

<b>CV</b>	Check Valves
<b>SH</b>	Shuttle Valves
<b>LM</b>	Load/Motor Controls
<b>FC</b>	Flow Controls
<b>PC</b>	Pressure Controls
<b>LE</b>	Logic Elements
<b>DC</b>	Directional Controls
<b>MV</b>	Manual Valves
<b>SV</b>	Solenoid Valves
<b>PV</b>	Proportional Valves
<b>CE</b>	Coils & Electronics
<b>CB</b>	Cartridge Bodies
<b>BC</b>	Bodies & Cavities
<b>TD</b>	Technical Data

### General Description

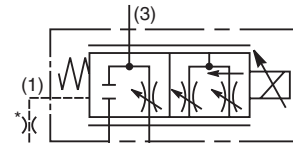
3 Way, Normally Closed, Proportional Flow Regulator Valve. Pressure Compensated. For additional information see Technical Tips on pages PV1-PV5.

### Features

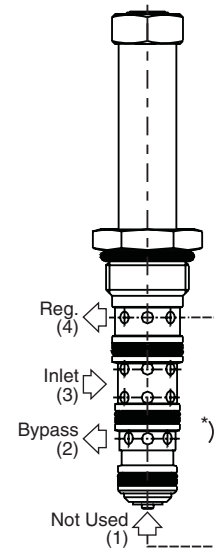
- Analog proportional pressure compensated flow control valve regulates flow proportionally to the input solenoid current
- One piece cartridge housing ensures internal concentricity
- Coil: Waterproof, hermetically sealed, requires no O'Rings; Symmetrical coil can be reversed without affecting performance.
- Nonmagnetic spool and housing assembly
- Factory-adjusted low variation option (Model "L") is available for applications where low variation of flow from valve to valve is essential at a given current.

### Specifications

Rated Inlet Flow	60 LPM (16 GPM)
Rated Regulated Flow	<b>31</b> 26 LPM (7 GPM) Standard ('SS' Coil) <b>31</b> 30 LPM (8 GPM) High Flow ('SP' Coil)
Maximum Input Pressure at Port 3	210 Bar (3000 PSI)
Minimum Pressure Differential	<b>31</b> 13.8 Bar (200 PSI) Standard <b>31</b> 20.7 Bar (300 PSI) High Flow
Maximum Internal Leakage	780 cc (46 cu. in.) @ 210 Bar (3000 PSI)
Hysteresis @ 100 Hz PWM	7%
Opening Point	<b>Standard</b> 21% of Nominal Amperage <b>High Flow</b> 17% of Nominal Amperage
Variation of Opening Point	<b>Standard Model</b> Up To ±50% of Amperage <b>Model "L"</b> ±20% of Amperage
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	0.14 kg (0.31 lbs.)
Cavity	4C (See BC Section for more details)



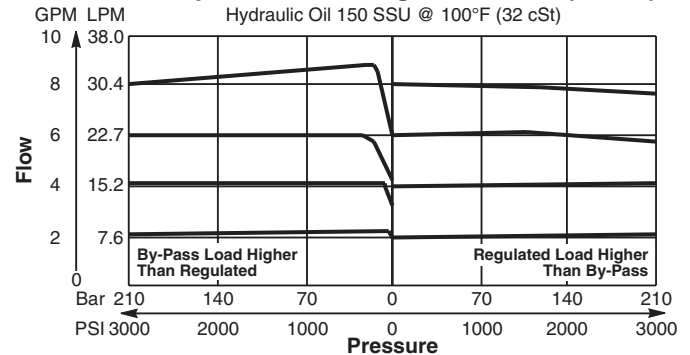
\*Always connect Port (1) to Port (4) through .039" orifice.



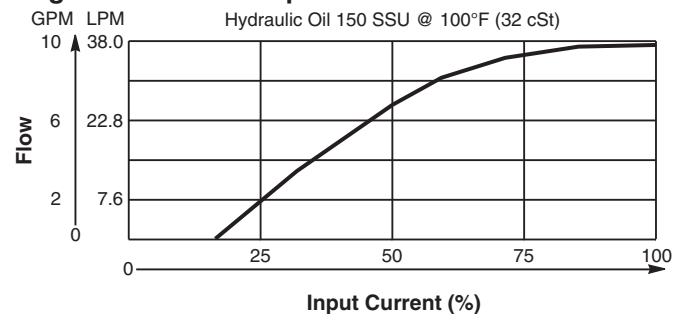
### Performance Curves

#### ▲ PWM Current Regulator Recommended

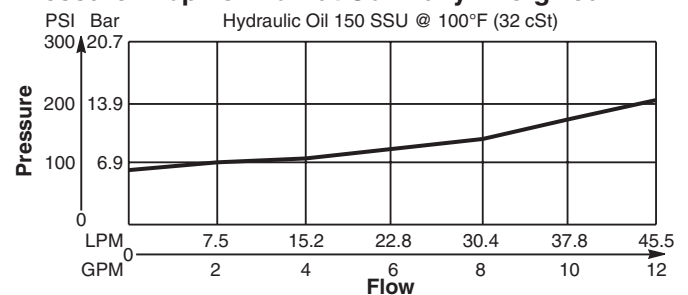
#### Pressure Compensation of Regulated Flow (Port 4)



