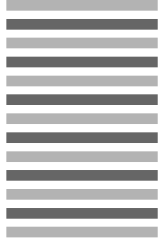




The specifications on each item can be amended without any prenotice to improve aperformance.
The specifications on each item can be different form actual specification.

YPC

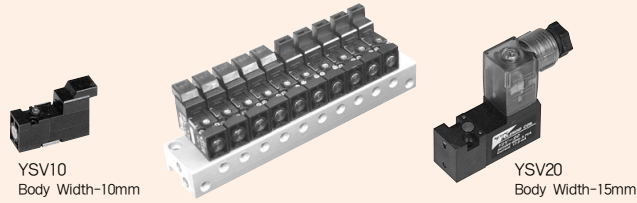
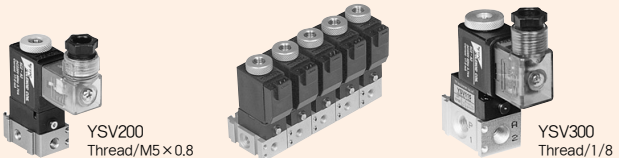
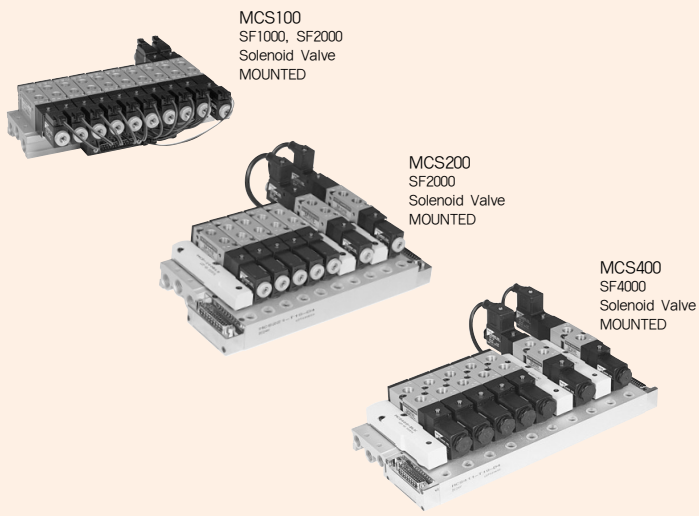
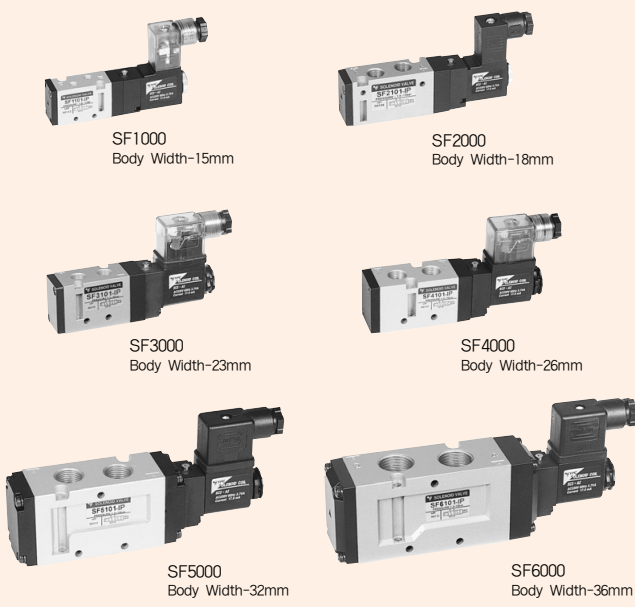


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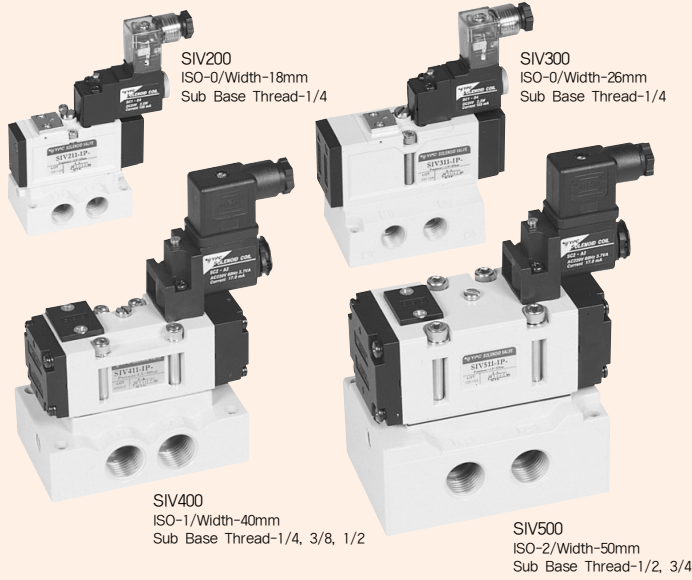
CHAPTER 01

CHAPTER 02

CHAPTER 03

ITEM	SERIES	MODEL	PORT SIZE	PAGE
YSV Series 3/2 10mm Pico V/V 3/2 15mm Micro V/V	 <p>YSV10 Body Width-10mm</p> <p>YSV20 Body Width-15mm</p>	YSV10	P = 0.6 R = 0.8	10
		YSV20	P = 1.1 R = 1.5	12
YSV Series 3/2-NC, NO Staking Body Valve	 <p>YSV200 Thread/M5 × 0.8</p> <p>YSV300 Thread/1/8</p>	YSV200	M5	14
		YSV300	1/8	16
MCS Series Multi Connector System	 <p>MCS100 SF1000, SF2000 Solenoid Valve MOUNTED</p> <p>MCS200 SF2000 Solenoid Valve MOUNTED</p> <p>MCS400 SF4000 Solenoid Valve MOUNTED</p>	MCS100	SF1000,2000 Solenoid Valve MOUNTED	20
		MCS200	SF2000 Solenoid Valve MOUNTED	22
		MCS400	SF4000 Solenoid Valve MOUNTED	24
SF (FLEXIBLE) Series 5/2, 5/3, 3/2 Solenoid, Pneumatic Valve	 <p>SF1000 Body Width-15mm</p> <p>SF2000 Body Width-18mm</p> <p>SF3000 Body Width-23mm</p> <p>SF4000 Body Width-26mm</p> <p>SF5000 Body Width-32mm</p> <p>SF6000 Body Width-36mm</p>	SF1000	M5 × 0.8	28
		SF2000	1/8	30
		SF3000	1/8	32
		SF4000	1/4	34
		SF5000	3/8	36
		SF6000	1/2	38

SIV (ISO) Series
5/2, 5/3 Solenoid, Pneumatic Valve



SIV200

ISO-0-18
Sub Base Thread
-1/4

42

SIV300

ISO-0-26
Sub Base Thread
-1/4

44

SIV400

ISO-1
Sub Base Thread
-1/4, 3/8, 1/2

46

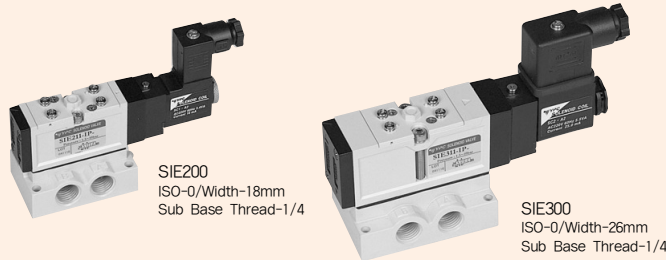
SIV500

ISO-2
Sub Base Thread
-1/2, 3/4

48

SIE (ECONOMY) Series

5/2, 5/3 Solenoid Pneumatic Valve



SIE200

ISO-0-18
Sub Base Thread
-1/4

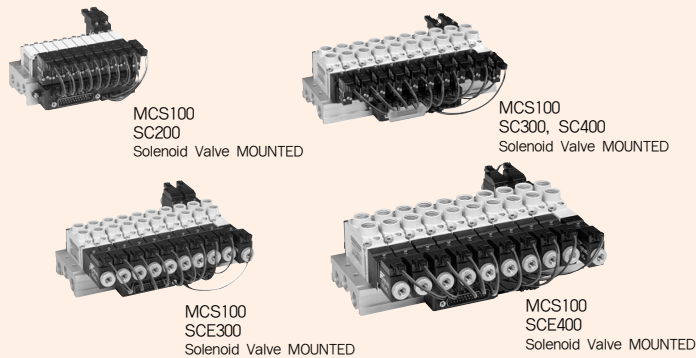
50

SIE300

ISO-0-26
Sub Base Thread
-1/4

52

MCS Series
Multi Connector System



MCS100

SC200,300,400
Solenoid
Valve
MOUNTED

56

SCE300,400
Solenoid
Valve
MOUNTED

58

SC (COMPACT) Series

5/2, 5/3, 3/2 Solenoid, Pneumatic Valve



SC200

M5, M3

62

SC300

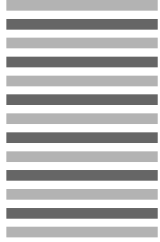
1/8, M5

64

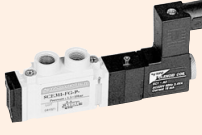
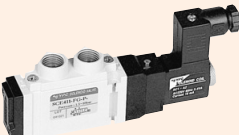


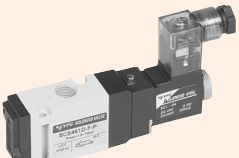
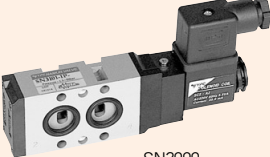
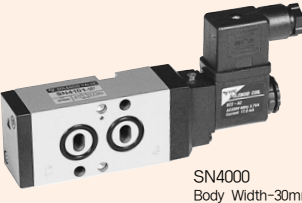












SC400

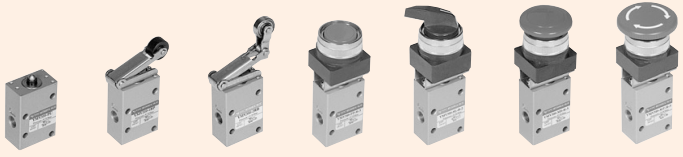
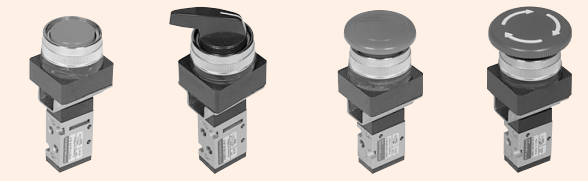
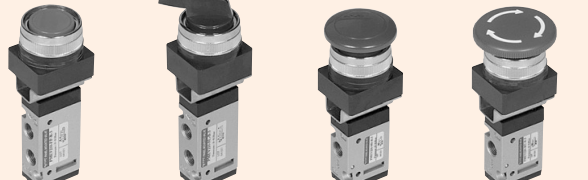
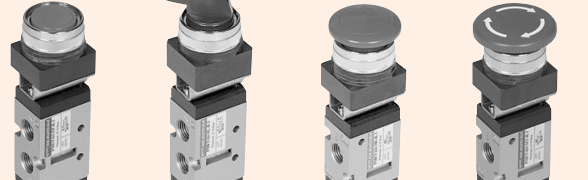
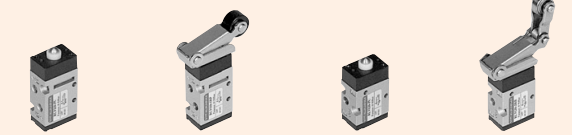
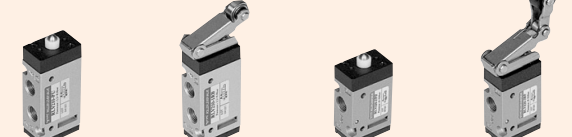

1/4, 1/8

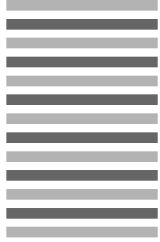
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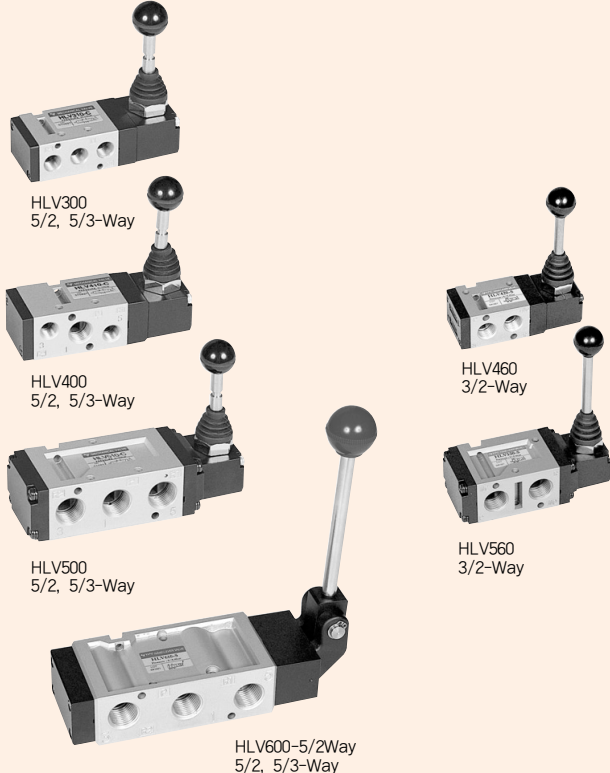

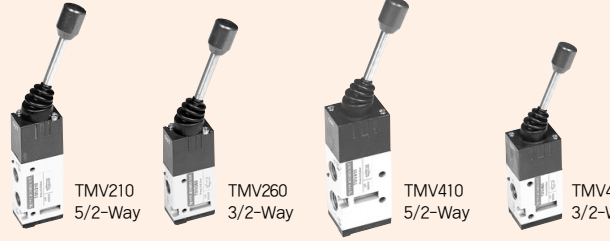
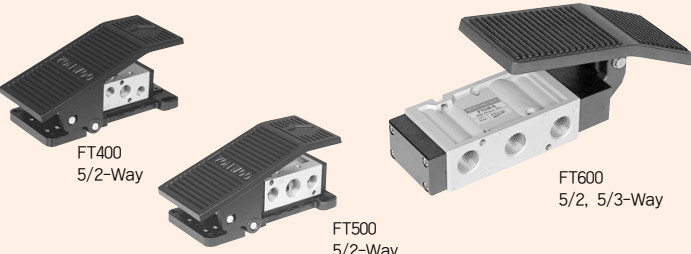
Products Item List
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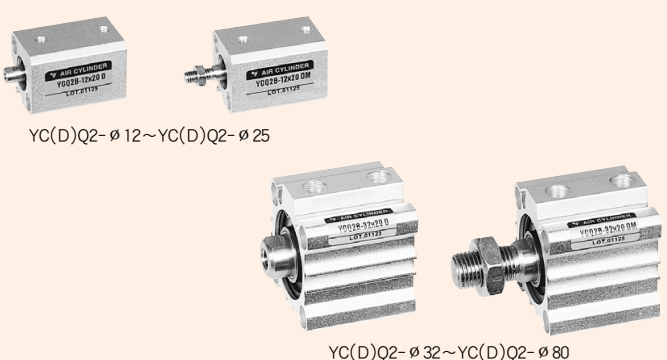
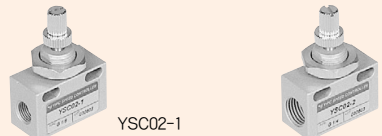
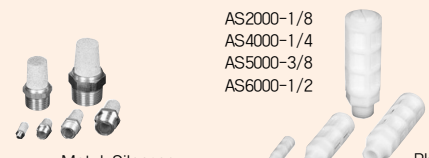
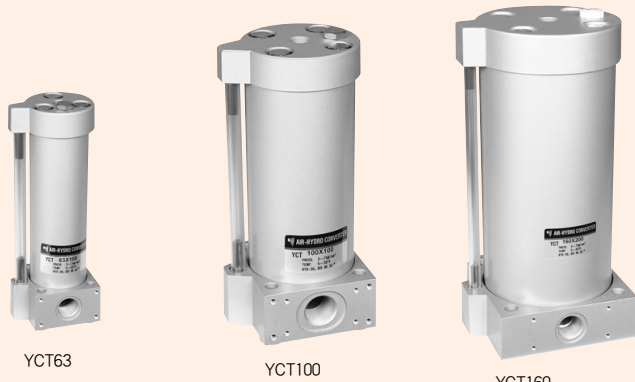
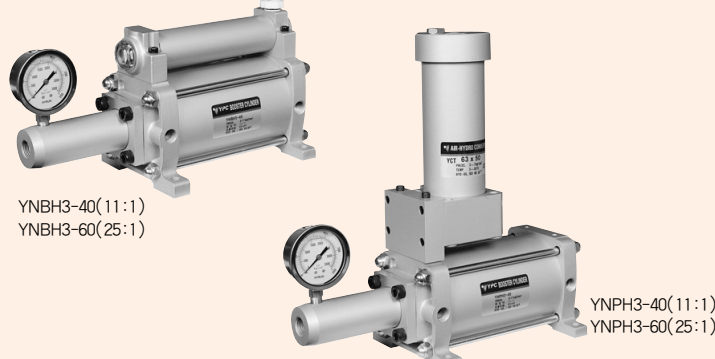
ITEM	SERIES	MODEL	PORT SIZE	PAGE	
SCE (ECONOMY) Series 5/2, 5/3, 3/2 Solenoid, Pneumatic Valve	 SCE300 Body Width-15mm  SCE400 Body Width-18mm  SCE500 Body Width-26mm  SCE360 Body Width-15mm  SCE460 Body Width-18mm	SCE300	M5, 1/8	68	
		SCE400	1/8, 1/4	70	
		SCE500	3/8	72	
		CHAPTER 06			
		CHAPTER 07			
SN Series 5/2, 5/3 Namur Solenoid, Pneumatic Valve	 SN3000 Body Width-23mm  SN4000 Body Width-30mm	SN3000	1/4	76	
		SN4000	1/4	78	
SOLENOID Coil	Width 15mm  SC1  SG1  SD1  SL1  SM1 Width 22mm  SC2  SG2  SD2	SC1-A2, A1, D4 (AC220V, 110V, DC24V) SC2-A2, A1, D4 (AC220V, 110V, DC24V)	Width-15mm Width-22mm	80	
		CHAPTER 08			
DIN CONNECTOR	 CN1  CD1 CZ1  CN2  CD2 CZ2	CN1 CN2	Width-15mm Width-22mm	82	

ITEM	SERIES	MODEL	PORT SIZE	PAGE
YMV Series 3/2 Mechanically Valve	 <p> YMV310-PU YMV310-1RP YMV310-2RB YMV310-FP YMV310-SL YMV310-MS YMV310-MT </p>	YMV310	1/8	86
	YMV410	1/4		
PMEV (ECONOMY) Series 5/2, 3/2 Panel Mounted Manually Valve	 <p> PMEV110-FP Body width-15mm Panel Hole-φ25 PMEV110-SL PMEV160-MS PMEV160-MT </p>	PMEV110 PMEV160	M5×0.8	88
	 <p> PMEV210-FP Body width-18mm Panel Hole-φ30 PMEV210-SL PMEV260-MS PMEV260-MT </p>	PMEV210 PMEV260	1/8	
	 <p> PMEV410-FP Body width-26mm Panel Hole-φ30 PMEV410-SL PMEV460-MS PMEV460-MT </p>	PMEV410 PMEV460	1/4	
RLV Series 5/2, 3/2 Roller Lever Mechanical Valve	 <p> RLV110-PU Body width-15mm RLV110-1RP RLV160-PU RLV160-2RB </p>	RLV110 RLV160	M5×0.8	90
	 <p> RLV210-PU Body width-18mm RLV210-1RB RLV260-PU RLV260-2RP </p>	RLV210 RLV260	1/8	
	 <p> RLV410-PU Body width-26mm RLV410-1RB RLV460-PU RLV460-2RP </p>	RLV410 RLV460	1/4	



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ITEM	SERIES	MODEL	PORT SIZE	PAGE
HLV Series 5/2, 5/3, 3/2 Hand Lever Manually Valve	 <p>HLV300 5/2, 5/3-Way</p> <p>HLV400 5/2, 5/3-Way</p> <p>HLV500 5/2, 5/3-Way</p> <p>HLV600-5/2Way 5/2, 5/3-Way</p> <p>HLV460 3/2-Way</p> <p>HLV560 3/2-Way</p>	HLV310-S HLV320-D HLV330-S,D HLV340-S,D HLV350-S,D HLV410-S HLV420-D HLV430-S,D HLV440-S,D HLV450-S,D HLV460-S,D HLV510-S HLV520-D HLV530-S,D HLV540-S,D HLV550-S,D HLV560-S,D HLV610-S HLV620-D HLV630-S,D HLV640-S,D HLV650-S,D	1/8 1/4 3/8 1/2	92
KMV Series 5/2, 3/2 Knob Push/Pull Manually Valve	 <p>KMV310 5/2-Way</p> <p>KMV410 5/2-Way</p> <p>KMV460 3/2-Way</p>	KMV310-S KMV310-D KMV310-DA KMV410-S,D,DA KMV460-S,D,DA	1/8 1/4	94
TMV Series 5/2, 3/2 Knob Push/Pull Manually Valve	 <p>TMV210 5/2-Way</p> <p>TMV260 3/2-Way</p> <p>TMV410 5/2-Way</p> <p>TMV460 3/2-Way</p>	TMV210 TMV260 TMV410 TMV460	1/8 1/4	96
FT Series 5/2, 5/3 Foot Treadle Manually Valve	 <p>FT400 5/2-Way</p> <p>FT500 5/2-Way</p> <p>FT600 5/2, 5/3-Way</p>	FT410-S FT510-S FT610-S FT620-D FT630-S,D FT640-S,D FT650-S,D	1/4 3/8 1/2	98

ITEM	SERIES	MODEL	PORT SIZE	PAGE
Compact Cylinder	 <p>YC(D)Q2-ø 12~YC(D)Q2-ø 25</p> <p>YC(D)Q2-ø 32~YC(D)Q2-ø 80</p>	YC[D]Q2-12	M5 × 0.8	102
		YC[D]Q2-16	M5 × 0.8	
		YC[D]Q2-20	M5 × 0.8	
		YC[D]Q2-25	M5 × 0.8	
		YC[D]Q2-32	1/8	
		YC[D]Q2-40	1/8	
		YC[D]Q2-50	1/4	
		YC[D]Q2-63	1/4	
	YC[D]Q2-80	3/8		
Speed Controller	 <p>YSC02-1</p> <p>YSC02-2</p>	YSC02-1	1/8	104
		YSC02-2	1/4	
Air Silencer	 <p>Metal Silencer</p> <p>Plastic Silencer</p>	ASS (Metal)	M5~PT1/2	106
		AS (Plastic)	PT1/8~PT1/2	
Air Hydro Converter	 <p>YCT63</p> <p>YCT100</p> <p>YCT160</p>	YCT63	Air Port-3/8 Oil Port-3/4	108
		YCT100	Air Port-1/2 Oil Port-1	
		YCT160	Air Port-3/4 Oil Port-1¼	
Booster Cylinder	 <p>YNBH3-40(11:1) YNBH3-60(25:1)</p> <p>YNPH3-40(11:1) YNPH3-60(25:1)</p>	YNBH3-40 (11:1) YNBH3-60 (25:1)	Air Port-3/8 Oil Port-1/2	110
		YNPH3-40 (11:1) YNPH3-60 (25:1)	Air Port-3/8 Oil Port-1/2	

REFERENCE MATERIALS

The surface of earth is covered with air layer, which consists of nitrogen(78Vo 1%), oxygen(21Vo 1%) and small amount of CO₂, AR, H₂, Ne, Kt and Xe. To understand air movement and the law of nature, various physical terms as follow should be utilized. For better mutual understanding, scientist in most countries come to same unit system, called SI unit. Following are the relation between generally used engineering terms and new SI unit. In defining aerology, following term and words are required.

BASIC UNITS

Unit	Sign	Eng. unit	SI unit
Length	l	m	m
Mass	m	$\frac{kp.s^2}{m}$	kg
Time	t	Sec.	Sec.
Temp.	T	Degress Celsius(°C)	Kelvin(K)
Electric current	I	Ampere(A)	Ampere(A)
Intensity light	I		Candela(cd)
	n		Mole(mol)

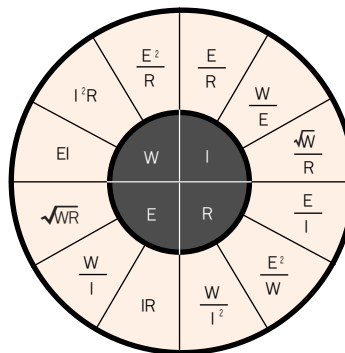
DERIVED UNITS

Unit	Sign	Eng. unit	SI unit
Force	F	kP	Newton(N) $1N = \frac{1kg.m}{S^2}$
Area	A	m ²	m ²
Volume	V	m ³	m ³
Flux	V(Q)	m ² /S	m ² /S
Pressure	P	(Kp/cm ²)	Pascal(Pa) Bar(bar) $1Pa = \frac{1N}{m^2}$ 1bar = 10 ⁵ Pa = 100kPa(10 ² kPa) = 14.5psi

CONVERSION TABLE OF PRESURE UNITS

No.	Pa	bar	kgf/cm ²	atm	mmH ₂ O	mmHg Torr	psi
1	1	1 × 10 ⁻⁵	1.01972 × 10 ⁻⁵	9.86923 × 10 ⁻⁶	1.01972 × 10 ⁻⁴	7.50062 × 10 ⁻³	1.45038 × 10 ⁻⁴
2	1 × 10 ⁵	1	1.01972	9.86923 × 10 ⁻⁴	1.01972 × 10 ⁴	7.50062 × 10 ²	1.45038 × 10 ⁴
3	9.80665 × 10 ⁴	9.80665 × 10 ⁻⁴	1	9.67841 × 10 ⁻⁴	1 × 10 ⁴	7.35559 × 10 ²	1.42234 × 10 ⁴
4	1.01325 × 10 ⁵	1.01325	1.03323	1	1.03323 × 10 ⁴	7.60 × 10 ²	1.46960 × 10 ⁴
5	9.80665	9.80665 × 10 ⁻⁵	1 × 10 ⁻⁴	9.67841 × 10 ⁻⁵	1	7.35559 × 10 ⁻²	1.42234 × 10 ⁻³
6	1.33322 × 10 ²	1.33322 × 10 ⁻³	1.35951 × 10 ⁻³	1.31579 × 10 ⁻³	1.35951 × 10	1	1.93368 × 10 ⁻²
7	6.89473 × 10 ³	6.89473 × 10 ⁻²	7.03065 × 10 ⁻²	6.80457 × 10 ⁻²	7.03067 × 10 ²	5.17147 × 10	1

DIAGRAM FOR THE LAW OF Ω



- I = Electric Current (A)
- E = Voltage (V)
- R = Resistance (Ω)
- W = Power consumption (w)

ALLOWABLE TEMPERATURE ACCORDING TO THE TYPE OF INSULATOR

Insulation Type	Temperature rising value (°C)	Max, allowable temperature (°C)
Y Type *	below 50	above 90
A Type	below 65	above 105
E Type	below 80	above 120
B Type	below 90	above 130
F Type	below 115	above 155
H Type	below 140	above 180
C Type *	below 140	above 180

* Theoretical Specifications

CONSUMPTION ELECTRIC POWER

AC Solenoid

electric power(VA) = Voltage(V) × electric current(A)

Consumption electric power(W) =

Voltage(V) × electric current(A) × COS θ

DC Solenoid

Consumption electric power(W) = Voltage(V) × electric current (A)

GUIDELINES FOR SAFELY USING SOLENOID VALVES

※Please carefully read prior to using the valves.



DANGER

Failure to follow may result in death or serious personal injury.



WARNING

Failure to follow may result in personal injury.



CAUTION

Failure to follow may result in personal injury or machinery equipment damage.

WARNING

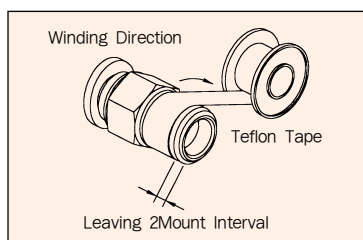
Design, specification, and usage of the compressed air system

- Only the qualified personnel should design, specify, and handle the compressed air system.
- Recommended working condition for each and every product shown in the catalog varies. Implement only the most suitable working condition prior to specifying the system for each product.
- Proper safety features should be installed and secured prior to operating any machinery equipment. The source of disassembling any machinery to avoid any personal injury.

CAUTION

Preparatory factors to consider prior to using the valves

- Verify the accuracy of the specifications of the valves prior to the usage.
- Verify and check that the specifications of the valves are consistent with the requested or ordered specifications.
- Use compressed air to clean any metallic residues, cutting oil, or dust inside of the piping system.
- Distance between the actuator and the valve should be as minimal as possible. The piping distance longer than the minimal leads to inefficiency, waste of compressed air, and slower response time of the valve.
- Use zinc-plated steel tube when steel tubing is required.
- Select and connect the proper ports for accurate piping.
P(1) : Compressed air input connection ports
B(2), A(4) : Actuator connection ports
R2(3), R1(5) : Residual air exhaust ports
- Any and all foreign materials of impurity must be removed at the points of connection or from the inside of valve prior to piping.
- When connecting fittings to the ports, apply Teflon tape to the fitting threads. The first 2 threads of fitting should be free of any Teflon tape. Any fragment or portion of Teflon tape entering the inside of valve will result in the improper operations of the valve.



WARNING

Installation environment for the valves

- Avoid any location where explosive, vibration, and impact factors are present.
- Maintain a sufficient space for a proper ventilation and for any needed repair work when installing valves.
- Use the valves within the allowable range of 5°C ~60°C of the ambient temperature and of the fluid material. In the valves when used under the low temperature working conditions.

CAUTION

Usage conditions for valves

- Installing air filter and oiler prior to piping of valves leads to the extension of the product life.
- Use the purified and dried air only. The source of the compressed air that contains any chemicals, organic raw materials, salt, corrosive materials will render the valves defective and non-operational.
- Excessive air leakage from the compressed air system may reduce the product life of valve.

- Proper filtering system must be installed to prevent any substance of impurity from entering valves. Periodical monitoring or replacement of filters is strongly suggested.
- Use turbine oil type or class 2 (ISO VG #32) oil in order to extend the product life. Non-graded oil may be used.
- Use only the recommended oil type. Using non-recommended oil type may reduce the product life of valves due to damage caused by the shrinkage or enlargement of the valve packing. (Do not use spindle oil, machine oil, hydraulic oil, cooking oil, or anti-corrosion oil)
- Do not use the valves in the dusty working condition. If the dusty working condition is unavoidable, place a protective cover over the control unit and place the noise muffler or silencer at the exhaust ports of R2(3) and R1(5).
- Do not allow the valves to be on the stand-by or pause mode for an extended period of time. The stand-by or pause mode of valves should be used briefly and momentarily.
- Solenoid valves are not designed to be suddenly interrupted, stopped, or shut off. Consider and prepare other safety measurements before using the solenoid valves.

WARNING

Electrical factors for the valves

- Allowable range of voltage variation should be within 10% of the recommended voltage for the proper operation of the valves. Any voltage exceeding more than 10% of the recommended voltage will result in the coil damage and the malfunctioning of the valves.
- Turning on or off of Alternate Current (AC) may result in surge current that may have problematic effect to the magnetic circuitry. It is recommended that an alternate plan is implemented to avoid such problematic effect.
- Continuous supply of electricity to the solenoid coil may result in increase of the surface temperature of the coil. In order to avoid the damage to the coil, please verify circuitry design before piping.
- Even if the source of electricity is completely disconnected, the operation of the valves may not come a complete stop due to a residual current in the magnetic circuitry. Reduce the magnitude of the leakage current on both sides by 20% of the rated voltage for AC supply current and by 10% of the rated voltage for DC supply current.

CAUTION

Applicable torque force when piping valves

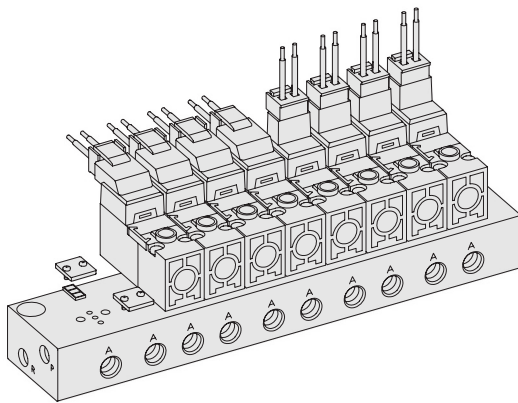
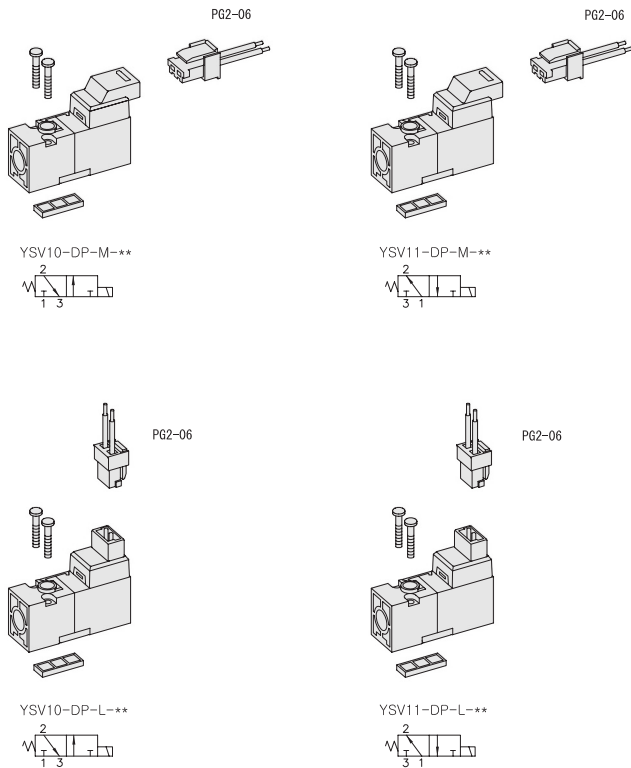
- Applying excessive torque force will damage the fitting threads when connection to the valves. Use the following guideline of torque force for each applicable port size.

Port size	Applicable Torque N.m(kgf/cm)
M5	2(20)
PT1/8	15(150)
PT1/4	20(200)
PT3/8	25(250)
PT1/2	34(340)
PT3/4	51(510)
PT1	69(690)
PT1 1/4	80(800)
PT1 1/2	85(850)
PT2	120(1200)

YSV10

Direct Actuated
10mm Pico Solenoid Valves

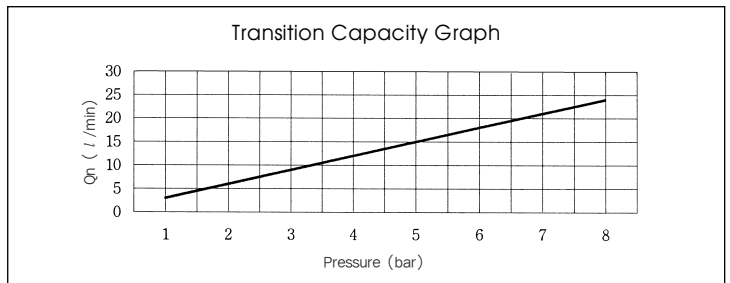
- 3/2- Direct Operation Type
- Manifold Mounting Type
- Orifice $\varnothing 0.6\text{mm}$



** : Voltage Selection

SPECIFICATION

ITEM	FUNCTION	YSV10	YSV11
	Fluids		Compressed Air & Inert Gases
Pressure(bar)		1~8.0	
Orifice(mm)		P = $\varnothing 0.6$, R = $\varnothing 0.7$	
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		10ms or Less	
Max. Working Frequency		30c/sec	
Lubrication		Not Required(Use ISO VG32#)	
Manual Override		Push Button	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		$\pm 10\%$ of Rated Voltage	
Off Min. Residual Voltage		10% of Rated Voltage	
Power Consumption		0.65W(24V : 27.0mA / 12V : 54.0mA)	



- ### The Material of Parts
- Pilot Parts : Glass Filled Nylon
 - Spring : Stainless
 - Seals : NBR
 - Armature : Stainless Steel
 - Indicator Cap : Polycarbonate

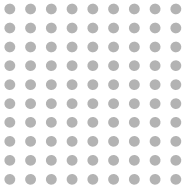
<p>Plug Connector With Clip</p> <p>Ordering Code PG2-06 (L : 600mm) PG2-10 (L : 1,000mm)</p>	<p>Blanking Plate (Material : STS304)</p> <p>Ordering Code YMF10 - BLK</p>
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※ The specification on each item can be amended without any prenotice to improve a performance.
※ The specification on each item can be different from actual specification.

ORDERING NO.

YSV1 0 - D P - L - D4

Valve Series	Function	Pilot Source	Manual Operator	Solenoid Coil Type	Voltage
YSV1 : Solenoid Valve	0 3/2 Normally Closed Spring Return 1 3/2 Normally Open Spring Return	D Direct Operated	P Push Non-Locking	L 90 Degree Plug-in Wire Assembly With LED M 180 Degree Plug-in Wire Assembly With LED	D4 DC 24V D2 DC 12V



YSV10-DP-M-***
Normally Closed Type

YSV11-DP-M-***
Normally Open Type

YSV10-DP-L-***
Normally Closed Type

YSV11-DP-L-***
Normally Open Type

YMF10-M04

(Sealing Area)

Manifold Block Ordering Code

YMF 10		-		2	
Symbol	Manifold Station				
YMF10	3 Way	02	2-Station		
		04	4-Station		
		06	6-Station		
		08	8-Station		
		10	10-Station		
		12	12-Station		
		14	14-Station		

Blanking Plate Ordering Code

YMF10-BLK

Blanking Plate.
(Material: STS304)

Manifold Gasket.
(Material: NBR)

YMF10 MANIFOLD BLOCK

(YSV10 Solenoid Valve Use)

Manual Button

2- ϕ 6.0 DP3.0 ϕ 3.2 Hole

4.0

21.0

25.0

31.0

$B=(10.5n+11.5)$

$P=10.5$

15.0

4.0

$A=(10.5n+19.5)$

Red

Black

2-M5x0.8(A-Port)

15.0

11.4

39.5

15.0

$P=10.5$

15.0

3-PORT MANIFOLD BLOCK DIMENSION

ITEM	n	2	3	4	5	6	7	8	9	10	11	12	13	14
B		32.5	43.0	53.5	64.0	74.5	85.0	95.5	106.0	116.5	127.0	137.5	148.0	158.5
A		40.5	51.0	61.5	72.0	82.5	93.0	103.5	114.0	124.5	135.0	145.5	156.0	166.5

n=STATION

Normally Closed Type

AWG24

6.00

43.5

2-M5x0.8(P-Port)

15.0

11.4

5.5

3.8

12.0

25.0

2-M5x0.8(R-Port)

A(2)

P(1)

R(3)

Normally Open Type

AWG24

6.00

43.5

2-M5x0.8(R-Port)

15.0

11.4

5.5

3.8

12.0

25.0

2-M5x0.8(P-Port)

A(2)

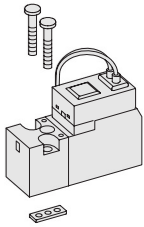
P(1)

R(3)

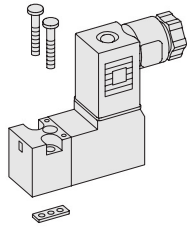
YSV20

Direct Actuated
15mm Micro Solenoid Valves

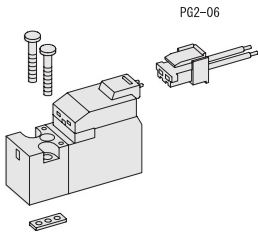
- 3/2- Direct Operation Type
- Manifold Mounting Type
- Orifice $\phi 1.1\text{mm}$



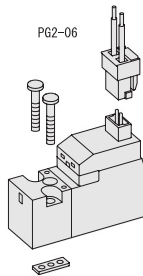
YSV20-DP-SD-***
M 1 2 3



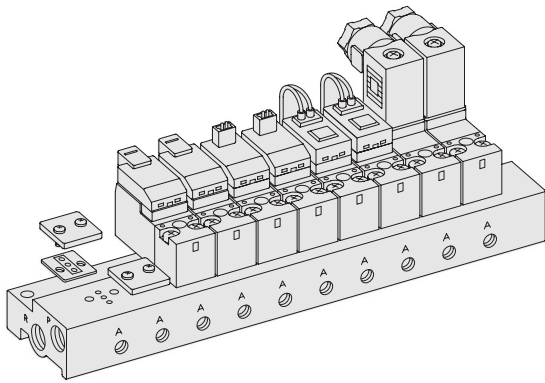
YSV20-DP-SC-CN1-***
M 1 2 3



YSV20-DP-SM-***
M 1 2 3



YSV20-DP-SL-***
M 1 2 3

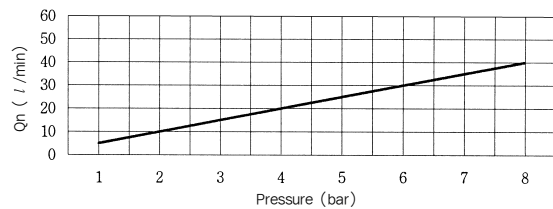


** : Voltage Selection

SPECIFICATION

ITEM	SERIES	FUNCTION
	YSV20	3/2-N.C
Fluids	Compressed Air & Inert Gases	
Pressure(bar)	0~8.0	
Orifice(mm)	P = $\phi 1.1$, R = $\phi 1.5$	
Ambient & Fluid Temp.	5~60°C (41~140°F)	
Response Time(5bar)	20ms or Less	
Max. Working Frequency	10c/sec	
Lubrication	Not Required(Use ISO VG32 #)	
Manual Override	Push Button	
Coil Insulation Class	F-Class or Equivalent	
Permissible Voltage Variation	$\pm 10\%$ of Rated Voltage	
Off Min. Residual Voltage	AC:20% or Less / DC:10% or Less	
Power Consumption	AC:3.5VA(60Hz) / DC:2.5W	

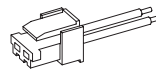
Transition Capacity Graph



The Material of Parts

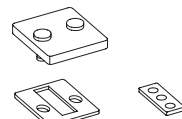
- Pilot Parts : Glass Filled Nylon
- Spring : Stainless
- Seals : NBR
- Armature : Stainless Steel
- Indicator Cap : Polycarbonate
- Lead Wire : AWG-no.24
- Lead Wire Packing : Viton

Plug Connector With Clip



Ordering Code
PG2-06 (L : 600mm)
PG2-10 (L : 1,000mm)

Blanking Plate (Material : STS304)



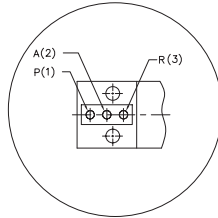
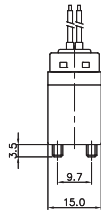
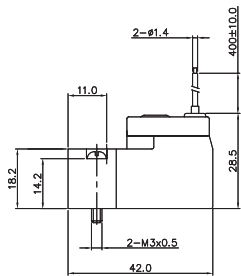
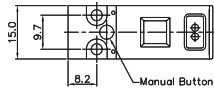
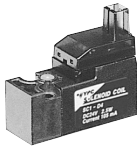
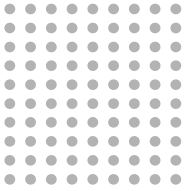
Ordering Code
YMF20 - BLK

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

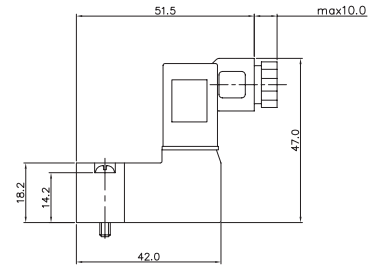
ORDERING NO.

