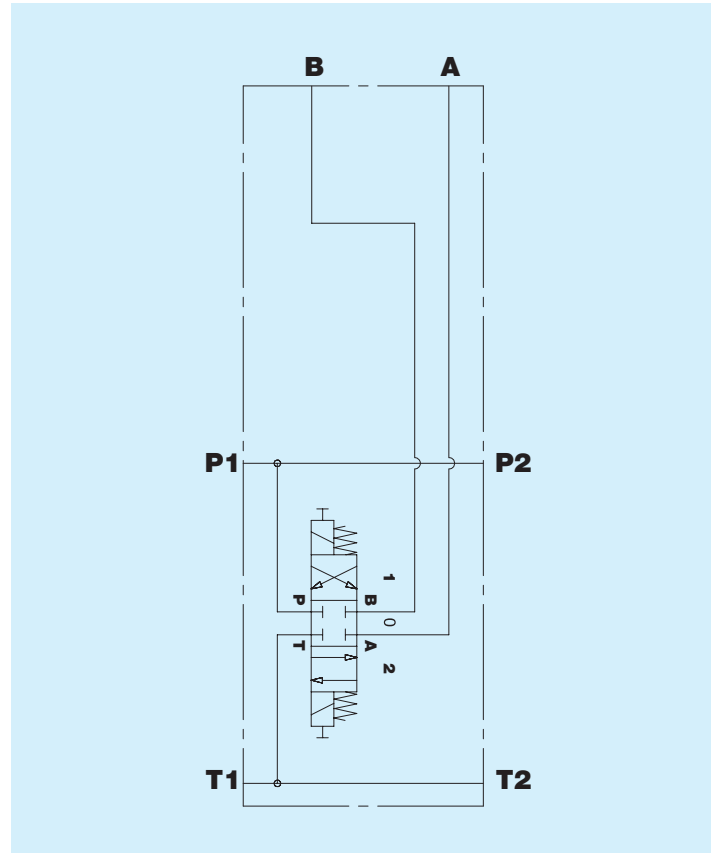


BW1022AO - Element 4/3 ON - OFF
Interface IBW1022

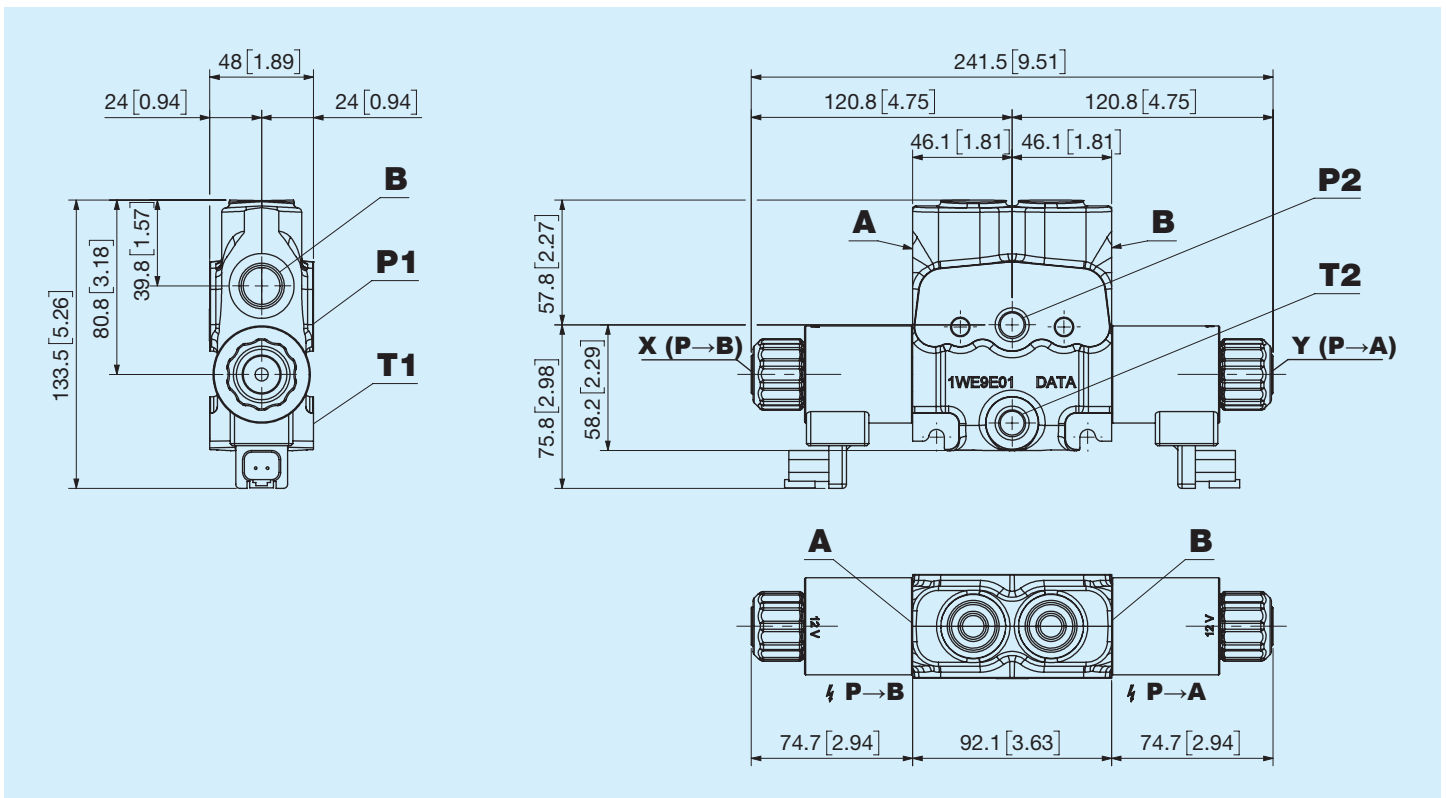


Before use, carefully read the GENERAL INSTRUCTIONS FOR USE OF DIRECTIONAL CONTROL VALVES

Nominal flow	90 l/min 23.78 US gpm
Nominal pressure	250 bar 3625 psi
Maximum tank pressure	50 bar 725 psi
Internal leakage	40 ± 20 cc/min
Temperature range	-20°C +85°C NBR seals (max peak +100°C) -20°C + 130°C HNBR seals
Oil viscosity d	from 15 mm²/s to 90 mm²/s (15 cSt to 90 cSt)
Fluid	Hydraulic fluids as defined in ISO 6743-4 standard
Weight	4.1 kg 9 lb
Interface	IBW1022

