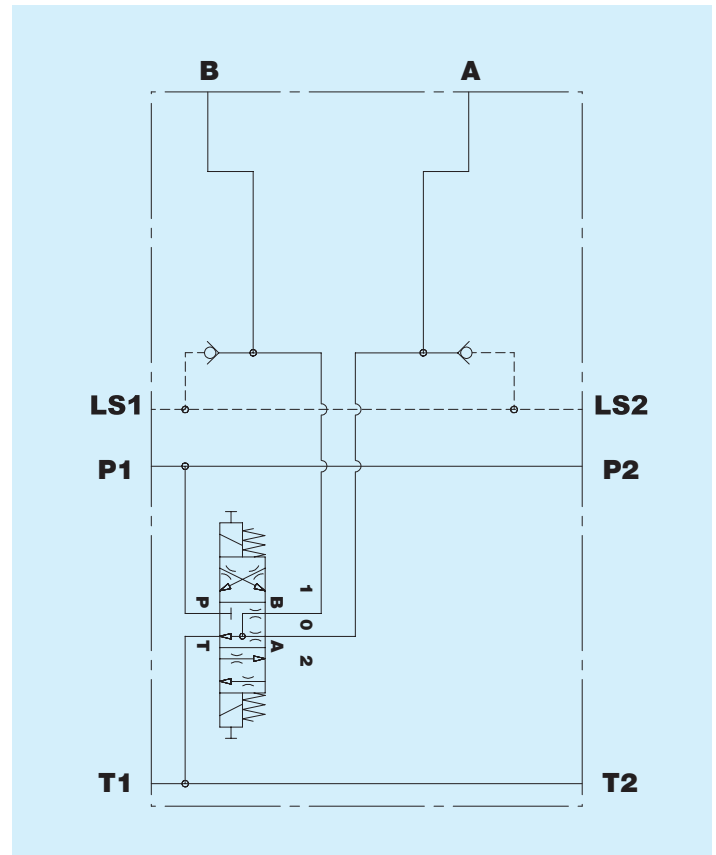


BW0511BO Element 4/3 ON - OFF with Top ports with Load sensing signal Interface IBW0511

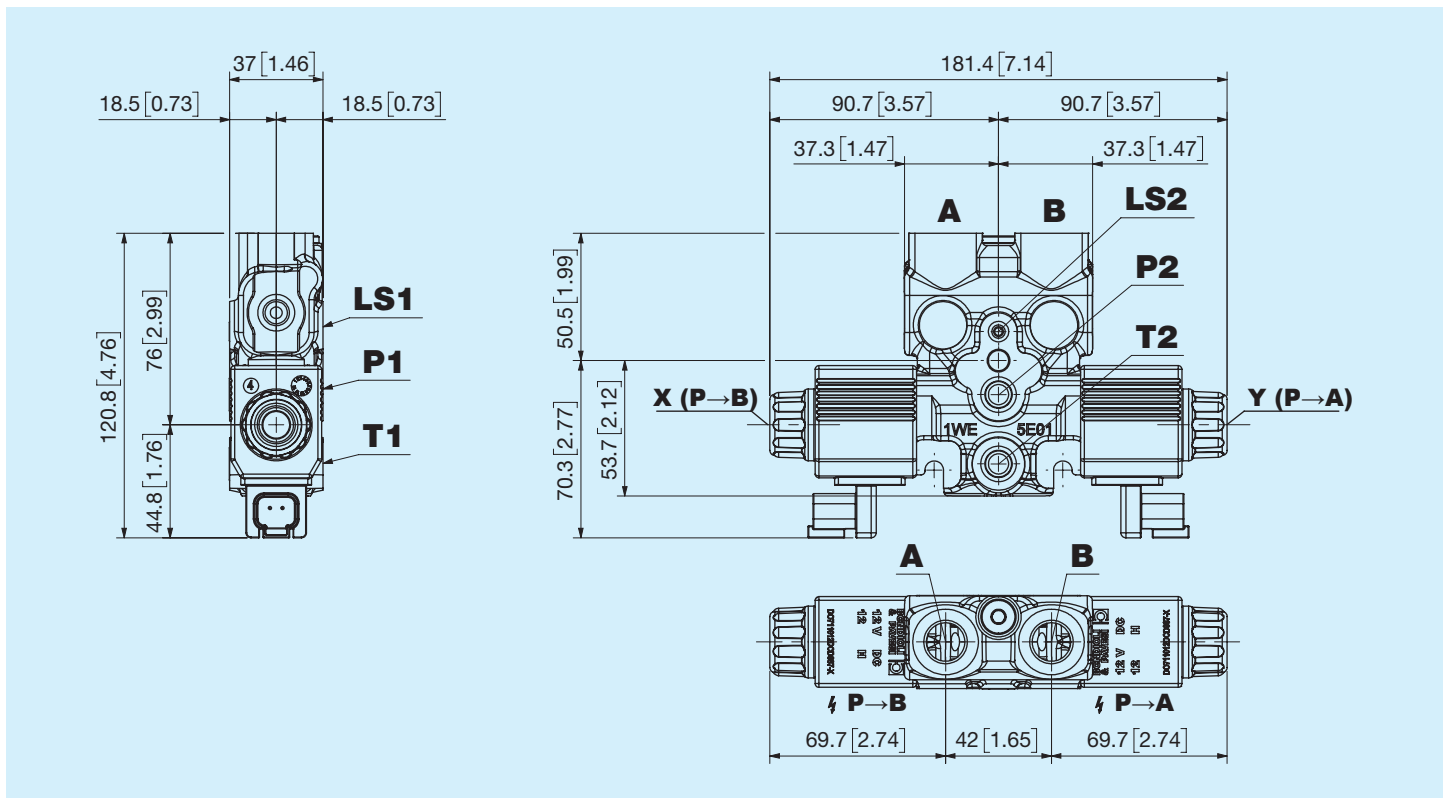


Before use, carefully read the GENERAL INSTRUCTIONS FOR USE OF DIRECTIONAL CONTROL VALVES