YSV2 0 - D P - SC - CN1 - D4

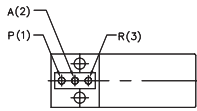
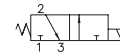
Valve Series	Function	Pilot Source	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
YSV2 : Solenoid Valve	0 3/2 Normally Closed Spring Return	D Direct Operated	P Push Non-Locking	0 None SC 3 Pin Connector Coil SG Grommet /Flying Leads SD Grommet /Flying Leads With LED SL 90 Degree Plug-in Wire Assembly with LED SM 180 Degree Plug-in Wire Assembly with LED	0 None CN1 Normal Connector CD1 Connector With LED CZ1 Connector With LED & Surge Suppressor	0 None A2 AC 220V A1 AC 110V D4 DC 24V D2 DC 12V



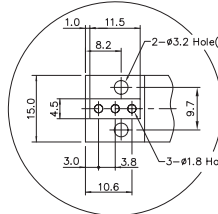
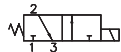
Normally Closed Type



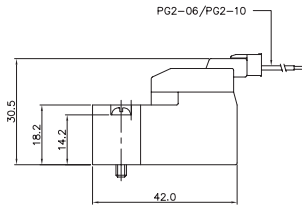
YSV20-DP-SC-CN1-***
Normally Closed



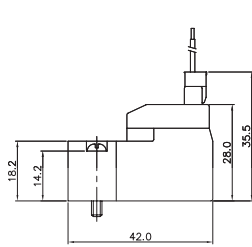
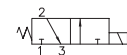
YSV20-DP-SD-***
Normally Closed



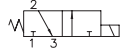
Sealing Area



YSV20-DP-SM-***
Normally Closed



YSV20-DP-SL-***
Normally Closed



Manifold Block Ordering Code

YMF 20		-	2
Symbol	Manifold Station		
YMF20	3 Way	02	2-Station
		04	4-Station
		06	6-Station
		08	8-Station
		10	10-Station
		12	12-Station
		14	14-Station

Blanking Plate Ordering Code

YMF20-BLK

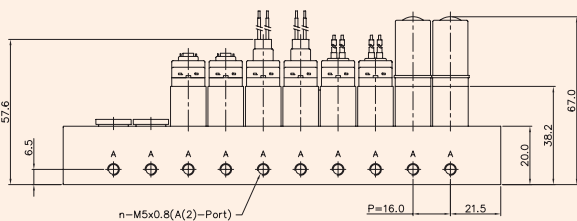
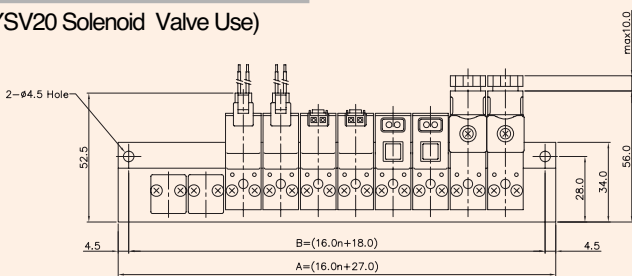
Blanking Plate.
(Material: STS304)

Manifold Plate.
(Material: STS304)

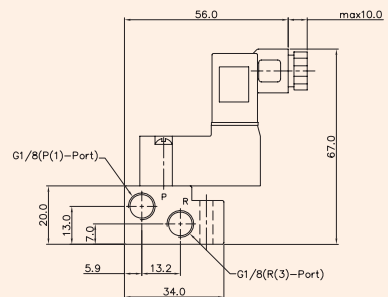
Manifold Gasket.
(Material: NBR)

YMF20 MANIFOLD BLOCK

(YSV20 Solenoid Valve Use)



3-PORT MANIFOLD BLOCK DIMENSION		n=STATION					
ITEM	2	4	6	8	10	12	14
B	50.0	82.0	114.0	146.0	178.0	210.0	242.0
A	59.0	91.0	123.0	155.0	187.0	219.0	251.0



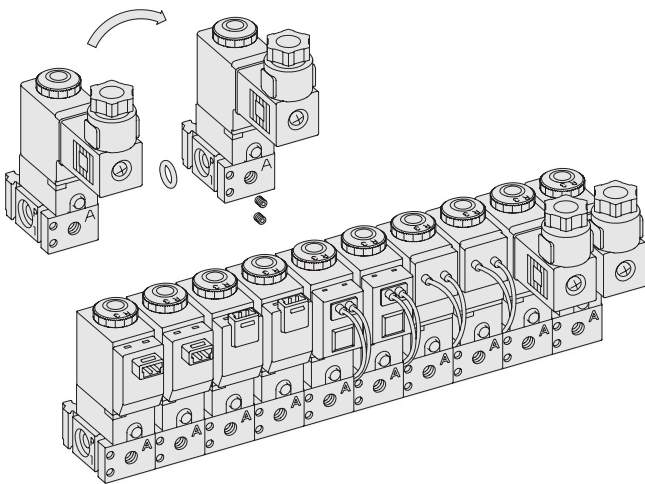
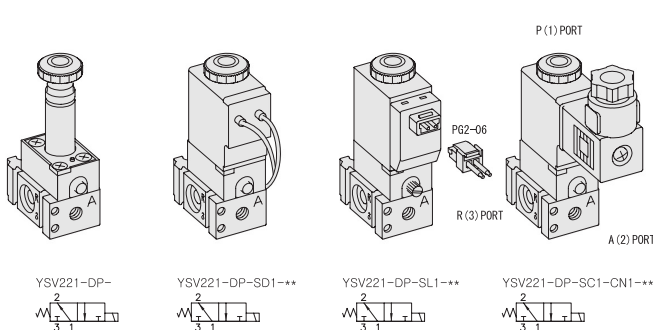
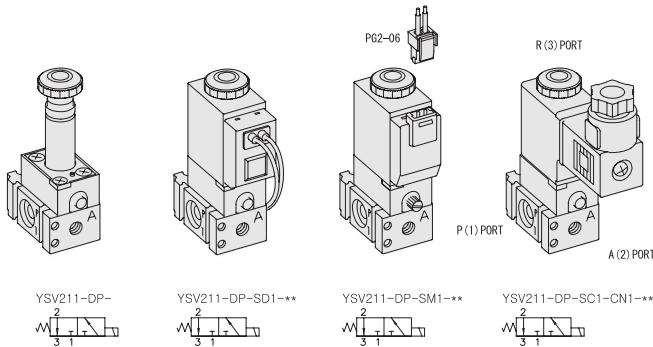
YSV200. M5

Direct Actuated
Staking Body Valves

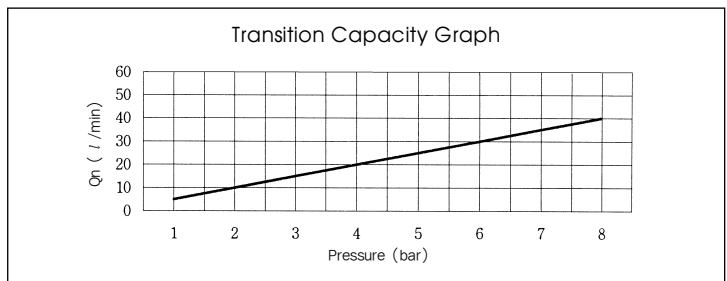
- 3/2- Direct Operation Type
- High Durability
- Orifice \varnothing 1.1mm

SPECIFICATION

ITEM	FUNCTION	YSV211	YSV221
		3/2-N.C	3/2-N.O
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		0~8.0	
Orifice(mm)		P = \varnothing 1.1, R = \varnothing 1.2	P = \varnothing 1.2, R = \varnothing 1.1
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		20ms or Less	
Max. Working Frequency		8c/sec	
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Optional)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		\pm 10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		AC:3.5VA(60Hz) / DC:2.5W	



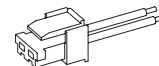
** : Voltage Selection (see page 80)



The Material of Parts

- Valve Body : Aluminium
- Pilot Parts : Glass Filled Nylon
- Pilot Plate : Zinc Pressure Die-Cast
- Spring : Stainless
- Seals : NBR
- Armature : Stainless Steel
- Armature Seals : Viton

Plug Connector With Clip



Ordering Code

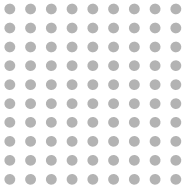
PG2-06 (L : 600mm)
PG2-10 (L : 1,000mm)

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

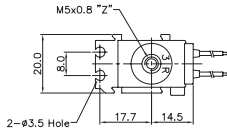
YSV2 1 1 - D P - SC1 - CN1 - A2

Valve Series	Function	Port Size & Thread	Pilot Source	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
YSV2 : Solenoid Valve	1	3/2 Normally Closed Spring Return	1 M5x0.8	D Direct Operated	P Push Non-Locking Override	0 None	0 None
	2	3/2 Normally Open Spring Return	2 10-32 UNF		L LeverLocking Override	SC1 3 Pin Connector Coil SG1 Grommet/Flying Leads SD1 Grommet/Flying Leads With LED SL1 90 Degree Plug-in Wire Assembly with LED SM1 180 Degree Plug-in Wire Assembly with LED	CN1 Normal Connector CD1 Connector With LED CZ1 Connector With LED & Surge Suppressor

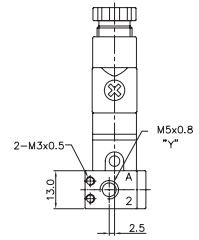
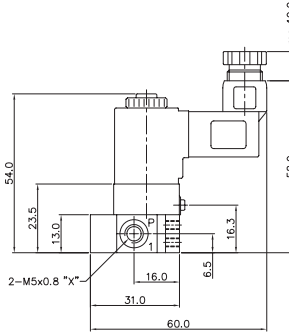
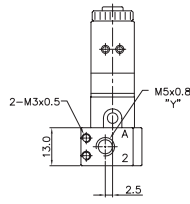
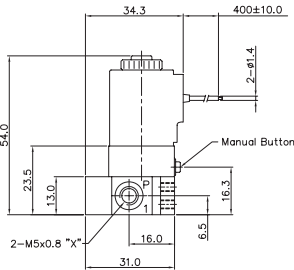
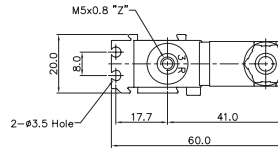


Direct Solenoid Actuated Valves

Port Thread **M5 × 0.8**



PORT	TYPE	N.C	N.O
X		P(1)	R(3)
Y		A(2)	A(2)
Z		R(3)	P(1)

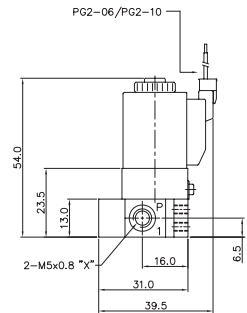
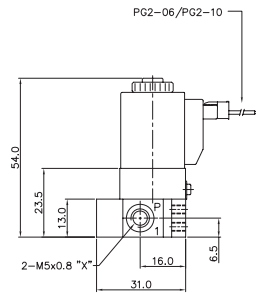
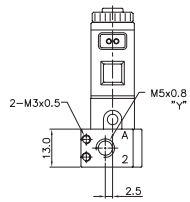
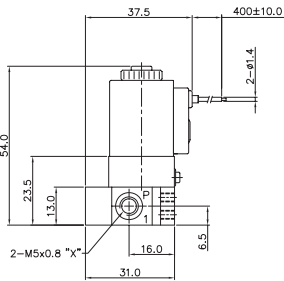
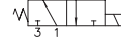
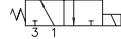
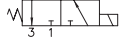


YSV211-DP-SG1-***
Normally Closed

YSV221-DP-SG1-***
Normally Open

YSV211-DP-SC1-CN1-***
Normally Closed

YSV221-DP-SC1-CN1-***
Normally Open



YSV211-DP-SD1-***
Normally Closed

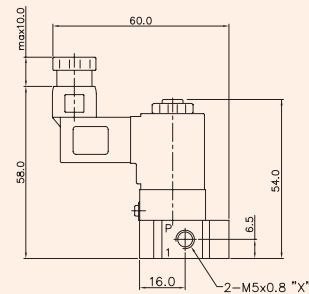
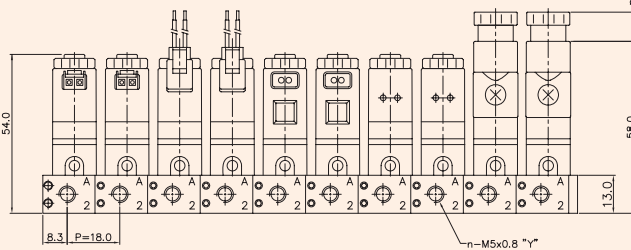
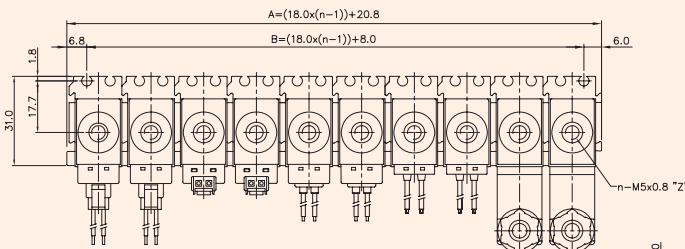
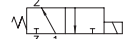
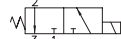
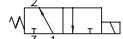
YSV221-DP-SD1-***
Normally Open

YSV211-DP-SL1-***
Normally Closed

YSV221-DP-SL1-***
Normally Open

YSV211-DP-SM1-***
Normally Closed

YSV221-DP-SM1-***
Normally Open



A, B = DIMENSIONS

n = STATION

ITEM	n	2	3	4	5	6	7	8	9	10
A		38.8	56.8	74.8	92.8	110.8	128.8	146.8	164.8	182.8
B		26.0	44.0	62.0	80.0	98.0	116.0	134.0	152.0	170.0

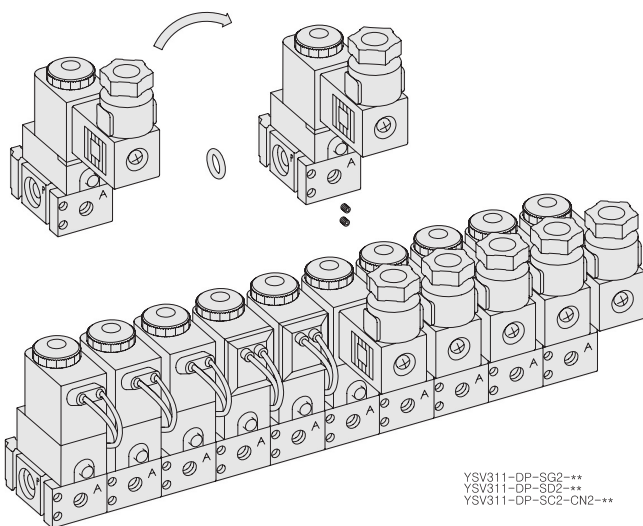
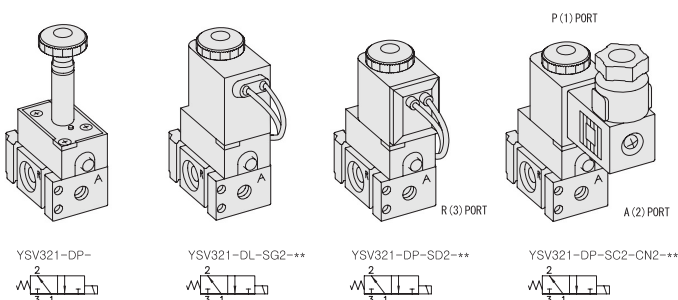
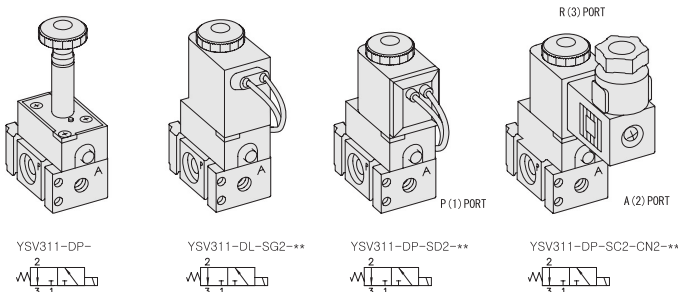
YSV300. 1/8

Direct Actuated
Staking Body Valves

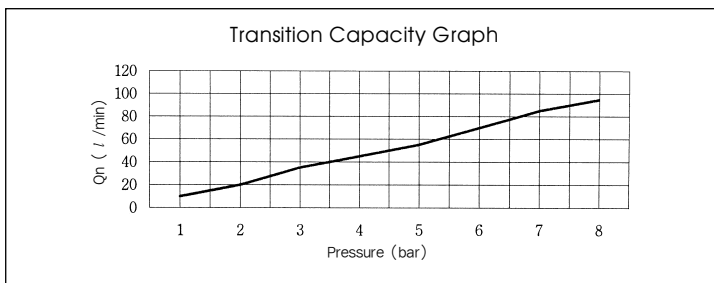
- 3/2- Direct Operation Type
- High Durability
- Orifice \varnothing 1.5mm

SPECIFICATION

ITEM	SERIES	YSV311	YSV321
	FUNCTION	3/2-N.C	3/2-N.O
Fluids	Compressed Air & Inert Gases		
Pressure(bar)	0~8.0		
Orifice(mm)	P = \varnothing 1.5, R = \varnothing 1.5		P = \varnothing 1.5, R = \varnothing 1.5
Ambient & Fluid Temp.	5~60°C (41~140°F)		
Response Time(5bar)	20ms or Less		
Max. Working Frequency	8c/sec		
Lubrication	Not Required(Use ISO VG32 #)		
Manual Override	Push Button(Standard), Lever Lock(Optional)		
Coil Insulation Class	F-Class or Equivalent		
Permissible Voltage Variation	\pm 10% of Rated Voltage		
Off Min. Residual Voltage	AC:20% or Less / DC:10% or Less		
Power Consumption	AC:3.5VA(60Hz) / DC:2.5W		



** : Voltage Selection (see page 80)



The Material of Parts

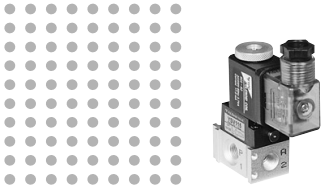
- Valve Body : Aluminium
- Pilot Parts : Glass Filled Nylon
- Spring : Stainless
- Seals : NBR
- Armature : Stainless Steel
- Armature Seals : Viton
- Pilot Plate : Zinc Pressure Die-Cast

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

YSV3 1 1 - D P - SC2 - CN2 - A2

Valve Series	Function	Port Size & Thread	Pilot Source	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
YSV3 : Solenoid Valve	1	1 G 1/8	D Direct Operated	P Push Non-Locking Override	0 None	0 None	0 None
	2	2 NPT 1/8		L Lever Locking Override	SC2 3 Pin Connector Coil	CN2 Normal Connector	A2 AC 220V
					SG2 Grommet/Flying Leads	CD2 Connector With LED	A1 AC 110V
					SD2 Grommet/Flying Leads With LED	CZ2 Connector With LED & Surge Suppressor	A4 AC 24V D4 DC 24V D2 DC 12V



Direct Solenoid Actuated Valves

Port Thread 1/8

PORT	TYPE	N.C	N.O
X	P(1)	R(3)	
Y	A(2)	A(2)	
Z	R(3)	P(1)	

YSV310-DP-SD2-***
 Normally Closed

YSV320-DP-SD2-***
 Normally Open

YSV310-DP-SG2-***
 Normally Closed

YSV320-DP-SG2-***
 Normally Open

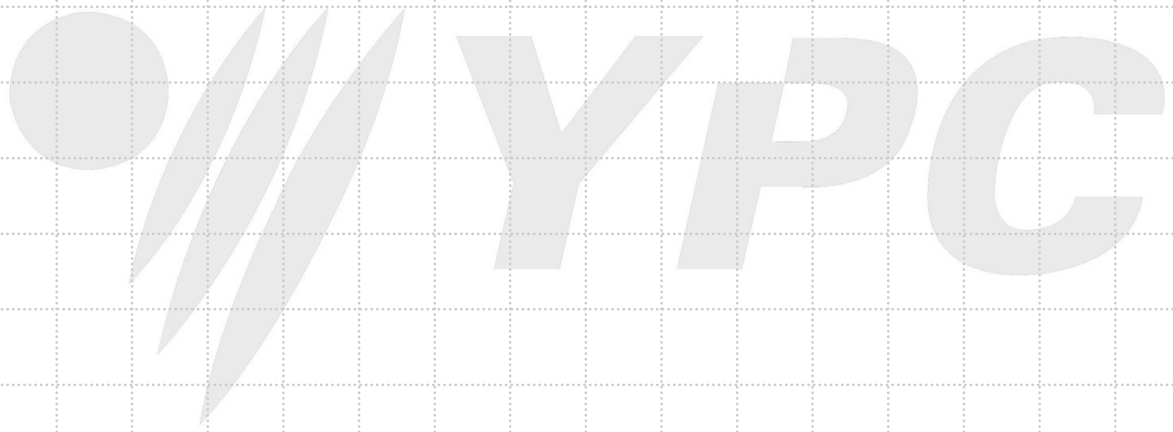
YSV310-DP-SC2-CN2-***
 Normally Closed

YSV320-DP-SC2-CN2-***
 Normally Open

$A = (24.8n + 4.0)$
 $B = (24.8n - 11.2)$

$n = \text{STATION}$

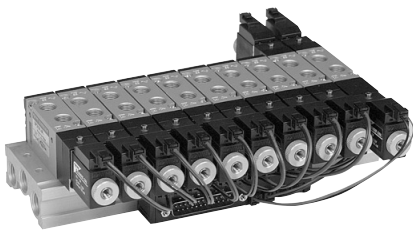
ITEM	n	2	3	4	5	6	7	8	9	10
A		53.6	78.4	103.2	128.0	152.8	177.6	202.4	227.2	252.0
B		38.4	63.2	88.0	112.8	137.6	162.4	187.2	212.0	236.8



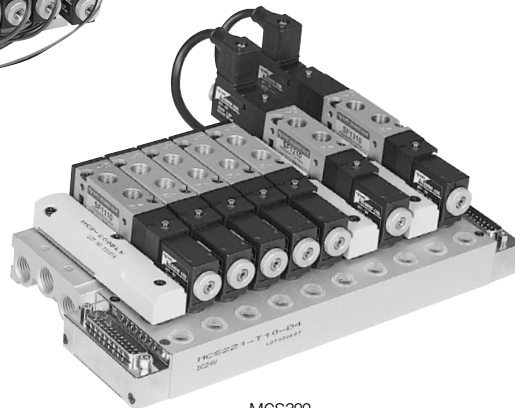
MCS Series

Multi Connector System (SF Series Solenoid Valve Mounted)

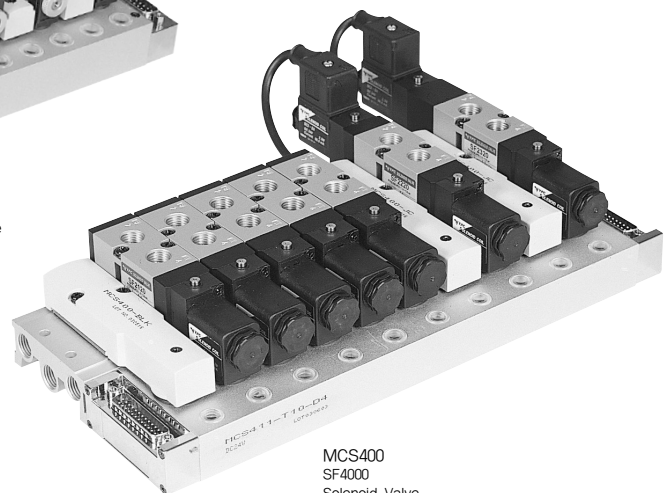
CHAPTER 02



MCS100
SF1000, SF2000
Solenoid Valve
MOUNTED



MCS200
SF2000
Solenoid Valve
MOUNTED



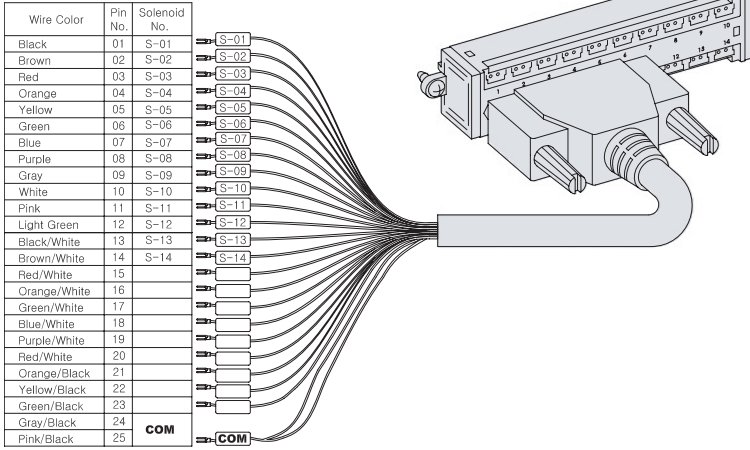
MCS400
SF4000
Solenoid Valve
MOUNTED

- MCS100
- MCS200
- MCS400

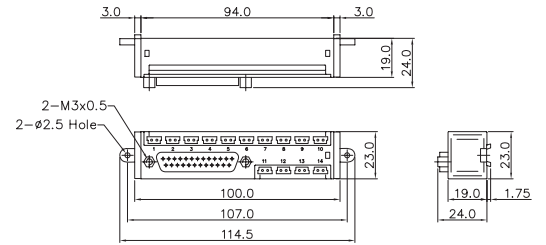
MCS100

Multi Connector System
SF1000, SF2000 Solenoid Valve MOUNTED

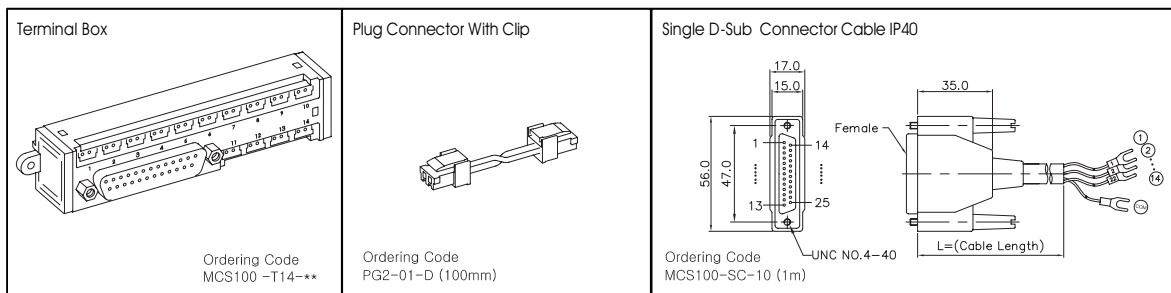
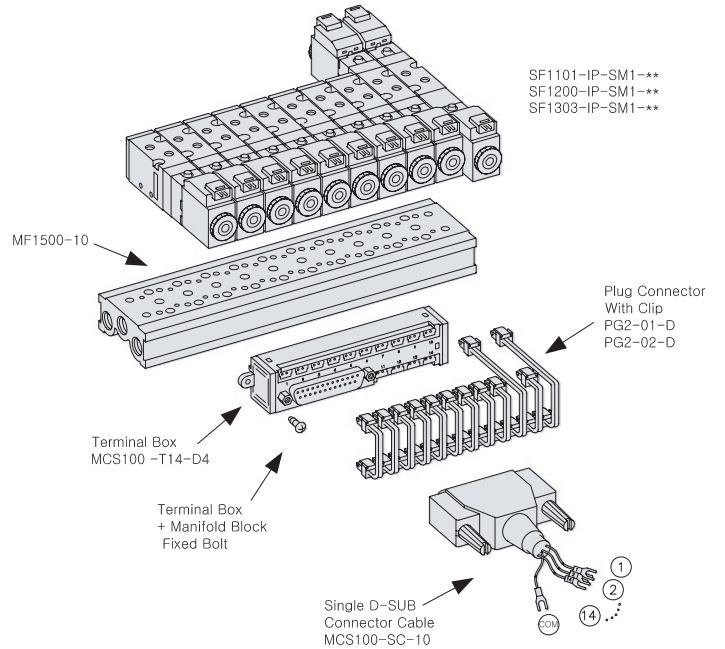
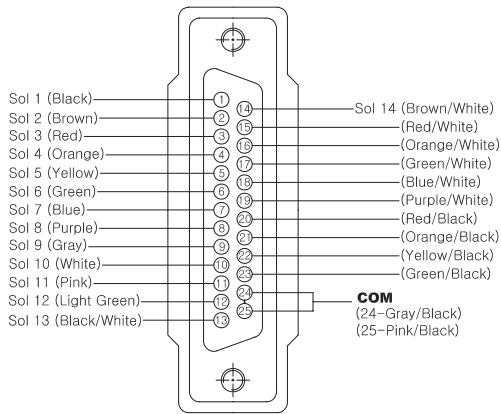
- DC 24V/ DC 12V
- 25Pin D-Sub Connector
- Simple Electric Wire System



Terminal Box
MCS100-T14-D4



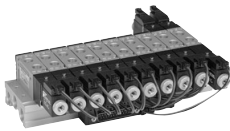
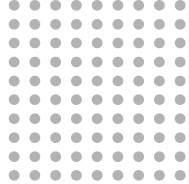
D-Sub Connector Pin No.



ORDERING NO.

MCS1 0 0 - T14 - D4

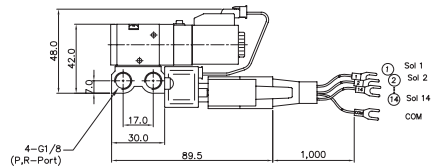
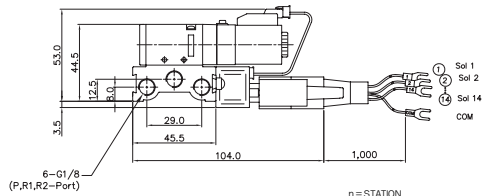
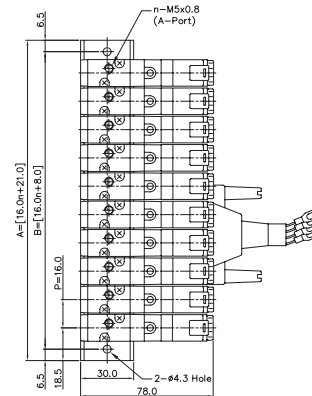
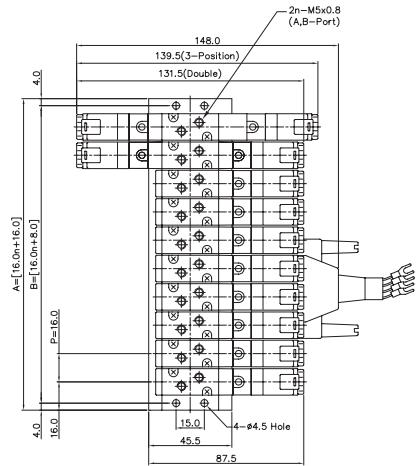
Series	Function	D-Sub Connector	Multipole Wireway Box	Voltage
MCS1 : Multi Connector Solenoid Valve Mounted	0 Single Module	0 25 Pin D-Sub Connector	T14 14 Station	0 None D4 DC 24V D2 DC 12V



Multi Connector System

Solenoid Valve Mounted

SF1000 Series Mounted



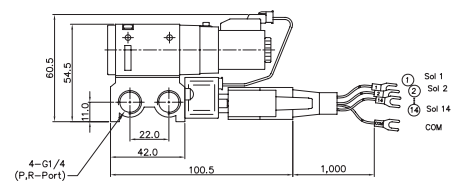
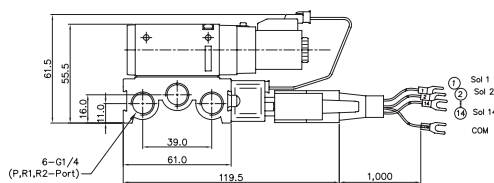
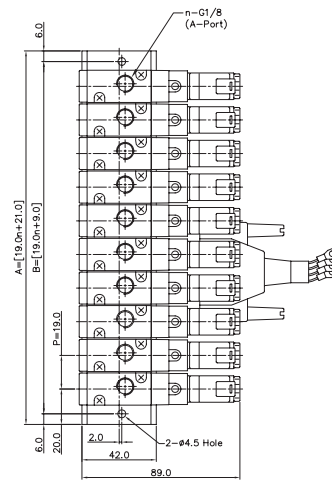
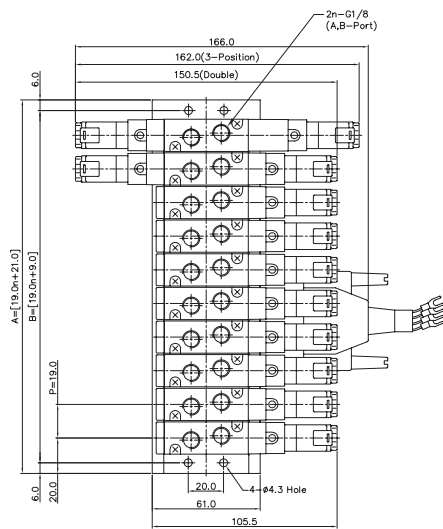
n = STATION

ITEM	n	8	10	12	14
B		136.0	168.0	200.0	232.0
A		144.0	176.0	208.0	240.0

n = STATION

ITEM	n	8	10	12	14
B		136.0	168.0	200.0	232.0
A		149.0	181.0	213.0	245.0

SF2000 Series Mounted



n = STATION

ITEM	n	8	10	12	14
B		161.0	199.0	237.0	275.0
A		173.0	211.0	249.0	287.0

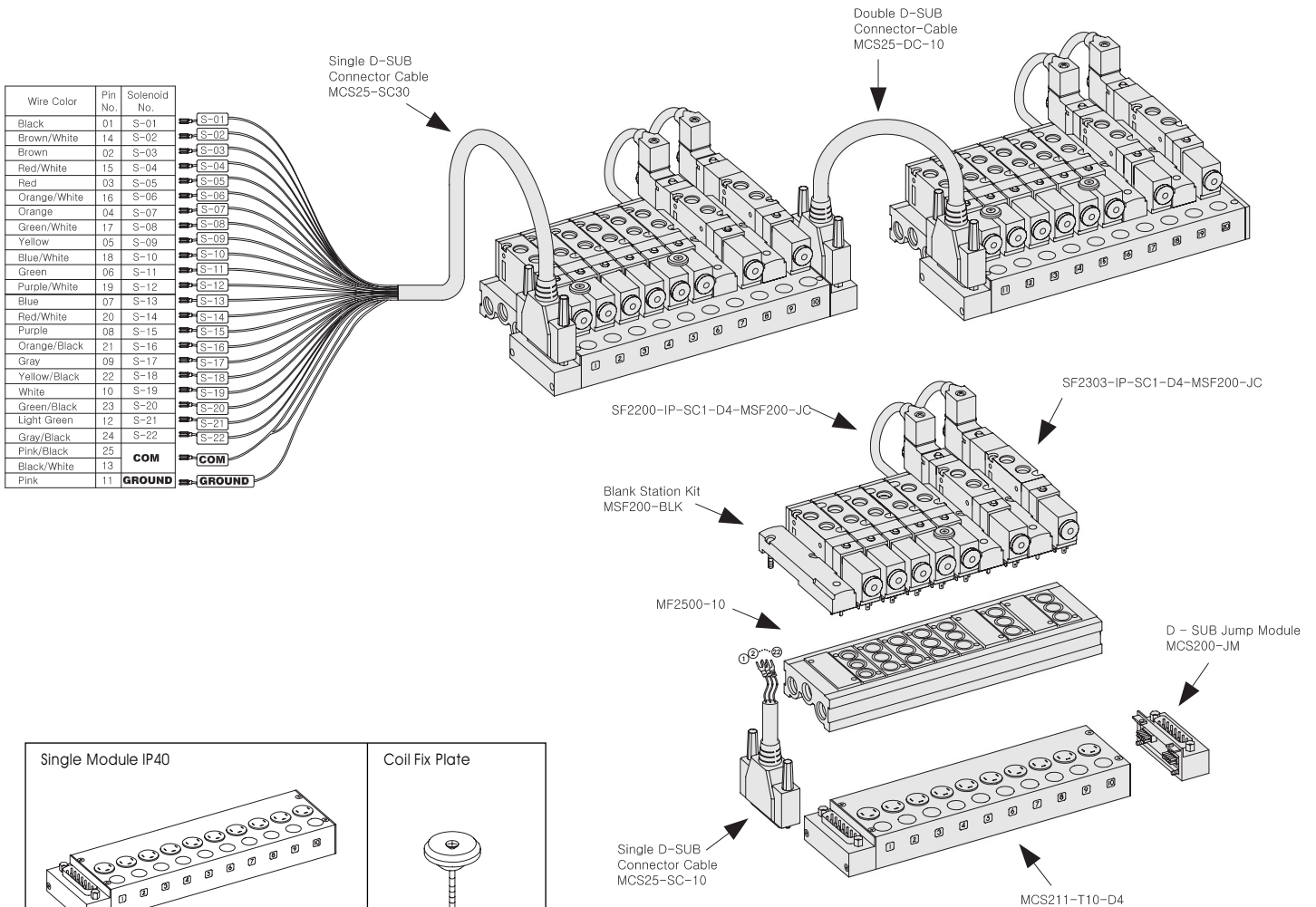
n = STATION

ITEM	n	8	10	12	14
B		161.0	199.0	237.0	275.0
A		173.0	211.0	249.0	287.0

MCS200

Multi Connector System
SF2000 Solenoid Valve MOUNTED

- DC 24V / DC 12V
- 25Pin D-Sub Connector
- Simple Electric Wire System



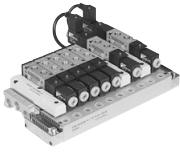
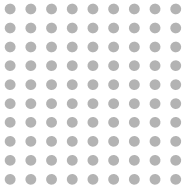
<p>Single Module IP40</p> <p>Ordering Code MCS211-T10-D4</p>	<p>Coil Fix Plate</p> <p>Ordering Code MCS200-CP</p>
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<p>Double Module IP40</p> <p>Ordering Code MCS221-T10-D4</p>	<p>D-Sub Jump Module IP40 (Material : Zinc)</p> <p>Ordering Code MCS200-JM</p>	<p>Single D-Sub Connector Cable IP40</p> <p>Ordering Code MCS25-SC-10 (1m) MCS25-SC-30 (3m) MCS25-SC-50 (5m) MCS25-SC-100 (10m)</p>	<p>Double D-Sub Connector Cable IP40</p> <p>Ordering Code MCS25-DC-05 (0.5m) MCS25-DC-10 (10m)</p>	<p>Blank Station Kit (Material : Zinc)</p> <p>Ordering Code MSF200-BLK</p>	<p>Jump Connector Kit IP40</p> <p>Ordering Code MSF200-JC</p>
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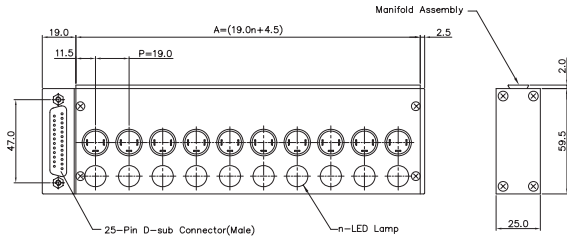
ORDERING NO.