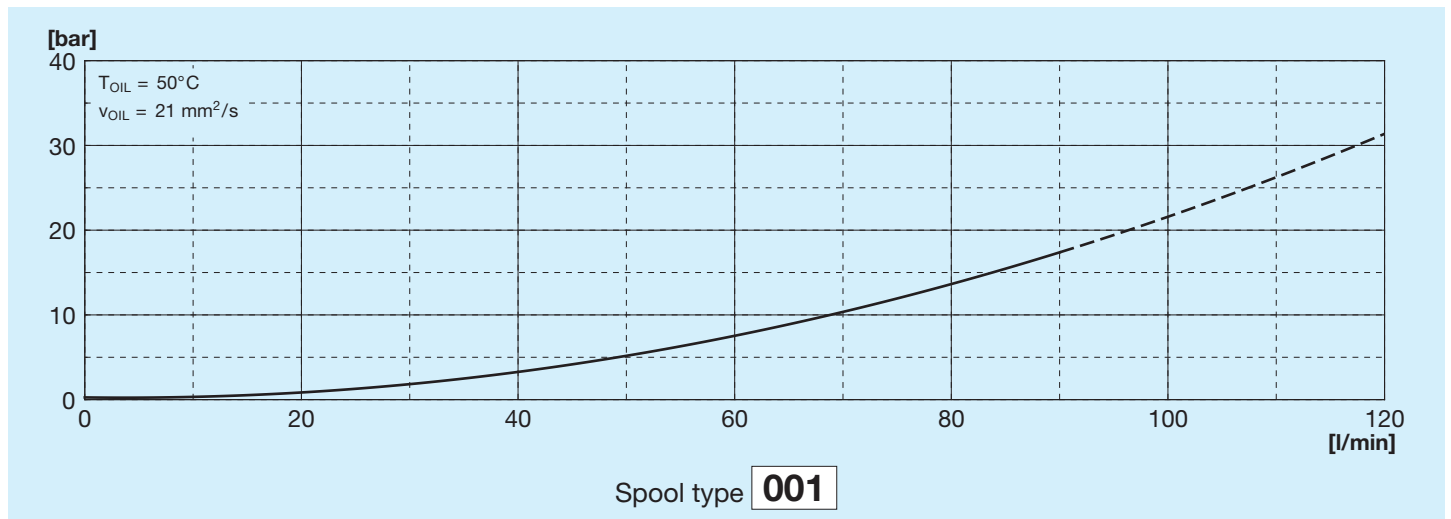


Dimensions

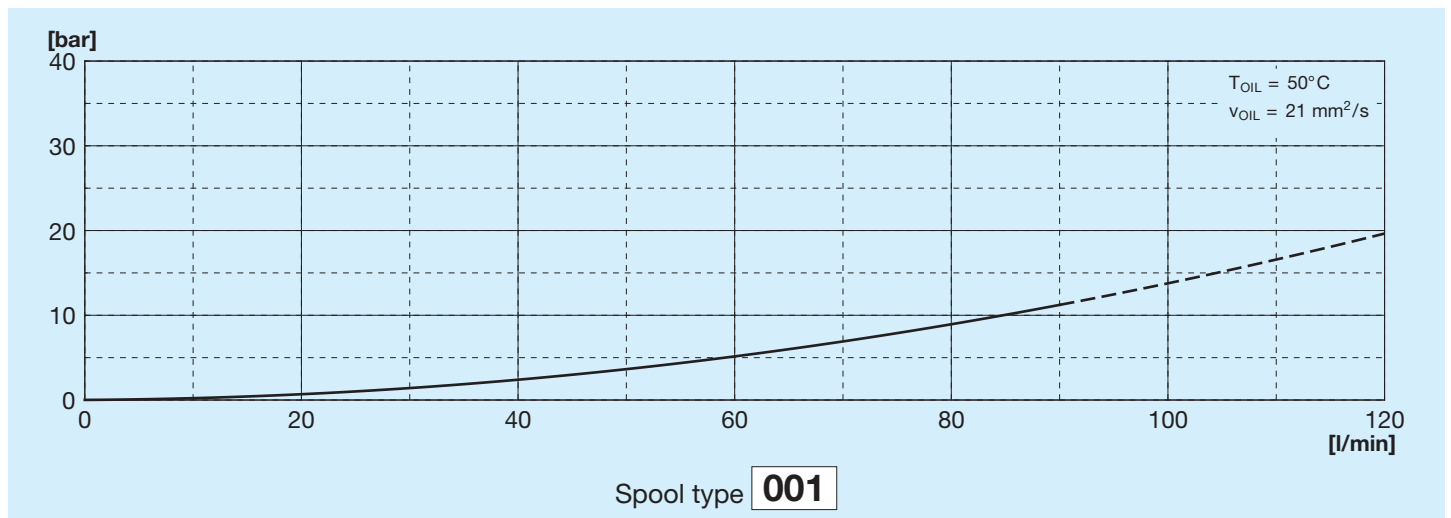


X - Y = Push type switch override

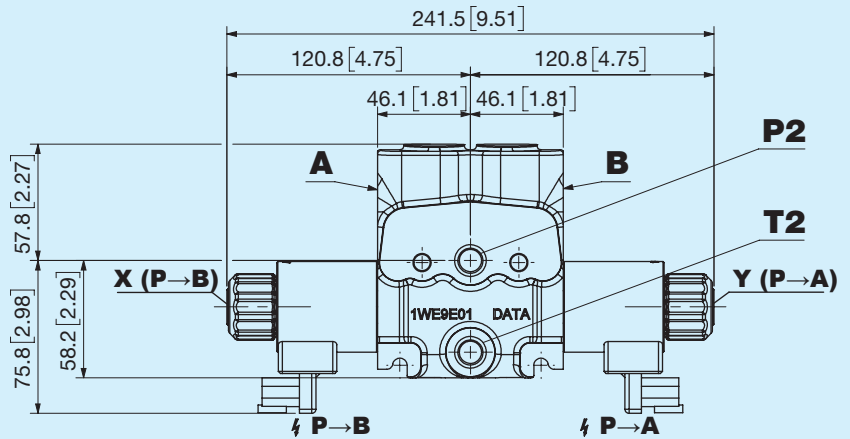
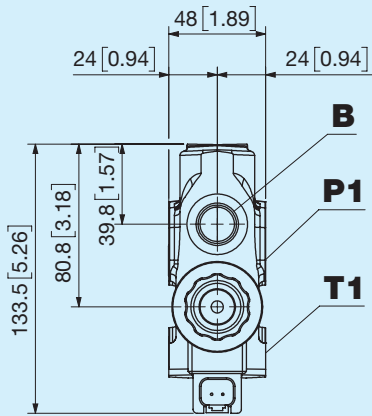
Flow curve P-A