Nominal flow	39 l/min - $\Delta P=18$ bar 10,30 US gpm - $\Delta P=261$ psi
Nominal pressure	250 bar 3625 psi
Maximum tank pressure	50 bar 725 psi
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	1.6 kg 3.5 lb
Interface	IBW0511

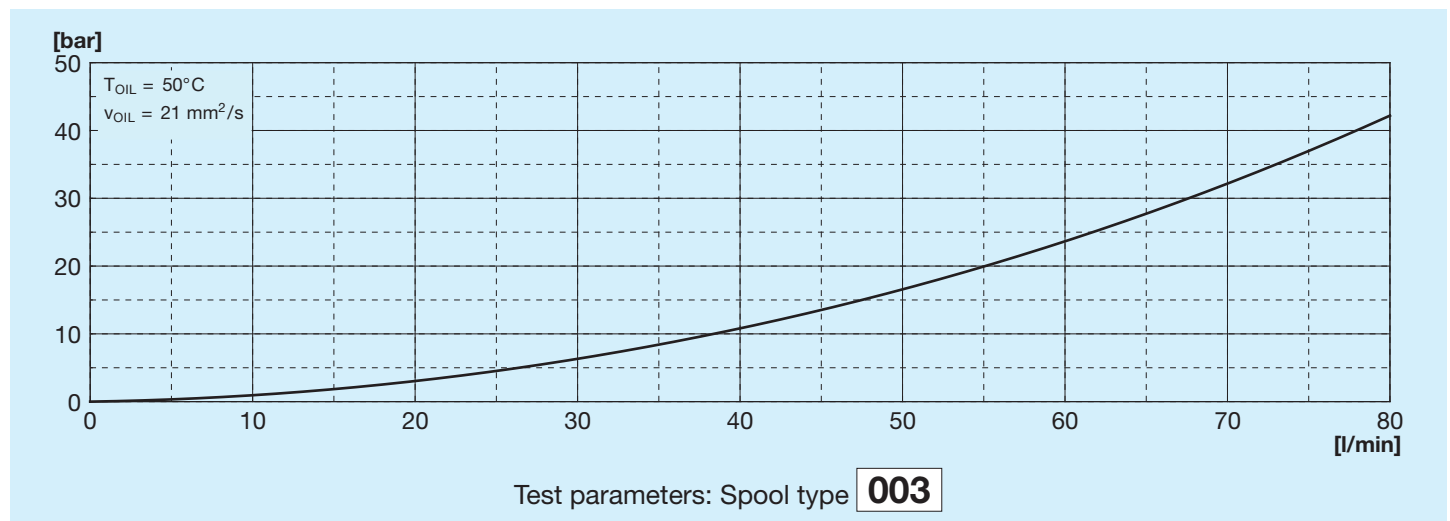


Dimensions



X - Y = Push type manual override

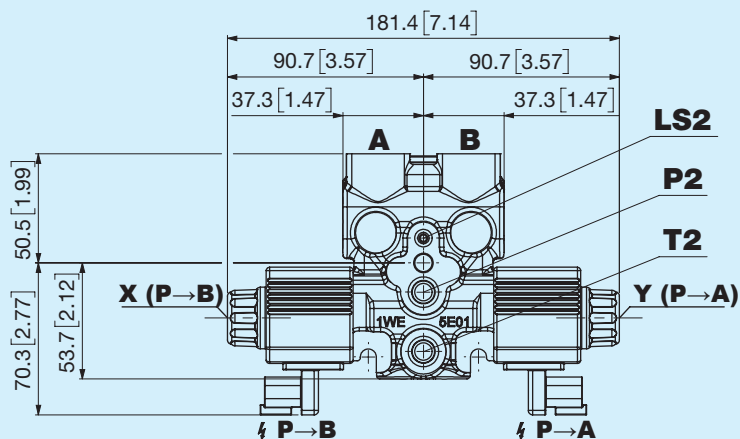
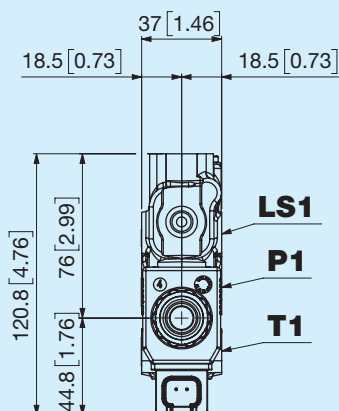
Pressure drops A/B-T



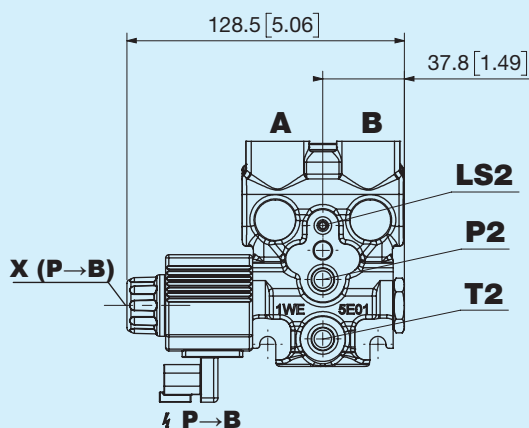
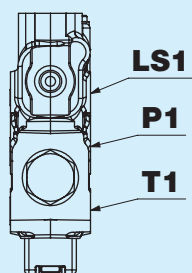
Electrical characteristics of ON-OFF actuation coils

Voltage	12	24	V (± 10%)
Resistance Cu 20°C	5,4	20,7	Ω (± 7%)
Nominal current	2,2	1,2	A
Power	26,5	27,8	W

