E•MC®

Directional Valve

With the advanced electrolysis technology to remove the burrs, the inner surface of the valve comes to be very smooth, and it is also a big support for ensuring the life cycles of valves when using the Japanese seals. 64 pcs valve bodies are machined simultaneously by completely computer controlled CNC machines at one time, coils are tested under 20,000 voltage equipment, and armatures are well provided by 3–D CNC machines imported from Japan, all these details make E・MC to be the top in China.

◎ Precaution for Installation and Use

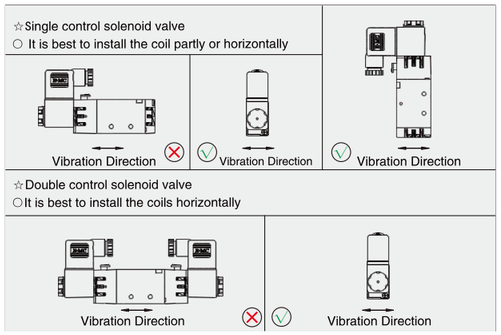
1. Please check whether the product is damaged during transport, and check the technical parameters (such as operating voltage, working pressure, working temperature, etc.) to confirm whether they satisfy the requirements before installation.

2. Please pay attention to the air flow direction during installation, P(1) is air inlet、A(2)/B(4) is working port、R(3)/S(5)is exhaust port, working medium must be filtered through 40um filter(higher filter precision is available).

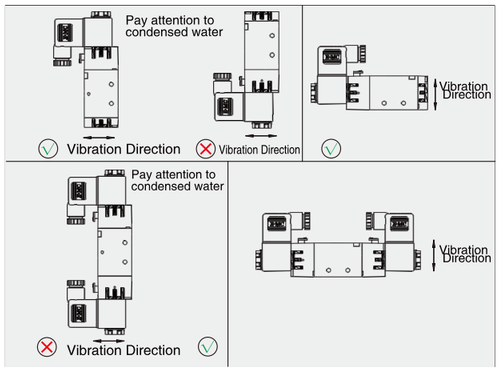
3. Before installation,the pipeline should be completely cleaned (Propos to use air guns or empty the pipeline directly before connection) to remove pipeline dust, debris and oil, so that to avoid the influence of valve action (such as stuck, no response or response slowly, etc.), avoid noise from damaged spool and the working life reduction.

4. When using fitting with thread to connect the valve and tubing, not allowed the thread dust and sealing tape fragments into the valve body;When using the sealing tape, the thread end should be set aside 1 or 2 thread pitch non-winding sealing tape;When using liquid glue, should avoid excessive liquid glue going into the valve body

5. Try to avoid using the valve in vibration environment ; if slight vibration, please make the vibration direction and spool action direction at right angle to avoid the influence of the spool.



6. In order to prevent condensate water, oil ,etc flowing into the coil, it is better to make the coil upwards or adopt lateral installation .



7. Try to install the valve as close as possible to the cylinder, to avoid the influence of active time because of the long pipeline and air consumption increase.

8. When manifold assembly used, please note back pressure phenomenon that caused by incompletely exhaust.Please note wrong action caused by the interaction between the valves. Especially when using the 3 positions , center exhaust valve and single acting cylinder, recommend to inlet and exhaust separately.

9. When using 3 positions center close or 3 positions center pressure valves , it is difficult to guarantee the cylinder stop exactly at any intermediate position , because air compressibility and reasonable leakage of valve and cylinder. If require to stay at the stop position for a long time, please take other methods (such as using induction check valve together).

10. When using 3 positions center close valve, please consider the residual pressure release between the valve and cylinder , please set the residual pressure release function in the air circuit .

11. When using internal pilot type, please consider minimum operating pressure , not allowed to throttle at inlet ,either exhaust emptied directly , to avoid wrong action caused by big air pressure reduction. If blowing environment, please use external pilot type.

12. Pilot valve, piston cavity, breathing hole and pilot valve exhaust port shall not block or restricted, and the filter need to do regular cleaning or replacement if necessary

13. It is recommended to install muffler to the exhaust port to avoid inhaling of impurity into the valve body.

14. such as valves used in vacuum condition, should use direct acting valve or exterior pilot type valve, and measures should be taken to prevent dust from sucking in the suction cup

15. Double electric air control valve has memory function (except three position valve), power up time should be more than 0.1s in time to ensure the valve reversing in place.

16. although the coil calibration is 100%ED, long time continuous electricity will cause overheating, accelerated insulation aging, reduce the performance of the solenoid valve、lifetime and energy, so in the condition of continuous power on,we should consider to use double electronically controlled solenoid valve with memory function or adopt energy saving and low power coil . in order to extended coil life , and save energy.

17. Solenoid valve installed in the control cabinet,We should pay attention to the ventilation of the control cabinet, heat radiation, to ensure that the temperature in the cabinet within the safety use range.

18. Solenoid valve coil should not be connected to the wrong voltage (such as the DC24V coil connect to the AC220V voltage), Otherwise, the coil will be burned, and the working voltage should be in the required voltage range, to make sure the valve works well.

19. Since DC solenoid valve has polarity indicator light, please pay attention to the positive and negative poles when wiring, "1" connect the positive pole, and "2" connect the negative pole, If the positive and negative poles are reversed, The light will not turn on, but the valve can still be actuated.

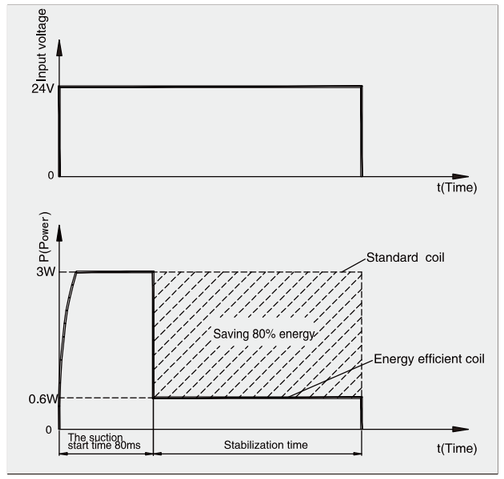
20. During use energy saving and low power consumption coil solenoid valve, please refer to energy-saving, low-power solenoid valve instructions.

21. The valve on this catalogue shall not be used as an emergency shut-off valve. If the emergency shut-off function is required, other ways of ensuring safety shall be used to control it.

◎ Precaution for Installation and Usev

1. Principle for energy saving:

There are 2 stages for valve electrifying: actuation start moment and the stable process. For actuation start moment, it requires high voltage and large current to make sure the valve start normally(High power for the coil is required for this process),after the actuation start moment, it comes to the stable process, for this stage, it only requires low power to maintain stable. The energy saving low power consumption coil is developed according to this feature, it saves 80% energy during the stable stage through the internal energy saving chip, it reduce the coil heat, lower the temperature rising, prolong the life-span of the valve. It can be widely used for the occasions which requires long time coil electrify and low coil temperature rising. The below drawing show the voltage and the energy saving(take N2R251 valve DC24V coil as example).



2. Requirement for input power: range of the fluctuation of voltage-15%~+10%;the electric source output power shall be above 2-3 times than the power in actuation start moment
3. Actuation start moment of energy saving coil: The starting time is different for different specification and voltage of coil. The lower voltage, the longer time for starting time. Here is the standard voltage testing value of our current products:

Energy saving coil/Modules specification	Starting time
N1R (Internal 110 series)	50±10ms
N2R/N3R/N4R (Internal 210series)	80±20ms
ELP (Internal solenoid valve series)	250±100ms
NF (External small power energy saving module)	50±10ms
NF (External big power energy saving module)	100±20ms

Note: The rise time shall be less than 5 ms when the voltage start from 0 to rated voltage in the proceed of solenoid valve energization.

4. When the coil is on stable keeping period, it can't be used in vibration and dust application because it is on energy saving and low power status. Air inlet of solenoid valve shall be fully filtered to avoid the impurity to reach the end face of pilo.
5. Working temperature: -20~80℃, the internal energy saving chip can no work in high temperature medium, like high temperature water/oil/gas and so on. If the working medium is high temperature, external energy saving conversion module is recommended, the important issue is to make sure environment temperature is not higher than 80℃。
6. Normal electric conversion components: mechanical switch; mechanical relay; solid-state relay; MOS tube; Thyistor tube. Please note below issues when using energy saving coil: om 0 to rated voltage in the proceed of solenoid valve energization.

   (1) Current for convert components should be 2-3 times higher than the Max.current when coils start and actuation.
   (2) Max.leak current for convert components should be ≤40uA. The leak current of Normal convert components with protection is relatively big, like solid-state relay(we suggest choose it carefully). In addition, RC circuit protection can not be used, otherwise, directional valve can not revert normally.

SV

Solenoid Valve&Valve Terminal

Product Features

- Integrated valve terminal , integrated wiring ;Adopt 25 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.

How to Order?

S1V valve terminal

Series No. | Body Size | Wiring Type — □ □ — Port Size | Voltage — Pilot Type — Wiring Type — Inlet & Exhaust port — Mounting — Thread Type

- Series No.: S: Standard; SN: Power saving
- Body Size: 1: 1 series
- Wiring Type: V: Top ported; VM: Side ported; VB: Bottom ported
- Qty: (suitable for same valve single control 2~24 links double control 2~12 links)
- Port Size: M5: M5; C4: ϕ4 one–touch fitting; M7: M7; C6: ϕ6 one–touch fitting
- Voltage: E4: DC24V
- Pilot Type: Blank: Interal pilot; WB: External pilot
- Wiring Type: Blank: Double control wiring (max.12 links); S: Single control wiring (max.24 links) (Note:Mix wiring is available to customize)
- Inlet & Exhaust port: Blank: Without accessories; D: With DIN rail clip and 1M guide rail; D0: With DIN rail clip, no guide rail; Din guide rail packed separatly)
- Mounting
- Thread Type: Blank: G; P: PT; T: NPT

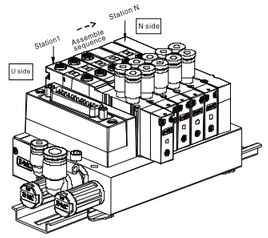
Code	Function	Remark
S	5/2 single	assembly sequence, 1st link start from U side
D	5/2 double	
C	5/3 center closed	
P	5/3 center pressure	
E	5/3 center exhaust	
Y	2pcs 3/2 (N.C.)	
H	2pcs 3/2 (N.O.)	
U	2pcs 3/2 (N.O./N.C.)	
B	blind plate	

Code	Port entry	Remark
Blank	Both side without silencer, fitting, plug	1) plugs are mounted on the opposite side of the selected ports; 2) only U side is available for bottom ported
U	U side with silencer, ϕ8 PC fitting	
N	Station N with silencer, ϕ8 PC fitting	
UN	Both side with silencer, , ϕ8 PC fitting	
UL	U side with silencer, ϕ8 PL fitting	
NL	Station N with silencer, ϕ8 PL fitting	
UNL	Both side with silencer, , ϕ8 PL fitting	
U1	U side with silencer, ϕ10 POC fitting	
N1	Station N with silencer, ϕ10 POC fitting	
Un1	Both side with silencer, , ϕ10 POCfitting	

Order Example:

1. Same valve: S series standard valve, 1 series body, top ported, 6 links 5/2 double controled, 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, port with ϕ4 one–touch fitting, DC24V,G thread, external pilot, double control wiring, U–sub side with silencer, ϕ8 PL fitting, with DIN rail clip and 1M guide rail, the ERP code is S1V–CDH2SB–C4E4–WB–UL–D



Solenoid valve

Series No. | ID code | Ports | Positions | —Body Size | Controls | — Original Status — | Port Size | Voltage | —Pilot Type | — Wiring

- Series No.: S: Standard; SN: Power saving
- ID code: V: Piping on valve; VM: Piping on manifold (Can not work separately, work with side ported/ bottom ported manifold)
- Ports: 5: 5 ports
- Positions: 2: 2 position; 3: 3 position; 4: 4 position dual 3–port valve
- Body Size: 1: 1 series
- Controls: 1: Single control; 2: Double control
- Original Status: C: 3 position 5 port(cernter close); P: 3 position 5 port(cernter pressure); E: 3 position 5 port(cernter exhaust); Y: 4 position dual 3–port valve(N.C.); H: 4 position dual 3–port valve(N.O.); U: 4 position dual 3–port valve(N.C./N.O.)
- Port Size: M5: M5; M7: M7 (Note:Only Wiring is available for V type)
- Voltage: E4: DC24V
- Pilot Type: Blank: Interal pilot; WB: External pilot
- Wiring: Blank: None; 0.3M: 0.3m wiring; 0.6M: 0.6m wiring; 1M: 1m wiring (Note:Only Wiring is available for V type)

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 — □ □ — Port Size | Voltage — Inlet & Exhaust port — Wiring — Thread Type

- Series No.: SV: SV series
- 5/2 way: 52
- Body Size: 1: 1 series
- Qty: (suitable for same valve max.24 links)
- Port Size: M5: M5; C4: ϕ4 one–touch fitting; M7: M7; C6: ϕ6 one–touch fitting
- Voltage: E4: DC24V
- Inlet & Exhaust port
- Wiring: Blank: Without wiring; 0.3M: 0.3M wiring; 0.6M: 0.6M wiring; 1M: 1M wiring
- Thread Type: Blank: G; P: PT; T: NPT

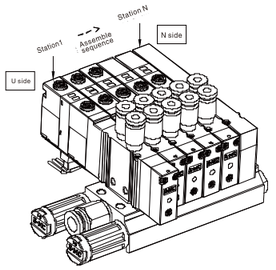
Code	Function	Remark
S	5/2 single	assembly sequence, 1st link start from U side
D	5/2 double	
C	5/3 center closed	
P	5/3 center pressure	
E	5/3 center exhaust	
Y	2pcs 3/2 (N.C.)	
H	2pcs 3/2 (N.O.)	
U	2pcs 3/2 (N.O./N.C.)	
B	blind plate	

Code	Port entry	Remark
Blank	Both side without silencer, fitting, plug	1) plugs are mounted on the opposite side of the selected ports; 2) only U side is available for bottom ported
U	U side with silencer, ϕ8 PC fitting	
N	Station N with silencer, ϕ8 PC fitting	
UN	Both side with silencer, , ϕ8 PC fitting	
UL	U side with silencer, ϕ8 PL fitting	
NL	Station N with silencer, ϕ8 PL fitting	
UNL	Both side with silencer, , ϕ8 PL fitting	
U1	U side with silencer, ϕ10 POC fitting	
N1	Station N with silencer, ϕ10 POC fitting	
Un1	Both side with silencer, , ϕ10 POCfitting	

Order Example:

1. Same valve: SV series valve block, 1 series body, 6 links 5/2 double controled SV5212, port size M5, DC24V,G thread, both side without silencer, fitting, pug, the ERP code is SV521–6D–M5E4

2. 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. port with ϕ4 one–touch fitting, DC24V,G thread, U–sub side with silencer, ϕ8 PC fitting, the ERP code is SV521–CDH2SB–C4E4–U



How to Order?

