



Individual wiring manifold
Body piping
Direct mount/DIN rail mount

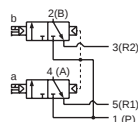
M3GD1/2EJ-(D)/M4GD1/ 2/3 /4EJ-(D) Series

● Applicable cylinder bore size: ø20 to ø140

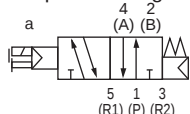


JIS symbol

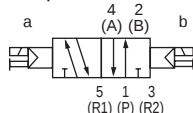
- Two 3-port valves integrated
(A side Valve: NC, B side Valve: NC)



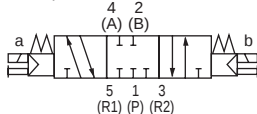
- 5-port valve
2 position single



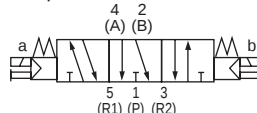
2-position double



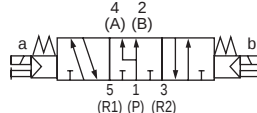
3-position
All ports closed



3-position A/B/R connection



3-position P/A/B connection



Manifold common specifications

Item	Description
Manifold	Integrated base
Mounting method	Direct mount/DIN rail mount
Air supply and exhaust method	Common supply/common exhaust (With internal exhaust check valve)
Pilot exhaust method	Internal pilot
Piping direction	Valve top direction
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7
Min. working pressure MPa	0.2
Proof pressure MPa	1.05
Ambient temperature °C	-5 to 55 (no freezing)
Fluid temperature °C	5 to 55
Manual override	Non-locking/locking common
Lubrication *1	Built-in controller eliminates controller installation space and wiring.
Degree of protection *2	IP67
Vibration resistance m/s ²	50 or less
Shock resistance m/s ²	300 or less
Atmosphere	Cannot be used in corrosive gas environments

Solenoid specifications

Item	Description
Rated voltage V	12 DC
Voltage fluctuation range	+10% -20%
Rated current A	0.05
Power consumption W	0.6
Thermal class	B

- *1 Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.
- *2 Tested according to the test method for IP67 (IEC60529) standards. Note that while the unit is protected from dust and water, it cannot be used immersed in water. Countermeasures such as covering the unit should also be taken if using in environments where it will be constantly exposed to dust or water.

Intrinsic safety explosion-proof specifications

Item	Description
Types of explosion-proof structures	Intrinsic safety explosion-proof structure (ib)
Target gas or above listed ignitability and flame-proof grade	Ex ib IIC T4 Gb
Barrier input voltage	24 VDC
Intrinsic safety circuit allowable voltage Ui	30 VDC
Intrinsic safety circuit allowable current Ii	200mA
Intrinsic safety circuit allowable power Pi	0.68 W
Internal inductance Li	Value that can be ignored
Internal capacitance Ci	Value that can be ignored

Individual specifications

Port size	M3GD1/M4GD1		M3GD2/M4GD2		M4GD3		M4GD4
	Direct mount	DIN rail Mount	Direct mount	DIN rail Mount	Direct mount	DIN rail Mount	Direct mount
Max. station No.	20 stations	16 stations	20 stations	16 stations	20 stations	16 stations	15 stations
2, 4-port (port A/B)	Push-in fitting ø1.8,ø4,ø6 M5		Push-in fitting ø4,ø6,ø8 Rc1/8		Push-in fitting ø6,ø8,ø10 Rc1/4		Push-in fitting ø8,ø10,ø12 Rc3/8
1, 3, 5-port (Port P/R1/R2)	Rc1/8		Rc1/4		Rc3/8		Rc1/2
Manifold base							
Weight calculation formula (n: station No.) g	23n+52	25n+60	47n+64	49n+92	74n+88	76n+117	150n+199

Refer to "Cautions for mounting the DIN rail" (page 79), and select the manifold. For 10 or more manifold station No. (5 stations for 4G3 and 4G4), use ports on both sides for air supply and exhaust. The manifold base weight is the value for screw specifications. M4GD4 is only compatible with direct mounting.

Flow Rate Characteristics

Model No.	Solenoid position		P → A/B		A/B → R1/R2	
			C[dm ³ /(s·bar)]	b	C[dm ³ /(s·bar)]	b
M3GD1 M4GD1	Two 3-port valves integrated		0.86	0.31	1.1 (0.66)	0.19 (0.22)
	2-position		0.99	0.20	1.2 (0.70)	0.20 (0.12)
	3-position	All ports closed	0.94	0.23	1.1 —	0.20 —
		ABR connection	0.93	0.18	1.3 (0.70)	0.23 (0.02)
		PAB connection	1.1	0.28	1.1 —	0.23 —
M3GD 2 M4GD 2	Two 3-port valves integrated		1.7	0.40	2.3 (1.7)	0.29 (0.32)
	2-position		2.3	0.36	2.9 (1.7)	0.24 (0.33)
	3-position	All ports closed	2.1	0.35	2.5 —	0.32 —
		ABR connection	2.2	0.37	2.9 (1.8)	0.32 (0.29)
		PAB connection	2.4	0.34	2.5 —	0.33 —
M4GD3	2-position		3.2	0.37	3.8 (2.5)	0.13 (0.28)
	3-position	All ports closed	2.9	0.35	3.3 —	0.35 —
		ABR connection	3.0	0.34	3.8 (2.6)	0.12 (0.27)
		PAB connection	3.3	0.30	3.3 —	0.32 —
M4GD4	2-position		7.3	0.12	9.0 —	0.17 —
	3-position	All ports closed	6.4	0.15	8.2 —	0.22 —
		ABR connection	6.3	0.33	8.9 —	0.26 —
		PAB connection	8.0	0.08	8.3 —	0.22 —

*1: Effective cross-sectional area S and sonic conductance C use the conversion formula $S \approx 5.0 \times C$.

*2: Values in () are with the exhaust check valve.

3GD*0EJ
4GD*0EJ

3GE*0EJ
4GE*0EJ

M3GD*0EJ
M4GD*0EJ

M3GE*0EJ
M4GE*0EJ

Related products

Manifold
specifications sheet

Safety precautions

M3GD1/ 2*EJ/M4GD1/ 2/3 / 4*EJ Series

Individual wiring manifold; Body piping

How to order

Manifold model No.

M 4GD1 1 0 EJ - C4 - RN H - 6 - 4

3-port manifold model No.

M 3GD1 66 0 EJ - M5 - RN H - 2 - 4

Discrete valve for integrated base

4GD1 1 9 EJ - C6 - RN H - 4

3-port discrete valve for integrated base

3GD1 66 9 EJ - M5 - RN H - 4

A Model No.

B Solenoid position

C Explosion-proof Series

D Port size

E Electrical connections

F Option

G Mount type

H Station No.

I Voltage

A Model No.

3GD1 3GD2 4GD1 4GD2 4GD3 4GD4

Code	Description	3GD1	3GD2	4GD1	4GD2	4GD3	4GD4
B Solenoid position							
1	2 position single			●	●	●	●
2	2-position double			●	●	●	●
3	3-position all ports closed			●	●	●	●
4	3-position ABR connection			●	●	●	●
5	3-position PAB connection			●	●	●	●
66	3-port valve Two valves integrated ^{*1/2} A valve side: Normally Closed B valve side: Normally Closed	●	●				
8	Mix manifold (when there are multiple solenoid positions)	●	●	●	●	●	●

C Explosion-proof Series							
EJ	Japan Explosion-Proof Inspected Product	●	●	●	●	●	●

D Port size [2(B), 4(A) port]							
Port	4(A)/2(B) port	Port P/R1/R2 (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8 (5)=Rc1/2					
C18	ø1.8 push-in fitting	(2)	(2)				
C4	ø4 push-in fitting	(2)	(3)	(2)	(3)		
C6	ø6 push-in fitting	(2)	(3)	(2)	(3)	(4)	
C8	ø8 push-in fitting		(3)		(3)	(4)	(5)
C10	ø10 push-in fitting					(4)	(5)
C12	ø12 push-in fitting						(5)
CX	Push-in fitting mix ^{*3}	(2)	(3)	(2)	(3)	(4)	(5)
M5	M5	(2)		(2)			
06	Rc1/8		(3)		(3)		
08	Rc1/4					(4)	
10	Rc3/8						(5)
00	Valve for base mounting	●	●	●	●	●	●

E Electrical connections							
RN	M8 connector without cable	●	●	●	●	●	●
R 1	M8 connector Straight cable ^{*4}	●	●	●	●	●	●
R 2	M8 connector L-cable ^{*4}	●	●	●	●	●	●

F Option							
Blank	Manual override of non-locking/locking common (standard)	●	●	●	●	●	●
H	With exhaust check valve ^{*5, *7}	●	●	●	●	●	●
A	Ozone/coolant proof	●	●	●	●	●	●
F	Port A/B filter ^{*6}	●	●	●	●	●	●
Z1	Air supply spacer ^{*7, *8}	●	●	●	●	●	●
Z2	In-stop valve spacer ^{*7, *8}	●	●	●	●	●	●
Z3	Exhaust spacer ^{*7, *8}	●	●	●	●	●	●

G Mount type							
Blank	Direct mount	●	●	●	●	●	●
D	DIN rail mount ^{*9}	●	●	●	●	●	●

H Station No.							
2	2 stations						2
to	to	●	●	●	●	●	to
20	20 stations (Refer to page 41 for the max. station number)						15

I Voltage							
4	12 VDC	●	●	●	●	●	●

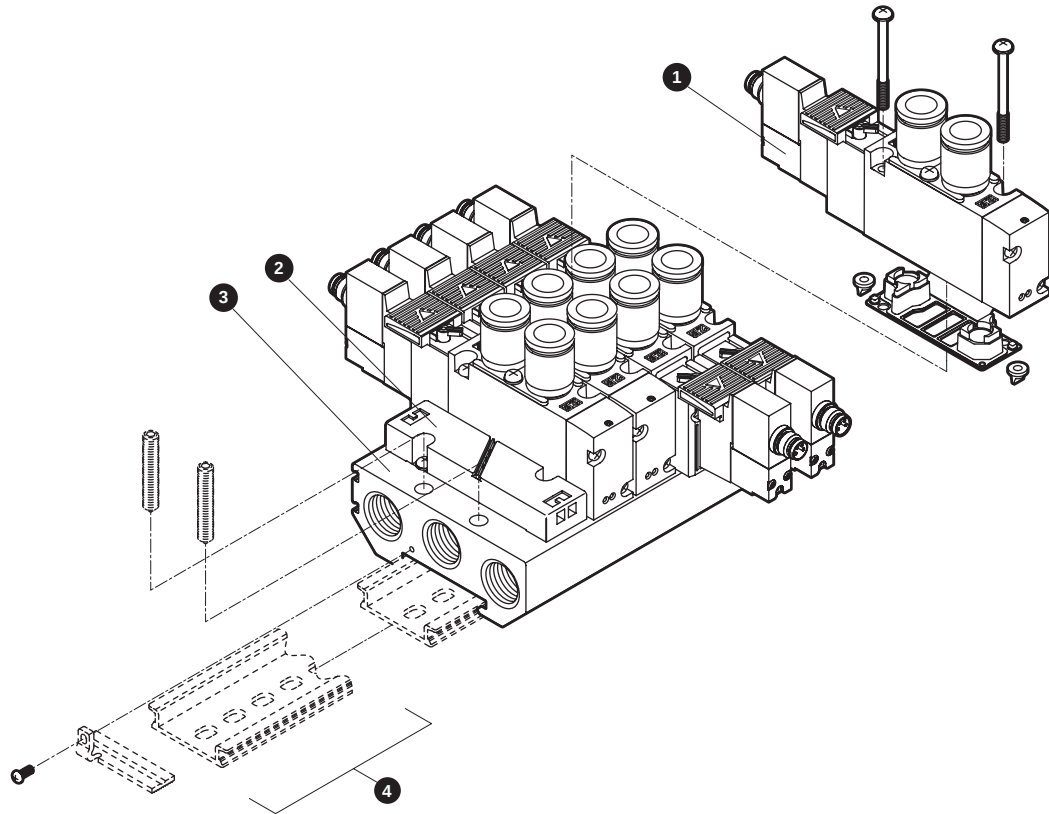
⚠ Precautions for model No. selection

- *1 M4GE*80EJ when using a mix of 3, 5-port valves. valves. M3GD* 80EJ when used with a masking plate.
- *2 Dimensions are the same as the respective 2-position double solenoid.
- *3 The push-in fitting cannot be mixed with the single valve's 4(A) or 2(B) port.
- *4 M8 connector length is 300mm. Select other lengths from page 65 as needed.
- *5 3-position all ports closed and PAB connection are not provided with exhaust check specifications (H). Refer to page 77 for details on the exhaust check valve.
- *6 A filter is built into port P as standard.
- *7 For 4G4, selection of exhaust check valves (H), air supply spacers (Z1), in-stop valve spacers (Z2), or exhaust spacers (Z3) is not available.
- *8 Specify the spacer mounting position/quantity in the manifold specifications sheet. Stacking of spacers is not possible. Combination with the masking plate is not supported. Refer to pages 59 to 63 for details.
- *9 4G4 cannot be selected for DIN rail mount (D).
- *10 Explosion-proof barrier sold separately. Select from page 69.

M4GD1/ 2/3 / 4*0EJ Series

Individual wiring manifold; Body piping

Manifold configuration explanation and parts list



Note:For 4G4, there is no DIN rail mount option.

Main configuration parts list

Part No.	Configuration parts name	Model No.	Description	Remarks
1	Discrete valve for integrated base	4GD/ 9EJ- Port size Electric wire Connection Option Voltage Solenoid position Series flow rate size	Discrete valve Gasket Mounting screws 2 (PR check valve 2)	Details on page 43
2	Masking plate	3G1/4G1 4G1R-MP 3G2/4G2 4G2R-MP 4G3 4G3R-MP 4G 4 4GA4-MP	Masking plate Gasket Mounting screws 2	*Two PR check valves are attached with 4G3/4G4.
3	Manifold base assembly	M4GD/R-00 Option Station No. Series flow rate size	Manifold base	Even if "D" mounting is selected, the DIN rail kit must be handled separately.
4	DIN rail kit			Details on page 79

Parts list

Part No.	Part name	Model No.	Part No.	Part name	Model No.
-	M8 connector cable	4GEX-M8CC- Direction Length *Details on page 65	-	Cartridge push-in fitting and related parts	4G1 ø 1.8 straight ø4 straight ø6 straight 4G1R-JOINT-C 18 4G1R-JOINT-C4 4G1R-JOINT-C6
-	Explosion-proof barrier	Details on pages 69 to 71			4G2 ø4 straight ø6 straight ø8 straight 4G2R-JOINT-C4 4G2R-JOINT-C6 4G2R-JOINT-C8
					4G3 ø6 straight ø8 straight ø10 straight 4G3R-JOINT-C6 4G3R-JOINT-C8 4G3R-JOINT-C10
					4G 4 ø8 straight ø10 straight ø12 straight 4G4-JOINT-C8 4G4-JOINT-C10 4G4-JOINT-C12

3GD*0EJ
4GD*0EJ

3GE*0EJ
4GE*0EJ

M3GD*0EJ
M4GD*0EJ

M3GE*0EJ
M4GE*0EJ

Related products

Manifold specifications sheet

Safety precautions

M4GD1*0EJ Series

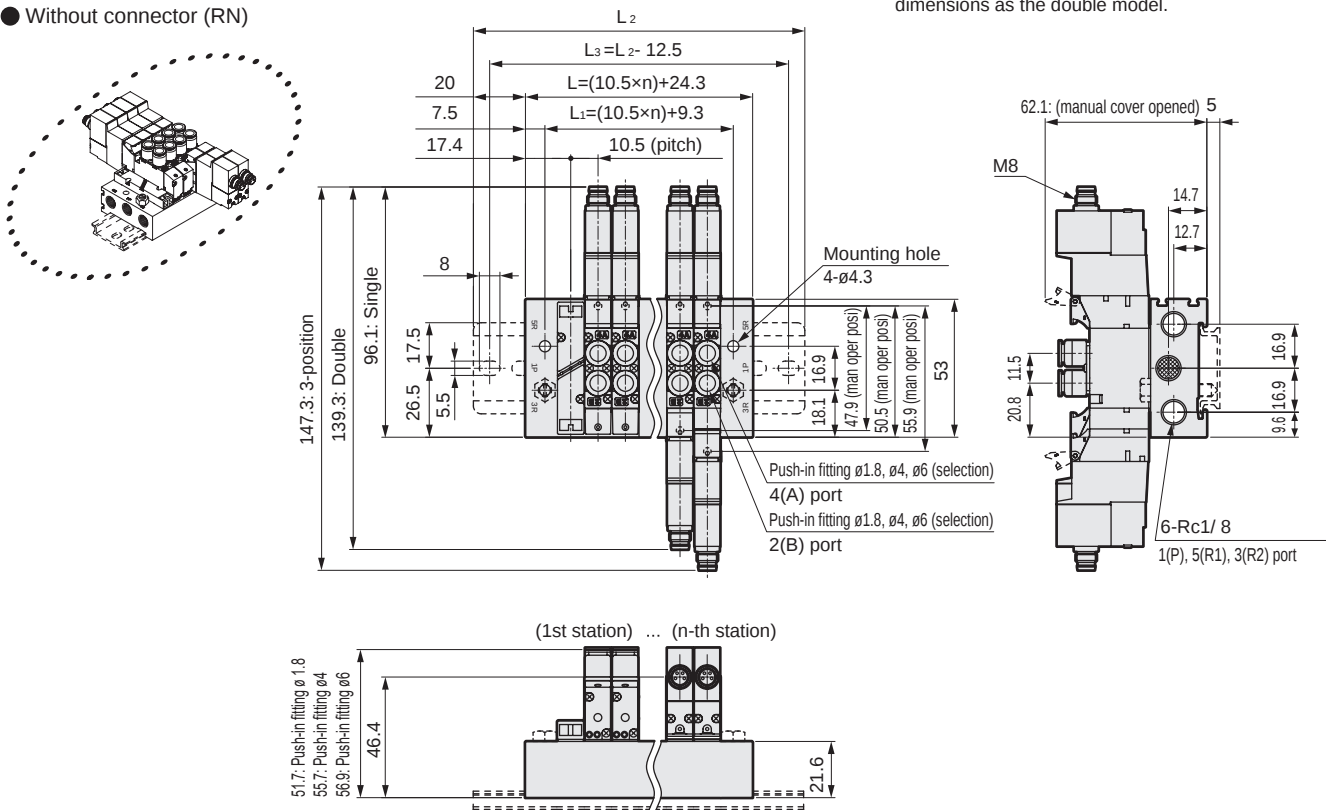
Individual wiring manifold; Body piping

Dimensions

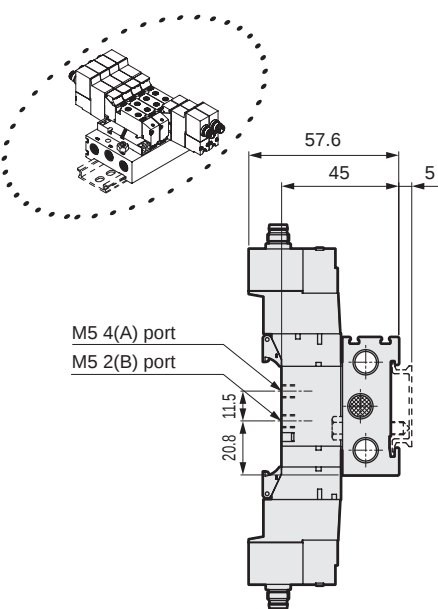
M4GD1*0EJ

● Without connector (RN)