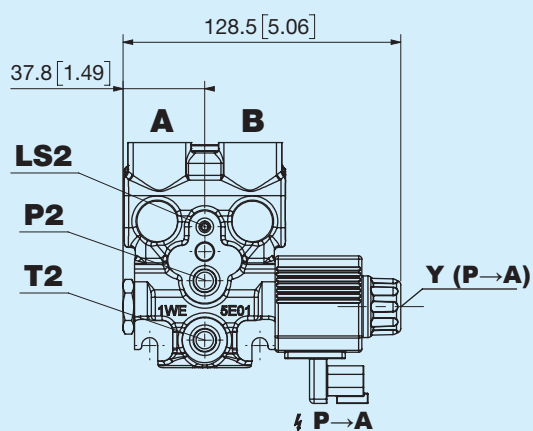
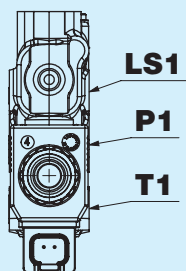
A Two coils port side A and B



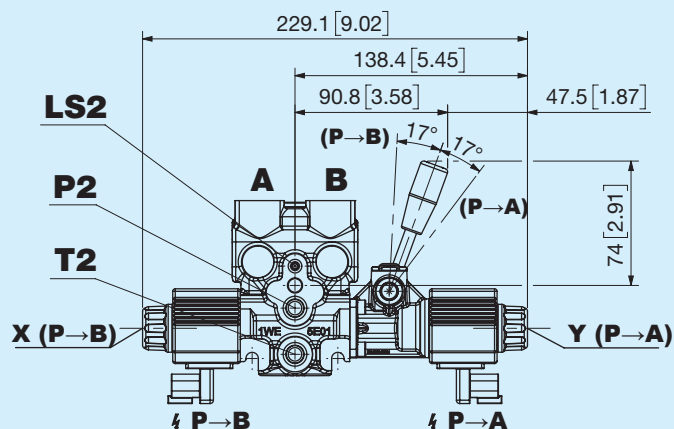
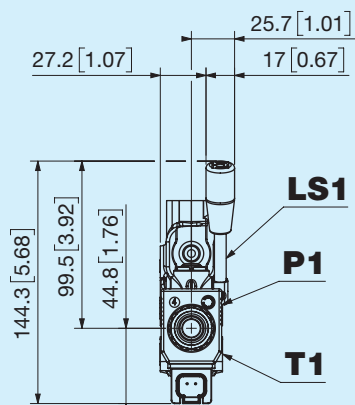
E One coil port side A



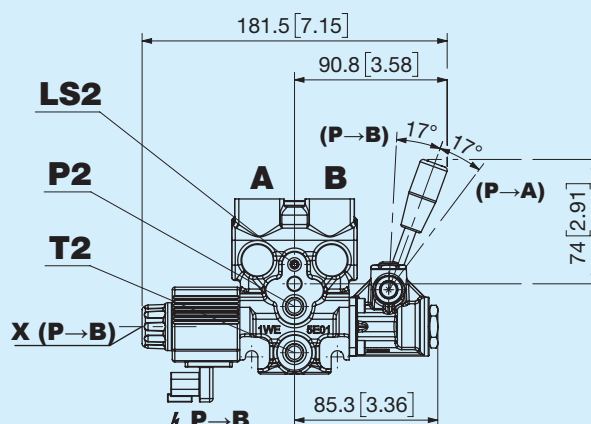
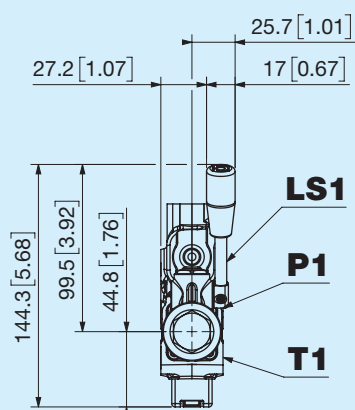
F One coil port side B



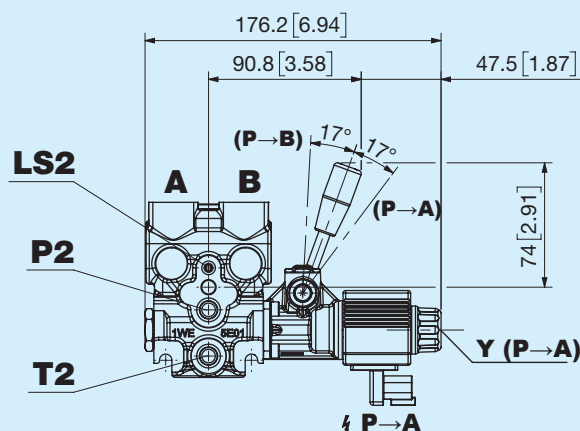
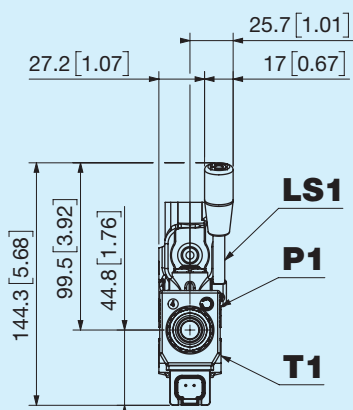
B Two coils A and B port side with lever override



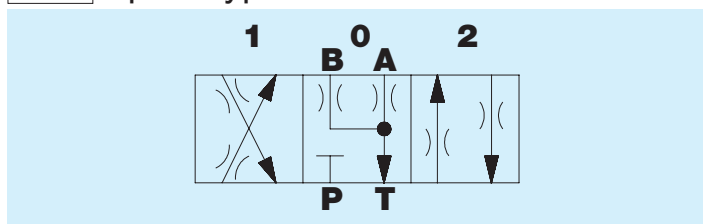
C One coil port side A with lever override



D One coil port side B with lever override



003 Spool type



Flow rate $\Delta P = 18$ bar

Code	l/min	US gpm
0A	6,5	1,71
0B	10,5	2,77
0C	16	4,23
0D	18	4,75
0E	23	6,07
0F	28,5	7,53
0G	33,5	8,85
0H	39	10,30

