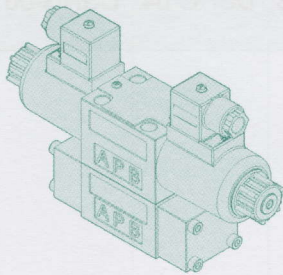


SOLENOID CONTROLLED PILOT OPERATED DIRECTIONAL VALVES DSHG TYPE

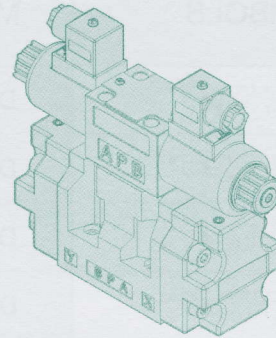
A

DSHG-N-01



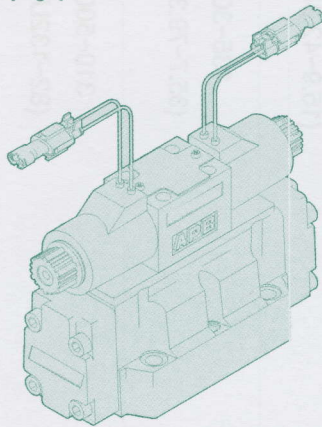
Max. Pressure : 210bar (3000PSI)
 Max. Flow : 40lpm (10.6USgpm)

DSHG-N-03



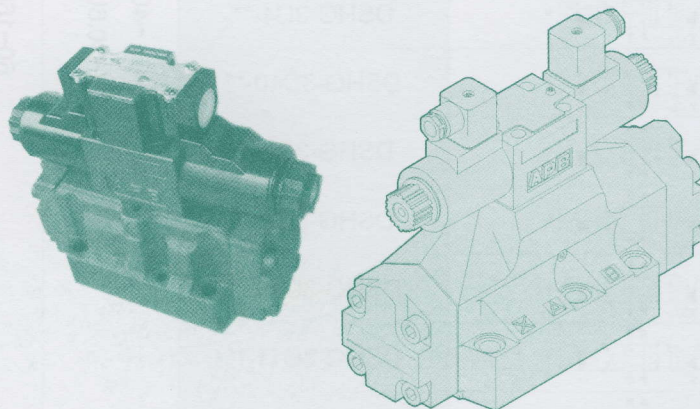
Max. Pressure : 250bar (3600PSI)
 Max. Flow : 160lpm (42.3USgpm)

DSHG-Y-04



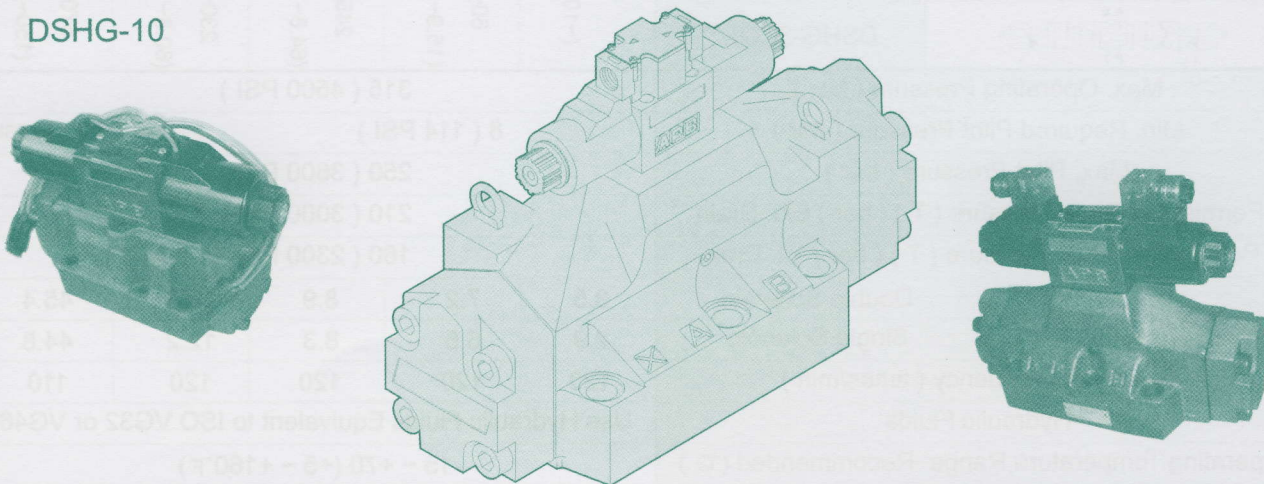
Max. Pressure : 250bar (3600PSI)
 Max. Flow : 300lpm (79.3USgpm)

DSHG-N-06



Max. Pressure : 250bar (3600PSI)
 Max. Flow : 500lpm (132USgpm)

