

**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

**CB**

Cartridge  
Bodies

**BC**

Bodies &  
Cavities

**TD**

Technical  
Data

## General Description

Pressure Compensated Flow Regulator Valve.

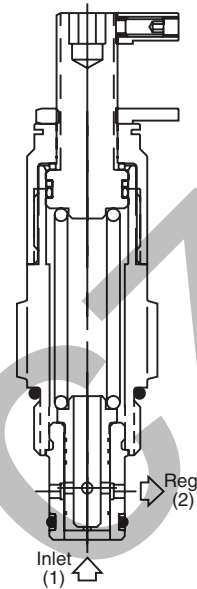
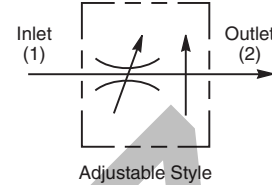
**NOTE:** When used with a fixed displacement pump, pressure to the cartridge must be controlled by a relief valve located between the pump and the FR101 cartridge. For additional information see Technical Tips on pages FC1-FC4.

## Features

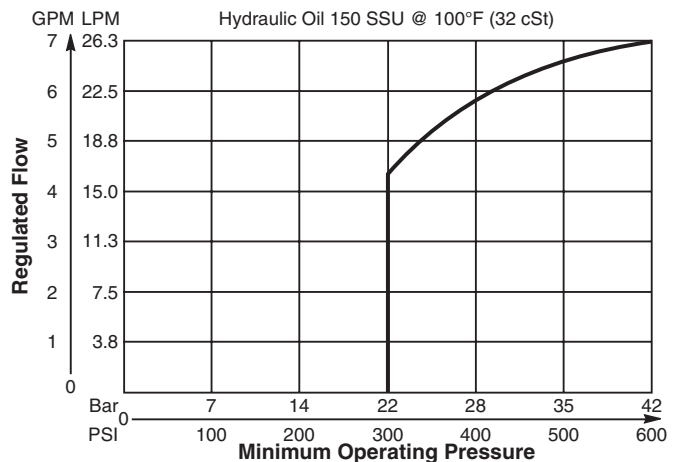
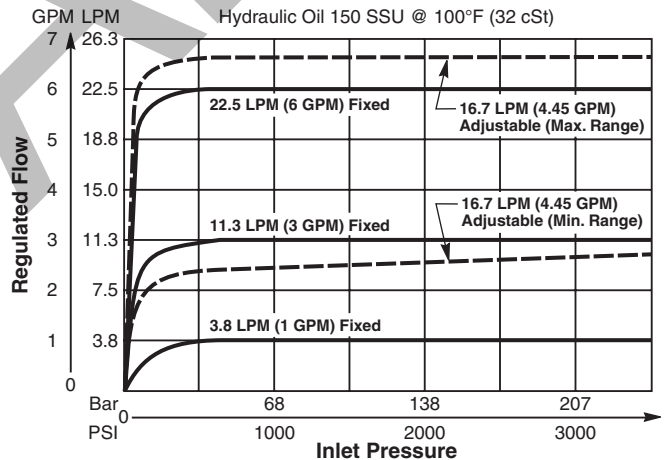
- Hardened, precision ground parts for durability
- Cartridge design
- Acts as a fixed orifice in reverse flow condition
- All external parts zinc plated