Portata $\Delta P = 25$ bar

Code	l/min	US gpm
0A	7,5	1,98
0B	12,5	3,30
0C	19,5	5,15
0D	21,5	5,68
0E	28,5	7,53
0F	34,5	9,11
0G	40	10,57
0H	Unavailable	Unavailable

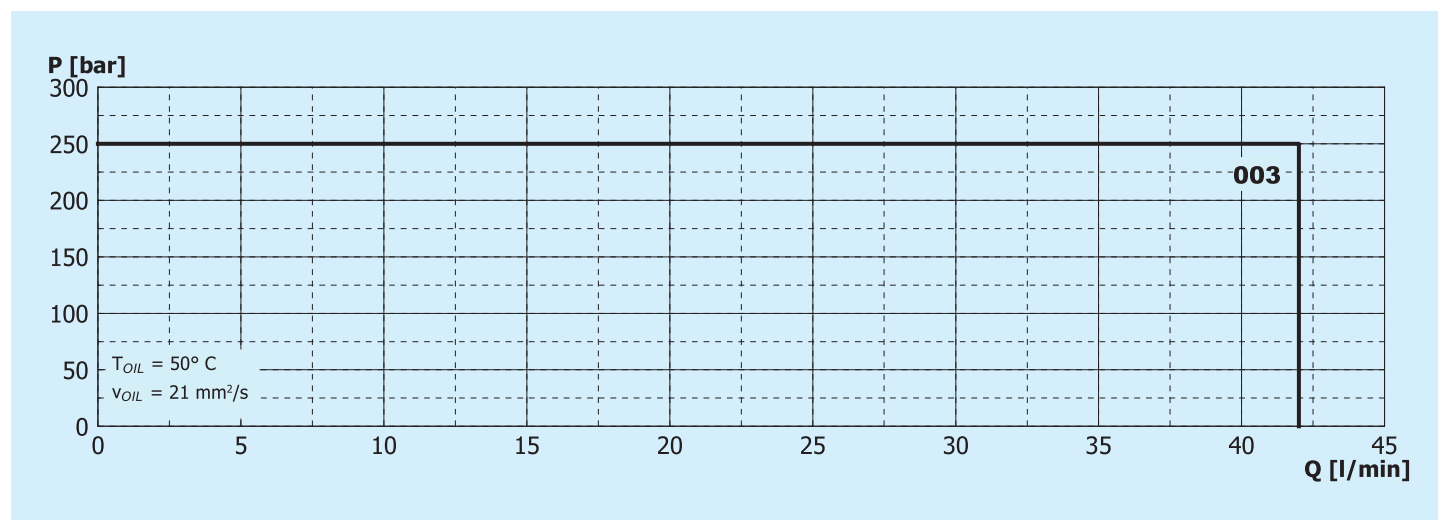
Positions

1	0	2
P→A B→T	B,A→T P—	P→B A→T

Flow rate $\Delta P = 20$ bar

Code	l/min	US gpm
0A	7	1,85
0B	11	2,90
0C	17	4,49
0D	19	5,02
0E	24	6,34
0F	30,5	8,06
0G	35,5	9,38
0H	41	10,83

Performance limits for spool type



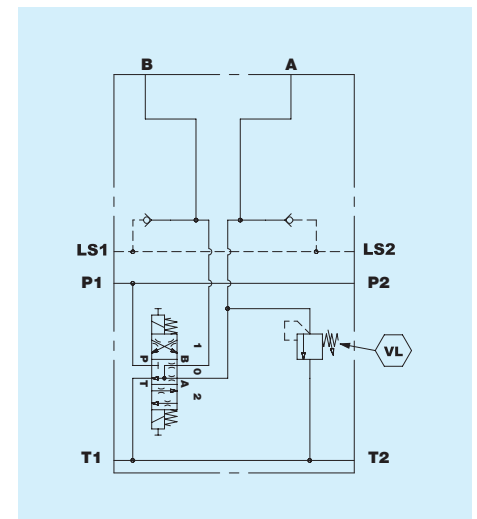
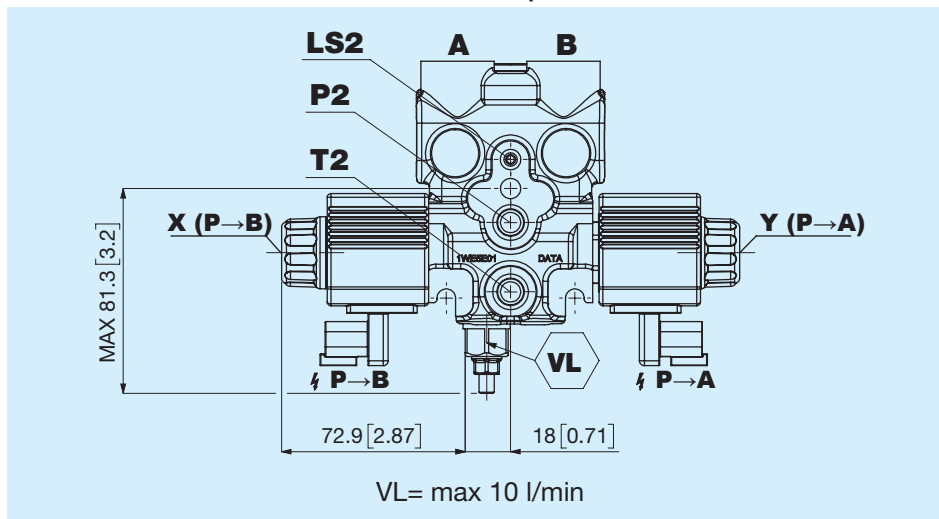
Thread port A and B

Model	Type	Torque Nm
A	3/8" GAS ISO 1179	45
C	M18x1.5 ISO 9974	45
W	M18x1.5 ISO 6149	45
E	3/4" 16 SAE ISO 11926	45