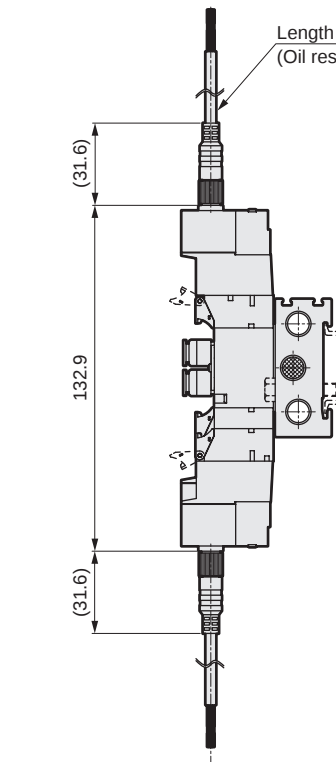
*The two 3-port valve built-in type has the same dimensions as the double model.



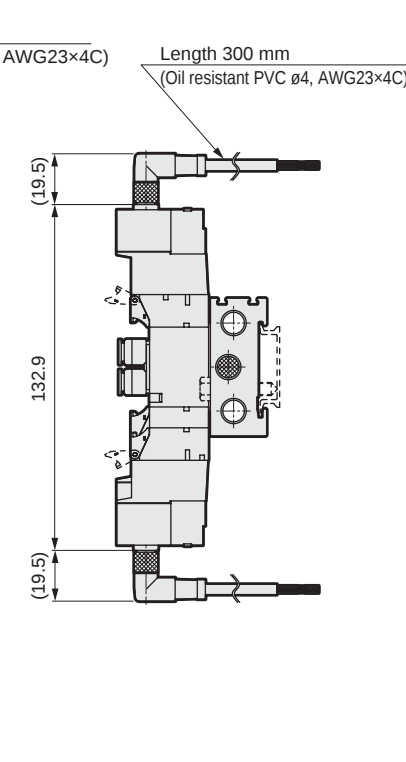
● M5 female thread (M5)



● M8 connector/straight cable (R1)



● M8 connector/L-cable (R2)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	45.3	55.8	66.3	76.8	87.3	97.8	108.3	118.8	129.3	139.8	150.3	160.8	171.3	181.8	192.3	202.8	213.3	223.8	234.3
L ₁	30.3	40.8	51.3	61.8	72.3	82.8	93.3	103.8	114.3	124.8	135.3	145.8	156.3	166.8	177.3	187.8	198.3	208.8	219.3
L ₂	87.5	100.0	112.5	125.0	137.5	150.0	150.0	162.5	175.0	187.5	200.0	212.5	212.5	225.0	237.5				
L ₃	75.0	87.5	100.0	112.5	125.0	137.5	137.5	150.0	162.5	175.0	187.5	200.0	200.0	212.5	225.0				

M4GD2*0EJ Series

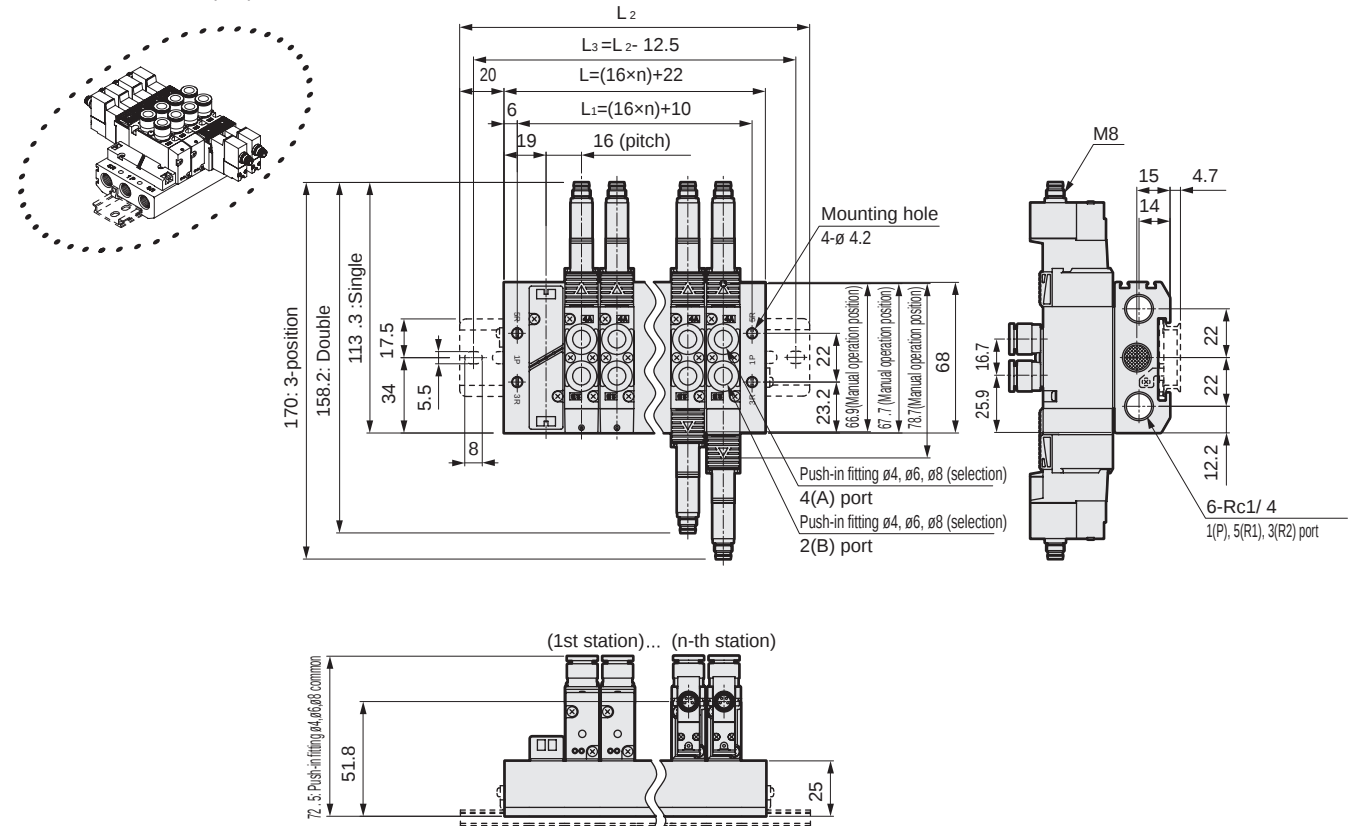
Individual wiring manifold; Body piping

Dimensions

M4GD2*0EJ

● Without connector (RN)

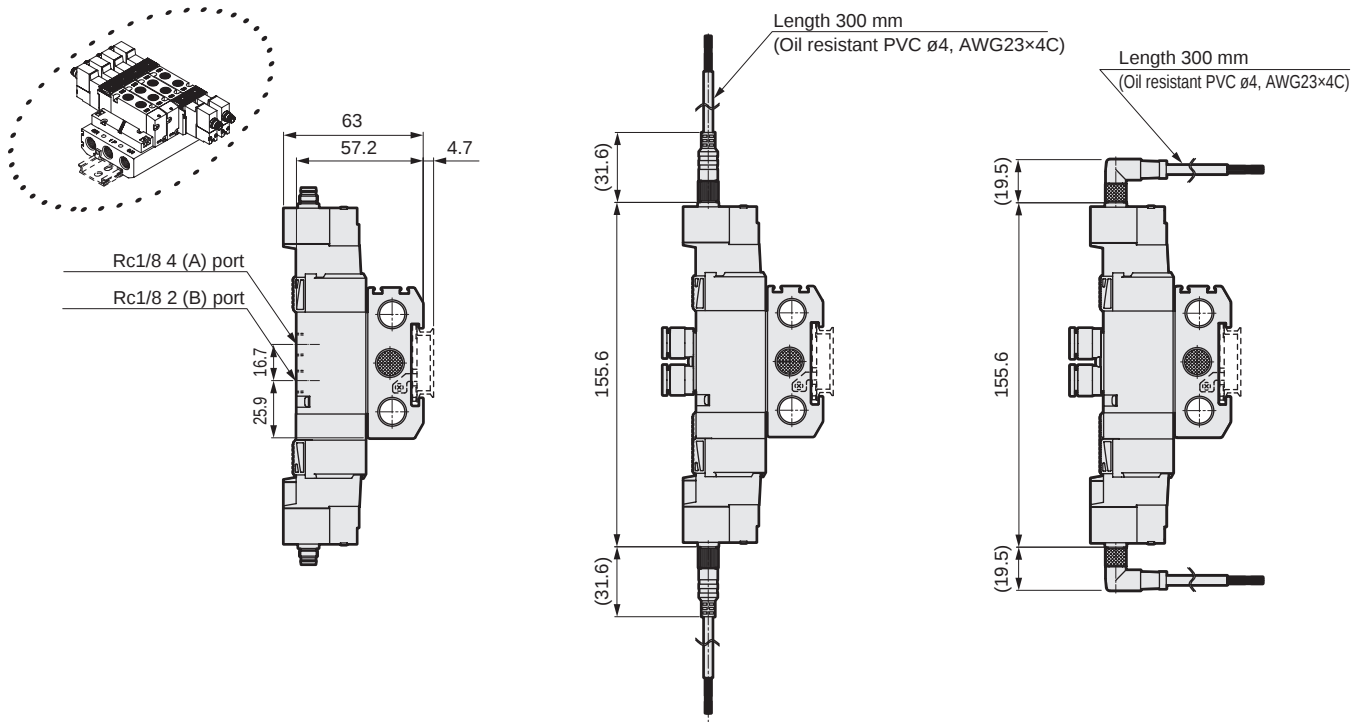
*3 The two 3-port valve built-in type has the same dimensions as the double model.



● Rc1/8 female thread (06)

● M8 connector/straight cable (R1)

● M8 connector/L-cable (R2)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	54.0	70.0	86.0	102.0	118.0	134.0	150.0	166.0	182.0	198.0	214.0	230.0	246.0	262.0	278.0	294.0	310.0	326.0	342.0
L ₁	42.0	58.0	74.0	90.0	106.0	122.0	138.0	154.0	170.0	186.0	202.0	218.0	234.0	250.0	266.0	282.0	298.0	314.0	330.0
L ₂	100.0	112.5	137.5	150.0	162.5	175.0	200.0	212.5	225.0	250.0	262.5	275.0	287.5	312.5	325.0				
L ₃	87.5	100.0	125.0	137.5	150.0	162.5	187.5	200.0	212.5	237.5	250.0	262.5	275.0	300.0	312.5				

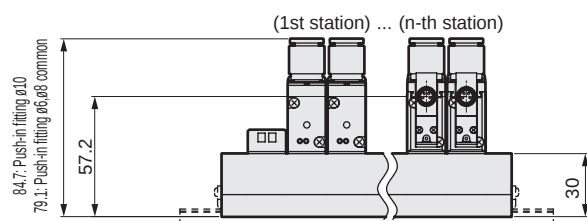
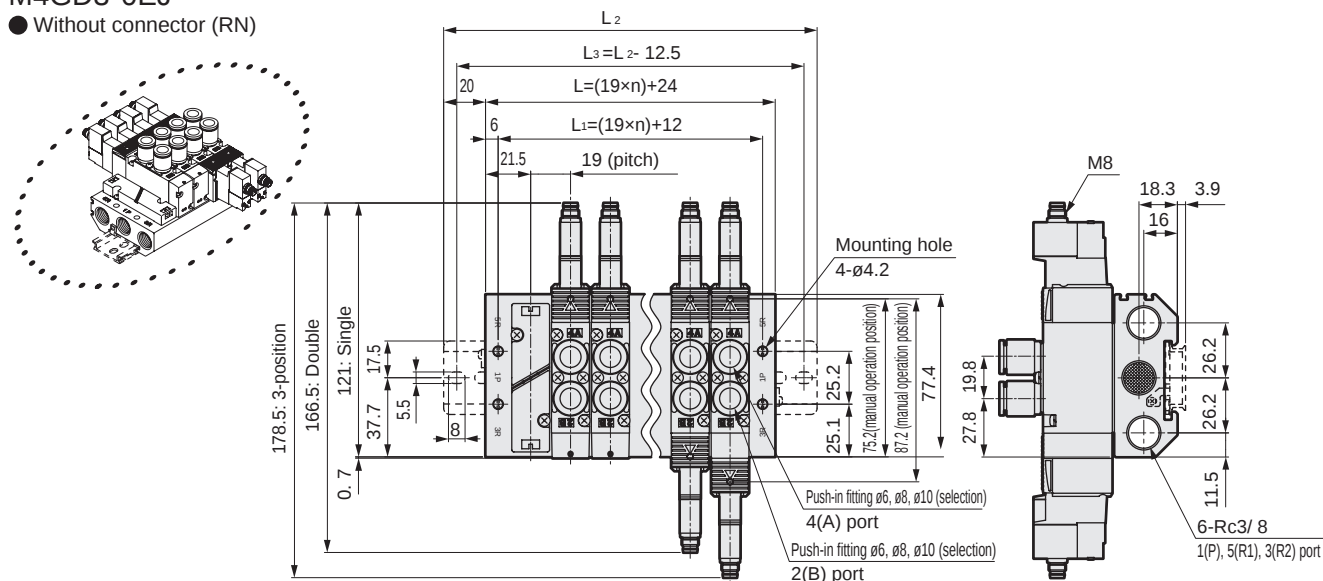
M4GD3*0EJ Series

Individual wiring manifold; Body piping

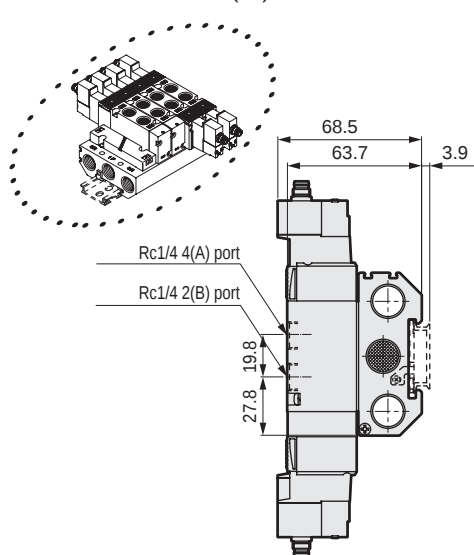
Dimensions

M4GD3*0EJ

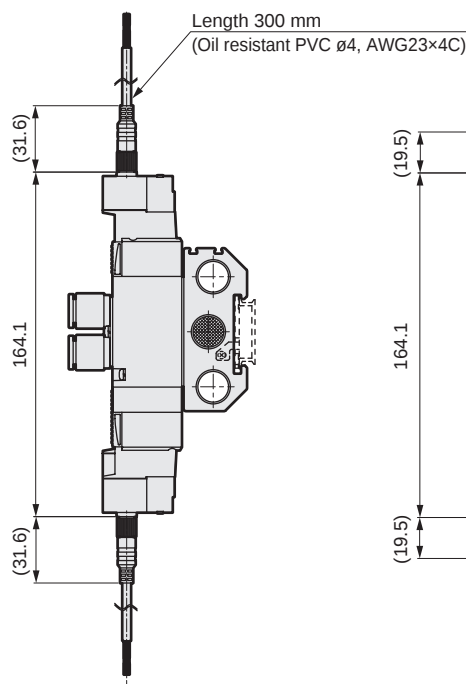
● Without connector (RN)