DSHG-10



Max. Pressure : 250bar (3600PSI)

Max. Flow : 1100lpm (291USgpm)

MODEL NO SPECIFICATIONS (Solenoid Controlled Pilot Operated Directional Valves)

A

Spool Type & Graphic Symbols		Rated Flow Capacity -Maximum Flow Capacity				
SYMBOLS	MODEL NO	DSHG-01	DSHG-03	DSHG-04	DSHG-06	DSHG-10
	DSHG-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)
	DSHG-2B3-**					
	DSHG-2B4-**					
	DSHG-2N2-**					
	DSHG-2N3-**					
	DSHG-3C2-**					
	DSHG-3C3-**					
	DSHG-3C4-**					
	DSHG-3C40-**					
	DSHG-3C7-**					
	DSHG-3C9-**					
	DSHG-3C10-**					
	DSHG-3C11-**					
	DSHG-3C12-**					
	DSHG-3C5-**					
	DSHG-3C6-**					
	DSHG-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)				
Permissible Back Pressure (T) (bar) Ext. Drain		210 (3000 PSI)				
Permissible Back Pressure (T) (bar) Int. Drain		160 (2300 PSI)				
Weight (Kgs)	Double Solenoid	3.5	7.2	8.9	12.8	45.4
	Single Solenoid	2.9	6.6	8.3	12.2	44.8
Switching Frequency (times/min)		120	120	120	120	110
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				



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

A

SPRING OFFSET 2 POSITION	GRAPHIC SYMBOLS (STANDARD)	SPRING CENTERED 3 POSITION	GRAPHIC SYMBOLS (STANDARD)	NO SPRING 2 POSITION	GRAPHIC SYMBOLS (STANDARD)
2A2		3C2		2N2	
2A3		3C3		2N3	
2A14		3C4		2N4	
2B2		3C40		2N40	
2B29		3C5		2N7	
2B3		3C6		2N2A	
2B4		3C60		2N3A	
2B40		3C7		2N4A	
2B7		3C8		2N40A	
		3C9		2N5A	
		3C10		2N6A	
		3C11		2N60A	
		3C12		2N7A	
		3C25		2N9A	
		3C29		2N10A	
		3C48		2N11A	
				2N12A	

DIMENSIONS

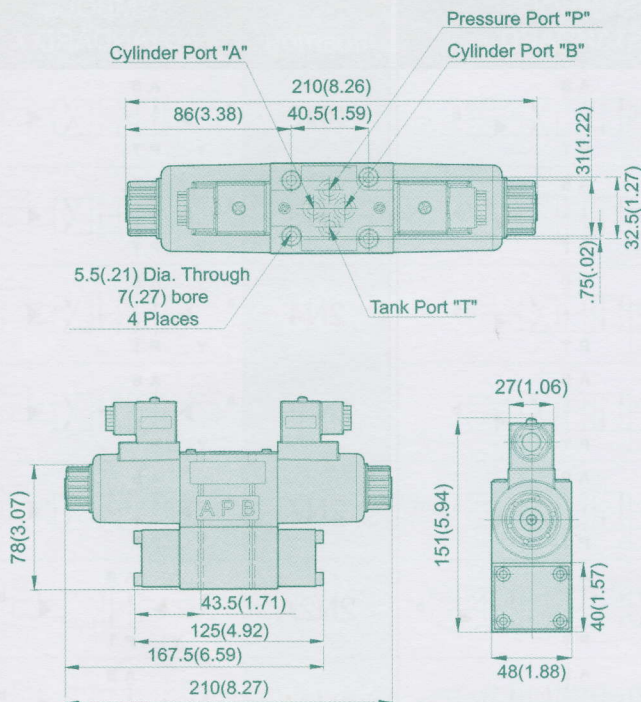
MILLIMETERS(INCHES)

A

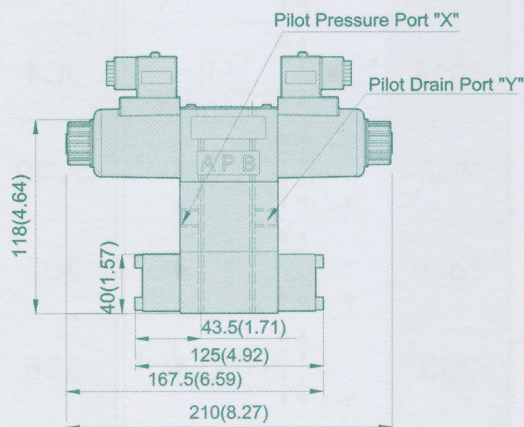
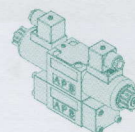
DSHG-01

