

**Technical Information**

- 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

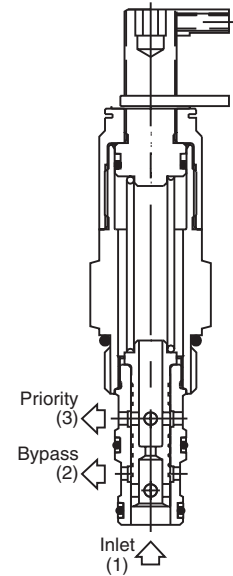
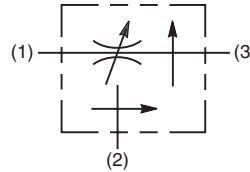
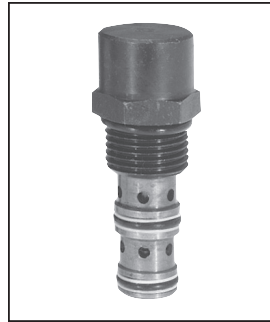
**General Description**

Pressure Compensated Priority Flow Regulator Valve. For additional information see Technical Tips on pages FC1-FC4.

**Caution:** If the priority line is blocked so that no flow can pass through the control orifice; the compensator spool will shift, blocking the bypass port and allowing inlet pressure to go to full system relief pressure. The FP101 cartridge does not provide a pressure relieving function.

**Specifications**

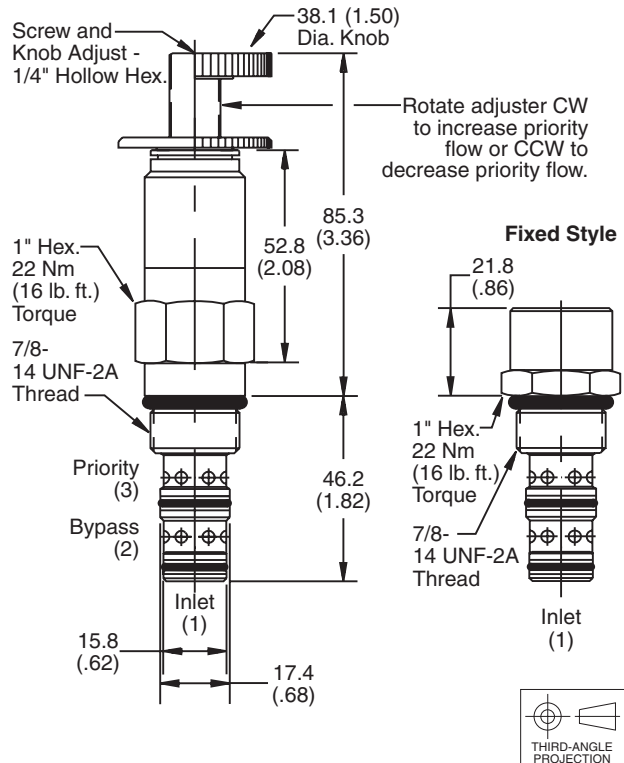
<b>Maximum Priority Flow</b>	<b>Fixed</b> 30.0 LPM (8 GPM) <b>Adjusted</b> 33.8 LPM (9 GPM)
<b>Maximum Inlet Flow</b>	56.3 LPM (15 GPM)
<b>Minimum Inlet Flow</b>	See Valve Performance Curves
<b>Maximum Inlet Pressure</b>	245 Bar (3500 PSI)
<b>Minimum Inlet Pressure</b>	See Valve Performance Curves
<b>Accuracy (Fixed)</b>	±20%
<b>Adjustment Range (Adj. Version)</b>	±20% Nominal
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-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)
<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 Code 16/13, SAE Class 4 or better
<b>Approx. Weight</b>	.23 kg (0.5 lbs.)
<b>Cavity</b>	No. C10-3 (See BC Section for more details)
<b>Form Tool</b>	Regulator NFT10-3R Finisher NFT10-3F



**Features**

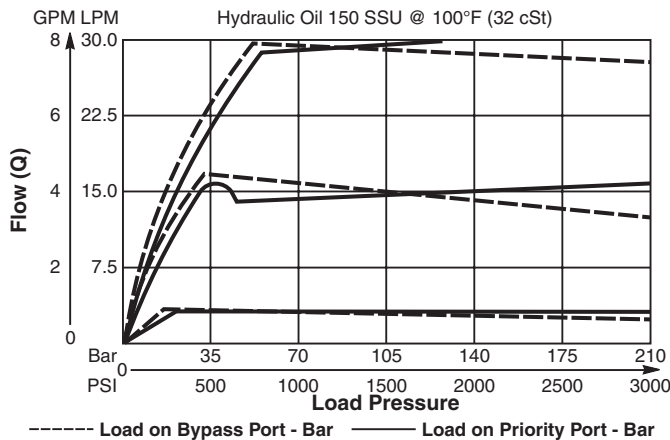
- Hardened, precision ground parts for durability
- Cartridge design
- Acts as a fixed orifice in reverse flow condition (Priority line only)
- All external parts zinc plated

