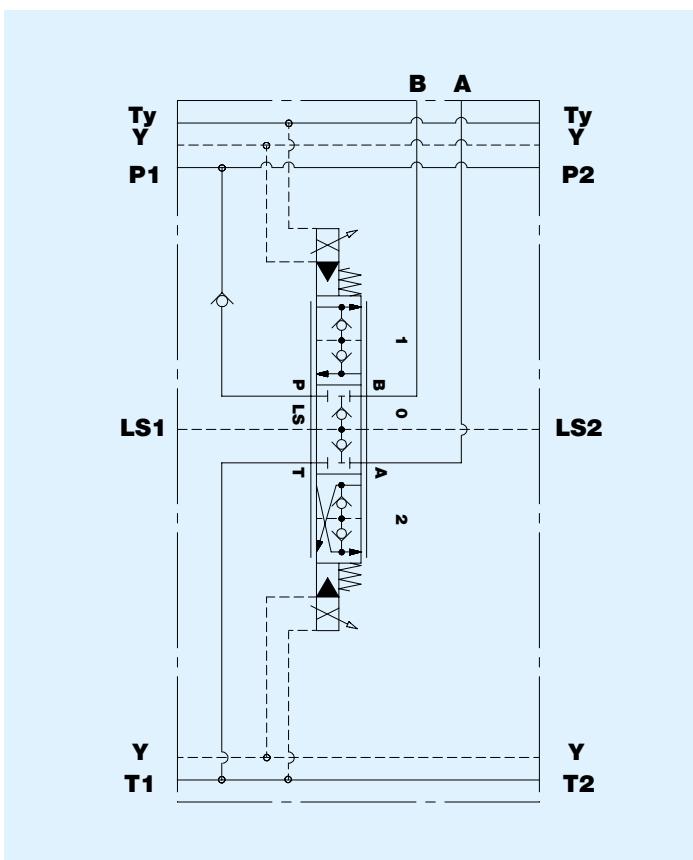


BW1477AP Element 6/3 Load sensing with electro-hydraulic actuator Interface IBW1477

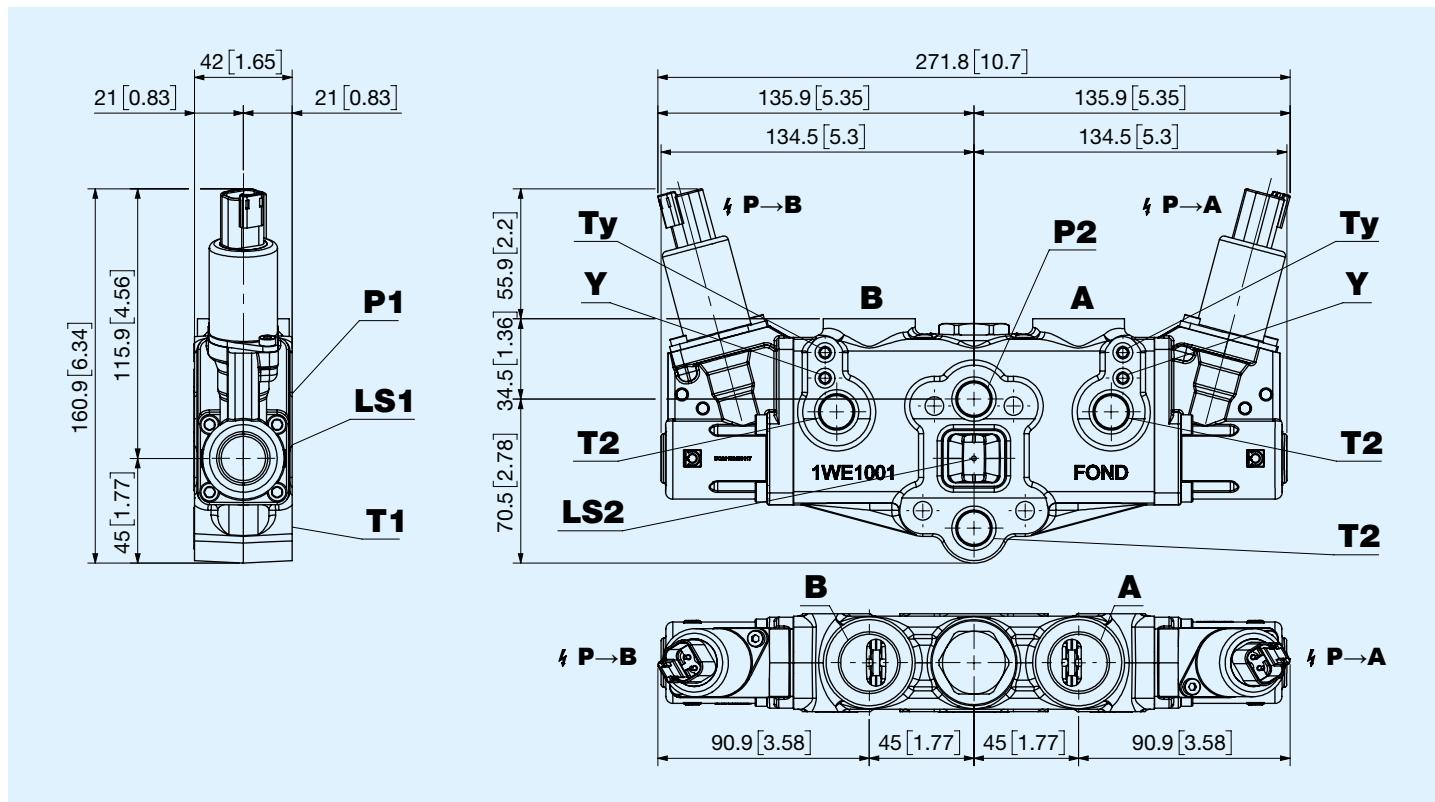


Before use, carefully read the GENERAL INSTRUCTIONS FOR USE OF DIRECTIONAL CONTROL VALVES

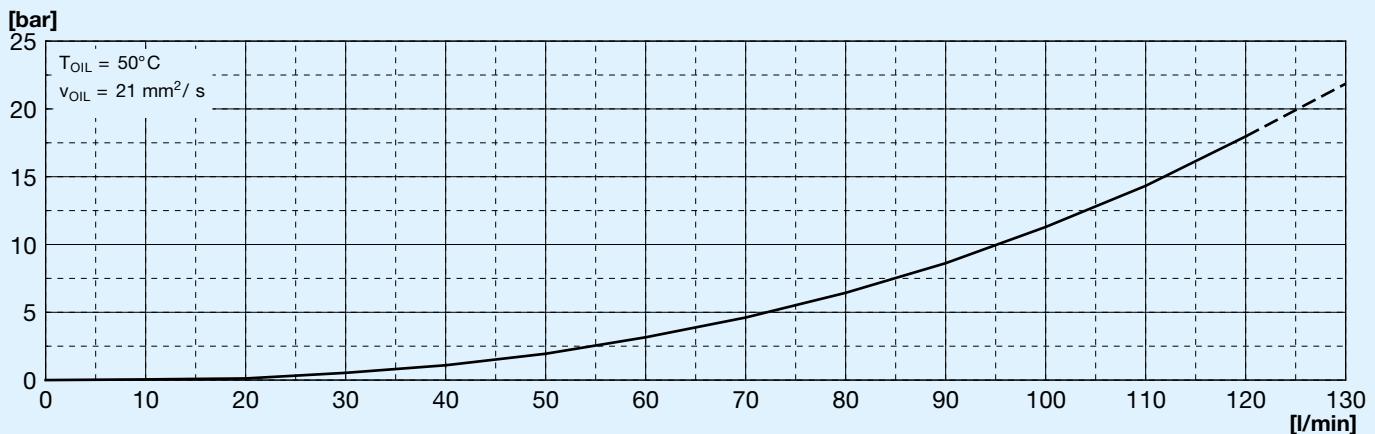
Nominal flow	120 l/min - $\Delta P=18$ bar 31.7 US gpm - $\Delta P=261$ psi
Nominal pressure	300 bar 4351 psi
Maximum tank pressure	50 bar 725 psi
Internal leakage	8 cc/min (21 cSt - 100 bar)
Temperature range	-20°C +85°C NBR seals (max peak +100°C) -20°C + 130°C HNBR seals
Oil viscosity	from 15 mm²/s to 90 mm²/s (15 cSt to 90 cSt)
Fluid	Hydraulic fluids as defined in ISO 6743-4 standard
Weight	3.6 kg 7.9 lb
Interface	IBW1477



