

Directional Valve



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Астрахань (8512)99-46-04
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Ставрополь (8652)20-65-13

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Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
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SR Integrated Manifold

SR

Integrated Manifold (Plug-in Type)



How to Order?

SR Valve Group:

Series No.	Valve Body Size	ID code	Port Size	Voltage	Mounting Type	Thread Type
S: Common type SN: Low power type	1: 1 series 2: 2 series	R: RV series valve	M5: M5 06: 1/8" 08: 1/4"	E4: DC24V E5: DC12V (Only DC24V for low power type)	Blank: No accessory D: DIN guide rail clip with 1 meter DIN guide rail D0: DIN guide rail clip without DIN guide rail (DIN guide rail packed separately)	Blank: G P: PT T: NPT

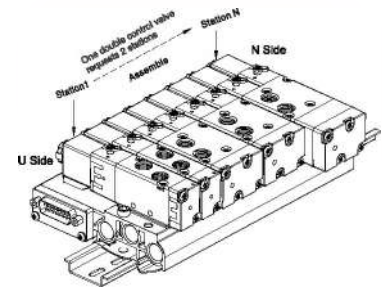
Qty (suitable for same valve, single control 2~24 pieces double control 2~7 pieces) (for mixed valves, maximum manifold is 14 stations)
Note: double control valve request 2 stations)

Code	Function	Remark
S	5/2 single	assembly sequence,
D	5/2 double	
C	5/3 center closed	1st link start from U side
P	5/3 center pressure	
E	5/3 center exhaust	
B	blind plate	

Order Example:

SR series integrated manifold with same valves, 1 series valve body, RV series valve, 6 pieces valves, single control, 1/8 port size, voltage DC24V, without accessories, G thread, ERP code is: S1R-6S-06E4

SR series integrated manifold with different valves, 1 series valve body, RV series valve, station 1 and 2 are 5/2 single control valves, station 3,4,5,6 are 2 pieces 5/2 double control valves, station 7 and 8 are 1 piece 5/3 double control, center close valve, 1/8 port size, voltage DC24V, with clips and 1 meter DIN rail, G thread, ERP code is: S1R-2S2DC-06E4-D

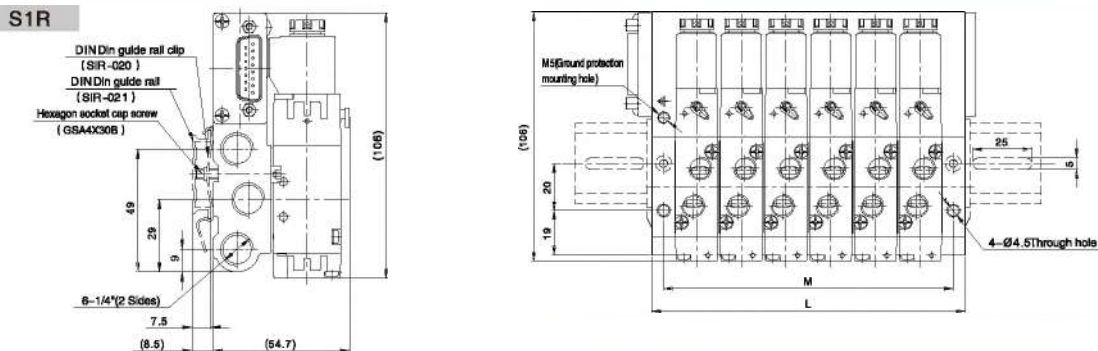


Connecting Cable

Connector	Number of cable core	Length of cable
D15: 15 pins D-sub Connector	15: 15 cores { 14 coils maximum } 08: 8 cores { 7 coils maximum }	1M: 1 meters 2M: 2 meters 3M: 3 meters Note: Length can be customized

Order Example: SR series integrated manifold, Valve Group, Length of cable: 3 meters, ERP code is: D15-15-3M

Main Dimension



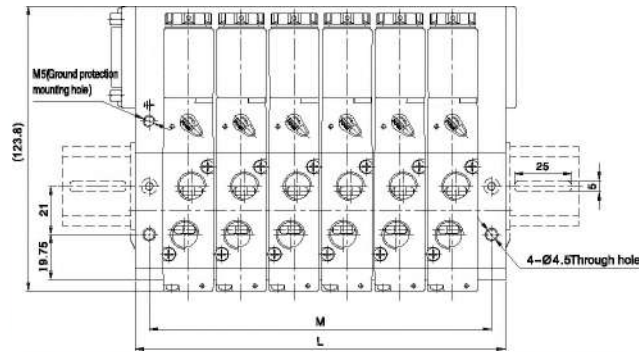
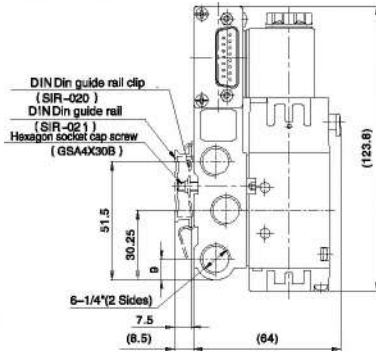
* The hole positions of Din guide rail can't be specified, its may change randomly.

(mm)

Sign/Model	S1R3S	S1R4S	S1R5S	S1R6S	S1R7S	S1R8S	S1R9S	S1R10S	S1R11S	S1R12S	S1R13S	S1R14S
L	76	95	114	133	152	171	190	209	228	247	266	285
M	68	85	104	123	142	161	180	199	218	237	256	275

Main Dimension

S2R



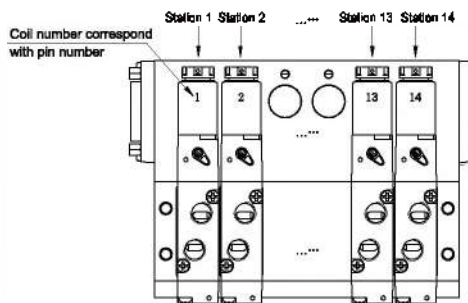
*The hole positions of Din guide rail can't be specified, its may change randomly.

(mm)

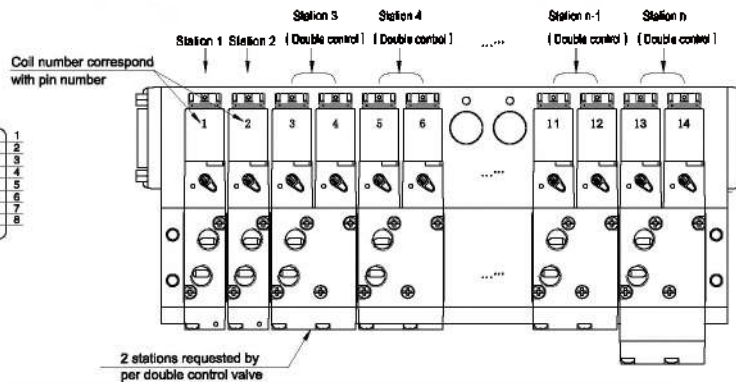
Sign/Model	S2R3S	S2R4S	S2R5S	S2R6S	S2R7S	S2R8S	S2R9S	S2R10S	S2R11S	S2R12S	S2R13S	S2R14S
L	92	115	138	161	184	207	230	253	276	299	322	345
M	80	103	126	149	172	195	218	241	264	287	310	333

Installation

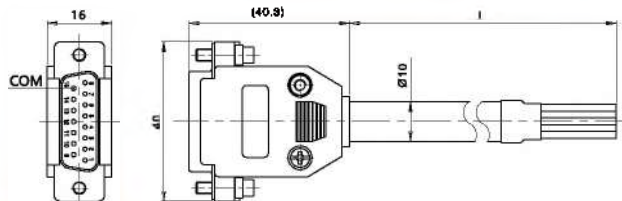
Wiring diagram of single control valves
(14 stations maximum)



Wiring diagram of mixed single control and double control



Wiring diagram and specification for cable of SR series



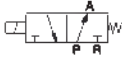
PIN number & Wire Color

Pin number	Wire color	Pin number	Wire color	Pin number	Wire color	Pin number	Wire color
1	Purple	5	White	9	Purple with point	13	White with point
2	Orange	6	Red	10	Orange with point	14	Red with point
3	Pink	7	Green	11	Pink with point	15	Black
4	Grey	8	Black with point	12	Grey with point		

V series standard/ N series low power solenoid valve (3/2 way)

2.03

V321



VP321-06

How to Order?

Low power solenoid valve

Series No.	Valve body ID code	ID Code	Positions	Ways	Controls	Port size	Voltage	Connection mode	Cover color	Thread type
N		M Standard armature + Low power coil	2: 2 positions	3: 3 ways	1: Single control	M5: M5 O6: 1/8"	E1: AC110V E2: AC220V E4: DC24V	Blank: DIN connector F: Flying leads	Blank: Brown translucent J: Colorless and translucent	Blank: G P: PT T: NPT

Blank: standard valve body
P: European valve body (Only for 3/2 way)

Standard solenoid valve

Series No.	Ways	Positions	Controls	Port size	ID Code	Voltage	Connection mode	Cover color	Thread type
V VP	3: 3 ways	2: 2 positions	1: Single control	V321 M5:M5 O6: 1/8" VP321 O6: 1/8"	Blank: standard type A: Amisco coil	E1: AC110V E2: AC220V E3: AC380V E4: DC24V E5: DC12V	Blank: DIN connector F: Flying leads	Blank: Brown translucent J: Colorless and translucent	Blank: G P: PT T: NPT

E6: AC36V
E7: AC24V
E8: DC110V
E9: DC48V
E10: DC36V

Order Example:

N series solenoid valve, standard pilot+Low power coil, 3/2 way, single control, 1/8" port size, standard coil, DC24V, DIN connector, G thread, ERP code is: NM231-06E4

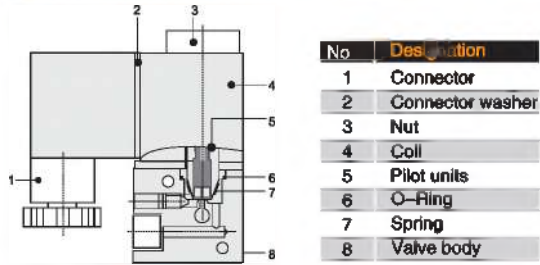
Specifications

Model No.	NM231-M5	NM231-O6	NM231-O6	NM231-O6	NM231-O6
Working medium	Clean air (After 40 µm filtration)				
Acting type	Direct acting				
Orifice (mm)	1.2				
Port size	M5	1/8	M5	1/8	
Lubrication	Not required				
Working pressure (MPa)	0~0.8				
Guaranteed pressure (MPa)	1.2				
Working temperature (°C)	-5~60				
Voltage range	-15% ~ +10%				
Power consumption	AC 1VA DC:0.9W		AC:5VA DC:4.8V	AC:7VA DC:8.5V	
Insulation class	Class F				
Protective class	IP65 (DIN40050)				
Max. acting frequency	10 cycles/s				
Seal material	NBR				
Activate time	Below 0.05 Sec.				
Weight (g)	141	138	141	138	

Product Features

- Various voltages and working styles are available.
- Different surface treatment, thread types (G,PT,NPT) are available.

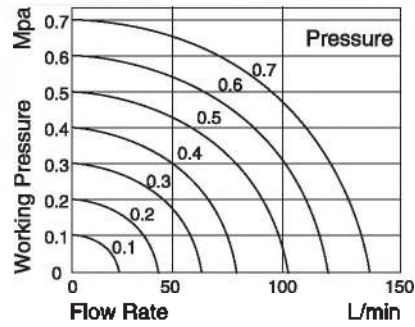
Internal structure



Main Parts Material

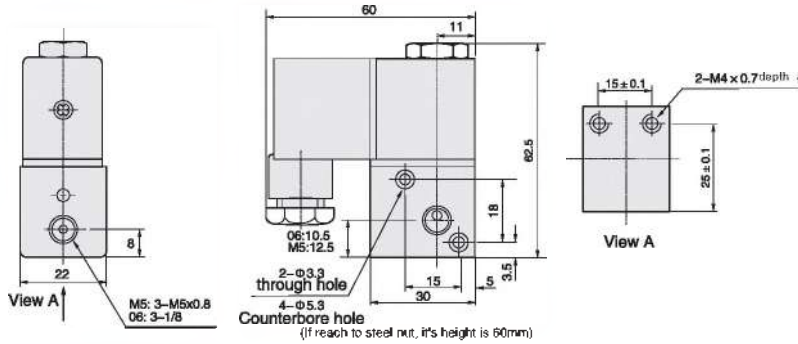
Part name	Material
Valve body	Aluminum alloy
Connector	Engineering plastic
Connector washer	NBR
Pilot units	Pure steel+Cu+Stainless steel
Diaphragm	NBR
Nut	POM+Carbon steel
Coil	Brass Wire covered with heat resistance colophony

Flow Chart

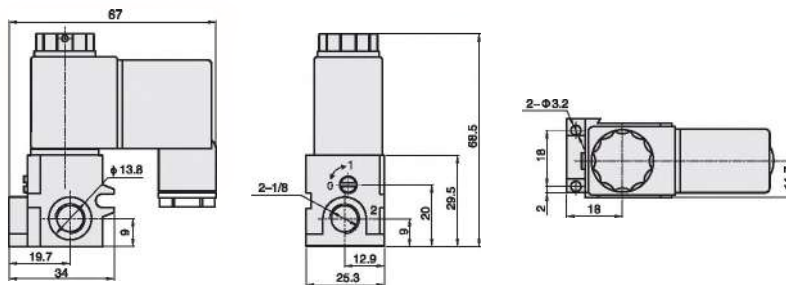


Main Dimension

V321-M5/06
NM231-M5/06



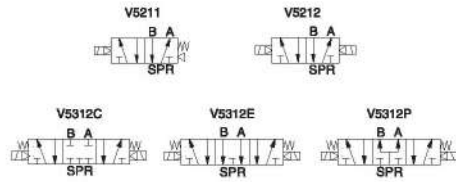
VP321-06
NPM231-06



V series standard/ N series low power solenoid valve (5/2,5/3 way)



V series 2.22



How to Order?

Standard solenoid valve

Series No.	Ways	Positions	Valve body size	Controls	Original status	Port size	ID Code	Voltage	Connection mode	Cover color	Valve color	Thread type
V	5:5 ways	2: 2 positions 3: 3 positions	1- 1Series 2- 2Series 3- 3Series 4- 4Series	1: Single control 2: Double control	C: Center close P: Center pressure E: Center exhaust (Only for 5/3 way)	M5: M5 06: 1/8" 08: 1/4" 10: 3/8" 15: 1/2"	Blank: standard type A: Amisoo coil E1: AC110V E2: AC220V E3: AC380V E4: DC24V E5: DC12V	E6: AC36V E7: AC24V E8: DC110V E9: DC48V E10: DC36V	Blank: DIN connector F: Flying leads	Blank: Brown translucent J: Colorless and translucent	Blank: Black W: White	Blank: G P: PT T: NPT

Order Example

V series solenoid valve, 2 series valve body size, 5/2 way, single control, 1/4" port size, standard coil, DC24V, DIN connector, G thread, ERP code is V5221-08E4

Specifications

Model NO.	V5211-M5 V5212-M5 V5312-M5	V5211-06 V5212-06 V5312-06	V5221-06 V5222-06 V5322-06	V5221-08 V5222-08 V5322-08	V5231-08 V5232-08 V5332-08	V5231-10 V5232-10 V5332-10	V5241-10 V5242-10 V5342-10	V5241-15 V5242-15 V5342-15
Port size	M5	G1/8	G1/8	G1/4(Ex G1/8)	G1/4	G3/8(Ex G1/4)	G3/8	G1/2
Sectional area(mm ²)	5/2:55(CV=0.31) 5/3:55(CV=0.28)	5/2:12(CV=0.67) 5/3:9(CV=0.50)	5/2:14(CV=0.78) 5/3:12(CV=0.67)	5/2:18(CV=0.68) 5/3:12(CV=0.67)	5/2:25(CV=1.40) 5/3:18(CV=1.00)	5/2:30(CV=1.68) 5/3:18(CV=1.00)	5/2:50(CV=2.79) 5/3:30(CV=1.67)	5/2:50(CV=2.79) 5/3:30(CV=1.67)
Working medium	Clean air(After 40 μm filtration)							
Acting type	Pilot type							
Lubrication	Not required							
Working pressure(MPa)	0.15~0.8							
Guaranteed pressure(MPa)	1.2							
Working temperature(°C)	-5~60							
Voltage range	-15%~+10%							
Power consumption	DC 2.8W ; AC 3.0VA				DC 4.8W ; AC 5VA			
Insulation class	Class F							
Protective class	IP65(DIN40050)							
Max. acting frequency	5/2: 5 Cycles/s . 5/3: 3 Cycles/s							
Activate time(S)	<0.05							
Weight(g)	V5211: 110 V5212: 171 V5312: 181	V5221: 209 V5222: 314 V5322: 357	V5231: 289 V5232: 400 V5332: 450	V5241: 528 V5242: 638 V5342: 727				

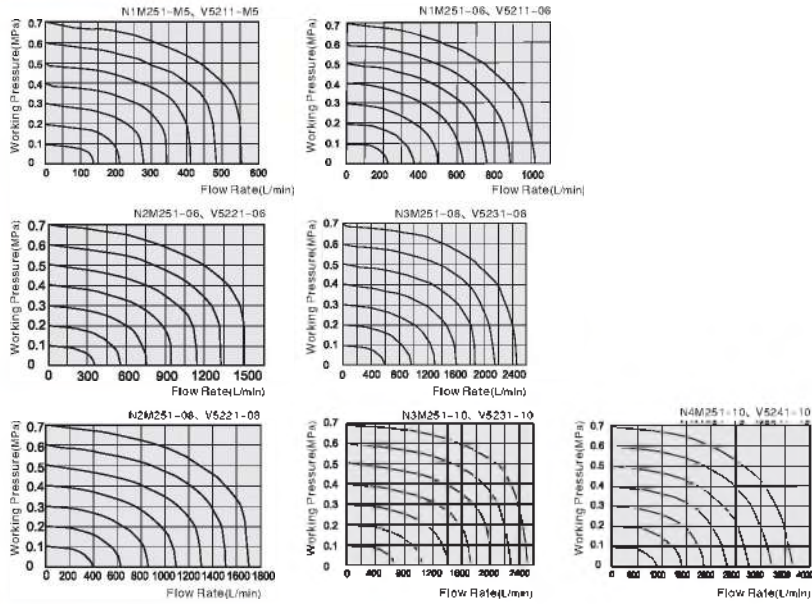
V series standard/ N series low power solenoid valve (5/2,5/3 way)

2.23

V series

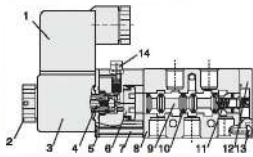
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Flow Chart

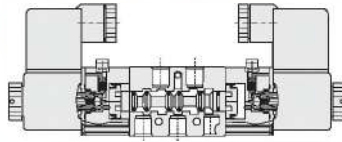


Internal structure

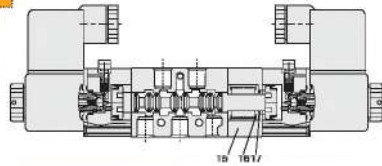
Single solenoid valve



Double solenoid valve



5/3 solenoid valve



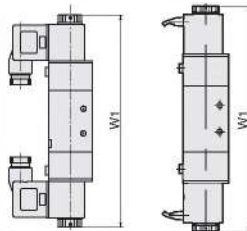
No.	Part name	Material
1	Connector	Engineering plastic
2	Nut	POM+Carbon steel
3	Coil	Cu
4	Pilot units	
5	Plate	Carbon steel
6	Piston	POM
7	Screw	Carbon steel
8	Valve body	Aluminum alloy
9	Spool	Aluminum alloy
10	O-ring	HNBR
11	Spring	Stainless steel
12	Rear cover	Zinc alloy
13	Screw	Alloy steel
14	Manual override	Engineering plastic
15	Back seat	Aluminum alloy
16	Spring seat	Aluminum alloy
17	C-type buckle	65Mn

Main Dimension

Double solenoid valve

DIN Type

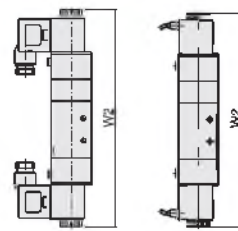
Flying Leads Type



5/3 solenoid valve

DIN Type

Flying Leads Type



Model/Sign	W1	W2
V5212	140.6	-
V5222	172	-
V5232	191	-
V5242	222	-
V5312	-	155.6
V5322	-	191
V5332	-	210
V5342	-	244

Note: The dimensions of N series and V series are same.

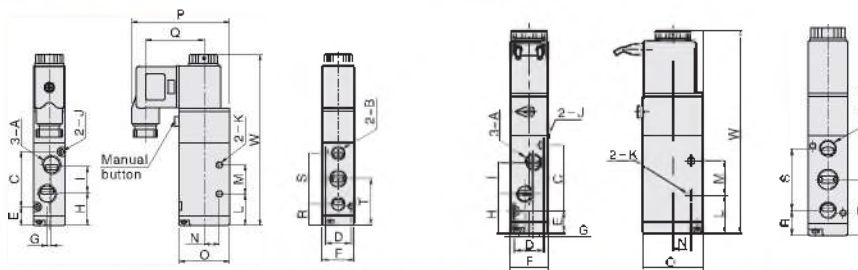
2

Main Dimension

Single solenoid valve

DIN Type

Flying Leads Type

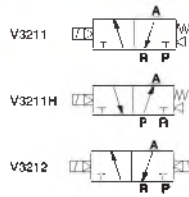


Model/Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	W
V5211-M5	M5	M5	30	13	13.2	1.8	0	21	14.5	3.3	3.3	21.2	14	9.5	27	54.8	32.8	14.5	27.5	28.2	98.5
V5211-05	G1/8	G1/8	30	13	13.2	1.8	3	20.2	16	3.3	3.3	21.2	14	9.5	27	54.8	32.8	14.5	27.5	28.2	98.5
V5221-05	G1/8	G1/8	38	17	12.7	2.2	0	22.7	18	3.3	4.3	21.7	20	10.5	35	67.5	40.5	14.2	36	31.7	117.7
V5221-08	G1/4	G1/8	38	17	12.7	2.2	3	21.7	20	3.3	4.3	21.7	20	10.5	35	67.5	40.5	14.2	36	31.7	117.7
V5231-08	G1/4	G1/4	50	20	15	2.7	0	28	24	4.3	4.3	28	24	13.5	40	70	40.5	17.5	45	40	135.5
V5231-10	G3/8	G1/4	50	20	15	2.7	4	28	24	4.3	4.3	28	24	13.5	40	70	40.5	17.5	45	40	135.5
V5241-10	G3/8	G3/8	72	27	21	3.4	0	39	36	4.3	5.5	43	28	17.5	50	75	40.5	25.5	63	57	168
V5241-15	G1/2	G1/2	72	27	21	3.4	4	39	36	4.3	5.5	43	28	17.5	50	75	40.5	25.5	63	57	168

Note: The dimensions of N series and V series are same.

V series standard/ N series low power solenoid valve (3/2 way)

2.09 V Series



How to Order?

2

Standard solenoid valve

Series No.	Ways	Positions	Valve body size	Controls	Original status	Port size	ID Code	Voltage	Connection mode	Cover color	Valve color	Thread type
V	3 3 ways	2; 2 positions	1: 1Series 2: 2Series 3: 3Series 4: 4Series	1: Single control 2: Double control	Blank: NC H: NO	M5; M5 06: 1/8"	Blank: standard type A: Amisco coil E1: AC110V E2: AC220V E3: AC380V E4: DC24V E5: DC12V	E6: AC36V E7: AC24V E8: DC110V E9: DC48V E10: DC36V	Blank: DIN connector F: Flying leads	Blank: Brown translucent J: Colorless and translucent	Blank: Black W: White	Blank: G P: PT T: NPT

Order Example:

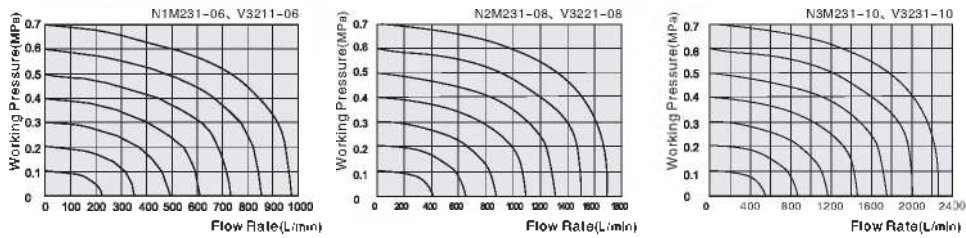
V series solenoid valve, 1 series valve body size, standard pilot+Low power coil, 3/2 way, single control, NC, 1/8" port size, standard coil, DC24V, DIN connector, G thread. ERP code is: V3211-06E4

Specifications

Model NO.	V3211-M5 V3212-M5	V3211-06 V3212-06	V3221-06 V3222-06	V3221-08 V3222-08	V3231-08 V3232-08	V3231-10 V3232-10	V3241-10 V3242-10	V3241-15 V3242-15
Port size	M5	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Sectional area(mm ²)	5.5(CV=0.31)	12(CV=0.67)	14(CV=0.78)	16(CV=0.89)	25(CV=1.40)	30(CV=1.68)	50(CV=2.79)	50(CV=2.79)
Working medium	Clean air(After 40 μm filtration)							
Acting type	Pilot type							
Lubrication	Not required							
Working pressure(MPa)	0.15~0.8							
Guaranteed pressure(MPa)	1.2							
Working temperature(°C)	-5~60							
Voltage range	-15%~10%							
Power consumption	DC:2.8W ; AC:3.0VA			DC:4.8W ; AC:5VA				
Insulation class	Class F							
Protective class	IP65(DIN40050)							
Max. acting frequency	5 Cycles/s							
Activate time(S)	<0.05							
Weight(g)	V3211: 102 V3212: 169	V3221: 107 V3222: 303	V3231: 260 V3232: 370	V3241: 443 V3242: 569				

Note: The technical data of NO type and NC type are same.

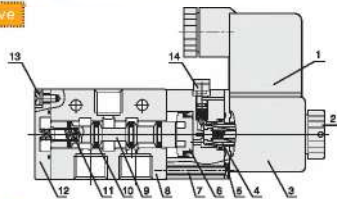
Flow Chart



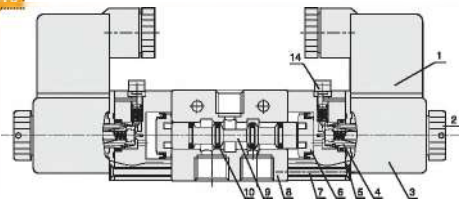
2

Internal structure

Single solenoid valve



Double solenoid valve



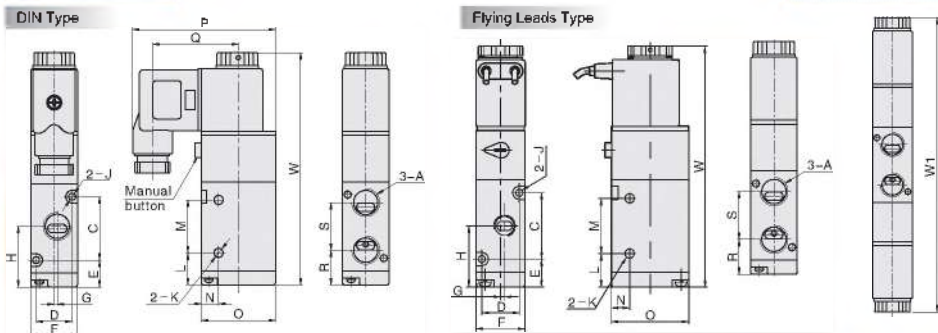
ID	Part name	Material
1	Connector	Engineering plastic
2	Nut	POM+Carbon steel
3	Coil	Cu
4	Pilot units	
5	Plate	Carbon steel
6	Piston	POM
7	Screw	Carbon steel
8	Valve body	Aluminum alloy
9	Spool	Aluminum alloy
10	O-ring	HNBR
11	Spring	Stainless steel
12	Rear cover	Zinc alloy
13	Screw	Carbon steel
14	Manual override	Engineering plastic



Main Dimension

Single solenoid valve

Double solenoid valve

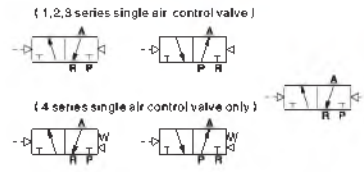


2

Model/Sign	A	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	W	W1*
V3211-M5	M5	19	13	13.2	18	0	22.7	3.3	3.3	12.2	21	7.5	27	54.8	32.8	15.7	14	87.5	129.6
V3211-06	G1/8	19	13	13.2	18	1.5	23.7	3.3	3.3	12.2	21	7.5	27	54.8	32.8	14.7	16	87.5	129.6
V3221-06	G1/8	30	17	12.7	22	0	27.7	3.3	4.3	15.2	25	8.2	35	67.5	40.5	18.5	18.5	109.7	164
V3221-08	G1/4	30	17	12.7	22	1.5	28.7	3.3	4.3	15.2	25	8.2	35	67.5	40.5	16.5	22.5	109.7	164
V3231-06	G1/4	35	20	15	27	0	32.5	4.3	4.3	17.5	30	10.5	40	70	40.5	21.5	22	120.5	176
V3231-10	G3/8	35	20	15	27	2	32.5	4.3	4.3	17.5	30	10.5	40	70	40.5	20.5	24	120.5	176
V3241-10	G3/8	40.5	27	24.8	34	0	45	4.3	5.3	21	48	13.5	50	75	40.5	29.5	31.5	144	198
V3241-15	G1/2	40.5	27	24.8	34	2	45	4.3	5.3	21	48	13.5	50	75	40.5	29.5	31.5	144	198

Note: The dimensions of NO type and NC type are same, the dimensions of N series and V series are same.

RV series air control valve (3/2way)



How to Order?

Series No.	Ways	Positions	Valve body ID code	Controls	Initial Status	Port size	Reset Type	Thread type
RVA	3; 3 ways	2,2 positions	1: 1Series 2: 2Series 3: 3Series 4: 4Series	1 Single control 2 Double control	Blank: normal close(N.C) H normal open(N.O)	M5: M5 06: 1/8" 08: 1/4" 10: 3/8" 15: 1/2"	Blank: spring return (Apply to 4 series single control valve) Q: air return (Apply to 1,2,3 series single control valve)	Blank: G P: PT T: NPT

Order Example:

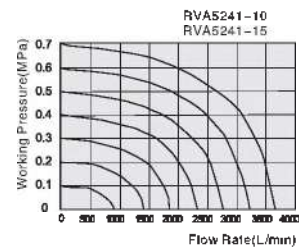
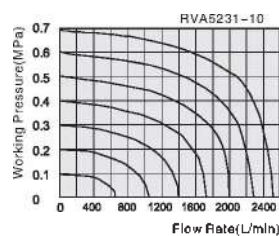
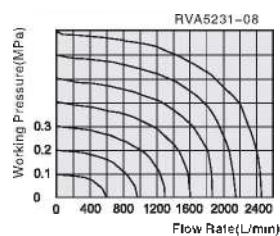
RVA series air control valve, 3/2 way, 2 series valve body size, single control, NC type, 1/4" port size, air reset, PT thread
ERP code is: RVA3221-06Q-P

Specifications

Model No.	RVA3211-M5 RVA3212-M5	RVA3211-06 RVA3212-06	RVA3221-06 RVA3222-06	RVA3221-08 RVA3222-08	RVA3231-08 RVA3232-08	RVA3231-10 RVA3232-10	RVA3241-10 RVA3242-10	RVA3241-15 RVA3242-15
Port size	M5	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Sectional area(mm)	5.5(CV=0.31)	12(CV=0.67)	14(CV=0.78)	16(CV=0.89)	25(CV=1.40)	30(CV=1.68)	50(CV=2.79)	50(CV=2.79)
Working medium	Clean air(After 40 μm filtration)							
Acting type	External type							
Reset type	Spring reset / Gas reset							
Lubrication	Not required							
Working pressure(MPa)	0.15-0.8							
Guaranteed Pressure(MPa)	1.2							
Working temperature(°C)	-20~70 (Dry air)							
Max. acting frequency	5 Cycles/s							
Weight(g)	RVA3211:60 RVA3212:75		RVA3221:116 RVA3222:143		RVA3231:187 RVA3232:220		RVA3241:378 RVA3242:430	

RV series air control valve (5/2, 5/3 way)

Flow Chart

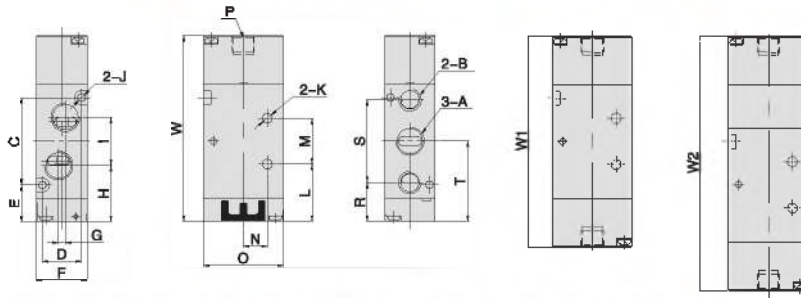


Main Dimension

Single air control

Double air control

5/3 ways solenoid valve

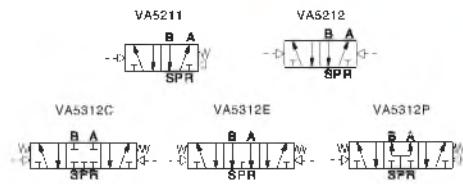


Model/Sign	A	B	C	D	E	F									R	S	T	W	W1	W2		
RVA5211-M5	M5	M5	30	13	16.5	18	0	24.5	14.1	3.3	3.3	24.5	14	9.5	27	G1/8	17.9	27.2	31.5	72	81	96
RVA5211-06	G1/8	G1/8	30	13	16.5	18	3	23.5	15	3.3	3.3	24.5	14	9.5	27	G1/8	17.5	28	31.5	72	81	96
RVA5221-06	G1/8	G1/8	38	17	16	22	0	26	18	3.3	4.3	25	20	10.5	35	G1/8	17	36	35	81	92	111
RVA5221-08	G1/4	G1/4	38	17	16	22	3	24.5	21	3.3	4.3	25	20	10.5	35	G1/8	17	36	35	81	92	111
RVA5231-08	G1/4	G1/4	50	20	19.1	27	0	33.1	22	4.3	4.3	32.1	24	13.5	40	G1/8	21.6	45	44.1	99.6	111	130
RVA5231-10	G3/8	G3/8	50	20	19.1	27	4	32.1	24	4.3	4.3	32.1	24	13.5	40	G1/8	21.6	45	44.1	99.6	111	130
RVA5241-10	G3/8	G3/8	72	27	21	34	0	39	36	4.3	5.5	43	28	17.5	50	G1/8	25.5	63	57	127	140	161
RVA5241-15	G1/2	G1/2	72	27	21	34	4	39	36	4.3	5.5	43	28	17.5	50	G1/8	25.5	63	57	127	140	161

V series air control valve (5/2,5/3 way)



VA series 2.28



How to Order?

