

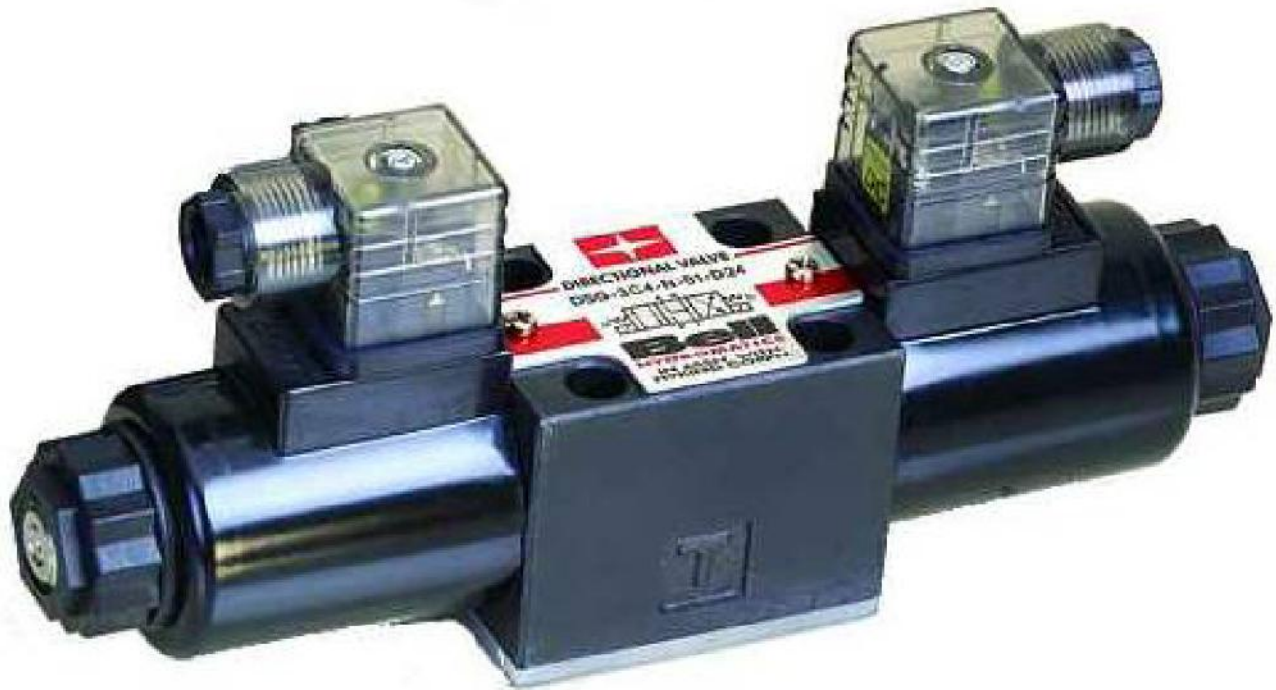


Bell Hydromatics

Directional Valves

Solenoid Operated(DSG)

DSG-01-DC



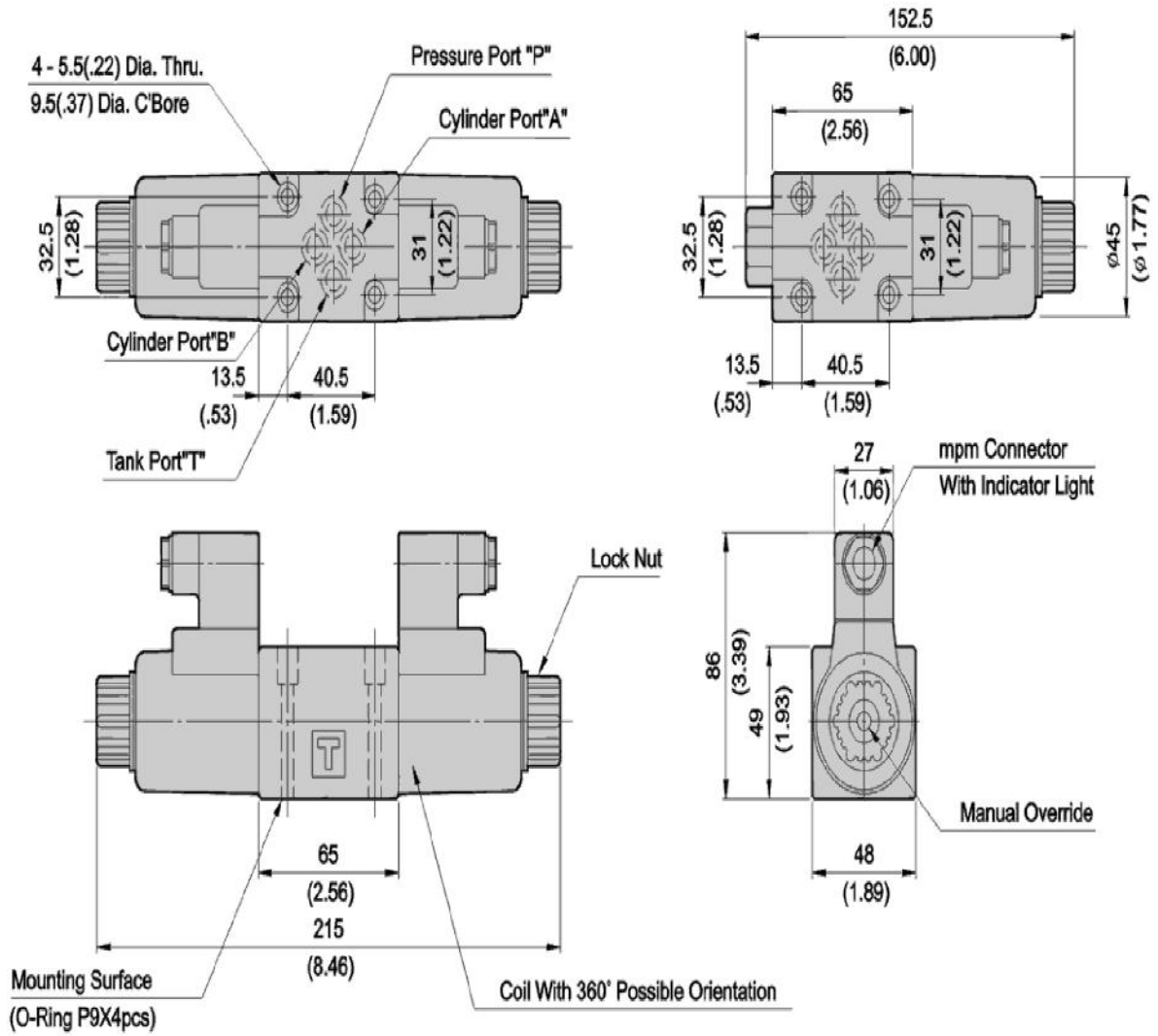
Features:

- High Flow rate upto 63 lpm (16.6 USgpm)
- Maximum Operating pressure upto 315 bar (4500 PSI)
- Long service life with average durability of 50 million spool shifts.

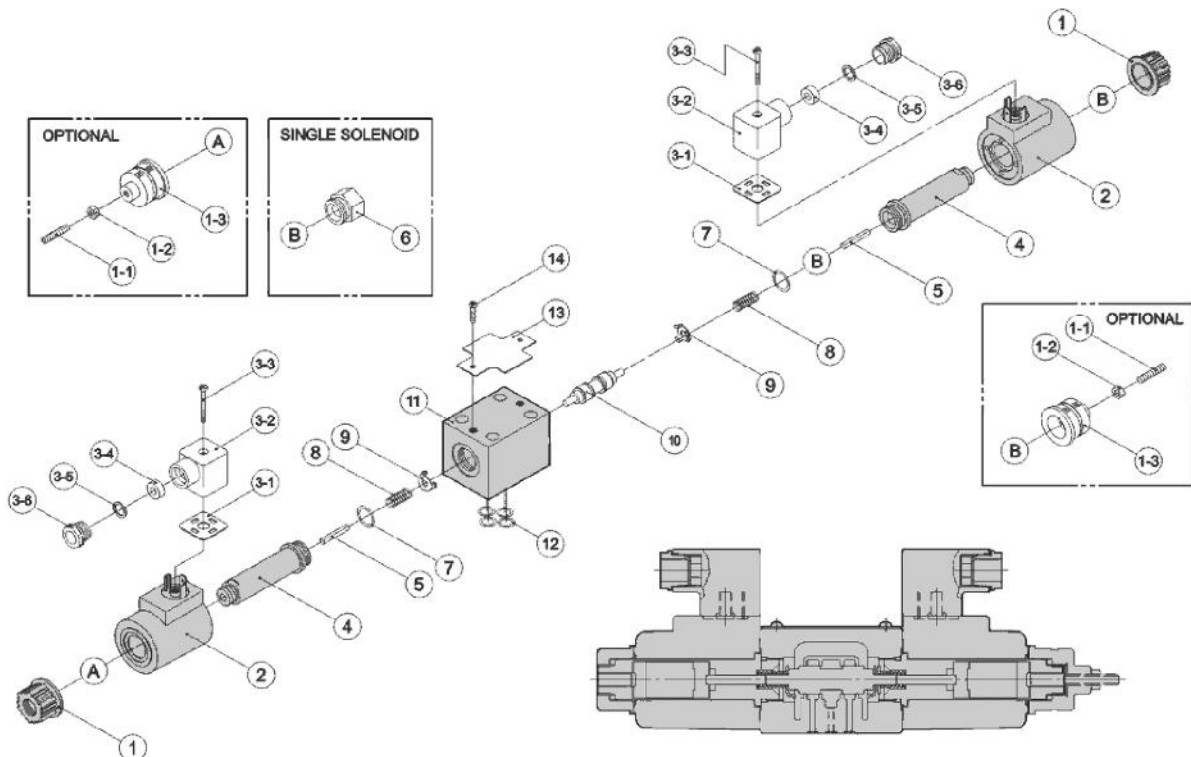
Technical Specifications

Spool Type & Graphic Symbols		DSG – 01 (1/8")	
Symbols	Model Number	Rated Flow Capacity	Maximum Flow Capacity
	DSG-01-2B2-**	30 lpm (7.9 USgpm)	63 lpm (16.6 USgpm)
	DSG-01-2B3-**		
	DSG-01-2B8-**		
	DSG-01-2D2-**		
	DSG-01-2D3-**		
	DSG-01-3C2-**		
	DSG-01-3C3-**		
	DSG-01-3C4-**		
	DSG-01-3C40-**		
	DSG-01-3C7-**		
	DSG-01-3C9-**		
	DSG-01-3C10-**		
	DSG-01-3C11-**		
	DSG-01-3C12-**		
	DSG-01-3C5-**	30 lpm (7.9 USgpm)	45 lpm (11.9 USgpm)
	DSG-01-3C6-**		
	DSG-01-3C60-**		
Max. Operating Pressure (P.AB) (bar)		315 (4500 PSI)	
Max. Operating Pressure 3C5/3C6 Types (bar)		250 (3600 PSI)	
Permissible Back Pressure (T) (bar)		160 (2300 PSI)	
Weight (Kgs)	Double Solenoid	2.0	
	Single Solenoid	1.6	
Switching Frequency (times/min)		280	
Hydraulic Fluids		Use Hydraulic Fluids Equivalent to ISO VG32 or VG46	
Operating Temperature Range (°C)		-15 ~ +70 (+5 ~ +160 °F)	
Operating Viscosity (cSt)		15 ~ 400 (80 ~ 1800 SSU)	
Filtration		25 Microns Absolute or Finer	

Dimensions

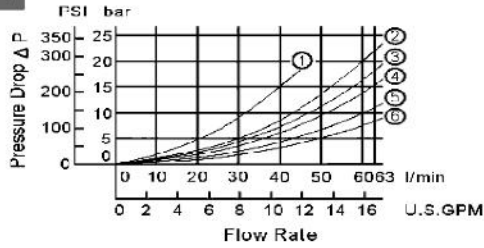


Assembly

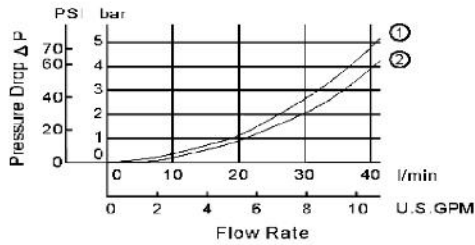


Performance Graphs

DSG-01



DSG-01-S



Series	Spool Type	Pressure Drop Curve Number				
