

**SOLENOID CONTROLLED PILOT
OPERATED DIRECTIONAL VALVE DG08H SIZE 25**

FEATURES :

- Highest performance in NG 25
- Optimized spool design to reduce flow force
- Proven quality through 10 million endurance test
- Manual overrides standard
- P port pilot pressure insert for open center spools
- Connections to DIN, ISO and CETOP



Model: DG08H

SPECIFICATION :

Maximum Flow Rate	700 L/Min (79 GPM)	
Maximum Operating Pressure	320 Bar (4500 PSI)	
Maximum Permissible Back Pressure	160 Bar (2285 PSI)	
Pilot Pressure	13~250 bar	
Ambient Temperature Range	-15°C~+50°C	
Hydraulic Fluid Temperature	-15°C~+70°C	
Viscosity Range	15~400 mm ² /S	
Hydraulic Oil	ISO VG32, 46, 68	
Fluid Cleanliness	25 μm	
Maximum Change over Frequency	120 Times/Min	
Mounting Pattern	ISO 4401-AE-08-4-A	
Approx. Weight (Valve with hydraulic operation)	17.0 kg	
Valve Fixing Screws	Metric	M12 x 60L (6 pcs)
	Inch	1/2"~13UNCx2-1/4"L (6 pcs)
Tightening Torque	100~122.5 Nm (M6)	

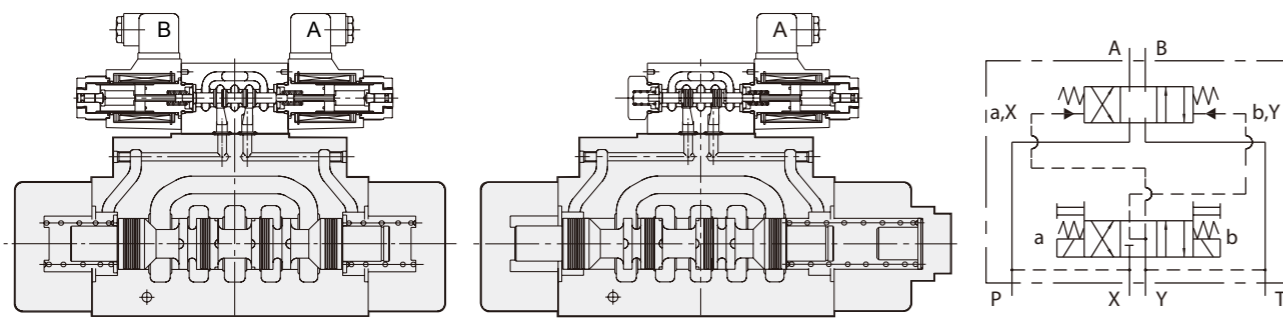
CROSS SECTION DIAGRAM:

■ DG08H-E1-2C-T-A*-DN-82

■ DG08H-E1-2A-T-A*-DN-82

GRAPHIC SYMBOL:

■ DG08H-E-*C-T-*-*



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ORDERING CODE :

D G 08H- E1 - 2 C - E T - A110 - DN - 82 - **
1 2 3 4 5 6 7 8 9 10 11 12

1 DIRECTIONAL CONTROL VALVE

2 MANIFOLD OR SUBPLATE MOUNTING

3 NOMINAL VALVE SIZE:

NG 25, CETOP 8 and ISO 4401-08 (NFPA-D08/DIN 24340)

4 OPERATOR

No code: Hydraulic (pilot) operation
E1: DSV/DSD electro-hydraulic operation
E2: DG electro-hydraulic operation

5 TYPE OF SPOOL (CENTER CONDITION)

0 A B P T	1 A B P T	2 A B P T	3 A B P T	6 A B P T	7 A B P T
8 A B P T	11 A B P T	22 A B P T	31 A B P T	33 A B P T	

- 0: Open center (All ports)
- 1: Open center (P, A to T)
- 2: Closed center (All ports)
- 3: Closed center (P, B)
- 6: Closed center (P only)
- 7: Open center (P to A, B)
- 8: Tandem center (P to T)
- 11: Open center (P, B to T)
- 22: Closed center (Two way)
- 31: Closed center (P, A)
- 33: Closed center (Bleed A,B)