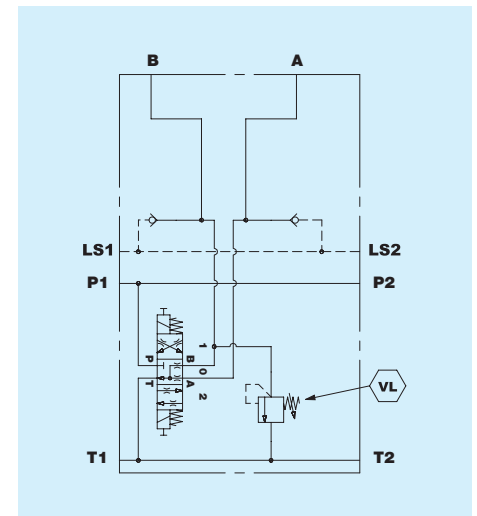
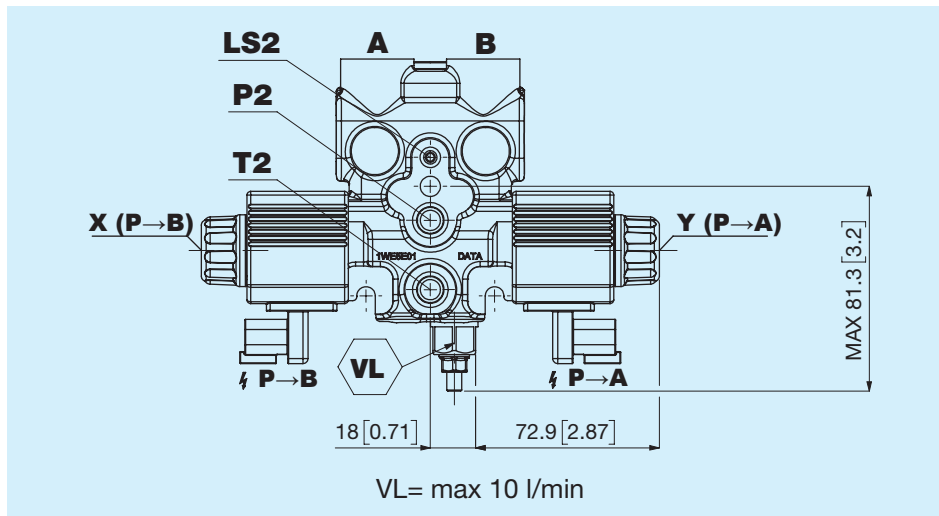
VL located under ports

BW0511BO

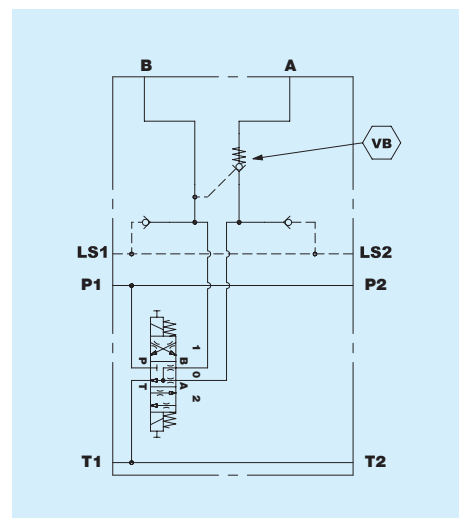
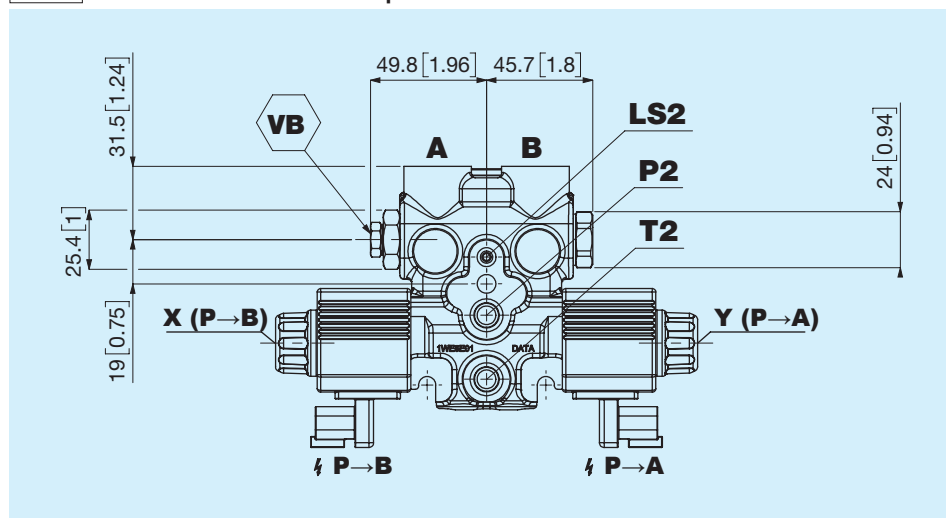
VL - Relief valve located under port A



