

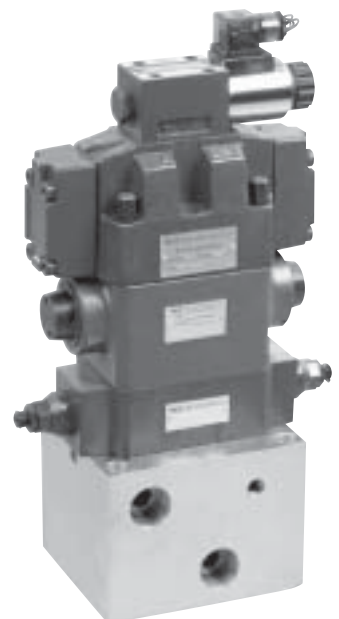
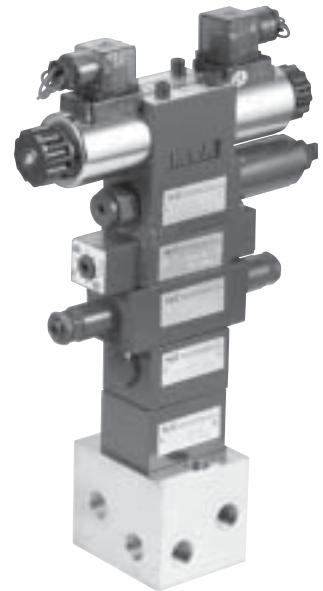
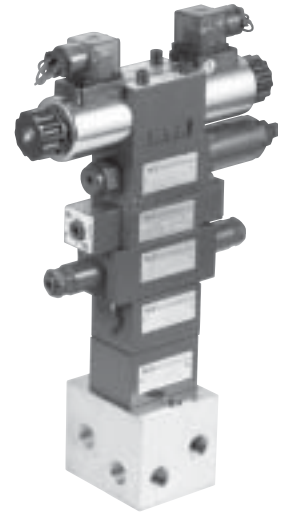
MODULA CONTROL

Modular valves are designed to meet the requirements of modern hydraulic systems, it has the characteristics of variety, rationality, but without pipeline connection.

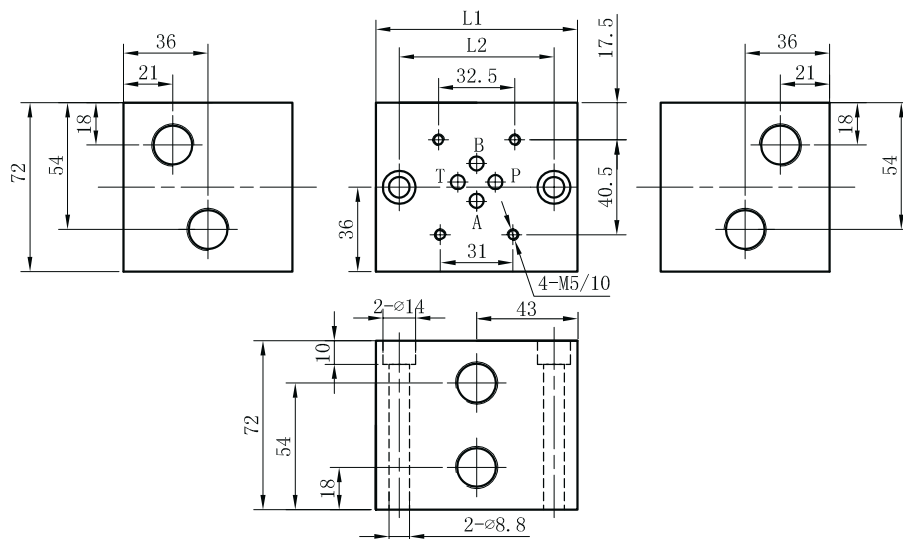
Pressure control modular valves, flow control valves and check valves are widely used in various hydraulic systems. The modular valves equipped with solenoid directional valves and manifolds lessen some devices and save space. As various valves can be mounted or removed easily, addition or change of oil lines can be obtained quickly and conveniently. The hydraulic system composed of modular valves overcomes leakage, vibration and flowing noise.

Such valves with orderly and good-looking appearance not only enhance the reliability, but also simplify the maintenance and checking process of hydraulic systems.

