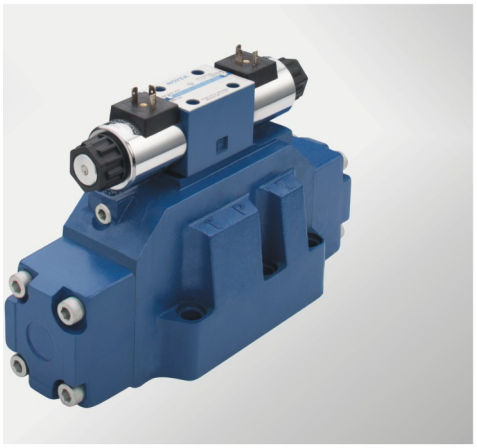
Itahydraulic
Power Tecnology

Electro-hydraulic directional control valve



Electro-hydraulic directional control valve is a control val ve which can use !he pres su re of !he hydraulic circuit to pull !he spool and change !he hydraulic oil direction.

Electro-hydraulic directional control valve is the combination of the electrical operated directional control valve and !he hydraulic operated directional control valve. 11 uses !he electrical operated directional control valve to control !he hydraulic operated directional control valve, and change !he hydraulic oil direction.

Electro-hydraulic directional control valve and hydraulic operated directional control valve are used mostly in hydraulic systems when electrical operated directional control valve can not afford !he flow. 11 may control !he movement of !he power elements, or control !he direction of !he flowing oil.

Technical specification

Specification		03		04		06	
Model		FWH-03	HFWH-03	FWH-04	HFWH-04	FWH-06	HFWH-06
Max. Working (MPa) pressure	P,A,B Por!	28	35	28	35	28	35
	T port (interna! leakage of control oil)	10		10		10	
	Y port (externa! leakage of control oil)	10		10		10	
Mínimum control pressure (MPa)		1.0 Spring-Return three-way valve two-way valve		1.2 Spring-Return three-way valve two-way valve		1.3 Spring-Return three-way valve two-way valve	
Maximum control pressure (MPa)		to25					
Max. Flow (L/min)		160		300		650	
Working fluid		Mineral oil,phosphate-ester					
Fluid temp. ("e)		-20-70					
Viscosity (mm'/s)		2.8-380					
Weight (kg)	Single-head solenoid	6.4		8.5		17.6	
	Double-head solenoids	6.8		8.9		18	
	FH Valve	4		7.3		16.5	
	Adjustor of reversing time	0.8		0.8		0.8	
	Pressure reducing valve	0.5		0.5		0.5	
Cleanliness	The maximum allowable cleanliness of !he oil should be according to 9th degree of Standard NAS1638 11 is suggested that !he mínimum filler rating shouldbe~10;;e75.						

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Model description

* FWH/FH -* *-*-* * * * / * * * * * * 50 *

L

Working pressure
Omit 28MPa
H 35MPa

FWH Electro-hydraulic directional control valve
FH Hydraulic operated directional control valve

Specification
03 NS 10
04 NS 16
06 NS 20

Main vave return type
Omit Spring return
H Hydraulic centration

Function code
Oetails as following symbol table

Working voltage
012 OC12V
024 OC24V
A110 AC110V
A220 AC220V
B11 0 AC11 OV Rectified
8220 AC220V Rectified

Z5L Square connector with light
Z6 Wire boxtype

Omit without hand emergency
N9 with concealed hand emergency

Serial number

Seal material
Omit NBR Seals
V FPM Seals

[2] Omit No reducing valve
03 With reducing valve

"Ornit Without pre-load valve
P4.5 With pre-load valve

Omit without stroke adjusting device
A Head A of main valve with stroke adjustment
B Head B of main valve with stroke adjustment
W Both heads with stroke adjustment

Omit without shifting time adjustment
S With shifting time adjustment: Inletflow control
S1 shifting time adjustment: Outletflow control

Omit without damping
08 cD0.8 Oamping
1 0 cD 1.0 Oamping
12 cD 1.2 Oamping

Omit Intl cntrl intl disch
XY Extl cntrl extl disch
X Extl cntrl intl disch
y Intl cntrl extl disch

