

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

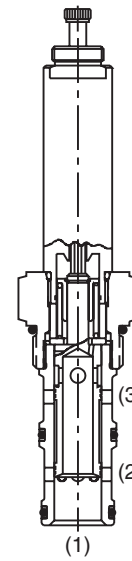
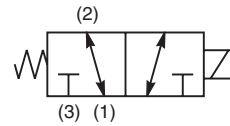
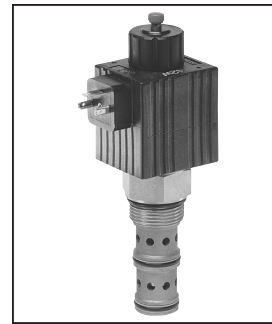
3-Way Spool Valves. For additional information see Technical Tips on pages SV1-SV5.

Features

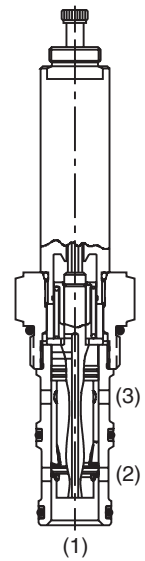
- High flow capacity with reduced space requirements
- Standard valve bodies and common cavities
- One-piece encapsulated coil with minimal amperage draw
- No dynamic seals
- Variety of coil terminations
- All external parts zinc plated
- Manual override standard

Specifications

Rated Flow	DS163	N.O.	45.4 LPM (12 GPM)
		N.C.	49.2 LPM (13 GPM)
		Selector	41.6 LPM (11 GPM)
Maximum Inlet Pressure	DS163B	N.O.	26.5 LPM (7 GPM)
		N.C.	53.0 LPM (14 GPM)
		Selector	56.8 LPM (15 GPM)
Leakage at 150 SSU (32 cSt)			82 cc/min. (5 in ³ /min.)
Minimum Operating Voltage			85% of rated voltage at 20°C (72°F).
Response Time			Normally Closed up to 90 ms Normally Open up to 100 ms
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			.59 kg (1.3 lbs.)
Cavity			C16-3 (See BC Section for more details)
Form Tool			Rougher NFT16-3R Finisher NFT16-3F

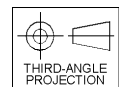
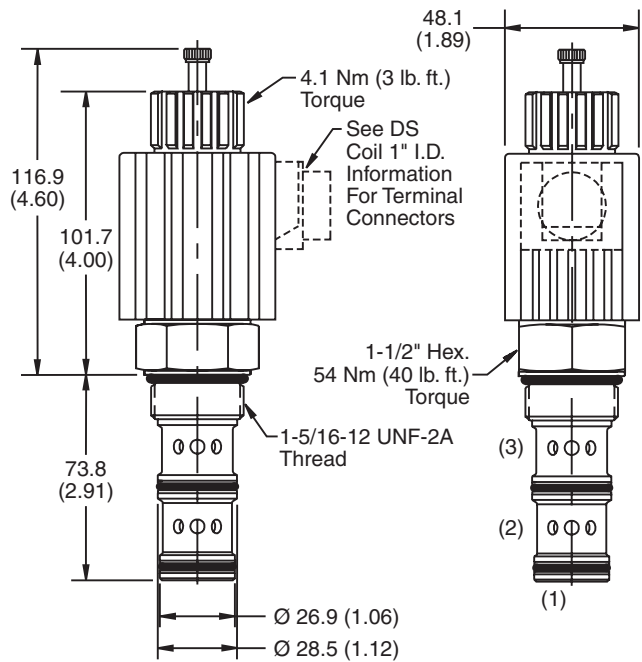