	P	T	B	A		P	T	B	A
Pressure Control Valves	ZPB...VP								
	ZPB...VA								
	ZPB...VB								
	ZPB...VC								
	ZPB...VD								
	ZPR.P...YM								
	ZPR.A...YM								
	ZPR.B...YM								
	ZPR.A...Y								
	ZPR.B...Y								
Flow Control Valves	Z2FDS...A.S								
	Z2FDS...B.S								
	Z2FDS...A.S2								
	Z2FDS...B.S2								
	Z2FDS...S								
	Z2FDS...S2								
Directional Control Valves	Z1DS...P								
	Z1DS...A								
	Z1DS...B								
	Z1DS...T								
	Z1DS...C								
	Z1DS...D								
	Z1DS...E								
	Z1DS...F								
	Z2DS...A								
	Z2DS...B								
Pressure Switches	ZAED4...A								
	ZAED4...B								
	ZAED4...P								
	ZAED4...AB								
	ZAED4...PA								
	ZAED4...PB								
Manifold									

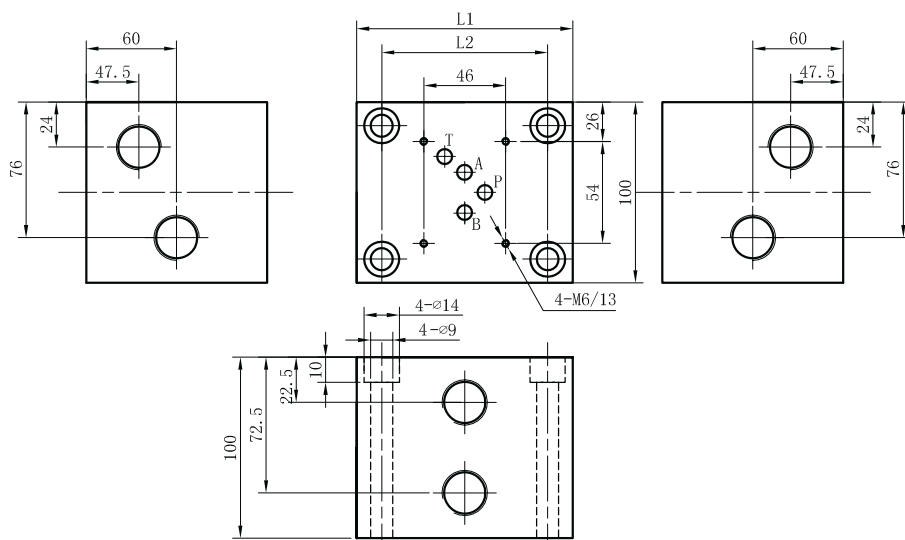


ZVB6 installation Dimensions



