

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

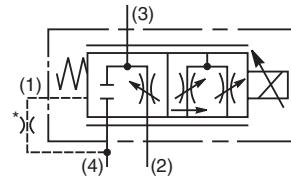
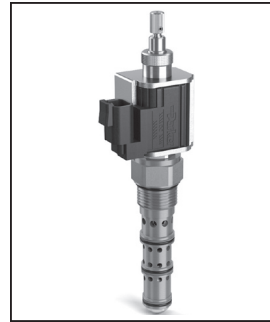
3 Way, Normally Closed, Proportional Flow Regulator Valve. Pressure Compensated. For additional information see Technical Tips on pages PV1-PV6.

Features

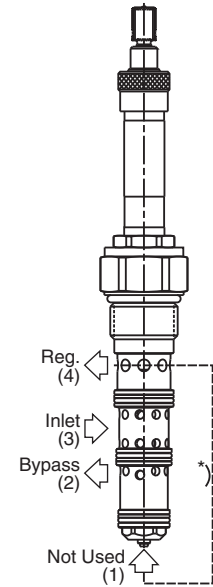
- Analog proportional pressure compensated flow control valve regulates flow proportionally to the input solenoid current
- One piece cartridge housing ensures internal concentricity
- Coil: Waterproof, hermetically sealed, requires no O’Rings; Symmetrical coil can be reversed without affecting performance.

Specifications

Rated Inlet Flow	75 LPM (20 GPM)
Rated Regulated Flow	56.8 LPM (15 GPM) Requires ‘SP’ Coil
Maximum Input Pressure At Port 3	210 Bar (3000 PSI)
Minimum Pressure Differential	13.8 Bar (200 PSI)
Maximum Internal Leakage	568 cc (35 cu. in.) @ 210 Bar (3000 PSI)
Hysteresis @ 100 Hz PWM	<15%
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	.45 kg (1.0 lbs.)
Cavity	C12-4L (See BC Section for more details)



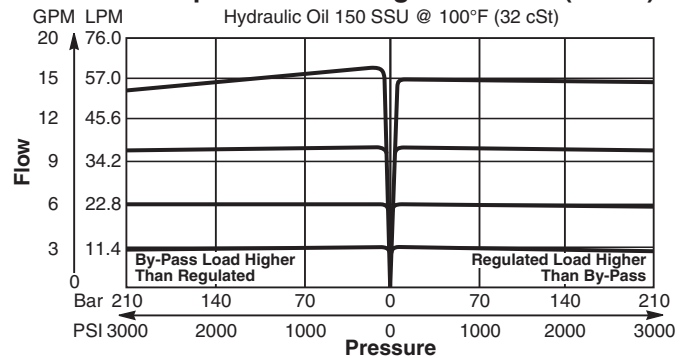
*Always connect Port (1) to Port (4) through .039" orifice.



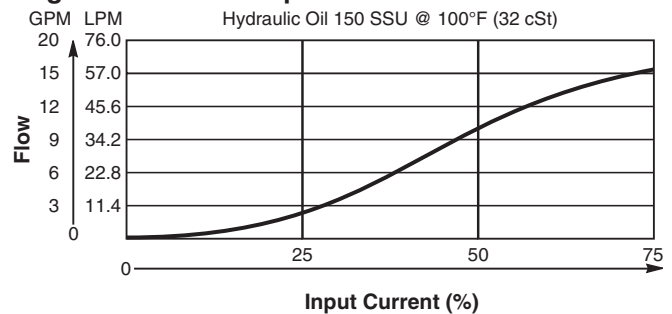
Performance Curves

▲ PWM Current Regulator Recommended

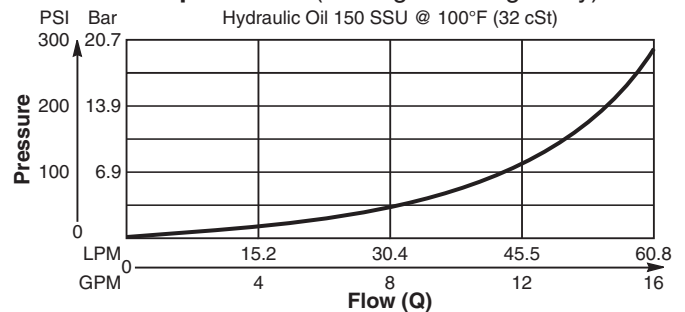
Pressure Compensation of Regulated Flow (Port 4)



