.1 bar (7500 psi)	
Burst pressure	1037.7 bar (15050 psi)	
Relief pressure defined	Pressure evident at 7.57 lpm (2 gpm)	
Reseat pressure	Nominal 90% of crack	
Relief pressure range	20.7 to 344.7 bar (300 to 5000 psi)	- Note: From zero to maximum control current

Flow Ratings

Flow rating	113.6 lpm (30 gpm)	- Note: At max pressure
Maximum internal leakage	147 ml/min (9 in ³ /min)	- Note: Port 2, at 85% of max crack

Other Ratings

Cycle life	500000 cycles at 241.3 bar (3500 psi)
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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

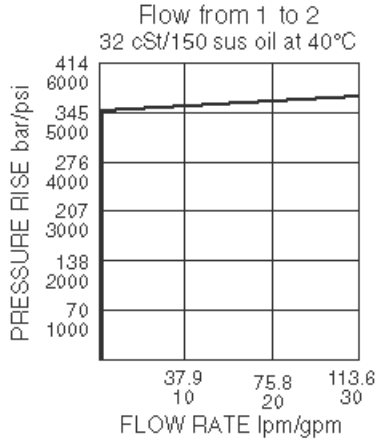
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



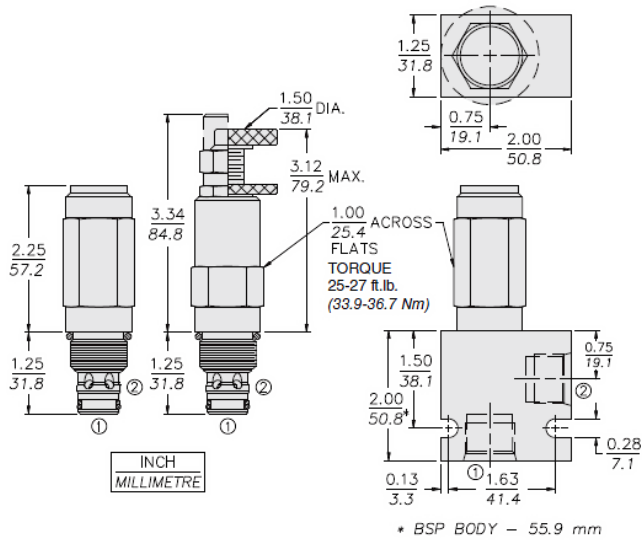
Properties

Unit weight	0.25 kg (0.55 lb)	- Note: A
	0.27 kg (0.60 lb)	- Note: B
	0.29 kg (0.65 lb)	- Note: C I
	0.24 kg (0.53 lb)	- Note: F h
Internal wetted surface area	141 cm ² (21.8 in ²)	- Note: A b c I
	161 cm ² (24.9 in ²)	- Note: F h

Performance



Dimensions



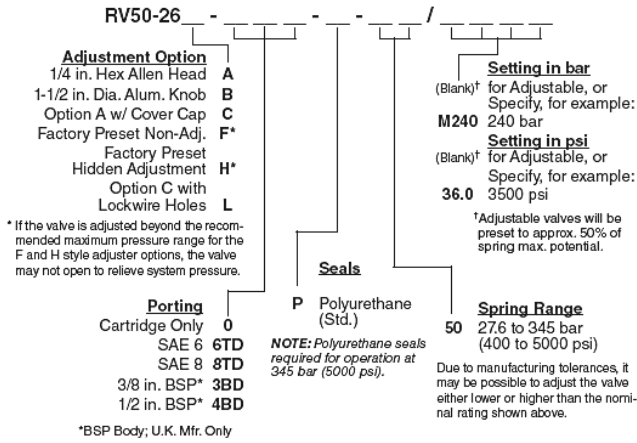
Installation Specifications

Cavity	VC10-2
Cartridge installation torque	47.6 to 50.2 N-m (35 to 37 ft-lb)
Maximum allowable torque	67.8 N-m (50 ft-lb)
H style plug torque	10.8 to 13.6 N-m (8 to 10 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-2X-B	- Note: X=n,v,p
	SK10-2U-O	- Note: Urethane

Order Code



Model Options

RV50-26F-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
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)
4B	Aluminum BSPP 1/2" (4)
4BD	Ductile Iron BSPP 1/2" (4)

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane

R Spring

CODE	DESCRIPTION
50	27.6 to 344.7 bar (300 to 5000 psi) Spring Range

S Setting

CODE	DESCRIPTION
MXXX	Spring Setting in XXX bar

**CODE DESCRIPTION**

XX	Spring Setting in XX psi (x 100)
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