1P1D: Internal pilot, internal drain

MOUNTING SURFACE: DSHG-01-CETOP3
ISO 03-NFPAD03



1P2D: Internal pilot, external drain
2P1D: External pilot, internal drain
2P2D: External pilot, external drain

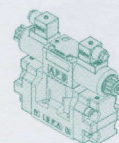
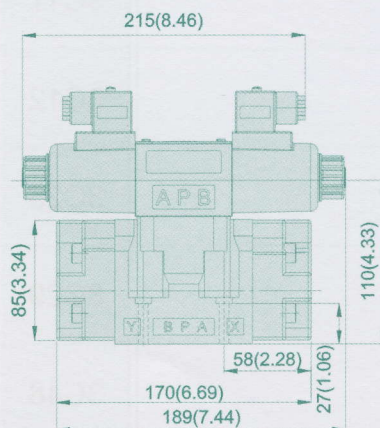
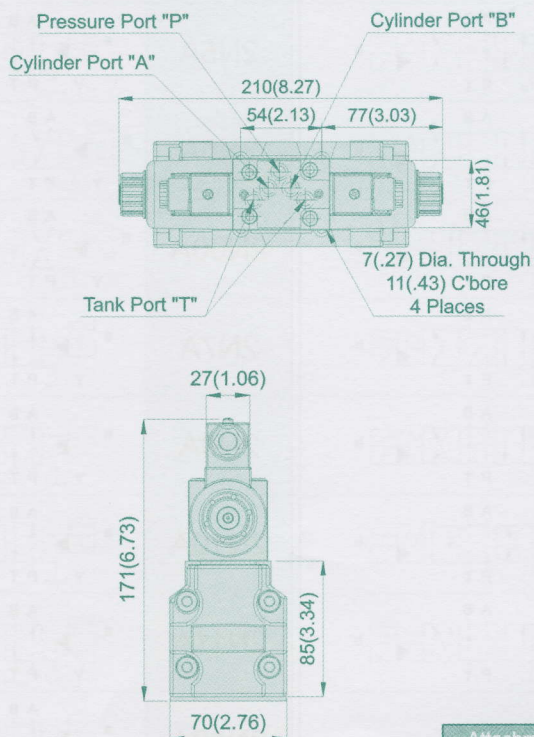


•Dimensions for models with terminal box type, reference page 15 for details.

Attachment Name	Description	Tightening Torque	Code
Soc. Hd. Cap Screw	M5 X45LgX4pcs	5-7 Nm	30
Soc. Hd. Cap Screw	10-24UNCX1-3/4"LgX4pcs	43-60 in.lbs	3090

DSHG-03

MOUNTING SURFACE: DSHG-03-CETOP5
ISO 05-NFPAD05



•Dimensions for models with Din connector, reference page 15 for details.

Attachment Name	Description	Tightening Torque	Code
Soc. Hd. Cap Screw	M6 X35LgX4pcs	12-15 Nm	30
Soc. Hd. Cap Screw	1/4-20UNCX1-1/2"LgX4pcs	105-130 in.lbs	3090