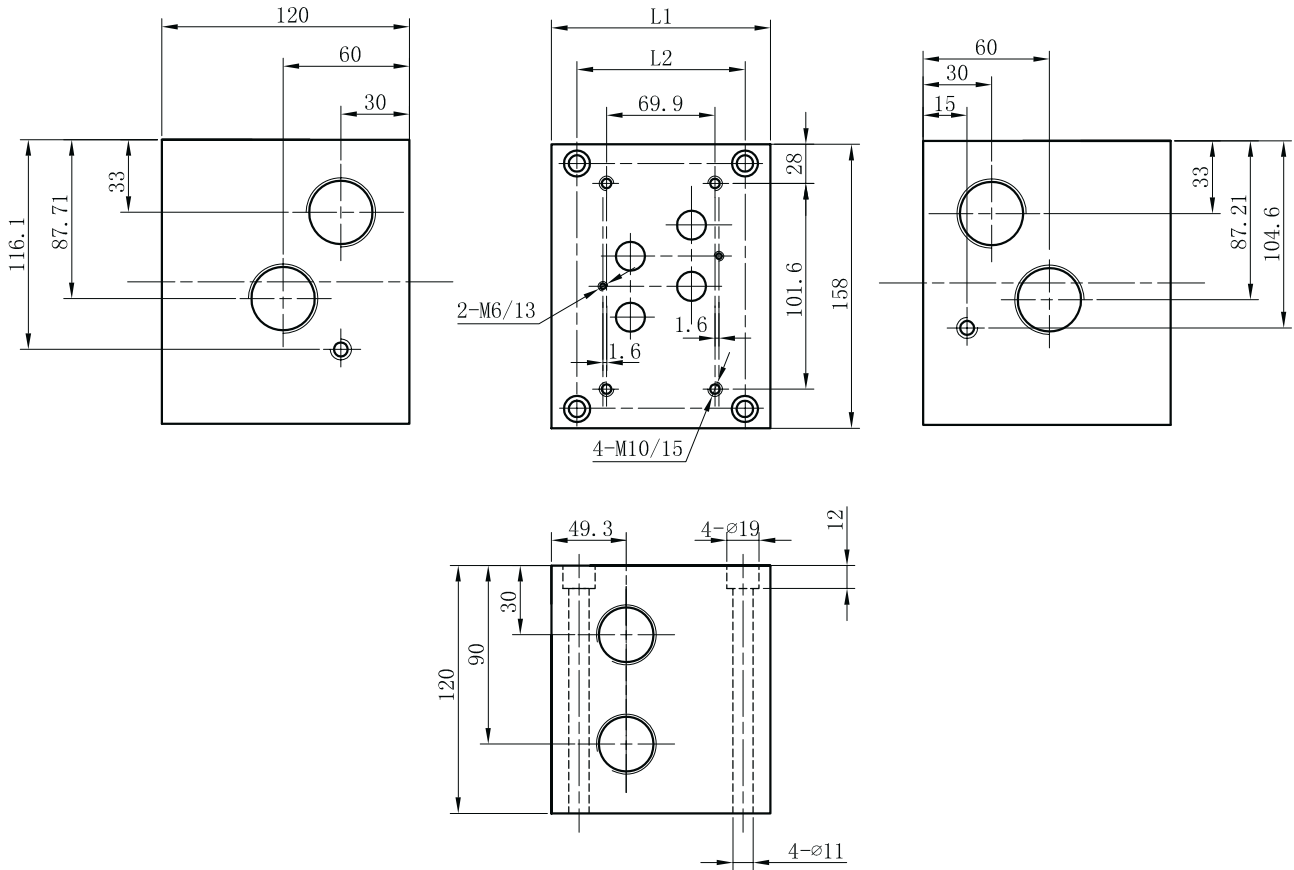
Model	L1	L2	A.B		P.T
			Metric	Inch	Inch
ZVB6-1	86	66	M18X1.5		G3/8"
ZVB6-2	136	116	M18X1.5		G3/8"
ZVB6-3	186	166	M18X1.5		G3/8"
ZVB6-4	236	216	M18X1.5		G3/8"
ZVB6-5	286	266	M18X1.5		G3/8"
ZVB6-6	336	316	M18X1.5		G3/8"
ZVB6-7	386	366	M18X1.5		G3/8"
ZVB6-8	436	416	M18X1.5		G3/8"
ZVB6-9	486	466	M18X1.5		G3/8"
ZVB6-10	536	516	M18X1.5		G3/8"

ZVB10 installation Dimensions



Model	L1	L2	A.B		P.T	
			Metric	Inch	Metric	Inch
ZVB10-1	110	90	M22X1.5	G1/2"	M27X2	G3/4"
ZVB10-2	185	195	M22X1.5	G1/2"	M27X2	G3/4"
ZVB10-3	260	240	M22X1.5	G1/2"	M27X2	G3/4"
ZVB10-4	335	315	M22X1.5	G1/2"	M27X2	G3/4"
ZVB10-5	410	390	M22X1.5	G1/2"	M27X2	G3/4"
ZVB10-6	485	465	M22X1.5	G1/2"	M27X2	G3/4"
ZVB10-7	560	540	M22X1.5	G1/2"	M27X2	G3/4"
ZVB10-8	635	615	M22X1.5	G1/2"	M27X2	G3/4"