Series No.	Ways	Positions	Valve body size	Controls	Original status	Port size	Valve type	Valve color	Thread type
VA	5:5 ways	2:2 positions 3:3 positions	1: 1Series 2: 2Series 3: 3Series 4: 4Series	1: Single control 2: Double control	C: Center close P: Center pressure E: Center exhaust (Only for 5/3 way)	M5 - M5 06: 1/8" 08: 1/4" 10: 3/8" 15: 1/2"	Blank: Standard type M: NAMUR type	Blank: Black W: White	Blank: G P: PT T: NPT

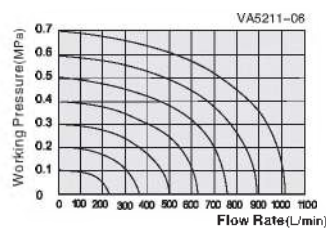
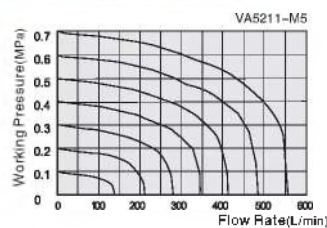
Order Example:

V series air control valve, 1 series valve body size, 5/2 way, single control, 1/8" port size, standard valve body, white color, PT thread, ERP code is: VA5211-06W-P

Specifications

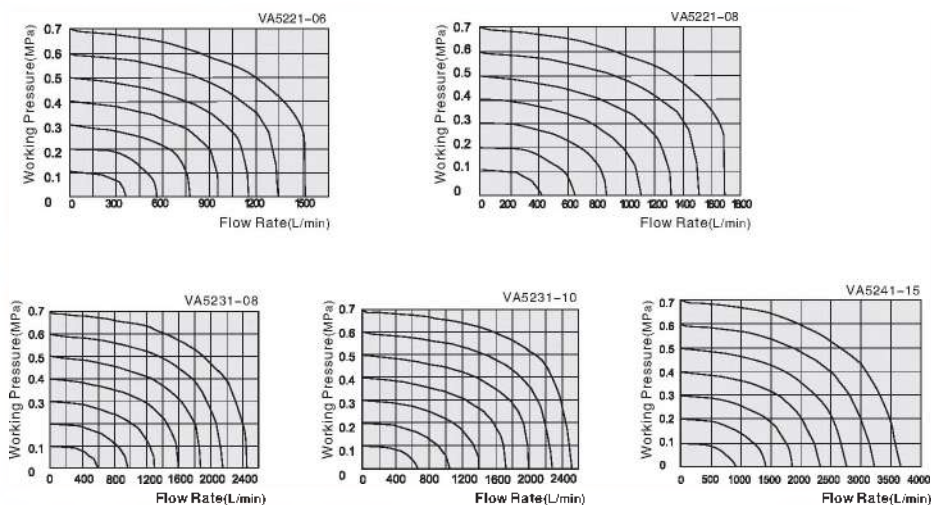
Model NO.	VA5211-M5 VA5212-M5 VA5312-M5	VA5211-06 VA5212-06 VA5312-06	VA5221-08 VA5222-06 VA5322-08	VA5221-08 VA5222-08 VA5322-08	VA5231-08 VA5232-08 VA5332-08	VA5231-10 VA5232-10 VA5332-10	VA5241-10 VA5242-10 VA5342-10	VA5241-15 VA5242-15 VA5342-15
Port size	M5	G1/8	G1/8	G1/4(Ex.G1/8)	G1/4	G3/8(Ex.G1/4)	G3/8	G1/2
Sectional area(mm ²)	5/2.5(CV=0.31) 5/3.5(CV=0.28)	5/2.12(CV=0.67) 5/3.9(CV=0.50)	5/2.14(CV=0.78) 5/3.12(CV=0.67)	5/2.16(CV=0.89) 5/3.12(CV=0.67)	5/2.25(CV=1.40) 5/3.18(CV=1.00)	5/2.30(CV=1.68) 5/3.18(CV=1.00)	5/2.50(CV=2.79) 5/3.30(CV=1.67)	5/2.50(CV=2.79) 5/3.30(CV=1.67)
Working medium	Clean air(After 40 μm filtration)							
Acting type	External type							
Lubrication	Not required							
Working pressure(MPa)	0.15-0.8							
Guaranteed pressure(MPa)	1.2							
Working temperature(°C)	-5-60							
Max acting frequency	5/2-5 Cycles/s; 5/3-3 Cycles/s							
Weight(g)	V5211: 72 V5212: 87 V5312: 181		V5221: 128 V5222: 153 V5322: 219		V5231: 218 V5232: 280 V5332: 358		V5241: 437 V5242: 490 V5342: 598	

Flow Chart



Flow Chart

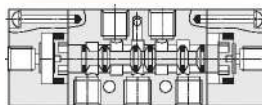
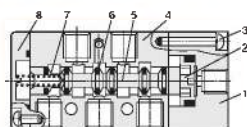
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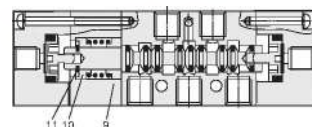
Internal structure

Single air control

Double air control



5/3 air control



Part name	Material
1 Air control cover	Aluminum alloy
2 Piston	POM
3 Screw	Carbon steel
4 Valve body	Aluminum alloy
5 Spool	Aluminum alloy
6 O-ring	NBR
7 Spring	Stainless steel
8 Rear cover	Zinc alloy
9 Back seal	Aluminum alloy
10 Spring seat	Aluminum alloy
11 C-type buckle	65Mn

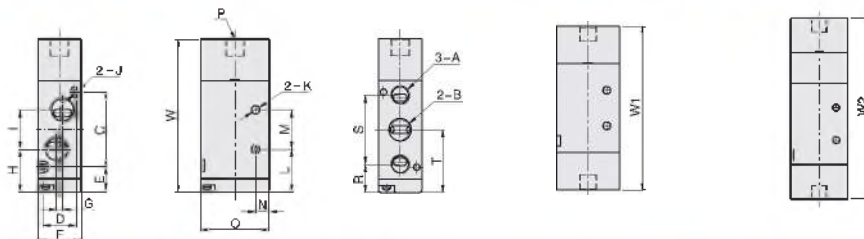
V series air control valve (5/2,5/3 way)

Main Dimension

Single air control

Double air control

5/3 air control

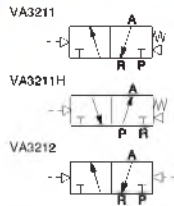


2

Model/Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	W	W1	W2
VA5211-MS	M6	M5	30	13	13.2	18	0	21	14.5	3.3	3.3	21.2	14	9.5	27	G1/8	14.5	27.5	28.2	68.7	81	96
VA5221-06	G1/8	G1/8	30	13	13.2	18	3	20.2	16	3.3	3.3	21.2	14	9.5	27	G1/8	14.5	27.5	28.2	68.7	81	96
VA5221-06	G1/8	G1/8	38	17	12.7	22	0	22.7	18	3.3	4.3	21.7	20	10.5	35	G1/8	14.2	35	31.7	77.7	92	111
VA5221-08	G1/4	G1/8	38	17	12.7	22	3	21.7	20	3.3	4.3	21.7	20	10.5	35	G1/8	14.2	35	31.7	77.7	92	111
VA5231-08	G1/4	G1/4	50	20	15	27	0	28	24	4.3	4.3	28	24	13.5	40	G1/8	17.5	45	40	95.5	111	130
VA5231-10	G3/8	G1/4	50	20	15	27	4	28	24	4.3	4.3	28	24	13.5	40	G1/8	17.5	45	40	95.5	111	130
VA5241-10	G3/8	G3/8	72	27	21	34	0	39	36	4.3	5.5	43	28	17.5	50	G1/8	25.5	63	57	127	140	162
VA5241-15	G1/2	G1/2	72	27	21	34	4	39	36	4.3	5.5	43	28	17.5	50	G1/8	25.5	63	57	127	140	162

V series air control valve (3/2 way)

2.15 VA Series



How to Order?

Series No.	Ways	Positions	Valve body size	Controls	Original status	Port size	Valve type	Valve color	Thread type
VA	3:3 ways	2:2 positions	1: 1Series 2: 2Series 3: 3Series 4: 4Series	1: Single control 2: Double control	Blank: NC H:NO	M5:M5 05:1/8" 08:1/4" 10:3/8" 15:1/2"	Blank: Standard type M: NAMUR type	Blank Black W: White	Blank: G P: PT T: NPT

Order Example:

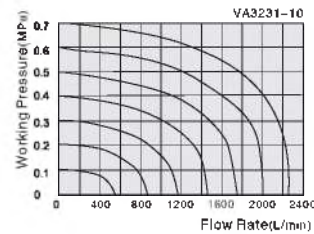
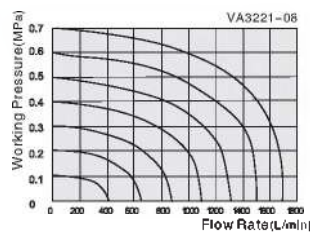
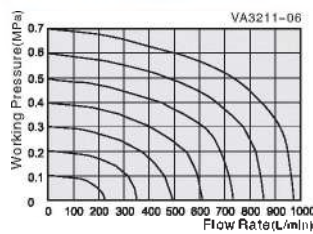
V series air control valve, 1 series valve body size, NC type, 3/2 way, 1/8" port size, standard valve body, white color, PT thread.
ERP code is: VA3211-06W-P

Specifications

Model NO.	VA3211-M5 VA3212-M5	VA3211-06 VA3212-06	VA3221-06 VA3222-06	VA3221-08 VA3222-08	VA3231-08 VA3232-08	VA3231-10 VA3232-10	VA3241-10 VA3242-10	VA3241-15 VA3242-15
Port size	M5	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Sectional area(mm ²)	5.5(CV=0.31)	12(CV=0.67)	14(CV=0.78)	16(CV=0.89)	25(CV=1.40)	30(CV=1.66)	50(CV=2.79)	50(CV=2.79)
Working medium	Clean air(After 40 μm filtration)							
Acting type	External type							
Lubrication	Not required							
Working pressure(MPa)	0.15~0.8							
Guaranteed pressure(MPa)	1.2							
Working temperature(°C)	-5~60							
Max acting frequency	5 Cycles/s							
Weight(g)	VA3211: 60 VA3212: 75		VA3221: 116 VA3222: 143		VA3231: 187 VA3232: 220		VA3241: 378 VA3242: 430	

Note: The technical data of NO type and NC type are same.

Flow Chart

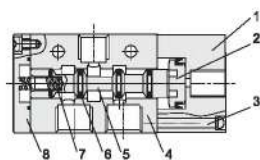


V series air control valve (3/2way)

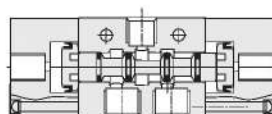
RVA Series 2.16

Internal structure

Single air control



Double air control

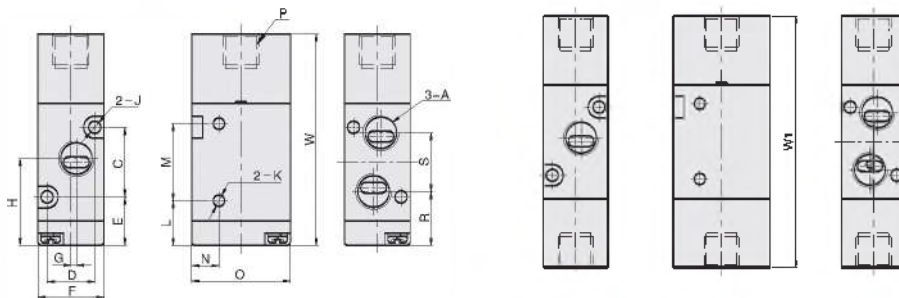


Part name	Material
1 Air control cover	Aluminum alloy
2 Piston	POM
3 Screw	Carbon steel
4 Valve body	Aluminum alloy
5 Spool	Aluminum alloy
6 O-ring	HNBR
7 Spring	Stainless steel
8 Rear cover	Zinc alloy

Main Dimension

Single air control

Double air control



Model/Sign	A	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	W	WI*
VA3211-M5	M5	19	13	13.2	18	0	22.7	3.3	3.3	12.2	21	7.5	27	G1/8	15.7	14	57.7	70
VA3211-06	G1/8	19	13	13.2	18	1.5	23.7	3.3	3.3	12.2	21	7.5	27	G1/8	14.7	16	57.7	70
VA3221-06	G1/8	30	17	12.7	22	0	27.7	3.3	4.3	15.2	25	8.2	35	G1/8	18.5	18.5	89.7	84
VA3221-08	G1/4	30	17	12.7	22	1.5	28.7	3.3	4.3	15.2	25	8.2	35	G1/8	18.5	22.5	89.7	84
VA3231-08	G1/4	35	20	15	27	0	32.5	4.3	4.3	17.5	30	10.5	40	G1/8	21.5	22	80.5	96
VA3231-10	G3/8	35	20	15	27	2	32.5	4.3	4.3	17.5	30	10.5	40	G1/8	20.5	24	80.5	96
VA3241-10	G3/8	40.5	27	24.8	34	0	45	4.3	5.3	21	48	13.5	50	G1/8	29.5	31.5	103	116
VA3241-15	G1/2	40.5	27	24.8	34	2	45	4.3	5.3	21	48	13.5	50	G1/8	29.5	31.5	103	116

Note: The dimensions of NO type and NC type are same.

V series Confluence Plate(3/2 way)

2.17 V series manifold



How to Order?

2



* V series manifold for 3/2, 2 series valve body, 5 linkers, model: V322-5F

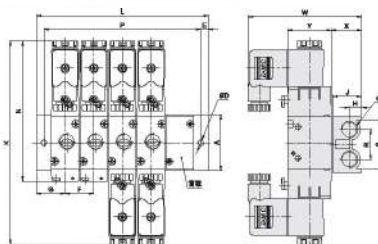
* Blind plate for 3/2 valve, 2 series valve body, Model: VBP-322

Note: Blind plate assembly comprising: Blind gaskets and mounting screws

Corresponding Application

N	Confluence Plate Model	Valve Model
1	V321-NF (N≤16)	V3211 (H) /V3212
2	V322-NF (N≤16)	V3221 (H) /V3222
3	V323-NF (N≤12)	V3231 (H) /V3232
4	V324-NF (N≤7)	V3241 (H) /V3242

Main Dimension

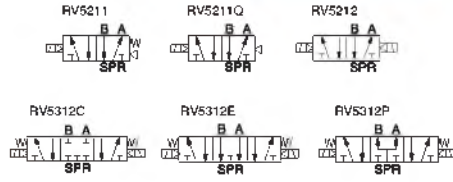


单位(mm)

Model/Sign	L										A	D	E	F	G	H	J	K
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F								
V321-□F	38	57	78	95	114	133	152	171	190	209	31	4.5	5.25	19	18	7.75	19	132.2
V322-□F	48	69	92	115	138	161	184	207	230	253	45	4.5	6	23	23	10	23.5	183.4
V323-□F	54	82	110	138	168	194	222	250	278	306	50	4.5	6	28	26	12	28	175.4
V324-□F	63	98	133	168	203	238	273	308	343	378	62.5	5.5	7	35	31.5	16	35	199.4

Model/Sign	G										N	O	R	S	W	X	Y
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F							
V321-□F	28	47	68	85	104	123	142	161	180	199	92.1	G1/8	17.5	25	75.2	20	27
V322-□F	34	57	80	103	126	149	172	195	218	241	112.7	G1/4	24	39	91.2	24.5	35
V323-□F	42	70	98	126	154	182	210	238	266	294	124.3	G3/8	29	42	98.2	29	40
V324-□F	49	84	119	154	189	224	259	294	329	364	144.7	G1/2	35.5	51.5	110.2	35	50

RV series standard/ low power solenoid valve (5/2,5/3 way)



How to Order?

Low power solenoid valve

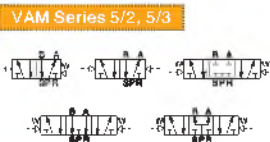
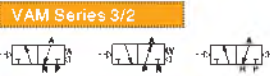
Series No	Valve body size	ID Code	Positions	Ways	Controls	Original status	Port size	Reset form	Voltage	Connection mode	Cover color	Acting type	Thread type
N	1: 1 Series 2: 2 Series 3: 3 Series 4: 4 Series	R	2: 2 positions 3: 3 positions	5 ways	1: Single control 2: Double control	C: Center close P: Center pressure E: Center exhaust (Only for 5/3 way)	M5- M5 06: 1/8" 08: 1/4" 10: 3/8" 15: 1/2"	Blank: Spring Q: Air (Only single control)	E1: AC110V E2: AC220V E4: DC24V f1 Series only DC24V)	Blank: DIN connector H: Waterproof DIN connector (Only 2, 3, 4 series is optional)	Blank: Brown translucent J: Colorless and translucent	Blank: Internal pilot WB: External pilot	Blank: G P: PT T: NPT

Order Example: RV series solenoid valve, 2 series valve body size, standard pilot+Low power coil, 5/2 way, single control, 1/4" port size, standard coil, DC24V, DIN connector, G thread. ERP code is: N2R251-08E4

Specifications

Model NO.	N1R251-M5 N1R252-M5 N1R352-M5	N1R251-06 N1R252-06 N1R352-06	N2R251-06 N2R252-06 N2R352-06	N2R251-08 N2R252-08 N2R352-08	N3R251-08 N3R252-08 N3R352-08	N3R251-10 N3R252-10 N3R352-10	N4R251-10 N4R252-10 N4R352-10	N4R251-15 N4R252-15 N4R352-15
Port size	M5	G1/8	G1/8	G1/4(Ex G1/8)	G1/4	G3/8(Ex G1/4)	G3/8	G1/2
Sectional area(mm ²)	5/2:5.9(CV=0.31) 5/3:5.9(CV=0.28)	5/2:12(CV=0.67) 5/3:9(CV=0.50)	5/2:14(CV=0.78) 5/3:12(CV=0.67)	5/2:16(CV=0.88) 5/3:12(CV=0.67)	5/2:25(CV=1.40) 5/3:18(CV=1.00)	5/2:30(CV=1.68) 5/3:18(CV=1.00)	5/2:50(CV=2.79) 5/3:30(CV=1.67)	5/2:50(CV=2.79) 5/3:30(CV=1.67)
Working medium	Clean air(After 40 μm filtration)							
Acting type	Internal pilot type / External pilot type							
Reset Type	Spring reset / Gas reset							
Lubrication	Not required							
Working pressure(MPa)	0.15-0.8							
Guaranteed pressure(MPa)	1.2							
Working temperature(°C)	-20~70(Dry air)							
Voltage range	-15%~10%							
Power consumption	DC:0.7W		DC:1.0W ; AC:1.0VA					
Insulation class	Class F							
Protective class	IP65(DIN40050)							
Max. acting frequency	5/2: 5 Cycles/s; 5/3: 3 Cycles/s							
Activate time(S)	<0.05							
Weight(g)	N1R251: 110 N1R252: 171 N1R352: 181	N2R251: 209 N2R252: 314 N2R352: 357	N3R251: 289 N3R252: 400 N3R352: 450	N4R251: 528 N4R252: 638 N4R352: 727				

V series NAMUR air control valve (3/2,5/2,5/3 way)



How to Order?

Series No	Ways	Positions	Valve body size	Controls	Original status	Port size	Valve type	Valve color	Thread type
VA	3: 3 ways 5: 5 ways	2: 2 positions 3: 3 positions	1: 1 Series 2: 2 Series 3: 3 Series 4: 4 Series	1: Single control 2: Double control	Blank NC H: NO C: Center close P: Center pressure E: Center exhaust (Only for 5/3 way)	1 Series M5- M5 06: 1/8" 08: 1/4" 10: 3/8" 15: 1/2"	M NAMUR type	Blank: Black W: White	Blank: G P: PT T: NPT

Order Example:

V series air control valve, 3/2 way, 2 series valve body, NC type, single control, 1/4" port size, NAMUR valve type, white valve body, PT thread, ERP code is: VA3221-08MW-P

Specifications

Model No.	VA3211/VA3212-M5	VA3211/VA3212-08	VA3221/VA3222-06	VA3221/VA3222-08	VA3231/VA3232-08
Working medium	Air (40 µm filter)				
Acting type	The external air control				
Port size	M5	1/8	In=Out=1/8	In=Out=1/4	In=Out=1/4
Sectional area	5.6mm ² (Cv=0.31)	12.0mm ² (Cv=0.67)	14.0mm ² (Cv=0.78)	16.0mm ² (Cv=0.89)	25.0mm ² (Cv=1.39)
Lubrication	Not required				
Pressure range	0.15~0.8Mpa (21~114psi)				
Guarantee pressure	1.5Mpa (215psi)				
Working temperature(°C)	-20~70				
Body material	Aluminum alloy				
Max. acting frequency	cycles/s				

Model No.	VA3241/VA3242-10	VA3241/VA3242-M5	VA3242/VA3242-M5	VA3251/VA3252-08	VA3262/VA3262-08
Working medium	Air (40 µm filter)				
Acting type	The external air control				
Port size	In=Out=3/8	In=Out=M5	In=Out=M5	In=Out=1/8	In=Out=1/8
Sectional area	30.0mm ² (Cv=1.67)	5.5mm ² (Cv=0.31)	5.0mm ² (Cv=0.28)	12.0mm ² (Cv=0.67)	9.0mm ² (Cv=0.50)
Lubrication	Not required				
Pressure range	0.15~0.8Mpa (21~114psi)				
Guarantee pressure	1.5Mpa (215psi)				
Working temperature(°C)	-20~70				
Body material	Aluminum alloy				
Max. acting frequency	5 cycles/s	3 cycles/s	3 cycles/s	5 cycles/s	3 cycles/s

Note: The technical data of NO type and NC type are same

SV Series Solenoid Valve&Valve Terminal

SV

Solenoid Valve&Valve Terminal



Product Features

- Integrated valve terminal , integrated wiring ;Adopt 26 pins D-sub connector .
- Centralized air inlet and exhaust, available for top ported , side ported and bottom ported , compact structure.
- Patent design: the pilots of double control valve are on same side; Wiring and piping are on same side.
- 5/2 ways,5/3 ways,5/4 ways(2pcs 3/2 ways) can be integrated on same valve terminal.
- 0.8W per coil.

How to Order?

S1V valve terminal

Series No.	Body Size	Piping Type	Valve Quantity	Voltage	Pilot Type	Wiring Type	Inlet & Exhaust port	Mounting	Thread Type
S: Standard	V: Top ported VM: Side ported VB: Bottom ported 1: 1 series 2: 2 series	Qty (Max.24 links for single control Max.12 links for double control)	(Applicable to different ports mixed; Blank if same ports)	E4: DC24V	Blank: Internal pilot WB: External pilot (Max.14 links for external pilot)	Blank: Double control wiring (max.12 links) S: Single control wiring (max.24 links) (Note:Mix wiring is available to customize)	Blank: Without accessories D: With DIN rail clip and 1M guide rail D0: With DIN rail clip, no guide rail (Din guide rail packed separately)	Blank: G P: PT T: NPT	

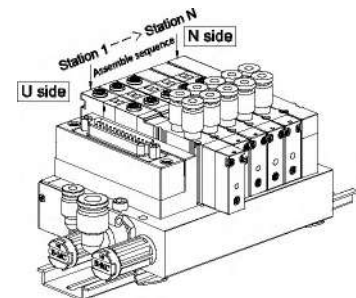
Code	Function	Remark
S	5/2 single	
D	5/2 double	
C	5/3 center closed	assembly sequence, 1st link start from U side
P	5/3 center pressure	
E	5/3 center exhaust	
Y	2pcs 3/2 (N.O.)	
H	2pcs 3/2 (N.O./N.C.)	
U	2pcs 3/2 (N.O./N.C.)	
B	blind plate	

No.	Code	Port size	Remark
1Series	M5	M5: M5 fitting	
	C4	φ 4 one-touch fitting(ZPOC04-M5C)	assembly sequence, 1st link start from U side
	C8	φ 8 one-touch fitting(ZPOC08-M7C)	
	C4A	φ 4 one-touch fitting(ZPOC04-M7C)	
2Series	O8	1/8 fitting	
	C4	φ 4 one-touch fitting(ZPC04-01)	
	C6	φ 6 one-touch fitting(ZPC06-01)	
	C8	φ 8 one-touch fitting(ZPC08-01)	

Code	Port entry	1 Station	2Station	Remark
Blank	Both side without silencer, fitting, plug	-	-	
U	U side with silencer			1) plugs are mounted on the opposite side of the selected ports; 2) only U,UL,UL side is available (at bottom ported)
N	Station N with silencer			
UN	Both side with silencer			
UL	U side with silencer	φ 8	φ 10	
NL	Station N with silencer			
UNL	Both side with silencer			
U1	U side with silencer			
N1	Station N with silencer	φ 10	φ 12	
UN1	Both side with silencer			

Order Example:

1. Same valve: S series standard valve, 1 series body, top ported, 6 links 5/2 double controlled, port size M5, DC24V, G thread, Internal pilot, double control wiring, both side without silencer, fitting, pug, the ERP code is S1V-6D-M5E4
2. Mix different valve: S series standard valve, 1 series body, top ported, see right picture : station 1 is 5/3 center closed, station 2 is 5/2 double control, station 3 is 2pcs 3/2 (N.O.) , station 4 & station 5 are 5/2 single, station 6 is blind plate,station 1 & 2 with φ 6 one-touch fitting ZPOC06-M7C, station 3~5 with with φ 4 one-touch fitting ZPOC04-M7C, DC24V,G thread, external pilot, double control wiring. U-sub side with silencer, φ 8 PL fitting, with DIN rail clip and 1M guide rail, the ERP code is S1V-CDH2SB-2C63C4AE4-WB-UL-D



SV Series Solenoid Valve & Valve Terminal

Solenoid valve

Series No.	Piping Type	Ports	Positions	Body Size	Controls	Original Status	Part Size	Voltage	Pilot Type	Wiring	Thread Type
S: Standard	V: Piping on valve VM: Piping on manifold (VM series should work with manifold)	5: 5 ports	2: 2 position 3: 3 position 4: 4 position dual 3-port valve	1: 1 series 2: 2 series	1: Single control 2: Double control	(Note: Only Wiring is available for V type)	M5: M5 M7: M7 06: 1/8"	E4: DC24V	Blank: Internal pilot WB: External pilot	Blank: None 0.3M: 0.3m wiring 0.6M: 0.6m wiring 1M: 1m wiring (Note: Wiring is available for V type only)	Blank: G P: PT T: NPT

Order Example:

S series standard type, piping on valve, 2 station 5 port, 1 series valve body, single control, M5 port, DC24V, internal pilot, 0.3 meter wiring, the ERP code is :SV5211-M5E4-0.3M.

SV valve terminal

Series No.	5/2 way	Body Size	Valve Quantity	Voltage	Inlet & Exhaust port	Wiring	Thread Type
SV: SV series	52	1: 1 series 2: 2 series	(Applicable to different ports mixed; Blank if same ports)	E4: DC24V		Blank: Without wiring 0.3M: 0.3M wiring 0.6M: 0.6M wiring 1M: 1M wiring	Blank: G P: PT T: NPT

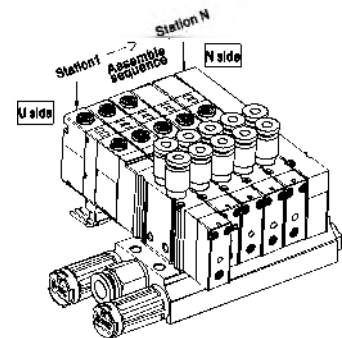
Code	Function	Remark
S	5/2 single	assembly sequence, 1st link start from U side
D	5/2 double	
C	5/3 center closed	
P	5/3 center pressure	
E	5/3 center exhaust	
Y	2pcs 3/2 (N.C.)	
H	2pcs 3/2 (N.O.)	
U	2pcs 3/2 (N.O./N.C.)	
B	blind plate	

No.	Code	Port size	Remark
1Series	M5	M5: M5 fitting	assembly sequence, 1st link start from U side
	C4	φ4 one-touch fitting(ZPOC04-M5C)	
	M7	M7: M7 fitting	
	C6	φ6 one-touch fitting(ZPOC06-M7C)	
2Series	C4A	φ4 one-touch fitting(ZPOC04-M7C)	
	06	1/8 fitting	
	C4	φ4 one-touch fitting(ZPC04-01)	
	C6	φ6 one-touch fitting(ZPC06-01)	

Code	Port entry	1Series	2Series	Remark
Blank	Both side without silencer, fitting, plug	-	-	1) plugs are mounted on the opposite side of the selected ports. 2) only U,UL,UL side is available for station ports
U	U side with silencer, φ8 PC fitting	φ 8	φ 10	
N	Station N with silencer, φ 8 PC fitting			
UN	Both side with silencer, φ 8 PC fitting			
UL	U side with silencer, φ 8 PL fitting			
NL	Station N with silencer, φ 8 PL fitting			
UNL	Both side with silencer, φ 8 PL fitting			
U1	U side with silencer, φ 10 POC fitting	φ 10	φ 12	
N1	Station N with silencer, φ 10 POC fitting			
UN1	Both side with silencer, φ 10 POC fitting			

Order Example:

- Same valve: SV series valve block, 1 series body, 6 links 5/2 double controlled SV5212, port size M5, DC24V, G thread, both side without silencer, fitting, plug, the ERP code is SV521-8D-M5E4
- Mix different valve: SV series valve block, 1 series body, see right picture : station 1 is 5/3 center closed, station 2 is 5/2 double control, station 3 is 2pcs 3/2 (N.O.), station 4 & station 5 are 5/2 single SV5211, station 6 is blind plate. station 1 & 2 with φ 6 one-touch fitting ZPOC06-M7C, station 3-5 with φ 4 one-touch fitting ZPOC04-M7C, DC24V, G thread, U-sub side with silencer, φ 8 PC fitting, the ERP code is SV521-CDH2SB-2C63C4AE4-U



SV Series Solenoid Valve & Valve Terminal

1

SV

How to Order?

Manifold				Connector							
SV	52	1	—	N	F	Thread Type	Connector Type	—	Cable Core	—	Cable Length
SV series	1: 1 series valve body 2: 2 series valve body	2 position 5 port	—	F: Manifold	Blank: G F: PT T: NPT		D25: D-sub connector 25 pins	—	25: 25 cores (24 coils or less) 16S: 16 cores (15 stations for single control or less) 16D: 16 cores (7 stations for double control or less) 08S: 8 cores (7 stations for single control or less)	—	1M: 1m cable 2M: 2m cable 3M: 3m cable (Note: please contact EMC for customized length)
				1: 1 station 2: 2 stations 3: 3 stations 24: 24 stations							
Wiring				Blind plate							
Wiring Series	—	Accessory	—	Wiring Length	SVBP	52	1				
SV5211: Single control SV5212: Double control		P01: With accessory		0.3M: 0.3m wiring 0.6M: 0.6m wiring 1M: 1m wiring (Note: Please contact EMC to customize wiring)	Blind plate for SV valve	2 position 5 port	1: 1 series valve body 2: 2 series valve body				

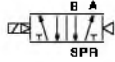
Specifications

Model	SV5211 SVM5211	SV5212 SVM5212	SV5312C/P/E SVM5312C/P/E	SV5412Y/H/U SV5412Y/H/U	SV5221 SVM5221	SV5222 SVM5222	SV5322C/P/E SVM5322C/P/E	SV5422Y/H/U SV5422Y/H/U
Sectional area (mm ²)	M5/C4: 5 (CV=0.28) M7/C6: 7 (CV=0.39)		M5/C4: 4.8 (CV=0.28) M7/C6: 6.5 (CV=0.38)		16.2 (CV=0.9)		14.5 (CV=0.8)	
Positions	2-position 5 port	2-position 5 port	3-position 5 port	4-position dual 3-port valve	2-position 5 port	2-position 5 port	3-position 5 port	4-position dual 3-port valve
Working pressure (MPa)	0.15-0.8	0.15-0.8	0.2-0.8	0.15-0.8	0.15-0.8	0.15-0.8	0.2-0.8	0.15-0.8
Port size	M5/M7 (Not available for VM series)				G1/8 (Not available for VM series)			
Working medium	Clean air (After 40 μm filtration)							
Pilot exhaust type	Internal pilot type / External pilot type							
Reset type	Air reset							
Lubrication	No required							
Proof pressure (Mpa)	1.2							
Working temperature (°C)	-20-70 (No freezing)							
Working Voltage	DC24V							
Voltage range	±10%							
Power consumption	0.8W							
Insulation class	F Class							
Protective class	IP40 Dust Proof							
Max. acting frequency	5/2: 5 cycles/s; 5/3: 3 cycles/s							
Activate time(0.5MPa)	15ms or less				20ms or less			
Weight (g)	55.5	64.5	68	65	68	97	104	98.5

SV Series Solenoid Valve & Valve Terminal

Symbol

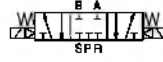
SV 5211
(5/2 single control)



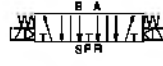
SV 5212
(5/2 double control)



SV 5312C
(5/3 center close)



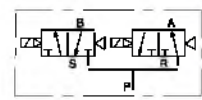
SV 5312E
(5/3 center exhaust)



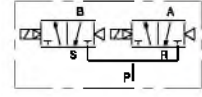
SV 5312P
(5/3 center pressure)



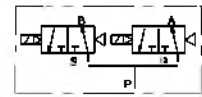
SV 5412U
(1pc 3/2 N.C + 1pc 3/2 N.O)



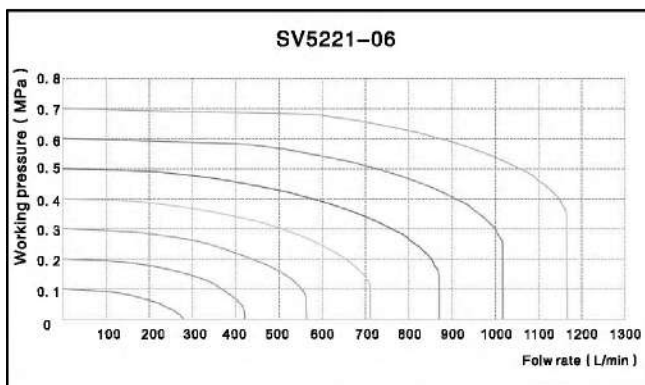
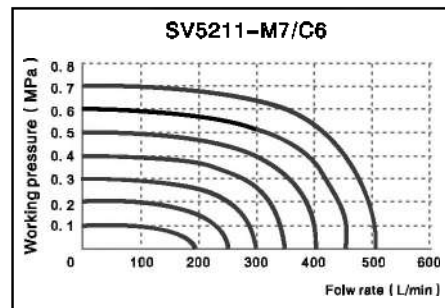
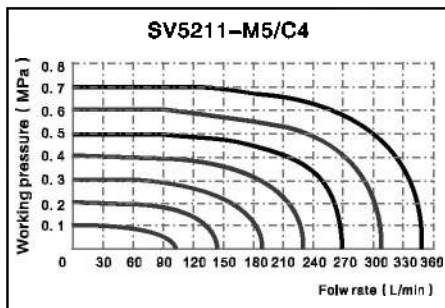
SV 5412Y
(2pcs 3/2 N.C)



SV 5412H
(2pcs 3/2 N.O)



