

WE10-3X SERIES WET-TYPE SOLENOID OPERATED DIRECTIONAL VALVES

【 Product Features 】

- 1.Direct-acting solenoid operational direction valve as standard type.
- 2.Installation area by DIN24 340 type A and CETOP-RP 121H
- 3.DC or AC wet-type solenoid that can be arbitrary rotation and with detachable coil.
- 4.Coil can be replaced without oil.
- 5.Equipped with manual emergency operation push rod.

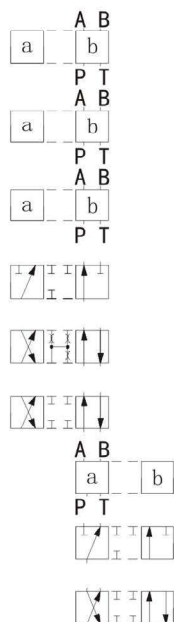


【 Model Code 】

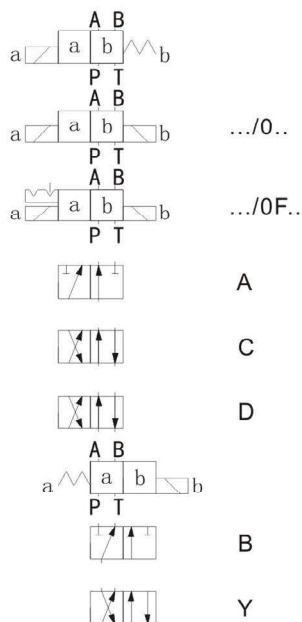
4	WE	10	E	3X		C	D24		L			L
3channel=3 4channel=4												
Solenoid operated directional valves												
Drift diameter : 10=10 diameter												
Code Symbol:												
30~39 series =3X (30~39: installation and linkage Size remain the same)												
O=no spring-return OF=no spring-return, with positioning No marks=Spring-return												
Solenoid thread linkage: =C												
D12 D24=DC 12V 24V A110 A220=AC 110V/50Hz 220V/50Hz R110 R220=RAC 110V 220V												
No marks = manual override NP = With self-locking manual emergency put rod												
H: DIN43650 plug L: DIN43650 plug (with lamp) F: DEUTSCH, protection class IP69K/Deutsch A: AMP, protection class IP66/AMP Junior-Timer D: double lines B: terminal box												
No marks=no cartridge choke B12=orifice $\Phi 1.0\text{mm}$ $\phi 0.039''$												
B08=orifice $\Phi 0.8\text{mm}$ $\phi 0.031''$ B12=orifice $\Phi 1.2\text{mm}$ $\phi 0.047''$												
Nitrile butadiene rubber seal=no marks V=viton seal												
The coating of the valve body												
H: black												
L: blue												

【 spool symbol 】

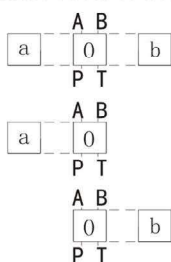
TRANSITION SPOOL



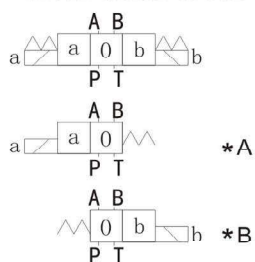
SLIDE VALVE SPOOL



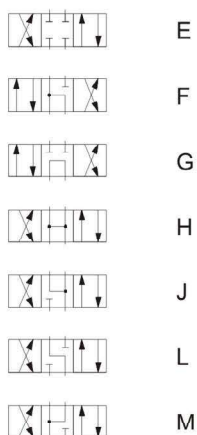
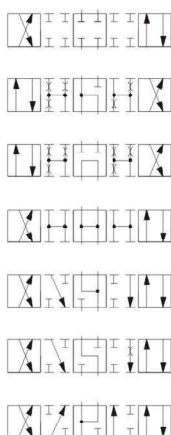
TRANSITION SPOOL



SLIDE VALVE SPOOL



☆ spool symbol with core a or b then code should be XA or XB
for example: spool E with core position a, then code should be EA



