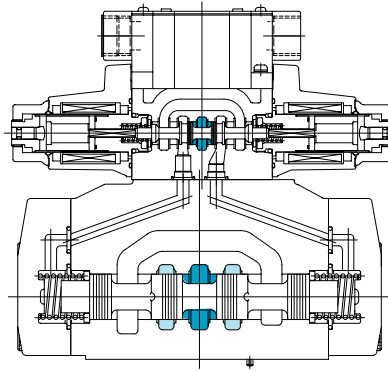


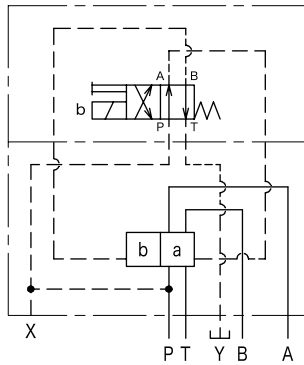
# Solenoid controlled pilot operated directional control valves DG5V-7/DG5V-H8



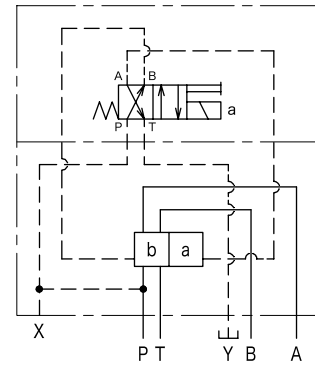
- Pilot operated directional control valves incorporate DG4V-3, 54 design pilot valves.

Functional Symbols  
(Internal Pilot, External Drain Types)

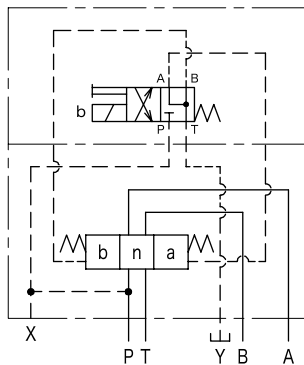
DG5V-7/H8-\*A  
Spring Offset, A Type



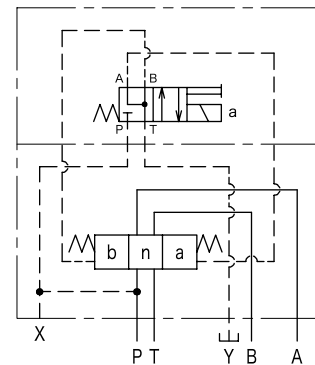
DG5V-7/H8-\*AL  
Spring Offset, AL Type



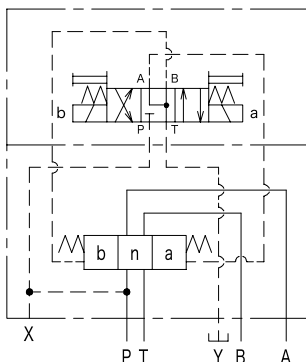
DG5V-7/H8-\*B  
Spring Offset, B Type



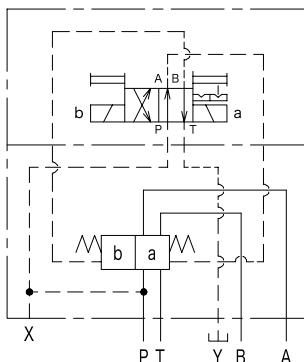
DG5V-7/H8-\*BL  
Spring Offset, BL Type



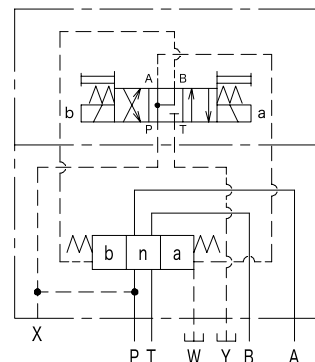
DG5V-7/H8-\*C  
Spring Centered Type



DG5V-7/H8-\*N  
No Spring Detented Type



DG5V-7/H8-\*D  
Pressure Centered Type



## Model Code

### (F3) - DG5V - 7-2A (L) - (1) - (E) -(T)- P 7- T - 84-JA

1 2 3 4 5 6 7 8 9 10 11 12 13

- |  |   |
|--|---|
| <p><b>1</b> Fluid<br/>Omitted for mineral oil, water glycol<br/>F3: phosphate ester</p> <p><b>2</b> Solenoid pilot operated directional valve (gasket mounting)</p> <p><b>3</b> Mounting<br/>7 : ISO 4410-AD-07-4-A<br/>H8 : ISO 4410-AE-08-4-A</p> <p><b>4</b> Spool (See page E80-83)</p> <p><b>5</b> Spool/spring arrangement<br/>A: Spring offset, A type (2 position, single solenoid)<br/>B: Spring offset, B type (2 position, single solenoid)<br/>C: Spring centered (3 position, double solenoid)<br/>D: Pressure centered (3 position, double solenoid)<br/>N: No spring detented (2 position, double solenoid)</p> <p><b>6</b> Solenoid assembly orientation (for spring arrangements A, B)<br/>Omitted for standard (energized P to B, A to T)<br/>L: Left hand build<br/>(energized P to A, B to T)</p> <p><b>7</b> Spool stroke control (option)<br/>Omitted for no option (standard)<br/>1: Stroke adjuster (both A, B ports)<br/>2: Pilot restrictor (meter out control)<br/>3: Pilot restrictor + stroke adjuster (both sides)<br/>7: Stroke adjuster (A port side)<br/>8: Stroke adjuster (B port side)<br/>27: Pilot restrictor + stroke adjuster (A port side)<br/>28: Pilot restrictor + stroke adjuster (B port side)</p> <p><b>8</b> Pilot<br/>Omitted for internal pilot<br/>E: External pilot</p> <p><b>9</b> Drain<br/>Omitted for external drain<br/>T: Internal drain</p> <p><b>10</b> Wiring connection<br/>Plug-in conduit box, G 1/2<br/>connector, pg. 11</p> | <p><b>11</b> Electrical accessories<br/>Omitted for no accessories (coil connections P, KU)<br/>1: Connectors without accessories<br/>(coil connection U)<br/>2: With indicator lamp (AC standard)<br/>4: With surge suppressor (coil connection KU, slow<br/>solenoid deenergize)<br/>7: With indicator lamp and surge suppressor<br/>(DC standard)<br/>9: ADC solenoid rectifier (fast solenoid de-energization)<br/>and indicator lamp (ADC standard)<br/>12: ADC solenoid rectifier (delayed solenoid de-<br/>energization) and indicator lamp<br/>Note: Electrical accessories - 9, 12<br/>• ADC solenoids (AC-DC rectifier) only<br/>• Wiring connection, P only<br/>• With surge suppressor</p> <p><b>12</b> Solenoid coil voltage<br/>T:100V 50/60Hz, 110V 60Hz<br/>V:200V 50/60Hz, 220V 60Hz<br/>G:DC12V<br/>H:DC24V<br/>TR:100V 50/60Hz (AC/DC rectifier)<br/>VR:200V 50/60Hz (AC/DC rectifier)</p> <p><b>13</b> Design no.</p> |
|--|---|

