

SOLENOID VALVE WITH HAND CONTROL



FWS can work as standard solenoid directional valve, also can control the spool movement with hand level on power-off condition.

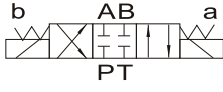
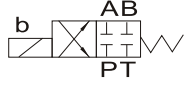
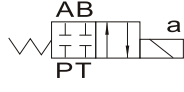
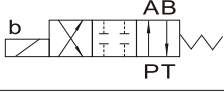
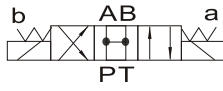
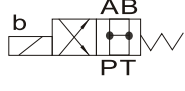
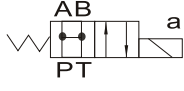
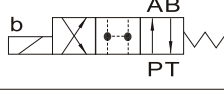
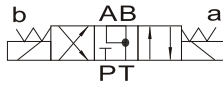
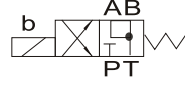
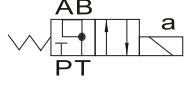
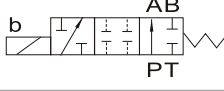
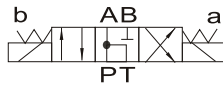
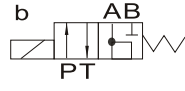
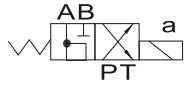
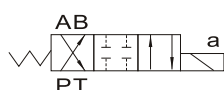
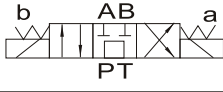
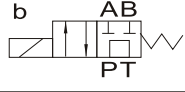
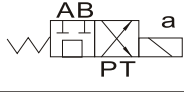
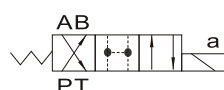
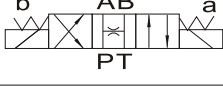

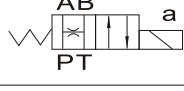
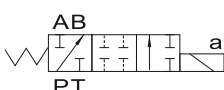


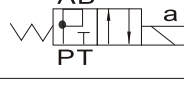


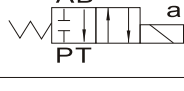
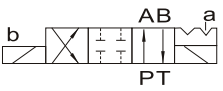
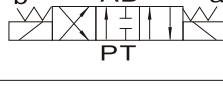

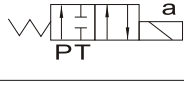
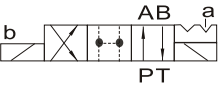



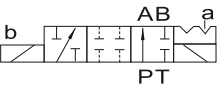
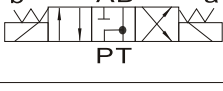

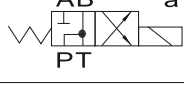


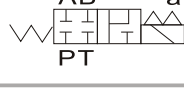

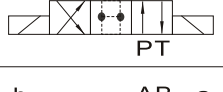

Technical Specification

Model		02	03
Pressure range (Bar)	Oil port P,A,B	350	315
	Oil port T	100	
Max. Flow rate (L/min)		80	120
Installation	Any, recommended horizontal installation		
Working fluid	Mineral oil; phosphate-ester		
Fluid temp. (°C)	-20~70		
Fluid viscosity (mm ² /s)	2.8~100		
Working voltage (V)	DC	12	24
	AC	110/50Hz	2200/50Hz
Protection grade	IP65		
Cleanliness	NAS 1638, Class 9, recommended filtration precision Min β ₁₀ ≥75 ₀		

Model Description

WWS - * - * - * * * / * * 50 *		
Solenoid valve with hand control		Remarks
Specification 02 : DN6 03 : DN10		Serial number
Spool type refer to spool list below		Seal material Omit : NBR Seals V : FPM Seals
Working pressure D12 DC 12V D24 DC 24V A110 AC 110V A220 AC 220V B110 RAC 110V rectified B220 RAC 220V rectified		Omit without damping 08 Φ0.8 Damping 10 Φ1.0 Damping 12 Φ1.2 Damping
Z5L Dinconnector LED		Omit with concealed emergency push rod

