

Electrically Control Valve

VPL Series

Product Introduction

- Pipe connection type:M5, G1/8...G1/2

NAMUR:G1/4,G3/8;
- High flow rate, robust and durable;
- Standard LED light junction box available in 3/2, 5/2, and 5/3 configurations;
- The easy-to-install floor-mounted NAMUR version is available;
- IP65 protection rating.

Technical Parameter

Service substance	Lubricated or non-lubricated compressed air filtered
Working pressure	0.15 ~ 0.8 MPa(22 ~ 116 psi)
Rate of flow	245 ~ 3350 l/min Inlet pressure: 0.6 Mpa (87 psi), pressure drop: 0.1 MPa
Installation site	Install horizontally at any location
Environment / Medium temperature	-5 ~ 70°C(+23 ~ 158°F) Ensure the air is dry. To prevent icing at temperatures below +2°C (+35°F)

Working temperature	-5 ~ +50°C(+23 ~ 122°F) The gas supply must be sufficiently dry. To avoid icing at temperatures below +2°C (+35°F)
Material quality	Valve body and base: Aluminum
	Blind plate: galvanized steel
	Valve core: Aluminum
	Screw: Nickel-plated steel
	Spring: Stainless steel
	Manual valve: Metal (M5, G1/8) Plastic (G1/4....1/2)

Selection Table

	VPL33					D-C	-					
Series	Code											
Solenoid valve	VPL											
18 mm-M5 or G1/8	A											
22 mm-G1/4	B											
27 mm-G3/8	C											
34 mm-G1/2	D											
Function	Code											
3/2 normally open	3											
3/2 normally closed	4											
5/2	5											
5/3 Mid-closed	6											
5/3 Mid-exhausted	7											
5/3 Mid-pressurised	8											
Takeover form	Code											
Pipe connection type	-											
Board connection type	B											
Drive Type	Code											
Electrical control/ Electrical control	11											
Electrical control/spring	17											
Coil	Code											
15mm(18mm valve width)	D-C											
22mm	A-A											

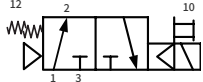
Voltage(VPL33A)	Code
24V DC	13F
110V AC	18F
220V AC	19F
Voltage(VPL33B/C/D)	Code
24V DC	13J
24V AC	14J
110V AC	18J
220V AC	19J
240V AC	20J
Manual	Code
Rotationand locking	2
Interface size	Code
M5(18mm valve width)	5
G1/8(18mm valve width)	A
G1/4(22mm valve width)	B
G3/8(27mm valve width)	C
G1/2(34mm valve width)	D
G1/4 NAMUR (27mm valve width)	E
G3/8 NAMUR (27mm valve width)	F
1/8 NPT(18mm valve width)	P
1/4 NPT(18mm valve width)	R
3/8 NPT(18mm valve width)	S
1/2 NPT(34mm valve width)	T
1/4 NPT NAMUR (27mm valve width) Note ¹⁾	U
3/8 NPT NAMUR (27mm valve width) Note ¹⁾	V

Note¹⁾ : The 3/2 NAMUR version can be obtained by adding a conversion plate to the5/2 NAMUR version.

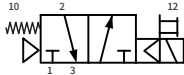
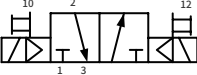
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Order Information

3/2 solenoid valve,normally open

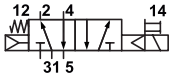
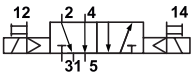
Pneumatic circuit diagram	Interface size	Drive Type	Medium/Ambient temperature (°C)	Pilot gas supply	Flow rate (l/min)	Working pressure(MPa)	Weight (kg)	Drawing type	Model
	M5	Electrical control/spring	-5 ~ +70	Internal pilot	240	0.15 ~ 0.8	0.13	1	VPL33A317D-C52
	G1/8	Electrical control/spring	-5 ~ +70	Internal pilot	600	0.15 ~ 0.8	0.13	1	VPL33A317D-CA2
	G1/4	Electrical control/spring	-5 ~ +70	Internal pilot	1050	0.15 ~ 0.8	0.20	1	VPL33B317A-AB2
	G3/8	Electrical control/spring	-5 ~ +70	Internal pilot	1500	0.15 ~ 0.8	0.27	1	VPL33C317A-AC2
	G1/2	Electrical control/spring	-5 ~ +70	Internal pilot	3300	0.15 ~ 0.8	0.30	1	VPL33D317A-AD2