## Specifications

Model	Size	Max. Operating Pressure MPa	Max. Flow L/min	Allowable T (Tank) Port Back Pressure MPa	Minimum Pilot Pressure MPa	Maximum Pilot Pressure MPa	Weight kg	
							Single Solenoid	Double Solenoid
DG5V-7	04	31.5	See Press.-Flow Charac.	20.6	See Min. Pilot Pressure Curves	31.5	8.6	9.1
DG5V-H8	06	31.5	See Press.-Flow Charac.	20.6	See Min. Pilot Pressure Curves	31.5	16.7	17.2

## Solenoid Specifications and Pilot Solenoid Directional Valve

DG4V-3 solenoid valve used as pilot. See page E10 for solenoid specifications.

Following spool/spring arrangement valves are used.

Spring offset, type A: DG4V-3-2A-M-\*\*-7-54

Spring offset, type B: DG4V-3-6B-M-\*\*-7-54

Spring center, type C: DG4V-3-6C-M-\*\*-7-54

Spring center, type D: DG4V-3-7C-M-\*\*-7-54

Spring offset, type AL: DG4V-3-2AL-M-\*\*-7-54

Spring offset, type BL: DG4V-3-6BL-M-\*\*-7-54

No spring detented, type N: DG4V-3-2N-M-\*\*-7-54

Note: 4/8B uses DG4V-3-6BL and 4/8BL uses DG4V-3-6B.

Two stage DG5VC-7 and DG4VC-H8 which incorporate fine current control pilot solenoid valves, DG4VC-3 (DC24V) also available. Consult Tokimec.

# Spool Types and Pressure-Flow Characteristics (DG5V-7)

80

DIRECTIONAL CONTROL VALVES

Spool Neutral Position		Valve Function Schematics			
		3 Position		2 Position	
		Spring Centered - C -	Pressure Centered - D -	Spring Offset, B Type - B -	
0		Open Center	DG5V-7-0C 	DG5V-7-0D 	DG5V-7-0B 
1		P-A-T Connection	DG5V-7-1C 	DG5V-7-1D 	DG5V-7-1B 
2		Closed Center	DG5V-7-2C 	DG5V-7-2D 	DG5V-7-2B 
3		A-T Connection	DG5V-7-3C 	DG5V-7-3D 	DG5V-7-3B 
4		Tandem	DG5V-7-4C 	DG5V-7-4D 	DG5V-7-4B 
6		A-B-T Connection	DG5V-7-6C 	DG5V-7-6D 	DG5V-7-6B 
8		Tandem	DG5V-7-8C 	DG5V-7-8D 	DG5V-7-8B 
9		Open Center w/ A, B Restrictors	DG5V-7-9C 	DG5V-7-9D 	DG5V-7-9B 
11		P-B-T Connection	DG5V-7-11C 	DG5V-7-11D 	DG5V-7-11B 
31		B-T Connection	DG5V-7-31C 	DG5V-7-31D 	DG5V-7-31B 
33		A-B-T Connection	DG5V-7-33C 	DG5V-7-33D 	DG5V-7-33B 
52		Closed Center	DG5V-7-52C 	DG5V-7-52D 	
X2		Closed Center	DG5V-7-X2C 	DG5V-7-X2D 	DG5V-7-X2B 
Y2		Closed Center	DG5V-7-Y2C 	DG5V-7-Y2D 	DG5V-7-Y2B 
X33		A-B-T Connection w/ Restrictors	DG5V-7-X33C 	DG5V-7-X33D 	DG5V-7-X33B 
Y33		A-B-T Connection w/ Restrictors	DG5V-7-Y33C 	DG5V-7-Y33D 	DG5V-7-Y33B 

Spool Neutral Position		Valve Function Schematics			
		2 Position		No Spring Detented - N -	
		Spring Offset, A Type			
		- A -	- AL -		
0		Open Center	DG5V-7-0A 	DG5V-7-0AL 	DG5V-7-0N 
2		Closed Center	DG5V-7-2A 	DG5V-7-2AL 	DG5V-7-2N 
6		A-B-T Connection	DG5V-7-6A 	DG5V-7-6AL 	DG5V-7-6N 
9		Open Center w/ A, B Restrictors	DG5V-7-9A 	DG5V-7-9AL 	DG5V-7-9N 
52		Closed Center	DG5V-7-52A 	DG5V-7-52AL 	DG5V-7-52N 
X2		Closed Center	DG5V-7-X2A 	DG5V-7-X2AL 	DG5V-7-X2N 
Y2		Closed Center	DG5V-7-Y2A 	DG5V-7-Y2AL 	DG5V-7-Y2N 

Note • Maximum flow without malfunction.