		P→A	B→T	P→B	A→T	P→T
DSG-01	3C2	⑤	⑤	⑤	⑤	—
	3C3	⑥	⑥	⑥	⑥	④
	3C4	⑤	⑥	⑤	⑥	—
	3C40	⑤	⑤	⑤	⑤	—
	3C60	①	①	①	①	④
	3C9	⑥	⑤	⑥	⑤	—
	3C10	⑤	⑥	⑤	⑥	—
	3C12	⑤	⑤	⑤	⑥	—
	2D2	⑤	②	⑤	②	—
	2B2	②	②	⑤	⑤	—
	2B3	③	③	⑤	⑥	—
2B8	⑤	—	⑤	—	—	

Series	Spool Type	Pressure Drop Curve Number			
		P→A	B→T	P→B	A→T
DSG-01-S	3C2	①	①	①	①
	3C1	①	②	①	②
	2B2	①	①	①	①

Graphs based on fluid viscosity of 35 cSt(162 SSU).

Solenoid Specifications

Voltage (V)		DC 12V	DC 24V
DSG (01) 1/8"	Holding Current (A)	2.2	1.1
	Holding Electrical Power (W)	26	26

Valve Response Capacity

Working Direction	Energisation	Spring Back
Spring Centered Type (3C*)	0.02 ~ 0.05	0.015 ~ 0.05
No Spring Type (2D*)	0.02 ~ 0.05	—
Spring Offset Type (2B*)	0.02 ~ 0.05	0.015 ~ 0.05

- Above response time test condition based on 140 bar (2000 psi), 30 lpm (7.9 USgpm).
- Changeover response time changes a little by test condition (pressure, flow, viscosity... etc.).

Ordering Code

DSG	3C2	N	01	D1	36
Series No.	Spool Type	Electrical Conduit Type	Valve Size	Coil Voltage	Design No.
DSG	Spring centered 3 Position (3C94, 3C60, 3C6, 3C3 etc.)	N: DIN connector with light.	01 – 1/8" (NFPA-D03)	D1: DC12V D2: DC24V	36: with DIN 912 bolts
	Spring Offset 2 Position(2B2, 2B3, 2B8, 2B29 etc.)			D3: DC36V D4: DC48V	
	Spring Detented 2 Position(2D2, 2D3 etc.)			D5: DC60V D6: DC72V	
	For complete list see Spool Types tab below			D14.5: DC14.5v D28: DC28V	