Flow Chart

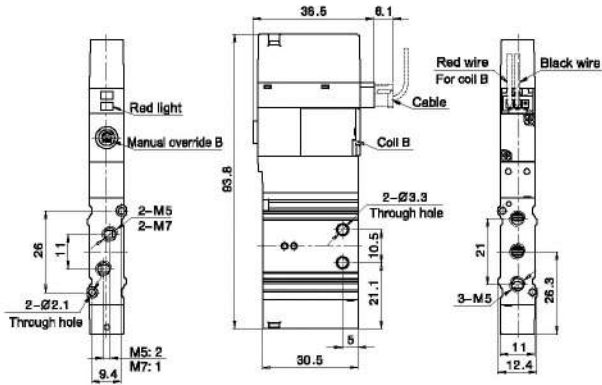


SV Series Solenoid Valve & Valve Terminal

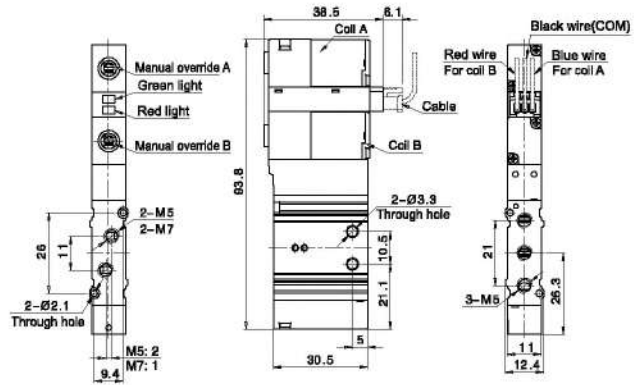
Main Dimension

Solenoid valve

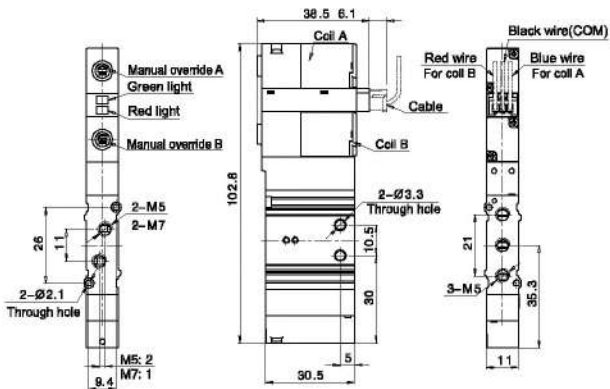
SV5211



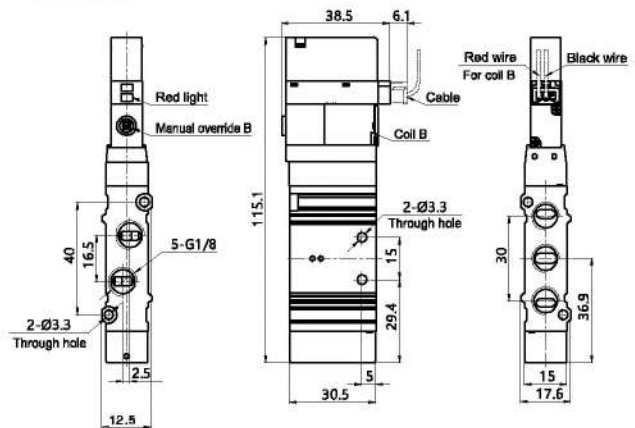
SV5212/SV5412



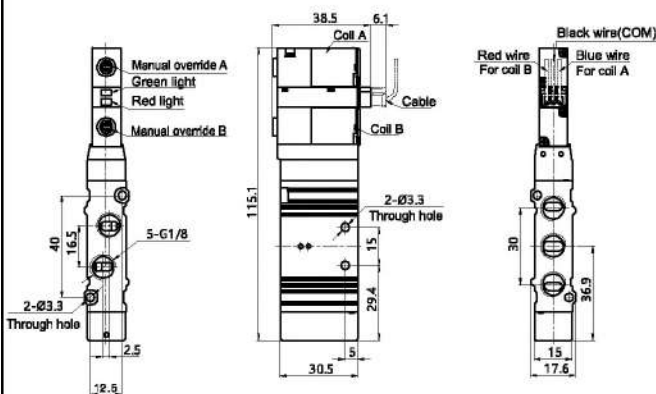
SV5312



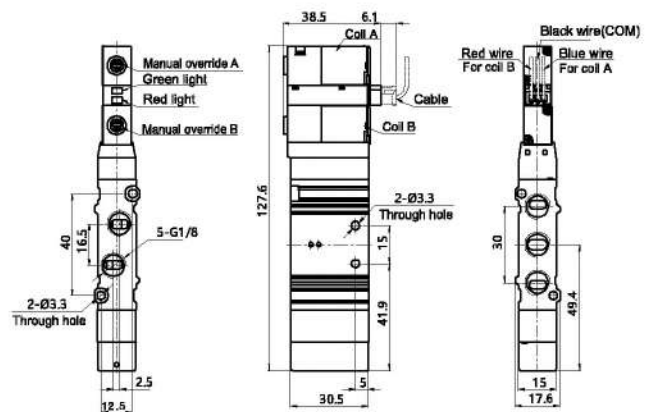
SV5221



SV5222/SV5422



SV5322

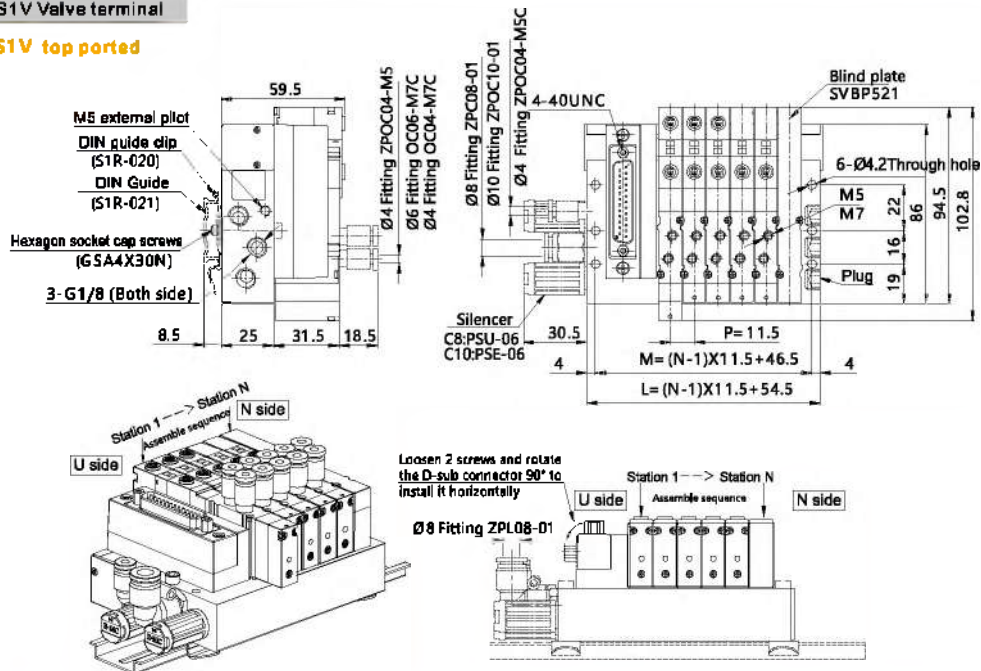


SV Series Solenoid Valve & Valve Terminal

Main Dimension

S1V Valve terminal

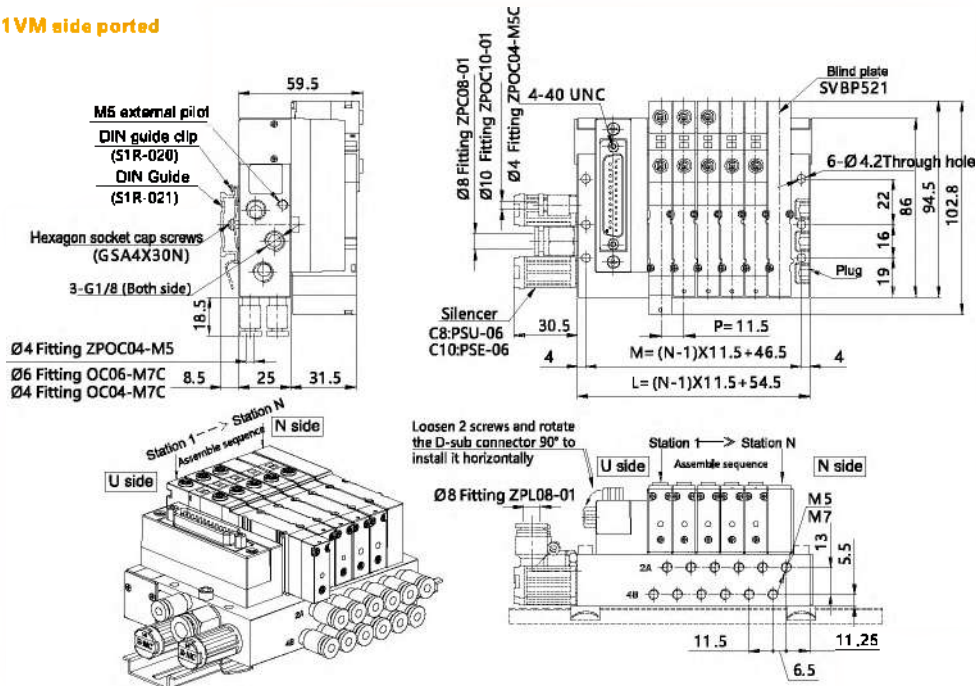
S1V top ported



Note: N means valve link

Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L	66	77.5	89	100.5	112	123.5	135	146.5	158	169.5	181	192.5	204	215.5	227	238.5	250	261.5	273	284.5	296	307.5	319	
M	68	69.5	81	92.5	104	116.5	127	138.5	150	161.5	173	184.5	196	207.6	219	230.5	242	253.5	265	276.5	288	299.5	311	

S1VM side ported



Note: N means valve link

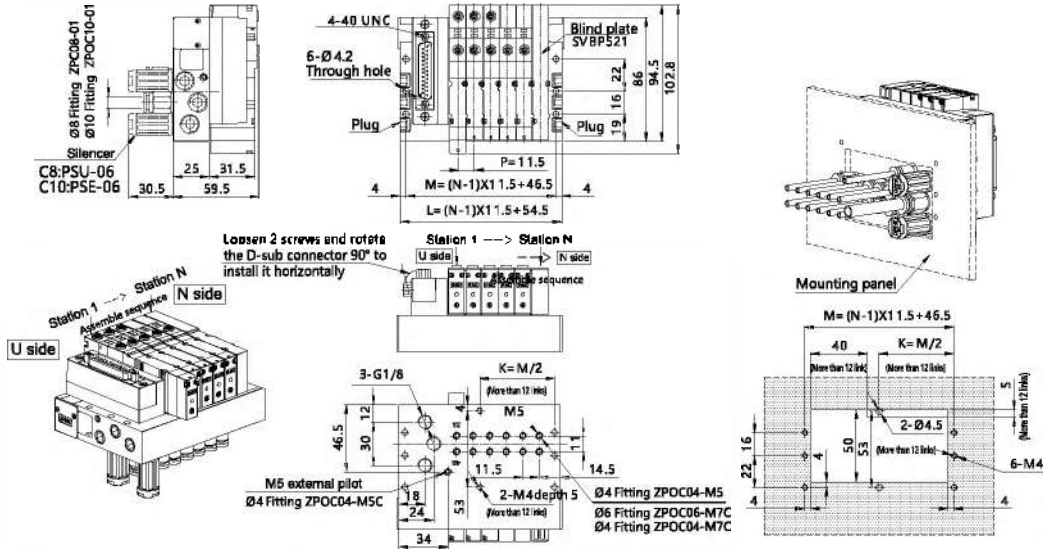
Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L	66	77.5	89	100.5	112	123.5	135	146.5	158	169.5	181	192.5	204	215.5	227	238.5	250	261.5	273	284.5	296	307.5	319	
M	58	69.5	81	92.5	104	116.5	127	138.5	150	161.5	173	184.5	196	207.6	219	230.5	242	253.5	265	276.5	288	299.5	311	

SV Series Solenoid Valve & Valve Terminal

Main Dimension

SV Valve terminal

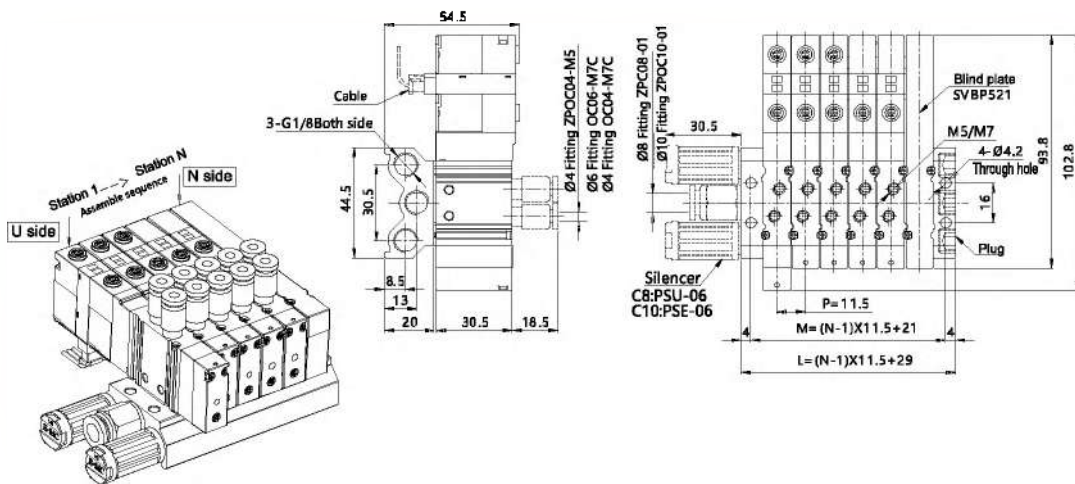
S1VB bottom ported



Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13
L		66	77.5	89	100.5	112	123.5	135	146.5	158	169.5	181	192.5
M		58	69.5	81	92.5	104	115.5	127	138.5	150	161.5	173	184.5
Sign	Model	14	15	16	17	18	19	20	21	22	23	24	
L		204	215.6	227	238.6	250	261.6	273	284.5	296	307.5	319	
M		198	207.6	219	230.5	242	253.6	265	276.5	288	299.5	311	
K		88	109.75	109.8	115.25	121	126.75	132.5	138.25	144	149.75	155.5	

Note: N means valve link

SV521 Valve terminal



Note: N means valve link

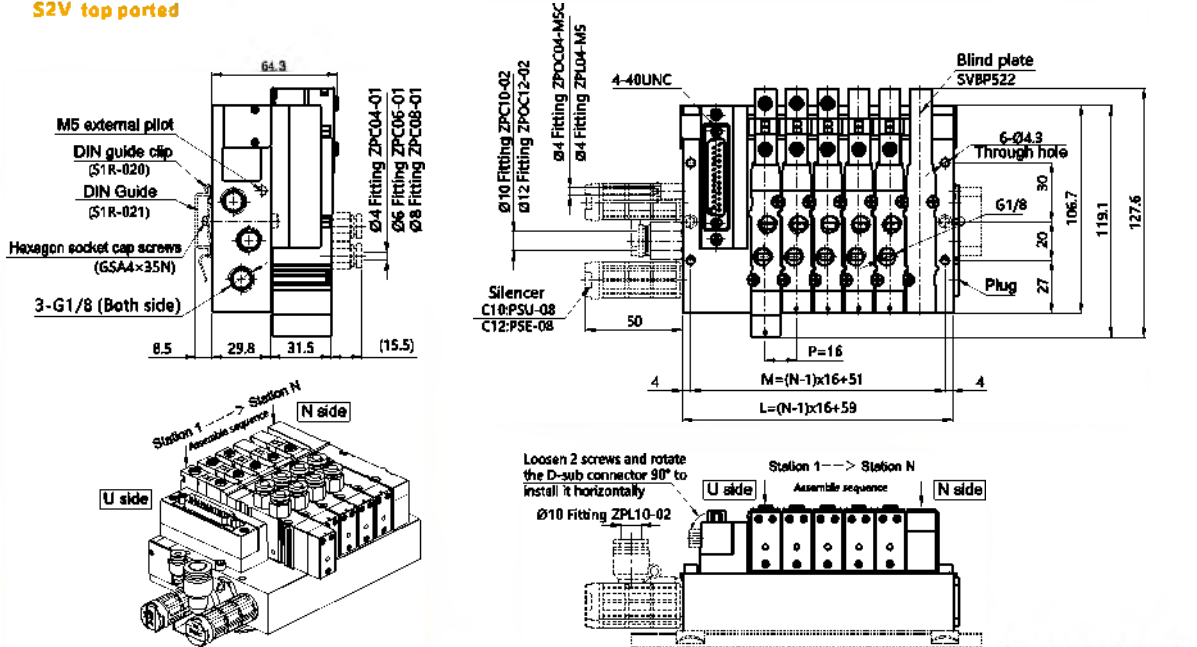
Sign	Model	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		29	40.5	52	63.5	75	86.5	98	109.5	121	132.5	144	155.5	167	178.5	190	201.5	213	224.5	236	247.5	259	270.5	282	293.5
M		21	32.5	44	55.5	67	78.5	80	101.5	113	124.5	136	147.5	159	170.5	182	193.5	205	216.5	228	239.5	251	262.5	274	285.5

SV Series Solenoid Valve & Valve Terminal

Main Dimension

S2V Valve terminal

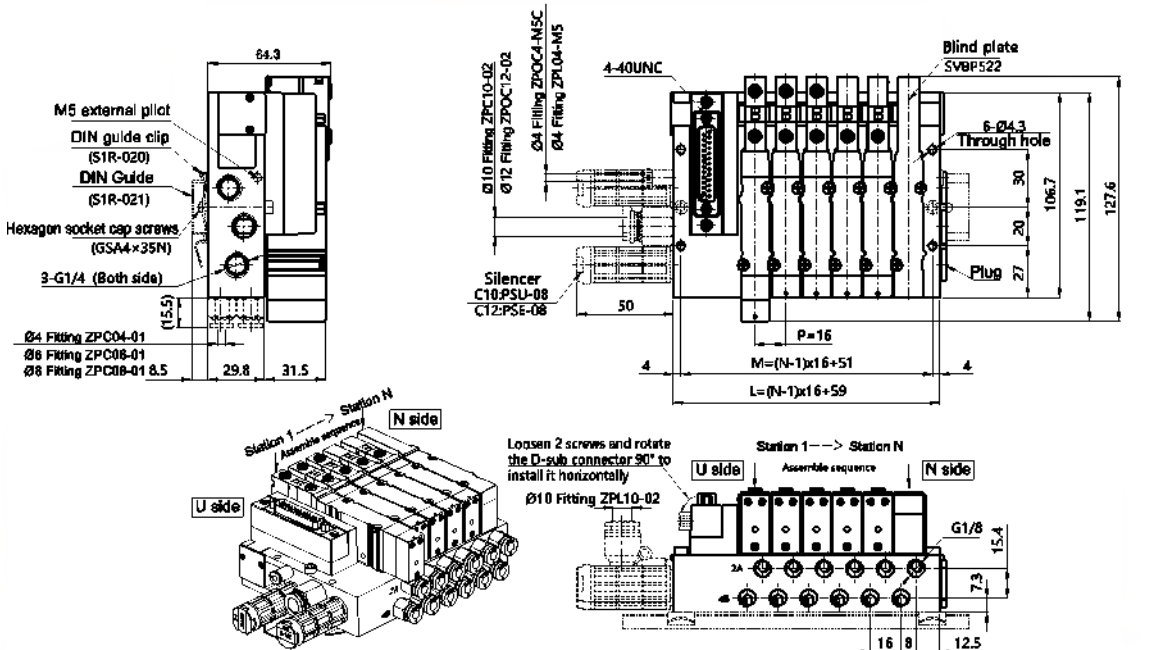
S2V top ported



Note: N means valve link

Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		75	91	107	123	139	155	171	187	203	219	235	251	267	283	299	315	331	347	363	379	395	411	427
M		67	83	99	115	131	147	163	179	195	211	227	243	259	275	291	307	323	339	355	371	387	403	419

S2VM side ported



Note: N means valve link

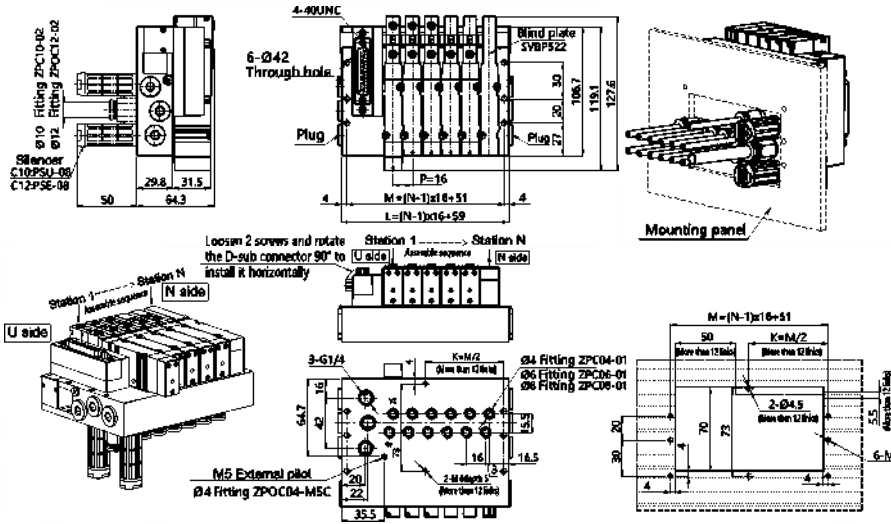
Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		75	91	107	123	139	155	171	187	203	219	235	251	267	283	299	315	331	347	363	379	395	411	427
M		67	83	99	115	131	147	163	179	195	211	227	243	259	275	291	307	323	339	355	371	387	403	419

SV Series Solenoid Valve & Valve Terminal

Main Dimension

S2V Valve terminal

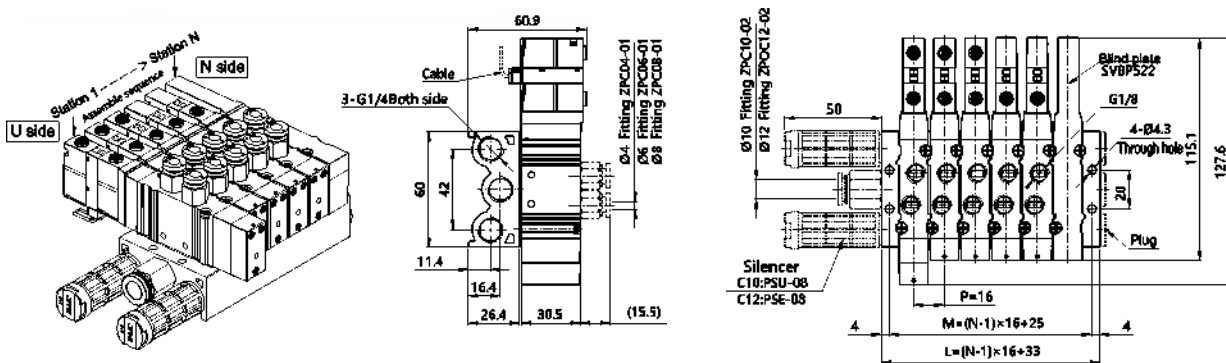
S1VB bottom ported



Sign	Model	2	3	4	5	6	7	8	9	10	11	12	
L		75	81	107	123	138	155	171	187	203	219	235	
M		87	93	98	115	131	147	163	178	195	211	227	
Sign	Model	13	14	15	16	17	18	19	20	21	22	23	24
L		251	267	283	299	315	331	347	363	379	395	411	427
M		243	259	275	291	307	323	339	355	371	387	403	419
K		121.5	129.5	137.5	145.5	153.5	161.5	169.5	177.5	185.5	193.5	201.5	209.5

Note: N means valve link

SV521 Valve terminal

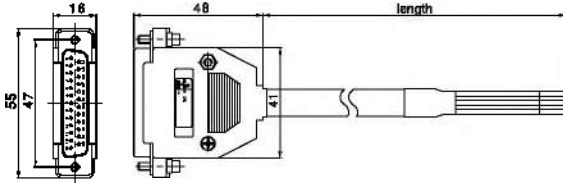


Note: N means valve link

Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		49	65	81	97	113	129	145	161	177	193	209	225	241	257	273	289	305	321	337	353	369	385	401
M		41	57	73	89	105	121	137	153	169	185	201	217	233	249	265	281	297	313	329	345	361	377	393

SV Series Solenoid Valve&Valve Terminal

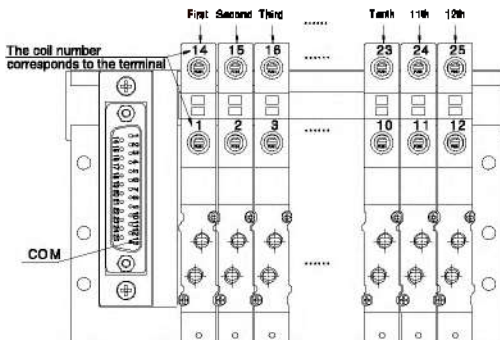
Connector & Cable



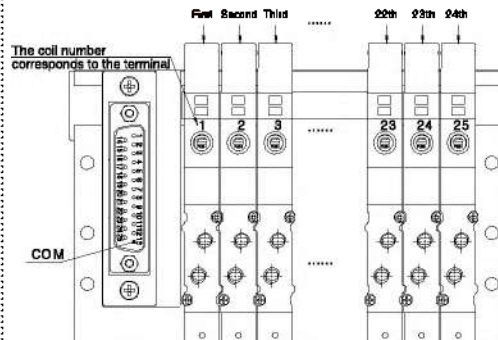
Connector Cable	PIN number & Wire Color				
	PIN Number	D2 5-25 Wire Color	D2 5-18D Wire Color	D2 5-18S Wire Color	D2 6-05S Wire Color
1	Purple	Purple	Purple	Purple	
2	Orange	Orange	Orange	Orange	
3	Pink	Pink	Pink	Pink	
4	Grey	Grey	Grey	Grey	
5	White	White	White	White	
6	Red	Red	Red	Red	
7	Green	Green	Green	Green	
8	Black	---	Black with point	---	
9	Purple with 1 point	---	Purple with 1 point	---	
10	Orange with 1 point	---	Orange with 1 point	---	
11	Pink with 1 point	---	Pink with 1 point	---	
12	Grey with 1 point	---	Grey with 1 point	---	
19(COM)	Yellow	Black	Black	Black	
14	White with 1 point	White with point	White with point	---	
15	Red with 1 point	Red with point	Red with point	---	
16	Green with 1 point	Green with point	Green with point	---	
17	Black with 1 point	Black with point	---	---	
18	Purple with 2 point	Purple with point	---	---	
19	Orange with 2 point	Orange with 1 point	---	---	
20	Pink with 2 point	Pink with point	---	---	
21	Grey with 2 point	---	---	---	
22	White with 2 point	---	---	---	
23	Red with 2 point	---	---	---	
24	Green with 2 point	---	---	---	
25	Black with 2 point	---	---	---	

Valve Terminal Inner Wiring Diagram

Double control wiring
max.12 links

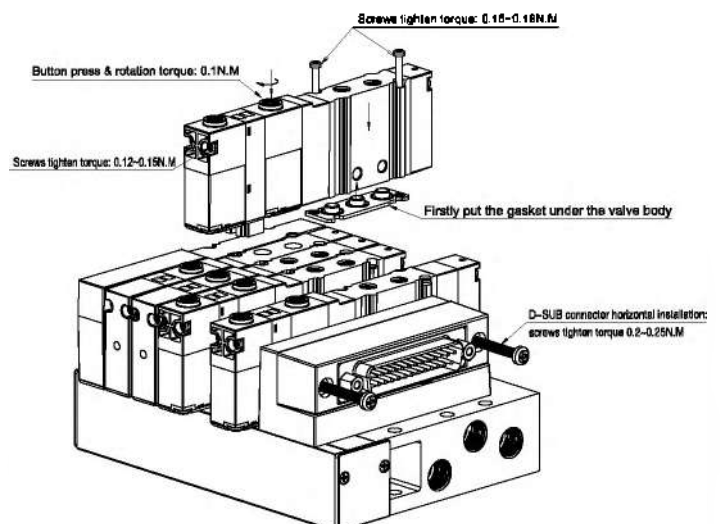


Single control wiring
max.24 links



Installation & Usage Attention

1. Do not drop the solenoid valve when it takes out from the box to avoid the damage;
2. Do not hit by external force during installation and adjustment;
3. Do not disassemble when using, once disassembled and reassembled, it may not meet the default setting and leads poor performance;
4. The torque required for relevant parts be showed on right picture.



ESV Fieldbus Valve Terminal

ESV

Solenoid Valve & Valve Terminal

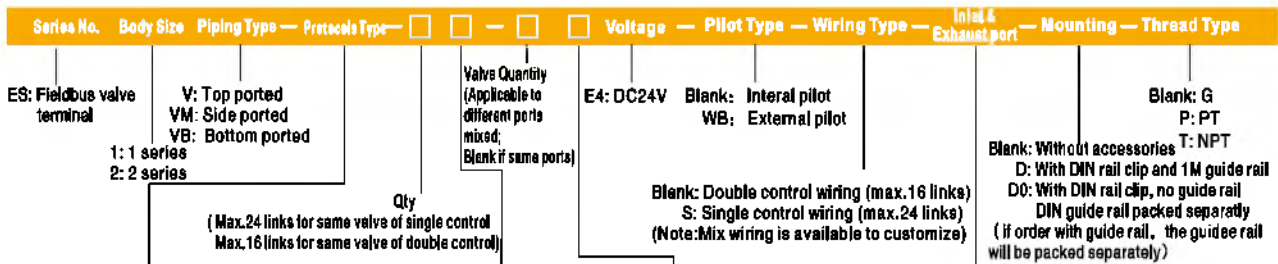


Product Features

- Compatible Protocols: PROFINET and EtherCAT
- 16 Outputs and 32 outputs for option, 16 outputs max. 16pcs coil/16pcs valve; 32 outputs max. 32pcs coil/16pcs double control valve/24pcs valve (8pcs double control + 16pcs single control)
- Equipped with two M12 BUS Interface, realize daisy-chain wiring communication, branch connector is not necessary, reduced wiring space
- Diagnostic functions: system diagnosis, communication error, undervoltage.
- Safe output can be set at any point in module parameter interface. For example, when the bus connection is interrupted, the valve could keep the last condition, or be forced to close or open.
- Plug and play: replace the entire valve terminal without shutdown, the new replaced valve terminal could be identified automatically and operated immediately.
- Simple installation and configuration, easy operation.

How to Order?

ES Fieldbus Valve Terminal



Code	Protocol's type	Output	Interface
PN16	PROFINET	16	M12
PN32		32	
EC16	EtherCAT	16	M12
EC32		32	

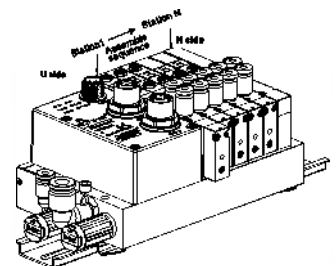
Code	Function	Remark
S	5/2 single	assembly sequence, 1st link start from U side
D	5/2 double	
C	5/3 center closed	
P	5/3 center pressure	
E	5/3 center exhaust	
Y	2pcs 3/2 (N.O.)	
H	2pcs 3/2 (N.O.)	
U	2pcs 3/2 (N.O./N.C.)	
B	blind plate	

No.	Code	Port size	Remark
1 Series	M5	M5: M5 fitting	assembly sequence, 1st link start from U side
	C4	φ4 one-touch fitting(ZPOC04-M7C)	
	M7	M7: M7 fitting	
	C6	φ6 one-touch fitting(ZPOC06-M7C)	
2 Series	C4A	φ4 one-touch fitting(ZPOC04-M7C)	
	06	1/8 fitting	
	C4	φ4 one-touch fitting(ZPOC04-01)	
	C6	φ6 one-touch fitting(ZPOC06-01)	
	C8	φ8 one-touch fitting(ZPOC08-01)	

Code	Port entry	1 Series	2 Series	Remark
Blank	Both side without silencer, fitting, plug	-	-	1) plugs are mounted on the opposite side of the selected parts; 2) only U, U1, UL side is available for double control
U	U side with silencer			
N	Station N with silencer			
UN	Both side with silencer			
UL	U side with silencer	φ8	φ10	
NL	Station N with silencer			
UNL	Both side with silencer			
U1	U side with silencer			
N1	Station N with silencer	φ10	φ12	
UN1	Both side with silencer			

Order Example:

- Same valve: ES Fieldbus Valve Terminal, 1 series body, top ported, PROFINET, 32 outputs, 6 links 5/2 double controlled, port size M5, DC24V, G thread, internal pilot, double control wiring, both side without silencer, fitting, plug, the ERP code is ES1V-PN32-6D-M5E4
- Mix different valves: ES series fieldbus system, 1 series body, top ported, PROFINET, 32 outputs, see right picture: station 1 is 5/3 center closed SV5312C, station 2 is 5/2 double control SV5212, station 3 is 2pcs 3/2 (N.O.) SV5412H, station 4 & station 5 are 5/2 single SV5211, station 6 is blind plate. station 1 & 2 with φ6 one-touch fitting ZPOC06-M7C, station 3-5 with φ4 one-touch fitting ZPOC04-M7C, DC24V, G thread, external pilot, double control wiring, U-sub side with silencer, φ8 one-touch fitting EPL, with DIN rail clip and 1M guide rail, the ERP code is ES1V-PN32-CHD2SB-2C63C4AE4-WB-UL-D

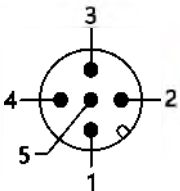


ESV Fieldbus Valve Terminal

Specifications

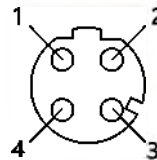
Code	ES1V(VM/VB)-PN16 ES2V(VM/VB)-PN16	ES1V(VM/VB)-PN32 ES2V(VM/VB)-PN32	ES1V(VM/VB)-EC16 ES2V(VM/VB)-EC16	ES1V(VM/VB)-EC32 ES2V(VM/VB)-EC32
Output	16	32	16	32
Protocols	PROFINET		EtherCAT	
Baud rate	100Mbps		100Mbps	
Configuration files	GSDML file		XML file	
Control power supply	Voltage	DC24V(DC21.6 ~ 26.4V)		
	Current consumption	120mA below		
Output voltage(valve)	DC24V(DC22.8 ~ 26.4V)			
Output type	NPP/Sink (+cam)			
Power interface	M12, 5pin, A encode			
Bus Interface	2xM12 socket, 4 hole, D encode			
Diagnostic	System diagnosis, communication error, undervoltage			
Protection	IP40 Dust proof			
Storage temperature(°C)	-20 ~ 70			
Working temperature(°C)	-10 ~ 50			

Power interface



Pin	Type	Description
1	PS24	+24V control voltage +24V
2	PL24	+24V Operating voltage of load valve
3	PS0	0V control voltage 0V
4	PL0	0V Operating voltage of load valve
5	FE	Functional earthing

BUS interface



Pin	Type	Description
1	TD+	Send data+
2	RD+	Receive data+
3	TD-	Send data-
4	RD-	Receive data-

Wiring

M125R - PVC - □

M12 Female
5 cores

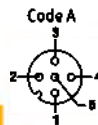
2M: 2 meters
5M: 5 meters
(Other length could be customized)

ESV-EN

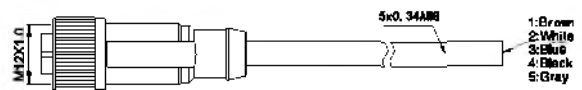
Ethernet fieldbus wiring

2M: 2 meters long
5M: 5 meters long
(Other length could be customized)

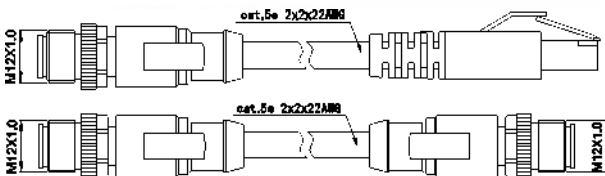
M12RJ: M12male connectors ↔ RJ45
M12M12: M12male connectors ↔ M12male connectors



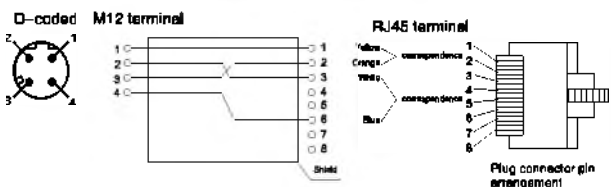
Power cable



Communication Cable



Connections



ESV Fieldbus Valve Terminal

LED Indicators

PROFINET

BF ○ ○ SF
L/A1 ○ ○ L/A2
PWR ○ ○ PWR(V)

Indicators	Status	Meaning
BF	ON	Communication not connected
	Flash	Module is connecting with PN master station, IP address or device name duplicated.
	OFF	System is normal
SF	OFF	System is normal
L/A1 L/A2	ON	Diagnosed fault, or the master station configuration does not match the valve station
	Yellow light on Yellow light off Green light flash Green light off	PROFINET BUS IN BUS OUT BUS IN BUS OUT
PWR	ON	Module with 24V power supply
	OFF	Module without power supply
PWR(V)	OFF	24V load voltage is normal
	ON	The load voltage is not connected or the load voltage is too low (During the under voltage monitor is on)

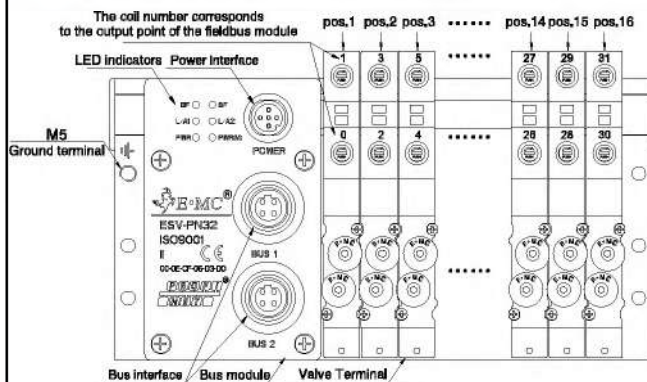
EtherCAT

RUN ○ ○ ERR
L/A IN ○ ○ L/A OUT
PWR ○ ○ PWR(V)

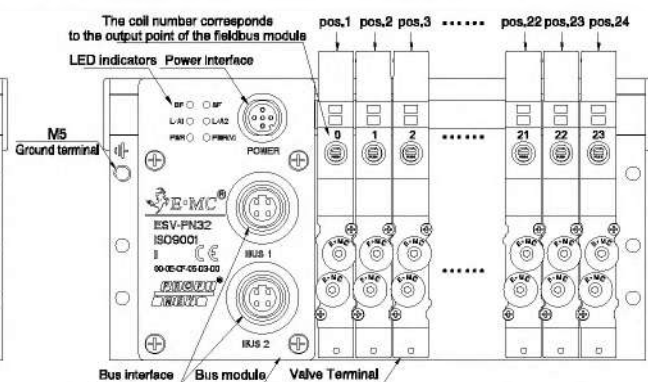
Indicators	Status	Meaning
RUN	OFF	Initial Status
	Rapid Flash	Pre-operational status
	Slow Flash	Safe Status
	ON	Operational Status(Enter into normal data exchange status)
ERR	OFF	Normal Initiation
	ON	Initiation Failure
L/A IN L/A OUT	ON	EtherCAT BUS IN
	OFF Flash	BUS OUT BUS IN WITH DATA TRANSMISSION ON NETWORK
PWR	ON	Module with 24V power supply
	OFF	Module without power supply
PWR(V)	OFF	24V load voltage is normal
	ON	The load voltage is not connected or the load voltage is too low (During the under voltage monitor is on)

Wiring Diagram

Wiring for double control (maximum 16 positions)



Wiring for single control (maximum 24 positions)



Precautions for Use

- Do not disassemble, modify (including replacing printed circuit boards) or repair without authorization, which may result in injury or failure.
- Do not operate the product exceeding the parameters (limited values), and do not use it for flammable or harmful liquids, which may cause fire, malfunction or damage to the product. Please verify the manual before using.
- Do not operate in an environment containing flammable and explosive gases, which may cause fire or explosion. This product is not designed for explosion-proof.
- If use this product in the interlock circuit:
 - Provide double interlocking systems, such as mechanical system;
 - Check regularly whether the product is operating normally; otherwise, malfunctions may occur leading to accidents.
- The following instructions must be followed during maintenance: (1) turn off the power; (2) stop providing gas, remove the remaining pressure and make sure that there is no air supply before maintenance; otherwise, it may cause injury.
- After the maintenance is completed, perform proper functional checks. If the equipment does not work properly, please stop the operation. In case of unexpected failure, safety cannot be guaranteed.
- The product designed used for industries. Except under industrial environments, when used under environments such as: mixed commercial and residential areas, measures must be taken to prevent radio interference.
- The bus manifold and power cord must be functionally grounded to ensure the safety and anti-noise performance of the fieldbus system.

