

SY3000/5000/7000/9000 Body Ported Type Single Valve



How to Order

SY 5 1 20 — 5 L — 01

Series

3	SY3000
5	SY5000
7	SY7000
9	SY9000

Type of actuation

1	2 position single
2	2 position double
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center

Rated voltage

DC specifications

5	24VDC
6	12VDC
V	6VDC
S	5VDC
R	3VDC

AC specifications (50/60Hz)

1	100VAC
2	200VAC
3	110VAC [115VAC]
4	220VAC [230VAC]

Note 1) DC specifications for "D" and "DO" are only available in 24VDC and 12VDC.
Note 2) "D" and "DO" are not available for SY3000.

Note) When single body ported solenoid valves are ordered, manifold mounting bolts and gaskets are not included. Order them separately, if necessary. (Refer to page 56 for details.)

A/B port size

Symbol	Port size	Applicable series
M5	M5 x 0.8	SY3000
C4	ø4 One-touch fitting	
C6	ø6 One-touch fitting	
01	Rc 1/8	SY5000
C4	ø4 One-touch fitting	
C6	ø6 One-touch fitting	
C8	ø8 One-touch fitting	SY7000
02	Rc 1/4	
C8	ø8 One-touch fitting	
C10	ø10 One-touch fitting	SY9000
02	Rc 1/4	
03	Rc 3/8	
C8	ø8 One-touch fitting	SY9000
C10	ø10 One-touch fitting	
C12	ø12 One-touch fitting	

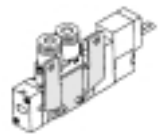
Bracket

Nil: Without bracket
F1: With foot bracket

(2 position single type only)



F2: With side bracket



* SY9000 does not use brackets.

Manual override

Nil: Non-locking push type



D: Push-turn locking slotted type



E: Push-turn locking lever



Indicator light/Surge voltage suppressor

For electrical entry G, H, L, M

Nil	Without indicator light/surge voltage suppressor
S	With surge voltage suppressor
Z	With indicator light/surge voltage suppressor
R	With surge voltage suppressor (non-polar type)
U	With indicator light/surge voltage suppressor (non-polar type)

Note 1) For AC, there is no "S" specification, since it is integrated with the rectifier.

Note 2) "R" and "U" are available for DC only.

For electrical entry D

Nil	Without indicator light/surge voltage suppressor
S	With surge voltage suppressor (non-polar type)
Z	With indicator light/surge voltage suppressor (non-polar type)

Note 1) "DOZ" is not available.
Note 2) For AC, there is no "S" specification, since it is integrated with the rectifier.

Electrical entry

24V, 12V, 6V, 5V, 3VDC/100V, 110V, 200V, 220VAC				24V, 12VDC 100V, 110V, 200V, 220VAC
Grommet	L type plug connector	M type plug connector		DIN terminal
G: Lead wire length 300mm 	L: With lead wire (length 300mm) 	M: With lead wire (length 300mm) 	MN: Without lead wire 	(Except SY3000) D: With connector
H: Lead wire length 600mm 	LN: Without lead wire 	LO: Without connector 	MO: Without connector 	DO: Without connector

Note 1) "LN" and "MN" include 2 sockets.

Note 2) "D" and "DO" are not available for SY3000.

Note 3) DIN43650C standard DIN terminal "Y" is also available. Refer to page 189 for details.

Specifications



Series		SY3000	SY5000	SY7000	SY9000
Fluid		Air			
Internal pilot operating pressure range MPa	2 position single	0.15 to 0.7			
	2 position double	0.1 to 0.7			
	3 position	0.2 to 0.7			
Ambient and fluid temperature °C		Maximum 50			
Maximum operating frequency Hz	2 position single, double	10	5	5	5
	3 position	3	3	3	3
Manual override		Non-locking push type, Push-turn locking slotted type, Push-turn locking lever type			
Pilot exhaust method		Common exhaust for main and pilot valves			
Lubrication		Not required			
Mounting orientation		Unrestricted			
Impact resistance/Vibration resistance m/s ² (Note)		150/30			
Enclosure		Dust proof (IP65 for DIN terminal*)			

* In compliance with IEC529 standard.
 Note) **Impact resistance:** No malfunction resulted from the impact test using a drop impact tester. The test was performed one time each in the axial and right angle directions of the main valve and armature, for both energized and de-energized states. (Value in the initial stage)
Vibration resistance: No malfunction occurred in a one-sweep test between 8.3 and 2000Hz. Test was performed for both energized and de-energized states in the axial and right angle directions of the main valve and armature. (Value in the initial stage)

Solenoid specifications

Electrical entry	Grommet (G)/(H), L type plug connector (L), M type plug connector (M), DIN terminal (D) (Note 1)		
Rated coil voltage V	DC	24, 12, 6, 5, 3	
	AC 50/60Hz	100, 110, 200, 220 (Note 2)	
Allowable voltage fluctuation	±10% of rated voltage		
Current consumption W	DC	0.5 [With indicator light: 0.55 (0.6 for DIN terminal with indicator light)] (Note 3)	
Apparent power VA	AC	100V	0.9 (With indicator light: 1.0)
		110V	1.0 (With indicator light: 1.1)
		[115V]	[1.1 (With indicator light: 1.2)]
		200V	1.8 (With indicator light: 1.9)
		220V	1.9 (With indicator light: 2.0)
		[230V]	[2.2 (With indicator light: 2.3)]
Surge voltage suppressor	Diodes (ZNR for DIN terminal, Zener diode for G, L or M non-polar type)		
Indicator light	LED (Neon bulb for AC type DIN terminal)		

Note 1) DIN terminal (D) is not available for SY3000.
 Note 2) 110 and 115VAC are common, as are 220 and 230VAC.
 Note 3) Energy saving [0.22W] type is also available. Refer to page 190 for details.

Response time

Note) Based on dynamic performance test JISB8375-1981 (at coil temperature of 20°C with rated voltage)

SY3000

Type of actuation	Response time ms (at 0.5MPa)		
	Without indicator light/surge voltage suppressor	With indicator light/surge voltage suppressor	
		S, Z types	R, U types
2 position single	12 or less	15 or less	12 or less
2 position double	10 or less	13 or less	10 or less
3 position	15 or less	20 or less	16 or less

SY5000

Type of actuation	Response time ms (at 0.5MPa)		
	Without indicator light/surge voltage suppressor	With indicator light/surge voltage suppressor	
		S, Z types	R, U types
2 position single	19 or less	26 or less	19 or less
2 position double	18 or less	22 or less	18 or less
3 position	32 or less	38 or less	32 or less

SY7000

Type of actuation	Response time ms (at 0.5MPa)		
	Without indicator light/surge voltage suppressor	With indicator light/surge voltage suppressor	
		S, Z types	R, U types
2 position single	31 or less	38 or less	33 or less
2 position double	27 or less	30 or less	28 or less
3 position	50 or less	56 or less	50 or less

SY9000

Type of actuation	Response time ms (at 0.5MPa)		
	Without indicator light/surge voltage suppressor	With indicator light/surge voltage suppressor	
		S, Z types	R, U types
2 position single	35 or less	41 or less	35 or less
2 position double	35 or less	41 or less	35 or less
3 position	62 or less	64 or less	62 or less

Order Made Pages 177 to 190

Single valve Type 20 Type 23 Type 20P Type 23P Single valve Type 41 Type 42 Type 43 Type 41P Type 42P Type 43P Type 45 Type 45-A NA Type 45

3 port valve Air operated Order made Manifold Spec. sheets Precautions

Body Ported Type

Models/Series SY3000

Valve model	Type of actuation		Port size		Effective area mm ² (Cv factor)		Weight g		
			P, EA, EB	A, B	P to A/B	A/B to EA/EB	Grommet	L/M type plug connector	DIN terminal
SY3□20-□-M5	2 pos.	Single	M5 x 0.8		3.6 (0.2)	3.78 (0.21)	48	51	
		Double							
	3 position	Closed center			3.6 (0.2)	3.42 (0.19)	65	72	
		Exhaust center			3.6 (0.2)	3.78 (0.21) [2.7 (0.15)]			
		Pressure center			3.96 (0.22) [2.88 (0.16)]	3.6 (0.2)			
SY3□20-□-C4	2 pos.	Single	M5 x 0.8	C4 ø4 (One-touch fitting)	3.42 (0.19)	3.6 (0.2)	57	61	
		Double							
	3 position	Closed center			3.42 (0.19)	3.42 (0.19)	75	82	
		Exhaust center			3.42 (0.19)	3.78 (0.21) [2.7 (0.15)]			
		Pressure center			3.6 (0.2) [2.16 (0.12)]	3.6 (0.2)			
SY3□20-□-C6	2 pos.	Single	M5 x 0.8	C6 ø6 (One-touch fitting)	3.6 (0.2)	4.14 (0.23)	53	57	
		Double							
	3 position	Closed center			3.6 (0.2)	3.96 (0.22)	71	78	
		Exhaust center			3.78 (0.21)	4.5 (0.25) [3.06 (0.17)]			
		Pressure center			3.96 (0.22) [2.88 (0.16)]	3.96 (0.22)			

Note) Values inside [] are for normal position.

Models/Series SY7000

Valve model	Type of actuation		Port size		Effective area mm ² (Cv factor)		Weight g		
			P, EA, EB	A, B	P to A/B	A/B to EA/EB	Grommet	L/M type plug connector	DIN terminal
SY7□20-□-02	2 pos.	Single	Rc 1/4		16.2 (0.9)	15.66 (0.87)	98	102	125
		Double							
	3 position	Closed center			12.06 (0.67)	11.34 (0.63)	122	129	175
		Exhaust center			11.88 (0.66)	16.74 (0.93) [11.7 (0.65)]			
		Pressure center			17.1 (0.95) [11.16 (0.62)]	11.34 (0.63)			
SY7□20-□-C8	2 pos.	Single	Rc 1/4	C8 ø8 (One-touch fitting)	13.86 (0.77)	13.68 (0.76)	104	108	131
		Double							
	3 position	Closed center			11.52 (0.64)	10.44 (0.58)	128	136	182
		Exhaust center			11.16 (0.62)	14.4 (0.8) [10.8 (0.6)]			
		Pressure center			14.58 (0.81) [10.62 (0.59)]	10.44 (0.58)			
SY7□20-□-C10	2 pos.	Single	Rc 1/8	C10 ø10 (One-touch fitting)	15.84 (0.88)	14.94 (0.83)	100	103	126
		Double							
	3 position	Closed center			12.24 (0.68)	11.16 (0.62)	124	131	177
		Exhaust center			11.88 (0.66)	16.2 (0.89) [11.34 (0.63)]			
		Pressure center			16.74 (0.93) [11.16 (0.62)]	11.34 (0.63)			

Note) Values inside [] are for normal position.

Models/Series SY5000

Valve model	Type of actuation		Port size		Effective area mm ² (Cv factor)		Weight g		
			P, EA, EB	A, B	P to A/B	A/B to EA/EB	Grommet	L/M type plug connector	DIN terminal
SY5□20-□-01	2 pos.	Single	Rc 1/8		9.18 (0.51)	10.6 (0.59)	67	70	93
		Double							
	3 position	Closed center			7.38 (0.41)	7.92 (0.44)	87	94	140
		Exhaust center			7.56 (0.42)	12.06 (0.67) [8.28 (0.46)]			
		Pressure center			10.62 (0.59) [4.32 (0.24)]	8.46 (0.47)			
SY5□20-□-C4	2 pos.	Single	Rc 1/8	C4 ø4 (One-touch fitting)	5.5 (0.31)	3.9 (0.22)	91	94	117
		Double							
	3 position	Closed center			5.3 (0.29)	3.9 (0.22)	111	118	164
		Exhaust center			5.3 (0.29)	3.9 (0.22)			
		Pressure center			5.7 (0.32)	3.9 (0.22)			
SY5□20-□-C6	2 pos.	Single	Rc 1/8	C6 ø6 (One-touch fitting)	9 (0.5)	9 (0.5)	85	89	112
		Double							
	3 position	Closed center			7.2 (0.4)	7.38 (0.41)	105	112	158
		Exhaust center			7.38 (0.41)	9.72 (0.54) [7.2 (0.4)]			
		Pressure center			10.62 (0.59) [4.32 (0.24)]	7.2 (0.4)			
SY5□20-□-C8	2 pos.	Single	Rc 1/8	C8 ø8 (One-touch fitting)	9.18 (0.51)	9.9 (0.55)	77	80	103
		Double							
	3 position	Closed center			7.38 (0.41)	7.92 (0.44)	97	104	150
		Exhaust center			7.38 (0.41)	11.88 (0.66) [7.74 (0.43)]			
		Pressure center			10.62 (0.59) [4.32 (0.24)]	7.92 (0.44)			

Note) Values inside [] are for normal position.

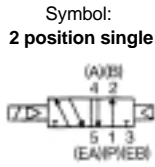
Models/Series SY9000

Valve model	Type of actuation		Port size		Effective area mm ² (Cv factor)		Weight g		
			P, EA, EB	A, B	P to A/B	A/B to EA/EB	Grommet	L/M type plug connector	DIN terminal
SY9□20-□-02	2 pos.	Single	Rc 1/4		35.76 (1.99)	37.43 (2.08)	238	242	265
		Double							
	3 position	Closed center			34.69 (1.93)	30.51 (1.70)	278	286	332
		Exhaust center			33.63 (1.87)	41.09 (2.28) [18.96 (1.05)]			
		Pressure center			37.99 (2.11)	31.62 (1.76) [15.22 (0.85)]			
SY9□20-□-03	2 pos.	Single	Rc 3/8		37.90 (2.11)	38.23 (2.12)	233	237	260
		Double							
	3 position	Closed center			35.98 (2.00)	32.37 (1.80)	273	281	327
		Exhaust center			34.17 (1.90)	44.76 (2.49) [24.92 (1.38)]			
		Pressure center			39.94 (2.22)	32.97 (1.83) [14.67 (0.82)]			
SY9□20-□-C8	2 pos.	Single	Rc 1/4	C8 ø8 (One-touch fitting)	27.34 (1.52)	16.23 (0.90)	290	294	317
		Double							
	3 position	Closed center			26.75 (1.49)	16.55 (0.92)	330	338	384
		Exhaust center			26.17 (1.45)	16.42 (0.91) [15.68 (0.87)]			
		Pressure center			27.49 (1.53)	16.28 (0.90) [16.28 (0.90)]			
SY9□20-□-C10	2 pos.	Single	Rc 1/4	C10 ø10 (One-touch fitting)	31.16 (1.73)	27.40 (1.52)	276	280	303
		Double							
	3 position	Closed center			30.74 (1.71)	26.08 (1.45)	316	324	370
		Exhaust center			30.02 (1.67)	27.13 (1.51) [18.26 (1.01)]			
		Pressure center			32.28 (1.79)	26.36 (1.46) [15.10 (0.83)]			
SY9□20-□-C12	2 pos.	Single	Rc 1/4	C12 ø12 (One-touch fitting)	33.45 (1.86)	35.81 (1.99)	262	266	289
		Double							
	3 position	Closed center			32.96 (1.83)	29.62 (1.65)	302	310	356
		Exhaust center			32.38 (1.80)	37.77 (2.10) [18.83 (1.05)]			
		Pressure center			35.41 (1.97)	30.55 (1.70) [15.23 (0.85)]			

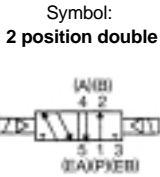
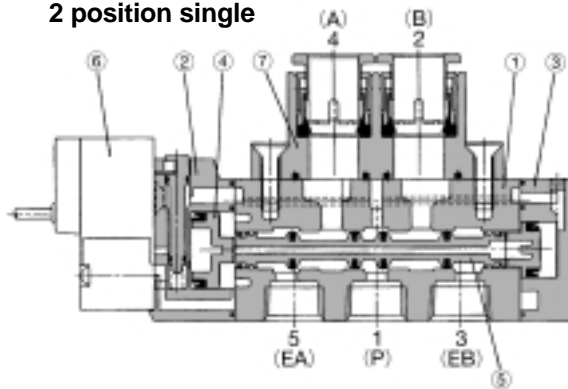
Note) Values inside [] are for normal position.

Construction

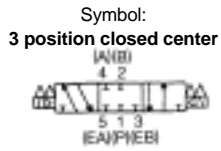
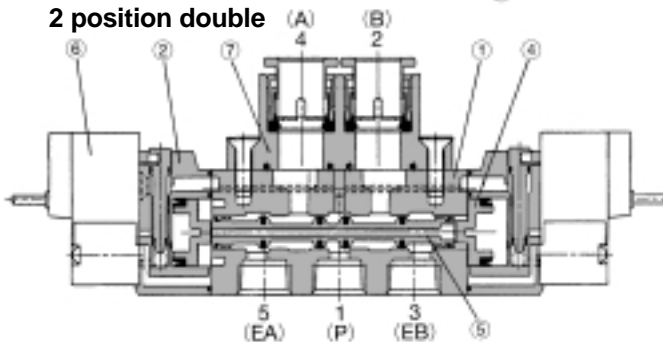
Series SY



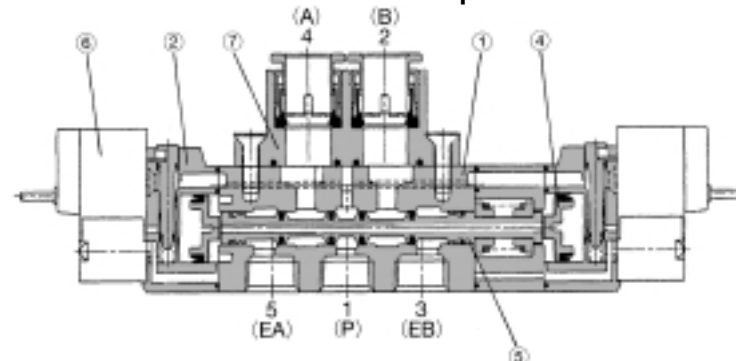
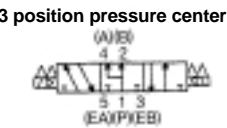
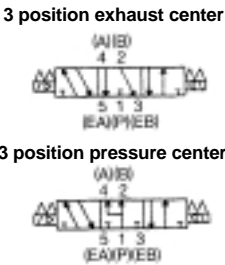
2 position single



2 position double



3 position closed center/exhaust center/pressure center



(The diagram above shows the closed center type.)

Parts list

No.	Description	Material	Note
1	Body	Die-cast aluminum (SY3000 is die-cast zinc.)	White
2	Adaptor plate	Resin	White (Gray for SY9000)
3	End plate	Resin	White
4	Piston	Resin	—
5	Spool valve assembly	Aluminum/NBR	—

Replacement parts

No.	Description	Part no.
6	Pilot valve assembly	Refer to "How to Order Pilot Valve Assemblies" on page 5.
7	Port block assembly	Refer to "How to Order Port Block Assemblies" on page 5.

Bracket assembly part nos.

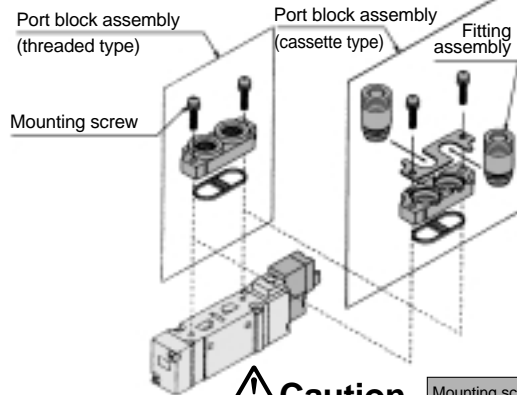
Description	Part no.
Bracket (for F1 type)	SX ³ 000-16-2A (with mounting screws)
Bracket (for F2 type)	SX ³ 000-16-1A (with mounting screws)

* Brackets are not available for SY9000.

How to Replace Port Block Assembly

With the body ported type, the A/B port size can be changed by replacing the port block assembly mounted on the body. Use appropriate tightening torque when replacing the port block assembly, as insufficient tightening of mounting screws will cause air leakage, etc.

● For SY5000 [SY5000-6A-01] [SY5000-6A-C6]



Caution Mounting screw tightening torques
 SY3000 (M2): 0.12N·m
 SY³000 (M3): 0.6N·m
 SY9000 (M4): 1.4N·m



* Refer to "How to Order Port Block Assemblies" on page 5 for part numbers.

Single valve

Type 20

Type 23

Type 20P

Type 23P

Single valve

Type 41

Type 42

Type 43

Type 41P

Type 42P

Type 43P

Type 45

Type 45-A

Type 45

3 port valve

Air operated

Order made

Manifold Spec. sheets

Precautions

Body Ported Type

How to Order Pilot Valve Assemblies

SY114—**5** **G**

Rated voltage

5	24VDC
6	12VDC
V	6VDC
S	5VDC
R	3VDC
1	100VAC 50/60Hz
2	200VAC 50/60Hz
3	110VAC 50/60Hz [115VAC 50/60Hz]
4	220VAC 50/60Hz [230VAC 50/60Hz]

Indicator light/Surge voltage suppressor

Nil	Without indicator light/surge voltage suppressor
S	With surge voltage suppressor
Z	With indicator light/surge voltage suppressor
R	With surge voltage suppressor (non-polar type)
U	With indicator light/surge voltage suppressor (non-polar type)

Note 1) "S" specification is not available for AC since it is integrated with the rectifier.
Note 2) "R" and "U" specifications are only available for DC.

Electrical entry

G	Grommet (lead wire length: 300mm)	
H	Grommet (lead wire length: 600mm)	
L	L type plug connector	With lead wire
LN	L type plug connector	Without lead wire
LO	L type plug connector	Without connector
M	M type plug connector	With lead wire
MN	M type plug connector	Without lead wire
MO	M type plug connector	Without connector

How to Order Connector Assemblies

DC: **SY100-30-4A**
 100VAC: **SY100-30-1A**
 200VAC: **SY100-30-2A**
 Other AC: **SY100-30-3A**
 Without lead wire: **SY100-30-A**
 (Connector, socket x 2pcs. only)

Lead wire length

Nil	300mm
6	600mm
10	1000mm
15	1500mm
20	2000mm
25	2500mm
30	3000mm
50	5000mm

SY115—**5** **D**

Rated voltage

5	24VDC
6	12VDC
1	100VAC 50/60Hz
2	200VAC 50/60Hz
3	110VAC 50/60Hz [115VAC 50/60Hz]
4	220VAC 50/60Hz [230VAC 50/60Hz]

Indicator light/Surge voltage suppressor

Nil	Without indicator light/surge voltage suppressor
S	With surge voltage suppressor (non-polar type)
Z	With indicator light/surge voltage suppressor (non-polar type)

Note 1) "DOZ" is not available.
Note 2) "S" specification is not available for AC since it is integrated with the rectifier.