DS163



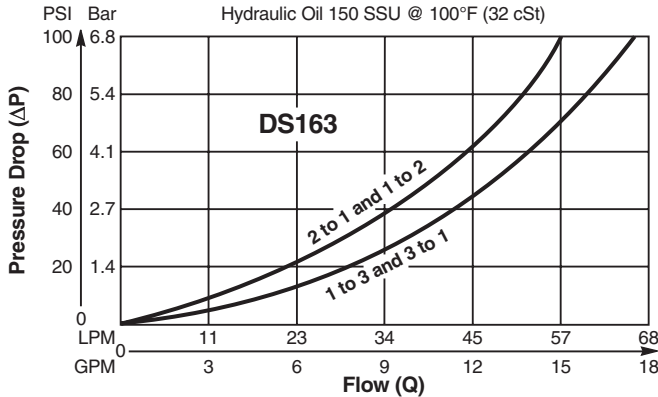
DS163B

Dimensions

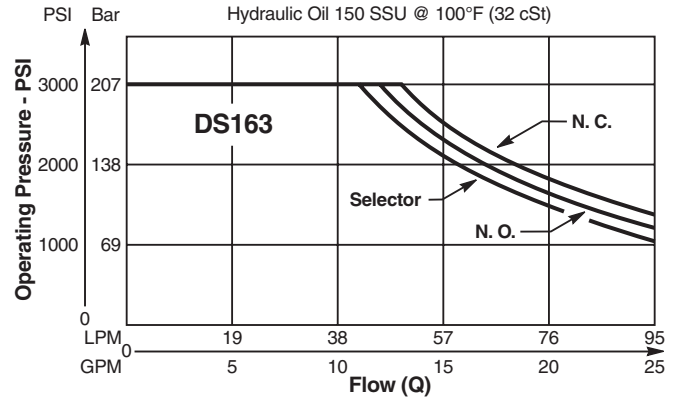


Performance Curves

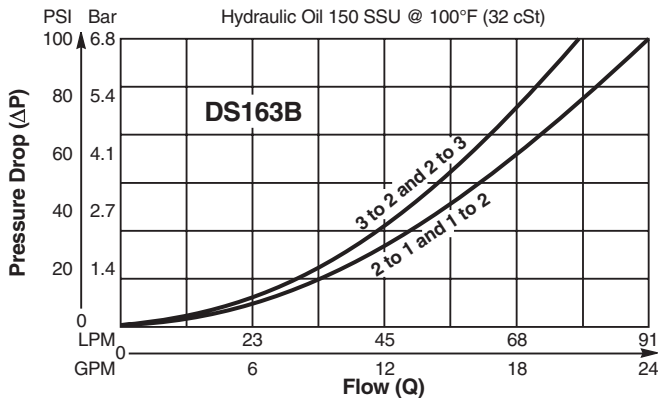
Pressure Drop vs. Flow (Through cartridge only)



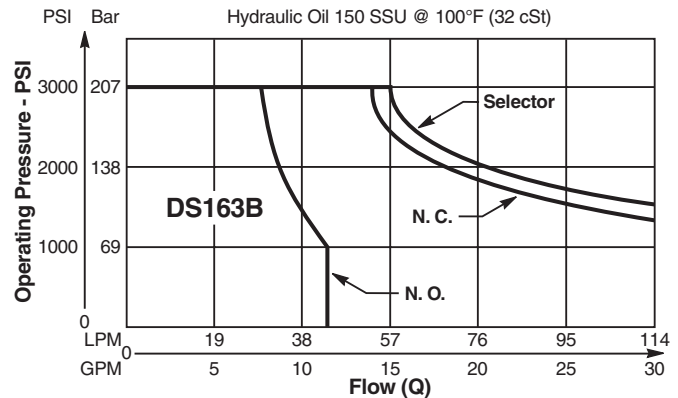
Shift Limit Characteristics (Min. Operating Voltage)



Pressure Drop vs. Flow (Through cartridge only)



Shift Limit Characteristics (Min. Operating Voltage)



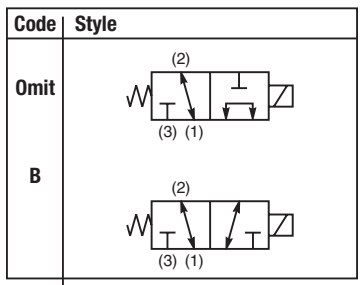
Ordering Information

DS163		
16 Size Solenoid Valve	Style	Seals

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, 1" Coil (DS series), for ordering information.

Order Bodies Separately See section BC



Code	Seals / Kit No.
N	Nitrile (SK16-3)
V	Fluorocarbon / (SK16-3V)

B16	-	3	-	
16 size		3-Way Cavity		Port Size

Code	Port Size / Body Material
16T	SAE-16 / Steel (5000 PSI)
A16T	SAE-16 / Aluminium (3000 PSI)

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- CE Coils & Electronics
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- TD Technical Data