**Dimensions** Millimeters (Inches)

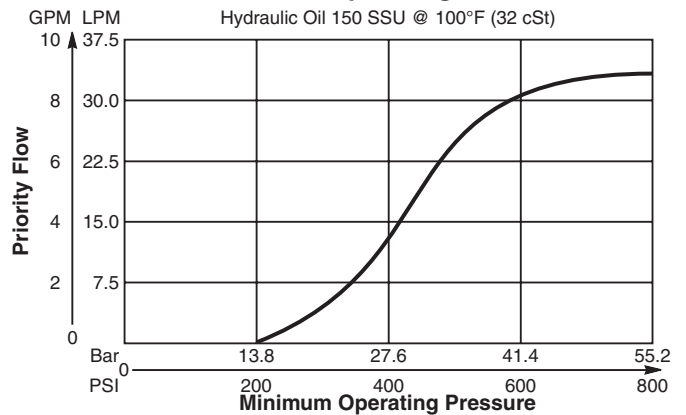


**Performance Curves (Through cartridge only)**

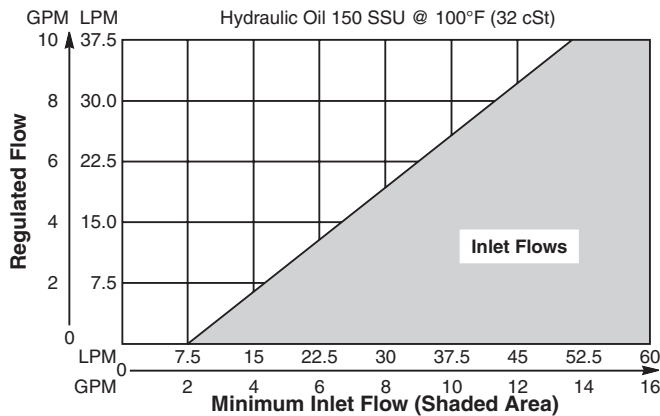
**Regulated Flow vs. Load Pressure**



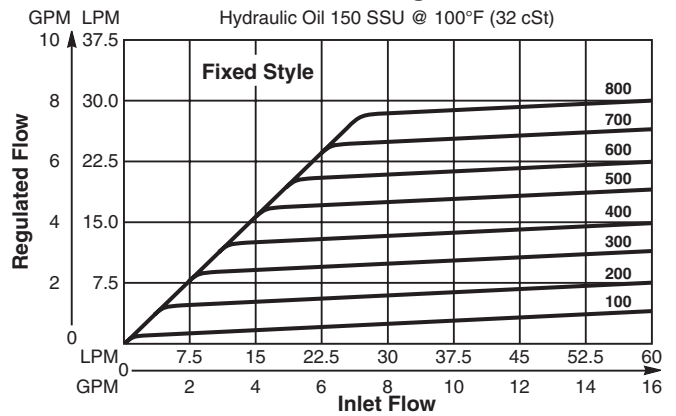
**Pressure vs. Priority Flow  
 Minimum Operating Pressure**



**Minimum Inlet Flow**



**Inlet Flow vs. Regulated Flow**



**Ordering Information**

**FP101**             —    

**10 Size Pressure Compensated Flow Regulator**    **Adjustment Style**    **Flow Setting/Range**    **Seals**    **Body Material**    **Port Size**

Code	Adjustment Style
F	Fixed Style present at factory
K	Knob Adjust
S	Screw Adjust

Code	Fixed Style Flow	Code	Knob/Screw Style Flow Range
100	3.8 LPM (1 GPM)	085	2.6-3.8 LPM (0.7-1.0 GPM)
200	7.5 LPM (2 GPM)	110	3.0-5.3 LPM (0.8-1.4 GPM)
300	11.3 LPM (3 GPM)	155	4.5-7.1 LPM (1.2-1.9 GPM)
400	15 LPM (4 GPM)	220	6.4-10.1 LPM (1.7-2.7 GPM)
500	18.8 LPM (5 GPM)	295	8.6-13.5 LPM (2.3-3.6 GPM)
600	22.5 LPM (6 GPM)	405	11.6-18.8 LPM (3.1-5.0 GPM)
700	26.3 LPM (7 GPM)	575	16.9-26.3 LPM (4.5-7.0 GPM)
800	30 LPM (8 GPM)	780	23.6-34.9 LPM (6.3-9.3 GPM)

Code	Seals / Kit. No.
Omit	Nitrile / (SK10-3N)
V	Fluorocarbon / (SK10-3V)

Code	Body Material
Omit	Steel
A	Aluminum

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

\* Add "A" for aluminum, omit for steel.  
 † Steel body only.