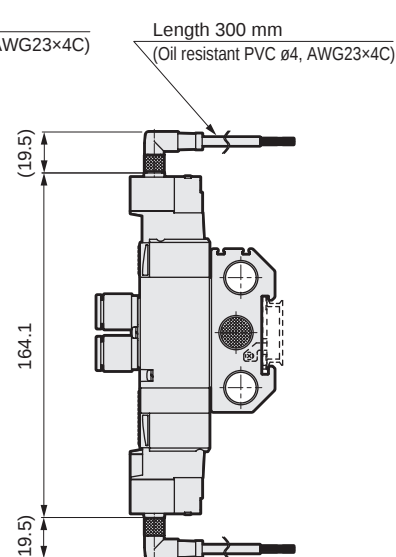
● Rc1/4 female thread (08)



● M8 connector/straight cable (R1)



● M8 connector/L-cable (R2)

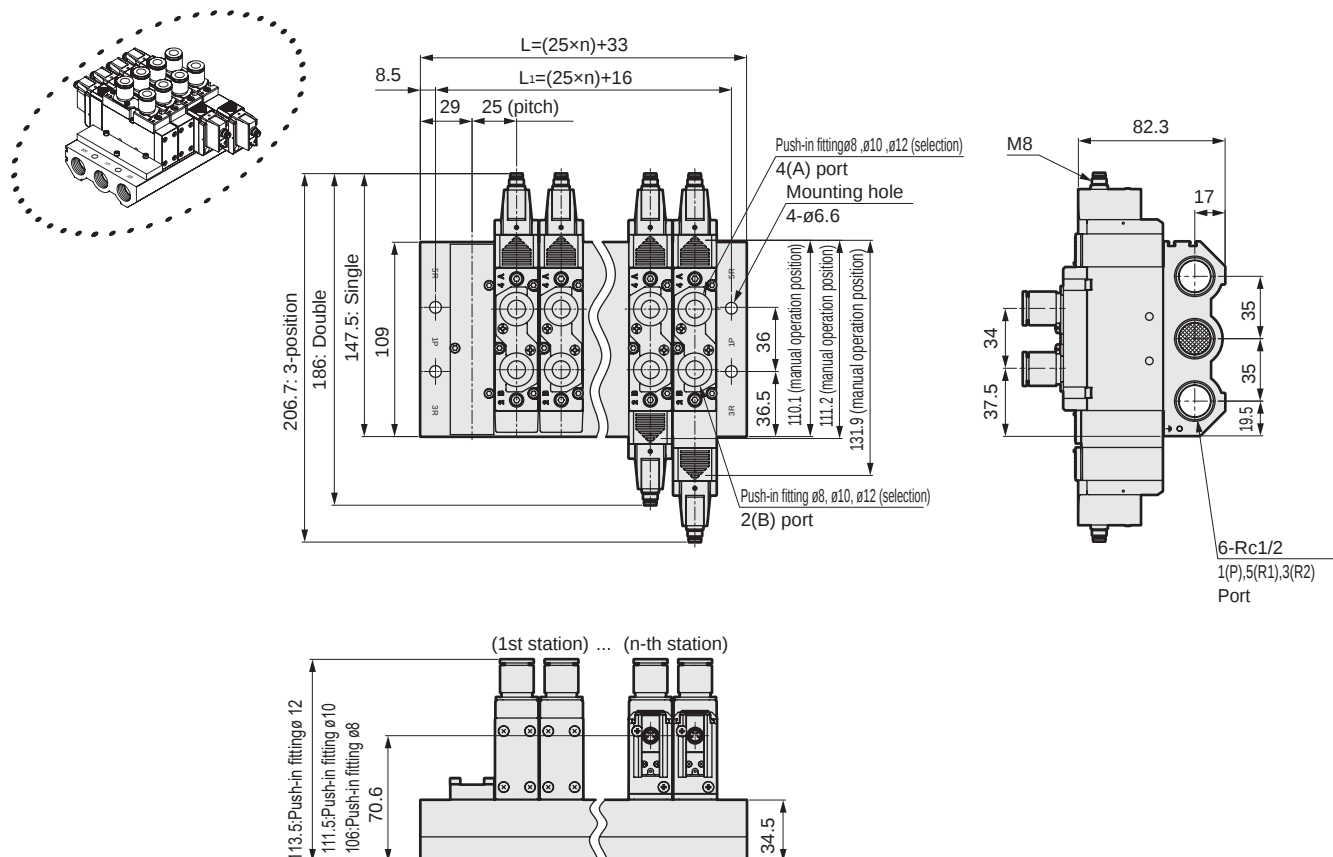


Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	62.0	81.0	100.0	119.0	138.0	157.0	176.0	195.0	214.0	233.0	252.0	271.0	290.0	309.0	328.0	347.0	366.0	385.0	404.0
L ₁	50.0	69.0	88.0	107.0	126.0	145.0	164.0	183.0	202.0	221.0	240.0	259.0	278.0	297.0	316.0	335.0	354.0	373.0	392.0
L ₂	112.5	125.0	150.0	162.5	187.5	200.0	225.0	237.5	262.5	275.0	300.0	312.5	337.5	350.0	375.0				
L ₃	100.0	112.5	137.5	150.0	175.0	187.5	212.5	225.0	250.0	262.5	287.5	300.0	325.0	337.5	362.5				

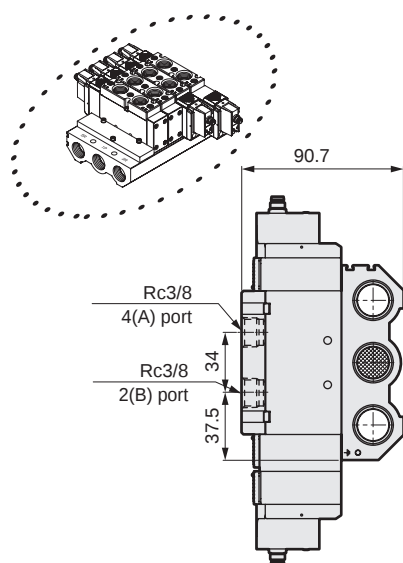
Dimensions

M4GD4*0EJ

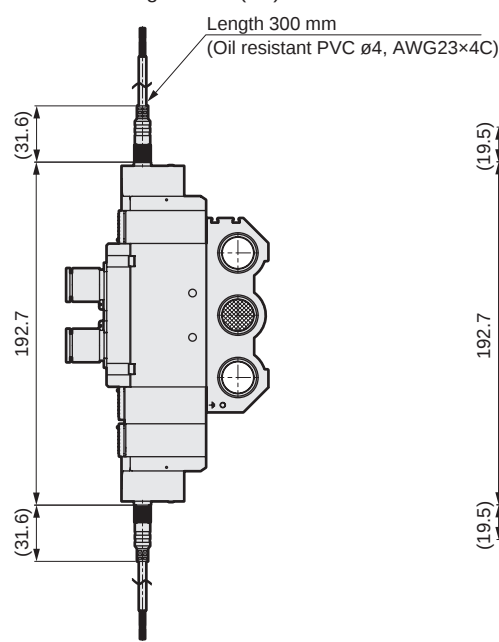
- Without connector (RN)



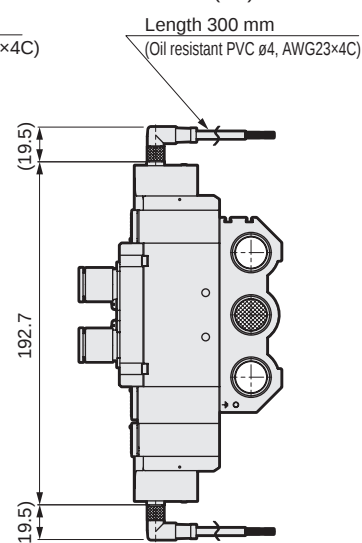
- Rc3/8 female thread (10)



- M8 connector/straight cable (R1)



- M8 connector/L-cable (R2)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L	83	108	133	158	183	208	233	258	283	308	333	358	383	408
L1	66	91	116	141	166	191	216	241	266	291	316	341	366	391



Individual wiring manifold
Base piping
Direct mount/DIN rail mount

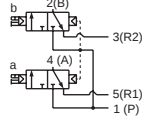
M3GE1, 2EJ/M4GE1, 2, 3, 4EJ-(D) Series

● Applicable cylinder bore size: ø20 to ø140

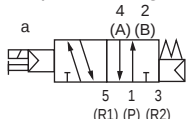


JIS symbol

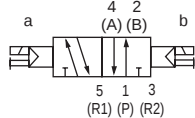
- Two 3-port valves integrated
(A side valve: NC, B side valve: NC)



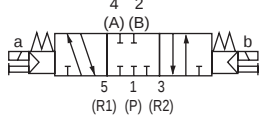
- 5-port valve
2 position single



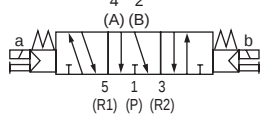
2-position double



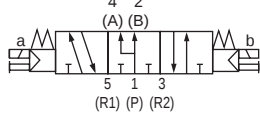
3-position
All ports closed



3-position A/B/R connection



3-position P/A/B connection



Manifold common specifications

Item	Description
Manifold	Integrated base
Mounting method	Direct mount/DIN rail mount
Air supply and exhaust method	Common supply/common exhaust (With internal exhaust check valve)
Pilot exhaust method	Internal pilot Main valve/pilot valve common exhaust (Standard) (Pilot exhaust check valve built-in)
Piping direction	Side direction of base
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7
Min. working pressure MPa	0.2
Proof pressure MPa	1.05
Ambient temperature °C	-5 to 55 (no freezing)
Fluid temperature °C	5 to 55
Manual override	Non-locking/locking common
Lubrication *1	Built-in controller eliminates controller installation space and wiring.
Degree of protection *2	IP67
Vibration resistance m/s ²	50 or less
Shock resistance m/s ²	300 or less
Atmosphere	Cannot be used in corrosive gas environments

*1

*2

Solenoid specifications

Item	Description
Rated voltage V	12 DC
Voltage fluctuation range	+10% -20%
Rated current A	0.05
Power consumption W (*3)	0.6
Thermal class	B

Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.

Tested according to the test method for IP67 (IEC60529) standards. Note that while the unit is protected from dust and water, it cannot be used immersed in water. Countermeasures such as covering the unit should also be taken if using in environments where it will be constantly exposed to dust or water.

Intrinsic safety explosion-proof specifications

Item	Description
Types of explosion-proof structures	Intrinsic safety explosion-proof structure (ib)
Target gas or above listed ignitability and flame-proof grade	Ex ib IIC T4 Gb
Barrier input voltage	24 VDC
Intrinsic safety circuit allowable voltage Ui	30 VDC
Intrinsic safety circuit allowable current Ii	200mA
Intrinsic safety circuit allowable power Pi	0.68 W
Internal inductance Li	Value that can be ignored
Internal capacitance Ci	Value that can be ignored

Individual specifications

Port size	M3GE1/M4GE1		M3GE2/M4GE2		M4GE3		M4GE4	
	Direct mount	DIN rail Mount	Direct mount	DIN rail Mount	Direct mount	DIN rail Mount	Direct mount	
Max. station No.	20 stations	16 stations	20 stations	16 stations	20 stations	16 stations	15 stations	12 stations
2, 4-port (port A/B)	Push-in fitting ø1.8, ø4, ø6 M5		Push-in fitting ø4, ø6, ø8 Rc1/4		Push-in fitting ø6, ø8, ø10 Rc1/4		Push-in fitting ø8, ø10, ø12 Rc1/4, Rc3/8	
1, 3, 5-port (Port P/R1/R2)	Rc1/8		Rc1/8		Rc3/8		Rc3/8	
Manifold base								
Weight calculation formula (n: station No.) g	35n+61	36n+115	71n+106	73n+134	113n+170	115n+119	273n+329	391n+560

Refer to "Cautions for mounting the DIN rail" (page 79), and select the manifold. For 10 or more manifold station No. (5 stations for 4G3 and 4G4), use ports on both sides for air supply and exhaust. The manifold base weight is the value for screw specifications. M4GE4 is only compatible with direct mounting.

M3GE1/2/M4GE1/ 2/3 / 4*EJ Series

Individual wiring manifold; Base piping

Flow Rate Characteristics

Model No.	Solenoid position		P → A/B		A/B → R1/R2	
			C[dm ³ /(s·bar)]	b	C[dm ³ /(s·bar)]	b
M3GE1 M4GE1	Two 3-port valves integrated		0.86	0.35	1.1 (0.67)	0.22 (0.23)
	2-position		1.1	0.22	1.2 (0.70)	0.20 (0.10)
	3-position	All ports closed	0.98	0.22	1.1 —	0.24 —
		ABR connection	0.97	0.35	1.3 (0.68)	0.22 (0.24)
		PAB connection	1.1	0.38	1.1 —	0.21 —
M3GE 2 M4GE 2	Two 3-port valves integrated		1.7	0.44	2.1 (1.6)	0.32 (0.30)
	2-position		2.4	0.34	2.7 (1.7)	0.24 (0.31)
	3-position	All ports closed	2.2	0.34	2.4 —	0.29 —
		ABR connection	2.2	0.34	2.8 (1.8)	0.24 (0.27)
		PAB connection	2.4	0.29	2.4 —	0.29 —
M4GE3	2-position		3.5	0.34	3.8 (2.6)	0.11 (0.27)
	3-position	All ports closed	3.1	0.33	3.3 —	0.22 —
		ABR connection	3.0	0.30	3.8 (2.7)	0.11 (0.22)
		PAB connection	3.6	0.36	3.3 —	0.28 —
M4GE4 1-port size Rc3/8	2-position		6.4	0.42	6.9 —	0.12 —
	3-position	All ports closed	6.0	0.37	6.8 —	0.12 —
		ABR connection	6.0	0.31	7.1 —	0.11 —
		PAB connection	6.0	0.37	6.8 —	0.13 —
M4GE4 1-port size Rc1/2	2-position		8.3	0.23	9.0 —	0.21 —
	3-position	All ports closed	7.4	0.15	8.8 —	0.19 —
		ABR connection	7.5	0.28	9.4 —	0.17 —
		PAB connection	7.7	0.21	8.7 —	0.18 —

*1: Effective cross-sectional area S and sonic conductance C use the conversion formula $S \approx 5.0 \times C$.

*2: Values in () are with the exhaust check valve.

3GD*0EJ
4GD*0EJ

3GE*0EJ
4GE*0EJ

M3GD*0EJ
M4GD*0EJ

M3GE*0EJ
M4GE*0EJ

Related products

Manifold
specifications sheet

Safety precautions

M3GE1/2/M4GE1/ 2/3 / 4*0EJ Series

Individual wiring manifold; Base piping

How to order

Manifold model No.

M 4GE1 1 0 EJ - C4 - RN H - 6 - 4

3-port manifold model No.

M 3GE1 66 0 EJ - M5 - RN H - 2 - 4

Discrete valve for integrated base

4GE1 1 9 EJ - 00 - RN H - 4

3-port discrete valve for integrated base

3GE1 66 9 EJ - 00 - RN H - 4

A Model No.

B Solenoid position

C Explosion-proof Series

D Port size

E Electrical connections

F Option

G Mount type

H Station No.

I Voltage

A Model No.

3GE1 3GE2 4GE1 4GE2 4GE3 4GE4

Code	Description	3GE1	3GE2	4GE1	4GE2	4GE3	4GE4
B Solenoid position							
1	2 position single			●	●	●	●
2	2-position double			●	●	●	●
3	3-position all ports closed			●	●	●	●
4	3-position ABR connection			●	●	●	●
5	3-position PAB connection			●	●	●	●
66	3-port valve Two valves integrated ^{*1/2} A valve side: Normally Closed B valve side: Normally Closed	●	●				
8	Mix manifold (when there are multiple solenoid positions)	●	●	●	●	●	●

C Explosion-proof Series							
EJ	Japan Explosion-Proof Inspected Product	●	●	●	●	●	●

D Port size [2(B), 4(A) port]							
Port	4(A)/2(B) port	Port P/R1/R2 (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8 (5)=Rc1/2					
C18	ø1.8 push-in fitting	(2)	(2)				
C4	ø4 push-in fitting	(2)	(3)	(2)	(3)		
C6	ø6 push-in fitting	(2)	(3)	(2)	(3)	(4)	
C8	ø8 push-in fitting		(3)		(3)	(4)	(4)
C10	ø10 push-in fitting					(4)	(4)
C12	ø12 push-in fitting						(4)
CX	Push-in fitting mix	(2)	(3)	(2)	(3)	(4)	(4)
M5	M5	(2)		(2)			
06	Rc1/8		(3)		(3)		
08	Rc1/4					(4)	(4)
10	Rc3/8						(4)
15	Rc1/2						(5)
00	Valve for base mounting	●	●	●	●	●	●

E Electrical connections							
RN	M8 connector without cable	●	●	●	●	●	●
R1	M8 connector Straight cable ^{*3}	●	●	●	●	●	●
R2	M8 connector L-cable ^{*3}	●	●	●	●	●	●

F Option							
Blank	Manual override of non-locking/locking common (standard)	●	●	●	●	●	●
H	With exhaust check valve ^{*4, *6}	●	●	●	●	●	●
A	Ozone/coolant proof	●	●	●	●	●	●
F	Port A/B filter ^{*5}	●	●	●	●	●	●
J	With indicator	●	●	●	●	●	●
Z1	Air supply spacer ^{*6, *7}	●	●	●	●	●	●
Z2	In-stop valve spacer ^{*6, *7}	●	●	●	●	●	●
Z3	Exhaust spacer ^{*6, *7}	●	●	●	●	●	●

G Mount type							
Blank	Direct mount ^{*8}	●	●	●	●	●	●
D	DIN rail mount ^{*9}	●	●	●	●	●	●

H Station No. ^{*10}							
2	2 stations						2
to	to	●	●	●	●	●	to
20	20 stations (Refer to page 49 for the max. station number)						15