Manifold

SV	52	1	—	N	F	—	Thread Type

- SV: SV series
- 52: 2 position 5 port
- 1: 1 series valve body
- N: 1: 1 station; 2: 2 stations; 3: 3 stations; ……; 24: 24 stations
- F: Manifold
- Thread Type: Blank: G; P: PT; T: NPT

Connector

Connector Type	—	Cable Core	—	Cable Length

- Connector Type: D25: D–sub connector 25 pins
- Cable Core: 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)
- Cable Length: 1M: 1m cable; 2M: 2m cable; 3M: 3m cable (Note: please contact EMC for customized length)

Wiring

Wiring Series	—	Accessory	—	Wiring Length

- Wiring Series: SV5211: Single control; Sv5212: Double control
- Accessory: P01: With accessory
- Wiring Length: 0.3M: 0.3m wiring; 0.6M: 0.6m wiring; 1M: 1m wiring (Note:Please contact EMC to customize wiring)

Blind plate

SVBP	52	1

- SVBP: Blind plate for SV valve
- 52: 2 position 5 port
- 1: 1:1 series valve body

Specifications

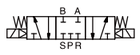
Model	SV5211 SVM5211	SV5212 SVM5212	SV5312C/P/E SVM5312C/P/E	SV5412Y/H/U SV5412Y/H/U
Sectional area (mm)	M5/C4: 5 (CV=0.28) M7/C6: 7 (CV=0.39)		M5/C4: 4.6 (CV=0.26) M7/C6: 6.5 (CV=0.36)	
Positions	2–positon 5 port	2–positon 5 port	3–positon 5 port	4–positon dual 3–port valve
Working pressure (MPa)	0.15~0.8	0.15~0.8	0.2~0.8	0.15~0.8
Port size	M5/M7/C4/C6 (Namur type no this option)			
Working medium	Clean air(After 40 μ m filteration)			
Pilot exhaust type	Interal pilot type / External pilot type			
Reset type	Ges reset			
Lubrication	No required			
Proof pressure (Mpa)	1.2			
Working temperture (℃)	–20~70 (No freezing)			
Working Voltage	DC24V			
Voltage range	± 10%			
Power consumption	Standard type：0.8W ; Energy–saving type：0.3W			
Insulation class	F Class			
Surge voltage suppressor	Diode(Varistor for non–polar type)			
Protective class	Ip40 Dust Proof			
Max.acting frequency	5/2：5 Cycle/s；5/3：3 Cycle/s			
Activate time	15ms or less(0.5MPa)			

Internal Structure

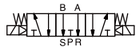
SV 5211
(5/2 single control)

SV 5212
(5/2 double control)

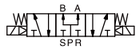
SV5312C
(5/3 center close)



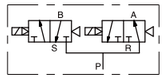
SV5312E
(5/3 center exaust)



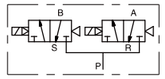
SV5312P
(5/3 center pressure)



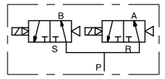
SV5412U
(1pc 3/2 N.C + 1pc 3/2 N.O)



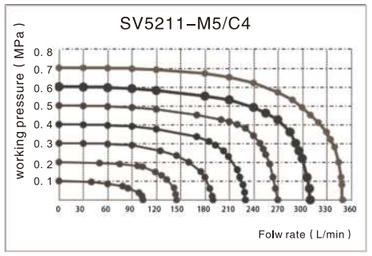
SV5412Y
(2pcs 3/2 N.C)

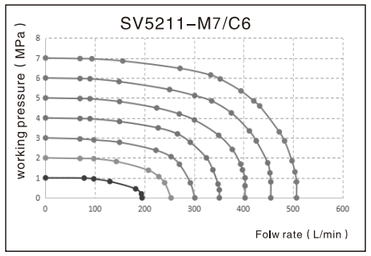


SV5412H
(2pcs 3/2 N.O)



Flow Chart

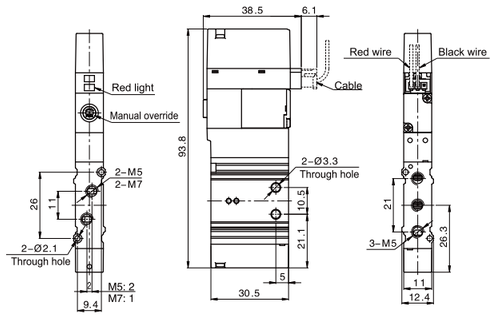




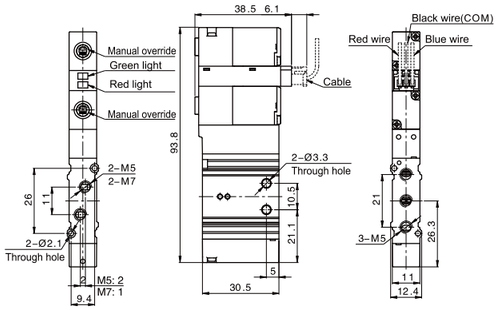
Main Dimension

Solenoid valve

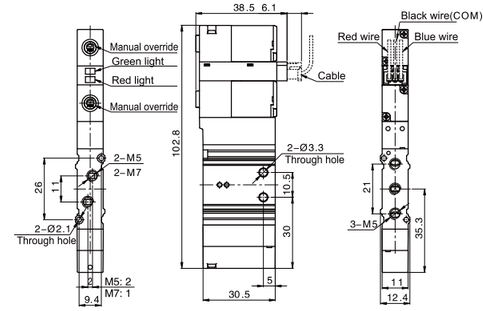
SV5211



SV5212/SV5412

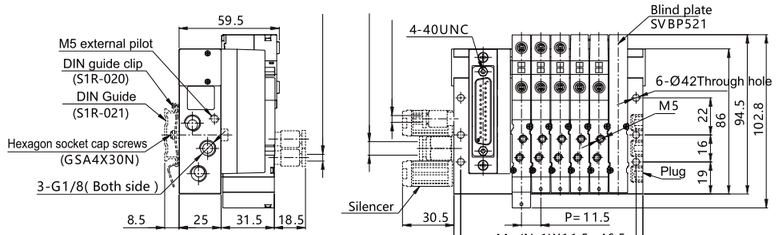


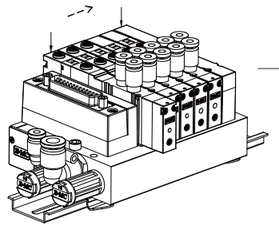
SV5312

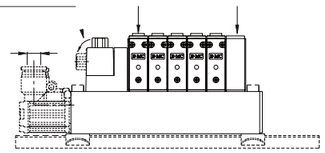


S1V Valve terminal

S1V top ported

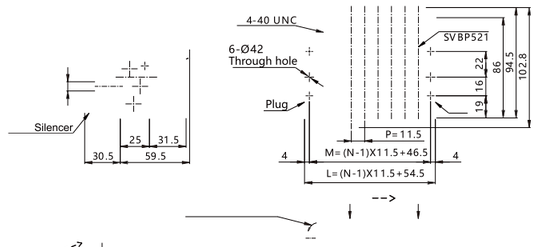


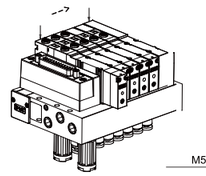


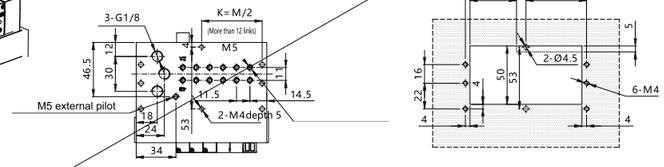


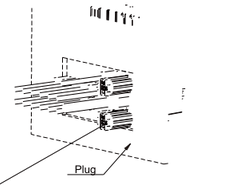
Note: N means valve link

S1VB bottom ported

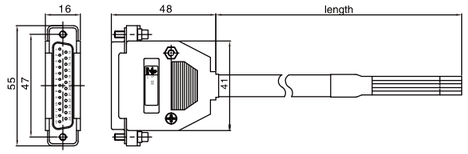




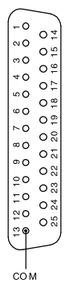




Connector & Cable

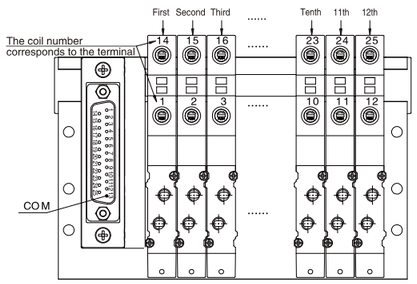


Connector Cable	PIN number & Wire Color				
	PIN Number	D25-25 Wire Color	D25-16D Wire Color	D25-16S Wire Color	D25-08S Wire Color
	1	Purple	Purple	Purple	Purple
	2	Orange	Orange	Orange	Orange
	3	Pink	Pink	Pink	Pink
	4	Grey	Grey	Grey	Grey
	5	White	White	White	White
	6	Red	Red	Red	Red
	7	Green	Green	Green	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	---
	13(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 with2 point	Orange with 1point	---	---
	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	---	---	---

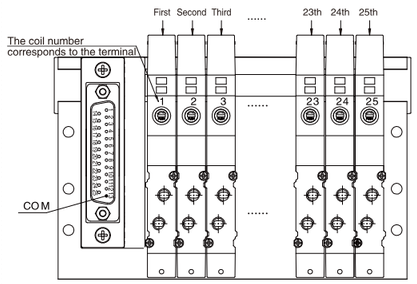


Valve Terminal Inner Wiring Diagram

Double control wiring
max.12 link

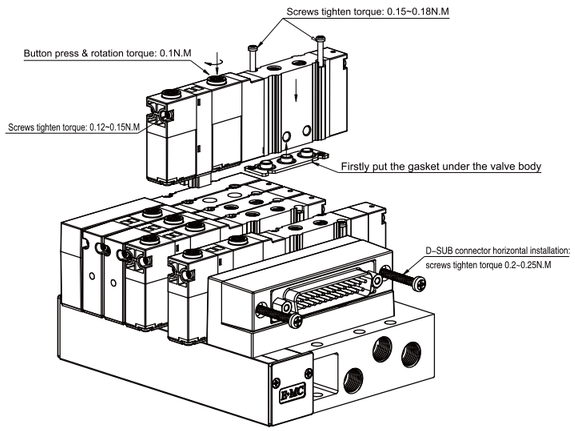


Single control wiring
max.24 link



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

Solenoid Valve&Valve Terminal

PROFINET

EtherCAT

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 neccessary, reduced wiring space
* Diagnostic functions: system diagnosis, communication error, undervoltage , short circuit.
* 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

Series No. | Body Size | Wiring Type — Protocols Type — [ ] [ ] — [ ] | [ ] Voltage — Pilot Type — Wiring Type — Inlet & Exhaust port — Mounting — Thread Type

- Series No.: ES: Fieldbus valve terminal
- Body Size: 1: 1 series
- Wiring Type: V: Top ported; VM: Side ported; VB: Bottom ported
- Protocols Type:

Code	Protocols type	Output	Interface
PN16	PROFINET	16	M12
PN32		32	
EC16	EtherCAT	16	M12
EC32		32	

- Qty (suitable for same valve single control 2~24 links double control 2~16 links)

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	

- Valve Quantity (Applicable to different ports mixed; Blank if same ports)
- Voltage: E4: DC24V
- Pilot Type: Blank: Interal pilot; WB: External pilot

Code	Port size	Remark
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)	
C4A	ϕ4 one-touch fitting (ZPOC04-M7C)	

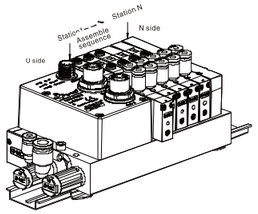
- Wiring Type: Blank: Double control wiring (max.16 links); S: Single control wiring (max.24 links) (Note:Mix wiring is available to customize)
- Inlet & Exhaust port: Blank: Without accessories; D: With DIN rail clip and 1M guide rail; D0: With DIN rail clip, no guide rail Din guide rail packed separatly)

Code	Port entry	Remark
Blank	Both side without silencer, fitting, plug	1) plugs are mounted on the opposite side of the selected ports; 2) only U side is available for bottom ported
U	U side with silencer, ϕ8 PC fitting	
N	Station N with silencer, ϕ8 PC fitting	
UN	Both side with silencer, , ϕ8 PC fitting	
UL	U side with silencer, ϕ8 PL fitting	
NL	Station N with silencer, ϕ8 PL fitting	
UNL	Both side with silencer, , ϕ8 PL fitting	
U1	U side with silencer, ϕ10 POC fitting	
N1	Station N with silencer, ϕ10 POC fitting	
Un1	Both side with silencer, , ϕ10 POCfitting	

Order Example:

1. Same valve: ES Fieldbus Valve Terminal, 1 series body, top ported, PROFINET,32 outputs, 6 links 5/2 double controled, port size M5, DC24V, G thread, internal pilot, double control wiring, both side without silencer, fitting, pug, the ERP code is ES1V-PN32-6D-M5E4

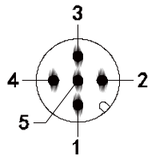
2. Mix different valves: ES series fieldbus system, 1 series body, top ported, PROFINET, 32 outputs, see let picture : station 1 is 5/3 center closed SV5312C, station 2 is 5/2 double control SV5212, station 3 is 2pcs 3/2 (N.O.) SV5412H ,station 4 & station 5 are 5/2 single SV5211, station 6 is blind plate. station 1 & 2 with ϕ6 one-touch fitting ZPOC06-M7C, station 3~5 with 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-CHD2SB-2C63C4AE4-WB-UL-D



Specifications

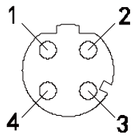
Code		ES1V(VM/VB)–PN16	ES1V(VM/VB)–PN32	ES1V(VM/VB)–EC16	ES1V(VM/VB)–EC32
Output		16	32	16	32
Protocols		PROFINET		EtherCAT	
Baud rate		100Mbps		100Mbps	
Configuration files		GSDML		GSDML	
Control power supply	Voltage	DC24V(DC21.6～26.4V)			
	Current consumption	120mA below			
Output voltage(valve)		DC24V(DC22.8～26.4V)			
Output type		PNP/（–com）			
Power interface		M12 5pin, A encode			
Bus Interface		2xM12 socket,4 hole，D encode			
Diagnostic		System diagnosis, communication error, undervoltage			
Protection		Dustproof Ip40			
Storage temperature		–20～70℃			
Working temperature		–10～50℃			

Power interface



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

BUS interface

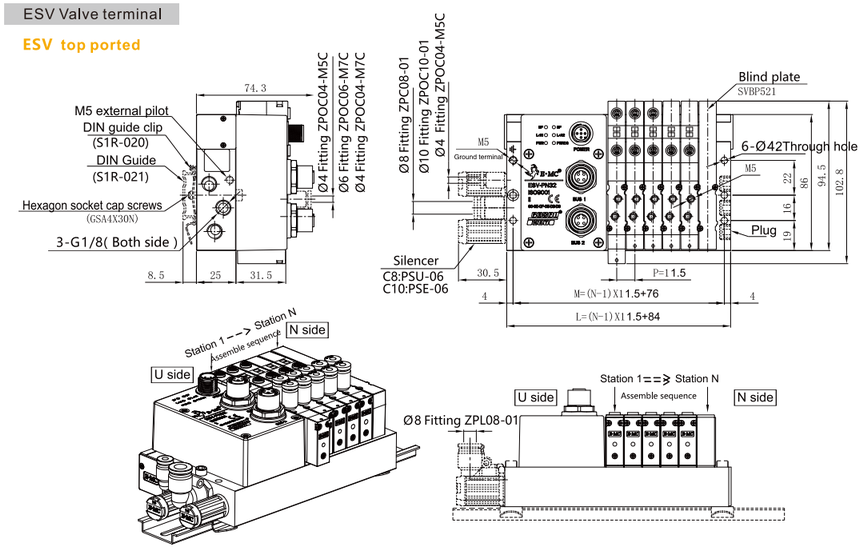


Pin	Type	Description
1	TD+	+ Send data+
2	RD+	+ Receive data+
3	TD–	– Send data–
4	RD–	– Receive data–

Main Dimension

ESV Valve terminal

ESV top ported

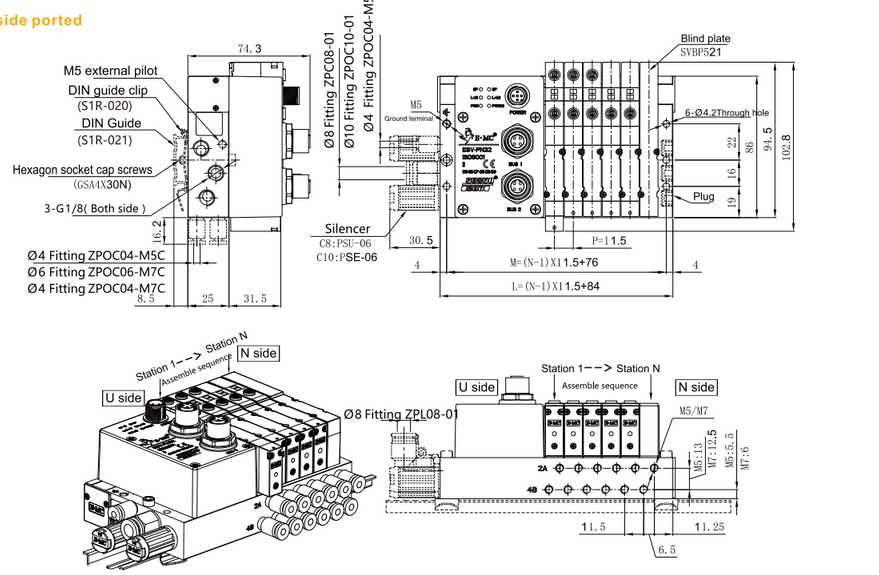


Note: N means valve link

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

Main Dimension

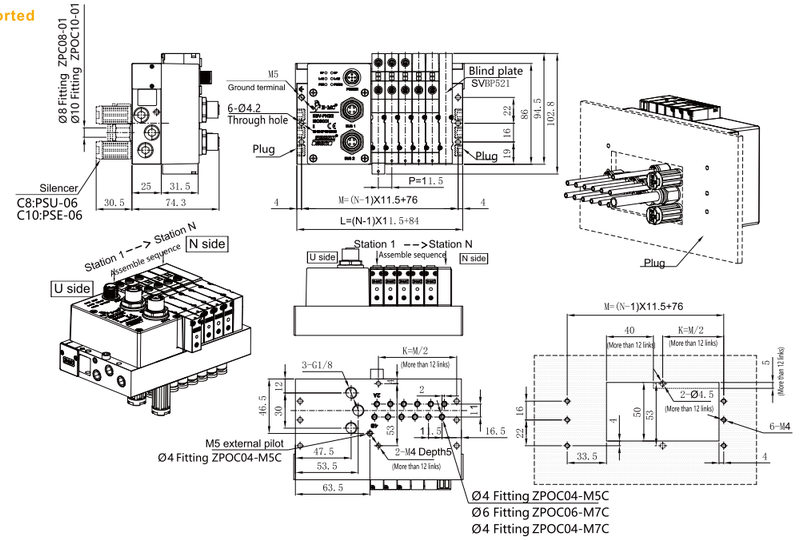
ESVM side ported



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

ESVB 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

ET307

Product Features

- Direct acting, sensitive action, response time less than 10ms,
- 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.
- Energy saving coil is available, 0.7 watt power consumption, less temperature rise, longer working life.