2 Position Spring Offset, B Type - BL -	Max. Flow L/min					Pressure Drop Curve Number				
	7 MPa	14 MPa	21 MPa	28 MPa	31.5 MPa	Switched Condition				Neutral
						P→A	B→T	P→B	A→T	P→T
DG5V-7-0BL 	300	300	300	300	300	②	①	②	③	③
DG5V-7-1BL 	260	220	120	100	90	①	②	②	③	④
DG5V-7-2BL 	300	300	300	300	300	①	②	①	②	—
DG5V-7-3BL 	300	300	300	300	300	①	②	①	③	—
DG5V-7-4BL 	260	220	120	100	90	②	②	②	①	⑥
DG5V-7-6BL 	300	300	300	300	300	①	①	①	③	—
DG5V-7-8BL 	300	300	250	165	140	②	②	②	①	⑤
DG5V-7-9BL 	260	220	120	100	90	①	②	①	③	⑦
DG5V-7-11BL 	260	220	120	100	90	②	③	①	②	④
DG5V-7-31BL 	300	300	300	300	300	①	③	①	②	—
DG5V-7-33BL 	300	300	300	300	300	①	②	①	②	—
DG5V-7-52BL 	300	300	300	300	300	②	—	③	③	—
DG5V-7-X2BL 	120	120	120	120	120	—	②	—	②	—
DG5V-7-Y2BL 	120	120	120	120	120	①	—	①	—	—
DG5V-7-X33BL 	120	120	120	120	120	—	②	—	②	—
DG5V-7-Y33BL 	120	120	120	120	120	①	—	①	—	—

Max. Flow L/min					Pressure Drop Curve No.			
7 MPa	14 MPa	21 MPa	28 MPa	31.5 MPa	Switched Condition			
					P→A	B→T	P→B	A→T
300	300	300	300	300	②	①	②	③
300	300	300	300	300	①	②	①	②
300	300	300	300	300	①	①	①	③
260	220	120	100	90	①	②	①	③
300	300	300	300	300	②	—	③	③
120	120	120	120	120	—	②	—	②
120	120	120	120	120	①	—	①	—

# Spool Types and Pressure-Flow Characteristics (DG5V-H8)

Spool Neutral Position		Valve Function Schematics			
		3 Position		2 Position	
		Spring Centered - C -	Pressure Centered - D -	Spring Offset, B Type - B -	
0		Open Center	DG5V-H8-0C 	DG5V-H8-0D 	DG5V-H8-0B 
1		P-A-T Connection	DG5V-H8-1C 	DG5V-H8-1D 	DG5V-H8-1B 
2		Closed Center	DG5V-H8-2C 	DG5V-H8-2D 	DG5V-H8-2B 
3		A-T Connection	DG5V-H8-3C 	DG5V-H8-3D 	DG5V-H8-3B 
4		Tandem	DG5V-H8-4C 	DG5V-H8-4D 	DG5V-H8-4B 
6		A-B-T Connection	DG5V-H8-6C 	DG5V-H8-6D 	DG5V-H8-6B 
8		Tandem	DG5V-H8-8C 	DG5V-H8-8D 	DG5V-H8-8B 
9		Open Center w/ A, B Restrictors	DG5V-H8-9C 	DG5V-H8-9D 	DG5V-H8-9B 
11		P-B-T Connection	DG5V-H8-11C 	DG5V-H8-11D 	DG5V-H8-11B 
31		B-T Connection	DG5V-H8-31C 	DG5V-H8-31D 	DG5V-H8-31B 
33		A-B-T Connection	DG5V-H8-33C 	DG5V-H8-33D 	DG5V-H8-33B 
52		Closed Center	DG5V-H8-52C 	DG5V-H8-52D 	
X2		Closed Center	DG5V-H8-X2C 	DG5V-H8-X2D 	DG5V-H8-X2B 
Y2		Closed Center	DG5V-H8-Y2C 	DG5V-H8-Y2D 	DG5V-H8-Y2B 
X33		A-B-T Connection w/ Restrictors	DG5V-H8-X33C 	DG5V-H8-X33D 	DG5V-H8-X33B 
Y33		A-B-T Connection w/ Restrictors	DG5V-H8-Y33C 	DG5V-H8-Y33D 	DG5V-H8-Y33B 

Spool Neutral Position		Valve Function Schematics			
		2 Position			
		Spring Offset, A Type		No Spring Detented	
		- A -	- AL -	- N -	
0		Open Center	DG5V-H8-0A 	DG5V-H8-0AL 	DG5V-H8-0N 
2		Closed Center	DG5V-H8-2A 	DG5V-H8-2AL 	DG5V-H8-2N 
6		A-B-T Connection	DG5V-H8-6A 	DG5V-H8-6AL 	DG5V-H8-6N 
9		Open Center w/ A, B Restrictors	DG5V-H8-9A 	DG5V-H8-9AL 	DG5V-H8-9N 
52		Closed Center	DG5V-H8-52A 	DG5V-H8-52AL 	DG5V-H8-52N 
X2		Closed Center	DG5V-H8-X2A 	DG5V-H8-X2AL 	DG5V-H8-X2N 
Y2		Closed Center	DG5V-H8-Y2A 	DG5V-H8-Y2AL 	DG5V-H8-Y2N 

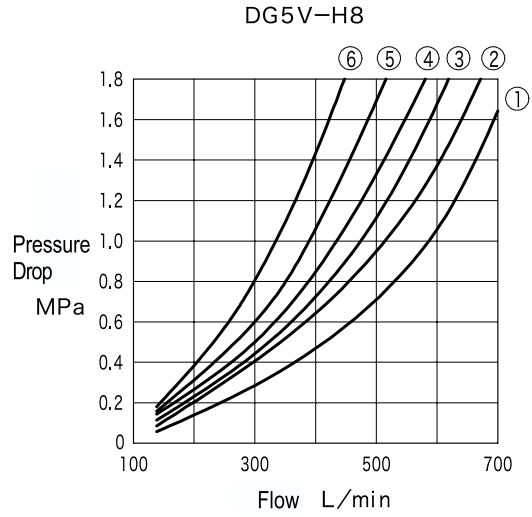
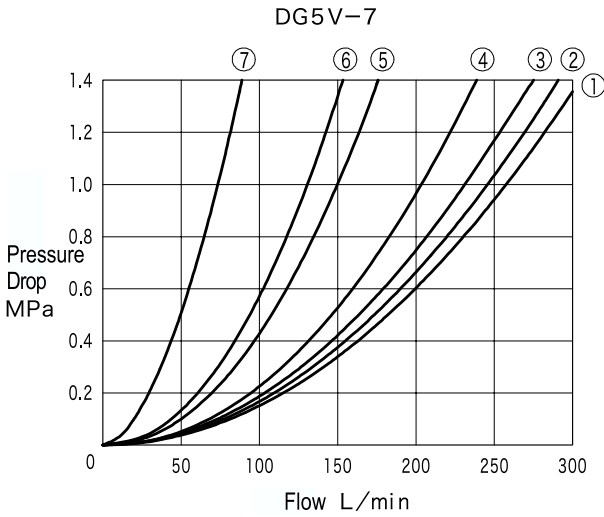
Notes • Upper values for maximum flow for spring offset, types A, AL; lower values for no spring detent types.  
• Max. flow without malfunction.