## Specifications

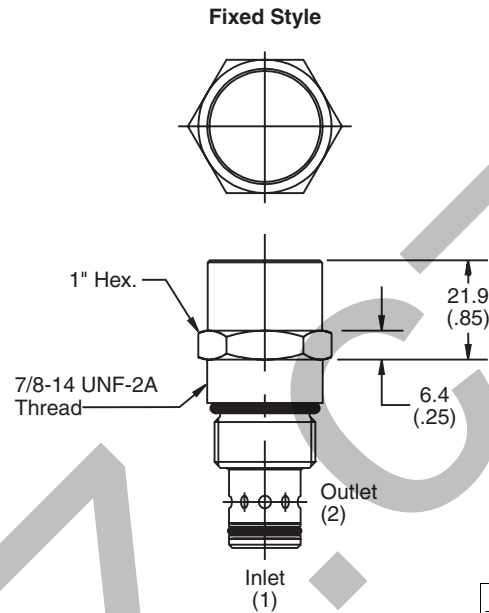
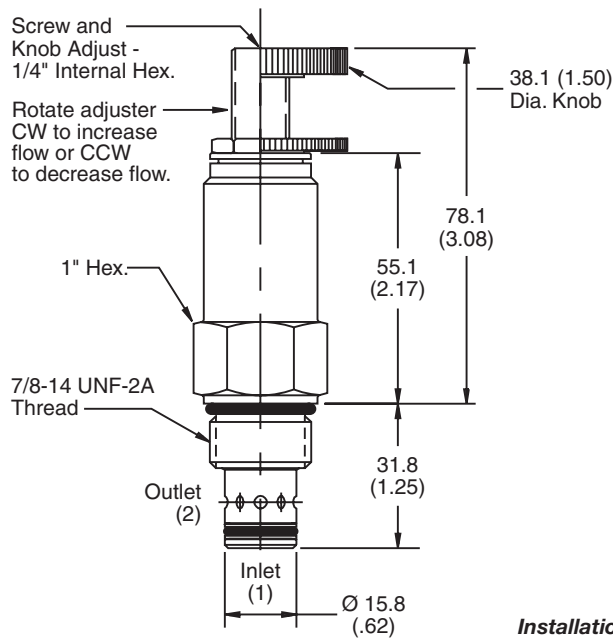
Rated Flow	<b>Fixed</b> 22.5 LPM (6 GPM) <b>Adjusted</b> 26.5 LPM (7 GPM)
Maximum Inlet Pressure	245 Bar (3500 PSI)
Accuracy (Fixed)	3.8 LPM (1 GPM) $\pm 20\%$ 7.5 - 11.3 LPM (2-3 GPM) $\pm 15\%$ 15 - 22.5 LPM (4-6 GPM) $\pm 10\%$
Adjustment Range (Adj. Version)	$\pm 30\%$ Nominal
Cartridge Material	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)
Form Tool	Rougher None Finisher NFT10-2F



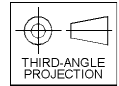
## Performance Curves Regulated Flow vs. Pressure (Through cartridge only)



**Dimensions** Millimeters (Inches)



**Installation Torque**  
**Aluminum** 22 Nm (16 lb. ft.)  
**Steel** 65 Nm (48 lb. ft.)



**Ordering Information**

**FR101**

10 Size  
 Pressure  
 Compensated  
 Flow Regulator  
 (Restrictive)

Adjustment  
 Style

Flow  
 Setting/  
 Range

Seals

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

Code	Adjustment Style
F	Fixed Style preset at factory
<b>K</b>	<b>Knob Adjust (840208K)</b>
<b>S</b>	<b>Screw Adjust</b>

Code	Fixed Style Flow
100	3.8 LPM (1 GPM)
200	7.5 LPM (2 GPM)
300	11.3 LPM (3 GPM)
400	15 LPM (4 GPM)
500	18.8 LPM (5 GPM)
600	22.5 LPM (6 GPM)

Code	Knob/Screw Style Flow Range
065	1.9-3.0 LPM (0.5-0.8 GPM)
095	3.0-4.5 LPM (0.8-1.2 GPM)
135	4.1-6.4 LPM (1.1-1.7 GPM)
185	6.0-8.3 LPM (1.6-2.2 GPM)
260	7.9-11.6 LPM (2.1-3.1 GPM)
375	11.3-16.9 LPM (3.0-4.5 GPM)
550	16.1-25.1 LPM (4.3-6.7 GPM)

Code	Seals / Kit No.
<b>Omit</b>	<b>Nitrile / (SK10-2)</b>
V	Fluorocarbon / (SK10-2V)

**Order Bodies Separately**  
 See section BC

<b>B10</b>	—	<b>2</b>	—	
10 size		2-Way Cavity		Port Size

Code	Porting / Body Material
8T	SAE-8 / Steel (5000 PSI)
<b>A8T</b>	<b>SAE-8 / Aluminium (3000 PSI)</b>

## General Description

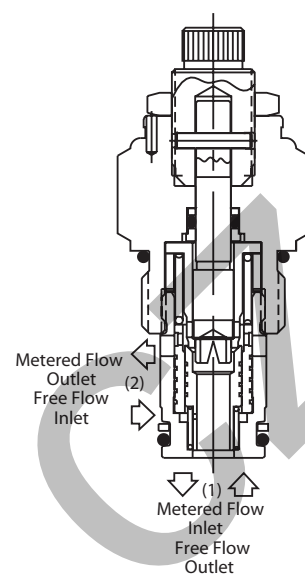
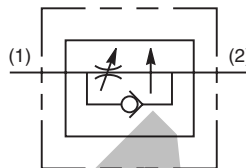
Fully Adjustable, Pressure Compensated Flow Control Valve. For additional information see Technical Tips on pages FC1-FC4.