I Voltage							
4	12 VDC	●	●	●	●	●	●

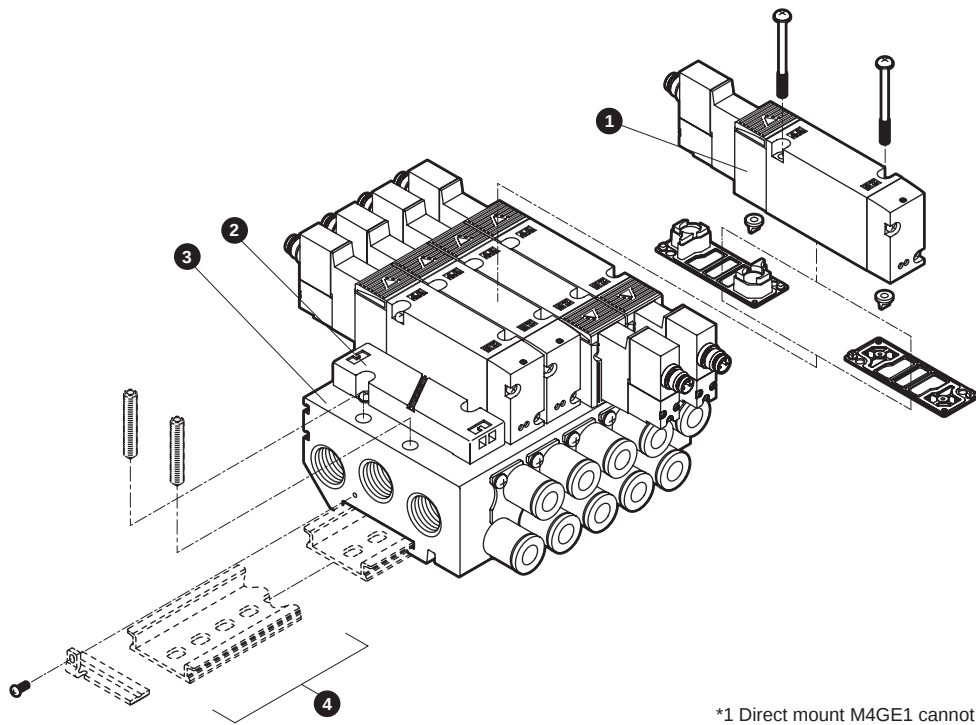
Precautions for model No. selection

- *1 M4GE*80EJ when using a mix of 3, 5-port valves. It will be M3GD * 80EJ when used mixed with a masking plate.
- *2 Dimensions are the same as the respective 2-position double solenoid.
- *3 M8 connector length is 300mm. Select other lengths from page 65 as needed.
- *4 3-position all ports closed and PAB connection are not provided with exhaust check valve specifications (H). Refer to page 77 for details on the exhaust check valve.
- *5 A filter is built into port P as standard.
- *6 For 4G4, selection of exhaust check valves (H), air supply spacers (Z1), in-stop valve spacers (Z2), or exhaust spacers (Z3) is not available.
- *7 Specify the spacer mounting position/quantity in the manifold specifications sheet. Stacking of spacers is not possible. Combination with the masking plate is not supported. Refer to pages 59 to 63 for details.
- *8 The direct mount type of M4GE1EJ cannot be changed after purchase to the DIN rail mount type.
- *9 4G4 cannot be selected for DIN rail mount (D).
- *10 The manifold max. station No. for port size 12 M4GE4 is 12.
- *11 Explosion-proof barrier sold separately. Select from page 69.

M4GE1/ 2/3 / 4*0EJ Series

Individual wiring manifold; Base piping

Manifold configuration explanation and parts list



*1 Direct mount M4GE1 cannot be changed to DIN rail mount.

*2 For 4G4, there is no DIN rail mount option.

Main configuration parts list

Part No.	Configuration parts name	Model No.	Description	Remarks
1	Discrete valve for integrated base	4GE ☐ 9EJ -00 - ☐ Electric wire Connection ☐ Option - ☐ Voltage Solenoid position Series flow rate size	Discrete valve Gasket Mounting screws 2 (2 PR check valves)	Details on page 51
2	Masking plate	3G1/4G1 4G1R-MP 3G2/4G2 4G2R-MP 4G3 4G3R-MP 4G4 4GB4-MP	Masking plate Gasket Mounting screws 2	*Two PR check valves are attached with 4G3/4G4.
3	Manifold base assembly	M4GE ☐ R - ☐ Connection Bore size - ☐ Option ☐ D - ☐ Station No. Series flow rate size Mount type	Manifold base	Even if "D" mounting is selected, the DIN rail kit must be handled separately.
4	DIN rail kit			Details on page 79

Parts list

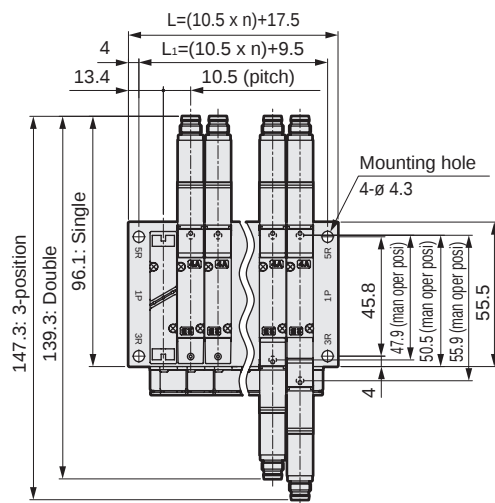
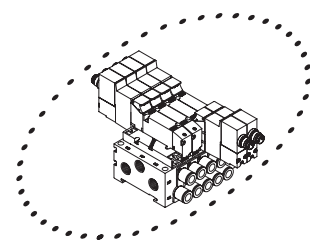
Part No.	Part name	Model No.	Part No.	Part name	Model No.
-	M8 connector cable	4GEX-M8CC- ☐ Direction - ☐ Length *Details on page 65	-	Cartridge push-in fitting and related parts	
-	Explosion-proof barrier	Details on pages 69 to 71			
			4G1	ø 1.8 straight	4G1R-JOINT-C 18
				ø4 straight	4G1R-JOINT-C4
				ø6 straight	4G1R-JOINT-C6
				Plug cartridge	4G1R-JOINT-CPG
			4G2	ø4 straight	4G2R-JOINT-C4
				ø6 straight	4G2R-JOINT-C6
				ø8 straight	4G2R-JOINT-C8
				Plug cartridge	4G2R-JOINT-CPG
			4G3	ø6 straight	4G3R-JOINT-C6
				ø8 straight	4G3R-JOINT-C8
				ø10 straight	4G3R-JOINT-C10
				Plug cartridge	4G3R-JOINT-CPG
			4G4	ø8 straight	4G4-JOINT-C8
				ø10 straight	4G4-JOINT-C10
				ø12 straight	4G4-JOINT-C12

Individual wiring manifold; Base piping

Dimensions

M4GE1*0EJ

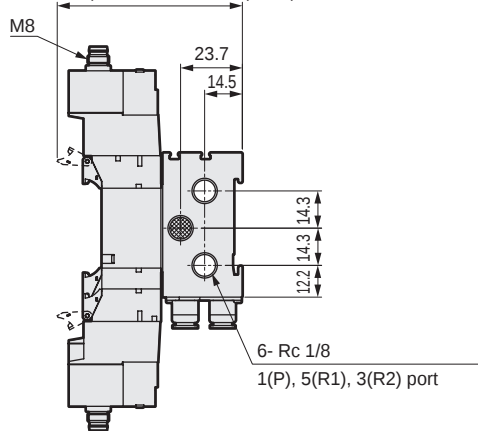
- Direct mount installation
Without connector (RN)



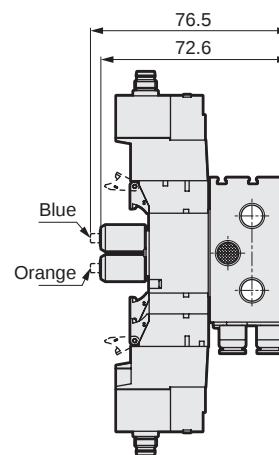
*1: Dedicated for direct mounting. This cannot be changed to DIN rail specifications.

*2: The two 3-port valve built-in type has the same dimensions as the double model.

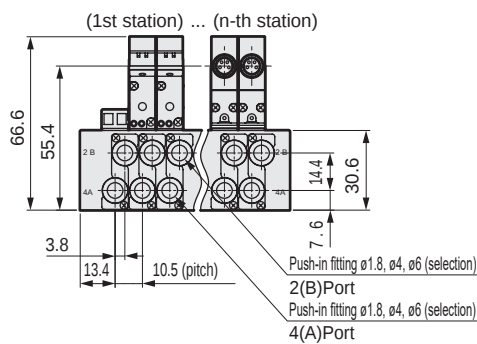
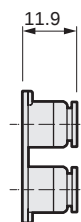
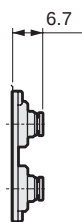
71.1 (when manual cover opened)



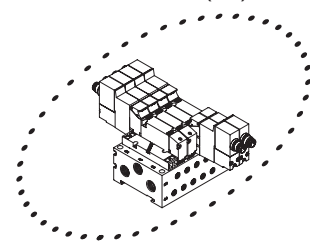
- With indicator (J)



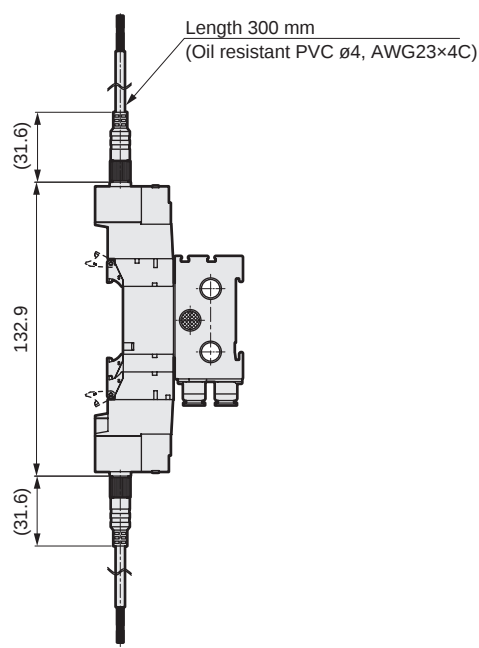
- $\varnothing 1.8$ (C18) ● $\varnothing 4$ (C4) ● $\varnothing 6$ (C6)



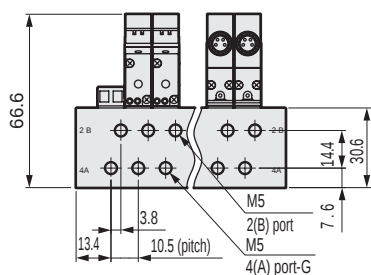
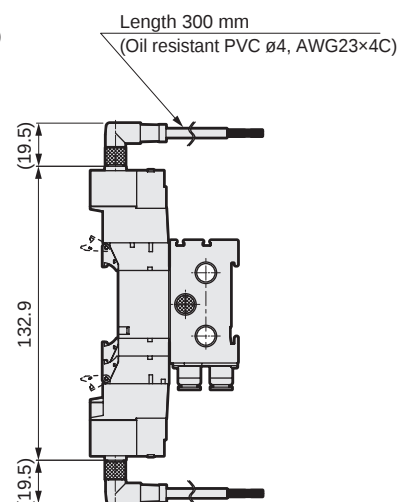
- M5 female thread (M5)



- M8 connector/straight cable (R1)



- M8 connector/L-cable (R2)

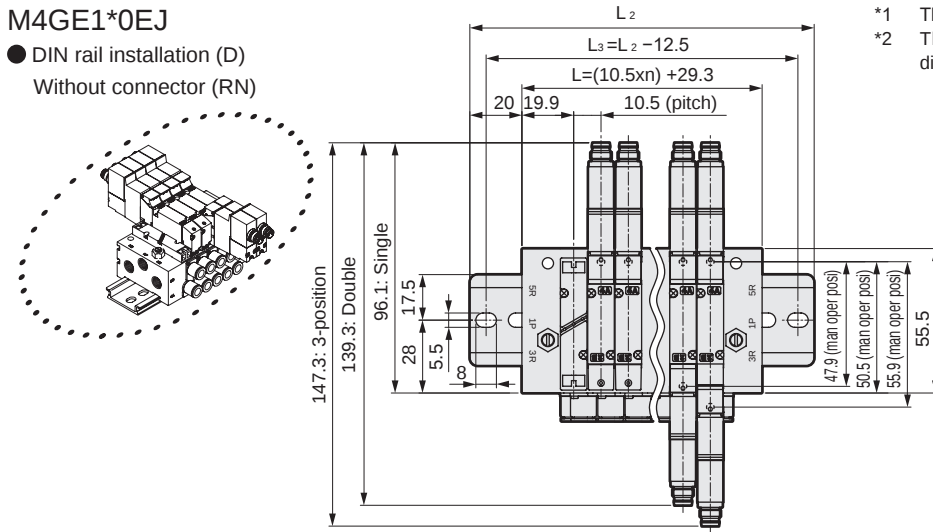


Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	38.5	49.0	59.5	70.0	80.5	91.0	101.5	112.0	122.5	133.0	143.5	154.0	164.5	175.0	185.5	196.0	206.5	217.0	227.5
L ₁	30.5	41.0	51.5	62.0	72.5	83.0	93.5	104.0	114.5	125.0	135.5	146.0	156.5	167.0	177.5	188.0	198.5	209.0	219.5

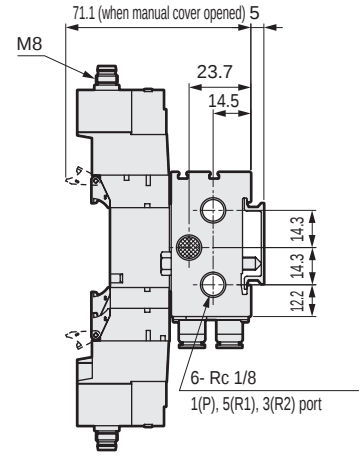
Dimensions

M4GE1*0EJ

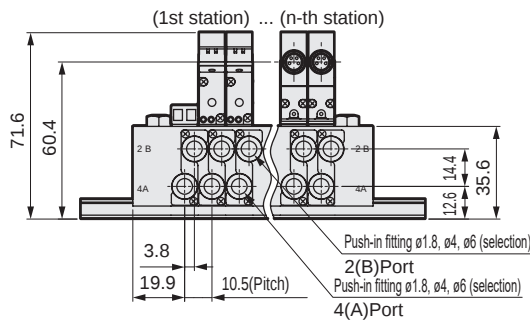
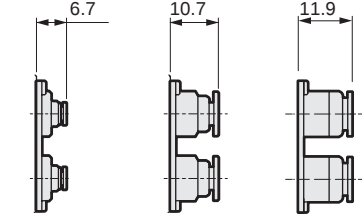
- DIN rail installation (D)
- Without connector (RN)



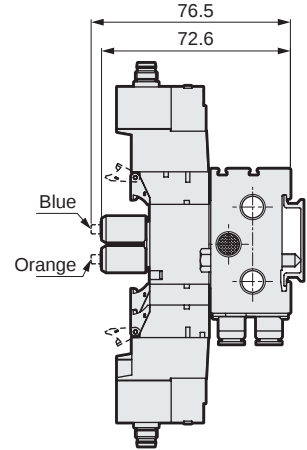
- *1 This can be changed to direct mount specifications.
- *2 The two 3-port valve built-in type has the same dimensions as the double model.