How to Order?

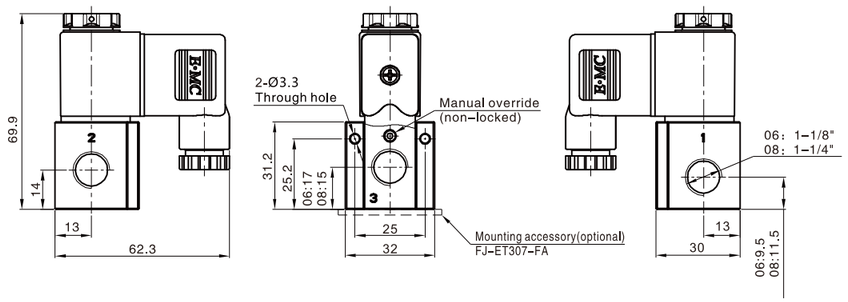
Series No.	ID code	—	Port Size	Voltage	Connection Mode	Connector color	—	Thread Type
ET: Standard type NET: Low power type	307		06: 1/8" 08: 1/4"	E1: AC110V E2: AC220V E4: DC24V E5: DC12V E7: AC24V (Low power type on optional: AC110V\AC220V\DC24V)	Blank: DIN type F: Flying leads K: Water proof type	Blank: Brown translucent J: Colorless and translucent B: Black(only black available for water proof connector)		Blank: G P: PT T: NPT

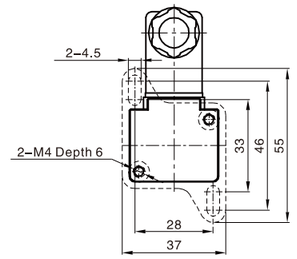
Specifications

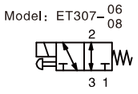
Model No.	ET307–06	ET307–08	NET307–06	NET307–08
Working Medium	Clean air(After 40 μm filteration)			
Acting type	Direct acting			
Sectional area(mm)	3.2(CV=0.18)	3.4(CV=0.19)	3.2(CV=0.18)	3.4(CV=0.19)
Port size	G1/8	1/4G	1/8G	G1/4
Lubrication	Not required			
Working Pressure(MPa)	–0.1~1.0			
Max.Pressure(MPa)	1.5			
Working Temperature	–20~70 (No freezing)			
Voltage Range	–15%~10%			
Power consumption	AC:4VA DC:3W		DC24V:0.7W AC220V:0.9VA AC110V:1.4VA	
Insulation Class	F Class			
Protective class	IP65(DIN40050)			
Max. acting frequency	10Cycles/s			
Seals Material	NBR			
Response Time	15ms Below			
Weight	163	159	174	170

Remark: Max.acting frequency on unload status.

Main Dimension







SR

Integrated Manifold (Plug-in Type)

How to Order?

SR Valve Group:

Series No.	Valve Body Size	ID code	Valve Numbers	Controls	—	Port Size	Voltage	Coil Type	—Thread Type	Mounting Type
S: Common type SN: Engergy saving type	1: 1 series 2: 2 series	R: RV series valve	3:3valves 9:9valves 4:4valves 10:10valves 5:5valves 11:11valves 6:6valves 12:12valves 7:7valves 13:13valves 8:8valves 14:14valves	S: Single coil		M5: M5 06: 1/8" 08: 1/4"	E4:DC24V E5:DC12V (Only DC24V for low power type)	Blank: Plug-in type	Blank: G P: PT T: NPT	Blank: No accessory D: Din guide rail clip with 1 meter din guide rail DO: Din guide rail clip without din guide rail (Din guide rail packed separatly)

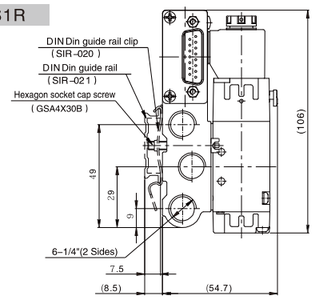
Order Example: SR series integrated manifold, 1 series valve body, RV series valve, 6 valves, single control, 1/8 port size, voltage DC24V, plug–in type coil, G thread, no accessory, ERP code is: S1R6S–06E4

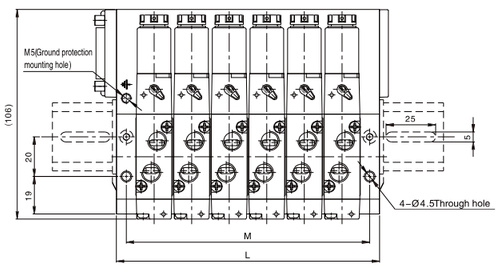
Connecting Cable

Connector	—	Number of cable core	—	Length of cable
D15: 15 pins D–sub Connector		15:15 cores (14 stations include below 14) 08:8 cores (7 stations include below 7)		1M: 1 meter 2M: 2 meter 3M: 3 meter ····· Note: Length can be customized

Main Dimension

S1R





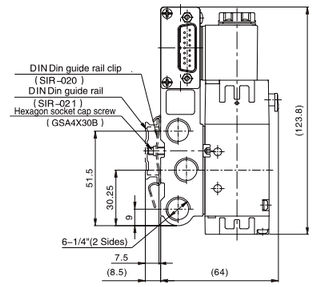
* The hole positions of Din guide rail can't be specified, its may change randomly.

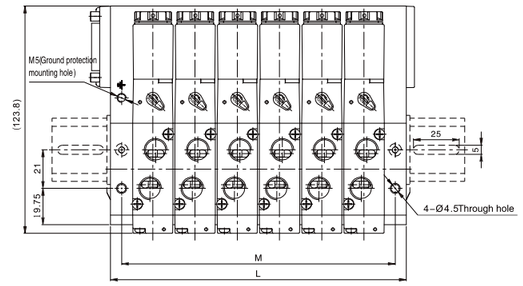
(mm)

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	66	85	104	123	142	161	180	199	218	237	256	275

Main Dimension

S2R





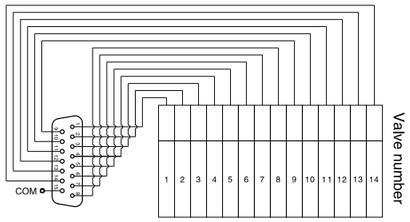
*The hole positions of Din guide rail can't be specified, its may change randomly.

(mm)

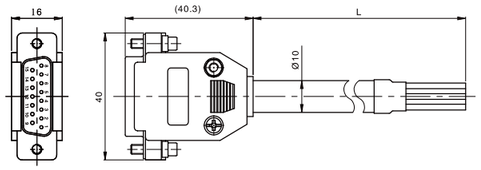
Sign/Model	S2R3S	S2R4S	S2R5S	S2R6S	S2R7S	S2R8S	S2R9S	S2R10S	S2R11S	S2R12S	S2R13S	S2R14S
L	92	115	138	161	184	207	230	253	276	299	322	345
M	80	103	126	149	172	195	218	241	264	287	310	333

Installation

SR Series integrated manifold(plug–in type) wiring diagram:



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

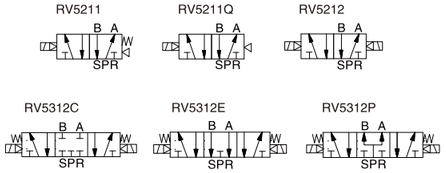


PIN number & Wire Color

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		

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	—	Thread Type
N	1：1Series 2：2Series 3：3Series 4：4Series	R: Standard armature +Engergy saving coil	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 Serise only DC24V)	Blank: DIN connector K: Waterproof DIN connector M: M8 connector (Only 2、3、4 series is opitional for K/M)	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+Engergy saving 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(排气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)	5/2:16(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 μ m filteration)							
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(℃)	–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	5/2：5 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	

How to Order?

Standard Solenoid Valve

Series No.	Ways	Positions	Valve Body Size	Controls	Original Status	—	Port Size	Reset Form	ID Code	Voltage	Connection Mode	Cover Color	Acting Type	—	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 06：1/8" 08：1/4" 10：3/8" 15：1/2"	Blank: Spring Q：Air (Only single control)	Blank: Standard type A: Amisco coil	E1：AC110V E6：AC36V E2：AC220V E7：AC24V E3：AC380V E8：DC110V E4：DC24V E9：DC48V E5：DC12V E10：DC36V	Blank: DIN connector F: Flying leads K: Waterproof DIN connector M: M8 connector (Only 2、3、4 series is opitional for K/M)	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

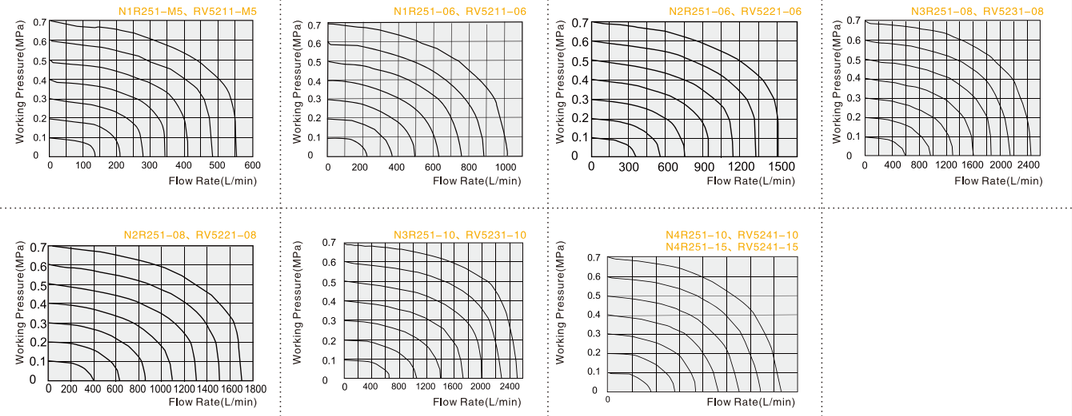
Order Example:

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

Specifications

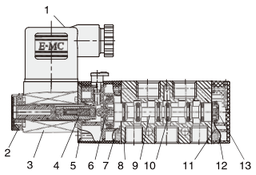
Model No.	RV5211-M5 RV5212-M5 RV5312-M5	RV5211-06 RV5212-06 RV5312-06	RV5221-06 RV5222-06 RV5322-06	RV5221-08 RV5222-08 RV5322-08	RV5231-08 RV5232-08 RV5332-08	RV5231-10 RV5232-10 RV5332-10	RV5241-10 RV5242-10 RV5342-10	RV5241-15 RV5242-15 RV5342-15
Port size	M5	G1/8	G1/8	G1/4(Ex.G1/8)	G1/4	G3/8(Ex.G1/4)	G3/8	G1/2
Sectional area(mm^2)	5/2:5.5(CV=0.31) 5/3:5.5(CV=0.28)	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 μ m filteration)							
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(℃)	–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: 209 RV5222: 314 RV5322: 357		RV5231: 289 RV5232: 400 RV5332: 450		RV5241: 528 RV5242: 638 RV5342: 727	

Flow Chat

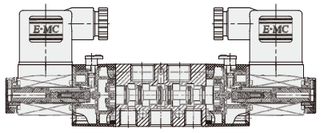


◎ Internal Structure

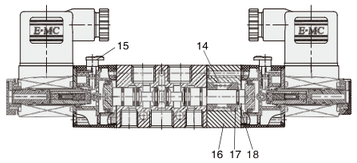
Single Solenoid Valve



Double Solenoid Valve



5/3 Solenoid Valve

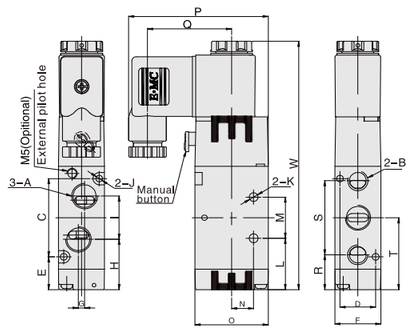


No.	Part Name	Material
1	Connector	Engineered plastics
2	Nut	POM+Carbon steel
3	Coil	Cu
4	Pilot units	Engineered plastics
5	Plate	Carbon steel
6	Piston	POM
7	Pilot seat	Engineered plastics
8	Valve body	Aluminum alloy
9	Spool	Aluminum alloy
10	O-ring	HNBR
11	Rear cover	Engineered plastics
12	Filter	Synthetic 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

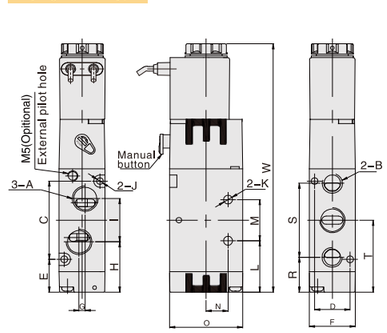
◎ Main Dimension

Single Solenoid Valve

DIN Type



Flying Leads Type



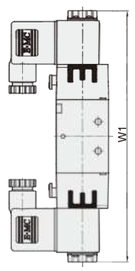
(mm)

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
RV5211-06	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	10.5	35	66.7	40.2	17	36	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	36	35	120.7
RV5231-08	G1/4	G1/4	50	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	19.1	27	4	32.1	24	4.3	4.3	32.1	24	13.5	40	69.2	40.2	21.6	45	44.1	139.3
RV5241-10	G3/8	G3/8	72	27	21	34	0	39	36	4.3	5.5	43	28	17.5	50	74.2	40.2	25.5	63	57	168.7
RV5241-15	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

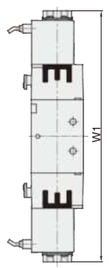
Note: The dimensions of NR series and RV series are same.

Double Solenoid Valve

DIN Type

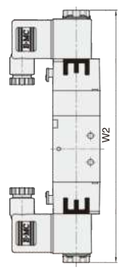


Flying Leads Type

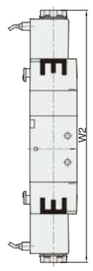


5/3 Solenoid Valve

DIN Type



Flying Leads Type



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

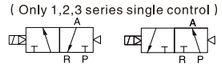
Model\Sign	W2
RV5312-M5	158.2
RV5312-06	158.2
RV5322-06	190.4
RV5322-08	190.4
RV5332-08	209.4
RV5332-10	209.4
RV5342-10	244.4
RV5342-15	244.4

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

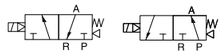
RV

Standard/ Low Power Solenoid Valve (3/2)

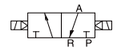
(Only 1,2,3 series single control)



(Only 4 series single control)



(Double control)



◎ 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	Thread Type
N	1：1Series 2：2Series 3：3Series 4：4Series	R: Standard armature + Engergy saving coil	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 1series, only DC24V available)	Blank: DIN connector K: Waterproof DIN connector (Only 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：G P：PT T：NPT

Order Example:

RV series engergy 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 μ m filteration)							
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 pressur(MPa)	1.2							
Working temperature(℃)	-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.

How to Order?