3/2 solenoid valve, normally closed

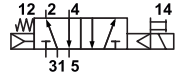
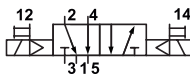
Pneumatic circuit diagram	Interface size	Drive Type	Medium/Ambient temperature (°C)	Pilot gas supply	Flow rate (l/min)	Working pressure(MPa)	Weight (kg)	Drawing type	Model
	M5	Electrical control/spring	-5 ~ +70	Internal pilot	240	0.15 ~ 0.8	0.13	1	VPL33A417D-C52
	G1/8	Electrical control/spring	-5 ~ +70	Internal pilot	600	0.15 ~ 0.8	0.13	1	VPL33A417D-CA2
	G1/4	Electrical control/spring	-5 ~ +70	Internal pilot	1050	0.15 ~ 0.8	0.20	1	VPL33B417A-AB2
	G3/8	Electrical control/spring	-5 ~ +70	Internal pilot	1500	0.15 ~ 0.8	0.27	1	VPL33C417A-AC2
	G1/2	Electrical control/spring	-5 ~ +70	Internal pilot	3300	0.15 ~ 0.8	0.38	1	VPL33D417A-AD2
	M5	Electrical control	-5 ~ +70	Internal pilot	240	0.15 ~ 0.8	0.18	2	VPL33A411D-C52
	G1/8	Electrical control	-5 ~ +70	Internal pilot	600	0.15 ~ 0.8	0.18	2	VPL33A411D-CA2
	G1/4	Electrical control	-5 ~ +70	Internal pilot	1050	0.15 ~ 0.8	0.30	2	VPL33B411A-AB2
	G3/8	Electrical control	-5 ~ +70	Internal pilot	1500	0.15 ~ 0.8	0.32	2	VPL33C411A-AC2
	G1/2	Electrical control	-5 ~ +70	Internal pilot	3300	0.15 ~ 0.8	0.51	2	VPL33D411A-AD2

※ 3/2 NAMUR version can be obtained by adding a conversion plate to the 5/2 NAMUR valve

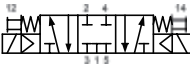
5/2 solenoid valve, pipe connection type

Pneumatic circuit diagram	Interface size	Drive Type	Medium/Ambient temperature (°C)	Pilot gas supply	Flow rate (l/min)	Working pressure(MPa)	Weight (kg)	Drawing type	Model
	M5	Electrical control/spring	0 ~ +70	Internal pilot	245	0.15 ~ 0.8	0.13	3	VPL33A517D-C52
	G1/8	Electrical control/spring	0 ~ +70	Internal pilot	600	0.15 ~ 0.8	0.13	3	VPL33A517D-CA2
	G1/4	Electrical control/spring	-5 ~ +70	Internal pilot	1050	0.15 ~ 0.8	0.20	3	VPL33B517A-AB2
	G3/8	Electrical control/spring	-5 ~ +70	Internal pilot	1800	0.15 ~ 0.8	0.28	3	VPL33C517A-AC2
	G1/2	Electrical control/spring	-5 ~ +70	Internal pilot	3350	0.15 ~ 0.8	0.50	3	VPL33D517A-AD2
	M5	Electrical control	0 ~ +70	Internal pilot	245	0.15 ~ 0.8	0.19	4	VPL33A511D-C52
	G1/8	Electrical control	0 ~ +70	Internal pilot	600	0.15 ~ 0.8	0.19	4	VPL33A511D-CA2
	G1/4	Electrical control	-5 ~ +70	Internal pilot	1050	0.15 ~ 0.8	0.31	4	VPL33B511A-AB2
	G3/8	Electrical control	-5 ~ +70	Internal pilot	1800	0.15 ~ 0.8	0.39	4	VPL33C511A-AC2
	G1/2	Electrical control	-5 ~ +70	Internal pilot	3350	0.15 ~ 0.8	0.62	4	VPL33D511A-AD2

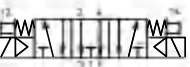
5/2 solenoid valve, pipe connection type

Pneumatic circuit diagram	Interface size	Drive Type	Medium/Ambient temperature (°C)	Pilot gas supply	Flow rate (l/min)	Working pressure(MPa)	Weight (kg)	Drawing type	Model
	M5	Electrical control/spring	0 ~ +70	Internal pilot	1050	0.15 ~ 0.8	0.29	6	VPL33C517A-AE2
	G1/8	Electrical control/spring	0 ~ +70	Internal pilot	1800	0.15 ~ 0.8	0.29	6	VPL33C517A-AF2
	G1/4	Electrical control	-5 ~ +70	Internal pilot	1050	0.15 ~ 0.8	0.39	7	VPL33C517A-AE2
	G3/8	Electrical control	-5 ~ +70	Internal pilot	1800	0.15 ~ 0.8	0.39	7	VPL33C517A-AF2

