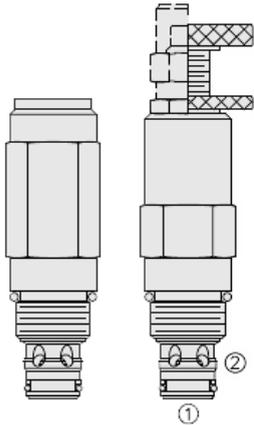




Overview



Description

RV10-26X 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

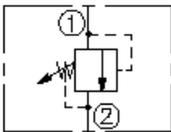
The RV10-26X blocks flow from port 1 to port 2 until sufficient pressure is present at port 1 to force the piloting relief off its seat, allowing the main (second stage) spool to shift, opening port 1 to port 2.

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

Features

- Adjustments cannot be backed out of the valve.
- Adjustment options A, B and C: positive stops prevent springs from going solid.
- Hardened spool and cage for long life.
- Optional spring ranges to 207 bar (3000 psi).
- Fast, smooth response to pressure surges.
- Industry common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating	241 bar (3500 psi)	
Proof pressure	517.1 bar (7500 psi)	
Burst pressure	1037.7 bar (15000 psi)	
Relief pressure defined	Pressure evident at 7.57 lpm (2 gpm)	
Reseat pressure	Nominal 90% of crack	
Relief pressure range	6.9 to 206.8 bar (100 to 3000 psi)	- Note: From zero to maximum control current

Flow Ratings

Flow rating	113.6 lpm (30 gpm)	- Note: At max pressure
Maximum internal leakage	114.7 ml/min (7 in ³ /min)	- Note: At port 2 at 85% of crack pressure. Pressure setting below 137.9 bar (2000 psi)
	491.6 ml/min (30 in ³ /min)	- Note: At port 2 at 85% of crack pressure. Pressure setting above 137.9 bar (2000 psi)

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 and urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

Other Ratings

Corrosion protection	Grv10-26x 960 hour salt spray per ASTM b117 cartridge weight
----------------------	--

Operating Parameters

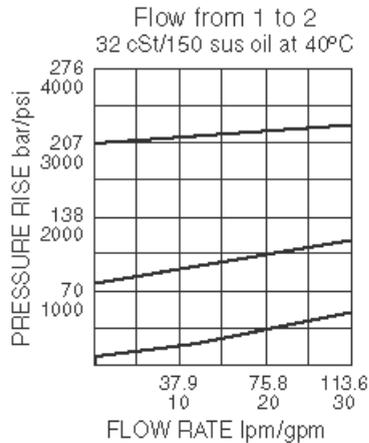
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



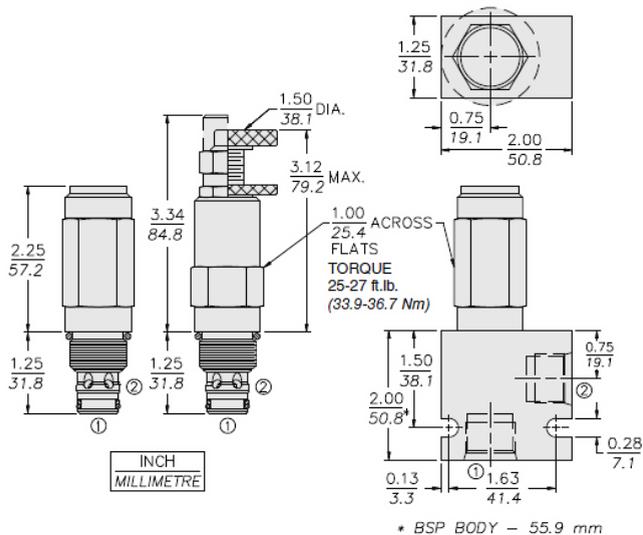
Properties

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



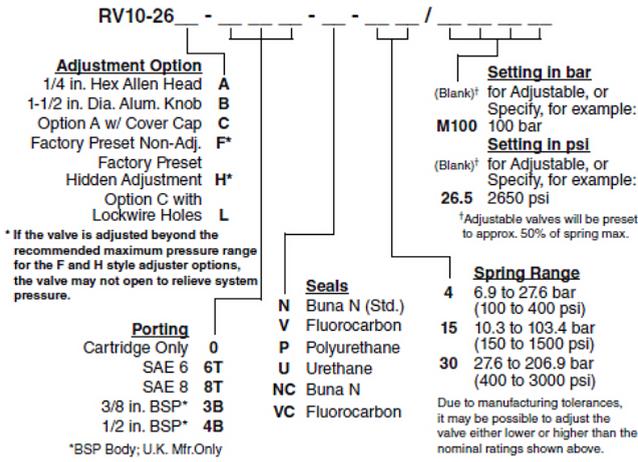
Installation Specifications

Cavity	VC10-2
Cartridge installation torque	33.9 to 36.7 N-m (25 to 27 ft-lb) 66.7 N-m (50 ft-lb) - Note: Maximum allowable
Adjuster cap torque	32.5 to 35.3 N-m (24 to 26 ft-lb) - Note: H-style plug
Orientation restriction	None

Accessories

Seal kit	SK10-2X-B	- Note: X = n, v, P
	SK10-2X-M	- Note: X = NC, VC
	SK10-2X-O	- Note: X = U

Order Code



Model Options

RV10-26F-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
U	PPDI Urethane

R Spring

CODE	DESCRIPTION
04	6.9 to 27.6 bar (100 to 400 psi) Spring Range
15	10.3 to 103.4 bar (150 to 1500 psi) Spring Range



CODE	DESCRIPTION
30	27.6 to 206.8 bar (400 to 3000 psi) Spring Range

S Setting

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