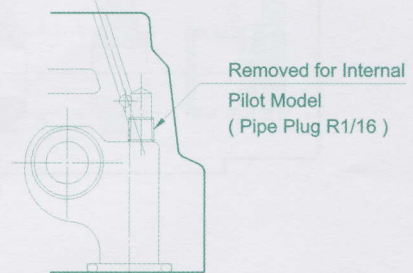
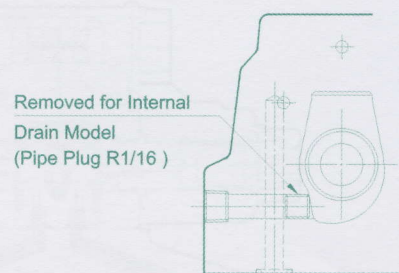
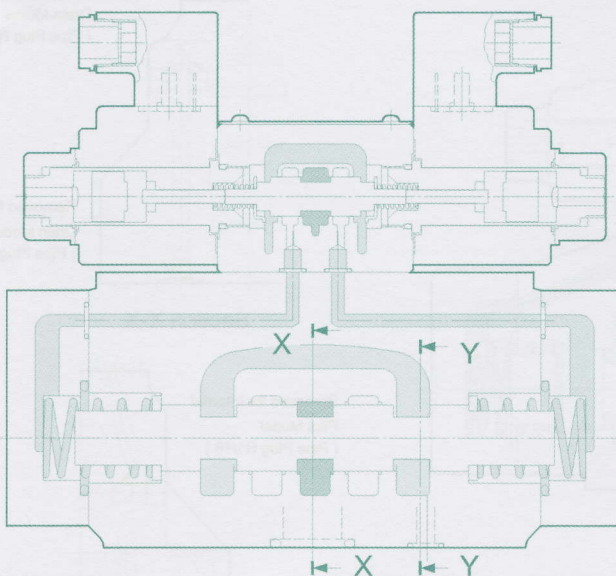
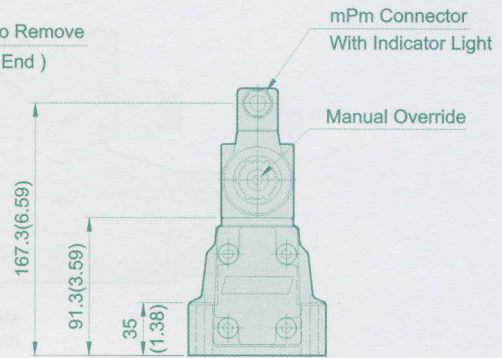
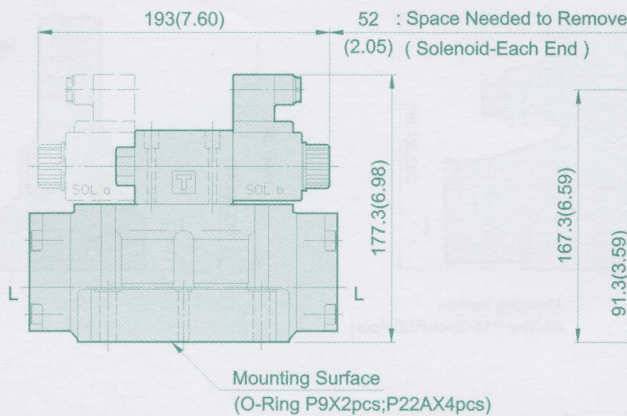
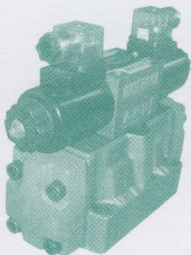
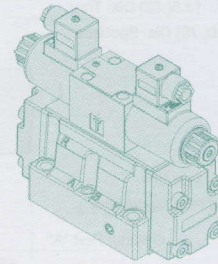
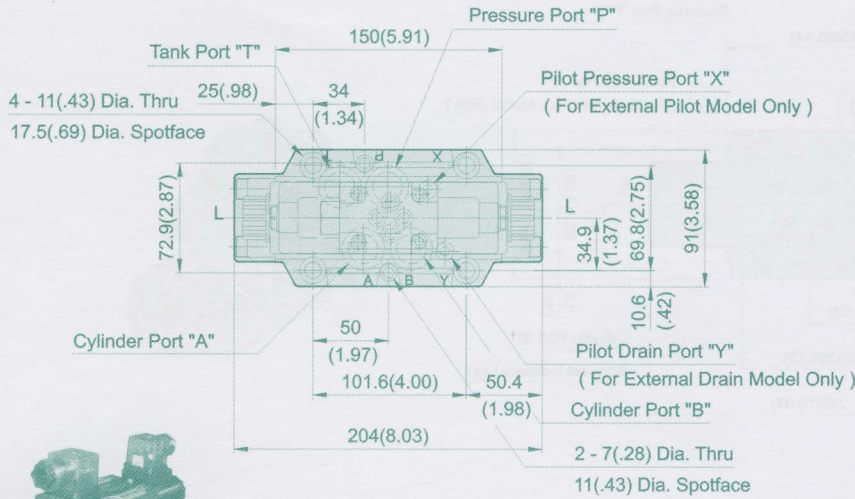
DIMENSIONS

MILLIMETERS(INCHES)