Electrical entry

D	DIN terminal	With connector
DO	DIN terminal	Without connector

Note) When replacing the pilot valve assembly alone, SY114 (G, H, L, and M) cannot be replaced with SY115 (DIN terminal), or vice versa.

How to Order Port Block Assemblies

SY **000**—**6A**—

Series

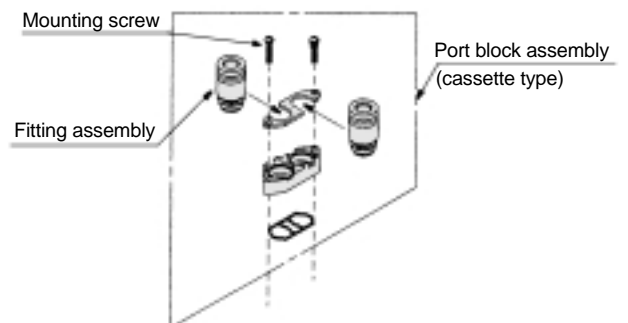
3	SY3000
5	SY5000
7	SY7000
9	SY9000

A/B port size

Symbol	Port size	Applicable series
M5	M5 x 0.8	SY3000
C4	ø4 One-touch fitting	
C6	ø6 One-touch fitting	
01	Rc 1/8	SY5000
C4	ø4 One-touch fitting	
C6	ø6 One-touch fitting	
C8	ø8 One-touch fitting	
02	Rc 1/4	SY7000
C8	ø8 One-touch fitting	
C10	ø10 One-touch fitting	
03	Rc 3/8	SY9000
C8	ø8 One-touch fitting	
C10	ø10 One-touch fitting	
C12	ø12 One-touch fitting	

* Fitting assembly alone can be replaced also.

SY3000	ø4 One-touch fitting	VVQ1000-50A-C4
	ø6 One-touch fitting	VVQ1000-50A-C6
SY5000	ø4 One-touch fitting	VVQ1000-51A-C4
	ø6 One-touch fitting	VVQ1000-51A-C6
SY7000	ø8 One-touch fitting	VVQ1000-51A-C8
	ø8 One-touch fitting	VVQ2000-51A-C8
SY9000	ø10 One-touch fitting	VVQ2000-51A-C10
	ø10 One-touch fitting	VVQ4000-50B-C10
	ø12 One-touch fitting	VVQ4000-50B-C12



Series SY3000 Dimensions



Note []: Values for AC
< >: Values with surge voltage suppressor

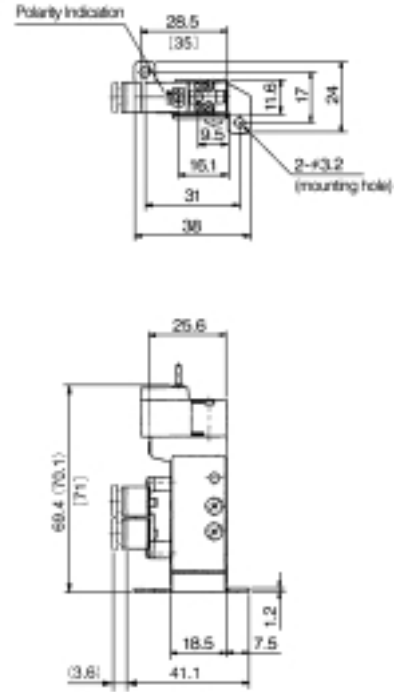
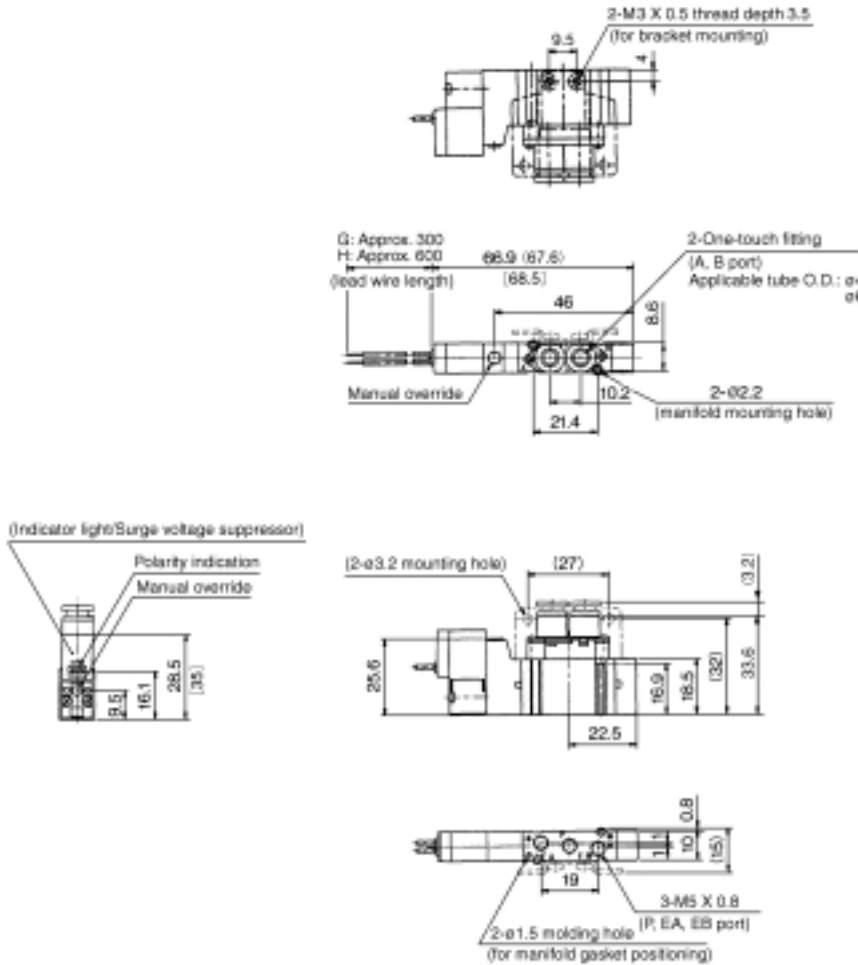
2 position single

Grommet (G), (H): SY3120-□_G□□-C₆-F2

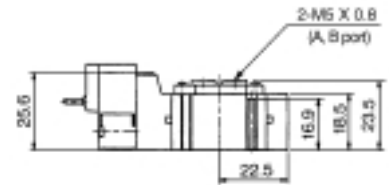
With foot bracket

SY3120-□_G□□-C₆-F1

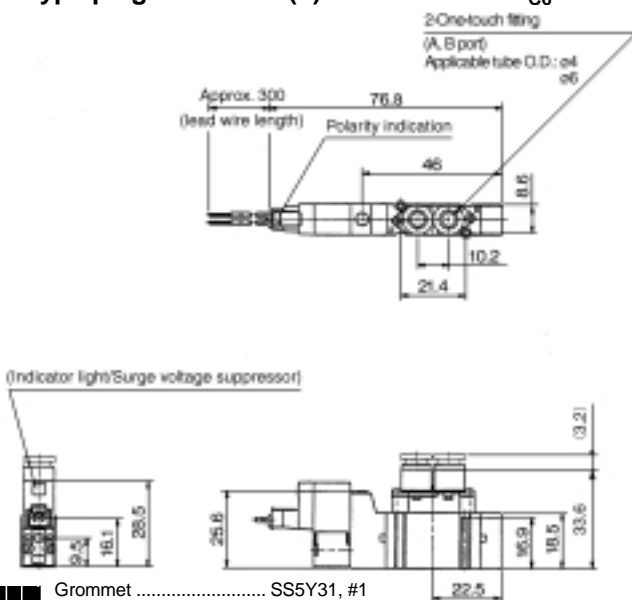
Scale: 40%



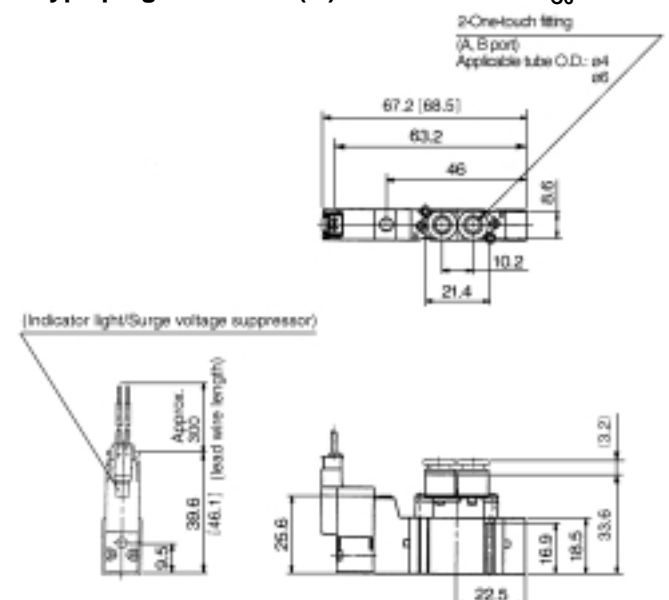
SY3120-□_G□□-M5



L type plug connector (L): SY3120-□_L□□-C₆



M type plug connector (M): SY3120-□_M□□-C₆



- Grommet SS5Y31, #1
- L type plug connector SS5Y31, #1 + #10
- M type plug connector SS5Y31, #1 + #13

Body Ported Type

Series SY3000 Dimensions



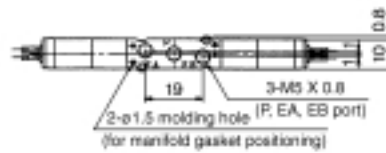
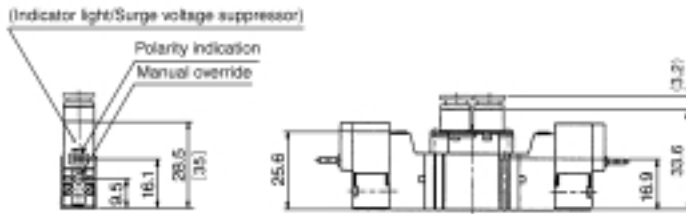
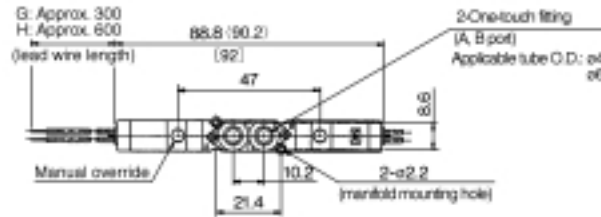
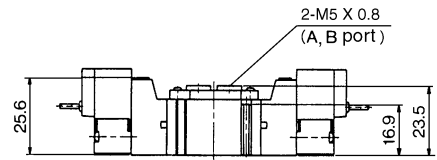
Note) [] : Values for AC
< > : Values with surge voltage suppressor

2 position double

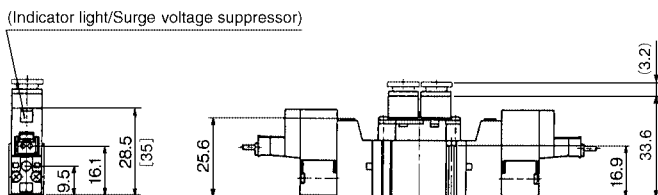
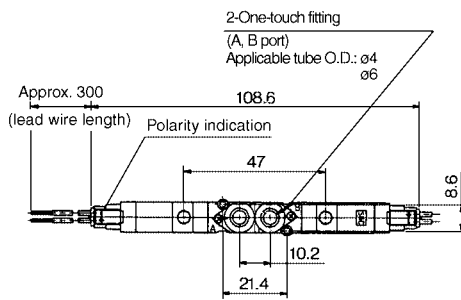
Grommet (G), (H): SY3220-□^G_H□□-C4
C6

SY3220-□^G_H□□-M5

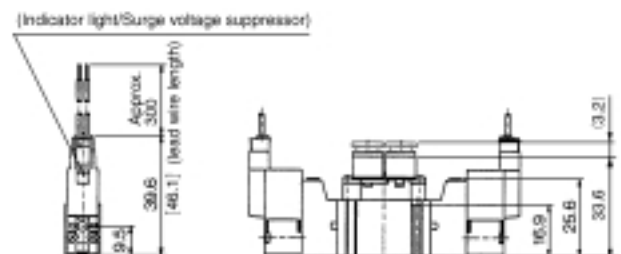
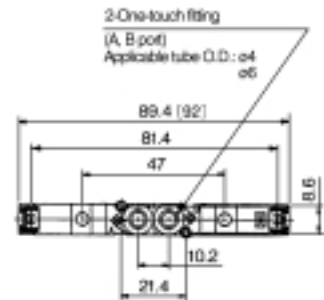
Scale: 40%



L type plug connector (L): SY3220-□L□□-C4 C6



M type plug connector (M): SY3220-□M□□-C4 C6



- Grommet SS5Y31, #2
- L type plug connector SS5Y31, #2 + #11
- M type plug connector SS5Y31, #2 + #14

Body Ported Type SY3000/5000/7000/9000



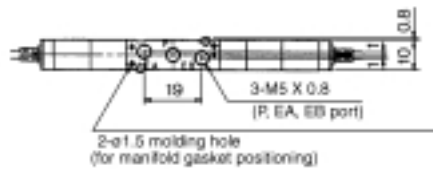
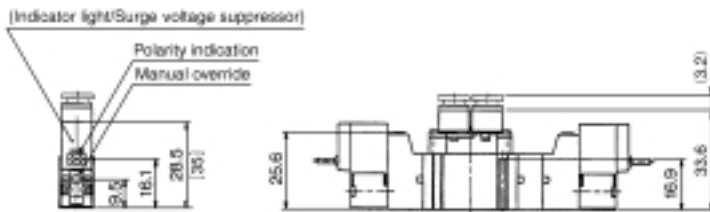
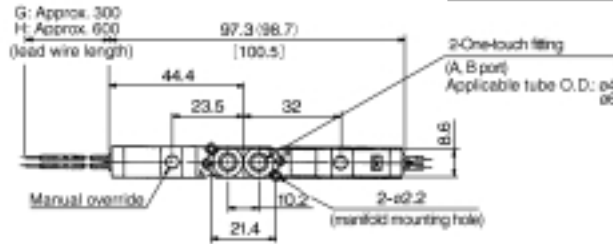
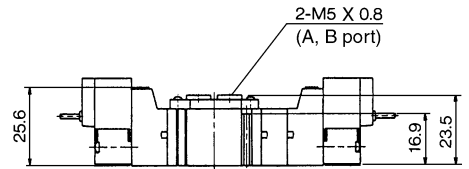
Note []: Values for AC
< >: Values with surge voltage suppressor

3 position closed center/exhaust center/pressure center

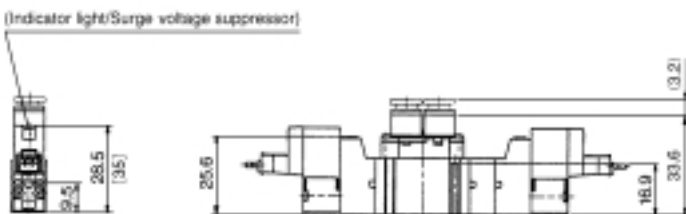
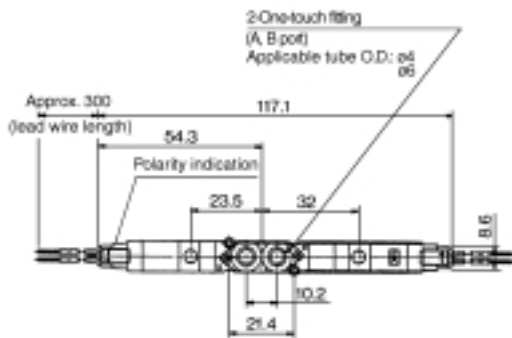
Grommet (G), (H): SY3³/₅20-□^G□□-C₆

SY3³/₅20-□^G□□-M5

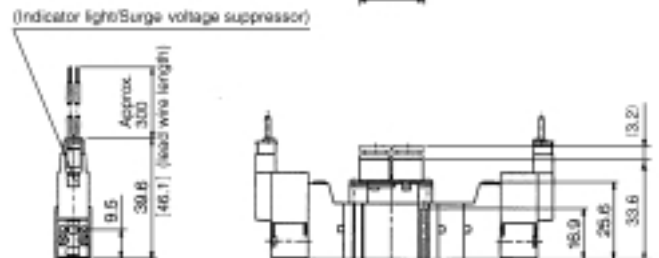
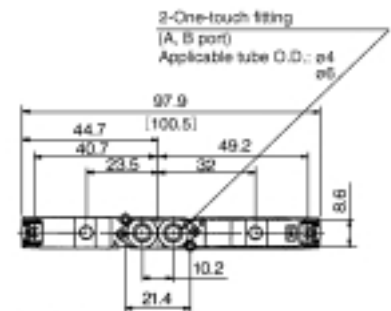
Scale: 40%



L type plug connector (L): SY3³/₅20-□^L□□-C₆



M type plug connector (M): SY3³/₅20-□^M□□-C₆



- Grommet SS5Y31, #3
- L type plug connector SS5Y31, #3 + #12
- M type plug connector SS5Y31, #3 + #15



Features

Single valve

Type 20

Type 23

Type 20P

Type 23P

Single valve

Type 41

Type 42

Type 43

Type 41P

Type 42P

Type 43P

Type 45

Type 45-A

Type 45-NA

Type 45

3 port valve

Air operated

Order made

Manifold Spec. sheets

Precautions

Body Ported Type

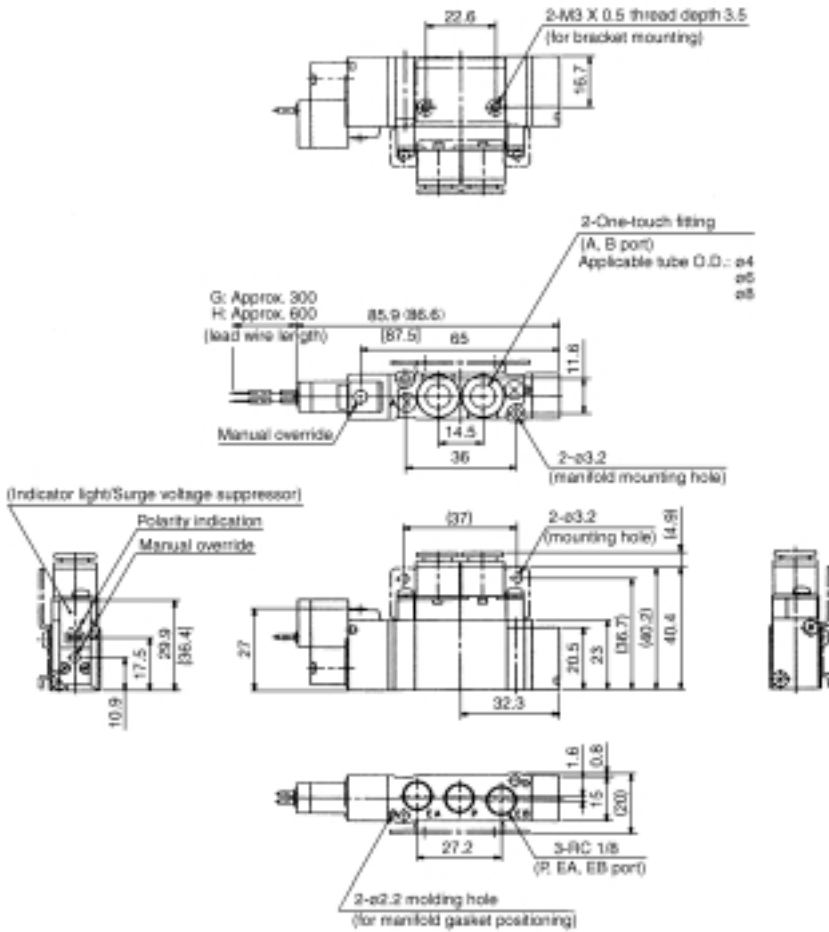
Series SY5000 Dimensions



Note []: Values for AC
< >: Values with surge voltage suppressor

2 position single

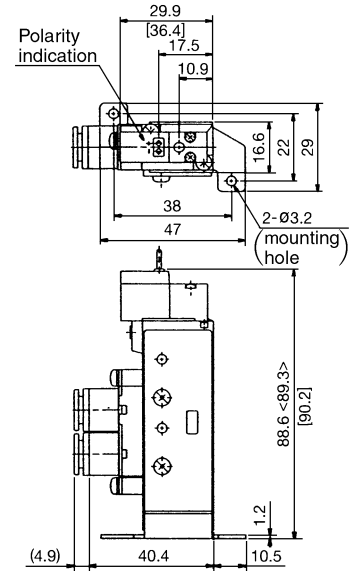
Grommet (G), (H): SY5120-□^G□□-C4
C6
C8 (-F2)



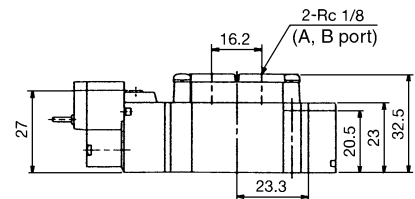
With foot bracket

SY5120-□^G□□-C4
C6
C8 -F1

Scale: 40%

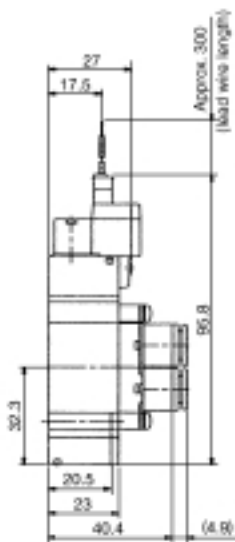


SY5120-□^G□□-01



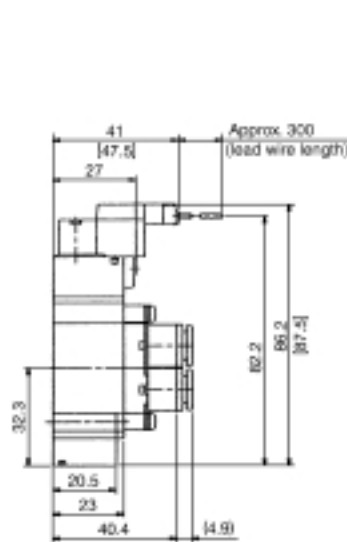
L type plug connector (L):