MCS2 1 1 - T04 - D4

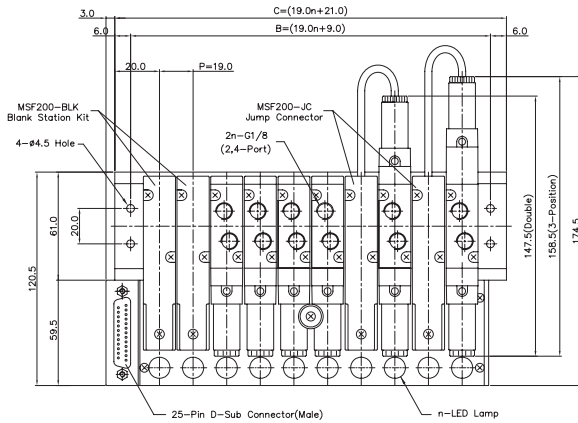
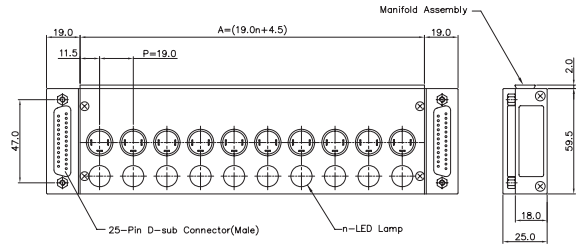
Series	Function	D-Sub Connector	Multipole Wireway Box	Voltage																														
MCS2 : SF2000-1/8-5Port Solenoid Valve Ass'y	<table border="1"> <tr><td>0</td><td>None</td></tr> <tr><td>1</td><td>Single Module</td></tr> <tr><td>2</td><td>Double Module</td></tr> </table>	0	None	1	Single Module	2	Double Module	<table border="1"> <tr><td>0</td><td>None</td></tr> <tr><td>1</td><td>25 Pin D-Sub Connector</td></tr> </table>	0	None	1	25 Pin D-Sub Connector	<table border="1"> <tr><td>0</td><td>None</td></tr> <tr><td>T04</td><td>4 Station</td></tr> <tr><td>T06</td><td>6 Station</td></tr> <tr><td>T08</td><td>8 Station</td></tr> <tr><td>T10</td><td>10 Station</td></tr> <tr><td>T12</td><td>12 Station</td></tr> <tr><td>T14</td><td>14 Station</td></tr> </table>	0	None	T04	4 Station	T06	6 Station	T08	8 Station	T10	10 Station	T12	12 Station	T14	14 Station	<table border="1"> <tr><td>0</td><td>None</td></tr> <tr><td>D4</td><td>DC 24V</td></tr> <tr><td>D2</td><td>DC 12V</td></tr> </table>	0	None	D4	DC 24V	D2	DC 12V
0	None																																	
1	Single Module																																	
2	Double Module																																	
0	None																																	
1	25 Pin D-Sub Connector																																	
0	None																																	
T04	4 Station																																	
T06	6 Station																																	
T08	8 Station																																	
T10	10 Station																																	
T12	12 Station																																	
T14	14 Station																																	
0	None																																	
D4	DC 24V																																	
D2	DC 12V																																	



MCS211-T10-D4



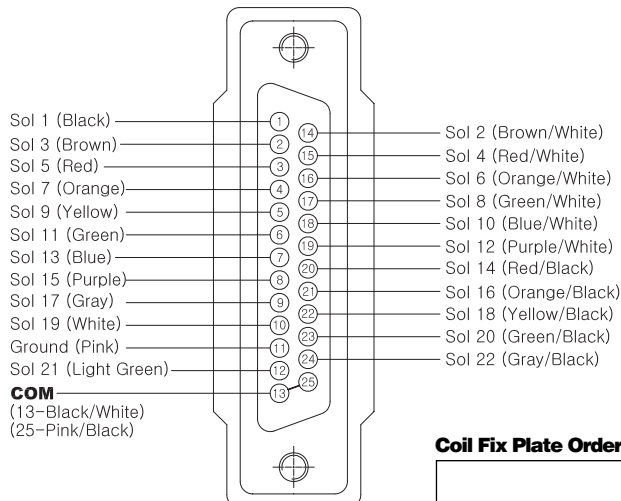
MCS221-T10-D4



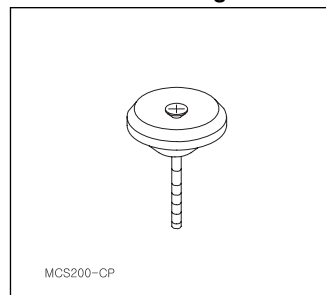
n = STATION

ITEM	n	4	6	8	10	12	14
A		80.5	118.5	156.5	194.5	232.5	270.5
B		85.0	123.0	161.0	199.0	237.0	275.0
C		97.0	135.0	173.0	211.0	249.0	287.0

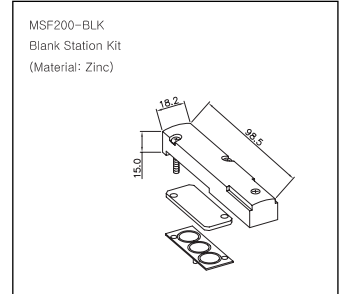
D-Sub Connector Pin No.



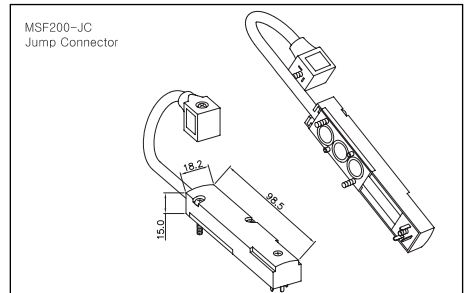
Coil Fix Plate Ordering Code



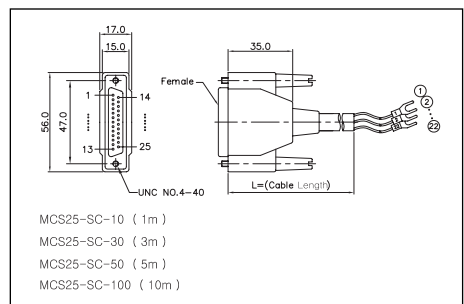
Blank Station Kit Ordering Code



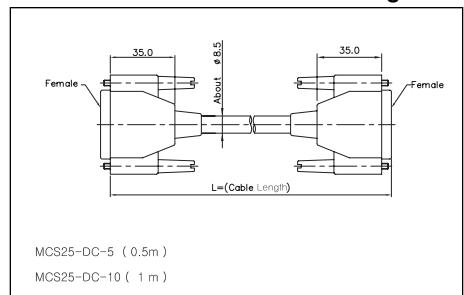
Jump Connector Cable Ordering Code



Single D-Sub Connector Cable Ordering Code



Double D-Sub Connector Cable Ordering Code



MCS400

Multi Connector System
SF4000 Solenoid Valve MOUNTED

- DC 24V / DC 12V
- 25Pin D-Sub Connector
- Simple Electric Wire System

Wire Color	Pin No.	Solenoid No.	
Black	01	S-01	S-01
Brown/White	14	S-02	S-02
Brown	02	S-03	S-03
Red/White	15	S-04	S-04
Red	03	S-05	S-05
Orange/White	16	S-06	S-06
Orange	04	S-07	S-07
Green/White	17	S-08	S-08
Yellow	05	S-09	S-09
Blue/White	18	S-10	S-10
Green	06	S-11	S-11
Purple/White	19	S-12	S-12
Blue	07	S-13	S-13
Red/White	20	S-14	S-14
Purple	08	S-15	S-15
Orange/Black	21	S-16	S-16
Gray	09	S-17	S-17
Yellow/Black	22	S-18	S-18
White	10	S-19	S-19
Green/Black	23	S-20	S-20
Light Green	12	S-21	S-21
Gray/Black	24	S-22	S-22
Pink/Black	25	COM	COM
Black/White	13	COM	COM
Pink	11	GROUND	GROUND

Single D-SUB Connector Cable MCS25-SC-30

Double D-SUB Connector Cable MCS25-DC-10

SF4200-IP-SC2-D4-MSF400-JC

SF4303-IP-SC2-D4-MSF400-JC

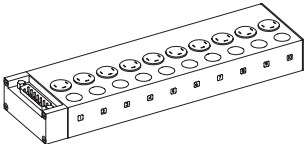

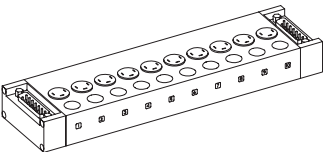

Blank Station Kit MSF400-BLK

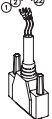
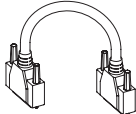
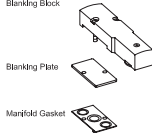
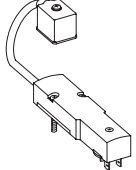
MF4500-10

D - SUB Jump Module MCS400-JM

MCS411-T10-D4

Single D-SUB Connector Cable MCS25-SC-10

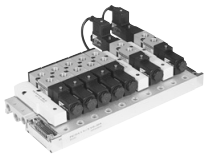
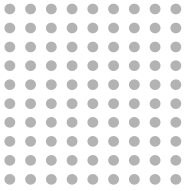
<p>Single Module IP40</p>  <p>Ordering Code MCS411-T10-D4</p>	<p>Coil Fix Plate</p>  <p>Ordering Code MCS200-CP</p>
<p>Double Module IP40</p>  <p>Ordering Code MCS421-T10-D4</p>	<p>D-Sub Jump Module IP40 (Material : Zinc)</p>  <p>Ordering Code MCS400-JM</p>

<p>Single D-Sub Connector Cable IP40</p>  <p>Ordering Code MCS25-SC-10 (1m) MCS25-SC-30 (3m) MCS25-SC-50 (5m) MCS25-SC-100 (10m)</p>	<p>Double D-Sub Connector Cable IP40</p>  <p>Ordering Code MCS25-DC-05 (0.5m) MCS25-DC-10 (1m)</p>	<p>Blank Station Kit (Material : Zinc)</p>  <p>Ordering Code MSF400-BLK</p>	<p>Jump Connector Kit IP40</p>  <p>Ordering Code MSF400-JC</p>
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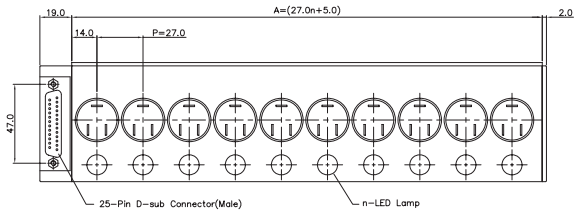
ORDERING NO.

MCS4 1 1 - T04 - D4

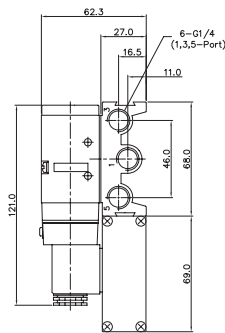
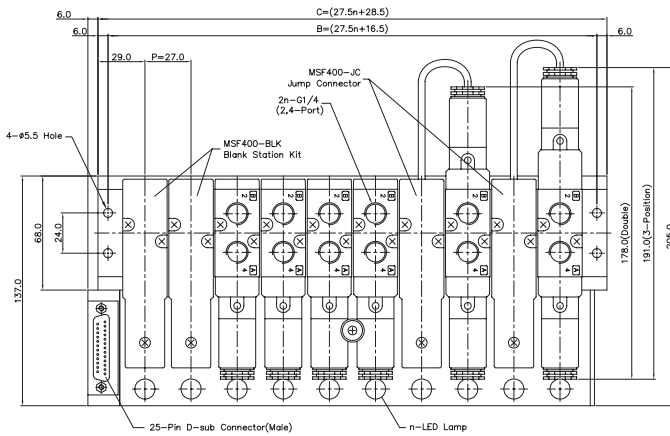
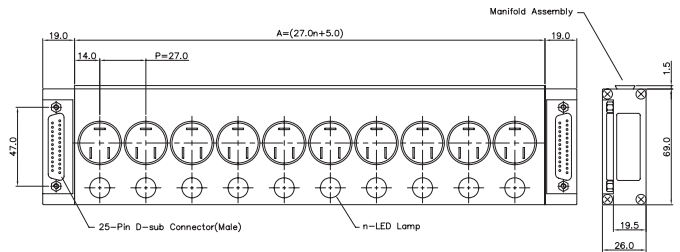
Series	Function	D-Sub Connector	Multipole Wireway Box	Voltage
MCS4: SF4000-1/4-5Port Solenoid Valve Ass'y	0 None 1 Single Module 2 Double Module	0 None 1 25 Pin D-Sub Connector	0 None T04 4 Station T06 6 Station T08 8 Station T10 10 Station T12 12 Station T14 14 Station	0 None D4 DC 24V D2 DC 12V



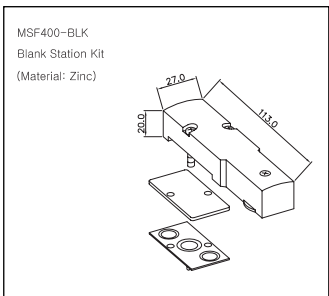
MCS411-T10-D4



MCS421-T10-D4

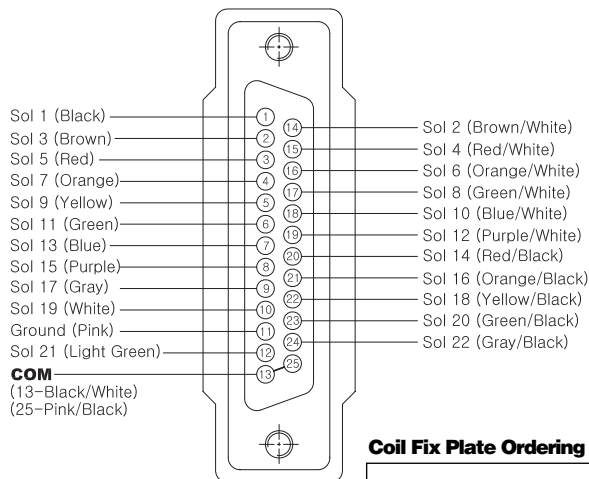


Blank Station Kit Ordering Code

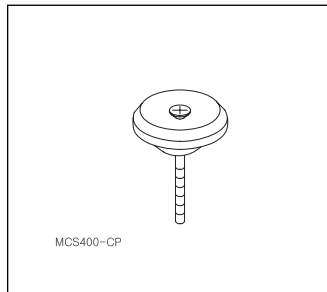


		n = STATION					
ITEM	n	4	6	8	10	12	14
A		113.0	167.0	221.0	275.0	329.0	383.0
B		126.5	181.5	236.5	291.5	346.5	401.5
C		138.5	193.5	248.5	303.5	358.5	413.5

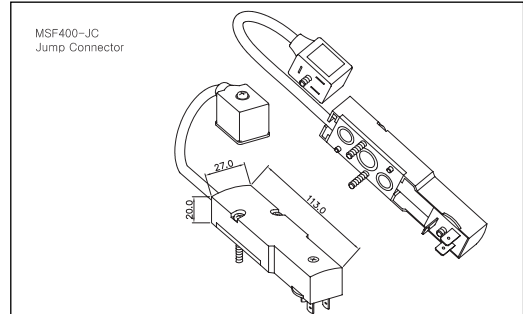
D-Sub Connector Pin No.



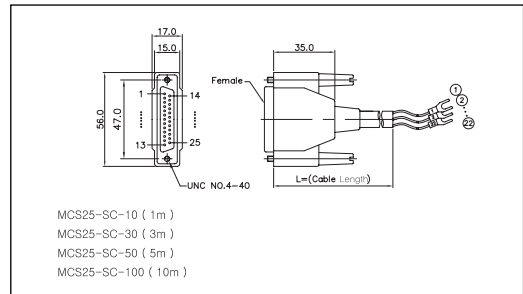
Coil Fix Plate Ordering Code



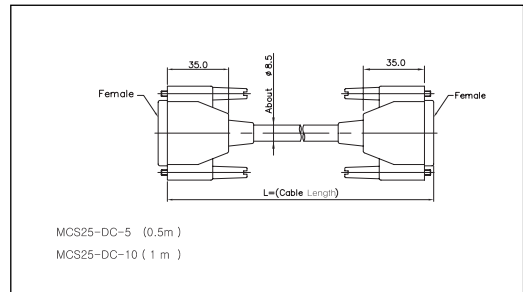
Jump Connector Cable Ordering Code

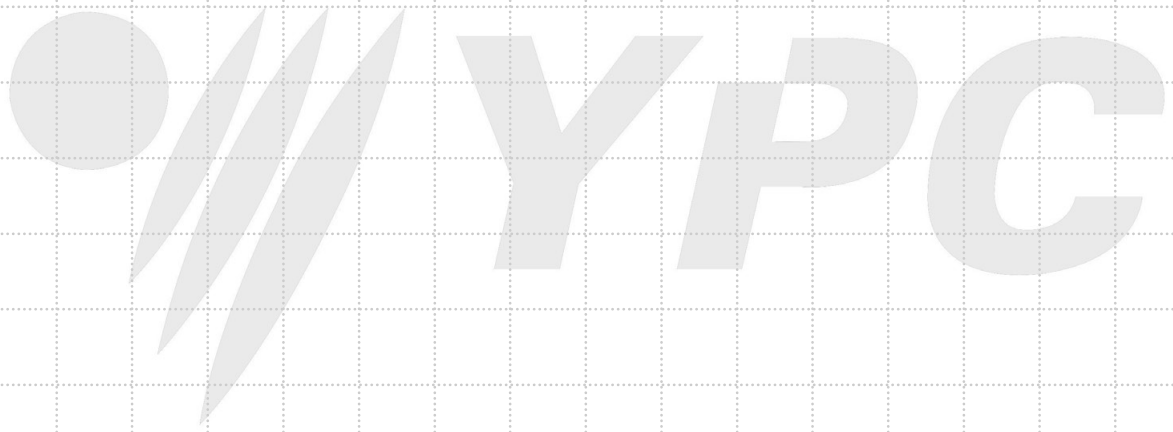


Single D-Sub Connector Cable Ordering Code



Double D-Sub Connector Cable Ordering Code





SF (FLEXIBLE) Series

5/2, 5/3, 3/2 Solenoid, Pneumatic Valve

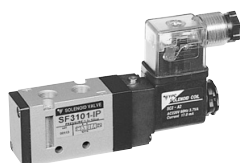
CHAPTER 03



SF1000
Body Width-15mm
Thread-M5



SF2000
Body Width-18mm
Thread-1/8



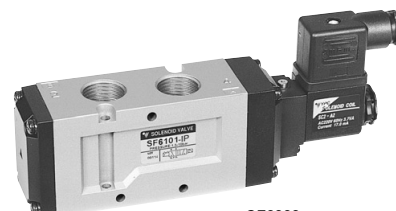
SF3000
Body Width-23mm
Thread-1/8



SF4000
Body Width-26mm
Thread-1/4



SF5000
Body Width-32mm
Thread-3/8



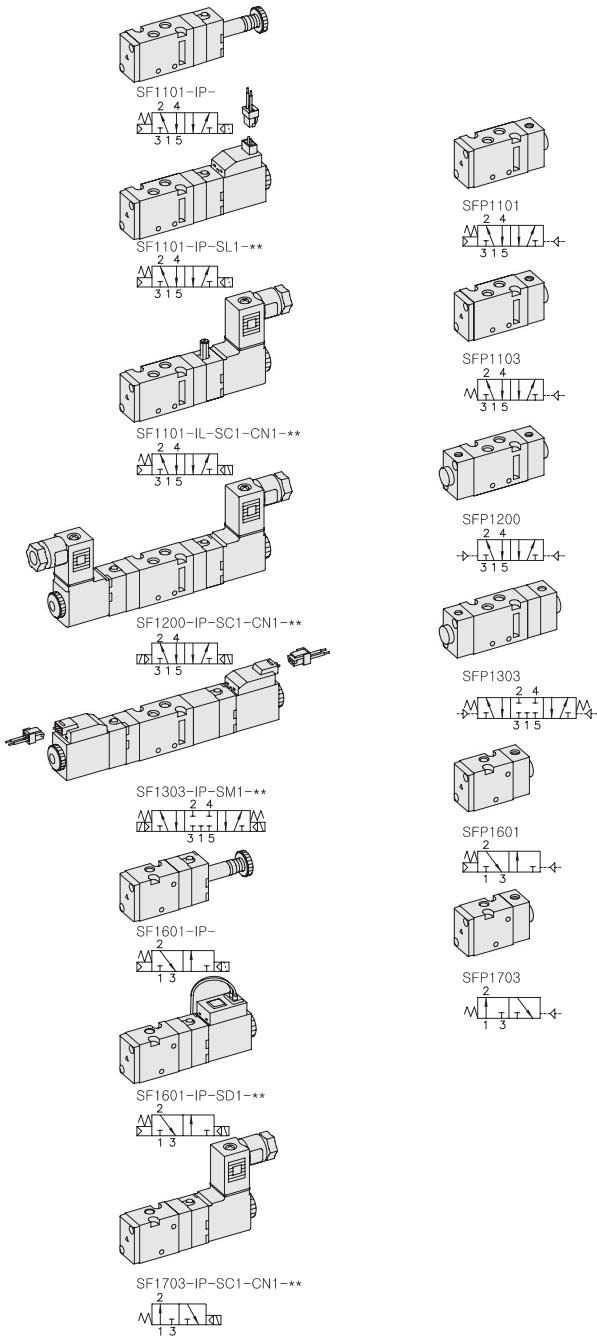
SF6000
Body Width-36mm
Thread-1/2

- SF1000
- SF2000
- SF3000
- SF4000
- SF5000
- SF6000

SF1000. M5

"F" FLEXIBLE Series
Solenoid / Pneumatic Valves

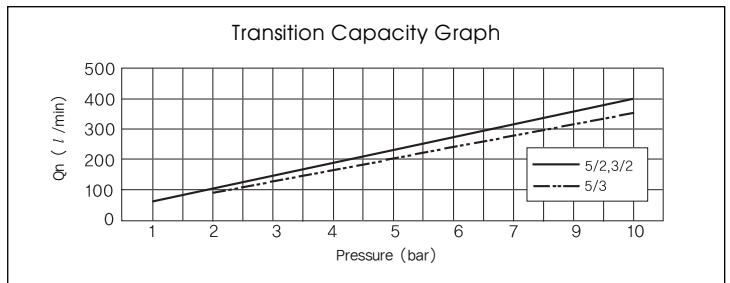
- 5/2, 5/3, 3/2 - M5
- 15mm Body Width
- Transition Flow 200ℓ/min (5bar)



** : Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		FUNCTION	
		5, 3 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Section Area(mm ²)-5bar		3.6	3.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		25ms or Less	35ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:3.5VA(60Hz) / DC:2.5W	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton

Plug Connector With Clip

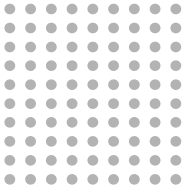
Ordering Code
PG2-06 (L : 600mm)
PG2-10 (L : 1,000mm)

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SF1 1 0 1 - I P - SC1 - CN1 - A2

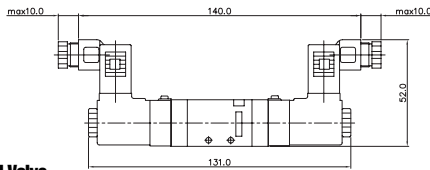
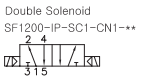
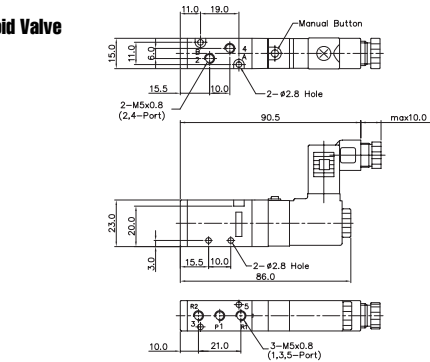
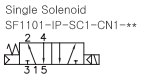
Valve Series	Function	Port Size & Thread	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SF1 : Solenoid Valve	1 5/2 Single	0 M5×0.8	0 None	I Internal Pilot	0 None	0 None	0 None	0 None
	2 5/2 Double	1 10-32 UNF	1 Air + Spring		P Push Non-Locking	SC1 3 Pin Connector Coil	CN1 Normal Connector	A2 AC 220V
	3 5/3 Closed Center		2 Air		L Lever Locking	SG1 Grommet/Flying Leads	CD1 Connector With LED	A1 AC 110V
SFP1 : Pneumatic Valve	4 5/3 Open Center		3 Spring			SD1 Grommet/Flying Leads With LED	CZ1 Connector With LED & Surge Suppressor	A4 AC 24V
	5 5/3 Pressure Center					SL1 90 Degree Plug-in Wire Assembly With LED		D4 DC 24V
	6 3/2 Normally Closed					SM1 180 Degree Plug-in Wire Assembly With LED		D2 DC 12V
	7 3/2 Normally Open							



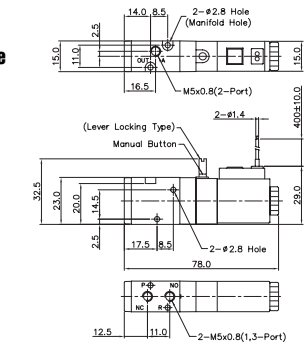
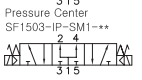
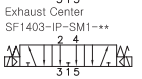
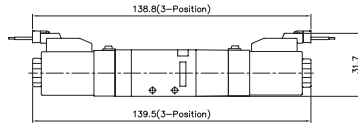
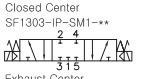
Solenoid & Pilot Actuated Spool Valves

Port Thread **M5 × 0.8**

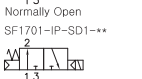
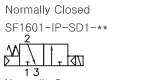
5Port 2Position Solenoid Valve



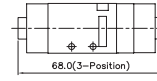
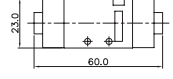
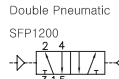
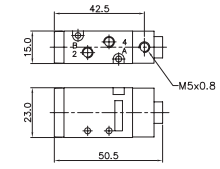
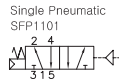
5Port 3Position Solenoid Valve



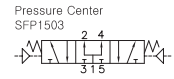
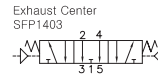
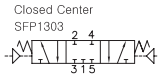
3Port 2Position Solenoid Valve



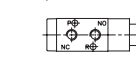
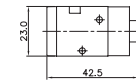
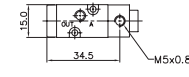
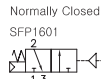
5Port 2Position Pneumatic Valve



5Port 3Position Pneumatic Valve



3Port 2Position Pneumatic Valve

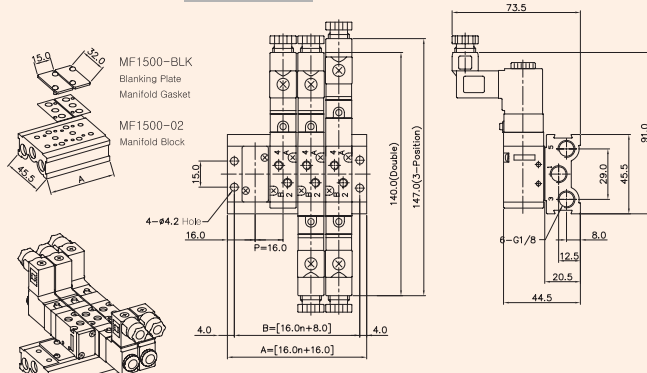


MF1000 MANIFOLD BLOCK

(SF-1000 Solenoid & Pneumatic Valve Use)

5-Port Manifold Block

MF1500-4



SPORT MANIFOLD BLOCK DIMENSION		n-STATION				
ITEM	n	2	4	6	8	10
B		40.0	72.0	104.0	136.0	168.0
A		48.0	80.0	112.0	144.0	176.0

Manifold Block Ordering Code

MF 1500		-		2	
Series	Manifold Station				
MF1500	5 Way	02		2-Station	
MF1300	3 Way	04		4-Station	
		06		6-Station	
		08		8-Station	
		10		10-Station	

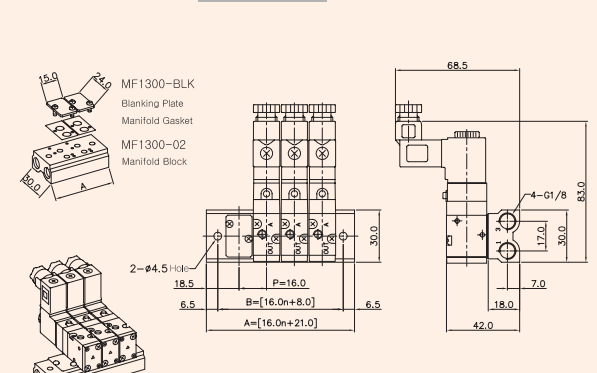
Blanking Plate Ordering Code

MF1500-BLK	
	Blanking Plate. (Material: SCP1)
	Manifold Gasket. (Material: NBR)

MF1300-BLK	
	Blanking Plate. (Material: SCP1)
	Manifold Gasket. (Material: NBR)

3-Port Manifold Block

MF1300-4

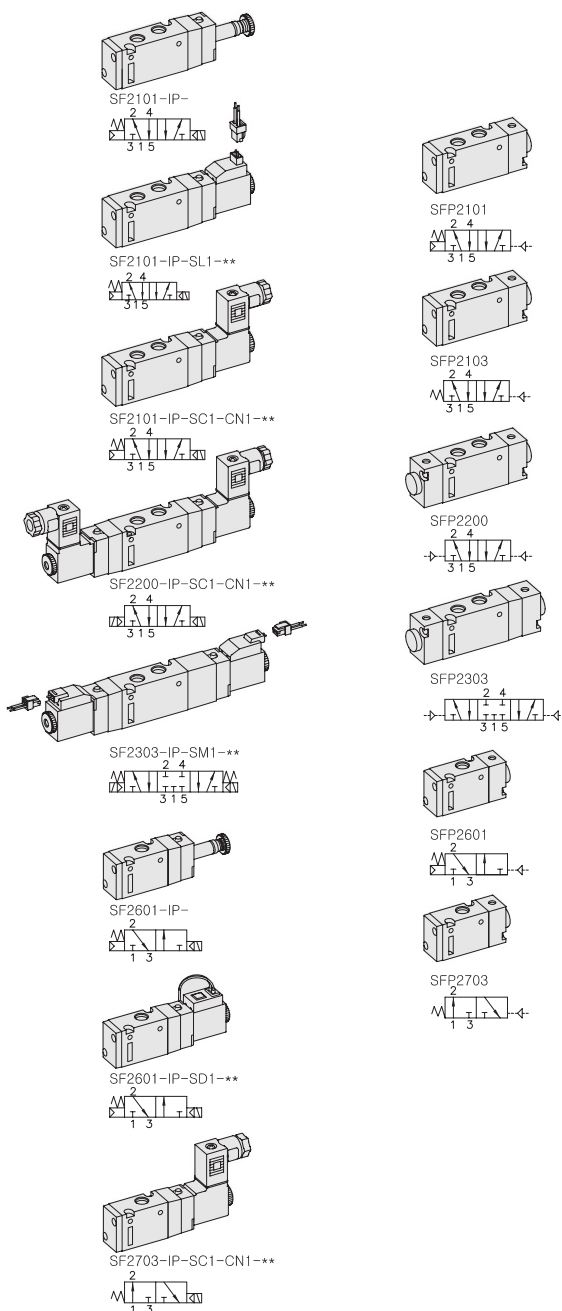


3PORT MANIFOLD BLOCK DIMENSION		n-STATION				
ITEM	n	2	4	6	8	10
B		40.0	72.0	104.0	136.0	168.0
A		53.0	85.0	117.0	149.0	181.0

SF2000. 1/8

"F" FLEXIBLE Series
Solenoid / Pneumatic Valves

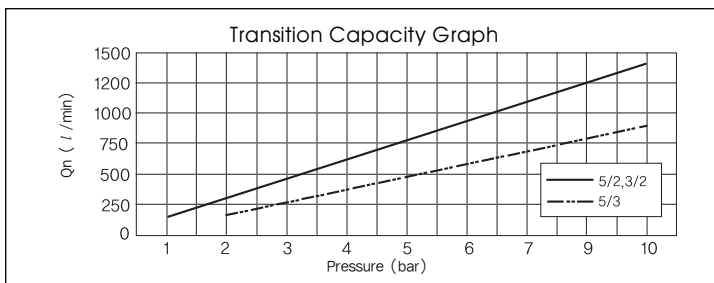
- 5/2, 5/3, 3/2 - 1/8
- 18mm Body Width
- Transition Flow 700ℓ/min (5bar)



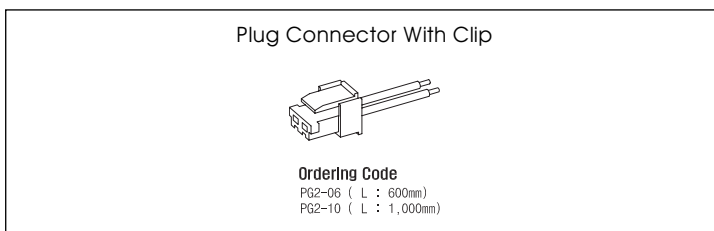
** : Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		FUNCTION	
		5, 3 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Section Area(mm ²)-5bar		12.6	9.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		25ms or Less	35ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:3.5VA(60Hz) / DC:2.5W	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton

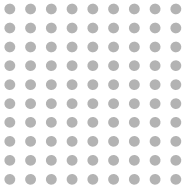


* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SF2 1 0 1 - I P - SC1 - CN1 - A2

Valve Series	Function	Port Size & Thread	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SF2 : Solenoid Valve	1 5/2 Single	0 G 1/8	0 None	I Internal Pilot	0 None	0 None	0 None	0 None
	2 5/2 Double	1 NPT 1/8	1 Air + Spring		P Push Non-Locking	SC1 3 Pin Connector Coil	CN1 Normal Connector	A2 AC 220V
	3 5/3 Closed Center		2 Air		L Lever Locking	SG1 Grommet/Flying Leads	CD1 Connector With LED	A1 AC 110V
SFP2 : Pneumatic Valve	4 5/3 Open Center		3 Spring			SD1 Grommet/Flying Leads With LED	CZ1 Connector With LED & Surge Suppressor	A4 AC 24V
	5 5/3 Pressure Center					SL1 90 Degree Plug-in Wire Assembly With LED		D4 DC 24V
	6 3/2 Normally Closed					SM1 180 Degree Plug-in Wire Assembly With LED		D2 DC 12V
	7 3/2 Normally Open							

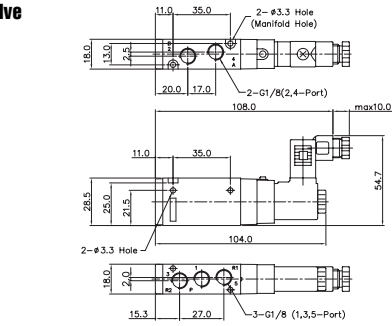


Solenoid & Pilot Actuated Spool Valves

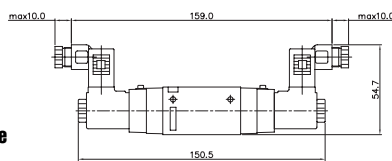
Port Thread 1/8

5Port 2Position Solenoid Valve

Single Solenoid
SF2101-IP-SC1-CN1-***

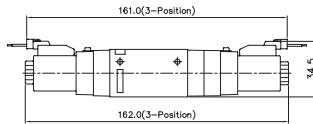


Double Solenoid
SF2200-IP-SC1-CN1-***



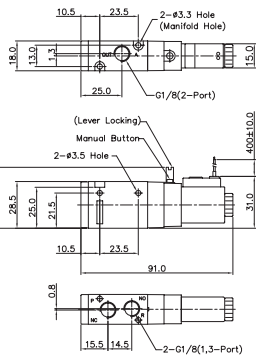
5Port 3Position Solenoid Valve

Closed Center
SF2303-IP-SM1-***
Exhaust Center
SF2403-IP-SM1-***
Pressure Center
SF2503-IP-SM1-***



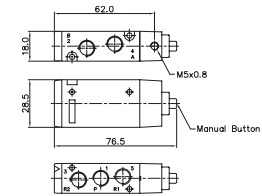
3Port 2Position Solenoid Valve

Normally Closed
SF2601-IP-SD1-***
Normally Open
SF2701-IP-SD1-***

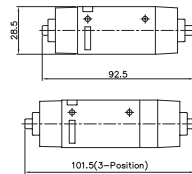


5Port 2Position Pneumatic Valve

Single Pneumatic
SFP2101



Double Pneumatic
SFP2200

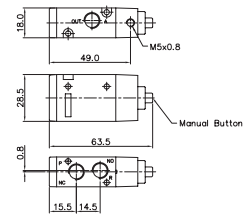


5Port 3Position Pneumatic Valve

Closed Center
SFP2303
Exhaust Center
SFP2403
Pressure Center
SFP2503

3Port 2Position Pneumatic Valve

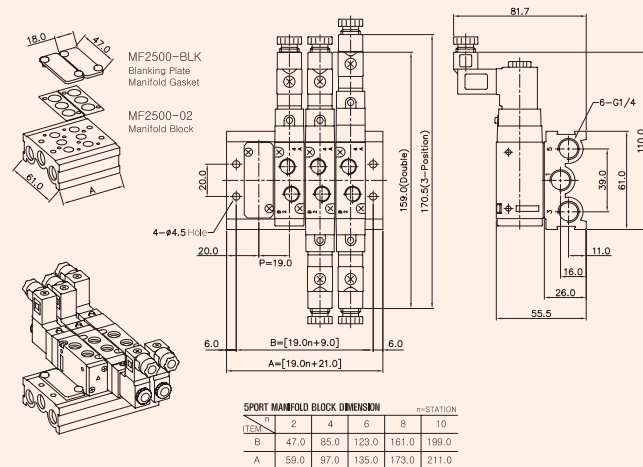
Normally Closed
SFP2601
Normally Open
SFP2701



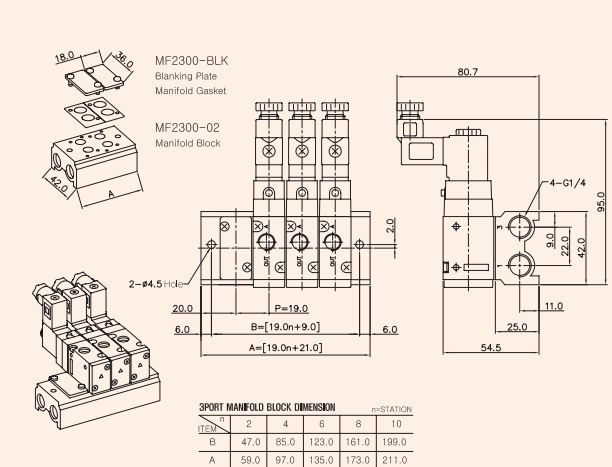
MF2000 MANIFOLD BLOCK

(SF2000 Solenoid & Pneumatic Valve Use)

5-Port Manifold Block MF2500-4



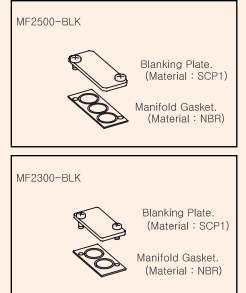
3-Port Manifold Block MF2300-4



Manifold Block Ordering Code

MF 2500		-		2	
Series	Manifold Station				
MF2500	5 Way	02	2-Station		
MF2300	3 Way	04	4-Station		
		06	6-Station		
		08	8-Station		
		10	10-Station		

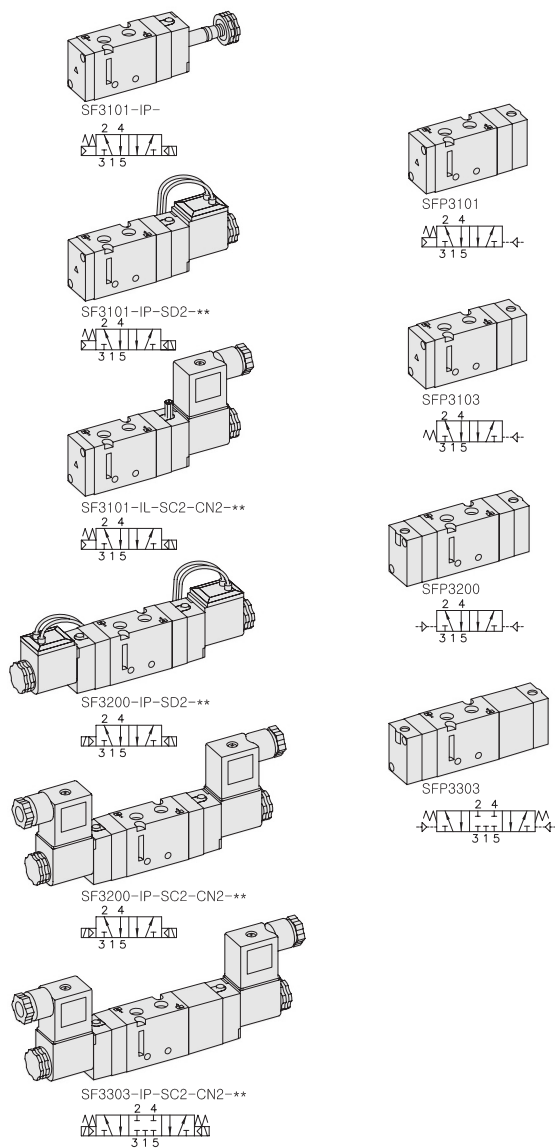
Blanking Plate Ordering Code



SF3000. 1/8

"F" FLEXIBLE Series
Solenoid / Pneumatic Valves

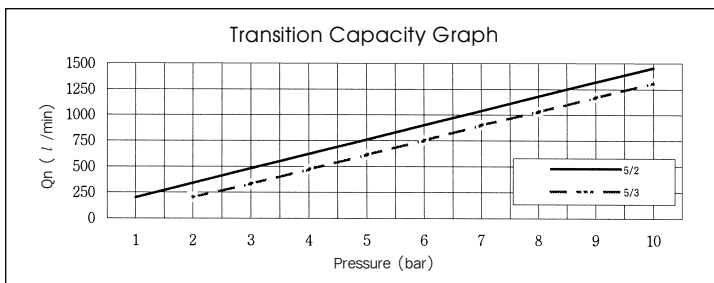
- 5/2, 5/3 - 1/8
- 23mm Body Width
- Transition Flow 760ℓ/min (5bar)



** : Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		5 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Section Area(mm ²)-5bar		13.5	11.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		25ms or Less	35ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:5.5VA(60Hz) / DC:2.5W	



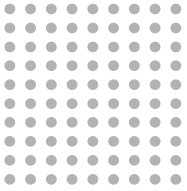
- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SF3 1 0 1 - I P - SC2 - CN2 - A2

Valve Series	Function	Port Size & Thread	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SF3 : Solenoid Valve	1 5/2 Single	0 G 1/8	0 None	I Internal Pilot	O None	O None	O None	O None
	2 5/2 Double	1 NPT 1/8	1 Air + Spring		P Push	SC2 3 Pin Connector Coil	CN2 Normal Connector	A2 AC 220V
	3 5/3 Closed Center		2 Air			SG2 Grommet/Flying Leads	CD2 Connector With LED	A1 AC 110V
	4 5/3 Open Center		3 Spring		L Lever Locking	SD2 Grommet/Flying Leads With LED	C22 Connector With LED & Surge Suppressor	A4 AC 24V D4 DC 24V D2 DC 12V
SFP3 : Pneumatic Valve	5 5/3 Pressure Center							

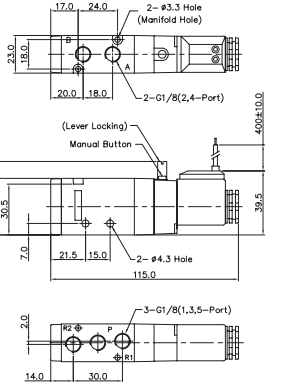


Solenoid & Pilot Actuated Spool Valves

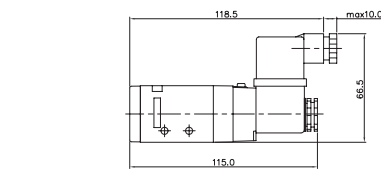
Port Thread 1/8

5Port 2Position Solenoid Valve

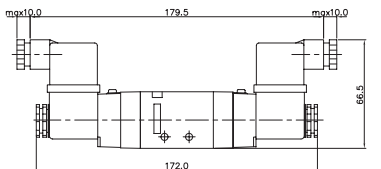
Single Solenoid
SF3101-IP-SD2-***



SF3101-IP-SC2-CN2-***

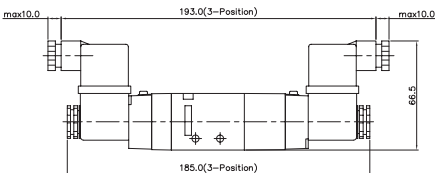
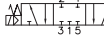


Double Solenoid
SF3200-IP-SC2-CN2-***

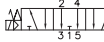


5Port 3Position Solenoid Valve

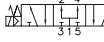
Closed Center
SF3303-IP-SC2-CN2-***



Exhaust Center
SF3403-IP-SC2-CN2-***

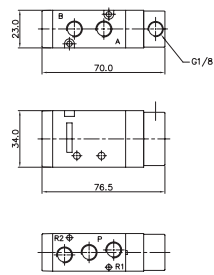
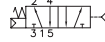


Pressure Center
SF3503-IP-SC2-CN2-***

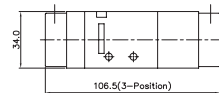
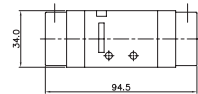
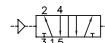


5Port 2Position Pneumatic Valve

Single Pneumatic
SFP3101

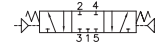


Double Pneumatic
SFP3200

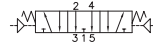


5Port 3Position Pneumatic Valve

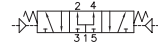
Closed Center
SFP3303



Exhaust Center
SFP3403



Pressure Center
SFP3503



Manifold Block Ordering Code

MF 3500		-		2	
Series	Manifold Station				
MF3500	5 Way	02	2-Station		
		04	4-Station		
		06	6-Station		
		08	8-Station		
		10	10-Station		

Blanking Plate Ordering Code

MF3500-BLK

Blanking Plate.
(Material: SCP1)

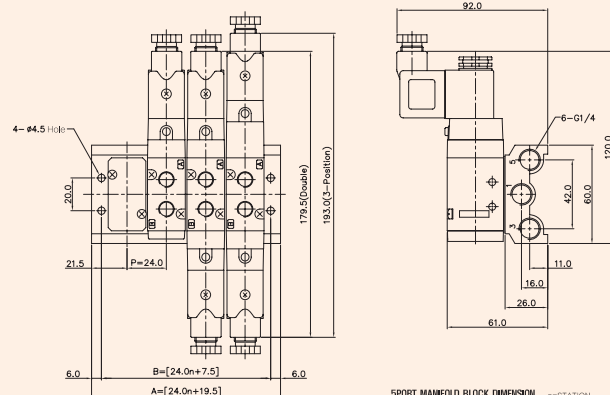
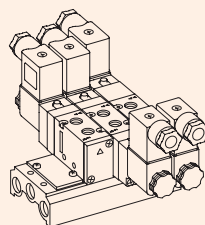
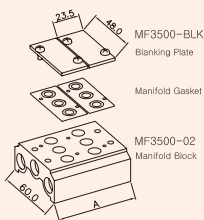
Manifold Gasket.
(Material: NBR)

MF3000 MANIFOLD BLOCK

(SF3000 Solenoid & Pneumatic Valve Use)

5-Port Manifold Block

MF3500-4

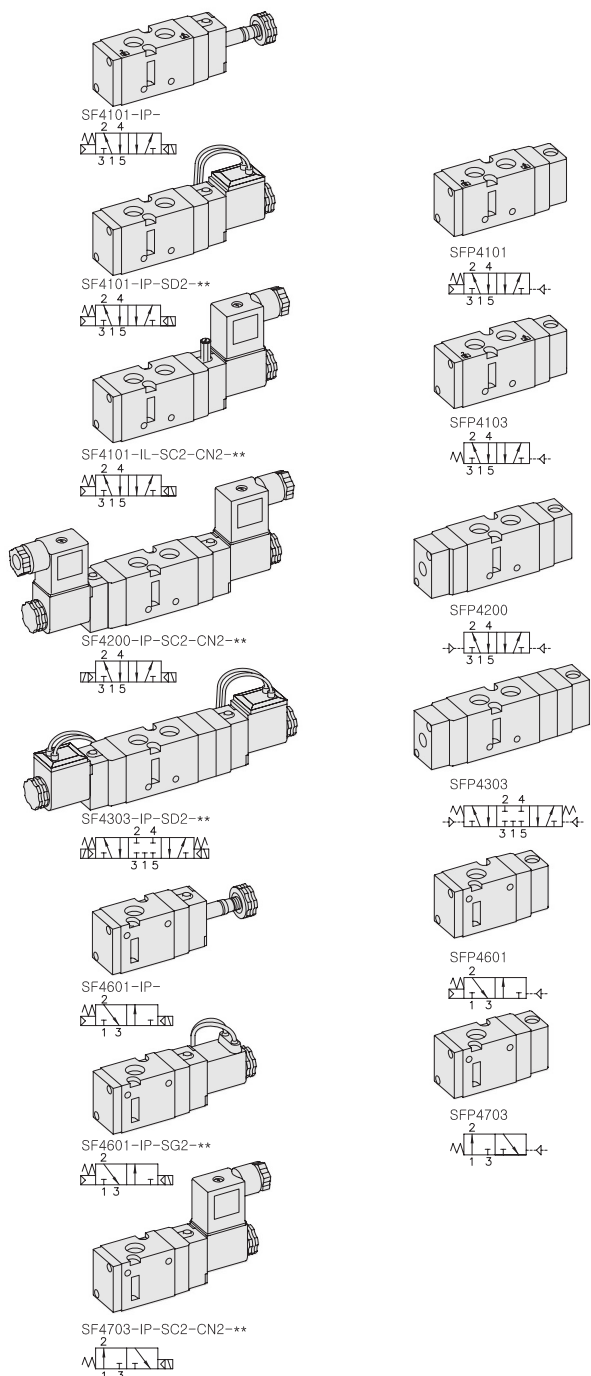


SPORT MANIFOLD BLOCK DIMENSION						n=STATION
ITEM	2	4	6	8	10	
B	55.5	103.5	151.5	199.5	247.5	
A	67.5	115.5	163.5	211.5	259.5	

SF4000. 1/4

"F" FLEXIBLE Series
Solenoid / Pneumatic Valves

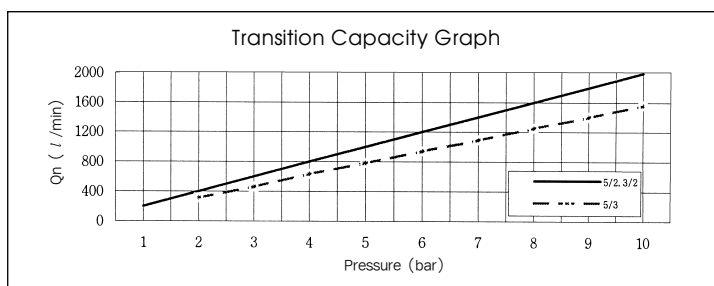
- 5/2, 5/3, 3/2 - 1/4
- 26mm Body Width
- Transition Flow 1000ℓ/min (5bar)



** : Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		FUNCTION	
		5, 3 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Section Area(mm ²)-5bar		19.0	11.5
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		25ms or Less	35ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:5.5VA(60Hz) / DC:2.5W	



The Material of Parts

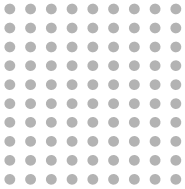
■ Valve Body : Die-Cast Aluminium	■ Pilot Parts : Glass Filled Nylon
■ Spool : Aluminium	■ Armature : Stainless Steel
■ Seals : NBR	■ Armature Seals : Viton
■ Spring : Stainless	
■ Cap : Zinc Pressure Die-Cast	

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SF4 1 0 1 - I P - SC2 - CN2 - A2

Valve Series	Function	Port Size & Thread	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SF4 : Solenoid Valve	1 5/2 Single	0 G 1/4	0 None	I Internal Pilot	0 None	0 None	0 None	0 None
	2 5/2 Double	1 NPT 1/4	1 Air + Spring		P Push Non-Locking	SC2 3 Pin Connector Coil	CN2 Normal Connector	A2 AC 220V
	3 5/3 Closed Center		2 Air		L Lever Locking	SG2 Grommet/Flying Leads	CD2 Connector With LED	A1 AC 110V
	4 5/3 Open Center		3 Spring			SD2 Grommet/Flying Leads With LED	CZ2 Connector With LED & Surge Suppressor	A4 AC 24V D4 DC 24V D2 DC 12V
SFP4 : Pneumatic Valve	5 5/3 Pressure Center							
	6 3/2 Normally Closed							
	7 3/2 Normally Open							

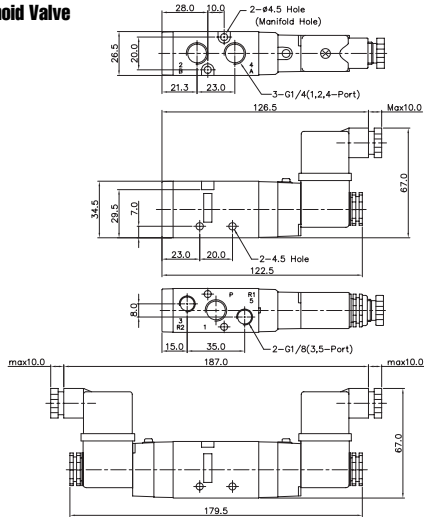
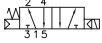


Solenoid & Pilot Actuated Spool Valves

Port Thread 1/4

5Port 2Position Solenoid Valve

Single Solenoid
SF4101-IP-SC2-CN2-***

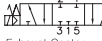


Double Solenoid
SF4200-IP-SD2-***

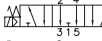


5Port 3Position Solenoid Valve

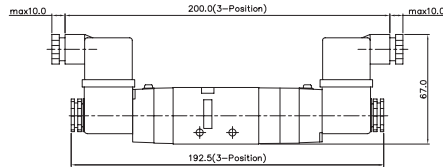
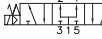
Closed Center
SF4303-IP-SC2-CN2-***



Exhaust Center
SF4403-IP-SC2-CN2-***

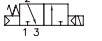


Pressure Center
SF4503-IP-SC2-CN2-***

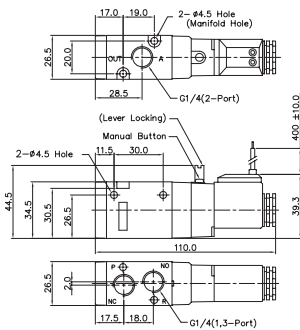
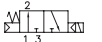


3Port 2Position Solenoid Valve

Normally Closed
SF4601-IP-SD2-***

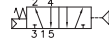


Normally Open
SF4701-IP-SD2-***

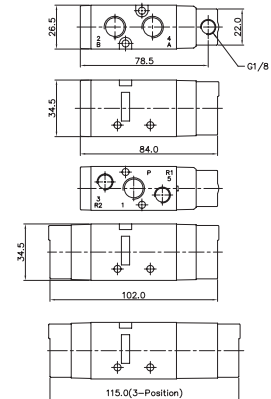
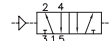


5Port 2Position Pneumatic Valve

Single Pneumatics
SFP4101



Double Pneumatic
SFP4200



5Port 3Position Pneumatic Valve

Closed Center
SFP4303



Exhaust Center
SFP4403



Pressure Center
SFP4503

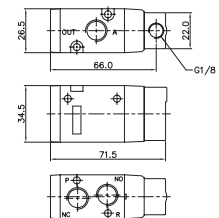


3Port 2Position Pneumatic Valve

Normally Closed
SFP4601



Normally Open
SFP4701



MF4000 MANIFOLD BLOCK

(SF4000 Solenoid & Pneumatic Valve Use)

Manifold Block Ordering Code

MF 4500 - 2

Series	Manifold Station
MF4500	5 Way
MF4300	3 Way

Station	Code
2-Station	02
4-Station	04
6-Station	06
8-Station	08
10-Station	10

Blanking Plate Ordering Code

MF4500-BLK

Blanking Plate. (Material: SCP1)

Manifold Gasket. (Material: NBR)

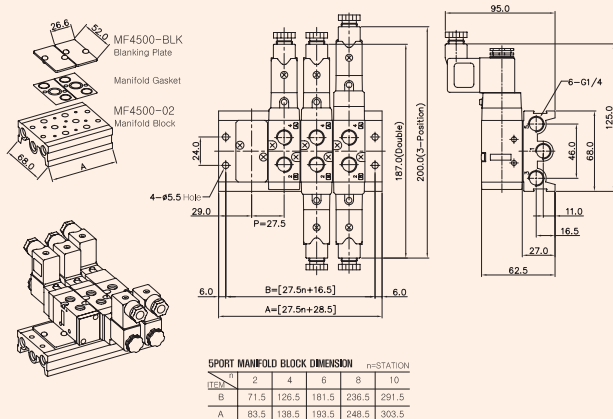
MF4300-BLK

Blanking Plate. (Material: SCP1)

Manifold Gasket. (Material: NBR)

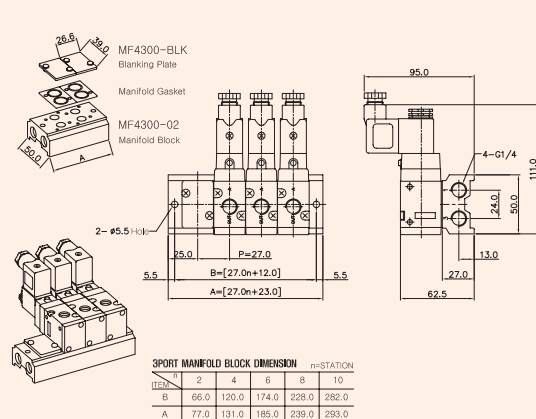
5-Port Manifold Block

MF4500-4



3-Port Manifold Block

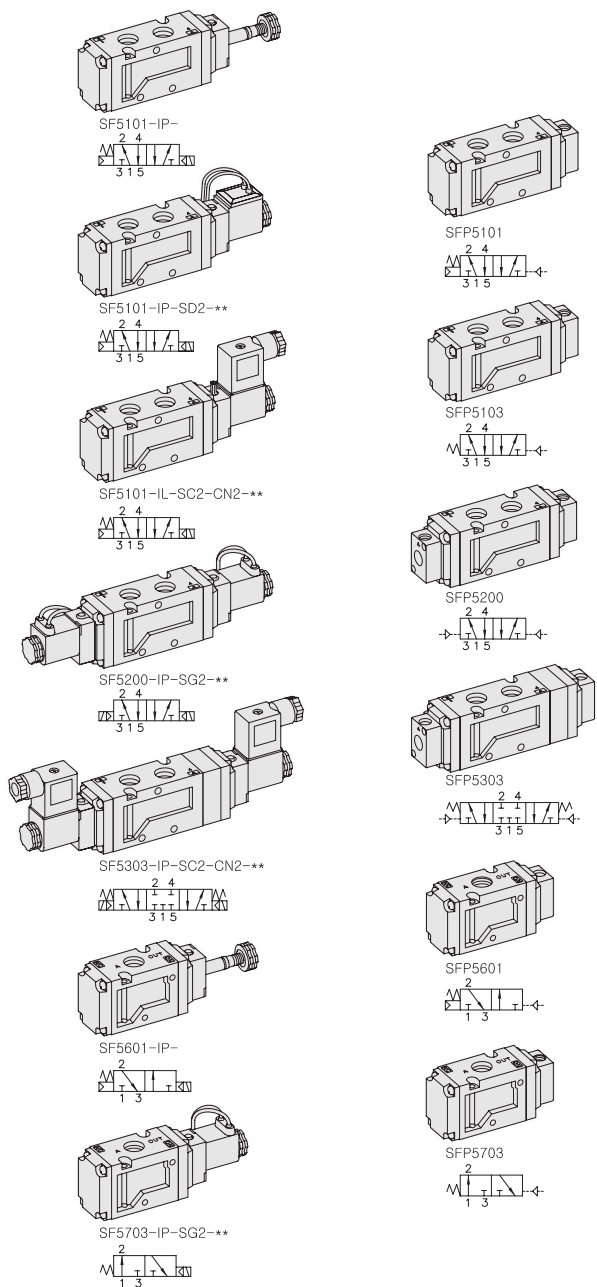
MF4300-4



SF5000. 3/8

"F" FLEXIBLE Series
Solenoid / Pneumatic Valves

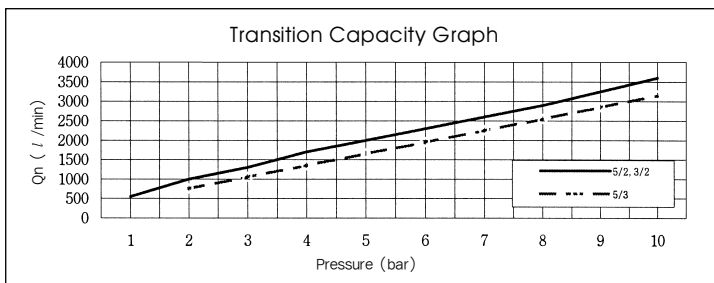
- 5/2, 5/3, 3/2 - 3/8
- 32mm Body Width
- Transition Flow 2000ℓ/min (5bar)



***: Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		FUNCTION	
		5, 3 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Section Area(mm ²)-5bar		36.0	30.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		30ms or Less	40ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:5.5VA(60Hz) / DC:2.5W	



The Material of Parts

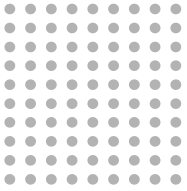
- Valve Body : Die-Cast Aluminium
- Spool : Aluminium
- Seals : NBR
- Spring : Stainless
- Cap : Zinc Pressure Die-Cast
- Pilot Parts : Glass Filled Nylon
- Armature : Stainless Steel
- Armature Seals : Viton

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SF5 1 0 1 - I P - SC2 - CN2 - A2

Valve Series	Function	Port Size & Thread	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SF5 : Solenoid Valve	1 5/2 Single	0 G 3/8	0 None	1 Internal Pilot	0 None	0 None	0 None	0 None
	2 5/2 Double	1 NPT 3/8	1 Air + Spring		P Push Non-Locking	SC2 3 Pin Connector Coil	CN2 Normal Connector	A2 AC 220V
	3 5/3 Closed Center		2 Air		L Lever Locking	SG2 Grommet/Flying Leads	CD2 Connector With LED	A1 AC 110V
	4 5/3 Open Center		3 Spring			SD2 Grommet/Flying Leads With LED	CZ2 Connector With LED & Surge Suppressor	A4 AC 24V D4 DC 24V D2 DC 12V
SFP5 : Pneumatic Valve	5 5/3 Pressure Center							
	6 3/2 Normally Closed							
	7 3/2 Normally Open							

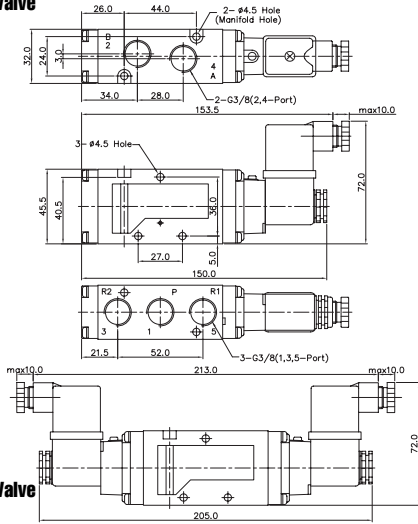


Solenoid & Pilot Actuated Spool Valves

Port Thread 3/8

5Port 2Position Solenoid Valve

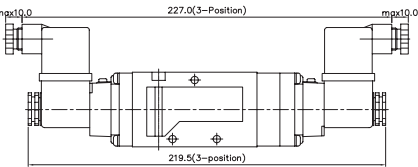
Single Solenoid
SF5300-IP-SC2-CN2-***
22 44
33 55



Double Solenoid
SF5200-IP-SC2-CN2-***
22 44
33 55

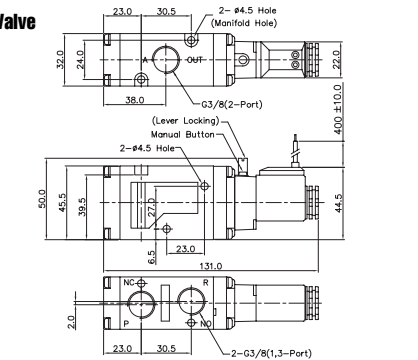
5Port 3Position Solenoid Valve

Double Center
SF5303-IP-SC2-CN2-***
2 4
3 1 5
Exhaust Center
SF5403-IP-SC2-CN2-***
2 4
3 1 5
Pressure Center
SF5503-IP-SC2-CN2-***
2 4
3 1 5



3Port 2Position Solenoid Valve

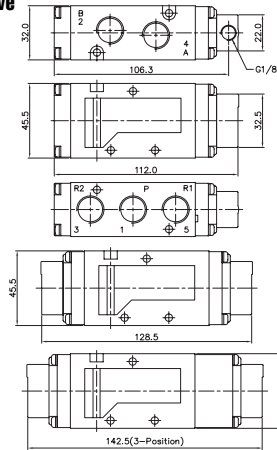
Normally Closed
SF5601-IP-SD2-***
2
1 3
Normally Closed
SF5701-IP-SD2-***
2
1 3



5Port 2Position Pneumatic Valve

Single Pneumatic
SFP5101
2 4
3 1 5

Double Pneumatic
SFP5200
2 4
3 1 5

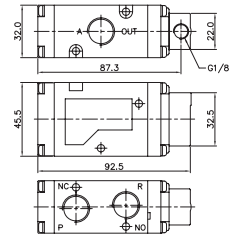


5Port 3Position Pneumatic Valve

Closed Center SFP5303 2 4 3 1 5
Exhaust Center SFP5403 2 4 3 1 5
Pressure Center SFP5503 2 4 3 1 5

3Port 2Position Pneumatic Valve

Single Pneumatic
SFP5601
2
1 3



MF5000 MANIFOLD BLOCK

(SF5000 Solenoid & Pneumatic Valve Use)

Manifold Block Ordering Code

MF 5500 - 2

Series	Manifold Station
MF5500	5 Way
MF5300	3 Way

02	2-Station
04	4-Station
06	6-Station
08	8-Station
10	10-Station

Blanking Plate Ordering Code

MF5500-BLK

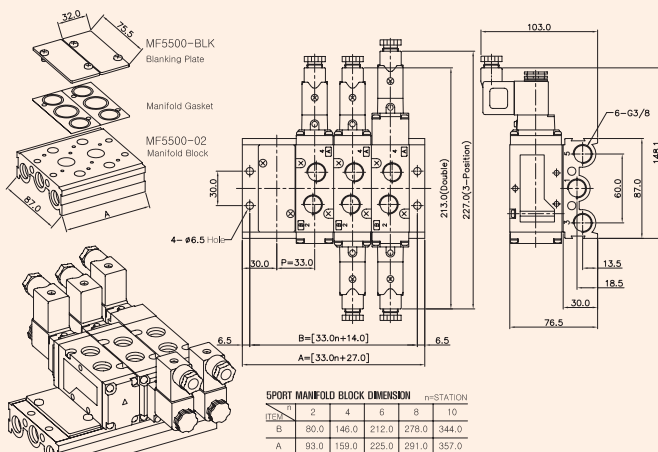
Blanking Plate. (Material: SCP1)
Manifold Gasket. (Material: NBR)

MF5300-BLK

Blanking Plate. (Material: SCP1)
Manifold Gasket. (Material: NBR)

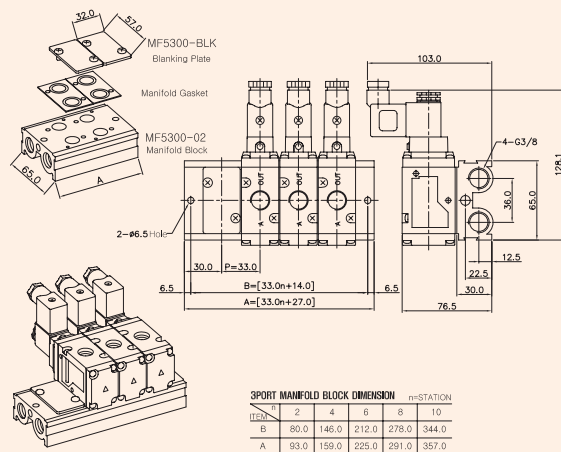
5-Port Manifold Block

MF5500-4



3-Port Manifold Block

MF5300-4



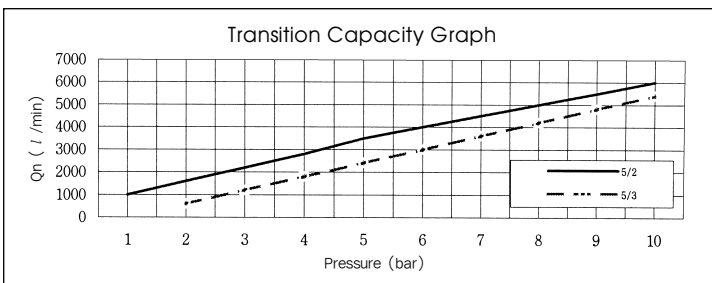
SF6000. 1/2

"F" FLEXIBLE Series
Solenoid / Pneumatic Valves

- 5/2, 5/3 - 1/2
- 36mm Body Width
- Transition Flow 3500ℓ/min (5bar)

SPECIFICATION

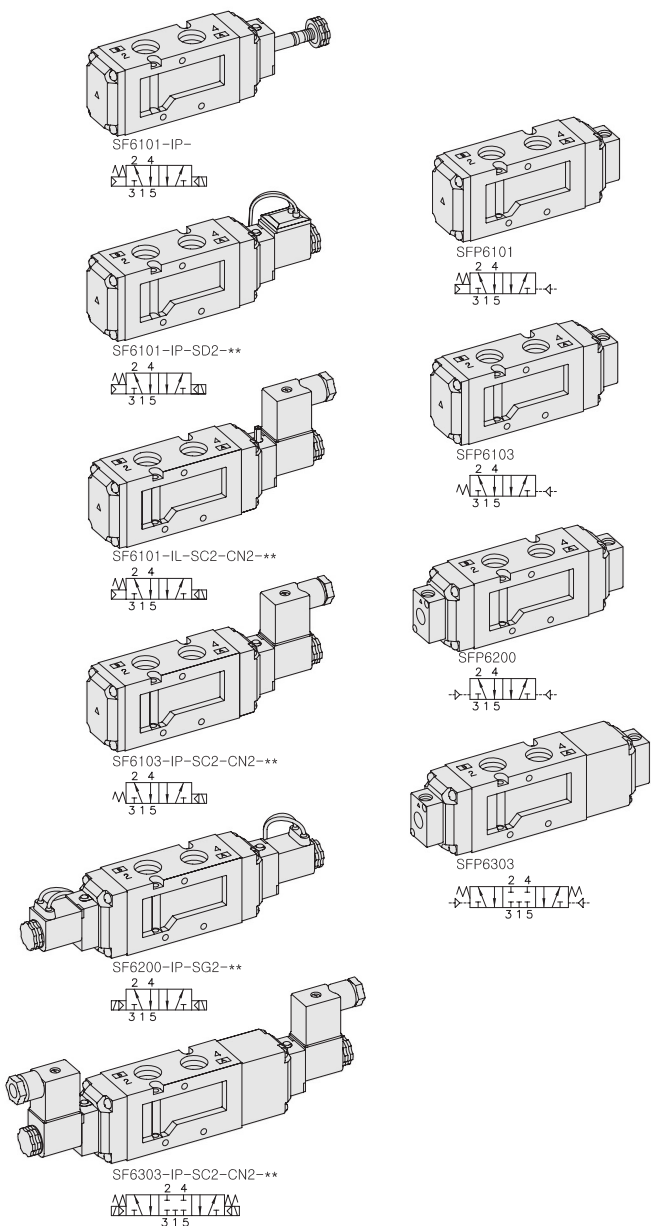
ITEM	SERIES	SOLENOID, PNEUMATIC	
		5 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Section Area(mm ²)-5bar		65.0	50.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		30ms or Less	40ms or Less
Max. Working Frequency		2c/sec	1c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:5.5VA(60Hz) / DC:2.5W	



The Material of Parts

- Valve Body : Die-Cast Aluminium
- Spool : Aluminium
- Seals : NBR
- Spring : Stainless
- Cap : Zinc Pressure Die-Cast
- Pilot Parts : Glass Filled Nylon
- Armature : Stainless Steel
- Armature Seals : Viton

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

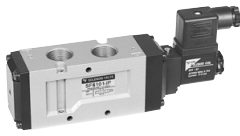
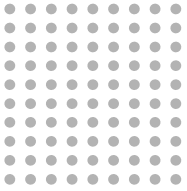


** : Voltage Selection (see page 80)

ORDERING NO.

SF6 1 0 1 - I P - SC2 - CN2 - A2

Valve Series	Function	Port Size & Thread	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SF6 : Solenoid Valve	1 5/2 Single	0 G 1/2	0 None	1 Internal Pilot	0 None	0 None	0 None	0 None
	2 5/2 Double	1 NPT 1/2	1 Air + Spring		P Push Non-Locking	SC2 3 Pin Connector Coil	CN2 Normal Connector	A2 AC 220V
	3 5/3 Closed Center		2 Air		L Lever Locking	SG2 Grommet/Flying Leads	CD2 Connector With LED	A1 AC 110V
	4 5/3 Open Center		3 Spring			SD2 Grommet/Flying Leads With LED	C22 Connector With LED & Surge Suppressor	A4 AC 24V
SFP6 : Pneumatic Valve	5 5/3 Pressure Center						D4 DC 24V	D2 DC 12V

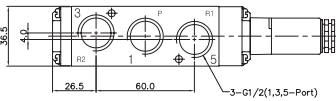
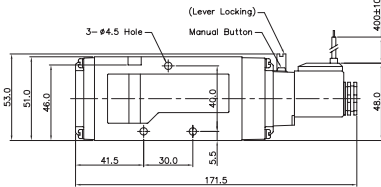
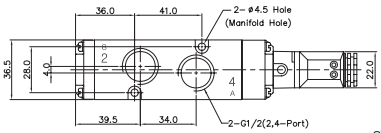
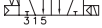


Solenoid & Pilot Actuated Spool Valves

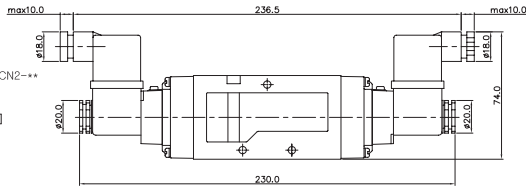
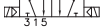
Port Thread 1/2

5Port 2Position Solenoid Valve

Single Solenoid
SF6101-IP-SD2-*



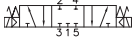
Double Solenoid
SF6200-IP-SC2-CN2-*



5Port 3Position Solenoid Valve

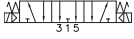
Closed Center

SF6303-IP-SC2-CN2-*



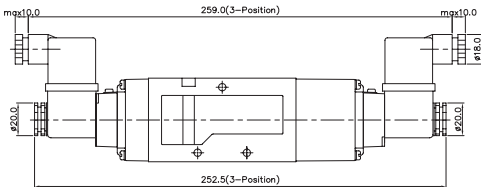
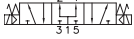
Exhaust Center

SF6403-IP-SC2-CN2-*



Pressure Center

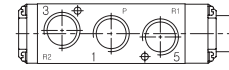
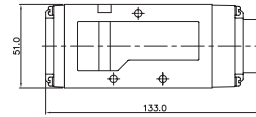
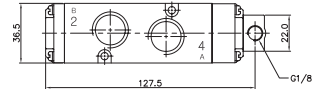
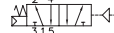
SF6503-IP-SC2-CN2-*



5Port 2Position Pneumatic Valve

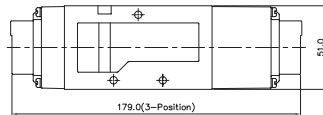
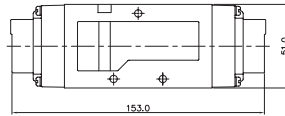
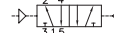
Single Pneumatic

SFP6101



Double Pneumatic

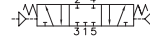
SFP6200



5Port 3Position Pneumatic Valve

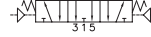
Closed Center

SFP6303



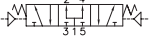
Exhaust Center

SFP6403



Pressure Center

SFP6503



Manifold Block Ordering Code

MF 6500		-		2	
Series	Manifold Station				
MF6500	5 Way	02	2-Station		
		04	4-Station		
		06	6-Station		
		08	8-Station		
		10	10-Station		

Blanking Plate Ordering Code

MF6500-BLK

Blanking Plate.
(Material: SCP1)

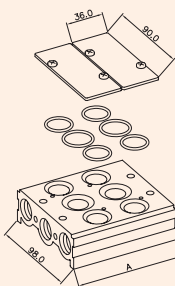
Gasket O-Ring
(Material: NBR)

MF6000 MANIFOLD BLOCK

(SF6000 Solenoid & Pneumatic Valve Use)

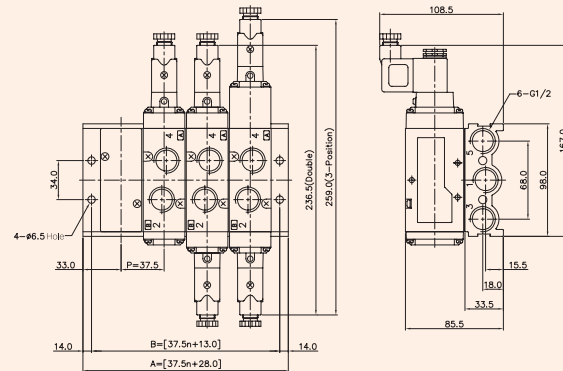
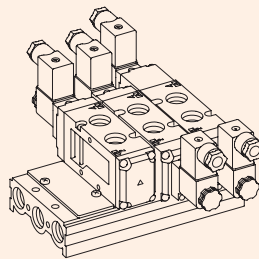
5-Port Manifold Block

MF6500-4

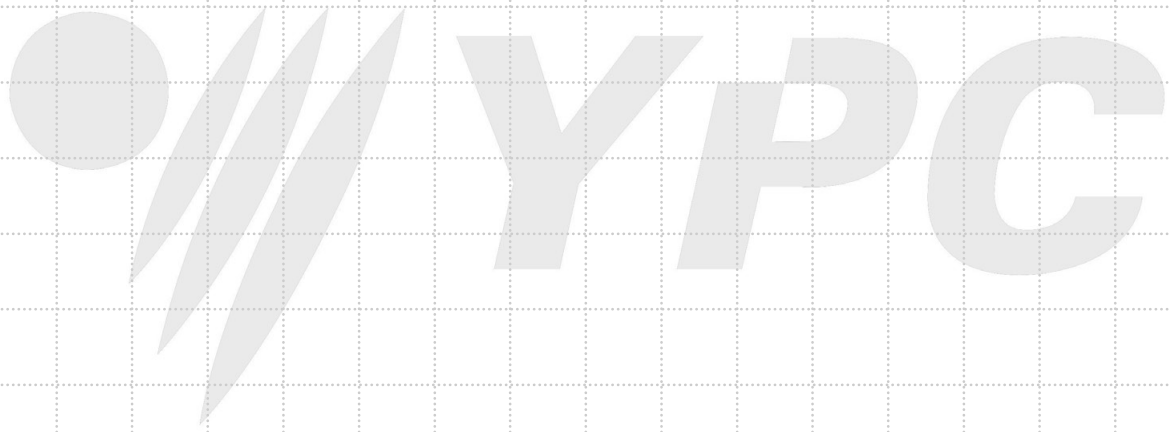


MF6500-BLK
Blanking Plate
Gasket O-Ring

MF6500-02
Manifold Block



5PORT MANIFOLD BLOCK DIMENSION		n=STATION				
ITEM	1	2	4	6	8	10
B	88.0	163.0	238.0	313.0	388.0	
A	103.0	178.0	253.0	328.0	403.0	



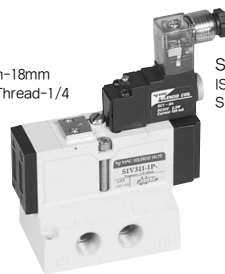
SIV·SIE (ISO) Series

5/2, 5/3 Solenoid, Pneumatic Valve

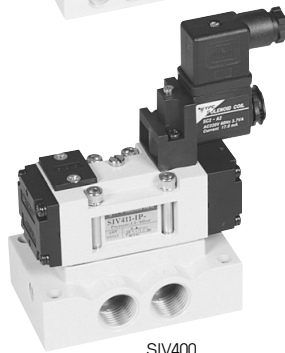
CHAPTER 04



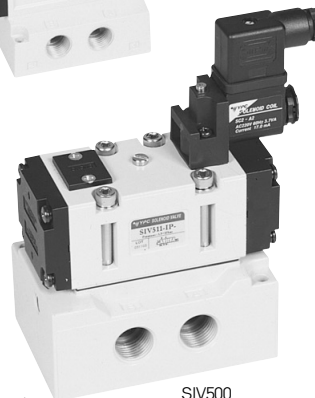
SIV200
ISO-0/Width-18mm
Sub Base Thread-1/4



SIV300
ISO-0/Width-26mm
Sub Base Thread-1/4



SIV400
ISO-1/Width-40mm
Sub Base Thread-1/4, 3/8, 1/2



SIV500
ISO-2/Width-50mm
Sub Base Thread-1/2, 3/4

- SIV200
- SIV300
- SIV400
- SIV500



SIE200
ISO-0/Width-18mm
Sub Base Thread-1/4



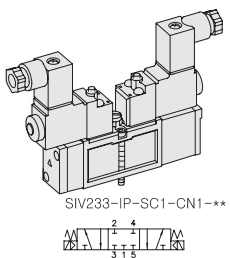
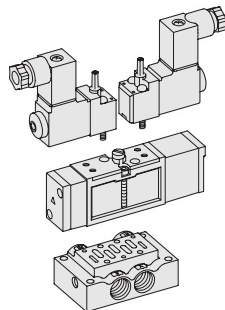
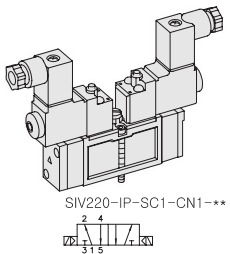
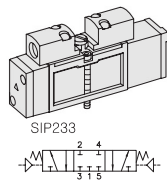
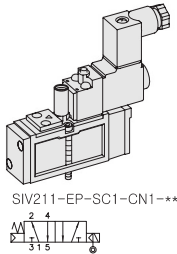
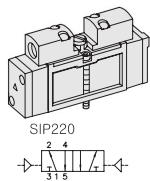
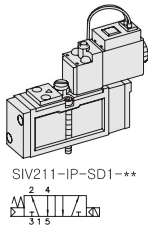
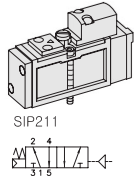
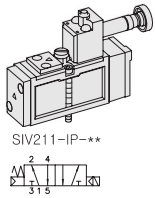
SIE300
ISO-0/Width-26mm
Sub Base Thread-1/4