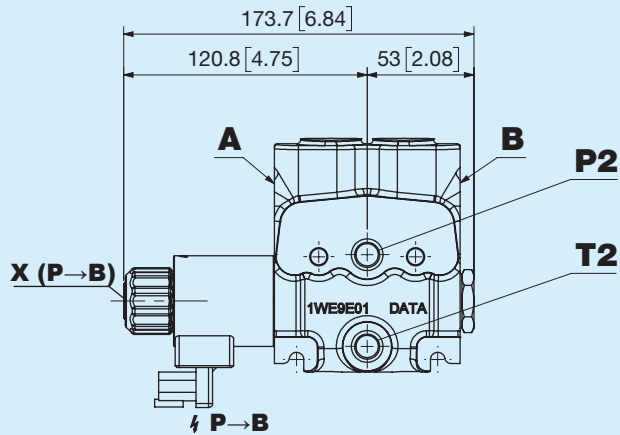
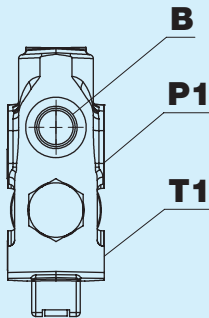
Flow curve B-T



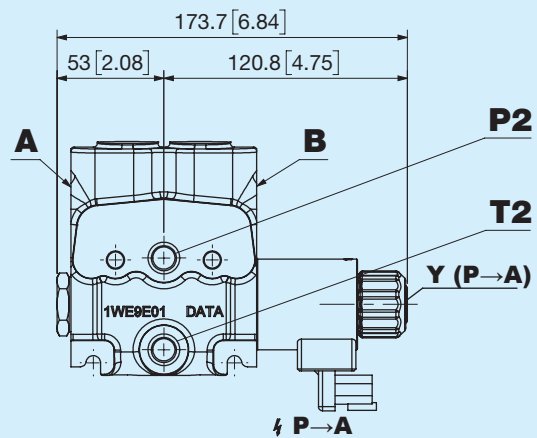
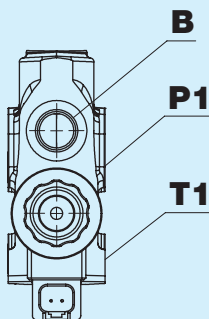
A Two coils, A and B port side



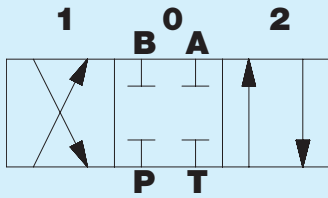
E One coil, A port side



F One coil, B port side



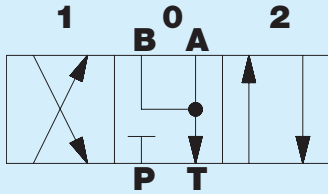
001 Spool type



Positions

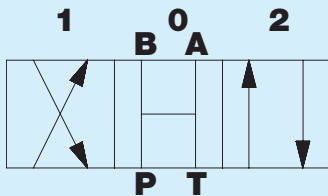
1	0	2
P → A B → T	P — T — A — B —	P → B A → T

003 Spool type



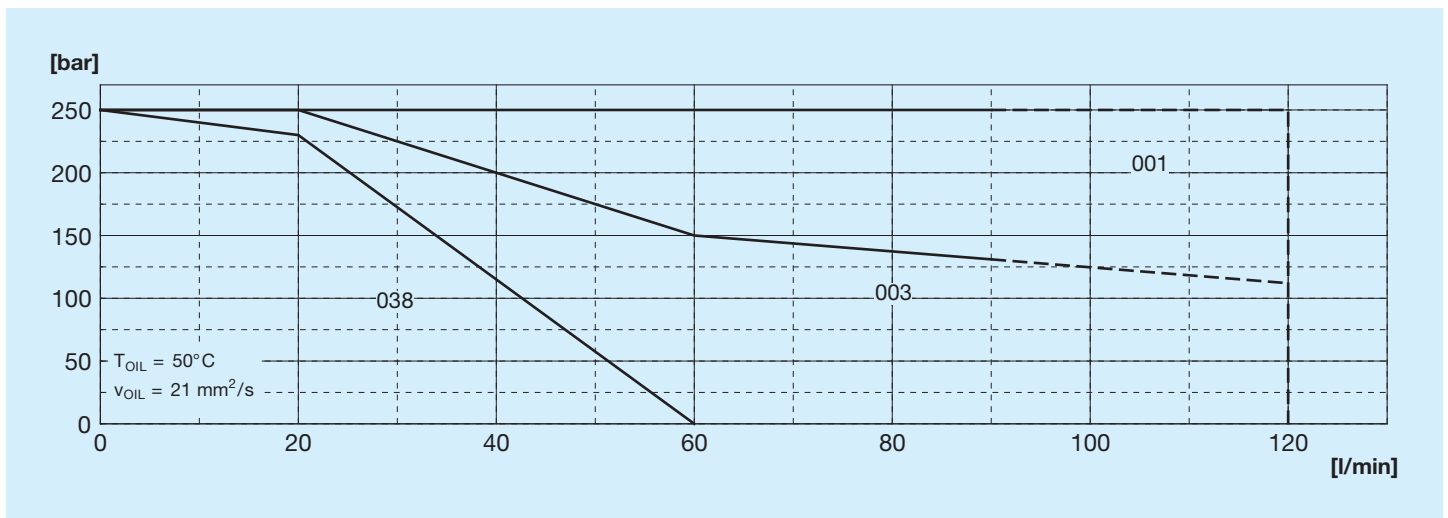
1	0	2
P → B A → T BP —	A, B → T P —	P → A B → T BP —

