



Overview



Description

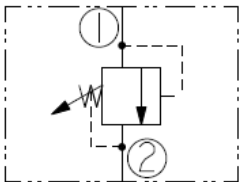
RV16-26X is a screw in, cartridge style, pilot operated (two stage), spool type relief valve, intended for use as a pressure limiting device in demanding hydraulic circuits which require fast response and low hysteresis.

Operation

The RV16-26X 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.

Symbol



Ratings

Pressure Ratings

Pressure rating	275.8 bar (4000 psi)
Proof pressure	620.5 bar (9000 psi)
Burst pressure	1275.5 bar (18500 psi)
Crack pressure defined	Pressure evident at 7.6 lpm (2 gpm)
Reseat pressure	Nominal 90% of crack
Relief pressure range	9.7 to 255.1 bar (140 to 3700 psi)

Flow Ratings

Flow rating	302.8 lpm (80 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 seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

Operating Parameters

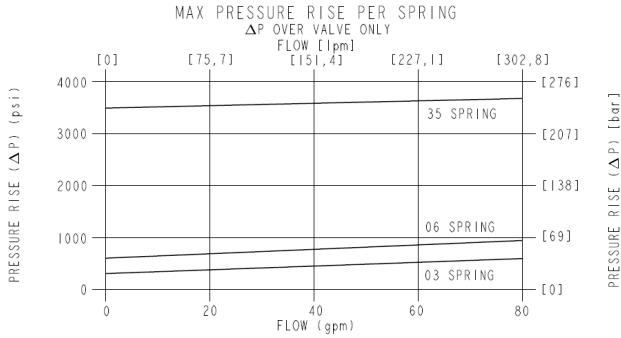
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



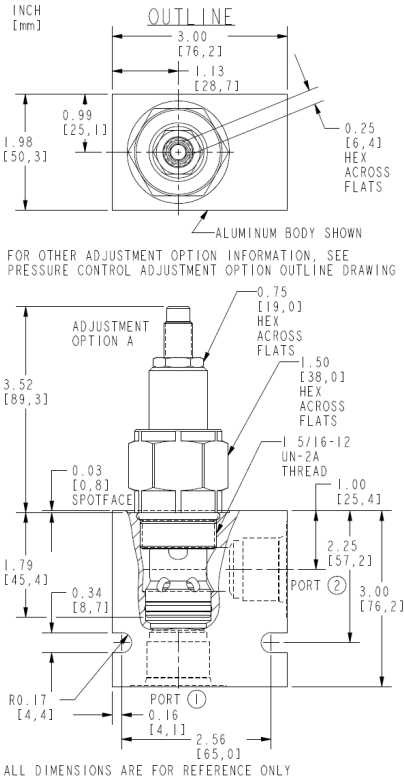
Properties

Unit weight	0.58 kg (1.28 lb)	- Note: A
	0.61 kg (1.34 lb)	- Note: B
	0.63 kg (1.38 lb)	- Note: C L
	0.71 kg (1.56 lb)	- Note: F H
Internal wetted surface area	273 cm ² (42.3 in ²)	- Note: A B C L
	308 cm ² (47.7 in ²)	- Note: F H

Performance



Dimensions



Installation Specifications

Cavity	VC16-2
Cartridge installation torque	62.7 to 73.4 N-m (46 to 54 ft-lb)
H style plug torque	32.5 to 35.3 N-m (24 to 26 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK16-2X-B	- Note: X=seal options
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Order Code



ORDERING INFORMATION:

RV16-26X-X-X-XX/XXXX

BASE MODEL NUMBER:

ADJUSTMENT OPTIONS:

- 0.25 [6,4] HEX ALLEN HEAD - A
- Ø1.50 [38,1] ALUMINUM KNOB - B
- OPTION (A) WITH COVER CAP - C
- FACTORY PRESET, NONADJUSTABLE - F
- FACTORY PRESET, HIDDEN ADJUSTMENT - H
- OPTION (C) WITH LOCK WIRE HOLES - L

PORTING:

CARTRIDGE ONLY - 0

SEALS:

- BUNA N - N
- FLUOROCARBON - V
- POLYURETHANE - P

PRESSURE SETTING RANGE:

- 140-300 psi - 03
- [9,7-20,7 bar]
- 230-600 psi - 06
- [15,9-41,4 bar]
- 400-3700 psi - 35
- [27,6-255,1 bar]

PRESSURE SETTING:

- FOR EXAMPLE:
- (IN psi)
 - 2500 psi - 25
 - (IN bar)
 - 240 bar - M240

Model Options

RV16-26F-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
12T	Aluminum SAE 12
16T	Aluminum SAE 16
12TD	Ductile Iron SAE 12
16TD	Ductile Iron SAE 16
6B	Aluminum BSPP 3/4" (6)
8B	Aluminum BSPP 1" (8)
8BD	Ductile Iron BSPP 1" (8)

J Seal

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



R Spring

CODE	DESCRIPTION
03	27.6 to 344.7 bar (140 to 300 psi) Spring Range
06	27.6 to 344.7 bar (230 to 600 psi) Spring Range
15	27.6 to 344.7 bar (530 to 1500 psi) Spring Range
35	27.6 to 344.7 bar (1200 to 3500 psi) Spring Range

S Setting

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