- SIE 200
- SIE 300

SIV200

ISO-0 15407-1 / VDMA 24563
Solenoid / Pneumatic Valves

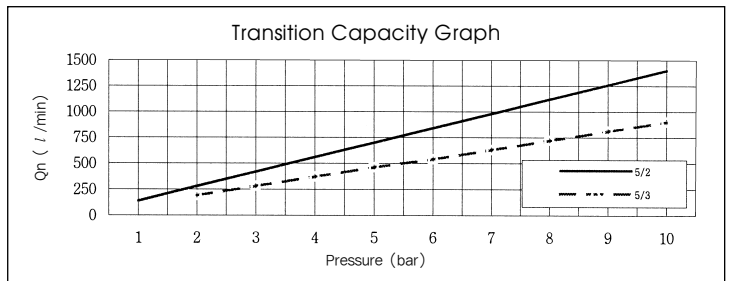
- 5/2, 5/3
- 18mm Body Width
- Sub-Base or Manifold Mounting Type
- Transition Flow 700ℓ/min (5bar)



** : Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		5 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Section Area(mm ²)-5bar		12.0	8.5
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		25ms or Less	35ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:3.5VA(60Hz) / DC:2.5W	



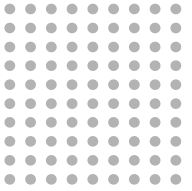
- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SIV2 1 1 - I P - SC1 - CN1 - A2

Valve Series	Function	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SIV2 : Solenoid Valve	1	5/2 Single	0 None	I Internal Pilot	0 None	0 None	0 None
	2	5/2 Double	1 Air + Spring	E External Pilot	P Push Non-Locking	CN1 Normal Connector	A2 AC 220V
	3	5/3 Closed Center	2 Air		L Lever Locking	SG1 Grommet/Flying Leads	A1 AC 110V
SIP2 : Pneumatic Valve	4	5/3 Open Center	3 Spring		SD1 Grommet/Flying Leads With LED	CZ1 Connector With LED & Surge Suppressor	A4 AC 24V
	5	5/3 Pressure Center			SL1 90 Degree Plug-in Wire Assembly With LED		D4 DC 24V
					SM1 180 Degree Plug-in Wire Assembly With LED		D2 DC 12V

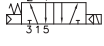


Solenoid & Pilot Actuated Spool Valves

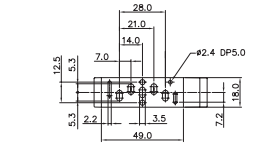
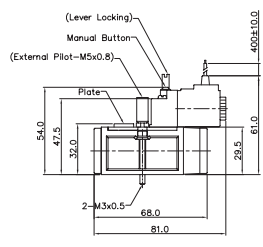
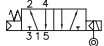
18mm Body Width

5Port 2Position Solenoid Valve

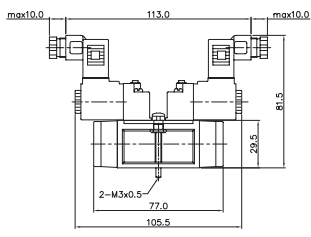
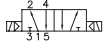
Single Solenoid
SIV211-IP-SG1-***



External Pilot
SIV211-EP-SG1-***

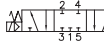


Double Solenoid
SIV220-IP-SC1-CN1-***

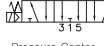


5Port 3Position Solenoid Valve

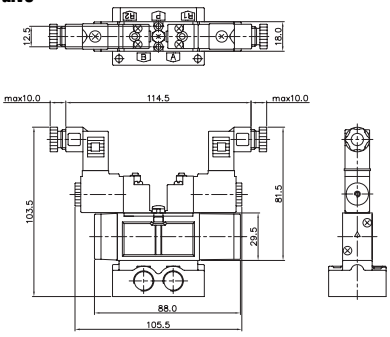
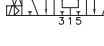
Closed Center
SIV233-IP-SC1-CN1-***



Exhaust Center
SIV243-IP-SC1-CN1-***

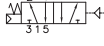


Pressure Center
SIV253-IP-SC1-CN1-***

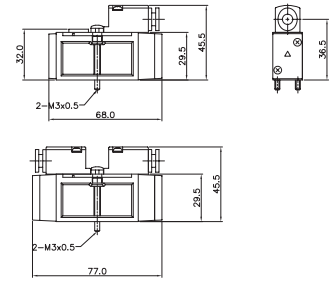
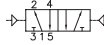


5Port 2Position Pneumatic Valve

Single Pneumatic
SIP211

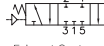


Double Pneumatic
SIP220

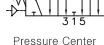


5Port 3Position Pneumatic Valve

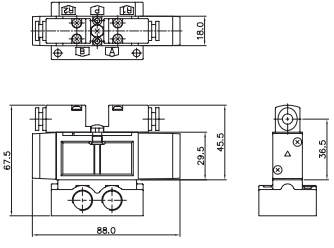
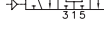
Closed Center
SIP233



Exhaust Center
SIP243



Pressure Center
SIP253

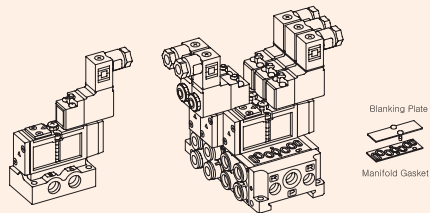


Sub Base Ordering Code

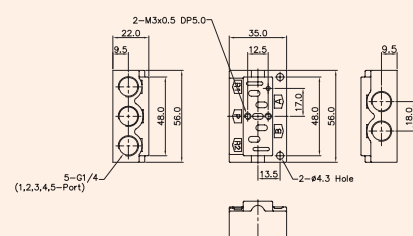
SIB2 1 - S		
Base Series	Port & Thread	Function
SIB2	0 None	S Single Station Sub Base, 1/4 Port Without Pilot Ports
SIV200 Solenoid Valve	1 G	SP Single Station Sub Base, 1/4 Port With Pilot Ports
	2 NPT	DB Single Station Sub Base, 1/8 Port Without Pilot Ports
		DC6 Double Modular Sub Base, Ø6 One-Touch Fitting
		E End Cover, 1/8 Port
		EB End Blanking Cover

SIB20 SINGLE, DOUBLE SUB BASE

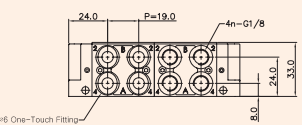
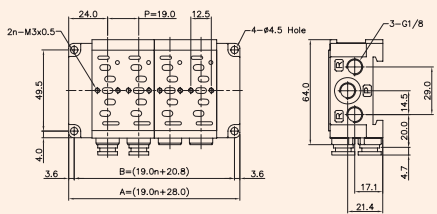
(SIV200 Solenoid & Pneumatic Valve Use Sub Base)



Single Station Sub Base Dimension



Double Modular Sub Base Dimension



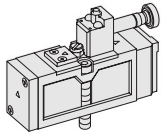
DOUBLE MODULAR SUB BASE DIMENSION		n-STATION			
ITEM	2	4	6	8	10
B	58.8	96.8	134.8	172.8	210.8
A	66.0	104.0	142.0	180.0	218.0

Ordering Code SIB20-BLK		Blanking Plate (Material: STS304)
		Manifold Gasket. (Material: NBR)
Ordering Code SIB21-E		End Cover, 1/8 (Material: AI)
Ordering Code SIB20-EB		End Blanking Cover (Material: AI)
Ordering Code SIB21-DB		Double Modular Sub Base, 1/8 (Material: AI)
Ordering Code SIB20-DC6		Double Modular Sub Base Ø6 one-touch fitting (Material: AI)

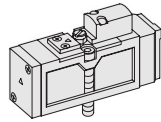
SIV300

ISO-0 15407-1 / VDMA 24563
Solenoid / Pneumatic Valves

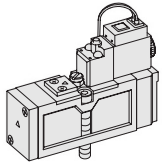
- 5/2, 5/3
- 26mm Body Width
- Sub-Base or Manifold Mounting Type
- Transition Flow 1000ℓ/min (5bar)



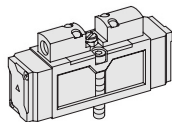
SIV311-IP-***



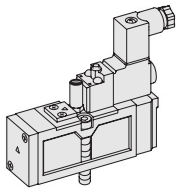
SIP311



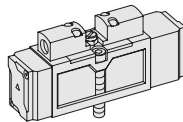
SIV311-IP-SD1-***



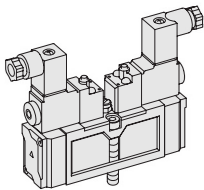
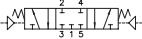
SIP320



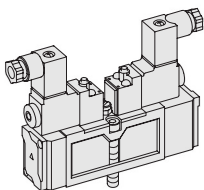
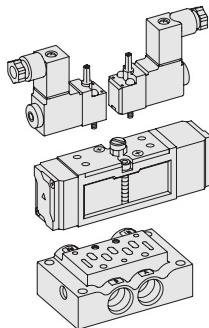
SIV311-EP-SC1-CN1-***



SIP333



SIV320-IP-SC1-CN1-***



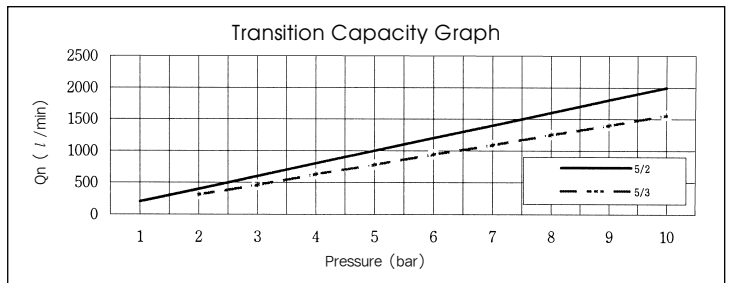
SIV333-IP-SC1-CN1-***



** : Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		5 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Section Area(mm ²)-5bar		18.0	11.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		25ms or Less	35ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:3.5VA(60Hz) / DC:2.5W	



The Material of Parts

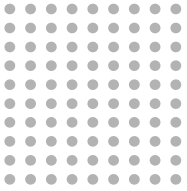
- Valve Body : Die-Cast Aluminium
- Spool : Aluminium
- Seals : NBR
- Spring : Stainless
- Cap : Zinc Pressure Die-Cast
- Pilot Parts : Glass Filled Nylon
- Armature : Stainless Steel
- Armature Seals : Viton

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SIV3 1 1 - I P - SC1 - CN1 - A2

Valve Series	Function	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage		
SIV3 : Solenoid Valve	1	5/2 Single	0	None	0	None	0	None	
	2	5/2 Double	1	Air + Spring	P	3 Pin Connector Coil	CN1	A2	AC 220V
	3	5/3 Closed Center	2	Air	L	Grommet/Flying Leads	CD1	A1	AC 110V
SIP3 : Pneumatic Valve	4	5/3 Open Center	3	Spring	SD1	Grommet/Flying Leads With LED	CZ1	A4	AC 24V
	5	5/3 Pressure Center			SL1	90 Degree Plug-in Wire Assembly With LED		D4	DC 24V
					SM1	180 Degree Plug-in Wire Assembly With LED		D2	DC 12V



Solenoid & Pilot Actuated Spool Valves

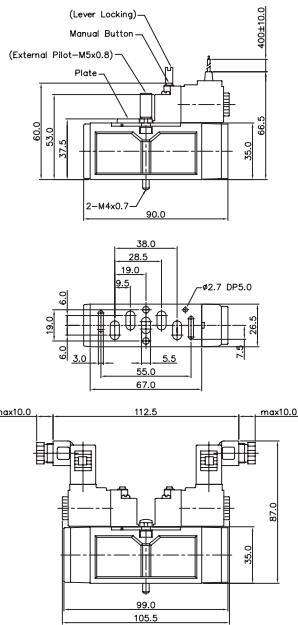
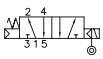
26mm Body Width

5Port 2Position Solenoid Valve

Single Solenoid
SIV311-IP-SG1-***



External Pilot
SIV311-EP-SG1-***

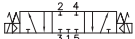


Double Solenoid
SIV320-IP-SC1-CN1-***



5Port 3Position Solenoid Valve

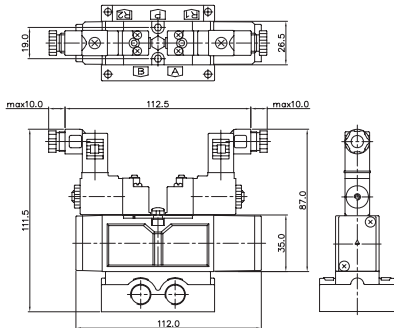
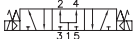
Closed Center
SIV333-IP-SC1-CN1-***



Exhaust Center
SIV343-IP-SC1-CN1-***



Pressure Center
SIV353-IP-SC1-CN1-***

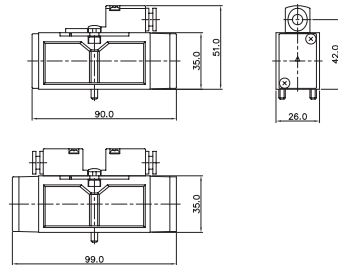
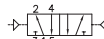


5Port 2Position Pneumatic Valve

Single Pneumatic
SIP311

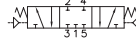


Double Pneumatic
SIP320

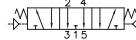


5Port 3Position Pneumatic Valve

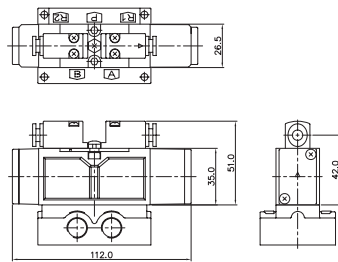
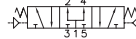
Closed Center
SIP333



Exhaust Center
SIP343



Pressure Center
SIP353

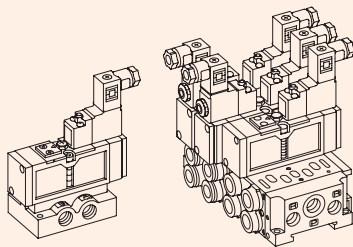


Sub Base Ordering Code

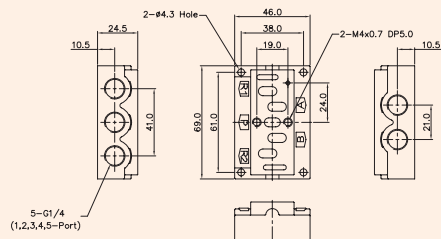
SIB3			1		S	
Base Series	Port & Thread		Function			
SIB3	0	None	S	Single Station Sub Base, 1/4 Port Without Pilot Ports		
SIV300 Solenoid Valve	1	G	SP	Single Station Sub Base, 1/4 Port With Pilot Ports		
	2	NPT	DB	Double Modular Sub Base, 1/4 Port Without Pilot Ports		
			DC8	Double Modular Sub Base, Ø8 One-Touch Fitting		
			E	End Cover, 1/4 Port		
			EB	End Blanking Cover		

SIB30 SINGLE, DOUBLE SUB BASE

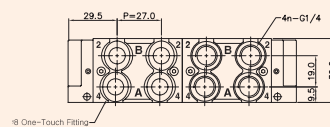
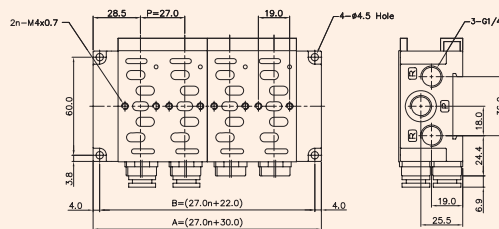
(SIV300 Solenoid & Pneumatic Valve Use Sub Base)



Single Station Sub Base Dimension



Double Modular Sub Base Dimension



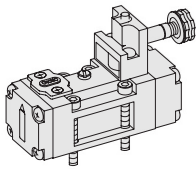
ITEM	2	4	6	8	10
A	76.0	130.0	184.0	238.0	292.0
B	84.0	138.0	192.0	246.0	300.0

Ordering Code SIB30-BLK		Blanking Plate (Material: STS304)
Ordering Code SIB31-E		End Cover, 1/4 (Material: Al)
Ordering Code SIB30-EB		End Blanking Cover (Material: Al)
Ordering Code SIB31-DB		Double Modular Sub Base, 1/4 (Material: Al)
Ordering Code SIB30-DC8		Double Modular Sub Base Ø8 one-touch fitting (Material: Al)

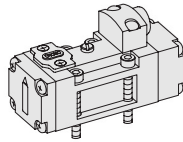
SIV400

ISO-1
Solenoid / Pneumatic Valves

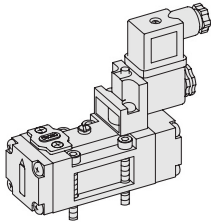
- 5/2, 5/3
- 40mm Body Width
- 30mm CNOMO pilot
- Sub-Base Mounting Type
- Transition Flow 1600ℓ/min (5bar)



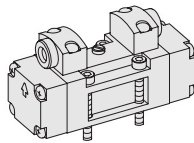
SIV411-IP-***



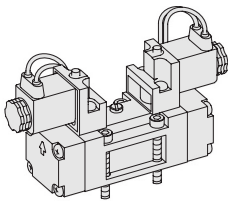
SIP411



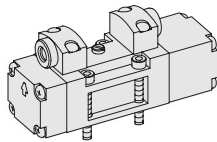
SIV411-EP-SC2-CN2-***



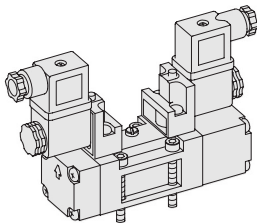
SIP420



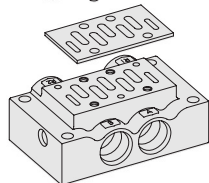
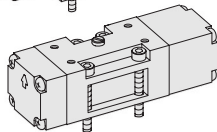
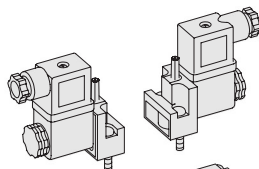
SIV420-IP-SG2-***



SIP433



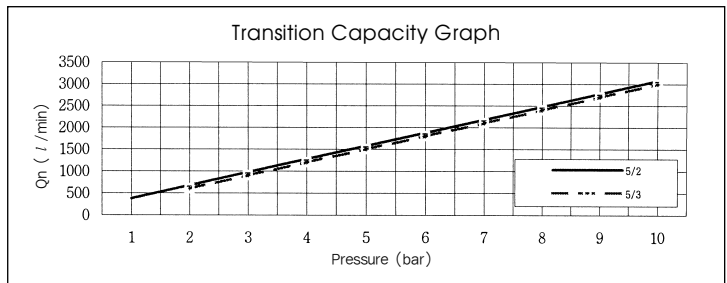
SIV433-IP-SC2-CN2-***



***: Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		5 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Section Area(mm ²)-5bar		30.0	25.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		30ms or Less	40ms or Less
Max. Working Frequency		3c/sec	1c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:5.5VA(60Hz) / DC:2.5W	



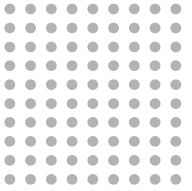
- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SIV4 1 1 - I P - SC2 - CN2 - A2

Valve Series	Function	Return Method		Int/Ext. Pilot	Manual Operator	Solenoid Coil Type		Connector Type		Voltage		
SIV4 : Solenoid Valve	1	5/2 Single	0	None	I	Internal Pilot	0	None	0	None		
	2	5/2 Double	1	Air + Spring	P	Push Non-Locking	SC2	3 Pin Connector Coil	CN2	Normal Connector	A2	AC 220V
	3	5/3 Closed Center	2	Air		L	Lever Locking	SG2	Grommet/Flying Leads	CD2	Connector With LED	A1
SIP4 : Pneumatic Valve	4	5/3 Open Center	3	Spring			SD2	Grommet/Flying Leads With LED	CZ2	Connector With LED & Surge Suppressor	A4	AC 24V
	5	5/3 Pressure Center									D4	DC 24V
											D2	DC 12V

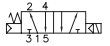


Solenoid & Pilot Actuated Spool Valves

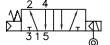
40mm Body Width

5Port 2Position Solenoid Valve

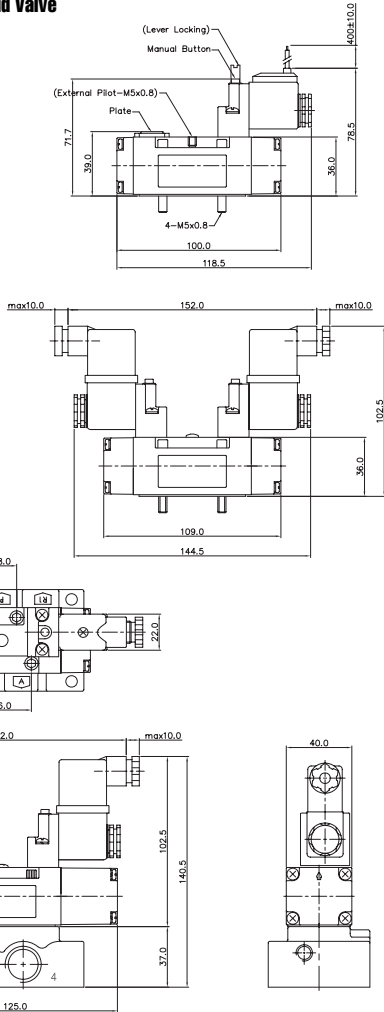
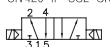
Single Solenoid
SIV411-IP-SD2-***



External Pilot
SIV411-EP-SD2-***

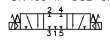


Double Solenoid
SIV420-IP-SC2-CN2-***

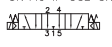


5Port 3Position Solenoid Valve

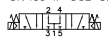
Closed Center
SIV433-IP-SC2-CN2-***



Exhaust Center
SIV443-IP-SC2-CN2-***

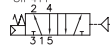


Pressure Center
SIV453-IP-SC2-CN2-***

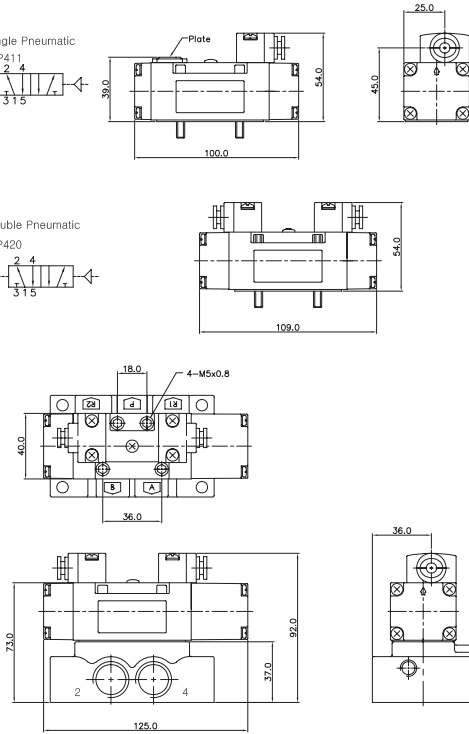
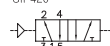


5Port 2Position Pneumatic Valve

Single Pneumatic
SIP411



Double Pneumatic
SIP420

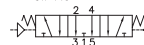


5Port 3Position Pneumatic Valve

Closed Center
SIP433



Exhaust Center
SIP443



Pressure Center
SIP453



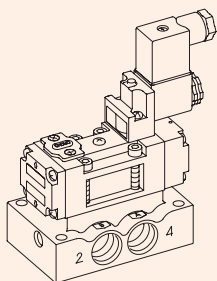
Sub Base Ordering Code

SIB4 1 - S			
Base Series	Port & Thread		Function
SIB4	0	None	S Single Station Sub Base, Without Pilot Ports
SIV400 Solenoid Valve	1	G 1/4	SP Single Station Sub Base, With Pilot Ports
	2	G 3/8	
	3	G 1/2	
	6	NPT 1/4	
	7	NPT 3/8	
	8	NPT 1/2	

SIB40 SINGLE SUB BASE

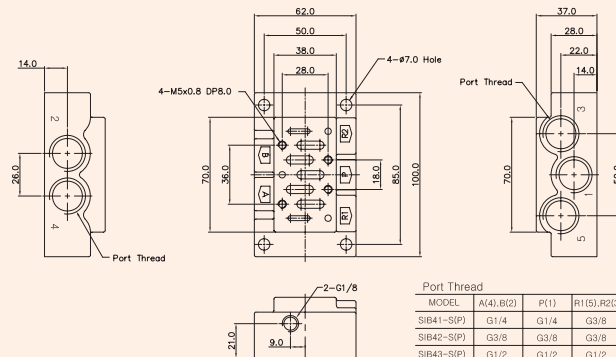
(SIV400 Solenoid & Pneumatic Valve Use Sub Base)

Single Station Sub Base Dimension



Sub Base Gasket
(Material: NBR)

Sub Base
(Material: Al)

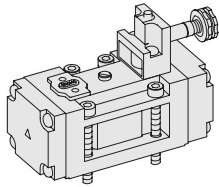


MODEL	A(4),B(2)	P(1)	R(1),R2(3)
SIB41-S(P)	G1/4	G1/4	G3/8
SIB42-S(P)	G3/8	G3/8	G3/8
SIB43-S(P)	G1/2	G1/2	G1/2

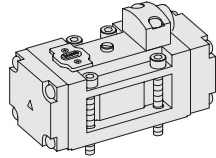
SIV500

ISO-2
Solenoid / Pneumatic Valves

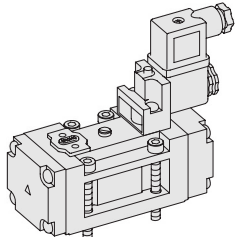
- 5/2, 5/3
- 50mm Body Width
- 30mm CNOMO PILOT
- Sub-Base Mounting Type
- Transition Flow 3500ℓ/min (5bar)



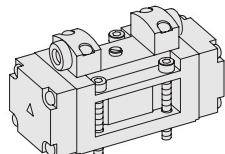
SIV511-IP-***



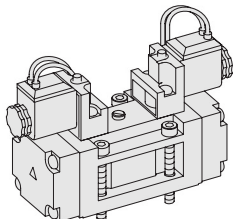
SIP511



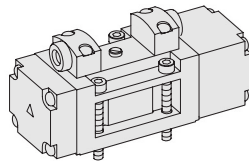
SIV511-EP-SC2-CN2-***



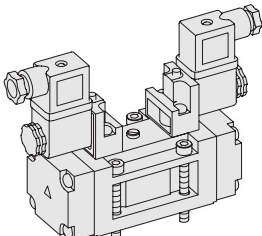
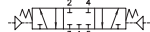
SIP520



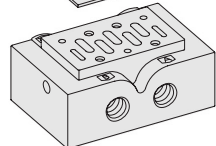
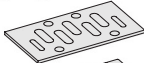
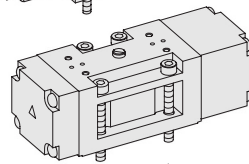
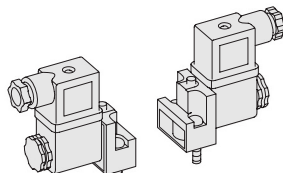
SIV520-IP-SD2-***



SIP533



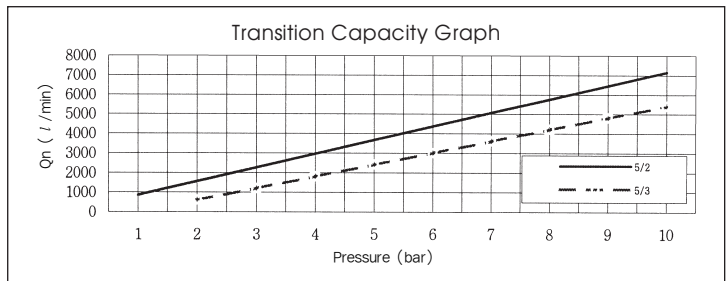
SIV533-IP-SC2-CN2-***



** : Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		5 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Sectional Area(mm ²)-5bar		65.0	50.0
Ambient & Fluid Temp.		5~60°C(41~140°F)	
Response Time(5bar)		35ms or Less	45ms or Less
Max. Working Frequency		3c/sec	1c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:5.5VA(60Hz) / DC:2.5W	



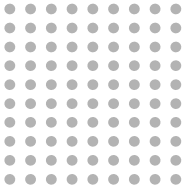
- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

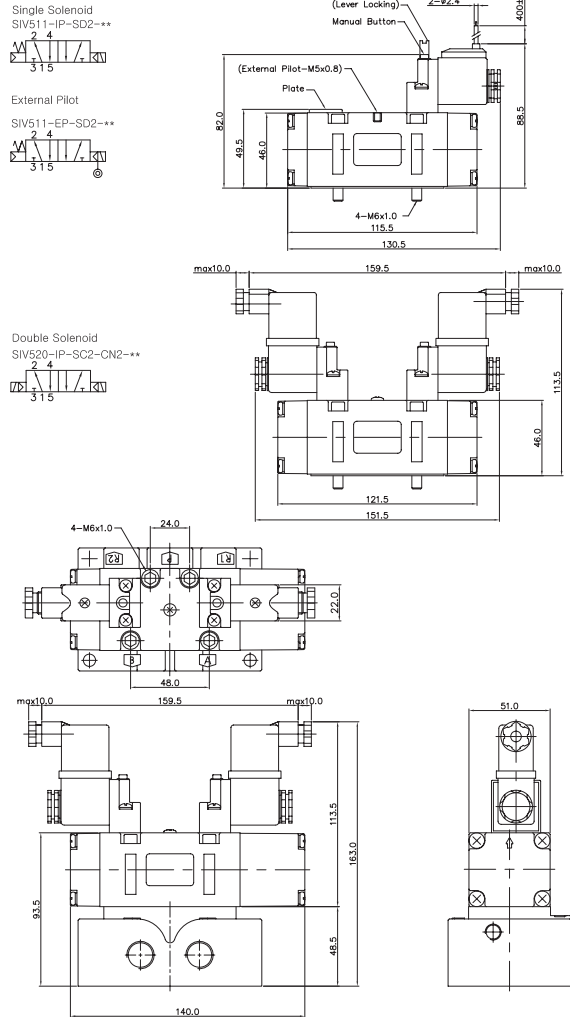
ORDERING NO.

SIV5 1 1 - I P - SC2 - CN2 - A2

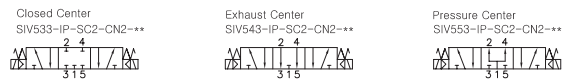
Valve Series	Function	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SIV5 : Solenoid Valve	1	5/2 Single	0 None	I Internal Pilot	0 None	0 None	0 None
	2	5/2 Double	1 Air + Spring	P Push Non-Locking	SC2 3 Pin Connector Coil	CN2 Normal Connector	A2 AC 220V
	3	5/3 Closed Center	2 Air	E External Pilot	L Lever Locking	SG2 Grommet/Flying Leads	CD2 Connector With LED
	4	5/3 Open Center	3 Spring			SD2 Grommet/Flying Leads	CZ2 Connector With LED
SIP5 : Pneumatic Valve	5	5/3 Pressure Center			With LED	& Surge Suppressor	A1 AC 110V A4 AC 24V D4 DC 24V D2 DC 12V



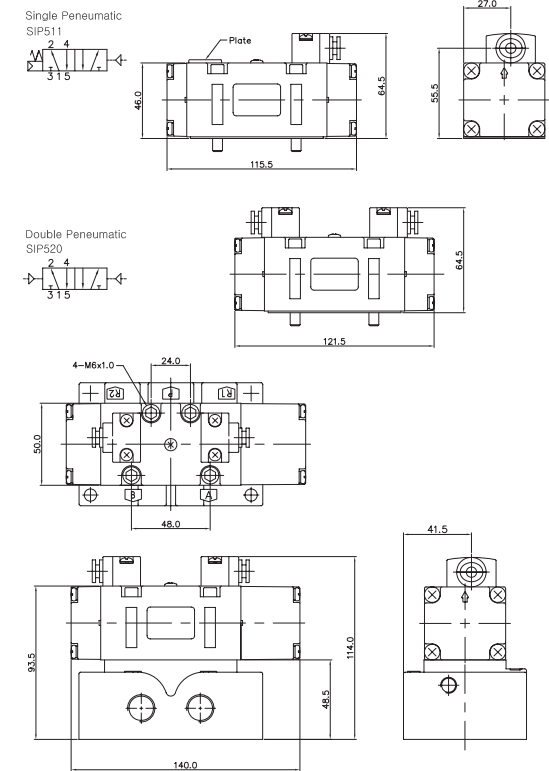
5Port 2Position Solenoid Valve



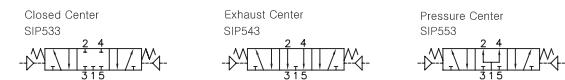
5Port 3Position Solenoid Valve



5Port 2Position Pneumatic Valve



5Port 3Position Pneumatic Valve



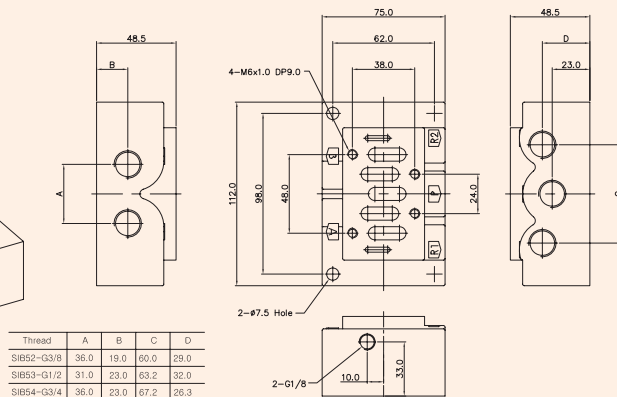
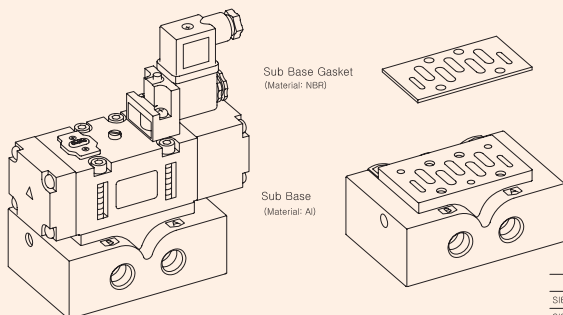
Sub Base Ordering Code

SIB5 1 - S		
Sub Base Series	Port & Thread	Function
SIB5	0 None	S Single Station Sub Base, Without Pilot Ports
SIV500 Solenoid Valve	2 G 3/8	SP Single Station Sub Base, With Pilot Ports
	3 G 1/2	
	4 G 3/4	
	7 NPT 3/8	
	8 NPT 1/2	
	9 NPT 3/4	

SIB50 SINGLE SUB BASE

(SIV500 Solenoid & Pneumatic Valve Use Sub Base)

Single Station Sub Base Dimension

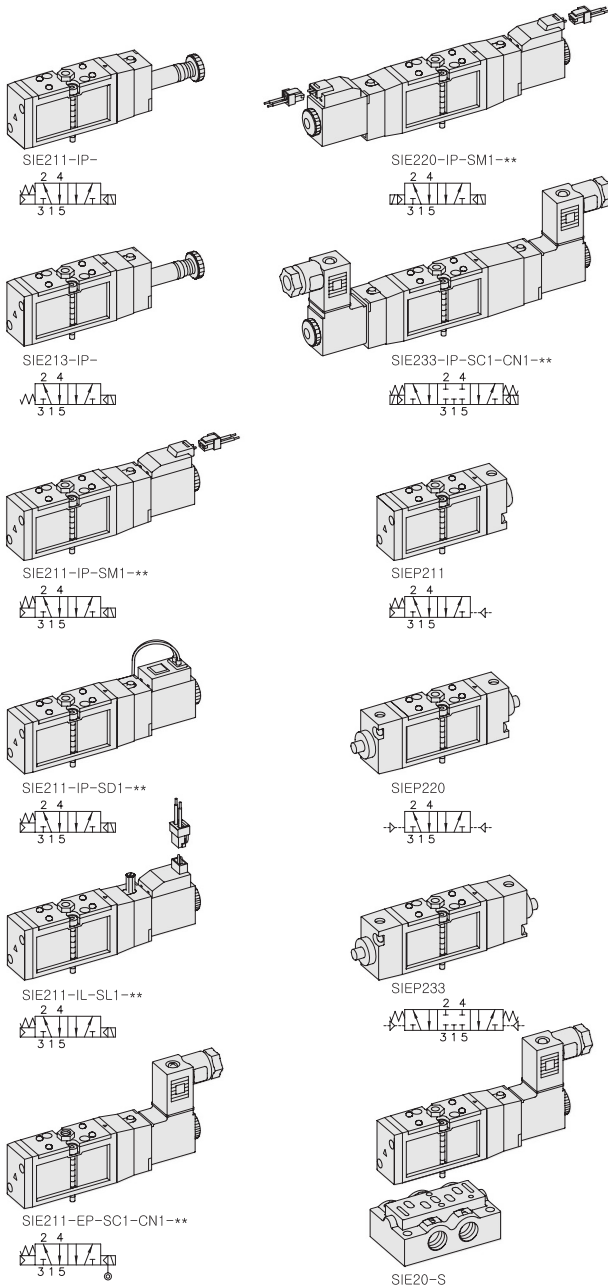


Thread	A	B	C	D
SIB52-G3/8	36.0	19.0	60.0	29.0
SIB53-G1/2	31.0	23.0	63.2	32.0
SIB54-G3/4	36.0	23.0	67.2	26.3

SIE200

"E" ECONOMY Series
Solenoid / Pneumatic Valves

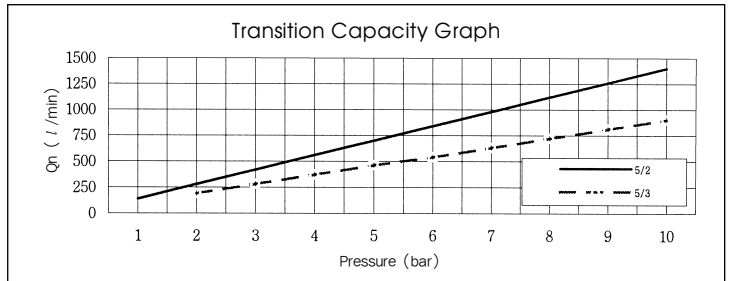
- 5/2, 5/3
- 18mm Body Width
- Sub-Base or Manifold Mounting Type
- Transition Flow 700ℓ/min (5bar)



** : Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		5 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Sectional Area(mm ²)-5bar		12.0	8.5
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		25ms or Less	35ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Optional)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:3.5VA(60Hz) / DC:2.5W	



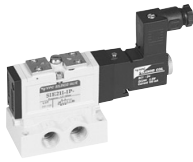
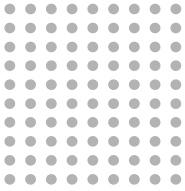
- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SIE2 1 1 - I P - SC1 - CN1 - A2

Valve Series	Function	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SIE2 : Solenoid Valve	1	5/2 Single	0 None	I Internal Pilot	0 None	0 None	0 None
	2	5/2 Double	1 Air + Spring	E External Pilot	P Push Non-Locking	CN1 Normal Connector	A2 AC 220V
	3	5/3 Closed Center	2 Air		L Lever Locking	SG1 Grommet/Flying Leads	A1 AC 110V
SIEP2 : Pneumatic Valve	4	5/3 Open Center	3 Spring		SD1 Grommet/Flying Leads With LED	CZ1 Connector With LED & Surge Suppressor	A4 AC 24V
	5	5/3 Pressure Center			SL1 90 Degree Plug-in Wire Assembly With LED		D4 DC 24V
					SM1 180 Degree Plug-in Wire Assembly With LED		D2 DC 12V

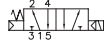


Solenoid & Pilot Actuated Spool Valves

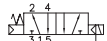
18mm Body Width

5Port 2Position Solenoid Valve

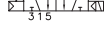
Single Solenoid
SIE211-IP-SG1-***



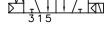
External Pilot
SIE211-EP-SG1-***



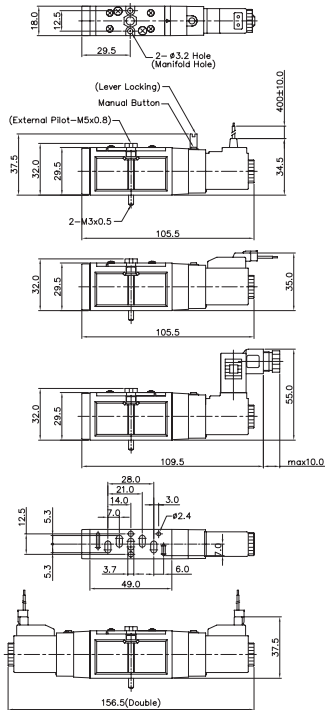
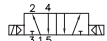
SIE211-IP-SM1-***



