

INTERNATIONAL VALVES - 4WE6

Solenoid Operated

## Cetop 3



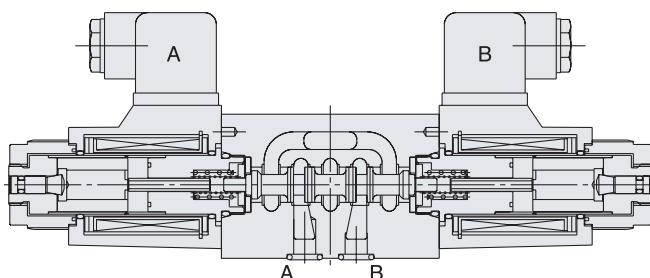
### Characteristics :

- Highest performance in Cetop 3
- Optimized spool design to reduce flow force.
- Proven quality through 10 million endurance test.
- Coil outside cover with BMC fire proof material.
- Surge suppressor inside DC wiring box type.
- Connections to DIN, ISO and CETOP.

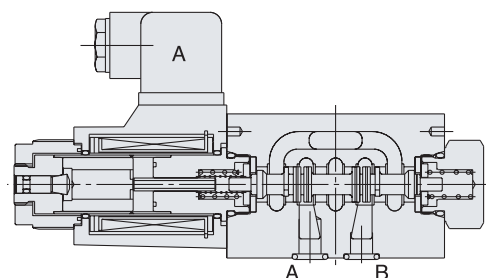
### Specification :

Maximum flow	80 l/min {21 GPM}	
Maximum operating pressure	350 bar {5075 PSI}	
Maximum permissible back pressure	160 bar {2285 PSI}	
Ambient temperature range	-15°C~50°C	
Hydraulic fluid temperature	-15°C~70°C	
Viscosity range	15~400mm <sup>2</sup> /s	
Hydraulic oil	ISO VG 32,46,68	
Fluid cleanliness	NAS class 9 MAX.	
Degree of protection to DIN40050 and IEP	IP65	
Maximum change over frequency	240 times/min (AC,DC)	
	120 times/min (RF)	
Mounting pattern	ISO 4401-AB-03-4-A	
Weight	Single solenoid	1.7Kg (DC);1.6Kg(AC)
	Double solenoid	2.1Kg (DC);2.0Kg(AC)
Valve fixing screws	Matrix	M5x45L x4pcs.
	Inch	10#~24UNCx1-3/4"L x4pcs
Tightening torque	5~7Nm	

### Cross section diagram :



4WE6E75/G..NZ4












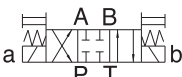
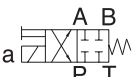
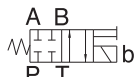






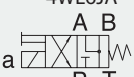




















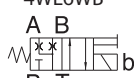
4WE6D75/G..NZ4

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Spool types :

Cetop 3

















Position type at neutral	Double solenoid valves, spring centered -C-	Single solenoid valves, solenoid at port A end -B-	Single solenoid valves, solenoid at port B end -BL-
H 	4WE6H A B  a P T b	4WE6HA A B  a P T	4WE6HB A B  P T b
F 	4WE6F A B  a P T b	4WE6FA A B  a P T	4WE6FB A B  P T b
E 	4WE6E A B  a P T b	4WE6EA A B  a P T	4WE6EB A B  P T b
	/		
L 	4WE6L A B  a P T b	4WE6LA A B  a P T	4WE6LB A B  P T b
J 	4WE6J A B  a P T b	4WE6JA A B  a P T	4WE6JB A B  P T b
M 	4WE6M A B  a P T b	4WE6MA A B  a P T	4WE6MB A B  P T b
G 	4WE6G A B  a P T b	4WE6GA A B  a P T	4WE6GB A B  P T b
P 	4WE6P A B  a P T b	4WE6PA A B  a P T	4WE6PB A B  P T b
U 	4WE6U A B  a P T b	4WE6UA A B  a P T	4WE6UB A B  P T b
W 	4WE6W A B  a P T b	4WE6WA A B  a P T	4WE6WB A B  P T b