Standard Solenoid Valve

Series No.	Ways	Positions	Valve Body ID Code	Controls	Original Status	—	Port Size	Reset Type	ID Code	Voltage	Connection Mode	Cover Color	Valve Color	—	Thread Type
RV	3: 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)	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 K: Waterproof DIN connector (Only for 2,3,4 series)	Blank: Brown translucent J: Colorless and translucent B: Black (Only Waterproof DIN connector)	Blank: Internal pilot WB: External pilot		Blank: G P: PT T: NPT

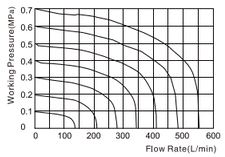
Order Example:
RV series solenoid valve, 2 series valve body size, 3/2 ways, single control, 1/8" port size, air return, standard coil, AC220V, DIN connector, G thread, ERP code is :RV3221–06QE2

Specifications

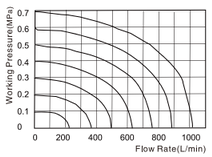
Model No.	RV3211–M5 RV3212–M5	RV3211–06 RV3212–06	RV3221–06 RV3222–06	RV3221–08 RV3222–08	RV3231–08 RV3232–08	RV3231–10 RV3232–10	RV3241–10 RV3242–10	RV3241–15 RV3242–15
Port size	M5	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Sectional area(mm)	2 way:5.5(CV=0.31)	2 way:12(CV=0.67)	2 way:14(CV=0.78)	2 way:16(CV=0.89)	2 way:25(CV=1.40)	2 way:30(CV=1.68)	2 way:50(CV=2.79)	2 way:50(CV=2.79)
Working medium	Clean air(After 40 μm filteration)							
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 pressur(MPa)	1.2							
Working temperature(℃)	–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: 443 RV3242: 569	

Flow Chat

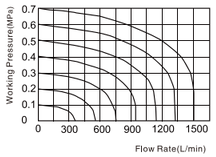
N1R231–M5、RV3211–M5



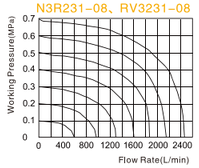
N1R231–06、RV3211–06



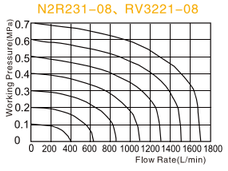
N2R231–06、RV3221–06



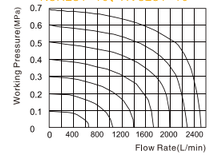
N3R231–08、RV3231–08



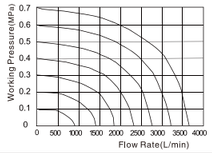
N2R231–08、RV3221–08



N3R231–10、RV3231–10

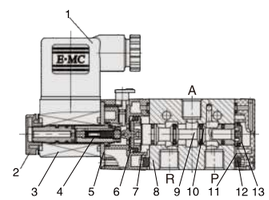


N4R231–10、RV3241–10
N4R231–15、RV3241–15

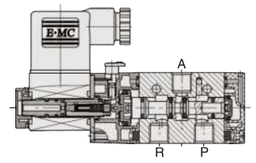


Internal Structure

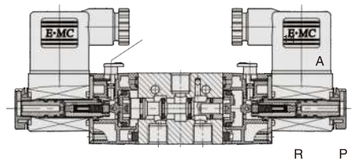
Single Solenoid Valve(Normal close)



Single Solenoid Valve(Normal open)



Double solenoid valve(Normal close)

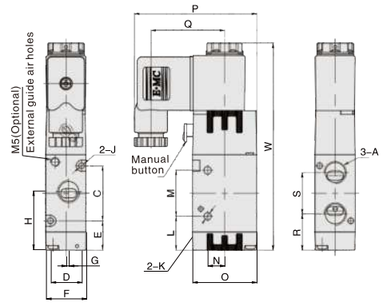


No.	Part Name	Material
1	Connector	Engineered plastics
2	Nut	POM
3	Coil	Cu+ Thermosetting resin
4	Pilot units	Pure iron + copper + stainless steel
5	Plate	Carton steel
6	Piston	POM
7	Pilot seat	Engineered plastics
8	Valve body	Aluminum alloy
9	Spool	Aluminum alloy
10	O–ring	NBR
11	Rear cover	Engineered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

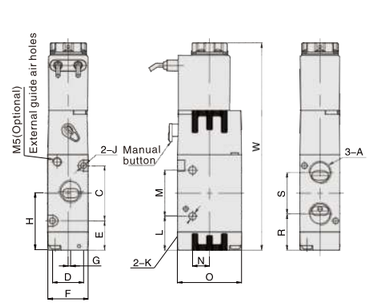
Main Dimension

Single Solenoid Valve

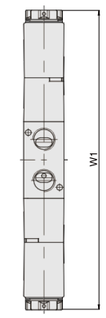
DIN Type



Flying Leads Type



Double Solenoid Valve



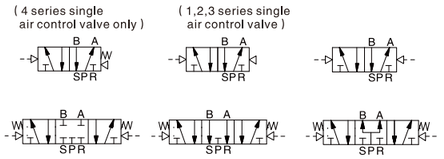
(mm)

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	26	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	66.7	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	66.7	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	9.5	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	9.5	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
RV3241–15	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

Air Control Valve (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 5/3 ways)		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)		Bland: G P: PT T: NPT

Order Example:

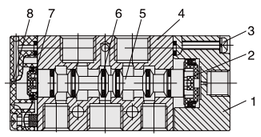
RV series air control valve, 5/2 way, 2 series valve body size, single control, 1/8" port size, air return, G thread,
ERP code is: RVA5221–06Q

Specifications

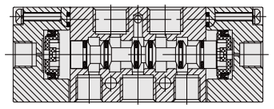
Model No.	RVA5211–M5 RVA5212–M5 RVA5312–M5	RVA5211–06 RVA5212–06 RVA5312–06	RVA5221–06 RVA5222–06 RVA5322–06	RVA5221–08 RVA5222–08 RVA5322–08	RVA5231–08 RVA5232–08 RVA5332–08	RVA5231–10 RVA5232–10 RVA5332–10	RVA5241–10 RVA5242–10 RVA5342–10	RVA5241–15 RVA5242–15 RVA5342–15
Port size	M5	G1/8	G1/8	G1/4(Ex.G1/8)	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=0.28)	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 filteration)							
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(℃)	–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 RVA5332:358		RVA5241:437 RVA5242:490 RVA5342:598	

Internal Structure

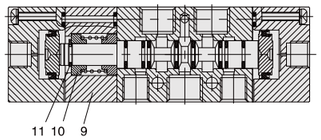
Single Air Control



Double Air Control



5/3 Ways Solenoid Valve

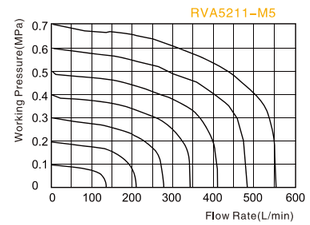


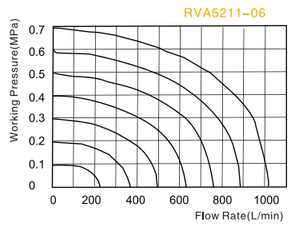
No.	Part Name	Material
1	Air Control Cover	Aluminum Alloy
2	Piston	POM
3	Screw	Carbon Steel
4	Valve Body	Aluminum Alloy
5	Spool	Aluminum Alloy
6	O–ring	NBR
7	Piston	POM
8	Rear Cover	Zinc Alloy
9	Back Seat	Aluminum Alloy
10	Spring Seat	Aluminum Alloy
11	C–type Buckle	65Mn

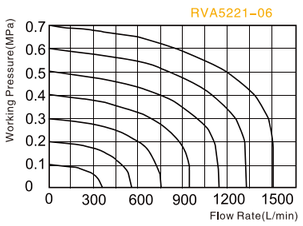
RV Series Air Control Valve (5/2,5/3way)

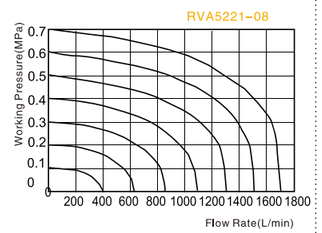
1
RVA(5/2,5/3)

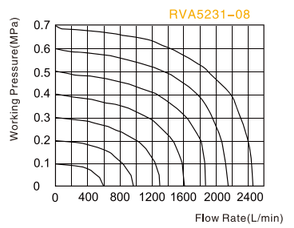
Flow Chat

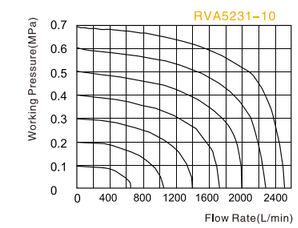


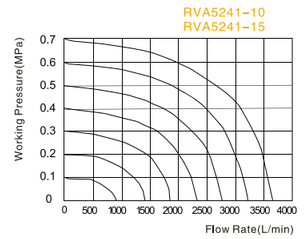






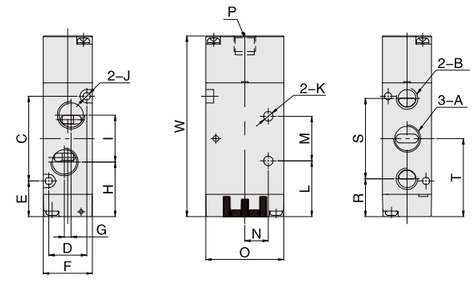




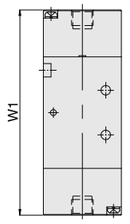


Main Dimension

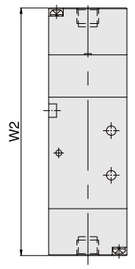
Single Air Control



Double Air Control



5/3 Ways Solenoid Valve



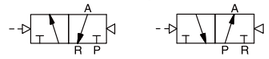
Model\Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	W	W1	W2
RVA5211–M5	M5	M5	30	13	16.5	18	0	24.5	14.1	3.3	3.3	24.5	14	9.5	27	G1/8	17.9	27.2	31.5	72	81	96
RVA5211–06	G1/8	G1/8	30	13	16.5	18	3	23.5	16	3.3	3.3	24.5	14	9.5	27	G1/8	17.5	28	31.5	72	81	96
RVA5221–06	G1/8	G1/8	38	17	16	22	0	26	18	3.3	4.3	25	20	10.5	35	G1/8	17	36	35	81	92	111
RVA5221–08	G1/4	G1/8	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	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	99.6	111	130
RVA5241–10	G3/8	G3/8	72	27	21	34	0	39	36	4.3	5.2	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

RV Series Air Control Valve (3/2 way)

RV

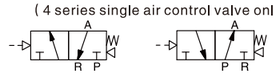
Air Control Valve (3/2)

(1,2,3 series single air control valve)



(Double control valve)

(4 series single air control valve only)



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:

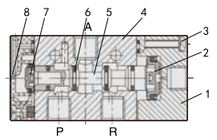
RVA series air control valve, 3/2 way, 2 series valve body size, single control, NC type, 1/4" port size, air return, PT thread
ERP code is: RVA3221–08Q–P

Specifications

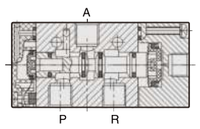
Model No.	RVA3211–M5 RVA3212–M5	RVA3211–06 RVA3212–06	RVA3221–06 RVA3222–06	RVA3221–08 RVA3222–08	RVA3231–08 RVA3232–08	RVA3231–10 RVA3232–10	RVA3241–10 RVA3242–10	RVA3241–15 RVA3242–15
Port size	M5	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Sectional area(mm)	5.5(CV=0.31)	12(CV=0.67)	14(CV=0.78)	16(CV=0.89)	25(CV=1.40)	30(CV=1.68)	50(CV=2.79)	50(CV=2.79)
Working medium	Clean air(After 40 μm filteration)							
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(℃)	–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

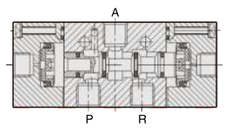
Single Air Control(N.C)



Double Air Control(N.O)



5/3 Ways Solenoid Valve

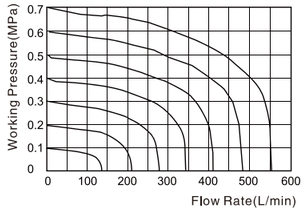


No.	Part Name	Material
1	Air Control Cover	Aluminum Alloy
2	Piston	POM
3	Screw	Carbon Steel
4	Valve Body	Aluminum Alloy
5	Spool	Aluminum Alloy
6	O–ring	NBR
7	Piston	POM
8	Rear Cover	Zinc Alloy

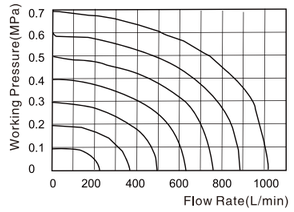
1
RVA(2/3)

Flow Chat

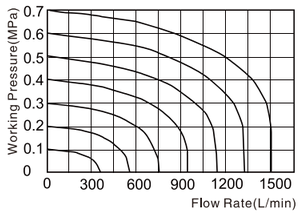
RVA3211–M5



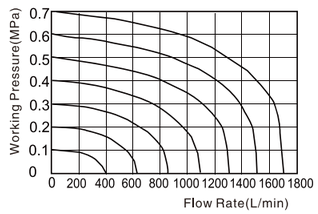
RVA3211–06



RVA3221–06

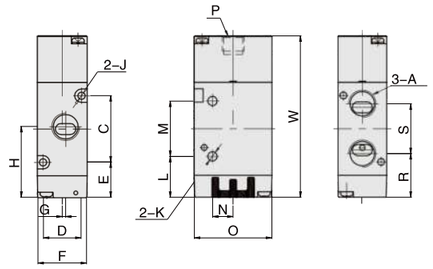


RVA3221–08

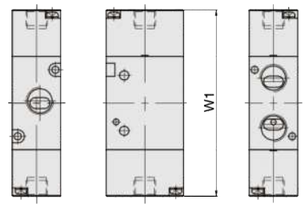


Main Dimension

Single Air Control



Double Air Control

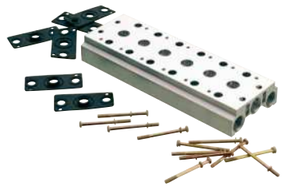


Model/Sign	A	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	W	W1*
RVA3211–M5	M5	19	13	16.5	18	0	26	3.3	3.1	15.5	21	6	27	G1/8	18.9	14.2	61	70
RVA3211–06	G1/8	19	13	16.5	18	1.5	27	3.3	3.1	15.5	21	6	27	G1/8	18	16	61	70
RVA3221–06	G1/8	30	17	16	22	0	31	3.3	4.2	18.5	25	9.3	35	G1/8	20	22	73	84
RVA3221–08	G1/4	30	17	16	22	1.5	32	3.3	4.2	18.5	25	9.3	35	G1/8	19.8	22.5	73	84
RVA3231–08	G1/4	35	20	19.1	27	0	36.6	4.3	4.3	21.6	30	9.5	40	G1/8	24.6	24	84.6	96
RVA3231–10	G3/8	35	20	19.1	27	2	36.6	4.3	4.3	21.6	30	9.5	40	G1/8	24.6	24	84.6	96
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	103	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	31.5	103	116

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

V/RV

Manifold (5/2,5/3)



◎ How to Order?

V	52	1	—	N	F
V Series	5 port, 2 position	1:1 series valve body 2:2 series valve body 3:3 series valve body 4:4 series valve body		1: 1 station 2: 2 stations 3: 3 stations ····· 16: 16 stations	Manifold

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

VBP	52	2
V series blind plate (for V series manifold)	5:5 port, 2 position	1:1 series valve body 2:2 series valve body 3:3 series valve body 4:4 series valve body

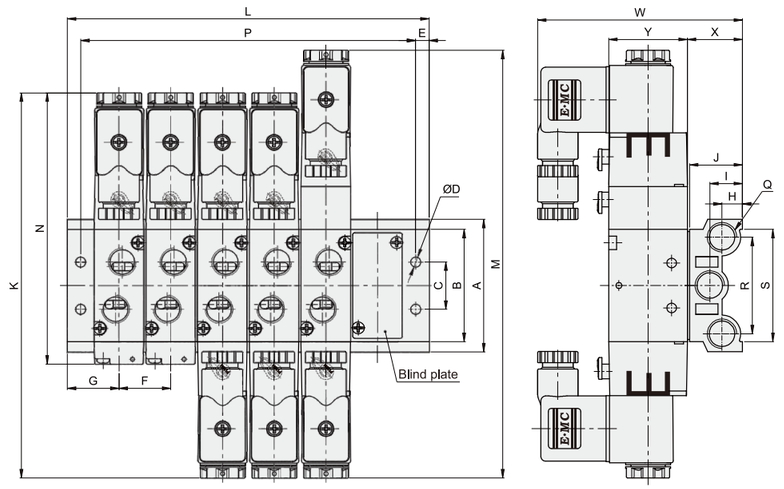
Order Example:
* Blind plate for 5/2 valve, 2 series valve body, Model: VBP–522

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)

◎ Main Dimension



Model/Sign	L															
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
V521–□F	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323
V522–□F	46	69	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	98	133	168	203	238	273	–	–	–	–	–	–	–	–	–

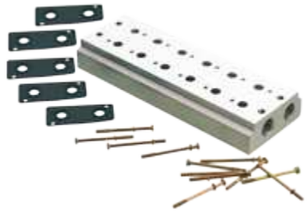
Model/Sign	A	B	C	D	E	F	G	H	I	J
V521–□F	58	43	20	4.5	5	19	19	9.5	14	23
V522–□F	59	50	21	4.5	6	23	23	9.5	15	23.5
V523–□F	75	64	26	4.5	6	28	27	12	17.5	28
V524–□F	98	94	32	5.5	7	35	31.5	16	21.5	35

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	275	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

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?