Explaination
1.For neutral unloaded directional control valve it mus! be ordered separately.
There is no model (FWH-03)Electro-hydraulic directional control valve NS10.
2.0nly applied when !he controlling pressure is higher !han 25MPa

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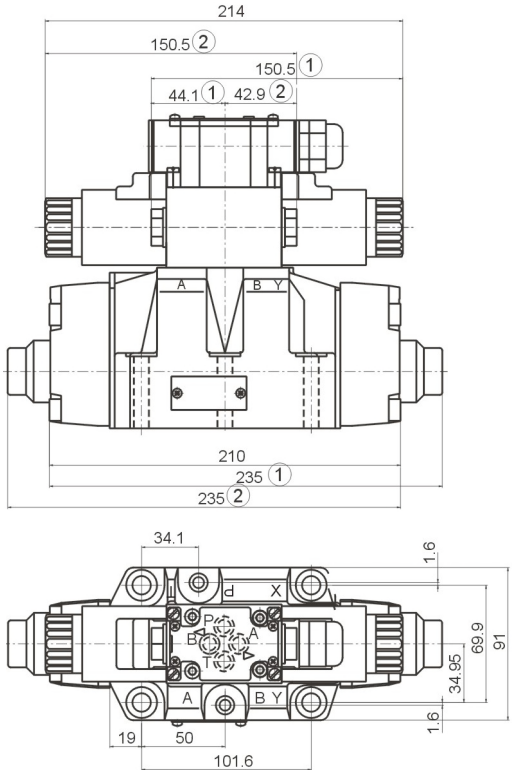
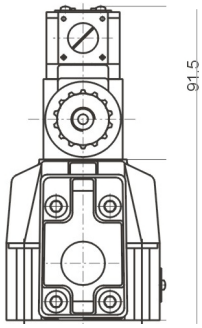
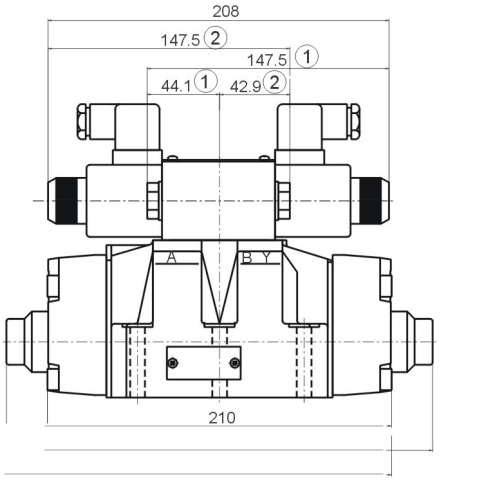
Externa! dimensions （04 Direct current wire box type)

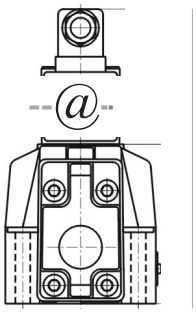




Two positions Electrical operated directional control valve

Externa! dimensions （04 Alternating current plug type)