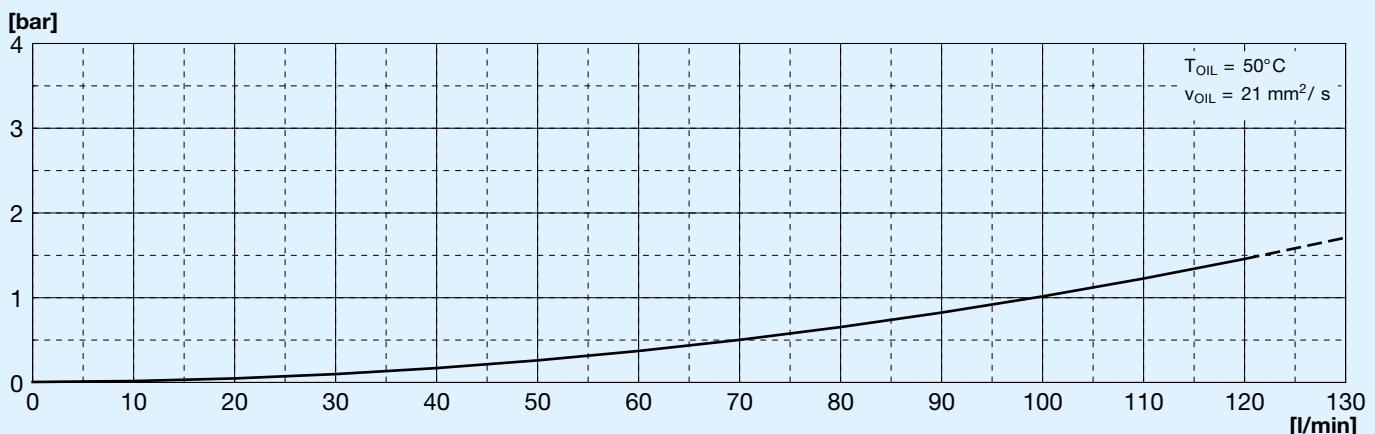
Dimensions



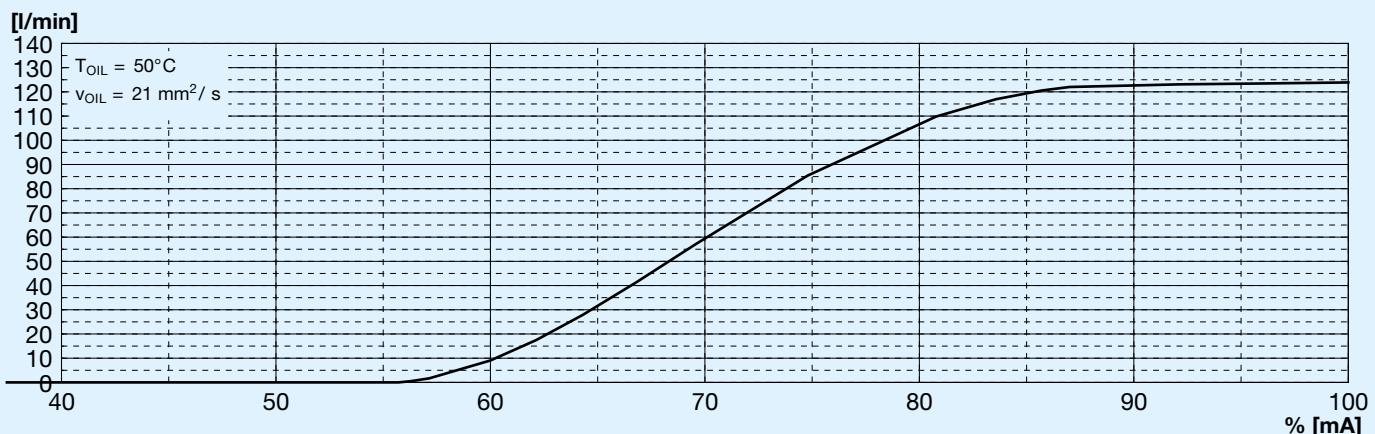
Flow curve P-AB



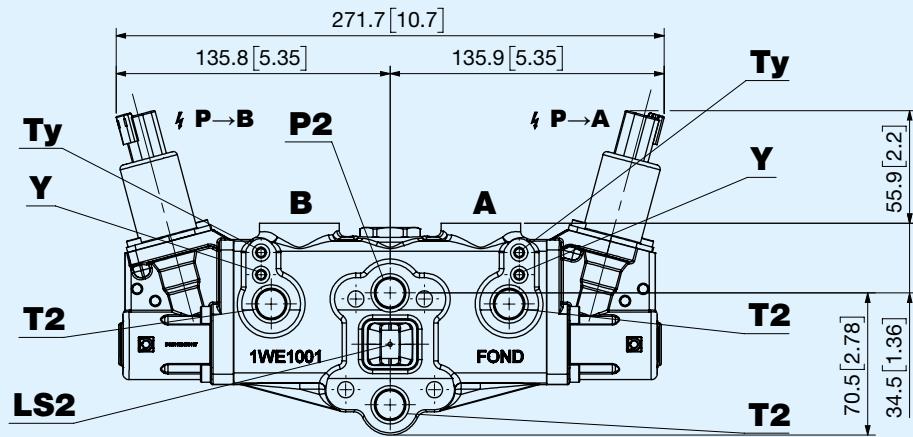
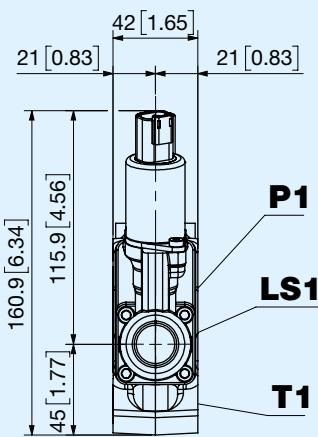
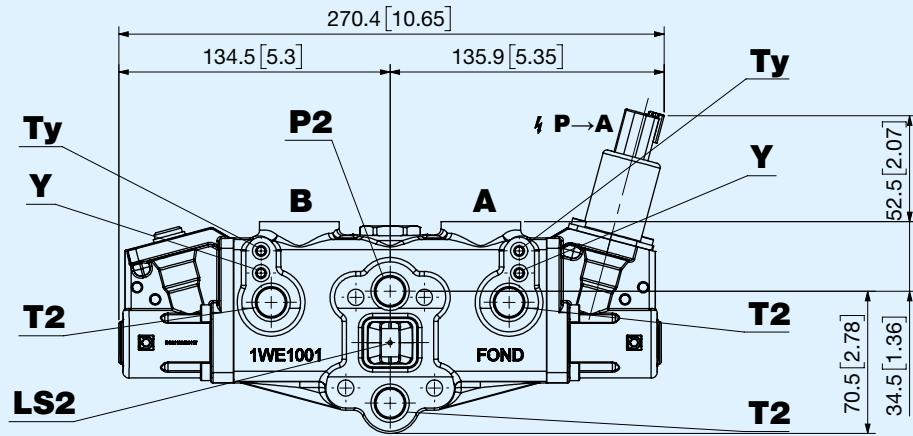
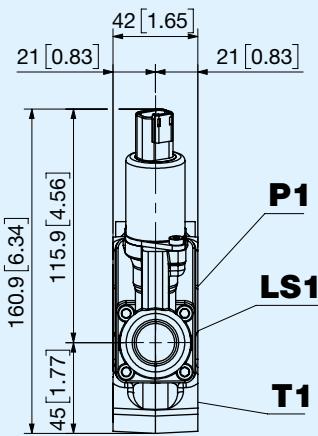
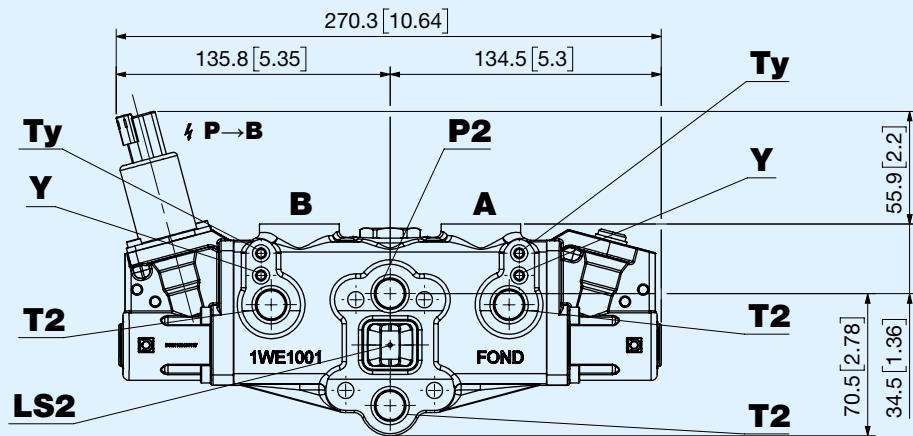
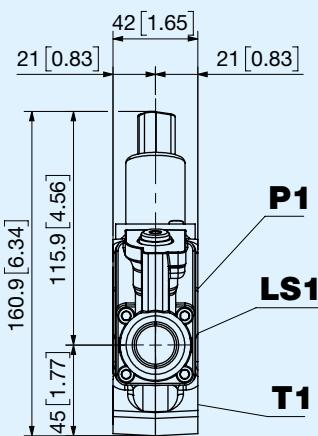
Flow curve AB-T



