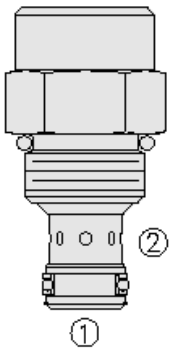




Overview



Description

FR08-20F is a screw-in, cartridge style, fixed orifice, pressure compensated, hydraulic flow regulator valve (restrictive type).

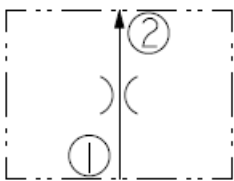
Operation

The valve maintains a constant flow rate from port 1 to port 2 regardless of load pressure changes. Reverse flow returns through the control orifice and is non-compensated.

Features

- Hardened parts for long life.
- Quiet, modulated response.
- Compact, industry-common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating	240 bar (3500 psi)
Proof pressure	345 bar (5000 psi)
Burst pressure	896 bar (13000 psi)

Flow Ratings

Flow rating	0.2 to 7.5 lpm (0.05 to 2.0 gpm)
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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 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	960 hr salt spray per ASTM b117 (GFR08-20F)
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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

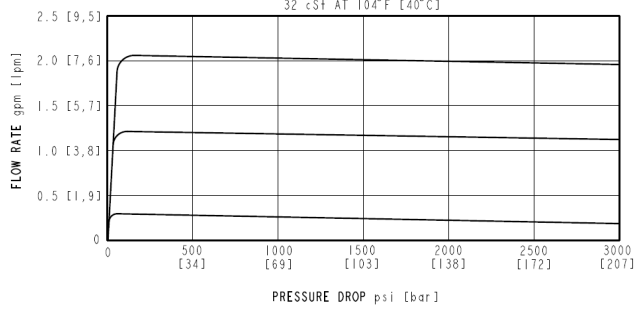
Unit weight	0.09 kg (0.20 lb)
Internal wetted surface area	162 cm ² (25 in ²)



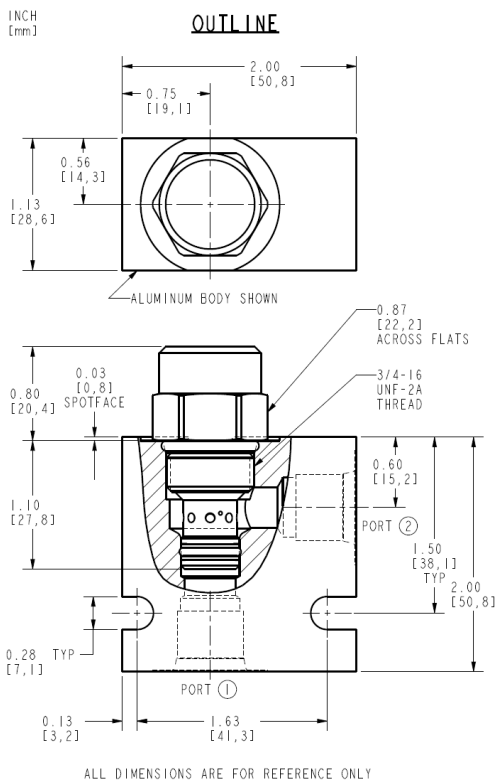
Performance

FLOW CHARACTERISTICS

INLET 3500 psi [241 bar]
32 cSt AT 104°F [40°C]



Dimensions



Installation Specifications

Cavity	VC08-2
Cartridge installation torque	24 to 27 N-m (18 to 20 ft-lb)
Maximum allowable torque	47.5 N-m (35 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK08-2X-M	- Note: X = seal option
	SK08-2U-0	- Note: Urethane

Order Code

ORDERING INFORMATION:

X FR08-20F-X-X-XXXX

PLATING

STANDARD PLATING - BLANK
 PLATING FOR 960 hr
 SALT SPRAY - G

BASE MODEL NUMBER

PORTING

CARTRIDGE ONLY - 0

SEAL OPTIONS

BUNA N - N
 FLUOROCARBON - V
 POLYURETHANE - P
 URETHANE - U

FLOW SETTING:

SETTING IN gpm
 RANGE: 0.05 TO 2.0 gpm
 SPECIFY, FOR EXAMPLE:
 1.3 gpm - 1.3
 2.0 gpm - 2.0

SETTING IN lpm
 RANGE: 0.2 TO 7.5 lpm
 SPECIFY, FOR EXAMPLE:
 1.8 lpm - M1.8
 5.0 lpm - M5.0

DRILL SIZE METHOD
 (IN THOUSANDS OF AN INCH)
 RANGE: 0.017 TO 0.096 in
 SPECIFY, FOR EXAMPLE:
 0.031 in CONTROL ORIFICE - D031

Model Options**FR08-20F-H-J-T****F Adjustment Option**

CODE	DESCRIPTION
F	Factory Preset Non-Adjustable

H Line Body

CODE	DESCRIPTION
0	No Body
4T	Aluminum SAE 4
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
2B	Aluminum BSPP 1/4" (2)
3B	Aluminum BSPP 3/8" (3)
3BD	Ductile Iron BSPP 3/8" (3)

J Seal

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

T Flow setting

CODE	DESCRIPTION
XX	Flow setting