SY5120-□L□□-C4
C6
C8



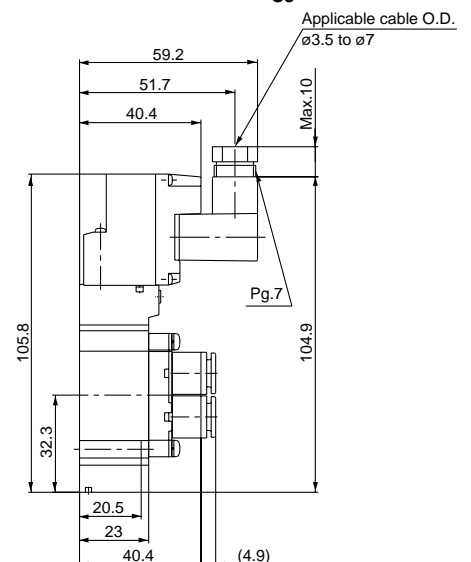
M type plug connector (M):

SY5120-□M□□-C4
C6
C8



DIN terminal (D):

SY5120-□D□□-C4
C6
C8



Grommet SS5Y51, #1
L type plug connector SS5Y51, #1 + #11
M type plug connector SS5Y51, #1 + #14

Body Ported Type SY3000/5000/7000/9000

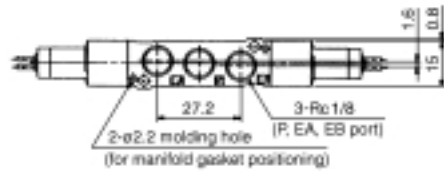
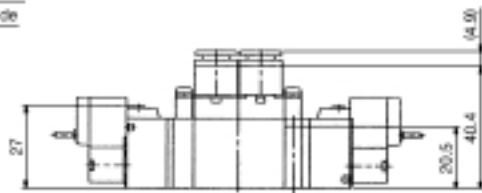
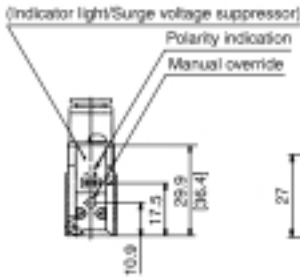
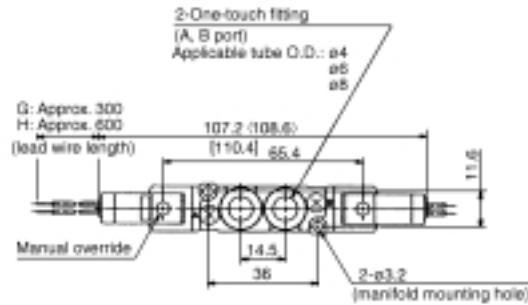


Note []: Values for AC
< >: Values with surge voltage suppressor

Features

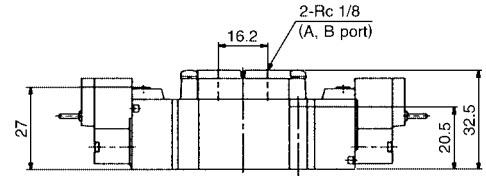
2 position double

Grommet (G), (H): SY5220-□^G□□□-C4
C6
C8



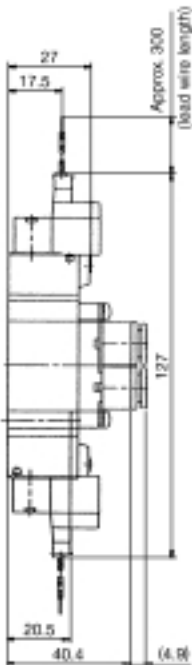
SY5220-□^G□□□-01

Scale: 40%



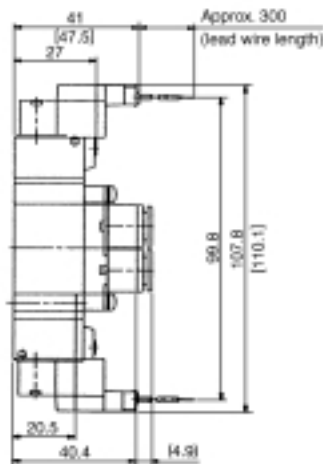
L type plug connector (L):

SY5220-□L□□-C4
C6
C8



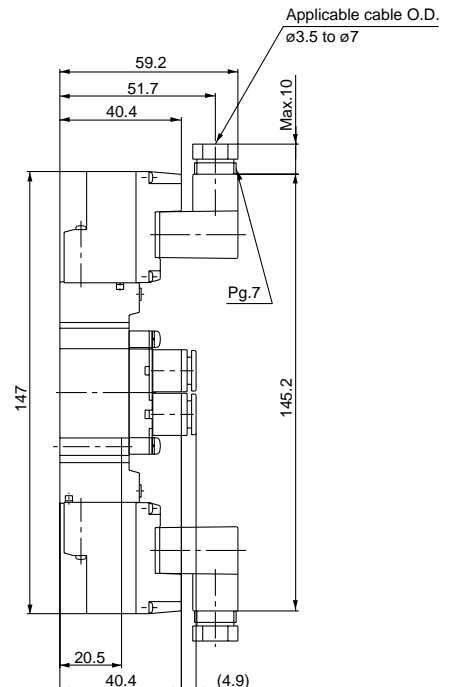
M type plug connector (M):

SY5220-□M□□-C4
C6
C8



DIN terminal (D):

SY5220-□D□□-C4
C6
C8



Grommet SS5Y51, #2
L type plug connector SS5Y51, #2 + #12
M type plug connector SS5Y51, #2 + #15

Single valve

Type 20

Type 23

Type 20P

Type 23P

Single valve

Type 41

Type 42

Type 43

Type 41P

Type 42P

Type 43P

Type 45

Type 45-A

Type 45

3 port valve

Air operated

Order made

Manifold Spec. sheets

Precautions

Body Ported Type

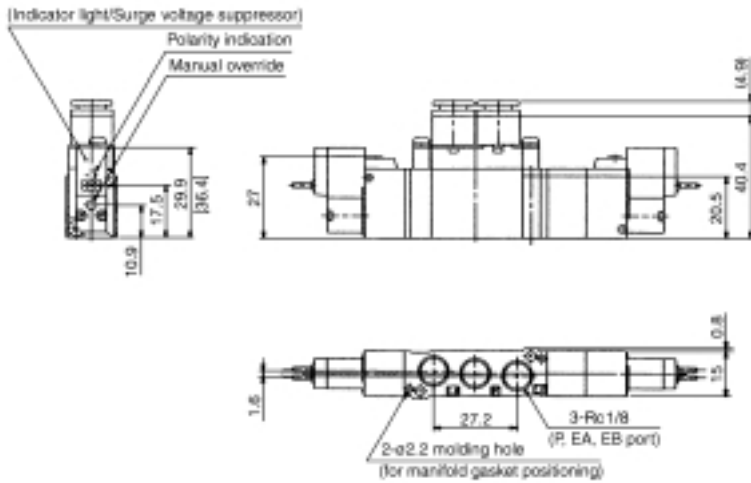
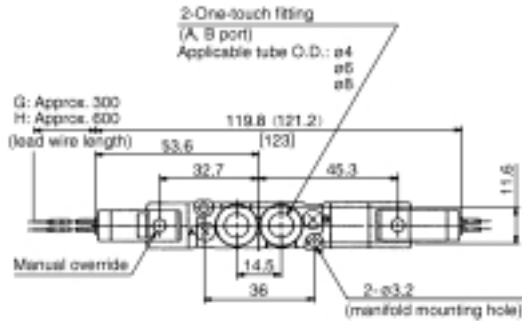
Series SY5000 Dimensions



Note) []: Values for AC
< >: Values with surge voltage suppressor

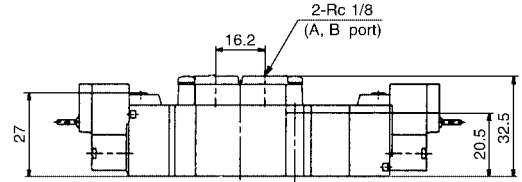
3 position closed center/exhaust center/pressure center

Grommet (G), (H): SY5³/₅20-□G□□-C4
C6
C8



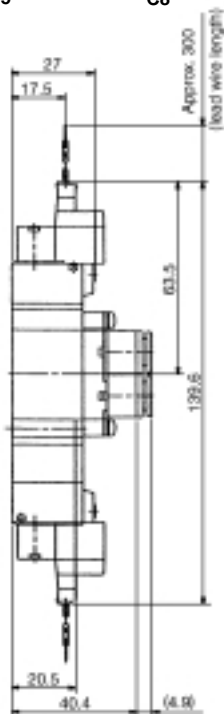
SY5³/₅20-□G□□-01

Scale: 40%



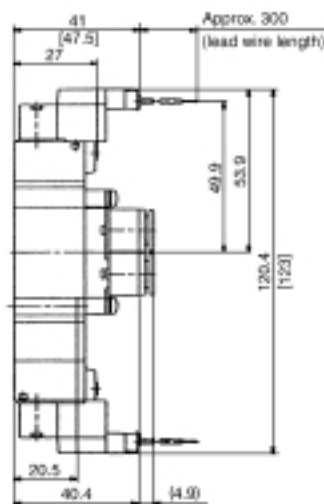
L type plug connector (L):

SY5³/₅20-□L□□-C4
C6
C8



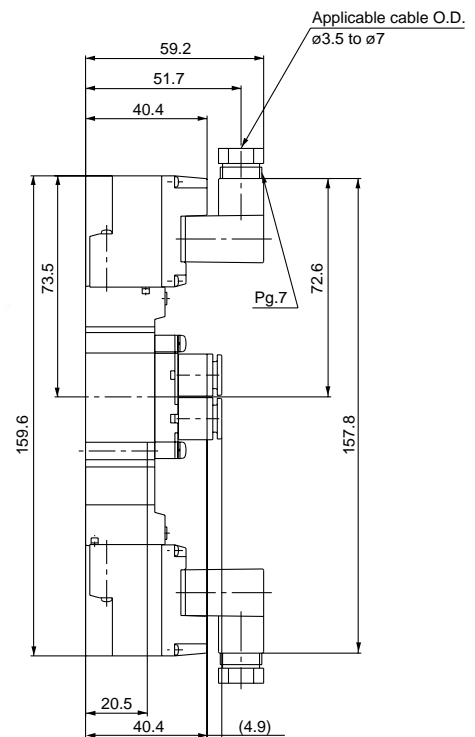
M type plug connector (M):

SY5³/₅20-□M□□-C4
C6
C8



DIN terminal (D):

SY5³/₅20-□D□□-C4
C6
C8



Grommet SS5Y51, #3
L type plug connector SS5Y51, #3 + #13
M type plug connector SS5Y51, #3 + #16

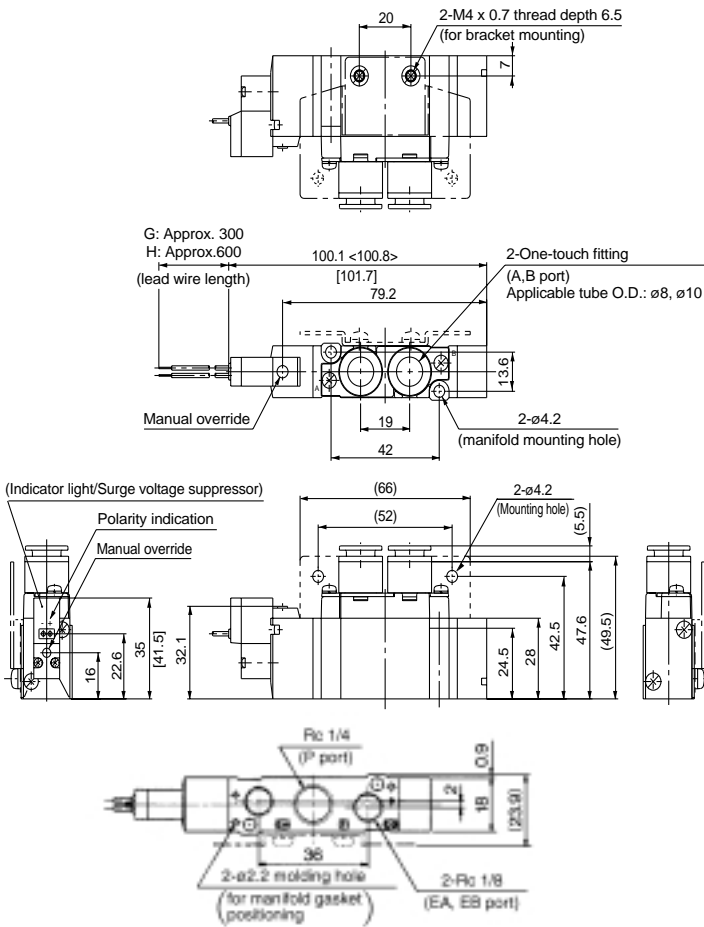
Series SY7000 Dimensions



Note) [] : Values for AC
< > : Values with surge voltage suppressor

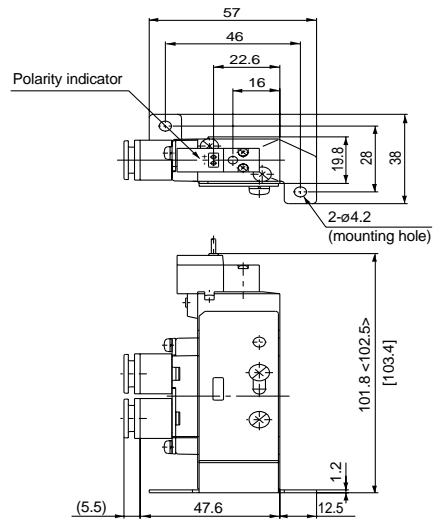
2 position single

Grommet (G), (H): SY7120-□^G□□□-C⁸_{C10} (-F2)

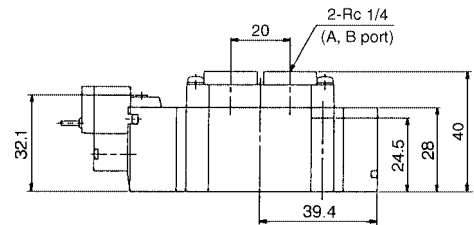


SY7120-□^G□□□-C⁸-F1

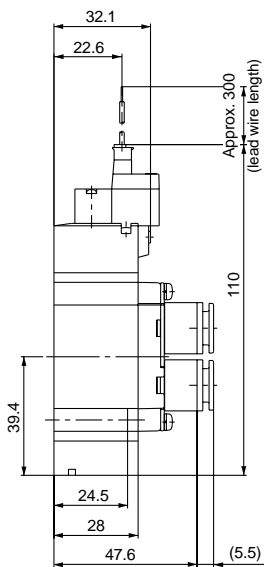
Scale: 40%



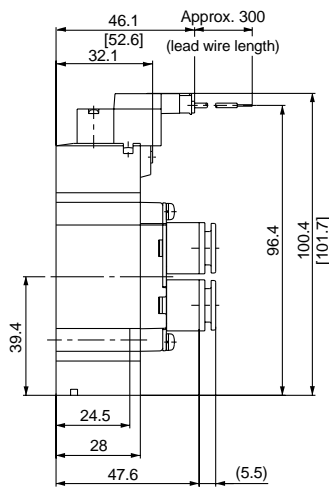
SY7120-□^G□□□-02



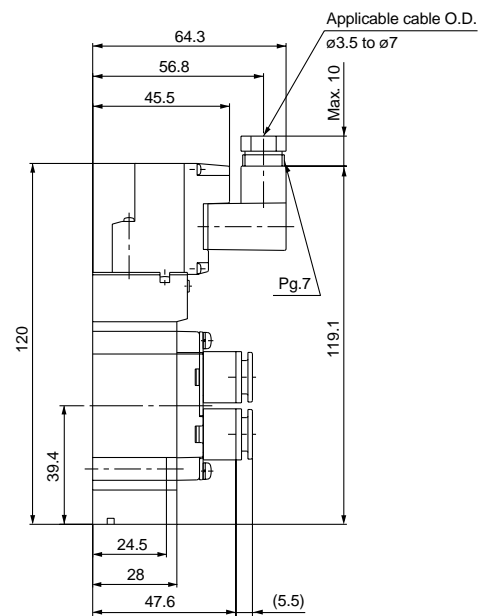
L type plug connector (L): SY7120-□^L□□□-C⁸_{C10}



M type plug connector (M): SY7120-□^M□□□-C⁸_{C10}



DIN terminal (D): SY7120-□^D□□□-C⁸_{C10}



Grommet SS5Y71, #1
L type plug connector SS5Y71, #1 + #10
M type plug connector SS5Y71, #1 + #13

Single valve
Type 20
Type 23
Type 20P
Type 23P
Single valve
Type 41
Type 42
Type 43
Type 41P
Type 42P
Type 43P
Type 45
Type 45-A
Type 45-NA
Type 45
3 port valve
Air operated
Order made
Manifold Spec. sheets
Precautions

Body Ported Type

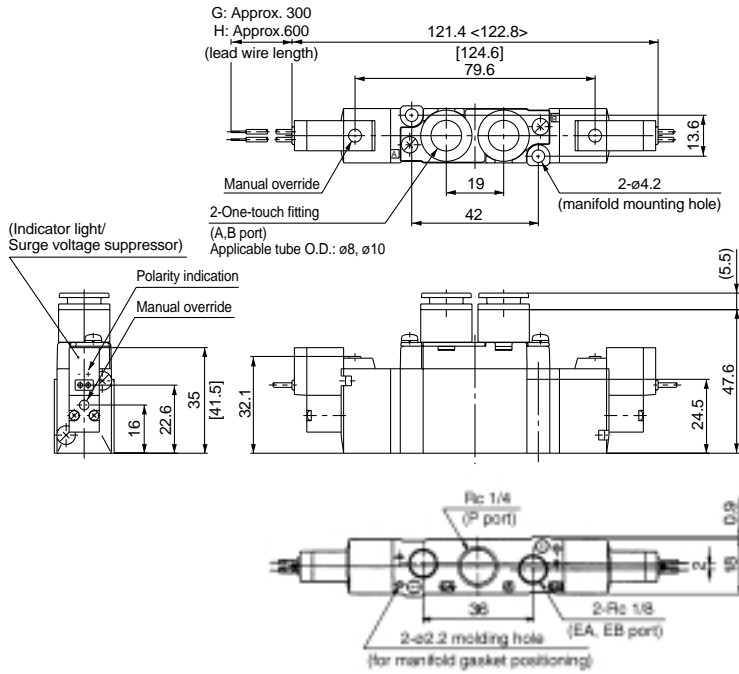
Series SY7000 Dimensions



Note) [] : Values for AC
< > : Values with surge voltage suppressor

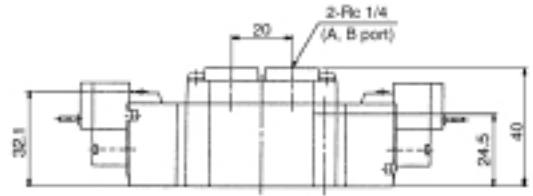
2 position double

Grommet (G), (H): SY7220-□^G□□-C⁸_{C10}

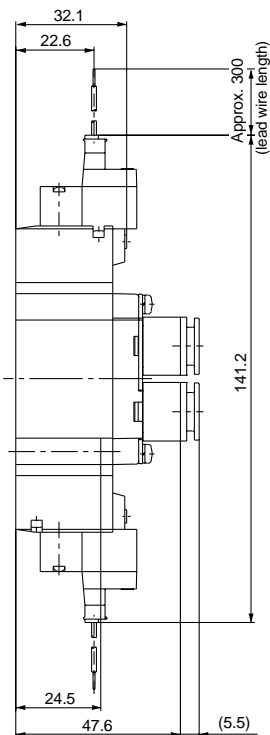


SY7220-□^G□□-02

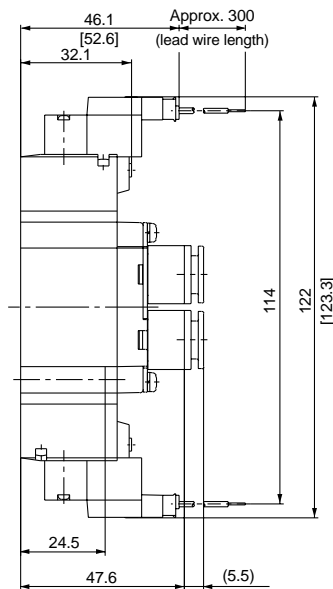
Scale: 40%



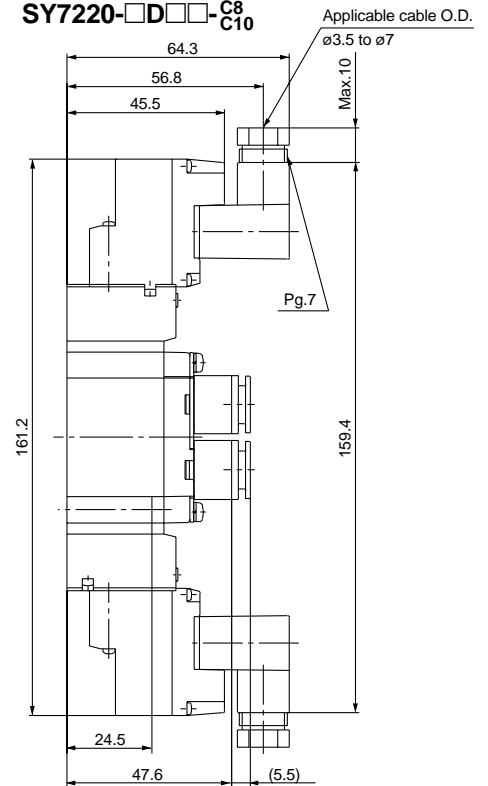
L type plug connector (L):
SY7220-□L□□-C⁸_{C10}



M type plug connector (M):
SY7220-□M□□-C⁸_{C10}



DIN terminal (D):
SY7220-□D□□-C⁸_{C10}



Grommet SS5Y71, #2
L type plug connector SS5Y71, #2 + #11
M type plug connector SS5Y71, #2 + #14