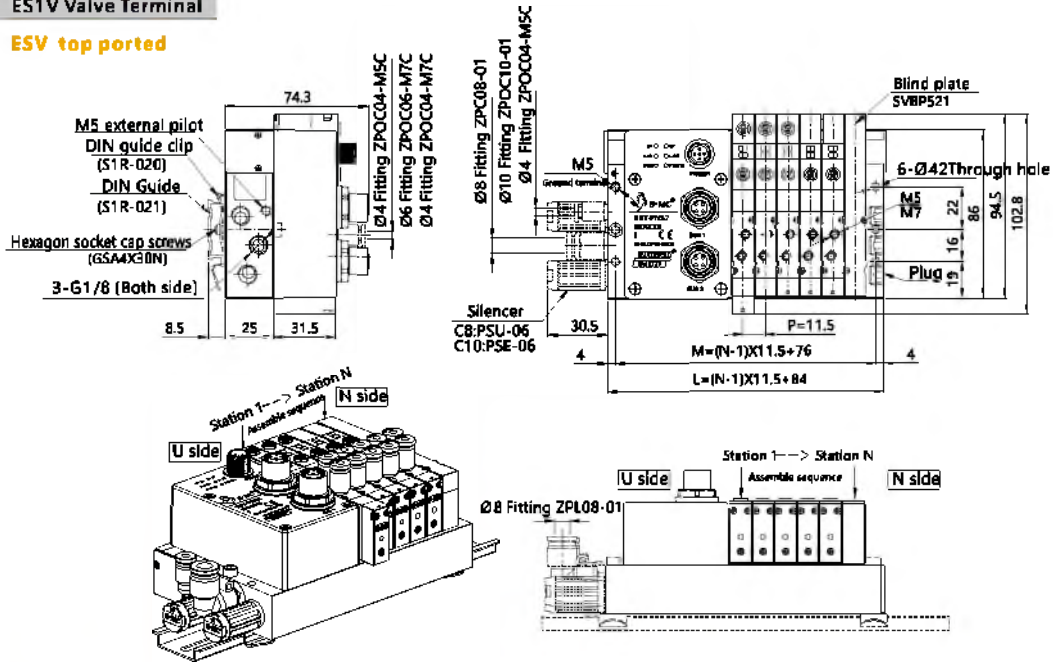
ESV Fieldbus Valve Terminal

ESV

Main Dimension

ES1V Valve Terminal

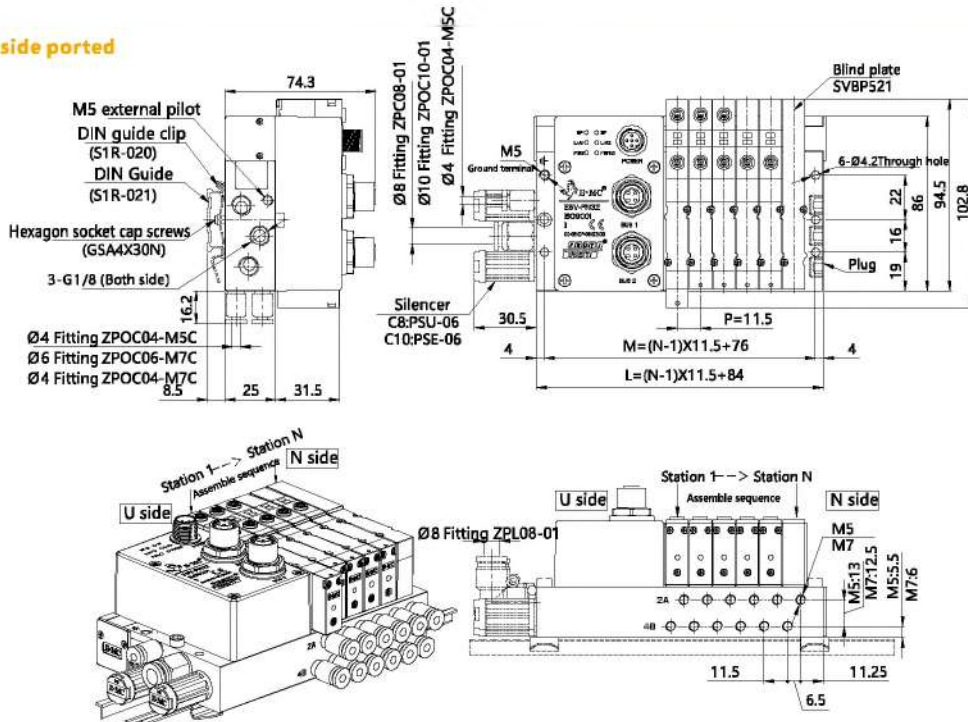
ESV top ported



Note: N means valve link

Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		95.5	107	118.5	130	141.5	153	164.5	176	187.5	199	210.5	222	233.5	245	256.5	268	279.5	291	302.5	314	325.5	337	348.5
M		87.5	99	110.5	122	133.5	145	156.5	168	179.5	191	202.5	214	225.5	237	248.5	260	271.5	283	294.5	306	317.5	329	340.5

ES1VM side ported



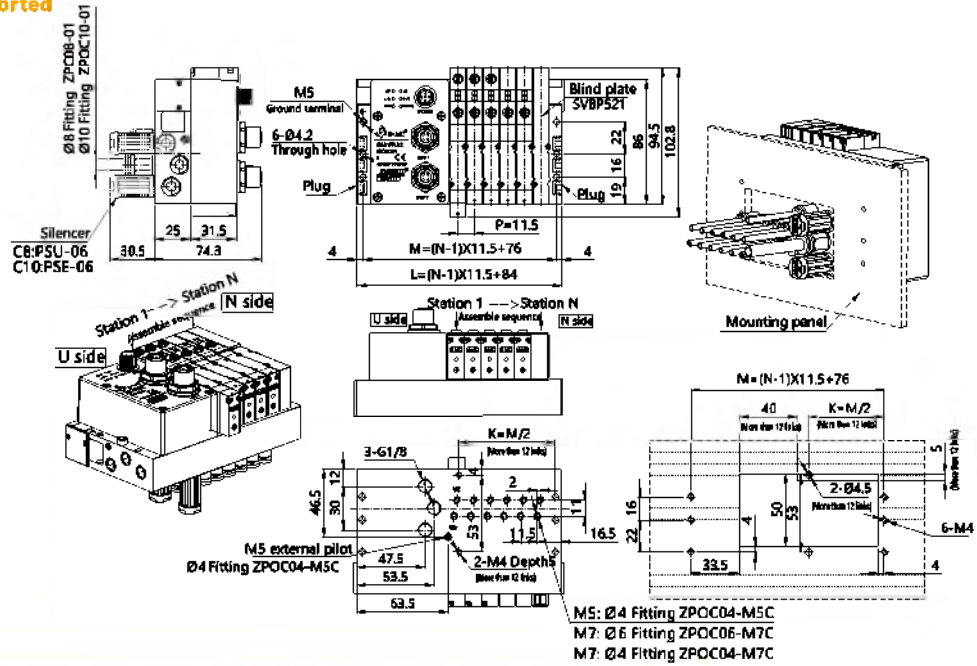
Note: N means valve link

Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		95.5	107	118.5	130	141.5	153	164.5	176	187.5	199	210.5	222	233.5	245	256.5	268	279.5	291	302.5	314	325.5	337	348.5
M		87.5	99	110.5	122	133.5	145	156.5	168	179.5	191	202.5	214	225.5	237	248.5	260	271.5	283	294.5	306	317.5	329	340.5

ESV Fieldbus Valve Terminal

Main Dimension

ES1VB bottom ported

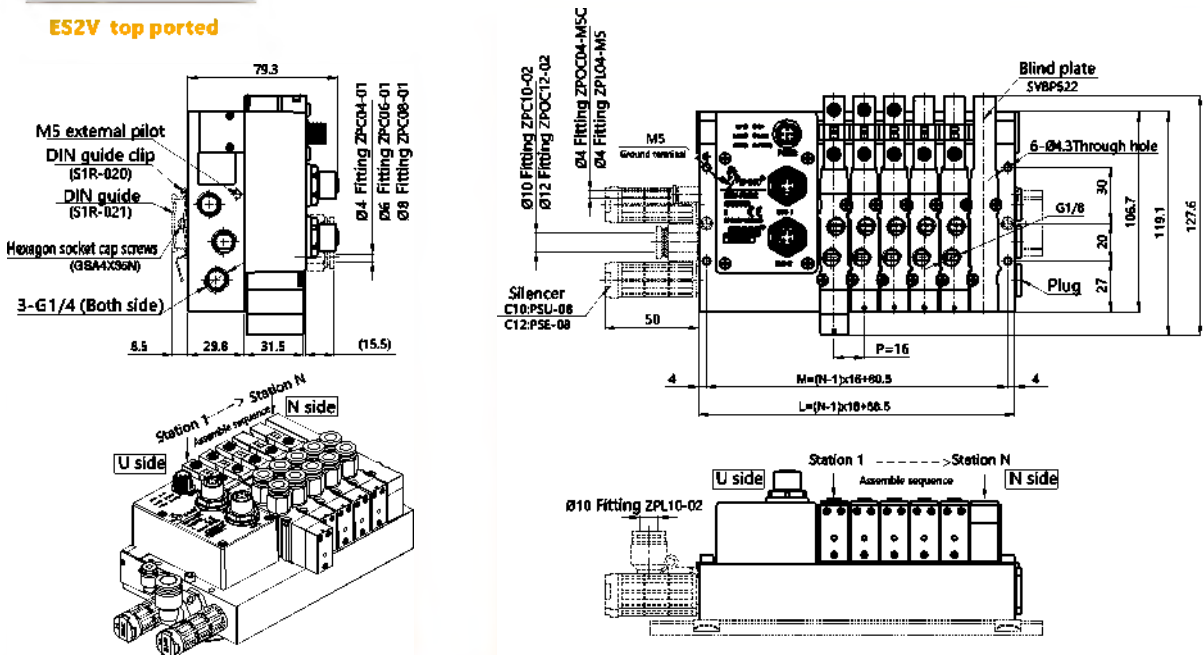


Sign	Model	2	3	4	5	6	7	8	9	10	11	12	
L		95.5	107	118.5	130	141.5	153	164.5	176	187.5	199	210.5	
M		87.5	99	110.5	122	133.5	145	156.5	168	179.5	191	202.5	
Sign	Model	13	14	15	16	17	18	19	20	21	22	23	24
L		222	233.5	245	256.5	268	279.5	291	302.5	314	325.5	337	348.5
M		214	225.5	237	248.5	260	271.5	283	294.5	306	317.5	329	340.5
K		107	112.75	118.5	124.25	130	135.75	141.5	147.25	153	158.75	164.5	170.25

Note: N means valve link

ES2V Valve Terminal

ES2V top ported



Note: N means valve link

Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		104.5	120.5	136.5	152.5	168.5	184.5	200.5	216.5	232.5	248.5	264.5	280.5	296.5	312.5	328.5	344.5	360.5	376.5	392.5	408.5	424.5	440.5	456.5
M		96.5	112.5	128.5	144.5	160.5	176.5	192.5	208.5	224.5	240.5	256.5	272.5	288.5	304.5	320.5	336.5	352.5	368.5	384.5	400.5	416.5	432.5	448.5

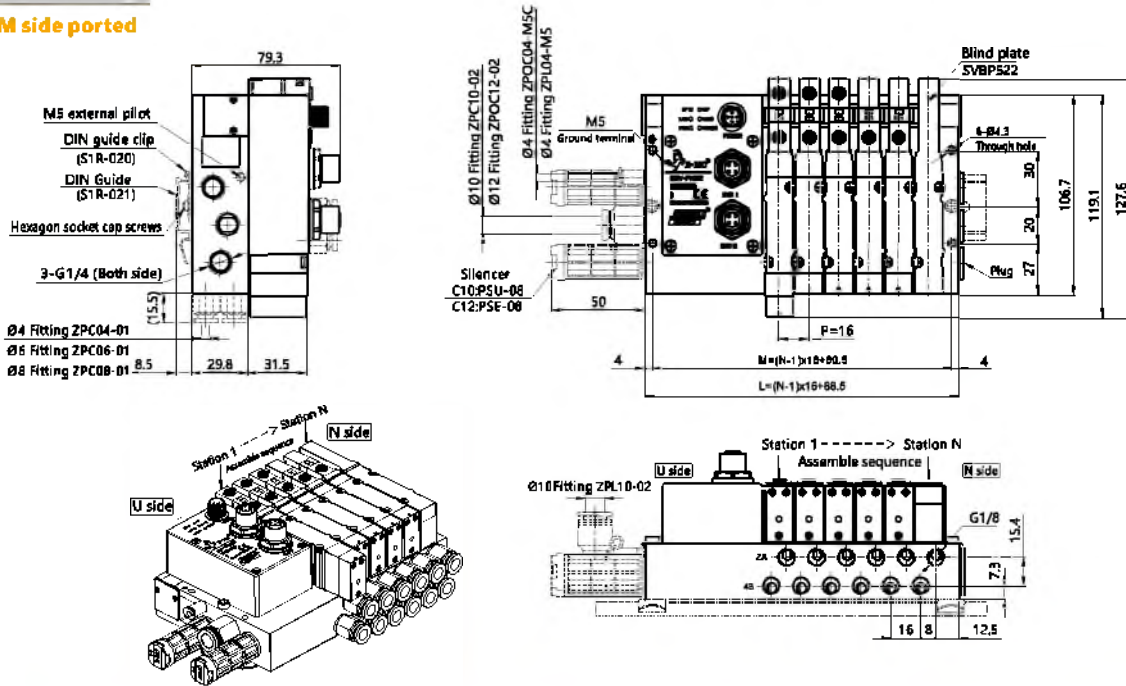
ESV Fieldbus Valve Terminal

ESV

Main Dimension

ES2V Valve Terminal

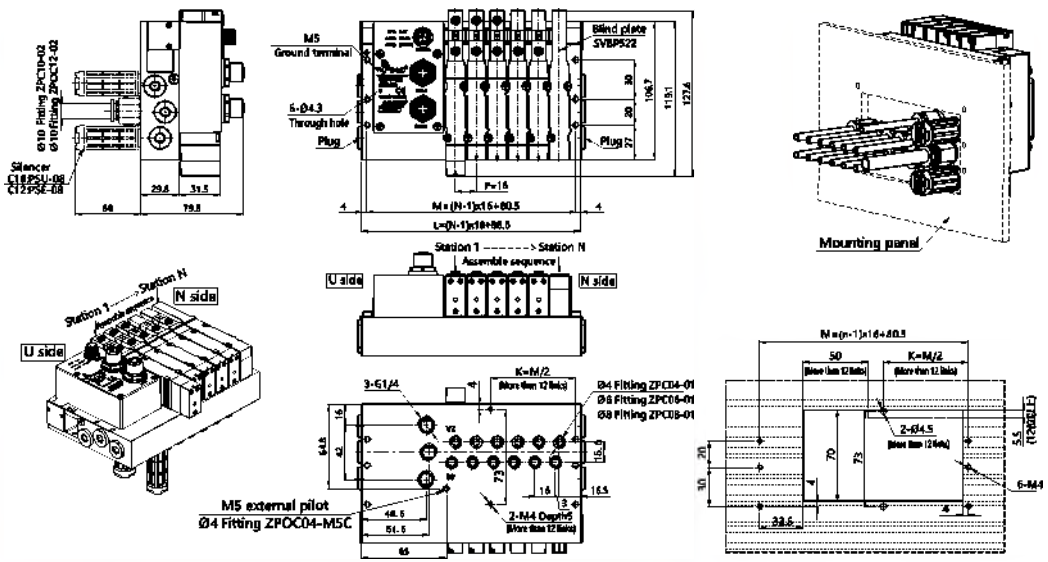
ES2VM side ported



Note: N means valve link

Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		104.5	120.5	136.5	152.5	168.5	184.5	200.5	216.5	232.5	248.5	264.5	280.5	296.5	312.5	328.5	344.5	360.5	376.5	392.5	408.5	424.5	440.5	456.5
M		96.5	112.5	128.5	144.5	160.5	176.5	192.5	208.5	224.5	240.5	256.5	272.5	288.5	304.5	320.5	336.5	352.5	368.5	384.5	400.5	416.5	432.5	448.5

ES2VB bottom ported



Model	2	3	4	5	6	7	8	9	10	11	12	
Sign L	104.5	120.5	136.5	152.5	168.5	184.5	200.5	216.5	232.5	248.5	264.5	
M	96.5	112.5	128.5	144.5	160.5	176.5	192.5	208.5	224.5	240.5	256.5	
Model	13	14	15	16	17	18	19	20	21	22	23	24
Sign L	280.5	296.5	312.5	328.5	344.5	360.5	376.5	392.5	408.5	424.5	440.5	456.5
M	272.5	288.5	304.5	320.5	336.5	352.5	368.5	384.5	400.5	416.5	432.5	448.5
K	136.25	144.25	152.25	160.25	168.25	176.25	184.25	192.25	200.25	208.25	216.25	224.25

Note: N means valve link

ET307/ETA307 Direct Acting Solenoid Valve(3/2way)

ET307/ETA307

Direct Acting Solenoid Valve(3/2way)



1
ET307/ETA307



Product Features

- Direct acting, sensitive action.
- Zero pressure starting, suitable for vacuum application.
- Universal for N.C. & N.O. type, suitable for 8 kinds applications.
- Coaxial shut-off design, balanced spool without back pressure, no influence from working medium pressure, high anti-dirty and excellent sealing.
- Multiple mounting types, manual button equipped for convenient debugging.
- Valve body is made by high strength aluminum alloy, and manufactured at one time, with hard oxidized surface treatment.

How to Order?

Series No.	ID code	Port Size	Voltage	Connection Mode	Connector Color	Wiring	Thread Type	Mounting
ET: ET Series	307	06: 1/8" 08: 1/4"	E1: AC110V E2: AC220V E4: DC24V E5: DC12V E7: AC24V	Blank: DIN type F: Flying leads K: Water proof type L: Plug-in Type	Blank: Brown translucent J: Colorless and translucent B: Black(Black is available for water proof connector only)	Blank:0.3 meter cable 0.6M:0.6 meter cable 1M:1 meter cable (Options for "L:Plug-in type" and "F:Flying leads type" Only)	Blank: G P: PT T: NPT	Blank: No FA: With bracket

Series No.	ID code	Port Size	Voltage	Connection Mode	Connector color	Patchcord	Thread Type	Mounting	Stations
ETA: ETA Series	307	06: 1/8"	E1: AC110V E2: AC220V E4: DC24V E5: DC12V E7: AC24V	Blank: DIN type F: Flying leads K: Water proof type L: Plug-in Type	Blank: Brown translucent J: Colorless and translucent B: Black(Black is available for water proof connector only)	Blank:0.3 meter cable 0.6M:0.6 meter cable 1M:1 meter cable (Options for "L:Plug-in type" and "F:Flying leads type" Only)	Blank: G P: PT T: NPT	Blank: No FA: With bracket (Not available for valve group)	2F: 2 Stations 3F: 3 Stations 10F: 10 Stations (Available for valve group only)

Order Example:

ET Series, 1/8 port size, AC220V, flying leads, brown translucent, G thread, no mounting, ERP code is: ET307-06E2F

Manifold

Series No.	N	F	Thread Type
ETA307 Series	2F: 2 Stations 3F: 3 Stations 10F: 10 Stations	F: Manifold	Blank: G P: PT T: NPT

Blind Plate

ETABP307

ETA307 Series Blind Plate

Specifications

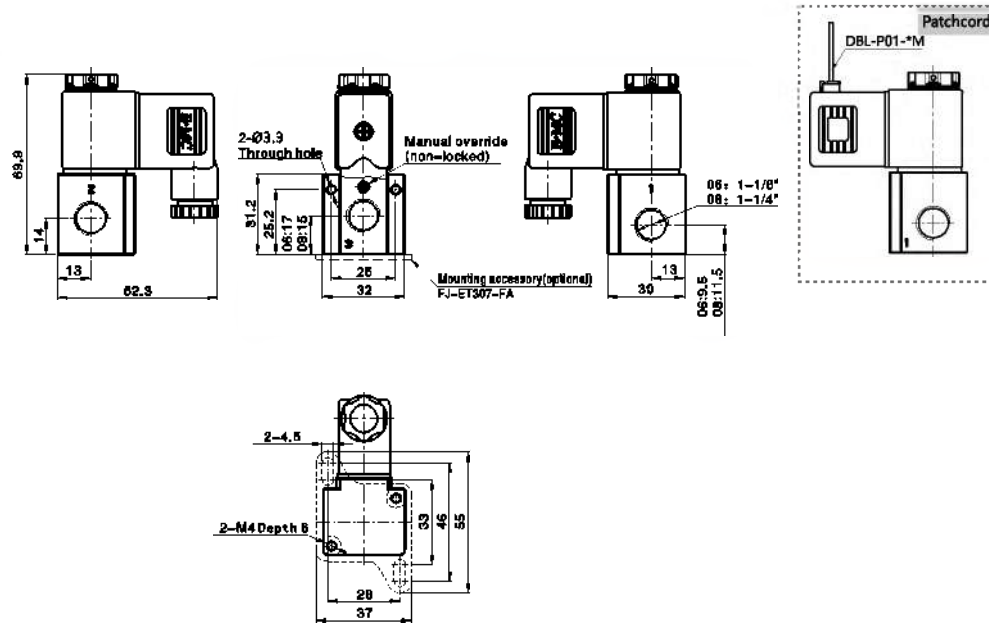
Model No.	ET307-06	ET307-08	ETA307-06
Working Medium	Clean air(After 40 μm filtration)		
Acting type	Direct acting		
Sectional area(mm)	3,2(CV=0,18)	3,4(CV=0,19)	3,2(CV=0,18)
Port size	G1/8	G1/4	G1/8
Lubrication	Not required		
Working Pressure(MPa)	-0.1~0.7		
Max.Pressure(MPa)	1.5		
Working Temperature(°C)	-20~70 (No freezing)		
Voltage Range	-15%~10%		
Power consumption	AC:7VA DC:6.5W		
Insulation Class	F Class		
Protective class	IP65(DIN40050)		
Max. acting frequency	10 cycles/s		
Seals Material	NBR		
Response Time	15ms Below		
Weight (g)	163	159	150

Remark: Max.acting frequency on unload status.

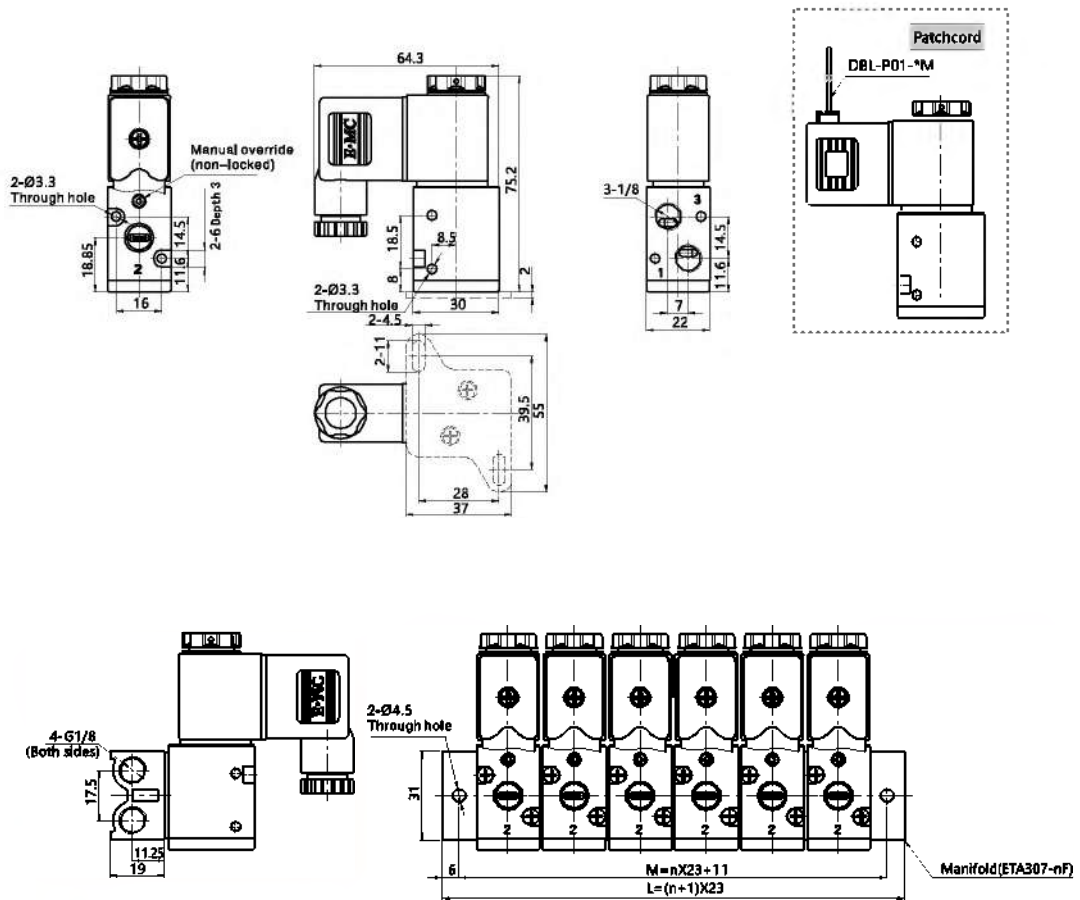
ET307/ETA307 Direct Acting Solenoid Valve(3/2way)

Main Dimension

ET307



ETA307

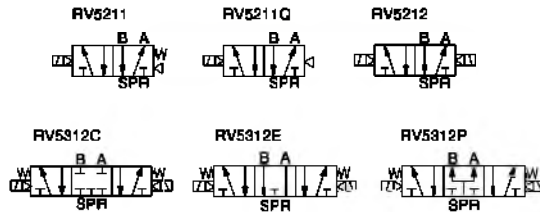


Model Sign	1F	2F	3F	4F	5F	6F	7F	8F	8F	10F
M	34	57	80	103	126	149	172	195	218	241
L	46	69	92	115	138	161	184	207	230	253

RV Series Standard/ Low Power Solenoid Valve (5/2,5/3 way)

RV

Standard/ Low Power Solenoid Valve (5/2,5/3)



How to Order?

Low Power Solenoid Valve

Series No.	Valve body size	ID Code	Positions	Ways	Controls	Original Status	Port Size	Reset Form	Voltage	Connection Mode	Cover Color	Acting Type	Patchcord	Thread Type
N	1: 1Series 2: 2Series 3: 3Series 4: 4Series		2: 2 positions 3: 3 positions	5: 5 ways	1: Single control 2: Double control	C: Center close P: Center pressure E: Center exhaust (Only for 5/3 way)	M5: M5 06: 1/8" 08: 1/4" 10: 3/8" 15: 1/2"	Blank: Spring Q: Air (Only single control)	E1: AC110V E2: AC220V E4: DC24V (1 Series only DC24V)	Blank: DIN connector type L: Plug-in Type K: Water proof connector type (only for 2,3,4 series)	Blank: Brown translucent J: Colorless and translucent B: Black (K/M connector is only available in black)	Blank: Internal pilot WB: External pilot		Blank: G P: PT T: NPT

Order Example:

RV series solenoid valve, 2 series valve body size, standard pilot+Energy saving coil, 5/2 way, single control, 1/4" port size, standard coil, DC24V, DIN connector, G thread, ERP code is: N2R251-08E4

Blank: Patchcord length is 0.3 meter
0.6M: Patchcord length is 0.6 meter
1M: Patchcord length is 1 meter
(Options for "L: Plug-in type" Only)

Specifications

Model No.	N1R251-M6 N1R252-M5 N1R352-M5	N1R261-06 N1R252-06 N1R352-06	N2R251-06 N2R252-06 N2R352-06	N2R261-06 N2R252-06 N2R352-06	N3R251-06 N3R252-06 N3R352-06	N3R251-10 N3R252-10 N3R352-10	N4R251-10 N4R252-10 N4R352-10	N4R251-15 N4R252-15 N4R352-15
Port size	M6	G1/8	G1/8	G1/4(Ex.G1/8)	G1/4	G3/8(排气G1/4)	G3/8	G1/2
Sectional area(mm ²)	52:5.5(CV=0.31) 53:5.5(CV=0.28)	52:12(CV=0.67) 53:9(CV=0.50)	52:14(CV=0.78) 53:12(CV=0.67)	52:16(CV=0.89) 53:12(CV=0.67)	52:25(CV=1.40) 53:18(CV=1.00)	52:30(CV=1.66) 53:18(CV=1.00)	52:50(CV=2.79) 53:30(CV=1.67)	52:50(CV=2.79) 53:30(CV=1.67)
Working medium	Clean air(After 40 μm filtration)							
Acting type	Internal pilot type / External pilot type							
Reset Type	Air reset				Spring reset / Air reset			
Lubrication	Not required							
Working pressure(MPa)	0.15~0.8							
Guaranteed pressure(MPa)	1.2							
Working temperature(°C)	-20~70(No freezing)							
Voltage range	-15%~10%							
Power consumption	DC24V:0.6W		DC24V:0.7W AC220V:0.8VA AC110V:1.4VA					
Insulation class	Class F							
Protective class	IP65(DIN40050)							
Max. acting frequency	5/2: 5 Cycles/s; 5/3: 3 Cycles/s							
Activate time(S)	<0.05							
Weight(g)	N1R251: 110 N1R252: 171 N1R352: 181	N2R251: 208 N2R252: 314 N2R352: 357	N3R251: 289 N3R252: 400 N3R352: 450	N4R251: 528 N4R252: 638 N4R352: 727				

RV Series Standard/ Low Power Solenoid Valve (5/2,5/3 way)

1
RV(5/2,5/3)

How to Order?