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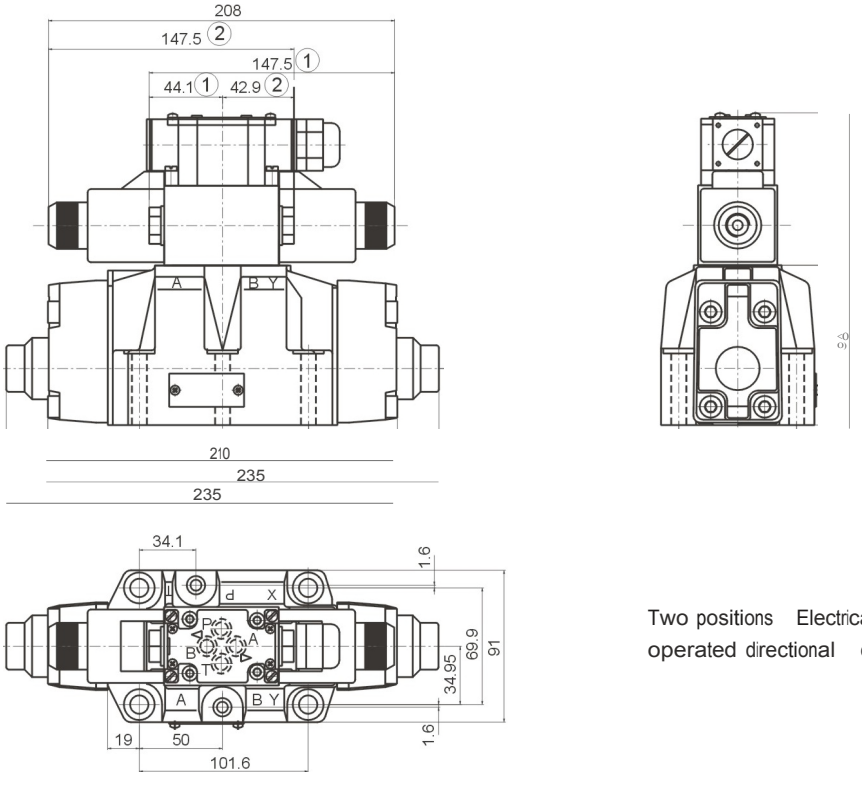
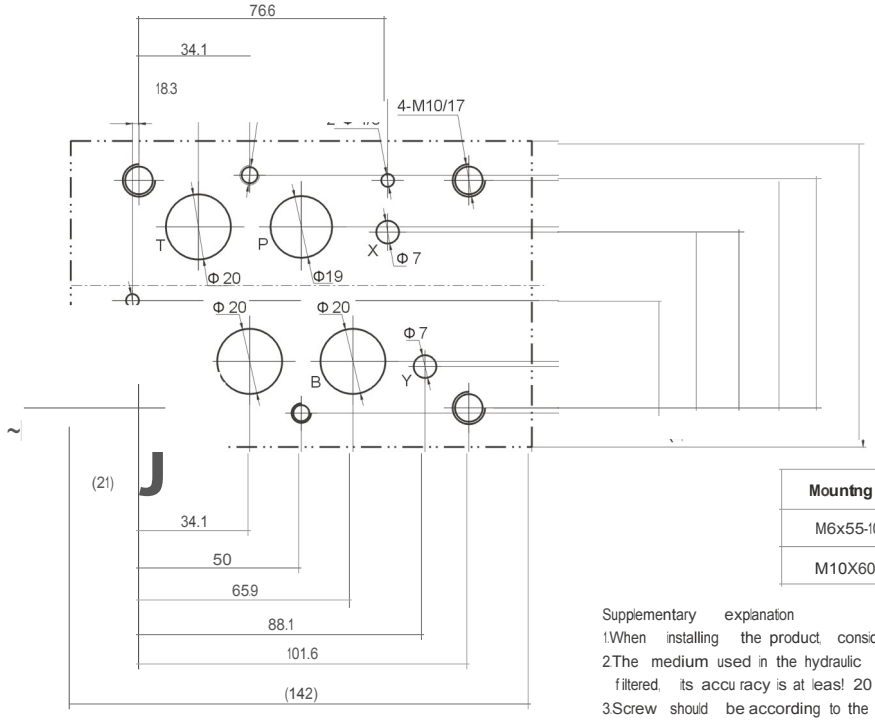
Externa! dimensions (04 Alternating current wire box type)



Two positions Electrical operated directional control valve

04 Size of subplate oil port



Mounting screw	Amount	Tighten torque
M6x55-10.9	2	15Nm
M10X60-10.9	4	75Nm

Supplementary explanation
1.When installing the product, considering horizontal position firstly.
2.The medium used in the hydraulic system must be filtered, its accu racy is at leas! 20 μ m.
3.Screw should be according to the parameters in catalogue.
4.The surface, connecting with the valve, should be Ra0.8 roughness, and 0.01/100mm flatness.