038 Spool type

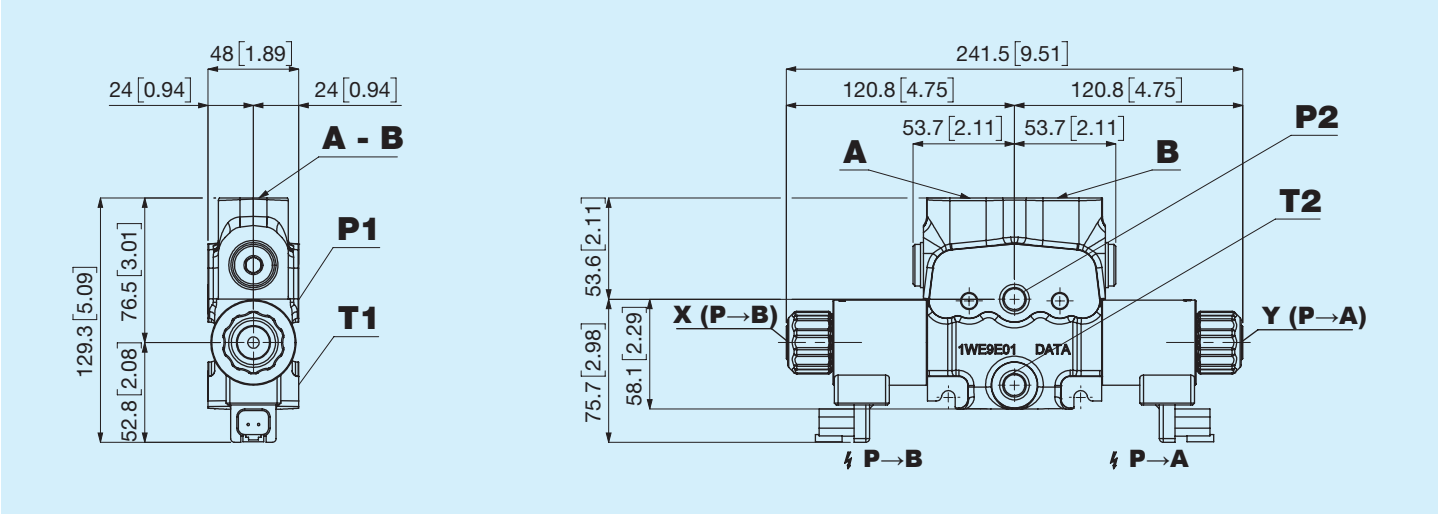


1	0	2
P → A B → T	B, A → T P —	P → B A → T

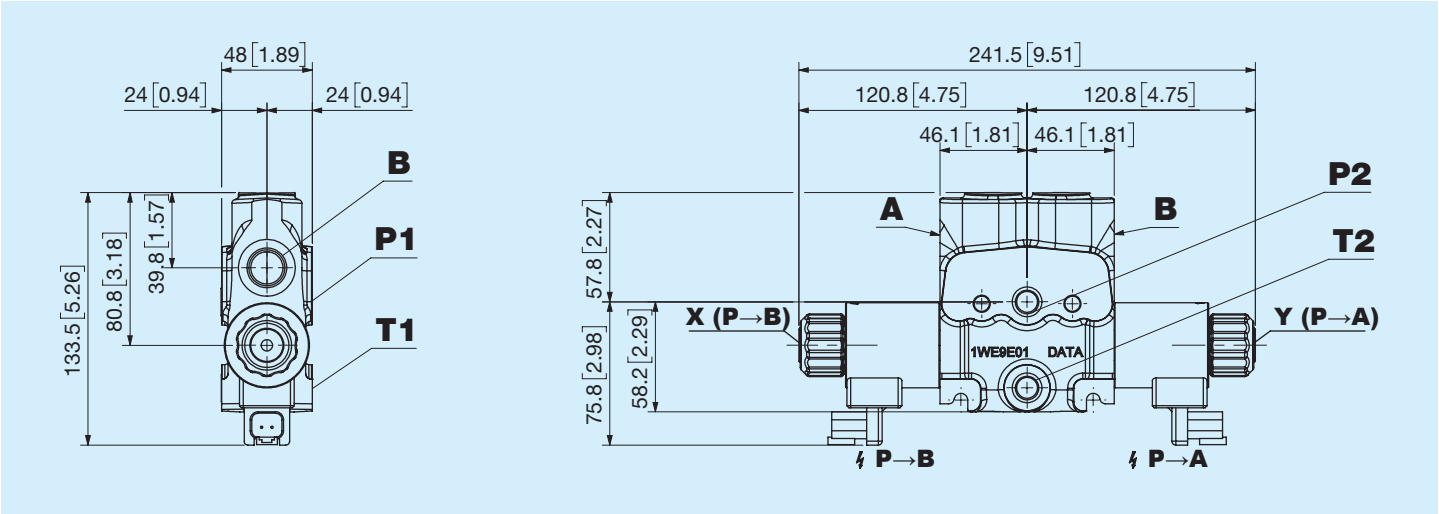
Performance limits for Spool type



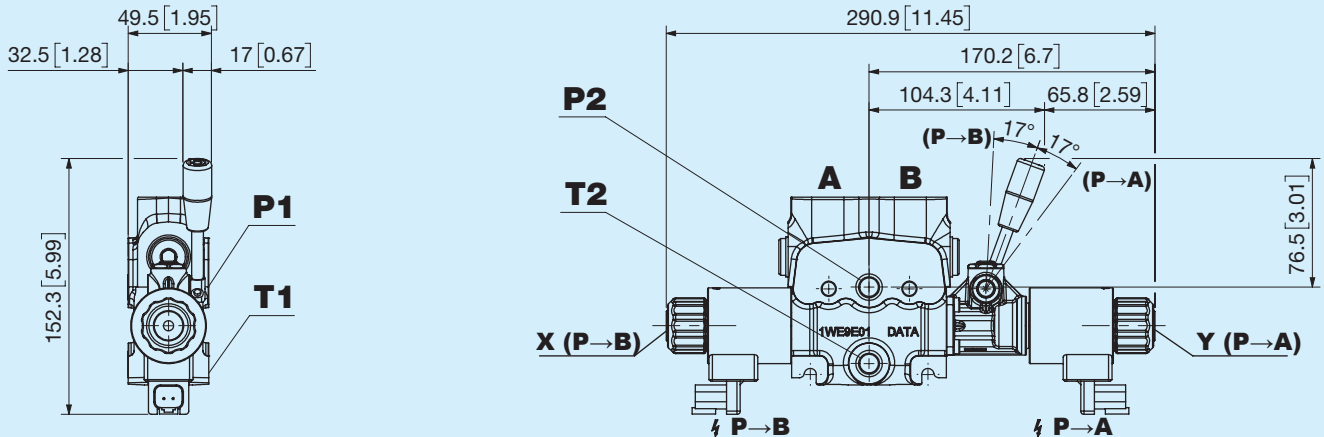
TP Top ports - Top ports



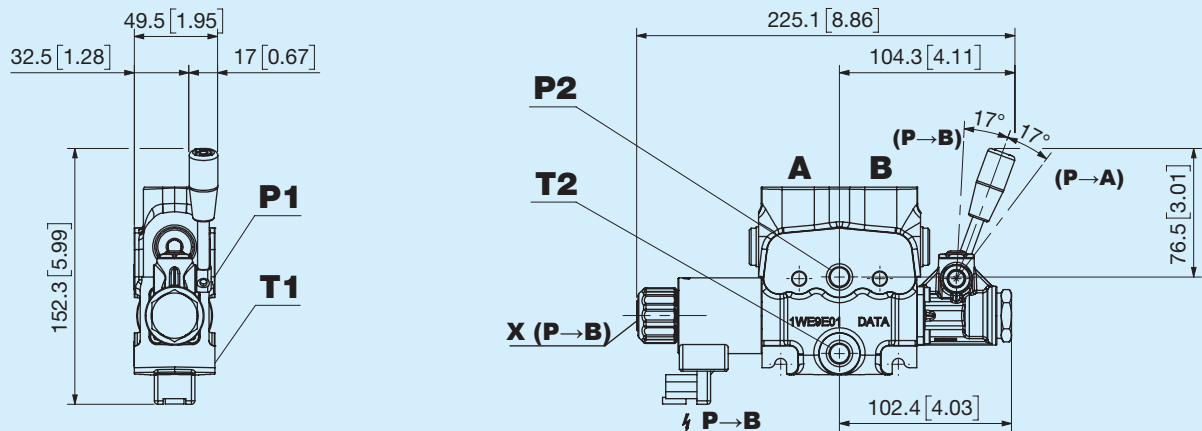