5/3 solenoid valve, mid-closed type

Pneumatic circuit diagram	Interface size	Drive Type	Medium/Ambient temperature (°C)	Pilot gas supply	Flow rate (l/min)	Working pressure(MPa)	Weight (kg)	Drawing type	Model
	M5	Electrical control	-5 ~ +70	Internal pilot	240	0.15 ~ 0.8	0.21	5	VPL33A611D-C52
	G1/8	Electrical control	-5 ~ +70	Internal pilot	470	0.15 ~ 0.8	0.21	5	VPL33A611D-CA2
	G1/4	Electrical control	-5 ~ +70	Internal pilot	700	0.15 ~ 0.8	0.36	5	VPL33B611A-AB2
	G3/8	Electrical control	-5 ~ +70	Internal pilot	1200	0.15 ~ 0.8	0.46	5	VPL33C611A-AC2
	G1/2	Electrical control	-5 ~ +70	Internal pilot	2400	0.15 ~ 0.8	0.71	5	VPL33D611A-AD2

5/3 solenoid valve, mid-exhausted type

Pneumatic circuit diagram	Interface size	Drive Type	Medium/Ambient temperature (°C)	Pilot gas supply	Flow rate (l/min)	Working pressure(MPa)	Weight (kg)	Drawing type	Model
	M5	Electrical control	-5 ~ +70	Internal pilot	240	0.15 ~ 0.8	0.21	5	VPL33A711D-C52
	G1/8	Electrical control	-5 ~ +70	Internal pilot	470	0.15 ~ 0.8	0.21	5	VPL33A711D-CA2
	G1/4	Electrical control	-5 ~ +70	Internal pilot	700	0.15 ~ 0.8	0.36	5	VPL33B711A-AB2
	G3/8	Electrical control	-5 ~ +70	Internal pilot	1200	0.15 ~ 0.8	0.46	5	VPL33C711A-AC2
	G1/2	Electrical control	-5 ~ +70	Internal pilot	2400	0.15 ~ 0.8	0.71	5	VPL33D711A-AD2

5/3 solenoid valve, mid-pressurised type

Pneumatic circuit diagram	Interface size	Drive Type	Medium/Ambient temperature (°C)	Pilot gas supply	Flow rate (l/min)	Working pressure(MPa)	Weight (kg)	Drawing type	Model
	M5	Electrical control	-5 ~ +70	Internal pilot	240	0.15 ~ 0.8	0.21	5	VPL33A811D-C52
	G1/8	Electrical control	-5 ~ +70	Internal pilot	470	0.15 ~ 0.8	0.21	5	VPL33A811D-CA2
	G1/4	Electrical control	-5 ~ +70	Internal pilot	700	0.15 ~ 0.8	0.36	5	VPL33B811A-AB2
	G3/8	Electrical control	-5 ~ +70	Internal pilot	1200	0.15 ~ 0.8	0.46	5	VPL33C811A-AC2
	G1/2	Electrical control	-5 ~ +70	Internal pilot	2400	0.15 ~ 0.8	0.71	5	VPL33D811A-AD2

▶ Base plate and accessories

Series Notes ¹⁾	Baseboard (5/2 and 5/3 valve injection Notes ²⁾)	Blind plate (Valve bottom plates for 5/2 and 5/3 models)	Baseboard (3/2 valve injection Note ²⁾)	Blind plate (3/2 valve base plate)	NAMUR keysets
VPL33A	VPL33A	VPL33A0551	VPL33A/3	VPL33A0351	-
VPL33B	VPL33B	VPL33B0551	VPL33B/3	VPL33B0351	-
VPL33C	VPL33C	VPL33C0551	VPL33C/3	VPL33C0351	VPL33C-Z01 Note ³⁾
VPL33D	VPL33D	VPL33D0551	VPL33D/3	VPL33D0351	-

Note¹⁾ :Insert the required number of valve stations **value 1~17 after the model
Note²⁾ :Only for G1/4 and G3/8 interfaces
Note³⁾ :The 3/2 NAMUR version can be obtained with a 5/2 NAMUR conversion plate, which must be ordered separately.

15 mm Coil (VCB22A)

Voltage	Power	Junction power	Code	Coil model
24V DC	2.8W	Industrial standard	13F	VPL33-15-13F
24V AC	2.5VA	Industrial standard	19F	VPL33-15-19F

22 mm Coil(VCB22 B/C/D)

Voltage	Power	Junction power	Code	Coil model
24V DC	3W	Industrial standard	13J	VPL33-22-13J
24V AC	4/2.5VA	Industrial standard	14J	309902450
110V AC	4/2.5VA	Industrial standard	16J	309911050
220V AC	3.5VA	Industrial standard	19J	VPL33-22-19J
240V AC	6/5.0VA	Industrial standard	20J	309923050

※ Codes 14J,18J and 19J can be used in environments above 40°C. For details, please contact PLIEM

