

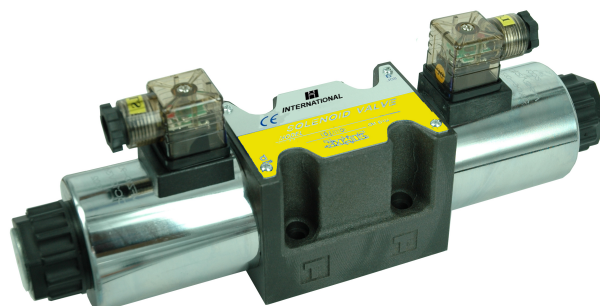
INTERNATIONAL VALVES - 4WE10

Solenoid Operated

Cetop 5

Characteristics :

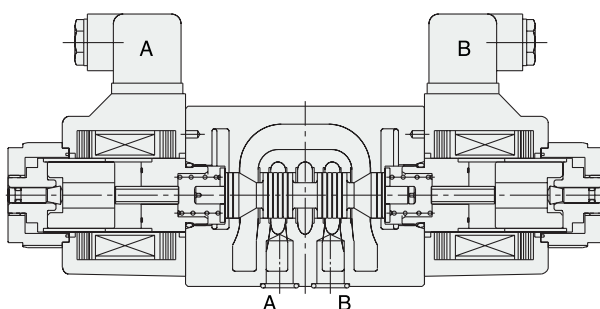
- Highest performance in Cetop 5.
- Optimized spool design to reduce flow force.
- Proven quality through 10 million endurance test.
- Coil outside cover with BMC fire proof material.
- Surge suppressor inside DC wiring box type.
- Connections to DIN, ISO and CETOP.



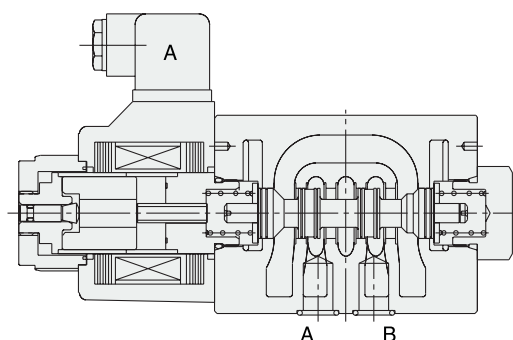
Specification :

Maximum flow		160 l/min {42 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 ² /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		180 times/min(AC,DC)
		120 times/min (RF)
Mounting pattern		ISO 4401-AC-05-4-A
Weight	Single solenoid	4.4kg(DC);3.6kg(AC)
	Double solenoid	6.1kg(DC);4.6kg(AC)
Valve fixing screws	Matrix	M6x35L x4pcs.
	Inch	1/4"~20UNCx1-3/8"L x4pcs
Tightening torque		12~15 Nm

Cross section diagram :



4WE10E23/..NZ4















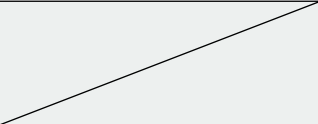






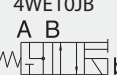







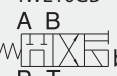







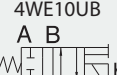



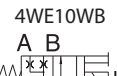
4WE10D23/..NZ4

INTERNATIONAL VALVES - 4WE10

Solenoid Operated

Spool types :

Cetop 5



















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 	4WE10H 	4WE10HA 	4WE10HB 
F 	4WE10F 	4WE10FA 	4WE10FB 
E 	4WE10E 	4WE10EA 	4WE10EB 
			4WE10BE 
L 			4WE10LB 
J 	4WE10J 	4WE10JA 	4WE10JB 
M 	4WE10M 	4WE10MA 	4WE10MB 
G 	4WE10G 	4WE10GA 	4WE10GB 
P 	4WE10P 	4WE10PA 	4WE10PB 
U 	4WE10U 	4WE10UA 	4WE10UB 
W 	4WE10W 	4WE10WA 	4WE10WB 

INTERNATIONAL VALVES - 4WE10

Solenoid Operated

Spool types :