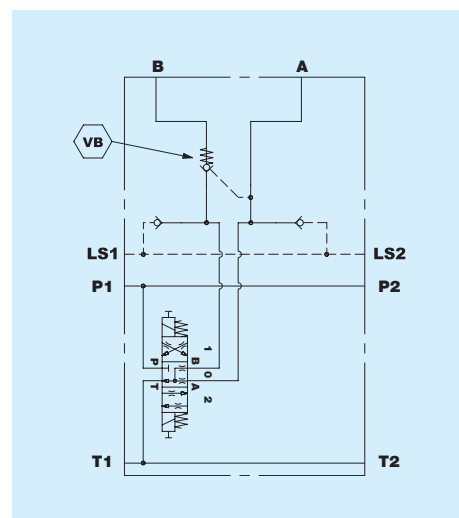
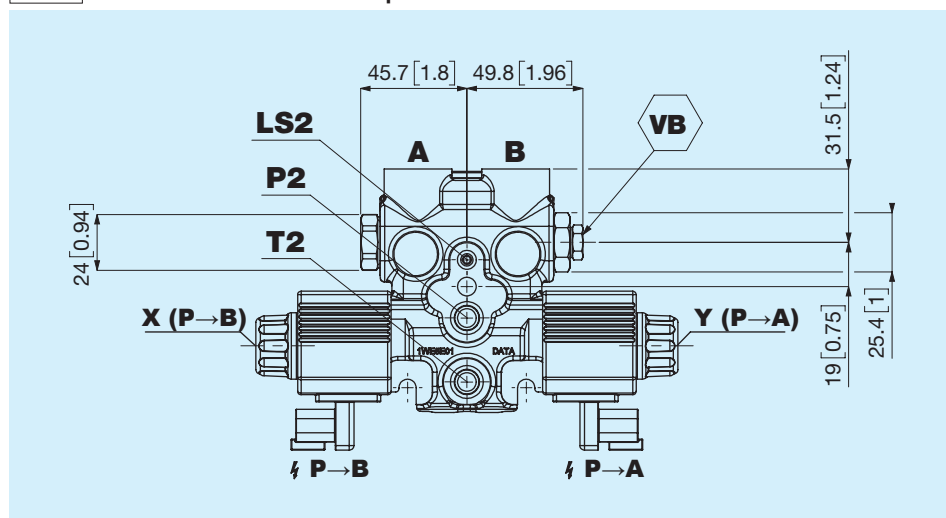
VL - Relief valve located under port B



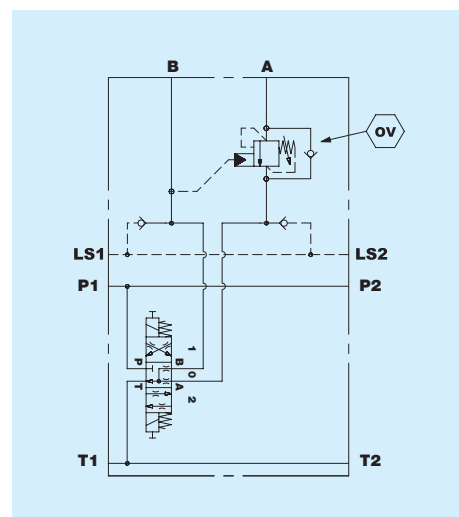
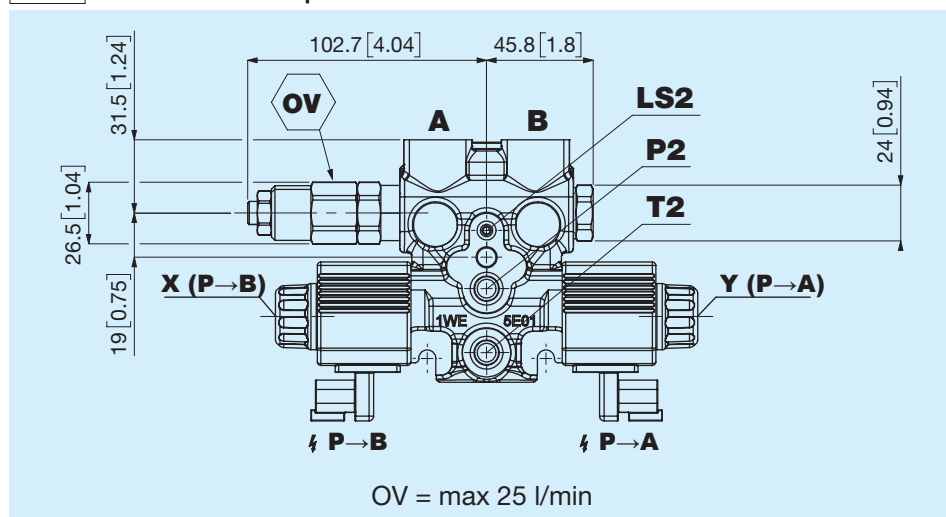
VB Pilot check valve port A