6 SPRING CRACKING PRESSURE

- A: Spring offset
- AL: Same with A
- B: Spring centered-single solenoid "A" removed
- BL: Same with B
- C: Spring centered
- N: Without spring with detent (pilot only)

7 EXTERNAL PILOT PRESSURE

No code: Internal Pilot
E: External Pilot

8 INTERNAL PILOT DRAIN

No code: External Drain
T: Internal Drain

9 ELECTRIC POWER SOURCE INDICATION

A110: AC100V, 50/60 Hz; AC110V, 60 Hz
A120: AC110V, 50 Hz; AC120V, 60 Hz
A220: AC200V, 50/60 Hz; AC220V, 60 Hz
A240: AC220V, 50 Hz; AC240V, 60 Hz
DC12: DC12V
DC24: DC24V
R110: AC110V, 60 Hz; Rectifier built-in type
R220: AC220V, 60 Hz; Rectifier built-in type

10 ELECTRICAL OPTIONS:

DN: DIN 43650 Coils with indicator lights
DNO: DIN 43650 Coils without indicator lights
WB: Wiring housing with G1/2 thread and indicator lights

11 DESIGN NUMBER

82

12 OPTIONAL INQUIRY

P: P Check
SA: Stroke Adjustment on A Port
SB: Stroke Adjustment on B Port
SW: Stroke Adjustment on Both A & B Port

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SPOOL TYPES:

Position type at neutral	Double solenoid valves, spring centered -C-	Single solenoid valves, solenoid at port A end -B-	Single solenoid valves, solenoid at port B end -BL-
0 (H)	DG08H-0C 	DG08H-0B 	DG08H-0BL
1 (F)	DG08H-1C 	DG08H-1B 	DG08H-1BL
2 (E)	DG08H-2C 	DG08H-2B 	DG08H-2BL
3 (L)	DG08H-3C 	DG08H-3B 	DG08H-3BL
6 (J)	DG08H-6C 	DG08H-6B 	DG08H-6BL
7 (M)	DG08H-7C 	DG08H-7B 	DG08H-7BL
8 (G)	DG08H-8C 	DG08H-8B 	DG08H-8BL
11 (P)	DG08H-11C 	DG08H-11B 	DG08H-11BL
31 (U)	DG08H-31C 	DG08H-31B 	DG08H-31BL
33 (W)	DG08H-33C 	DG08H-33B 	DG08H-33BL

*() : Rexroth Model

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SPOOL TYPES:

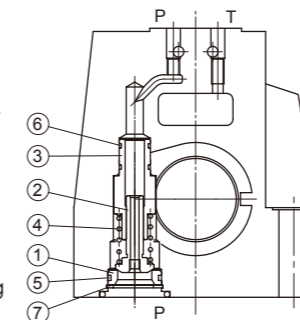
Position type during transition	Single solenoid valves, solenoid at port A end -A-	Single solenoid valves, solenoid at port B end -AL-
0 (H)	DG08H-0A 	DG08H-0AL
2 (E)	DG08H-2A 	DG08H-2AL
6 (J)	DG08H-6A 	DG08H-6AL
7 (M)	DG08H-7A 	DG08H-7AL
22 (A)	DG08H-22A 	DG08H-22AL

*() : Rexroth Model

P CHECK

■ DG08-H-*.**.-82-P

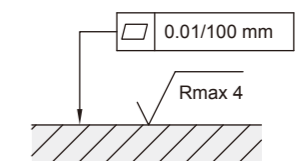
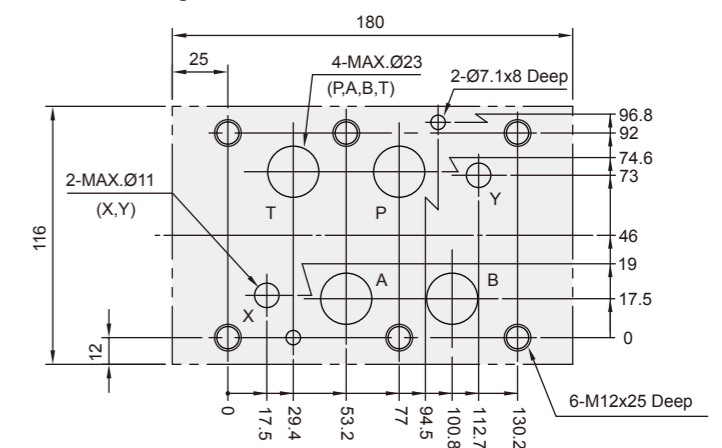
- 1.Seat
- 2.Poppet
- 3.Spring Retainer
- 4.Spring
- 5.O-Ring
- 6.O-Ring
- 7.C-retaining ring