2 Position Spring Offset, B Type - BL -	Max. Flow L/min		Pressure Drop Curve Number				
	21 MPa	31.5 MPa	Switched Condition				Neutral
			P→A	B→T	P→B	A→T	P→T
DG5V-H8-0BL 	700	650	②	⑤	②	③	④
DG5V-H8-1BL 	650	500	①	②	②	②	⑤
DG5V-H8-2BL 	700	700	①	②	①	②	—
DG5V-H8-3BL 	700	700	①	②	①	④	—
DG5V-H8-4BL 	350	220	①	④	①	③	⑥
DG5V-H8-6BL 	650	600	①	④	①	④	—
DG5V-H8-8BL 	700	450	①	④	①	③	⑥
DG5V-H8-9BL 	350	220	②	④	②	③	—
DG5V-H8-11BL 	650	500	②	②	①	②	⑤
DG5V-H8-31BL 	700	700	①	④	①	②	—
DG5V-H8-33BL 	700	700	①	②	①	①	—
DG5V-H8-52BL 	700	700	②	—	⑤	②	—
DG5V-H8-X2BL 	300	300	—	②	—	②	—
DG5V-H8-Y2BL 	300	300	①	—	①	—	—
DG5V-H8-X33BL 	300	300	—	②	—	②	—
DG5V-H8-Y33BL 	300	300	①	—	①	—	—

Max. Flow L/min		Pressure Drop Curve Number			
21 MPa	31.5 MPa	Switched Condition			
		P→A	B→T	P→B	A→T
500 700	500 650	②	⑤	②	③
700	700	①	②	①	②
500 650	500 600	①	④	①	④
500 350	500 220	②	④	②	③
700	700	②	—	⑤	②
300	300	—	②	—	②
300	300	①	—	①	—

# Performance Curve ( viscosity 20 mm<sup>2</sup>/s , specific gravity 0.87)

## Pressure Drop Characteristics



1. For pressure drops ( $\Delta P_1$ ) of viscosities other than 20mm<sup>2</sup>/s, calculate using multiplier coefficients in below table.
2. The formula to calculate pressure drops ( $\Delta P_1$ ) for specific gravities other than 0.87 is as follows.

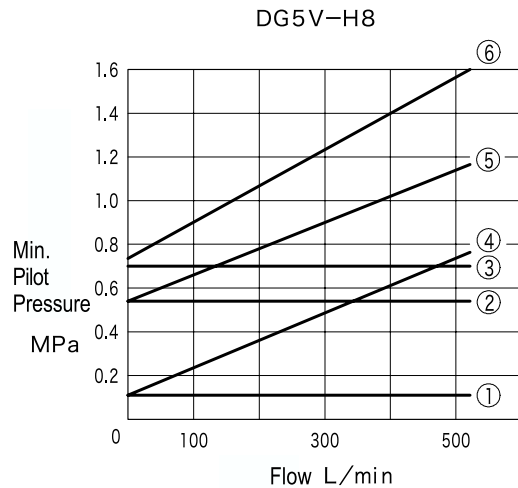
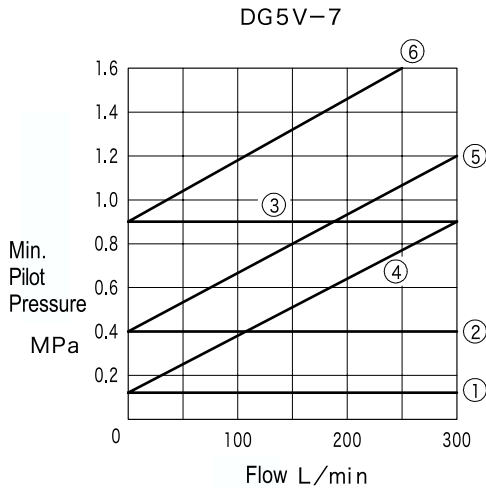
$$\Delta P_1 = \Delta P \times G_1 / G$$

$\Delta P$ ..... characteristics curve value  
 $G$ ..... 0.87  
 $G_1$ ..... desired specific gravity

Viscosity mm <sup>2</sup> /s	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Coefficient	0.85	1.00	1.09	1.17	1.24	1.29	1.34	1.38	1.42	1.46	1.49	1.52	1.56	1.59	1.62

## Pilot

### Minimum Pilot Pressure



### Min. Pilot Pressure Curve No.

Spool/Spring Arrangement	Spool Types	Min. Pilot Press. Curve No.
A, AL	0, 9	①
	2, 6, 52, X2, Y2	④
B, BL, C, N	0, 1, 4, 8, 9, 11	②
	2, 3, 6, 31, 33, 52, X2, Y2, X33, Y33	⑤
D	0, 1, 4, 8, 9, 11	③
	2, 3, 6, 31, 33, 52, X2, Y2, X33, Y33	⑥

● In case of internal pilot, pilot pressure is equal to P port pressure.