WE10-3X SERIES WET-TYPE SOLENOID OPERATED DIRECTIONAL VALVES

【 Technical Data 】

General data

Mounting position	anywhere
Operating temperature	-30~+50℃ (nitrile rubber seal) (-22 + 122°F)
	-20~+50℃ (fluorous rubber seal) (-4 + 122°F)
weight	Single solenoid valve
	Double solenoid valve
	4.3 kg (DC) ; 3.5 kg (AC) (9.48 lbs DC) ; (7.71 lbs AC)
	6.0 kg (DC) ; 4.9 kg (AC) (13.22 lbs DC) ; (10.8 lbs AC)

Hydraulic Data

Maximum operating voltage	fluid port	P、A、B	31.5 MPa (4568 PSI)
Hydraulic fluid port	T		21 (MPa DC) : 16 (MPa AC) (3045 PSI DC) : (2320 PSI AC)
			When working pressure exceeds the allowable pressure, valves with the sign bit A,B must use T as oil drain port
Maximum flow rate			120 l/min (32 Gallon/min)
Flux areas (when in the median)	Type Q		11 (A/B→T) ; 10.3 (P→A/B) mm ² (0.0017 inch ²)
	Type W		2.5(A/B→T) mm ² (0.0038 inch ²)
	Type Q		2.5(A/B→T) mm ² (0.0038 inch ²)
Hydraulic oil	Mineral oil (HL,HLP) by DIN51 524		
1、suitable for nitrile rubber and fluoro rubber seal	Rapid biological solution oil by VDMA24 568		
Fluoro seal only	HETG 1) ; HEPG 2) ;HEES 3)		
The oil temperature range	-30~+80℃ (nitrile rubber seal) (-22 + -176°F)		
	-20~+80℃ (rubber seal) (-4 + -176°F)		
Viscosity range	2.8~500 mm ² /s (0.004 inch ² /s - 0.775 inch ² /s)		
Oil cleanliness	SQ. IN.	The highest oil pollution level by NAS11639 Class 9 recommend minimum filter filtration precision β10 ≥ 75	

Electric data

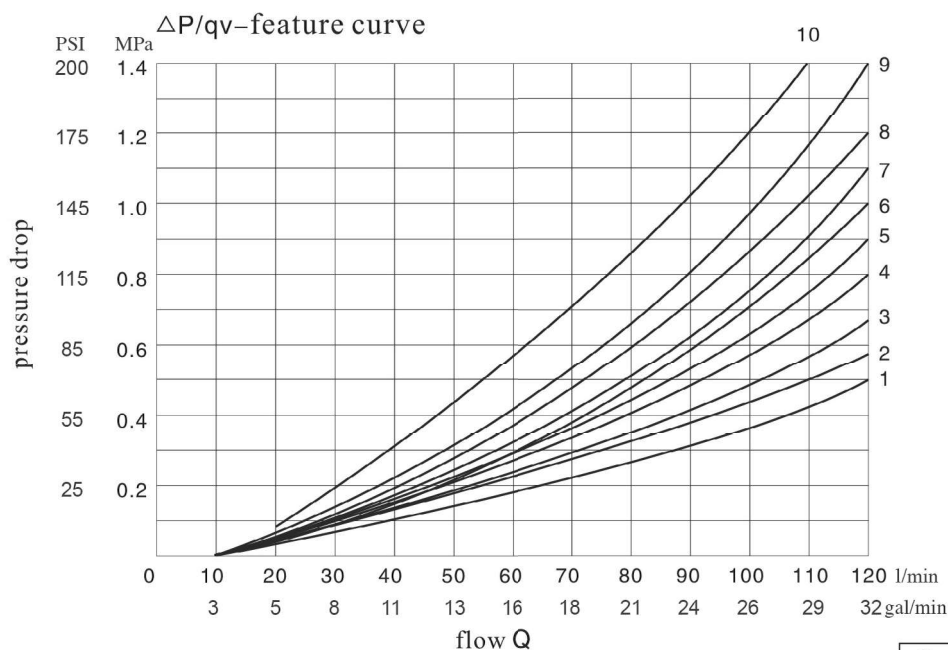
Voltage category	DC	AC(50HZ)
Supply voltage	12, 24, 48, 96, 110, 220V	110, 220 V
Allowable voltage tolerance	+10~-15 %	
Power consumption	36 W	-
Holding current	-	0.42(220V) A
Starting current	-	1.40(220V) A
Working system	100 ED%	
Reversing time	145~160 ms	15~25 ms
Resetting time	120~130 ms	20~30 ms
Switching time	≤15000 times/h	≤7200 times/h
Protection class by DIN 40050	IP65(AMP: IP66)	Deutsch:IP69k
Maximum coil temperature	135℃ (class B) (275°F)	180℃ (class H) (356°F)

NOTICE: 1) The reversing time of RAC is close to DC , but the resetting time is longer and random.