SP Lateral ports - Side ports



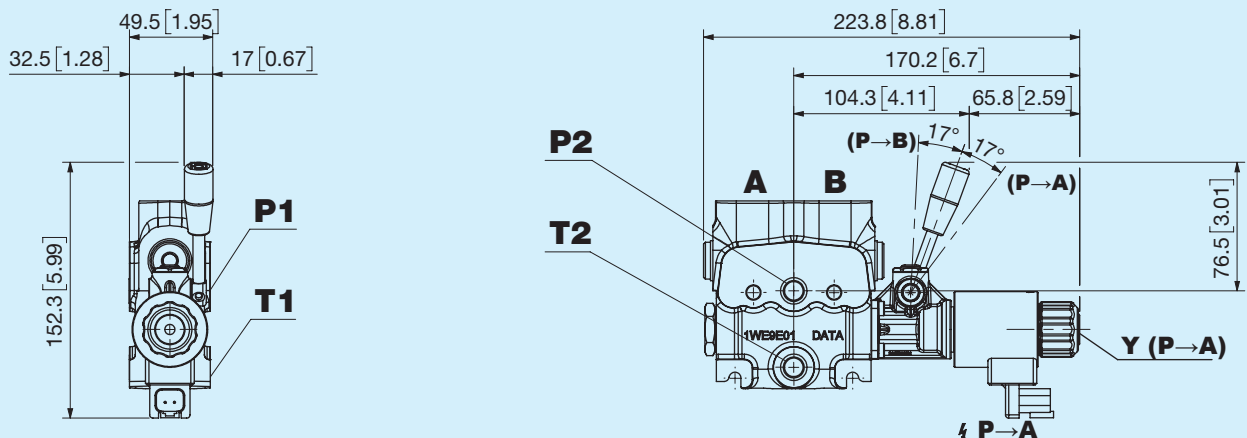
B Two coils, A and B port side and emergency lever



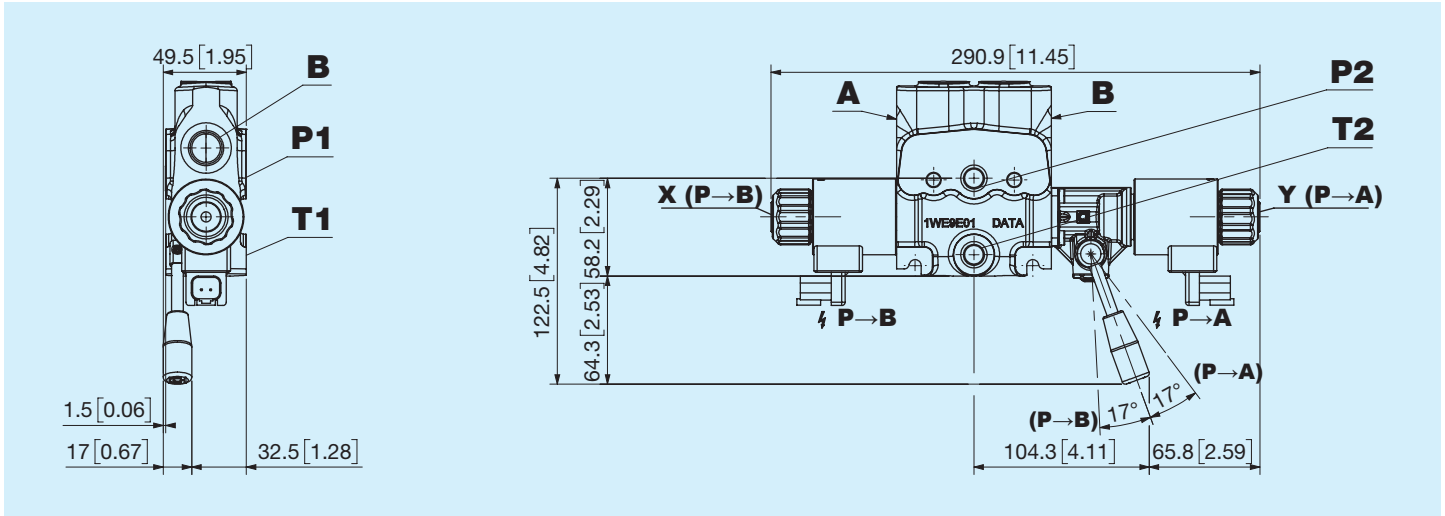
C One coil, A port side and emergency lever



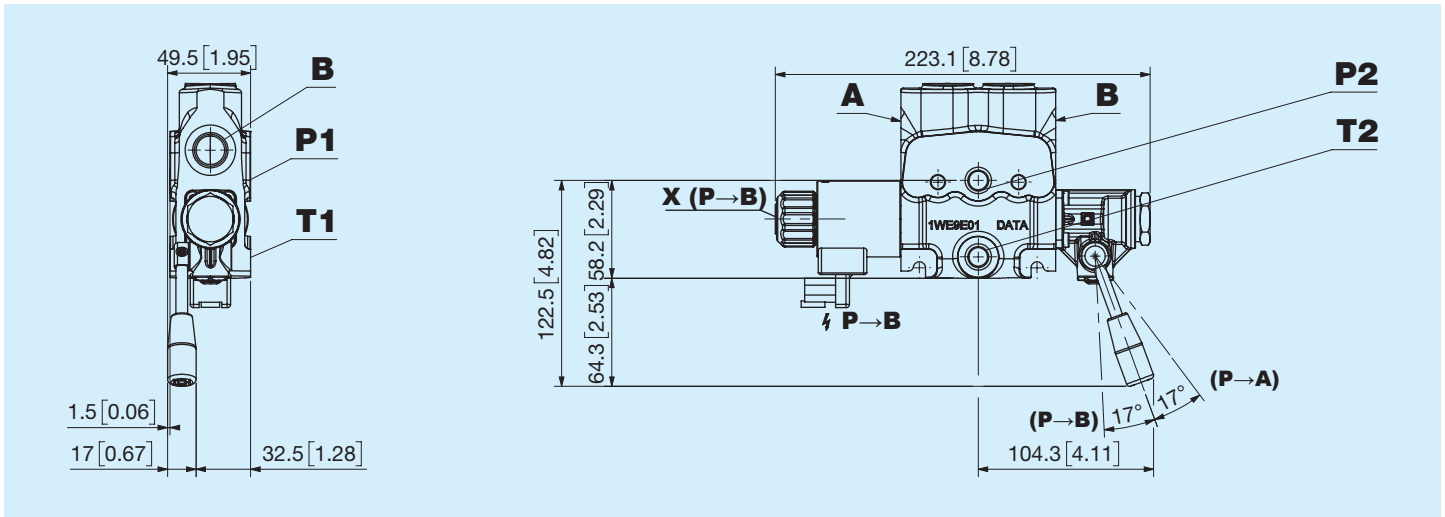
D One coil, B port side and emergency lever