A

04(1/2")(S)DSHG-***-N-04

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

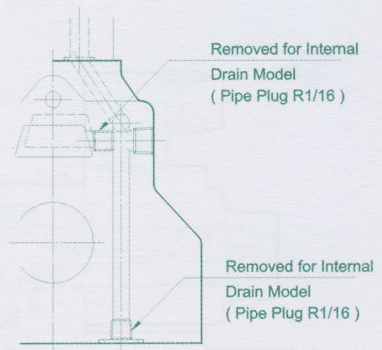
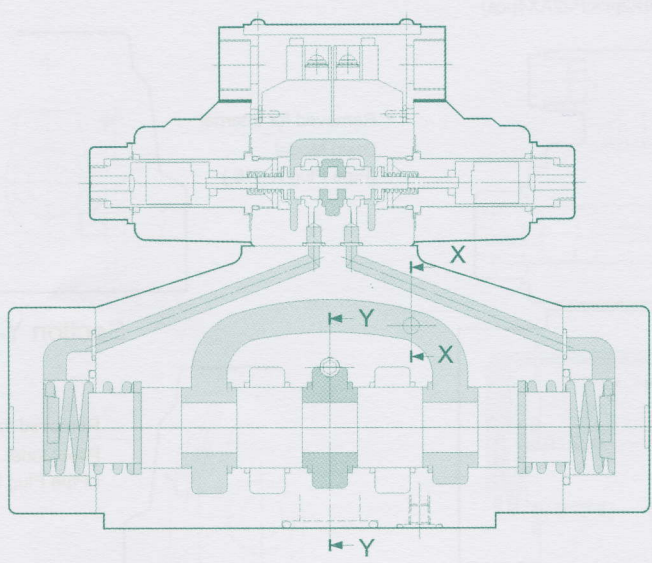
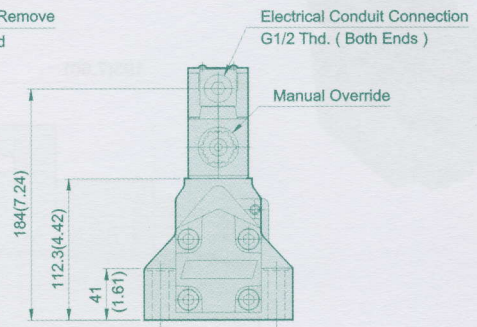
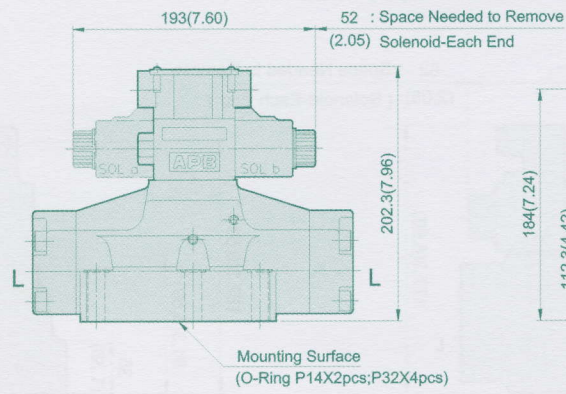
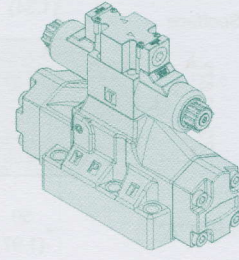
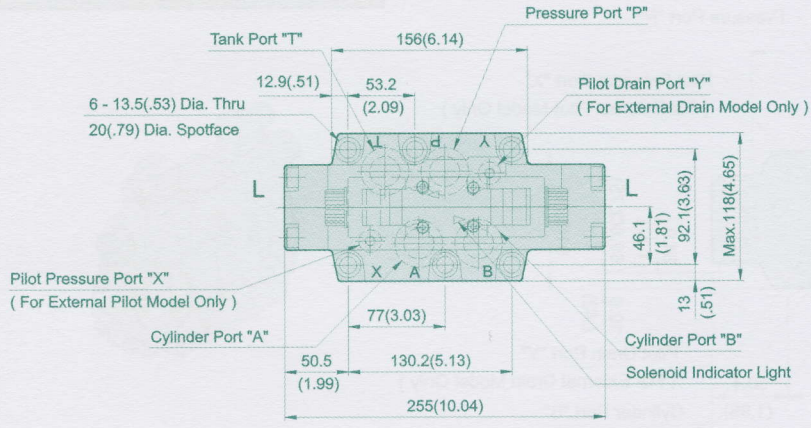


Attachment Name	Description	Tightening Torque	Code
Soc. Hd. Cap Screw	M6X45LgX2pcs	12-15 Nm	30
	M10X45LgX4pcs	58-72 Nm	
Soc. Hd. Cap Screw	1/4-20UNCX1-3/4"LgX2pcs	104-130 in.lbs	3090
	3/8-16UNCX1-3/4"Lg X4pcs	504-625 in.lbs	

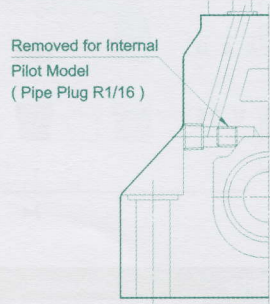
A

06(3/4")S)DSHG-***-06

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



Section X-X



Section Y-Y

Attachment Name	Description	Tightening Torque	Code
Soc. Hd. Cap Screw	M12X55LgX6pcs	100-123 Nm	30
Soc. Hd. Cap Screw	1/2-13UNCX2-1/8"Lg X6pcs	868-1068 in.lbs	3090



