

YUKEN HYDRAULIC PRODUCTS

YUKEN

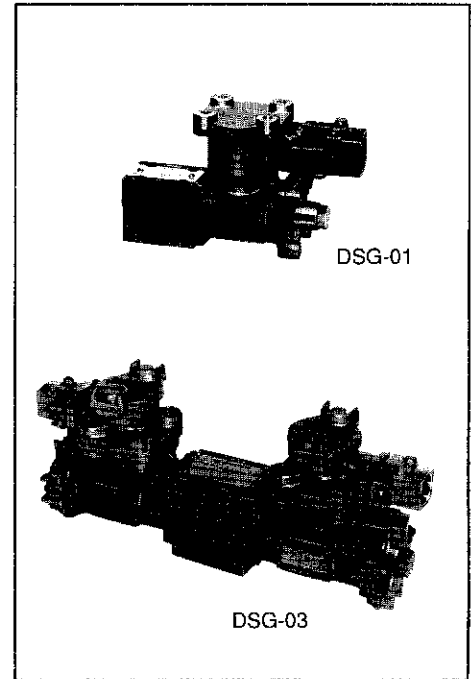
OIL HYDRAULIC EQUIPMENT

■ Explosion Proof (Flameproof) Type Solenoid Operated Directional Valves

The concept of explosion proof (flameproof) construction is that even if explosive gases intrude from outside and explode in the vessel, any causes of explosion will be isolated in the vessel to avoid serious external effects.

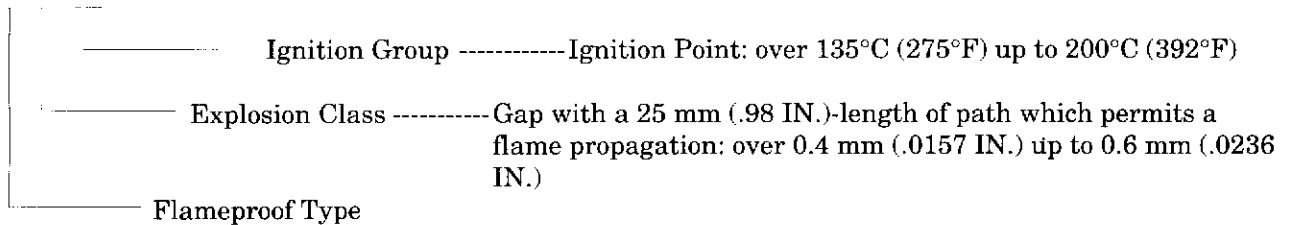
Following this concept, the explosion proof (flameproof) type solenoid operated directional valves enclose the solenoid and terminal block in the vessel.

The valve can be used in Division 1 and 2 locations.



■ Explosion Proof Code

d 2 G4



■ Ratings

Model Numbers	Max. Flow * l/min (U.S.GPM)	Max. Operating Pressure bar (PSI)	Max. T-Line Back Pressure bar (PSI)	Max. Change-over Frequency Cycles/Min (min ⁻¹)	Mass kg (lbs)
DSG-01-3C*-*X*-50		315 (4500)			7.3 (16.1)
DSG-01-2D2*-*X*-50	35 (9.2)	(Spool Type 60 Only)	140 (2000)	120	7.3 (16.1)
DSG-01-2B*-*X*-50		250 (3600)			4.1 (9)
DSG-01-3C*-*X*-40		315 (4500)	100 (1430): At time spool shift is required.	240: Model with DC Solenoid.	19 (42)
DSG-01-2D2*-*X*-40	100 (26.4)	(Spool Type 60 Only)	140 (2000): At time spool shift is not required.	120: Model with R Type Solenoid.	19 (42)
DSG-01-2B*-*X*-40		250 (3600)			11 (24.2)

* Maximum flow indicates a ceiling flow. As the ceiling flow depends on the type of spool and operating condition, refer to the list of spool functions on pages 400 to 401 for details.

■ Certification Number

Model No.	MINISTRY OF LABOUR The Research Institute of Industrial Safety JAPAN	National Research Institute for Pollution and Resources (JAPAN)	The Ship Equipment Inspection Society of Japan
DSG-01	No. 32873 (All Models)	—	—
DSG-03	No. 22127 (X3, X4, X5) No. 22128 (X1, X2, X8-X15)	No. 2082 (Flameproof) (X3 only)	Approved by ABS, JG (X3 only)

■ Solenoid Ratings

● DSG-01

Electric Source	Rated Voltage (V)	Frequency (Hz)	Current (A) ±5%	Power (W) ±5%
DC	12	—	2.4	29
	24		1.2	
	48		0.6	
	100		0.29	
	110		0.26	
	115		0.25	
	200		0.15	
AC →DC Rectified (R)	220	50/60	0.13	29
	100		0.32	
	110		0.28	
	115		0.29	
	200		0.17	
220	0.15			

Note: 1. Serviceable Voltage Range: 90 to 110% of the rated value.
2. Insulation Class of Solenoid: Class H

● DSG-03

Electric Source	Rated Voltage (V)	Frequency (Hz)	Current (A) ±5%	Power (W) ±5%
DC	12	—	2.4	26.4
	24		1.1	26.4
	48		0.55	26.4
	100/110		0.26/0.28	26/30.8
	200/220		0.13/0.14	26/30.8
AC →DC Rectified (R)	100/110	50/60	0.3/0.33	30/36.3
	115		0.26	29.9
	200/220		0.15/0.165	30/36.3

Note: 1. Serviceable Voltage Range: 85 to 110% of the rated value.
2. Insulation Class of Solenoid: Class B

■ Sub-plates

Valve Model Numbers	Sub-plate Model Numbers	Thread Size Rc	Approx. Mass kg (lbs)
DSG-01	DSGM-01-30	1/8	0.8 (1.8)
	DSGM-01X-30	1/4	
	DSGM-01Y-30	3/8	
DSG-03	DSGM-03-40	3/8	3.0 (6.6)
	DSGM-03X-40	1/2	3.0 (6.6)
	DSGM-03Y-40	3/4	4.7 (10.4)

