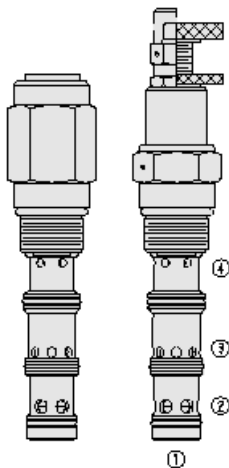




Overview



Description

Frrv12-41f/x is a screw-in, cartridge type, combination valve. It includes a pressure compensated, non adjustable priority type flow regulator and a pressure relief valve.

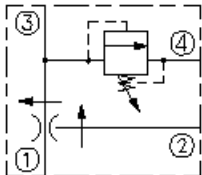
Operation

With inlet at port 1, it maintains a constant flow rate from port 3 regardless of load pressure changes at priority port 3 or bypass port 2. When the load in priority line exceeds preset value, the valve relieves pressure to port 4.

Features

- Two valve functions in one, industry-common cavity.
- Adjustments cannot be backed out of the valve.
- Relief valve adjustments prohibit relief valve spring from going solid.
- Quiet, modulated response.
- Hardened parts for long life.

Symbol



Ratings

Pressure Ratings

Pressure rating	207 bar (3000 psi) 276 bar (4000 psi)	- Note: Maximum system pressure
Compensating pressure differential	5.5 bar (80 psi)	

Flow Ratings

Priority flow rating	45.4 lpm (12.0 gpm)	- Note: Maximum
Inlet flow rating	75.7 lpm (20 gpm)	

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

Operating Parameters

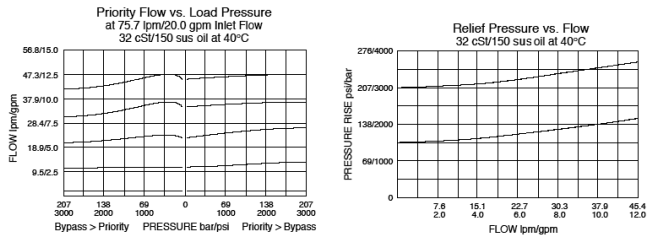
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



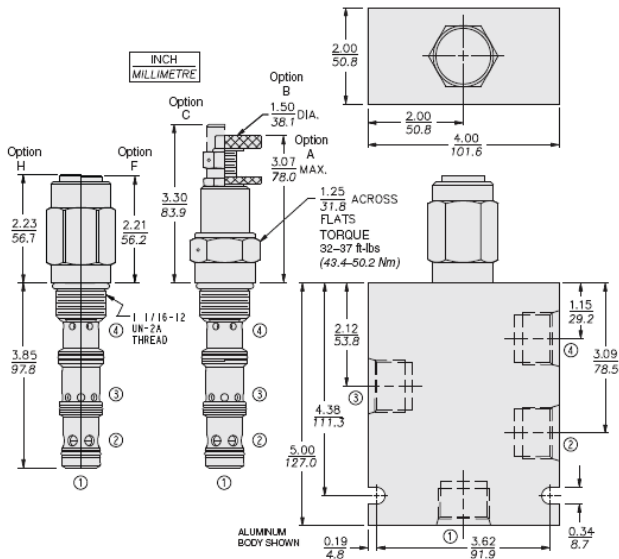
Properties

Unit weight	0.43 kg (0.95 lb)	- Note: Frrv12-41f/a
	0.45 kg (1.00 lb)	- Note: Frrv12-41f/b
	0.48 kg (1.05 lb)	- Note: Frrv12-41f/c
	0.42 kg (0.92 lb)	- Note: Frrv12-41f/f
	0.42 kg (0.92 lb)	- Note: Frrv12-41f/h
	0.48 kg (1.05 lb)	- Note: Frrv12-41f/l
Internal wetted surface area	379.9 cm ² (58.88 in ²)	

Performance



Dimensions



Installation Specifications

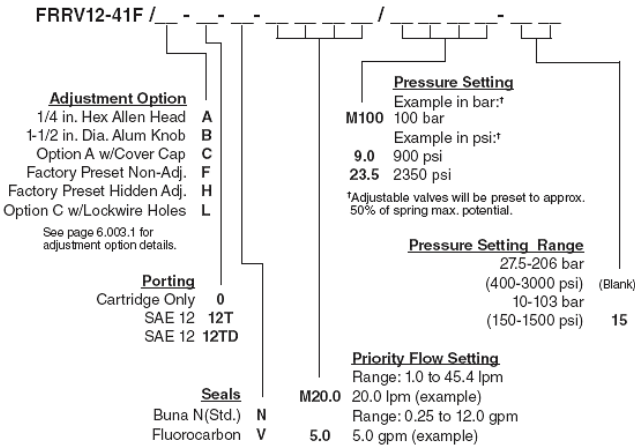
Cavity	VC12-4
Cartridge installation torque	45 to 50 N-m (33 to 37 ft-lb)
Orientation restriction	None

Accessories

Seal kit	Hsk12-4n-mmm, hsk12-4v-mmm, hsk12-4u-ooo
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Order Code



Model Options

FRRV12-41F-H-J-S-T

F Adjustment Option

CODE	DESCRIPTION
F/A	1/4" Hex Allen Head
F/B	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob
F/C	1/4" Hex Allen Head with Cover Cap
F/F	Factory Preset Non-Adjustable
F/H	Factory Preset Hidden Adjustment
F/L	1/4" Hex Allen Head with Cover Cap and Lockwire Holes

H Line Body

CODE	DESCRIPTION
0	No Body
10T	Aluminum SAE 10
12T	Aluminum SAE 12
12TD	Ductile Iron SAE 12
6B	Aluminum BSPP 3/4" (6)

J Seal

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

S Spring Setting

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

T Flow Setting

CODE	DESCRIPTION
XX	Flow Setting