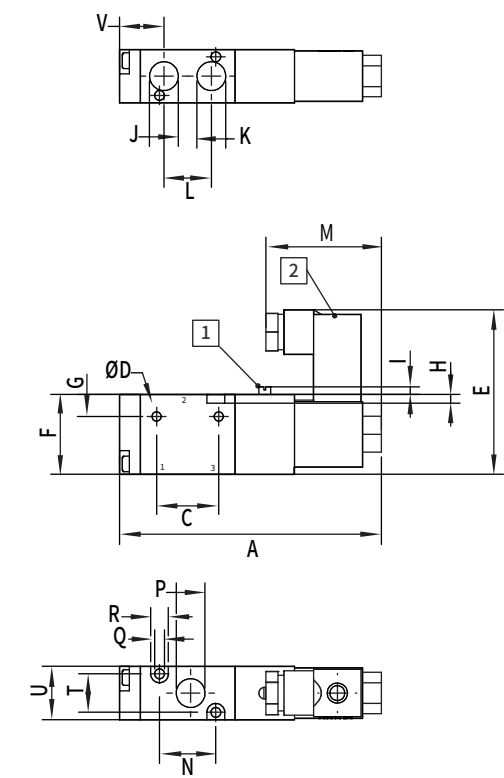
Junction box

15mm Industrial standard	22mm Industrial standard	22mm Industrial standard
VPL33-13F 24V DC	VPL33-13J 24V DC	M/P24121/1 24V AC/DC M/P24121/2 90~130V AC
VPL33-19F 110/220V AC	VPL33-19J 110/220V AC	M/P24121/3 150~250V AC

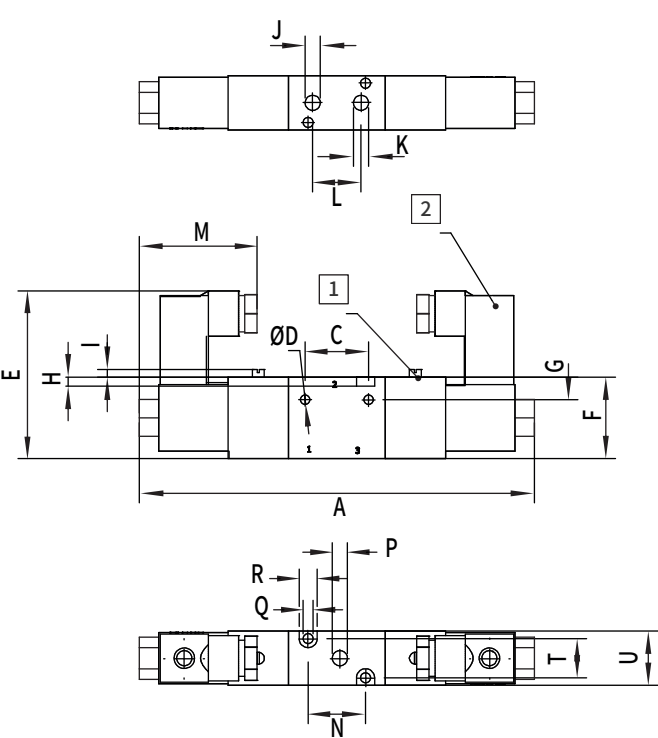
※ Standard electrical connector with LED lights

► Dimensional draw

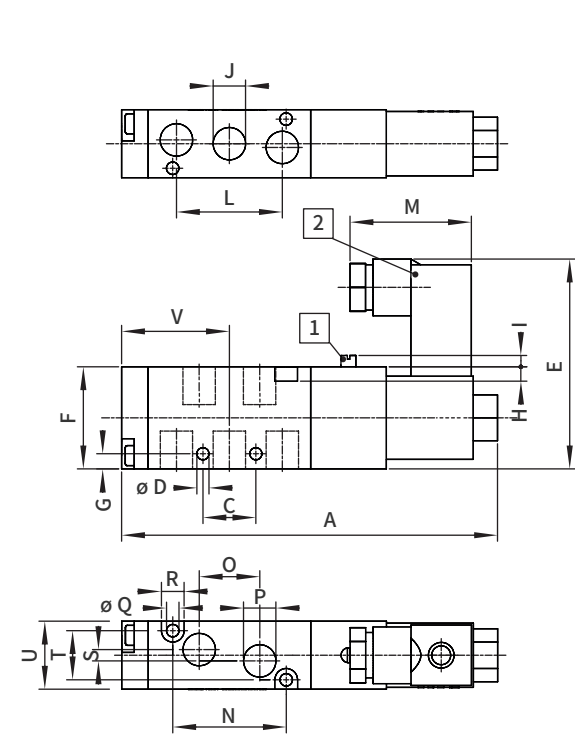
① 3/2 single electronically controlled
spring reset