INSTALLATION DIMENSIONS:

(Machined valve mounting face with position of ports)

■ Mounting Surface: ISO 4401-AE-08-4-A



Required surface finish of mating piece when fitting the valve without subplate

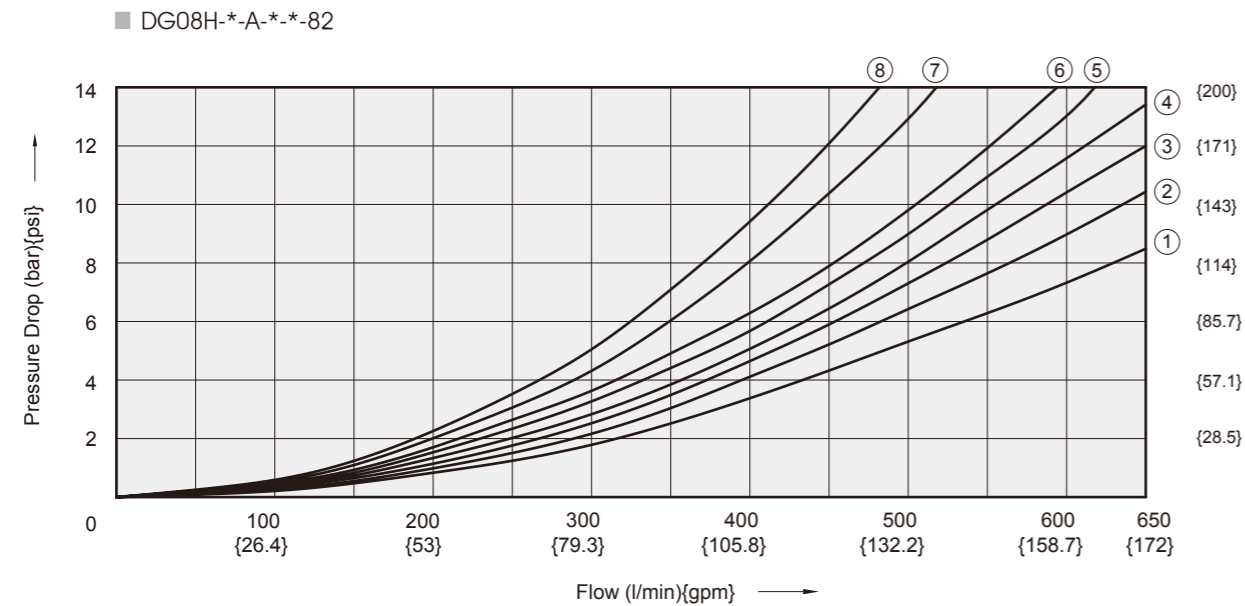
SOLENOID CONTROLLED PILOT OPERATED DIRECTIONAL VALVE DG08H SIZE 25

PERFORMANCE FIGURES & CURVES:

Pressure Drop Curve Reference Chart

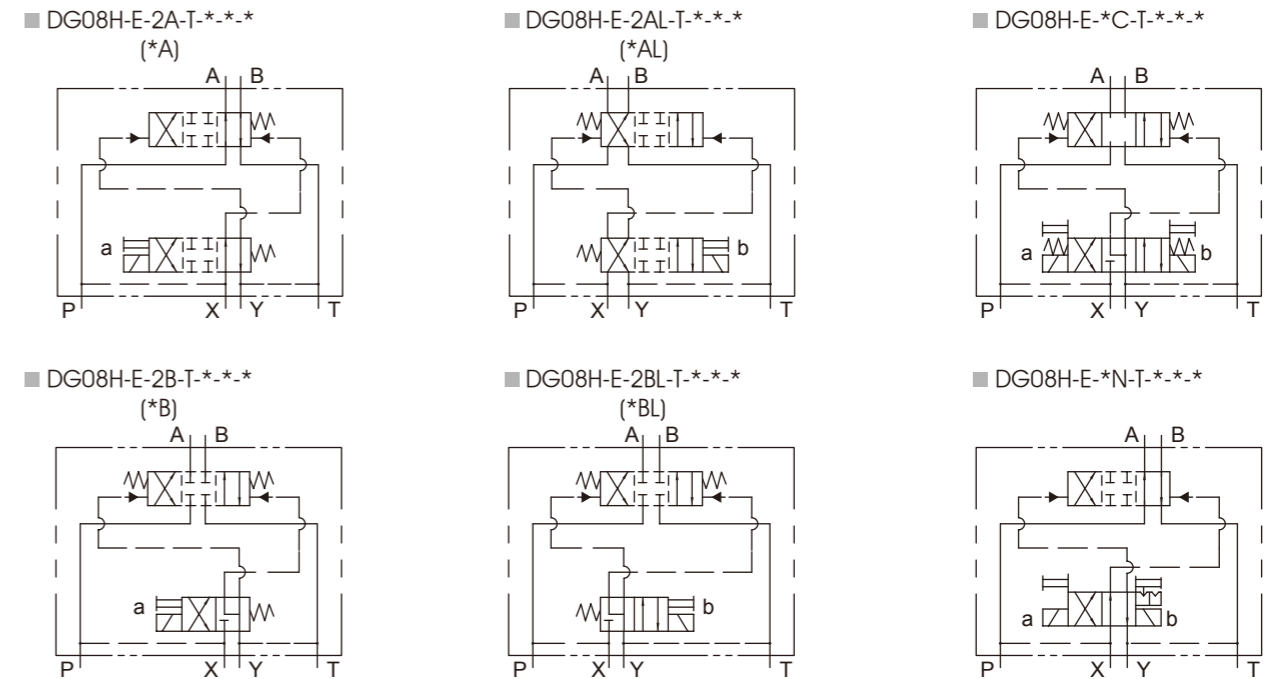
Viscosity of Hydraulic Fluid: 41 mm²/s

Spool Type	Pressure Drop Characteristics				
	P→A	P→B	A→T	B→T	P→T
0C (H)	4	4	3	4	-
1C (F)	1	4	3	3	-
2C (E)	1	1	1	3	-
3C (L)	2	2	3	3	-
6C (J)	2	2	3	5	-
7C (M)	4	4	1	4	-
8C (G)	3	1	2	4	7
11C (P)	4	1	1	5	-
31C (U)	2	1	1	6	-
33C (W)	2	2	3	5	-