## Features

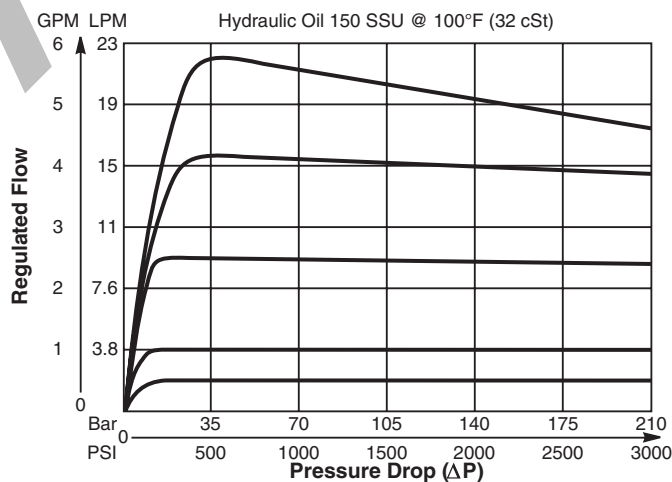
- Fully adjustable from 0.75 LPM (0.2 GPM) to 20.6 LPM (5.5 GPM)
- Hardened, precision ground parts for durability
- All external parts are zinc plated
- Compact size for reduced space requirements

## Specifications

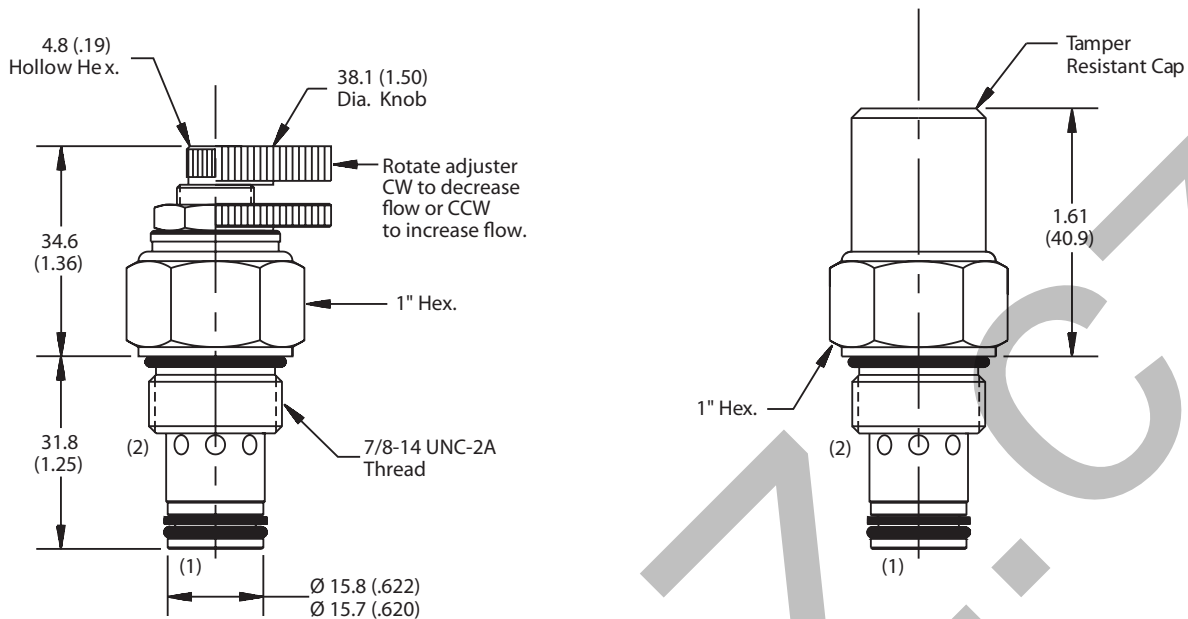
Rated Flow	20.6 LPM (5.5 GPM)
Maximum Inlet Pressure	210 Bar (3000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
Fluid Compatibility/Viscosity	Mineral-based 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)
Form Tool	Rougher None Finisher NFT10-2F