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【 feature curve 】

(testing result on basis of using HLP46, $t=40^{\circ}\text{C}$)

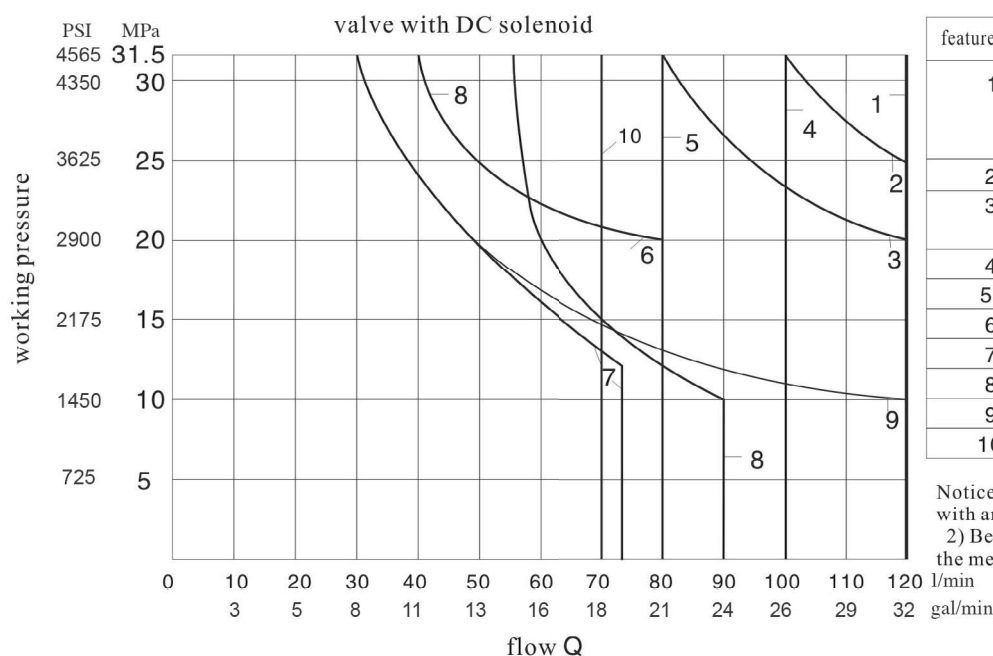


symbol	flow direction			
	P→A	P→B	A→T	B→T
A,B	3	3	-	-
C	3	3	4	5
D,Y	5	5	6	6
E	1	1	4	4
F	2	3	7	4
G	3	3	6	7
H	1	1	6	7
J	1	1	3	3
L	2	2	3	5
M	1	1	4	5
P	4	2	5	7
Q	1	2	1	3
R	3	6	4	-
T	3	3	6	7
U,V	2	2	3	3
W	2	3	4	5
on-position	P→A	P→B	A→T	B→T
R	-	9	-	-
on-position	P→A	P→B	B→T	A→T
F	4	-	-	9
P	-	5	8	-
G,T			-	9
H			-	3

【 power limit 】

(testing result on basis of using HLP46, $t=40^{\circ}\text{C}$)

- 1.The working limit can be used for both the two flow direction
(For example: Flow return from B to T, at the same time, flow from P to A)
- 2.Power limit tested when solenoid is at working temperature, under voltage 10%, and port T have no back pressure.
- 3.When unidirectional flow (if flow from P to A, port B closed), due to the fluid power in the valve, the allowed reverse power limit will drop obviously.



