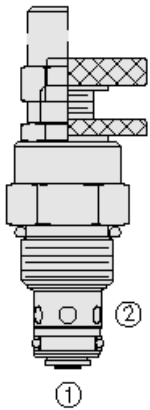




Overview



Description

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

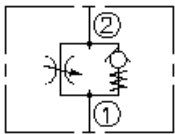
Operation

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

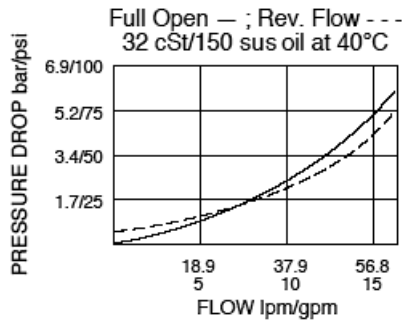
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

Properties

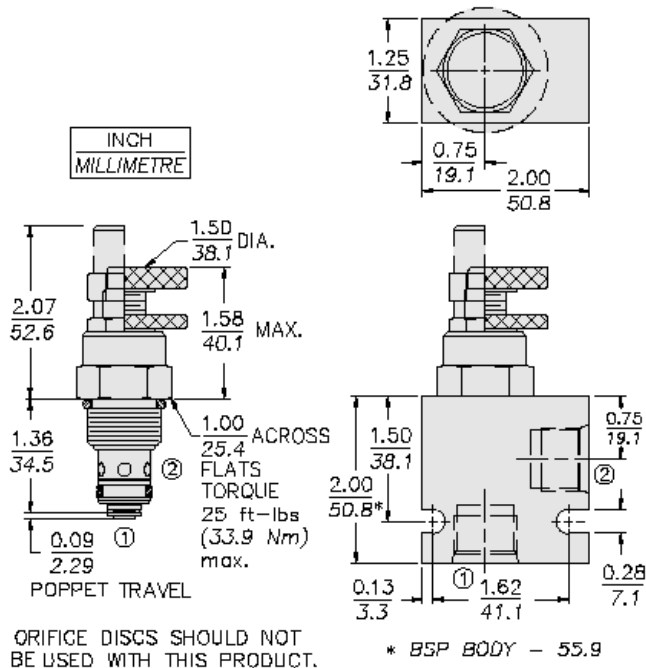
Adjustment torque	0.34 N-m (3 in-lb)	- Note: At 7 bar (100 psi)
	4.52 N-m (40 in-lb)	- Note: At 207 bar (3000 psi)
Unit weight	0.16 kg (0.35 lb)	- Note: Option A
Internal wetted surface area	95.8 cm ² (14.85 in ²)	



Performance



Dimensions



Materials

Materials

Cartridge: Weight: 0.17 kg. (0.37 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and polyester elastomer back-ups standard. Anodized aluminum knobs.

Standard Ported Body: Weight: 0.16 kg. (0.35 lbs.); Anodized high-strength 6061T6 aluminum alloy, rated to 207 bar (3000 psi); Ductile iron bodies available; dimensions may differ.

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
Housings		



Order Code

POSITION	CODE	DESCRIPTION
		FC10-21F-H-J-R
F		Adjustment Option
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	D	1-1/2" Diameter Aluminum Knob with Lock Nut
F	E	1-1/2" Diameter Aluminum Knob Only
H		Line Body
H	0	No Body
H	6T	Aluminum SAE 6
H	8T	Aluminum SAE 8
H	6TD	Ductile Iron SAE 6
H	8TD	Ductile Iron SAE 8
H	2B	Aluminum BSPP 1/4" (2)
H	3B	Aluminum BSPP 3/8" (3)
H	4B	Aluminum BSPP 1/2" (4)
H	4BD	Ductile Iron BSPP 1/2" (4)
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane
R		Spring Options
R	05	5 psi
R	25	25 psi
R	55	55 psi