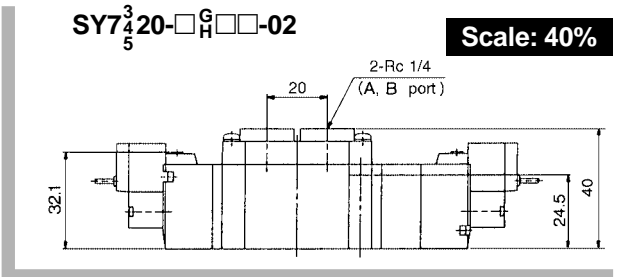
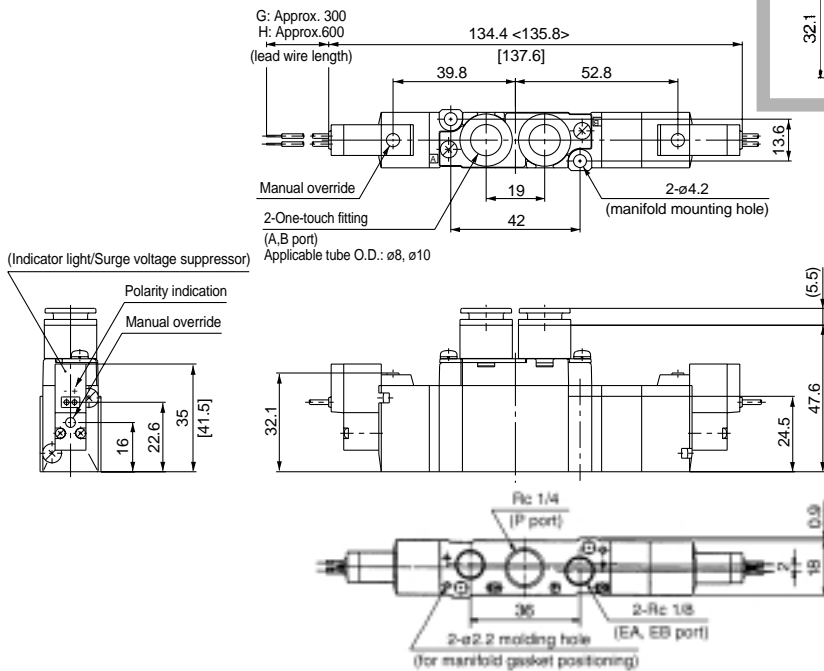


Note []: Values for AC
< >: Values with surge voltage suppressor

3 position closed center/exhaust center/pressure center
Grommet (G), (H): SY7³/₄20-□^G□□-C₈^{C10}

SY7³/₄20-□^G□□-02

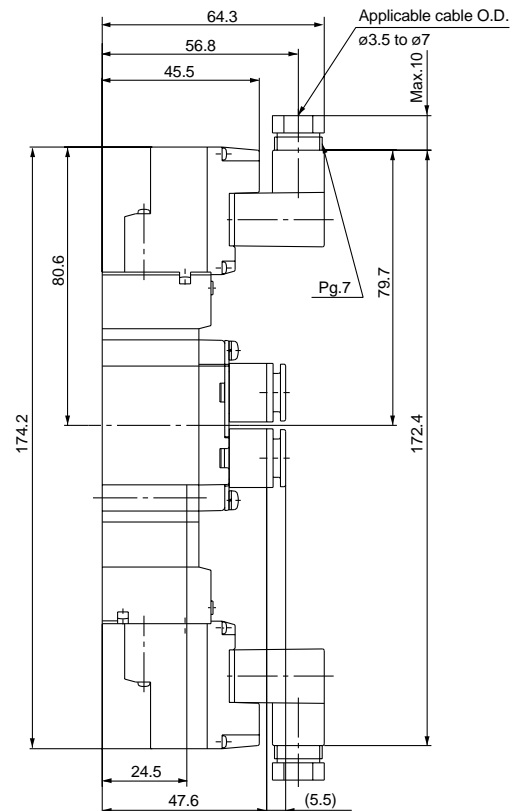
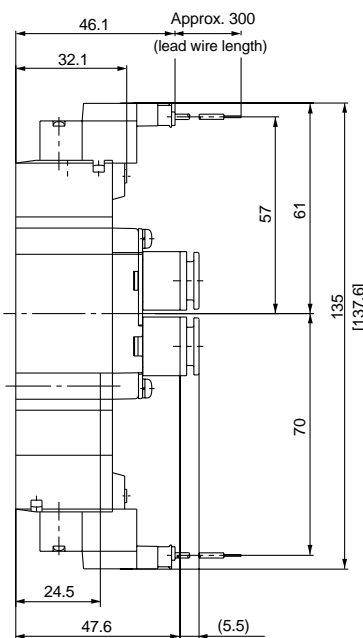
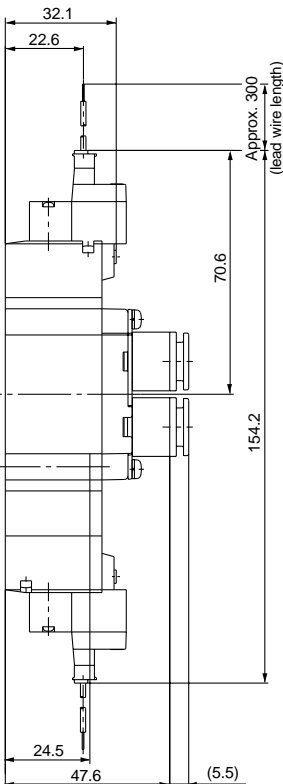
Scale: 40%



L type plug connector (L):
SY7³/₄20-□^L□□-C₈^{C10}

M type plug connector (M):
SY7³/₄20-□^M□□-C₈^{C10}

DIN terminal (D):
SY7³/₄20-□^D□□-C₈^{C10}



- Grommet SS5Y71, #3
- L type plug connector SS5Y71, #3 + #12
- M type plug connector SS5Y71, #3 + #15

Features

Single valve

Type 20

Type 23

Type 20P

Type 23P

Single valve

Type 41

Type 42

Type 43

Type 41P

Type 42P

Type 43P

Type 45

Type 45-A

Type 45

Type 45

3 port valve

Air operated


Order made

Manifold Spec. sheets

Precautions

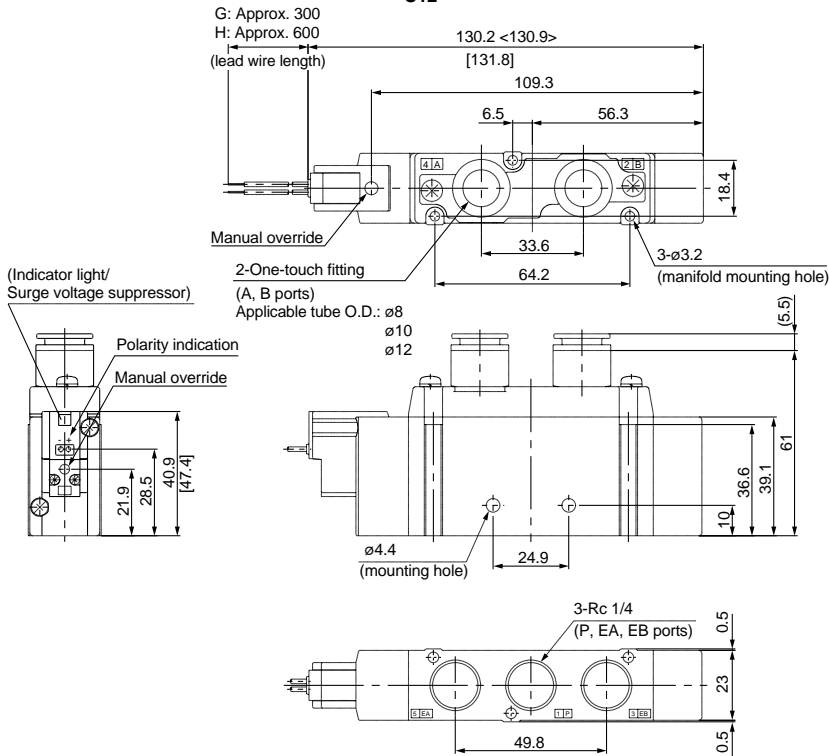
Body Ported Type

Series SY9000 Dimensions

 Note []: Values for AC
< >: Values with surge voltage suppressor

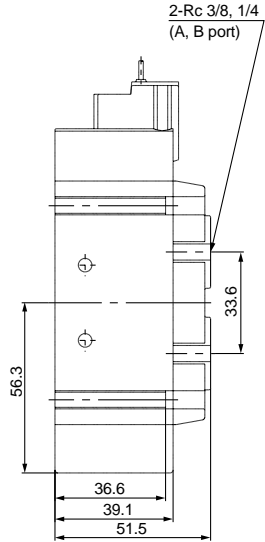
2 position single

Grommet (G), (H): SY9120-□_G□_H□_{C8}□_{C10}□_{C12}



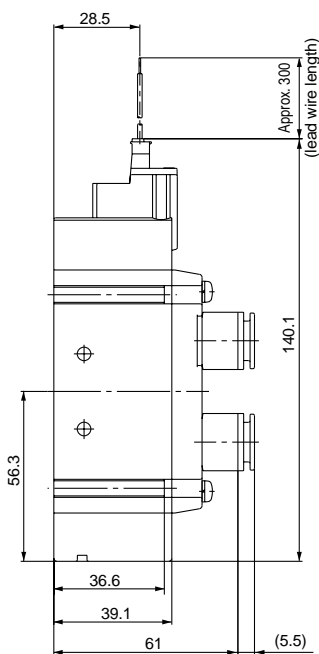
SY9120-□_G□_H□_{C8}□_{C10}□_{C12}

Scale: 40%



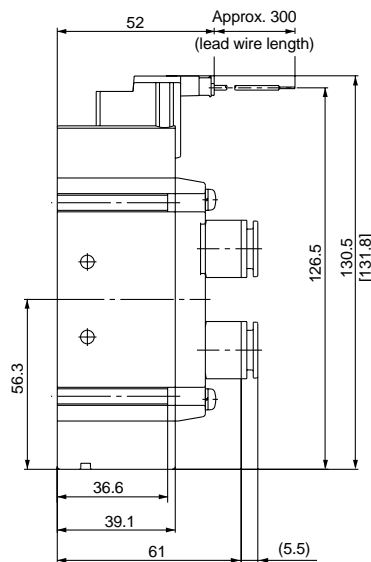
L type plug connector (L):

SY9120-□_L□_{C8}□_{C10}□_{C12}



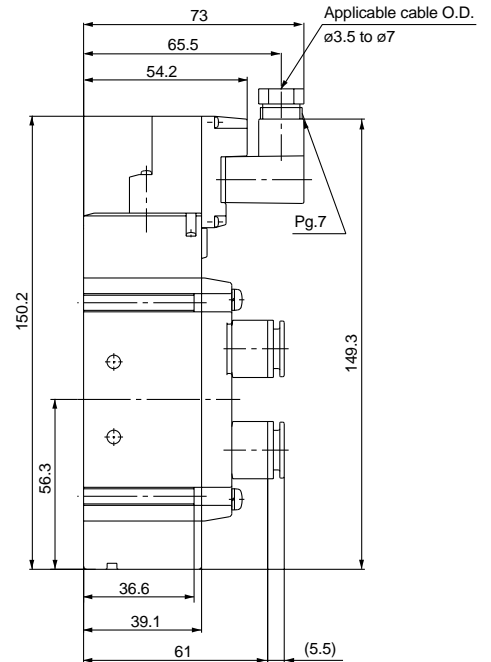
M type plug connector (M):

SY9120-□_M□_{C8}□_{C10}□_{C12}



DIN terminal (D):

SY9120-□_D□_{C8}□_{C10}□_{C12}



Note) []: Values for AC
< >: Values with surge voltage suppressor

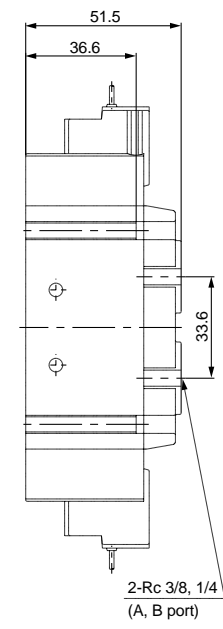
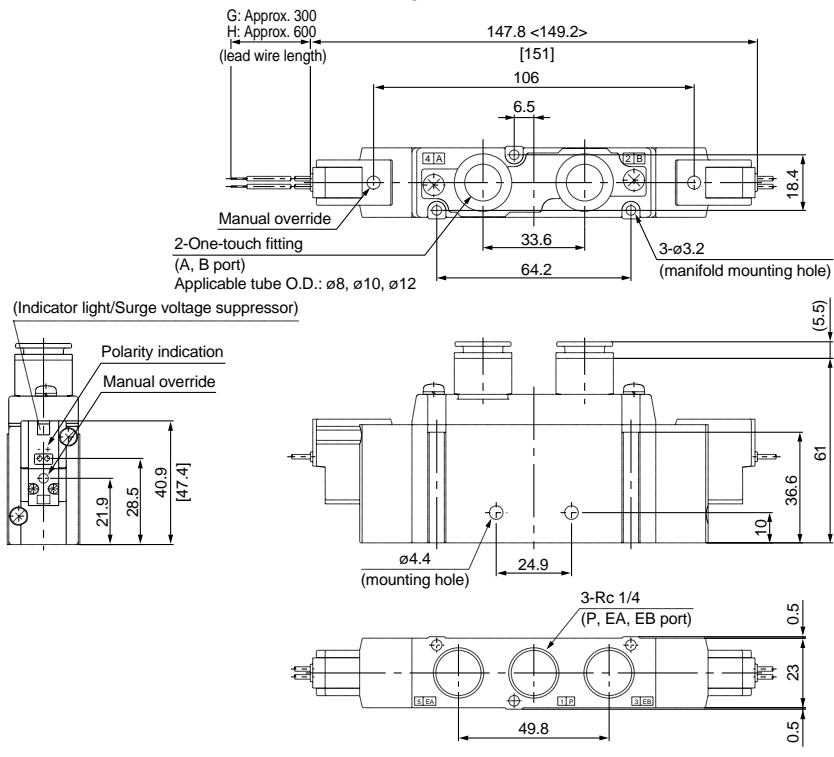
Series SY9000 Dimensions

2 position double

Grommet (G), (H): SY9220-□G□□-C8
C10
C12

SY9220-□G□□-02
03

Scale: 40%



L type plug connector (L):

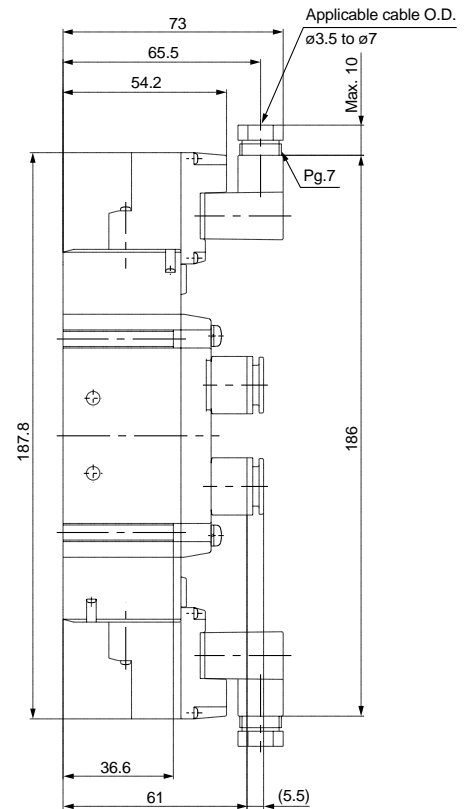
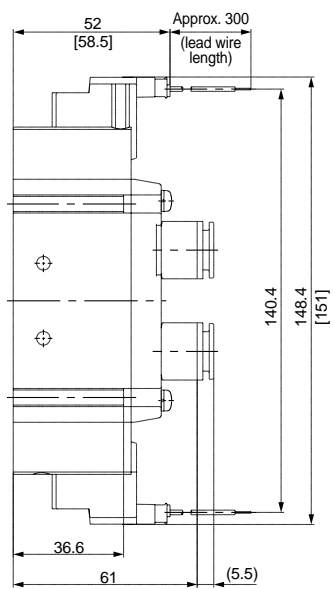
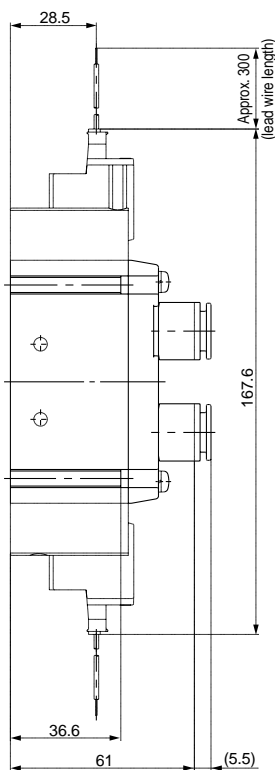
SY9220-□L□□-C8
C10
C12

M type plug connector (M):

SY9220-□M□□-C8
C10
C12

DIN terminal (D):

SY9220-□D□□-C8
C10
C12



Single valve
Type 20
Type 23
Type 20P
Type 23P
Single valve
Type 41
Type 42
Type 43
Type 41P
Type 42P
Type 43P
Type 45
Type 45-A NA
Type 45

3 port valve
Air operated
Order made
Manifold Spec. sheets
Precautions

Body Ported Type

Series SY9000 Dimensions

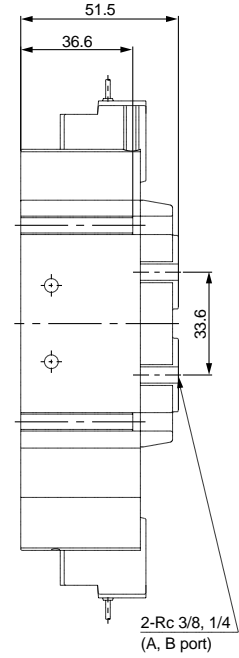
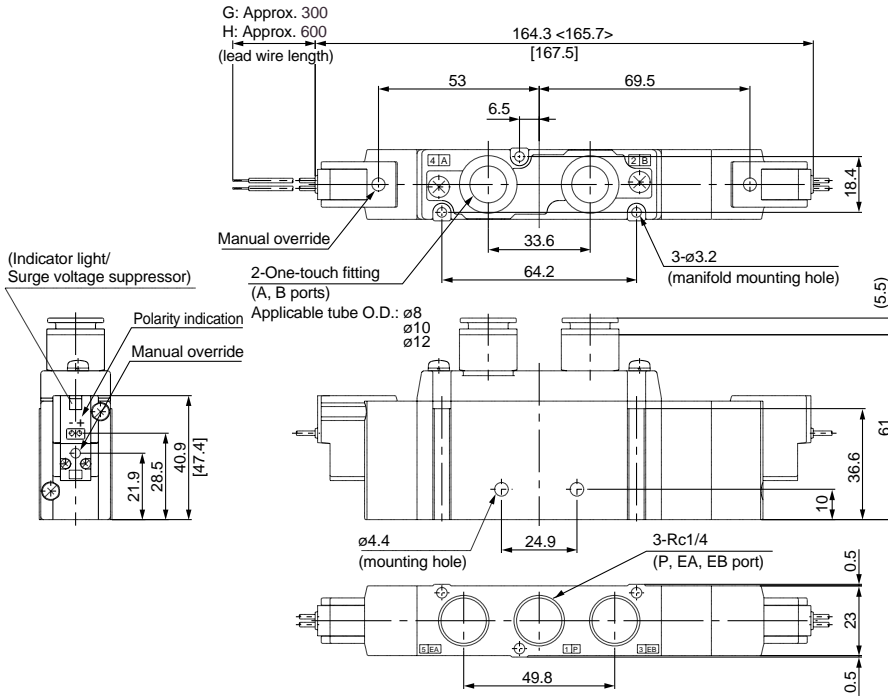
Note) []: Values for AC
< >: Values with surge voltage suppressor

3 position closed center/exhaust center/pressure center

Grommet (G), (H): SY9³/₅20-□G□□-C⁸/_{C10}/_{C12}

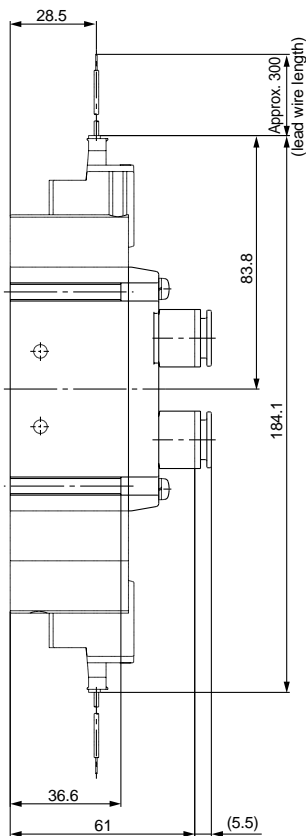
SY9³/₅20-□G□□-02

Scale: 40%



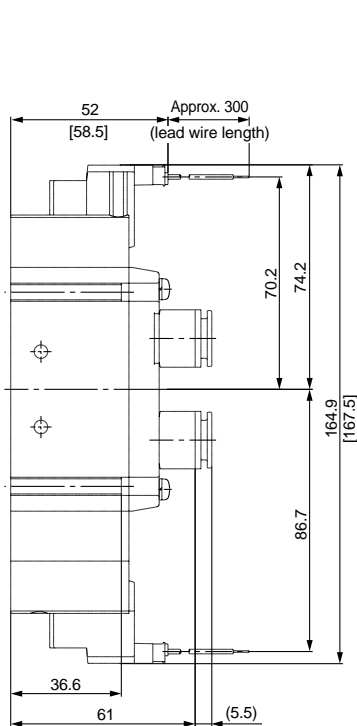
L type plug connector (L):

SY9³/₅20-□L□□-C⁸/_{C10}/_{C12}



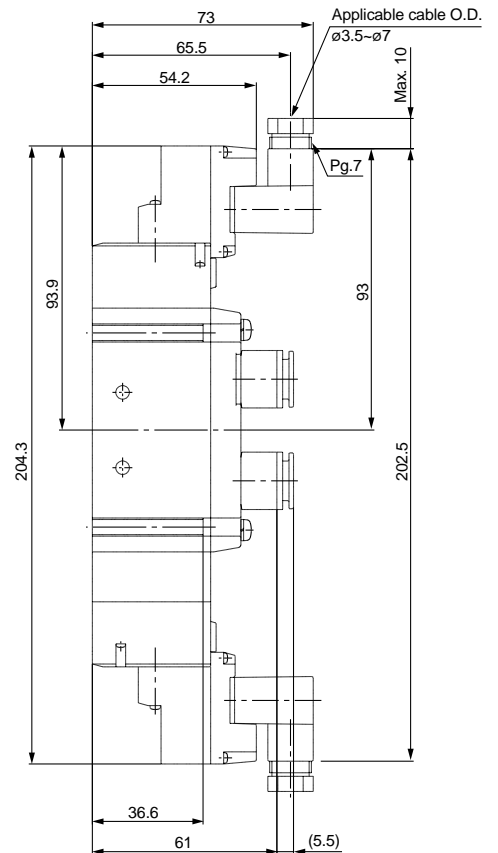
M type plug connector (M):

SY9³/₅20-□M□□-C⁸/_{C10}/_{C12}



DIN terminal (D):

SY9³/₅20-□D□□-C⁸/_{C10}/_{C12}



SY3000/5000/7000/9000 Base Mounted Type Single Valve



How to Order

SY 5 2 40 [] 5 L [] [] []

Series

3	SY3000
5	SY5000
7	SY7000
9	SY9000

Type of actuation

1	2 position single
2	2 position double
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center

Pilot type

Nil	Internal pilot
R	External pilot

Rated voltage

DC specifications

5	24VDC
6	12VDC
V	6VDC
S	5VDC
R	3VDC

AC specifications (50/60Hz)

1	100VAC
2	200VAC
3	110VAC [115VAC]
4	220VAC [230VAC]

Note 1) DC specifications for "D" and "DO" are only available in 24VDC and 12VDC.
Note 2) "D" and "DO" are not available for SY3000.

