



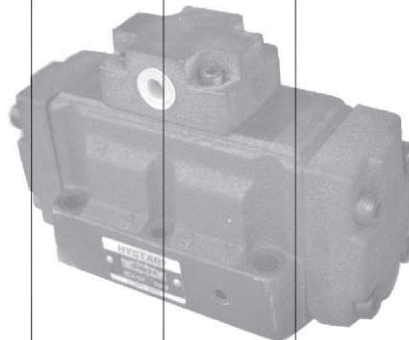
Bell
HYDROMATICS

Solenoid Valves

MODEL NO SPECIFICATIONS (DHG-04/06/10 Pilot Operated Directional Valves)

B2

Spool Type & Graphic Symbols		Rated Flow Capacity -Maximum Flow Capacity							
SYMBOLS	MODEL NO	DHG-01	DHG-03	DHG-04	DHG-06	DHG-10			
	DHG-2B2-**-	~40 lpm (~10.6USgpm)	60~160 lpm (15.9~42.3USgpm)	135~300 lpm (35.7~79.3USgpm)	310~500 lpm (82~132USgpm)	570~1100 lpm (150~291USgpm)			
	DHG-2B3-**-								
	DHG-2N2-**-								
	DHG-2N3-**-								
	DHG-3C2-**-								
	DHG-3C3-**-								
	DHG-3C4-**-								
	DHG-3C40-**-								
	DHG-3C7-**-								
	DHG-3C9-**-								
	DHG-3C10-**-	~40 lpm (~10.6USgpm)	60~160 lpm (15.9~42.3USgpm)	245~280 lpm (64.8~74.5USgpm)	230~450 lpm (60.8~120USgpm)	570~950 lpm (150~250USgpm)			
	DHG-3C11-**-								
	DHG-3C12-**-								
	DHG-3C5-**-								
	DHG-3C6-**-								
	DHG-3C60-**-								
Max. Operating Pressure (bar)		315 (4500 PSI)							
Min. Required Pilot Pressure (bar)		8 (114 PSI)				10(143 PSI)			
Max. Pilot Pressure (bar)		250 (3600 PSI)							
Max. T-line Back Pressure (bar)		210 (3000 PSI)							
Weight (Kgs)		3.5 (7.7 lbs)	7.2 (15.9 lbs)	7.4 (16.3 lbs)	11.2 (24.7 lbs)	43.8 (96.6 lbs)			
Hydraulic Fluids		Use Hydraulic Fluids Equivalent to ISO VG32 or VG46							
Operating Temperature Range Recommended (°C)		-15 ~ +70 (+5 ~ +160°F)							
Operating Viscosity (cSt)		15 ~ 400 (80 ~ 1800SSU)							
Filtration		25 Microns Absolute or Finer							





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HYDROMATICS

Solenoid Valves

LIST OF SPOOL FUNCTIONS (DHG-04/06/10)

SPRING CENTERED 3 POSITIONS	GRAPHIC SYMBOLS (STANDARD)	PRESSURE CENTERED 3 POSITIONS	GRAPHIC SYMBOLS (STANDARD)	NO SPRING 2 POSITIONS	GRAPHIC SYMBOLS (STANDARD)
3C2		3H2		2N2	
3C3		3H3		2N3	
3C4		3H4		2N4	
3C40		3H40		2N40	
3C5		3H5		2N7	
3C6		3H6		2N2A	
3C60		3H60		2N3A	
3C7		3H7		2N4A	
3C8		3H8		2N40A	
3C9		3H9		2N5A	
3C10		3H10		2N6A	
3C11		3H11		2N60A	
3C12		3H12		2N7A	
3C25		3H25		2N9A	
3C29		3H29		2N10A	
3C48		3H48		2N11A	
				2N12A	

B2



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Solenoid Valves

LIST OF SPECIAL TWO POSITION VALVES (DHG-04/06/10)