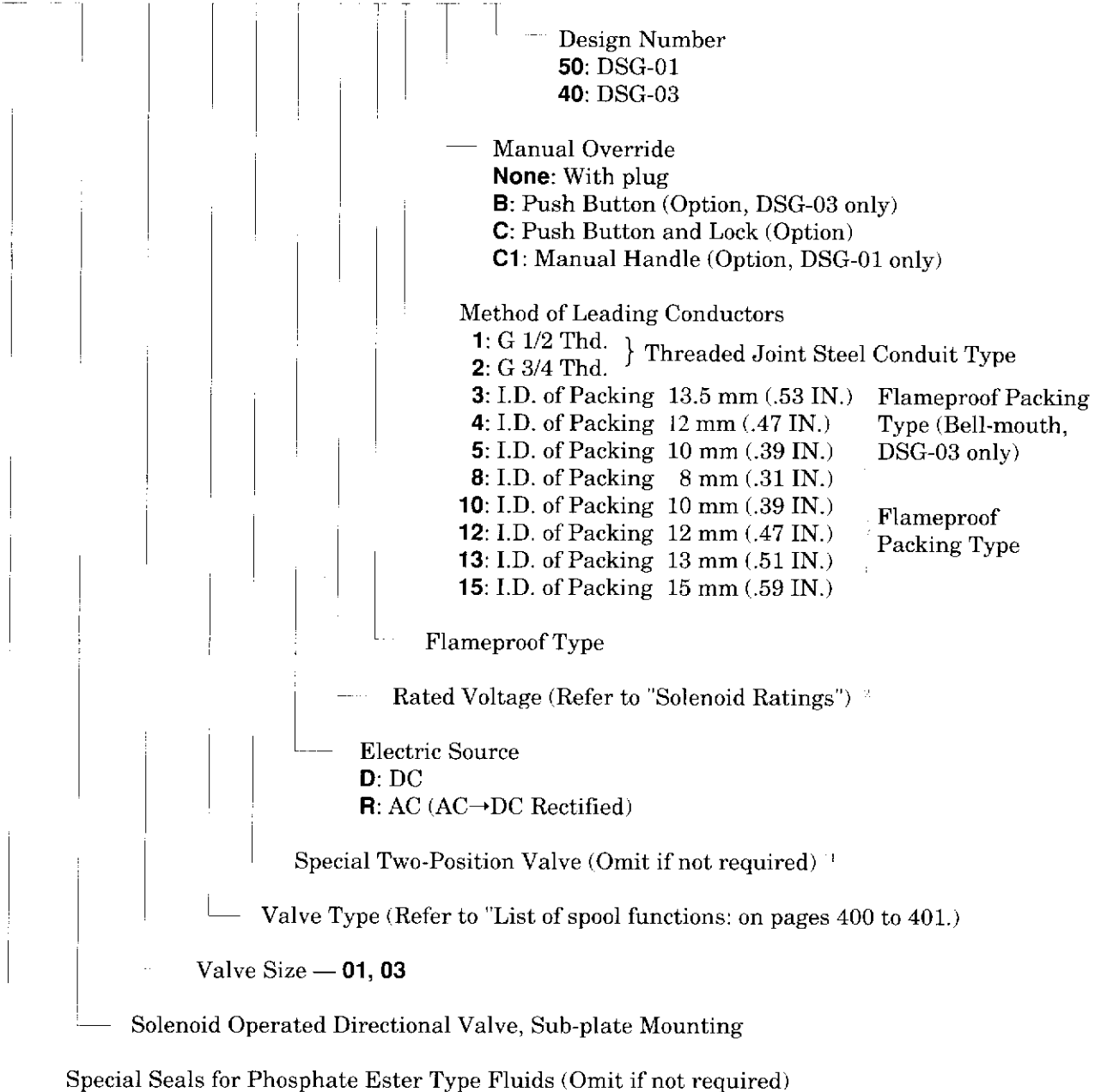
● Sub-plates are available. Specify sub-plate model from the table above. When sub-plates are not used, the mounting surface should have a good machined finish.

■ Attachment

Valve Model Numbers	Mounting Bolt (Soc. Hd. Cap Screw)	Tightening Torque of Mounting Bolt
DSG-01	M5 x 55 Lg. — 4 Pcs.	5 – 7 Nm (43 – 60 in. lbs)
		6 – 7 Nm (52 – 60 in. lbs)
DSG-03	M6 x 50 Lg. — 4 Pcs.	(Applicable to working pressure more than 250 bar (3600 PSI).)
		12 – 15 Nm (105 – 130 in. lbs)

■ Model Number Designation

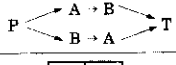
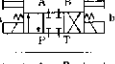
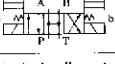

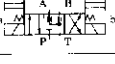
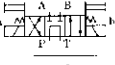
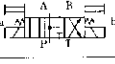
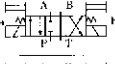

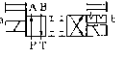
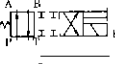
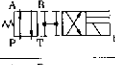
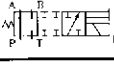
F - DSG - 01 - 2B2 A - R 100 X 1 - C - 50



1. A special 2-position valve is available which is identical to the standard DSG-01, DSG-03 series valves.

2. Where rated voltage of DSG-03 is 100/110•200/220V, model designation comes to:
 rated voltage 100/110V→100
 200/220V •200

List of Spool Functions (DSG-01)

No. of Valve Positions	Spool-Spring Arrangement	Model Numbers	Graphic Symbols	Max. Flow l/min (U.S.GPM)															
				 P → A/B → T				P → A [Port "B" Blocked]				P → B [Port "A" Blocked]							
				70 bar (1000 PSI)	140 bar (2000 PSI)	210 bar (3000 PSI)	315 bar (4500 PSI)	70 bar (1000 PSI)	140 bar (2000 PSI)	210 bar (3000 PSI)	315 bar (4500 PSI)	70 bar (1000 PSI)	140 bar (2000 PSI)	210 bar (3000 PSI)	315 bar (4500 PSI)				
Three Positions	Spring Centred	DSG-01-3C2		35 (9.2)	35 (9.2)	35 (9.2)	35 (9.2)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)				
		DSG-01-3C3		30 (7.9)	30 (7.9)	30 (7.9)	30 (7.9)	—	—	—	—	—	—	—	—	—			
		DSG-01-3C4		35 (9.2)	35 (9.2)	35 (9.2)	30 (7.9) 20 (5.3)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)
		DSG-01-3C40		35 (9.2)	35 (9.2)	35 (9.2)	35 (9.2)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)
		DSG-01-3C60		30 (7.9)	30 (7.9) 25 (6.6)	30 (7.9) 25 (6.6)	—	30 (7.9)	30 (7.9) 25 (6.6)	—	—	30 (7.9)	30 (7.9) 25 (6.6)	—	—	30 (7.9)	30 (7.9) 25 (6.6)	—	—
		DSG-01-3C9		30 (7.9)	30 (7.9)	30 (7.9)	30 (7.9)	—	—	—	—	—	—	—	—	—	—	—	—
		DSG-01-3C10		35 (9.2)	35 (9.2)	35 (9.2)	35 (9.2)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)
		DSG-01-3C12		35 (9.2)	35 (9.2)	35 (9.2)	35 (9.2)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)	35 (9.2)	18 (4.8)	15 (4.0)	8 (2.1)
Two Positions	No-Spring Detented	DSG-01-2D2		35 (9.2)	35 (9.2)	35 (9.2)	35 (9.2)	23 (6.1)	23 (6.1)	23 (6.1)	15 (4.0)	23 (6.1)	23 (6.1)	23 (6.1)	23 (6.1)	23 (6.1)	15 (4.0)	15 (4.0)	
	Spring Offset	DSG-01-2B2		30 (7.9)	30 (7.9)	30 (7.9)	30 (7.9)	15 (4.0)	10 (2.6)	7 (1.8)	—	25 (6.6)	13 (3.4)	10 (2.6)	7 (1.8)	—	—	—	—
		DSG-01-2B3		35 (9.2)	35 (9.2)	35 (9.2)	35 (9.2)	25 (6.6)	25 (6.6)	25 (6.6)	—	35 (9.2)	25 (6.6)	20 (5.3)	15 (4.0)	—	—	—	—
		DSG-01-2B8		—	—	—	—	15 (4.0)	10 (2.6)	7 (1.8)	—	25 (6.6)	13 (3.4)	10 (2.6)	7 (1.8)	—	—	—	—