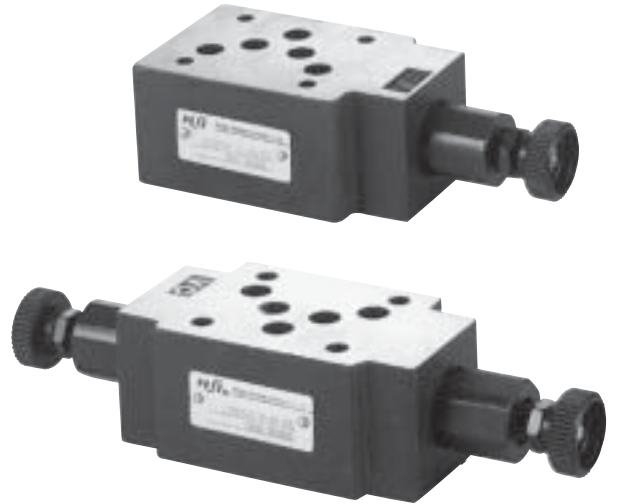
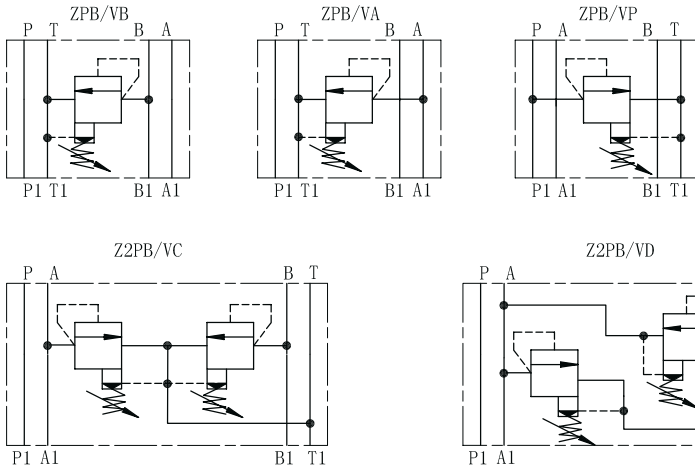
► ZVB16 installation Dimensions



Model	L1	L2	A.B		P.T	
			Metric	Inch	Metric	Inch
ZVB16-1	140	116	M33X2	G1"	M42X2	G1 1/2"
ZVB16-2	240	216	M33X2	G1"	M42X2	G1 1/2"
ZVB16-3	340	316	M33X2	G1"	M42X2	G1 1/2"
ZVB16-4	440	416	M33X2	G1"	M42X2	G1 1/2"
ZVB16-5	540	516	M33X2	G1"	M42X2	G1 1/2"
ZVB16-6	640	616	M33X2	G1"	M42X2	G1 1/2"

ZPB/Z2PB SERIES RELIEF MODULAR VALVES

Pressure relief valves of ZPB/Z2PB series are pilot operated style modular valves.



Z	2	PB	6	VA	2	40	315	V	*
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Modular type

No code=Single relief cartridge
2=Two relief cartridges

Model

Size:6;10;16;22

Relief form

VA:A→T
VB:B→T
VP:P→T
VC:A→T B→T
VD:A→B B→A

For further details

No code=NBR seals for petroleum oils
V=FPM seals for phosphate ester

Pressure range
50:5Mpa
100:10Mpa
200:20Mpa
315:31.5Mpa

Series number

1=Rotary handle;
2=Adjustable screw and protective cap

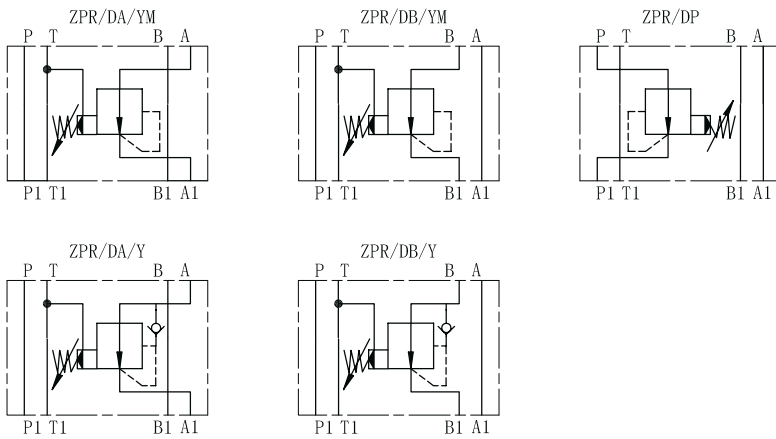
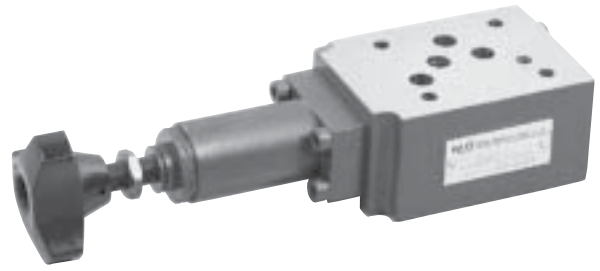
Technical data