Model	Spool/Spring Arrangement	Neutral to Stroke End	Stroke End to Stroke End
DG5V-7	A, AL, N	—	8.1
	B, BL	4.1	—
	C, D	4.1	8.1
DG5V-H8	A, AL, N	—	23
	B, BL	12	—
	C, D	12	23

Unit : cm<sup>3</sup>

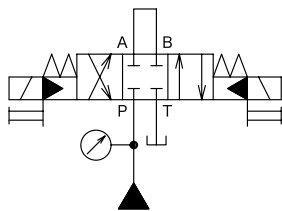
# Switching Times

Unit :ms

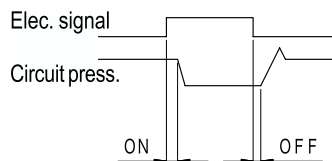
Model	Power	Operation	Pilot Pressure				
			1.5 MPa	5 MPa	15 MPa	21 MPa	25 MPa
DG5V-7-2C	AC	Solenoid Energize	50	30	25	20	18
		Spring Return	40	40	40	40	40
	DC	Solenoid Energize	60	40	35	30	28
		Spring Return	50	50	50	50	50
DG5V-H8-2C	AC	Solenoid Energize	120	60	45	40	35
		Spring Return	85	85	85	85	85
	DC	Solenoid Energize	145	85	70	60	45
		Spring Return	90	90	90	90	90

Note: Values may vary slightly according spool type, circuit conditions, and in case diode or rectifier is incorporated in electrical circuit.

[Circuit Example]



[Switching Time Definition]



Conditions: spool type 2, spring center type, open loop circuit, flow 300 L/min (DG5V-7), 350 L/min (DG5V-H8), supply pressure 31.5 MPa, fluid viscosity 20 mm<sup>2</sup>/s, fluid temperature 50°C

## Spool Transient Condition

Detailed Symbol		Simple Symbol		Detailed Symbol		Simple Symbol		Detailed Symbol		Simple Symbol	
b	n	a	b	n	a	b	n	a	b	n	a
0			11			X33					
1			31			Y33					
2			33						a	n	b
3			52			4					
6			X2			8					
9			Y2								

## Operating Considerations

- Mounting orientation**  
 To ensure sure switching of no spring detented type valves, mount valves so spool axis is horizontal. There are no mounting attitude restrictions for other spool/spring arrangements.
- Solenoid energization**  
 Always insure that one side solenoid is deenergized before energizing the opposite side solenoid. For spring centered and spring offset valves, solenoid should be continuously energized during circuit switching. Deenergization of solenoid will cause spool to return to prescribed position by spring force. For no spring detented type valves, spool will be maintained in switched position by the detent but to ensure sure circuit switching, solenoid should be energized for more than 0.1 second.
- Long periods of solenoid energization**  
 Care should be paid as long periods of solenoid energization at high pressure may cause spool "sticking" and switching malfunction.
- Drain and pilot**
  - For internal drain type valves, pilot pressure (P port pressure of internal pilot valves) must be higher than min. pilot pressure + tank line back pressure. Therefore the pressure difference must be maintained even when surge pressures occur in the tank line.
  - External drain type valve is recommended when surge pressures may occur in tank line. Drain line should also be piped directly to tank.
  - In case of internal drain valve with spring sets B, C, and D and spool types 0, 1, 4, 8, 9, and 11, internal pilot type valve cannot be used if P to T port pressure drop during solenoid deenergization falls below minimum pilot pressure. Use external pilot type valve in this case.
- Manual operation**  
 For manual switching, push the manual override pin. Be aware that actuation force increases with higher back pressure. (See page E16)
- Solenoid indicator lamp**  
 For valves with indicator lamps, the lamps will light when current flows to the solenoid.



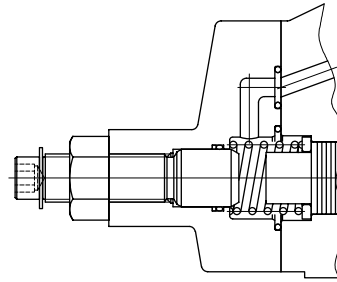
## Options

### Spool stroke adjustment

Spool stroke adjusters can be installed on one or both sides and provides flow control by adjustment of the spool maximum opening. Flow control can be enhanced by use X2, X33, Y2, Y33 type spools.

### Pilot restrictor valve

A restrictor module valve incorporated with the pilot solenoid valve enables meter out control of oil from the pilot chamber during shifting of the main valve spool. This reduces transient shock. Stack valve restrictor valve model, TGMFN-3-Y-A2W-B2W-50.



## Mounting Bolts (JIS B1176, Strength Class 12.9)

Model	Hex Socket Bolt	Quantity
DG5V-7	M10 × 60	4
	M 6 × 55	2
DG5V-H8	M12 × 80	6

- Order mounting bolts separately.
- Mounting bolt tightening torque:  
M6: 9~14Nm  
M10: 50~60Nm  
M12: 75~81Nm

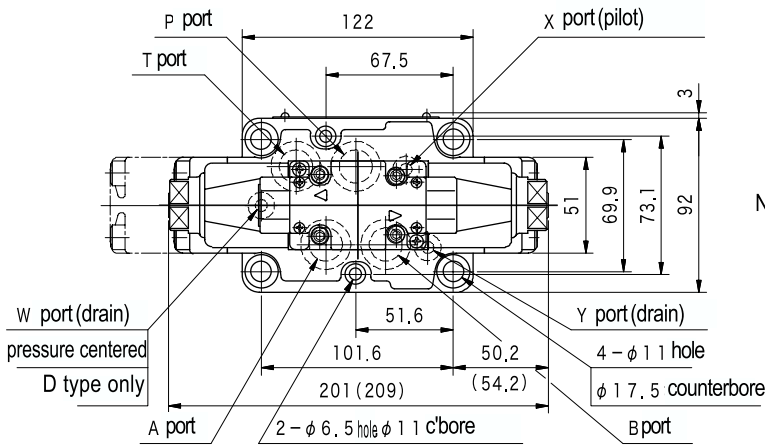
## Subplate

Model	Subplate Model	Port Dia.	
		P, T, A, B	X, Y, W
DG5V-7	DGSMV-04-10	Rc1/2	Rc1/4
	DGSMV-04-D-10		
	DGSMV-04X-10	Rc3/4	
	DGSMV-04X-D-10		
DG5V-H8	DGSMV-06-10	Rc3/4	Rc1/4
	DGSMV-06-D-10		
	DGSMV-06X-10	Rc1	
	DGSMV-06X-D-10		