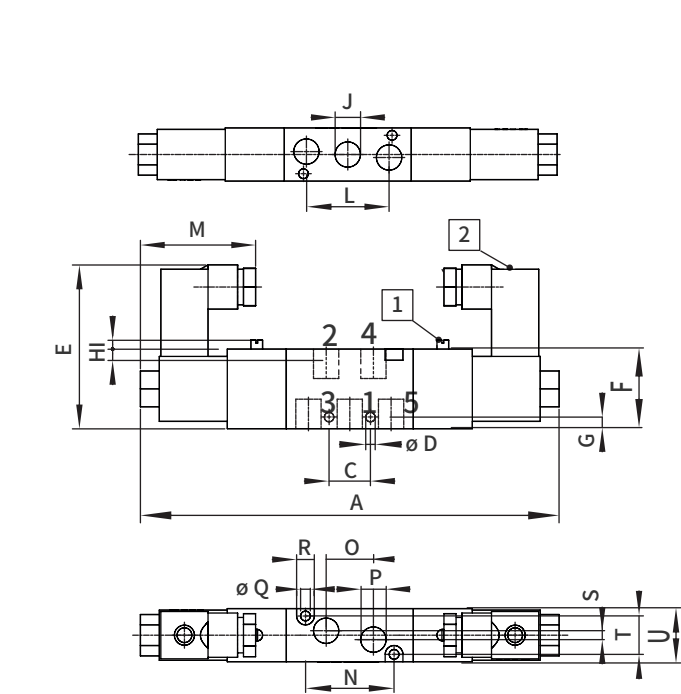
② 3/2 dual electronic control



③ 5/2 single electronically controlled
spring reset



④ 5/2 dual electronic control



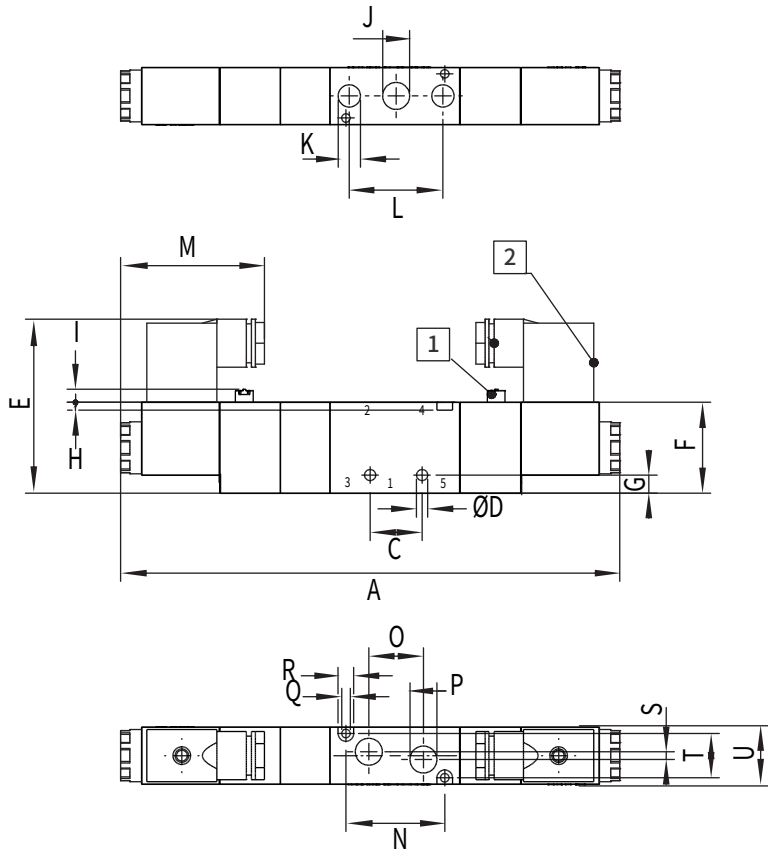
※ Manual control (press & rotate to lock)
Grain head size Pg9
M5 and G1/8 can rotate 2x180 °G1/4 to G1/2 can rotate 4x90°

NO.	A	C	ØD	E	F	G	H	I	J	K	L	M	N	O	ØP	ØQ	R	S	T	U	V	Model
①	88	21	3.2	54	27	7.5	3	2.5	M5	M5	16	39	19	-	M5	3.3	6	-	13	18	-	VPL33A317D-C52 VPL33A417D-C52
①	88	21	3.2	54	27	7.5	3	2.5	G1/8	G1/8	16	39	19	-	G1/8	3.3	6	-	13	18	-	VPL33A317D-CA2 VPL33A417D-CA2
①	110	25	4.3	67	35	8.2	3	5	G1/4	G1/4	22.5	55	30	-	G1/4	3.3	6	-	17	22	-	VPL33B317A-AB2 VPL33B417A-AB2
①	118	30	4.3	70	40	10.5	3	5	G3/8	G3/8	24	55	35	-	G3/8	4.3	8	-	20	27	-	VPL33C317A-AC2 VPL33C417A-AC2
②	131	21	3.2	54	27	7.5	3	2.5	M5	M/5	16	39	19	-	M/5	3.3	6	-	13	18	-	VPL33A411D-C52
②	131	21	3.2	54	27	7.5	3	2.5	G1/8	G1/8	16	39	19	-	G1/8	3.3	6	-	13	18	-	VPL33A411D-CA2
②	165	25	4.3	67	35	8.2	3	5	G1/4	G1/4	22.5	55	30	-	G1/4	3.3	6	-	17	22	-	VPL33B411A-AB2
②	173	24	4.3	70	40	10.5	4	5	G1/8	G1/8	24	55	35	-	G3/8	4.3	8	-	20	27	-	VPL33C411A-AC2