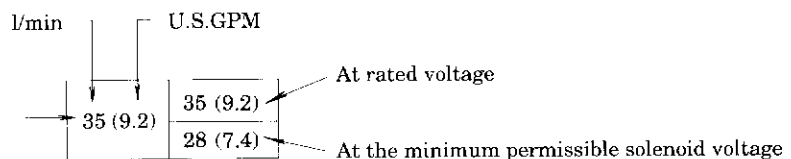
Note: 1. Maximum flow rates and applied current.

- The single column describes maximum flow rates regardless of voltage as long as it is within the serviceable voltage range.

- Where two figures are shown in the same column, the upper is at rated voltage and the latter is at the minimum permissible solenoid voltage.

(Example)

Flow rate is constant regardless of voltage as long as within the serviceable range.



List of Spool Functions (DSG-03)

No. of Valve Positions	Spool-Spring Arrangement	Model Numbers	Graphic Symbols	Max. Flow l/min (U.S.GPM)									
				 P → A → B → T P → B → A → T			 P → A [Port "B" Blocked]			 P → A + B [Port "A" Blocked]			
				100 bar (1430 PSI)	160 bar (2285 PSI)	250 bar (3600 PSI)	100 bar (1430 PSI)	160 bar (2285 PSI)	250 bar (3600 PSI)	100 bar (1430 PSI)	160 bar (2285 PSI)	250 bar (3600 PSI)	
Three Positions	Spring Centred	DSG-03-3C2		100 (26.4)	100 (26.4)	100 (26.4)	100 (26.4) 80 (21.1)	100 (26.4) 55 (14.5)	60 (15.9) 32 (8.5)	100 (26.4) 80 (21.1)	100 (26.4) 55 (14.5)	60 (15.9) 32 (8.5)	
		DSG-03-3C3		100 (26.4)	90 (23.8)	90 (23.8)	—	—	—	—	—	—	—
		DSG-03-3C4		100 (26.4)	100 (26.4)	100 (26.4)	100 (26.4) 80 (21.1)	100 (26.4) 55 (14.5)	60 (15.9) 32 (8.5)	100 (26.4) 80 (21.1)	100 (26.4) 55 (14.5)	60 (15.9) 32 (8.5)	
		DSG-03-3C40		100 (26.4)	100 (26.4)	100 (26.4)	100 (26.4) 80 (21.1)	100 (26.4) 55 (14.5)	60 (15.9) 32 (8.5)	100 (26.4) 80 (21.1)	100 (26.4) 55 (14.5)	60 (15.9) 32 (8.5)	
		DSG-03-3C60		70 (18.5) 50 (13.2)	70 (18.5) 50 (13.2)	70 (18.5) 50 (13.2)	100 (26.4) 60 (15.9)	100 (26.4) 10 (2.6)	80 (21.1) 6 (1.6)	100 (26.4) 60 (15.9)	100 (26.4) 10 (2.6)	80 (21.1) 6 (1.6)	
		DSG-03-3C9		100 (26.4)	100 (26.4)	100 (26.4)	—	—	—	—	—	—	—
		DSG-03-3C10		100 (26.4)	100 (26.4)	100 (26.4)	100 (26.4) 80 (21.1)	100 (26.4) 55 (14.5)	60 (15.9) 32 (8.5)	100 (26.4) 80 (21.1)	100 (26.4) 55 (14.5)	60 (15.9) 32 (8.5)	
		DSG-03-3C12		100 (26.4)	100 (26.4)	100 (26.4)	100 (26.4) 80 (21.1)	100 (26.4) 55 (14.5)	60 (15.9) 32 (8.5)	100 (26.4) 80 (21.1)	100 (26.4) 55 (14.5)	60 (15.9) 32 (8.5)	
Two Positions	No-Spring Detented	DSG-03-2D2		100 (26.4)	100 (26.4)	100 (26.4)	70 (18.5)	70 (18.5)	60 (15.9)	70 (18.5)	70 (18.5)	60 (15.9)	
		DSG-03-2B2		100 (26.4)	100 (26.4)	100 (26.4)	60 (15.9)	30 (7.9)	25 (6.6)	100 (26.4) 60 (15.9)	80 (21.1) 35 (9.2)	50 (13.2) 15 (4.0)	
	Spring Offset	DSG-03-2B3		100 (26.4)	100 (26.4)	100 (26.4)	70 (18.5)	70 (18.5)	70 (18.5)	100 (26.4) 70 (18.5)	80 (21.1) 50 (13.2)	60 (15.9) 30 (5.3)	
		DSG-03-2B8		—	—	—	60 (15.9)	30 (7.9)	25 (6.6)	100 (26.4) 60 (15.9)	80 (21.1) 35 (9.2)	50 (13.2) 15 (4.0)	

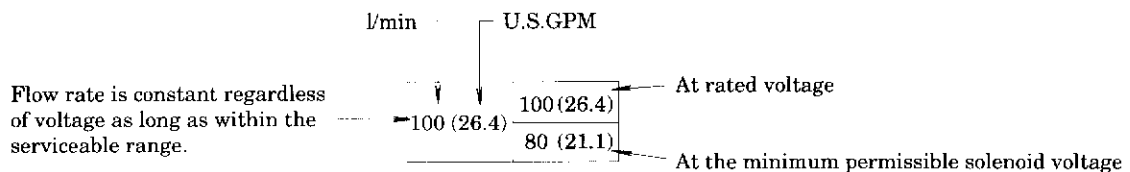
Note: 1. Valves fitted with spool type "8" the tank port acts as a drain port, and should be connected directly to the reservoir with a maximum allowable back pressure of 3.5 bar (50 PSI).