B2

SPRING OFFSET 2 POSITION	GRAPHIC SYMBOLS		SPRING OFFSET 2 POSITION	GRAPHIC SYMBOLS	
	STANDARD	(ALTERNATED)		STANDARD	(ALTERNATED)
2B2A(L)			2B2B(L)		
2B3A(L)			2B3B(L)		
2B4A(L)			2B4B(L)		
2B40A(L)			2B40B(L)		
2B5A(L)			2B5B(L)		
2B6A(L)			2B6B(L)		
2B60A(L)			2B60B(L)		
2B7A(L)			2B7B(L)		
2B8A(L)			2B8B(L)		
2B9A(L)			2B9B(L)		
2B10A(L)			2B10B(L)		
2B11A(L)			2B11B(L)		
2B12A(L)			2B12B		
2B25A(L)			2B25B(L)		
2B29A(L)			2B29B(L)		
2B48A(L)			2B48B(L)		

NOTE : Standard Model No. + L = Alternate Model.

For example, 2B2A is Standard Model, 2B2AL is Alternate Model.



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HYDROMATICS

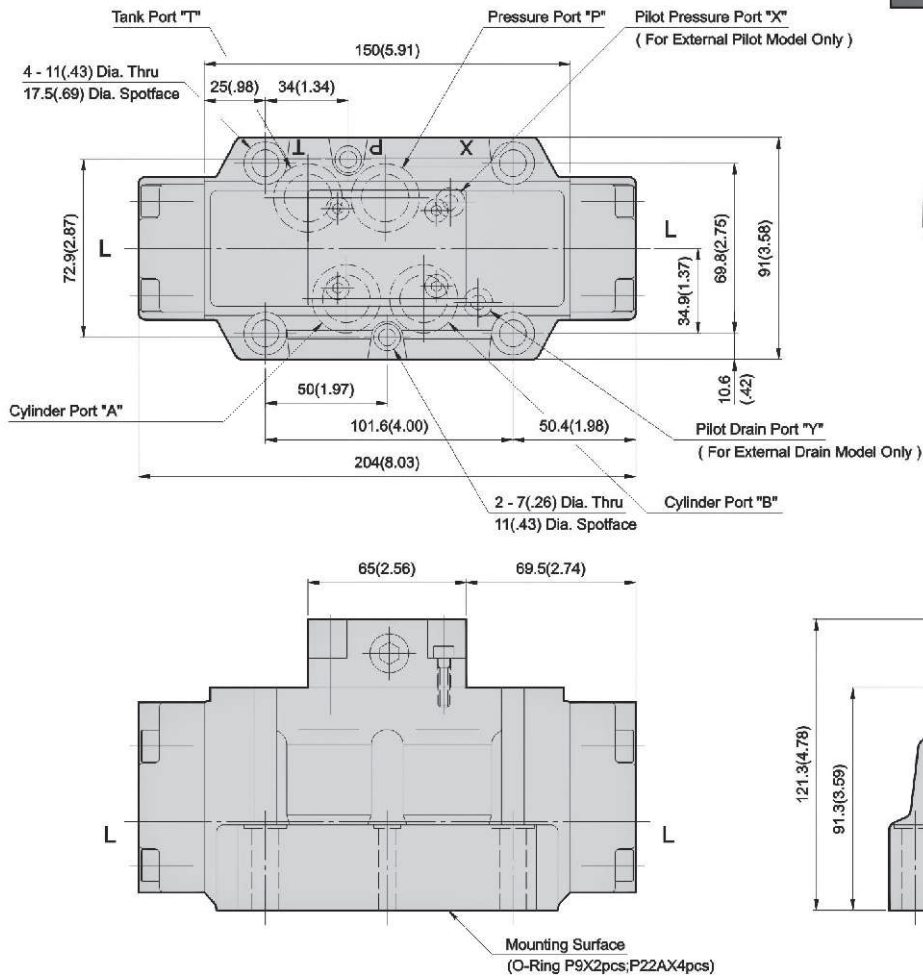
Solenoid Valves

DIMENSIONS

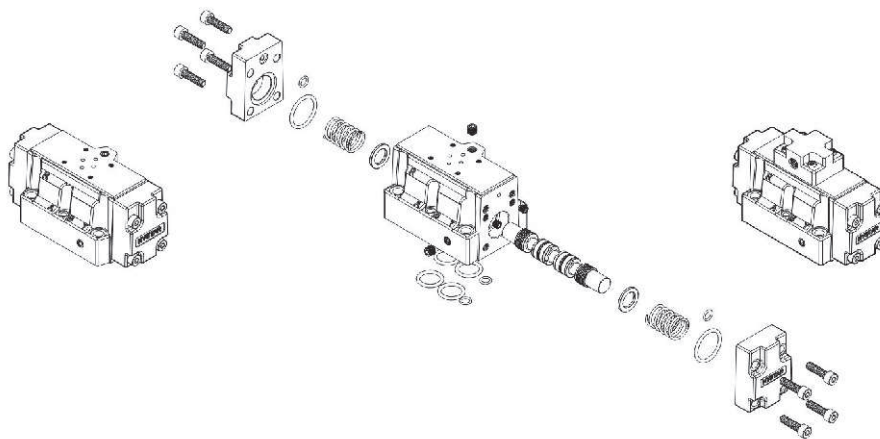
MILLIMETERS(INCHES)

DHG-***-04

MOUNTING SURFACE:DHG-04-CETOP7
ISO 07-NFPAD07



Attachment Name	Description	Tightening Torque	Code
Soc. Hd. Cap Screw	M6X45LgX2pcs M10X45LgX4pcs	12-15 Nm 58-72 Nm	30
Soc. Hd. Cap Screw	1/4-20UNCX1-3/4"LgX2pcs 3/8-16UNCX1-3/4"Lg X4pcs	104-130 in.lbs 504-625 in.lbs	3090



B2



Bell
HYDROMATICS

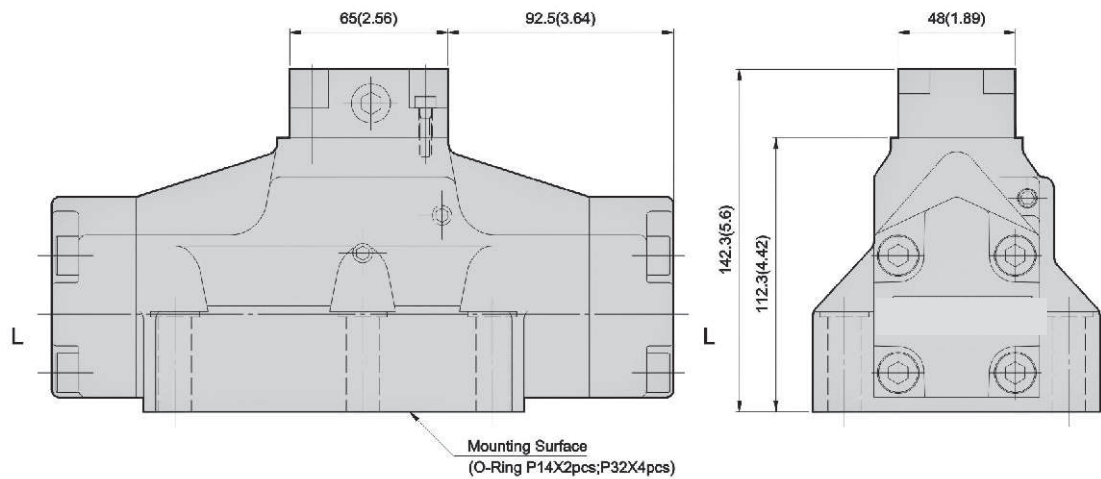
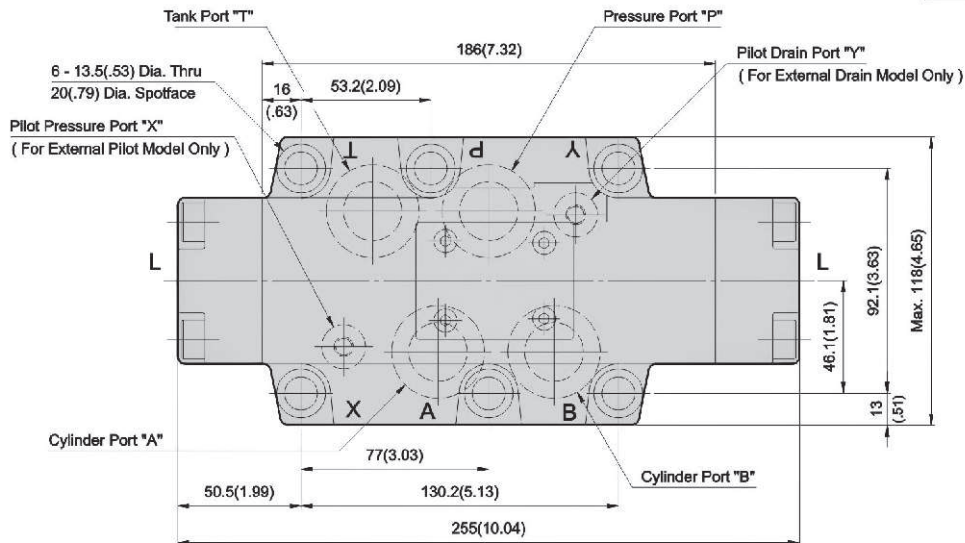
Solenoid Valves