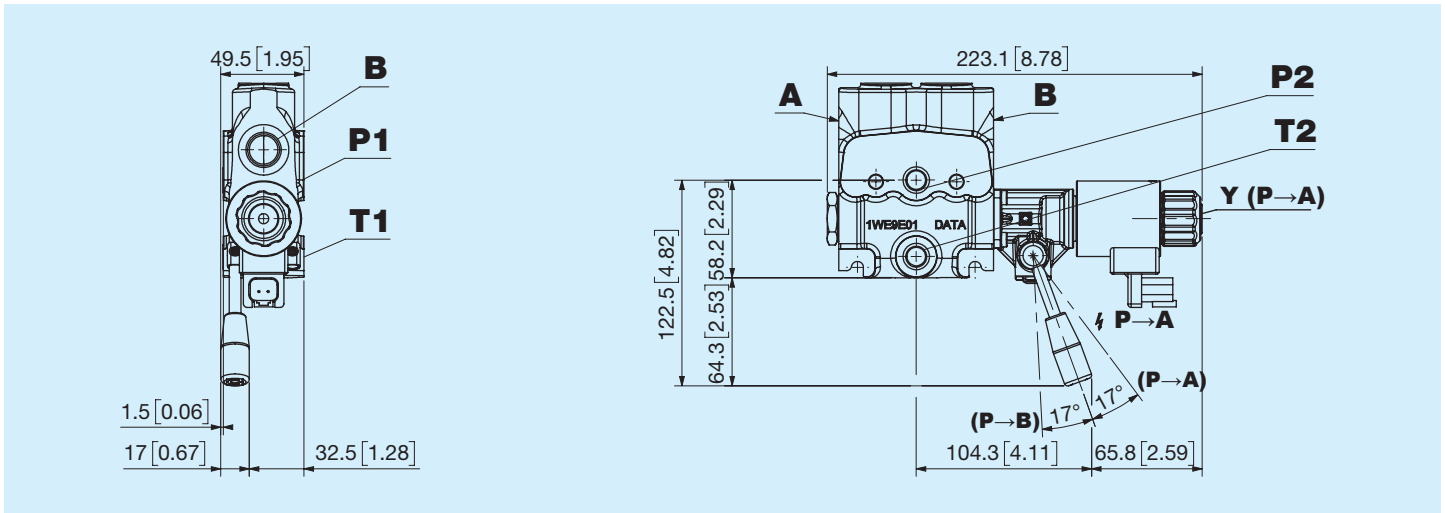
B Two coils, A and B port side and emergency lever



C One coil, A port side and emergency lever



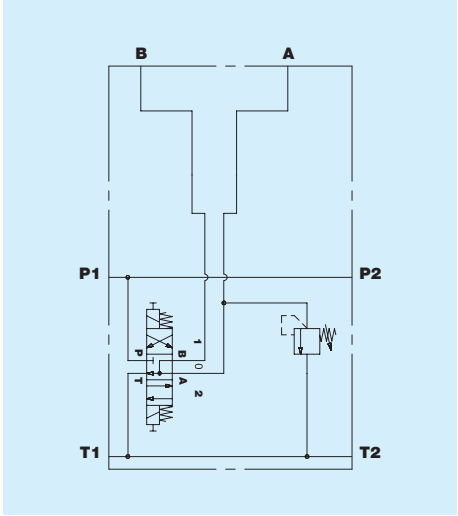
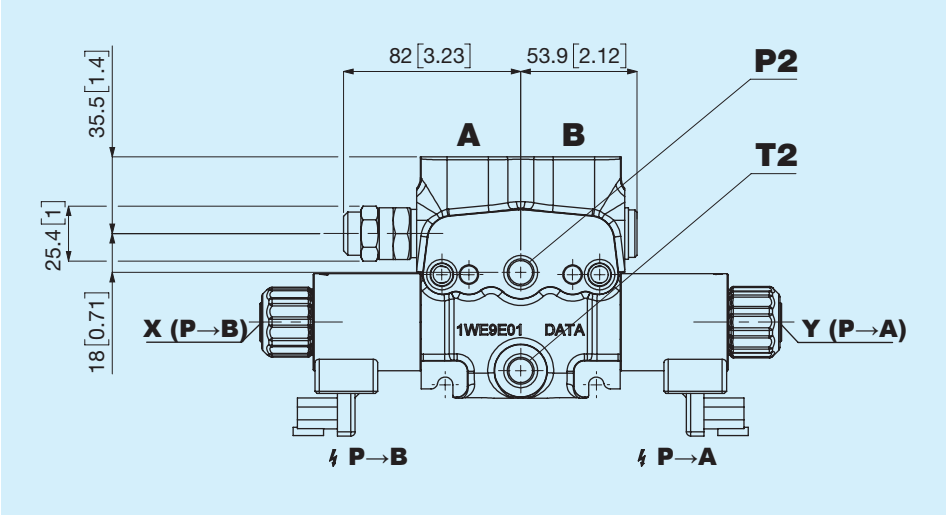
D One coil, B port side and emergency lever



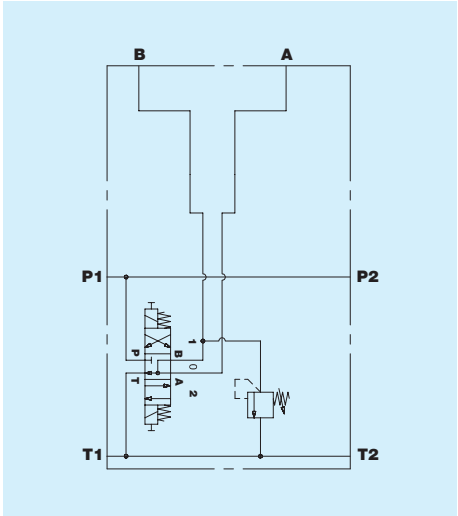
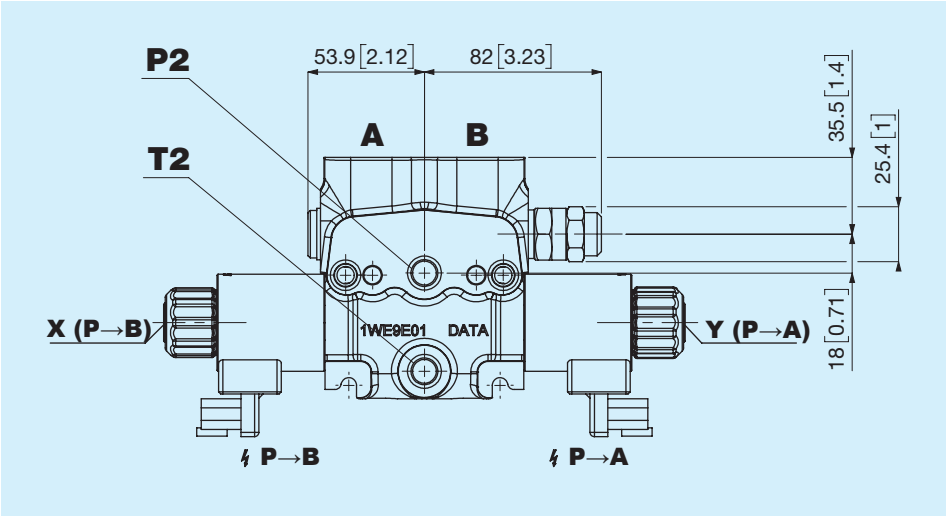
Thread Port A and B