"DHSG" DIRECTIONAL VALVES

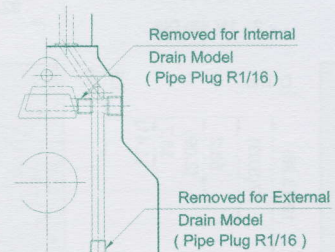
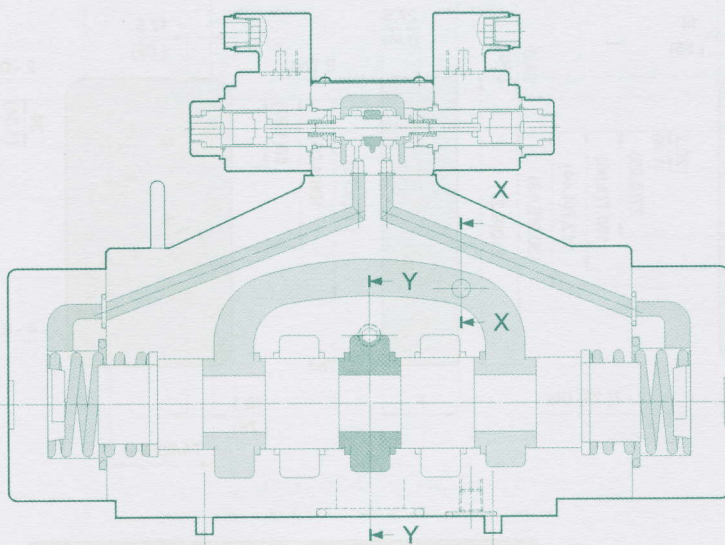
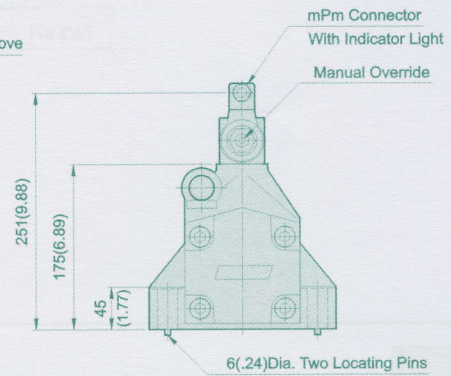
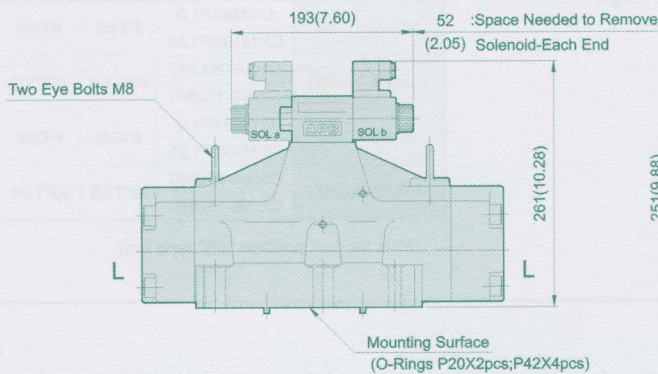
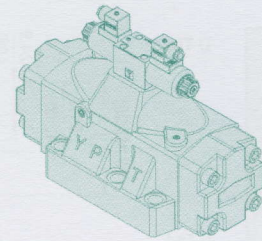
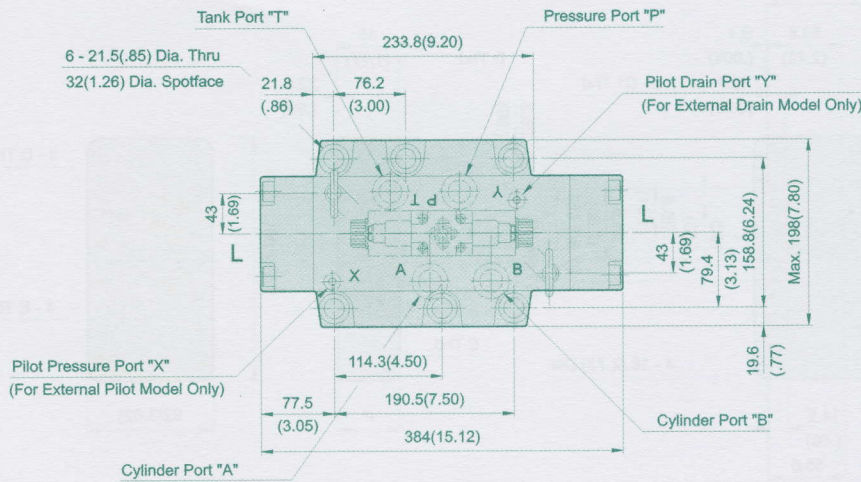
DIMENSIONS

MILLIMETERS(INCHES)