Standard Solenoid Valve

Series No.	Ways	Positions	Valve Body Size	Controls	Original Status	Port Size	Reset Form	Voltage	Connection Mode	Cover Color	Acting Type	Patchcord	Thread Type
RV	5:5 ways	2: 2 positions 3: 3 positions	1: 1Series 2: 2Series 3: 3Series 4: 4Series	1: Single control 2: Double control	C: Center close P: Center pressure E: Center exhaust (Only for 5/3 way)	M5: M5 08: 1/8" 08: 1/4" 10: 3/8" 15: 1/2"	Blank: Spring Q: Air (Only single control)	E1: AC110V E8: AC80V E2: AC220V E7: AC24V E3: AC380V E6: DC110V E4: DC24V E9: DC48V E5: DC12V E10: DC36V	Blank: DIN connector L: Plug-in type F: Flying leads K: Waterproof DIN connector (Only 2, 3, 4 series is optional for K)	Blank: Brown translucent J: Colorless and translucent B: Black (K/M connector is only available in black)	Blank: Internal pilot WB: External pilot	Blank: G P: PT T: NPT	

Order Example:

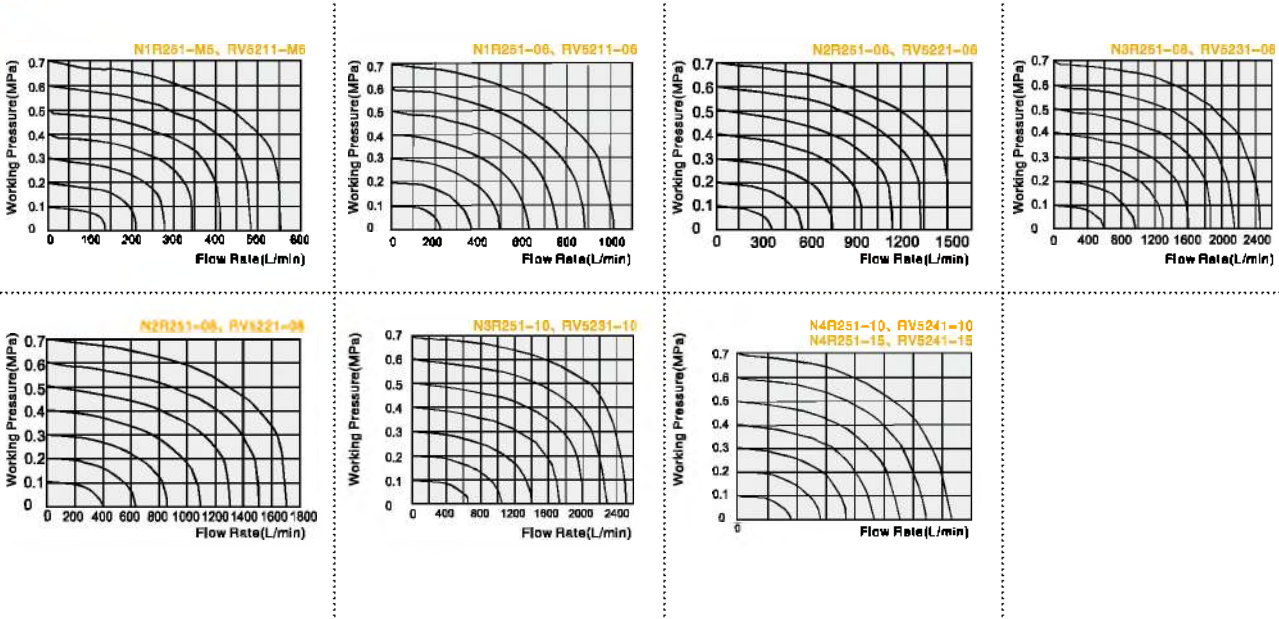
RV series solenoid valve, 2 series valve body size, 5/2 way, single control, 1/4" port size, standard coil, DC24V, DIN connector, G thread, ERP code is: RV5221-08E4

Blank: Patchcord length is 0.3 meter
0.6M: Patchcord length is 0.6 meter
1M: Patchcord length is 1 meter
(Options for "L: Plug-in type" and "F: Flying leads type" Only)

Specifications

Model No.	RV5211-M5 RV6212-M5 RV6312-M5	RV5211-08 RV5212-08 RV5312-08	RV5221-08 RV5222-08 RV5322-08	RV5221-08 RV5222-08 RV5322-08	RV5231-08 RV5232-08 RV5332-08	RV5231-10 RV5232-10 RV5332-10	RV5241-10 RV5242-10 RV5342-10	RV5241-15 RV5242-15 RV5342-15
Port size	M5	G1/8	G1/8	G1/4(Ex.G1/8)	G1/4	G3/8(Ex.G1/4)	G3/8	G1/2
Sectional area(mm ²)	5/2:5.5(CV=0.31) 5/3:5.5(CV=0.26)	5/2:12(CV=0.67) 5/3:9(CV=0.50)	5/2:14(CV=0.78) 5/3:12(CV=0.67)	5/2:16(CV=0.89) 5/3:12(CV=0.67)	5/2:25(CV=1.40) 5/3:18(CV=1.00)	5/2:30(CV=1.68) 5/3:18(CV=1.00)	5/2:50(CV=2.79) 5/3:30(CV=1.67)	5/2:50(CV=2.79) 5/3:30(CV=1.67)
Working medium	Clean air(After 40 μm filtration)							
Acting type	Internal pilot type / External pilot type							
Reset Type	Air reset						Spring reset / Air reset	
Lubrication	Not required							
Working pressure(MPa)	0.15~0.8							
Guaranteed pressure(MPa)	1.2							
Working temperature(°C)	-20~70(No freezing)							
Voltage range	-15%~10%							
Power consumption	DC:2.8W ; AC:3.0VA				DC:3.0W ; AC:4.0VA			
Insulation class	Class F							
Protective class	IP65(DIN40050)							
Max. acting frequency	5/2: 5 Cycles/s; 5/3: 3 Cycles/s							
Activate time(S)	<0.05							
Weight(g)	RV5211: 110 RV5212: 171 RV5312: 181	RV5221: 208 RV5222: 314 RV5322: 357	RV5231: 289 RV5232: 400 RV5332: 450	RV5241: 628 RV5242: 638 RV5342: 727				

Flow Chart



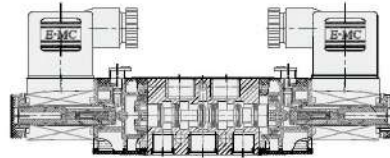
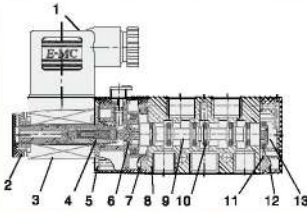
RV Series Standard/ Low Power Solenoid Valve (5/2,5/3 way)

RV(5/2,5/3)

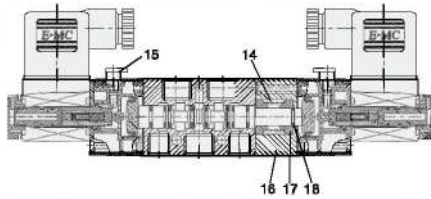
Internal Structure

Single Solenoid Valve

Double Solenoid Valve



5/3 Solenoid Valve

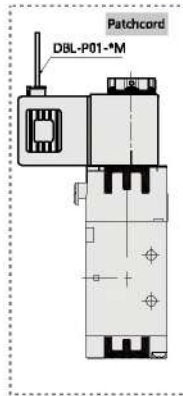
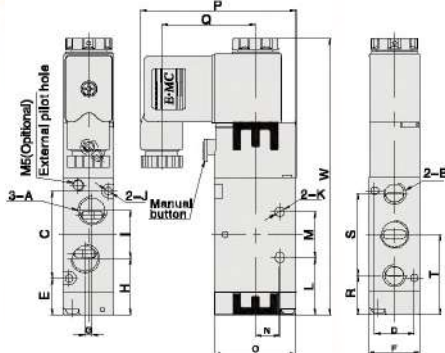


No.	Part Name	Material
1	Connector	Engineered plastics
2	Nut	POM+Carbon steel
3	Coll	Cu
4	Pilot units	Engineered plastics
5	Plate	Carbon steel
6	Piston	POM
7	Pilot seat	Engineered plastics
8	Valve body	Aluminum alloy
9	Spool	Aluminum alloy
10	O-ring	HNBR
11	Rear cover	Engineered plastics
12	Filter	Synthetic material
13	Piston	POM
14	Spring	Stainless steel
15	Manual override	Engineered plastics
16	Back seat	Aluminum alloy
17	Spring seat	Aluminum alloy
18	C-type buckle	65Mn

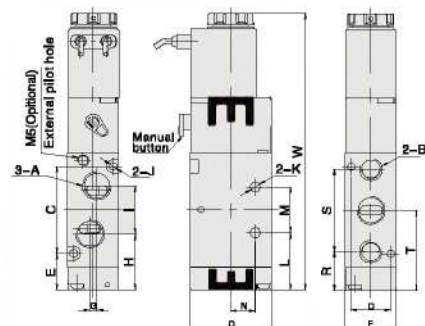
Main Dimension

Single Solenoid Valve

DIN Type



Flying Leads Type



Model/Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	W
RV5211-M5	M5	M5	30	13	16.5	18	0	24.5	14.1	3.3	3.3	24.5	14	9.5	27	55.2	33.9	17.9	27.2	31.5	103.1
RV6211-08	G1/8	G1/8	30	13	16.5	18	3	23.5	16	3.3	3.3	24.5	14	9.5	27	55.2	33.9	17.5	28	31.5	103.1
RV5221-06	G1/8	G1/8	38	17	16	22	0	26	18	3.3	4.3	25	20	10.6	35	66.7	40.2	17	35	35	120.7
RV5221-08	G1/4	G1/8	38	17	16	22	3	24.5	21	3.3	4.3	25	20	10.5	35	66.7	40.2	17	35	35	120.7
RV6231-08	G1/4	G1/4	30	20	19.1	27	0	33.1	22	4.3	4.3	32.1	24	13.5	40	69.2	40.2	21.6	45	44.1	139.3
RV5231-10	G3/8	G1/4	50	20	18.1	27	4	32.1	24	4.3	4.3	32.1	24	13.6	40	69.2	40.2	21.6	45	44.1	139.3
RV5241-10	G3/8	G3/8	72	27	21	34	0	35	36	4.3	5.5	43	28	17.5	50	74.2	40.2	25.5	63	57	168.7
RV6241-16	G1/2	G1/2	72	27	21	34	4	39	36	4.3	5.5	43	28	17.5	50	74.2	40.2	25.5	63	57	168.7

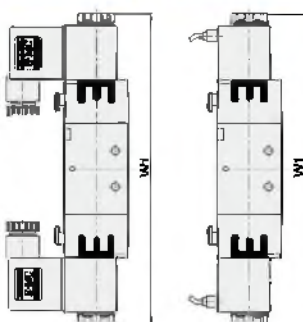
Note: The dimensions of NR series and RV series are same.

Double Solenoid Valve

5/3 Solenoid Valve

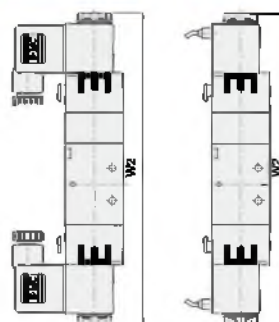
DIN Type

Flying Leads Type



DIN Type

Flying Leads Type



Model/Sign	W1
RV5212-M5	143.2
RV6212-06	143.2
RV5222-06	171.4
RV5222-08	171.4
RV6232-08	190.4
RV5232-10	190.4
RV5242-10	223.4
RV5242-15	223.4

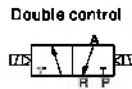
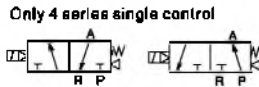
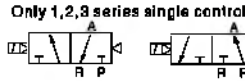
Model/Sign	W2
RV5312-M5	168.2
RV5312-06	158.2
RV6322-06	190.4
RV5322-08	190.4
RV5332-08	209.4
RV6332-10	209.4
RV5342-10	244.4
RV5342-15	244.4

Note: The dimensions of NR series and RV series are same.

RV Series Standard/ Low Power Solenoid Valve (3/2 way)

RV

Standard/ Low Power Solenoid Valve (3/2)



How to Order?

Low Power Solenoid Valve

Series	Valve body size	ID code	Positions	Ways	Controls	Original Status	Port Size	Reset Type	Voltage	Connection Mode	Cover Color	Acting Type	Patchcord	Thread Type
N	1: 1Series 2: 2Series 3: 3Series 4: 4Series		2: positions 3: 3 ways		1: Single control 2: Double control Blank: Normal close H: Normal open		M5: M5 06: 1/8" 08: 1/4" 10: 3/8" 15: 1/2"	Blank: Spring (4 series single control only) Q: Air (1,2,3 series single control)	E1: AC110V E2: AC220V E4: DC24V (for 1 series, only DC24V available)	Blank: DIN connector type L: Plug-in Type K: Water proof connector type (only for 2,3,4 series)	Blank: Brown translucent J: Colorless and translucent B: Black (Only black color available for water proof connector) Blank: Internal pilot WB: External pilot	Blank: Patchcord length is 0.3 meter 0.6M: Patchcord length is 0.6 meter 1M: Patchcord length is 1 meter (Options for "L: Plug-in type" Only)	Blank: G P: PT T: NPT	

Order Example:

RV series energy saving solenoid valve, 2 series valve body size, 3/2 ways, double control, 1/8" port size, AC220V, DIN connector, G thread, ERP code is :N2R232-06E2

Specifications

Model No.	N1R231-M5 N1R232-M5	N1R231-06 N1R232-06	N2R231-06 N2R232-06	N2R231-08 N2R232-08	N3R231-08 N3R232-08	N3R231-10 N3R232-10	N4R231-10 N4R232-10	N4R231-15 N4R232-15
Port size	M5	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Sectional area(mm)	5.5(CV=0.31)	12(CV=0.67)	14(CV=0.78)	16(CV=0.89)	25(CV=1.40)	30(CV=1.68)	50(CV=2.79)	50(CV=2.79)
Working medium	Clean air(After 40 μm filtration)							
Acting type	Internal pilot type/External pilot type							
Reset type	Air reset						Spring reset /Air reset	
Lubrication	Not required							
Working pressure(MPa)	0.15-0.8							
Guaranteed pressure(MPa)	1.2							
Working temperature(°C)	-5-60(No freezing)							
Voltage range	-15%-10%							
Power consumption	DC24V:0.6W		DC24V:0.7W AC220V:0.9VA AC110V:1.4VA					
Insulation class	Class F							
Protective class	IP65(DIN40050)							
Max. acting frequency	5 Cycles/s							
Activate time(S)	<0.05							
Weight(g)	N1R231: 102 N1R232: 169	N2R231: 107 N2R232: 303		N3R231: 260 N3R232: 370		N4R231: 443 N4R232: 569		

Note: Normal open is same as normal close.

RV Series Standard/ Low Power Solenoid Valve (3/2 way)

How to Order?

Standard Solenoid Valve

Series No.	Ways	Positions	Valve Body ID Code	Controls	Original Status	Part Size	Reset Type	Voltage	Connection Mode	Cover Color	Valve Color	Patchcord	Thread Type
RV	2; 3 ways	2; 2 positions	1: 1Series 2: 2Series 3: 3Series 4: 4Series	1: Single control 2: Double control	Blank: Normal close H: Normal open	M5: M5 06: 1/8" 08: 1/4" 10: 3/8" 15: 1/2"	Blank: Spring (Only 4 series single control) Q: Air (1,2,3 series single control)	E1: AC110V E6: AC84V E2: AC220V E7: AC24V E3: AC380V E8: DC110V E4: DC24V E9: DC48V E5: DC12V E10: DC36V	Blank: DIN connector L: Plug-in type F: Flying leads K: Waterproof DIN connector (Only 2, 3, 4 series is optional for KM)	Blank: Internal pilot WB: External pilot	Blank: Patchcord length is 0.3 meter 0.6M: Patchcord length is 0.6 meter 1M: Patchcord length is 1 meter (Options for "L: Plug-in type" and "F: Flying leads type" Only)	Blank: G P: PT T: NPT	

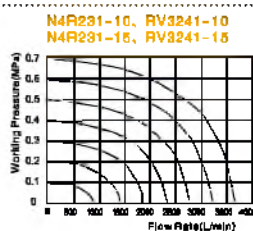
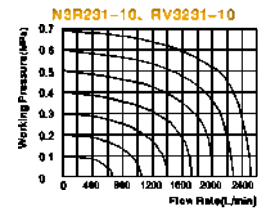
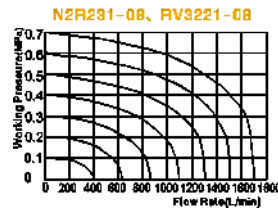
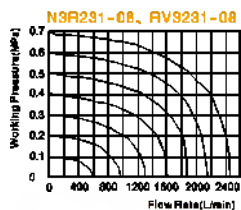
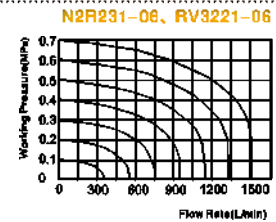
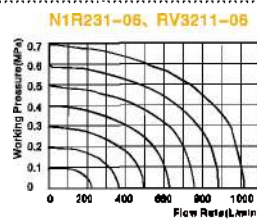
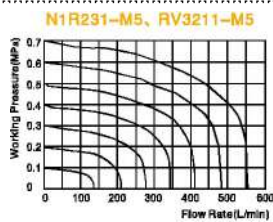
Order Example:

RV series solenoid valve, 2 series valve body size, 3/2 ways, single control, 1/8" port size, air return, standard coil, AC220V, DIN connector, G thread, ERP code is :RV3221-08QE2

Specifications

Model No.	RV3211-M5 RV3212-M5	RV3211-06 RV3212-06	RV3221-06 RV3222-06	RV3221-08 RV3222-08	RV3231-06 RV3232-06	RV3231-10 RV3232-10	RV3241-10 RV3242-10	RV3241-15 RV3242-15
Port size	M5	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Sectional area(mm)	2 way:5.5(CV=0.31)	2 way:12(CV=0.67)	2 way:14(CV=0.78)	2 way:16(CV=0.89)	2 way:25(CV=1.40)	2 way:30(CV=1.66)	2 way:50(CV=2.79)	2 way:50(CV=2.79)
Working medium	Clean air(After 40 μm filtration)							
Acting type	Internal pilot type/External pilot type							
Reset type	Air reset					Spring reset /Air reset		
Lubrication	Not required							
Working pressure(MPa)	0.15~0.8							
Guaranteed pressure(MPa)	1.2							
Working temperature(°C)	-5~70(No freezing)							
Voltage range	-15%~10%							
Power consumption	DC:2.8W ; AC:3.0VA			DC:3.0W ; AC:4.0VA				
Insulation class	Class F							
Protective class	IP65(DIN40050)							
Max. acting frequency	5 Cycles/s							
Activate time(S)	<0.05							
Weight(g)	RV3211: 102 RV3212: 169		RV3221: 107 RV3222: 303		RV3231: 260 RV3232: 370		RV3241: 449 RV3242: 569	

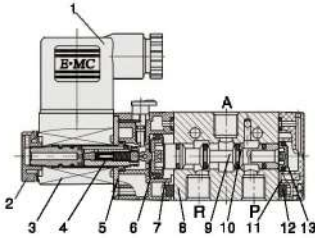
Flow Chart



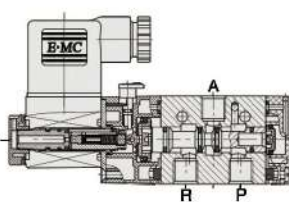
RV Series Standard/ Low Power Solenoid Valve (3/2 way)

Internal Structure

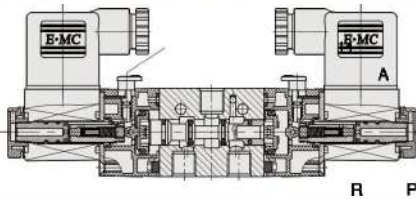
Single Solenoid Valve(Normal close)



Single Solenoid Valve(Normal open)



Double solenoid valve(Normal close)



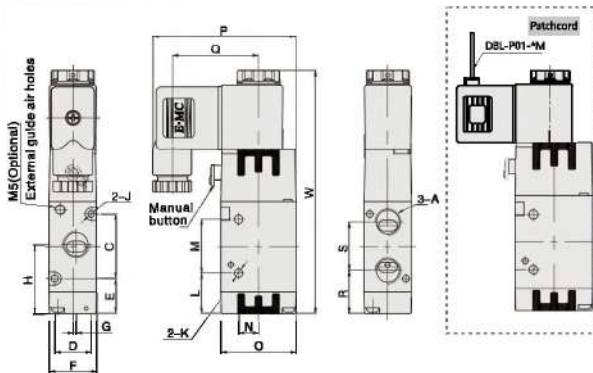
No.	Part Name	Material
1	Connector	Engineered plastics
2	Nut	POM
3	Coil	Cu+ Thermosetting resin
4	Pilot units	Pure iron + copper + stainless steel
5	Plate	Carbon steel
6	Piston	POM
7	Pilot seat	Engineered plastics
8	Valve body	Aluminum alloy
9	Spool	Aluminum alloy
10	O-ring	NBR
11	Rear cover	Engineered plastics
12	Filter	Synthetic material
13	Piston	Engineered plastics
14	Manual button	Engineered plastics

Main Dimension

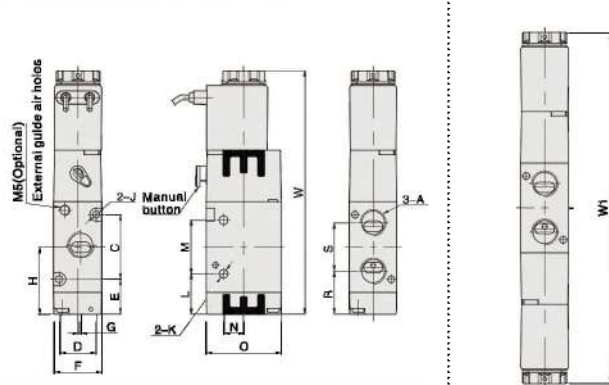
Single Solenoid Valve

Double Solenoid Valve

DIN Type



Flying Leads Type



Model/Sign	A	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	W	W1*
RV3211-M5	M5	19	13	16.5	18	0	28	3.3	3.1	15.5	21	6	27	55.2	33.9	18.9	14.2	92.1	132.2
RV3211-06	G1/8	19	13	16.5	18	1.5	27	3.3	3.1	15.5	21	6	27	55.2	33.9	18	16	92.1	132.2
RV3221-06	G1/8	30	17	16	22	0	31	3.3	4.2	18.5	25	9.3	35	68.7	40.2	20	22	112.7	163.4
RV3221-08	G1/4	30	17	16	22	1.5	32	3.3	4.2	18.5	25	9.3	35	68.7	40.2	19.8	22.5	112.7	163.4
RV3231-08	G1/4	35	20	19.1	27	0	36.6	4.3	4.3	21.6	30	8.5	40	69.2	40.2	24.6	24	124.3	175.4
RV3231-10	G3/8	35	20	19.1	27	2	36.6	4.3	4.3	21.6	30	8.5	40	69.2	40.2	24.6	24	124.3	175.4
RV3241-10	G3/8	40.5	27	24.8	34	0	45	4.3	5.2	21	48	11.5	50	74.2	40.2	29.3	31.5	144.7	199.4
RV3241-16	G1/2	40.5	27	24.8	34	2	45	4.3	5.2	21	48	11.5	50	74.2	40.2	29.3	31.5	144.7	199.4

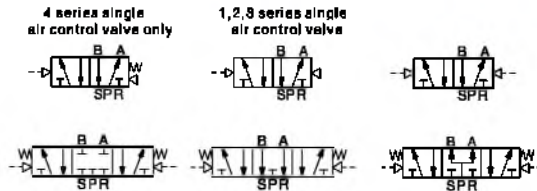
Note: The dimension of NR series and RV series are same. The dimension of normal open type and normal close type are same. W1* is the dimension of double control solenoid valve.

RV Series Air Control Valve (5/2,5/3way)

RV

Air Control Valve (5/2,5/3)

1
RVA(5/2,5/3)



How to Order?

Series No./ways	Positions	Valve Body ID Code	Controls	Initial Status	Port Size	Reset Type	Thread Type
RVA	5: 5 ways 2: 2 positions 3: 3 positions	1: 1Series 2: 2Series 3: 3Series 4: 4Series	1: Single control 2: Double control	C: Center close P: Center pressure E: Center exhaust (only for 6/3 ways)	M5: M5 08: 1/8" 10: 3/8" 15: 1/2"	Blank: Spring return (Apply to 4 series single control valve) Q: Air return (Apply to 1,2,3 series single control valve)	Blank: G P: PT T: NPT

Order Example:

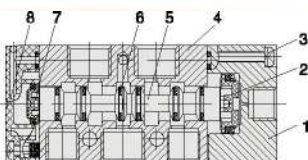
RV series air control valve, 5/2 way, 2 series valve body size, single control, 1/8" port size, air return, G thread, ERP code is: RVA5221-06G

Specifications

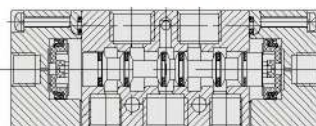
Model No.	RVA5211-M5	RVA5211-08	RVA6221-06	RVA5221-08	RVA5231-08	RVA6231-10	RVA6241-10	RVA5241-15
	RVA5212-M5	RVA5212-08	RVA6222-08	RVA5222-08	RVA5232-08	RVA6232-10	RVA6242-10	RVA5242-15
	RVA5312-M5	RVA5312-06	RVA5322-06	RVA5322-08	RVA5332-08	RVA5332-10	RVA5342-10	RVA5342-15
Port size	M5	G1/8	G1/8	G1/4(Ex.G1/8)	G1/4	G3/8(Ex.G1/4)	G3/8	G1/2
Sectional area(mm)	5/2: 5.5(CV=0.31) 5/3: 5.5(CV=0.29)	5/2: 12(CV=0.67) 5/3: 9(CV=0.50)	5/2: 14(CV=0.78) 5/3: 12(CV=0.67)	5/2: 18(CV=0.88) 5/3: 12(CV=0.67)	5/2: 25(CV=1.40) 5/3: 18(CV=1.00)	5/2: 30(CV=1.88) 5/3: 18(CV=1.00)	5/2: 50(CV=2.78) 5/3: 30(CV=1.67)	5/2: 50(CV=2.78) 5/3: 30(CV=1.67)
Working medium	Clean air(After 40 μm filtration)							
Acting type	External type							
Reset type	Air reset				Spring reset / Air reset			
Lubrication	Not required							
Working pressure(MPa)	0.15-0.8							
Guaranteed pressure(MPa)	1.2							
Working temperature(°C)	-20~70 (No freezing)							
Max. acting frequency	5/2: 5 Cycles/s; 5/3: 3 Cycles/s							
Weight(g)	RVA5211:72 RVA5212:87 RVA5312:181	RVA5221:128 RVA5222:153 RVA5322:219	RVA5231:218 RVA5232:260 RVA6332:358	RVA5241:437 RVA5242:490 RVA5342:598				

Internal Structure

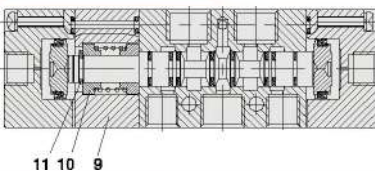
Single Air Control



Double Air Control



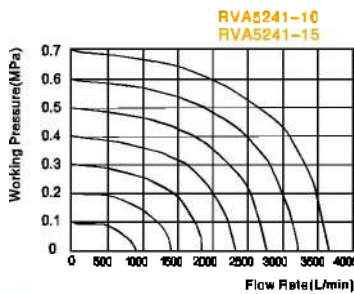
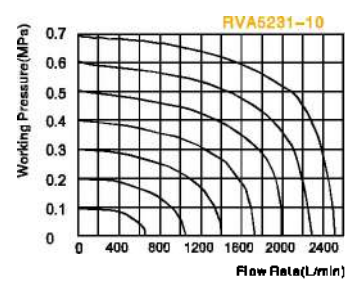
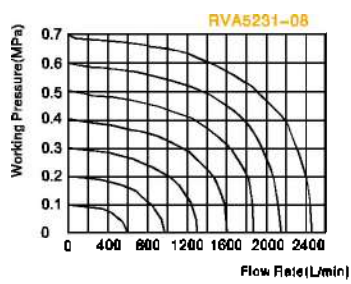
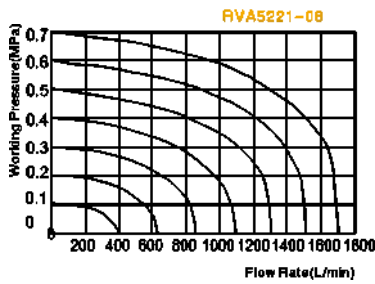
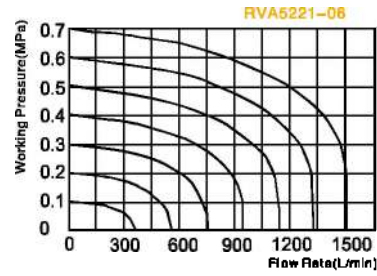
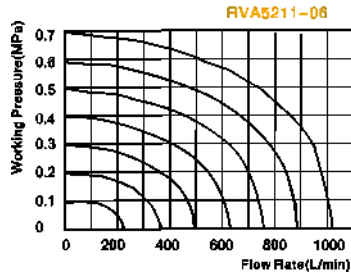
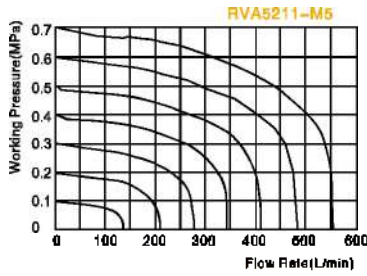
5/3 Ways Solenoid Valve



No.	Part Name	Material
1	Air Control Cover	Aluminum Alloy
2	Piston	POM
3	Screw	Carbon Steel
4	Valve Body	Aluminum Alloy
5	Spool	Aluminum Alloy
6	O-ring	NBR
7	Piston	POM
8	Rear Cover	Zinc Alloy
9	Back Seat	Aluminum Alloy
10	Spring Seat	Aluminum Alloy
11	C-type Buckle	65Mn

RV Series Air Control Valve (5/2,5/3way)

Flow Chart

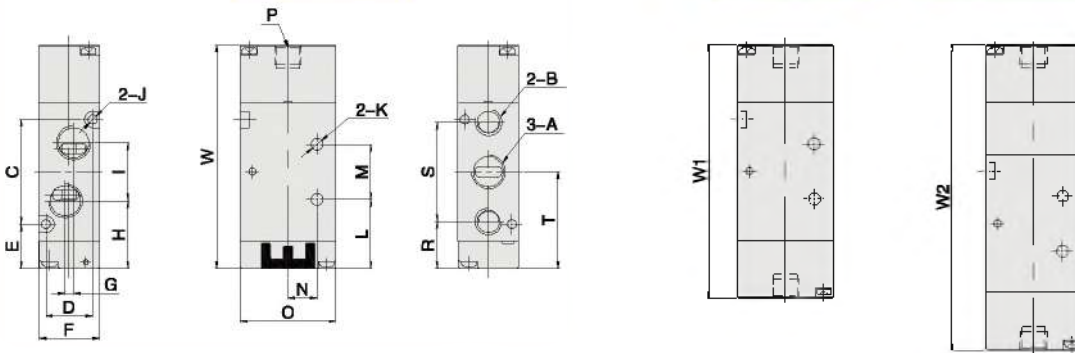


Main Dimension

Single Air Control

Double Air Control

5/3 Ways Solenoid Valve

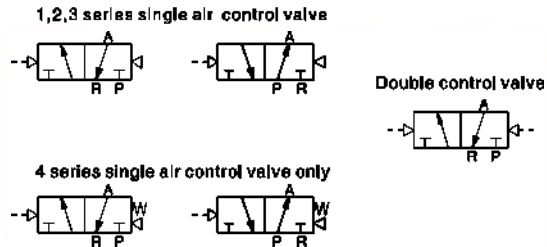


Model/Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	W	W1	W2
RVA5211-M5	M5	M5	30	13	16.5	18	0	24.5	14.1	3.3	3.3	24.6	14	9.5	27	G1/8	17.9	27.2	31.6	72	81	96
RVA5211-06	G1/8	G1/8	30	13	16.5	18	3	23.5	16	3.3	3.3	24.6	14	8.5	27	G1/8	17.5	28	31.6	72	81	96
RVA5221-06	G1/8	G1/8	38	17	18	22	0	26	18	3.3	4.3	25	20	10.5	35	G1/8	17	36	35	81	92	111
RVA5221-08	G1/4	G1/8	38	17	18	22	3	24.5	21	3.3	4.3	25	20	10.5	35	G1/8	17	36	35	81	92	111
RVA5231-08	G1/4	G1/4	50	20	19.1	27	0	33.1	22	4.3	4.3	32.1	24	13.5	40	G1/8	21.6	45	44.1	99.8	111	130
RVA5231-10	G3/8	G1/4	50	20	19.1	27	4	32.1	24	4.3	4.3	32.1	24	13.5	40	G1/8	21.6	45	44.1	99.8	111	130
RVA5241-10	G3/8	G3/8	72	27	21	34	0	39	36	4.3	5.2	43	28	17.6	50	G1/8	26.5	63	57	127	140	161
RVA5241-15	G1/2	G1/2	72	27	21	34	4	39	36	4.3	5.5	43	28	17.6	50	G1/8	26.5	63	57	127	140	161

RV Series Air Control Valve (3/2 way)

RV

Air Control Valve (3/2)



How to Order?

Series No.	Ways	Positions	Valve Body ID Code	Controls	Initial Status	Part Size	Reset Type	Thread Type
RVA	3: 3 ways	2: 2 positions	1: 1Series 2: 2Series 3: 3Series 4: 4Series	1: Single control 2: Double control Blank: Normal close(N.C) H: Normal open(N.O)		M5: M5 06: 1/8" 08: 1/4" 10: 3/8" 15: 1/2"	Blank: Spring return (Apply to 4 series single control valve) Q: Air return (Apply to 1,2,3 series single control valve)	Blank: G P: PT T: NPT

Order Example:

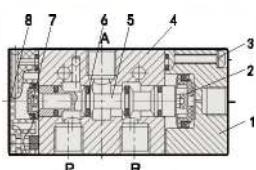
RVA series air control valve, 3/2 way, 2 series valve body size, single control, NC type, 1/4" port size, air return, PT thread
ERP code is: RVA3221-08Q-P

Specifications

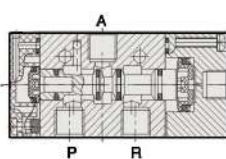
Model No.	RVA3211-M5 RVA3212-M5	RVA3211-06 RVA3212-06	RVA3221-06 RVA3222-06	RVA3221-08 RVA3222-08	RVA3231-08 RVA3232-08	RVA3231-10 RVA3232-10	RVA3241-10 RVA3242-10	RVA3241-15 RVA3242-15
Port size	M5	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Sectional area(mm)	5.5(CV=0.31)	12(CV=0.67)	14(CV=0.78)	16(CV=0.88)	25(CV=1.40)	30(CV=1.68)	50(CV=2.79)	50(CV=2.79)
Working medium	Clean air(After 40 μm filtration)							
Acting type	External type							
Reset type	Air reset						Spring reset /Air reset	
Lubrication	Not required							
Working pressure(MPa)	0.15~0.8							
Guaranteed Pressure(MPa)	1.2							
Working temperature(°C)	-20~70(No freezing)							
Max. acting frequency	5 Cycles/s							
Weight(g)	RVA3211:60 RVA3212:75		RVA3221:116 RVA3222:143		RVA3231:187 RVA3232:220		RVA3241:378 RVA3242:430	

Internal Structure

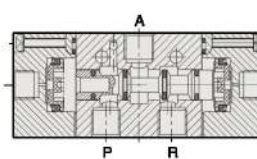
Single Air Control(N.C)



Double Air Control(N.O)



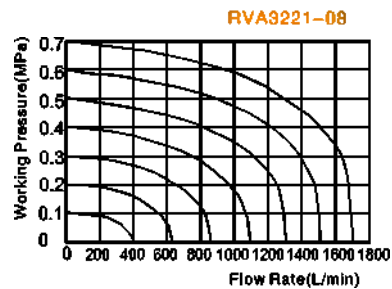
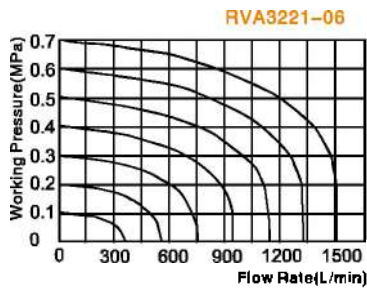
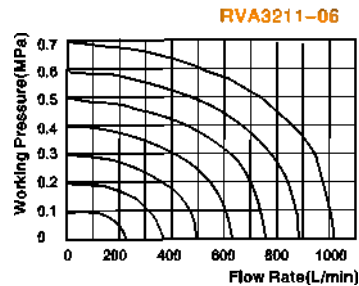
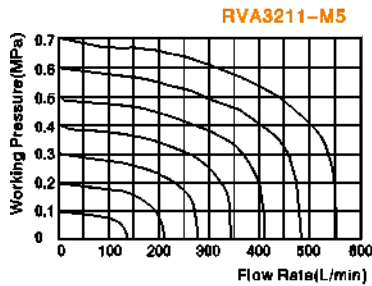
5/3 Ways Solenoid Valve



No.	Part Name	Material
1	Air Control Cover	Aluminum Alloy
2	Piston	POM
3	Screw	Carbon Steel
4	Valve Body	Aluminum Alloy
5	Spool	Aluminum Alloy
6	O-ring	NBR
7	Piston	POM
8	Rear Cover	Zinc Alloy

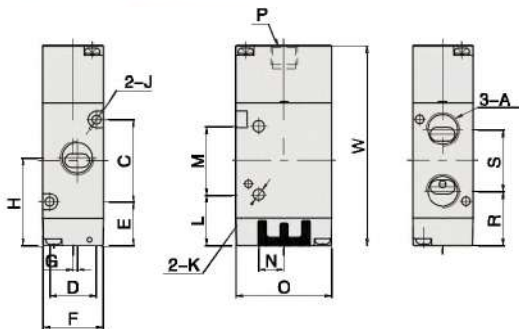
RV Series Air Control Valve (3/2 way)

Flow Chart

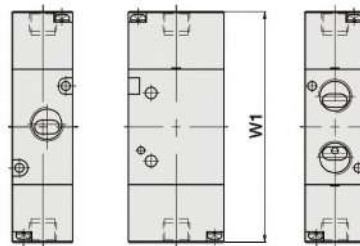


Main Dimension

Single Air Control



Double Air Control



Model/Sign	A	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	W	W1*
RVA3211-M5	M5	19	19	16.5	18	0	26	3.3	3.1	15.5	21	8	27	G1/8	18.9	14.2	61	70
RVA3211-06	G1/8	19	19	16.5	18	1.5	27	3.3	3.1	15.5	21	6	27	G1/8	18	16	61	70
RVA3221-06	G1/8	30	17	18	22	0	31	3.3	4.2	18.5	25	8.3	35	G1/8	20	22	73	84
RVA3221-08	G1/4	30	17	18	22	1.5	32	3.3	4.2	18.5	25	8.3	35	G1/8	19.8	22.5	73	84
RVA3231-08	G1/4	35	20	19.1	27	0	36.8	4.3	4.3	21.6	30	9.5	40	G1/8	24.6	24	84.6	98
RVA3231-10	G3/8	35	20	19.1	27	2	36.8	4.3	4.3	21.6	30	9.5	40	G1/8	24.6	24	84.6	98
RVA3241-10	G3/8	40.5	27	24.8	34	0	45	4.3	5.2	21	48	11.5	50	G1/8	29.3	31.5	109	116
RVA3241-15	G1/2	40.5	27	24.8	34	2	45	4.3	5.2	21	48	11.5	50	G1/8	29.3	31.6	109	116

Note: The dimension of N.O type and N.C type are same, W1* is the dimension of double control type.