Flow curve Metering



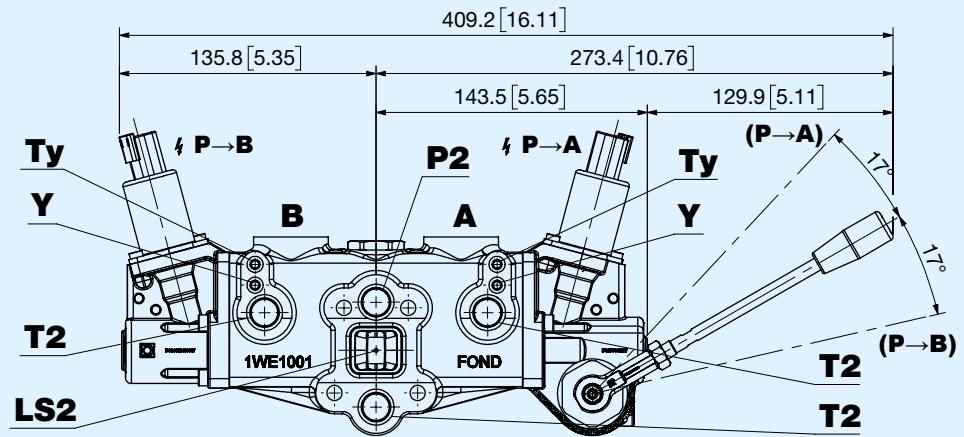
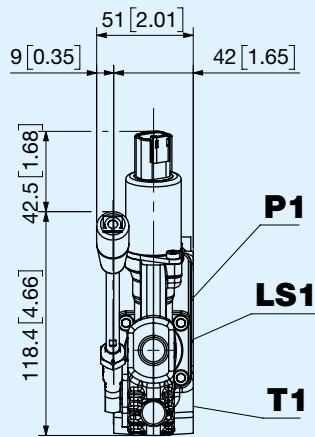
$\Delta p = 18 \text{ bar}$ PWM = 100 Hz I Max=1400 mA 12V (± 100 mA) I Max=680 mA 24V (± 100 mA)

A Two coils, A and B port side**E** One coil, A port side**F** One coil, B port side

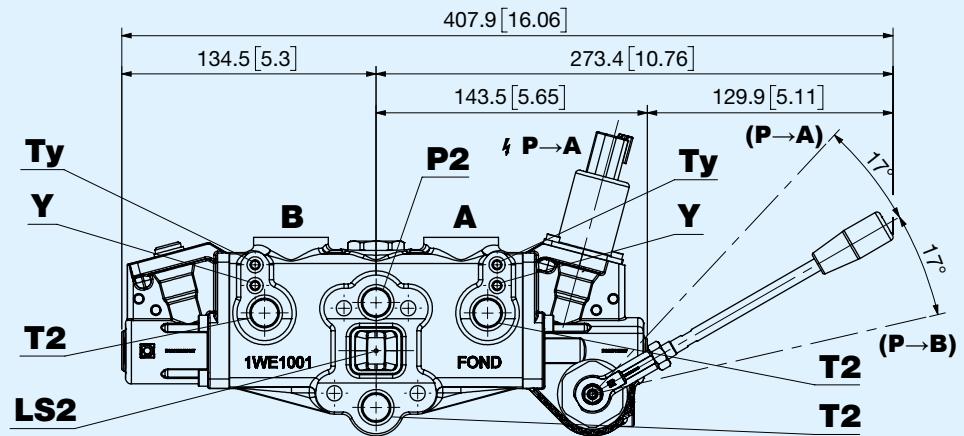
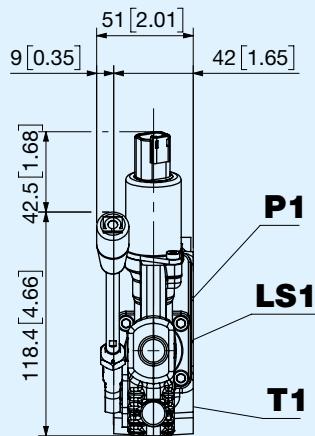
Configurations