※ Manual control (press & rotate to lock)
Grain head size Pg9
M5 and G1/8 can rotate 2x180 °G1/4 to G1/2 can rotate 4x90°

NO.	A	C	ØD	E	F	G	H	I	J	K	L	M	N	O	ØP	ØQ	R	S	T	U	V	Model
③	99	14	3.2	54	27	4	3	2.5	M5	-	27.1	39	30	13.9	M5	3.3	6	-	13	18	28.5	VPL33A517D-C52
③	99	14	3.2	54	27	4	3	2.5	G1/8	-	28	39	30	16	G1/8	3.3	6	3	13	18	28.5	VPL33A517D-CA2
③	118	20	4.3	67	35	7	3	5	G1/4	G1/8	36	55	38	21	G1/4	3.3	6	3	17	22	32	VPL33B517A-AB2
③	135	24	4.3	70	40	6.5	4	5	G3/8	G1/4	45	55	50	24	G3/8	4.3	8	4	20	27	40	VPL33C517A-AC2
③	170	28	5.5	74	50	7.5	4	5	G1/2	G1/2	63	55	72	36	G1/2	4.3	8	4	27	34	58	VPL33D517A-AD2
④	142	14	3.2	54	27	4	3	2.5	M5	-	27.1	39	30	13.9	M5	3.3	6	-	13	18	-	VPL33A511D-C52
④	142	14	3.2	54	27	4	3	2.5	G1/8	-	28	39	30	16	G1/8	3.3	6	3	13	18	-	VPL33A511D-CA2
④	117	20	4.3	67	35	7	3	5	G1/4	G1/8	36	55	38	21	G1/4	3.3	6	3	17	22	-	VPL33B511A-AB2
④	190	24	4.3	70	40	6.5	4	5	G3/8	G1/4	45	55	50	24	G3/8	4.3	8	4	20	27	-	VPL33C511A-AC2
④	225	28	5.5	74	50	7.5	4	5	G1/2	G1/2	63	55	72	36	G1/2	4.3	8	4	27	34	-	VPL33D511A-AD2

