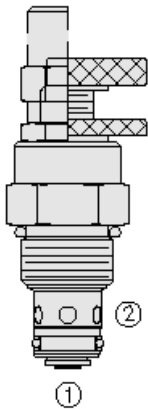




Overview



Description

A screw-in, cartridge style, variable orifice, hydraulic flow control valve with reverse flow check.

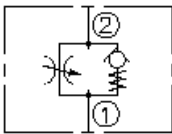
Operation

The FC10-21 valve increases its orifice value from fully closed to fully open with clockwise adjustment rotation.

Features

- Adjustments cannot be backed out of the valve.
- Desired settings may be locked down.
- Hardened parts for long life.
- Aluminum knob option.
- Positive shut-off.
- Linear adjustment.
- Industry-common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating	241 bar (3500 psi)
Proof pressure	345 bar (5000 psi)
Burst pressure	896 bar (13000 psi)

Flow Ratings

Flow rating	57 lpm (15 gpm)	- Note: At fully open (2 turns) 5.5 bar (80 psi)
Maximum internal leakage	0.5 ml/min (10 drops/min)	

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

Operating Parameters

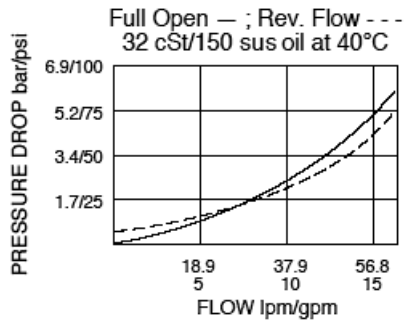
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties	
Fluid viscosity range	7.4 to 420 cSt	
Maximum operating contamination level	18/16/13 per ISO 4406	

Properties

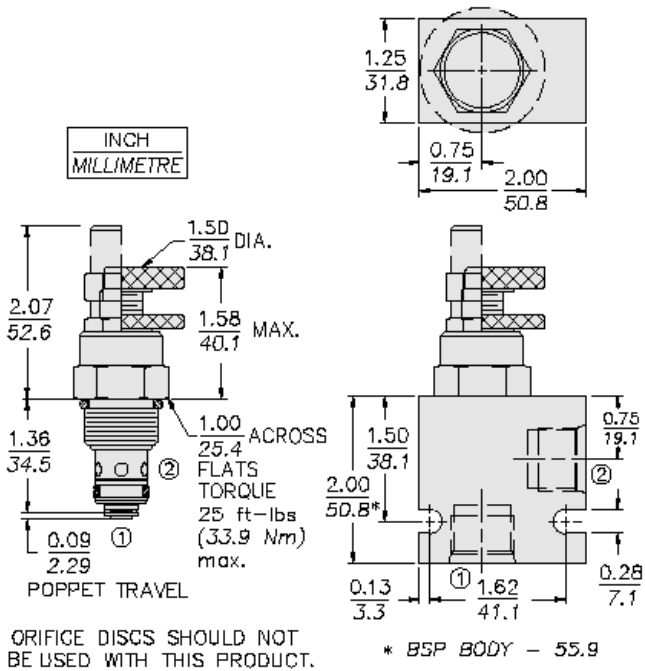
Adjustment torque	0.34 N-m (3 in-lb)	- Note: At 7 bar (100 psi)
	4.52 N-m (40 in-lb)	- Note: At 207 bar (3000 psi)
Unit weight	0.16 kg (0.35 lb)	- Note: Option A
Internal wetted surface area	95.8 cm ² (14.85 in ²)	



Performance



Dimensions



Installation Specifications

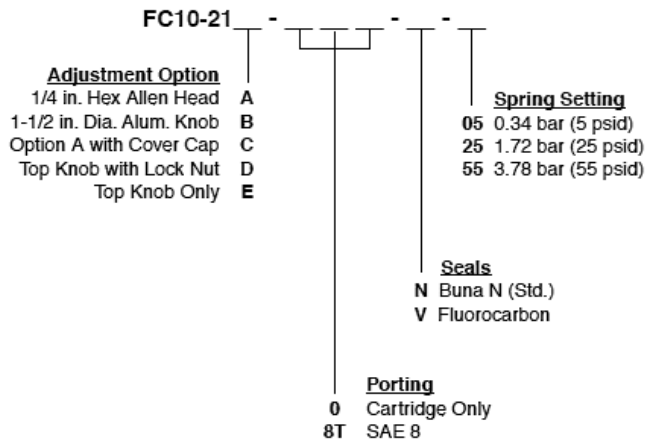
Cavity	VC10-2A
Cartridge installation torque	33 to 35 N-m (24 to 26 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-2X-M	- Note: X = seal option
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Order Code



Model Options

FC10-21F-H-J-R

F Adjustment Option

CODE	DESCRIPTION
A	1/4" Hex Allen Head
B	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob
C	1/4" Hex Allen Head with Cover Cap
D	1-1/2" Diameter Aluminum Knob with Lock Nut
E	1-1/2" Diameter Aluminum Knob Only

H Line Body

CODE	DESCRIPTION
0	No Body
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)
4B	Aluminum BSPP 1/2" (4)
4BD	Ductile Iron BSPP 1/2" (4)

J Seal

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

R Spring Options

CODE	DESCRIPTION
05	5 psi
25	25 psi
55	55 psi