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transition	Double solenoid valves, two-position (detented) N	Single solenoid valves, solenoid at port A end A	Single solenoid valves, solenoid at port B end AL
C 		4WE6C A B a  P T	4WE6CB A B  b P T
D 	4WE6....-OF A B a  b P T	4WE6D A B a  P T	4WE6DB A B  b P T
DJ 		4WE6DJ A B a  P T	4WE6DJB A B  b P T
DM 		4WE6DM A B a  P T	4WE6DMB A B  b P T
A 		4WE6A A B a  P T	4WE6AB A B  b P T

Features of electro-magnetic coil :

Solenoid Classification	Power Source	Voltage (V)	Frequency (Hz)	Inrush Current (A)	Holding Current (A)	Holding Power (W)	Permissible Voltage (%)	Insulation Grade	Coil Insulation Class	Insulation Resistance (MΩ)
AC	A1	110	50	111	0.47	23	+10,-15	B	(180°C)	>50
		120	60	1.5	0.42	23	+10,-15			
	A2	220	50	0.8	0.24	23	+10,-15			
		240	60	0.75	0.21	24	+10,-15			
DC	D1	12	-	-	2.4	29	+10,-10	B	H (180°C)	
	D2	24	-	-	1.16	28	+10,-10			
RF	R1	AC110V,50/60Hz ↓ DC99V		-	0.33	30	+10,-10	B	H (180°C)	
		AC220V,50/60Hz ↓ DC198V		-	0.16	30	+10,-10			

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Performance curves :

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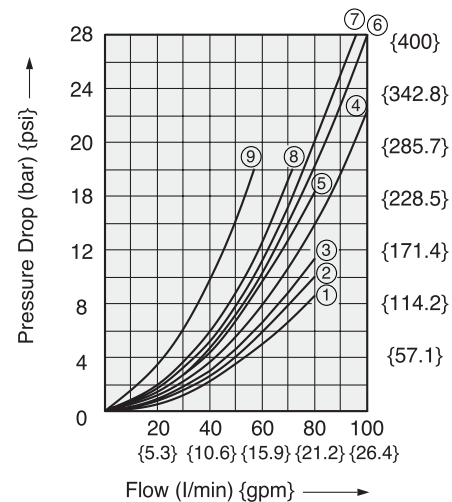
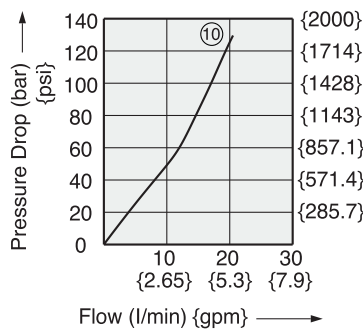
Perssure Drop Curve Reference Chart

Viscosity of Hydraulic Fluid: 20 mm<sup>2</sup>/s

Spool Type	C, B, BL								
	Control Position				Neutral Position				
	P → A	B → T	P → B	A → T	P → T	A → T	B → T	P → A	P → B
H	5	3	4	3	4	1	1	4	4
F	4	3	4	3	8	2	-	4	-
E	6	4	6	4	-	-	-	-	-
L	6	4	8	2	-	4	-	-	-
J	8	2	8	2	-	4	4	-	-
M	4	6	4	6	-	-	-	7	7
G	7	5	7	5	8	-	-	-	-
P	4	3	4	3	8	-	2	-	4
U	8	2	6	4	-	-	4	-	-
W	6	4	6	4	-	10	10	-	-

Spool Type	A, AL			
	Control Position			
	P → A	B → T	P → B	A → T
C	5	4	5	4
D	7	6	7	8
DJ	7	4	8	4
DM	5	8	5	9
A	6	-	7	-