Cetop 5

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 		4WE10C 	4WE10CB 
D 		4WE10D 	4WE10DB 
DJ 		4WE10DJ 	4WE10DJB 
DM 		4WE10DM 	4WE10DMB 
A 		4WE10A 	4WE10AB 

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	6.2	0.63		+10,-15	B	H (180°C)	>50
		120	60	6.0	0.54		+10,-15			
	A2	220	50	3.1	0.32		+10,-15			
		240	60	3.0	0.27		+10,-15			
DC	D1	12	-	-	3.17	38	+10,-10	B	H (180°C)	>50
	D2	24	-	-	1.58	38	+10,-10			
RF	R1	AC110V,50/60Hz ↓ DC99V		-	0.42	41	+10,-10	B	H (180°C)	>50
	R2	AC220V,50/60Hz ↓ DC198V		-	0.21	41	+10,-10			

INTERNATIONAL VALVES - 4WE10

Directional Control Valve

Performance curves :

Cetop 5

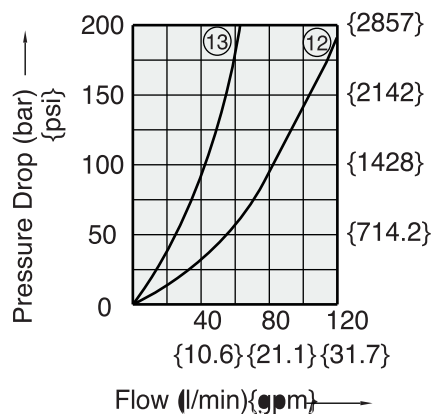
Perssure Drop Curve Reference Char

Viscosity of Hydraulic Fluid: 36 mm

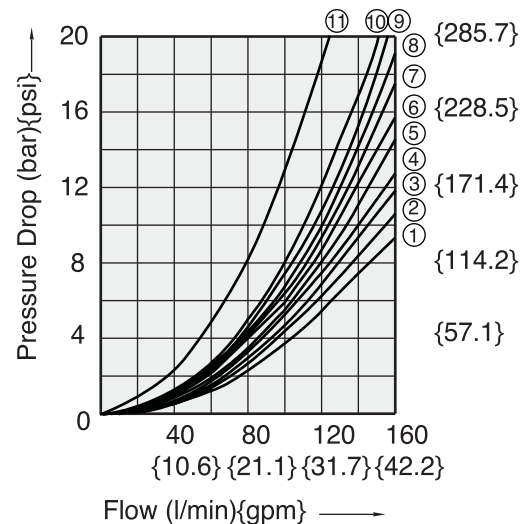
²/s

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	7	10	7	10	8	8	8	6	6
F	6	3	9	11	10	2	-	6	-
E	5	3	5	3	-	-	-	-	-
L	5	3	5	9	-	4	-	-	-
J	5	9	5	9	-	4	4	-	-
M	6	3	6	3	-	-	-	7	7
G	1	10	1	10	11	-	-	-	-
P	9	11	6	3	10	-	2	-	6
U	5	9	5	3	-	-	4	-	-
W	5	3	5	3	-	13	13	-	-

