

Technical Information

CV

Check
Valves

SH

Shuttle
ValvesLM
Load/Motor
ControlsFC
Flow
ControlsPC
Pressure
ControlsLE
Logic
ElementsDC
Directional
ControlsMV
Manual
ValvesSV
Solenoid
ValvesPV
Proportional
ValvesCE
Coils &
ElectronicsBC
Bodies &
CavitiesTD
Technical
Data

General Description

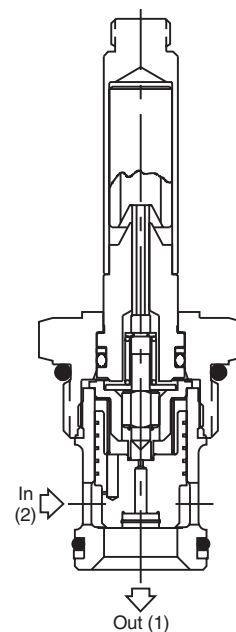
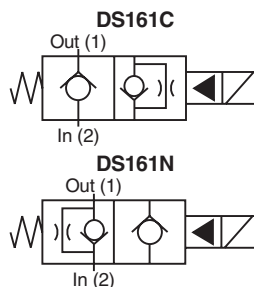
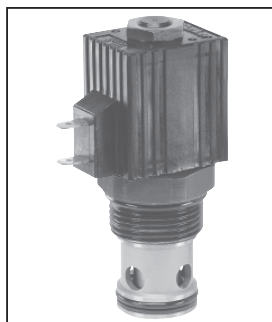
2-Way Poppet Valves. For additional information see Technical Tips on pages SV1-SV6.

Features

- Low hysteresis
- Replaceable, one piece encapsulated coils with minimal amperage draw
- Various coil terminations and voltages
- Various manual override options
- Fast response available, (CH) rated at 60 LPM (15 GPM)
- All external parts zinc plated

Specifications

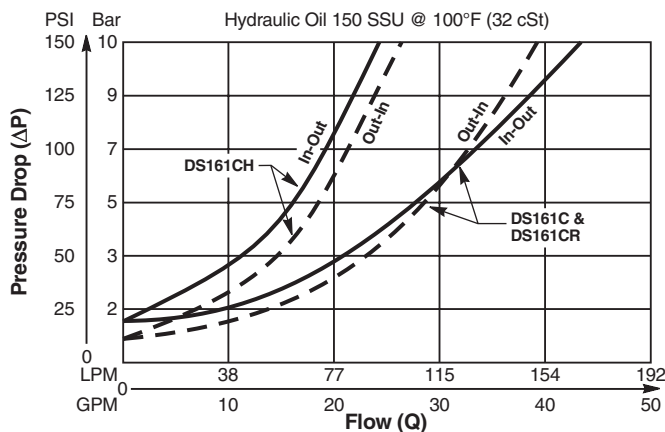
Rated Flow	150 LPM (40 GPM)		
Maximum Inlet Pressure	210 Bar (3000 PSI)		
Leakage at 150 SSU (32 cSt)	20 drops/min. (1.33 cc/min.)		
Minimum Operating Voltage	85% of rated voltage at 20°C (72°F).		
Response Time	C, CR CH N, NR	Energized 50 ms 40 ms 45 ms	De-Energized 130 ms 60 ms 75 ms
Cartridge Material	All parts steel. All operating parts hardened steel.		
Operating Temp. Range/Seals	-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)		
Fluid Compatibility/ Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)		
Filtration	ISO Code 16/13, SAE Class 4 or better		
Approx. Weight	.34 kg (.75 lbs.)		
Cavity	C16-2 (See BC Section for more details)		
Form Tool	Rougher Finisher	None NFT16-2F	