SIE211-IP-SC1-CN1-***

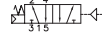


Double Solenoid
SIE220-IP-SL1-***

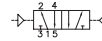


5Port 2Position Pneumatic Valve

Single Pneumatic
SIEP211

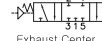


Double Pneumatic
SIEP220



5Port 3Position Pneumatic Valve

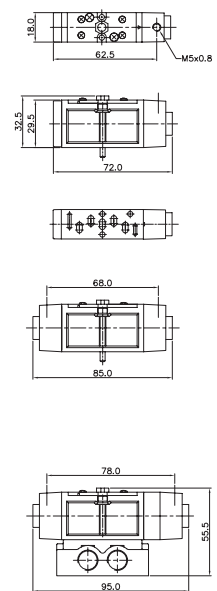
Closed Center
SIEP233



Exhaust Center
SIEP243

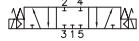


Pressure Center
SIEP253

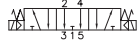


5Port 3Position Solenoid Valve

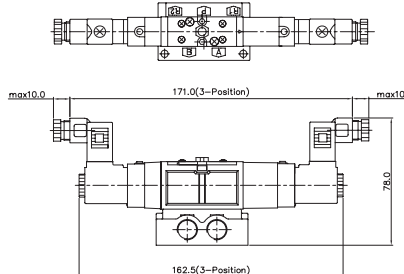
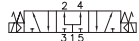
Closed Center
SIE233-IP-SC1-CN1-***



Exhaust Center
SIE243-IP-SC1-CN1-***



Pressure Center
SIE253-IP-SC1-CN1-***

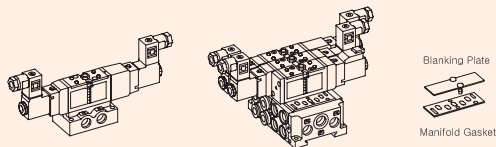


Sub Base Ordering Code

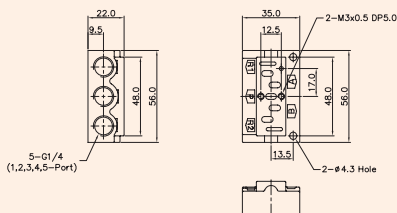
Sub Base Series	Port & Thread	Function
SIB2	0 None	S Single Station Sub Base, 1/4 Port Without Pilot Ports
SIE200 Solenoid Valve	1 G	SP Single Station Sub Base, 1/4 Port With Pilot Ports
	2 NPT	DB Double Modular Sub Base, 1/8 Port Without Pilot Ports
		DC6 Double Modular Sub Base #6 One-Touch Fitting
		E End Cover, 1/8 Port
		EB End Blanking Cover

SIB20 SINGLE, DOUBLE SUB BASE

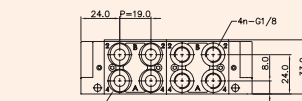
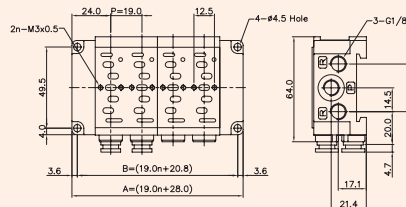
(SIE200 Solenoid & Pneumatic Valve Use Sub Base)



Single Station Sub Base Dimension



Double Modular Sub Base Dimension



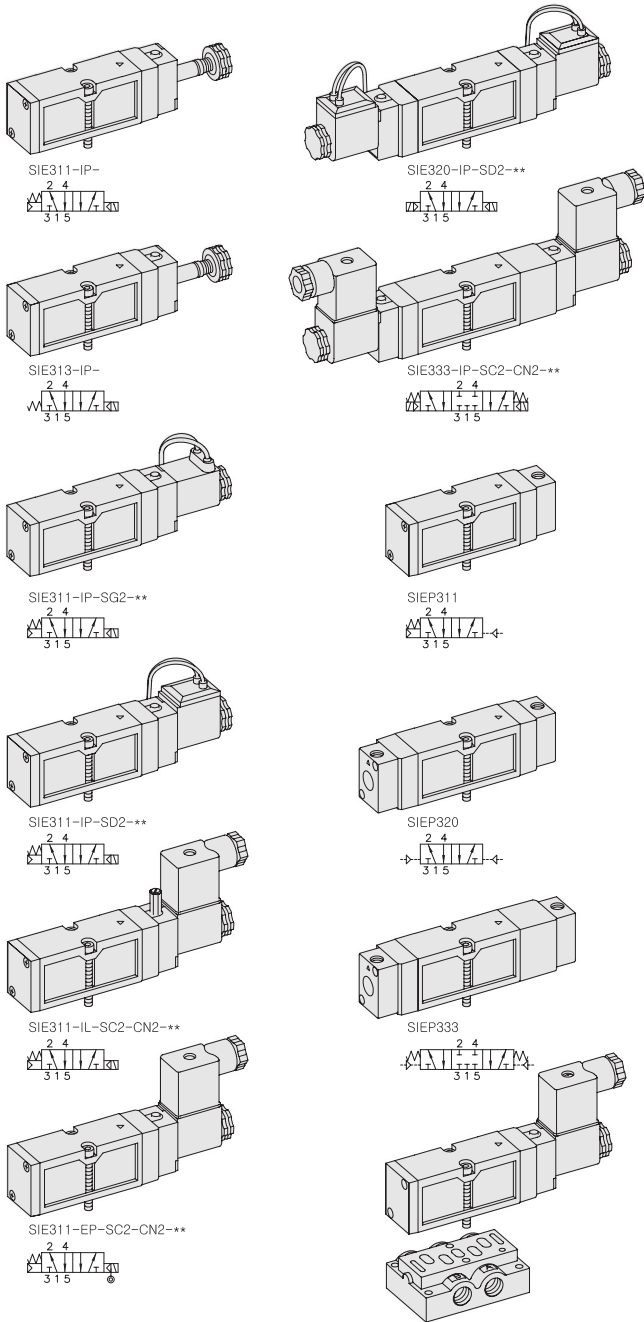
DOUBLE MODULAR SUB BASE DIMENSION (n=STATION)	2	4	6	8	10
B	58.8	96.8	134.8	172.8	210.8
A	66.0	104.0	142.0	180.0	218.0

Ordering Code SIB20-BLK	Blanking Plate (Material: STS304)
	Manifold Gasket. (Material: NBR)
Ordering Code SIB21-E	End Cover, 1/8 (Material: AI)
Ordering Code SIB20-EB	End Blanking Cover (Material: AI)
Ordering Code SIB21-DB	Double Modular Sub Base, 1/8 (Material: AI)
Ordering Code SIB20-DC6	Double Modular Sub Base #6 one-touch fitting (Material: AI)

SIE300

"E" ECONOMY Series
Solenoid / Pneumatic Valves

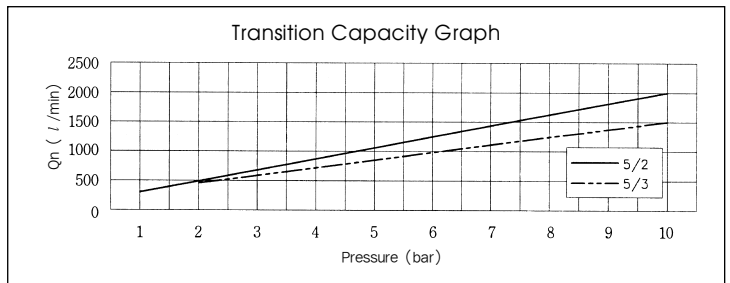
- 5/2, 5/3
- 26mm Body Width
- Sub-Base or Manifold Mounting Type
- Transition Flow 1000ℓ/min (5bar)



** : Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		5 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Sectional Area(mm ²)-5bar		18.0	11.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		25ms or Less	35ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:5.5VA(60Hz) / DC:2.5W	



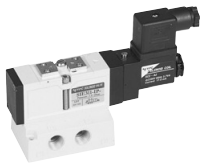
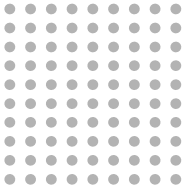
- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SIE3 1 1 - I P - SC2 - CN2 - A2

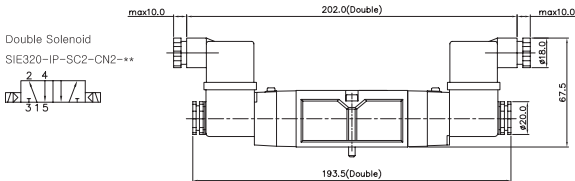
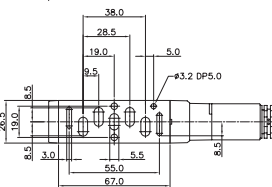
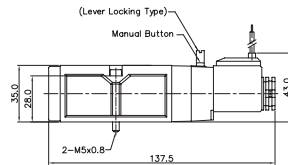
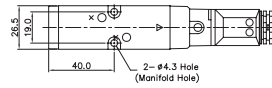
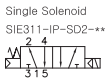
Valve Series	Function	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SIE3 : Solenoid Valve	1	5/2 Single	0 None	I Internal Pilot	0 None	0 None	0 None
	2	5/2 Double	1 Air+Spring	E External Pilot	SC2 3 Pin Connector Coil	CN2 Normal Connector	A2 AC 220V
	3	5/3 Closed Center	2 Air		L Lever Locking	SG2 Grommet/Flying Leads	A1 AC 110V
	4	5/3 Open Center	3 Spring			SD2 Grommet/Flying Leads With LED	A4 AC 24V
	5	5/3 Pressure Center					D4 DC 24V
SIEP3 : Pneumatic Valve						C22 Connector With LED & Surge Suppressor	D2 DC 12V



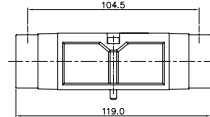
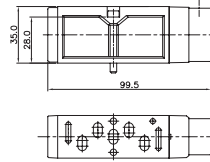
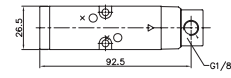
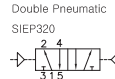
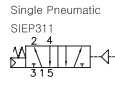
Solenoid & Pilot Actuated Spool Valves

26mm Body Width

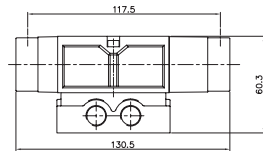
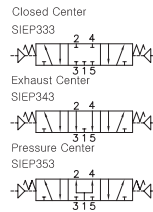
5Port 2Position Solenoid Valve



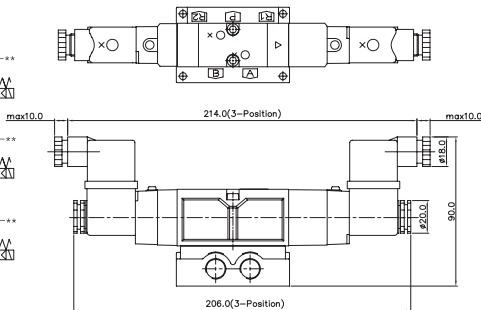
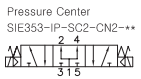
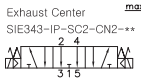
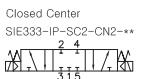
5Port 2Position Pneumatic Valve



5Port 3Position Pneumatic Valve



5Port 3Position Solenoid Valve



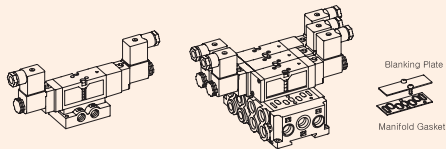
Sub Base Ordering Code

SIB3		1		S	
Sub Base Series	Port & Thread	Function			
SIB3	0 None	S	Single Station Sub Base, 1/4 Port Without Pilot Ports		
SIE300 Solenoid Valve	1 G	SP	Single Station Sub Base, 1/4 Port With Pilot Ports		
	2 NPT	DB	Double Modular Sub Base, 1/4 Port Without Pilot Ports		
		DC8	Double Modular Sub Base, Ø8 One-Touch Fitting		
		E	End Cover, 1/4 Port		
		EB	End Blanking Cover		

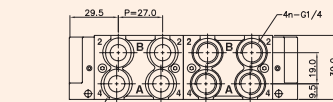
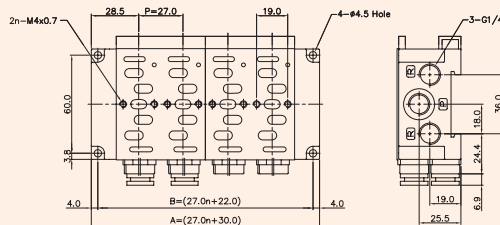
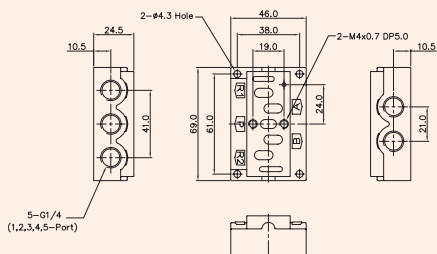
SIB30 SINGLE, DOUBLE SUB BASE

(SIE300 Solenoid & Pneumatic Valve Use Sub Base)

Double Modular Sub Base Dimension

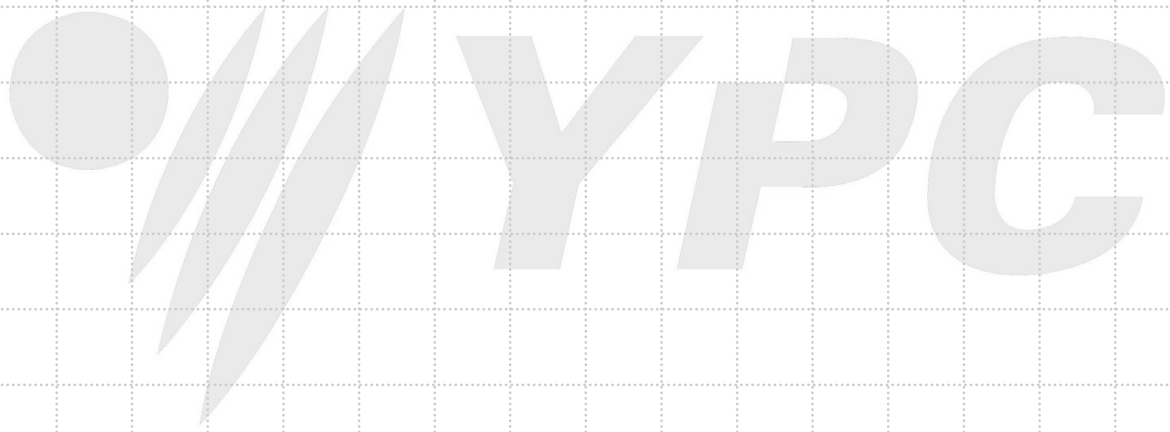


Single Station Sub Base Dimension



DOUBLE MODULAR SUB BASE DIMENSION n=STATION						
ITEM	n	2	4	6	8	10
A		76.0	130.0	184.0	238.0	292.0
B		84.0	138.0	192.0	246.0	300.0

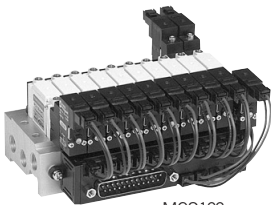
Ordering Code SIB30-BLK	Blanking Plate (Material: STS304)
	Manifold Gasket. (Material: NBR)
Ordering Code SIB31-E	End Cover, 1/4 (Material: AI)
Ordering Code SIB30-EB	End Blanking Cover (Material: AI)
Ordering Code SIB31-DB	Double Modular Sub Base, 1/4 (Material: AI)
Ordering Code SIB30-DC8	Double Modular Sub Base Ø8 one-touch fitting (Material: AI)



MCS Series

Multi Connector System (SC Series Solenoid Valve Mounted)

CHAPTER 05



MCS100
SC200
Solenoid Valve
MOUNTED



MCS100
SC300, SCE300
Solenoid Valve
MOUNTED



MCS100
SC400, SCE400
Solenoid Valve
MOUNTED

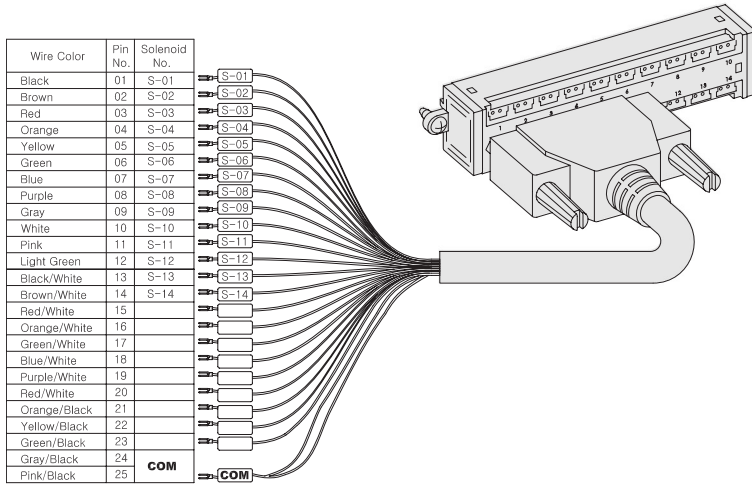
■ MCS100

MCS100

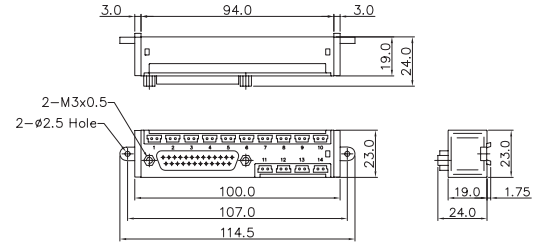
Multi Connector System

SC200, 300, 400 Series Solenoid Valve MOUNTED

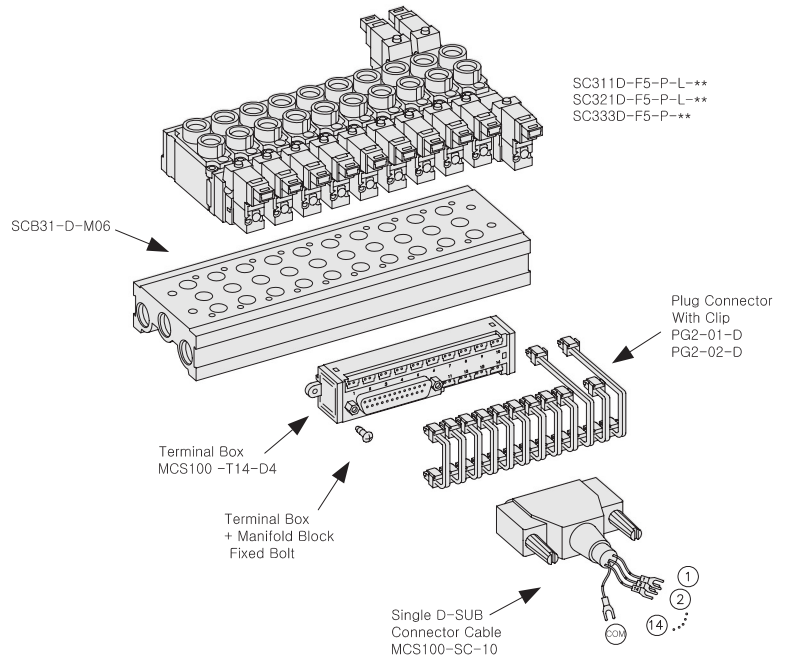
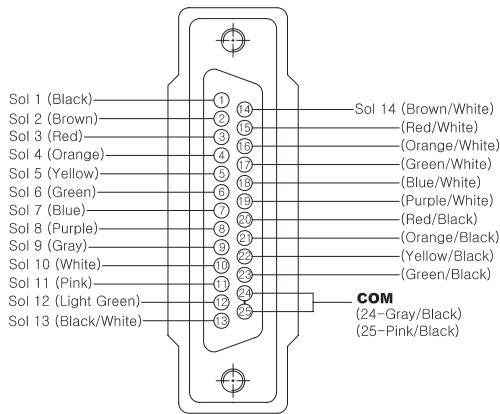
- DC 24V/ DC 12V
- 25Pin D-Sub Connector
- Simple Electric Wire System



Terminal Box
MCS100 -T14-D4



D-Sub Connector Pin No.

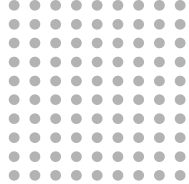


<p>Terminal Box</p> <p>Ordering Code MCS100 -T14-**</p>	<p>Plug Connector With Clip</p> <p>Ordering Code PG2-01-D (100mm) PG2-02-D (200mm)</p>	<p>Single D-Sub Connector Cable IP40</p> <p>Ordering Code MCS100-SC-10 (1m) MCS100-SC-30 (3m)</p>
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ORDERING NO.

MCS1 0 0 - T14 - D4

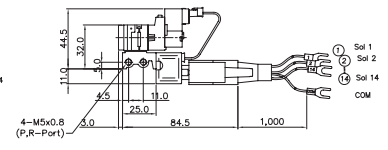
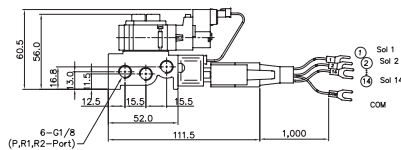
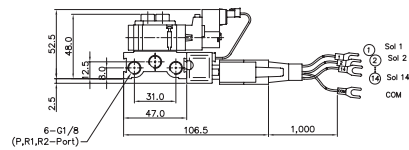
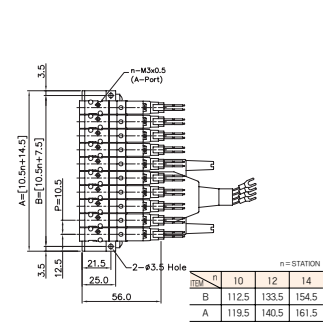
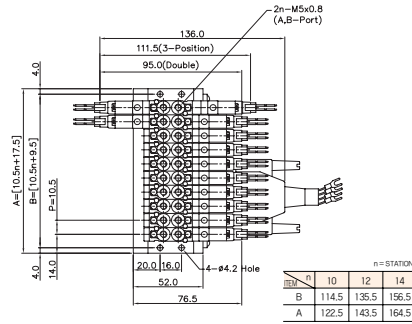
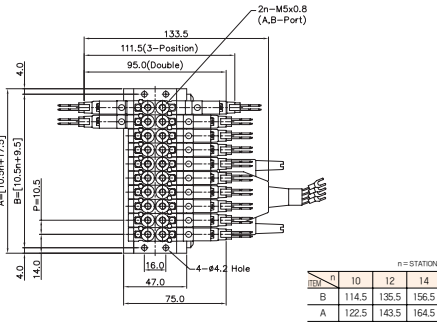
Series	Function	D-Sub Connector	Multipole Wireway Box	Voltage
MCS1 : Multi Connector Solenoid Valve Mounted	0 Single Module	0 25 Pin D-Sub Connector	T14 14 Station	0 None D4 DC 24V D2 DC 12V



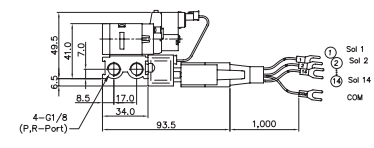
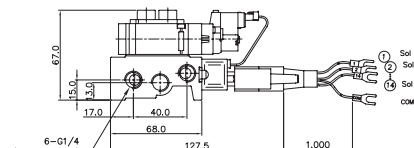
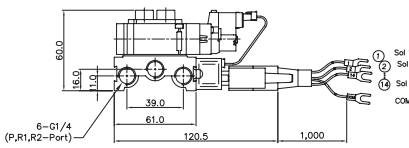
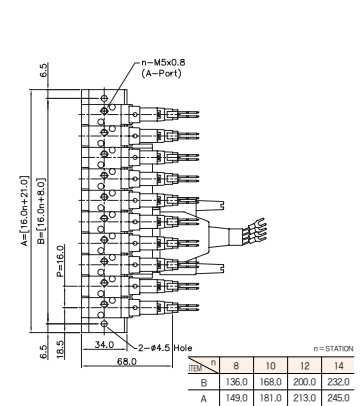
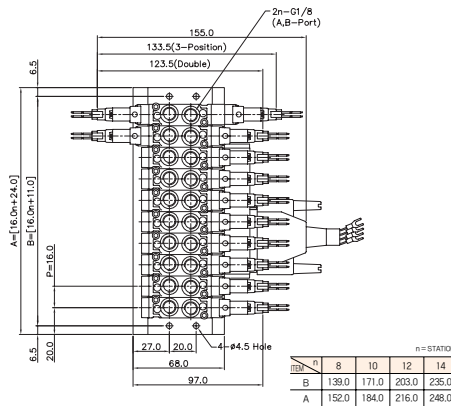
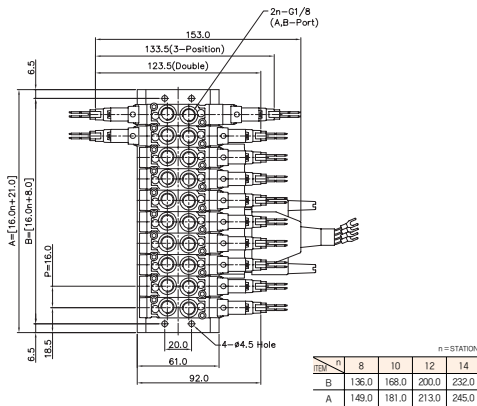
Multi Connector System

Solenoid Valve Mounted

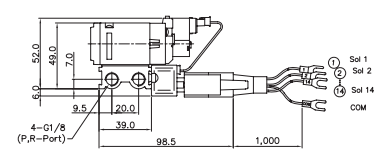
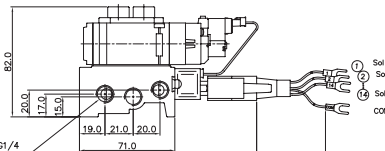
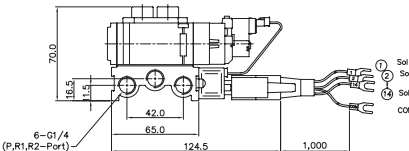
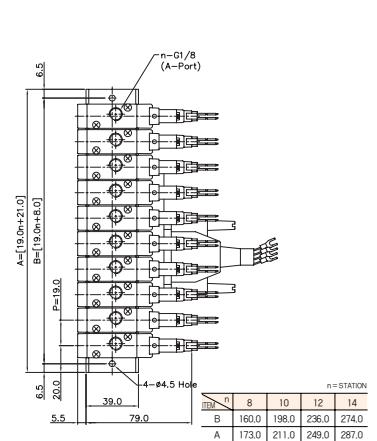
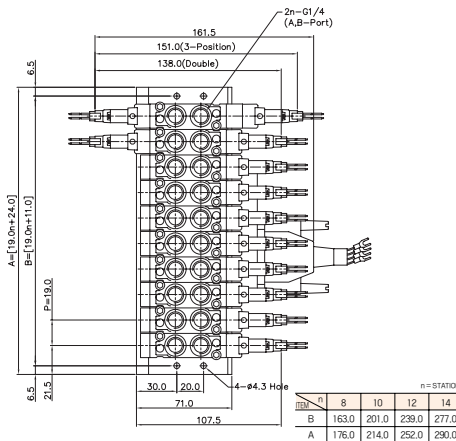
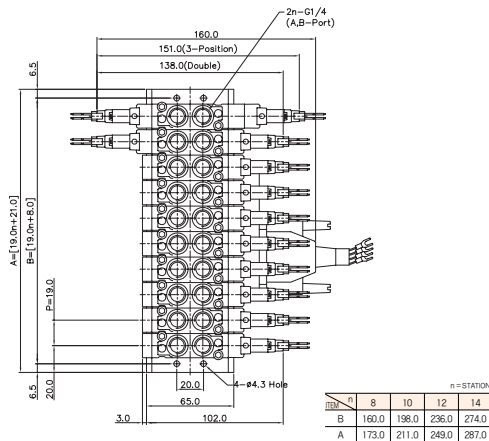
SC200 Series Mounted



SC300 Series Mounted



SC400 Series Mounted

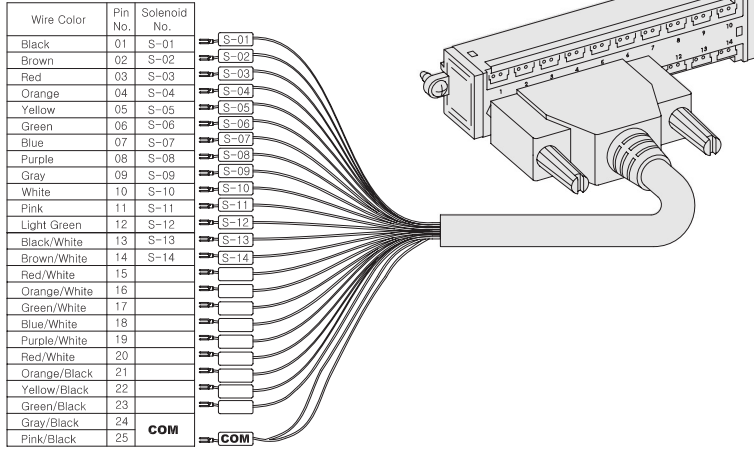


MCS100

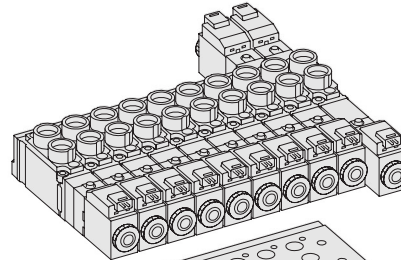
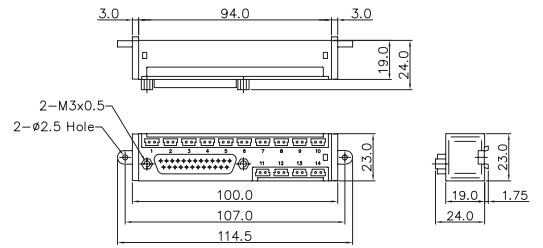
Multi Connector System

SCE 300, 400 Series Solenoid Valve MOUNTED

- DC 24V/ DC 12V
- 25Pin D-Sub Connector
- Simple Electric Wire System

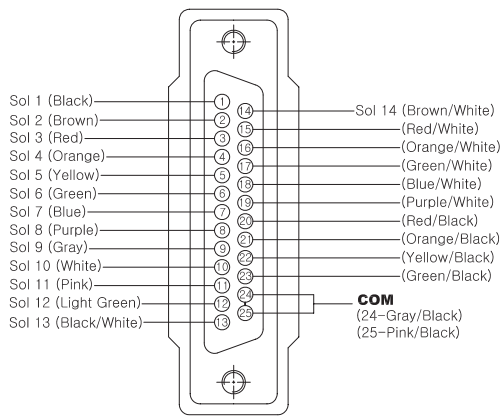


Terminal Box
MCS100 -T14-D4

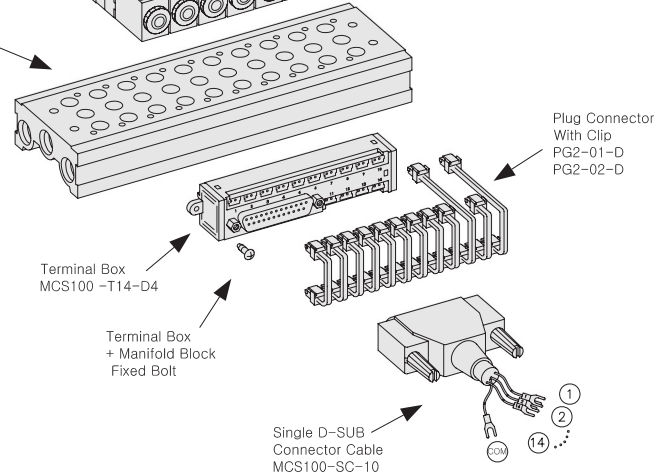


SCE311D-F5-P-L-**
SCE321D-F5-P-L-**
SCE333D-F5-P-**

D-Sub Connector Pin No.



SCB31-D-M06

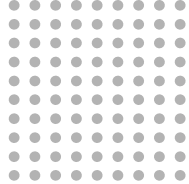


Terminal Box	Plug Connector With Clip	Single D-Sub Connector Cable IP40
Ordering Code MCS100 -T14-**	Ordering Code PG2-01-D (100mm) PG2-02-D (200mm)	Ordering Code MCS100-SC-10 (1m) MCS100-SC-30 (3m)

ORDERING NO.

MCS1 0 0 - T14 - D4

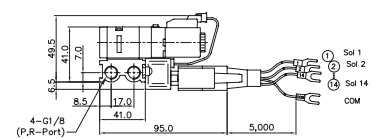
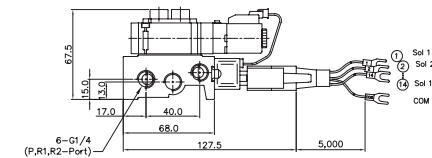
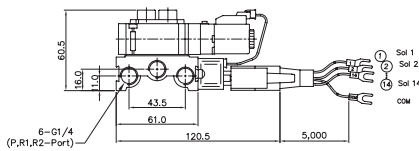
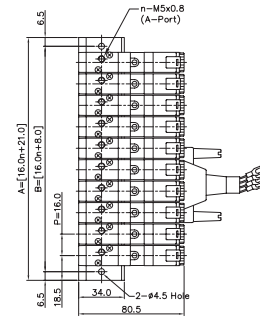
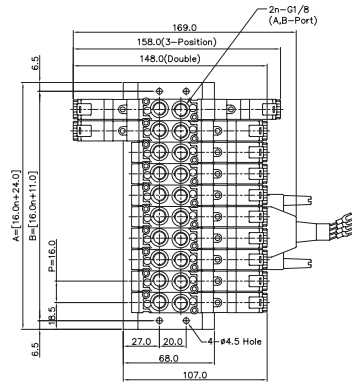
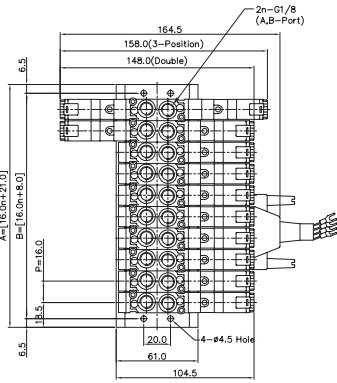
Series	Function	D-Sub Connector	Multipole Wireway Box	Voltage
MCS1 : Multi Connector Solenoid Valve Mounted	0 Single Module	0 25 Pin D-Sub Connector	T14 14 Station	0 None D4 DC 24V D2 DC 12V



Multi Connector System

Solenoid Valve Mounted

SCE300 Series Mounted

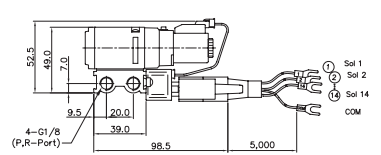
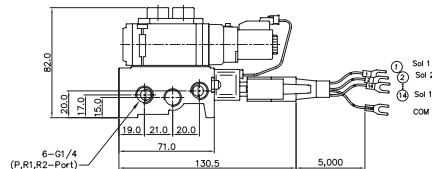
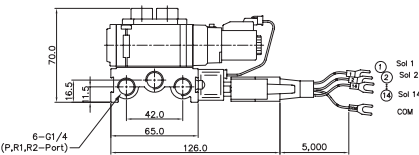
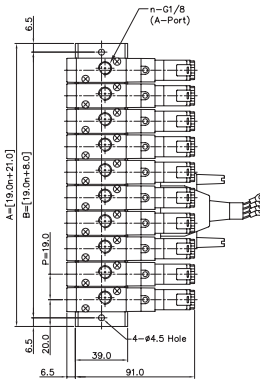
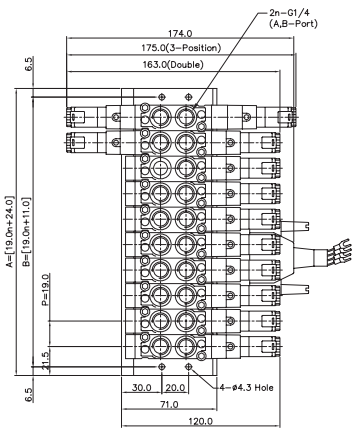
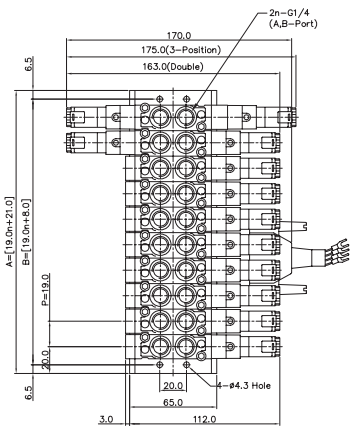


n=STATION					
ITEM	n	8	10	12	14
B		136.0	168.0	200.0	232.0
A		149.0	181.0	213.0	245.0

n=STATION					
ITEM	n	8	10	12	14
B		139.0	171.0	203.0	235.0
A		152.0	184.0	216.0	248.0

n=STATION					
ITEM	n	8	10	12	14
B		136.0	168.0	200.0	232.0
A		149.0	181.0	213.0	245.0

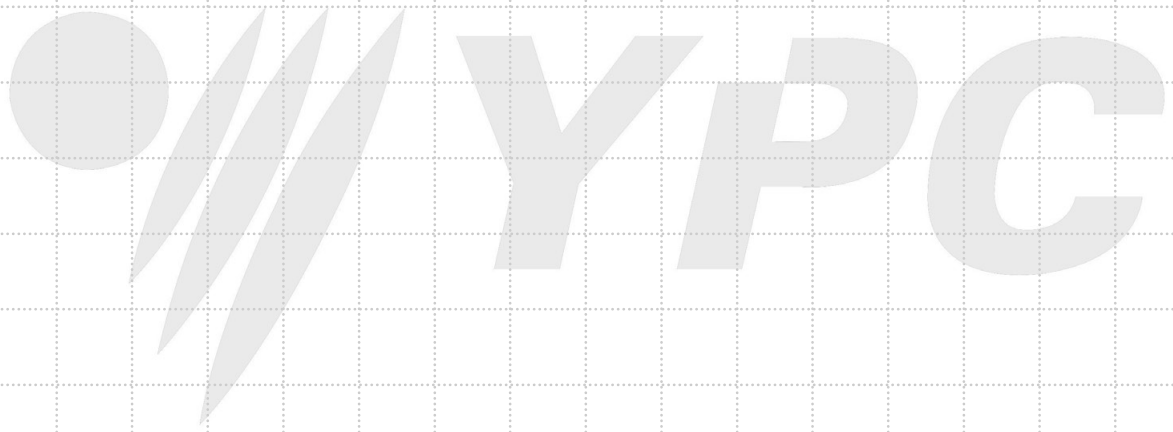
SCE400 Series Mounted



n=STATION					
ITEM	n	8	10	12	14
B		160.0	198.0	236.0	274.0
A		173.0	211.0	249.0	287.0

n=STATION					
ITEM	n	8	10	12	14
B		163.0	201.0	239.0	277.0
A		176.0	214.0	252.0	290.0

n=STATION					
ITEM	n	8	10	12	14
B		160.0	198.0	236.0	274.0
A		173.0	211.0	249.0	287.0



SC·SCE (COMPACT) Series

5/2, 5/3, 3/2 Solenoid, Pneumatic Valve

CHAPTER 06



SC200
Body Width-10mm
Thread-M5, M3



SC300
Body Width-15mm
Thread-1/8, M5

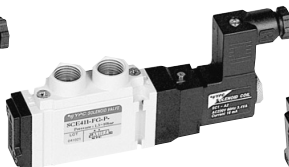


SC400
Body Width-18mm
Thread-1/4, 1/8

- SC200
- SC300
- SC400



SCE300
Body Width-15mm
Thread-1/8, M5



SCE400
Body Width-18mm
Thread-1/4, 1/8



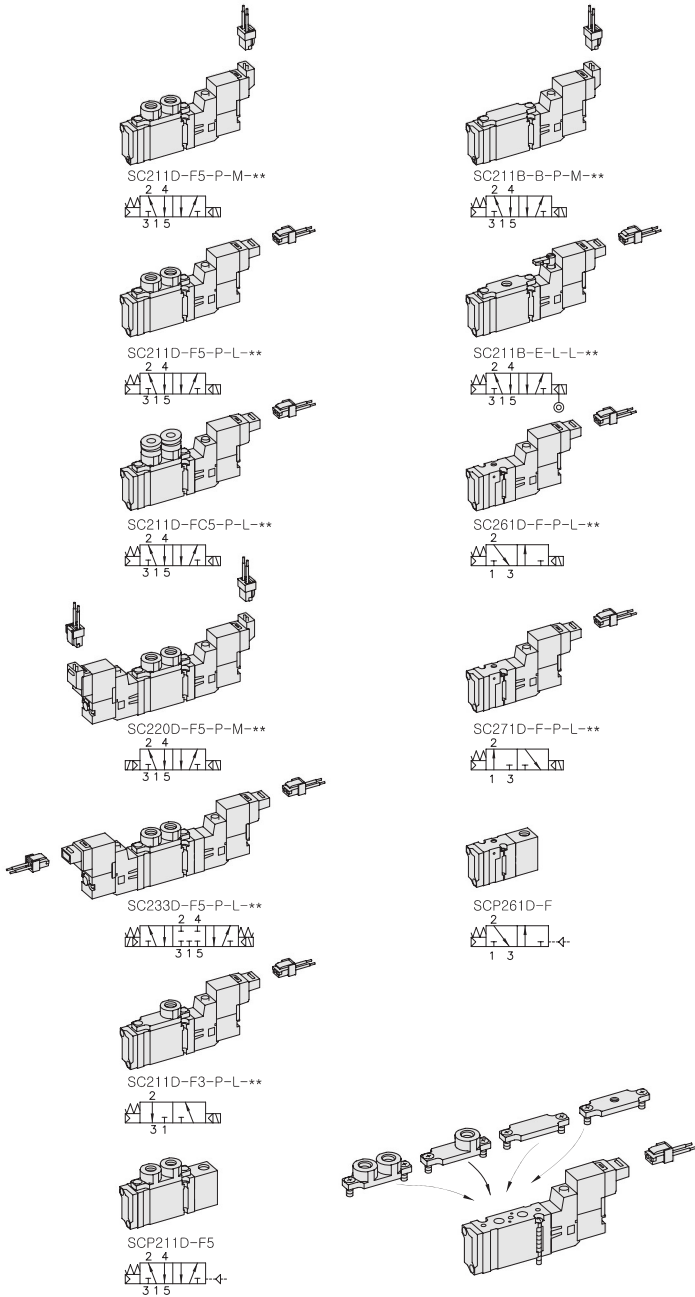
SCE500
Body Width-26mm
Thread-3/8

- SCE300
- SCE400
- SCE500

SC200. M5

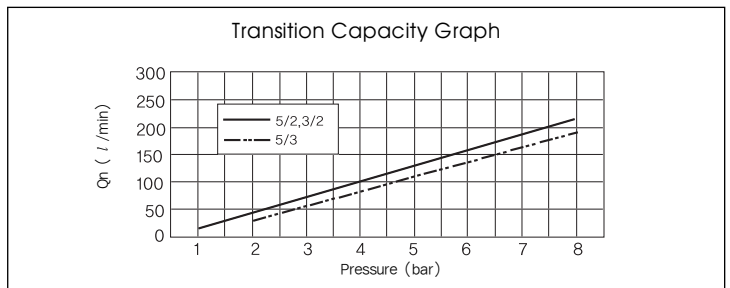
"C" COMPACT Series
Solenoid / Pneumatic Valves