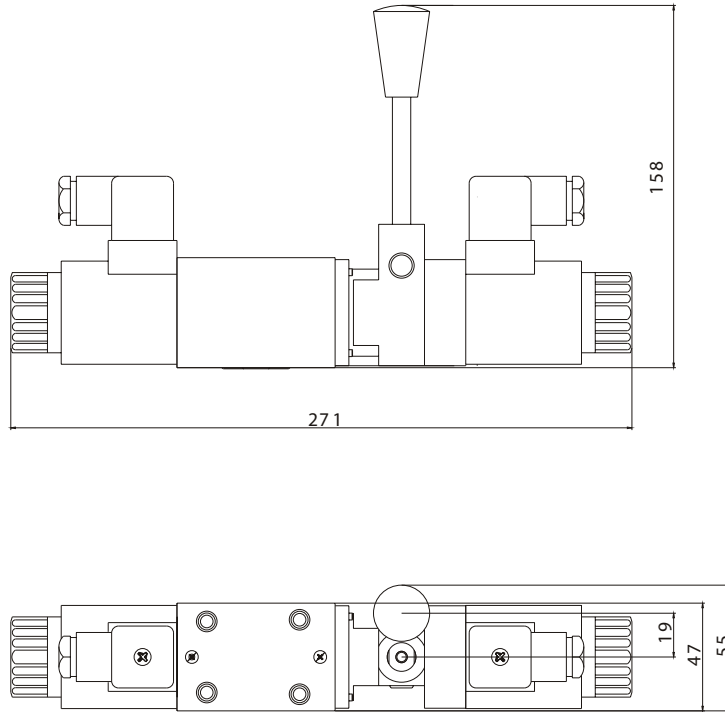
SOLENOID VALVE WITH HAND CONTROL
Code Symbol
Spring return

302		2828		2828L		282	
303		2838		2838L		283	
304		2848		2848L		288	
305		2858		2858L		282L	
306		2868		2868L		283L	
307		2878		2878L		288L	
309		2898		2898L		With detent	
3010		28108		28108L			2D2
3011		28118		28118L			2D3
3012		28128		28128L			2D8
3025		28258		28258L		No spring return and no detent mechanical positioning	
3029		28298		28298L			2N2
							2N3
							2N8

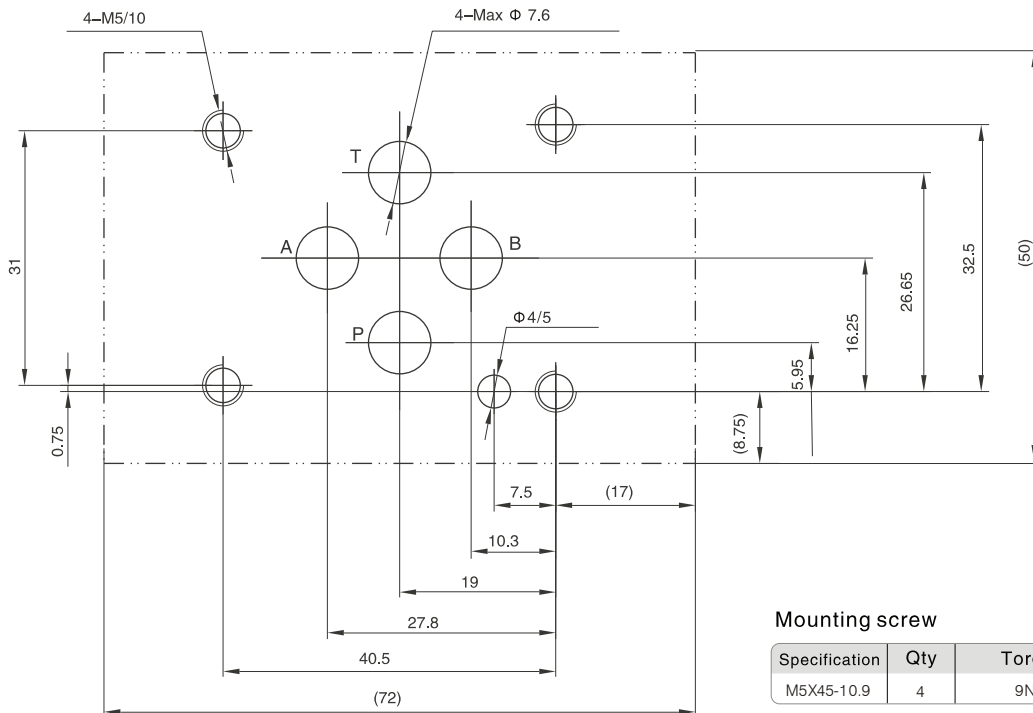
Note: *D* (No spring return mechanical positioning)
 solenoid directional control valve should be installed horizontally.