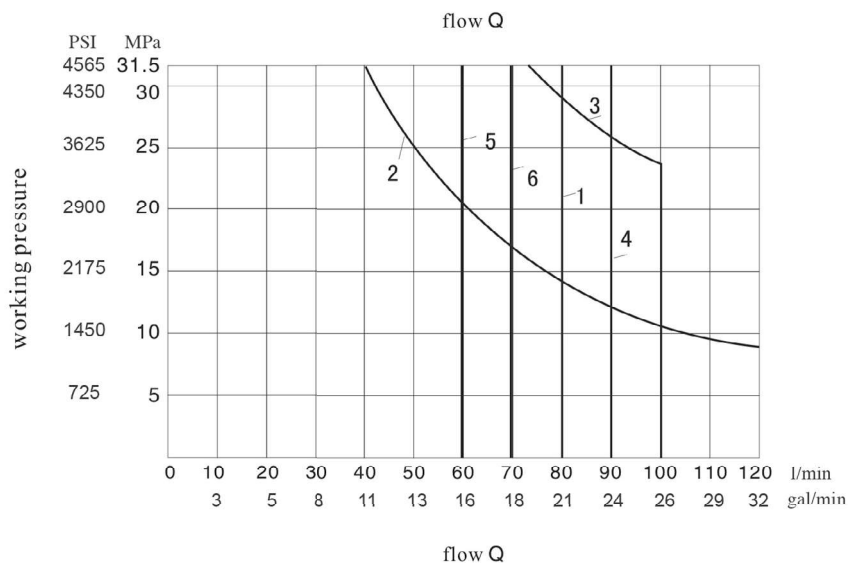
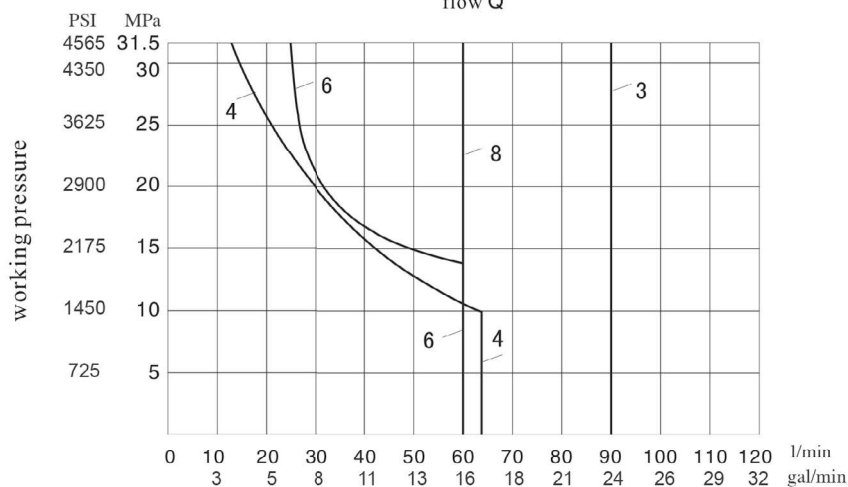
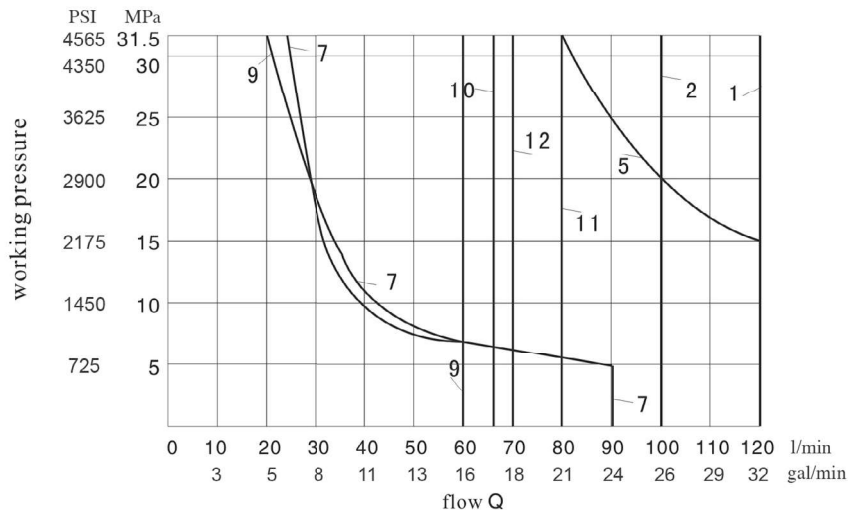
feature curve	symbol
1	C, C/O, C/OF D, D/O, D/OF Y,M
2	E
3	A/O, A/OF L, U, J, Q, W
4	H
51)	R, L2), U2)
6	G
7	T
8	F, P
9	A, B
10	V