2. Maximum flow rates and applied current.

- The single column describes maximum flow rates regardless of voltage as long as it is within the serviceable voltage range.
- Where two figures are shown in the same column, the upper is at rated voltage and the latter is at the minimum permissible solenoid voltage.

3. The maximum flow marked † is 100 l/min (26.4 U.S. GPM) when no-spring detented type is energised continuously.

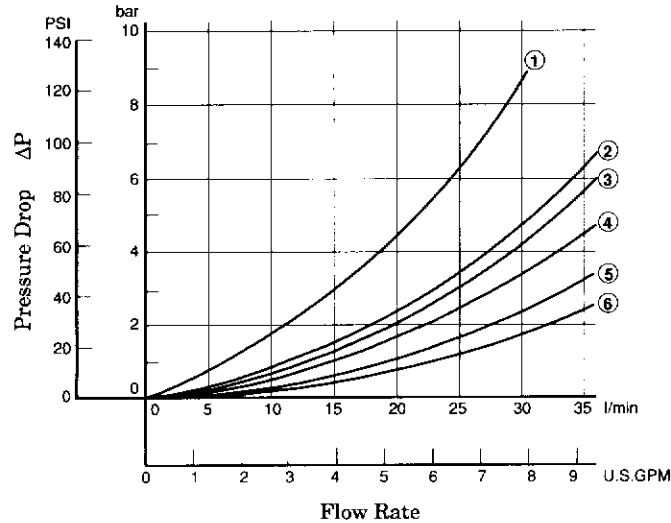
(Example)



■ Pressure Drop

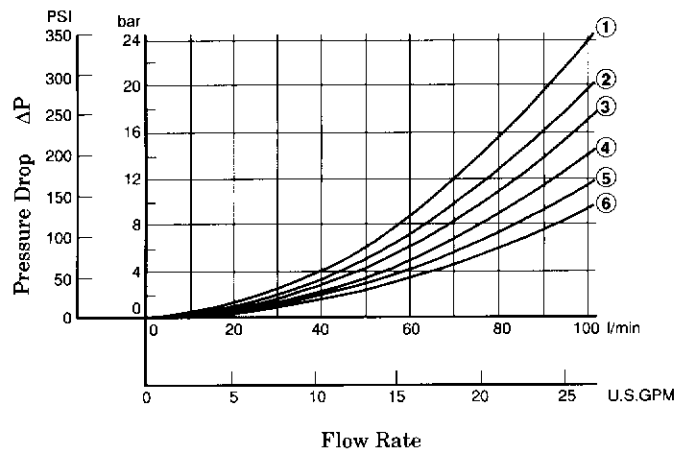
Pressure drop curves based on viscosity of 35 cSt (160 SSU) and specific gravity of 0.850.

● DSG-01



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

● DSG-03



Model Numbers	Pressure Drop Curve Numbers				
	P→A	B→T	P→B	A→T	P→T
DSG-03-3C2	④	③	④	③	—
DSG-03-3C3	⑥	⑤	⑥	⑤	⑤
DSG-03-3C4	④	⑥	④	⑥	—
DSG-03-3C40	④	④	④	④	—
DSG-03-3C60	④	④	④	④	①
DSG-03-3C9	⑥	③	⑥	③	—
DSG-03-3C10	④	④	④	③	—
DSG-03-3C12	④	③	④	⑤	—
DSG-03-2D2	④	③	④	③	—
DSG-03-2B2	③	②	④	③	—
DSG-03-2B3	③	②	④	④	—
DSG-03-2B8	⑤	—	①	—	—

- For any other viscosity, multiply by the factors in the table below.

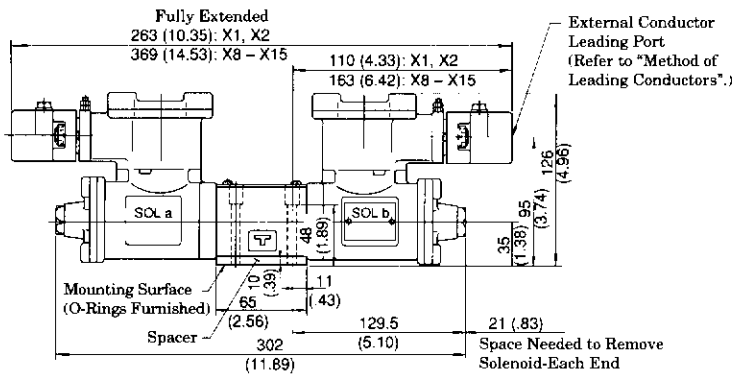
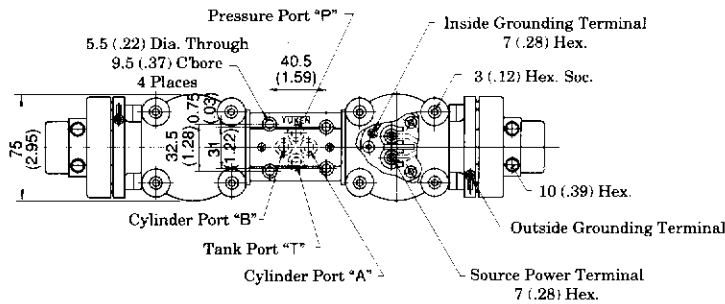
Viscosity	cSt	15	20	30	40	50	60	70	80	90	100
		SSU	77	98	141	186	232	278	324	371	417
Factor		0.81	0.87	0.96	1.03	1.09	1.14	1.19	1.23	1.27	1.30

- For any other specific gravity (G'), the pressure drop ($\Delta P'$) may be obtained from the formula below.

$$\Delta P' = \Delta P (G'/0.850)$$

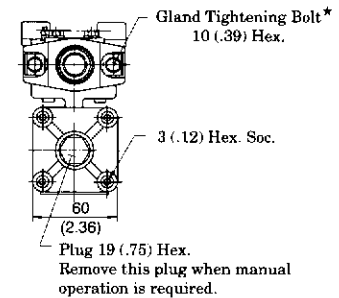
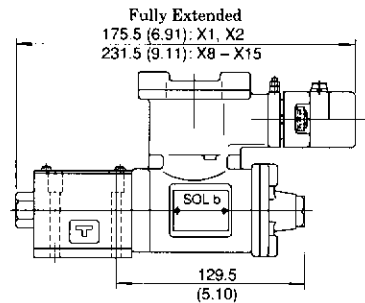
■ Spring Centred: DSG-01-3C*- $\frac{R}{D}$ *X*-50