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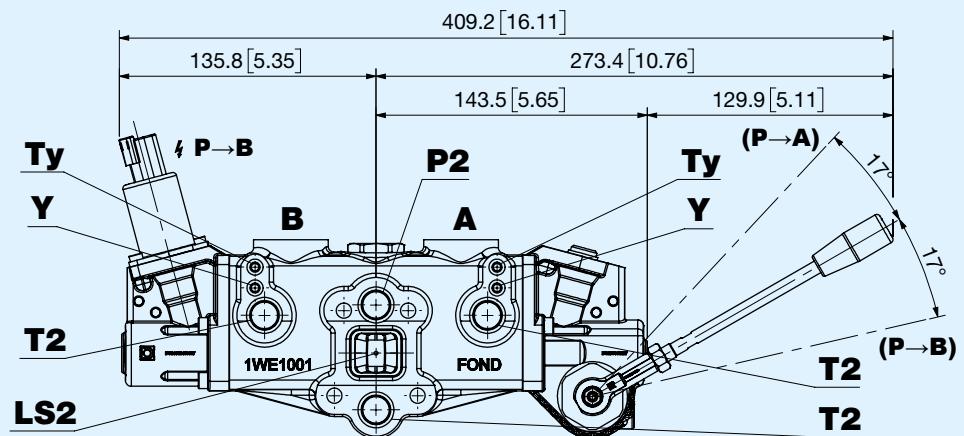
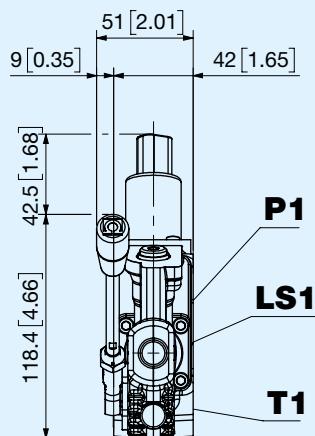
B Two coils, A and B port side and emergency lever



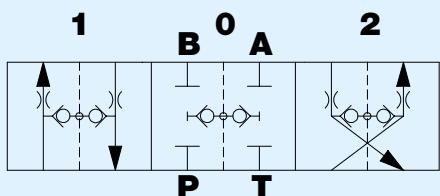
C One coil, A port side and emergency lever