V/RV Series Manifold (5/2 way)

1

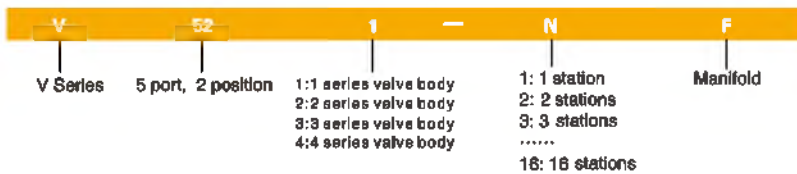
Manifold (5/2)

V/RV

Manifold (5/2,5/3)

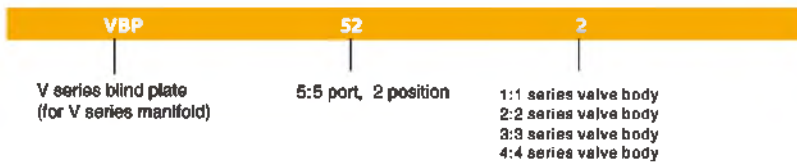


How to Order?



Order Example:

* V series manifold for 5/2, 2 series valve body, 5 stations, Model: V522-5F



Order Example:

* Blind plate for 5/2 valve, 2 series valve body, Model: VBP-522

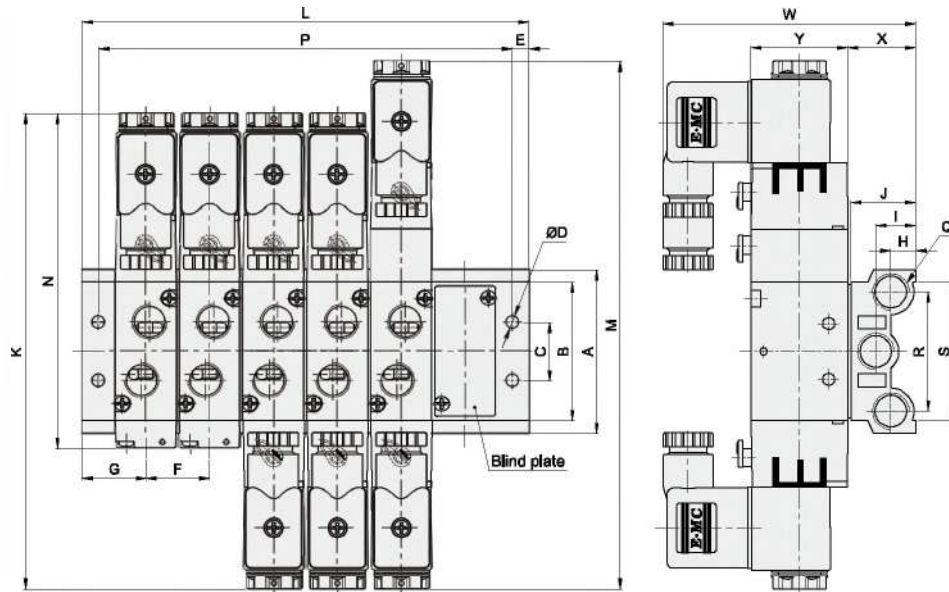
Note: 1. The dimensions of 5/3 way is same as 5/2 way series.
2. Blind plate assembly include: plate, gasket and screws.

Corresponding Application

Valve Model	RV5211/RV5212/RV5312	RV5221/RV5222/RV5322	RV5231/RV5232/RV5332	RV5241/RV5242/RV5342
Manifold Model	V521-NF(N≤16)	V522-NF(N≤16)	V523-NF(N≤12)	V524-NF(N≤7)

V/RV Series Manifold (5/2 way)

© Main Dimension



Model/Sign	L															
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
V521-□F	98	57	76	85	114	133	162	171	180	209	228	247	266	285	304	323
V522-□F	46	68	92	115	138	161	184	207	230	253	276	299	322	345	368	391
V523-□F	54	82	110	138	166	194	222	250	278	306	334	362	-	-	-	-
V524-□F	63	96	139	166	209	238	273	-	-	-	-	-	-	-	-	-

Model/Sign	A	B	C	D	E	F	G	H	I	J
V521-□F	58	43	20	4.5	5	19	19	9.5	14	23
V522-□F	59	50	21	4.5	6	23	23	9.5	15	23.5
V523-□F	75	64	26	4.5	6	28	27	12	17.5	28
V524-□F	98	94	32	5.5	7	35	31.5	16	21.5	35

Model/Sign	P															
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
V521-□F	28	47	66	85	104	123	142	161	180	199	218	237	256	276	294	313
V522-□F	34	57	80	103	126	149	172	195	218	241	264	287	310	333	356	379
V523-□F	42	70	98	126	154	182	210	238	266	294	322	350	-	-	-	-
V524-□F	49	84	119	154	189	224	259	-	-	-	-	-	-	-	-	-

Model/Sign	K	M	N	Q	R	S	W	X	Y
V521-□F	143.2	158.2	103.1	G1/4	40	49	79.2	24	27
V522-□F	171.4	190.4	120.7	G1/4	43	50	91.2	24.5	35
V523-□F	190.4	209.4	139.3	G3/8	53	67	98.2	29	40
V524-□F	223.4	244.4	168.7	G1/2	70.5	86.8	110.2	36	50

V/RV Series Manifold (3/2 way)

V/RV

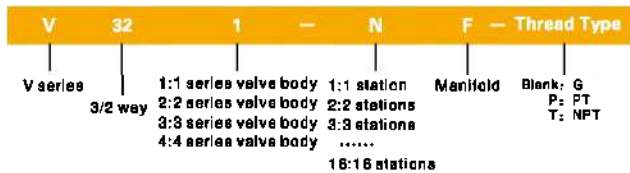
Manifold (3/2)



Manifold Model

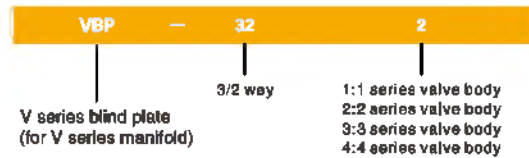
No.	Manifold Model	Valve Model
1	V321-NF (N≤16)	RV3211 (H) /RV3212
2	V322-NF (N≤16)	RV3221 (H) /RV3222
3	V323-NF (N≤12)	RV3231 (H) /RV3232
4	V324-NF (N≤7)	RV3241 (H) /RV3242

How to Order?



Order Example:

* V series manifold for 3/2, 2 series valve body, 5 stations,
Model: V322-5F

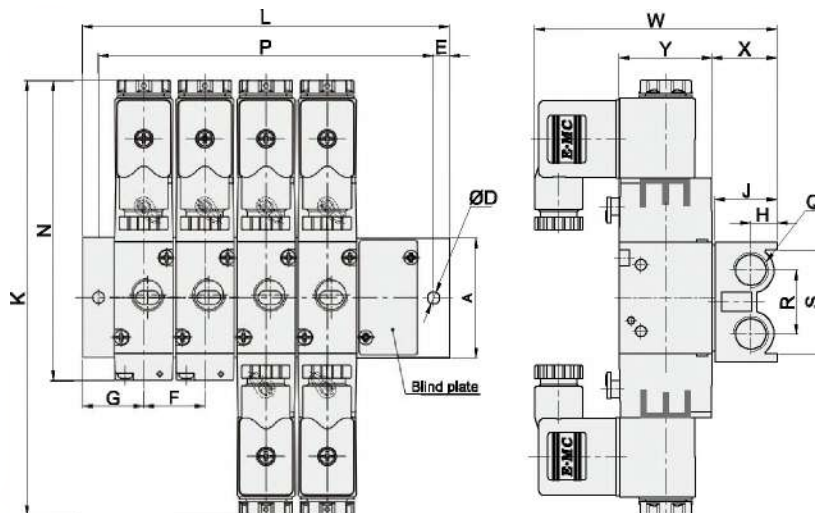


Order Example:

* Blind plate for 3/2 valve, 2 series valve body,
Model: VBP-322

Note: Blind plate assembly includes: Blinds, gaskets and mounting screws

Main Dimension



Model\Sign	L										(mm)							
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	A	D	E	F	G	H	J	K
V321-□F	36	57	78	85	114	133	152	171	190	208	31	4.5	5.25	19	18	7.75	19	132.2
V322-□F	46	89	82	115	138	161	184	207	230	253	45	4.5	6	23	23	10	23.5	163.4
V323-□F	54	82	110	138	166	194	222	250	278	306	50	4.5	6	28	28	12	28	175.4
V324-□F	63	98	133	168	203	238	273	308	343	378	62.5	5.5	7	35	31.5	16	35	199.4

Model\Sign	P										(mm)						
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	N	Q	R	S	W	X	Y
V321-□F	28	47	66	85	104	123	142	161	180	199	92.1	G1/8	17.5	25	75.2	20	27
V322-□F	34	57	80	103	126	149	172	195	218	241	112.7	G1/4	24	39	91.2	24.5	35
V323-□F	42	70	98	126	154	182	210	238	266	294	124.3	G3/8	29	42	98.2	29	40
V324-□F	49	84	119	154	189	224	269	294	329	364	144.7	G1/2	36.5	61.5	110.2	36	50

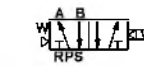
RV Series NAMUR Solenoid Valve(5/2,5/3 way)

RV

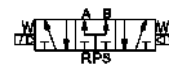
NAMUR Solenoid Valve (5/2,5/3)



(4 series single control valve only)



(1,2,3 series single control valve)



How to Order?

Low Power Solenoid Valve

Series No.	Valve Body ID Code	ID Code	Positions	Ways	Controls	Initial Status	Port Size	Reset Type	Valve Body Type	Voltage	Connection Mode	Cover Color - Patchcord	Thread Type
N	1: 1Series 2: 2Series 3: 3Series 4: 4Series	R: Standard armature +Energy saving coil	2: 2 positions 3: 3 positions	5: 5 ways	1: Single control 2: Double control	M6: M5 08: 1/4" 18: 1/2"	06: 1/8" 08: 1/4" 10: 3/8" 18: 1/2"	Blank: Spring return (4 series single solenoid control only) C: Air return (1,2,3 series single solenoid control)	M: NAMUR	E1: AC110V E2: AC220V E4: DC24V (for 1 series, only DC24V available)	Blank: DIN connector type L: Plug-in Type K: Water proof connector type (only for 2,3,4 series)	Blank: Brown translucent J: Colorless and translucent B: Black (only black color available for KM)	Blank: G P: PT T: NPT

Blank Patchcord length is 0.3 meter
0.6M Patchcord length is 0.6 meter
1M Patchcord length is 1 meter
(Options for "L: Plug-in type" Only)

Order Example:

RV series Energy saving solenoid valve, 5/2 ways, 1 series valve body size, double control, 1/8" port size, NUMAR type, DC24V, DIN connector, G thread, ERP code is N1R252-06ME4

Specifications

Model	N1R251-M5QM N1R252-M5M N1R352-M5M	N1R251-06QM N1R252-06M N1R352-06M	N2R251-06QM N2R252-06M N2R352-06M	N2R251-08QM N2R252-08M N2R352-08M	N3R251-06QM N3R252-06M N3R352-06M	N3R251-10QM N3R252-10M N3R352-10M	N4R251-10M N4R252-10M N4R352-10M	N4R251-15M N4R252-15M N4R352-15M
Port Size	M5	G1/8	G1/8	G1/4(Ex.G1/8)	G1/4	G3/8(Ex.G1/8)	G3/8	G1/2
Sectional area(mm)	5/2: 5.6(CV=0.91) 5/3: 5.6(CV=0.28)	5/2: 12(CV=0.87) 5/3: 9(CV=0.60)	5/2: 14(CV=0.78) 5/3: 12(CV=0.67)	5/2: 16(CV=0.88) 5/3: 12(CV=0.67)	5/2: 25(CV=1.40) 5/3: 18(CV=1.00)	5/2: 30(CV=1.68) 5/3: 18(CV=1.00)	5/2: 50(CV=2.79) 5/3: 30(CV=1.67)	5/2: 50(CV=2.79) 5/3: 30(CV=1.67)
Working medium	Clean air(After 40 μm filtration)							
Acting type	Internal pilot							
Reset type	Air reset						Spring reset / Air reset	
Lubrication	Not required							
Working pressure(MPa)	0.15~0.8							
Guaranteed Pressure(MPa)	1.2							
Working temperature(°C)	-20~70 (No freezing)							
Voltage Range	-15%~10%							
Power Consumption	DC24V:0.6W		DC24V:0.7W AC220V:0.9VA AC110V:1.4VA					
Insulation Class	Class F							
Protective Class	IP65(DIN40050)							
Max. acting frequency	5 cycles/s							
Activate time(S)	<0.05							
Weight(g)	N1R251-M:119 N1R252-M:176 N1R352-M:166	N2R251-M:208 N2R252-M:306 N2R352-M:348	N3R251-M:300 N3R252-M:409 N3R352-M:458	N4R251-M:533 N4R252-M:666 N4R352-M:755				

RV Series NAMUR Solenoid Valve(5/2,5/3 way)

How to Order?

Standard Solenoid Valve

Series No.	Ways	Positions	Valve Body ID Code	Controls	Initial Status	Port Size	Reset Type	Valve Body Type	ID Code	Voltage	Connection Mode	Cover Color	Patchcord	Thread Type
RV(Solenoid valve)	5:5 ways	2:2 positions 3:3 positions	1: 1Series 2: 2Series 3: 3Series 4: 4Series	1: Single control 2: Double control	C: Center close P: Center pressure E: Center exhaust (only for 5/3 ways)	M5: M5 08: 1/8" 08: 1/4" 10: 3/8" 15: 1/2"	Blank: Spring return (Only apply to 4 series single control valve) C: Air return (Only apply to 1,2,3 series single control valve)	M: NAMUR type Blank: Standard type A: Annisco coil	E1: AC110V E2: AC220V E3: AC380V E4: DC24V E5: DC12V E6: AC38V E7: AC24V E8: DC110V E9: DC48V E10: DC96V	Blank: DIN connector L: Plug-in Type F: Flying leads K: Waterproof DIN connector (Only 2, 3, 4 series is optional for KM)	Blank: Brown translucent J: Colorless and translucent B: Black(only black color available for KM)	Blank: Patchcord length is 0.3 meter 0.6M: Patchcord length is 0.6 meter 1M: Patchcord length is 1 meter (Options for "L: Plug-in type" and "F: Flying leads type" Only)	Blank: G F: PT T: NPT	

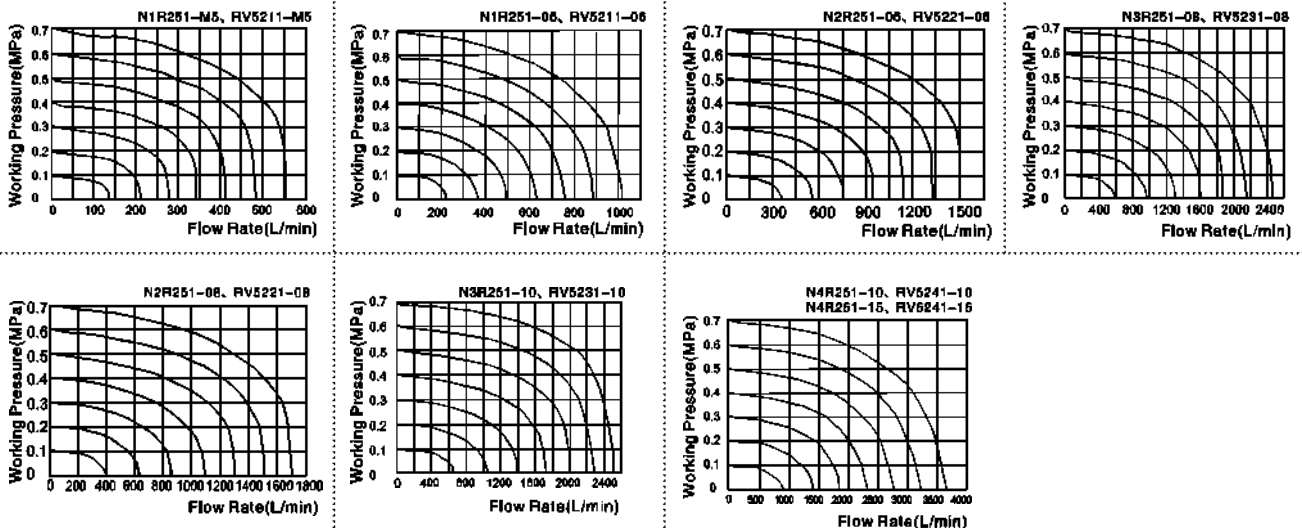
Order Example:

RV series solenoid valve, 5/2 ways, 1 series valve body size, double control, 1/8" port size, NAMUR type, standard coil, DC24V. Flying leads connector, G thread, ERP code is RV5212-06ME2F

Specifications

Model	RV5211-M5QM RV5212-M5M RV5312-M5M	RV5211-06QM RV5212-06M RV5312-06M	RV5221-06QM RV5222-06M RV5322-06M	RV5221-08QM RV5222-08M RV5322-08M	RV5231-08QM RV5232-06M RV5332-06M	RV5231-10QM RV5232-10M RV5332-10M	RV5241-10M RV5242-10M RV5342-10M	RV5241-15M RV5242-15M RV5342-15M
Port Size	M5	G1/8	G1/8	G1/4(Ex,G1/8)	G1/4	G3/8(Ex,G1/4)	G3/8	G1/2
Sectional area(mm ²)	5/2: 5.5(CV=0.31) 5/3: 5.5(CV=0.28)	5/2: 12(CV=0.67) 5/3: 9(CV=0.50)	5/2: 14(CV=0.78) 5/3: 12(CV=0.67)	5/2: 18(CV=0.80) 5/3: 12(CV=0.67)	5/2: 25(CV=1.40) 5/3: 18(CV=1.00)	5/2: 30(CV=1.68) 5/3: 18(CV=1.00)	5/2: 50(CV=2.78) 5/3: 30(CV=1.67)	5/2: 60(CV=2.78) 5/3: 30(CV=1.67)
Working medium	Clean air(After 40 μm filtration)							
Acting type	Internal pilot							
Reset type	Air reset				Spring reset / Air reset			
Lubrication	Not required							
Working pressure(MPa)	0.15-0.8							
Guaranteed Pressure(MPa)	1,2							
Working temperature(°C)	-20~70(No freezing)							
Voltage Range	-15%~10%							
Power Consumption	DC:2.8W ; AC:3.0VA			DC:3.0W ; AC:4.0VA				
Insulation Class	Class F							
Protective Class	IP65(DIN40050)							
Max. acting frequency	5/2: 5 cycles/s; 5/3: 3 cycles/s							
Activate time(S)	<0.05							
Weight(g)	RV5211: M:113 RV5212: M:178 RV5312: M:188	RV5221: M:208 RV5222: M:308 RV5322: M:349	RV5231: M:300 RV5232: M:408 RV5332: M:459	RV5241: M:533 RV5242: M:666 RV5342: M:755				

Flow Chart



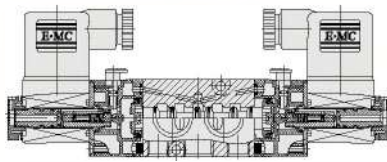
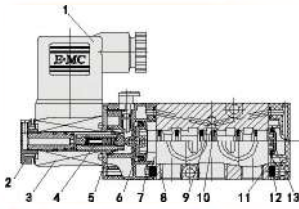
RV Series NAMUR Solenoid Valve(5/2,5/3 way)

1
RV (3/2,3/5)
NAMUR Type

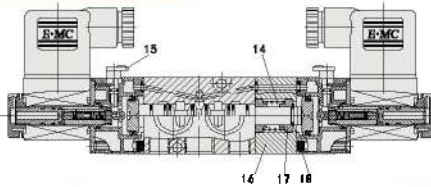
Internal Structure

Single Solenoid Valve

Double Solenoid Valve



5/3 Ways Solenoid Valve

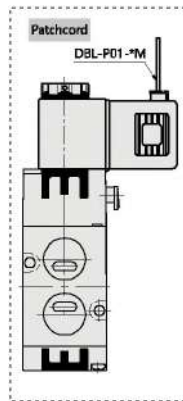
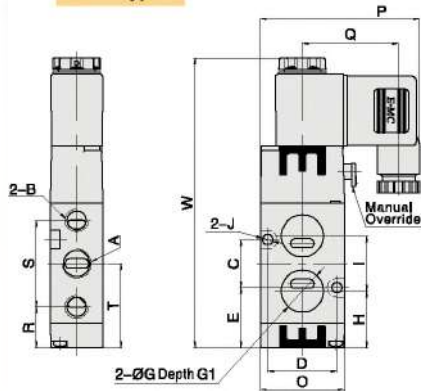


No.	Part Name	Material
1	Connector	Engineered plastics
2	Fixing Nut	PCM
3	Coll	Brass+Thermoset Resin
4	Pilot Units	Pure Brass+Stainless Steel
5	Plate	Carbon Steel
6	Piston	PCM
7	Pilot Seat	Engineered plastics
8	Valve Body	Aluminum Alloy
9	Spool	Aluminum Alloy
10	O ring	NBR
11	Rear Cover	Engineered plastics
12	Filter	High Molecular Material
13	Piston	Engineered plastics
14	Spring	Stainless Steel
15	Manual Override	Engineered plastics
16	Back Seat	Aluminum Alloy
17	Spring Seat	Aluminum Alloy
18	C type buckle	65Mn

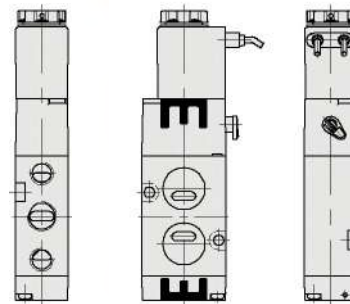
Main Dimension

Single Solenoid Valve

DIN Type



Flying Lead Type



(mm)

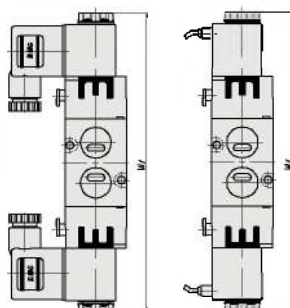
Model/Sign	A	B	C	D	E	F	G	G1	H	I	J	O	P	Q	R	S	T	W
RV5221-08QM	G1/4	G1/8	20	29	25	22	17.6	1.5	23.5	23	4.3	35	66.7	40.2	17	36	35	120.7
RV5231-08QM	G1/4	G1/4	24	32	32.1	27	19.6	1.6	32.1	24	5.2	40	68.2	40.2	21.6	45	44.1	139.3
RV5231-10QM	G3/8	G1/4	24	32	32.1	27	19.6	1.5	32.1	24	5.2	40	68.2	40.2	21.6	45	44.1	139.3

Note: N series energy saving solenoid valve have same sizes as above table.

Double Solenoid Valve

DIN Type

Flying Lead Type

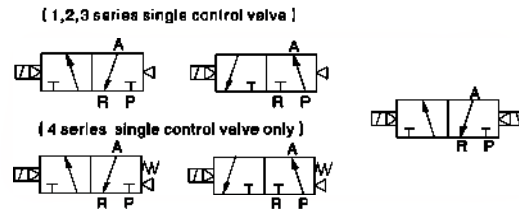


Model/Sign	W1
RV5222-08QM	171.4
RV5232-08QM	190.4
RV5232-10QM	190.4

RV Series NAMUR Solenoid Valve(3/2 way)

RV

NAMUR Solenoid Valve (3/2)



How to Order?

Low Power Solenoid Valve

Series No.	Valve body ID code	ID Code	Positions	Ways	Controls	Initial Status	Part Size	Reset Type	Valve Body Type	Voltage	Connection Mode	Cover Color - Patchcord - Thread Type
N	1: 1Series 2: 2Series 3: 3Series 4: 4Series	R: Standard armature -Energy saving coil	2: 2 positions	3: 3 ways	1: Single control 2: Double control	Blank: Normal close H: Normal open	M5-M6 06:1/8" 08:1/4" 10:3/8" 16:1/2"	Blank Spring return (4 series single solenoid control only) Q: Air return (1,2,3 series single solenoid control)	M: NAMUR	E1: AC110V E2: AC220V E4: DC24V (for 1 series, only DC24V available)	Blank: DIN connector type L: Plug-in Type K: Water proof connector type (only for 2,3,4 series)	Blank: Brown translucent J: Colorless and translucent B: Black (only black color available for KM)

Order Example:

RV series low power solenoid valve, 3/2 ways, 1 series valve body size, double control, 1/8" port size, NUMAR type, DC24V, DIN connector, G thread, ERP code is N1R232-06ME4

Blank: Patchcord length is 0.3 meter
0.6M: Patchcord length is 0.6 meter
1M: Patchcord length is 1 meter
(Options for "L: Plug-in type" Only)

Specifications

Model	N1R231-M5QM N1R232-M5M	N1R231-06QM N1R232-06M	N2R231-06QM N2R232-06M	N2R231-08QM N2R232-08M	N3R231-08QM N3R232-08M	N3R231-10QM N3R232-10M	N4R231-10M N4R232-10M	N4R231-15M N4R232-15M
Port Size	M5	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Sectional area(mm)	5.5(CV=0.31)	12(CV=0.67)	14(CV=0.78)	16(CV=0.89)	25(CV=1.40)	30(CV=1.68)	50(CV=2.79)	50(CV=2.79)
Working medium	Clean air(After 40 μm filtration)							
Acting type	Internal pilot							
Reset type	Air reset						Spring reset / Air reset	
Lubrication	Not required							
Working pressure(MPa)	0.15~0.8							
Guaranteed Pressure(MPa)	1.2							
Working temperature(°C)	-20~70 (Dry air)							
Voltage Range	-15%~10%							
Power Consumption	DC24V:0.6W		DC24V:0.7W			AC220V:0.9VA	AC110V:1.4VA	
Insulation Class	Class F							
Protective Class	IP65(DIN40050)							
Max. acting frequency	5 Cycles/s							
Activate time(S)	<0.05							
Weight(g)	N1R231-M:114 N1R232-M:171		N2R231-M:203 N2R232-M:310		N3R231-M:295 N3R232-M:403		N4R231-M:448 N4R232-M:578	

RV Series NAMUR Solenoid Valve(3/2 way)

How to Order?

Standard Solenoid Valve

Series No.	Ways	Positions	Valve body ID code	Controls	Initial Status	Port Size	Reset Type	Valve body Type	ID Code	Voltage	Connection Mode	Cover Color	Patchcord	Thread Type
RV (Solenoid valve) RVA (Air control valve)	3: 3 ways 8: 8 ways	2: 2 positions	1: 1 Series 2: 2 Series 3: 3 Series 4: 4 Series	Blank: Normal close H: Normal open	1: Single control 2: Double control	M: NAMUR type	Blank: Spring return (Only apply to 4 series single control valve) Q: Air return (Only apply to 1,2,3 series single control valve)	Blank: Standard type A: Amico coil	E1: AC110V E6: AC38V E2: AC220V E7: AC24V E3: AC380V E8: DC110V E4: DC24V E9: DC48V E5: DC12V E10: DC36V	Blank: DIN connector L: Plug-in type F: Flying leads K: Waterproof DIN connector (Only 2, 3, 4 series is optional for KM)	Blank: Brown translucent J: Colorless and translucent B: Black (only black color available for KM)	Blank: G P: PT T: NPT	Blank: Patchcord length is 0.3 meter 0.6M: Patchcord length is 0.6 meter 1M: Patchcord length is 1 meter (Options for "L: Plug-in type" and "F: Flying leads type" Only)	

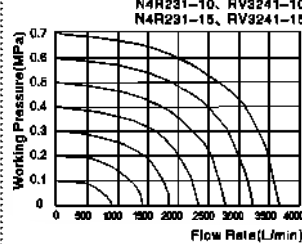
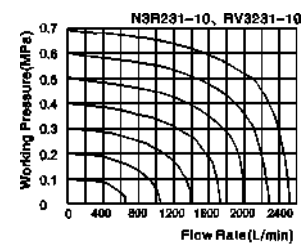
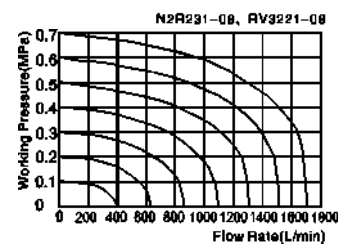
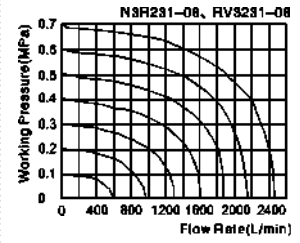
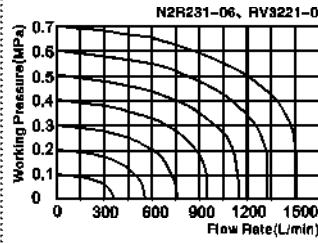
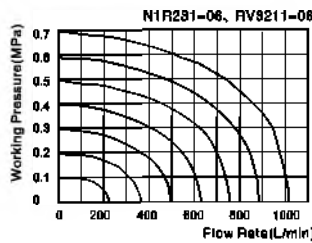
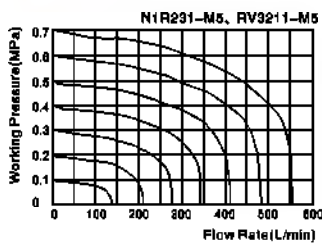
Order Example:

RV series solenoid valve, 3/2 ways, 1 series valve body size, double control, 1/8" port size, NAMUR type, standard coil, DC24V, Fly leads connector, G thread, ERP code is RV3212-08ME2F

Specifications

Model	RV3211-M5QM RV3212-M6M	RV3211-08QM RV3212-08M	RV3221-08QM RV3222-08M	RV3221-08QM RV3222-08M	RV3231-08QM RV3232-08M	RV3231-10QM RV3232-10M	RV3241-10M RV3242-10M	RV3241-15M RV3242-15M
Port Size	M5	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Sectional area(mm)	5.5(CV=0.31)	12(CV=0.67)	14(CV=0.76)	16(CV=0.89)	25(CV=1.40)	30(CV=1.68)	50(CV=2.79)	50(CV=2.79)
Working medium	Clean air(After 40 μm filtration)							
Acting type	Internal pilot							
Reset type	Air reset				Spring reset / Air reset			
Lubrication	Not required							
Working pressure(MPa)	0.15~0.6							
Guaranteed Pressure(MPa)	1.2							
Working temperature(°C)	-20~70 (Dry air)							
Voltage Range	-15%~10%							
Power Consumption	DC:2.6W ; AC:3.0VA				DC:3.0W ; AC:4.0VA			
Insulation Class	Class F							
Protective Class	IP65(DIN40050)							
Max. acting frequency	5 cycles/s							
Activate time(S)	<0.05							
Weight(g)	RV3211-M:114 RV3212-M:171	RV3221-M:203 RV3222-M:310	RV3231-M:295 RV3232-M:409	RV3241-M:448 RV3242-M:578				

Flow Chart

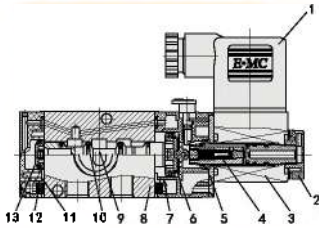


1
RV (3/2)
NAMUR type

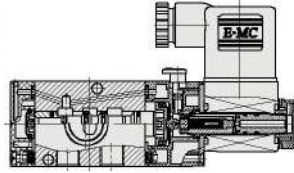
RV Series NAMUR Solenoid Valve(3/2 way)

Internal Structure

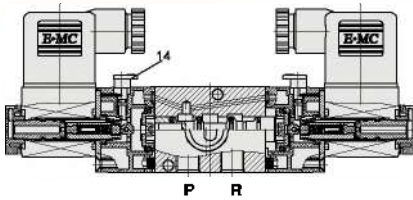
Single Air Control(N.C)



Single Air Control(N.O)



Double Air Control

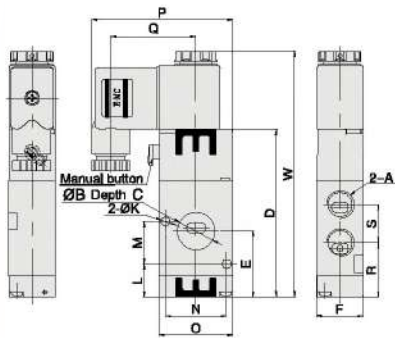


No.	Part Name	Material
1	Connector	Engineered plastics
2	Fixing Nut	POM
3	Coil	Brass+Thermoset Resin
4	Pilot Units	Pure Iron+Brass +Stainless Steel
6	Plate	Carbon Steel
8	Piston	POM
7	Pilot Seat	Engineered plastics
8	Valve Body	Aluminum Alloy
9	Spool	Aluminum Alloy
10	O ring	NBR
11	Rear Cover	Engineered plastics
12	Filter	High Molecular Material
13	Piston	Engineered plastics
14	Manual Override	Engineered plastics

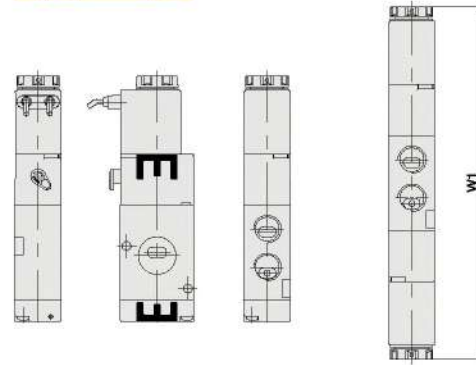
Main Dimension

Single Solenoid Valve

DIN Type



Flying Lead Type



Model/Sign	A	B	C	D	E	F	K	L	M	N	O	P	Q	R	S	W	W1*
RV3211-M5QM	M5	13.8	1.5	68.5	29	18	3.3	16	14	22	27	55.2	33.9	21.9	14.2	98.1	138.2
RV3211-Ø6QM	G1/8	13.8	1.5	68.5	29	18	3.3	16	14	22	27	55.2	33.9	23	14	98.1	138.2
RV3221-Ø8QM	G1/8	17.6	1.5	79	31	22	4.3	15.6	20	29	35	66.7	40.2	23.6	18	115.7	166.4
RV3221-Ø8QM	G1/4	17.6	1.5	79	31	22	4.3	15.6	20	29	35	66.7	40.2	25.6	18	115.7	166.4
RV3231-Ø8QM	G1/4	19.6	1.5	97.6	42.1	27	5.2	18.1	24	32	40	89.2	40.2	31.1	21	134.3	185.4
RV3231-10QM	G3/8	19.6	1.5	97.6	42.1	27	5.2	18.1	24	32	40	89.2	40.2	30.1	23	134.3	185.4
RV3241-10M	G3/8	21.8	1.8	108	45.5	34	6	17.5	33	41	50	74.2	40.2	30	31.5	144.7	199.4
RV3241-15M	G1/2	21.8	1.8	108	45.5	34	6	17.5	33	41	50	74.2	40.2	32	31.5	144.7	199.4

Note: The dimensions of N series and RV series are same.

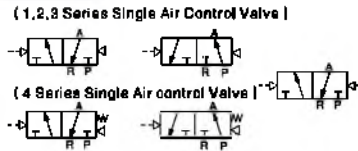
RV Series NAMUR Air Control Valve(3/2, 5/2, 5/3 Way)

RV

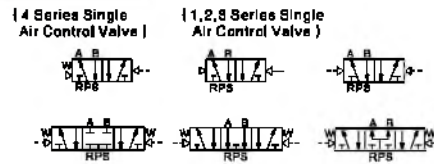
NAMUR Air Control Valve(3/2, 5/2, 5/3)



RVA Series 3/2 way



RVA Series 5/2, 5/3 way



How to Order?