Model	Type	Torque Nm
B	1/2" GAS ISO 1179	70
N	M22x1.5 ISO 9974	78
J	M22x1.5 ISO 6149	78
R	7/8" - 14 SAE ISO 11926	77

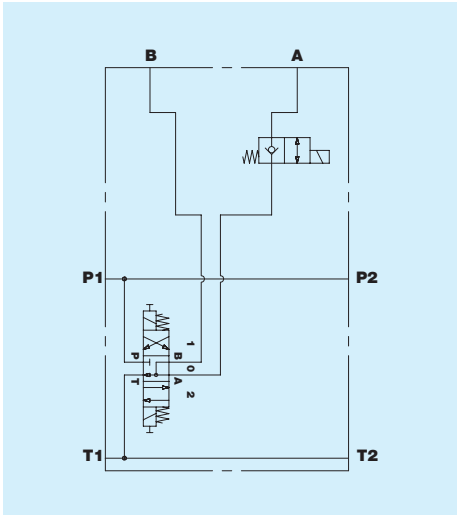
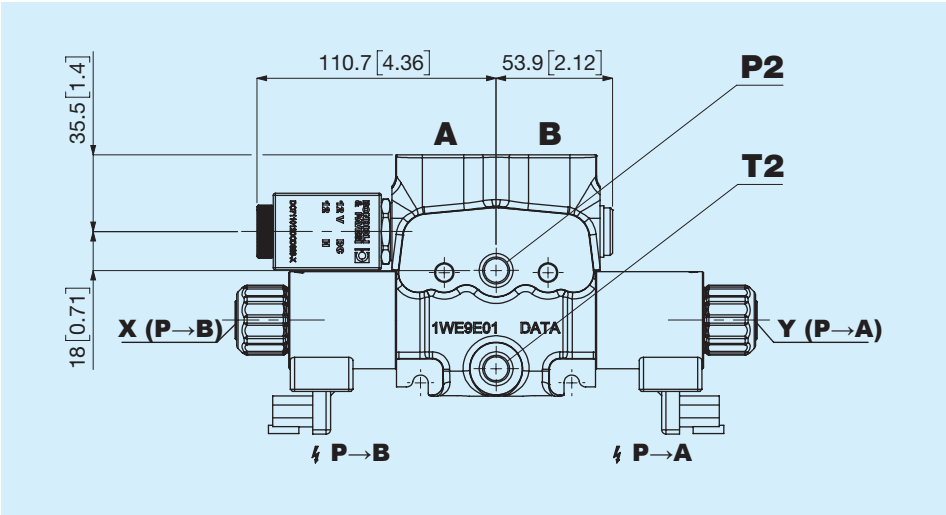
VL Pressure limiting valve A port



VL Pressure limiting valve B port



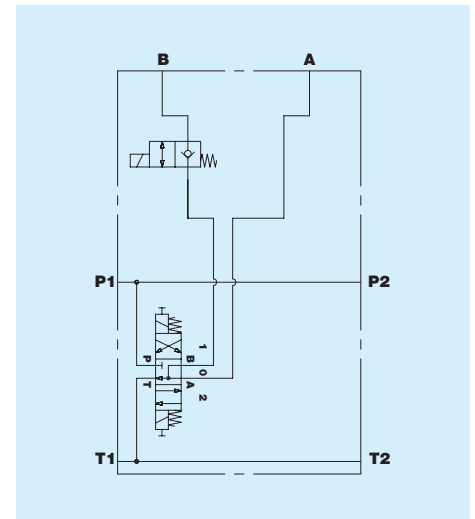
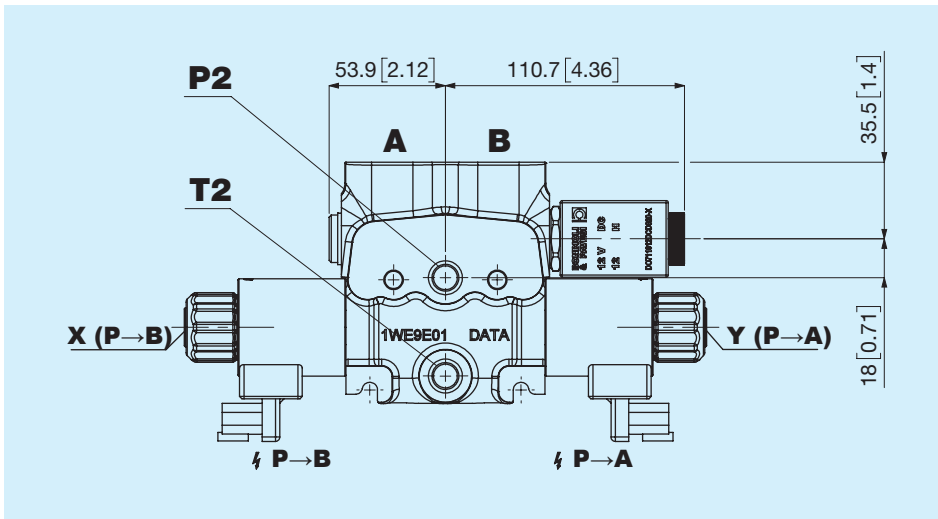
NE Solenoid operated valve 2/2 port A