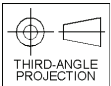
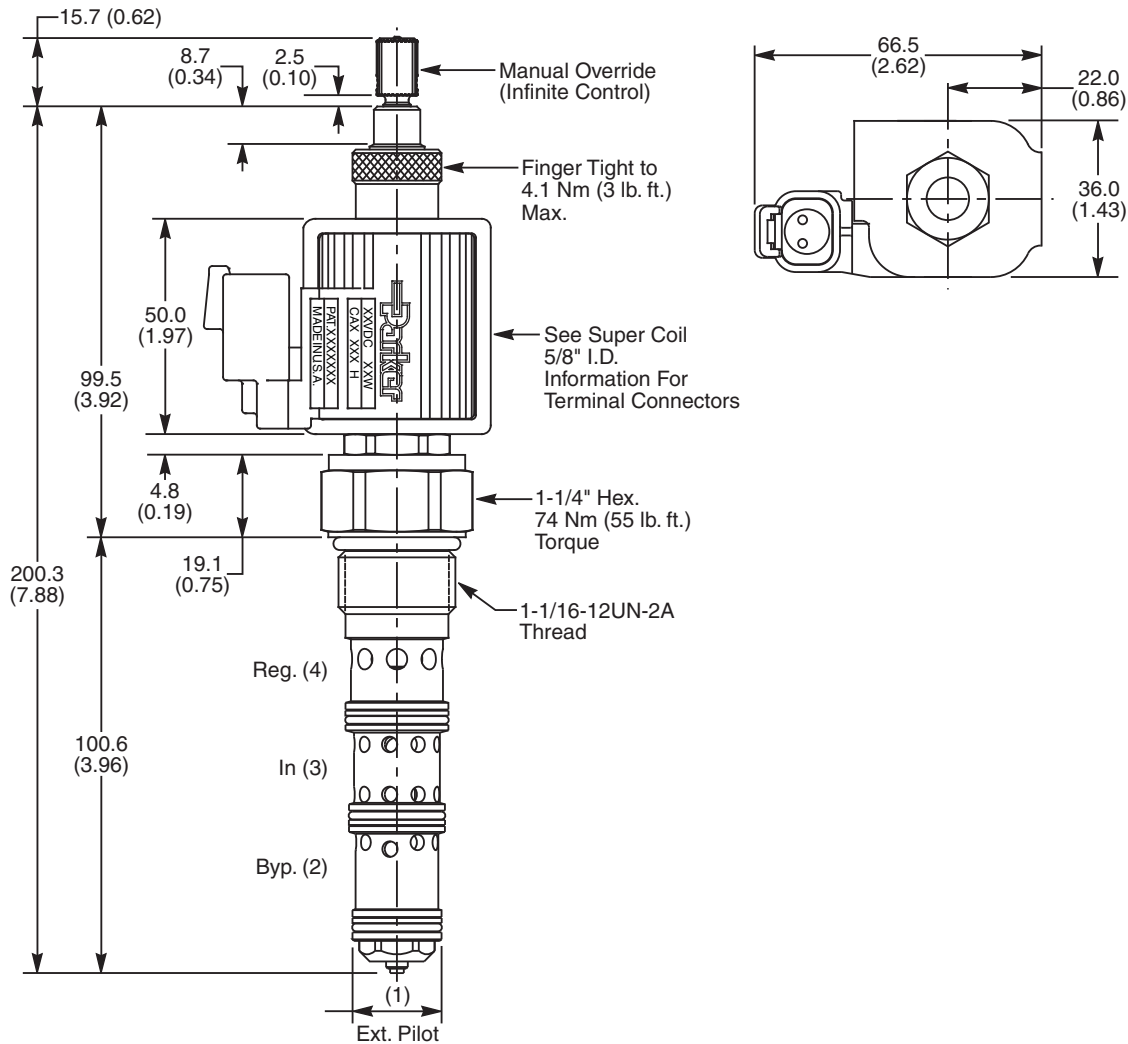
Regulated Flow vs. Input Current Stabilized



Pressure Drop vs. Flow (Through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information

DFA125C	31	S				
12 Size Proportional Valve	Style	Override Option	Seals	Coil Type	Coil Voltage	Coil Termination

Code	Style (Maximum Regulated Flow)
31	High Flow ("SP" Coil) 56.8 LPM (15 GPM)

Code	Coil Type
Omit	Without Coil
SP	Super Coil - 28 Watts

Code	Coil Termination
Omit	Without Coil
A	Amp Jr. Timer*
C	Conduit With Leads
D	DIN Plug Face
H	Molded Deutsch*
L	Dual Lead Wire*
PF	Packard Female*
PM	Packard Male*
S	Dual Spade*

Code	Override Option
Omit	Not Available
S	Standard M.O. (Infinite Control)

Code	Coil Voltage
Omit	Without Coil
D012	12 VDC
D024	24 VDC

Code	Seals / Kit No.
N	Nitrile / Buna-N (Std.) (SK12-4LN)
V	Fluorocarbon / (SK12-4LV)

See Super Coil 5/8" I.D.
 *DC Only

Order Bodies Separately

B12	4L	A	12T
12 Size	4-Way Long Cavity	Body Material	Port Size

Code	Body Material
A	Aluminum

Code	Port Size
12T	SAE - 12



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