## Needle Valve Series FV101 and FV102

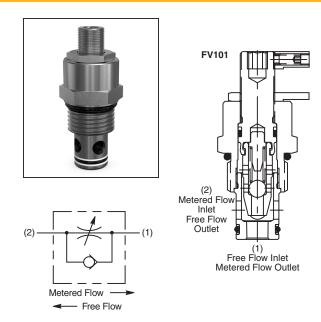
# **General Description**

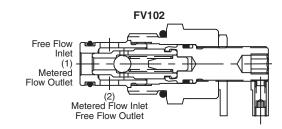
Needle Valve with a Reverse Check. Also known as a Flow Control Valve.

For additional information see Technical Tips on pages FC2-FC5.

#### **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

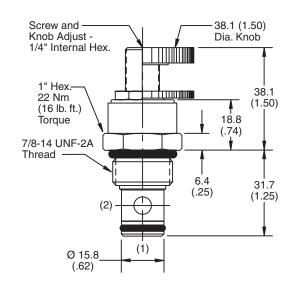




## **Specifications**

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Rated Flow	<b>FV101</b> 45 LPM (12 GPM) <b>FV102</b> 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	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)		
Fluid Compatibility/ Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)		
Filtration	ISO-4406 18/16/13, SAE Class 4		
Approx. Weight	0.23 kg (0.50 lbs.)		
Cavity	C10-2 (See BC Section for more details)		

# **Dimensions** Millimeters (Inches)



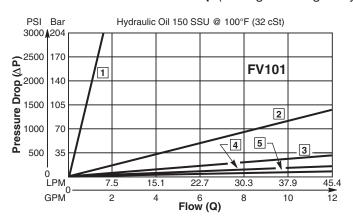
CV Check Valves SH LM Load/Motor Controls FC PC Pressure Controls LE Logic Elements DC Directional Controls SV Solenoid Valves Proportional Valves CE Coils & Electronics BC Bodies & Cavities TD

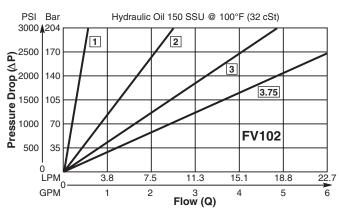
FC10

### Needle Valve Series FV101 and FV102

### **Performance Curves**

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





CV

SH

LM

FC

PC

LE

DC

SV

PV

CE

BC

TD

Check Valves

Shuttle

.oad/Motor

Controls

Controls

Pressure Controls

Logic Elements

Directional Controls

Solenoid Valves

Proportional Valves

Coils & Electronics

Cavities

#### = 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 (non-metered 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**

FV10

Style



10 Size Flow Control Valve Adjustment Style

Highlighted represents preferred options that offer the shortest lead times. Other options may be available, but at extended lead times.

Code	Style
1	Coarse Flow
2	Fine Flow

Code	Adjustment Style
S	Screw Adjust

Code	Seals
0mit	Nitrile

Kit	Part Number
Knob	840208K
Nitrile Seal	SK10-2
Fluorocarbon Seal	SK10-2V

Order Bodies Separately See section BC



Code	Porting / Body Material
8T	SAE-8 / Steel (5000 PSI)

-Parker