■ No-Spring Detented: DSG-01-2D2- $\frac{R}{D}$ *X*-50



Mounting Surface:
ISO 4401-AB-03-4-A

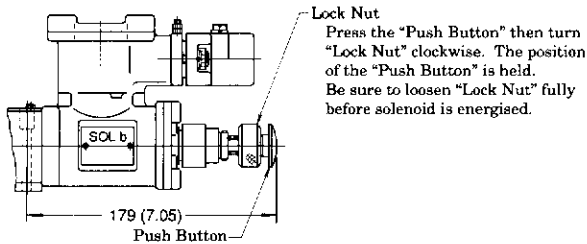
■ Spring Offset:
DSG-01-2B*- $\frac{R}{D}$ *X*-50



Options

Models with Push Button & Lock:

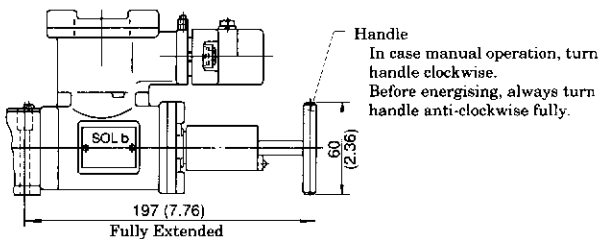
DSG-01-***- $\frac{R}{D}$ *X*-C-50



Press the "Push Button" then turn "Lock Nut" clockwise. The position of the "Push Button" is held. Be sure to loosen "Lock Nut" fully before solenoid is energised.

Models with Manual Handle:

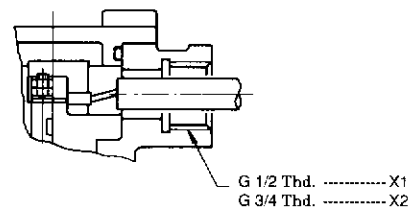
DSG-01-***- $\frac{R}{D}$ *X*-C1-50



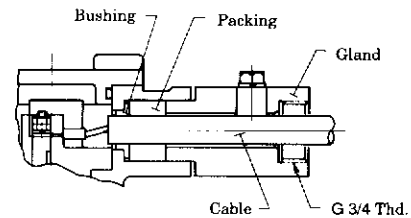
In case manual operation, turn handle clockwise. Before energising, always turn handle anti-clockwise fully.

Method of Leading Conductors

Threaded Joint Steel Conduit Type (X1, X2)



Flameproof Packing Type (X8, X10, X12, X13, X15)



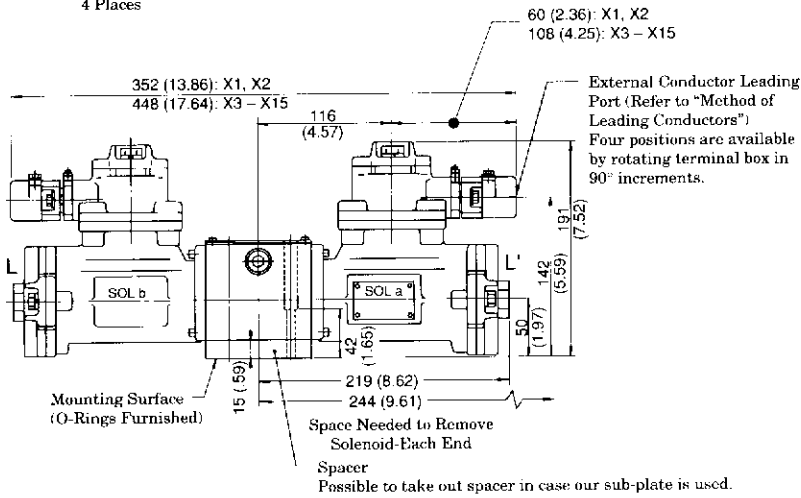
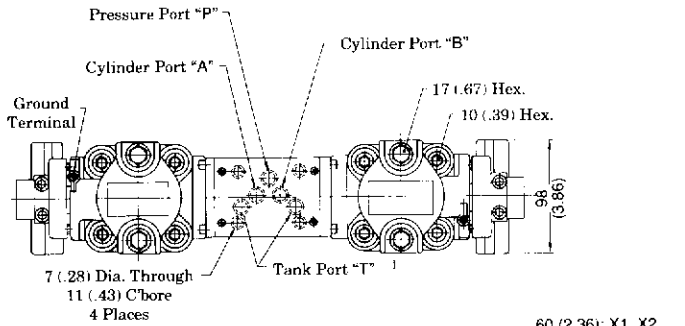
Model	I.D. of Packing mm (In.)	I.D. of Bushing mm (In.)	O.D. of Cable mm (In.)
X8	8 (.31)	9 (.35)	7 - 8 (.28 - .31)
X10	10 (.39)	11 (.43)	8 - 10 (.31 - .39)
X12	12 (.47)	13 (.51)	10 - 12 (.39 - .47)
X13	13 (.51)	14 (.55)	12 - 13 (.47 - .51)
X15	15 (.59)	16 (.63)	13 - 15 (.51 - .59)

None: In case of flameproof packing type, tighten the gland tightening bolt * so that packing is held sufficient compression.

DIMENSIONS IN
MILLIMETRES (INCHES)

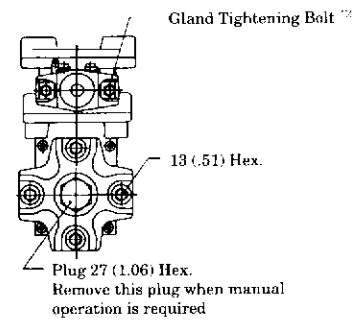
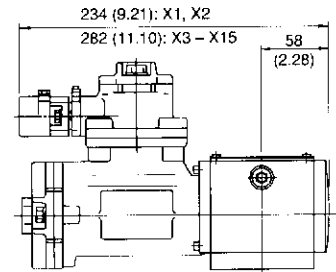
■ Spring Centred: DSG-03-3C*-R_D*X*-40

■ No-Spring Detented: DSG-03-2D2-R_D*X*-40



Mounting Surface:
ISO 4401-AC-05-4-A

■ Spring Offset:
DSG-03-2B*-R_D*X*-40



DIMENSIONS IN MILLIMETRES (INCHES)

- *1. Although the tank port is shown on the left in our sub-plate, either may be used.
- *2. In case of flameproof packing type, tighten the gland tightening bolt so that packing is held under sufficient compression.