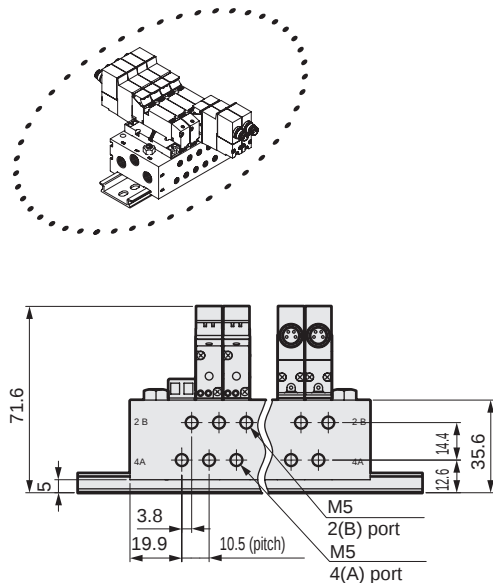
- ø1.8 (C18)
- ø4 (C4)
- ø6 (C6)



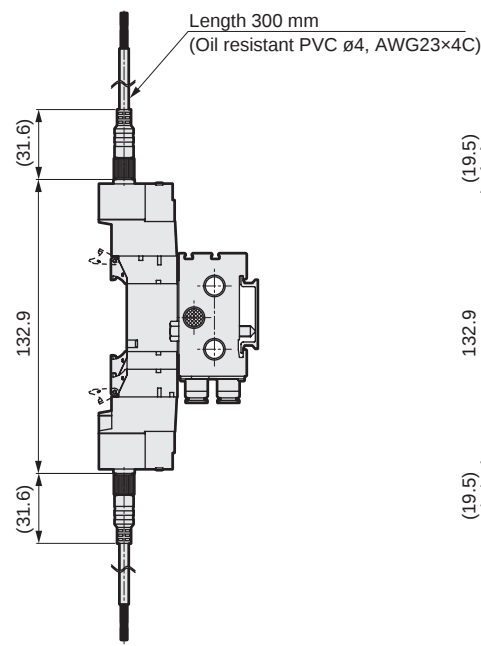
- With indicator (J)



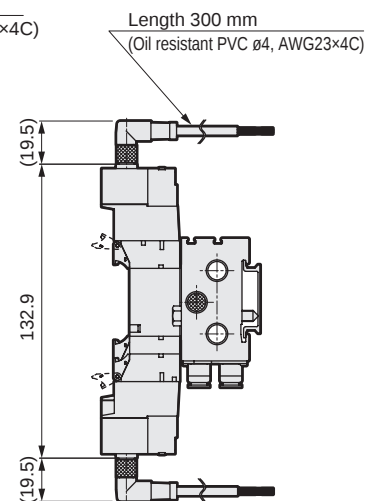
- DIN rail installation (D)
- M5 female thread (M5)



- DIN rail installation (D)
- M8 connector/straight cable (R1)



- M8 connector/L-cable (R2)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	50.3	60.8	71.3	81.8	92.3	102.8	113.3	123.8	134.3	144.8	155.3	165.8	176.3	186.8	197.3
L ₂	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	175.0	187.5	200.0	212.5	225.0	237.5	237.5
L ₃	87.5	100.0	100.0	112.5	125.0	137.5	150.0	162.5	162.5	175.0	187.5	200.0	212.5	225.0	225.0

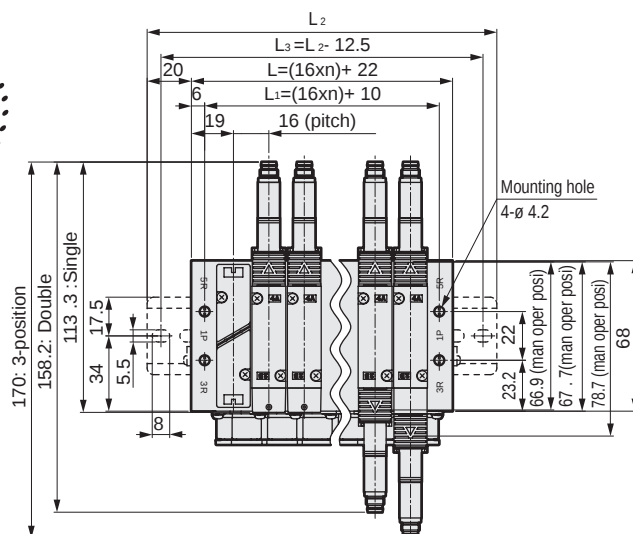
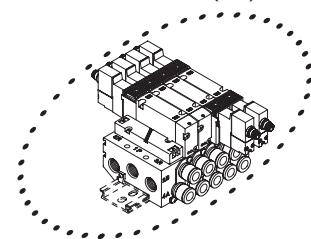
M4GE2*0EJ Series

Individual wiring manifold; Base piping

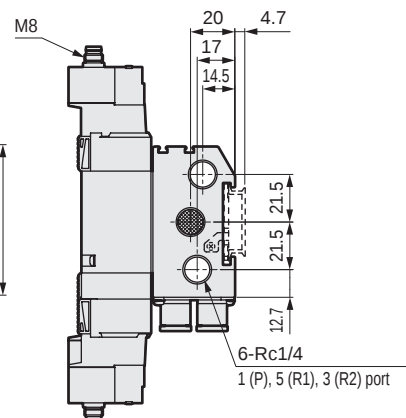
Dimensions

M4GE2*0EJ

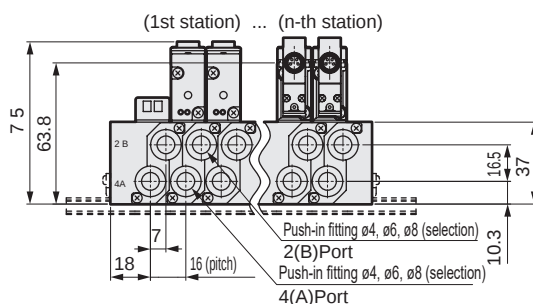
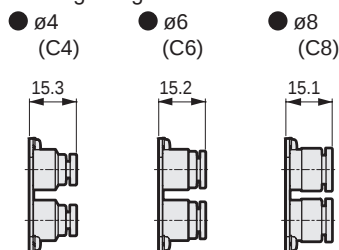
- Without connector (RN)



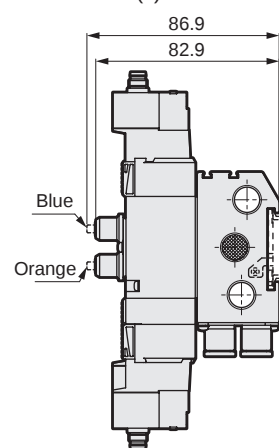
Note The two 3-port valve built-in type has the same dimensions as the double model.



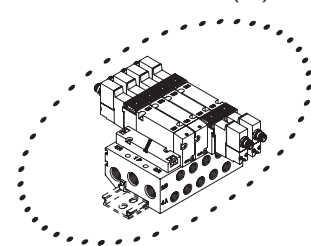
- Fitting straight



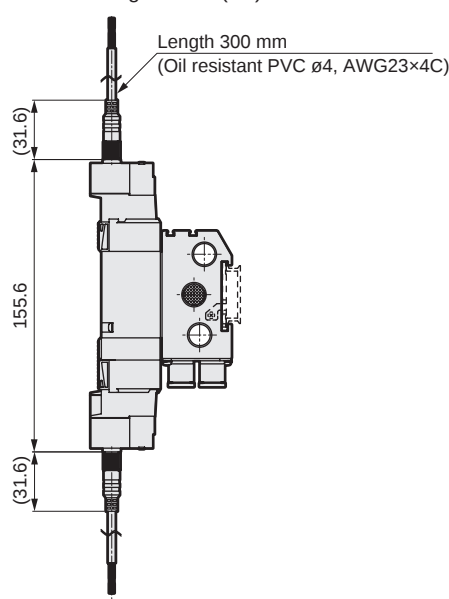
- With indicator (J)



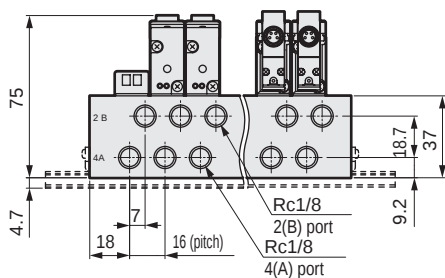
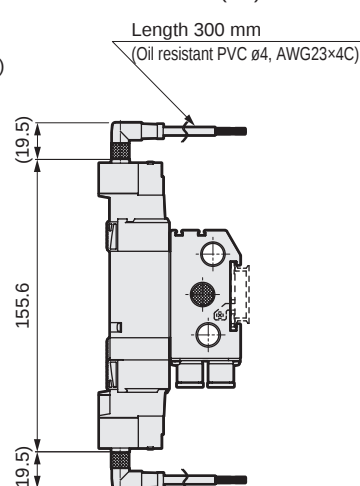
- Rc1/8 female thread (06)



- M8 connector/straight cable (R1)



- M8 connector/L-cable (R2)

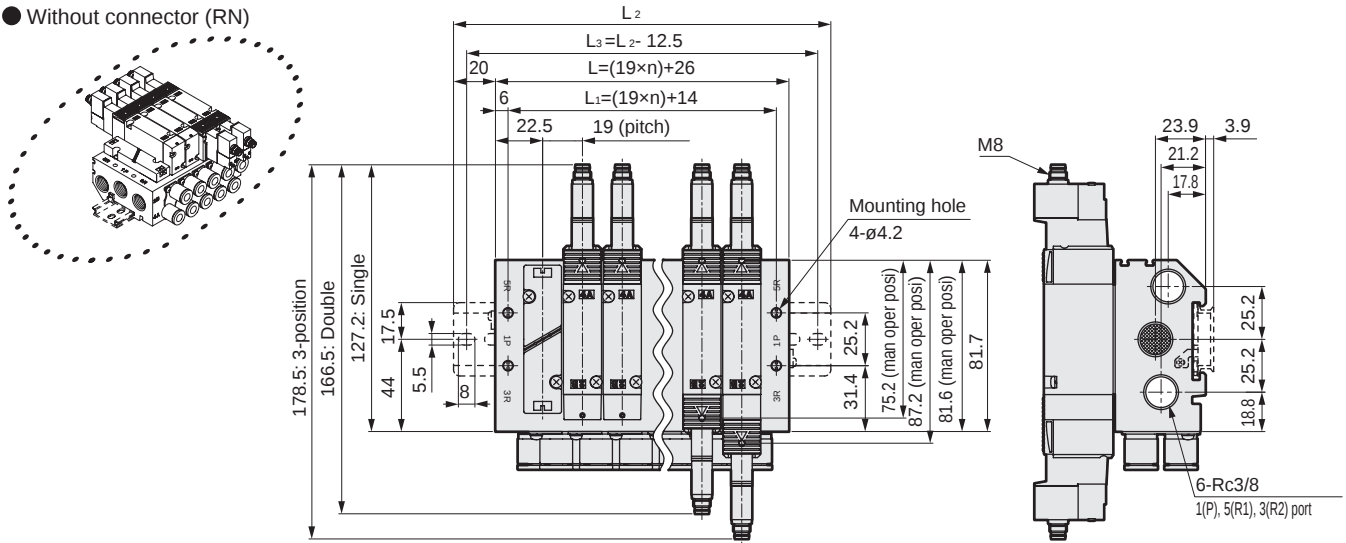


Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	54.0	70.0	86.0	102.0	118.0	134.0	150.0	166.0	182.0	198.0	214.0	230.0	246.0	262.0	278.0	294.0	310.0	326.0	342.0
L ₁	42.0	58.0	74.0	90.0	106.0	122.0	138.0	154.0	170.0	186.0	202.0	218.0	234.0	250.0	266.0	282.0	298.0	314.0	330.0
L ₂	100.0	112.5	137.5	150.0	162.5	175.0	200.0	212.5	225.0	250.0	262.5	275.0	287.5	312.5	325.0				
L ₃	87.5	100.0	125.0	137.5	150.0	162.5	187.5	200.0	212.5	237.5	250.0	262.5	275.0	300.0	312.5				

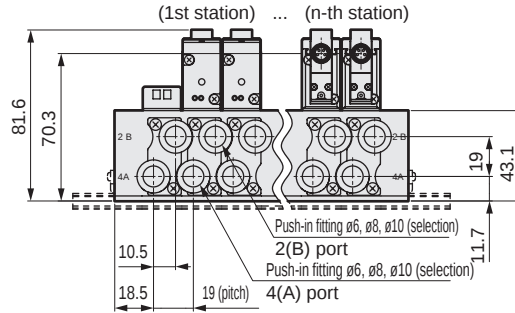
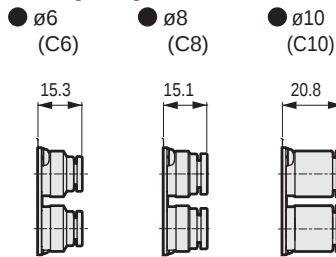
Dimensions

M4GE3*0EJ

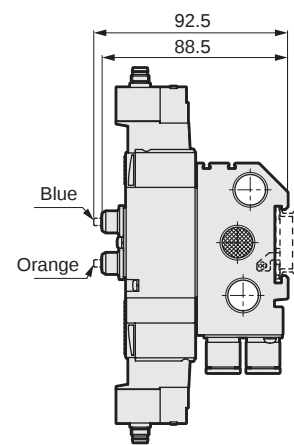
- Without connector (RN)



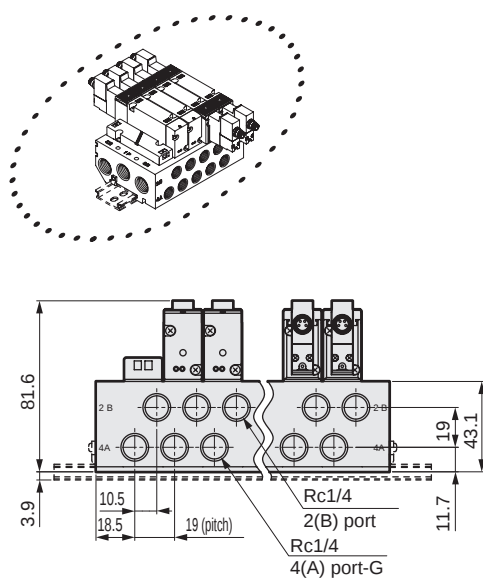
- Fitting straight



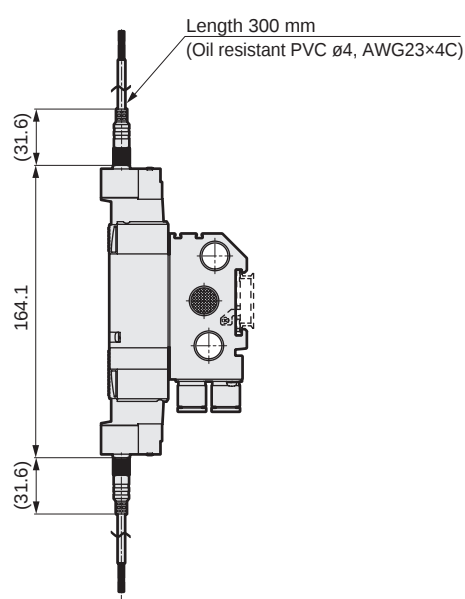
- With indicator (J)



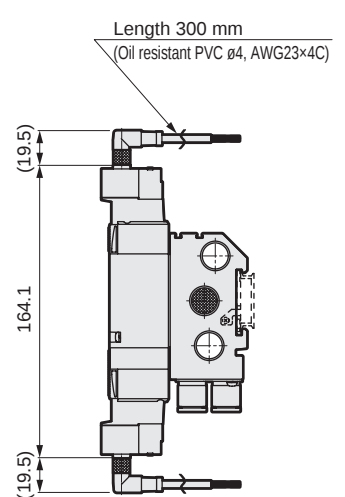
- Rc1/4 female thread (Ø8)



- M8 connector/straight cable (R1)



- M8 connector/L-cable (R2)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	83.0	102.0	121.0	140.0	159.0	178.0	197.0	216.0	235.0	254.0	273.0	292.0	311.0	330.0	349.0	368.0	387.0	406.0
L ₁	52.0	71.0	90.0	109.0	128.0	147.0	166.0	185.0	204.0	223.0	242.0	261.0	280.0	299.0	318.0	337.0	356.0	375.0	394.0
L ₂	112.5	125.0	150.0	162.5	187.5	200.0	225.0	237.5	262.5	275.0	300.0	325.0	337.5	362.5	375.0				
L ₃	100.0	112.5	137.5	150.0	175.0	187.5	212.5	225.0	250.0	262.5	287.5	312.5	325.0	350.0	362.5				

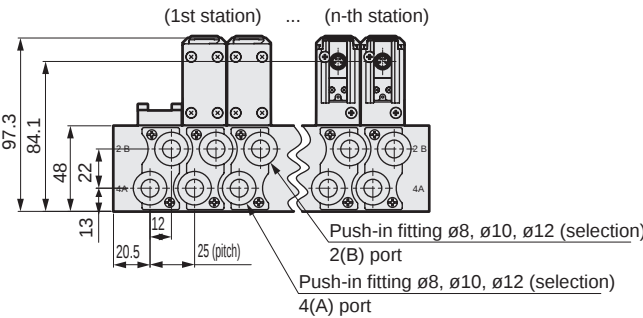
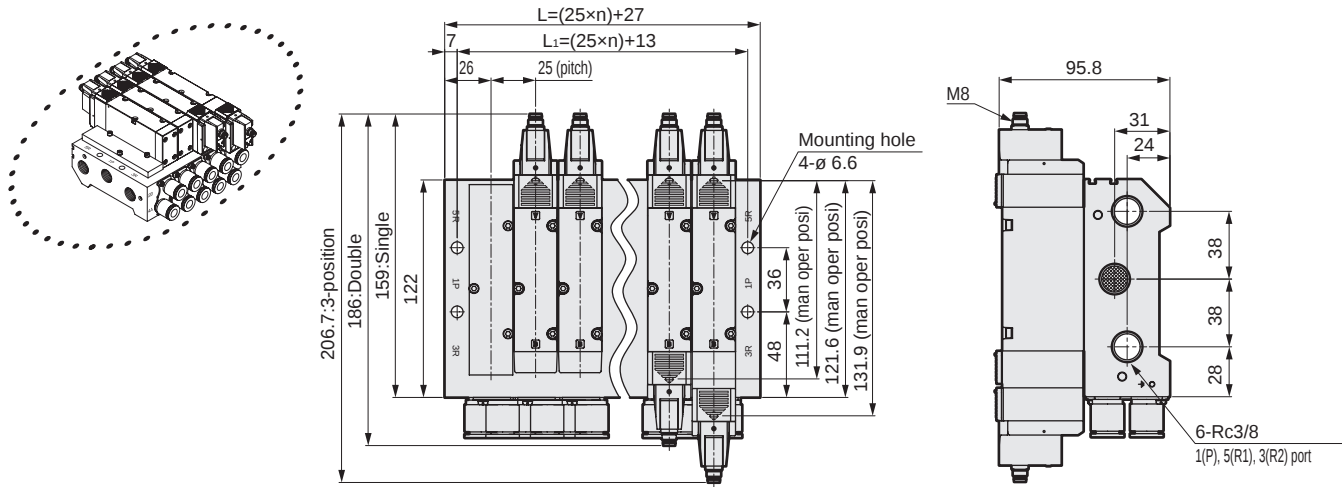
M4GE4*0EJ Series

Individual wiring manifold; Base piping

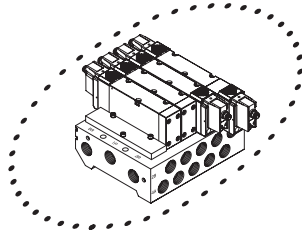
Dimensions

M4GE4*0EJ

● Without connector (RN)