Spool Type	N			
	Control Position			
	P → A	B → T	P → B	A → T
DD	7	4	7	4



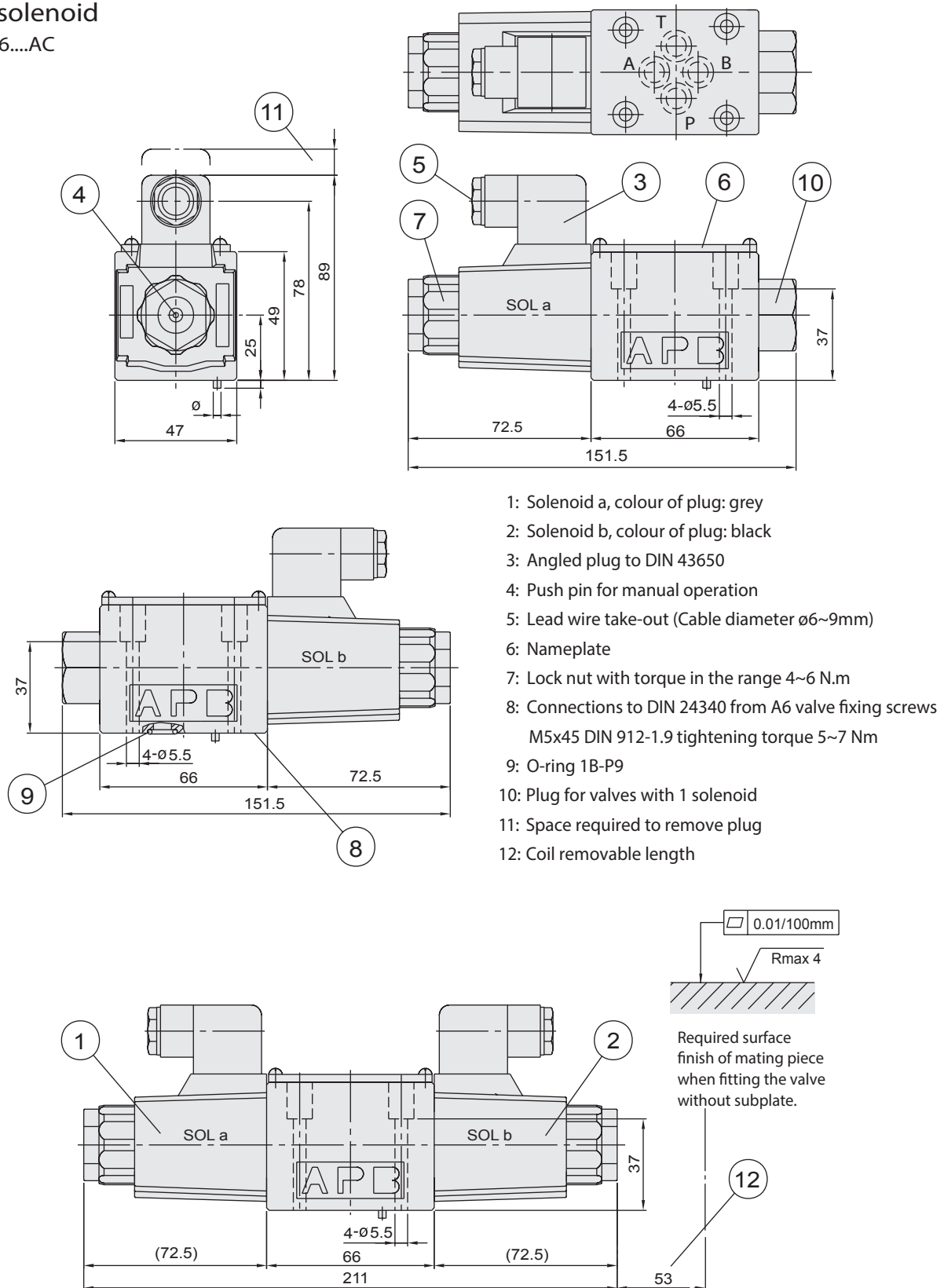
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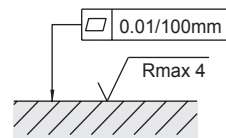
Dimensions :