Notice: 1) the flow of oil return (have no relation with area ratio)
2) Be only applied to the condition that spool is in the median position

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【power limit】

(testing result on basis of using HLP46, $t=40^{\circ}\text{C}$)



feature curve	spool symbol
1	C, C/O, C/OF D, D/O, D/OF Y
2	E, L, U, Q, W
3	M
4	A, B
5	A/O, A/OF, J
6	G
7	F, P
8	V
9	T
10	H
11	R
121)	L, U

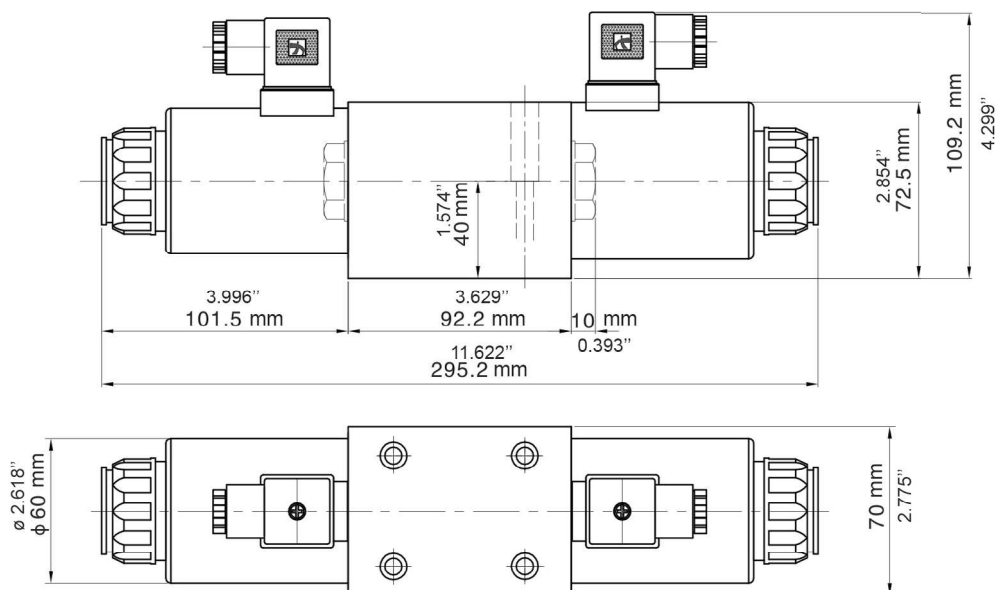
Be only applied to the condition that spool is in the median position

feature curve	spool symbol
1	C, C/O, C/OF D, D/O, D/OF Y
2	A/O, A/OF
3	E
4	M
5	V
6	H