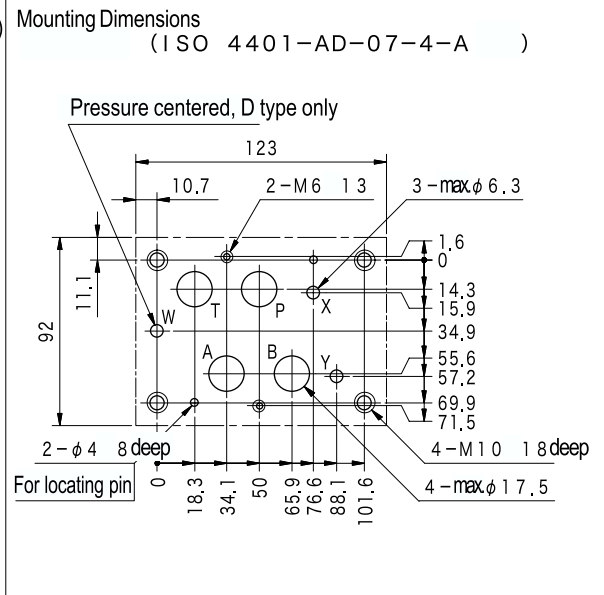
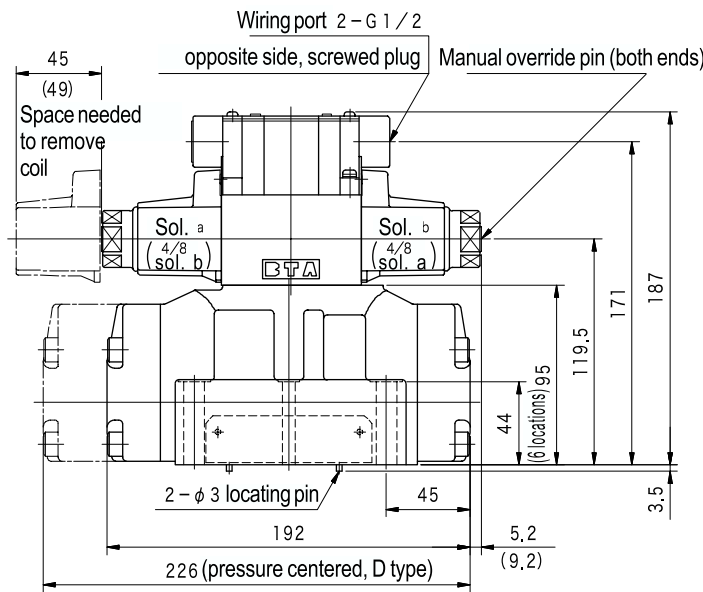
- Subplate must be ordered separately.
- Hex socket bolts for subplate mounting are included.
- See page Q6 for dimensions.
- DGSMV-\*\*-D-10 used is pressure center type.
- Max. working pressure 21 MPa. For higher pressures, valve should be mounted on manifold block.

# Dimensions

DG5V-7-\*C  
 DG5V-7-\*D  
 DG5V-7-\*N

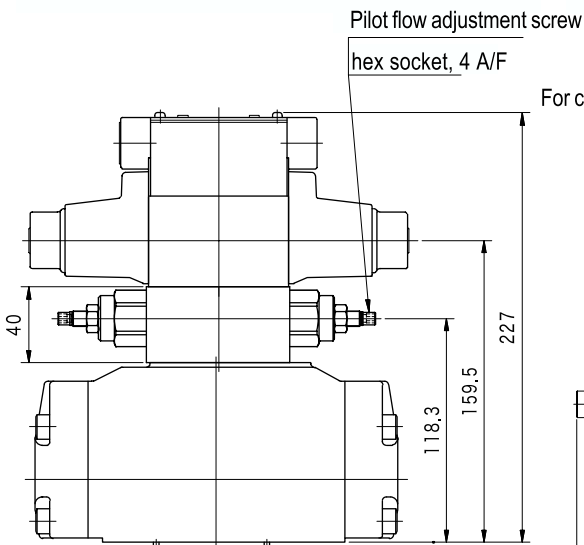


Notes: - For DG5V-7-\*A, DG5V-7-\*8, solenoid valve for pilot will be only for one side (side b).  
 - For DG5V-7-\*AL, DG5V-7-\*BL, solenoid valve for pilot will be only for one side (side a).  
 - Dimensions in ( ) indicate DC solenoids.