V — 32 — 1 — N — F — Thread Type

- V: V series
- 32: 3/2 way
- 1: 1:1 series valve body; 2:2 series valve body; 3:3 series valve body; 4:4 series valve body
- N: 1:1 station; 2:2 stations; 3:3 stations; ..... ; 16:16 stations
- F: Manifold
- Thread Type: Blank: G; P: PT; T: NPT

Order Example:

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

VBP — 32 — 2

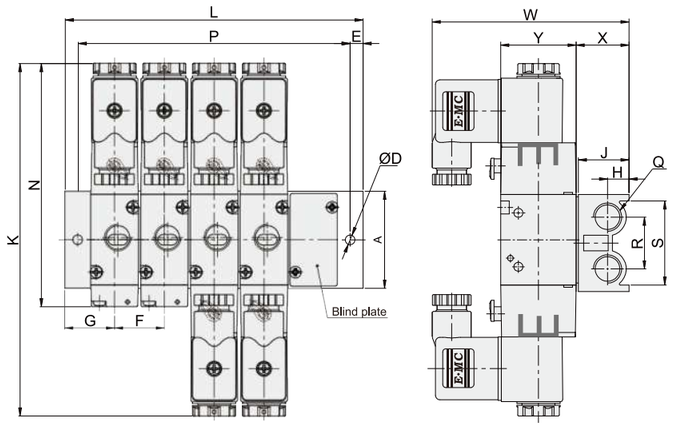
- VBP: V series blind plate (for V series manifold)
- 32: 3/2 way
- 2: 1:1 series valve body; 2:2 series valve body; 3:3 series valve body; 4:4 series valve body

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



(mm)

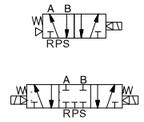
Model\Sign	L										A	D	E	F	G	H	J	K
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F								
V321–□F	38	57	76	95	114	133	152	171	190	209	31	4.5	5.25	19	18	7.75	19	132.2
V322–□F	46	69	92	115	138	161	184	207	230	253	45	4.5	6	23	23	10	23.5	163.4
V323–□F	54	82	110	138	166	194	222	250	278	306	50	4.5	6	28	26	12	28	175.4
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	P										N	Q	R	S	W	X	Y
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F							
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	259	294	329	364	144.7	G1/2	35.5	51.5	110.2	36	50

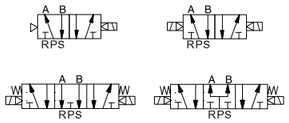
RV

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 — Thread Type

- N: Series No.
- Valve Body ID Code: 1: 1Series; 2: 2Series; 3: 3Series; 4: 4Series
- ID Code: R: Standard armature +Engergy saving coil
- Positions: 2:2 positions; 3:3 positions
- Ways: 5:5 ways
- Controls: 1: Single control; 2: Double control
- Initial Status: C: Center close; P: Center pressure; E: Center exhaust (only for 5/3 ways)
- Port Size: M5:M5; 08:1/4"; 15:1/2"; 06:1/8"; 10:3/8"
- Reset Type: Blank: Spring return (4 series single solenoid control only); Q: Air return (1,2,3 series single solenoid control)
- Valve Body Type: M:NAMUR
- Voltage: E1:AC110V; E2:AC220V; E4:DC24V(for 1series, only DC24V available)
- Connection Mode: Blank: DIN connector type; K: Water proof connector type; M: M8 connector type (K/M only for 2,3,4 series)
- Cover Color: Blank: Brown translucent; J: Colorless and translucent; B: Black(only black color available for K/M)
- Thread Type: Blank: G; P: PT; T: NPT

Order Example:

RV series Engergy 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	N3R251–08QM N3R252–08M N3R352–08M	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)	5/2：5,5(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)	5/2：16(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 μ m filteration)							
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(℃)	–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:113 N1R252–M:176 N1R352–M:186		N2R251–M:208 N2R252–M:306 N2R352–M:349		N3R251–M:300 N3R252–M:409 N3R352–M:459		N4R251–M:533 N4R252–M:666 N4R352–M:755	

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	—	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 06:1/8" 08:1/4" 10:3/8" 15:1/2"		Blank: Spring return (Only apply to 4 series single control valve) Q: Air return (Only apply to 1,2,3 series single control valve)		M:NAMUR type Blank: Standard type A: Amisco coil	E1: AC110V E6: AC36V E2: AC220V E7: AC24V E3: AC380V E8: DC110V E4: DC24V E9: DC48V E5: DC12V E10: DC36V		Blank: DIN connector type K: Water proof connector type M: M8 connector type (K/M only for 2,3,4 series)	Blank: Brown translucent J: Colorless and translucent B: Black(only black color available for K/M)		Blank: G P: PT T: NPT

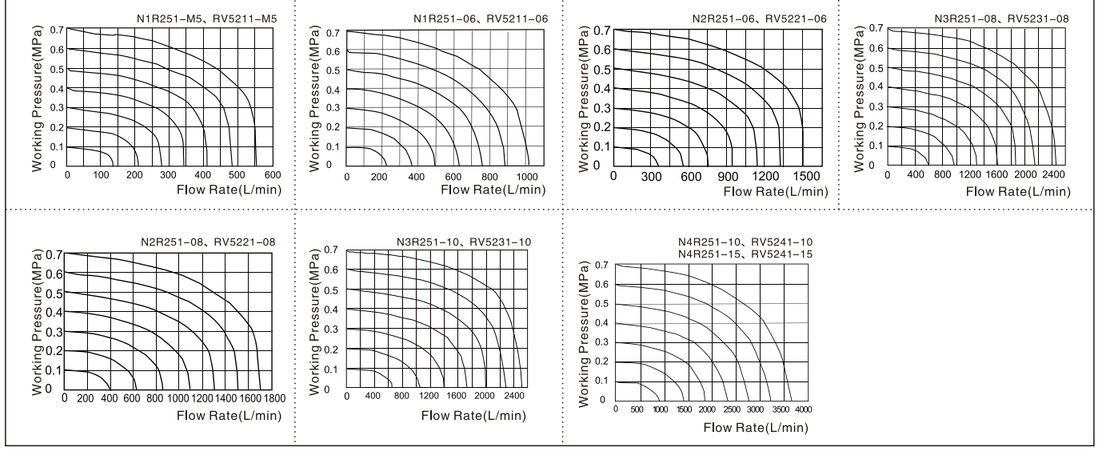
Order Example:

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

Specifications

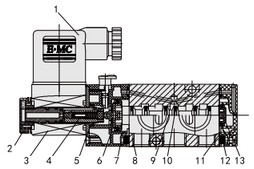
Model	RV5211-M5QM RV5212-M5M RV5312-M5M	RV5211-06QM RV5212-06M RV5312-06M	RV5221-06QM RV5222-06M RV5322-06M	RV5221-08QM RV5222-08M RV5322-08M	RV5231-08QM RV5232-08M RV5332-08M	RV5231-10QM RV5232-10M RV5332-10M	RV5241-10M RV5242-10M RV5342-10M	RV5241-15M RV5242-15M RV5342-15M
Port Size	M5	G1/8	G1/8	G1/4(Ex.G1/8)	G1/4	G3/8(Ex.G1/4)	G3/8	G1/2
Sectional area(mm)	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: 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 filteration)							
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(℃)	-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:176 RV5312: M:186	RV5221: M:208 RV5222: M:306 RV5322: M:349		RV5231: M:300 RV5232: M:409 RV5332: M:459			RV5241: M:533 RV5242: M:666 RV5342: M:755	

Flow Chat

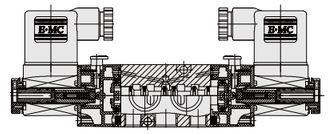


Internal Structure

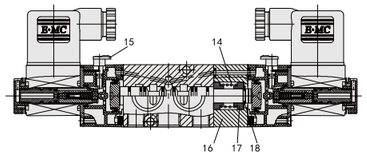
Single Solenoid Valve



Double Solenoid Valve



5/3 Ways Solenoid Valve

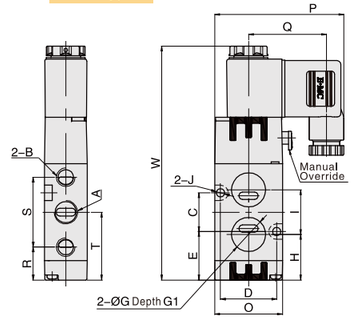


No.	Part Name	Material
1	Connector	Engineered plastics
2	Fixing Nut	POM
3	Coil	Brass+Thermoset Resin
4	Pilot Units	Pure Iron+Brass +Stainless Steel
5	Plate	Carton Steel
6	Piston	POM
7	Pilot Seat	Engineered plastics
8	Valve Body	Aluminum Alloy
9	Spool	Aluminum Alloy
10	O ring	NBR
11	Rear Cover	Engineered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

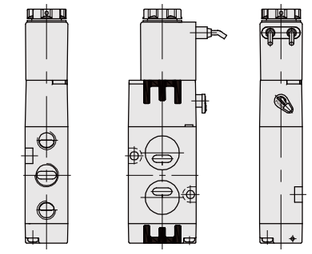
Main Dimension

Single Solenoid Valve

DIN Type



Flying Lead Type



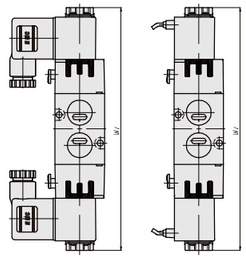
(mm)

Model/Sign	A	B	C	D	E	F	G	G1	H	I	J	O	P	Q	R	S	T	W
RV5211-M5QM	M5	M5	14	22	24.5	18	13.6	1.5	22.3	18.5	3.3	27	55.2	33.9	17.9	27.2	31.5	103.1
RV5211-06QM	G1/8	G1/8	14	22	24.5	18	13.6	1.5	22.3	18.5	3.3	27	55.2	33.9	17.9	28	31.5	103.1
RV5221-06QM	G1/8	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
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	1.5	32.1	24	5.2	40	69.2	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	69.2	40.2	21.6	45	44.1	139.3
RV5241-10M	G3/8	G3/8	33	41	40.5	34	21.8	1.8	38.8	36.5	6	50	74.2	40.2	25.5	63	57	168.7
RV5241-15M	G1/2	G1/2	33	41	40.5	34	21.8	1.8	38.8	36.5	6	50	74.2	40.2	25.5	63	57	168.7

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

Double Solenoid Valve

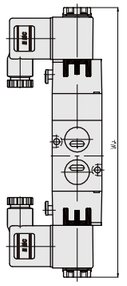
DIN Type



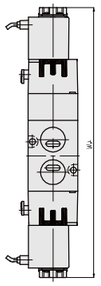
Flying Lead Type

5/3 Ways Solenoid Valve

DIN Type



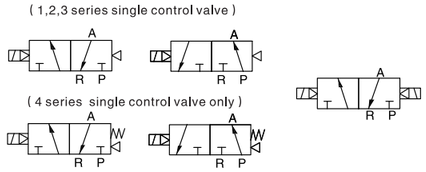
Flying Lead Type



Model/Sign	W1	W2
RV5212-M5QM	143.2	158.2
RV5212-06QM	143.2	158.2
RV5222-06QM	171.4	190.4
RV5222-08QM	171.4	190.4
RV5232-08QM	190.4	209.4
RV5232-10QM	190.4	209.4
RV5242-10M	223.4	244.4
RV5242-15M	223.4	244.4

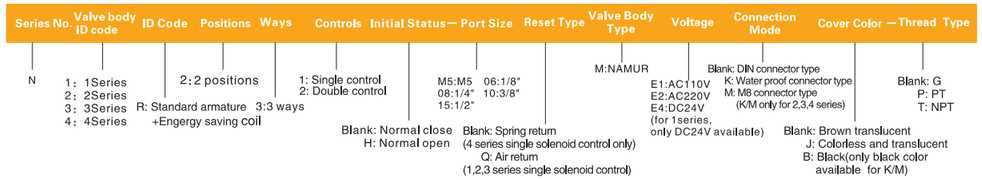
RV

NAMUR Solenoid Valve (3/2)



How to Order?

Low Power Solenoid Valve



Order Example:

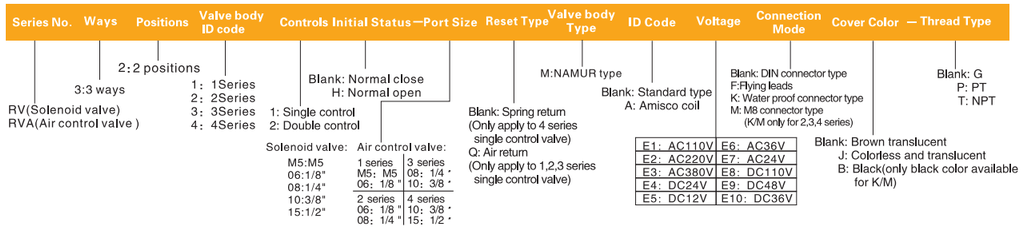
RV series low power solenoid valve,3/2 ways,1 series valve body size, double control,1/8 "port size, NUMAR type, DC24V, DIN connector, G thread, ERP code is N1R232-06ME4

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 filteration)							
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(℃)	-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	

How to Order?

Standard Solenoid Valve



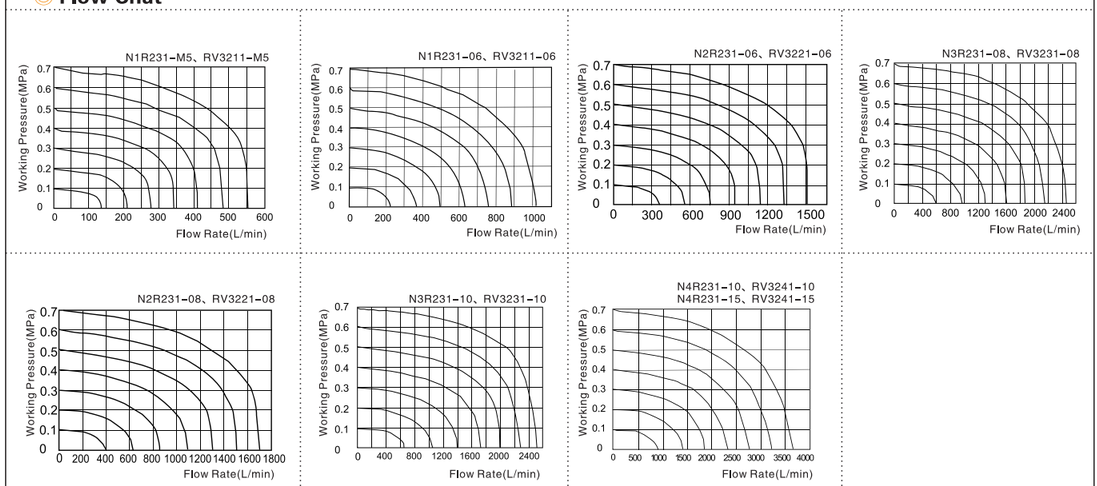
Order Example:

RV series solenoid valve,3/2 ways,1 series valve body size, double control,1/8 "port size, NUMAR type, standard coil, DC24V, Fly leads connector, G thread, ERP code is RV3212-06ME2F

Specifications

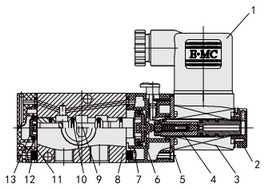
Model	RV3211-M5QM RV3212-M5M	RV3211-06QM RV3212-06M	RV3221-06QM RV3222-06M	RV3221-08QM RV3222-08M	RV3231-08QM RV3232-08M	RV3231-10QM RV3232-10M	RV3241-10M RV3242-10M	RV3241-15M RV3242-15M
Port Size	M5	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2
Sectional area(mm)	5.5(CV=0.31)	12(CV=0.67)	14(CV=0.78)	16(CV=0.89)	25(CV=1.40)	30(CV=1.68)	50(CV=2.79)	50(CV=2.79)
Working medium	Clean air(After 40 μm filteration)							
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(℃)	-20~70（Dry air）							
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- M:114 RV3212- M:171		RV3221- M:203 RV3222- M:310		RV3231- M:295 RV3232- M:403		RV3241- M:448 RV3242- M:578	

Flow Chat

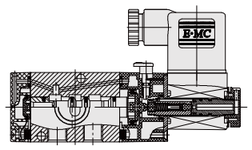


◎ Internal Structure

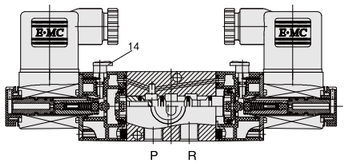
Single Air Control(N.C)



Single Air Control(N.O)



Double Air Control

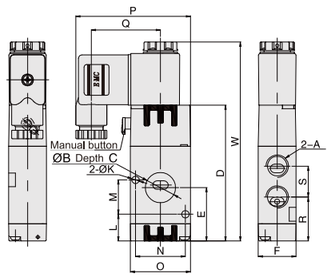


No.	Part Name	Material
1	Connector	Engineered plastics
2	Fixing Nut	POM
3	Coil	Brass+Thermoset Resin
4	Pilot Units	Pure iron+Brass +Stainless Steel
5	Plate	Carton Steel
6	Piston	POM
7	Pilot Seat	Engineered plastics
8	Valve Body	Aluminum Alloy
9	Spool	Aluminum Alloy
10	O ring	NBR
11	Rear Cover	Engineered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

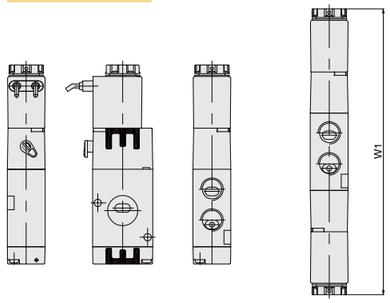
◎ Main Dimension

Single Solenoid Valve

DIN Type



Flying Lead Type



(mm)

Model\Sign	A	B	C	D	E	F	K	L	M	N	O	P	Q	R	S	W	W1*
RV3211-M5QM	M5	13.6	1.5	68.5	29	18	3.3	16	14	22	27	55.2	33.9	21.9	14.2	98.1	138.2
RV3211-06QM	G1/8	13.6	1.5	68.5	29	18	3.3	16	14	22	27	55.2	33.9	23	14	98.1	138.2
RV3221-06QM	G1/8	17.6	1.5	79	31	22	4.3	15.5	20	29	35	66.7	40.2	23.5	18	115.7	166.4
RV3221-08QM	G1/4	17.6	1.5	79	31	22	4.3	15.5	20	29	35	66.7	40.2	25.5	18	115.7	166.4
RV3231-08QM	G1/4	19.6	1.5	97.6	42.1	27	5.2	18.1	24	32	40	69.2	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	69.2	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

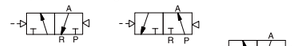
Note: The dimensions of N series and RV series are same.