Port size

Symbol	Port size	Applicable series
Nil	Without sub-plate	
01	Rc 1/8 With sub-plate	SY3000
02	Rc 1/4 With sub-plate	SY5000 SY7000
03	Rc 3/8 With sub-plate	SY7000 SY9000
04	Rc 1/2 With sub-plate	SY9000

Manual override

Nil: Non-locking push type 	D: Push-turn locking slotted type
E: Push-turn locking lever type 	

Indicator light/Surge voltage suppressor

For electrical entry G, H, L, M

Nil	Without indicator light/surge voltage suppressor
S	With surge voltage suppressor
Z	With indicator light/surge voltage suppressor
R	With surge voltage suppressor (non-polar type)
U	With indicator light/surge voltage suppressor (non-polar type)

Note 1) For AC, there is no "S" specification, since it is integrated with the rectifier.
Note 2) "R" and "U" are available for DC only.

For electrical entry D

Nil	Without indicator light/surge voltage suppressor
S	With surge voltage suppressor (non-polar type)
Z	With indicator light/surge voltage suppressor (non-polar type)

Note 1) "DOZ" is not available.
Note 2) For AC, there is no "S" specification, since it is integrated with the rectifier.

Electrical entry

24V, 12V, 6V, 5V, 3VDC/100V, 110V, 200V, 220VAC				24V, 12VDC 100V, 110V, 200V, 220VAC
Grommet	L type plug connector	M type plug connector		DIN terminal
G: Lead wire length 300mm 	L: With lead wire (length 300mm) 	M: With lead wire (length 300mm) 	MN: Without lead wire 	(Except SY3000) D: With connector
H: Lead wire length 600mm 	LN: Without lead wire 	LO: Without connector 	MO: Without connector 	DO: Without connector

Note 1) "LN" and "MN" include 2 sockets
Note 2) "D" and "DO" are not available for SY3000.
Note 3) DIN43650C standard DIN terminal "Y" is also available. Refer to page 189 for details.



Pages 177 to 190

Specifications

Series	SY3000				SY5000				SY7000				SY9000																		
Fluid	Air																														
Internal pilot operating pressure range MPa	2 position single				0.15 to 0.7				2 position double				0.1 to 0.7																		
	3 position				0.2 to 0.7				Operating pressure range				-100kPa to 0.7																		
	External pilot operating pressure range MPa				Pilot pressure range				2 position single				0.25 to 0.7																		
				2 position double				0.25 to 0.7				3 position				0.25 to 0.7															
Ambient and fluid temperature °C																Maximum 50															
Maximum operating frequency Hz	2 position single, double				10				5				5				5														
	3 position				3				3				3				3														
Manual override																Non-locking push type, Push-turn locking slotted type, Push-turn locking lever type															
Pilot exhaust type	Internal pilot				Common exhaust for main and pilot valves																										
	External pilot				Separate exhaust for pilot valve																										
Lubrication																Not required															
Mounting orientation																Unrestricted															
Impact resistance/Vibration resistance m/s ² (Note)																150/30															
Enclosure																Dust proof (IP65 for DIN terminal*)															

* In compliance with IEC529 standard.
 (Note) **Impact resistance:** No malfunction resulted from the impact test using a drop impact tester. The test was performed one time each in the axial and right angle directions of the main valve and armature, for both energized and de-energized states. (Value in the initial stage)
Vibration resistance: No malfunction occurred in a one-sweep test between 8.3 and 2000Hz. Test was performed for both energized and de-energized states in the axial and right angle directions of the main valve and armature. (Value in the initial stage)

Solenoid specifications

Electrical entry	Grommet (G)/(H), L type plug connector (L), M type plug connector (M), DIN terminal (D) (Note 1)																														
Rated coil voltage V	DC				24, 12, 6, 5, 3																										
	AC 50/60Hz				100, 110, 200, 220 (Note 2)																										
Allowable voltage fluctuation																±10% of rated voltage															
Current consumption W	DC				0.5 [With indicator light: 0.55 (0.6 for DIN terminal with indicator light)] (Note 3)																										
Apparent power VA	AC	100V				0.9 (With indicator light: 1.0)																									
		110V				1.0 (With indicator light: 1.1)																									
		[115V]				[1.1 (With indicator light: 1.2)]																									
		200V				1.8 (With indicator light: 1.9)																									
		[230V]				1.9 (With indicator light: 2.0) [2.2 (With indicator light: 2.3)]																									
Surge voltage suppressor																Diodes (ZNR for DIN terminal, Zener diode for G, L or M non-polar type)															
Indicator light																LED (Neon bulb for AC type DIN terminal)															

Note 1) DIN terminal (D) is not available for SY3000.
 Note 2) 110 and 115VAC are common, as are 220 and 230VAC.
 Note 3) Energy saving [0.22W] type is also available. Refer to page 190 for details.

Response time

(Note) Based on dynamic performance test JISB8375-1981 (at coil temperature of 20°C with rated voltage)

SY3000

Type of actuation	Response time ms (at 0.5MPa)			
	Without indicator light/surge voltage suppressor	With indicator light/surge voltage suppressor		R, U types
		S, Z types	R, U types	
2 position single	12 or less	15 or less	12 or less	
2 position double	10 or less	13 or less	10 or less	
3 position	15 or less	20 or less	16 or less	

SY7000

Type of actuation	Response time ms (at 0.5MPa)			
	Without indicator light/surge voltage suppressor	With indicator light/surge voltage suppressor		R, U types
		S, Z types	R, U types	
2 position single	31 or less	38 or less	33 or less	
2 position double	27 or less	30 or less	28 or less	
3 position	50 or less	56 or less	50 or less	

SY5000

Type of actuation	Response time ms (at 0.5MPa)			
	Without indicator light/surge voltage suppressor	With indicator light/surge voltage suppressor		R, U types
		S, Z types	R, U types	
2 position single	19 or less	26 or less	19 or less	
2 position double	18 or less	22 or less	18 or less	
3 position	32 or less	38 or less	32 or less	

SY9000

Type of actuation	Response time ms (at 0.5MPa)			
	Without indicator light/surge voltage suppressor	With indicator light/surge voltage suppressor		R, U types
		S, Z types	R, U types	
2 position single	35 or less	41 or less	35 or less	
2 position double	35 or less	41 or less	35 or less	
3 position	62 or less	64 or less	62 or less	

Base Mounted Type

Models/Series SY3000

Valve model	Type of actuation		Port size	Effective area ^{Note 1)} mm ² (CV factor)		Weight g ^{Note 2)}	
				P to A/B	A/B to EA/EB	Grommet	L/M type plug connector
SY3□40-□-01	2 pos.	Single	Rc 1/8	4.86 (0.27)	5.4 (0.3)	81 (47)	85 (51)
		Double		4.86 (0.27)	5.4 (0.3)	96 (62)	103 (69)
	3 position	Closed center		4.68 (0.26)	4.86 (0.27)	98 (63)	105 (70)
		Exhaust center		4.86 (0.27)	5.94 (0.33) [3.24 (0.18)]		
		Pressure center		6.66 (0.37) [3.24 (0.18)]	5.22 (0.29)		



Note 1) Values inside [] are for normal position.

Note 2) Values inside () are for valves without sub-plate.

Models/Series SY5000

Valve model	Type of actuation		Port size	Effective area ^{Note 1)} mm ² (CV factor)		Weight g ^{Note 2)}		
				P to A/B	A/B to EA/EB	Grommet	L/M type plug connector	DIN terminal
SY5□40-□-02	2 pos.	Single	Rc 1/4	12.78 (0.71)	12.6 (0.7)	118 (55)	121 (59)	154 (82)
		Double		12.78 (0.71)	12.6 (0.7)	133 (70)	140 (77)	186 (123)
	3 position	Closed center		7.56 (0.42)	8.1 (0.45)	138 (76)	146 (83)	192 (129)
		Exhaust center		7.92 (0.44)	14.4 (0.8) [9.0 (0.5)]			
		Pressure center		15.84 (0.88) [4.5 (0.25)]	8.64 (0.48)			



Note 1) Values inside [] are for normal position.

Note 2) Values inside () are for valves without sub-plate.

Models/Series SY7000

Valve model	Type of actuation		Port size	Effective area ^{Note 1)} mm ² (CV factor)		Weight g ^{Note 2)}		
				P to A/B	A/B to EA/EB	Grommet	L/M type plug connector	DIN terminal
SY7□40-□-03	2 pos.	Single	Rc 1/4 Rc 3/8	23.22 (1.29)	21.6 (1.2)	215 (86)	219 (90)	242 (113)
		Double		23.22 (1.29)	21.6 (1.2)	231 (102)	238 (109)	284 (155)
	3 position	Closed center		14.04 (0.78)	12.24 (0.68)	233 (104)	241 (112)	287 (158)
		Exhaust center		14.04 (0.78)	20.88 (1.16) [12.96 (0.72)]			
		Pressure center		24.48 (1.36) [13.5 (0.75)]	12.42 (0.69)			



Note 1) Values inside [] are for normal position.

Note 2) Values inside () are for valves without sub-plate.

Models/Series SY9000

Valve model	Type of actuation		Port size	Effective area ^{Note 1)} mm ² (CV factor)		Weight g ^{Note 2)}		
				P to A/B	A/B to EA/EB	Grommet	L/M type plug connector	DIN terminal
SY9□40-□-03	2 pos.	Single	Rc 3/8	40.29 (2.24)	47.94 (2.66)	466 (169)	470 (173)	493 (196)
		Double		40.29 (2.24)	47.94 (2.66)	482 (185)	490 (193)	535 (239)
	3 position	Closed center		39.57 (2.20)	36.92 (2.05)	506 (209)	514 (217)	560 (263)
		Exhaust center		37.56 (2.09)	62.31 (3.46) [20.64 (1.15)]			
		Pressure center		37.51 (2.08) [16.48 (0.92)]	57.25 (3.18)			



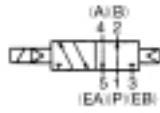
Note 1) Values inside [] are for normal position.

Note 2) Values inside () are for valves without sub-plate.

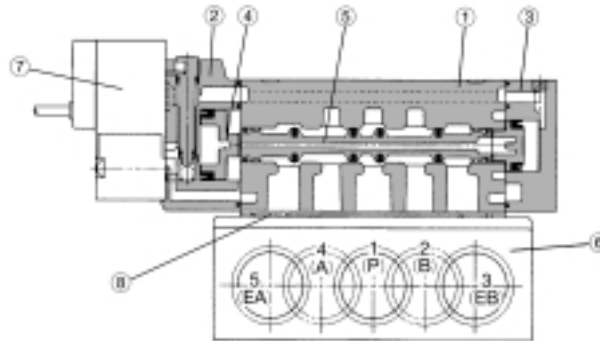
Construction

Series SY

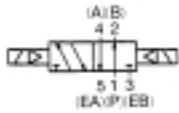
Symbol:
2 position single



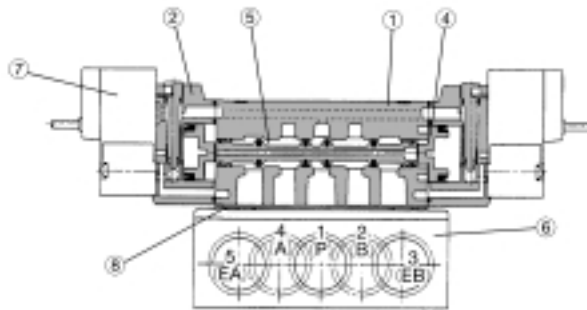
2 position single



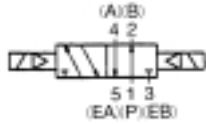
Symbol:
2 position double



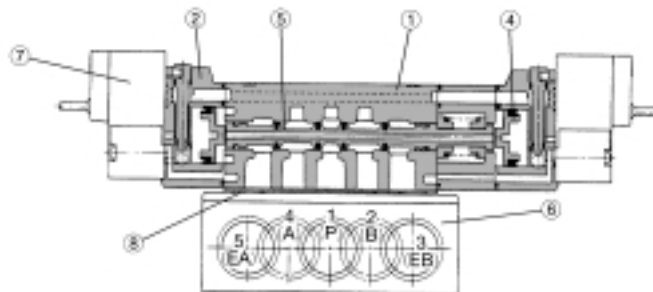
2 position double



Symbol:
3 position closed center



3 position closed center/exhaust center/pressure center



3 position exhaust center



3 position pressure center



(The diagram above shows the closed center type.)

Parts list

No.	Description	Material	Note
1	Body	Die-cast aluminum (SY3000 is die-cast zinc.)	White
2	Adaptor plate	Resin	White (Gray for SY9000)
3	End plate	Resin	White
4	Piston	Resin	—
5	Spool valve assembly	Aluminum/NBR	—

Replacement parts

No.	Description	Part no.				Note
		SY3□40	SY5□40	SY7□40	SY9□40	
6	Sub-plate	SY3000-27-1	SY5000-27-1	Rc 1/4: SY7000-27-1 Rc 3/8: SY7000-27-2	Rc 3/8: SY9000-27-1 Rc 1/2: SY9000-27-2	Die-cast aluminum
7	Pilot valve assembly	Refer to "How to Order Pilot Valve Assemblies" on page 23.				
8	Gasket	SY3000-11-25	SY5000-11-13	SY7000-11-7	SY9000-11-2	NBR
—	Round head combination screw	SY3000-23-4 (M2 x 21)	M3 x 26	M4 x 31	SY9000-18-2 (M3 x 42)	For mounting valves (Flat nickel plated)

Caution

Mounting screw tightening torques
 M2: 0.15N·m
 M3: 0.6N·m
 M4: 1.4N·m

Single valve

Type 20

Type 23

Type 20P

Type 23P

Single valve

Type 41

Type 42

Type 43

Type 41P

Type 42P

Type 43P

Type 45

Type 45-A

Type 45□

3 port valve

Air operated

Order made

Manifold Spec. sheets

Precautions

Base Mounted Type

How to Order Pilot Valve Assemblies

SY114—**5** **G** □

Rated voltage	
5	24VDC
6	12VDC
V	6VDC
S	5VDC
R	3VDC
1	100VAC 50/60Hz
2	200VAC 50/60Hz
3	110VAC 50/60Hz [115VAC 50/60Hz]
4	220VAC 50/60Hz [230VAC 50/60Hz]

Indicator light/Surge voltage suppressor	
Nil	Without indicator light/surge voltage suppressor
S	With surge voltage suppressor
Z	With indicator light/surge voltage suppressor
R	With surge voltage suppressor (non-polar type)
U	With indicator light/surge voltage suppressor (non-polar type)

Note 1) "S" specification is not available for AC since it is integrated with the rectifier.
Note 2) "R" and "U" specifications are only available for DC.

Electrical entry	
G	Grommet (lead wire length: 300mm)
H	Grommet (lead wire length: 600mm)
L	L type plug connector
LN	Without lead wire
LO	Without connector
M	M type plug connector
MN	Without lead wire
MO	Without connector

SY115—**5** **D** □

Rated voltage	
5	24VDC
6	12VDC
1	100VAC 50/60Hz
2	200VAC 50/60Hz
3	110VAC 50/60Hz [115VAC 50/60Hz]
4	220VAC 50/60Hz [230VAC 50/60Hz]

Indicator light/Surge voltage suppressor	
Nil	Without indicator light/surge voltage suppressor
S	With surge voltage suppressor (non-polar type)
Z	With indicator light/surge voltage suppressor (non-polar type)

* DOZ is not available.
* "S" specification is not available for AC since it is integrated with the rectifier.

Electrical entry	
D	DIN
DO	terminal

How to Order Connector Assemblies

DC: **SY100-30-4A** □
100VAC: **SY100-30-1A** □
200VAC: **SY100-30-2A** □
Other AC: **SY100-30-3A** □

Without lead wire: **SY100-30-A**
(Connector, socket x 2pcs. only)

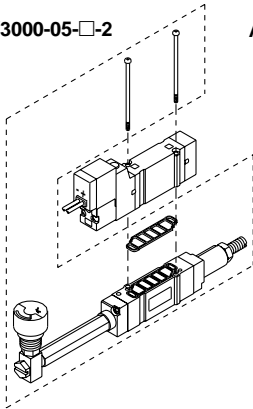
Lead wire length	
Nil	300mm
6	600mm
10	1000mm
15	1500mm
20	2000mm
25	2500mm
30	3000mm
50	5000mm

How to Order Interface Regulators (SY3000, 5000 only)

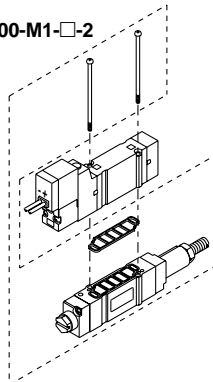
Series SY3000
ARBY3000—**05** **P**—**2**

Pressure gauge connecting port		Regulated port	
05	Pressure gauge (G15-10-01)	P	P port
M1	Plug (M-5P)	A1	A port (P port control type A port regulated)
		B1	B port (P port control type B port regulated)

ARBY3000-05-□-2



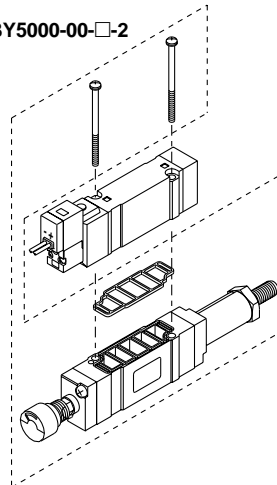
ARBY3000-M1-□-2



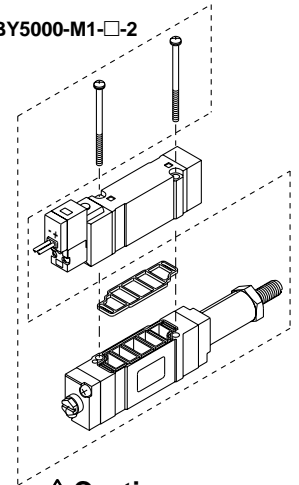
Series SY5000
ARBY5000—**00** **P**—**2**

Pressure gauge connecting port		Regulated port	
00	Pressure gauge (G15-10-01)	P	P port
M1	Plug (M-5P)	A1	A port (P port control type A port regulated)
		B1	B port (P port control type B port regulated)

ARBY5000-00-□-2



ARBY5000-M1-□-2



Accessories

Series	Round head combination screw	Gasket
ARBY3000	SY3000-23-10 (M2 x 36)	SX3000-57-4
ARBY5000	M3 x 48.5 (Flat nickel plated)	SX5000-57-5