D One coil, B port side and emergency lever



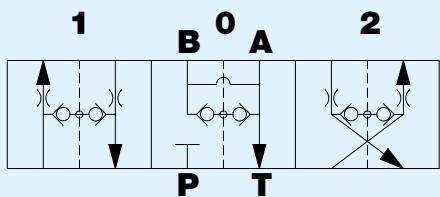
001 Spool type



Positions

1	0	2
P→B A→T	A— B— P— T—	P→A B→T

003 Spool type



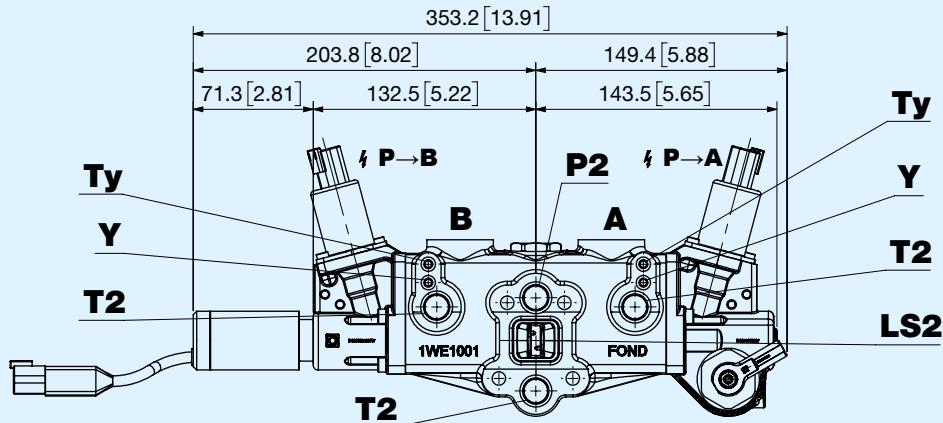
Positions

1	0	2
P→B A→T	B,A→T P—	P→A B→T

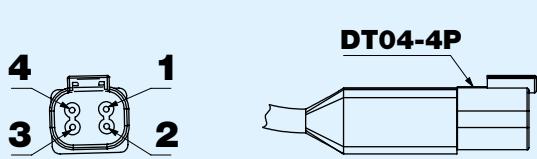
Flow rate $\Delta P = 18$ bar

Model	l/min	US gpm
0A	120	31.70
0B	90	23.77
0C	60	15.85
0D	30	7.92

G Spool position electromagnetic sensor



Technical data of spool position electromagnetic sensor

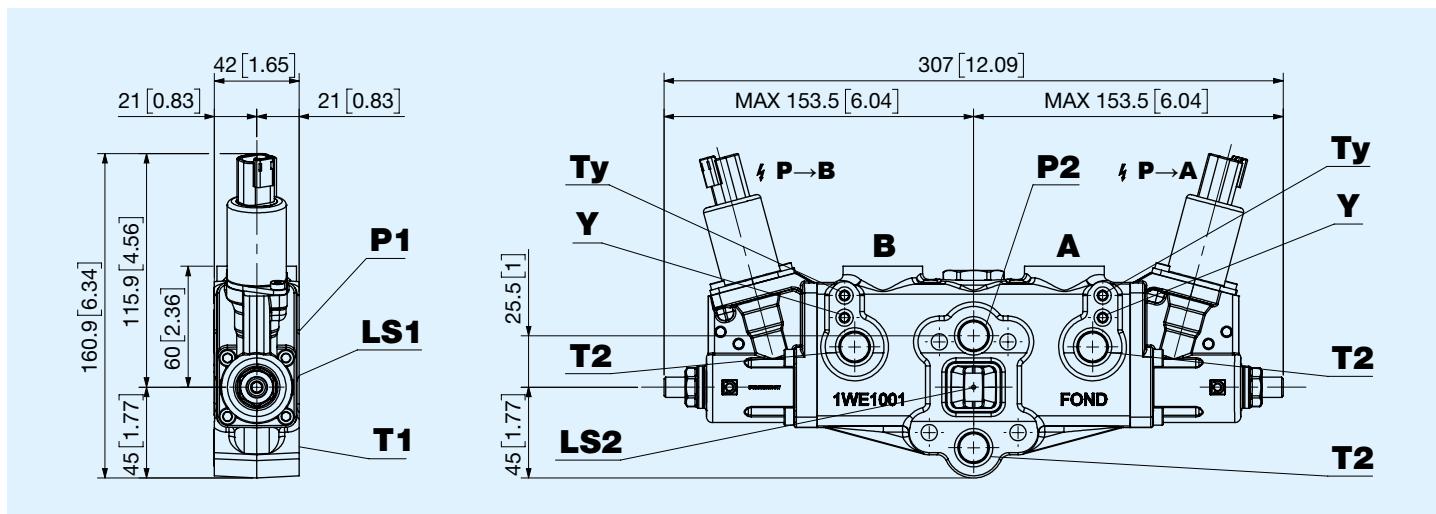


PIN	Connection
1	+V (Voltage)
2	-V (Voltage-GND)
3	Output signal

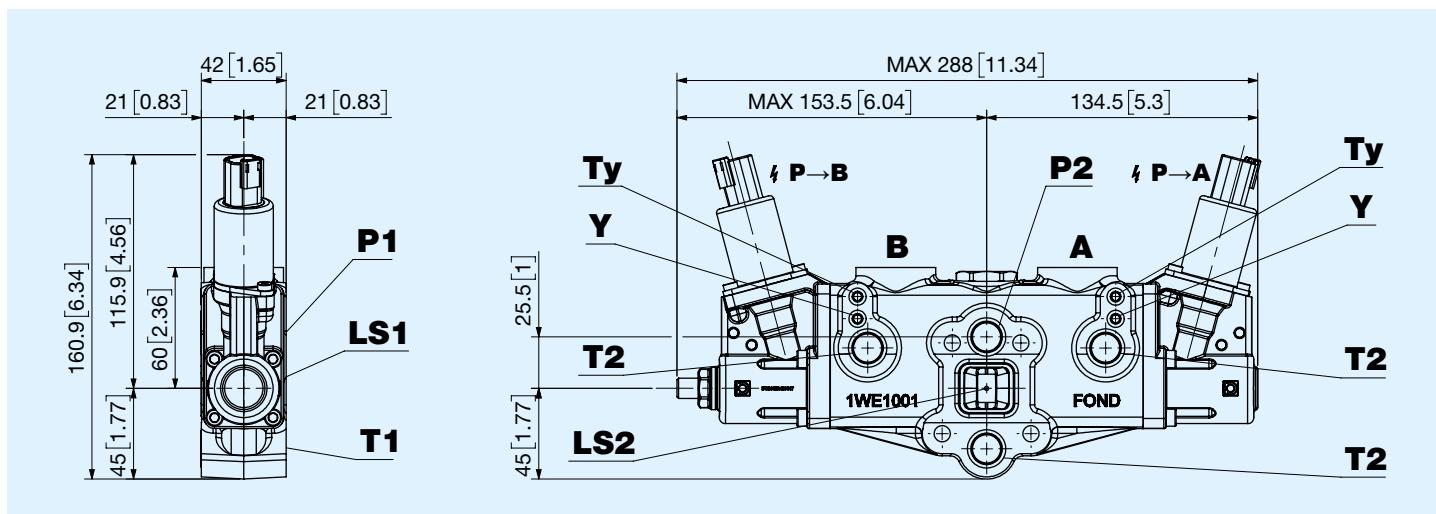
Technical data of electromagnetic sensor

Temperature range	-40°C +100°C
Maximum operating pressure	60 bar- 870.2 psi
VB	9 - 32 V
Output signal	PNP
Maximum output current	15 mA

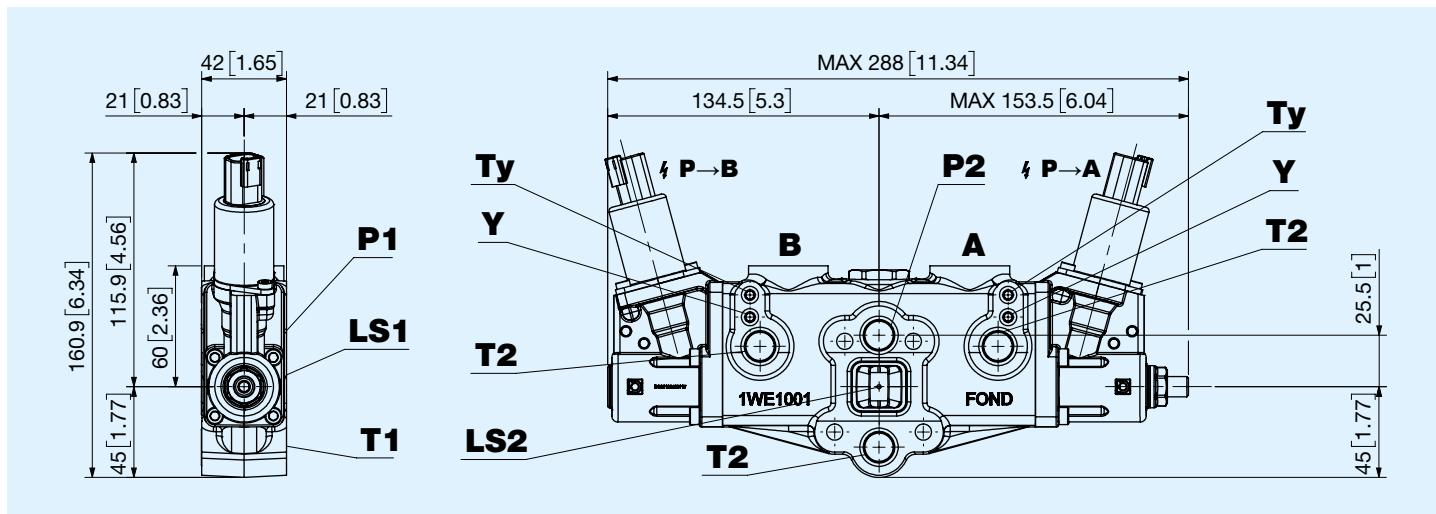
Spool stroke limiting port A and B



Spool stroke limiting port A



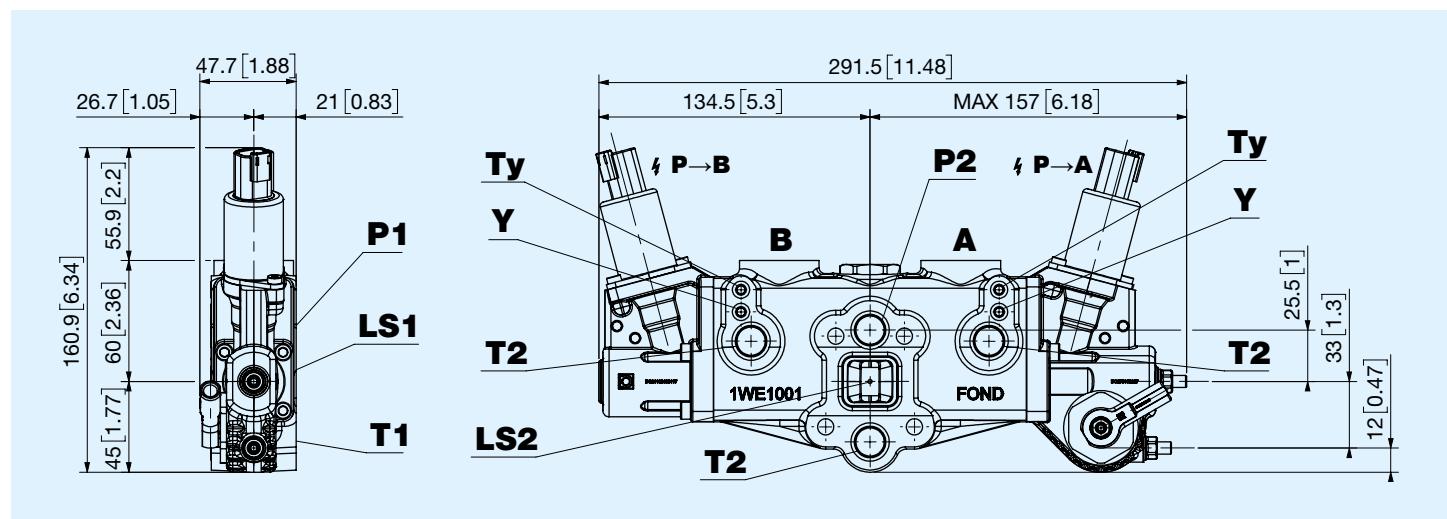
Spool stroke limiting port B



Spool stroke limiting

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Spool stroke limiting port A and B and emergency lever