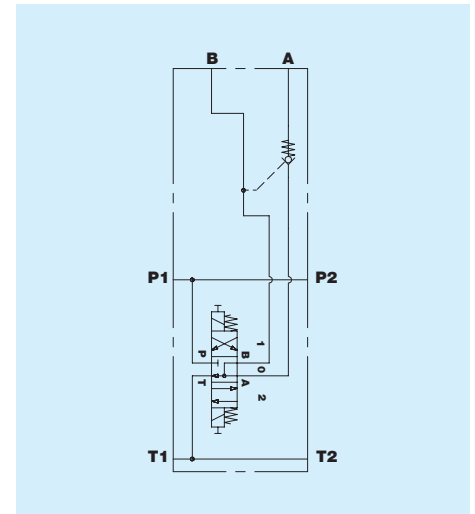
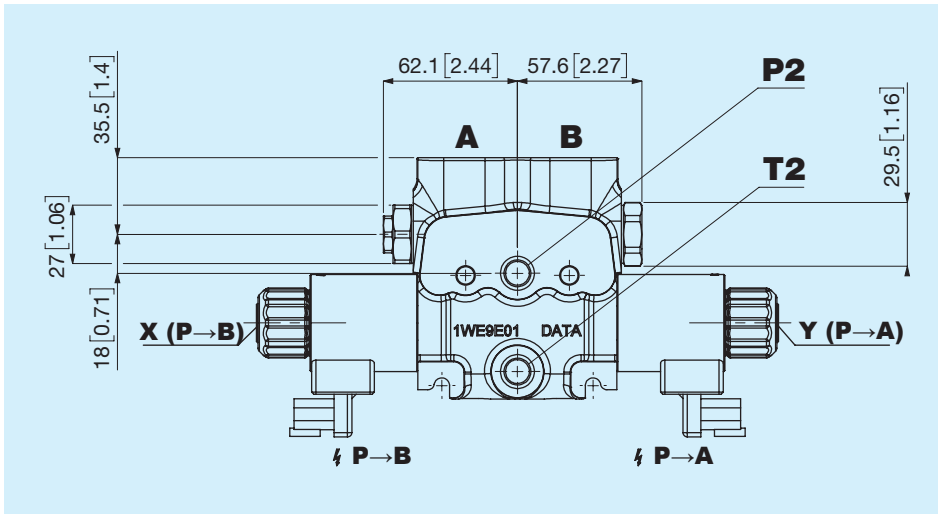
Valve type port A B

BW1022AO

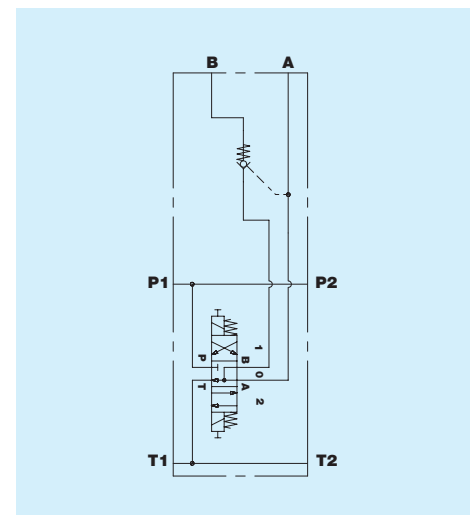
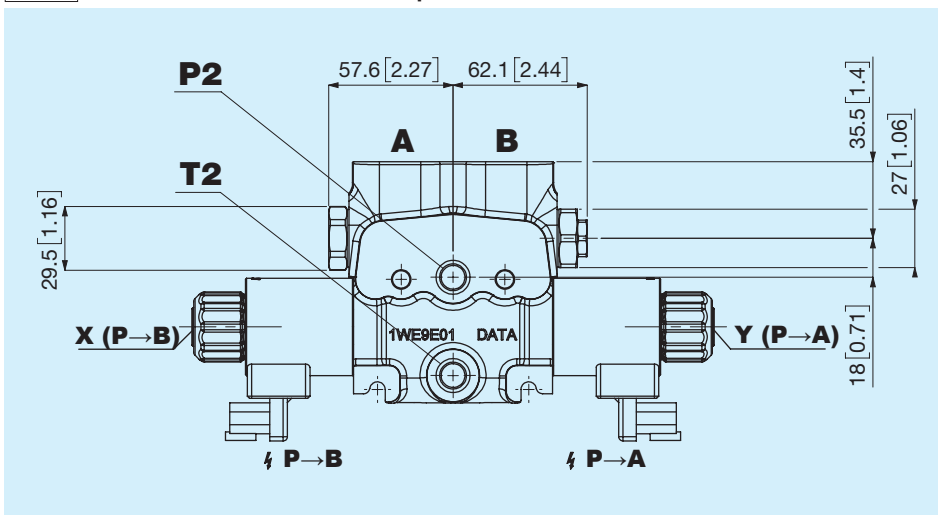
NE Solenoid operated valve 2/2 port B



VB Pilot check valve A port



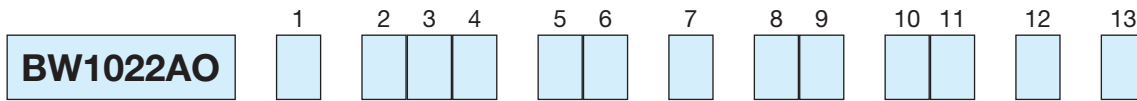
VB Pilot check valve B port



Possible valve combinations port A and B

Port A	Port B				
	NN	TP	VL	VB	NE
NN	•	•	•	•	•
TP	•	•	•	•	•
VL	•	•	•		•
VB	•	•		•	
NE	•	•	•		•

- NN** - None
- TP** - Machined plugged
- VB** - Pilot check valve
- NE** - Solenoid operated valve 2/2
- VL** - Pressure limiting valve



1	Configurations			
1	A Two coils, A and B port side	F One coil, B port side	C One coil, A port side and emergency lever	
	E One coil, A port side	B Two coils, A and B port side and emergency lever	D One coil, B port side and emergency lever	
2 3 4	Spool types			
2 3 4	001 Spool type	003 Spool type	038 Spool type	
5 6	Element type			
5 6	TP Top ports - Top ports	SP Lateral ports - Side ports		
7	Thread Port A and B			
7	B 1/2" GAS ISO 1179	N M22x1.5 ISO 9974	J M22x1.5 ISO 6149	R 7/8" - 14 SAE ISO 11926
8 9	Port A valve type			
8 9	NN None	09 VL 90 bar	15 VL 150 bar	21 VL 210 bar
	TP Machined plugged	10 VL 100 bar	16 VL 160 bar	22 VL 220 bar
	NE Solenoid operated valve 2/2	11 VL 110 bar	17 VL 170 bar	23 VL 230 bar
	VB Pilot check valve	12 VL 120 bar	18 VL 180 bar	24 VL 240 bar
	07 VL 70 bar	13 VL 130 bar	19 VL 190 bar	25 VL 250 bar
	08 VL 80 bar	14 VL 140 bar	20 VL 200 bar	
10 11	Port A valve type			
10 11	NN None	09 VL 90 bar	15 VL 150 bar	21 VL 210 bar
	TP Machined plugged	10 VL 100 bar	16 VL 160 bar	22 VL 220 bar
	NE Solenoid operated valve 2/2	11 VL 110 bar	17 VL 170 bar	23 VL 230 bar
	VB Pilot check valve	12 VL 120 bar	18 VL 180 bar	24 VL 240 bar
	07 VL 70 bar	13 VL 130 bar	19 VL 190 bar	25 VL 250 bar
	08 VL 80 bar	14 VL 140 bar	20 VL 200 bar	
12	Voltage and connector			
12	A 12V DIN 43650	B 24V DIN 43650	G 12V Deutsch	H 24V Deutsch
13	External coating			
13	A External coating	N None		