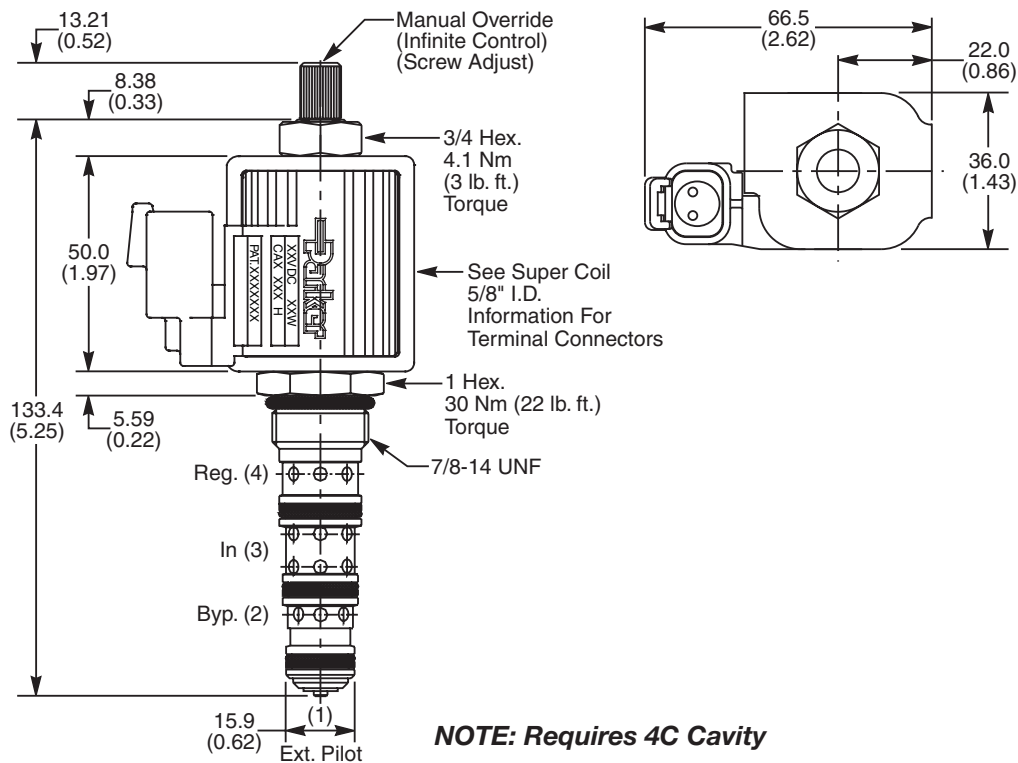
#### Regulated Flow vs. Input Current Stabilized



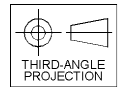
#### Pressure Drop vs. Flow at Coil Fully Energized



**Dimensions** Millimeters (Inches)



**NOTE: Requires 4C Cavity**



**Ordering Information**

<b>JP04C</b>	<b>31</b>				
10 Size Proportional Valve	Style	Override Option	Filter Screen	Seals	Flow Variation

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

**Coil(s) sold separately.** Please see section CE of this catalog, 5/8" Super-Coil (CA series), for ordering information.

Code	Style (Maximum Regulated Flow)
31	Standard ('SS' Coil) 26 LPM (7 GPM)
31	High Flow ('SP' Coil) 30 LPM (8 GPM)

Code	Seals / Kit No.
<b>N</b>	<b>Nitrile / Buna-N (SK30082N-1)</b>
V	Fluorocarbon / (SK30082V-1)

*Order Bodies Separately  
 See section BC*

<b>LB10</b>		
Line Body	Porting	Body Material

Code	Override Option
0	Omit
5	Screw Adjust (Infinite Control)

Code	Flow Variation
Omit	Standard up to ±20% of Rated Flow
L	Low Variation (±7% of Rated Flow)

Code	Porting
562	1/2" SAE Steel (5000 PSI)
562A	1/2" SAE Aluminium (3000 PSI)

Code	Filter Screen
0	Not Available



- 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 Cartrak Bodies
- BC Bodies & Cavities
- TD Technical Data