Caution

Mounting screw tightening torques

M2: 0.15N·m
M3: 0.6N·m

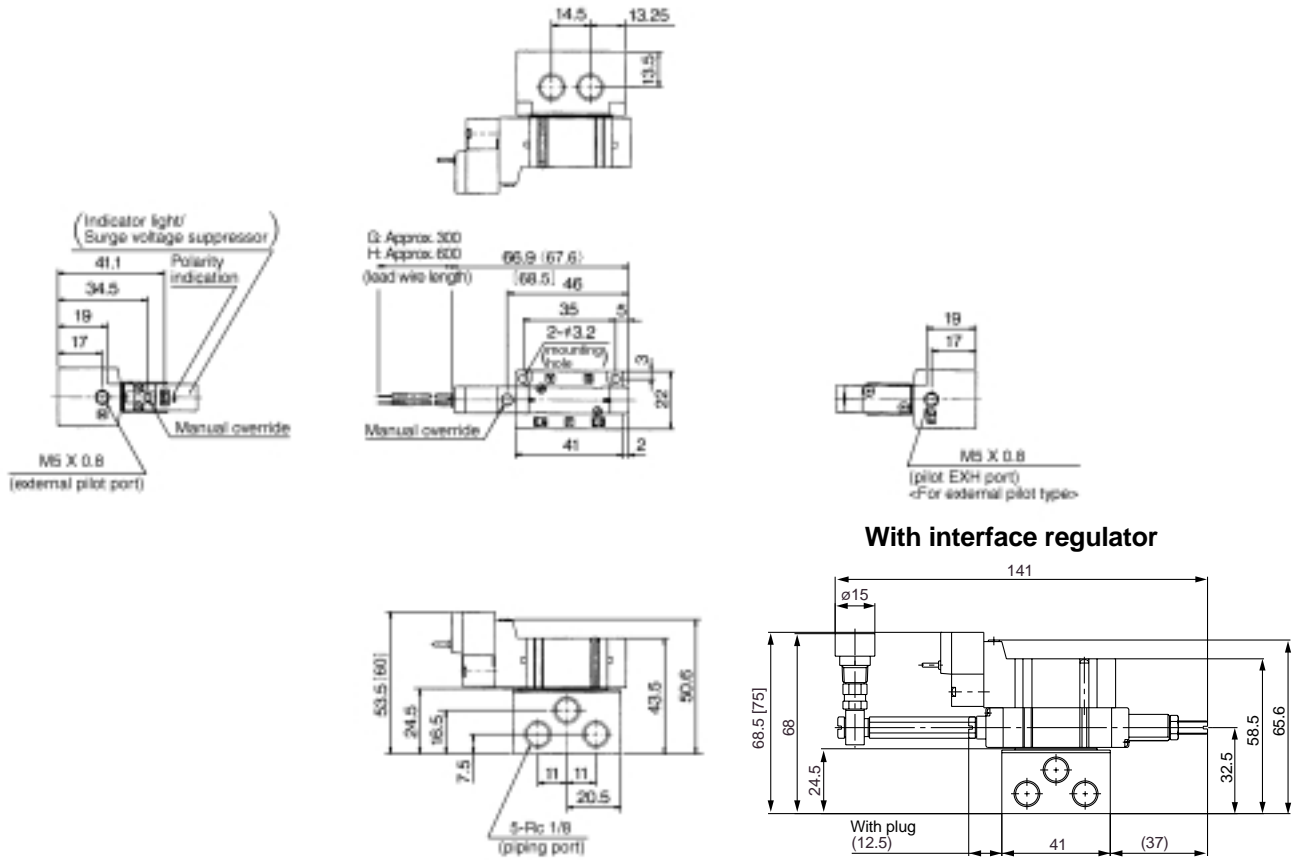
Series SY3000 Dimensions



Note) [] : for AC
< > : Values with surge voltage suppressor

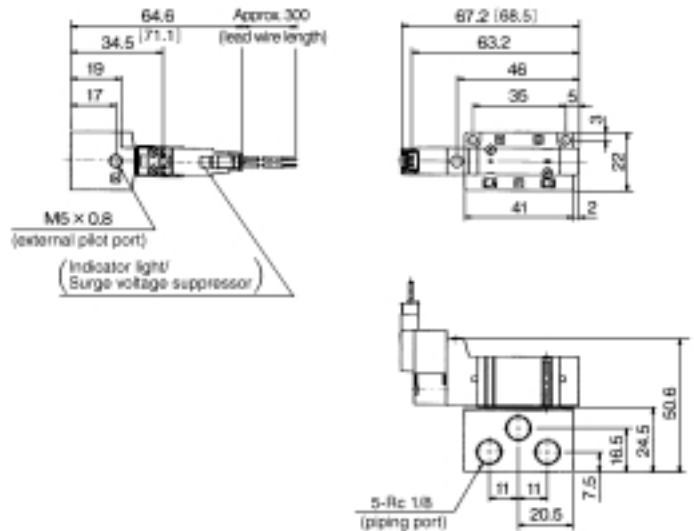
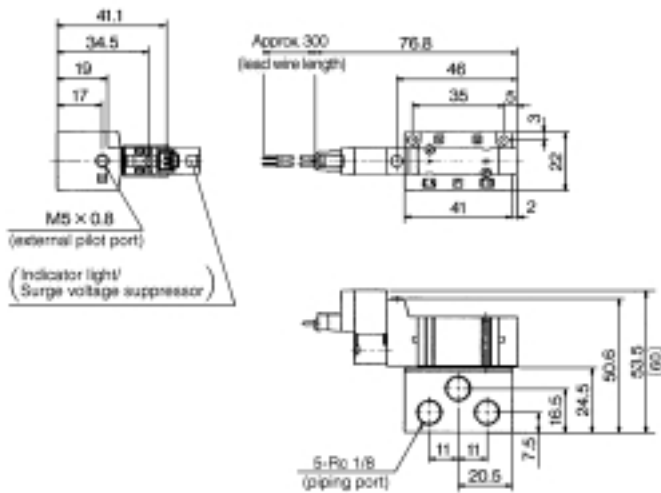
2 position single
Grommet (G), (H): SY3140(R)-□_G□□-01

Scale: 35%



L type plug connector (L): SY3140(R)-□L□□-01

M type plug connector (M): SY3140(R)-□M□□-01



- GrommetSS5Y31, #1 + #4
- L type plug connectorSS5Y31, #1 + #4 + #10
- M type plug connectorSS5Y31, #1 + #4 + #13



Base Mounted Type

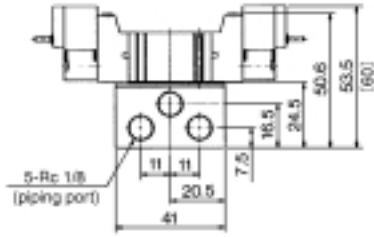
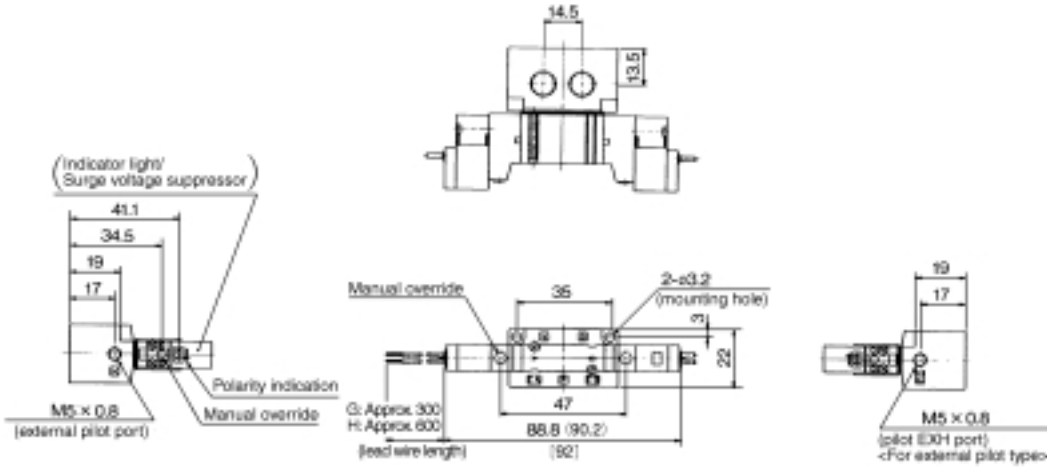
Series SY3000 Dimensions



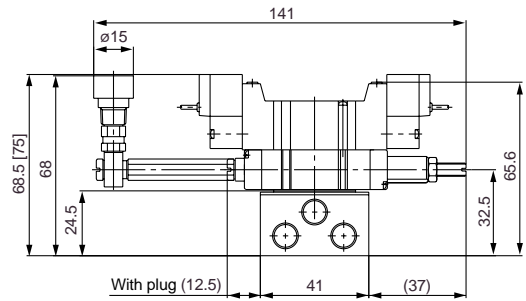
Note []: Values for AC
< >: Values with surge voltage suppressor

2 position double
Grommet (G), (H): SY3240(R)-□□□□-01

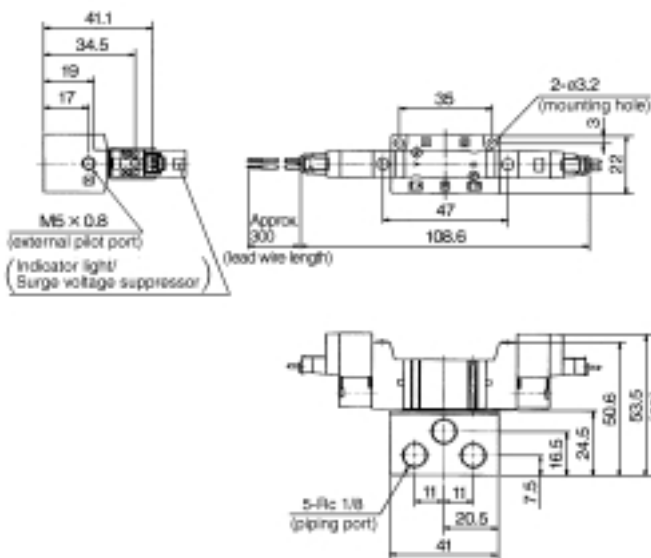
Scale: 35%



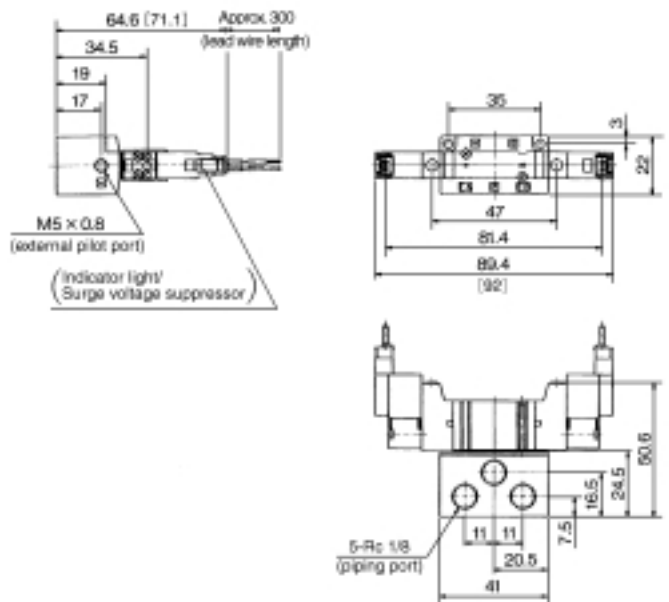
With interface regulator



L type plug connector (L): SY3240(R)-□L□□-01



M type plug connector (M): SY3240(R)-□M□□-01



- Grommet SS5Y31, #2 + #4
- L type plug connector SS5Y31, #2 + #4 + #11
- M type plug connector SS5Y31, #2 + #4 + #14



Note) [] : Values for AC
< > : Values with surge voltage suppressor

Features

Single valve

Type 20

Type 23

Type 20P

Type 23P

Single valve

Type 41

Type 42

Type 43

Type 41P

Type 42P

Type 43P

Type 45

Type 45-A

Type 45

3 port valve

Air operated

Order made

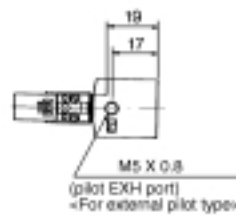
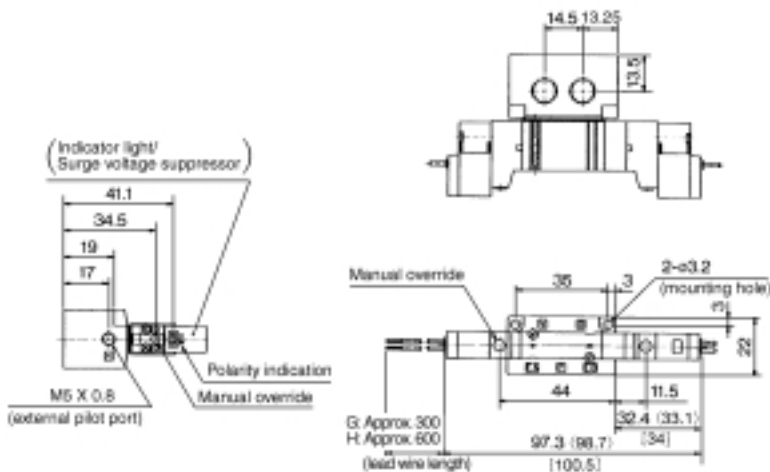
Manifold Spec. sheets

Precautions

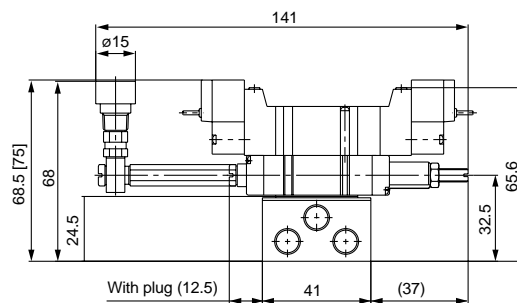
3 position closed center/exhaust center/pressure center

Grommet (G), (H): SY3³/₅40(R)-□^G□□-01

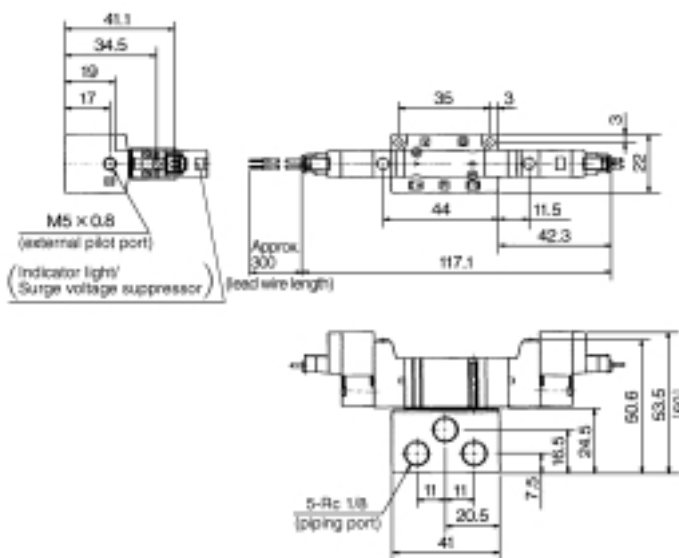
Scale: 35%



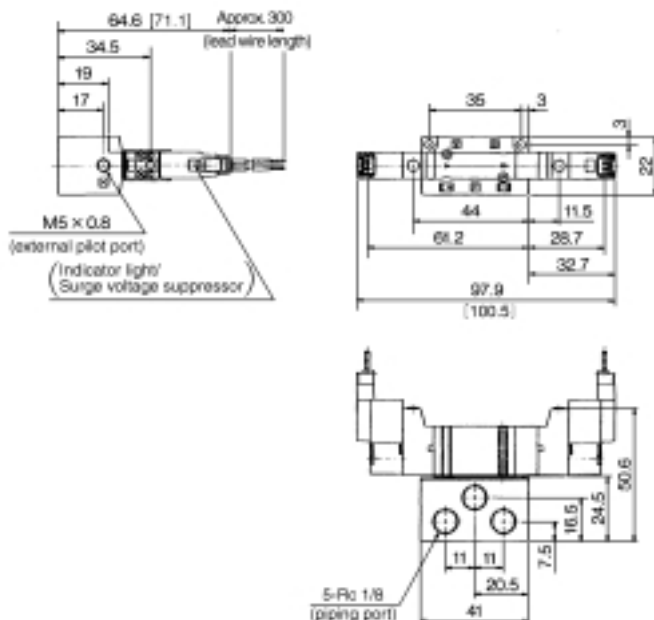
With interface regulator



L type plug connector (L): SY3³/₅40(R)-□L□□-01



M type plug connector (M): SY3³/₅40(R)-□M□□-01



- Grommet SS5Y31, #3 + #4
- L type plug connector SS5Y31, #3 + #4 + #12
- M type plug connector SS5Y31, #3 + #4 + #15



Base Mounted Type

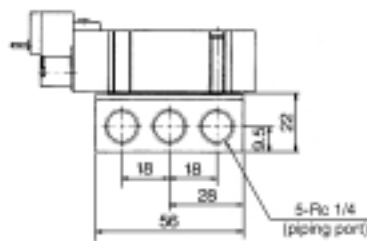
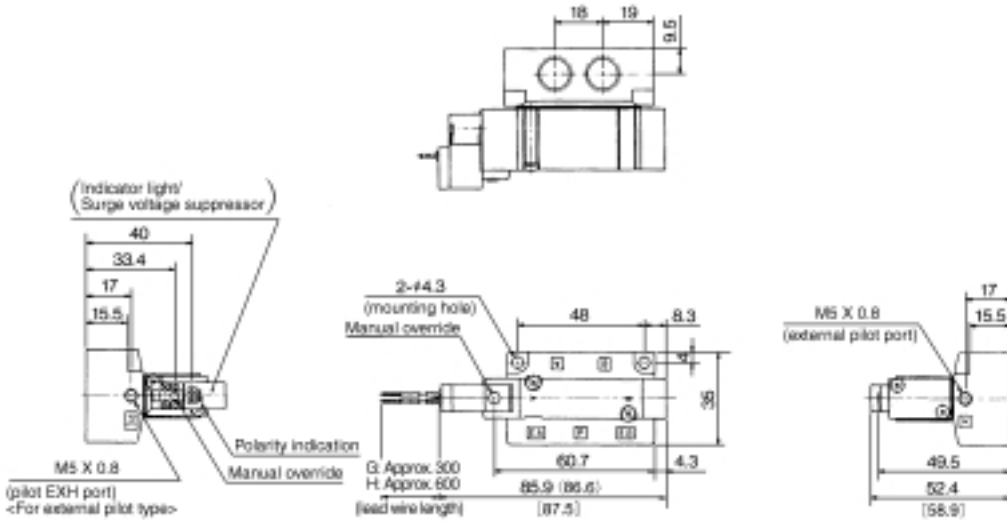
Series SY5000 Dimensions



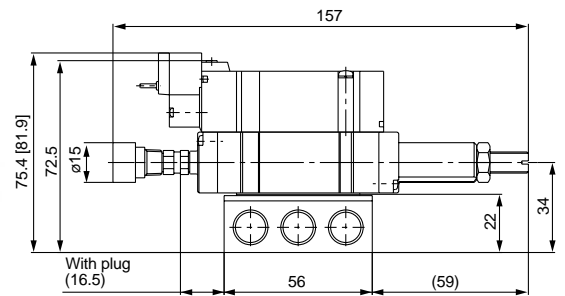
Note) [] : Values for AC
< > : Values with surge voltage suppressor

2 position single
Grommet (G), (H): SY5140(R)-□□□□-02

Scale: 35%



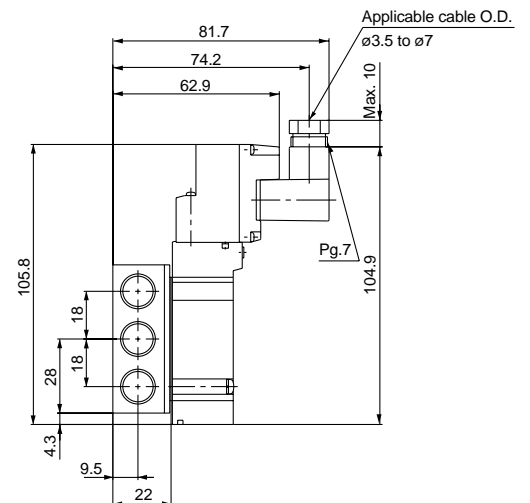
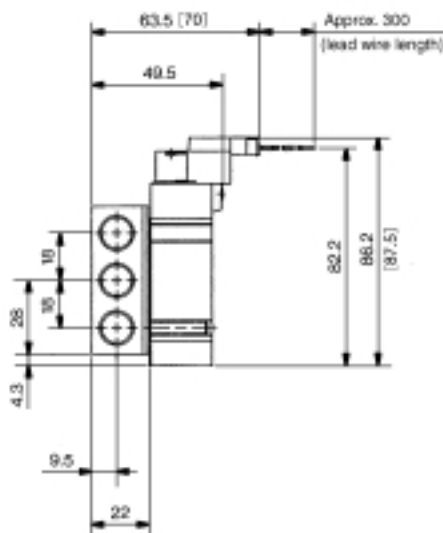
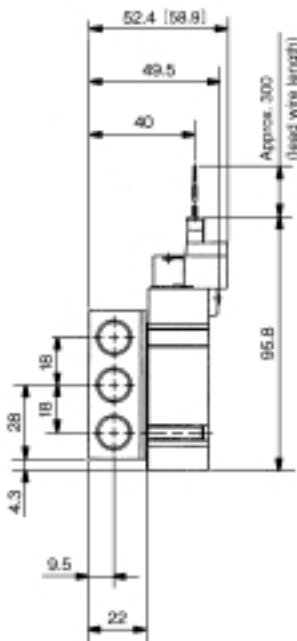
With interface regulator



L type plug connector (L):
SY5140(R)-□L□□-02

M type plug connector (M):
SY5140(R)-□M□□-02

DIN terminal (D):
SY5140(R)-□D□□-02



GrommetSS5Y51, #1 + #4
L type plug connector SS5Y51, #1 + #4 + #11
M type plug connectorSS5Y51, #1 + #4 + #14



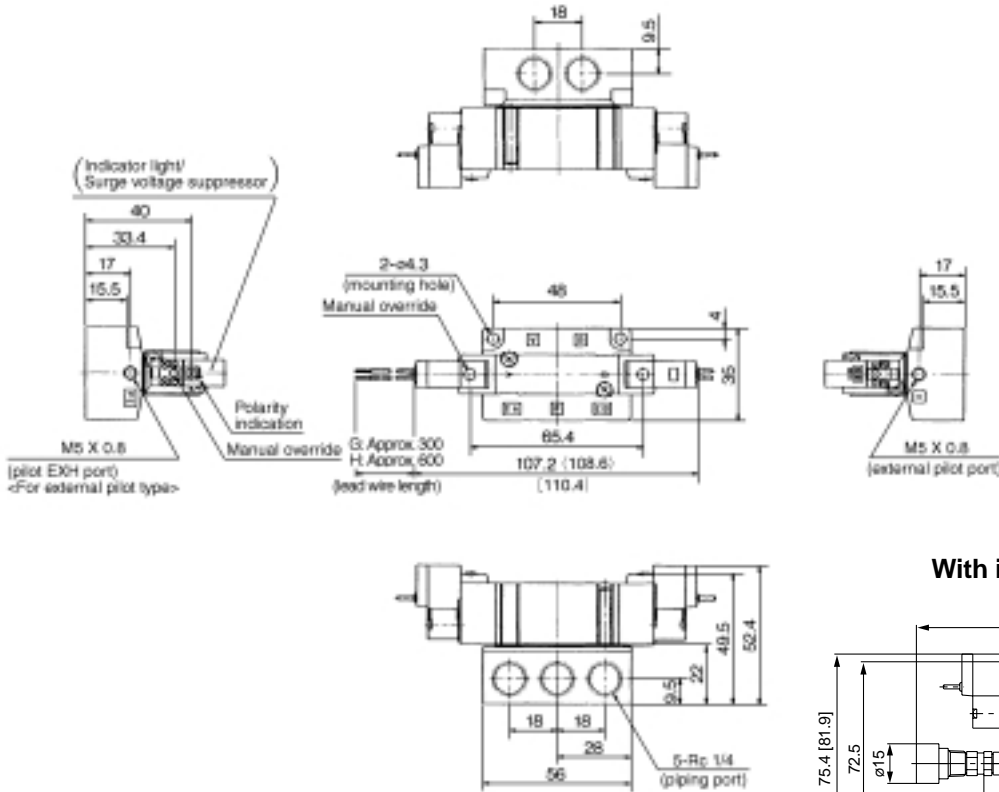
Note) []: Values for AC
< >: Values with surge voltage suppressor