RV

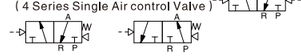
NAMUR Air Control Valve(3/2, 5/2, 5/3)

RVA Series 3/2 way

(1,2,3 Series Single Air Control Valve)



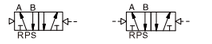
(4 Series Single Air control Valve)

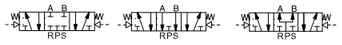


RVA Series 5/2,5/3 way

(4 Series Single Air Control Valve)

(1,2,3 Series Single Air Control Valve)





◎ How to Order?

Low Power Solenoid Valve

Series No.	Ways	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)		Bland: 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, NUMAR type, PT thread, ERP code is RVA3221-08QM-P

◎ Specifications

Model	RVA5211-M5M RVA5212-M5M RVA5312-M5M	RVA5211-06M RVA5212-06M RVA5312-06M	RVA5221-06M RVA5222-06M RVA5322-06M	RVA5221-08M RVA5222-08M RVA5322-08M	RVA5231-08M RVA5232-08M RVA5332-08M	RVA5231-10M RVA5232-10M RVA5332-10M	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)	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: 16(CV=0.89) 3P: 12(CV=0.67)	2P: 25(CV=1.40) 3P: 18(CV=1.00)	2P: 30(CV=1.68) 3P: 18(CV=1.00)	2P: 50(CV=2.79) 3P: 30(CV=1.67)	2P: 50(CV=2.79) 3P: 30(CV=1.67)
Working Medium	Clean air(After 40 μ m filteration)							
Acting type	Outer air control							
Reset type	Air reset						Spring reset / Air reset	
Lubrication	Not Required							
Working Pressure(MPa)	0.15~0.8							
Guatranteed Pressure(MPa)	1.2							
Working Temperature(℃)	-20~70 (No freezing)							
Insulation Class	F Class							
Max.acting frequnency	2 Positon: 5 Cycles/s; 3 Positon: 3 Cycles/s							

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

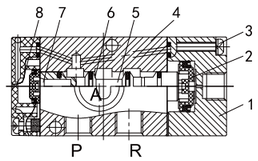
Specifications

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 filteration)							
Acting type	Outer air control							
Reset type	Air reset						Spring reset+Air reset	
Lubrication	Not Required							
Working Pressure(MPa)	0.15~0.8							
Guatranteed Pressure(MPa)	1.2							
Working Temperature(℃)	–20~70 (No freezing)							
Max.acting frequnency	5 Cycles/s							

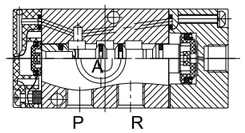
Internal Structure

3/2 Way

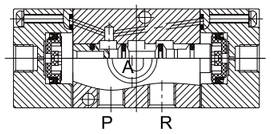
Single Air Control(N.C)



Single Air Control(N.O)



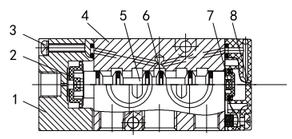
Double Air Control



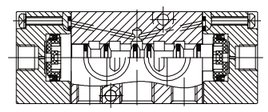
No.	Part Name	Material
1	Air Control Cover	Aluminum alloy
2	Piston	POM
3	Nut	Carbon steel
4	Valve body	Aluminum alloy
5	Spool	Aluminum alloy
6	O-ring	NBR
7	Piston	POM
8	Rear cover	Zinc Alloy

5/2 ,5/3 Way

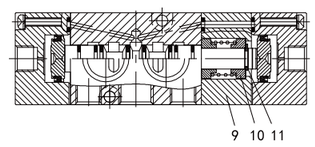
Single Air Control



Double Air Control



3 Positions



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)

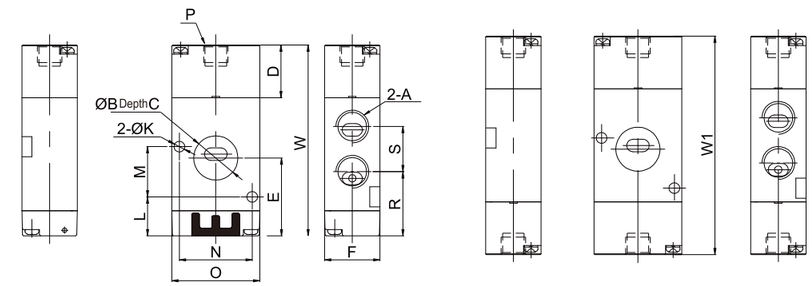
1
RVA
Namur Type

Main Dimension

3/2 Way

Single Air Control

Double Air Control



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	21.9	14.2	67	76
RVA3211-06QM	G1/8	13.6	1.5	19	29	18	3.3	16	14	22	27	G1/8	23	14	67	76
RVA3221-06QM	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	94.6	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	94.6	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
RVA3241-15M	G1/2	21.8	1.8	23	45.5	34	6	17.5	33	41	50	G1/8	32	31.5	103	116

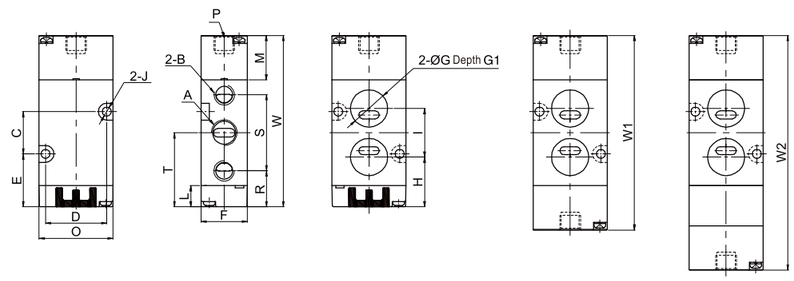
Note: The dimensions of N.O type and N.C type are same, w1 is double control direction valve's dimensions.

5/2 ,5/2 Way

Single Air Control

Double Air Control

3 Positions

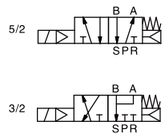


Model/Sign	A	B	C	D	E	F	G	G1	H	I	J	M	O	P	R	S	T	W	W1*	W2*
RVA5211-M5QM	M5	M5	14	22	24.5	18	13.6	1.5	22.3	18.5	3.3	19	27	G1/8	17.9	27.2	31.5	72	81	96
RVA5211-06QM	G1/8	G1/8	14	22	24.5	18	13.6	1.5	22.3	18.5	3.3	19	27	G1/8	17.5	28	31.5	72	81	96
RVA5221-06QM	G1/8	G1/8	20	29	25	22	17.6	1.5	23.5	23	4.3	21	35	G1/8	17	36	35	81	92	111
RVA5221-08QM	G1/4	G1/8	20	29	25	22	17.6	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	21.6	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	21.6	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	36.5	6	23	50	G1/8	25.5	63	57	127	140	161

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

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 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	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

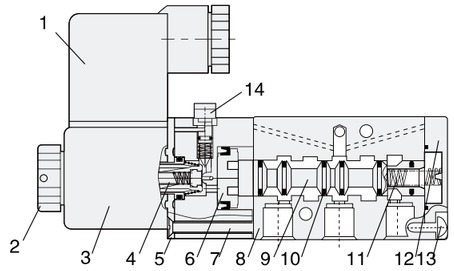
Specifications

Model No.	V523231–08MR	V523231–08MG
Port size	1/4❶	
Sectional area(mm²)	25(CV=1.40)	
Working medium	Clean air(After 40 μ m filteration)	
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℃（23~140℉)(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

❶ G、PT、NPT thread type is optional.

Internal Structure

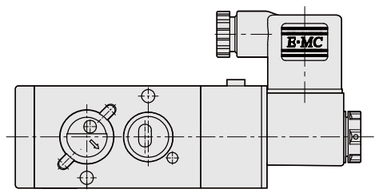
Single Solenoid Valve



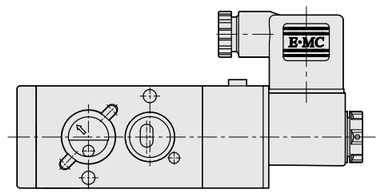
NO.	Part Name	Material
1	Connector	Engineered plastics
2	Nut	POM+Carbon steel
3	Coil	Cu
4	Pilot units	
5	Plate	Carbon steel
6	Piston	POM
7	Screw	Carbon steel
8	Valve body	Aluminum alloy
9	Spool	Aluminum alloy
10	O–ring	HNBR
11	Spring	Stainless steel
12	Rear cover	Zinc alloy
13	Screw	Carbon steel
14	Manual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

How to Mount?

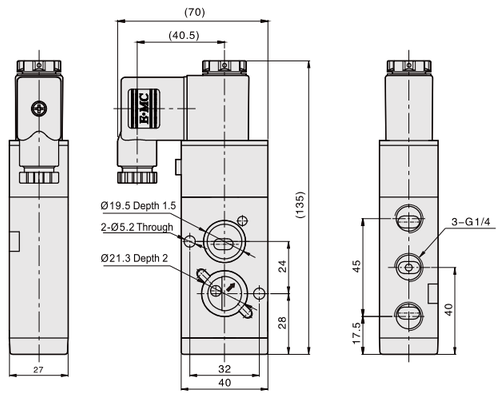
2/5 way



2/3 way



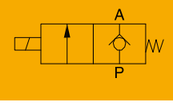
Main Dimension



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

V

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	—	Thread Type
N	M: Standard armature +Engergy 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	Blank: Brown translucent J: Colorless and translucent		Blank: G P: PT T: NPT

Standard Solenoid Valve

Series No.	ID Code	Positions	Controls	—	Port Size	Ways	Voltage	Connection Mode	Cover Color	—	Thread Type
V	Blank: Standard type A: Amisco coil	2 positions	1: Single control		06: 1/8 " 08: 1/4 "	2:2 ways	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: G P: PT T: NPT

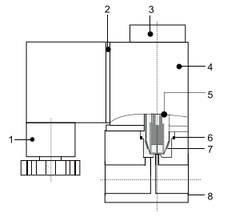
Order Example:

V series directional valve, 2/2 way, single control, 1/8 port size, Amisco coil, AC110V, DIN connector, G thread, the ERP code is: V221–06AE1

Specifications

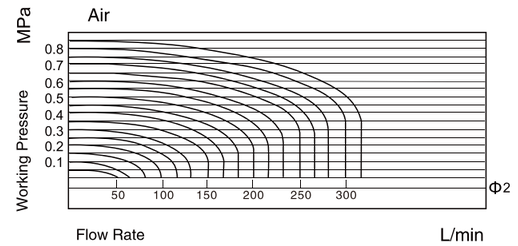
Model No.	NM221–06	NM221–08	V221–06	V221–08
Working medium	Air. water. oil			
Acting type	Direct acting			
Orifice (mm)	2			
Port size	1/8	1/4	1/8	1/4
Lubrication	Not required			
Working pressure (MPa)	0~0.8			
Guaranteed pressure (MPa)	1.2			
Working temperature (℃)	–5~60(No freezing)			
Voltage range	–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

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 Chat

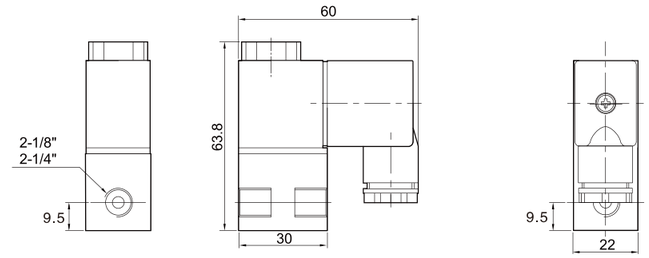


Main Parts Material

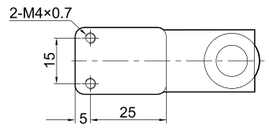
Part name	Material
Valve body	Aluminum alloy
Connector	Engineered plastics
Connector washer	NBR (FPM)
Pilot units	Pure steel+Cu+Stainless steel
Diaphragm	NBR
Nut	POM+Carbon steel
Coil	Brass Wire covered with heat resistance colophony

Main Dimension

V221–06/08



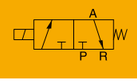
(If with the steel nut, the height is 60.7mm)



V

Standard/Low Power Solenoid Valve (3/2)

V321



Product Features

* Various voltages and working styles are available.
* Different surface treatment, thread types (G,PT,NPT) are available.
* With manual installation, easy to debugging

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	—	Valves
N	Blank: Standard valve body P: Europeans valve body (Only for 3/2 way)	M: Standard armature +Engergy saving coil	2:2 positions	3:3 ways	1: Single control		M5：M5 06：1/8 "	E1：AC110V E2：AC220V E4：DC24V	Blank: DIN connector	Blank: Brown translucent J: Colorless and translucent		Blank: G P: PT T: NPT		Blank：1Valve (No mounting accessory) 2F:2 Valves 3F:3 Valves ..... 20F:20 Valves

Note：Only V series solenoid valve has port size M5 and only the 1 valve type (no mounting accessory)

Standard Solenoid Valve

Series No.	Ways	Positions	Controls	—	Port Size	ID Code	Voltage	Connection Mode	Cover Color	—	Thread Type	—	Valves
V VP	3:3 ways	2:2 positions	1: Single control		V321 M5:M5 06：1/8 " VP321 06：1/8 "	Blank: Standard type A: Amisco coil	E1：AC110V E6：AC36V E2：AC220V E7：AC24V E3：AC380V E8：DC110V E4：DC24V E9：DC48V E5：DC12V E10：DC36V	Blank: DIN connector F: Flying leads	Blank: Brown translucent J: Colorless and translucent		Blank: G P: PT T: NPT		Blank：1Valve (No mounting accessory) 2F:2 Valves 3F:3 Valves ..... 20F:20 Valves

Note：Only V series solenoid valve has port size M5 and only the 1 valve type (no mounting accessory)

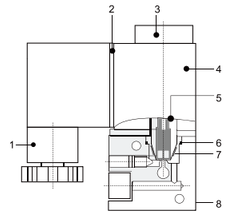
Order Example:

N series solenoid valve, standard pilot+Engergy saving 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	NM231-06	NPM231-06	V321-M5	V321-06	VP321-06
Working medium	Clean air (After 40 μm filteration)					
Acting type	Direct acting					
Orifice (mm)	1.2					
Port size	M5	G 1/8		M5	G 1/8	
Lubrication	Not required					
Working pressure (MPa)	0~0.8					
Guaranteed pressure (MPa)	1.2					
Working temperature (℃)	-5~60(No freezing)					
Voltage range	-15%~+10%					
Power consumption	DC24V:0.7W AC220V:0.9VA AC110V:1.4VA			AC:4VA DC:3W		AC:7VA DC:6.5W
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

Internal Structure

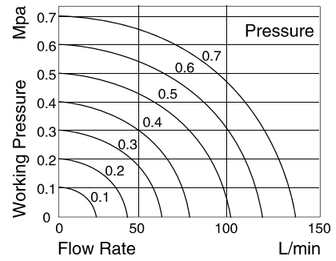


No.	Designation
1	Connector
2	Connector washer
3	Nut
4	Coil
5	Pilot units
6	O–Ring
7	Spring
8	Valve body