DIMENSIONS

MILLIMETERS(INCHES)

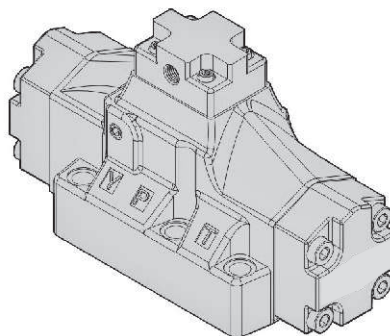
DHG-***-06

MOUNTING SURFACE:DHG-06-CETOP8
ISO 08-NFPAD08



Mounting Surface
(O-Ring P14X2pcs;P32X4pcs)

Attachment Name	Description	Tightening Torque	Code
Soc. Hd. Cap Screw	M12X55LgX6pcs	100-123 Nm	30
Soc. Hd. Cap Screw	1/2-13UNCX2-1/8"LgX6pcs	868-1068 in.lbs	3090



B2



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HYDROMATICS

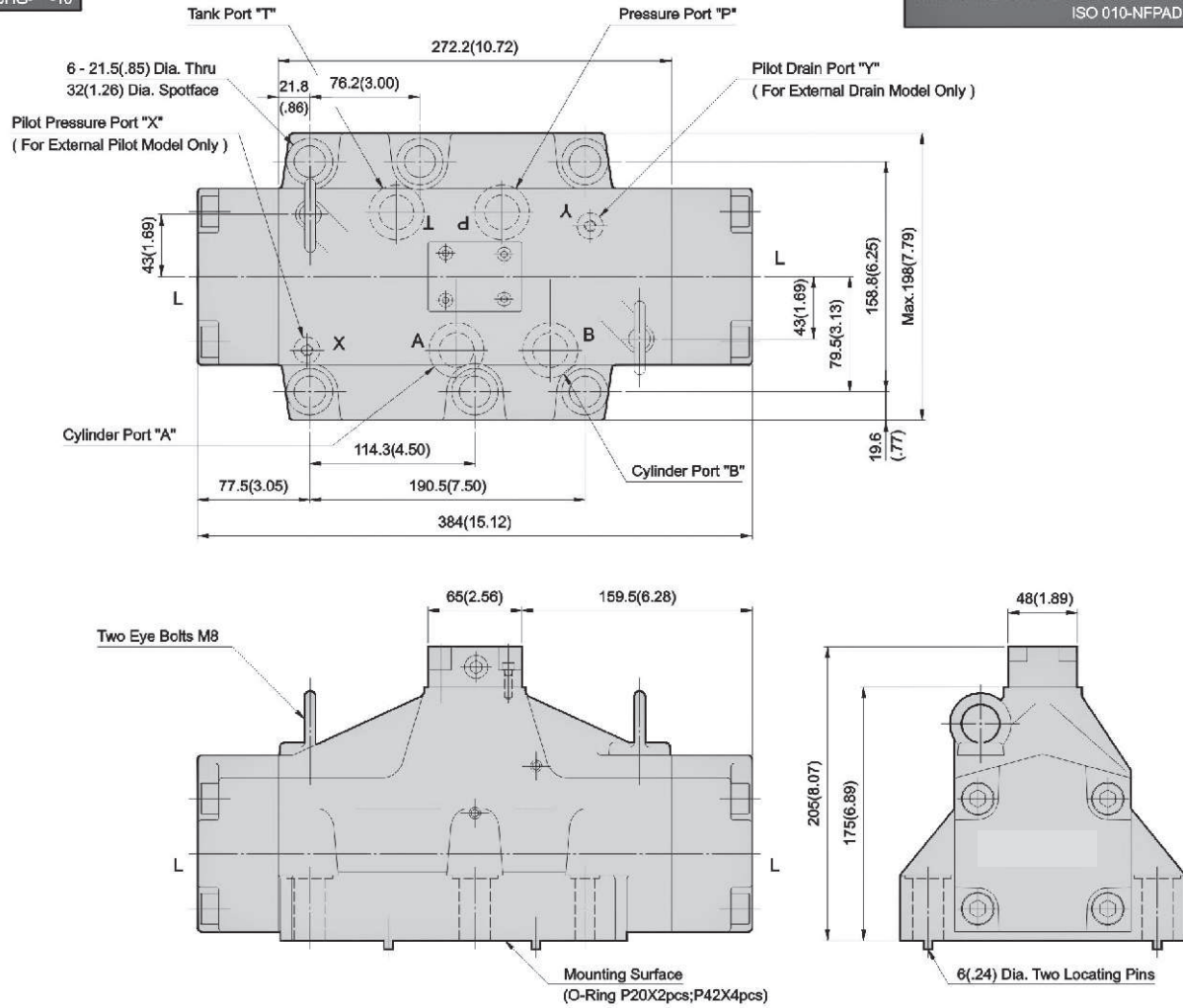
Solenoid Valves

DIMENSIONS

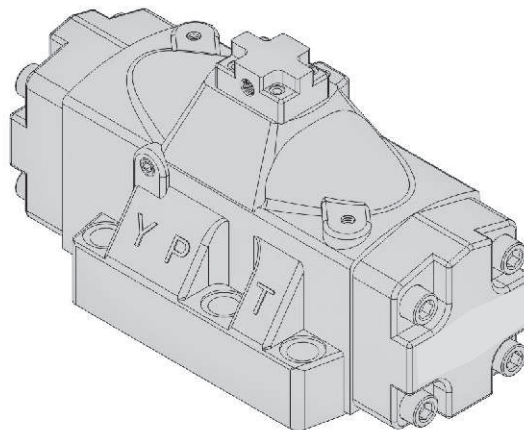
MILLIMETERS(INCHES)

DHG-***-10

MOUNTING SURFACE:DHG-10-CETOP10
ISO 010-NFPAD010



Attachment Name	Description	Tightening Torque	Code
Soc. Hd. Cap Screw	M20X75LgX6pcs	473-585 Nm	30
Soc. Hd. Cap Screw	3/4-10UNCX3"LgX6pcs	4106-5078 in.lbs	3090

