## Series FV101 and FV102

CV

Check Valves

SH

Shuttle Load/Motor Valves L Controls

FC Flow Controls

Pressure E

PC

Logic C Directional Elements D Controls

Manual Valves S

MV

## **General Description**

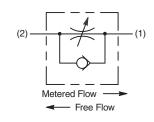
**Technical Information** 

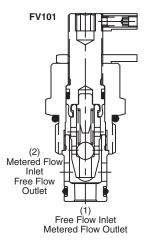
Needle Valve with a Reverse Check. Also known as a Flow Control Valve. For additional information see Technical Tips on pages FC1-FC4.

#### **Features**

- Hardened, precision ground parts for durability
- Compact size for reduced space requirements
- Fine thread needle option available for precise adjustment
- All external parts zinc plated

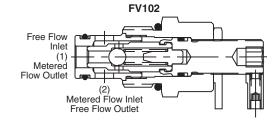




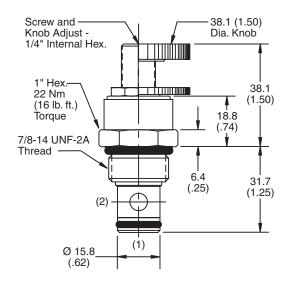


# **Specifications**

Rated Flow	FV101 45 LPM (12 GPM) FV102 23 LPM (6 GPM)		
Maximum Inlet Pressure	210 Bar (3000 PSI)		
Cartridge Material	All parts steel. All operating parts hardened steel.		
Operating Temp. Range/Seals	-40°C to +93.3°C (Nitrile) (-40°F to +200°F) -31.7°C to +121.1°C (Fluorocarbon) (-25°F to +250°F)		
Fluid Compatibility/ Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)		
Filtration	ISO Code 16/13, SAE Class 4 or better		
Approx. Weight	.23 kg (0.5 lbs.)		
Cavity	C10-2 (See BC Section for more details)		
Form Tool	Rougher None Finisher NFT10-2F		



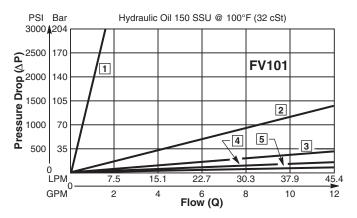
## **Dimensions** Millimeters (Inches)

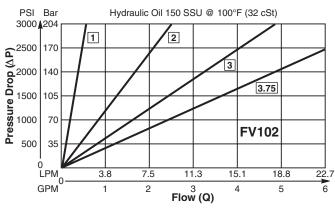




#### **Performance Curves**

#### Metered Flow vs. Pressure Drop (Through cartridge only)





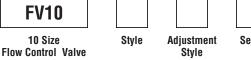
= No. of Turns CCW From Fully Closed.

The number on each curve indicates the number of complete turns of the knob or screw adjustment from fully closed. When the metered flow is 22.5 LPM (6 GPM) and the adjustment is two complete turns from closed, the pressure drop will be 13.8 Bar (200 PSI). When the metered flow is 22.5 LPM (6 GPM) and the adjustment is five complete turns from closed, the pressure drop will be 3.5 Bar (50 PSI).

### = No. of Turns CCW From Fully Closed.

The number on each curve indicates the number of complete turns of the knob or screw adjustment from fully closed (nonmetered flow). When the metered flow is 7.5 LPM (2 GPM) and the adjustment is two complete turns from closed, the pressure drop will be 156.9 Bar (2275 PSI). When the metered flow is 7.5 LPM (2 GPM) and the adjustment is 3.75 turns from closed, the pressure drop will be 56.6 Bar (820 PSI).

# **Ordering Information**



Code	Style	
1	Coarse Flow	
2	Fine Flow	

Code	Adjustment Style
K	Knob Adjust (840208K)
S	Screw Adjust

		Style	Sears	Mater	,	Size
	Code	Seals / Kit.	No.		Code	<b>Body Material</b>
	0mit	Nitrile / (SK	10-2N)		0mit	Steel
١	V	Fluorocarbo	n /		Α	Aluminum

(SK10-2V)

Code	Port Size	Body Part No.			
0mit	Cartridge Only				
4P 6P 8P	1/4" NPTF 3/8" NPTF 1/2" NPTF	(B10-2-*4P) (B10-2-*6P) (B10-2-*8P)			
6T 8T T8T	SAE-6 SAE-8 SAE-8	(B10-2-*6T) (B10-2-*8T) (B10-2-T8T)†			
6B	3/8" BSPG	(B10-2-6B)†			

<sup>\*</sup> Add "A" for aluminum, omit for steel. † Steel body only.

CV

Load/Motor Controls

LE

DC

MV

PV Proportional Valves

CE

BC

TD



Port