Features

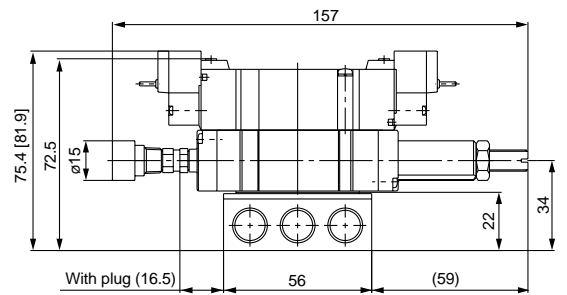
2 position double

Grommet (G), (H): SY5240(R)-□^G□□-02

Scale: 35%



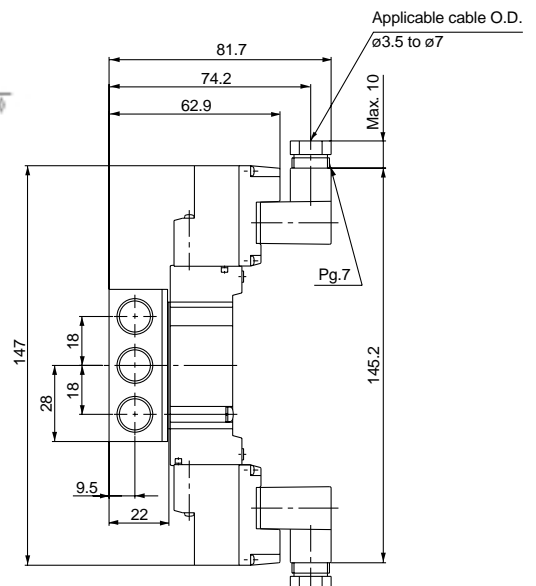
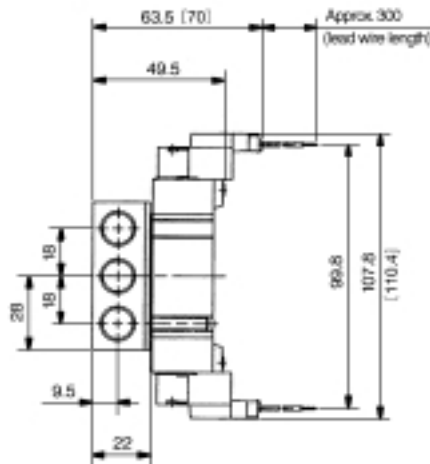
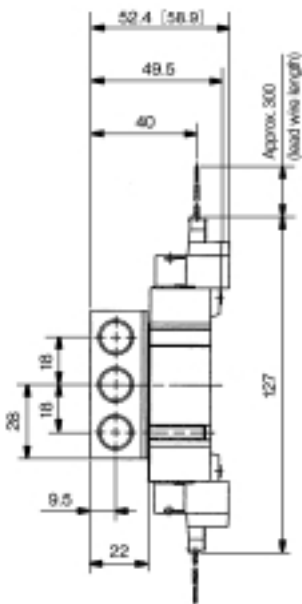
With interface regulator



L type plug connector (L):
SY5240(R)-□L□□-02

M type plug connector (M):
SY5240(R)-□M□□-02

DIN terminal (D):
SY5240(R)-□D□□-02



- Grommet SS5Y51, #2 + #4
- L type plug connector SS5Y51, #2 + #4 + #12
- M type plug connector SS5Y51, #2 + #4 + #15

Single valve

Type 20

Type 23

Type 20P

Type 23P

Single valve

Type 41

Type 42

Type 43

Type 41P

Type 42P

Type 43P

Type 45

Type 45-A NA

Type 45

3 port valve

Air operated

Order made

Manifold Spec. sheets

Precautions

Base Mounted Type

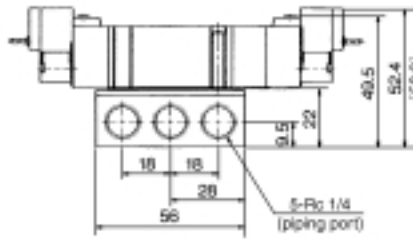
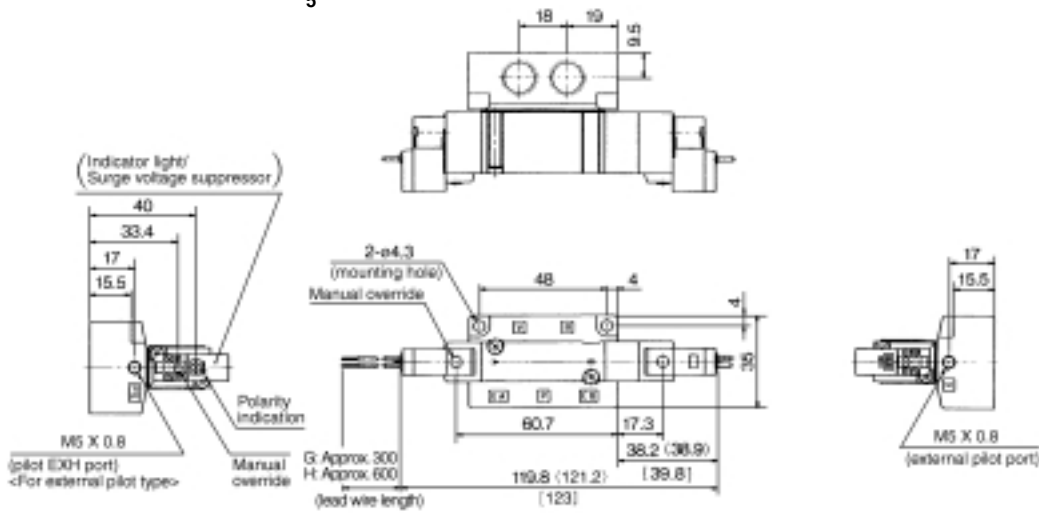
Series SY5000 Dimensions



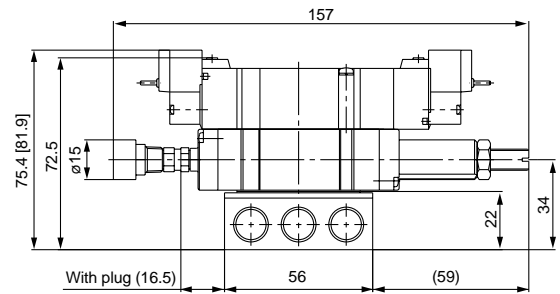
Note) []: Values for AC
< >: Values with surge voltage suppressor

3 position closed center/exhaust center/pressure center
Grommet (G), (H): SY5³/₅40(R)-□^G□□-02

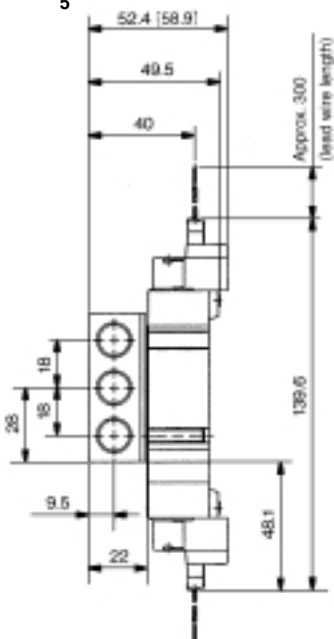
Scale: 35%



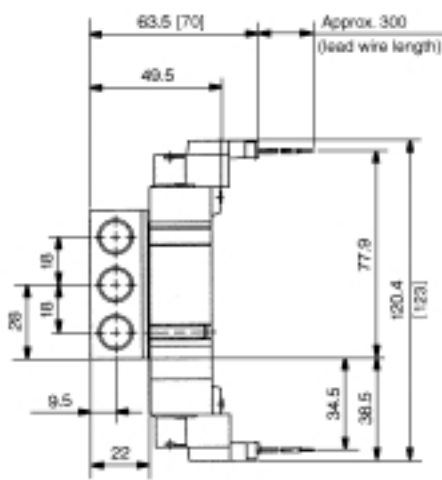
With interface regulator



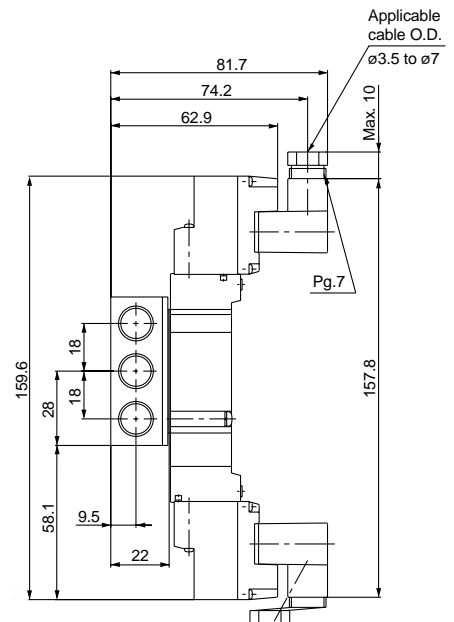
L type plug connector (L):
SY5³/₅40(R)-□L□□-02



M type plug connector (M):
SY5³/₅40(R)-□M□□-02



DIN terminal (D):
SY5³/₅40(R)-□D□□-02



- Grommet SS5Y51, #3 + #4
- L type plug connector SS5Y51, #3 + #4 + #13
- M type plug connector SS5Y51, #3 + #4 + #16

Series SY7000 Dimensions

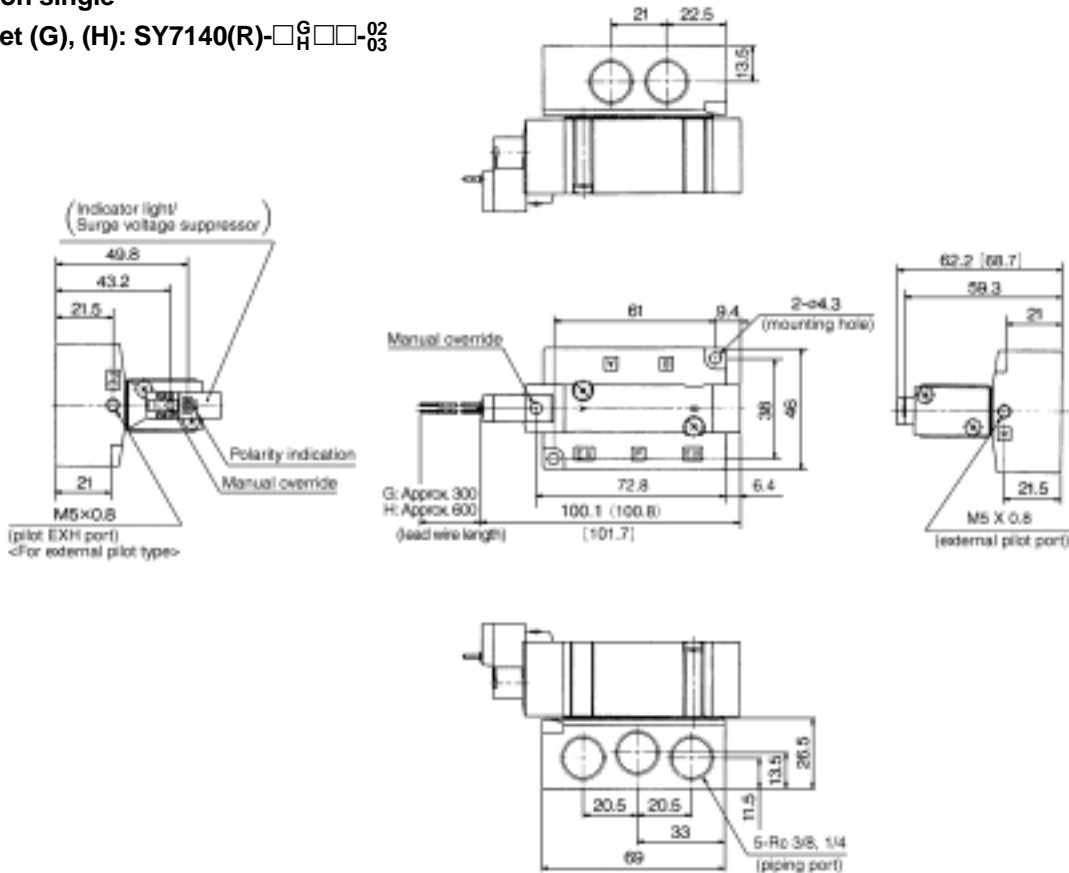


Note []: Values for AC
< >: Values with surge voltage suppressor

2 position single

Grommet (G), (H): SY7140(R)-□G□□-02

Scale: 35%



L type plug connector (L):

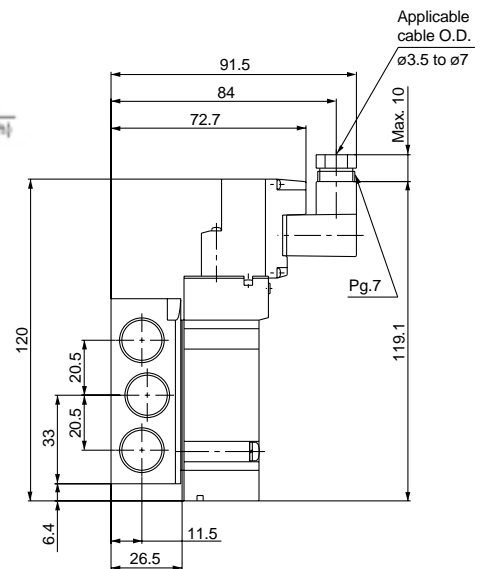
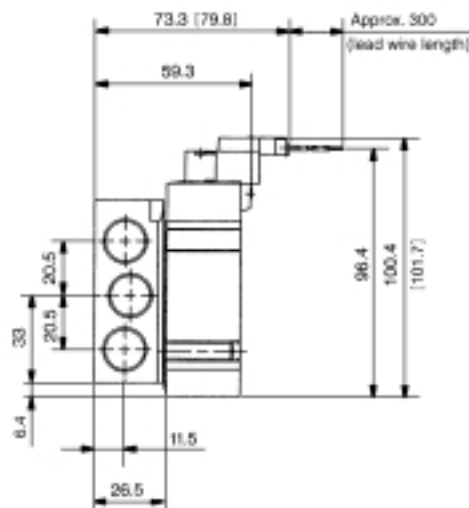
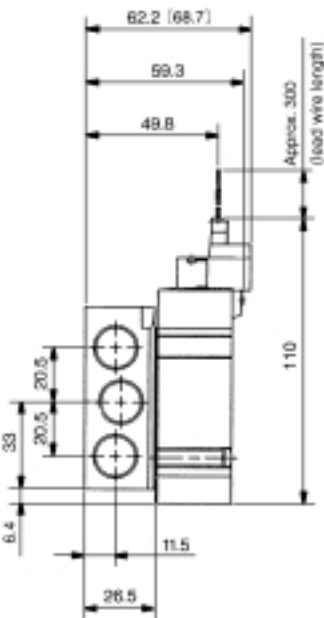
SY7140(R)-□L□□-02

M type plug connector (M):

SY7140(R)-□M□□-02

DIN terminal (D):

SY7140(R)-□D□□-02



Grommet SS5Y71, #1
L type plug connector SS5Y71, #1 + #4 + #10
M type plug connector SS5Y71, #1 + #4 + #13

Base Mounted Type

Series SY7000 Dimensions

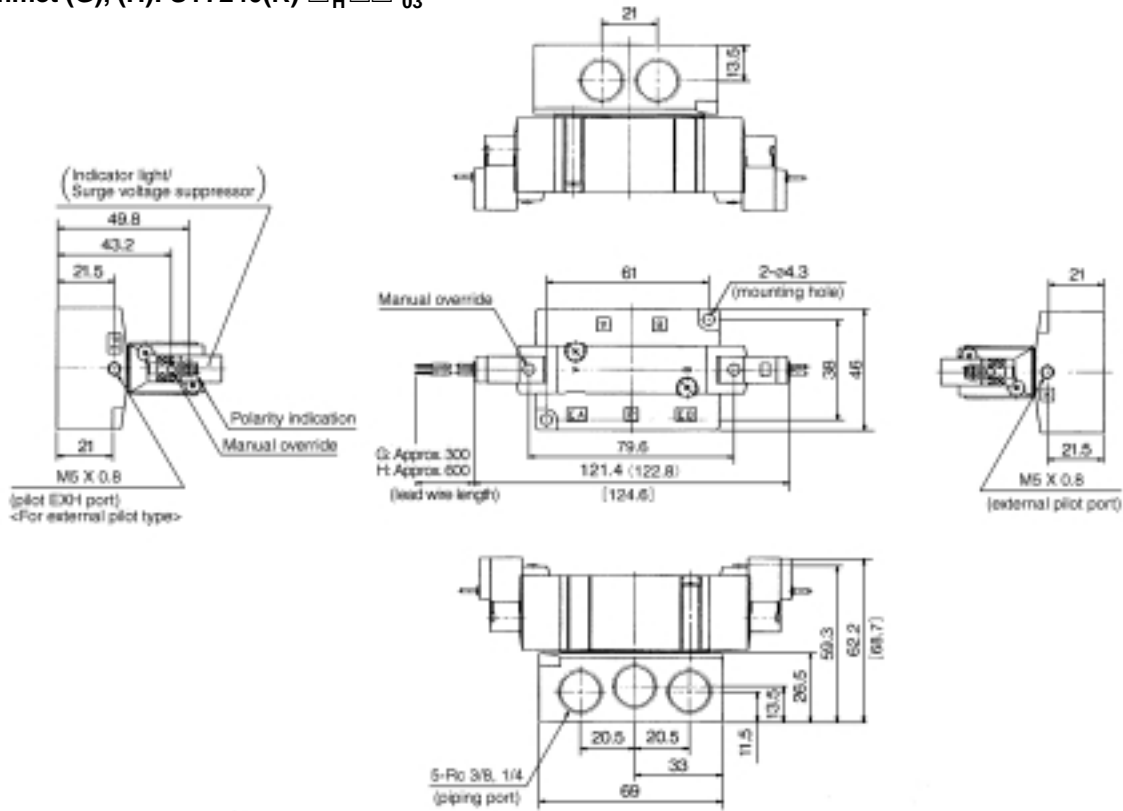


Note) []: Values for AC
< >: Values with surge voltage suppressor

2 position double

Grommet (G), (H): SY7240(R)-□^G□□-02
□^H□□-03

Scale: 35%



L type plug connector (L):

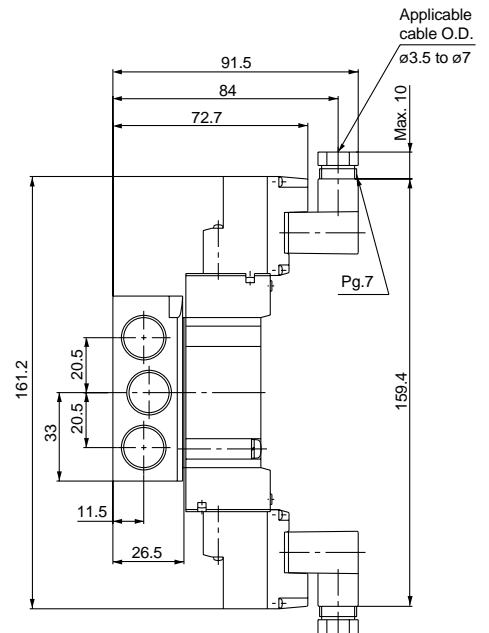
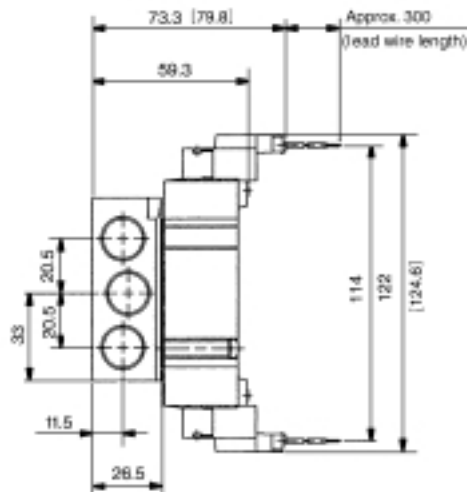
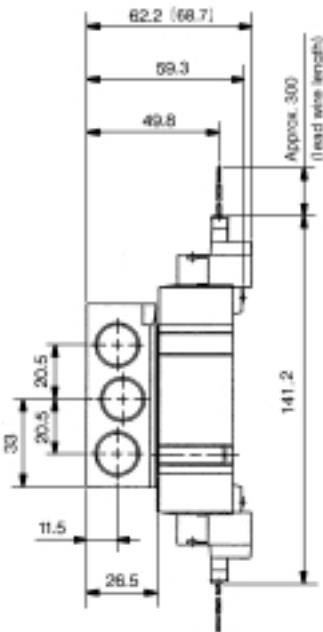
SY7240(R)-□L□□-02
□□-03

M type plug connector (M):

SY7240(R)-□M□□-02
□□-03

DIN terminal (D):

SY7240(R)-□D□□-02
□□-03



- Grommet SS5Y71, #2 + #4
- L type plug connector SS5Y71, #2 + #4 + #11
- M type plug connector SS5Y71, #2 + #4 + #15