Method of Leading Conductors

Threaded Joint Steel Conduit Type
(X1, X2)

Flameproof Packing Type (Bell-mouth)
(X3, X4, X5)

Flameproof Packing Type
(X8, X10, X12, X13, X15)

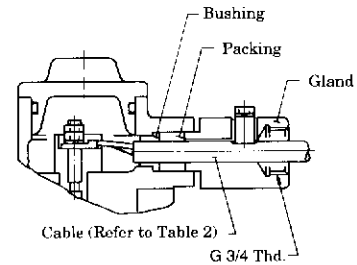
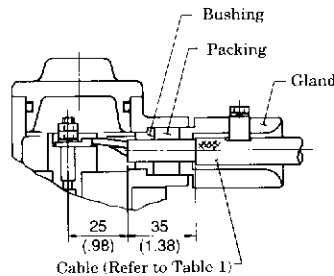
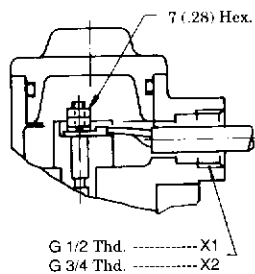


Table 1

Model	I.D. of Packing mm (In.)	I.D. of Bushing mm (In.)	Recommended Cable
X3	13.5 (.53)	14 (.55)	(H-DBYCY-2.0)
			L-DPYCY-2.0
X4	13 (.51)	13 (.51)	H-DPYCY-2.0
			H-DPYCY-1.25
X5	11 (.43)	11 (.43)	L-DPYCY-1.25

Table 2

Model	I.D. of Packing mm (In.)	I.D. of Bushing mm (In.)	O.D. of Cable mm (In.)
X8	8 (.31)	9 (.35)	7 - 8 (.28 - .31)
X10	10 (.39)	11 (.43)	8 - 10 (.31 - .39)
X12	12 (.47)	13 (.51)	10 - 12 (.39 - .47)
X13	13 (.51)	14 (.55)	12 - 13 (.47 - .51)
X15	15 (.59)	16 (.63)	13 - 15 (.51 - .59)

● Request Yuken on drawings for optionals such as with push button (B), push button with lock (C).

■ Explosion Proof (Increased Safety) Type Solenoid Operated Directional Valves

The concept of explosion proof (increased safety) construction is that higher safety levels should be provided to electric devices in which any causes of explosion (i.e. such as sparking or heat generating) cease to exist.

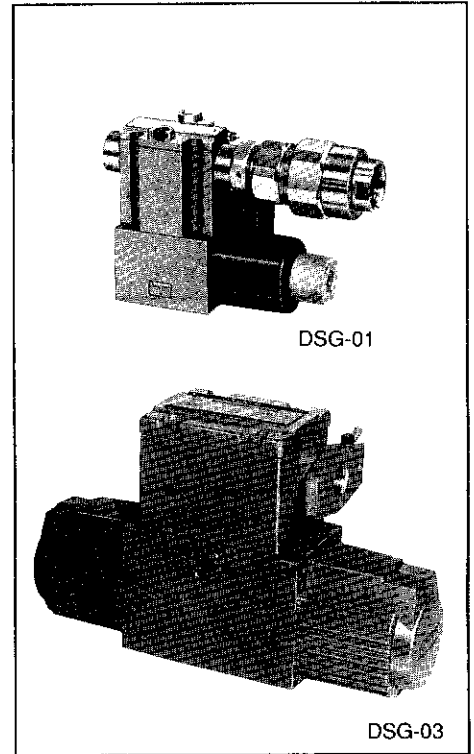
Following this concept, safety of the explosion proof (increased safety) type solenoid operated directional valve is increased in respect of the temperature-rise, the insulation and the like. However, it is not advised for use in division 1 locations.

■ Explosion Proof Code

e G3

Ignition Group ----- Ignition Point: over 200°C (392°F)
up to 300°C (572°F)

Increased Safety Type



■ Certification No. of the Research Institute of Industrial Safety (JAPAN)

- DSG-01 ----- Models with DC Solenoid: No. 32043
Models with R Type Solenoid: No. 33366
(with a built-in rectifier)
- DSG-03 ----- No. 37196 – No. 37199, No. 21691

■ Ratings

Model Numbers	Max. Flow * l/min (U.S.GPM)	Max. Operating Pressure bar (PSI)	Max. T-Line Back Pressure bar (PSI)	Max. Change-over Frequency Cycles/Min (min ⁻¹)	Mass kg (lbs)
DSG-01-3C*-#Y*-50	35 (9.2)	315 (4500)	140 (2000)	120	2.8 (6.2)
DSG-01-2D2*-#Y*-50		(Spool Type 60 Only)			2.8 (6.2)
DSG-01-2B*-#Y*-50		250 (3600)			2.2 (4.9)
DSG-03-3C*-#Y*-40	100 (26.4)	315 (4500)	100 (1430): At time spool shift is required. 140 (2000): At time spool shift is not required.	240: Models with DC Solenoid. 120: Models with R Type Solenoid.	7.6 (16.8)
DSG-03-2D2*-#Y*-40		(Spool Type 60 Only)			7.6 (16.8)
DSG-03-2B*-#Y*-40		250 (3600)			6.1 (13.5)

* Maximum flow indicates a ceiling flow. As the ceiling flow depends on the type of spool and operating condition, refer to the List of Spool functions of flameproof type on pages 400 to 401 for details.

■ Sub-plates & Attachment (Mounting Bolt)

Sub-plate and mounting bolt is common with standard DSG-01/03 series valves. Refer to page 363 (DSG-01) and page 380 (DSG-03).

■ Solenoid Ratings

● DSG-01

Electric Source	Rated Voltage (V)	Frequency (Hz)	Current (A) ±5%	Power (W) ±5%
DC	12	—	2.4	29
	24		1.2	
	48		0.6	
	100		0.29	
	110		0.26	
	200		0.15	
	220		0.13	
AC→DC Rectified (R)	100	50/60	0.32	29
	110		0.28	
	120		0.27	
	200		0.17	
	220		0.15	
	240		0.14	

Note: 1. Serviceable Voltage Range: 90 to 110% of the rated value
2. Insulation Class of Solenoid: Class H