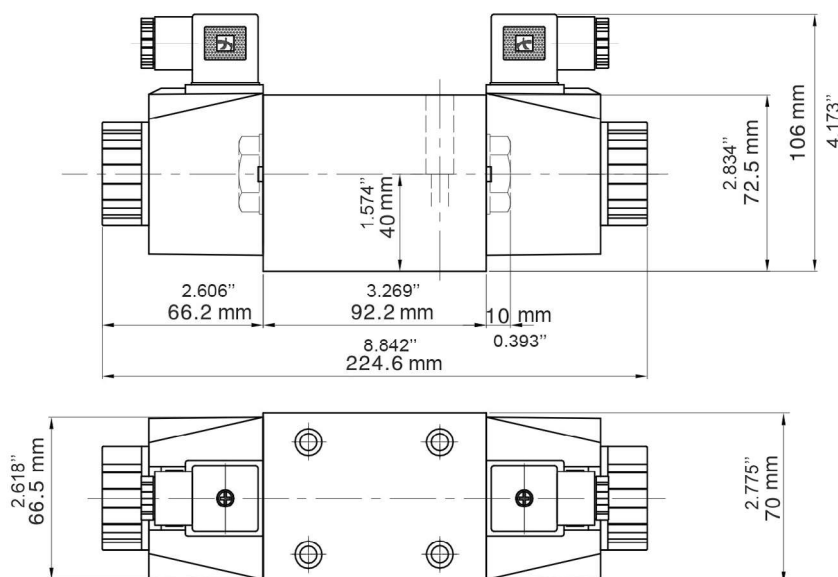
110V, 60Hz
220V, 60Hz

【 drawing of installation dimension 】

4WE10-DC-H



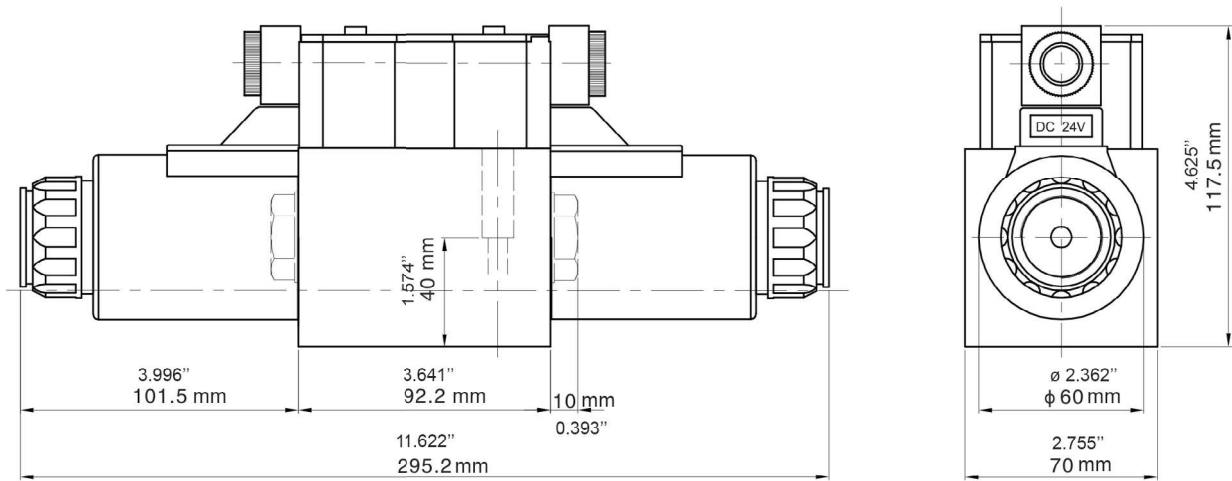
4WE10-AC-H



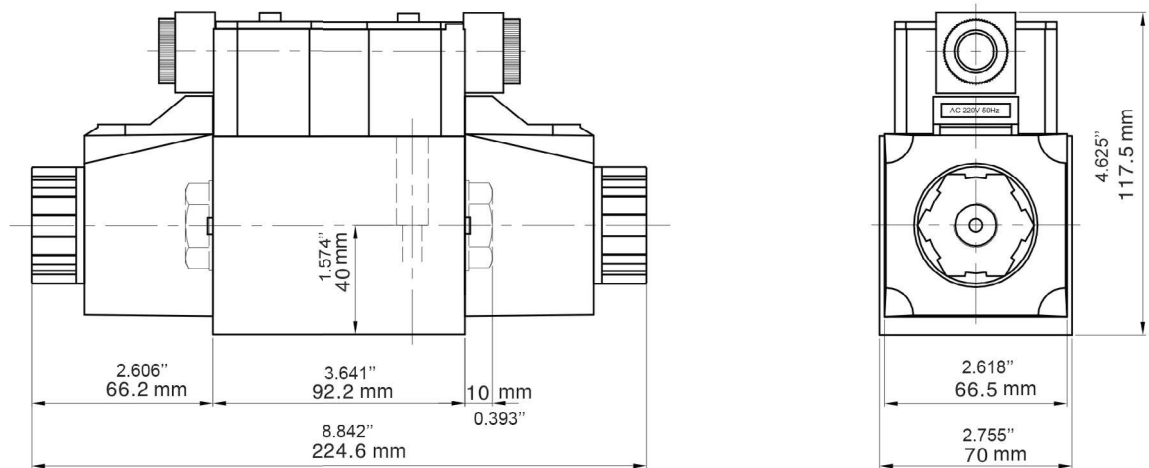
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【 drawing of installation dimension 】