SOLENOID VALVE WITH HAND CONTROL

02 Dimensions



02 Subplate Mounting Size

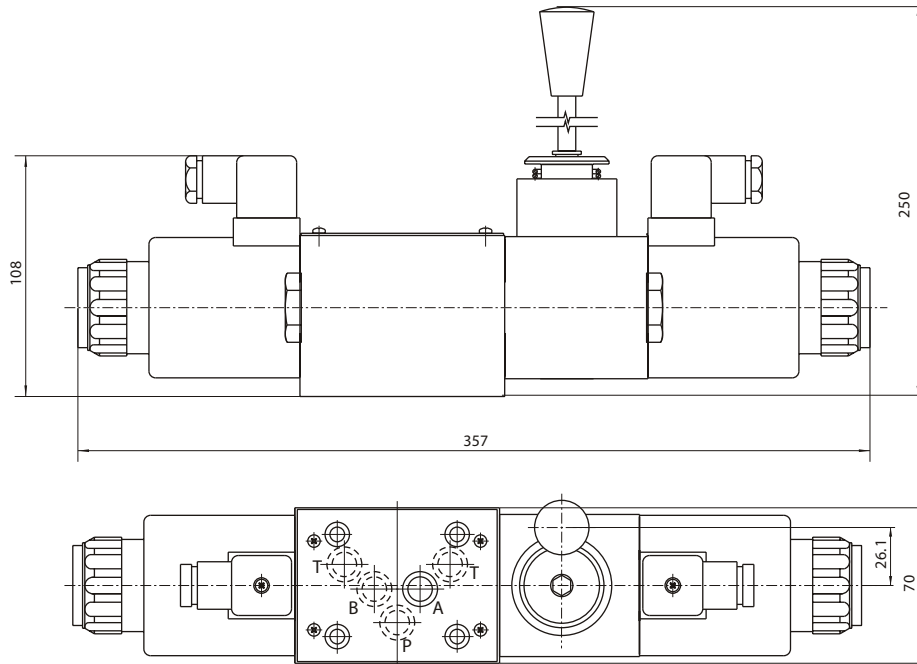


Mounting screw

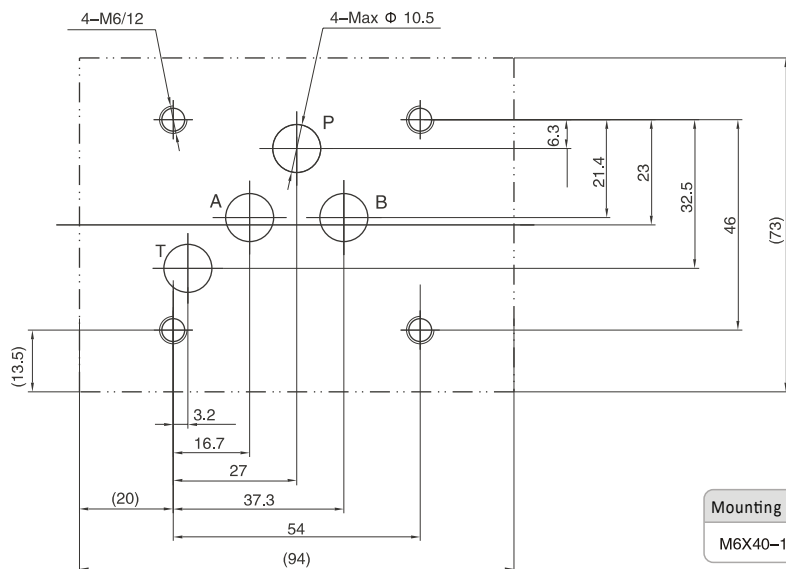
Specification	Qty	Torque
M5X45-10.9	4	9Nm

SOLENOID VALVE WITH HAND CONTROL

03 Dimensions



03 Subplate Mounting Size



Mounting bolt	Qty	Tightening torque
M6X40-10.9	4	15Nm

Notice:

1. Please refer to "user's guide" before mounting .
2. When installing the product, considering horizontal position firstly.
3. The medium used in the hydraulic system must be filtered, its accuracy is at least 20 μ m.

4. Screw should be according to the parameters in catalogue.
5. The surface, connecting with the valve, should be Ra0.8 roughness, and 0.01/100mm flatness.