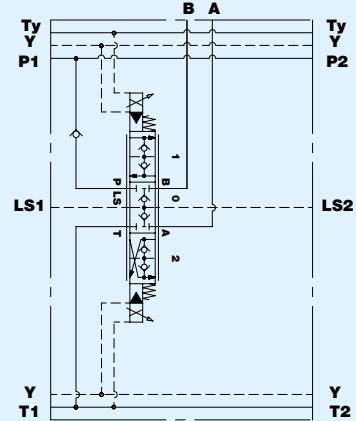
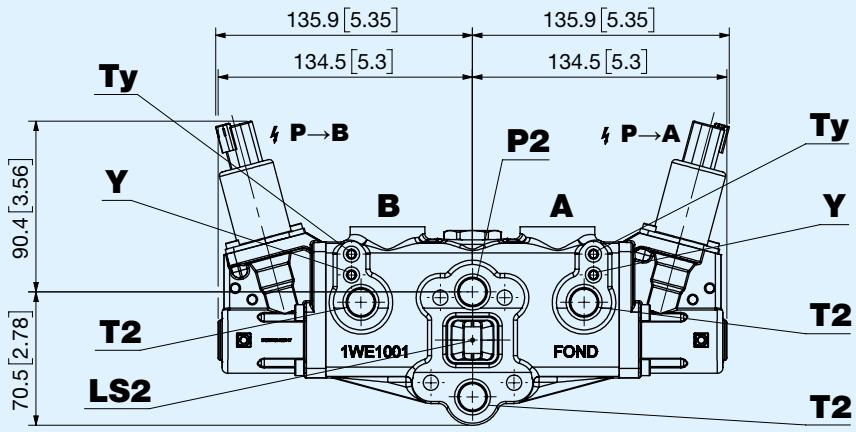


Model	Type	Torque Nm
B	1/2" GAS ISO 1179	70
F	3/4" GAS ISO 1179	150
N	M22x1.5 ISO 9974	70
J	M22x1.5 ISO 6149	78
5	M27x2 ISO 9974	160
U	M27x2 ISO 6149	170
R	7/8" - 14 SAE ISO 11926	77
V	1" 1/16 - 12 SAE ISO 11926	125

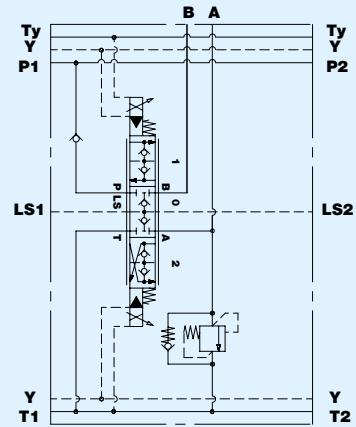
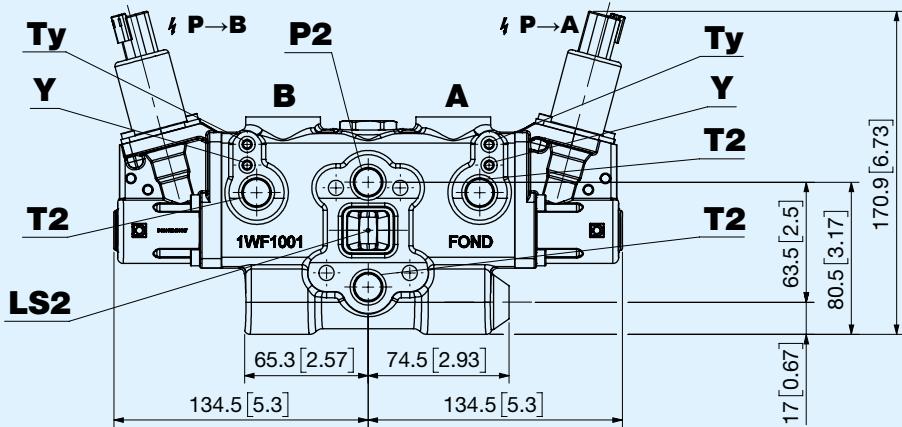
Valve type port A B

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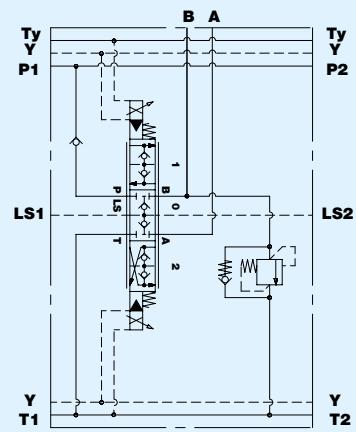
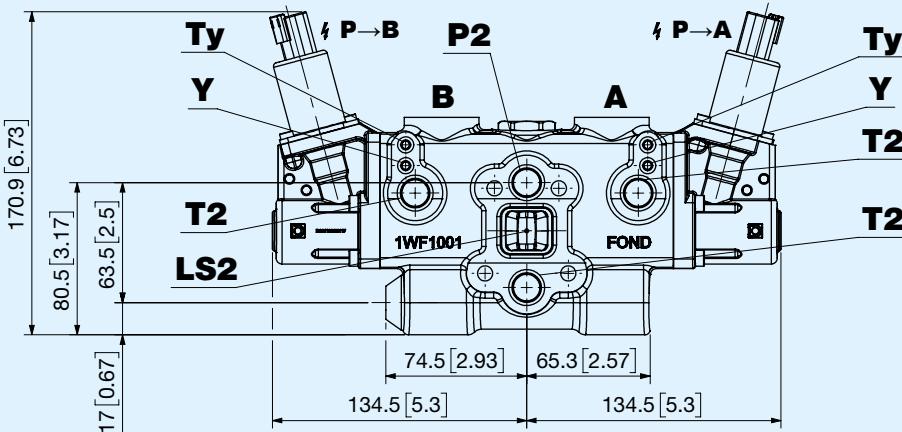
NN None