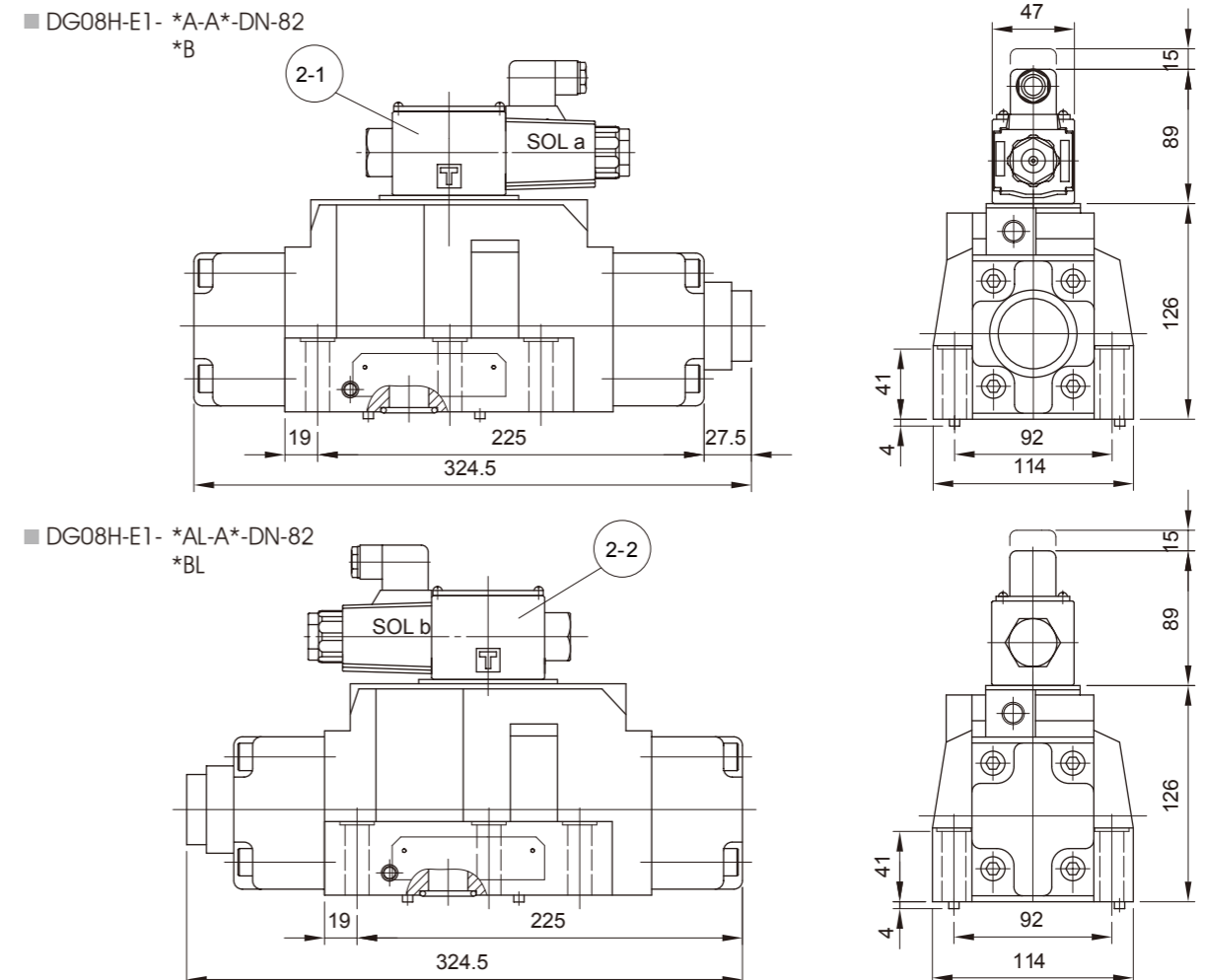


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HYDRAULIC CONFIGURATION:



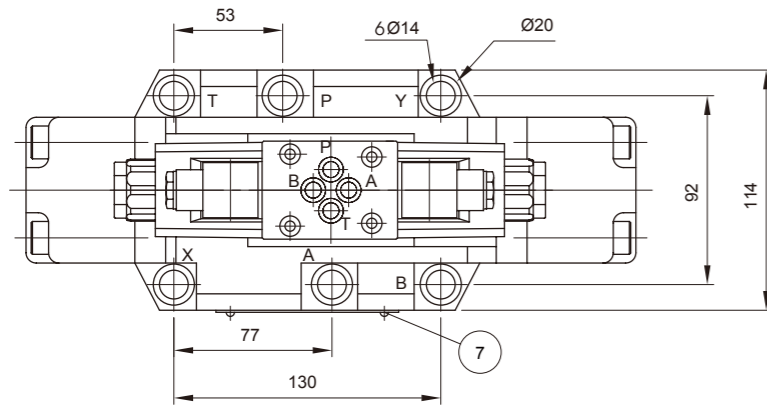
DIMENSIONS:



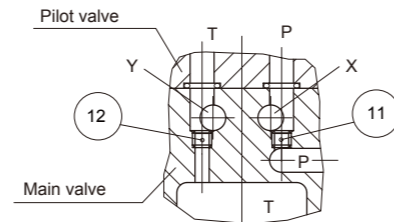
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DIMENSIONS:

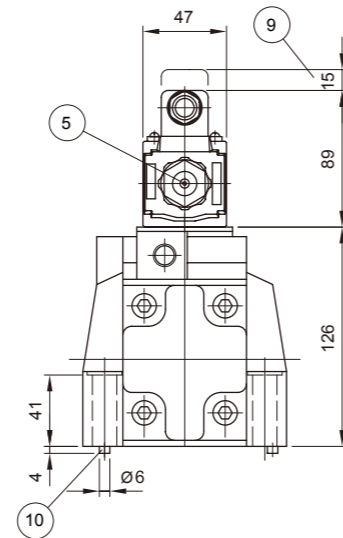
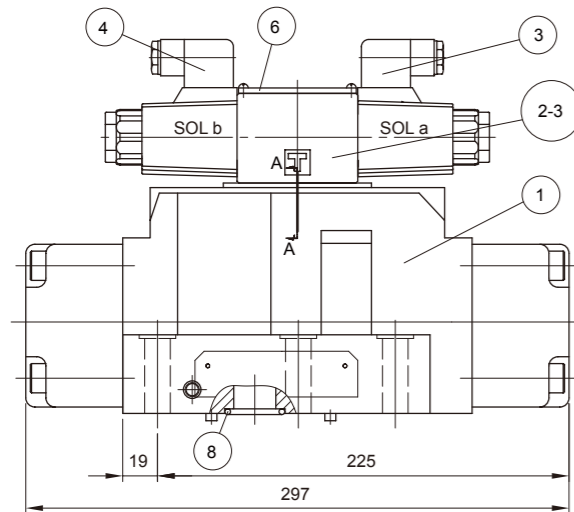
■ DG08H-E1-*C-A*-DN-82



SEC. A-A



Pilot oil feed(plug: M6x8L)
External: 11 plugged
Internal: 11 open
Pilot oil drain(plug: M6x8L)
External: 12 plugged
Internal: 12 open



- 1: Main valve
- 2: Pilot valve
 - 2-1: Pilot valve DSV/DSD-G02-2A-* (1 solenoid) for main valves with spools *A, *B (3 position valve with solenoid on side a)
 - 2-2: Pilot valve DSV/DSD-G02-2AL-* (1 solenoid) for main valves with spools *AL, *BL (3 position valve with solenoid on side b)
 - 2-3: Pilot valve DSV/DSD-G02-6C-* (2 solenoid) for main valves with 3 positions

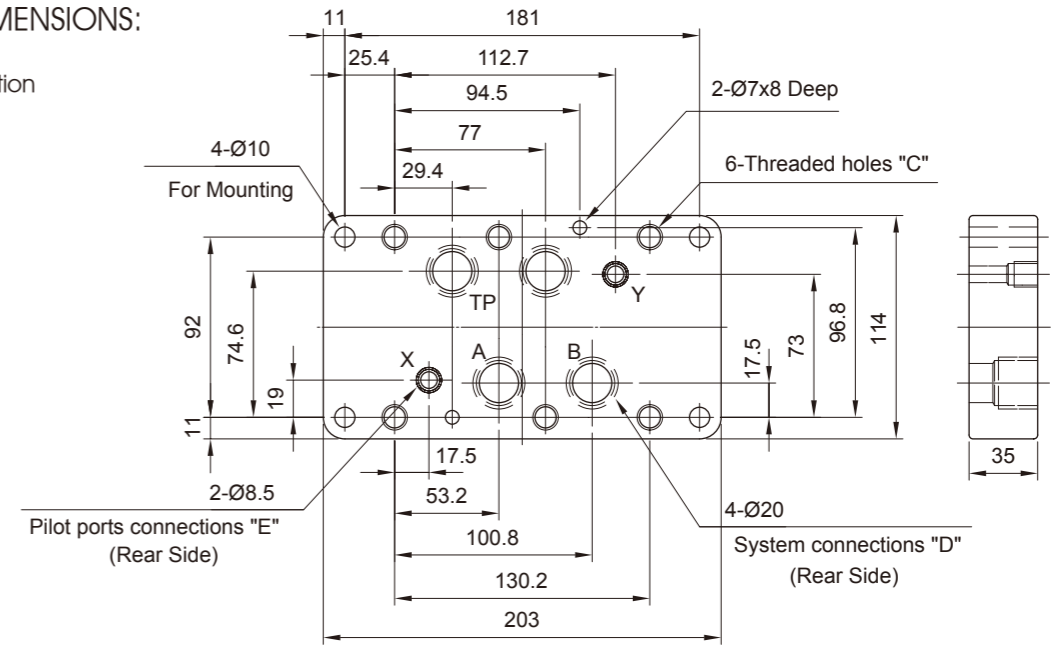
- 3: Solenoid a
- 4: Solenoid b
- 5: Push pin for manual operation
- 6: Nameplate for pilot valve
- 7: Nameplate for whole valve
- 8: O-ring:
 - Ports A,B,P,T: AS568-215 (NBR,Hs90);
 - Ports X,Y: AS568-210 (NBR,Hs90)
- 9: Space required to remove plug
- 10: Locating pin