Spool Type	A, AL			
	Control Position			
	P→A	B→T	P→B	A→T
C	6	9	6	6
D	6	3	6	3



Spool Type	N			
	Control Position			
	P→A	B→T	P→B	A→T
DD	7	3	7	3



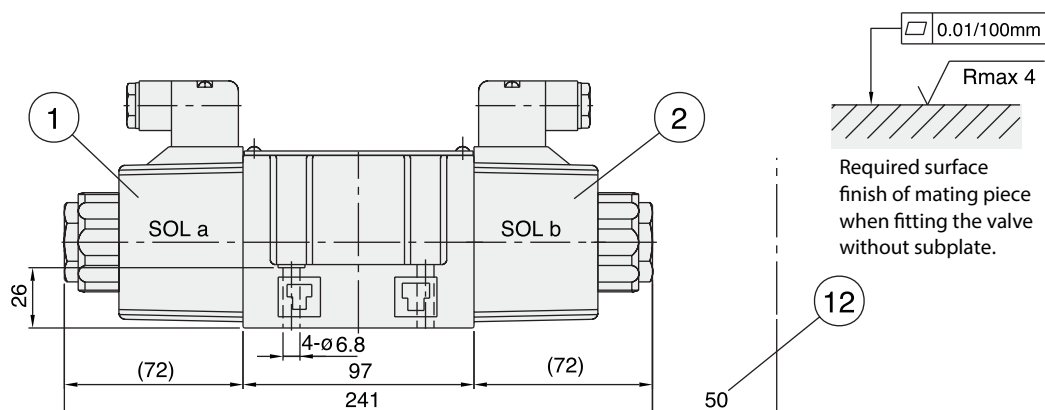
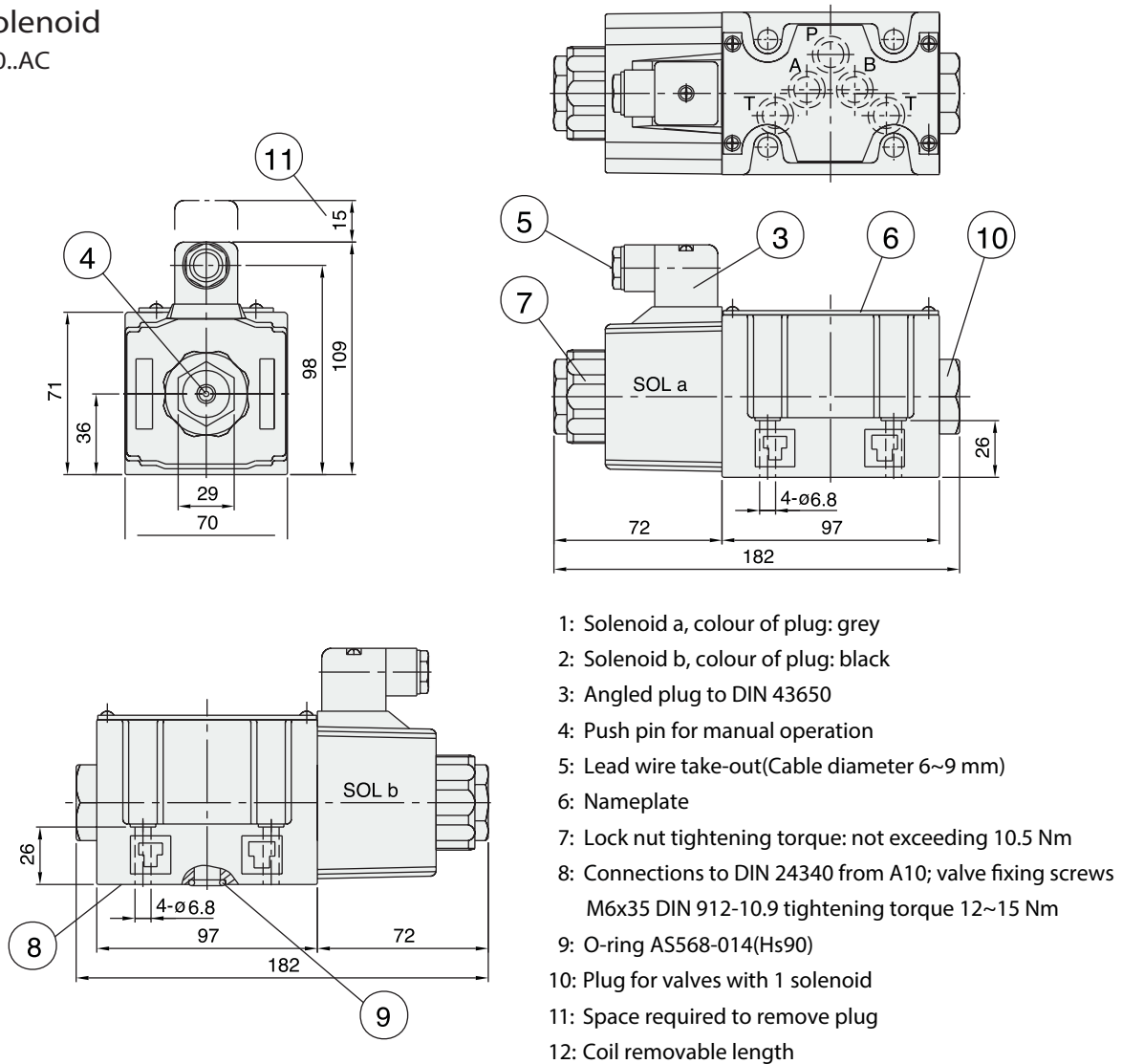
INTERNATIONAL VALVES - 4WE10