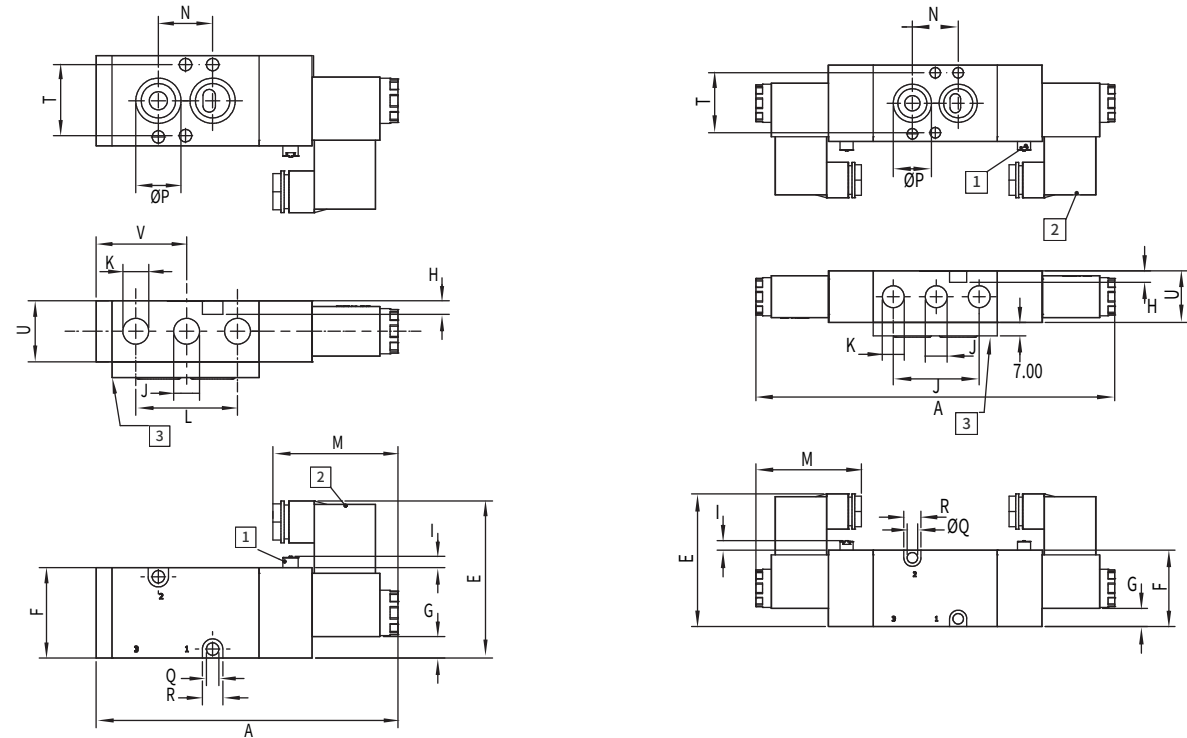
⑤ 5/3 Dual electronic control



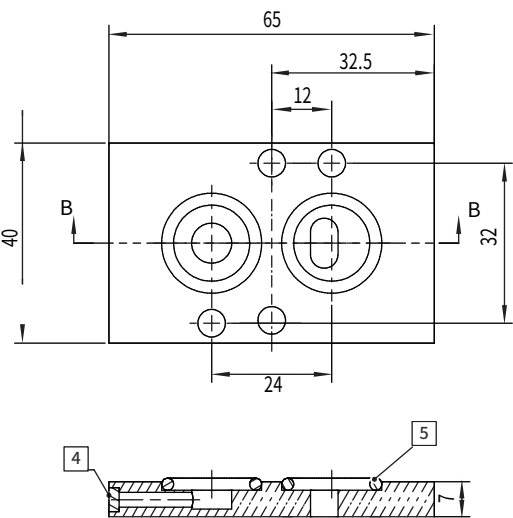
※ Manual control (press & rotate to lock)
Grain head size Pg9
M5 and G1/8 can rotate 2x180 °G1/4 to G1/2 can rotate 4x90°

NO.	A	C	ØD	E	F	G	H	I	J	K	L	M	N	O	ØP	ØQ	R	S	T	U	V	Model
⑤	157	14	3.2	54	27	4	3	2.5	M5	M5	27.1	39	30	13.9	M5	3.3	6	-	13	18	-	VPL33A611D-C52 VPL33A711D-C52 VPL33A811D-C52
⑤	157	14	3.2	54	27	4	3	2.5	G1/8	G1/8	29.1	39	30	13.9	G1/8	3.3	6	-	13	18	-	VPL33A611D-CA2 VPL33A711D-CA2 VPL33A811D-CA2
⑤	192	20	4.3	67	35	7	3	5	G1/4	G1/4	36	55	38	21	G1/4	3.3	6	3	17	22	-	VPL33B611A-AB2 VPL33B711A-AB2 VPL33B811A-AB2
⑤	207	24	4.3	70	40	6.5	4	5	G3/8	G3/8	45	55	50	24	G3/8	4.3	8	4	20	27	-	VPL33C611A-AC2 VPL33C711A-AC2 VPL33C811A-AC2
⑤	248	28	5.5	74	50	7.5	4	5	G1/2	G1/2	63	39	72	36	G1/2	4.3	8	4	27	34	-	VPL33D611D-AD2 VPL33D711D-AD2 VPL33D811D-AD2

⑥ 5/2 and 3/2 single electronic control(NAMUR) ⑦ 5/2 and 3/2 dual electronic control(NAMUR)



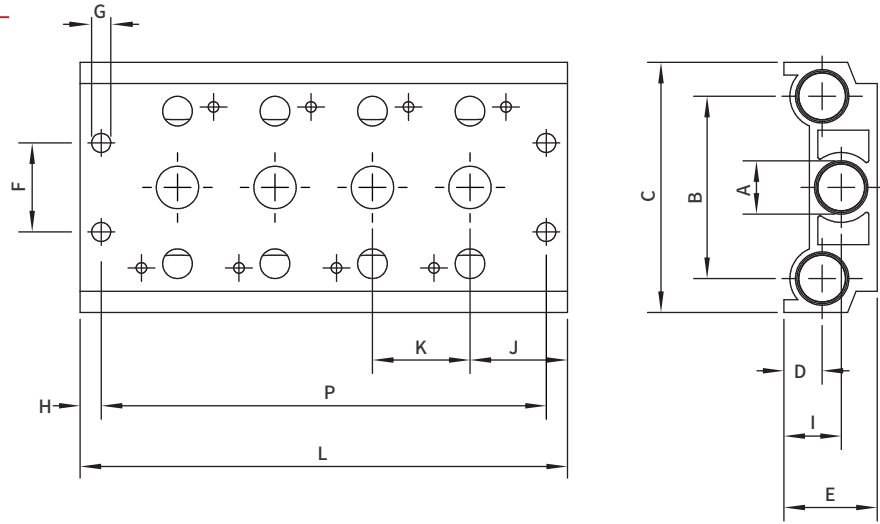
⑧ Switching board (5/2 to 3/2)



※ Manual control (press & rotate to lock)
Grain head size Pg9
M5 and G1/8 can rotate 2x180 °G1/4 to G1/2 can rotate 4x90°
solenoid valve product and installed by the customer.