Low Power Solenoid Valve

Series No.	Way	Positions	Valve body ID code	Controls	Initial Status	Port size	Reset Type	Thread Type
RVA	3: 3 ways 5: 5 ways	2: 2 positions 3: 3 positions	1: 1Series 2: 2Series 3: 3Series 4: 4Series	1: Single control 2: Double control	3/2 Way Blank: Normal close H: Normal open 5/3 Way C: Center close P: Center pressure E: Center exhaust (Only for 5/3 ways)	1 series M5: M5 06: 1/8" 2 series 06: 1/8" 08: 1/4" 3 series 08: 1/4" 10: 3/8" 4 series 10: 3/8" 15: 1/2"	Blank: Spring return (Apply to 4 series single control valve) Q: Air return (Apply to 1,2,3 series single control valve)	Blank: G P: PT T: NPT

Order Example:

RV series air control valve, 3/2 ways, 2 series valve body size, normal close, single control, 1/4" port size, gas reset, NAMUR type, PT thread, ERP code is RVA3221-08QM-P

Specifications

Model	RVA5211-M5M RVA5212-M5M RVA6312-M5M	RVA5211-06M RVA5212-06M RVA6312-06M	RVA5221-06M RVA5222-06M RVA6322-06M	RVA5221-08M RVA5222-08M RVA6322-08M	RVA5231-08M RVA5232-08M RVA6332-08M	RVA5231-10M RVA5232-10M RVA6332-10M	RVA5241-10M RVA5242-10M RVA5342-10M	RVA5241-15M RVA5242-15M RVA5342-15M
Port Size	M5	G1/8	G1/8	G1/4(Exhaust G1/8)	G1/4	G3/8(Exhaust G1/4)	G3/8	G1/2
Sectional area(mm ²)	2P: 5.5(CV=0.31) 3P: 5.5(CV=0.28)	2P: 12(CV=0.67) 3P: 9(CV=0.50)	2P: 14(CV=0.78) 3P: 12(CV=0.67)	2P: 18(CV=0.88) 3P: 12(CV=0.67)	2P: 25(CV=1.40) 3P: 16(CV=1.00)	2P: 30(CV=1.68) 3P: 18(CV=1.00)	2P: 50(CV=2.78) 3P: 30(CV=1.67)	2P: 50(CV=2.78) 3P: 30(CV=1.67)
Working Medium	Clean air(After 40 μm filtration)							
Acting type	Outer air control							
Reset type	Air reset						Spring reset / Air reset	
Lubrication	Not Required							
Working Pressure(MPa)	0.15~0.8							
Guaranteed Pressure(MPa)	1.2							
Working Temperature(°C)	-20~70 (No freezing)							
Insulation Class	F Class							
Max.acting frequency	2 Position: 5 Cycles/s; 3 Position: 3 Cycles/s							

Note: 2P: 2 Position 3P: 3 Position

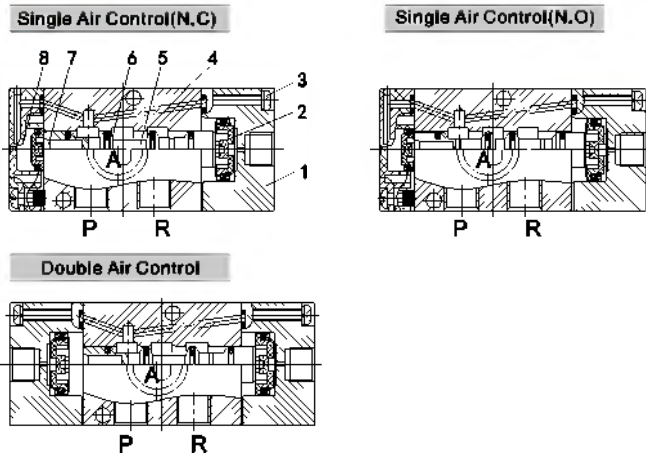
RV Series NAMUR Air Control Valve(3/2, 5/2, 5/3 Way)

Specifications

Model	RVA3211-M5M RVA3212-M5M	RVA3211-06M RVA3212-06M	RVA3221-06M RVA3222-06M	RVA3221-08M RVA3222-08M	RVA3231-08M RVA3232-08M	RVA3231-10M RVA3232-10M	RVA3241-10M RVA3242-10M	RVA3241-15M RVA3242-15M
Port Size	M5	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Sectional area(mm)	5.5(CV=0.31)	12(CV=0.67)	14(CV=0.78)	16(CV=0.89)	25(CV=1.40)	30(CV=1.68)	50(CV=2.79)	50(CV=2.79)
Working Medium	Clean air(After 40 μ m filtration)							
Acting type	Outer air control							
Reset type	Air reset				Spring reset+Air reset			
Lubrication	Not Required							
Working Pressure(MPa)	0.15~0.8							
Guaranteed Pressure(MPa)	1.2							
Working Temperature(°C)	-20~70 (No freezing)							
Max.acting frequency	5 Cycles/s							

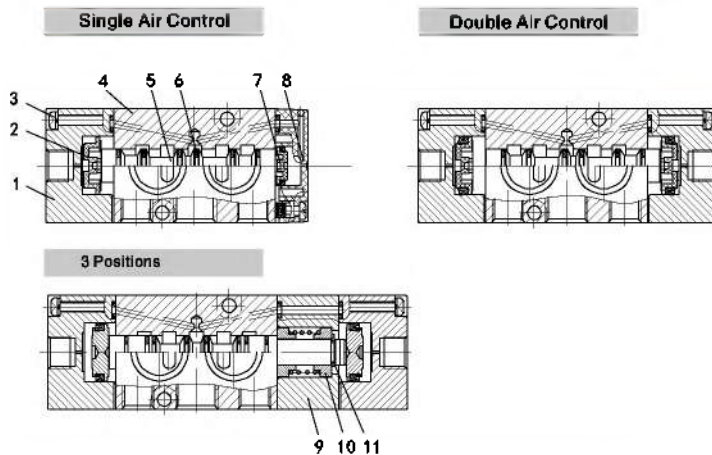
Internal Structure

3/2 Way



No.	Part Name	Material
1	Air Control Cover	Aluminum alloy
2	Piston	POM
3	Nut	Carbon steel
4	Valve body	Aluminum alloy
5	Spool	Aluminum alloy
6	O-ring	NBR
7	Piston	POM
8	Rear cover	Zinc Alloy

5/2,5/3 Way

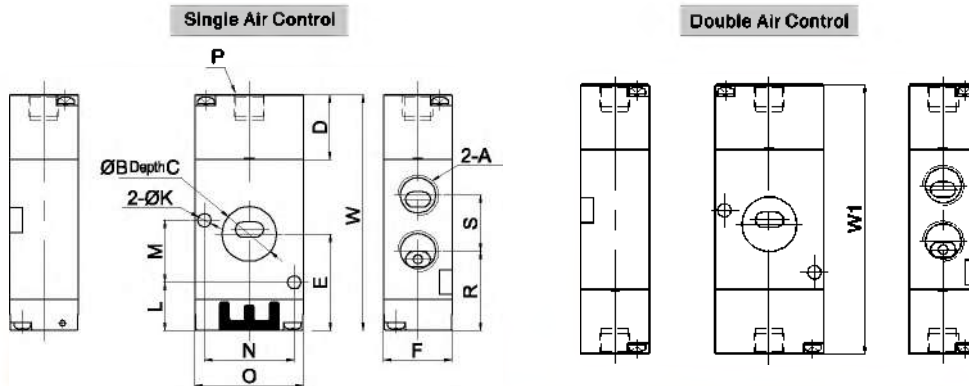


No.	Part Name	Material
1	Air Control Cover	Aluminum alloy
2	Piston	POM
3	Nut	Carbon steel
4	Valve body	Aluminum alloy
5	Spool	Aluminum alloy
6	O-ring	NBR
7	Piston	POM
8	Rear cover	Zinc Alloy
9	Back seat	Aluminum alloy
10	Spring seat	Aluminum alloy
11	C type buckle	65Mn

RV Series NAMUR Air Control Valve(3/2, 5/2, 5/3 Way)

Main Dimension

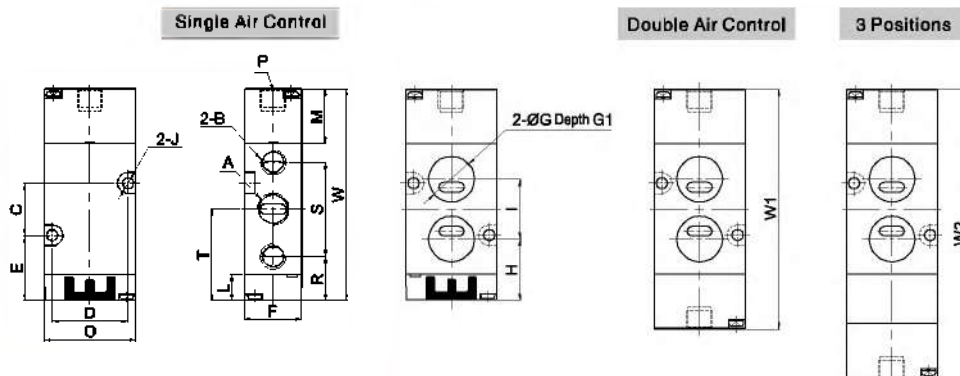
3/2 Way



Model/Sign	A	B	C	D	E	F	K	L	M	N	O	P	R	S	W	W1*
RVA3211-M5QM	M5	13.6	1.5	19	29	18	3.3	16	14	22	27	G1/8	21.8	14.2	67	76
RVA3211-08QM	G1/8	13.6	1.5	19	29	18	3.3	16	14	22	27	G1/8	23	14	67	76
RVA3221-08QM	G1/8	17.6	1.5	21	31	22	4.3	15.5	20	29	35	G1/8	23.5	18	76	87
RVA3221-08QM	G1/4	17.6	1.5	21	31	22	4.3	15.5	20	29	35	G1/8	25.5	18	76	87
RVA3231-08QM	G1/4	19.5	1.5	23	42.1	27	5.2	18.1	24	32	40	G1/8	31.1	21	94.8	106
RVA3231-10QM	G3/8	19.5	1.5	23	42.1	27	5.2	18.1	24	32	40	G1/8	30.1	23	94.8	106
RVA3241-10M	G3/8	21.8	1.8	23	45.5	34	6	17.5	33	41	50	G1/8	30	31.5	103	116
RVA3241-16M	G1/2	21.8	1.8	23	45.5	34	6	17.5	33	41	50	G1/8	32	31.5	103	116

Note: The dimensions of N.O type and N.C type are same, w1 is double control direction valve's dimensions.

5/2, 5/2 Way



Model/Sign	A	B	C	D	E	F	G	G1	H	I	J	M	O	P	R	S	T	W	W1*	W2*
RVA5211-M5QM	M5	M5	14	22	24.5	18	13.8	1.5	22.3	18.5	3.3	19	27	G1/8	17.9	27.2	31.5	72	81	96
RVA5211-08QM	G1/8	G1/8	14	22	24.5	18	13.8	1.5	22.3	18.5	3.3	19	27	G1/8	17.5	28	31.5	72	81	96
RVA5221-08QM	G1/8	G1/8	20	28	25	22	17.8	1.6	23.5	23	4.3	21	35	G1/8	17	36	36	81	92	111
RVA5221-08QM	G1/4	G1/8	20	28	25	22	17.8	1.5	23.5	23	4.3	21	35	G1/8	17	36	35	81	92	111
RVA5231-08QM	G1/4	G1/4	24	32	32.1	27	19.6	1.5	32.1	24	5.2	23	40	G1/8	21.8	45	44.1	99.6	111	130
RVA5231-10QM	G3/8	G1/4	24	32	32.1	27	19.6	1.5	32.1	24	5.2	23	40	G1/8	21.8	45	44.1	99.6	111	130
RVA5241-10M	G3/8	G3/8	33	41	40.5	34	21.8	1.8	38.8	36.5	6	23	50	G1/8	25.5	63	57	127	140	161
RVA5241-15M	G1/2	G1/2	33	41	40.5	34	21.8	1.8	38.8	36.6	6	23	60	G1/8	25.5	63	67	127	140	161

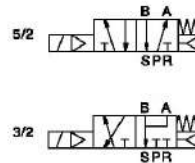
Note: W1 is double control direction valve's dimensions, W2 is three position air control valve's dimensions.

1
RVA
NAMUR Type

Universal Convertible 3/2 and 5/2 NAMUR Solenoid Valve

Universal Convertible

NAMUR Solenoid Valve (3/2,5/2)



How to Order?

Series No.	Ways	Valve Body Size	Controls	Port Size	Valve Type	Exhaust Type	ID Code	Voltage	Connection Mode	Cover Color	Valve Color	Thread Type
V	Universal convertible 3/2 and 5/2	3:3 series	1: Single control	08: 1/4"	M: NAMUR type	R: Outer exhaust G: Inner exhaust	Blank: Standard type A: Amisco coil	E1: AC110V E2: AC220V E3: AC380V E4: DC24V E5: DC12V	Blank: DIN connector F: Flying leads	Blank: Black Blank: Brown translucent J: Colorless and translucent	Blank: G P: PT T: NPT	

Order Example:

Universal convertible 3/2 and 5/2 NAMUR solenoid valve, 3 series valve body, single control, port size 1/4", inner exhaust type, standard coil, AC220V, flying leads coil, black color valve, G thread, ERP code is: V523231-08MGE2F

Specifications

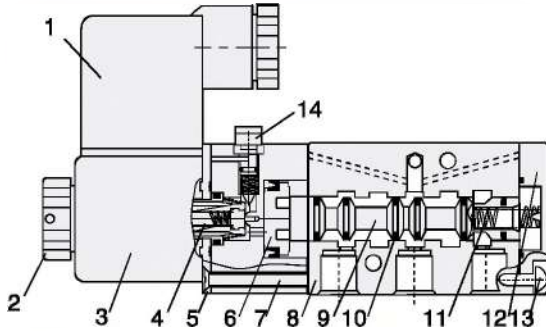
Model No.	V523231-08MR	V523231-08MG
Port size	1/4"	
Sectional area(mm ²)	25(CV=1.40)	
Working medium	Clean air(After 40 μm filtration)	
Acting type	Pilot type	
Flow rate	At 5/2 way: 1830L/min; At 3/2 way: 1090L/min	
Lubrication	Not required	
Working pressure(psi)	21,8~116	
Guaranteed pressure(psi)	174	
Working temperature	-5~60°C (23~140°F)(No freezing)	
Voltage range	-15%~10%	
Power consumption	DC:3.0W ; AC:4.0VA	
Insulation class	Class F	
Protective class	IP65(DIN40050)	
Max. acting frequency	5 Cycles/s	
Activate time(s)	<0.05	
Accessories	1pc D20X16 O - Ring, 1pc position seal plate, 2pcs M5X30 mounting bolts	
Weight(g)	340	460

① G, PT, NPT thread type is optional.

Universal Convertible 3/2 and 5/2 NAMUR Solenoid Valve

Internal Structure

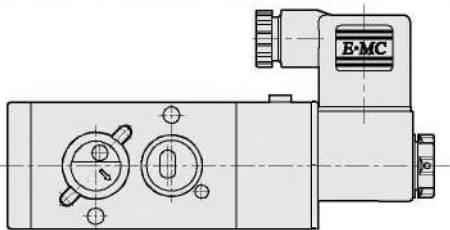
Single Solenoid Valve



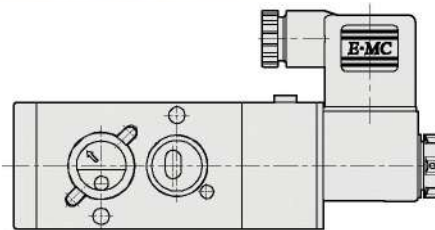
NO.	Part Name	Material
1	Connector	Engineered plastics
2	Nut	POM+Carbon steel
3	Coil	Cu
4	Pilot units	
5	Plate	Carbon steel
6	Piston	POM
7	Screw	Carbon steel
8	Valve body	Aluminum alloy
9	Spool	Aluminum alloy
10	O-ring	HNBR
11	Spring	Stainless steel
12	Rear cover	Zinc alloy
13	Screw	Carbon steel
14	Manual override	Engineered plastics

How to Mount?

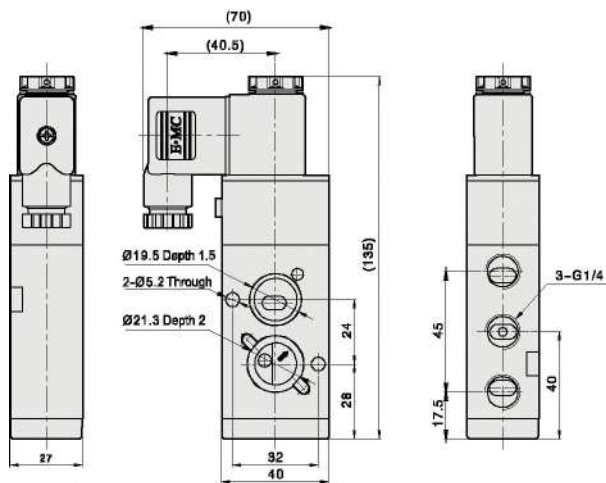
2/5 way



2/3 way



Main Dimension



Note: The boundary dimensions of MG series and MR series are same.

V Series Standard/Low Power Solenoid Valve (2/2 way)

V

Standard/Low Power Solenoid Valve (2/2)



Product Features

- Various voltages and working styles are available.
- Different surface treatment, thread types (G,PT,NPT) are available.

How to Order?

Low Power Solenoid Valve

Series No.	ID Code	Positions	Ways	Controls	Port Size	Voltage	Connection Mode	Cover Color	Patchcord	Thread Type
N	M: Standard armature +Energy saving coil	2 positions	2:2 ways	1: Single control	06: 1/8" 08: 1/4"	E1: AC110V E2: AC220V E4: DC24V	Blank: DIN connector type L: Plug-In Type	Blank: Brown translucent J: Colorless and translucent	Blank: Patchcord length is 0.3 meter 0.6M: Patchcord length is 0.6 meter 1M: Patchcord length is 1 meter (Options for 'L:Plug-in type' Only)	Blank: G P: PT T: NPT

Standard Solenoid Valve

Series No.	Positions	Ways	Controls	Port Size	Voltage	Connection Mode	Cover Color	Patchcord	Thread Type
V	2 positions	2:2 ways	1: Single control	06: 1/8" 08: 1/4"		Blank: DIN connector F: Flying leads L: Plug-In Type	Blank: Brown translucent J: Colorless and translucent	Blank: Patchcord length is 0.3 meter 0.6M: Patchcord length is 0.6 meter 1M: Patchcord length is 1 meter (Options for "L:Plug-in type" and "F:Flying leads type" Only)	Blank: G P: PT T: NPT

E1: AC110V	E8: AC38V
E2: AC220V	E7: AC24V
E3: AC380V	E6: DC110V
E4: DC24V	E9: DC48V
E5: DC12V	E10: DC36V

Order Example:

V series directional valve, 2/2 way, single control, 1/8 port size, AC110V, DIN connector, G thread, the ERP code is: V221-08E1

Specifications

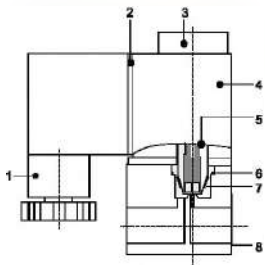
Model No.	NM221-06	NM221-08	V221-06	V221-08
Working medium	Air, water, oil			
Acting type	Direct acting			
Orifice (mm)	2			
Port size	1/8	1/4	1/8	1/4
Lubrication	Not required			
Working pressure (MPa)	0-0.8			
Guaranteed pressure (MPa)	1.2			
Working temperature (°C)	-5-60(No freezing)			
Voltage range	-15% - +10%			
Power consumption	AC: 1VA	DC: 0.9W	AC: 5VA	DC: 4.8W
Insulation class	Class F			
Protective class	IP65 (DIN40050)			
Activate time (s)	<0.05			
Seal material	NBR			
Weight (g)	141	138	141	138

V Series Standard/Low Power Solenoid Valve (2/2 way)

1

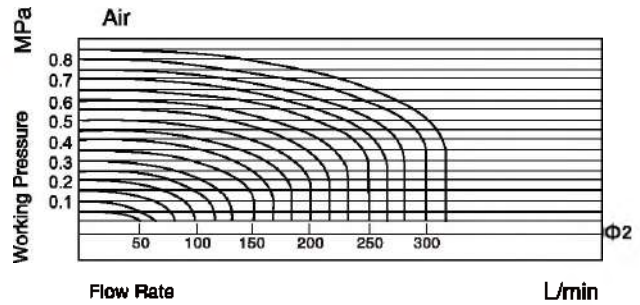
V221

Internal Structure



No	Designation
1	Connector
2	Connector washer
3	Nut
4	Coil
5	Pilot units
6	O-ring
7	Spring
8	Valve body

Flow Chart

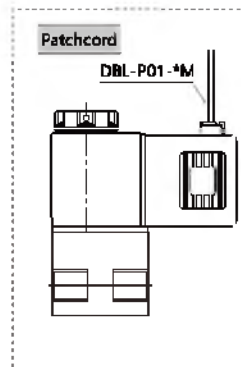
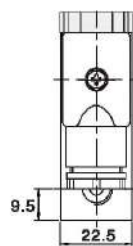
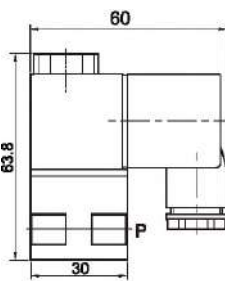
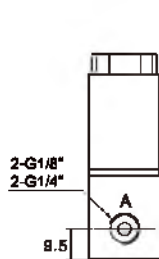


Main Parts Material

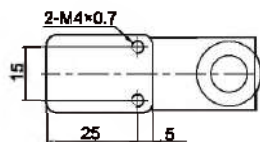
Part name	Material
Valve body	Aluminum alloy
Connector	Engineered plastics
Connector washer	NBR (FPM)
Pilot units	Pure steel+Cu+Stainless steel
Diaphragm	NBR
Nut	POM+Carbon steel
Coil	Brass Wire covered with heat resistance colophony

Main Dimension

V221-06/08



(If with the steel nut, the height is 60.7mm)



RVT Series Standard/Low Power Solenoid Valve (3/2 way)

RVT

Standard/Low Power Solenoid Valve (3/2)



Product Features

- *Direct Acting, Normal Close, Sensitive Response;
- *Same pilot units as RV valve, High temperature resistance by HNBR seals, longer working life;
- *Integrated body with grey surface oxidation, Easy installation;
- *Multiple voltage and Energy-Saving are optional;
- *Multiple connection mode are optional.

How to Order?

Low Power Solenoid Valve

Series No.	Valve Body ID Code	ID Code	Positions	Ways	Controls	Port Size	Voltage	Connection Mode	Cover Color	Thread Type	Patchcord	Valves
N	T: Integrated body R: Standard armature +Energy saving coil		2: 2 positions	3: 3 ways	1: Single control	06: 1/8"	E1: AC110V E2: AC220V E4: DC24V	Blank: DIN connector type L: Plug-in Type K: Water proof connector type (only for 2,3,4 series)	Blank: Brown translucent J: Colorless and translucent B: Black (Only black color available for water proof connector)	Blank: G P: PT T: NPT	Blank: Patchcord length is 0.3 meter 0.6M: Patchcord length is 0.6 meter 1M: Patchcord length is 1 meter (Options for "L: Plug-in type" Only)	2F: 2 Valves 3F: 3 Valves 13F: 13 Valves

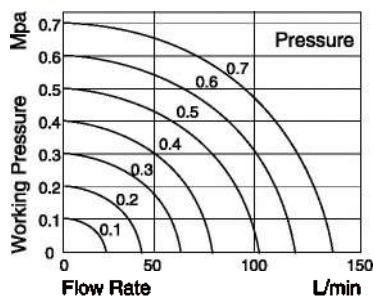
Standard Solenoid Valve

Series No.	Ways	Positions	Controls	Port Size	ID Code	Voltage	Connection Mode	Cover Color	Thread Type	Patchcord	Valves
RVT	3: 3 ways	2: 2 positions	1: Single control	06: 1/8"	Blank: Standard type A: Amisco coil	E1: AC110V E6: AC96V E2: AC220V E7: AC24V E3: AC360V E8: DC110V E4: DC24V E9: DC48V E5: DC12V E10: DC96V	Blank: DIN connector L: Plug-in Type F: Flying leads K: Water proof DIN connector (Only 2, 3, 4 series is optional for KM)	Blank: Brown translucent J: Colorless and translucent B: Black (Only black color available for water proof connector)	Blank: G P: PT T: NPT	Blank: Patchcord length is 0.3 meter 0.6M: Patchcord length is 0.6 meter 1M: Patchcord length is 1 meter (Options for "L: Plug-in type" and "F: Flying leads type" Only)	2F: 2 Valves 3F: 3 Valves 13F: 13 Valves

Order Example:

RVT series solenoid valve, 3/2 way, Amisco coil, single control, 1/8" port size, AC110V, DIN connector, G thread, ERP code is: RVT321-06AE1-5F

Flow Chart

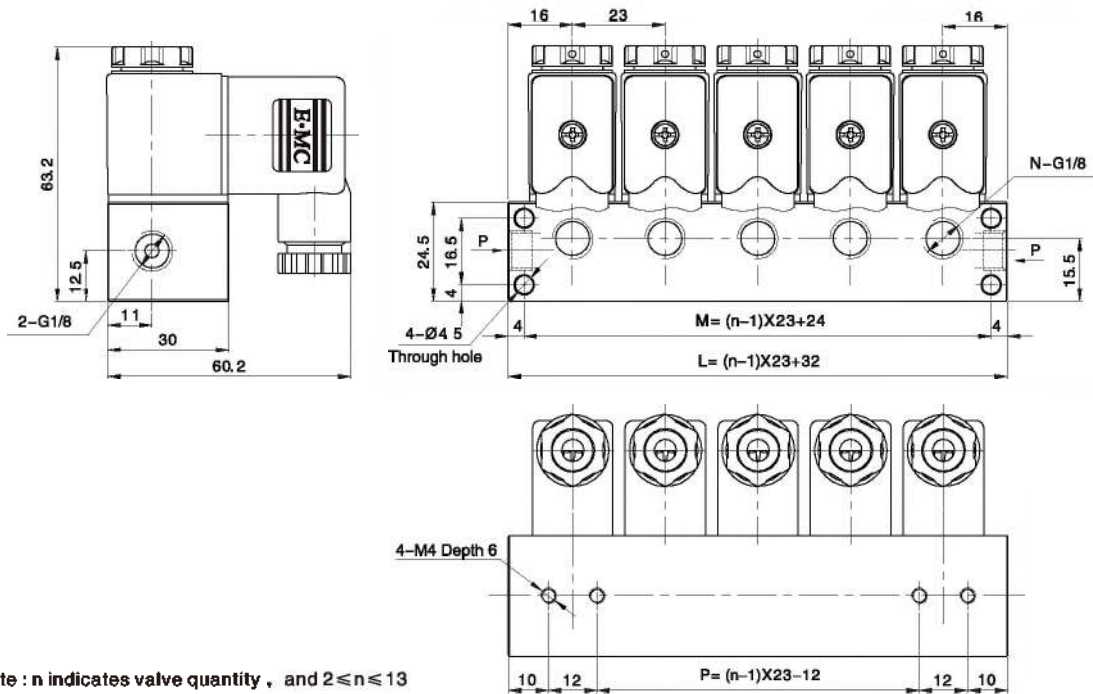


Specifications

Model No.	NTR231-06	RVT321-06
Working medium	Clean air (After 40 μm filtration)	
Acting type	Direct acting	
Orifice (mm)	1.2	
Port size	G 1/8	
Lubrication	Not required	
Working pressure (MPa)	0~0.8	
Guaranteed pressure (MPa)	1.2	
Working temperature (°C)	-20~70	
Voltage range	-15% ~ +10%	
Power consumption	DC24V:0.7W AC220V:0.9VA AC110V:1.4VA	AC:4VA DC:3W
Insulation class	Class F	
Protective class	IP65 (DIN40050)	
Max. acting frequency	10 cycles/s	
Seal material	HNBR	
Activate time	0.05s below	
Weight (g)	Each valve increases 141 weight	Each valve increases 138 weight

RVT Series Standard/Low Power Solenoid Valve (3/2 way)

Main Dimension

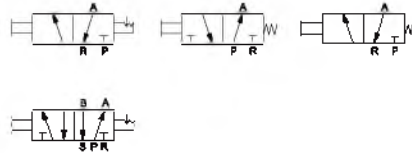


Sign/Valves	2Valves	3Valves	4Valves	5Valves	6Valves	7Valves	8Valves	9Valves	10Valves	11Valves	12Valves	13Valves
L	55	78	101	124	147	170	193	216	239	262	285	308
M	47	70	93	116	139	162	185	208	231	254	277	300
P	11	34	57	80	103	126	149	172	195	218	241	264

L Series Hand Pull Valve (3/2,5/2 Way)

L

Hand Pull Valve (3/2, 5/2)



How to Order?

Series No.	Ways	Positions	Valve Body size	Port Size	Reset	Valve Color	Thread Type
L	3:3 ways 5:5 ways	2:2 positions	1: 1 Series 2: 2 Series 3: 3 Series 4: 4 Series	1 Series 06: 1/8" * 2 Series 06:1/8" * 08:1/4" *	3 Series 08: 1/4" * 10: 3/8" * 4 Series 10:3/8" * 15:1/2" *	Blank: Manual reset S: Spring return	Blank: G P: PT T: NPT

Order Example:

L series hand pull valve, 3/2 way, 2 series valve body, NC type, 1/4" port size, manual reset, black valve body, G thread, ERP code is: L322-08

Specifications

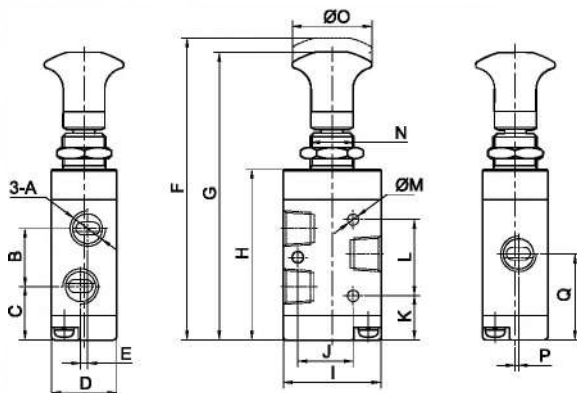
Model	L Series Hand pull valve
Working medium	Clean air(After 40 μm filtration)
Acting type	External control
Lubrication	Not required
Working pressure (MPa)	0-0.8
Guaranteed pressure (MPa)	1.2
Working temperature(°C)	-5-60

Product Features

- * Manual operated
- * Various working styles are available
- * Black color is standard color, different color are optional

Main Dimension

L321/L322/L323/L324



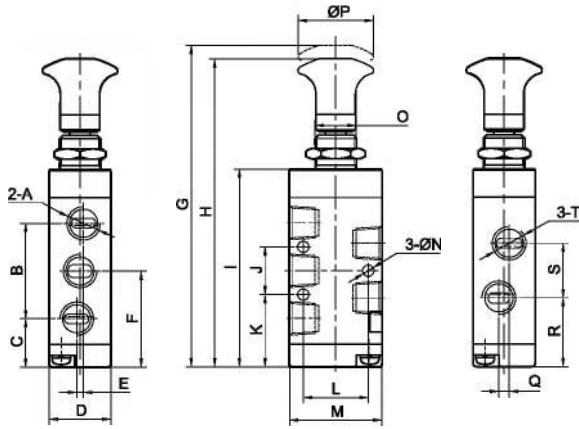
Model/Sign	L321	L322-06	L322-08	L323-08	L323-10	L324-10	L324-15
A	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
B	18	18.5	22.5	22	24	31.5	31.5
C	14.7	18.45	16.45	21.5	20.5	29.25	29.3
D	18	22	22	27	27	34	34
E	2	0	0	0	2	0	0
F	84.5	94	94	111.3	111.3	141	141
G	80.5	89.7	89.7	105.7	105.7	136	136
H	44.7	54.7	54.7	63.5	63.5	87.5	87.5
I	27	35	35	40	40	50	50
J	18	24	24	28	28	36	36
K	15.7	17.7	17.7	20.5	20.5	31	31
L	18.7	20	20	24	24	28	28
M	3.1	4.3	4.3	4.3	4.3	5.5	5.5
N	M14x1	M14x1	M14x1	M14x1	M14x1	M22x2.5	M22x2.5
O	22.4	22.5	22.4	32	32	32	32
P	1	0	1.5	0	2	2	2
Q	23.7	27.7	28.7	32.5	32.5	45	45

1
L
Hand Pull Valve

L Series Hand Pull Valve (3/2,5/2 Way)

Main Dimension

L521/L522/L523/L524

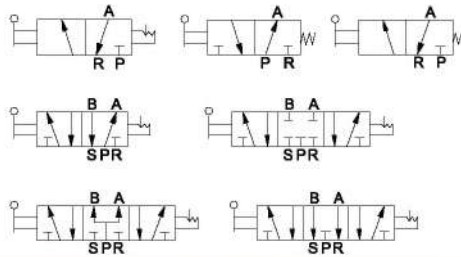


Model/ Sign	L521	L522 -06	L522 -08	L523 -08	L523 -10	L524 -10	L524 -15
A	G1/8	G1/8	G1/8	G1/4	G1/4	G3/8	G1/2
B	28	35	35	45	45	63	63
C	14.2	14.2	14.2	17.5	17.5	25.5	25.5
D	18	22	22	27	27	34	34
E	1	0	0	0	4	0	0
F	28.2	31.7	31.7	40	40	57	57
G	95.5	102	102	126.3	126.3	165	165
H	91.5	98	98	120.7	120.7	160	160
I	55.7	62.7	62.7	78.5	78.5	111.5	111.5
J	14	20	20	24	24	28	28
K	21.2	21.7	21.7	28	28	43	43
L	19	24	24	28	28	36	36
M	27	35	35	40	40	50	50
N	3.3	4.3	4.3	4.3	4.3	5.5	5.5
O	M14x1	M14x1	M14x1	M14x1	M14x1	M22x1.5	M22x1.5
P	22.5	22.5	22.5	32	32	32	32
Q	3	0	3	0	4	0	4
R	20.2	22.7	21.7	28	28	39	39
S	16	18	20	24	24	36	35.5
T	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2

H Series Hand Push Valve (3/2,5/2,5/3 Way)

H

Hand Push Valve (3/2,5/2,5/3)



How to Order?