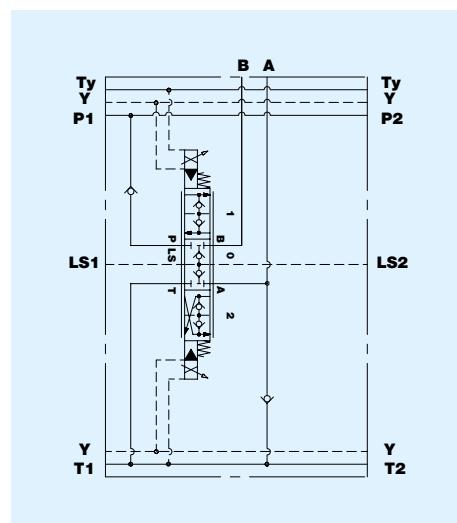
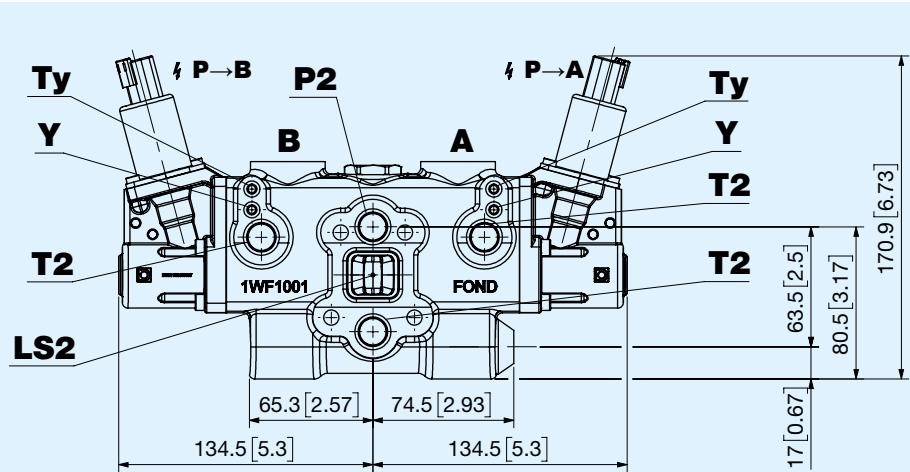
RC Internal pressure limiter and anticavitation cartridge port A



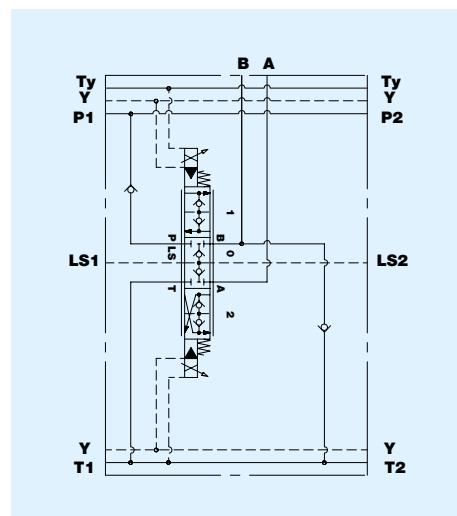
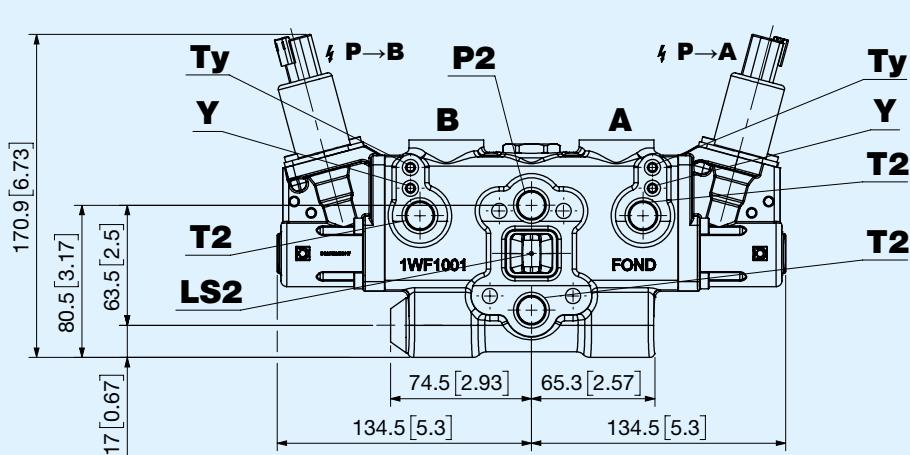
RC Internal pressure limiter and anticavitation cartridge port B



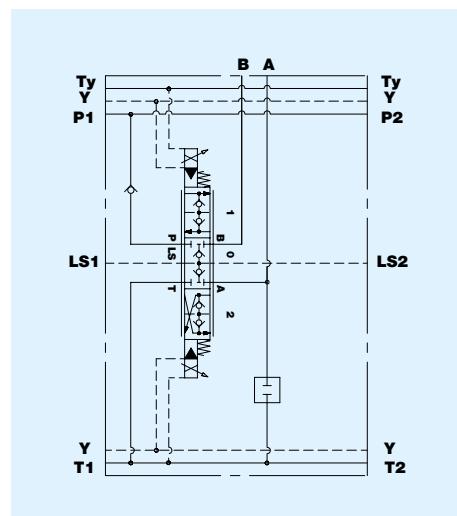
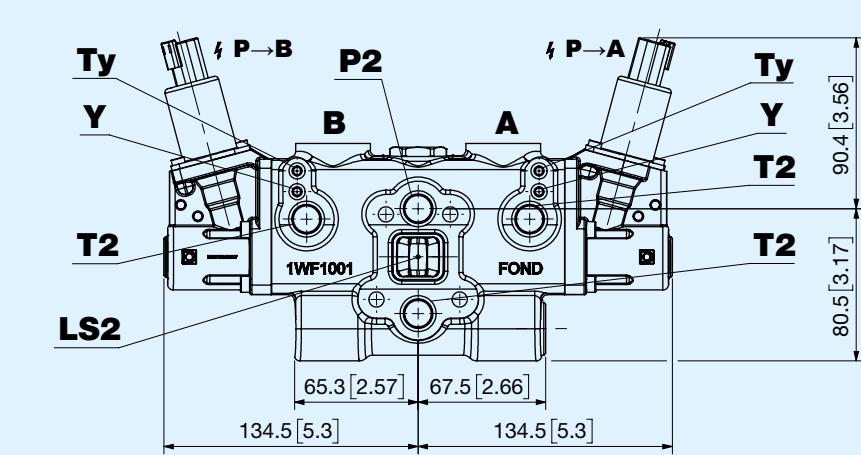
VC Anticavitation valve port A



VC Anticavitation valve port B



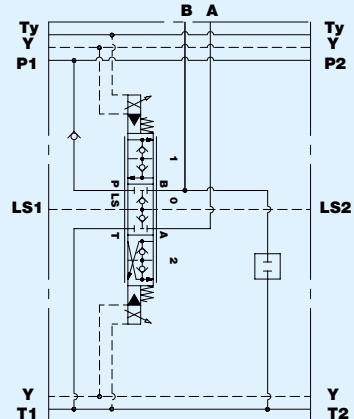
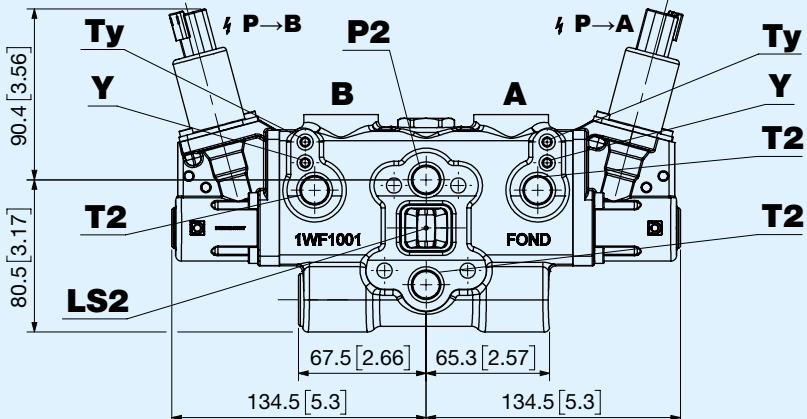
TP Set plugged for RC/VC port A