VB Pilot check valve port B



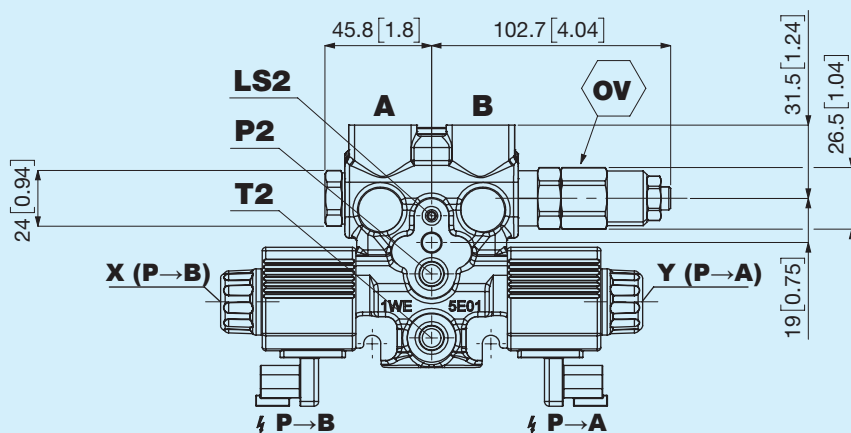
OV Over-center port A



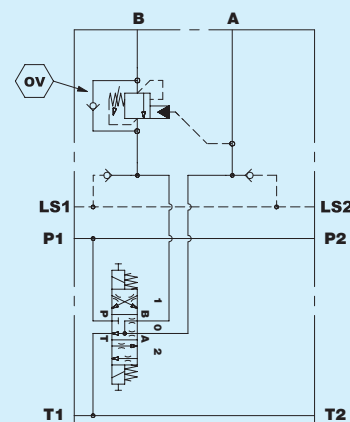
Valve type port A - B

BW0511BO

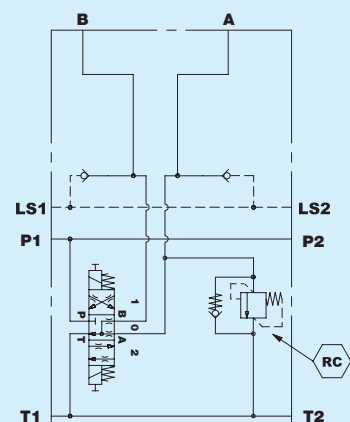
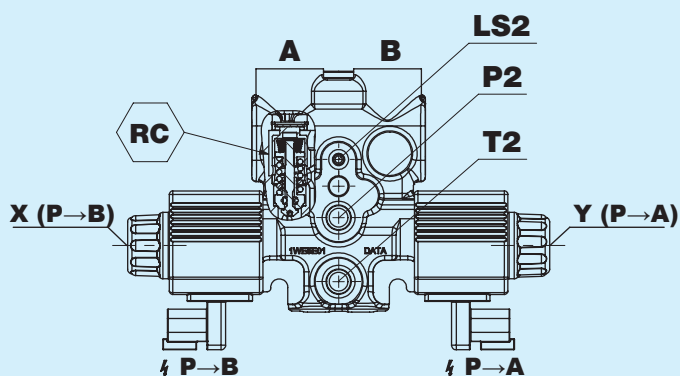
OV Over-center port B



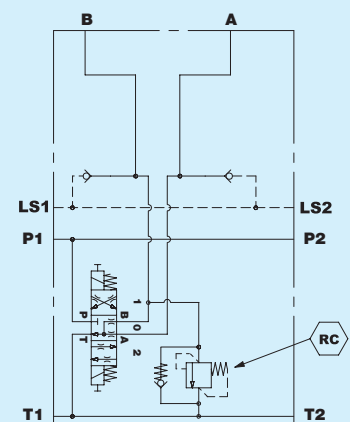
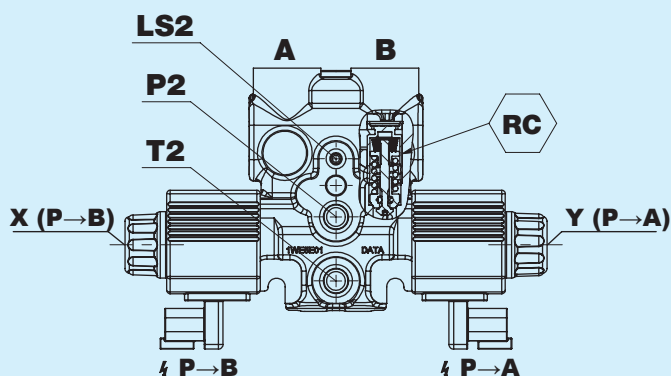
OV = max 25 l/min



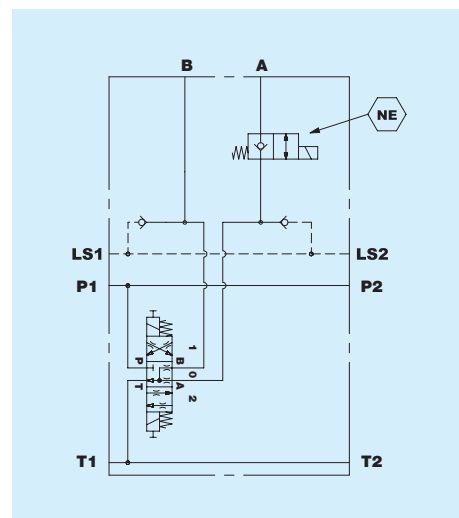
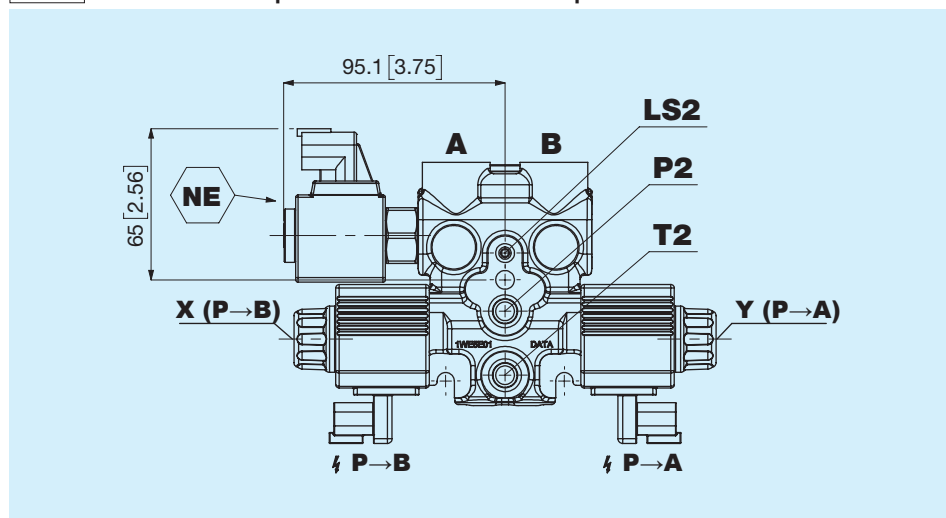
RC Internal pressure limiter and anticavitation valve on port A