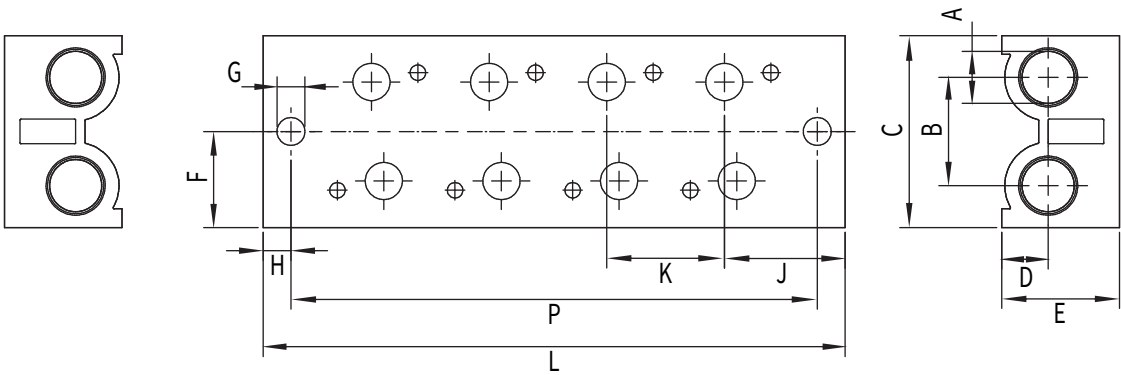
NO.	A	C	D	E	F	G	H	I	J	K	L	M	N	O	ØP	ØQ	R	S	T	U	V	Model
⑥	135	-	-	70	40	9.5	6	5	G1/4	G1/4	45	55	24	-	20	5.5	9	-	32	27	40	VPL33C517A-AE2***
⑥	135	-	-	70	40	9.5	6	5	G3/8	G1/4	45	55	24	-	20	5.5	9	-	32	27	40	VPL33C517A-AF2***
⑦	190	-	-	70	40	9.5	6	5	G1/4	G1/4	45	55	24	-	20	5.5	9	-	32	27	-	VPL33C511A-AE2***
⑦	190	-	-	70	40	9.5	6	5	G3/8	G1/4	45	55	24	-	20	5.5	9	-	32	27	-	VPL33C511A-AF2***

⑨ 5/2 & 5/3 Floorboard



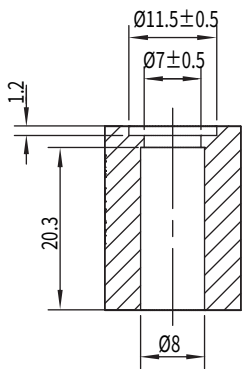
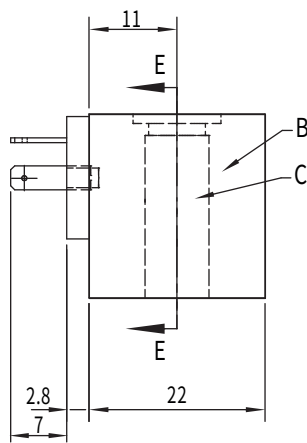
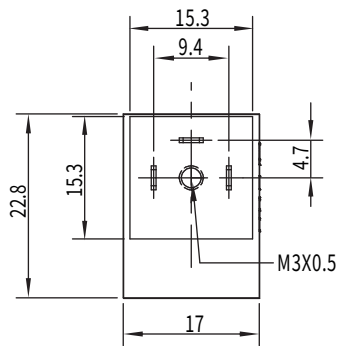
NO.	A	C	D	E	F	ØG	H	I	J	K	L	P	Model
⑨	G1/4	40	56.5	9	20	4.5	5	13.5	19	19	19+(N x 19)	9+(N x 19)	VPL33A**
⑨	G1/4	43	59	9	21	4.5	6	13.5	23	23	23+(N x 23)	11+(N x 23)	VPL33B**
⑨	G1/4	53	73	11.7	26	4.5	6	17	27	27	26+(N x 28)	14+(N x 28)	VPL33C**
⑨	G1/4	70	98	16.5	32	4.5	7	24	31.5	31.5	28+(N x 35)	14+(N x 35)	VPL33D**

⑩ 3/2 Floorboard



NO.	A	C	D	E	F	ØG	H	I	J	K	L	P	Model
⑩	1/8	17.5	31	6	19	15.5	4.5	4.5	19.5	19.5	18+(N x 19)	9+(N x 19)	VPL33A/3**
⑩	1/4	23	45	8.5	22.5	22.5	4.5	6	23	23	23+(N x 23)	11+(N x 23)	VPL33B/3**
⑩	3/8	29	50	12	28	25	4.5	7	27	27	26+(N x 28)	14+(N x 28)	VPL33C/3**
⑩	1/2	35.5	62.5	16	35	31	5.5	24	31.5	32	28+(N x 35)	14+(N x 35)	VPL33D/3**

⑪ 15mm Coil



⑫ 22mm Coil