Size	6	10	16	22
Operating pressure(Mpa)	31.5	31.5	31.5	31.5
Flow rate(L/min)	60	100	200	400
Oil temperature range(°C)	-20 ~ 70	-20 ~ 70	-20 ~ 70	-20 ~ 70

Installation dimensions refer to 4DWG6, 4DWG10, DWHG16

ZPR-D SERIES DIRECT REDUCING MODULAR VALVES

ZPR-D series are 3-way direct operated pressure reducing valves, which are used to reduce the pressure in a certain circuit lower than of the main circuit.



Modula Control Valves

Z PR 6 D A 2 30 25 Y M *

Modular	Z	PR	6	D	A	2	30	25	Y	M	*	For further details
Model											No code=With check valve M=Without check valve	
Size 6;10											Y=Internal pilot;external drain	
Direct type											Pressure range 25=2.5Mpa 75=7.5Mpa 150=15Mpa 210=21Mpa	
Pilot oil port A=A oil port B=B oil port P=P oil port											Series number	
1=Adjustable handwheel 2=Adjustable screw 3=Lockable handwheel												

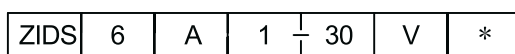
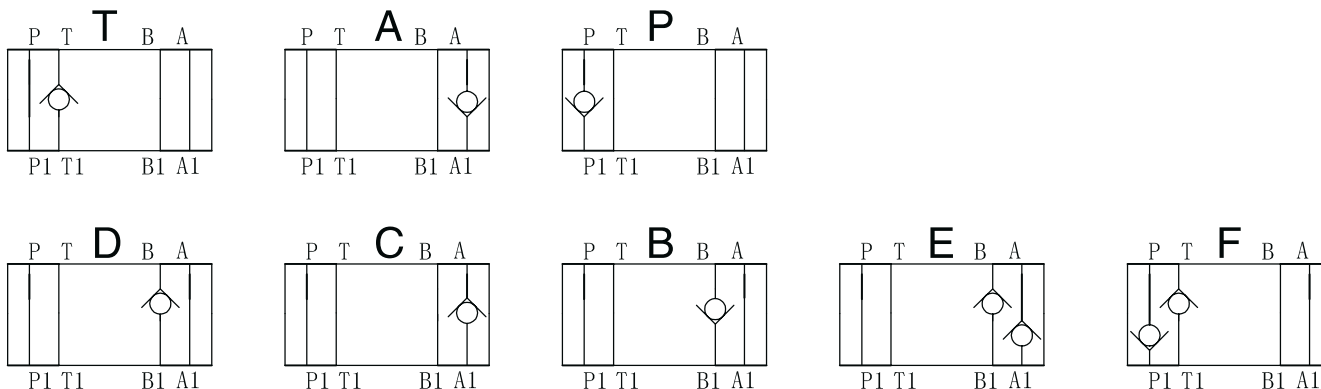
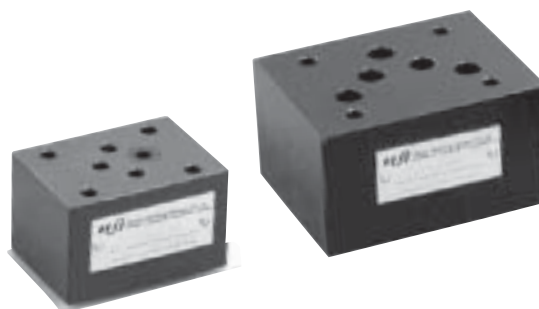
Technical data

Size	6	10
Operating pressure(MPa)	31.5	31.5
Second working pressure(MPa)	21	21
Back pressure(MPa)	6	6
Flow rate(L/min)	30	60
Fluid temperature(°C)	-20 ~ 80	-20 ~ 80

Subplate Installation dimensions is the same with 4DWG6, 4DWG10, refer to page19、20

Z1DS SERIES MODULAR CHECK VALVES

Z1DS series are direct operated check valves.



