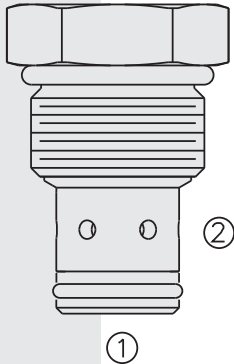


RV10-21F Pressure-Regulator, Direct-Acting,



DESCRIPTION

A screw-in, cartridge-style, direct-acting, spool-type, pressure regulator intended for use as a pressure limiting device for diesel engine applications, including variable flow pump, fuel and oil controls, SCR/EGR emission and exhaust controls.

OPERATION

The RV10-21F blocks flow from 1 to 2 until sufficient pressure is present at 1 to force the poppet off its seat. The cartridge offers fast response to load changes in typical hydraulic circuits requiring low internal leakage.

FEATURES

- Compatible with diesel fuel types 1 and 2.
- Corrosion-resistant plating.
- Stainless steel options available - consult factory.
- Several pressure codes available.
- Rapid response to pressure surges.
- Low internal leakage.
- Industry common cavity.
- Hardened spool and cage for long life.

RATINGS

Operating Pressure: 228 bar (3300 psi)

Internal Leakage: 10 drops/minute max. at 85% of crack pressure.

Crack (Set) Pressure Defined (at 0.76 lpm (0.2 gpm):

Pressure Code **30:** 1.38 bar to 2.76 bar (20 psi to 40 psi)

Pressure Code **100:** 6.21 bar to 7.59 bar (90 psi to 110 psi)

Pressure Code **150:** 9.66 bar to 11.04 bar (140 psi to 160 psi)

Flow Limit:

Pressure Code **30:** 11.36 lpm (3 gpm)

Pressure Code **100:** 20.82 lpm (5.5 gpm)

Pressure Code **150:** 24.60 lpm (6.5 gpm)

Reseat Pressure: Nominal 85% of crack pressure

Storage Temperature: -40 to 100°C (-40 to 212°F) with standard Buna N seals;

-26 to 204°C (-15 to 400°F) with fluorocarbon seals;

-54 to 107°C (-65 to 225°F) with polyurethane seals.

Filtration: Compatible with ISO Classification 19 (25 µm), NAS classification.

Fluids: For use with common diesel fluids.

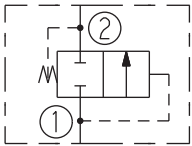
Installation: No restrictions; See page 9.020.1

Cavity: VC10-2; See page 9.110.1

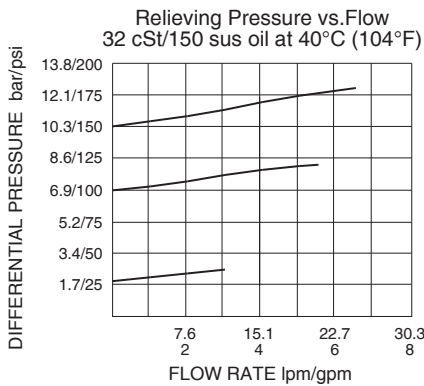
Cavity Tool: CT10-2XX; See page 8.600.1

Seal Kit: SK10-2X-B; See page 8.650.1

ISO SYMBOL



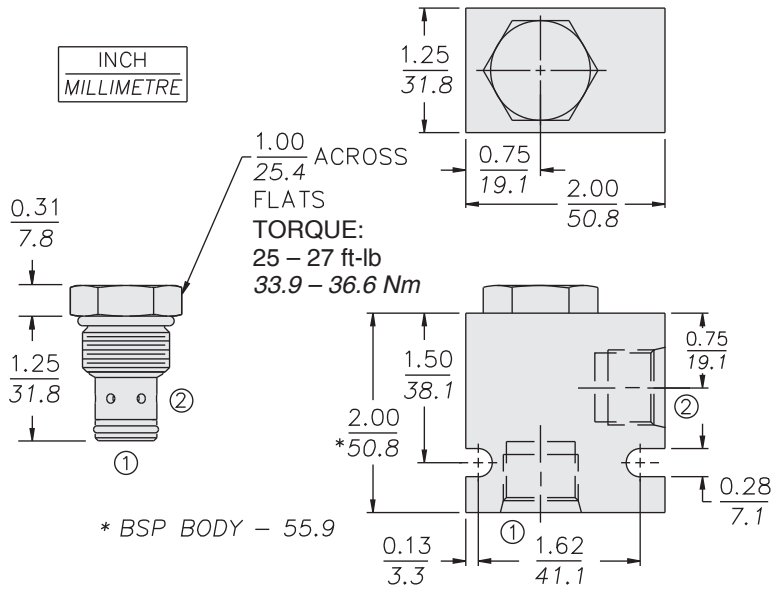
PERFORMANCE (Cartridge Only)



Spool

RV10-21F

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.09 kg. (0.20 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester elastomer back-up standard;
Anodized aluminum knobs.

Standard 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.
See page 8.010.1

TO ORDER

RV10-21F - - -

Porting		Pressure Code	
Cartridge Only	0	30	1.4 to 2.8 bar (20 to 40 psi)
SAE 6	6T	100	6.2 to 7.6 bar (90 to 110 psi)
SAE 8	8T	150	9.7 to 11.0 bar (140 to 160 psi)
1/4 in. BSP*	2B		
3/8 in. BSP*	3B		
1/2 in. BSP*	4B		

*BSP Body; U.K. Mfr. Only

Seals	
Buna N (Std.)	N
Fluorocarbon	V
Polyurethane	P