Solenoid Operated

Dimensions :

Cetop 5

AC solenoid
4WE10..AC



INTERNATIONAL VALVES - 4WE10

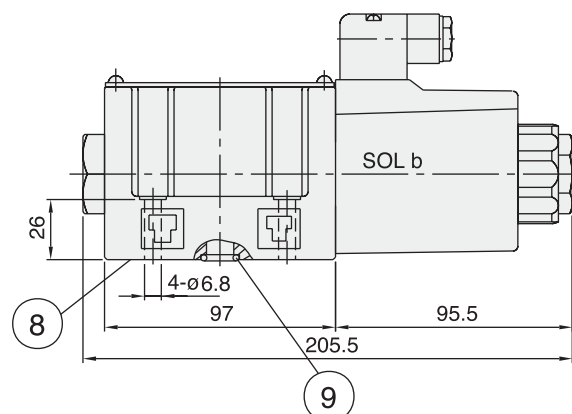
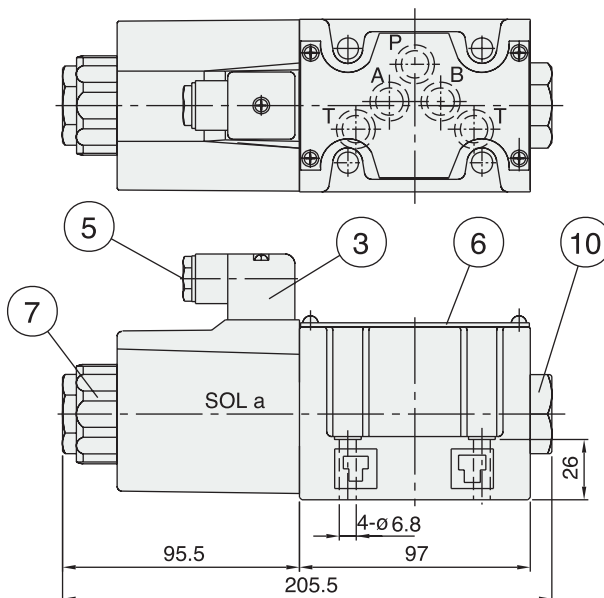
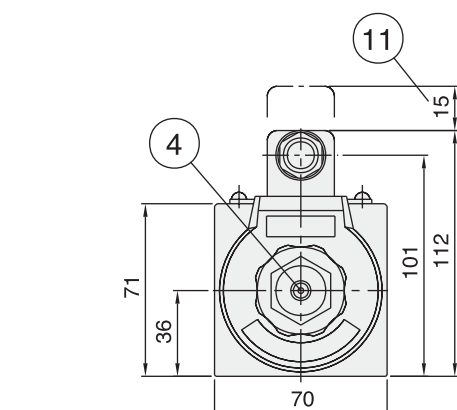
Solenoid Operated

Dimensions :

Cetop 5

DC solenoid

4WE10....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 6~9 mm)
- 6: Nameplate
- 7: Lock nut tightening torque: not exceeding 10.5 Nm
- 8: Connections to DIN 24340 from A10; valve fixing screws
M6x35 DIN 912-10.9 tightening torque 12~15 Nm
- 9: O-ring AS568-014 (Hs90)
- 10: Plug for valves with 1 solenoid
- 11: Space required to remove plug
- 12: Coil removable length