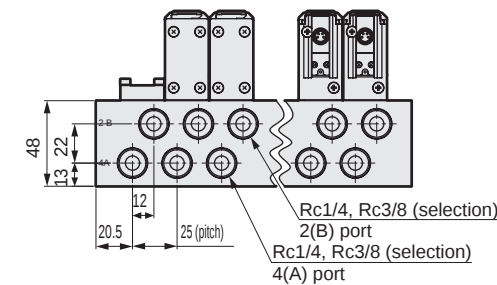
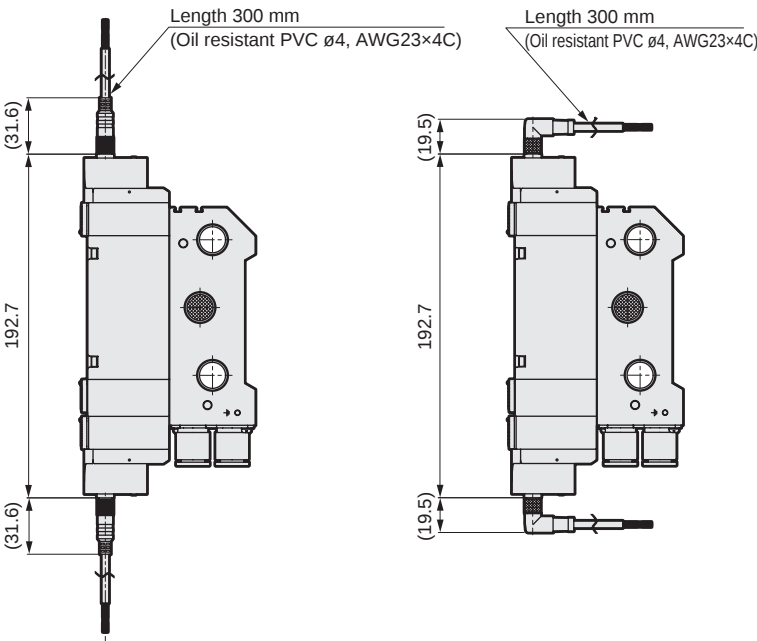


● Rc1/4, Rc3/8 female thread (08, 10)



● M8 connector/straight cable (R1)

● M8 connector/L-cable (R2)

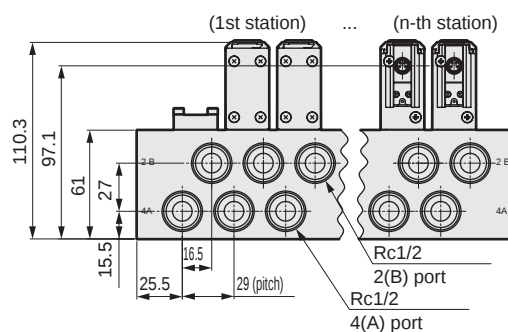
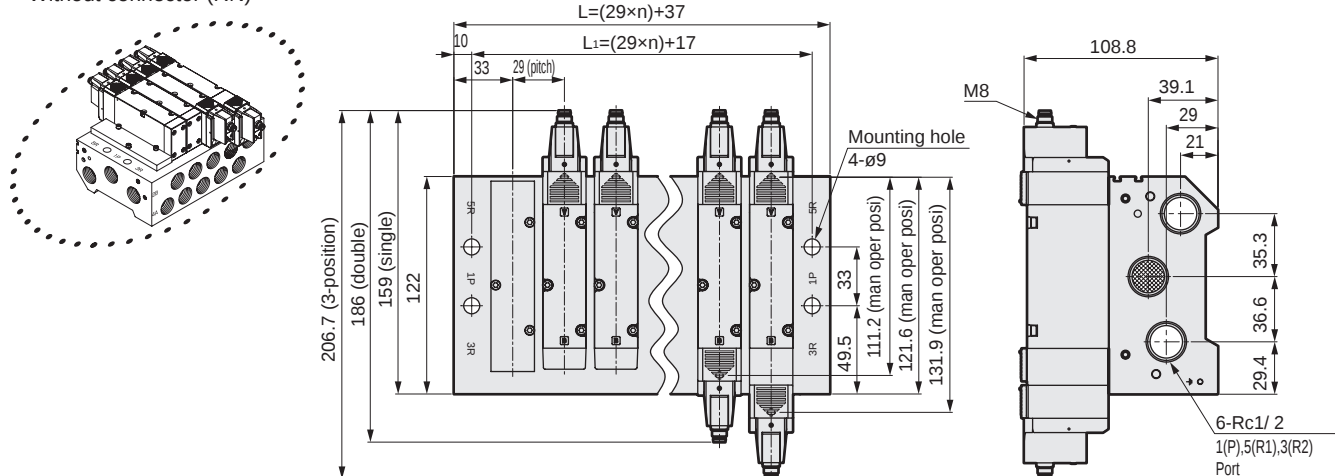


Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L	77	102	127	152	177	202	227	252	277	302	327	352	377	402
L1	63	88	113	138	163	188	213	238	263	288	313	338	363	388

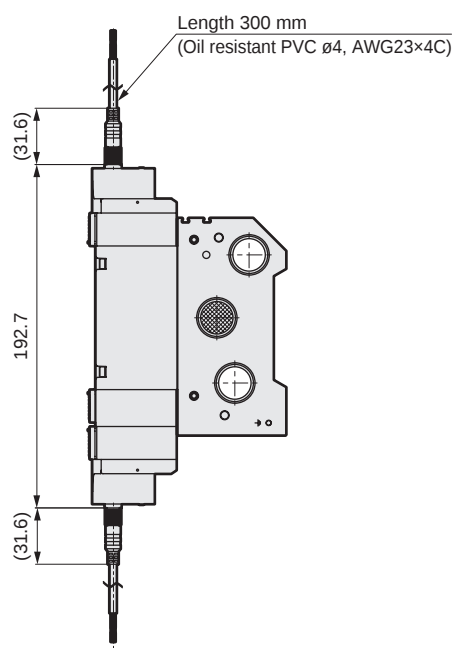
Dimensions

M4GE4*0EJ

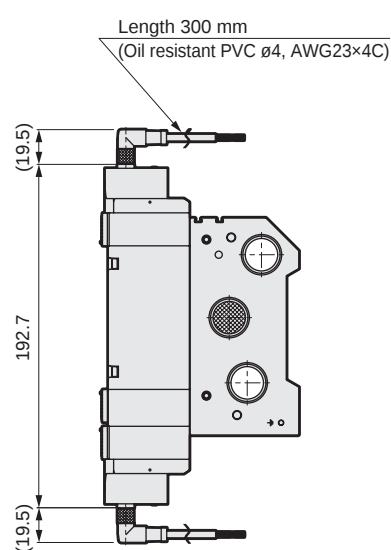
- Rc1/2 female thread
Without connector (RN)



- M8 connector/straight cable (R1)



- M8 connector/L-cable (R2)



Station No.	2	3	4	5	6	7	8	9	10	11	12
L	95	124	153	182	211	240	269	298	327	356	385
L ₁	75	104	133	162	191	220	249	278	307	336	365

M4GD1 to 3 /M4GE1 to 3 *0EJ Series

Related products

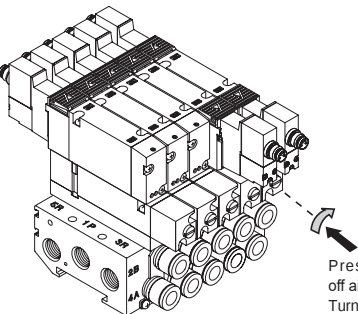
Related products

● In-stop valve spacer

Specifications

Model No.	P → A/B		A/B → R		Weight g
	C(dm ³ /(s·bar))	b	C(dm ³ /(s·bar))	b	
4G1	0.54	0.03	0.82	0.27	17
4G2	1.5	0.17	1.6	0.20	63
4G3	1.9	0.09	2.8	0.16	80

*1: Values with base piping and 2-position valve mounted.
*2: The effective cross-sectional area when discharging residual pressure is 1.0mm² (reference value).
*3: Effective cross-sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$.
*4: For 4G4, in-stop valve spacers are not available.
Attachments: 2 PR check valves, 1 body gasket



How to order discrete units

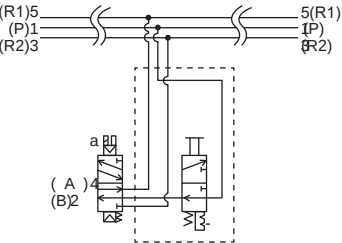
4G1R - IS

4G2R - IS

4G3R - IS

In-stop valve spacer

JIS symbol

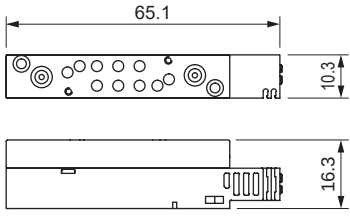
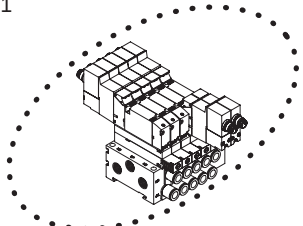


⚠ Precautions for model No. selection

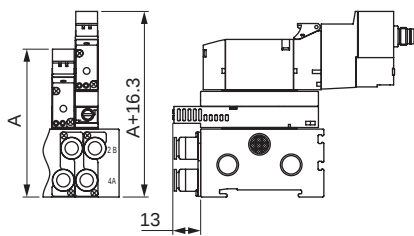
*1: Specify the spacer mounting position and quantity in manifold specifications sheet.

Dimensions

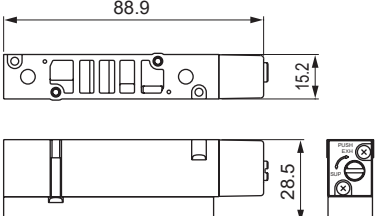
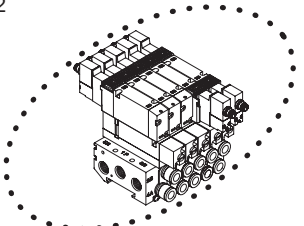
● 4G1



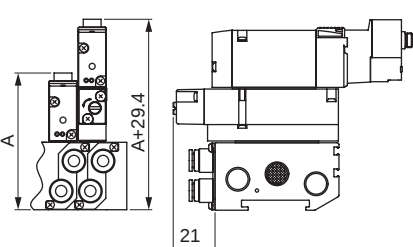
Dimensions when mounted



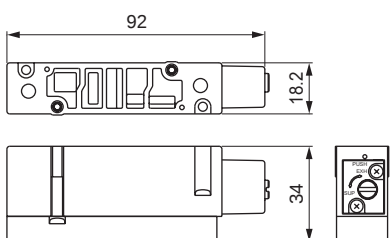
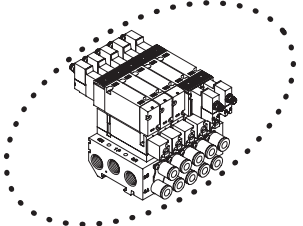
● 4G2



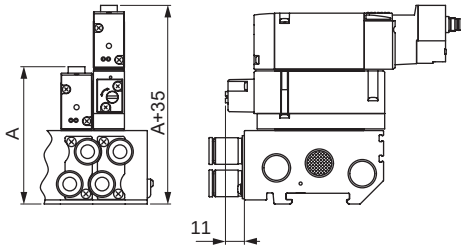
Dimensions when mounted



● 4G3



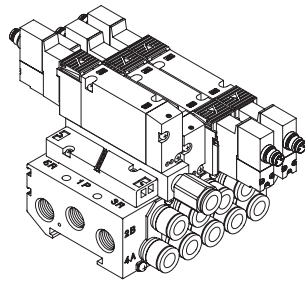
Dimensions when mounted



Note: For A dimensions, check the dimensions of the respective specifications.

Related products

● Air supply spacer



Specifications

Model No.	P → A/B		A/B → R		Weight g
	C(dm ³ /(s·bar))	b	C(dm ³ /(s·bar))	b	
4G1	0.70	0.23	0.93	0.16	8
4G2	1.6	0.17	1.8	0.16	35
4G3	2.6	0.22	3.1	0.14	56

*1: Values are when a valve is mounted.

*2: Effective cross-sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$.

How to order discrete units

● Air supply spacer

Air supply spacer model No.

4G **3** **R - P** - **GWS10**

A Air supply spacer model No.

B Port size
*1

		Valve model No.		
		4G1	4G2	4G3
Code	Description			
A Air supply spacer model No.				
1	For 4G1	●		
2	For 4G2		●	
3	For 4G3			●
B Port size				
Blank	M5 thread (4G1), Rc thread (4G2/4G3)	①	②	③
GWS4	ø4 fitting	●		
GWS6	ø6 fitting	●	●	
GWS8	ø8 fitting		●	●
GWS10	ø10 fitting			●

is not available.

Accessories: 2 mounting screws, 2 PR check valves, 1 body gasket

⚠ Precautions for model No. selection

*1: Blank, ① M5 ② Rc1/8 ③ Rc1/4.

*2: Specify the air supply spacer mounting position and quantity on the manifold specifications sheet of each catalog.

*3: Combination with the masking plate is not supported.

*4: 4G4 air supply spacers are made to order products. Contact CKD for details.

3GD*0EJ
4GD*0EJ

3GE*0EJ
4GE*0EJ

M3GD*0EJ
M4GD*0EJ

M3GE*0EJ
M4GE*0EJ

Related products

Manifold
specifications sheet

Safety precautions

M4GD1 to 3 /M4GE1 to 3 *0EJ Series

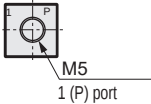
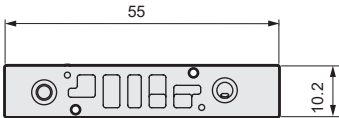
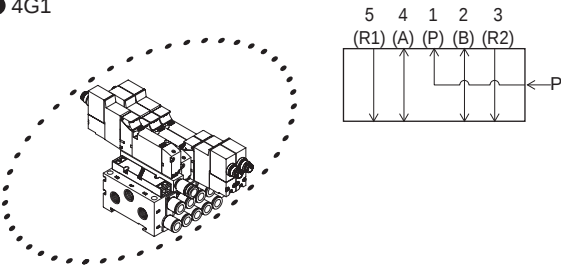
Related products

Related products

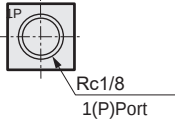
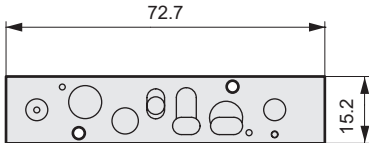
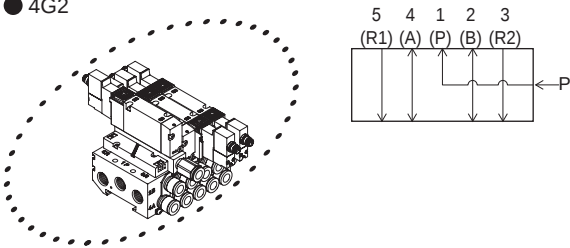
● Air supply spacer

Dimensions

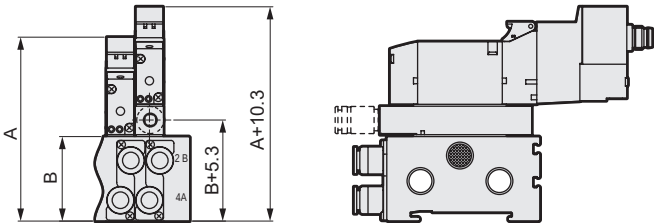
● 4G1



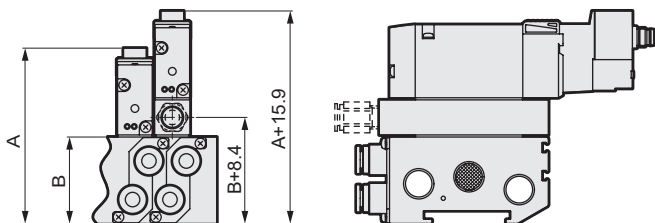
● 4G2



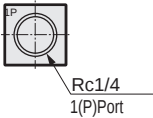
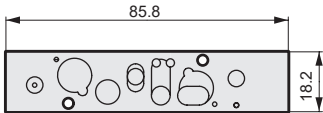
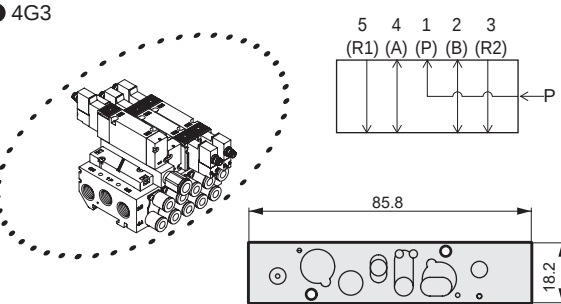
Dimensions when mounted



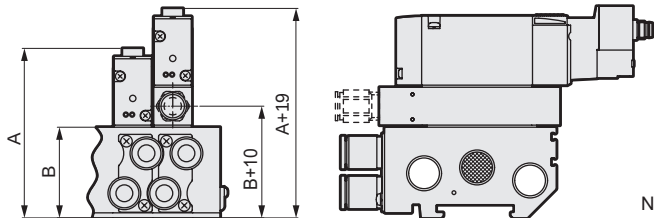
Dimensions when mounted



● 4G3



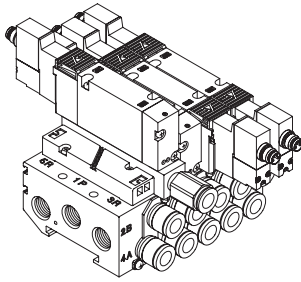
Dimensions when mounted



Note: For A and B dimensions, check the dimensions of the respective specifications.