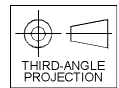
## Performance Curves Regulated Flow vs. Pressure Drop (Through cartridge only)



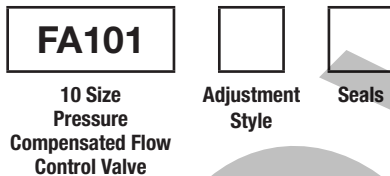
**Dimensions** Millimeters (Inches)



**Installation Torque**  
**Aluminum** 22 Nm (16 lb. ft.)  
**Steel** 65 Nm (48 lb. ft.)



**Ordering Information**



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

Code	Adjustment Style / Kit No.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (717785)

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

*Order Bodies Separately*  
*See section BC*

B10	—	2	—	
10 size		2-Way Cavity		Port Size

Code	Porting / Body Material
8T	SAE-8 / Steel (5000 PSI)
A8T	SAE-8 / Aluminium (3000 PSI)

## General Description

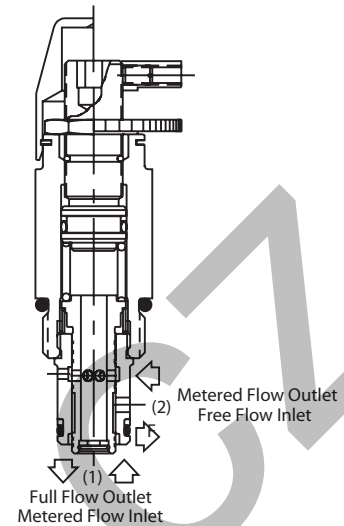
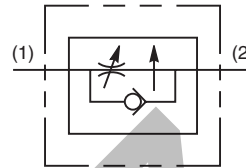
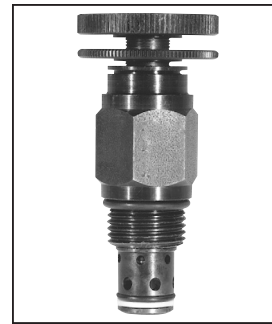
Pressure Compensated Flow Control. For additional information see Technical Tips on pages FC1-FC4.

## Features

- Hardened, precision ground parts for durability
- Compact size for reduced space requirements
- Free flow in reverse condition
- All external parts zinc plated

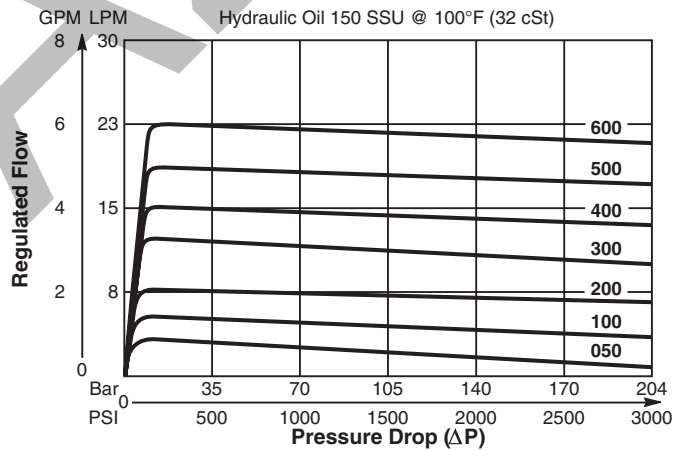
## Specifications

Rated Flow	56 LPM (15 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)
Form Tool	Rougher None Finisher NFT10-2F