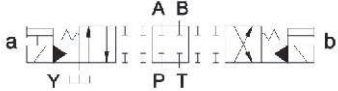
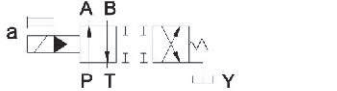
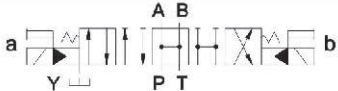
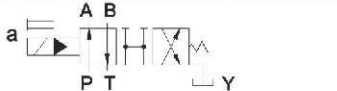
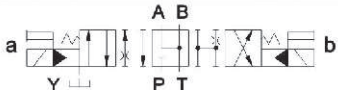
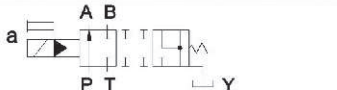
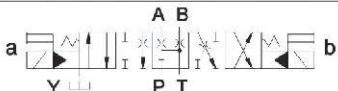
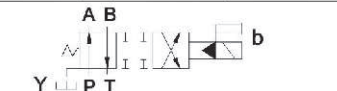
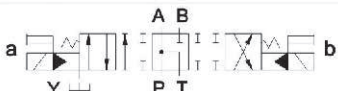
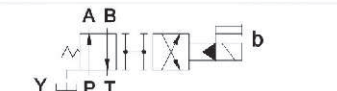
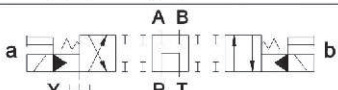
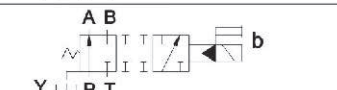
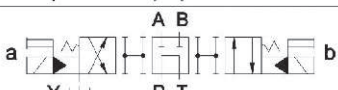
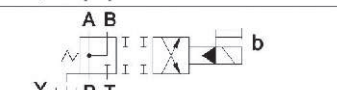
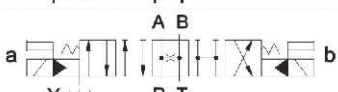
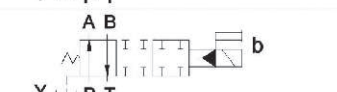
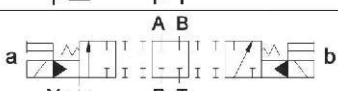
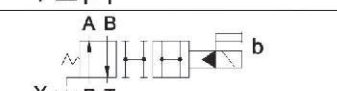
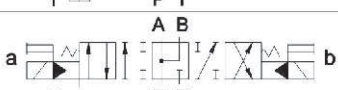
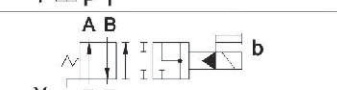
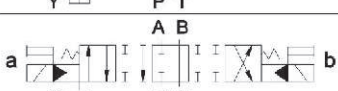
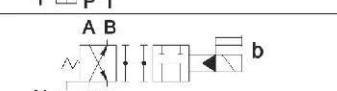
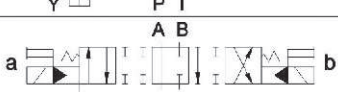
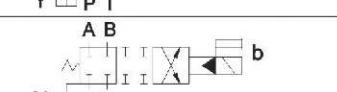
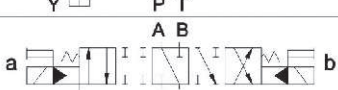
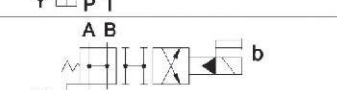
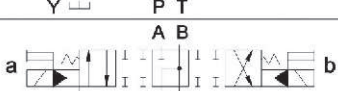
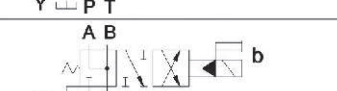
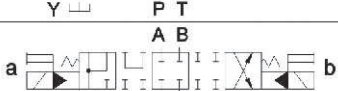
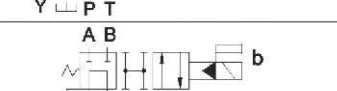
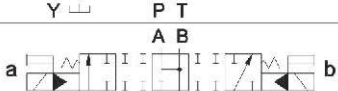


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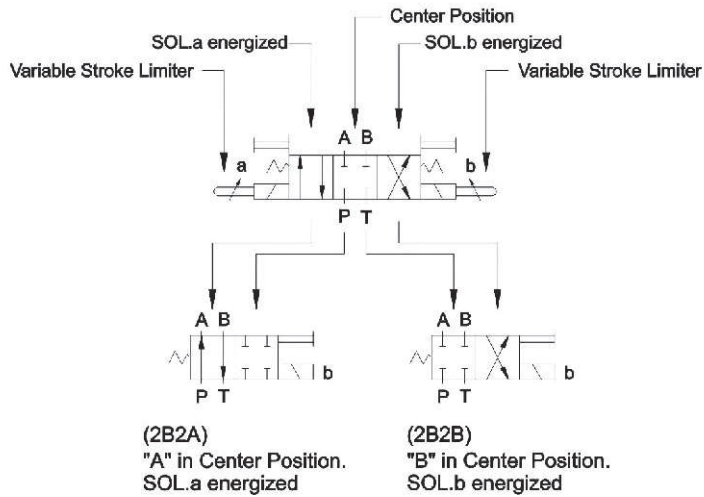
Solenoid Valves

