

- 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

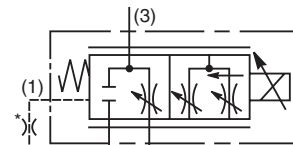
3 Way, Normally Closed, Proportional Flow Regulator Valve. Pressure Compensated. For additional information see Technical Tips on pages PV1-PV5.

Features

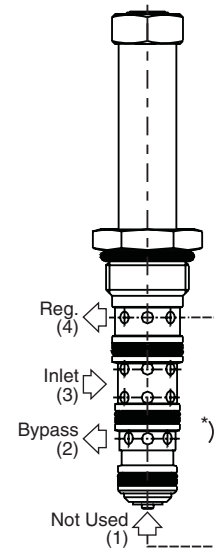
- Analog proportional pressure compensated flow control valve regulates flow proportionally to the input solenoid current
- One piece cartridge housing ensures internal concentricity
- Coil: Waterproof, hermetically sealed, requires no O’Rings; Symmetrical coil can be reversed without affecting performance.
- 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	31 26 LPM (7 GPM) Standard (‘SS’ Coil) 31 30 LPM (8 GPM) High Flow (‘SP’ Coil)
Maximum Input Pressure at Port 3	210 Bar (3000 PSI)
Minimum Pressure Differential	31 13.8 Bar (200 PSI) Standard 31 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	Standard 21% of Nominal Amperage High Flow 17% of Nominal Amperage
Variation of Opening Point	Standard Model Up To ±50% of Amperage Model “L” ±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)



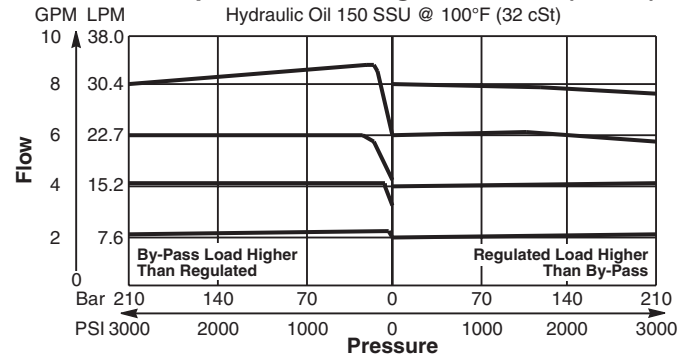
*Always connect Port (1) to Port (4) through .039" orifice.



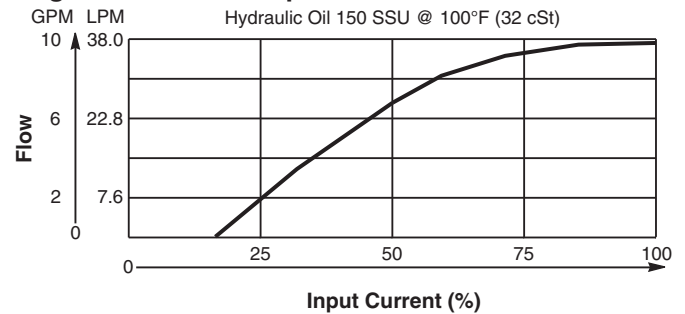
Performance Curves

▲ PWM Current Regulator Recommended

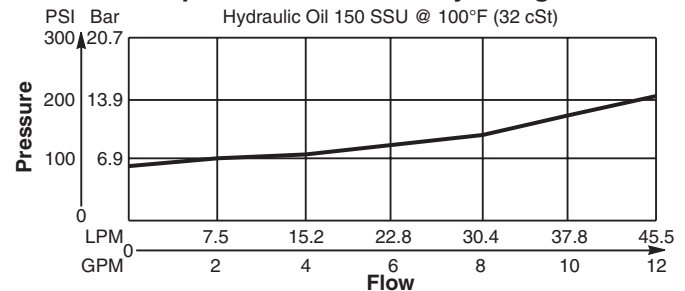
Pressure Compensation of Regulated Flow (Port 4)



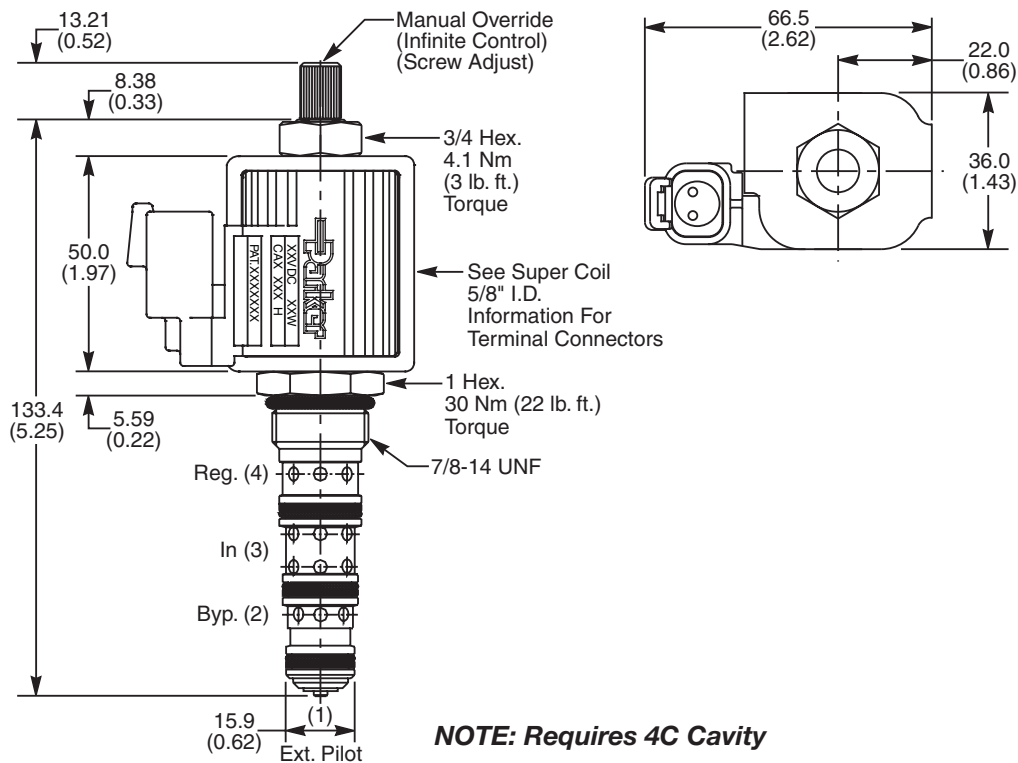
Regulated Flow vs. Input Current Stabilized



Pressure Drop vs. Flow at Coil Fully Energized



Dimensions Millimeters (Inches)



NOTE: Requires 4C Cavity

Ordering Information

JP04C	31				
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.
N	Nitrile / Buna-N (SK30082N-1)
V	Fluorocarbon / (SK30082V-1)

Code	Override Option
0	Not Required
5	Screw Adjust (Infinite Control)

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

Code	Filter Screen
0	Not Available

*Order Bodies Separately
 See section BC*

LB10		
Line Body	Porting	Body Material

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

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