Main Parts Material

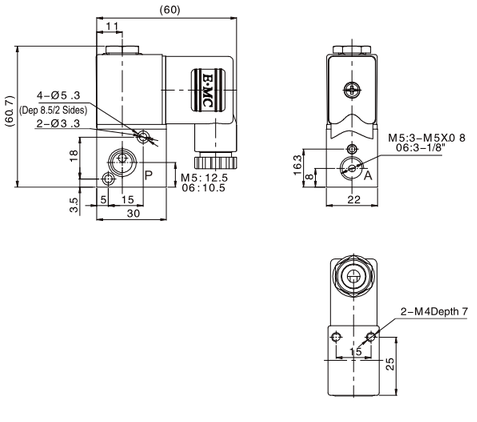
Part name	Material
Valve body	Aluminum alloy
Connector	Engineered plastics
Connector washer	NBR
Pilot units	Pure steel+Cu+Stainless steel
Nut	POM+Carbon steel
Coil	Brass Wire covered with heat resistance colophony

Flow Chat

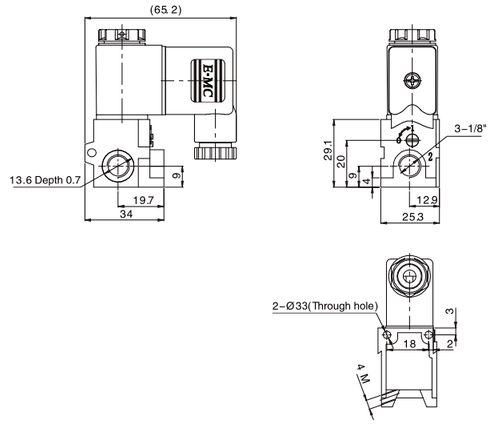


Main Dimension

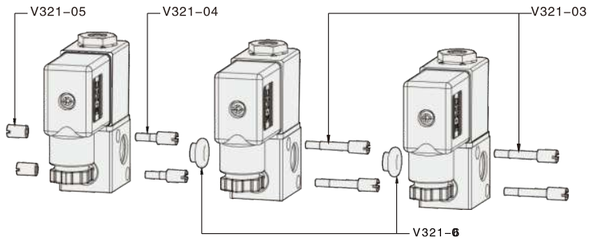
V321



VP321



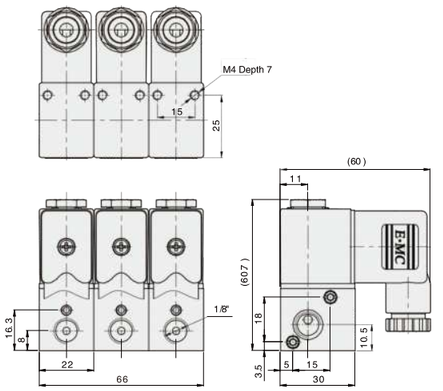
◎ Combination of Schematic Diagram

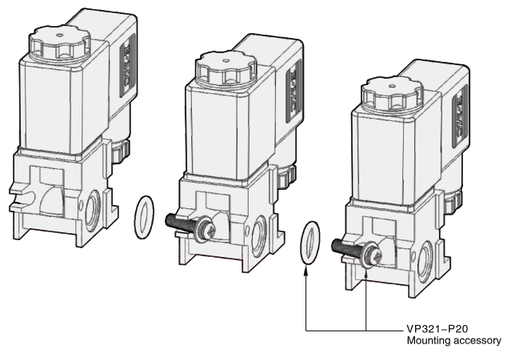


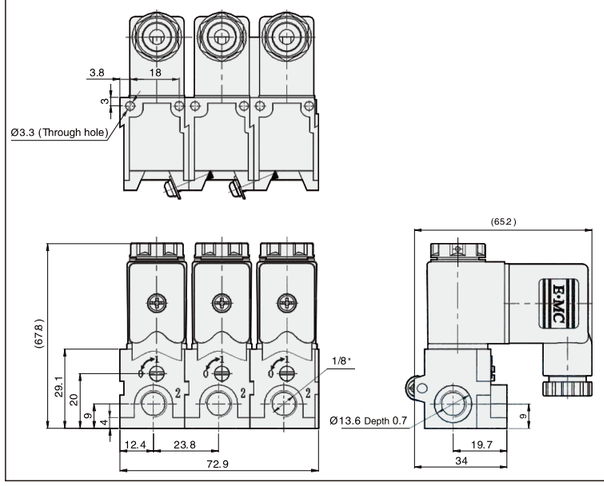
Mounting accessory order details:

Valve Quantity	V321-06□ The finished valves	V321-03	V321-04	V321-05	V321-06
V321-06□-□-2F	2	2	2	2	1
V321-06□-□-3F	3	4	2	2	2
.....	.....	.....	.....	.....	.....
V321-06□-□-nF	n	2(n-1)	2	2	n-1

Note : n indicates valve quantity， and 2≤n≤20

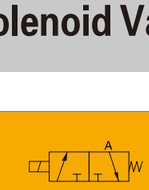






RVT

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 valtage and Energy-Saving are optional;
*Multiple connection mode are optional.

◎ How to Order?

Low Power Solenoid Valve

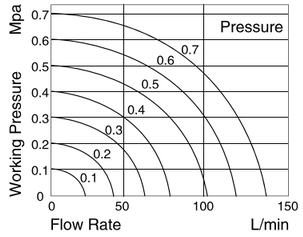
Series No.	Valve Body ID code	ID Code	Positions	Ways	Controls	—	Port Size	Voltage	Connection Mode	Cover Color	—	Thread Type	—	Valves
N	T:Integrated body	R: Standard armature +Engergy saving coil	2:2 positions	3:3 ways	1: Single control		06:1/8"	E1:AC110V E2:AC220V E4:DC24V	Blank: DIN connector K: Waterproof DIN connector M: M8 connector	Blank: Brown translucent J: Colorless and translucent B: Black (Only black color availale for water proof connector)		Blank: G P: PT T: NPT		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	—	Valves
RVT	3:3 ways	2:2 positions	1: Single control		06:1/8"	Blank: Standard type A: Amisco coil	E1: AC110V E6: AC36V E2: AC220V E7: AC24V E3: AC380V E8: DC110V E4: DC24V E9: DC48V E5: DC12V E10: DC36V	Blank: DIN connector F: Flying leads K: Waterproof DIN connector M: M8 connector		Blank: Brown translucent J: Colorless and translucent B: Black (Only black color availale for water proof connector)		Blank: G P: PT T: NPT		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

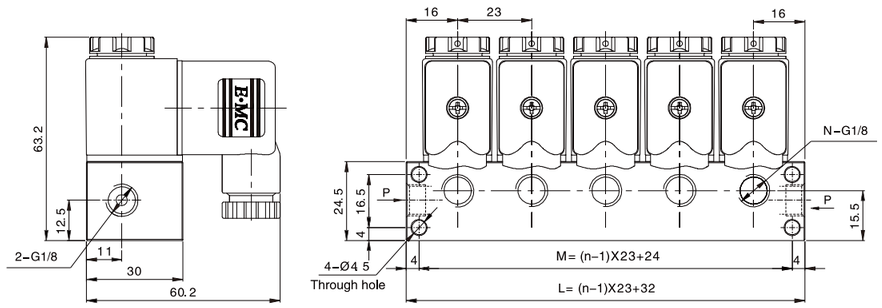
◎ Flow Chat



◎ Specifications

Model No.	NTR231-06	RVT321-06
Working medium	Clean air (After 40 μm filteration)	
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 (℃)	-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

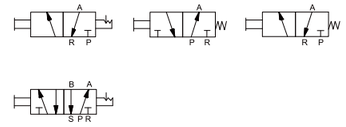
Main Dimension



Note : n indicates valve quantity， and 2≤n≤13

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
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 3：3Series 4：4Series		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: Black W: White		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

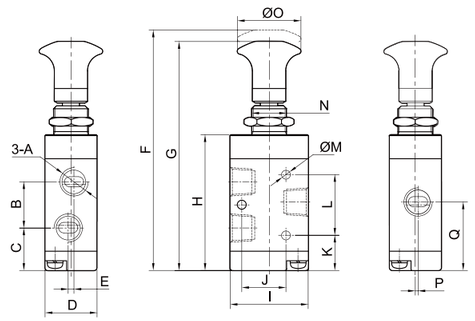
Model	L Series Hand pull valve
Working medium	Clean air(After 40 μm filteration)
Acting type	External control
Lubrication	Not required
Working pressure (MPa)	0~0.8
Guaranteed pressure (MPa)	1.2
Working temperature(℃)	–5~60

Product Features

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

Main Dimension

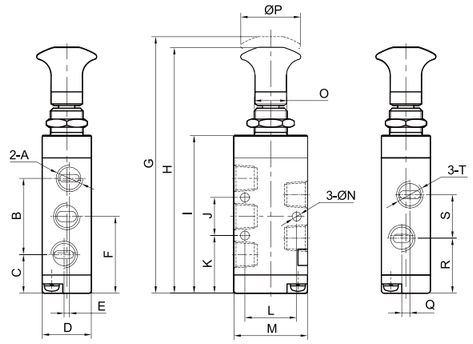
L321/L322/L323/L324



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	16	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	19	24	24	28	28	36	36
K	15.7	17.7	17.7	20.5	20.5	31	31
L	16.7	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

Main Dimension

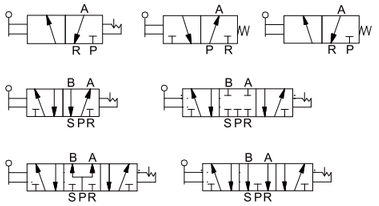
L521/L522/L523/L524



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

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

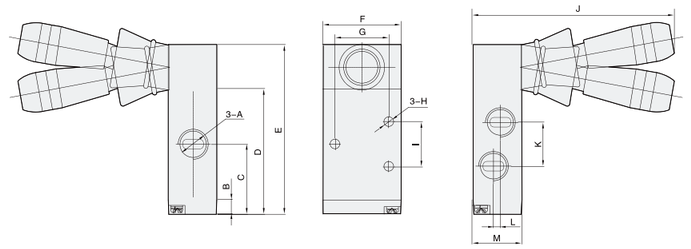
Model	H Series Hand push valve
Working medium	Clean air(After 40 μm filteration)
Acting type	External control
Lubrication	Not required
Working pressure (MPa)	0~0.8
Guaranteed pressure (MPa)	1.2
Working temperature (°C)	–5~60
Seal material	NBR

Product Features

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

Main Dimension

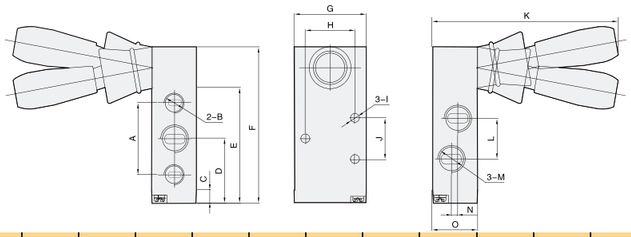
H321/H322/H323/H324



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	16	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	99.3	24	2	27
H324–15	G1/2	10	45	80	108	50	36	Φ5.5	28	105.8	31.5	0	34

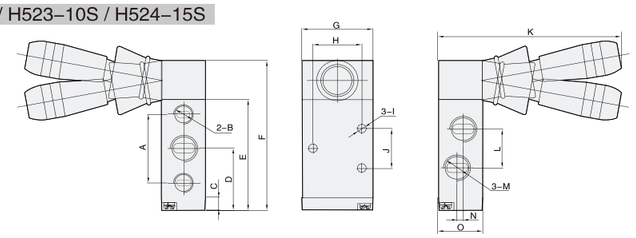
◎ Main Dimension

H521/H522/H523/H524



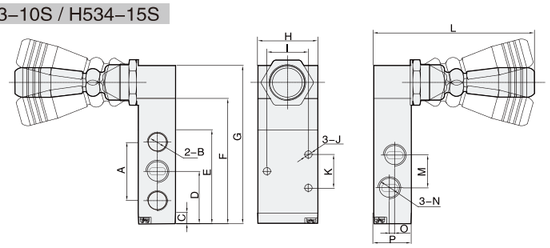
Model/Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
H521–06	28	G1/8	6.7	28.2	49.7	69.7	27	19	Φ3.3	14	83.8	16	G1/8	3	18
H522–08	35	G1/8	6.7	31.7	56.7	76.7	35	24	Φ4.3	20	91.3	20	G1/4	3	22
H523–10	45	G1/4	7.5	40	72.5	92.5	40	28	Φ4.3	24	96.5	24	G3/8	4	27
H524–15	63	G1/2	10	57	104	132	50	36	Φ5.5	28	105	36	G1/2	4	34

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



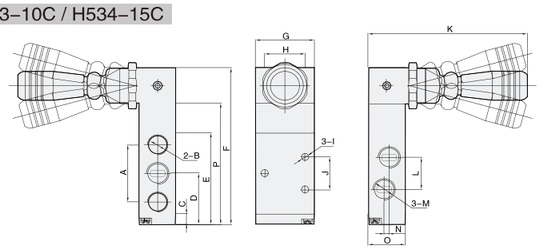
Model/Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
H521–06S	28	G1/8	6.7	28.2	49.7	69.7	27	19	Φ3.3	14	87.5	16	G1/8	3	18
H522–08S	35	G1/8	6.7	31.7	56.7	76.7	35	24	Φ4.3	20	90	20	G1/4	3	22
H523–10S	45	G1/4	7.5	40	72.5	92.5	40	28	Φ4.3	24	96.5	24	G3/8	4	27
H524–15S	63	G1/2	10	57	104	132	50	36	Φ5.5	28	105	36	G1/2	4	34

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	84.7	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	91.5	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



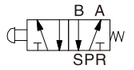
Model/Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
H531–06C	28	G1/8	6.5	28.2	49.7	84.5	27	19	Φ3.3	14	94.5	16	G1/8	3	18	64.5
H532–08C	35	G1/8	6.5	31.7	56.7	97	35	24	Φ4.3	20	95.5	20	G1/4	3	22	75.5
H533–10C	45	G1/4	7.5	40	72.5	113.5	40	28	Φ4.3	24	100	24	G3/8	4	27	91.5
H534–15C	63	G1/2	10	57	104	152	50	36	Φ5.5	28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

M

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

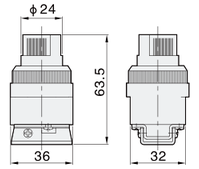
Model	MV32–06	MJ32–08	M32–08	M52–08
Working medium	Clean air(After μm filteration)			
Acting type	External control			
Lubrication	Not required			
Working pressure (MPa)	0~0.8			
Guaranteed pressure (MPa)	1.2			
Working temperature (°C)	–5~60			
Max. acting frequency	5 cycles/s			
Port size	1/8 , 1/4			

◎ Product Features

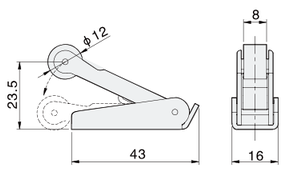
* Black color is standard color, different colors are optional
* Controlled by mechanical force
* Various buttons are available

◎ Main Dimension for Button

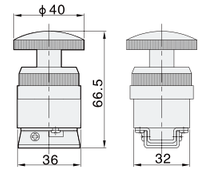
S1



S2

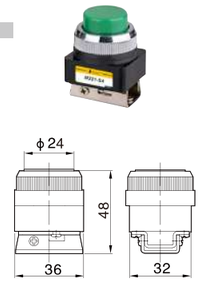


S3

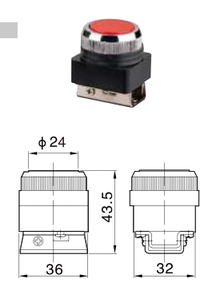


◎ Main Dimension for Button

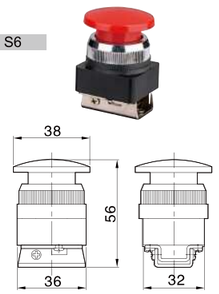
S4



S5



S6

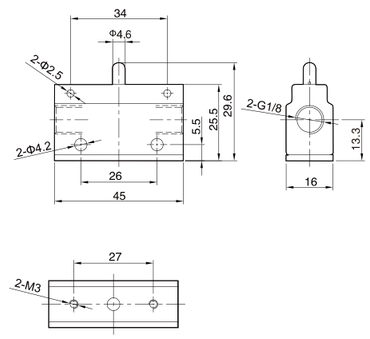


◎ Main Dimension

MV32 Series

MV32–06S1 MV32–06S2 MV32–06S3

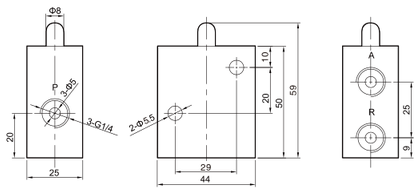
MV32–06S4 MV32–06S5 MV32–06S6



MJ32 Series

MJ32–08S1 MJ32–08S2 MJ32–08S3

MJ32–08S4 MJ32–08S5 MJ32–08S6

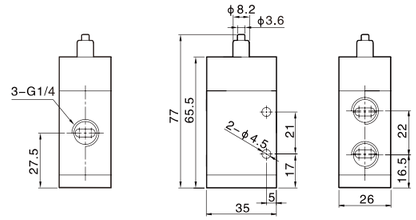


◎ Main Dimension

M32 Series

M32–08S1 M32–08S2 M32–08S3 M32–08S4

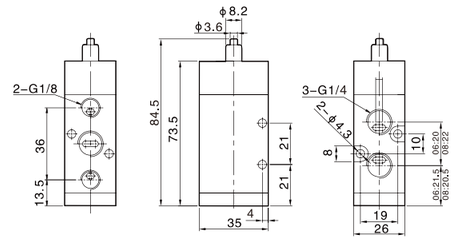
M32–08S5 M32–08S6 M32–08



M52 Series

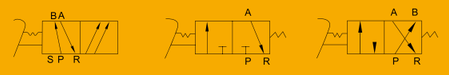
M52–08S1 M52–08S2 M52–08S3 M52–08S4

M52–08S5 M52–08S6 M52–08



F

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



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

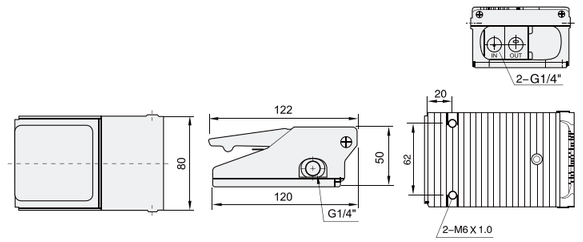
Order Example:
F series foot valve, 5/2 way, 2 series valve body, without cover, 1/4" port size, with lock, G thread, ERP code is: F522–08L