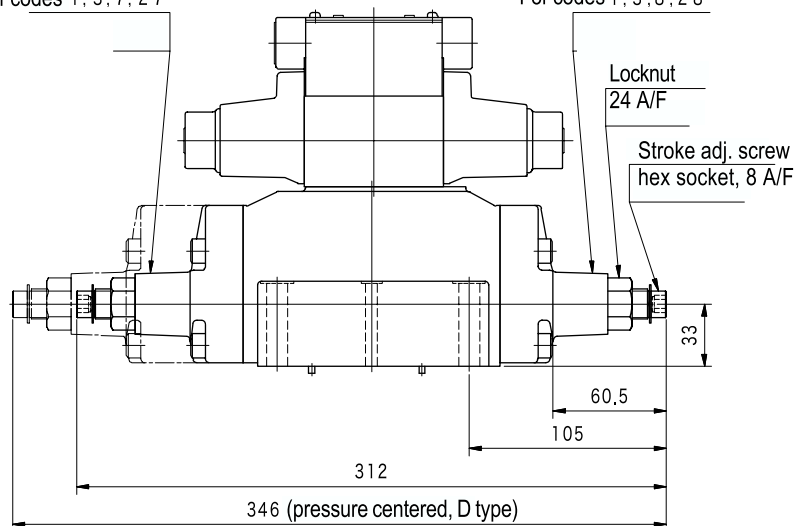
With Pilot Restrictor Valve

With Stroke Adjuster



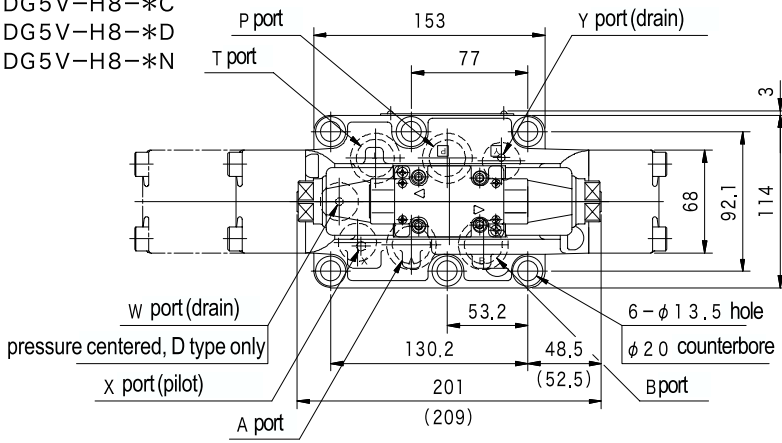
For codes 1, 3, 7, 2, 7

For codes 1, 3, 8, 2, 8



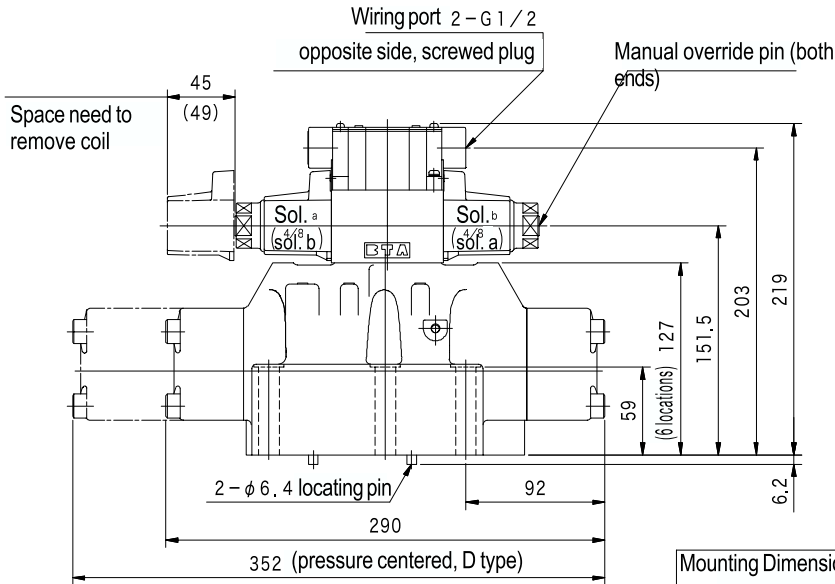
# Dimensions

DG5V-H8-\*C  
 DG5V-H8-\*D  
 DG5V-H8-\*N



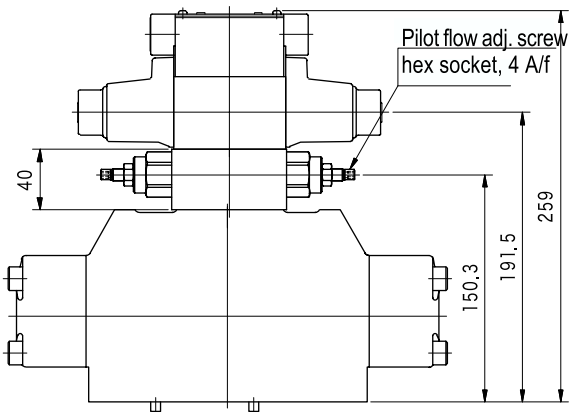
**Notes:**

- For DG5V-H8-\*A, DG5V-H8-\*8, solenoid valve for pilot will be only for one side (side b).
- For DG5V-H8-\*AL, DG5V-H8-\*BL, solenoid valve for pilot will be only for one side (side a).
- Dimensions in ( ) indicate DC solenoids.