Related products

● Exhaust spacer



Specifications

Model No.	P → A/B		A/B → R		Weight g
	C(dm ³ /(s·bar))	b	C(dm ³ /(s·bar))	b	
4G1	0.94	0.28	0.68	0.33	7
4G2	1.5	0.24	1.9	0.24	34
4G3	3.4	0.21	2.9	0.27	58

*1: Values are when a valve is mounted.

*2: Effective cross-sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$.

How to order discrete units

● Exhaust spacer

Exhaust spacer model No.

4G 3 R - R - GWS10

A Exhaust spacer model No.

B Port size
*1

		Valve model No.		
		4G1	4G2	4G3
Code	Description			
A Exhaust spacer model No.				
1	For 4G1	●		
2	For 4G2		●	
3	For 4G3			●
B Port size				
Blank	M5 thread (4G1), Rc thread (4G2/4G3)	①	②	③
GWS4	ø4 fitting	●		
GWS6	ø6 fitting	●	●	
GWS8	ø8 fitting		●	●
GWS10	ø10 fitting			●

is not available.

Accessories: 2 mounting screws (*2), 2 PR check valves, 1 body gasket

⚠ Precautions for model No. selection

*1 Blank, ① M5 ② Rc1/8 ③ Rc1/4.

*2: Specify the exhaust spacer mounting position and quantity on the manifold specifications sheet of each catalog.

*3 Combination with the masking plate is not supported.

*4 4G4 exhaust spacers are made to order products. Contact CKD for details.

3GD*0EJ
4GD*0EJ

3GE*0EJ
4GE*0EJ

M3GD*0EJ
M4GD*0EJ

M3GE*0EJ
M4GE*0EJ

Related products

Manifold
specifications sheet

Safety precautions

M4GD1 to 3 /M4GE1 to 3 *0EJ Series

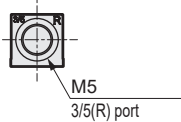
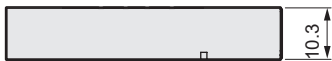
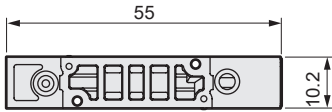
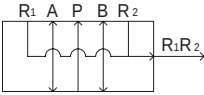
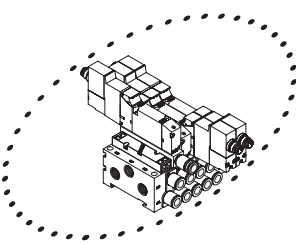
Related products

Related products

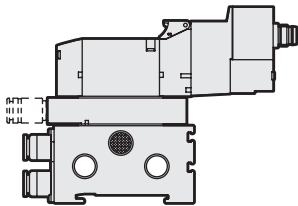
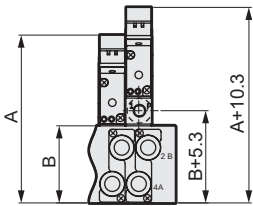
● Exhaust spacer

Dimensions

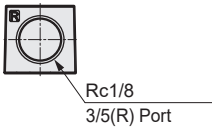
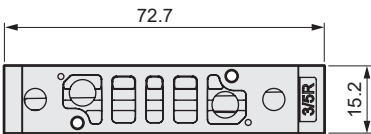
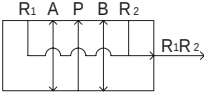
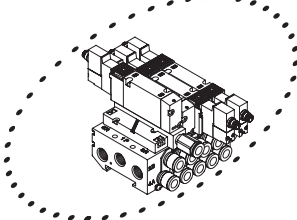
● 4G1



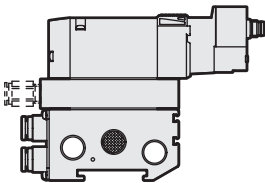
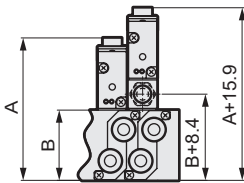
Dimensions when mounted



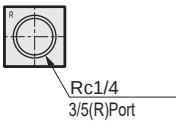
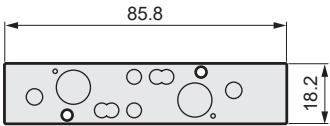
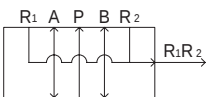
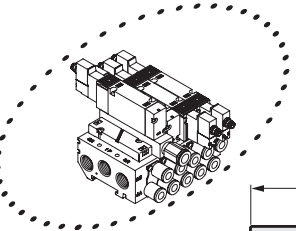
● 4G2



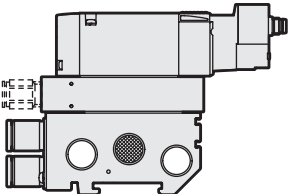
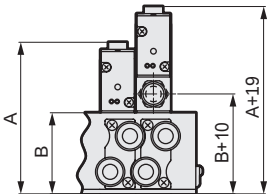
Dimensions when mounted



● 4G3



Dimensions when mounted

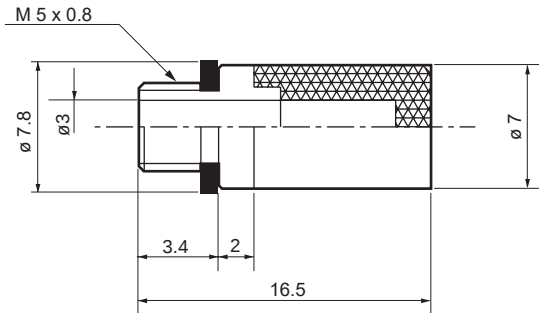


Note: For A and B dimensions, check the dimensions of the respective specifications.

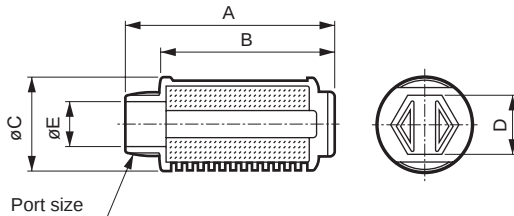
Related products

● Silencer

● SLM-M5



● SLW-6A, 8A, 10A, 10L, 15A

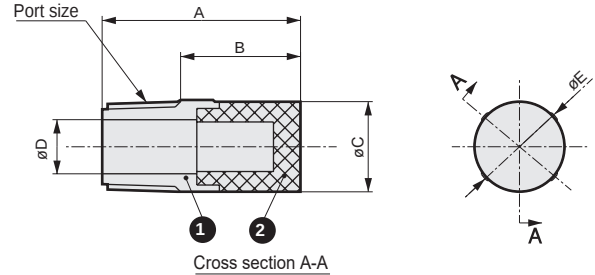


*1: Select the silencer mounting after confirming the dimensions.

*2: Use SLW-8S for the M4GD2 DIN rail mount. Interference occurs if SLW-8A is used.

Code Model No.	Noise reduction effect dB (A)	Effective cross-sectional area mm ²	A	B	C	D	E	Port size
SLW-6A	30 or more	10	34.5	28	16.5	10	7	R 1/8
SLW-8A	30 or more	20	44.5	36	20	13	8.5	R 1/4
SLW-10A	30 or more	30	58.5	48.5	25.5	17	12	R 3/8
SLW-10L	30 or more	60	68.2	58.4	28	19	12	R 3/8
SLW-15A	30 or more	75	71.4	58.4	28	19	15	R 1/2

● SLW-6S, 8S



Model No.	Port size	A	B	C	D	E
SLW-6S	R 1/8	22	13.3	10.5	6	10.5
SLW-8S	R 1/4	28	19	14.8	9	15.4

● Plug type

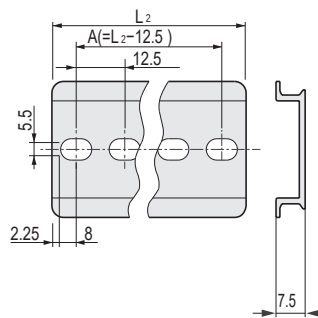
Part name	Model No.	Compatible bore size	Appearance
Blanking plug	PG-P2-B	ø1.8	
	GWP4-B	ø4	
	GWP6-B	ø6	
	GWP8-B	ø8	
	GWP10-B	ø10	
	GWP12-B	ø12	
Threaded plug	4GIR-M5P	M5	
	4GR-08P	Rc1/8	
	4GR-08P	Rc1/4	
	4GR-10P	Rc3/8	
	4GR-15P	Rc1/2	

● DIN rail

N4GR-BAA



Rail length



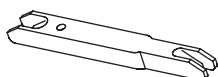
*1: Rail lengths not included in the list are made-to-order products.

L1: Manifold length	L2: Rail length	A: Mounting pitch
35 47.5 or less	87.5	75
Over 47.5 to 60	100	87.5
60 72.5	112.5	100
72.5 85	125	112.5
85 97.5	137.5	125
97.5 110	150	137.5
110 122.5	162.5	150
122.5 135	175	162.5
135 147.5	187.5	175
147.5 160	200	187.5
160 172.5	212.5	200
172.5 185	225	212.5
185 197.5	237.5	225
197.5 210	250	237.5
210 222.5	262.5	250
222.5 235	275	262.5
235 247.5	287.5	275
247.5 260	300	287.5
260 272.5	312.5	300
272.5 285	325	312.5
285 297.5	337.5	325
297.5 310	350	337.5
310 322.5	362.5	350
322.5 335	375	362.5
335 347.5	387.5	375
347.5 360	400	387.5
360 372.5	412.5	400
372.5 385	425	412.5
385 397.5	437.5	425
397.5 410	450	437.5
410 422.5	462.5	450
422.5 435	475	462.5
435 447.5	487.5	475
447.5 460	500	487.5
460 472.5	512.5	500
472.5 485	525	512.5
485 497.5	537.5	525
497.5 510	550	537.5

If the length exceeds 510, calculate using a multiple of 12.5.

● Push-in fitting tube remover

For ø1.8/ø4 push-in fitting
4GR-EOT18-4



For ø4/ø6 push-in fittings
4GR-EOT4-6

Related products

Manifold specifications sheet

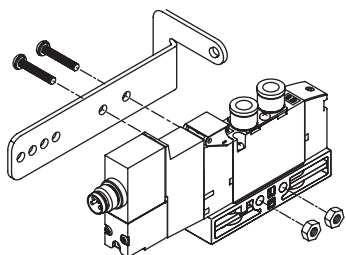
Safety precautions

M4GD1 to 4/M4GE1 to 4*0EJ Series

Related parts

Related parts

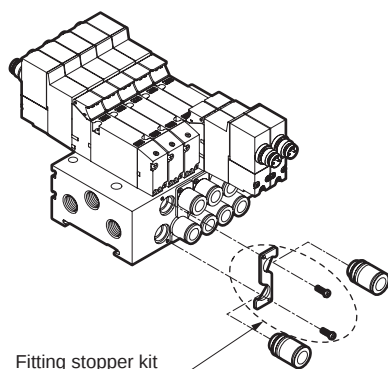
(1) Mounting plate (P) kit



Mounting (P) kit

Model	Kit model No.	Set parts
4GD1	4G1R-MOUNT-PLATE-KIT	Mounting plate, 2 mounting screws, 2 nuts
4GD 2	4G2R-MOUNT-PLATE-KIT	Mounting plate, 2 mounting screws
4GD3	4G3R-MOUNT-PLATE-KIT	Mounting plate, 2 mounting screws

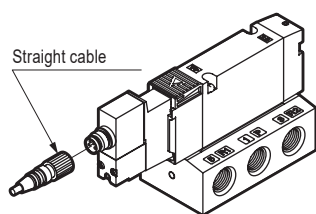
(2) Cartridge push-in fitting related parts Discrete



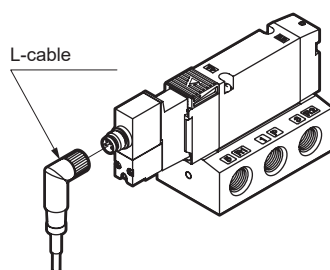
Fitting stopper plate kit

Model	Kit model No.
M4G1	4G1R-JNT-STP-PLATE-KIT
M4G2	4G2R-JNT-STP-PLATE-KIT
M4G3	4G3R-JNT-STP-PLATE-KIT
M4G4	4GB4-JNT-STP-PLATE-KIT

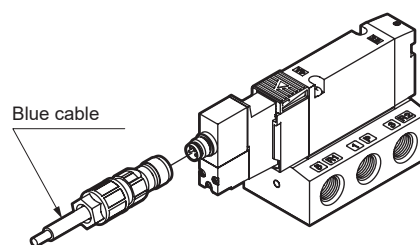
(3) M8 connector cable



Straight cable (R1)



L-cable (R2)



Straight cable (R3)

◆ Cable Capacitance and Inductance

Type	Capacitance [nF/m] at 1kHz	Inductance [mH/m] at 1kHz
Straight (R1)	0.058	0.003
L type (R2)	0.125	0.003
Straight (R3)	0.065	0.002

◆ Minimum bending radius of cable

Type	No load [mm]	With load [mm]
Straight (R1)	20.0	36.0
L type (R2)	23.5	42.3
Straight (R3)	20.0	-

4GEX - M8CC - R1 - 300

Ⓐ Direction Ⓑ Length

Ⓐ Direction		4G1	4G2	4G3	4G4
R1 *1	Straight cable (color: gray)	●	●	●	●
R2 *1	L-cable (color: black)	●	●	●	●
R3 *2	Straight cable (color: blue)		●	●	●

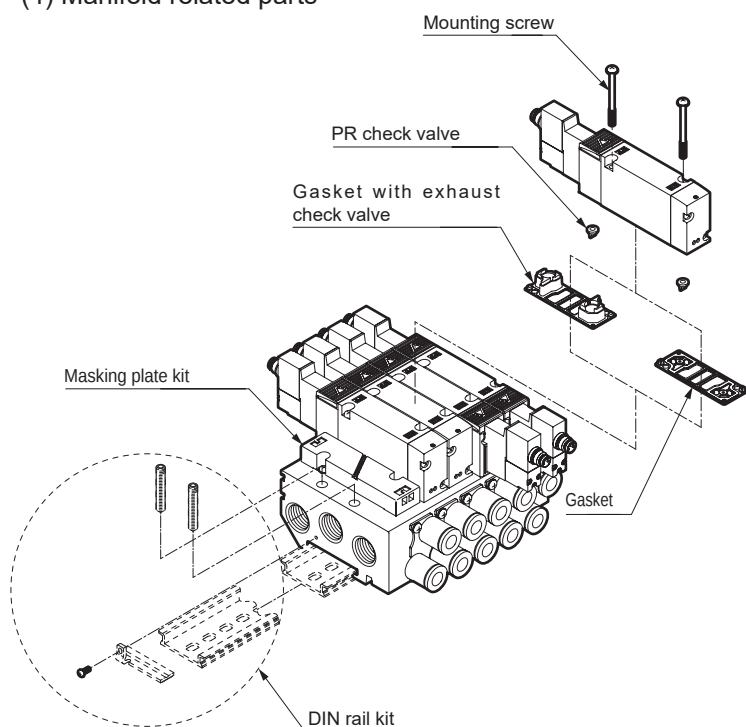
Ⓑ Length	
300	Cable length 300mm
500	Cable length 500mm
1000	Cable length 1000mm
3000	Cable length 3000mm

*1: R1 and R2 types come with a blue marker for identification.

*2: Available as made to order.

Related parts

(4) Manifold related parts



Masking plate kit

Model	Model No.	Description	Remarks
M3G1/M4G1	4G1R-MP	Masking plate Gasket 2 Mounting screws	4G3/4G4 have two PR check valves attached.
M3G2/M4G2	4G2R-MP		
M4G3	4G3R-MP		
M4GD4	4GA4-MP		
M4GE4	4GB4-MP		

Gasket

Model	Part model No.
3G1/4G1	4G1R-GASKET
3G1/4G1 (For masking plate)	4G1R-MP-GASKET
3G2/4G 2	4G2R-GASKET
3G2/4G2 (For masking plate)	4G2R-MP-GASKET
4G3	4G3R-GASKET
4GD4	4GA4-GASKET
4GE4	4GB4-GASKET

Gasket with exhaust check valve

Model	Part model No.
3G1/4G1	4G1R-CHECK-VALVE
3G2/4G 2	4G2R-CHECK-VALVE
4G3	4G3R-CHECK-VALVE

Note: 4G4 does not have a gasket with check valve.

PR check valve kit (2 per set)

Model	Kit model No.
3G1/4G1	4G1R-PR
3G2/4G2	4G2R-PR
4G3	4G3R-PR
4G 4	4G4-PR

Mounting screw (10 per set)

Model	Part model No.
3G1/4G1	4G1R-SET-SCREW
3G2/4G 2	4G2R-SET-SCREW
4G3	4G3R-SET-SCREW
4G 4	4G4-SET-SCREW

DIN rail kit

Model	Model No.	Description
M4G1	4GA1R-BAA [length] -D	DIN rail, 2 mounting screws 2 Lock nuts
	4GB1R-BAA [length] -D	
M4G2	4GA2R-BAA [length] -D	DIN rail/2 holders 2 tapping screws, 4 mounting screws
	4GB2R-BAA [length] -D	
M4G3	4GA3R-BAA [length] -D	
	4GB3R-BAA [length] -D	

Specify the length "0" when the DIN rail is not required.

Set the DIN rail length with reference to the current manifold dimensions.

Note: For 4G4, there is no DIN rail kit.

3GD*0EJ
4GD*0EJ

3GE*0EJ
4GE*0EJ

M3GD*0EJ
M4GD*0EJ

M3GE*0EJ
M4GE*0EJ

Related products

Manifold
Specifications sheet

Safety precautions

M4GD1 to 4/M4GE1 to 4*0EJ Series

Related parts

Related parts

(5) Sub-plate

How to order

● 4GD piping adapter

4G1 R-ADAPTOR-M5

A Model No.