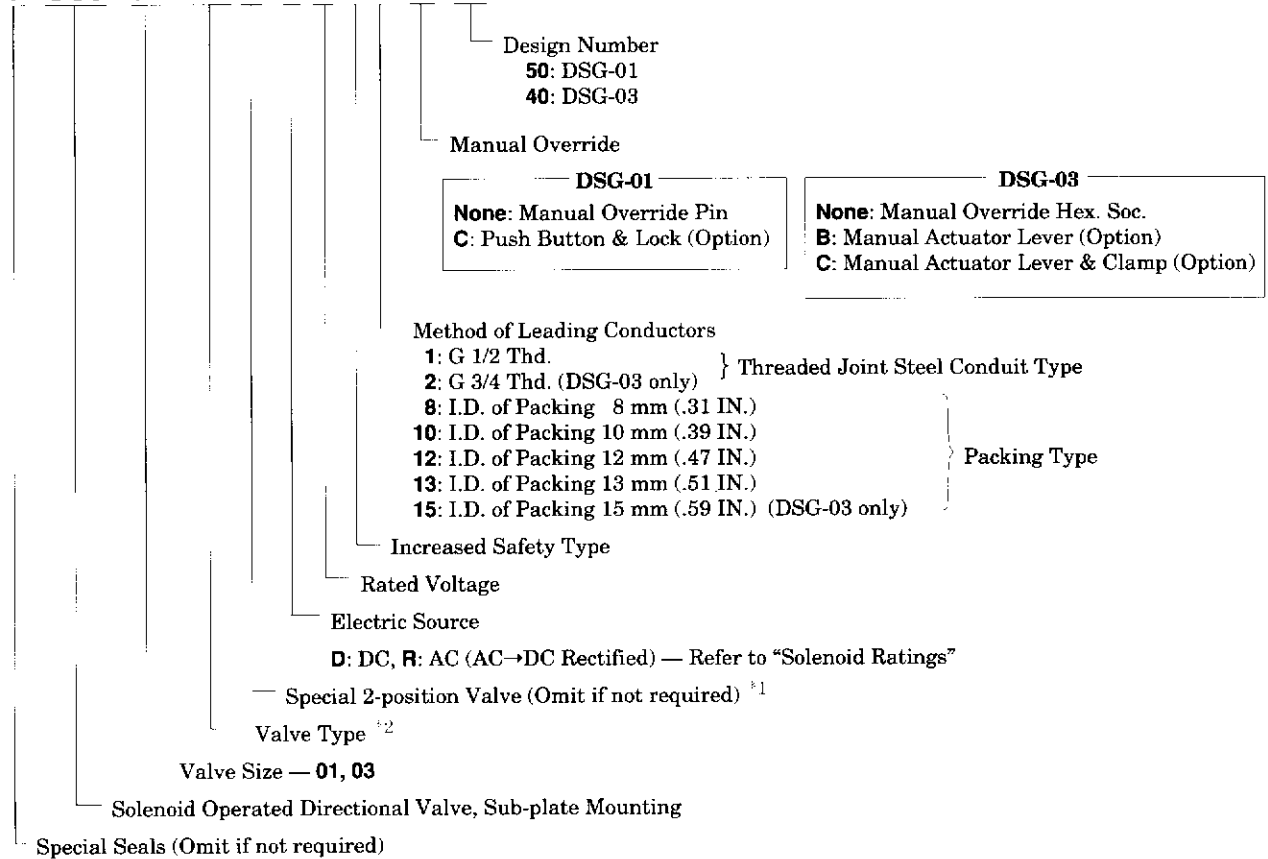
● DSG-03

Electric Source	Rated Voltage (V)	Frequency (Hz)	Current (A) ±5%	Power (W) ±5%
DC	12	—	3.0	36
	24		1.5	
	48		0.76	
	100		0.37	
	110		0.33	
	200		0.18	
	220		0.17	
AC→DC Rectified (R)	100	50/60	0.42	42
	110		0.38	
	200		0.21	
	220		0.19	

Note: 1. Serviceable Voltage Range: 85 to 110% of the rated value
2. Insulation Class of Solenoid: Class H

■ Model Number Designation

F - DSG - 01 - 2B2 A - D 24 Y 1 - C - 50



*1. A special 2-position valve is available which is identical to the standard DSG-01, DSG-03 series valves.

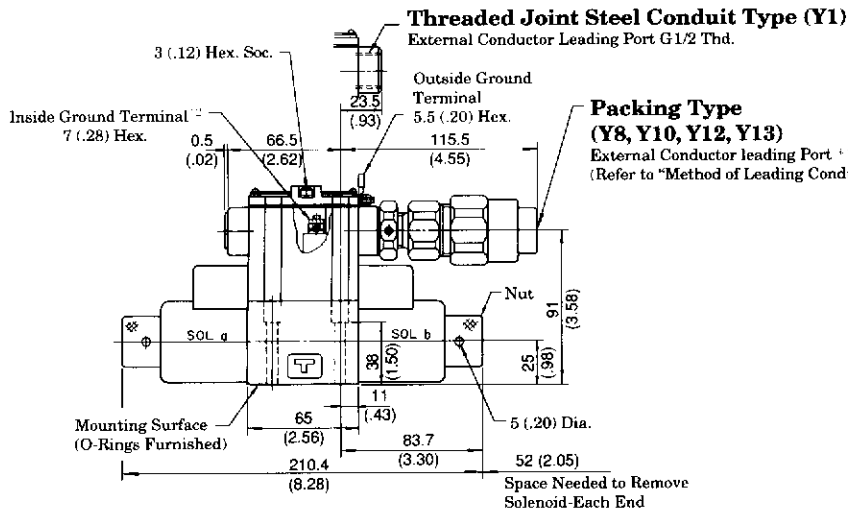
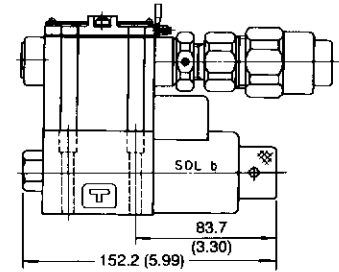
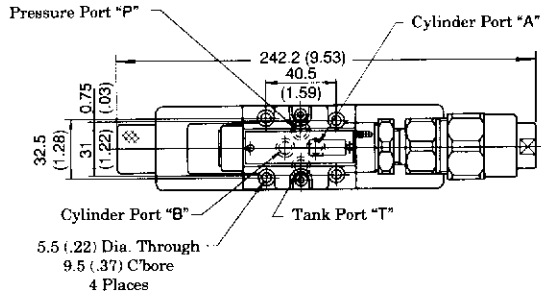
*2. Refer to pages 400 and 401 showing "List of Spool Functions" as the same valve types as those of flameproof type are available.