Cetop 3

AC solenoid  
4WE6....AC



- 1: Solenoid a, colour of plug: grey
- 2: Solenoid b, colour of plug: black
- 3: Angled plug to DIN 43650
- 4: Push pin for manual operation
- 5: Lead wire take-out (Cable diameter  $\phi 6\sim 9\text{mm}$ )
- 6: Nameplate
- 7: Lock nut with torque in the range 4~6 N.m
- 8: Connections to DIN 24340 from A6 valve fixing screws  
M5x45 DIN 912-1.9 tightening torque 5~7 Nm
- 9: O-ring 1B-P9
- 10: Plug for valves with 1 solenoid
- 11: Space required to remove plug
- 12: Coil removable length



Required surface finish of mating piece when fitting the valve without subplate.

12

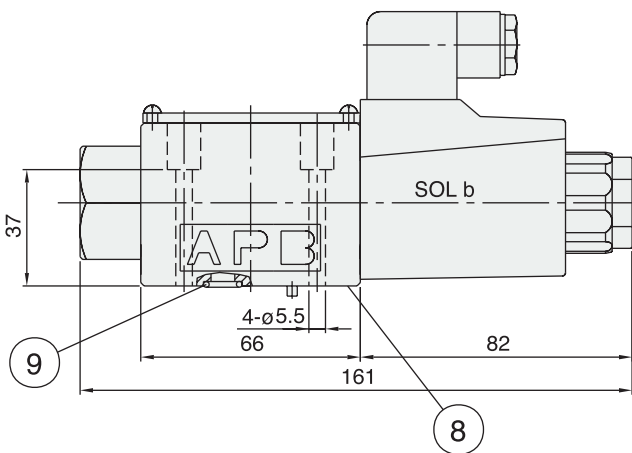
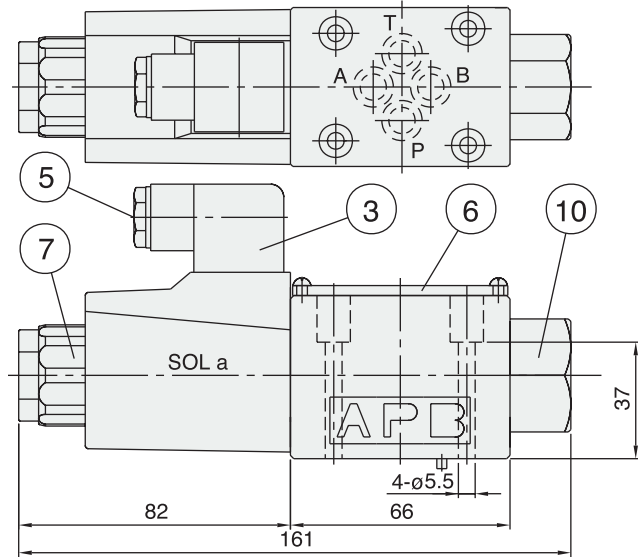
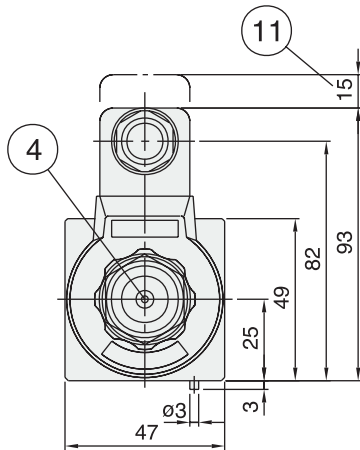
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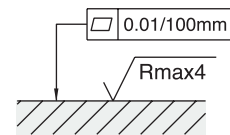
Dimensions :

Cetop 3

DC solenoid  
4WE6....DC



- 1: Solenoid a, colour of plug: grey
- 2: Solenoid b, colour of plug: black
- 3: Angled plug to DIN 43650
- 4: Push pin for manual operation
- 5: Lead wire take-out (Cable diameter  $\phi 6\sim 9\text{mm}$ )
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