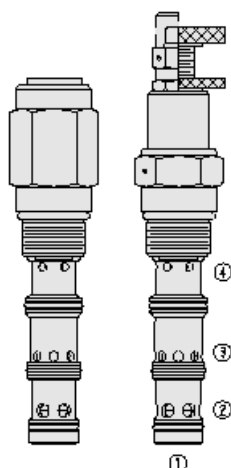




## Overview



### 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.

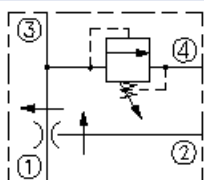
### Operation

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)	- <b>Note:</b> Maximum system pressure
Compensating pressure differential	5.5 bar (80 psi)	

### Flow Ratings

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

### Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- <b>Note:</b> With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- <b>Note:</b> With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- <b>Note:</b> 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

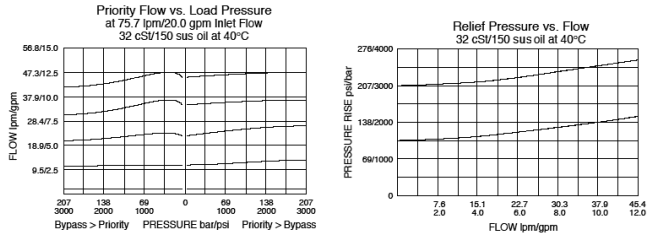
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

## Properties

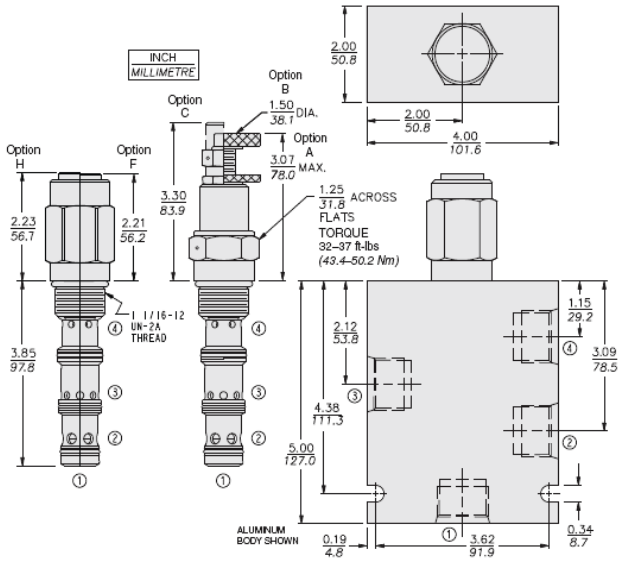
Unit weight	0.43 kg (0.95 lb)	- <b>Note:</b> Frrv12-41f/a
	0.45 kg (1.00 lb)	- <b>Note:</b> Frrv12-41f/b
	0.48 kg (1.05 lb)	- <b>Note:</b> Frrv12-41f/c
	0.42 kg (0.92 lb)	- <b>Note:</b> Frrv12-41f/f
	0.42 kg (0.92 lb)	- <b>Note:</b> Frrv12-41f/h
	0.48 kg (1.05 lb)	- <b>Note:</b> Frrv12-41f/l
Internal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



## Performance



## Dimensions



## Installation Specifications

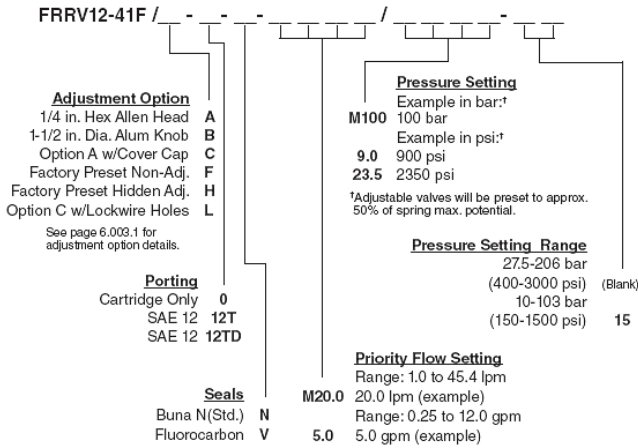
Cavity	VC12-4
Cartridge installation torque	45 to 50 N-m (33 to 37 ft-lb)
Orientation restriction	None

## Accessories

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



Order Code



POSITION	CODE	DESCRIPTION
		FRRV12-41F-H-J-S-T
F		Adjustment Option
F	F/A	1/4" Hex Allen Head
F	F/B	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob
F	F/C	1/4" Hex Allen Head with Cover Cap
F	F/F	Factory Preset Non-Adjustable
F	F/H	Factory Preset Hidden Adjustment
F	F/L	1/4" Hex Allen Head with Cover Cap and Lockwire Holes
H		Line Body
H	0	No Body
H	10T	Aluminum SAE 10
H	12T	Aluminum SAE 12
H	12TD	Ductile Iron SAE 12
H	6B	Aluminum BSPP 3/4" (6)
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane
S		Spring Setting
S	MXXX	Spring Setting in XXX bar
S	XX	Spring Setting in XX psi (x 100)
T		Flow Setting
T	XX	Flow Setting