CROSS OVER CONDITIONAL OF NORMAL SPOOL TYPE (DSHG-04/06/10)

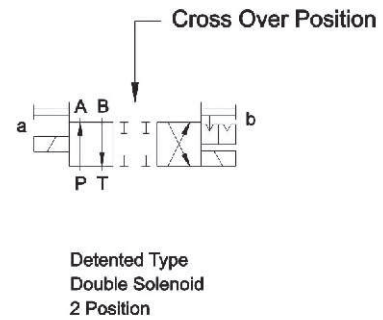
B2

SPRING CENTERED 3 POSITIONS	GRAPHIC SYMBOLS WITH DETAILS CROSS OVER	SPRING OFFSET 2 POSITIONS	GRAPHIC SYMBOLS WITH DETAILS CROSS OVER
3C2		2A2	
3C3		2A3	
3C4		2A14	
3C40		2B2	
3C5		2B3	
3C6		2B8	
3C60		2B29	
3C7		2B2A	
3C8		2B3A	
3C9		2B4A	
3C10		2B60A	
3C11		2B2B	
3C12		2B3B	
3C25		2B4B	
3C29		2B60B	
3C48		2B10B	
3C94		2B12B	

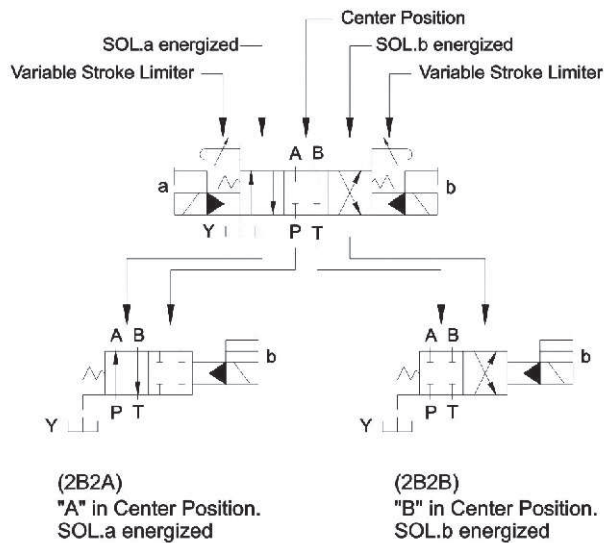
(DSG-3C2-01/03-RW)



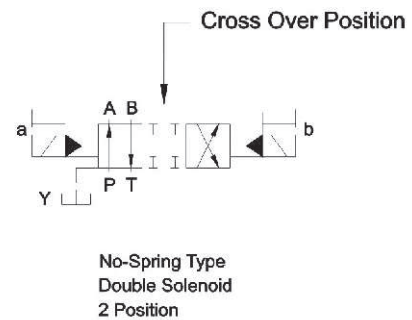
(DSG-2D2-01/03)



(DSHG-3C2-04/06/10-RW)



(DSHG-2N2-04/06/10)



a.	SOL.a energized side
b.	SOL.b energized side
A.	Cylinder Port "A"
B.	Cylinder Port "B"
P.	Pressure Port "P"
T.	Tank Port "T"
	Manual Override
	Closed Line
	Open Line
	Spring
	Connection Lines

	Detented
a	Single Acting Solenoid
	P → A,B T → Connections
	A → T,P B → Connections
	Oil Pressure
	Variable Stroke Limiter
	Connecting Point Of Lines And Passages
Y	Drain Line
	Cross Over Position-All Ports Closed
	Cross Over Position-All Ports Open