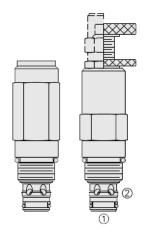


#### **Overview**



#### **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**

Pr	es	sur	еŀ	Rat	in	qs

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)

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** 

Reseat pressure

Flow rating 113.6 lpm (30 gpm) - **Note:** At max pressure

Maximum internal leakage 114.7 ml/min (7 in³/min) - **Note:** At port 2 at 85% of crack pressure. Pressure setting below 137.9 bar (2000 psi)

491.6 ml/min (30 in³/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 - **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

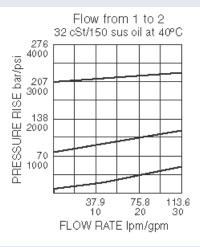
hydraforce.com 3/25/2021 RV10-26



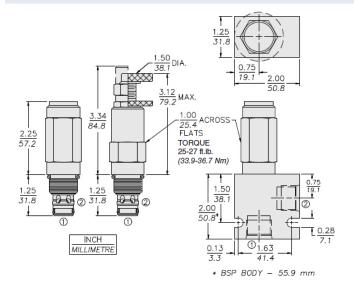
# **Properties**

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 cm² (21.8 in²) - Note: F h
161 cm² (24.9 in²) - Note: F h

### **Performance**



### **Dimensions**



## **Materials**

#### **Materials**

Cartridge: Weight: with Adjustment Option A: 0.25 kg. (0.55 lb.) B: 0.27 kg. (0.60 lb.) C,L: 0.29 kg. (0.65 lb.) F,H: 0.24 kg. (0.53 lb.) Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N seals standard. Anodized aluminum knobs. Optional polyurethane seals recommended for pressures over 240 bar (3500 psi).

**Ported Body:** Weight: 0.16 kg. (0.35 lbs.) Anodized high-strength aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ.

# **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**

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

Housings

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# **Order Code**

POSITION	CODE	DESCRIPTION		
		RV10-26F-H-J-R/S		
F		Adjustment Option		
F	Α	1/4" Hex Allen Head		
F	В	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob		
F	С	1/4" Hex Allen Head with Cover Cap		
F	F	Factory Preset Non-Adjustable		
F	Н	Factory Preset Hidden Adjustment		
F	L	1/4" Hex Allen Head with Cover Cap and Lockwire Holes		
Н		Line Body		
Н	0	No Body		
Н	6T	Aluminum SAE 6		
Н	8T	Aluminum SAE 8		
Н	6TD	Ductile Iron SAE 6		
Н	8TD	Ductile Iron SAE 8		
Н	2B	Aluminum BSPP 1/4" (2)		
Н	3B	Aluminum BSPP 3/8" (3)		
Н	4B	Aluminum BSPP 1/2" (4)		
Н	4BD	Ductile Iron BSPP 1/2" (4)		
J		Seal		
J	N	Buna-N		
J	V	Fluorocarbon		
J	Р	Polyurethane		
J	U	PPDI Urethane		
R		Spring		
R	04	6.9 to 27.6 bar (100 to 400 psi) Spring Range		
R	15	10.3 to 103.4 bar (150 to 1500 psi) Spring Range		
R	30	27.6 to 206.8 bar (400 to 3000 psi) Spring Range		
S		Setting		
S	MXXX	Spring Setting in XXX bar		
S	XX	Spring Setting in XX psi (x 100)		
Adjustment Option  1/4 in. Hex Allen Head A 1-1/2 in. Dia. Alum. Knob B Option A w/ Cover Cap C Factory Preset Non-Adj. F* Factory Preset Hidden Adjustment H* Option C with Lockwire Holes L  1/1 the valve is adjusted beyond the recommended maximum pressure range for the F and I style adjuste options, the valve may not open to relieve system pressure.  Porting Cartridge Only 0 Seals N Buna N (Std.) Porting Cartridge Only 0 Setting in bar (Blank)* for Adjustable, or Specify, for example:  (Blank)* for Adjustable, or Specify, for example:  Setting in pai (Blank)* for Adjustable, or Specify, for example:  Setting in bar (Blank)* for Adjustable, or Specify, for example:  Setting in pai (Blank)* for Adjustable, or Specify, for example:  Setting in bar (Blank)* for Adjustable, or Specify, for example:  Setting in bar (Blank)* for Adjustable, or Specify, for example:  Setting in bar (Blank)* for Adjustable, or Specify, for example:  Setting in bar (Blank)* for Adjustable, or Specify, for example:  Setting in bar (Blank)* for Adjustable, or Specify, for example:  Setting in bar (Blank)* for Adjustable, or Specify, for example:  Setting in bar (Blank)* for Adjustable, or Specify, for example:  Setting in bar (Blank)* for Adjustable, or Specify, for example:  Setting in bar (Blank)* for Adjustable, or Specify, for example:  Setting in bar (Blank)* for Adjustable, or Specify, for example:  Setting in bar (Blank)* for Adjustable, or Specify for example:  Setting in bar (Blank)* for Adjustable, or Specify for example:  Setting in bar (Blank)* for Adjustable, or Specify for example:  Setting in bar (Blank)* for Adjustable, or Specify for example:  Setting in bar (Blank)* for Adjustable, or Specify for example:  Setting in bar (Blank)* for Adjustable, or Specify for example:  Setting in bar (Blank)* for Adjustable, or Specify for example:  Setting in bar (Blank)* for Adjustable, or Specify for Adjustable valves will be preset to approve for Specify for example:  Setting in bar (Blank)* for Adjustable valves will be preset to a				

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