		A Model No.				
		3G1	3G2	4G1	4G2	4G3
Code	Description					
B Port size (Port P/R1/R2)						
M5	M5	●		●		
06	Rc1/8		●		●	
08	Rc1/4					●
C Option						
P	With mounting plate (included)	●	●	●	●	●

is not available.

Note: For 4G4, there is no piping adapter.

● 4GE discrete sub-plate

4G1 R-SUB-BASE-06

A Model No.

		A Model No.					
		3G1	3G2	4G1	4G2	4G3	4G4
Code	Description						
B Port size (Port A/B/P/R1/R2)							
06	Rc1/8	●		●			
08	Rc1/4		●		●	●	
10	Rc3/8					●	●
15	Rc1/2						●
C Option							
F	A/B port filter integrated *1	●	●	●	●	●	●

*1: A filter is built into port P as standard.

is not available.

Related products

Manifold
Specifications sheet

Safety precautions

Related parts

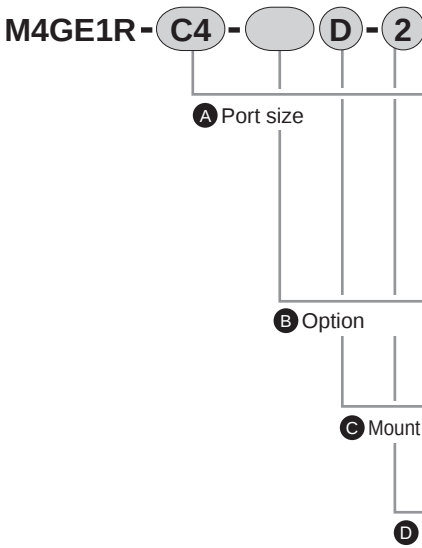
(6) Manifold sub-plate kit individual wiring

● M4GD sub-plate



Code	Description
A Model No.	
M4GD1	Metal base, 4G1 size, body piping
M4GD2	Metal base, 4G2 size, body piping
M4GD3	Metal base, 4G3 size, body piping
M4GD4	Metal base, 4G4 size, body piping
D Station No.	
2	2 stations
to	to
20	Refer to the specifications page for the max. station number.

● M4GE1 sub-plate



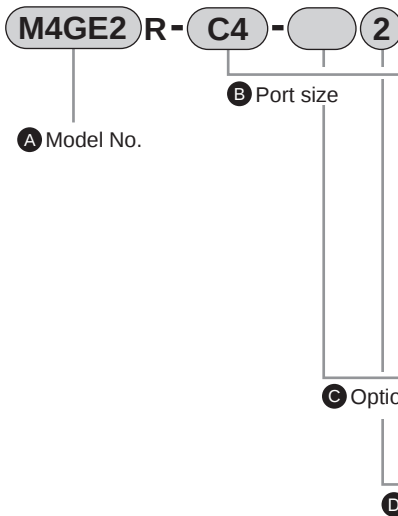
Code	Description	
A Port size		
Port	4(A), 2(B) port	Port P/R1/R2
C18	ø1.8 push-in fitting	Rc1/8
C4	ø4 push-in fitting	
C6	ø6 push-in fitting	
M5	M5	
B Option		
Blank		
F	Port A/B filter built in	*1
C Mount type		
Blank	Direct mount	
D	DIN rail mount	*2
D Station No.		
2	2 stations	
to	to	
20	Refer to the specifications page for the max. station number.	

*1: A filter is built into port P as standard.

*2: DIN rail kit needs to be prepared separately.

(7) Manifold sub-plate kit individual wiring

● M4GE2/3 sub-plate



		A Model No.	
		M4GE2	M4GE3
Code	Description		
B Port size			
Port	4(A), 2(B) port	Port P/R1/R2 (1) = Rc1/4 (2) = Rc3/8	
C4	ø4 push-in fitting	(1)	
C6	ø6 push-in fitting	(1)	(2)
C8	ø8 push-in fitting	(1)	(2)
C10	ø10 push-in fitting		(2)
06	Rc1/8	(1)	
08	Rc1/4		(3)
C Option			
Blank			
F	Port A/B filter built in *1		
D Station No.			
2	2 stations		
to	to		
20	Refer to the specifications page for the max. station number.		

*1: A filter is built into port P as standard.

3GD*0EJ
4GD*0EJ

3GE*0EJ
4GE*0EJ

M3GD*0EJ
M4GD*0EJ

M3GE*0EJ
M4GE*0EJ

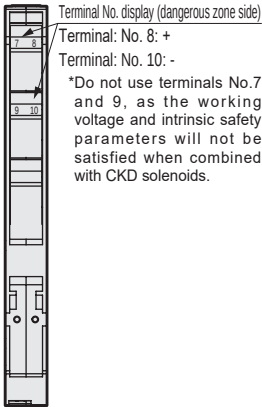
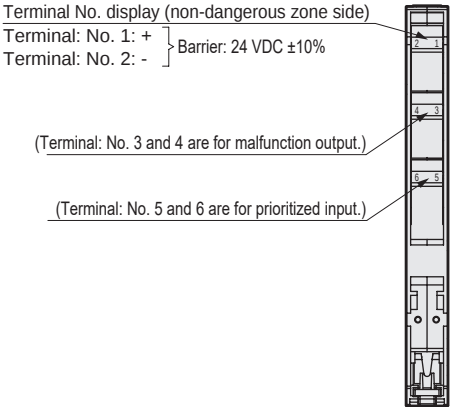
Related products

Manifold
Specifications sheet

Safety precautions

INSULATED EXPLOSION PROOF BARRIER Dimensions

Model No.: **D5048S**



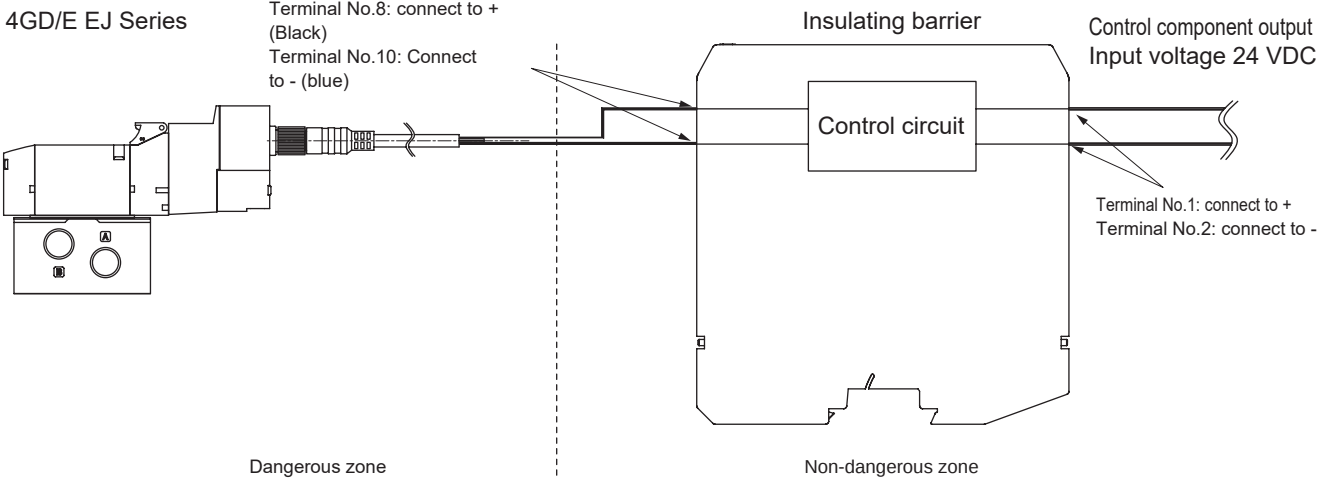
Barrier intrinsic safety parameters

Item	Between terminals No. 8-10
Intrinsic safety circuit max. voltage Uo	24.8V
Intrinsic safety circuit max. current Io	108mA
Intrinsic safety circuit max. power Po	667mW
Intrinsic safety circuit allowable capacitance Co	0.113 μF
Intrinsic safety circuit allowable inductance Lo	1.42mH
Operating ambient temperature range	-40 to 70°C

- *1: Always use valves in combination with a barrier.
- *2: Connection terminals are polarized. Take care to prevent incorrect wiring.
- *3: Applicable wire is 0.25 to 2.5mm².
- *4: Recommended terminal tightening torque is 0.5 to 0.6N·m.
- *5: Barrier degree of protection is IP20.

Supply source: IDEC Co., Ltd. (G.M.I.)
Detailed specifications / Refer to the IDEC Co., Ltd. or G.M.I. catalog / website for the non-judgment document.

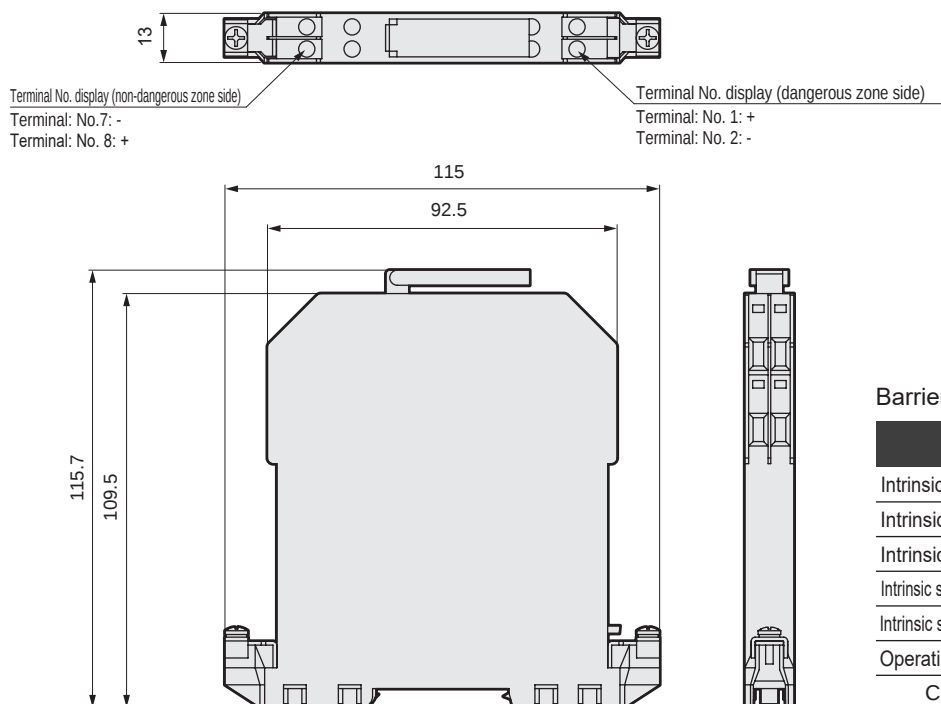
About Valve and Barrier Connections



* Voltage equivalent to 12 VDC is supplied to the valve via an insulating barrier.

Zener barrier (1CH) Dimensions

Model No.: **Z728**



Supply sources: Pepperl+Fuchs Inc.
Detailed specifications / Refer to the Pepperl+Fuchs Inc. catalog / WEB for the non-judgment report, etc.

Barrier intrinsic safety parameters

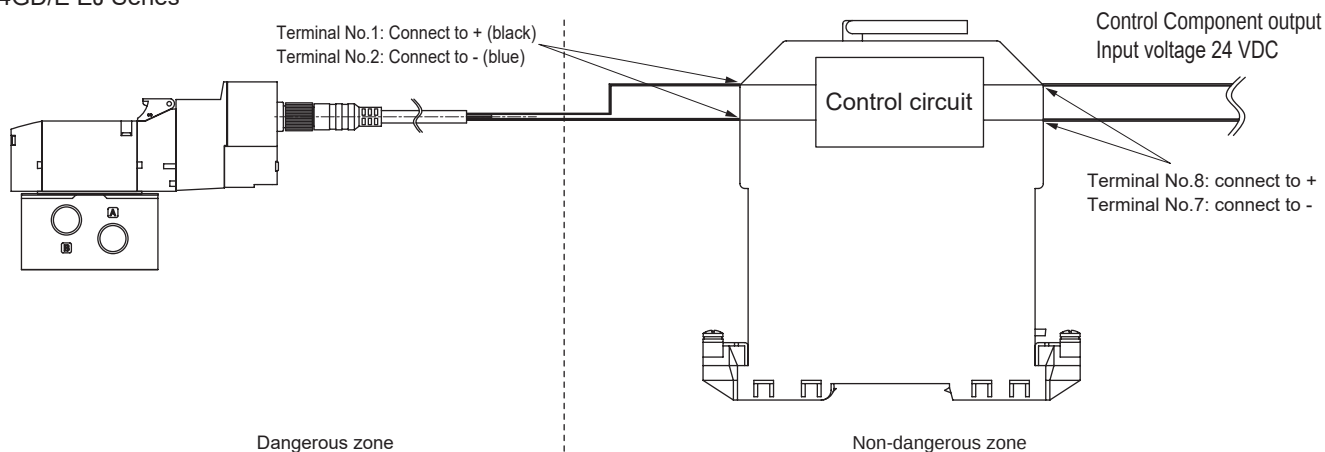
Item	Description
Intrinsic safety circuit max. voltage U_0	28V
Intrinsic safety circuit max. current I_0	93mA
Intrinsic safety circuit max. power P_0	0.65 W
Intrinsic safety circuit allowable capacitance C_0	0.083 μ F
Intrinsic safety circuit allowable inductance L_0	3.05mH
Operating ambient temperature range	-20 to 60°C
Current limiting resistor	300 Ω

- * Always use valves in combination with a barrier.
- * Connection terminals are polarized. Miswiring can lead to barrier failure.
- * Compatible wires have a allowable area of 2.5mm².
- * Barrier degree of protection is IP20.
- * Type A grounding is required for barrier installation.

About Valve and Barrier Connections

4GD/E EJ Series

1CH TYPE ZENER TYPE BARRIER



3GD*0EJ
4GD*0EJ

3GE*0EJ
4GE*0EJ

M3GD*0EJ
M4GD*0EJ

M3GE*0EJ
M4GE*0EJ

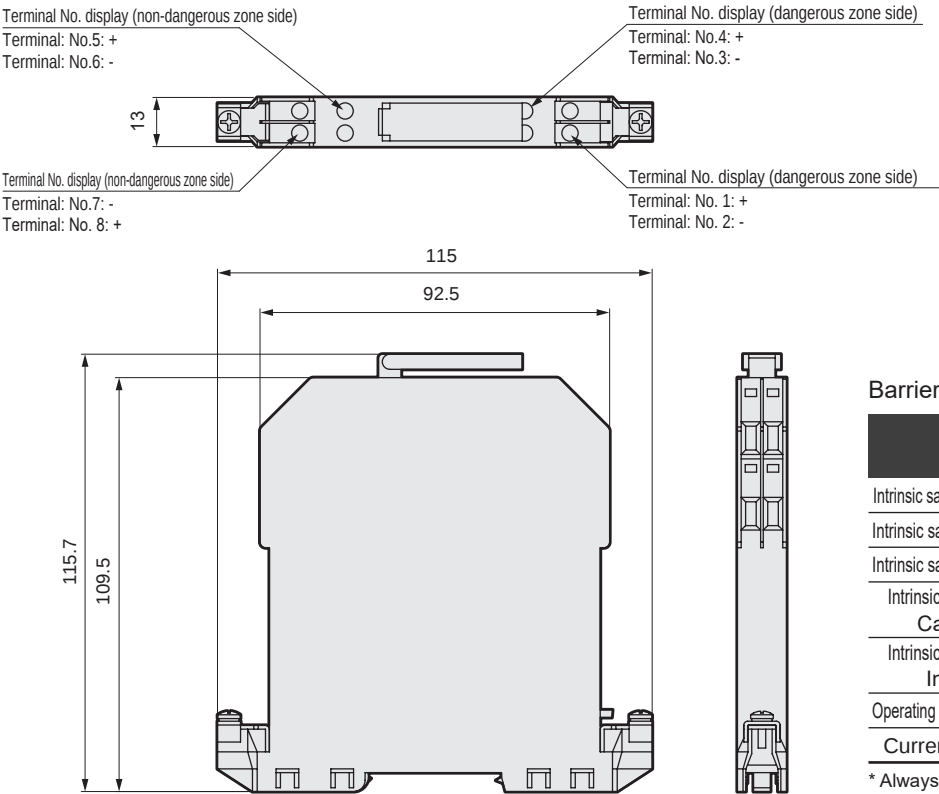
Related products

Manifold
Specifications sheet

Safety precautions

Zener barrier (2CH) Dimensions

Model No.: **Z779**



Supply source: Pepperl+Fuchs Inc.
Detailed specifications / Refer to the
Pepperl+Fuchs Inc. catalog / WEB for
the non-judgment report, etc.

Barrier intrinsic safety parameters

Item	Description	
	CH1	CH2
Intrinsic safety circuit max. voltage Uo	28V	28V
Intrinsic safety circuit max. current Io	93mA	93mA
Intrinsic safety circuit max. power Po	0.65 W	0.65 W
Intrinsic safety circuit allowable Capacitance Co	0.083 μF	0.083 μF
Intrinsic safety circuit allowable Inductance Lo	3.05mH	3.05mH
Operating ambient temperature range	-20 to 60°C	-20 to 60°C
Current limiting resistor	301 Ω	301 Ω

- * Always use valves in combination with a barrier.
- * Connection terminals are polarized.
- Miswiring can lead to barrier failure.
- * Compatible wires have a allowable area of 2.5mm².
- * Barrier degree of protection is IP20.
- * Type A grounding is required for barrier installation.

About Valve and Barrier Connections