Model

Size:6;10

See the symbol for flow type

1=Cracking pressure: 0.05MPa
 2=Cracking pressure: 0.3MPa
 3=Cracking pressure: 0.5MPa

For further details

No code=NBR seals for petroleum oils
 V=FPM seals for phosphate ester

Series number

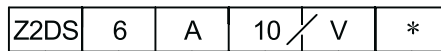
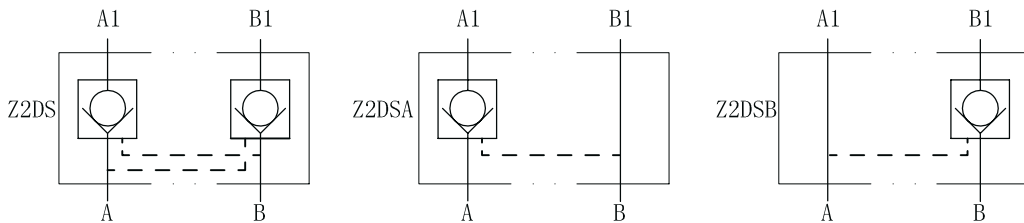
Technical data

Size	6	10
Operating pressure (MPa)	31.5	31.5
Flow rate (L/min)	40	100
Oil temperature range (°C)	-20 ~ 70	-20 ~ 70

- Z1DS6 Subplate Installation Dimension is the same with 4DWG6, Refer to page19, Height 40
- Z1DS10 Subplate Installation Dimension is the same with 4DWG10, Refer to page20 Height 50

Z2DS SERIES PILOT CONTROLLED CHECK MODULAR VALVES

Z2DS series are pilot operated style sandwich valves. These valves used to close one or two actuator ports.



Model

For further details

Size:6;10;16;22

No code=A,B ports with check valves
A=A ports with check valve
B=B ports with check valve

No code=NBR seals for petroleum oils
V=FPM seals for phosphate ester

Series number 50=Size 6;
10=Size 10;30=Size 16;22

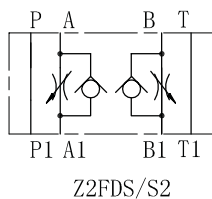
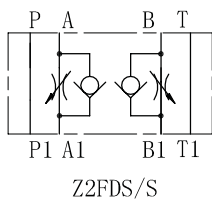
Technical data

Size	6	10	16	22
Operating pressure (MPa)	31.5	31.5	31.5	31.5
Cracking pressure of check valve (MPa)	0.15	0.1	0.1	0.25
Flow rate (L/min)	50	80	200	300
Fluid temperature range (°C)	-20 ~ 80	-20 ~ 80	-20 ~ 80	-20 ~ 80

- Z2DS6 Subplate Installation Dimension is the same with 4DWG6, Refer to page 19, Height 40
- Z2DS10 Subplate Installation Dimension is the same with 4DWG10, Refer to page 20, Height 50
- Z2DS16 Subplate Installation Dimension is the same with DWHG16, Refer to page 23, Height 80
- Z2DS22 Subplate Installation Dimension is the same with DWHG25, Refer to page 23, Height 100

▶ Z2FDS SERIES DOUBLE THROTTLE CHECK VALVES

Z2FDS series double throttle/check valves are used to restrict flow in one direction while allowing free-flow in the opposite direction as check valves.



	Z2FDS	6	30	/ S	V	*	
Model							For further details
Size: 6,10,16,22							No code=NBR seals for petroleum oils V=FPM seals for phosphate ester
Series number 30=Size6,16,22; 20=Size10							S=Meter-in control; S2=Meter-out control

▶ Technical data

Size	6	10	16	22
Operating pressure (MPa)	31.5	31.5	35	35
Flow rate (MPa)	80	160	250	350
Fluid temperature range (°C)	-30 ~ 80°C	-30 ~ 80°C	-30~80°C	-30~80°C

- ▶ Z2FDS6 Subplate Installation Dimension is the same with 4DWG6, Refer to page 19, Height 28.6
- Z2FDS10 Subplate Installation Dimension is the same with 4DWG10, Refer to page 20, Height 32.5
- Z2FDS16 Subplate Installation Dimension is the same with DWHG16, Refer to page 23, Height 51
- Z2FDS22 Subplate Installation Dimension is the same with DWHG25, Refer to page 23, Height 55