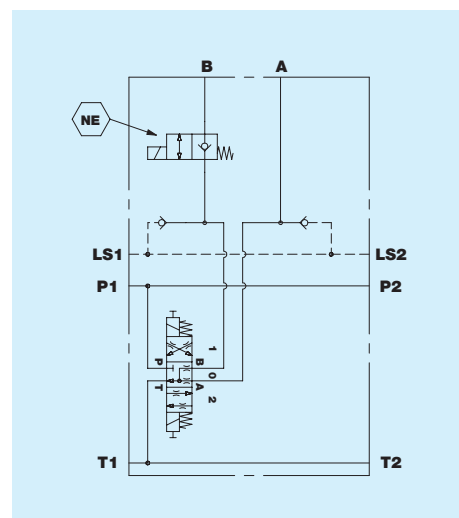
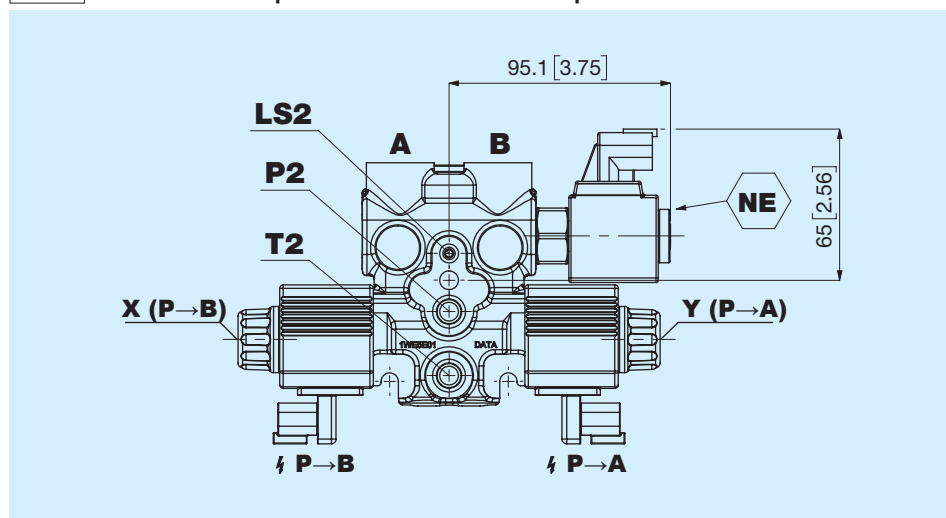
RC Internal pressure limiter and anticavitation valve on port B



NE Solenoid operated valve 2/2 port A



NE Solenoid operated valve 2/2 port B



Electrical characteristics of the solenoid valve 2/2 coil

Voltage	12	24	V ($\pm 10\%$)
Resistance Cu 20°C	7,7	19,4	$\Omega (\pm 7\%)$
Nominal current	1,55	1,24	A
Power	18,6	30	W

Possible valve combinations port A and B

Port A	Port B					
	NN	VL	VB	NE	OV	RC
NN	•	•	•	•	•	•
VL	•	•	•	•	•	
VB	•	•	•			
NE	•	•		•		•
OV	•	•			•	
RC	•			•		•

- NN** None
- VL** Pressure limiting valve
- VB** Pilot operated check valve
- NE** Solenoid operated valve 2/2
- OV** Over-center
- RC** Internal pressure limiter and anticavitation valve

BW0511BO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
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1	Configurations																
	A Two coils port side A and B				F One coil port side B				C One coil port side A with lever override								
	E One coil port side A				B Two coils A and B port side with lever override				D One coil port side B with lever override								
2	3	4	Spool types														
			003 Spool type														
5	6	Flow rate $\Delta P = 18$ bar															
		0A 6,5 l/min - 1,71 US gpm				0C 16 l/min - 4,23 US gpm				0E 23 l/min - 6,07 US gpm				0G 33,5 l/min - 8,85 US gpm			
		0B 10,5 l/min - 2,77 US gpm				0D 18 l/min - 4,75 US gpm				0F 28,5 l/min - 7,53 US gpm				0H 39 l/min - 10,30 US gpm			
7	Thread port A and B																
	A 3/8" GAS ISO 1179				C M18x1.5 ISO 9974				W M18x1.5 ISO 6149				E 3/4" 16 SAE ISO 11926				
8	9	VL Relief valve located under port A															
		NN None				09 VL 90 bar				15 VL 150 bar				21 VL 210 bar			
		04 VL 40 bar				10 VL 100 bar				16 VL 160 bar				22 VL 220 bar			
		05 VL 50 bar				11 VL 110 bar				17 VL 170 bar				23 VL 230 bar			
		06 VL 60 bar				12 VL 120 bar				18 VL 180 bar							
		07 VL 70 bar				13 VL 130 bar				19 VL 190 bar							
		08 VL 80 bar				14 VL 140 bar				20 VL 200 bar							
10	11	VL Relief valve located under port B															
		NN None				09 VL 90 bar				15 VL 150 bar				21 VL 210 bar			
		04 VL 40 bar				10 VL 100 bar				16 VL 160 bar				22 VL 220 bar			
		05 VL 50 bar				11 VL 110 bar				17 VL 170 bar				23 VL 230 bar			
		06 VL 60 bar				12 VL 120 bar				18 VL 180 bar							
		07 VL 70 bar				13 VL 130 bar				19 VL 190 bar							
		08 VL 80 bar				14 VL 140 bar				20 VL 200 bar							
12	13	Valve type port A															
		NN None				NE Solenoid operated valve 2/2				RC Internal pressure limiter and anticavitation valve							
		VB Pilot operated check valve				OV Over-center											
14	15	Setting OV/RC valve port A															
		NN None				08 80 bar				14 140 bar				20 200 bar			
		03 30 bar				09 90 bar				15 150 bar				21 210 bar			
		04 40 bar				10 100 bar				16 160 bar				22 220 bar			
		05 50 bar				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			
16	17	Valve type port B															
		NN None				NE Solenoid operated valve 2/2				RC Internal pressure limiter and anticavitation valve							
		VB Pilot operated check valve				OV Over-center											

18	19	20	21

18	19

Setting OV/RC valve port B

NN None	08 80 bar	14 140 bar	20 200 bar
03 30 bar	09 90 bar	15 150 bar	21 210 bar
04 40 bar	10 100 bar	16 160 bar	22 220 bar
05 50 bar	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

20

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Voltage and connector

A 12V DIN 43650	B 24V DIN 43650	G 12V DEUTSCH DT04-2P	H 24V DEUTSCH DT04-2P
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21

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External treatment

N None	Z Zinc plating
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