Series No.	Ways	Positions	Valve Body Size	Original Status	Port Size	Reset	Thread Type	
H	3:3 ways 5:5 ways	2:2 positions 3:3 positions	1: 1 Series 2: 2 Series 3: 3 Series 4: 4 Series	C: Center close P: Center pressure E: Center exhaust (Only for 5/3 way)	1 Series M5: M5 06: 1/8" 2 Series 06: 1/8" 08: 1/4"	3 Series 08: 1/4" 10: 3/8" 4 Series 10: 3/8" 15: 1/2"	Blank: Manual reset S: Spring return	Blank: G P: PT T: NPT

Order Example:

H series hand push valve, 3/2 way, 2 series valve body, NC type, 1/4" port size, manual reset, black valve body, G thread, ERP code is: H322-08

Specifications

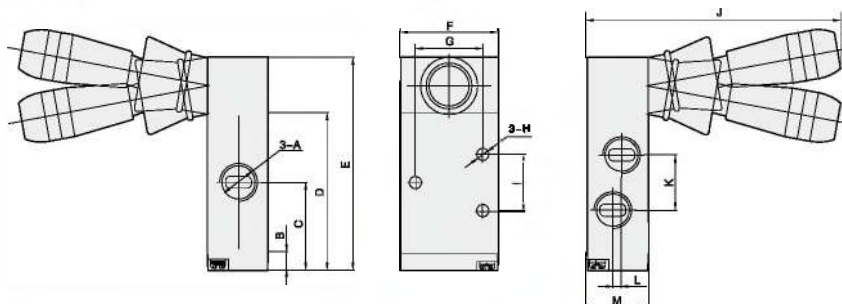
Model	H Series Hand push valve
Working medium	Clean air(After 40 μm filtration)
Acting type	External control
Lubrication	Not required
Working pressure(MPa)	0~0.8
Guaranteed pressure (MPa)	1.2
Working temperature (°C)	-5~60
Seal material	NBR

Product Features

- * Manual operated
- * Various working style are available
- * Black color is standard color, different color are optional

Main Dimension

H321/H322/H323/H324

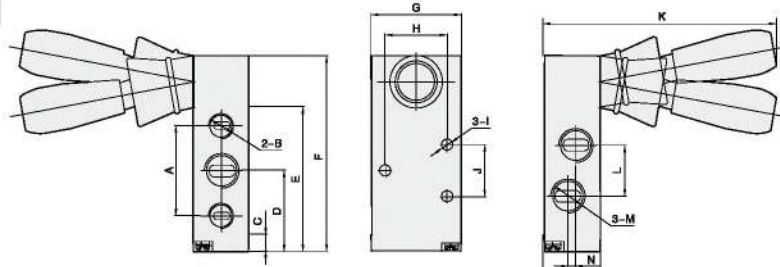


Model/Sign	A	B	C	D	E	F	G	H	I	J	K	L	M
H321-06	G1/8	6.7	23.7	38.7	58.7	27	19	Φ3.1	14	83.8	18	2	18
H322-08	G1/4	6.7	28.7	48.7	68.7	35	24	Φ4.3	20	89	22.5	0	22
H323-10	G3/8	7.5	32.5	57.5	77.7	40	28	Φ4.3	24	95.3	24	2	27
H324-15	G1/2	10	45	80	108	50	36	Φ5.5	28	105.8	31.5	0	34

H Series Hand Push Valve (3/2,5/2,5/3 Way)

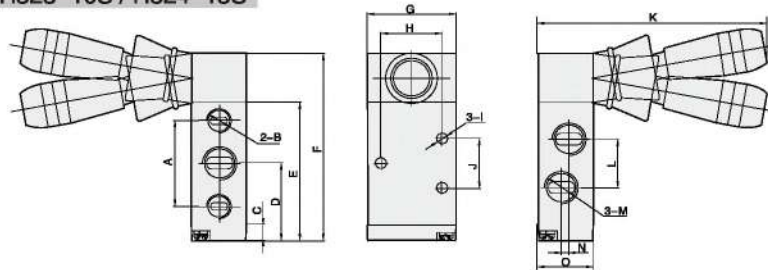
Main Dimension

H521/H522/H523/H524



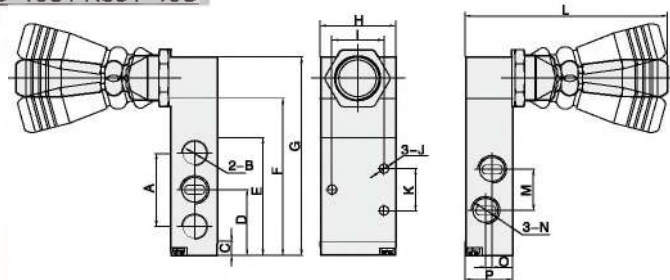
Model/Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
H521-06	28	G1/8	6.7	28.2	49.7	69.7	27	19	Φ3.3	14	83.8	16	G1/8	3	18
H522-08	35	G1/8	6.7	31.7	56.7	76.7	35	24	Φ4.3	20	91.3	20	G1/4	3	22
H523-10	45	G1/4	7.5	40	72.5	92.5	40	28	Φ4.3	24	96.5	24	G3/8	4	27
H524-15	63	G1/2	10	57	104	132	50	36	Φ5.5	28	105	36	G1/2	4	34

H521-06S / H522-08S / H523-10S / H524-15S



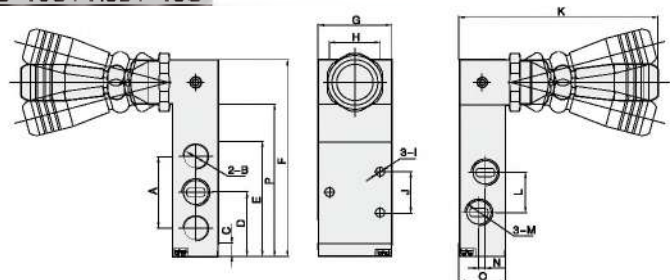
Model/Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
H521-06S	28	G1/8	6.7	28.2	49.7	69.7	27	19	Φ3.3	14	87.5	16	G1/8	3	18
H522-08S	35	G1/8	6.7	31.7	56.7	76.7	35	24	Φ4.3	20	90	20	G1/4	3	22
H523-10S	45	G1/4	7.5	40	72.5	92.5	40	28	Φ4.3	24	96.5	24	G3/8	4	27
H524-15S	63	G1/2	10	57	104	132	50	36	Φ5.5	28	105	36	G1/2	4	34

H531-06S / H532-08S / H533-10S / H534-15S



Model/Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
H531-06S	28	G1/8	6.5	28.2	49.7	64.5	64.7	27	19	Φ3.3	14	92.5	16	G1/8	3	18
H532-08S	35	G1/8	6.5	31.7	56.7	75.5	97.7	35	24	Φ4.3	20	94.2	20	G1/4	3	22
H533-10S	45	G1/4	7.5	40	72.5	81.5	113.5	40	28	Φ4.3	24	100	24	G3/8	4	27
H534-15S	63	G1/2	10	57	104	124	154	50	36	Φ5.5	28	109.6	36	G1/2	4	34

H531-06C / H532-08C / H533-10C / H534-15C



Model/Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
H531-06C	28	G1/8	6.5	28.2	49.7	84.5	27	19	Φ3.3	14	94.5	16	G1/8	3	18	64.5
H532-08C	35	G1/8	6.5	31.7	56.7	97	35	24	Φ4.3	20	95.5	20	G1/4	3	22	75.5
H533-10C	45	G1/4	7.5	40	72.5	113.5	40	28	Φ4.3	24	100	24	G3/8	4	27	91.5
H534-15C	63	G1/2	10	57	104	152	50	36	Φ5.5	28	108	36	G1/2	4	34	124

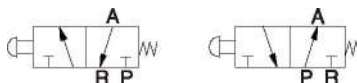
M Series Mechanical Valve(3/2,5/2 Way)

M

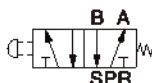
Mechanical Valve (3/2,5/2)



Three way two position



Five way two position



How to Order?

Series No.	Ways	Positions	Port Size	Button Type	Thread Type
MV MJ M	3: 3 ways 5: 5 ways	2: 2 position	06: 1/8" 08: 1/4"	Blank: No button S1B: The button with arrow mark(Black) S2: Roller type S3R: Button with "Reset" mark(Red) S4G: Concave button(Green) S5R: Flat button(Red) S6R: Mushroom head button(Red) S6B: Mushroom head button(Black) Note: S1 and S3 with manual return, Others with spring return.	Blank: G P: PT T: NPT

Order Example:

M series mechanical valve, 3/2 way, 1/8" port size, with black button with arrow mark, G thread, ERP code is: M32-06S1B

Note: Button mechanical valve assembly comprising: a Button component, the mounting bracket, under mounting brackets and mounting screws.

Specifications

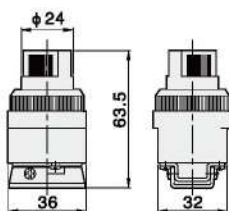
Model	MV32-06	MJ32-08	M32-08	M52-08
Working medium	Clean air(After μ m filtration)			
Acting type	External control			
Lubrication	Not required			
Working pressure (MPa)	0-0.8			
Guaranteed pressure (MPa)	1.2			
Working temperature (°C)	-5-60			
Max. acting frequency	5 cycles/s			
Port size	1/8, 1/4			

Product Features

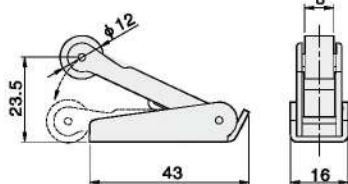
- * Black color is standard color, different colors are optional
- * Controlled by mechanical force
- * Various buttons are available

Main Dimension for Button

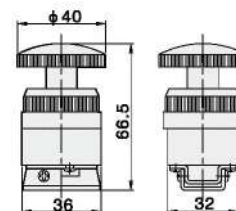
S1



S2



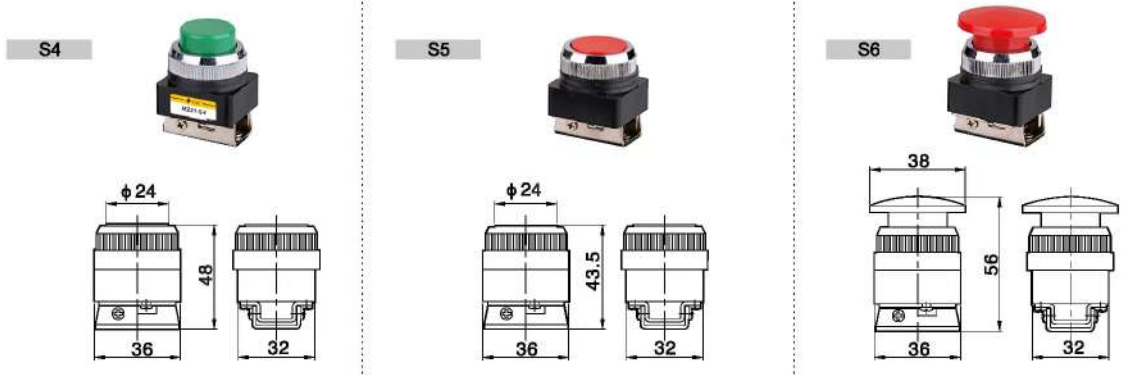
S3



1
M
Mechanical Valve

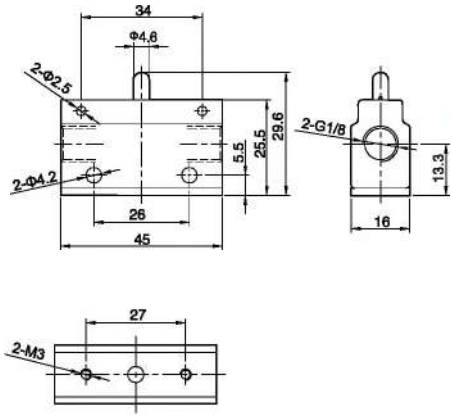
M Series Mechanical Valve(3/2,5/2 Way)

○ Main Dimension for Button

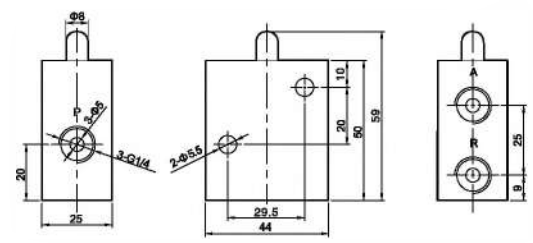


○ Main Dimension

MV32 Series



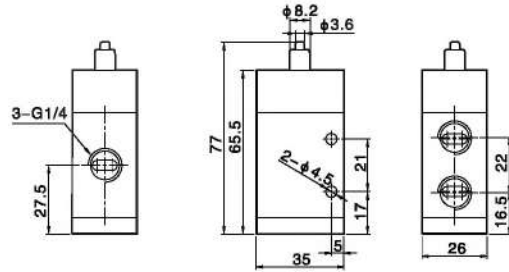
MJ32 Series



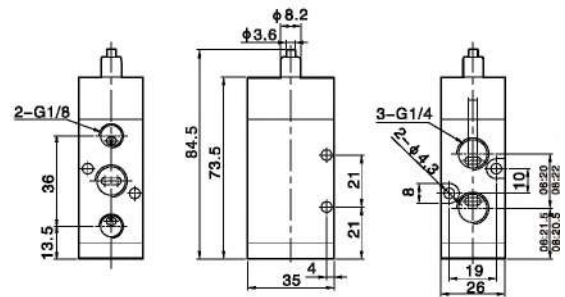
M Series Mechanical Valve(3/2,5/2 Way)

Main Dimension

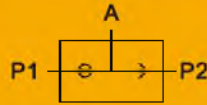
M32 Series



M52 Series



QS Shuttle Valve



Specifications

Model (mm)	QS-06	QS-08
Working medium	Clean air(After 40 μm filtration)	
Working Pressure (psi)	0.15~0.8	
Guaranteed pressure (psi)	1.2	
Working temperature(F)	-20~70	
Port size	1/8"	1/4"
Standard rated flow	P1: 700	2300
The amount (L/min)	P2: 500	1700
Weight(g)	45	85

⊕ G、PT、NPT thread type is optional.

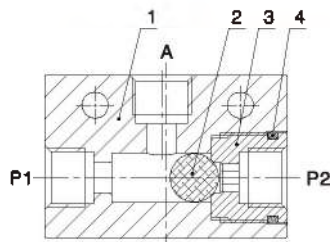
How to Order?

Series No.	Port Size	Thread Type
QS:Shuttle valve	06:1/8" 08:1/4"	Blank: G P : PT T : NPT

Order Example:

QS series shuttle valve, port size: 1/4", G thread, the ERP code is: QS-08

Internal Structure

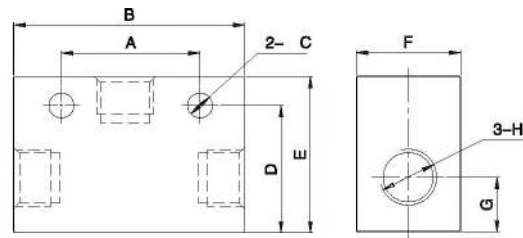


No.	Name
1	Valve body
2	Rubber ball
3	End cover
4	O-ring

Product Features

* Valve provides better assistance for completed control pneumatic system.

Main Dimension



Model	A	B	C	D	E	F	G	H
QS-06	24	40	4.3	22	27	18	10	1/8"
QS-08	35	50	6.5	27.5	35	22	13	1/4"

QSC Series Flow Control Valve (Precise Type)

QSC

Flow Control Valve (Precise Type)



Specifications

Model (mm)	QSC-06	QSC-08	QSC-10	QSC-15
Working medium	Clean air(After 40 μm filtration)			
Working Pressure (Mpa)	0.05~1.0			
Guaranteed pressure (Mpa)	1.5			
Working temperature(°C)	-20~70			
Port size ①	1/8"	1/4"	3/8"	1/2"
Standard rated flow	P→A: 0~350	0~860	0~1650	0~1900
The amount (L/min)	A→P: 300~450	760~890	1320~1650	1610~1990
Weight(g)	33	50	128	119

① G、PT、NPT thread type is optional.

1
QSC
Flow Control Valve

How to Order?

Series No.	Port Size	Thread Type
QSC:Flow control valve (precise type)	06:1/8" 08:1/4" 10:3/8" 15:1/2"	Blank: G P : PT T : NPT

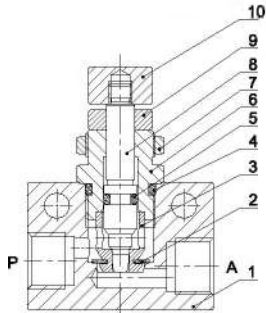
Order Example:

QSC series flow control valve, 1/4" port size, G thread, the ERP code is QSC-08

Product Features

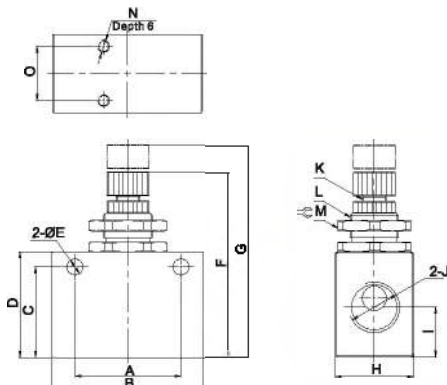
- * Compact structure and high precision
- * Install in several positions to facilitate installation and application
- * Apply to exhaust throttle, widely used for cylinder speed adjustment

Internal Structure



No.	Name
1	Valve body
2	Diaphragm
3	Throttle body
4	O-ring
5	O-ring
6	Throttle sheath
7	Fixed nut
8	Throttle column
9	Lock nut
10	Adjustment cap

Main Dimension

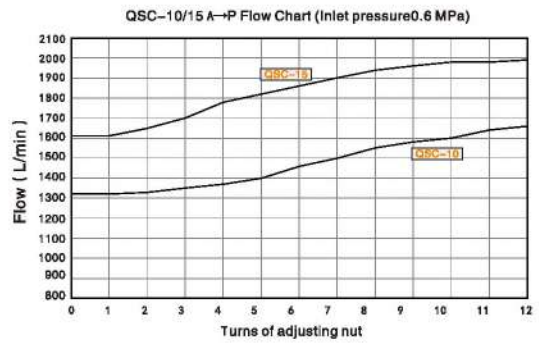
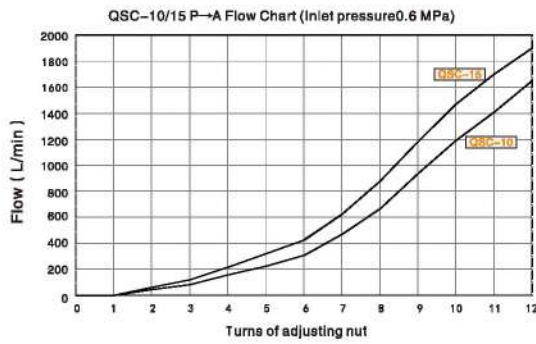
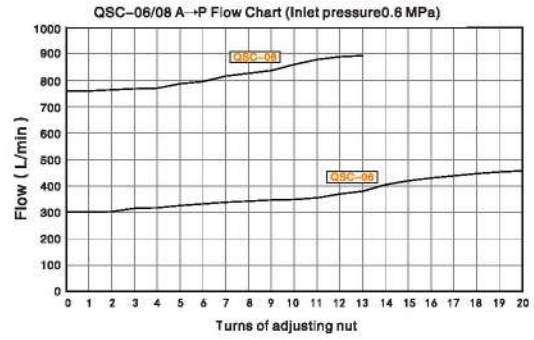
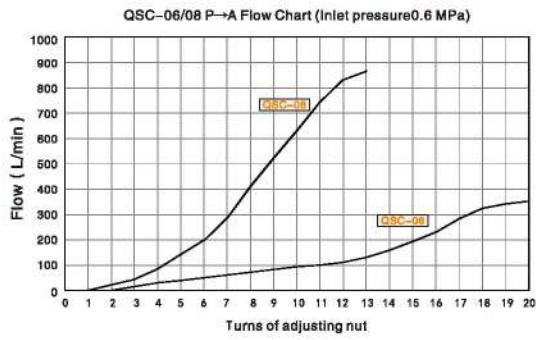


Model	A	B	C	D	E	F	G	H
QSC-06	22	32	20	26	4.3	46	51	15
QSC-08	26	36	23	27	4.3	51	57.5	18
QSC-10	35	50	30	35	5.3	62.5	71.5	26
QSC-15	35	50	30	35	5.3	62.5	71.5	26

Model	I	J	K	L	M	N	O
QSC-06	8.5	1/8	M5X0.25	M12X0.75	14	—	—
QSC-08	13.3	1/4	M6X0.5	M14X1	17	—	—
QSC-10	16.5	3/8	M8X0.75	M16X1	24	M4X0.7	18
QSC-15	16.5	1/2	M6X0.75	M16X1	24	M4X0.7	18

QSC Series Flow Control Valve (Precise Type)

Flow Chart



R Series Hand Switch Valve (4/3 Way)

R

Hand Switch Valve (4/3)



Specifications

Model	M432	U432	R432	MR432
Working medium	Clean air(After 40 μm filtration)			
Acting type	External control			
Lubrication	Not required			
Working pressure (MPa)	0~1.0			
Guaranteed pressure (MPa)	1.5			
Working temperature (°C)	-5~60			
Port size	1/4", 3/8", 1/2"			

* Note:R432 series also have "bottom thread" type

How to Order?

Series No.	Ways	Positions	Valve Body Size	Port Size	Thread Type
M: M series	4: 4 ways	3: Three position	2:2 series	M432/U432: 08: 1/4"	Blank: G
U: U series				R432/MR432: 08: 1/4"	P: PT
R: R series				10: 3/8"	T: NPT
MR: MR series				15: 1/2"	

Order Example:

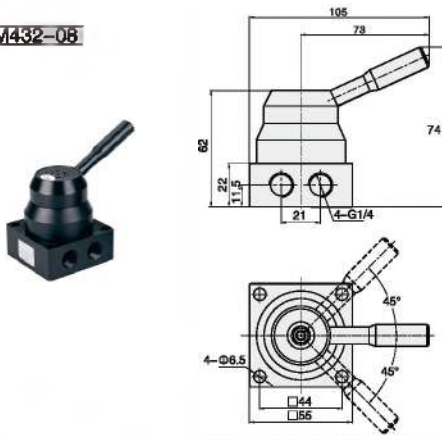
R series hand switch valve, 4/3 way, 2 series valve body, G thread, ERP code is: R432-08

Product Features

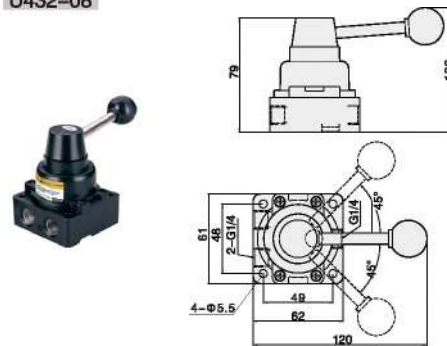
- * Different types are available
- * MR series valve is the valve with longer lifetime and the better performance
- * Sizes are from 1/4" to 1/2"

Main Dimension

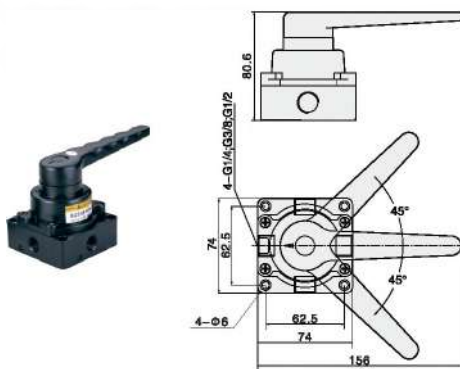
M432-08



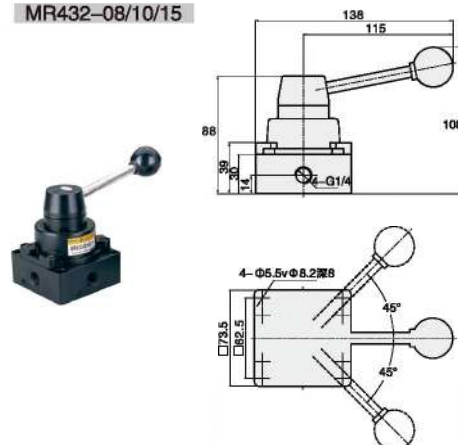
U432-08



R432-08/10/15



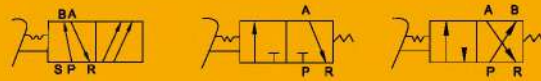
MR432-08/10/15



F Series Foot Valve (3/2, 4/2, 5/2 Way)

F

Foot Valve (3/2, 4/2, 5/2)



1
Foot Valve



T

Product Features

- * Strong design and work in harsh environment
- * Various types are available

How to Order?

Series No.	Ways	Positions	Valve Body Size	Type	Port Size	Valve Type	Thread Type
F: F series foot valve	3: 3 ways 4: 4 ways 5: 5 ways	2: 2 position	2: 2 series	Blank: No cover C: With cover	06: 1/8" 08: 1/4"	Blank: Basic type L: With lock LB: With lock, big valve body	Blank: G P: PT T: NPT

Order Example:

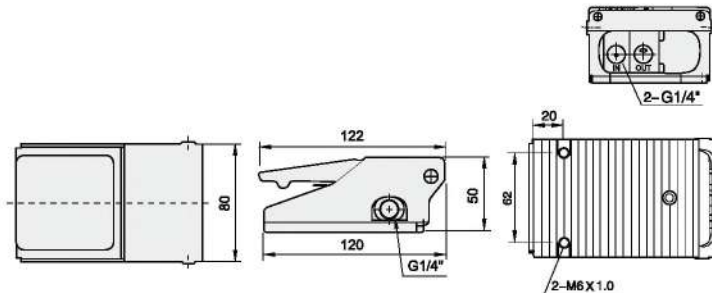
F series foot valve, 5/2 way, 2 series valve body, without cover, 1/4" port size, with lock, G thread, ERP code is: F522-08L

Specifications

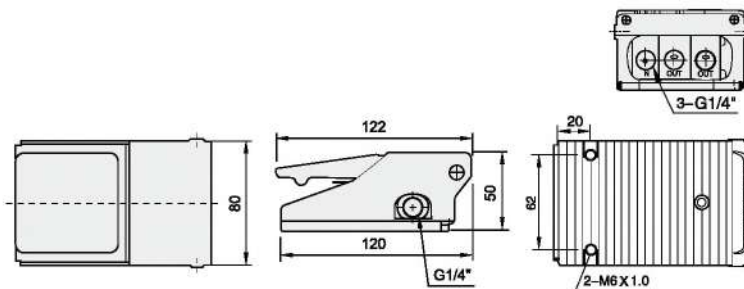
Model	F322	F422	F522
Working medium	Clean air(After 40 μm filtration)		
Acting type	External control		
Lubrication	Not required		
Working pressure (MPa)	0-0.8		
Max pressure (MPa)	1.2		
Working temperature (°C)	-5-80		
Port size	1/8", 1/4"		

Main Dimension

F322-08



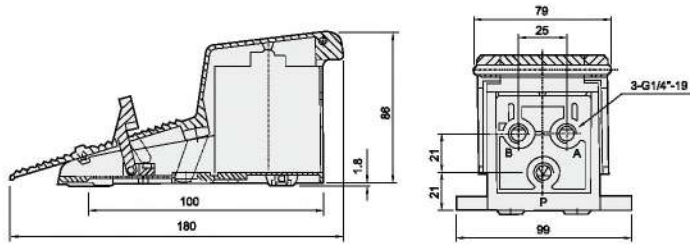
F422-08



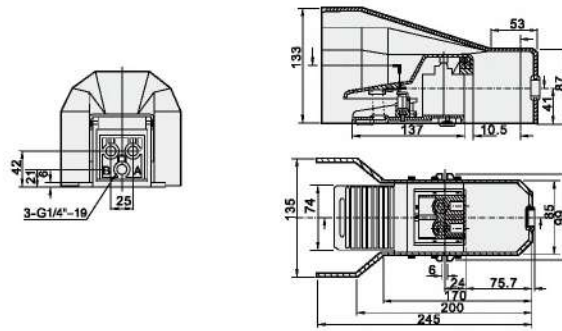
F Series Foot Valve (3/2, 4/2, 5/2 Way)

Main Dimension

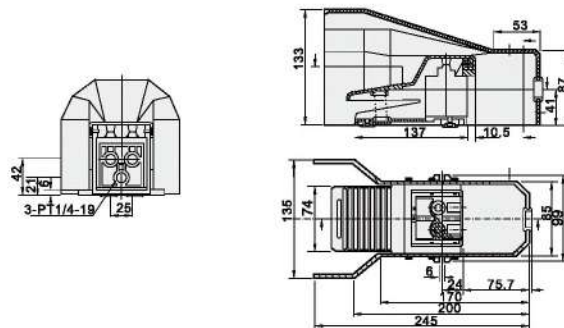
F522-08L



F522C-08L



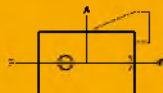
F522C-08



KKP Series Quick Exhaust Valve

KKP

Quick Exhaust Valve



Specifications

Model	KKP-06	KKP-08	KKP-10	KKP-15
Working medium	Clean air(After 40 μm filtration)			
Working pressure(MPa)	0.15-0.8			
Guaranteed pressure resistance (MPa)	1.2			
Working temperature (°C)	-5-60			
Port size	1/8" - 1/2"			

How to Order?

Series No.	Port Size	Thread Type
KKP: Quick exhaust valve	06: 1/8" 10: 3/8" 08: 1/4" 15: 1/2"	Blank: G P: PT T: NPT

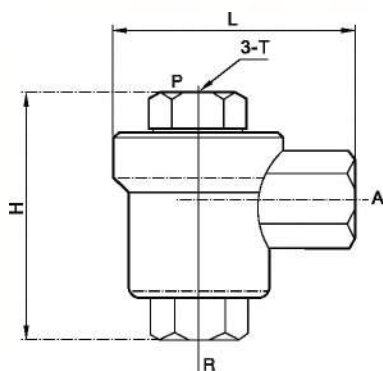
Product Features

- * Normally working with main valve together, not be used separately
- * Provide assistance to control the system better

Order Example:

KKP quick exhaust valve, 1/4" port size, G thread, ERP code is: KKP-08

Main Dimension



Model	T	H	L
KKP-6	1/8"	37	41.5
KKP-8	1/4"	45.5	38
KKP-10	3/8"	56	46.5
KKP-15	1/2"	67	54

EA

One Way Valve



Specifications

Model	EA-06	EA-08	EA-10	EA-15	EA-20	EA-25
Working medium	Clean air(After 40 μ m filtration)					
Lubrication	Not required					
Working pressure (MPa)	0.05-0.8					
Guaranteed pressure (MPa)	1.2					
Working temperature (°C)	-5-60					
Port size	1/8"	1/4"	3/8"	1/2"	3/4"	1"

How to Order?

Series No.	Port Size	Thread Type
EA: One-way valve	06: 1/8" 08: 1/4" 10: 3/8" 15: 1/2"	20: 3/4" 25: 1" 32: 1 1/4" 40: 1-1/2" 50: 2"
		Blank: G P: PT T: NPT

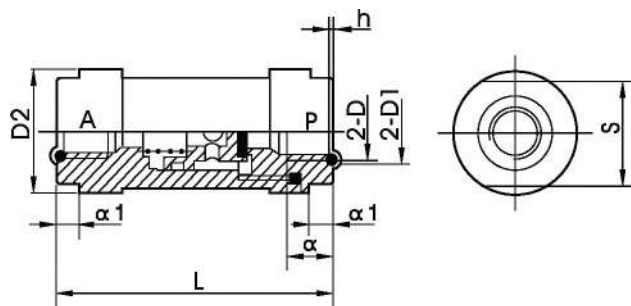
Order Example:

EA series one way valve. 1/4" port size, G thread, ERP code is : EA-08

Product Features

- * Normally working with main valve together, not be used separately
- * Provide assistance to control the system better

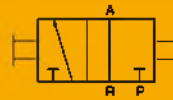
Main Dimension



Model	Port size	D	D1	D2	S	L	α	α1	H
EA-6	6	G1/8	φ13	φ25	24	63	10	6	1.4 ^{+0.1} _{-0.1}
EA-8	8	G1/4	φ16	φ25	24	63	12	6	1.4 ^{+0.1} _{-0.1}
EA-10	10	G3/8	φ20	φ38	36	81	14	8	1.8 ^{+0.1} _{-0.1}
EA-15	15	G1/2	φ26	φ38	36	81	14	8	1.8 ^{+0.1} _{-0.1}
EA-20	20	G3/4	φ32	φ49	46	109	21	10	1.8 ^{+0.1} _{-0.1}
EA-25	25	G1	φ40	φ49	46	109	23	10	2.7 ^{+0.12} _{-0.12}
EA-32	32	G1-1/4	φ48	φ86	75	160	25	18	2.7 ^{+0.12} _{-0.12}
EA-40	40	G1-1/2	φ54	φ86	75	160	26	18	2.7 ^{+0.12} _{-0.12}
EA-50	50	G2	φ70	φ86	90	160	26	26	4.5 ^{+0.18} _{-0.18}

YHS Series Slide Valve

YHS Slide Valve



Product Features

- * Normally working with main valve together, not be used separately
- * Provide assistance to control the system better

How to Order?

Series No.	Port Size	Type	Thread Type
YHS: Slide valve	06: 1/8" * 08: 1/4" * 10: 3/8" * 15: 1/2" * 20: 3/4" * 25: 1" *	Blank: Standard type MM: Double male thread type FF: Double female thread type MF: One male and the other female type	Blank: G P: PT T: NPT

Order Example:

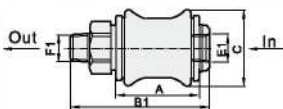
YHS slide valve, 1/4" port size, double male thread type, G thread, ERP code is: YHS-08MM

Specifications

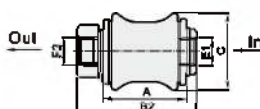
Model	YHS-06	YHS-08	YHS-10	YHS-15	YHS-20	YHS-25
Working medium	Clean air(After 40 μm filtration)					
Acting type	External control					
Lubrication	Not required					
Working pressure (MPa)	0-1.0					
Guaranteed pressure (MPa)	1.5					
Working temperature (°C)	-5-60					
Port size	1/8"	1/4"	3/8"	1/2"	3/4"	1"

Main Dimension

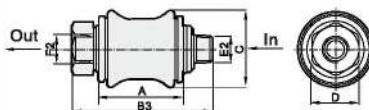
Standard type



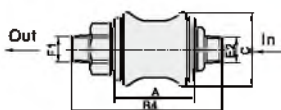
Double female thread type (FF)



One male and the other female thread type (MF)



Double male thread type (MM)

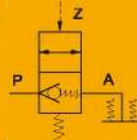


Model	A	B1	B2	B3	B4	C
YHS06	20	36	36	38	46	20
YHS08	32	58	58	58	68	28
YHS10	32	58	58	58	69	32
YHS15	40	80	80	80	94	38
YHS20	45	85	85	85	101	46
YHS25	45	85	85	85	101	52

Model	D	E1	E2	F1	F2
YHS06	14	G1/8"	G1/8"	G1/8"	G1/8"
YHS08	19	G1/4"	G1/4"	G1/4"	G1/4"
YHS10	22	G3/8"	G3/8"	G3/8"	G3/8"
YHS15	27	G1/2"	G1/2"	G1/2"	G1/2"
YHS20	34	G3/4"	G3/4"	G3/4"	G3/4"
YHS25	38	G1"	G1"	G1"	G1"

QPC

Pilot No-return Valve



Product Features

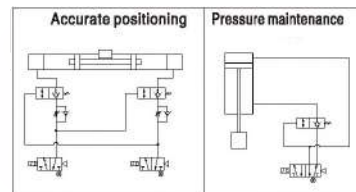
1. Can make cylinder momentary stop, accurate orientation;
2. Prevent cylinder moving after stopped;
3. Can be used for safety loop of pressure holding;
4. Can be used for special loop.

How to Order?

Series	Port Size
QPC	08: 1/4" 10: 3/8" 15: 1/2" (Note:PT thread only)

Order Example:

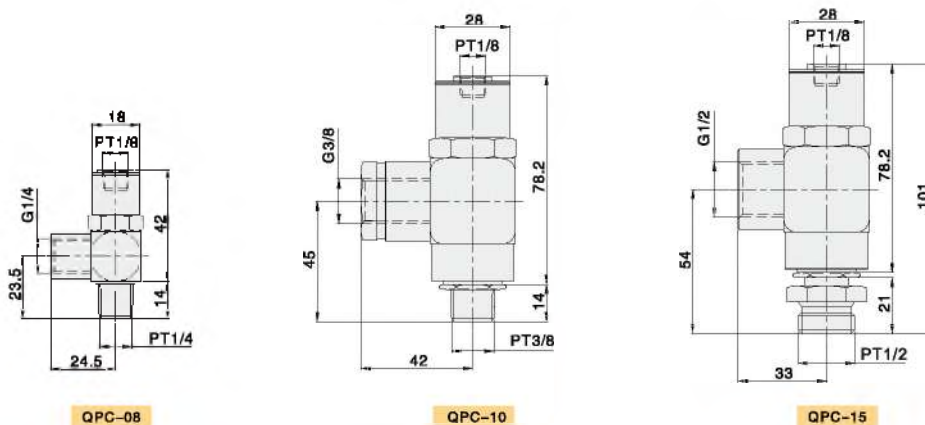
QPC series valve, 1/4" port size, ERP code is: QPC-08



Specifications

Model	QPC-08	QPC-10	QPC-15
Working medium	Clean air(After 40 μm filtration)		
Sectional (mm)	24	78	78
Working pressure(MPa)	0.1~1.0		
Guaranteed pressure(MPa)	1.5		
Working temperature(°C)	-20~70		
Operating Frequency (Times/min)	60	40	40
Valve material	Nickel plated brass	Aluminum alloy	Aluminum alloy
Port size	1/4"	3/8"	1/2"
Pilot Port Size	1/8"		

Main Dimension



Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
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Волгоград (844)278-03-48
Вологда (8172)26-41-59
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Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
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