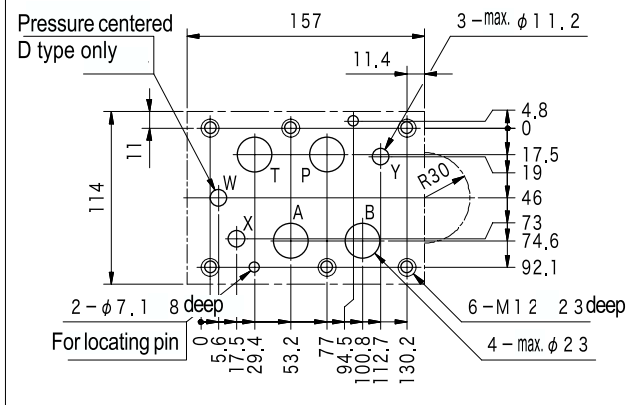
DIRECTIONAL CONTROL VALVES

With Pilot Restrictor Valve

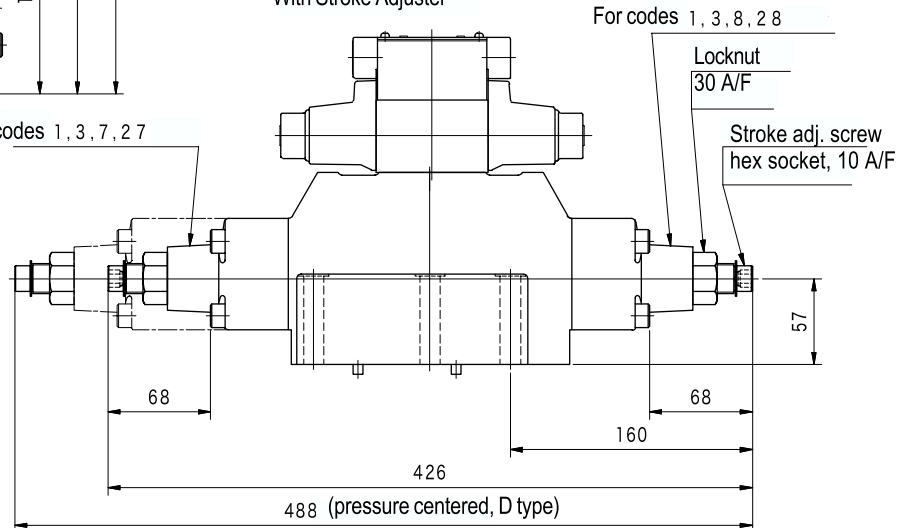


**Mounting Dimensions**

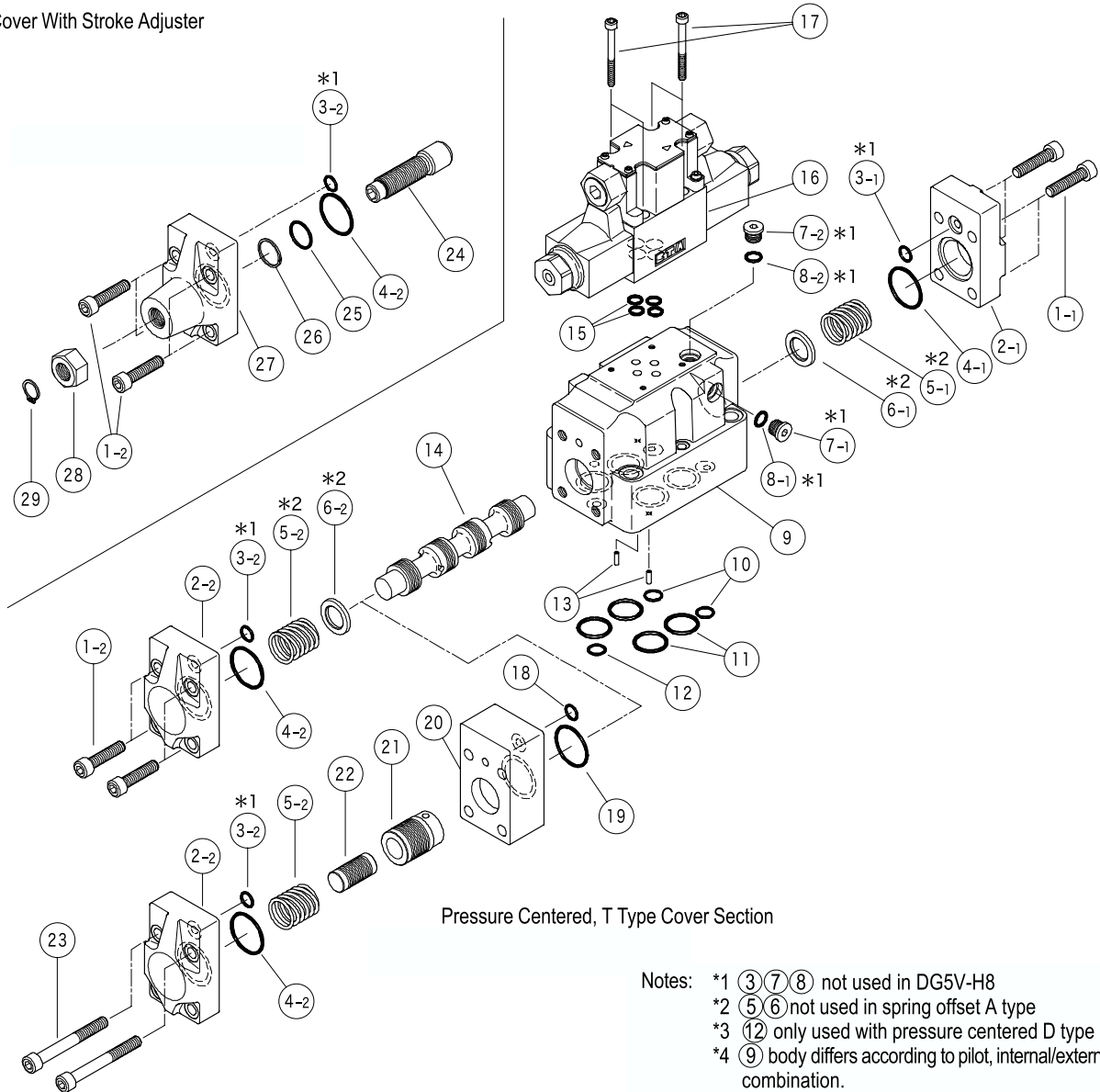
(ISO 4401-AE-08-4-A)



With Stroke Adjuster



Cover With Stroke Adjuster



Pressure Centered, T Type Cover Section

- Notes: \*1 (3)(7)(8) not used in DG5V-H8  
 \*2 (5)(6) not used in spring offset A type  
 \*3 (12) only used with pressure centered D type  
 \*4 (9) body differs according to pilot, internal/external drain combination.  
 \*5 (16) solenoid directional valve DG4V-3 model varies according to spool/spring arrangement. See page E79.

DG5V-7

No.	Description	Part No.	Standard	Qty
3	O-ring	007911019	AS568-110 (NBR, Hs90)	2
4	O-ring	007912319	AS568-123 (NBR, Hs90)	2
8	O-ring	007990419	AS568-904 (NBR, Hs90)	2
10	O-ring	007901319	AS568-013 (NBR, Hs90)	2
11	O-ring	007911819	AS568-118 (NBR, Hs90)	4
12	O-ring	007901319	AS568-013 (NBR, Hs90)	1
15	O-ring	007901219	AS568-012 (NBR, Hs90)	4
18	O-ring	007911019	AS568-110 (NBR, Hs90)	1
19	O-ring	007912319	AS568-123 (NBR, Hs90)	1
25	O-ring	007901819	AS568-018 (NBR, Hs90)	1 or 2
26	Backup ring	48197576	MS28774-018	1 or 2

DG5V-H8

No.	Description	Part No.	Standard	Qty
4	O-ring	007922419	AS568-224 (NBR, Hs90)	2
10	O-ring	007921019	AS568-210 (NBR, Hs90)	2
11	O-ring	007921519	AS568-215 (NBR, Hs90)	4
12	O-ring	007921019	AS568-210 (NBR, Hs90)	1
15	O-ring	007901219	AS568-012 (NBR, Hs90)	4
18	O-ring	007901119	AS568-011 (NBR, Hs90)	1
19	O-ring	007913119	AS568-131 (NBR, Hs90)	1
25	O-ring	007902319	AS568-023 (NBR, Hs90)	1 or 2
26	Backup ring	48197581	MS28774-023	1 or 2

Note: For external pilot, external drain, O-ring 8 quantity is 1 pc.