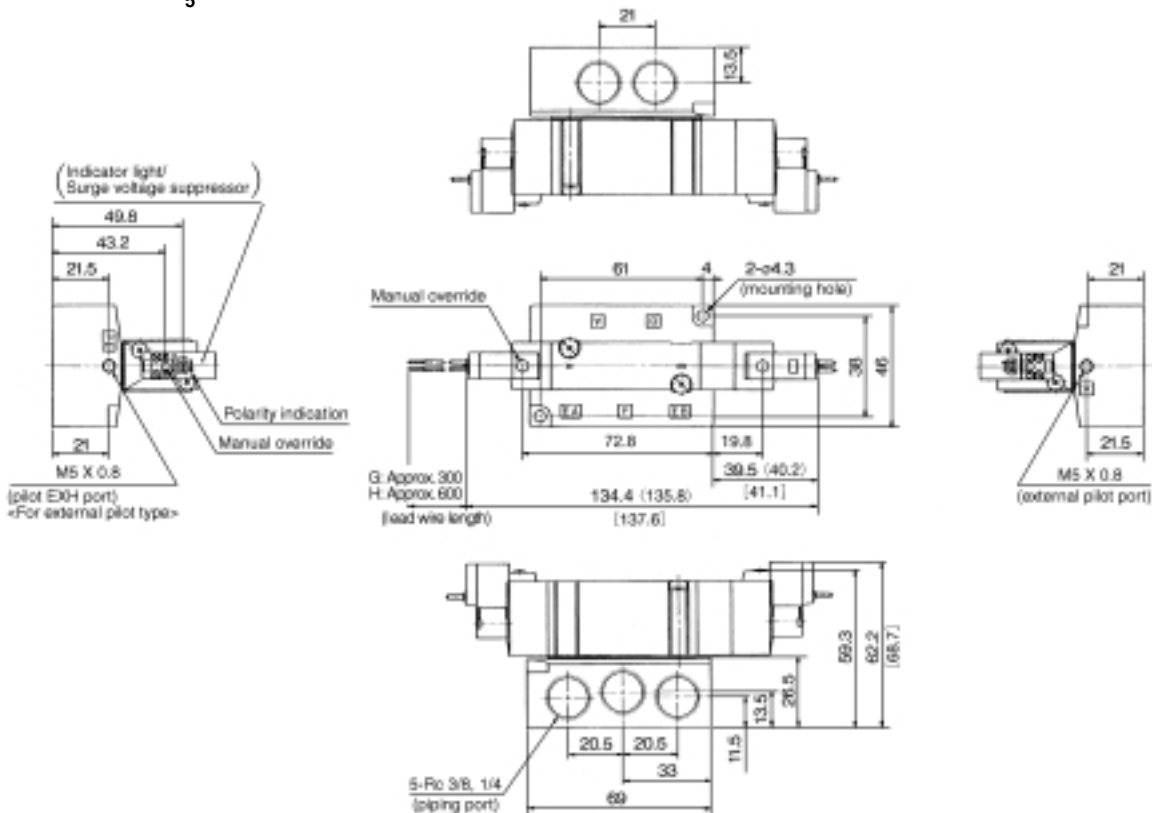
Note []: Values for AC
< >: Values with surge voltage suppressor

Features

3 position closed center/exhaust center/pressure center

Grommet (G), (H): SY7³/₅440(R)-□^G□□-02/03

Scale: 35%



L type plug connector (L):

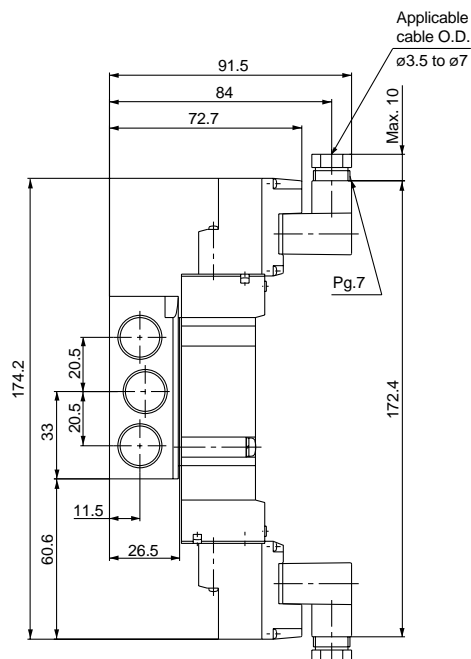
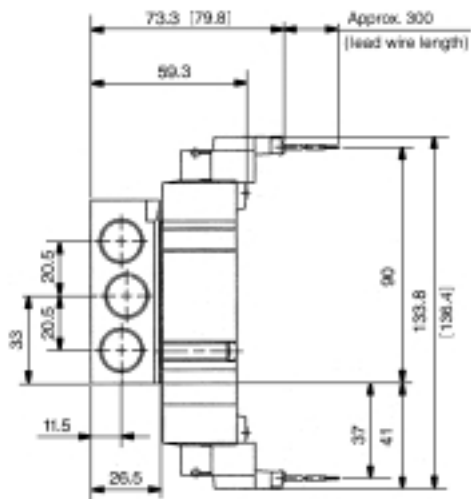
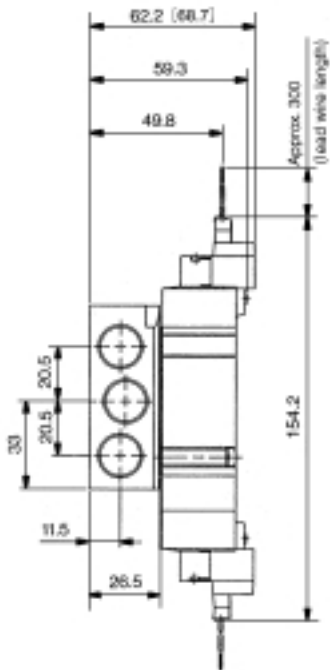
SY7³/₅440(R)-□L□□-02/03

M type plug connector (M):

SY7³/₅440(R)-□M□□-02/03

DIN terminal (D):

SY7³/₅440(R)-□D□□-02/03



Grommet SS5Y71, #3 + #4
L type plug connector SS5Y71, #3 + #4 + #12
M type plug connector SS5Y71, #3 + #4 + #15

Single valve Type 20 Type 23 Type 20P Type 23P Single valve Type 41 Type 42 Type 43 Type 41P Type 42P Type 43P Type 45 Type 45-A NA Type 45 3 port operated Air Order made Manifold Spec. sheets Precautions

Base Mounted Type

Series SY9000 Dimensions

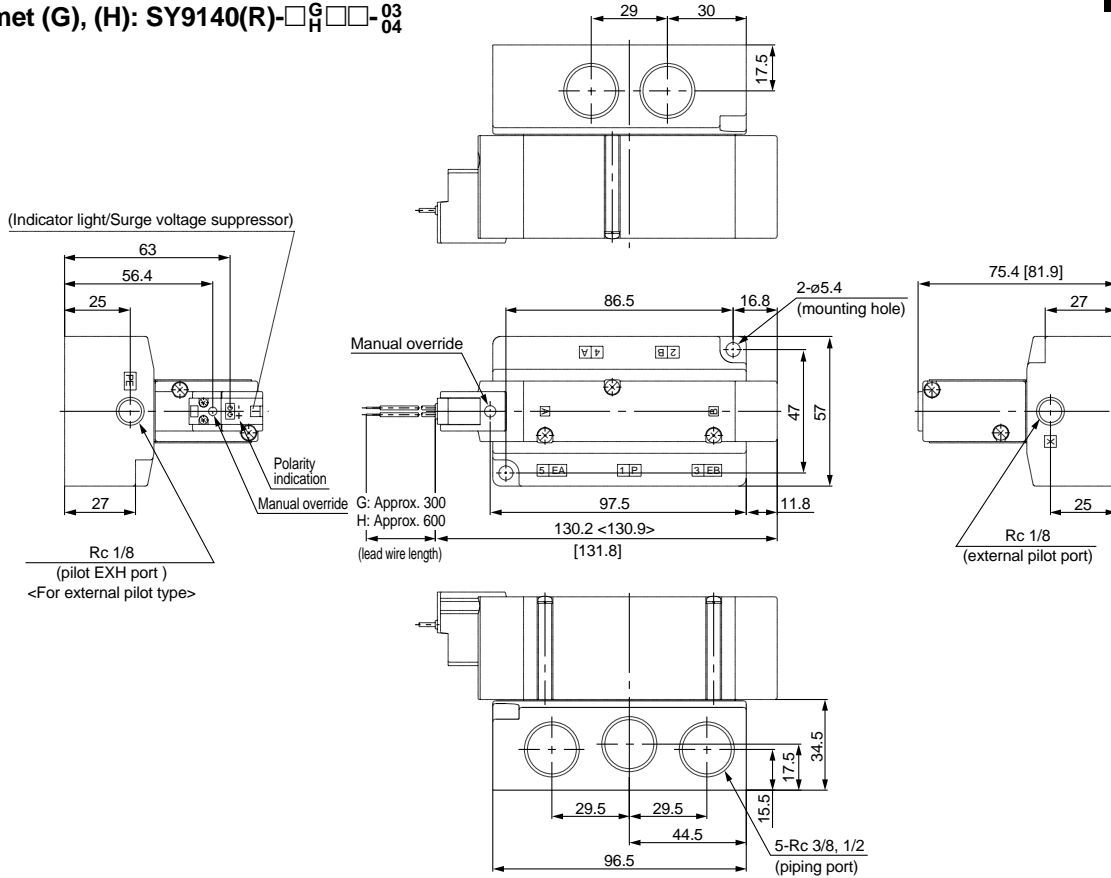


Note) []: Values for AC
< >: Values with surge voltage suppressor

2 position single

Grommet (G), (H): SY9140(R)-□G□□-03
□H□□-04

Scale: 35%



L type plug connector (L):

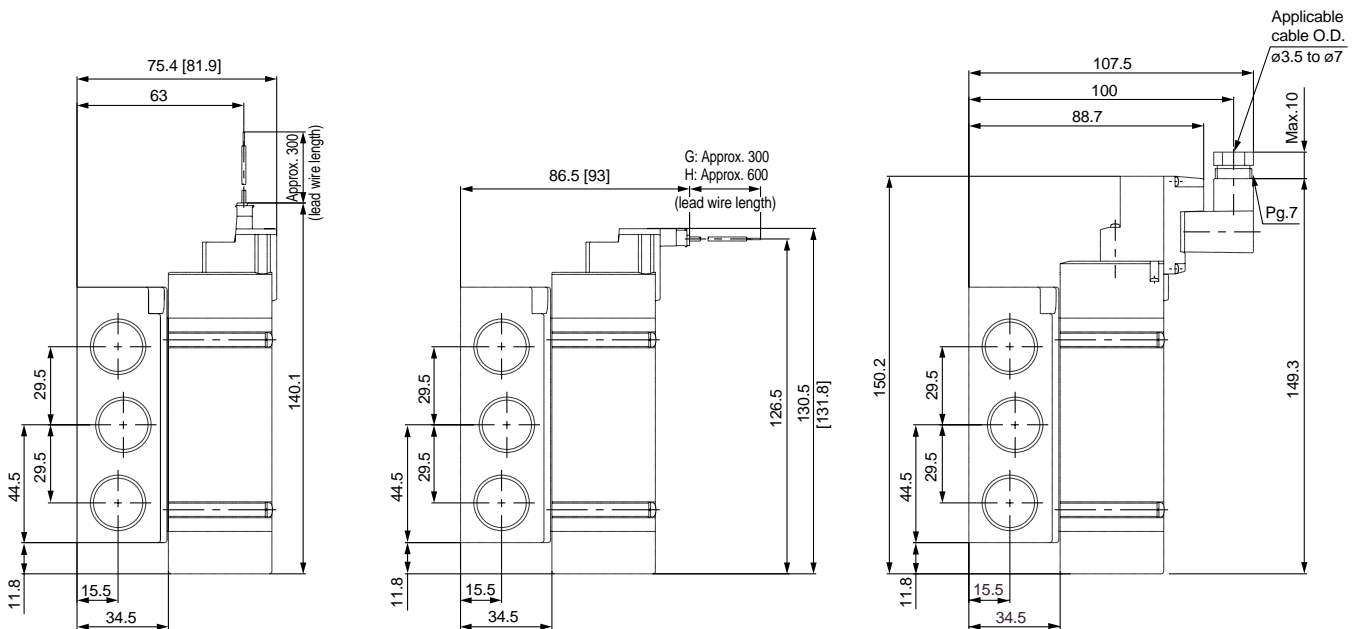
SY9140(R)-□L□□-03
□□□□-04

M type plug connector (M):

SY9140(R)-□M□□-03
□□□□-04

DIN terminal (D):

SY9140(R)-□D□□-03
□□□□-04





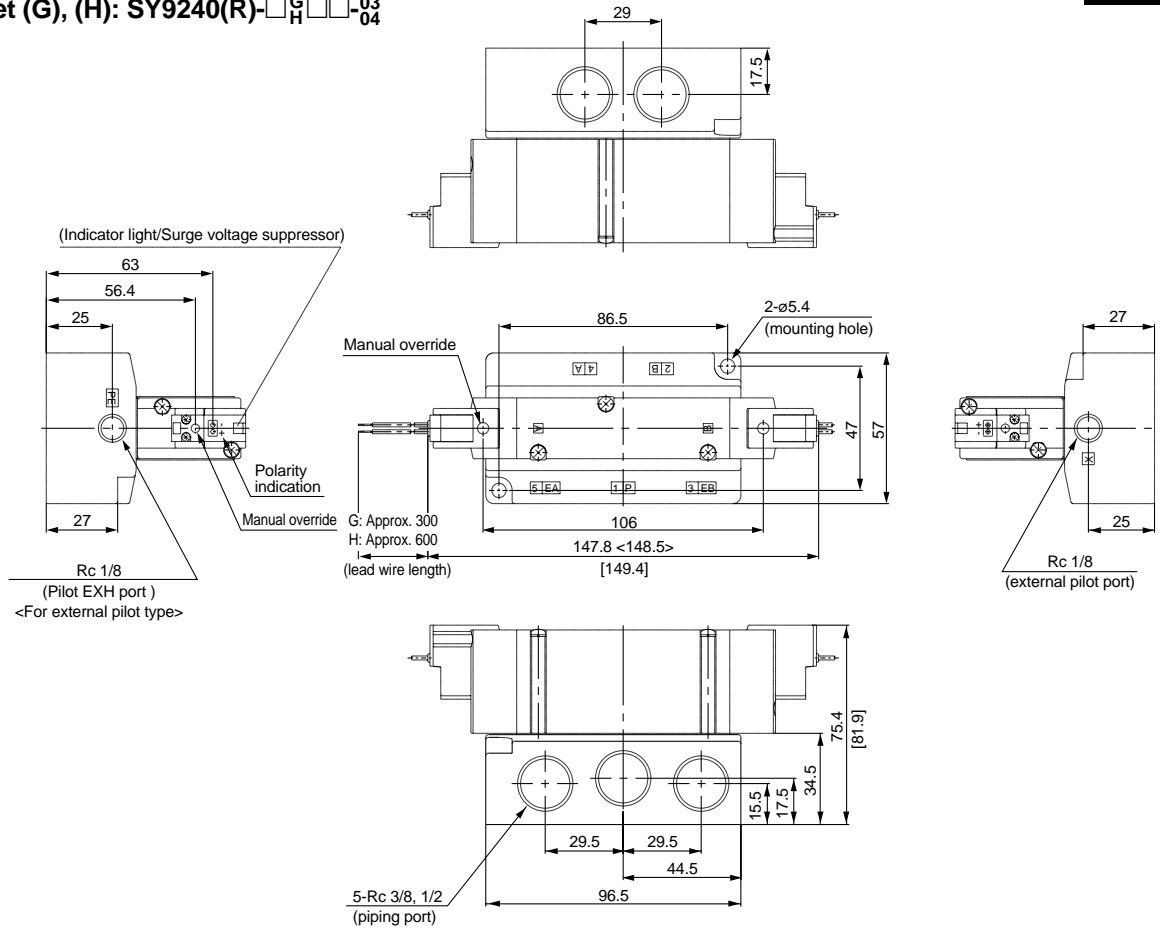
Note) []: Values for AC
< >: Values with surge voltage suppressor

Series SY9000 Dimensions

2 position double

Grommet (G), (H): SY9240(R)-□G□□-03
□H□□-04

Scale: 35%



L type plug connector (L):

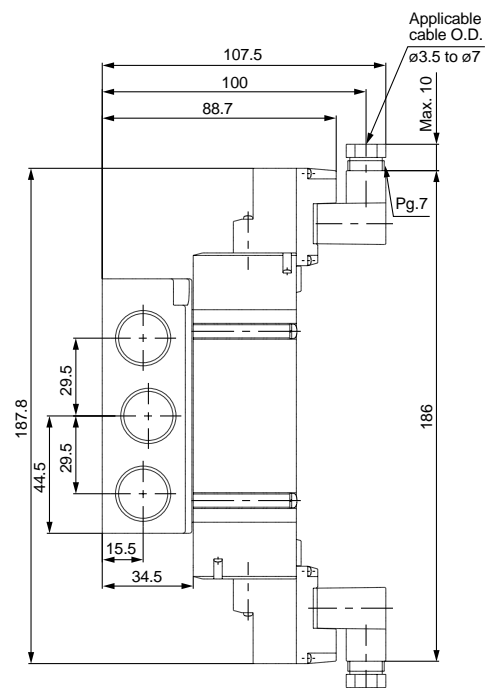
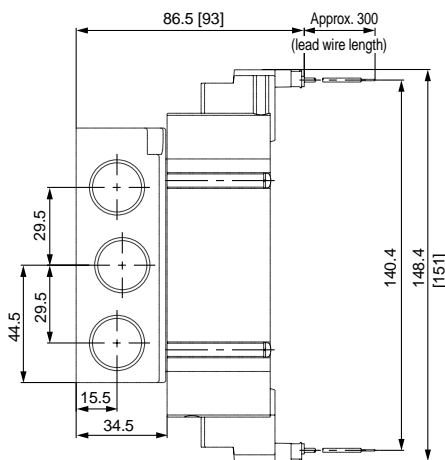
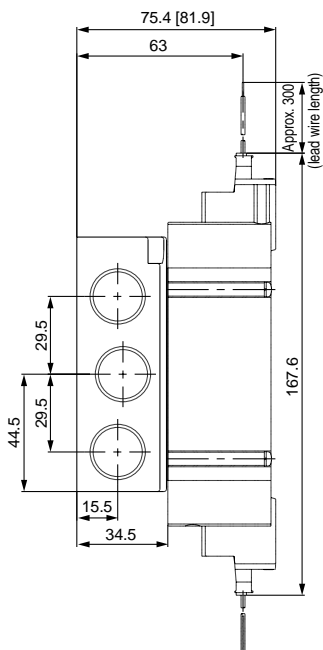
SY9240(R)-□L□□-03
□□-04

M type plug connector (M):

SY9240(R)-□M□□-03
□□-04

DIN terminal (D):

SY9240(R)-□D□□-03
□□-04



Single valve

Type 20

Type 23

Type 20P

Type 23P

Single valve

Type 41

Type 42

Type 43

Type 41P

Type 42P

Type 43P

Type 45

Type 45-A

Type 45

Type 45

3 port valve

Air operated

Order made

Manifold Spec. sheets

Precautions

Base Mounted Type

Series SY9000 Dimensions

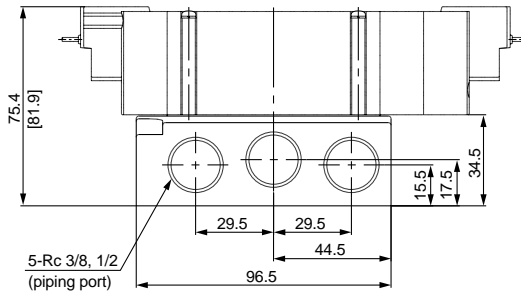
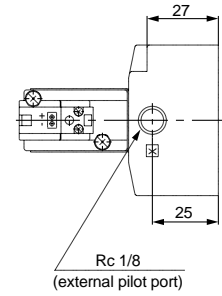
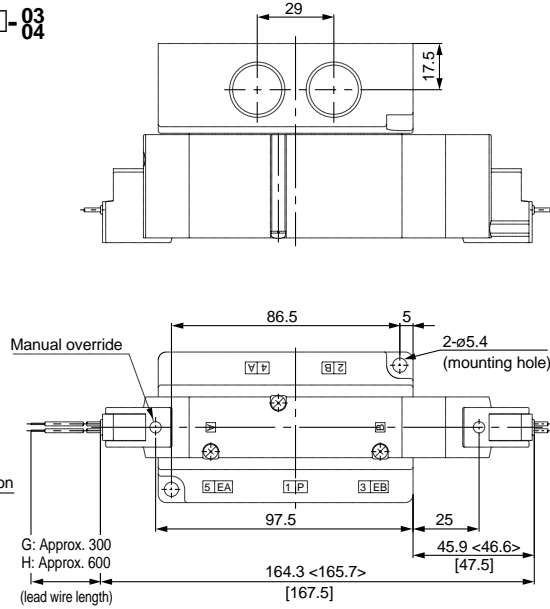
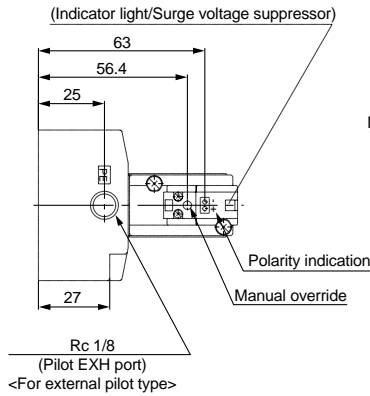


Note) []: Values for AC
< >: Values with surge voltage suppressor

3 position closed center/exhaust center/pressure center

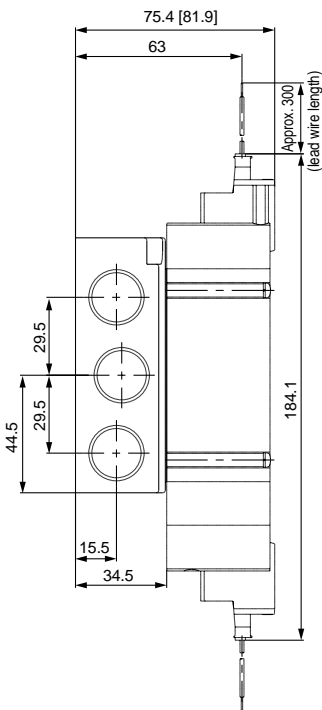
Grommet (G), (H): SY9³/₄40(R)-□G□□-⁰³/₀₄

Scale: 35%



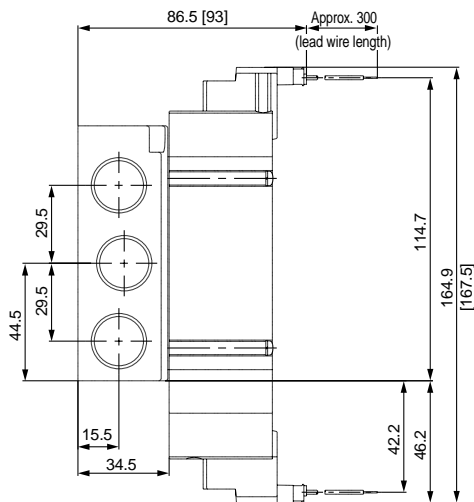
L type plug connector (L):

SY9³/₄40(R)-□L□□-⁰³/₀₄



M type plug connector (M):

SY9³/₄40(R)-□M□□-⁰³/₀₄



DIN terminal (D):

SY9³/₄40(R)-□D□□-⁰³/₀₄