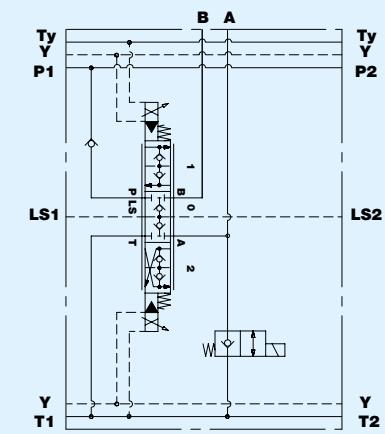
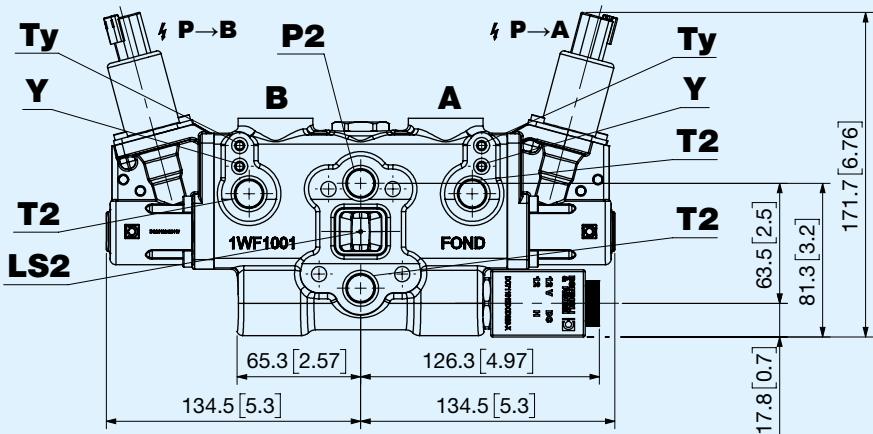
Valve type port A B

BW1477AP

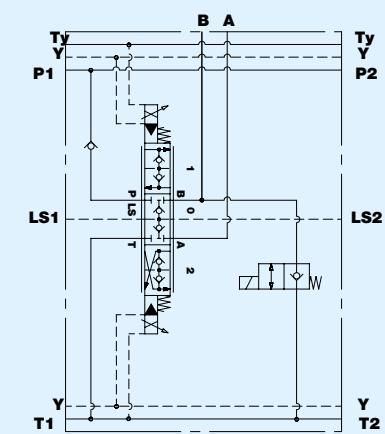
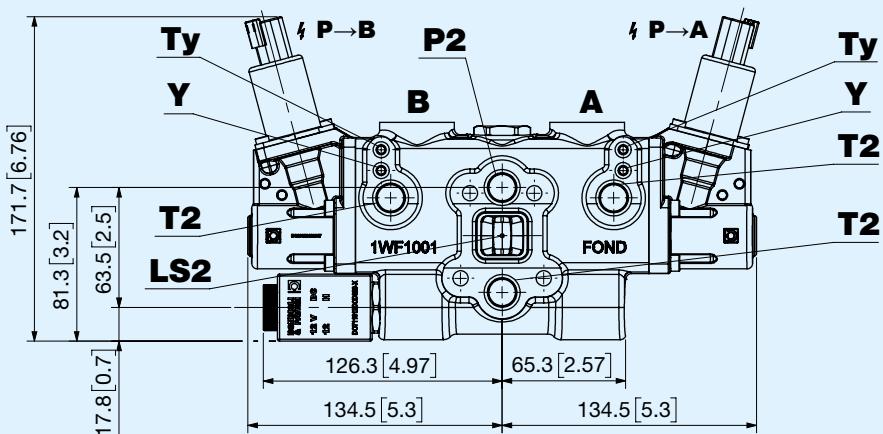
TP Set plugged for RC/VC port B



NE Solenoid operated valve 2/2 port A



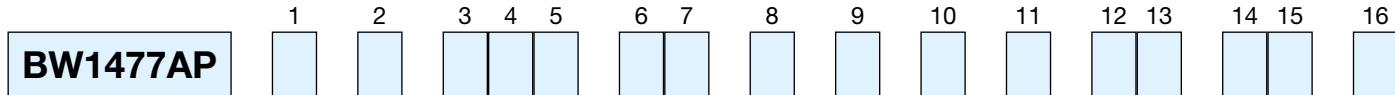
NE Solenoid operated valve 2/2 port B



Possible valve combinations port A and B

Port A	Port B	NN	TP	RC	VC	NE
NN		•	•	•	•	•
TP		•	•	•	•	•
RC		•	•	•	•	•
VC		•	•	•	•	•
NE		•	•	•	•	•

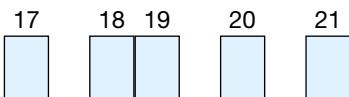
NN - None**TP** - Plugged presetting**RC** - Pressure limiter and anticavitation cartridge**VC** - Anticavitation valve**NE** - Solenoid operated valve 2/2



1	Configurations			
	A Two coils, A and B port side E One coil, A port side			
	F One coil, B port side 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			
2	Actuators			
	P Proportional O ON-OFF			
3 4 5	Spool types			
	001 Spool type 003 Spool type			
6 7	Flow rate ?P = 18 bar			
	0A 120 l/min - 31.70 US gpm 0B 90 l/min - 23.77 US gpm 0C 60 l/min - 15.85 US gpm 0D 30 l/min - 7.92 US gpm			
8	Spool options			
	N None G Spool position electromagnetic sensor			
9	Spool stroke limiting port A			
	N None A With limiting			
10	Spool stroke limiting port B			
	N None A With limiting			
11	Thread Port A and B			
	B 1/2" GAS ISO 1179 F 3/4" GAS ISO 1179	N M22x1.5 ISO 9974 J M22x1.5 ISO 6149	5 M27x2 ISO 9974 U M27x2 ISO 6149	R 7/8" - 14 SAE ISO 11926 V 1" 1/16 - 12 SAE ISO 11926
12 13	Port A valve type			
	NN None RC Pressure limiter and anticavitation cartridge	VC Anticavitation valve TP Set plugged	NE Solenoid operated valve 2/2	
14 15	RC calibration pressure port A			
	NN None 06 60 bar 07 70 bar 08 80 bar 09 90 bar 10 100 bar	11 110 bar 12 120 bar 13 130 bar 14 140 bar 15 150 bar 16 160 bar	17 170 bar 18 180 bar 19 190 bar 20 200 bar 21 210 bar 22 220 bar	23 230 bar 24 240 bar 25 250 bar 26 260 bar 27 270 bar 28 280 bar
16 17	Valve type port B			
	NN None RC Pressure limiter and anticavitation cartridge	VC Anticavitation valve TP Set plugged	NE Solenoid operated valve 2/2	

Instructions for ordering

BW1477AP



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RC calibration pressure port B

NN	None	11	110 bar	17	170 bar	23	230 bar
06	60 bar	12	120 bar	18	180 bar	24	240 bar
07	70 bar	13	130 bar	19	190 bar	25	250 bar
08	80 bar	14	140 bar	20	200 bar	26	260 bar
09	90 bar	15	150 bar	21	210 bar	27	270 bar
10	100 bar	16	160 bar	22	220 bar	28	280 bar

20

Voltage and connector

G	12V Deutsch	H	24V Deutsch
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External treatment

A	External treatment	N	None
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