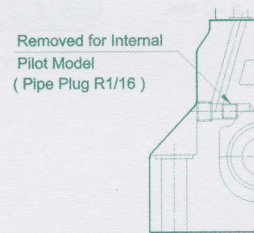
A

10(1-1/4")(S)DSHG-***-10

MOUNTING SURFACE: DSHG-10-CETOP10
ISO 10-NFPAD10



Section X-X

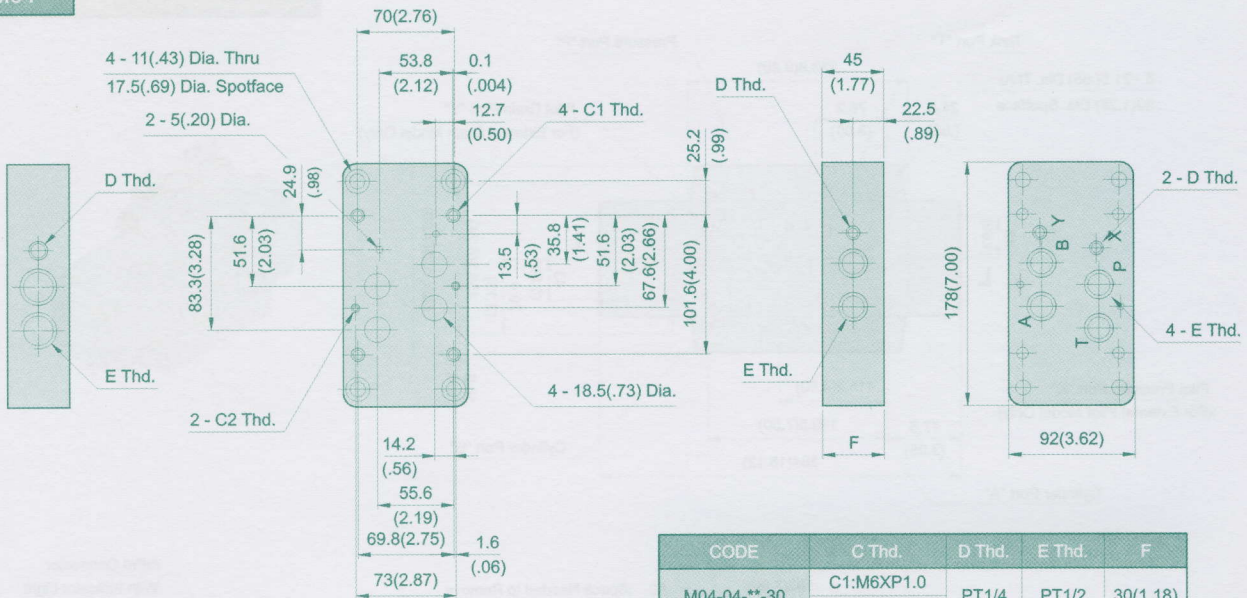


Section Y-Y

Attachment Name	Description	Tightening Torque	Code
Soc. Hd. Cap Screw	M20X75LgX6pcs	473-585 Nm	30
Soc. Hd. Cap Screw	3/4-10UNCX3"Lg X6pcs	4106-5078 in.lbs	3090