■ Spring Centred: DSG-01-3C*- $\frac{R}{D}$ *Y*-50

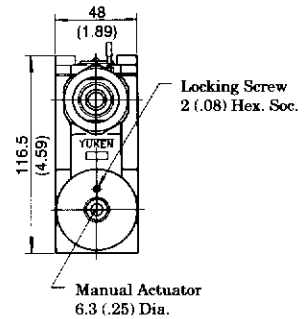
■ No-Spring Detented: DSG-01-2D2- $\frac{R}{D}$ *Y*-50

Mounting Surface:
ISO 4401-AB-03-4-A

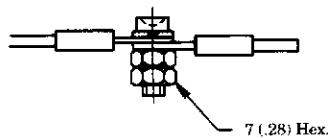
■ Spring Offset:
DSG-01-2B*- $\frac{R}{D}$ *Y*-50



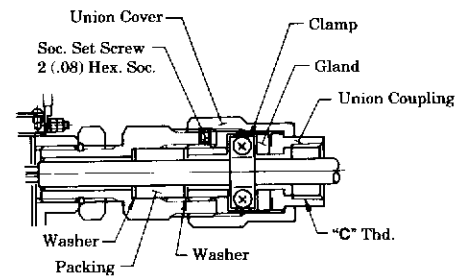
DIMENSIONS IN
MILLIMETRES (INCHES)



- The direction of external conductor leading port can be altered Sol. a side.
- Wiring in the terminal box. After wiring as shown below, tape fully with adhesive tapes for electrical insulation.

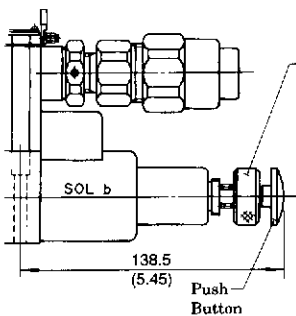


Method of Leading Conductors (Packing Type)



Options Models with Push Button & Lock:

DSG-01-***- $\frac{R}{D}$ *Y*-C-50



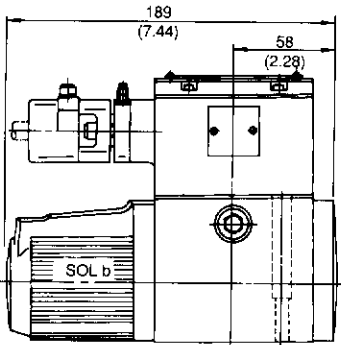
Lock Nut
Press the "Push Button" then turn "Lock Nut" clockwise. The position of the "Push Button" is held. Be sure to loosen "Lock Nut" fully before solenoid is energised.

Model	"C" Thd.	I.D. of Packing mm (In.)	I.D. of Washer mm (In.)	O.D. of Cable mm (In.)
Y8	G 1/2	8 (.31)	9 (.35)	7 - 8 (.28 - .31)
Y10		10 (.39)	11 (.43)	8 - 10 (.31 - .39)
Y12	G 3/4	12 (.47)	13 (.51)	10 - 12 (.39 - .47)
Y13		13 (.51)	14 (.55)	12 - 13 (.47 - .51)

- Note: After wiring in the terminal box, treat wiring as below.
- Press packing by way of screwing in gland. Then set socket set screw and fix gland.
 - Fix cable by clamp.
 - Set union coupling and screwing in union cover.

■ Spring Offset:

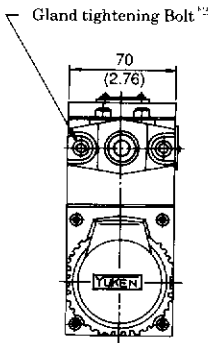
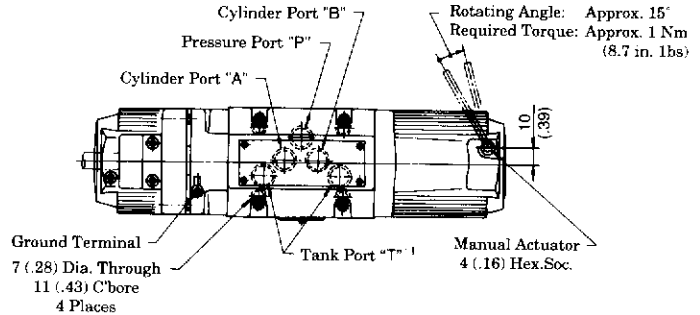
DSG-03-2B* $\frac{R}{D}$ *Y*40



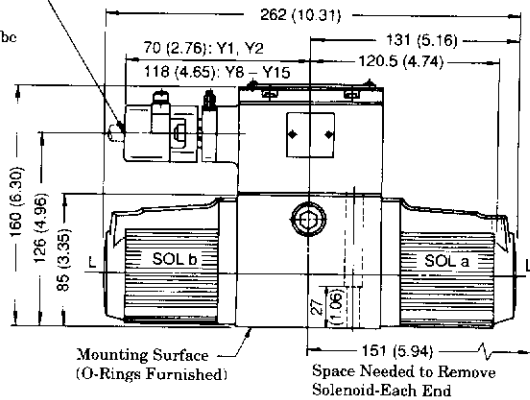
Mounting Surface:
ISO 4401-AC-05-4-A

■ Spring Centred: DSG-03-3C* $\frac{R}{D}$ *Y*40

■ No-Spring Detented: DSG-03-2D2- $\frac{R}{D}$ *Y*40



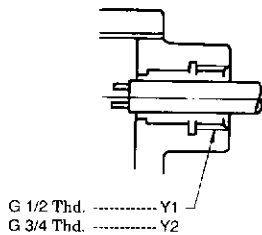
External Conductor Leading Port (Refer to "Method of Leading Conductors")
Leading port position can be changed Sol "a" side.



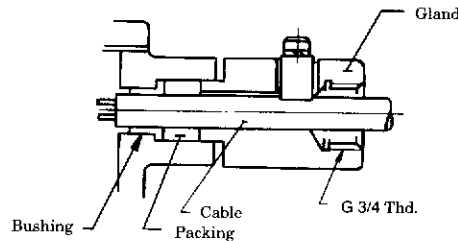
- *1. Although the tank port is shown on the left in our sub-plate, either may be used.
- *2. In case of packing type, tighten the gland tightening bolt so that packing is held under sufficient compression.

Method of Leading conductors

Threaded Joint Steel Conduit Type
(Y1, Y2)



Packing Type
(Y8, Y10, Y12, Y13, Y15)



DIMENSIONS IN
MILLIMETRES (INCHES)

Note: Crimp-style terminals [conductor area: 1.04-2.63 mm² (.0016-.0041 sq.in.)] are furnished with terminal block for external conductor in the terminal box.

Model	I.D. of Packing mm (In.)	I.D. of Washer mm (In.)	O.D. of Cable mm (In.)
Y8	8 (.31)	9 (.35)	7 - 8 (.28 - .31)
Y10	10 (.39)	11 (.43)	8 - 10 (.31 - .39)
Y12	12 (.47)	13 (.51)	10 - 12 (.39 - .47)
Y13	13 (.51)	14 (.55)	12 - 13 (.47 - .51)
Y15	15 (.59)	16 (.63)	13 - 15 (.51 - .59)

● Request Yuken on drawings of options such as with manual actuator lever (B), manual actuator lever & clamp (C).