Specifications

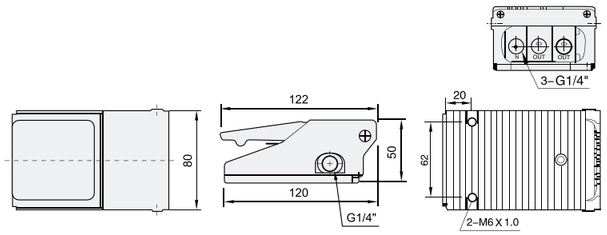
Model	F322	F422	F522
Working medium	Clean air(After 40 μm filteration)		
Acting type	External control		
Lubrication	Not required		
Working pressure (MPa)	0~0.8		
Max pressure (MPa)	1.2		
Working temperature (℃)	–5~60		
Port size	1/8 " , 1/4 "		

Main Dimension

F322–08

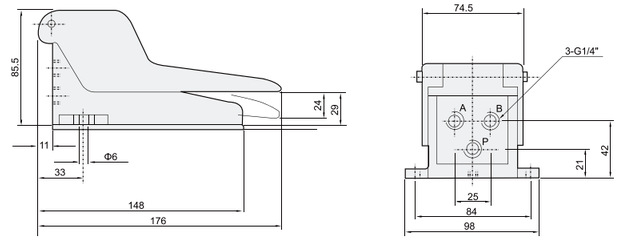


F422–08

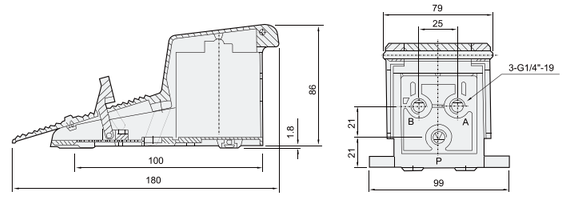


Main Dimension

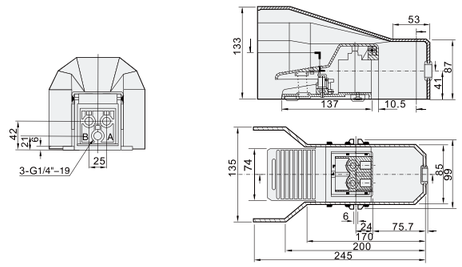
F522–08N



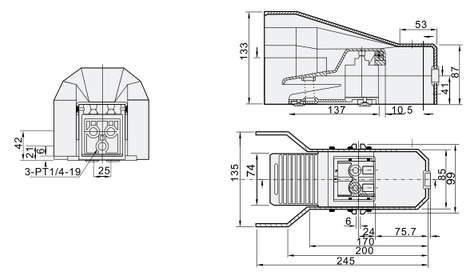
F522–08L



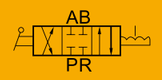
F522C–08L



F522C–08



R
Hand Switch Valve (4/3)



Specifications

Model	M432	U432	R432	MR432
Working medium	Clean air(After 40 μm filteration)			
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 U: U series R: R series MR: MR series	4: 4 ways	3: Three position	2:2 series		M432/U432: 08: 1/4 " R432/MR432: 08: 1/4 " 10: 3/8 " 15: 1/2 "		Blank: G P: PT T: NPT

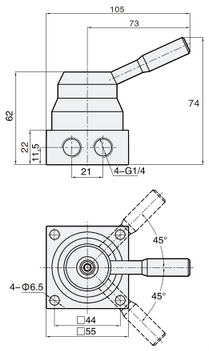
Order Example:
R series hand switch valve, 4/3 way, 2 series valve body, G thread,
ERP code is: R432–08

Product Features

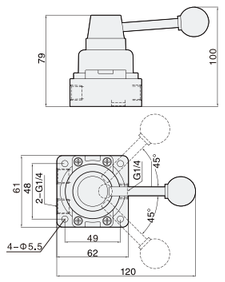
* Different types are available
* MR series valve is the valve with longer lifetime and the better performance
* Sizes are from 1/4" to 1/2"

Main Dimension

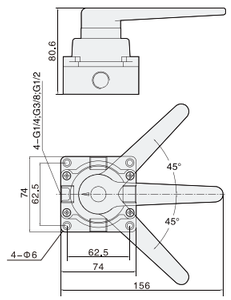
M432–08



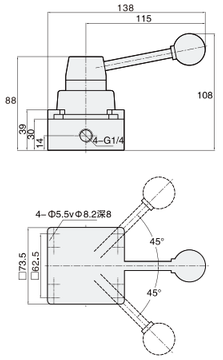
U432–08



R432–08/10/15



MR432–08/10/15



QSC
Flow Control Valve (Precise Type)

Specifications

Model (mm)		QSC–06	QSC–08	QSC–10	QSC–15
Working medium		Clean air(After 40 μ m filteration)			
Working Pressure (psi)		0.05~1.0			
Guaranteed pressure (psi)		1.5			
Working temperature(℉)		–20~70			
Port size ❶		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

❶ G、PT、 NPT thread type is optional.

How to Order?

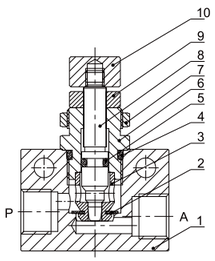
Series No.	Port Size	—	Thread Type
QSC:Flow control valve (precise type)	06:1/8" 08:1/4" 10:3/8" 15:1/2"		Blank: G P : PT T : NPT

Order Example:
QSC series flow control valve, 1/4" port size, G thread,
the ERP code is QSC–08

Product Features

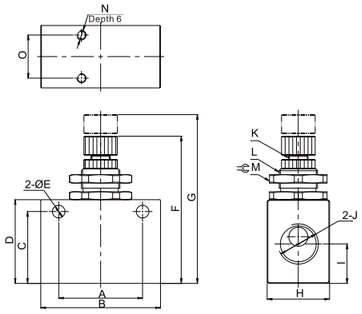
* Compact structure and high precision
* Install in several positions to facilitate ,installation and application
* Apply to exhaust throttle, widely used for cylinder speed adjustment

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

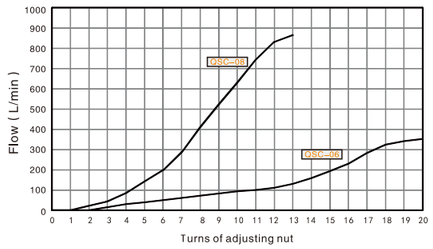


Model	A	B	C	D	E	F	G	H
QSC–06	22	32	20	25	4.3	46	51	15
QSC–08	26	36	23	27	4.3	51	57.5	18
QSC–10	35	50	30	35	5.3	62.5	71.5	26
QSC–15	35	50	30	35	5.3	62.5	71.5	26

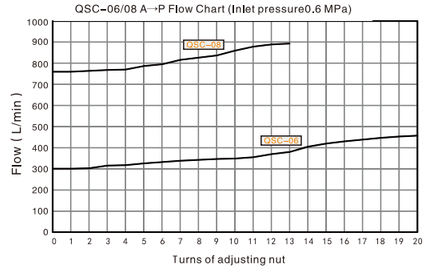
Model	I	J	K	L	M	N	O
QSC–06	8.5	1/8	M5X0.25	M12X0.75	14	––	––
QSC–08	13.3	1/4	M6X0.5	M14X1	17	––	––
QSC–10	16.5	3/8	M8X0.75	M16X1	24	M4X0.7	18
QSC–15	16.5	1/2	M8X0.75	M16X1	24	M4X0.7	18

Flow Chat

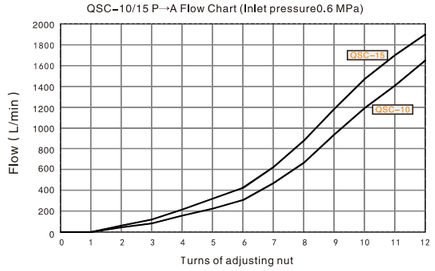
QSC-06/08 P→A Flow Chart (Inlet pressure0.6 MPa)



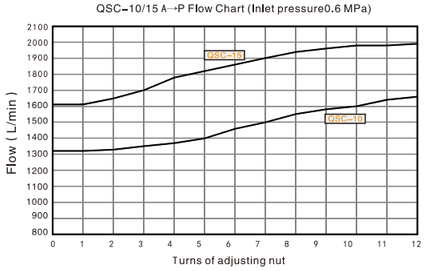
QSC-06/08 A→P Flow Chart (Inlet pressure0.6 MPa)



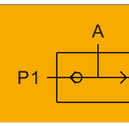
QSC-10/15 P→A Flow Chart (Inlet pressure0.6 MPa)



QSC-10/15 A→P Flow Chart (Inlet pressure0.6 MPa)



QS
Shuttle Valve



Specifications

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

❶ G、PT、 NPT thread type is optional.

How to Order?

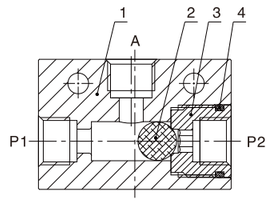
Series No.	–	Port Size	–	Thread Type
QS:Shuttle valve		06:1/8" 08:1/4"		Blank：G P：PT T：NPT

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

Product Features

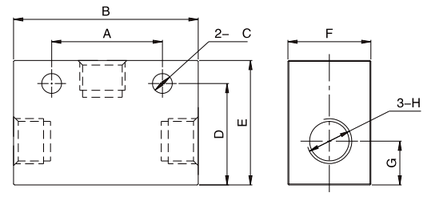
* Valve provides better assistance for completed control pneumatic system.

Internal Structure



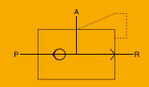
No.	Name
1	Valve body
2	Rubber ball
3	End cover
4	O-ring

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"

KKP
Quick Exhaust Valve



Specifications

Model	KKP–06	KKP–08	KKP–10	KKP–15
Working medium	Clean air(After 40 μm filteration)			
Working pressure(MPa)	0.15~0.8			
Guaranteed. pressure resistance (MPa)	1.2			
Working temperature (℃)	–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

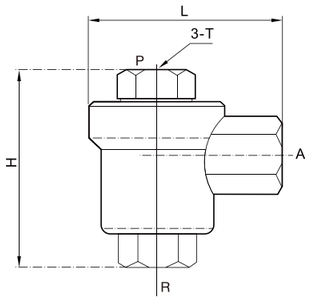
Order Example:

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

Product Features

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

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 μm filteration)					
Lubrication	Not required					
Working pressure (MPa)	0.05~0.8					
Guaranteed pressure (MPa)	1.2					
Working temperature (℃)	–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 " 20：3/4 " 08：1/4 " 25：1 " 10：3/8 " 32：11/4 " 15：1/2 " 40：1–1/2 " 50：2 "		Blank: G P: PT T: NPT

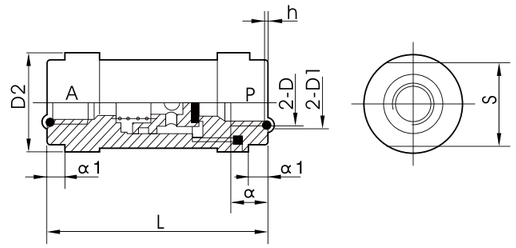
Order Example:

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

Product Features

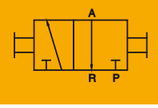
* Normally working with main valve together, not be used separately
* Provide assistance to control the system better

Main Dimension



Model	Port size	D	D1	D2	S	L	α	α 1	H
EA–6	6	G1/8	ϕ13	ϕ25	24	63	10	6	$1.4^{0}_{-0.1}$
EA–8	8	G1/4	ϕ16	ϕ25	24	63	12	6	$1.4^{0}_{-0.1}$
EA–10	10	G3/8	ϕ20	ϕ38	36	81	14	8	$1.8^{0}_{-0.1}$
EA–15	15	G1/2	ϕ26	ϕ38	36	81	14	8	$1.8^{0}_{-0.1}$
EA–20	20	G3/4	ϕ32	ϕ49	46	109	21	10	$1.8^{0}_{-0.1}$
EA–25	25	G1	ϕ40	ϕ49	46	109	23	10	$2.7^{0}_{-0.12}$
EA–32	32	G1–1/4	ϕ48	ϕ86	75	160	25	18	$2.7^{0}_{-0.12}$
EA–40	40	G1–1/2	ϕ54	ϕ86	75	160	26	18	$2.7^{0}_{-0.12}$
EA–50	50	G2	ϕ70	ϕ86	90	160	26	26	$4.5^{0}_{-0.18}$

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 " 15: 1/2 " 08: 1/4 " 20: 3/4 " 10: 3/8 " 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

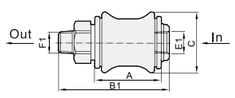
Order Example:
YHS slide valve,1/4" port size, double male thread type, G thread ,ERP code is: YHS-08MM

Specifications

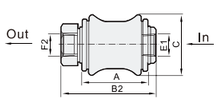
Model	YHS-06	YHS-08	YHS-10	YHS-15	YHS-20	YHS-25
Working medium	Clean air(After 40 μm filteration)					
Acting type	External control					
Lubrication	Not required					
Working pressure (MPa)	0~1.0					
Guaranteed pressure (MPa)	1.5					
Working temperature (℃)	-5~60					
Port size	1/8"	1/4"	3/8"	1/2"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

Main Dimension

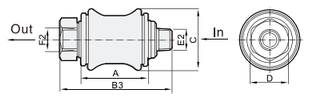
Standard type



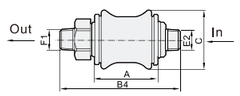
Double female thread type (FF)



One male and the other female thread type (MF)



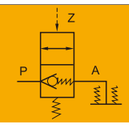
Double male thread type(MM)



Model	A	B1	B2	B3	B4	C
YHS06	20	38	38	38	46	20
YHS08	32	58	58	58	68	26
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



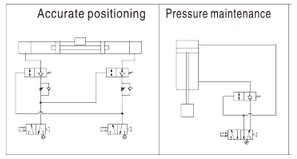
Product Features

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

How to Order?

Series	—	Port Size
QPC		08：1/4 " 10：3/8 " 15：1/2 "

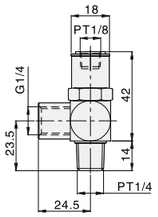
Order Example:
QPC series valve, 1/4" port size, ERP code is: QPC-08



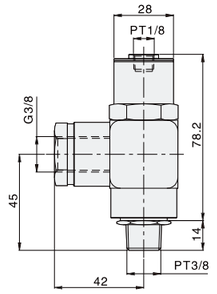
Specifications

Model	QPC-08	QPC-10	QPC-15
Working medium	Clean air(After 40 μm filteration)		
Sectional (mm)	24	79	79
Working pressure(MPa)	0.1~1.0		
Guaranteed pressure(MPa)	1.5		
Working temperture(℃)	-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"		

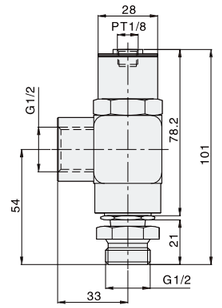
Main Dimension



QPC-08



QPC-10



QPC-15