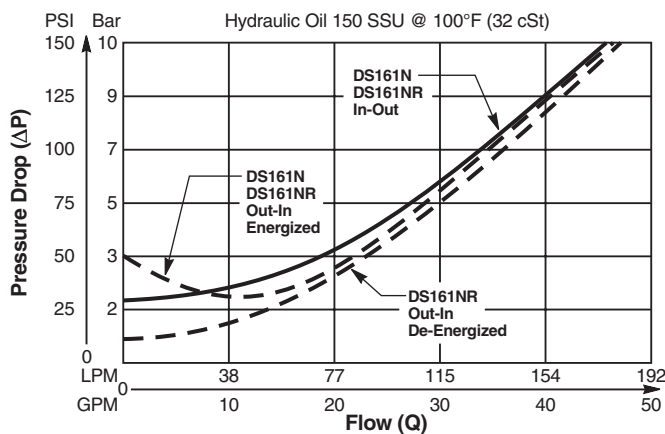
Performance Curves

Pressure Drop vs. Flow (Through cartridge only)

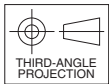
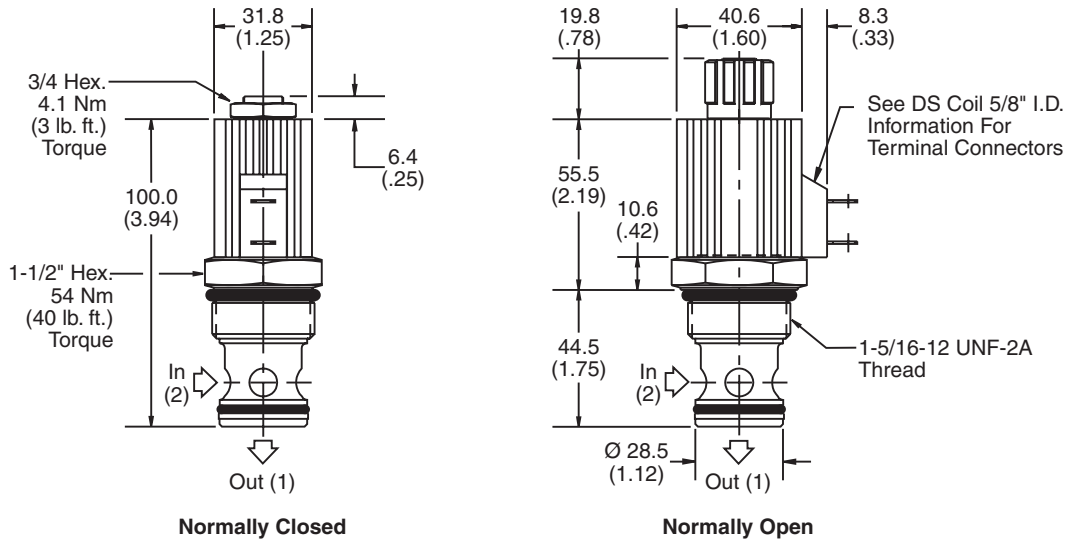
Normally Closed



Normally Open



Dimensions Millimeters (Inches)



Ordering Information

DS161								
16 Size Solenoid Valve	Style	Override Option	Seals	Coil Voltage	Coil Wattage	Coil Termination	Body Material	Port Size

Code / Style	
C Normally Closed Metered reverse flow	
CH Normally Closed Metered reverse flow (Fast response)	
CR Normally Closed Free reverse flow	
N Normally Open Metered reverse flow	
NR Normally Open Free reverse flow	

Code	Override Options
Omit	None
E	Push Type with Extended Rod (N.O. Only)
M	Push Type with Flush Rod (N.O. Only)
P	Pull & Release (N.C. Only)
T	Push & Twist (N.C. Only)

Code	Seals / Kit. No.
Omit	Nitrile / (SK16-2)
V	Fluorocarbon / (SK16-2V)

Code	Coil Voltage
Omit	Without Coil
D012	12 VDC
D024	24 VDC
A120	120/110 VAC, 60/50 Hz
A240	240/220 VAC, 60/50 Hz

Code	Wattage
Omit	Without Coil
L	17 Watts
H	30 Watts

Code	Coil Termination
Omit	Without Coil
C	Conduit (AC Only)
D	DIN Plug Face
P	Dual Spade (DC Only)
S	Dual Screw (DC Only)
W	Dual Lead (DC Only)

See DS coil 5/8" I.D.

Code	Body Material
Omit	Steel
A	Aluminum

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12T	SAE-12	(B16-2-*12T)
16T	SAE-16	(B16-2-*16T)
12B	3/4" BSPG	(B16-2-*12B)
16B	1" BSPG	(B16-2-16B)†

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