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SUBPLATE DIMENSIONS:

Bottom Connection

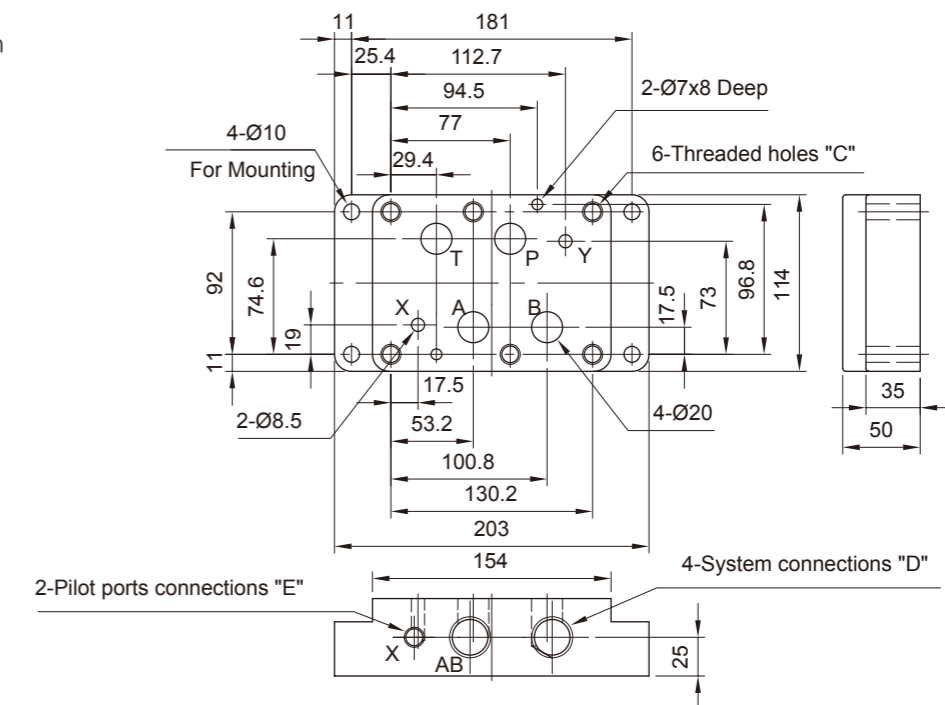
■ DGSP-08*-*



Model	C	D	E	Weight	Model	C	D	E	Weight
DGSP-08-12		3/4" Rc	1/4" RC	4.8 kgs	DGSP-08N-12		3/4" NPT	1/4" RC	4.8 kgs
DGSP-08-16	M12x25 Deep (min)	1" Rc	1/4" RC	4.8 kgs	DGSP-08N-16	1/2"~13UNC-2B Thd. x 1" Deep Full Thread Depth	1" NPT	1/4" RC	4.8 kgs
DGSP-08G-12	Full Thread Depth	3/4" BSP	1/4" BSP	4.8 kgs	DGSP-08S-12		3/4" SAE	1/4" BSP	4.8 kgs
DGSP-08G-16		1" BSP	1/4" BSP	4.8 kgs	DGSP-08S-16		1" SAE	1/4" BSP	4.8 kgs

Side Connection

■ DGSP-08*-*E



Model	C	D	E	Weight	Model	C	D	E	Weight
DGSP-08-12E		3/4" Rc	1/4" RC	6.4 kgs	DGSP-08N-12E		3/4" NPT	1/4" RC	6.4 kgs
DGSP-08-16E	M12x25 Deep (min)	1" Rc	1/4" RC	6.4 kgs	DGSP-08N-16E	1/2"~13UNC-2B Thd. x 1" Deep Full Thread Depth	1" NPT	1/4" RC	6.4 kgs
DGSP-08G-12E	Full Thread Depth	3/4" BSP	1/4" BSP	6.4 kgs	DGSP-08S-12E		3/4" SAE	1/4" BSP	6.4 kgs
DGSP-08G-16E		1" BSP	1/4" BSP	6.4 kgs	DGSP-08S-16E		1" SAE	1/4" BSP	6.4 kgs