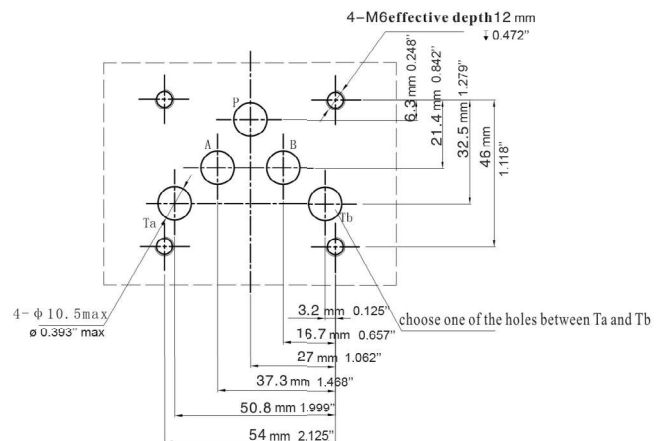
4WE10-DC-B



4WE10-AC-B

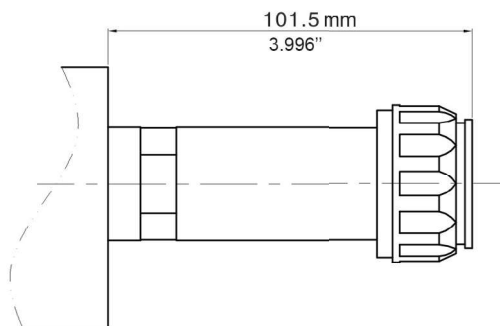


0.0003"/3.93"
0.01/100mm
(32)
0.8
the surface of mating parts request precision process



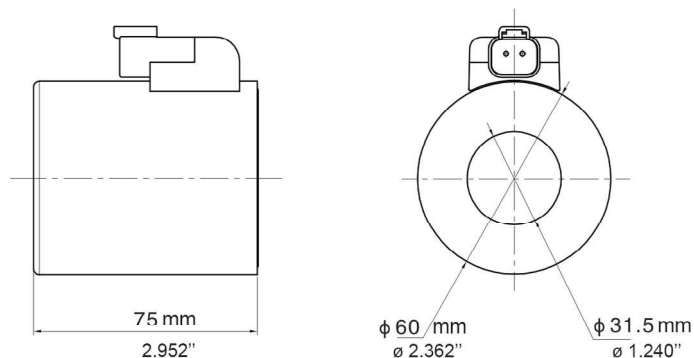
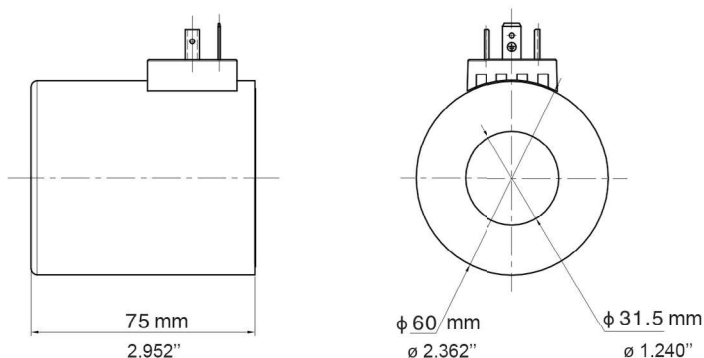
【option of electronic connector】

Without coil, fastening the tube and locknut on the homologous valve body, according to the different IP grade, then choose the coil with homologous structure.



Coil with connector meets
DIN43650EN175301-803 ISO4400

Coil with connector AMP, the IP grade of coil house is IP67



coil with connector
DEUTSCH DT04-2P, the IP grade of coil house is IP-69K

apply to pin type coil with connection type B

