

CV

Check  
Valves

SH

Shuttle  
Valves

LM

Load/Motor  
Controls

FC

Flow  
Controls

PC

Pressure  
Controls

LE

Logic  
Elements

DC

Directional  
Controls

MV

Manual  
Valves

SV

Solenoid  
Valves

PV

Proportional  
Valves

CE

Coils &  
Electronics

BC

Bodies &  
Cavities

TD

Technical  
Data

## General Description

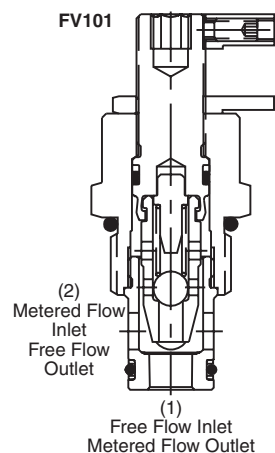
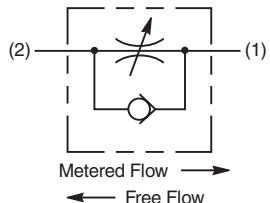
Needle Valve with a Reverse Check. Also known as a Flow Control Valve. For additional information see Technical Tips on pages FC1-FC4.

## Features

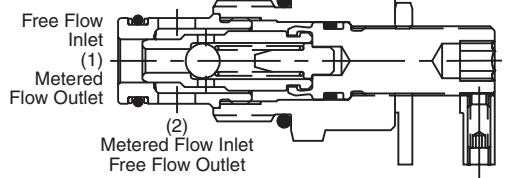
- Hardened, precision ground parts for durability
- Compact size for reduced space requirements
- Fine thread needle option available for precise adjustment
- All external parts zinc plated

## Specifications

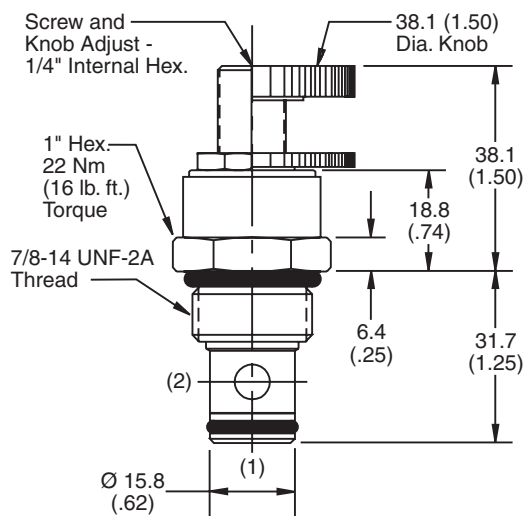
<b>Rated Flow</b>	<b>FV101</b> 45 LPM (12 GPM) <b>FV102</b> 23 LPM (6 GPM)
<b>Maximum Inlet Pressure</b>	210 Bar (3000 PSI)
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
<b>Fluid Compatibility/Viscosity</b>	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
<b>Filtration</b>	ISO-4406 18/16/13, SAE Class 4
<b>Approx. Weight</b>	.23 kg (0.5 lbs.)
<b>Cavity</b>	C10-2 (See BC Section for more details)
<b>Form Tool</b>	Rougher None Finisher NFT10-2F



FV102

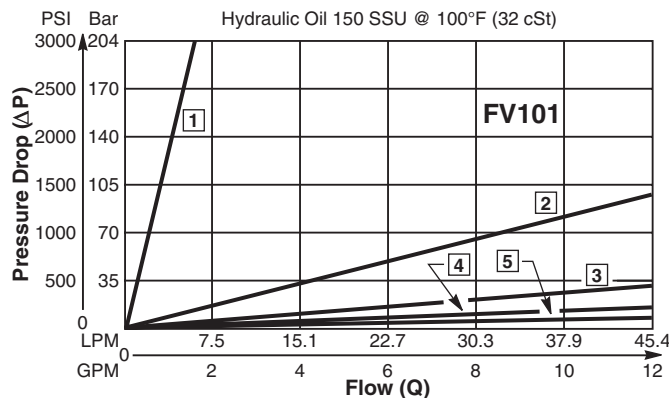


## Dimensions

 Millimeters (Inches)

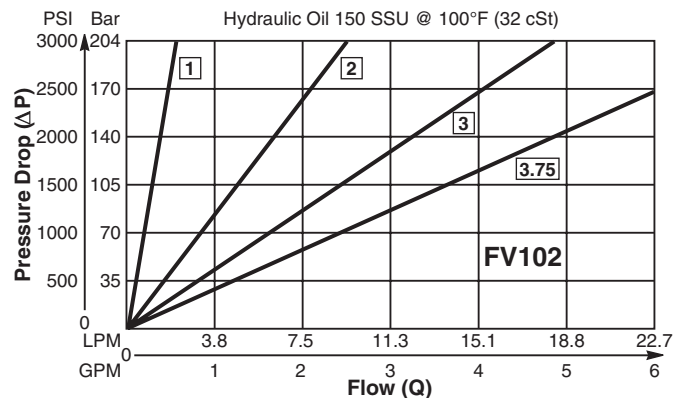
## Performance Curves

### 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 (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



Code	Style
1	Coarse Flow
2	Fine Flow

Code	Seals / Kit. No.
Omit	Nitrile / (SK10-2N)
V	Fluorocarbon / (SK10-2V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Port Size	Body Part No.
Omit	Cartridge Only	
6T	SAE-6	(B10-2-*6T)
8T	SAE-8	(B10-2-*8T)

\* Add "A" for aluminum, omit for steel.

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