A

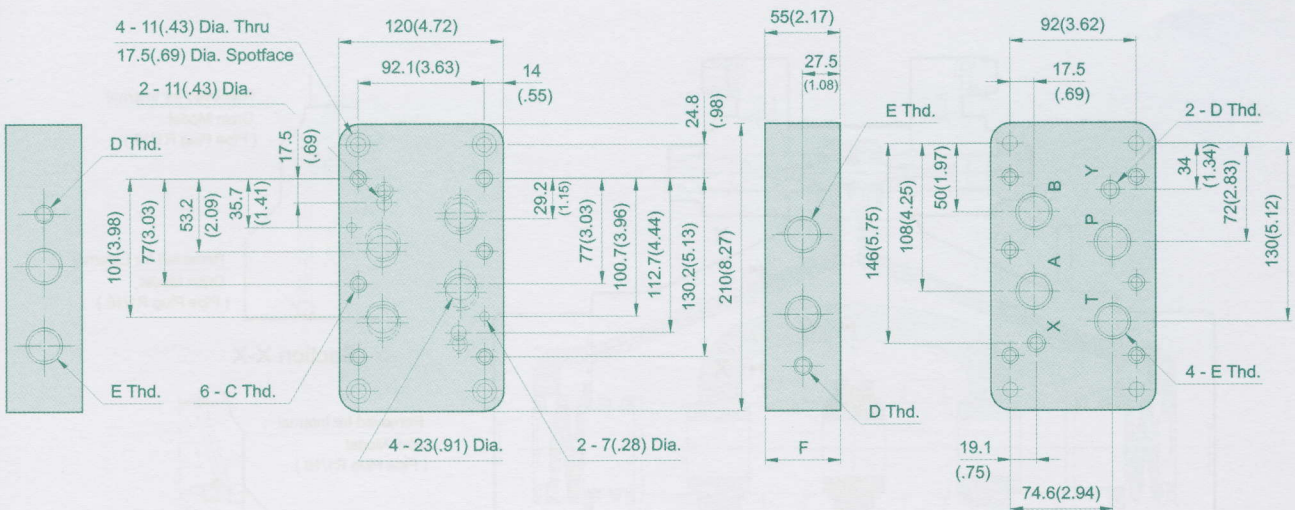
M04--**



CODE	C Thd.	D Thd.	E Thd.	F
M04-04-**-30	C1:M6XP1.0	PT1/4	PT1/2	30(1.18)
	C2:M10XP1.25			
M04-04-**-3090	C1:1/4-20UNC	NPT1/4	NPT1/2	30(1.18)
	C2:3/8-16UNC			
M04-06-**-30	C1:M6XP1.0	PT3/8	PT3/4	---
	C2:M10XP1.25			
M04-06-**-3090	C1:1/4-20UNC	NPT3/8	NPT3/4	---
	C2:3/8-16UNC			

"F" is for port position "4B" type only.

M06--**



CODE	C Thd.	D Thd.	E Thd.	F
M06-06-**-30	M12XP1.5	PT3/4	PT3/4	30(1.18)
M06-06-**-3090	1/2-13UNC	NPT3/4	NPT3/4	30(1.18)
M06-08-**-30	M12XP1.5	PT1"	PT1"	30(1.18)
M06-08-**-3090	1/2-13UNC	NPT1"	NPT1"	30(1.18)

"F" is for port position "4B" type only.



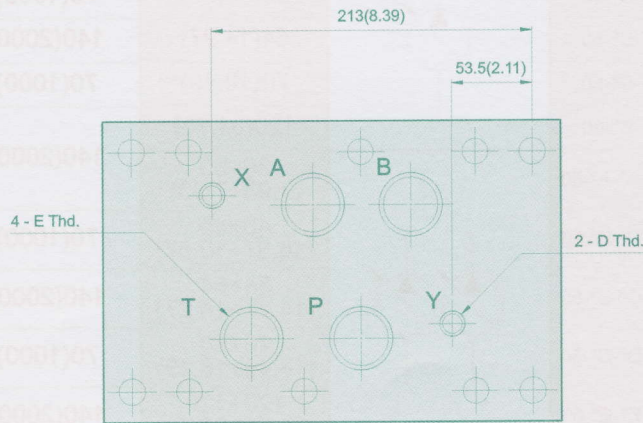
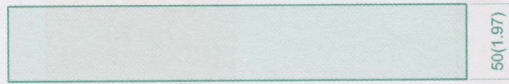
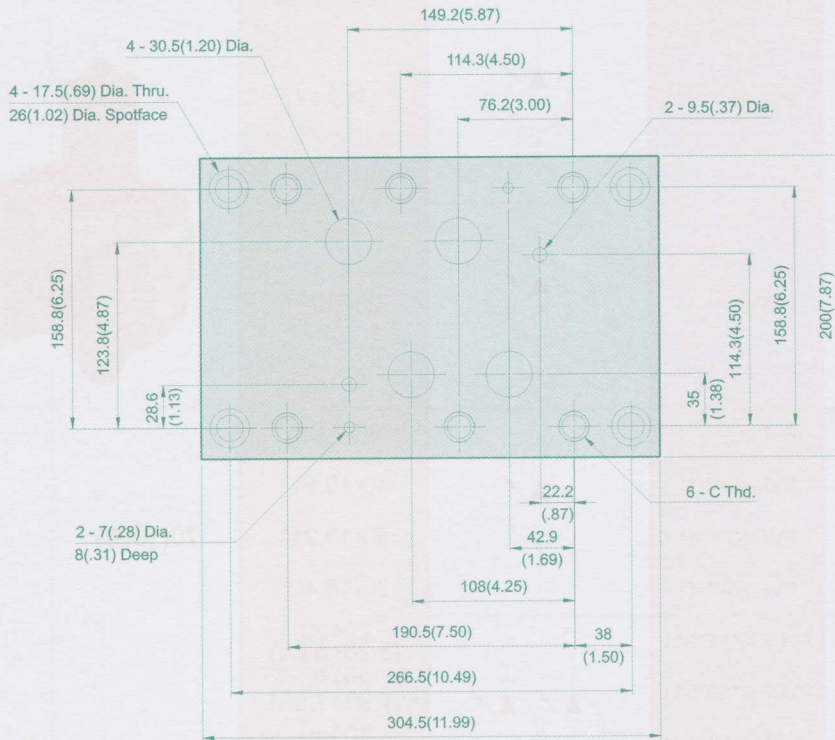
SUBPLATE

DIMENSIONS : MILLIMETERS(INCHES)

A

B

M10-**



CODE	C Thd.	D Thd.	E Thd.
M10-10-**-30	M20XP2.5	PT1/4	PT1-1/4
M10-10-**-3090	3/4-10UNC	NPT1/4	NPT1-1/4