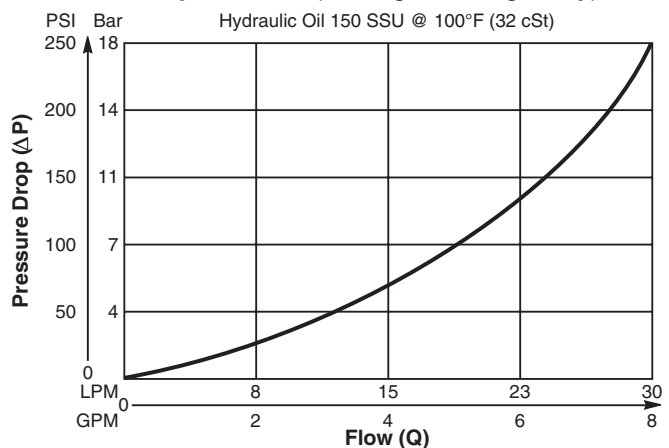


## Performance Curves

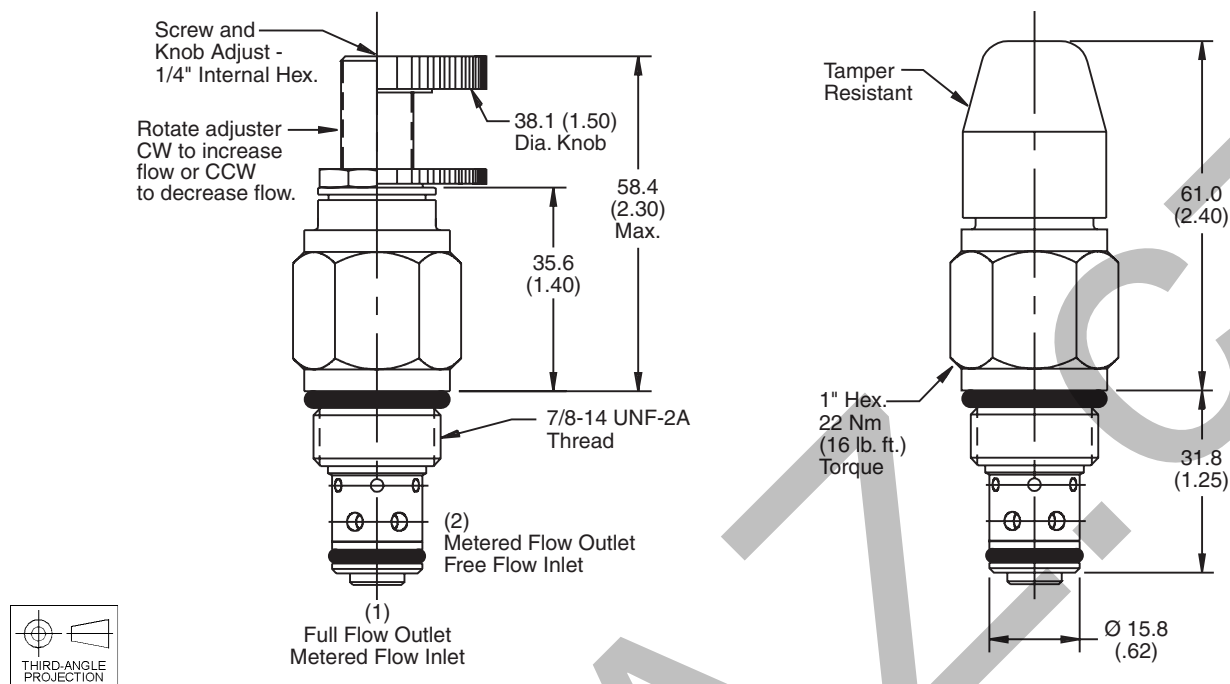
### Regulated Flow vs. Pressure Drop (Through cartridge only)



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



**Dimensions** Millimeters (Inches)



**Ordering Information**

<b>FC101</b>			
10 Size Pressure Compensated Flow Control	Adjustment Style	Flow Range	Seals

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

Code	Adjustment Style / Kit No.
<b>K</b>	<b>Knob Adjust (840208K)</b>
<b>S</b>	<b>Screw Adjust</b>
T	Tamper Resistant Cap (717783)

Code	Seals / Kit No.
<b>Omit</b>	<b>Nitrile / (SK10-2)</b>
V	Fluorocarbon / (SK10-2V)

Code	Flow Range and Standard Setting
050	1.1-3.8 LPM (.30-1.0 GPM) (1.9 LPM (.5 GPM) @ 69 Bar (1000 PSI) ΔP)
100	2.8-8.3 LPM (.75-2.2 GPM) (3.8 LPM (1 GPM) @ 69 Bar (1000 PSI) ΔP)
300	7.5-16.9 LPM (2.0-4.5 GPM) (11.3 LPM (3 GPM) @ 69 Bar (1000 PSI) ΔP)
600	15-30 LPM (4.0-8.0 GPM) (22.5 LPM (6 GPM) @ 69 Bar (1000 PSI) ΔP)

Order Bodies Separately  
 See section BC

<b>B10</b>	—	<b>2</b>	—	
10 size		2-Way Cavity		Port Size

Code	Porting / Body Material
8T	SAE-8 / Steel (5000 PSI)
A8T	SAE-8 / Aluminium (3000 PSI)