- 5/2, 5/3-M5, 3/2-M3 ■ 10mm Body Width
- Manifold or Sub-Base Type
- High Efficiency, Space Economy Type
- Transition Flow 130ℓ/min (5bar)



SPECIFICATION

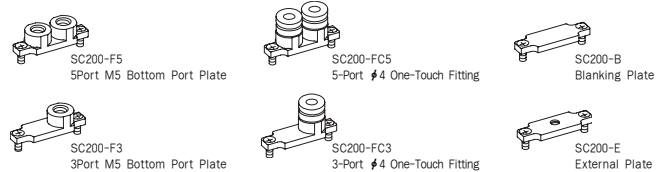
ITEM	SERIES	SOLENOID, PNEUMATIC	
		5, 3Port 2Position	5Port 3Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		2.0~7.0	2.5~7.0
Eff. Sectional Area(mm ²)-5bar		2.3	1.8
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		20ms or Less	30ms or Less
Max. Working Frequency		10c/sec	8c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		DC:10% or Less	
Power Consumption(DC)		Holding-DC: 0.65W (24V:27.0mA/12V:54.0mA)	



The Material of Parts

- Valve Body : Die-Cast Aluminium
- Spool : Aluminium
- Seals : NBR
- Spring : Stainless
- Cap : Zinc Pressure Die-Cast
- Pilot Parts : Glass Filled Nylon
- Armature : Stainless Steel
- Armature Seals : Viton

Port Plate Ordering Code (Material : Zinc)

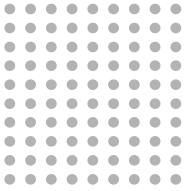


* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SC2 1 1 D - F5 - P - L - D4

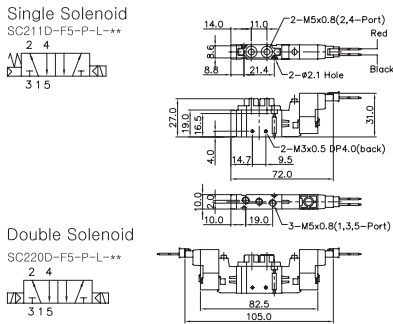
Valve Series	Function	Return Method	Port Type	Port Plate & Thread	Manual Operator	Solenoid Coil Type	Voltage
SC2 : Solenoid Valve	1 5/2 Single	0 None	D Manifold	0 None	0 None	0 None	0 None
	2 5/2 Double	1 Air + Spring	B Sub-Base	F5 5-Port M5×0.8	P Push Non-Locking	L 90 Degree Plug-in Wire Assembly with LED	D4 DC 24V
	3 5/3 Closed Center	2 Air		F3 3-Port M5×0.8	L Lever Locking	M 180 Degree Plug-in Wire Assembly with LED	D2 DC 12V
SCP2 : Pneumatic Valve	4 5/3 Open Center	3 Spring		FN5 5-Port NPT M5×0.8			
	5 5/3 Pressure Center			FN3 3-Port NPT M5×0.8			
	6 3/2 Normally Closed			FC5 5-Port φ4 One-Touch Fitting			
	7 3/2 Normally Open			FC3 3-Port φ4 One-Touch Fitting			
				E External End Plate, Plate M3×0.5			
				B Blanking End Plate			



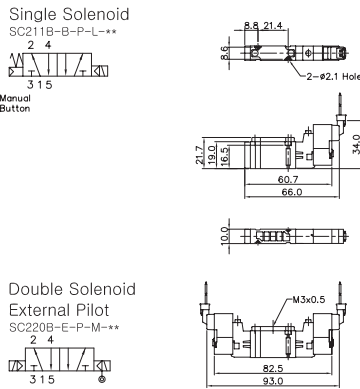
Solenoid & Pilot Actuated Spool Valves

Port Thread M5, M3

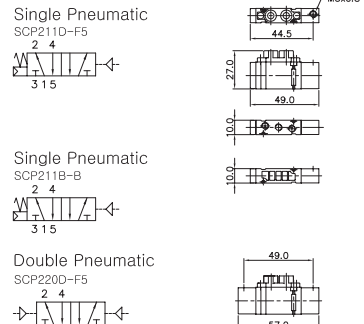
5Port 2Position Solenoid Valve (Manifold)



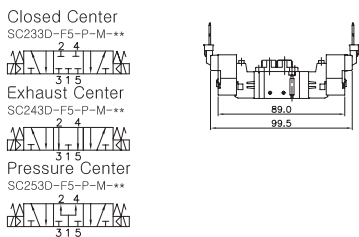
5Port 2Position Solenoid Valve (Sub-Base)



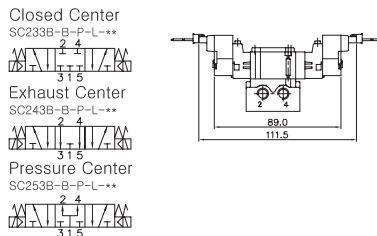
5Port 2Position Pneumatic Valve



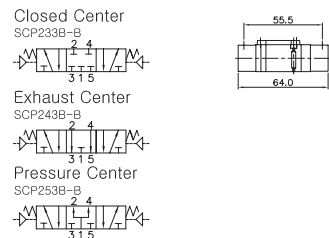
5Port 3Position Solenoid Valve (Manifold)



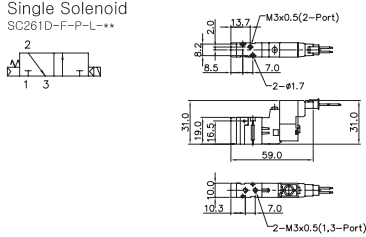
5Port 3Position Solenoid Valve (Sub-Base)



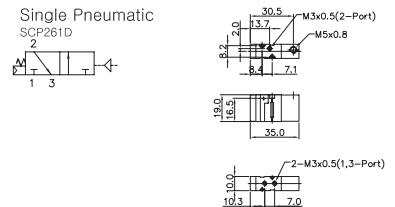
5Port 3Position Pneumatic Valve



3Port 2Position Solenoid Valve (Manifold)



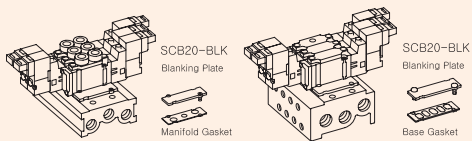
3Port 2Position Pneumatic Valve



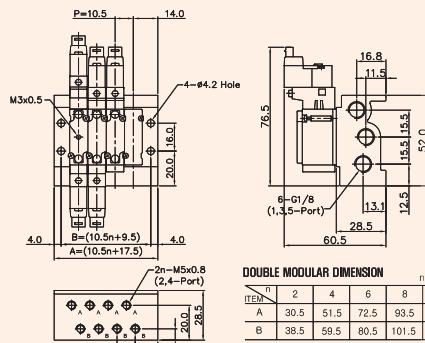
SCB20 SINGLE, DOUBLE MANIFOLD BLOCK

(SC200 Solenoid & Pneumatic Valve Use)

Manifold Block Dimension



Double Modular Manifold Block Dimension

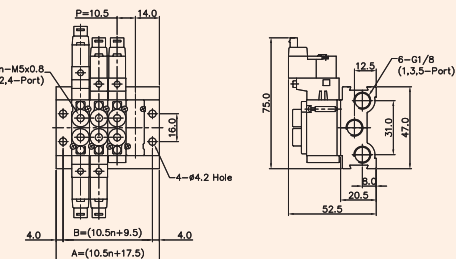
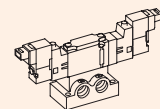


Manifold Ordering Code

SCB2 1 - D - M04

Series	Port & Thread	Function	Manifold Station
SCB2	0 None	0 None	M02 2-Station
SC200 Solenoid Valve	1 G	S Single Station Sub Base, 1/8 Port Without Pilot Ports	M04 4-Station
	2 NPT	D Manifold, Port 1/8	M06 6-Station
		DB Double Modular Manifold Block, M5 Port	M08 8-Station
		DC4 Double Modular Manifold Block, Ø 4 Fitting	M10 10-Station
		D3 Manifold, M5 Port Without Pilot Ports(3/2Way)	

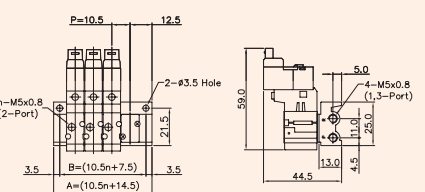
Single Station Sub Base Dimension (SCB21-S)



DOUBLE MODULAR DIMENSION

ITEM	n	2	4	6	8	10
A	30.5	51.5	72.5	93.5	114.5	
B	38.5	59.5	80.5	101.5	122.5	

Manifold Block Dimension

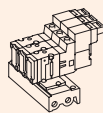


5PORT MANIFOLD BLOCK DIMENSION

ITEM	n	2	4	6	8	10
A	30.5	51.5	72.5	93.5	114.5	
B	38.5	59.5	80.5	101.5	122.5	

3PORT MANIFOLD BLOCK DIMENSION

ITEM	n	2	4	6	8	10
A	28.5	49.5	70.5	91.5	112.5	
B	35.5	56.5	77.5	98.5	119.5	

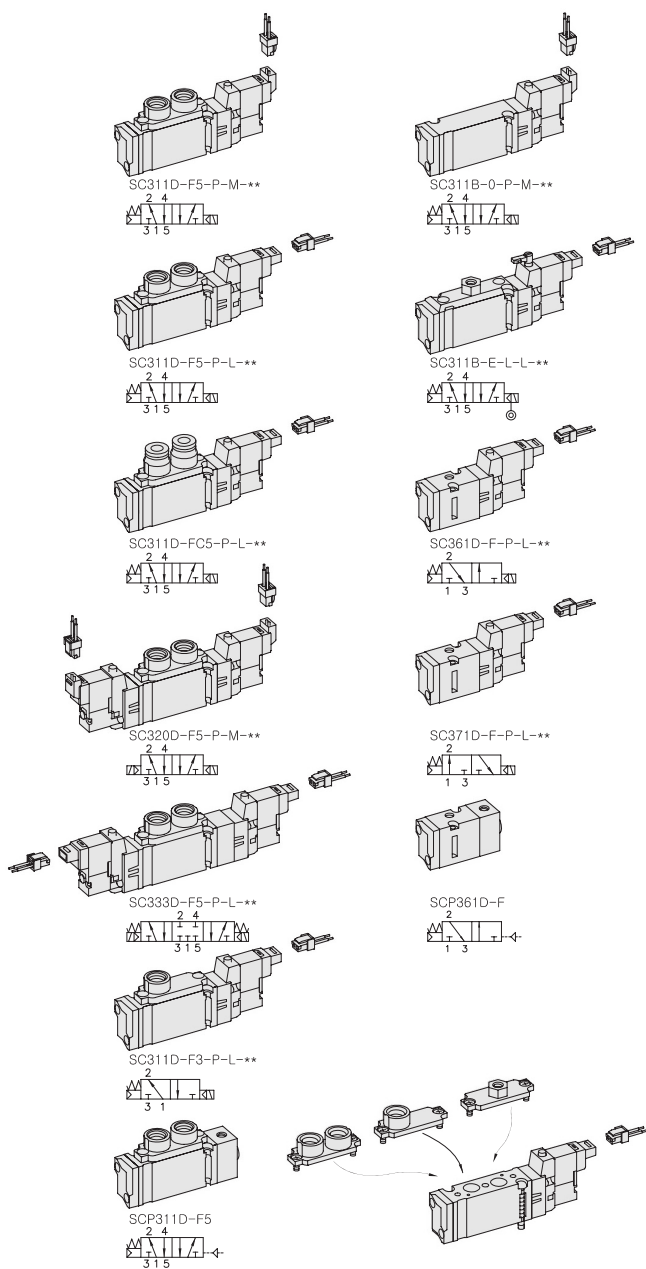


Ordering Code	Ordering Code
SCB26-BLK	SCB20-BLK
Blanking Plate Material: STS304	Blanking Plate (Material: STS304)
Manifold Gasket. (Material: NBR)	Manifold Gasket. Base Gasket. (Material: NBR)

SC300. 1/8

"C" COMPACT Series
Solenoid / Pneumatic Valves

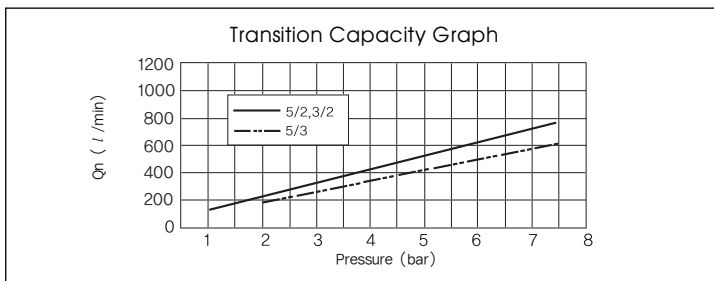
- 5/2, 5/3-1/8, 3/2-M5 ■ 15mm Body Width
- Manifold or Sub-Base Type
- High Efficiency, Space Economy Type
- Transition Flow 500ℓ/min (5bar)



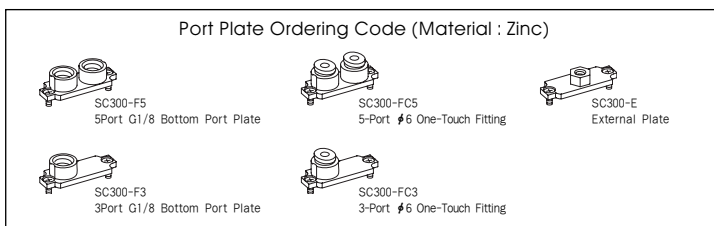
** : Voltage Selection (see page 10)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		FUNCTION	
		5, 3Port 2Position	5Port 3Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~7.0	2.0~7.0
Eff. Sectional Area(mm ²)-5bar		9.0	7.5
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		25ms or Less	35ms or Less
Max. Working Frequency		8c/sec	5c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		DC:10% or Less	
Power Consumption(DC)		Holding-DC: 0.65W (24V:27.0mA/12V:54.0mA)	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Cap : Zinc Pressure Die-Cast
 - Spool : Aluminium
 - Pilot Parts : Glass Filled Nylon
 - Seals : NBR
 - Armature : Stainless Steel
 - Spring : Stainless
 - Armature Seals : Viton

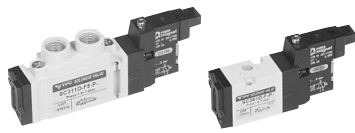
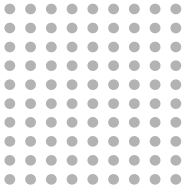


* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.



Valve Series	Function	Return Method	Port Type	Port Plate & Thread	Manual Operator	Solenoid Coil Type	Voltage	
SC3 : Solenoid Valve	1	5/2 Single	0	None	D	Manifold	0	None
	2	5/2 Double	1	Air + Spring	B	Sub-Base	F5	5-Port G1/8
	3	5/3 Closed Center	2	Air	F3	3-Port G1/8	P	Push Non-Locking
SCP3 : Pneumatic Valve	4	5/3 Open Center	3	Spring	FN5	5-Port NPT1/8	L	Lever Locking
	5	5/3 Pressure Center			FN3	3-Port NPT1/8		
	6	3/2 Normally Closed			FC5	5-Port #6 One-Touch Fitting		
	7	3/2 Normally Open			FC3	3-Port #6 One-Touch Fitting		
				E	External End Plate, Plate M5×0.8			

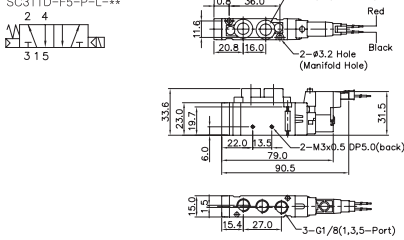


Solenoid & Pilot Actuated Spool Valves

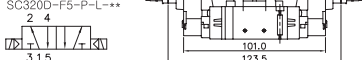
Port Thread 1/8, M5

5Port 2Position Solenoid Valve (Manifold)

Single Solenoid
SC311D-F5-P-L-***

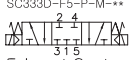


Double Solenoid
SC320D-F5-P-L-***

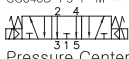


5Port 3Position Solenoid Valve (Manifold)

Closed Center
SC330D-F5-P-M-***



Exhaust Center
SC340D-F5-P-M-***

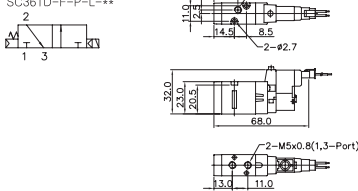


Pressure Center
SC350D-F5-P-M-***



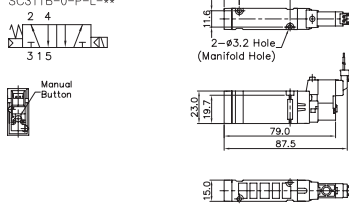
3Port 2Position Solenoid Valve (Manifold)

Single Solenoid
SC361D-F-P-L-***

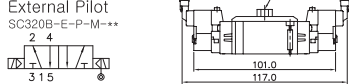


5Port 2Position Solenoid Valve (Sub-Base)

Single Solenoid
SC311B-0-P-L-***

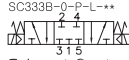


Double Solenoid
External Pilot
SC320B-E-P-M-***

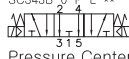


5Port 3Position Solenoid Valve (Sub-Base)

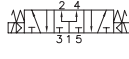
Closed Center
SC333B-0-P-L-***



Exhaust Center
SC343B-0-P-L-***

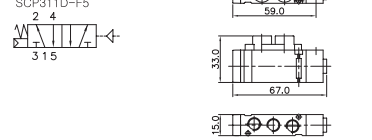


Pressure Center
SC353B-0-P-L-***

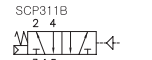


5Port 2Position Pneumatic Valve

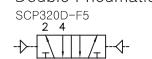
Single Pneumatic
SCP311D-F5



Single Pneumatic
SCP311B

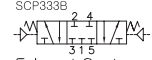


Double Pneumatic
SCP320D-F5

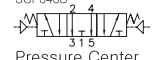


5Port 3Position Pneumatic Valve

Closed Center
SCP333B



Exhaust Center
SCP343B

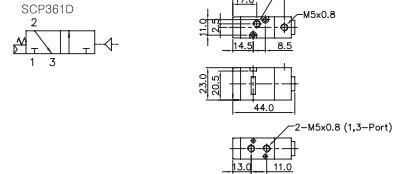


Pressure Center
SCP353B



3Port 2Position Pneumatic Valve

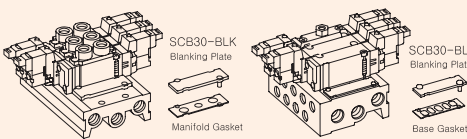
Single Pneumatic
SCP361D



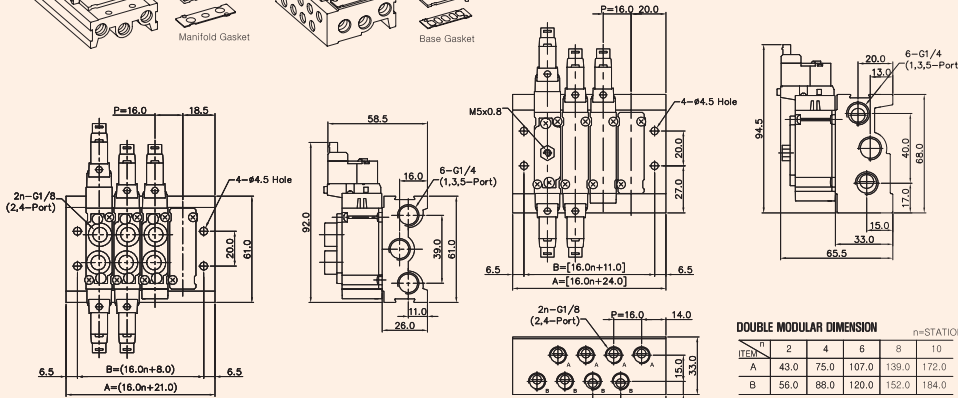
SCB30 SINGLE, DOUBLE MANIFOLD BLOCK

(SC300 Solenoid & Pneumatic Valve Use)

Manifold Block Dimension

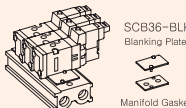


Double Modular Manifold Block Dimension

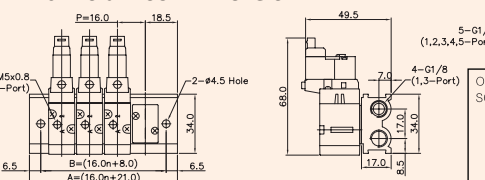


ITEM	n=STATION				
	2	4	6	8	10
A	40.0	72.0	104.0	136.0	168.0
B	53.0	85.0	117.0	149.0	181.0

ITEM	n=STATION				
	2	4	6	8	10
A	40.0	72.0	104.0	136.0	168.0
B	53.0	85.0	117.0	149.0	181.0



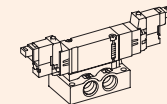
Manifold Block Dimension



Manifold Ordering Code

Series	Port & Thread	Function	Manifold Station
SCB3	0	None	M02
SC300 Solenoid Valve	1	G	M04
	2	NPT	M06
		D	M08
		DB	M10
		DC6	
		D3	

Single Station Sub Base Dimension (SCB31-S)

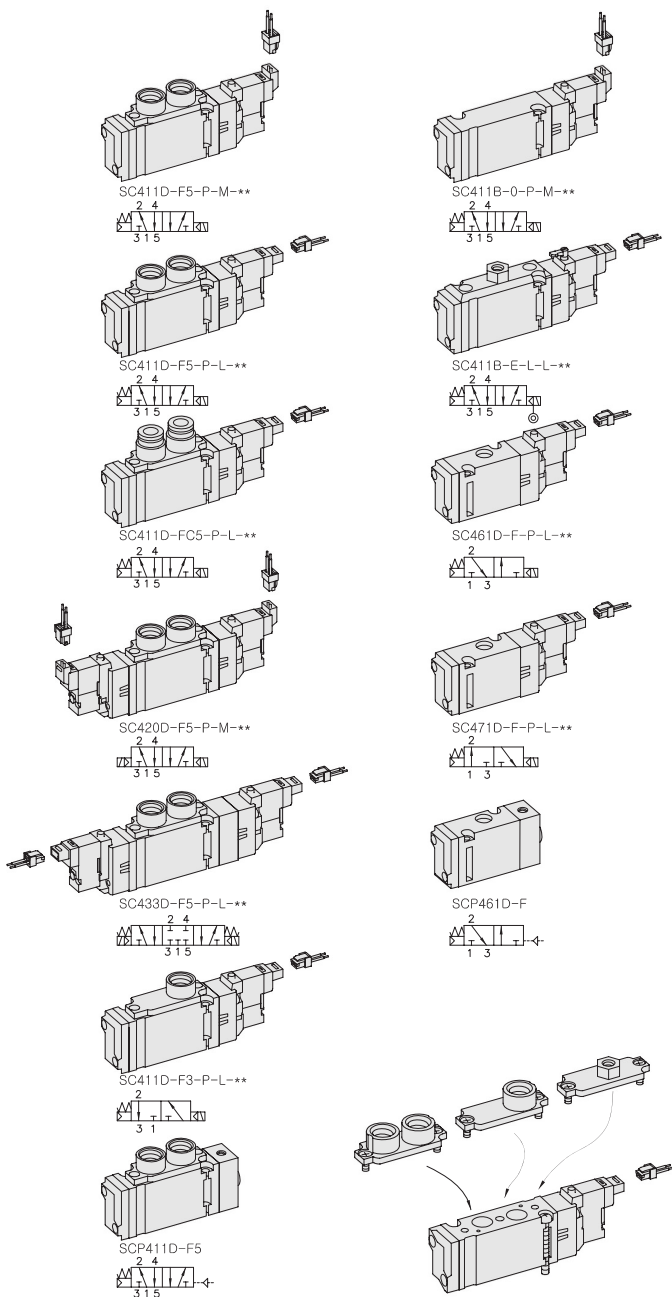


Ordering Code	Ordering Code
SCB36-BLK	SCB30-BLK
Blanking Plate (Material: STS304)	Blanking Plate (Material: STS304)
Manifold Gasket (Material: NBR)	Manifold Gasket
	Base Gasket (Material: NBR)

SC400. 1/4

"C" COMPACT Series
Solenoid / Pneumatic Valves

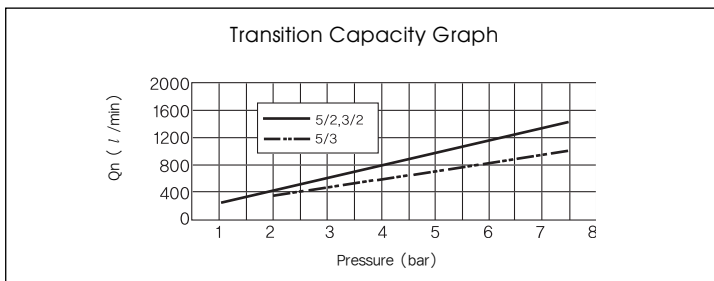
- 5/2, 5/3-1/4, 3/2-1/8 ■ 18mm Body Width
- Manifold or Sub-Base Type
- High Efficiency, Space Economy Type
- Transition Flow 900ℓ/min (5bar)



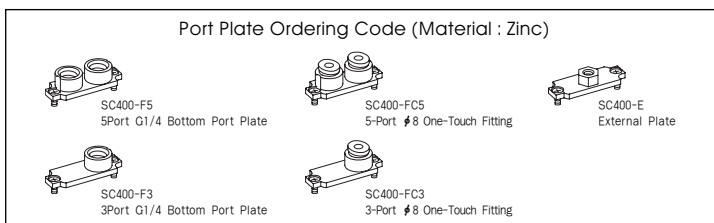
** : Voltage Selection (see page 10)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		FUNCTION	
		5, 3Port 2Position	5Port 3Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~7.0	2.0~7.0
Eff. Sectional Area(mm ²)-5bar		16.0	12.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		25ms or Less	35ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		DC:10% or Less	
Power Consumption(DC)		Holding-DC: 0.65W (24V:27.0mA/12V:54.0mA)	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Cap : Zinc Pressure Die-Cast
 - Spool : Aluminium
 - Pilot Parts : Glass Filled Nylon
 - Seals : NBR
 - Armature : Stainless Steel
 - Spring : Stainless
 - Armature Seals : Viton



* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SC4 1 1 D - F5 - P - L - D4

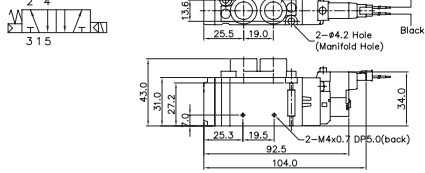
Valve Series	Function	Return Method	Port Type	Port Plate & Thread	Manual Operator	Solenoid Coil Type	Voltage
SC3 : Solenoid Valve	1 5/2 Single	0 None	D Manifold	0 None	0 None	0 None	0 None
	2 5/2 Double	1 Air + Spring	B Sub-Base	F5 5-Port G1/4	P Push	L 90 Degree Plug-in Wire Assembly with LED	D4 DC 24V
	3 5/3 Closed Center	2 Air		F3 3-Port G1/4	Non-Locking		D2 DC 12V
SCP3 : Pneumatic Valve	4 5/3 Open Center	3 Spring		FN5 5-Port NPT1/4	L Lever Locking	M 180 Degree Plug-in Wire Assembly with LED	
	5 5/3 Pressure Center			FN3 3-Port NPT1/4			
	6 3/2 Normally Closed			FC5 5-Port ø8 One-Touch Fitting			
	7 3/2 Normally Open			FC3 3-Port ø8 One-Touch Fitting			
				E External End Plate, Plate M5×0.8			

Solenoid & Pilot Actuated Spool Valves

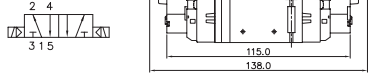
Port Thread 1/4, 1/8

5Port 2Position Solenoid Valve (Manifold)

Single Solenoid
SC411D-F5-P-L-***



Double Solenoid
SC420D-F5-P-L-***



5Port 3Position Solenoid Valve (Manifold)

Closed Center
SC433D-F-P-M-***



Exhaust Center
SC443D-F5-P-M-***

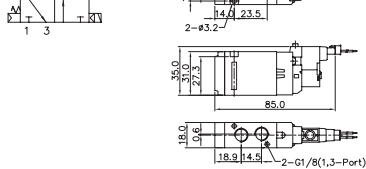


Pressure Center
SC453D-F5-P-M-***



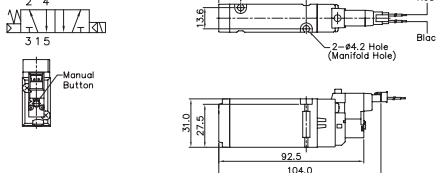
3Port 2Position Solenoid Valve (Manifold)

Single Solenoid
SC461D-F-P-L-***

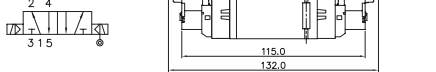


5Port 2Position Solenoid Valve (Sub-Base)

Single Solenoid
SC411B-0-P-L-***



Double Solenoid
External Pilot
SC420B-E-P-L-***

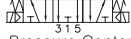


5Port 3Position Solenoid Valve (Sub-Base)

Closed Center
SC433B-0-P-L-***



Exhaust Center
SC443B-0-P-L-***

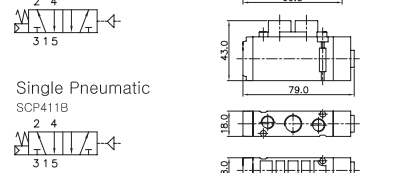


Pressure Center
SC453B-0-P-L-***



5Port 2Position Pneumatic Valve

Single Pneumatic
SCP411D-F5

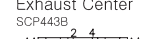


Double Pneumatic
SCP420D-F5

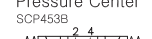


5Port 3Position Pneumatic Valve

Closed Center
SCP433B



Exhaust Center
SCP443B

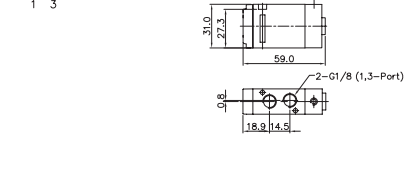


Pressure Center
SCP453B



3Port 2Position Pneumatic Valve

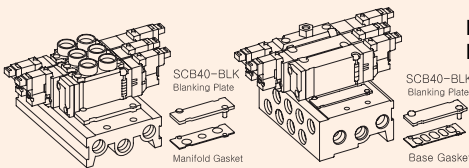
Single Pneumatic
SCP461D



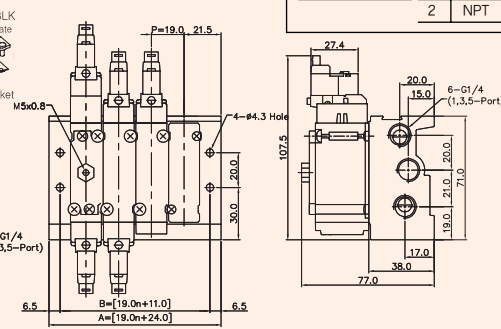
SCB40 SINGLE, DOUBLE MANIFOLD BLOCK

(SC400 Solenoid & Pneumatic Valve Use)

Manifold Block Dimension



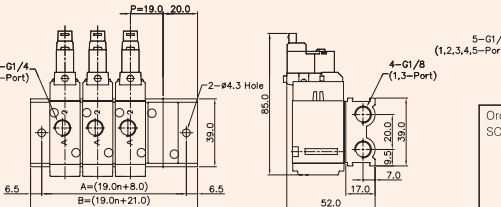
Double Modular Manifold Block Dimension



Double Modular Sub Base Dimension

ITEM	2	4	6	8	10
B	49.0	87.0	125.0	163.0	201.0
A	62.0	100.0	138.0	176.0	214.0

Manifold Block Dimension

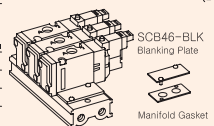


5Port Manifold Block Dimension

ITEM	2	4	6	8	10
B	46.0	84.0	122.0	160.0	198.0
A	59.0	97.0	135.0	173.0	211.0

3Port Manifold Block Dimension

ITEM	2	4	6	8	10
B	46.0	84.0	122.0	160.0	198.0
A	59.0	97.0	135.0	173.0	211.0

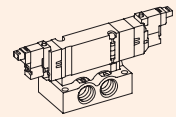


Manifold Ordering Code

SCB4 1 - D - M04

Series	Port & Thread	Function	Manifold Station
SCB3	0 None	0 None	M02 2-Station
SC400 Solenoid Valve	1 G	S Single Station Sub Base, 1/4 Port Without Pilot Ports	M04 4-Station
	2 NPT	D Manifold, Port 1/4	M06 6-Station
		DB Double Modular Manifold Block, 1/4 Port	M08 8-Station
		DC8 Double Modular Manifold Block, Ø 8 Fitting	M10 10-Station
		D3 Manifold, Port 1/8 (3/2Way)	

Single Station Sub Base Dimension (SCB41-S)



Ordering Code
SCB46-BLK

- Blanking Plate (Material : STS304)
- Manifold Gasket (Material : NBR)

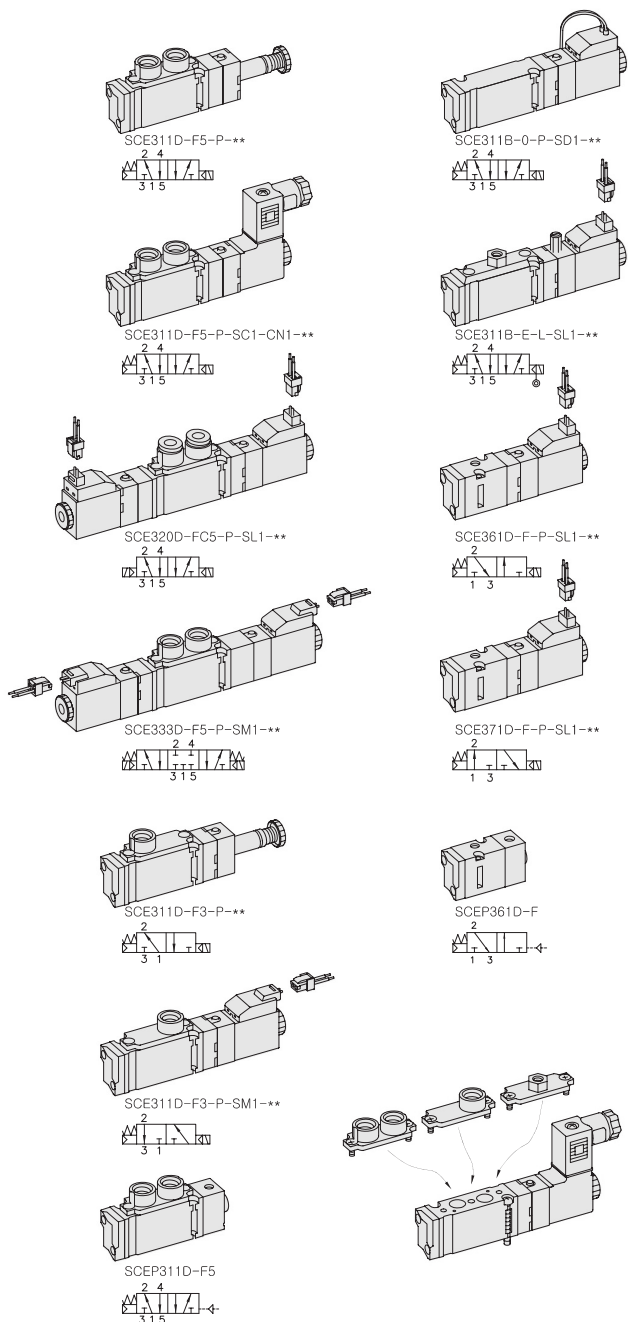
Ordering Code
SCB40-BLK

- Blanking Plate (Material : STS304)
- Manifold Gasket (Material : NBR)
- Base Gasket (Material : NBR)

SCE300.1/8

"E" ECONOMY Series
Solenoid / Pneumatic Valves

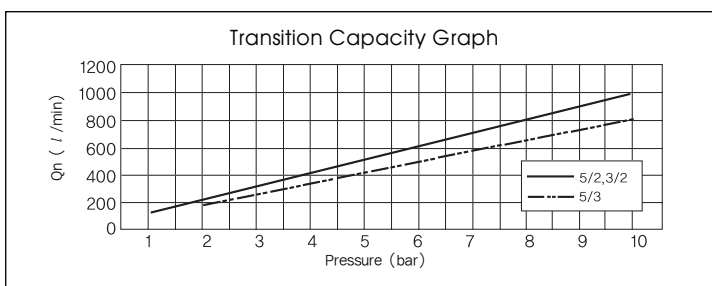
- 5/2, 5/3-1/8, 3/2-M5 ■ 15mm Body Width
- Manifold or Sub-Base Type
- High Efficiency, Expense Reduction Type
- Transition Flow 500ℓ/min (5bar)



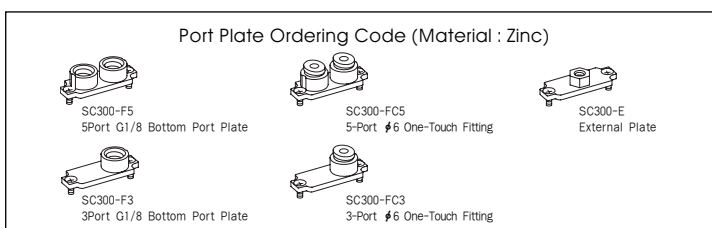
***: Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		5, 3Port 2Postion	5Port 3Postion
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Sectional Area(mm ²)-5bar		9.5	7.5
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		25ms or Less	35ms or Less
Max. Working Frequency		8c/sec	5c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:3.5VA(60Hz) / DC:2.5W	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton



* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

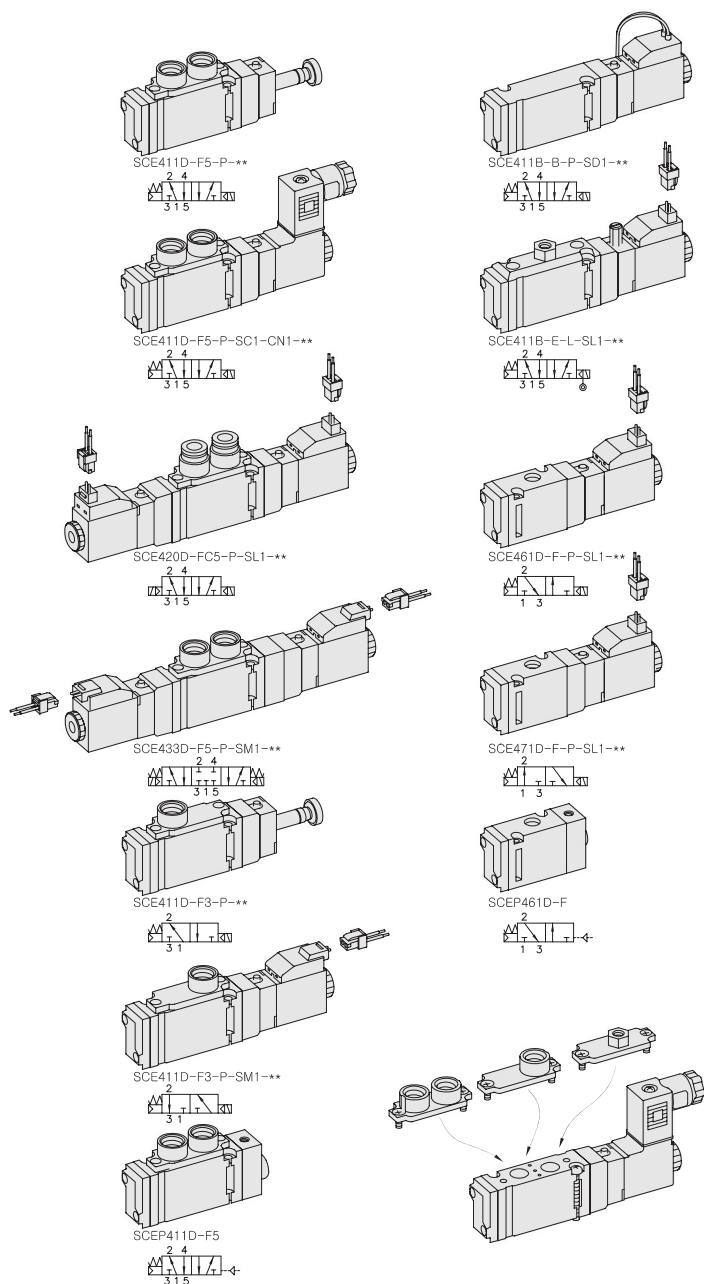
SCE3 1 1 D - F5 - P - SC1 - CN1 - D4

Valve Series	Function	Return Method	Port Type	Port Plate & Thread	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SCE3 : Solenoid Valve	1	5/2 Single	0	None	D	Manifold	0	None
	2	5/2 Double	1	Air + Spring	B	Sub-Base	SC1	3 Pin Connector Coil
	3	5/3 Closed Center	2	Air	F3	3-Port G1/8	SG1	Grommet/Flying Leads
	4	5/3 Open Center	3	Spring	FN5	5-Port NPT1/8	SD1	Grommet/Flying Leads With LED
SCEP3 : Pneumatic Valve	5	5/3 Pressure Center			FN3	3-Port NPT1/8		
	6	3/2 Normally Closed			FC5	5-Port #6 One-Touch Fitting	SL1	90 Degree Plug-in Wire Assembly with LED
	7	3/2 Normally Open			FC3	3-Port #6 One-Touch Fitting	SM1	180 Degree Plug-in Wire Assembly with LED
					E	External End Plate, Plate M5×0.8		

SCE400.1/4

"E" ECONOMY Series
Solenoid / Pneumatic Valves

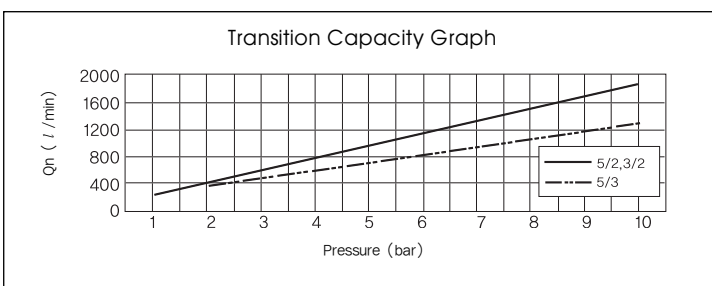
- 5/2, 5/3-1/4, 3/2-1/8 ■ 18mm Body Width
- Manifold or Sub-Base Type
- High Efficiency, Expense Reduction Type
- Transition Flow 900ℓ/min (5bar)



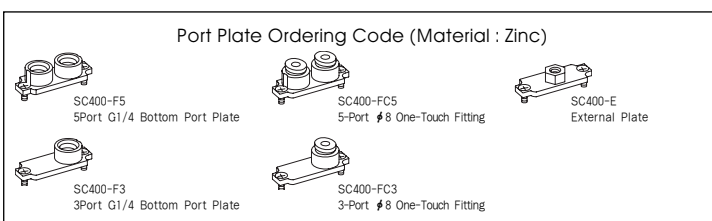
** : Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		5, 3Port 2Postion	5Port 3Postion
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Sectional Area(mm ²)-5bar		16.0	12.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		25ms or Less	35ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:3.5VA(60Hz) / DC:2.5W	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton



* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

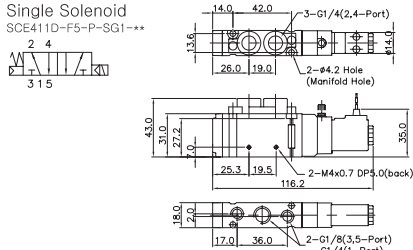
SCE4 1 1 D - F5 - P - SC1 - CN1 - D4

Valve Series	Function	Return Method	Port Type	Port Plate & Thread	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SCE4 : Solenoid Valve	1	5/2 Single	0	None	D	Manifold	0	None
	2	5/2 Double	1	Air + Spring	B	Sub-Base	CN1	Normal Connector
	3	5/3 Closed Center	2	Air	F3	3-Port G1/4	SG1	Grommet / Flying Leads
SCEP4 : Pneumatic Valve	4	5/3 Open Center	3	Spring	FN5	5-Port NPT1/4	SD1	Grommet / Flying Leads With LED
	5	5/3 Pressure Center			FN3	3-Port NPT1/4	SL1	90 Degree Plug-in Wire Assembly with LED
	6	3/2 Normally Closed			FC5	5-Port #8 One-Touch Fitting	SM1	180 Degree Plug-in Wire Assembly with LED
	7	3/2 Normally Open			FC3	3-Port #8 One-Touch Fitting		
				E	External End Plate, Plate M5×0.8			

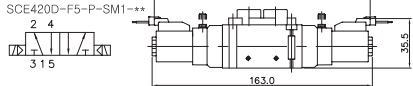
Solenoid & Pilot Actuated Spool Valves

Port Thread 1/4, 1/8

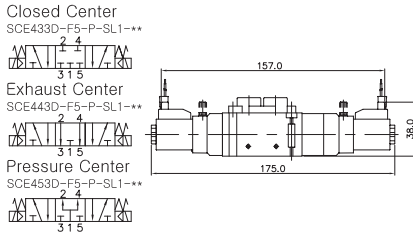
5Port 2Position Solenoid Valve (Manifold)



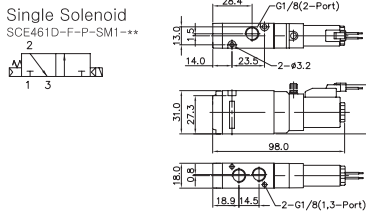
Double Solenoid



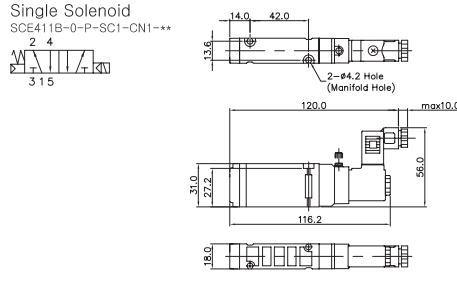
5Port 3Position Solenoid Valve (Manifold)



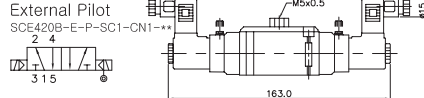
3Port 2Position Solenoid Valve (Manifold)



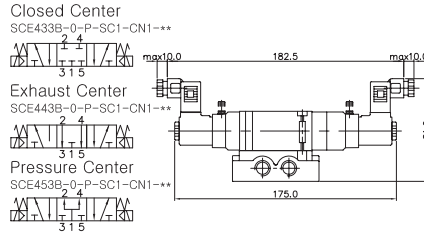
5Port 2Position Solenoid Valve (Sub-Base)



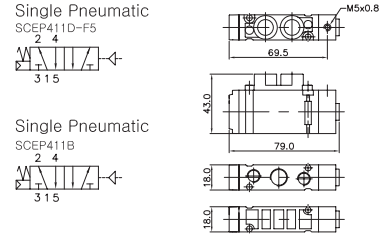
Double Solenoid



5Port 3Position Solenoid Valve (Sub-Base)



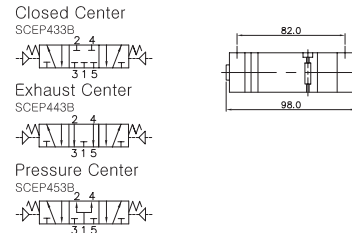
5Port 2Position Pneumatic Valve



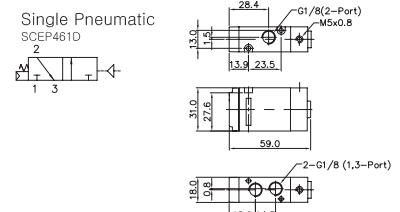
Double Pneumatic



5Port 3Position Pneumatic Valve



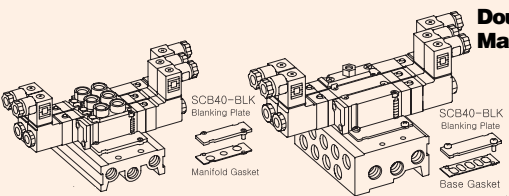
3Port 2Position Pneumatic Valve



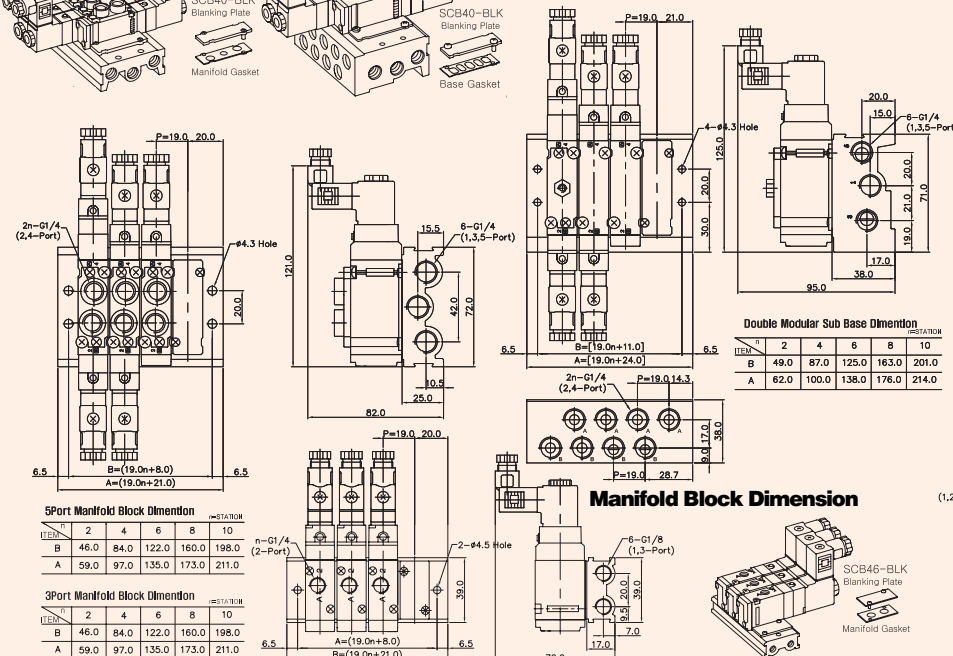
SCB40 SINGLE, DOUBLE MANIFOLD BLOCK

(SCE400 Solenoid & Pneumatic Valve Use)

Manifold Block Dimension



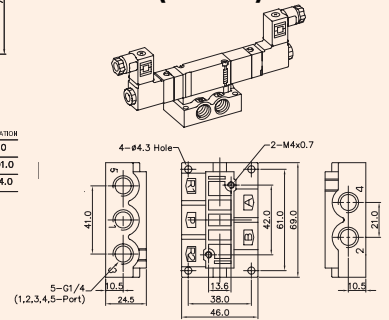
Double Modular Manifold Block Dimension



Manifold Ordering Code

SCB4		1 - D - M04	
Series	Port & Thread	Function	Manifold Station
SCB4	0 None	0 None	M02 2-Station
SC400 Solenoid Valve	1 G	S Single Station Sub Base, 1/4 Port Without Pilot Ports	M04 4-Station
	2 NPT	D Manifold, Port 1/4	M06 6-Station
		DB Double Modular Manifold Block, 1/4 Port	M08 8-Station
		DC8 Double Modular Manifold Block, Ø 8 Fitting	M10 10-Station
		D3 Manifold, Port 1/8 (3/2Way)	

Single Station Sub Base Dimension (SCB41-S)



ITEM	2	4	6	8	10
B	49.0	87.0	125.0	163.0	201.0
A	62.0	100.0	138.0	176.0	214.0

5Port Manifold Block Dimension		n-STATION			
ITEM	2	4	6	8	10
B	46.0	84.0	122.0	160.0	198.0
A	59.0	97.0	135.0	173.0	211.0

3Port Manifold Block Dimension		n-STATION			
ITEM	2	4	6	8	10
B	46.0	84.0	122.0	160.0	198.0
A	59.0	97.0	135.0	173.0	211.0

Ordering Code

- SCB46-BLK
Blanking Plate (Material : STS304)
Manifold Gasket. (Material : NBR)

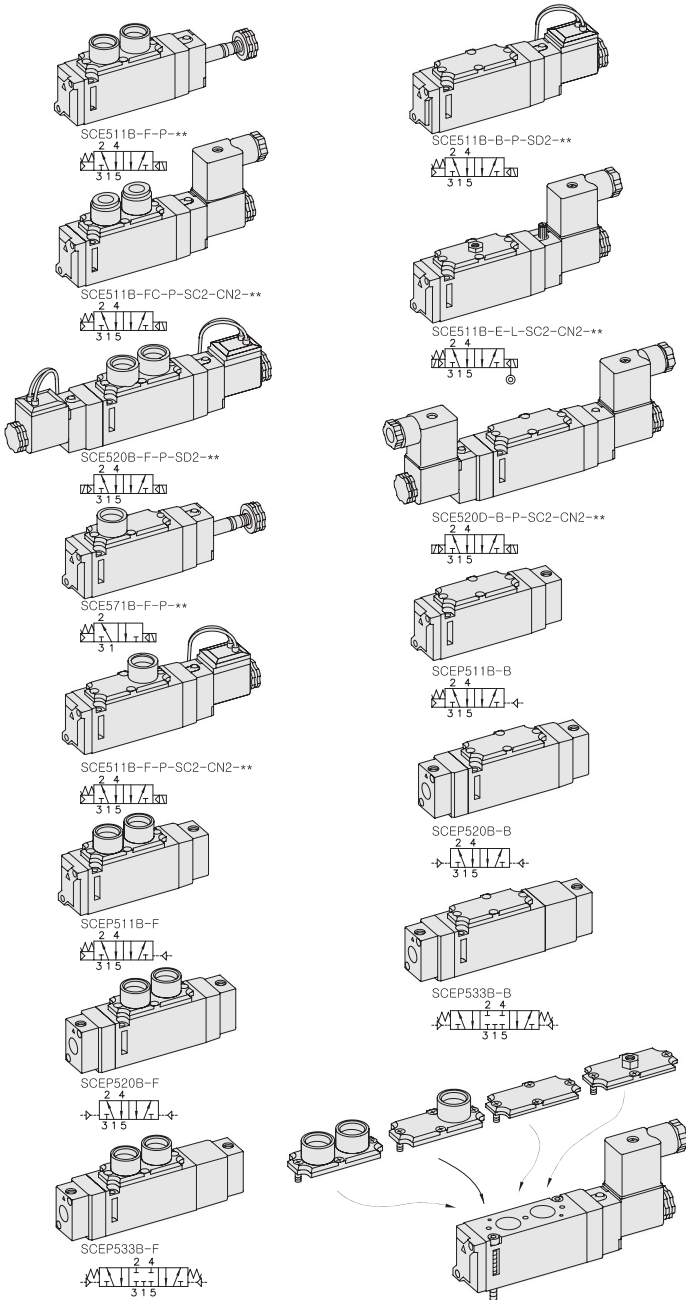
Ordering Code

- SCB40-BLK
Blanking Plate (Material : STS304)
Manifold Gasket. (Material : NBR)
Base Gasket. (Material : NBR)

SCE500. 3/8

"E" ECONOMY Series
Solenoid / Pneumatic Valves

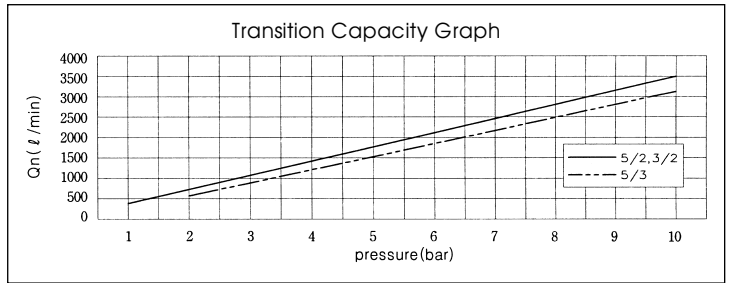
- 5/2, 5/3, 3/2-3/8 ■ 26mm Body Width
- Sub-Base or Manifold Mounting Type
- High Efficiency, Expense Reduction Type
- Transition Flow 2200ℓ/min (5bar)



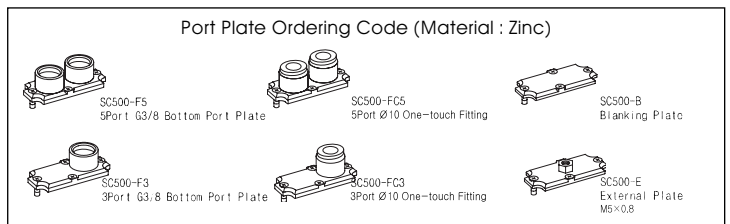
** : Voltage Selection (see page 60)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		FUNCTION	
		5, 3 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Sectional Area(mm ²)-5bar		40.0	30.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		30ms or Less	40ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:5.5VA(60Hz) / DC:2.5W	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton



* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SCE5 1 1 B - F - P - SC2 - CN2 - D4

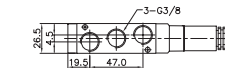
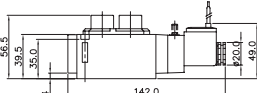
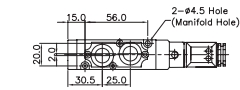
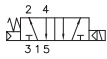
Valve Series	Function	Return Method	Port Type	Port Plate & Thread	Manual Operator	Solenoid Coil Type	Connector Type	Voltage		
SCE5 : Solenoid Valve	1	5/2 Single	0	None	D	Manifold	F	G3/8	0	None
	2	5/2 Double	1	Air + Spring	B	Sub-Base	FN	NPT 3/8	P	Push
	3	5/3 Closed Center	2	Air	FC	Ø10 One-Touch Fitting	SG2	Grommet / Flying Leads	CD2	Connector With LED
	4	5/3 Open Center	3	Spring	B	Blanking End Plate	SD2	Grommet / Flying Leads With LED	CZ2	Connector With LED & Surge Suppressor
SCEP5 : Pneumatic Valve	5	5/3 Pressure Center			E	External End Plate, Plate M5×0.8			A2	AC 220V
	6	3/2 Normally Closed							A1	AC 110V
	7	3/2 Normally Open							A4	AC 24V
									D4	DC 24V
									D2	DC 12V

Solenoid & Pilot Actuated Spool Valves

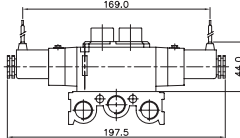
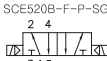
Port Thread 3/8

5Port 2Position Solenoid Valve (Manifold)

Single Solenoid
SCE511D-B-P-SG2-***

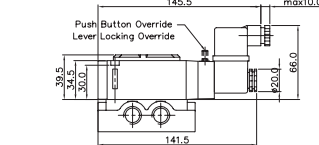
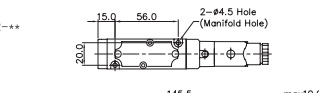
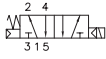


Double Solenoid
SCE520B-F-P-SG2-***

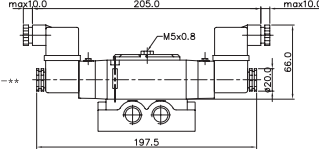
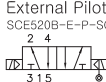


5Port 2Position Solenoid Valve (Sub-Base)

Single Solenoid
SCE511B-B-P-SC2-CN2-***

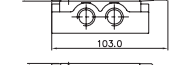
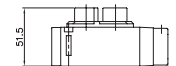
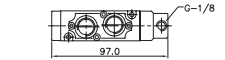


Double Solenoid
External Pilot
SCE520B-E-P-SC2-CN2-***

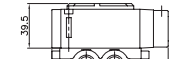


5Port 2Position Pneumatic Valve

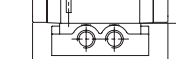
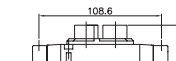
Single Pneumatic
SCEP511B-F



Single Pneumatic
SCEP511B-B

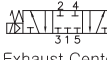


Double Pneumatic
SCEP520B-F

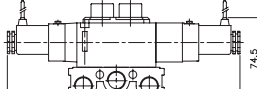
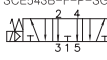


5Port 3Position Solenoid Valve (Manifold)

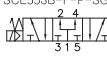
Closed Center
SCE533B-F-P-SG2-***



Exhaust Center
SCE543B-F-P-SG2-***

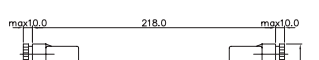
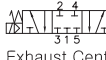


Pressure Center
SCE553B-F-P-SG2-***

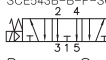


5Port 3Position Solenoid Valve (Sub-Base)

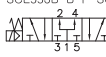
Closed Center
SCE533B-B-P-SC2-CN2-***



Exhaust Center
SCE543B-B-P-SC2-CN2-***

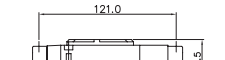
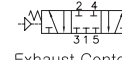


Pressure Center
SCE553B-B-P-SC2-CN2-***

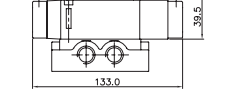


5Port 3Position Pneumatic Valve

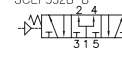
Closed Center
SCEP532B-B



Exhaust Center
SCEP542B-B



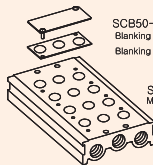
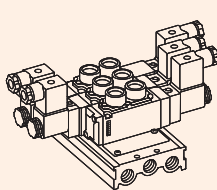
Pressure Center
SCEP552B-B



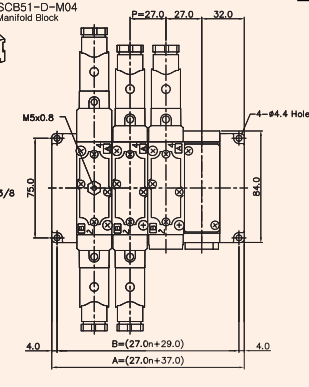
SCB50 SINGLE, DOUBLE MANIFOLD BLOCK

(SCE500 Solenoid & Pneumatic Valve Use)

Manifold Block Dimension

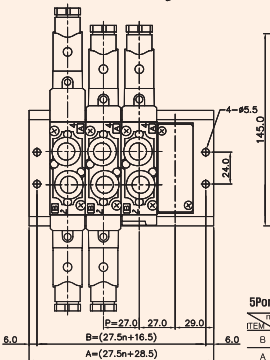


Double Modular Sub Base Dimension



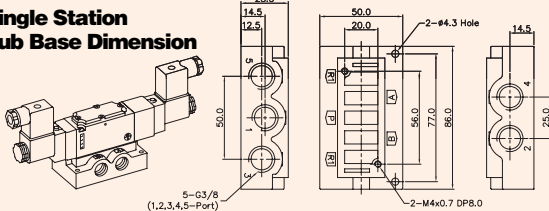
Manifold Ordering Code

SCB5 1 - D - M04			
Series	Port & Thread	Function	Manifold Station
SCB5	0 None	0 None	M02 2-Station
SCE500 Solenoid Valve	1 G	S Single Station Sub Base, 3/8 Port Without Pilot Ports	M04 4-Station
	2 NPT	D Manifold, Port 3/8	M06 6-Station
		DB Double Modular Sub Base, 3/8 Port Without Pilot Ports	M08 8-Station
		DC10 Double Modular Sub Base, ø 10 Fitting	M10 10-Station
		E End Cover, 3/8 Port	
		EB End Blanking Cover	



ITEM	n-STATION				
	2	4	6	8	10
B	71.5	126.5	181.5	236.5	291.5
A	83.5	138.5	193.5	248.5	303.5

Single Station Sub Base Dimension



ITEM	n-STATION				
	2	4	6	8	10
B	83.0	137.0	191.0	245.0	299.0
A	91.0	145.0	199.0	253.0	307.0

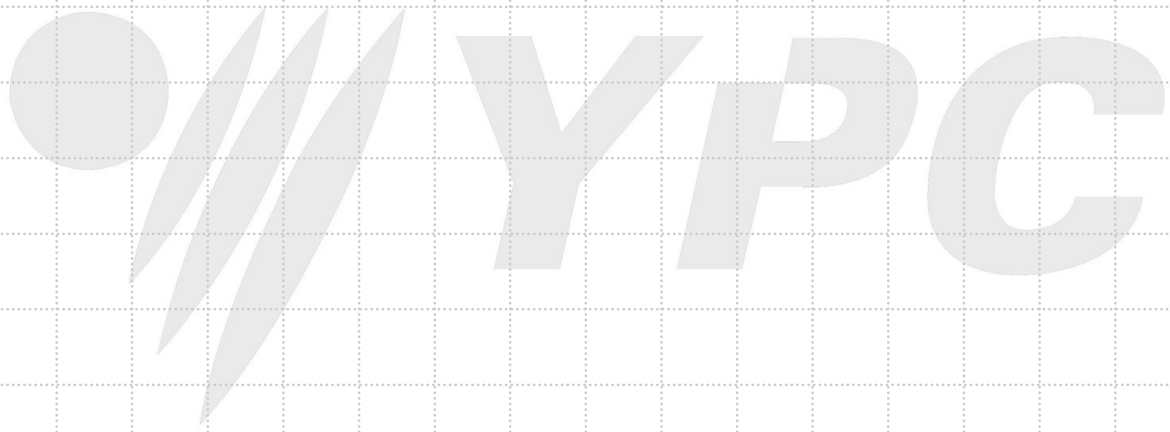
Ordering Code
SCB50-BLK
Blanking Plate
(Material: STS304)
Manifold Gasket.
Base Gasket.
(Material: NBR)

Ordering Code
SCB51-E
End Cover, 3/8
(Material: Al)

Ordering Code
SCB50-DC10
Double Modular
Sub Base
ø10 one-touch
fitting
(Material: Al)

Ordering Code
SCB51-DB
Double Modular
Sub Base, 3/8
(Material: Al)

Ordering Code
SCB50-EB
End Blanking
Cover
(Material: Al)



SN (NAMUR) Series

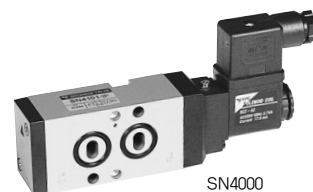
5/2, 5/3 Solenoid, Pneumatic Valve

CHAPTER 07

- SN3000
- SN4000



SN3000
Body Width-23mm
Thread-1/4

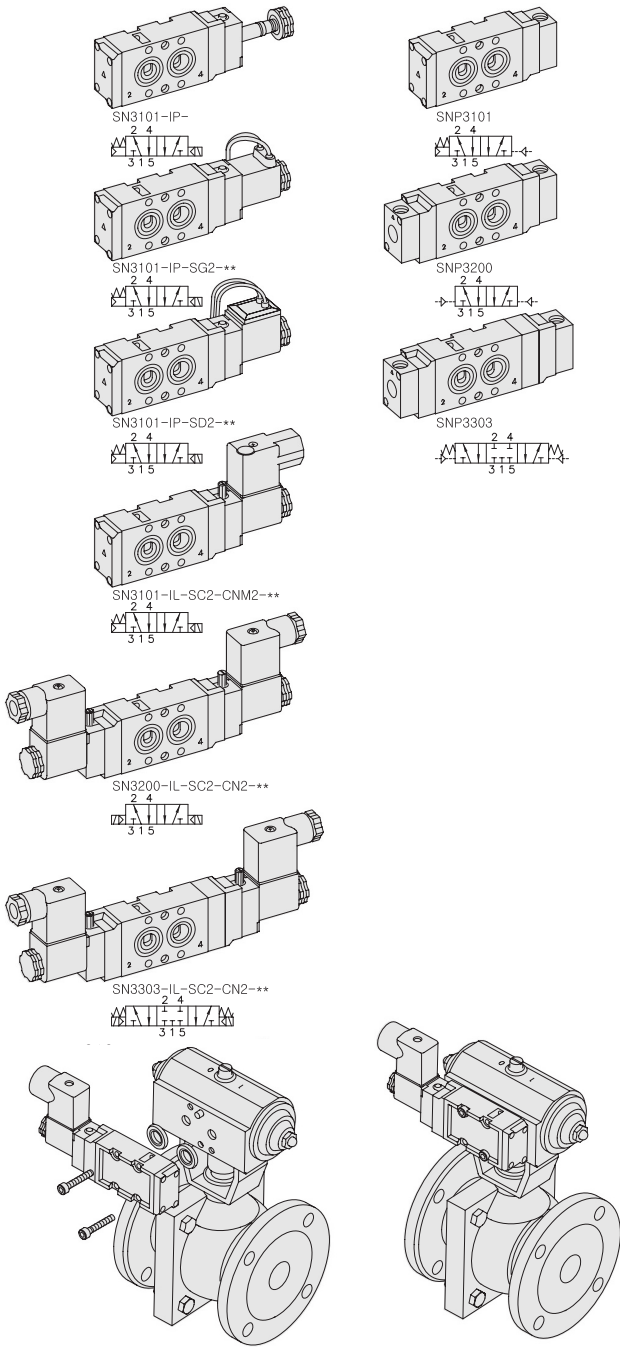


SN4000
Body Width-30mm
Thread-1/4

SN3000. 1/4

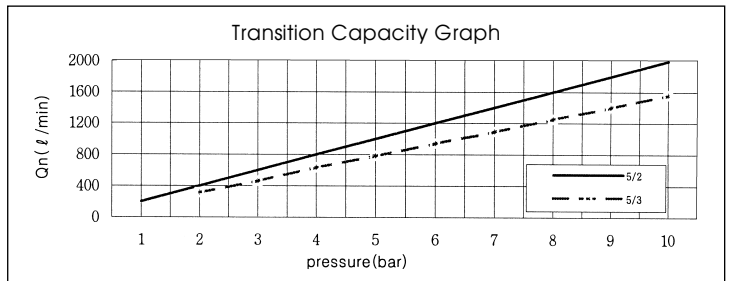
NAMUR Interface
Solenoid / Pneumatic Valves

- 5/2, 5/3 -1/4
- 23mm Body Width
- Transition Flow 1000ℓ/min (5bar)

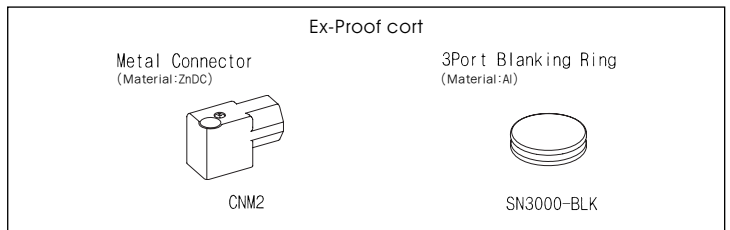


SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		5 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Sectional Area(mm ²)-5bar		18.0	12.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		30ms or Less	40ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:5.5VA(60Hz) / DC:2.5W	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton

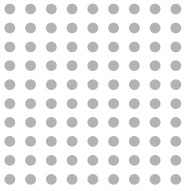


* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

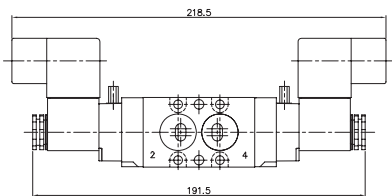
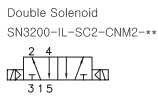
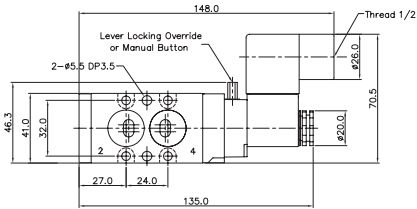
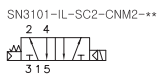
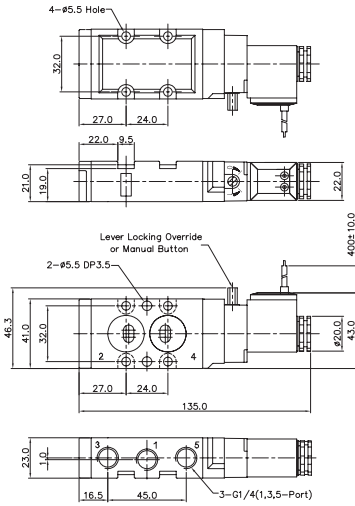
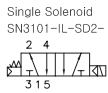
SN3 1 0 1 - I P - SC2 - CN2 - A2

Valve Series	Function	Port Size & Thread	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SN3 : Solenoid Valve	1 5/2 Single	0 G 1/4	0 None	I Internal Pilot	O None	O None	O None	O None
	2 5/2 Double	1 NPT 1/4	1 Air + Spring		P Push	SC2 3 Pin Connector Coil	CN2 Normal Connector	A2 AC 220V
	3 5/3 Closed Center		2 Air		Non-Locking	SG2 Grommet/Flying Leads	CD2 Connector With LED	A1 AC 110V
	4 5/3 Open Center		3 Spring		L Lever Locking	SD2 Grommet/Flying Leads With LED	C22 Connector With LED & Surge Suppressor	A4 AC 24V D4 DC 24V
SNP3 : Pneumatic Valve	5 5/3 Pressure Center						CNM2 Metal Connector	D2 DC 12V
							CDM2 Metal Connector With LED	
							C2M2 Metal Connector With LED & Surge Suppressor	

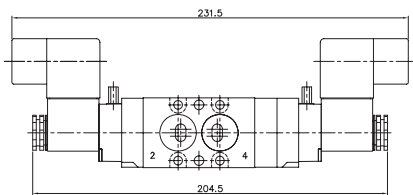
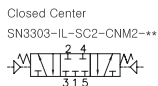


Solenoid & Pilot Actuated Spool Valves

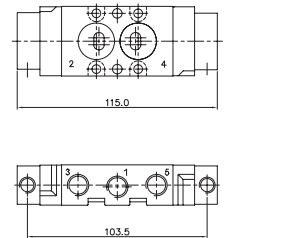
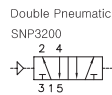
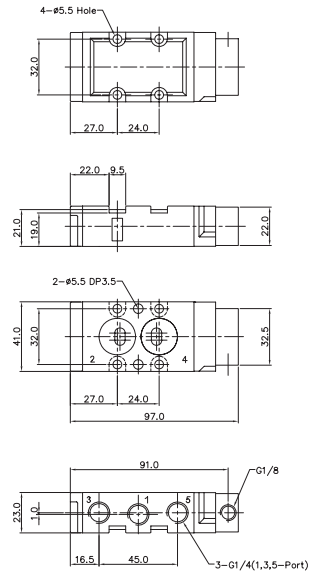
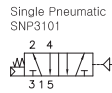
5Port 2Position Solenoid Valve



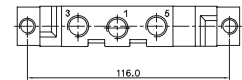
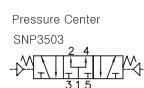
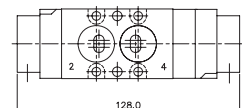
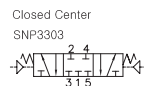
5Port 3Position Solenoid Valve



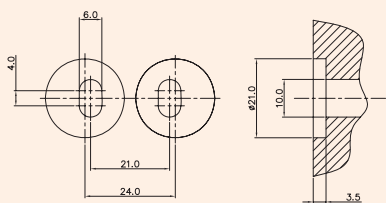
5Port 2Position Pneumatic Valve



5Port 3Position Pneumatic Valve

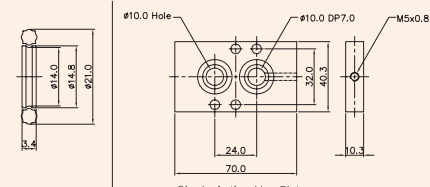


Sealing Part Dimension



Sealing Area

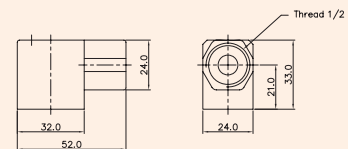
3-Port Blanking Part (Material : Al)



SN3000-BLK

Single Acting Use Plate
 SN3000-Plate

Metal Connector (Material : ZnDC)



CNM2

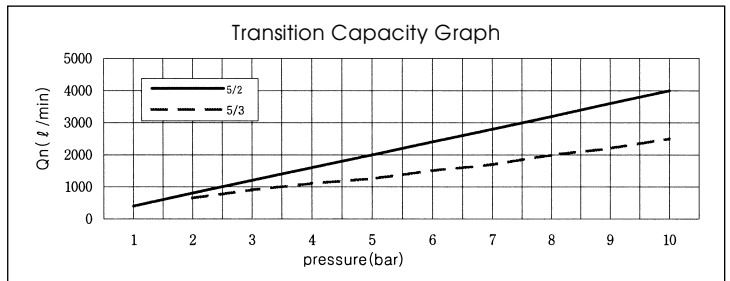
SN4000. 1/4

NAMUR Interface
Solenoid / Pneumatic Valves

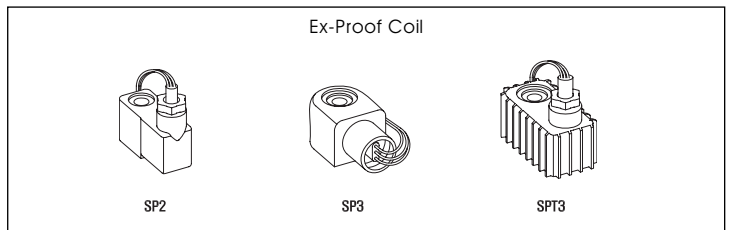
- 5/2, 5/3-1/4
- 30mm Body Width
- Transition Flow 1800ℓ/min (5bar)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		5 Port 2 Position	5 Port 3 Position
Fluids		Compressed Air & Inert Gases	
Pressure(bar)		1.5~10.0	2.0~10.0
Eff. Sectional Area(mm ²)-5bar		32.0	16.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Response Time(5bar)		30ms or Less	40ms or Less
Max. Working Frequency		5c/sec	3c/sec
Lubrication		Not Required(Use ISO VG32 #)	
Manual Override		Push Button(Standard), Lever Lock(Option)	
Coil Insulation Class		F-Class or Equivalent	
Permissible Voltage Variation		±10% of Rated Voltage	
Off Min. Residual Voltage		AC:20% or Less / DC:10% or Less	
Power Consumption		Holding-AC:5.5VA(60Hz) / DC:2.5W	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton

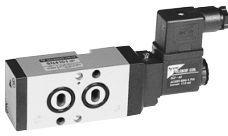
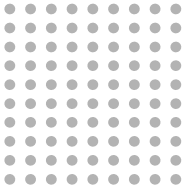


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ORDERING NO.

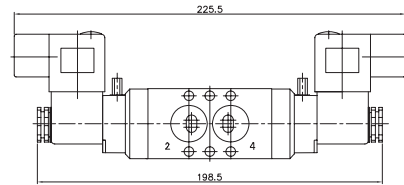
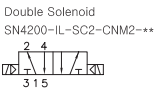
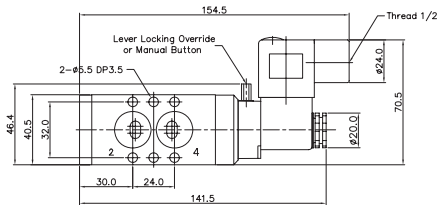
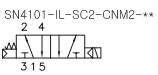
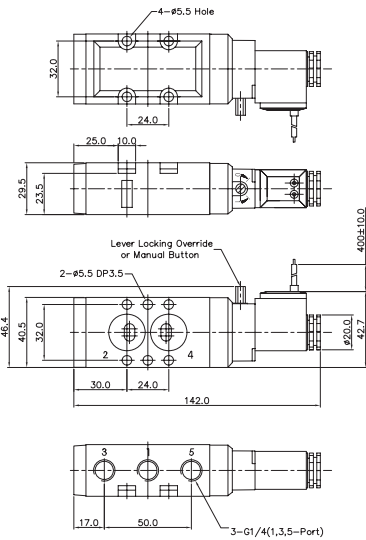
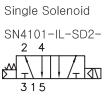
SN4 1 0 1 - I P - SC2 - CN2 - A2

Valve Series	Function	Port Size & Thread	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SN4 : Solenoid Valve	1 5/2 Single	0 G 1/4	0 None	I Internal Pilot	O None	O None	O None	0 None
	2 5/2 Double	1 NPT 1/4	1 Air + Spring		P Push	SC2 3 Pin Connector Coil	CN2 Normal Connector	A2 AC 220V
	3 5/3 Closed Center		2 Air		Non-Locking	SG2 Grommet/Flying Leads	CD2 Connector With LED	A1 AC 110V
	4 5/3 Open Center		3 Spring		L Lever Locking	SD2 Grommet/Flying Leads With LED	CZ2 Connector With LED & Surge Suppressor	A4 AC 24V
SNP4 : Pneumatic Valve	5 5/3 Pressure Center					SP2 22mm 방폭코일	CNM2 Metal Connector	D4 DC 24V
						SP3 36mm 방폭코일	CDM2 Metal Connector With LED	D2 DC 12V
						SPT3 36mm 방폭코일	CZM2 Metal Connector With LED & Surge Suppressor	

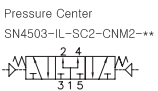
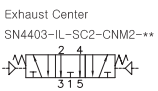
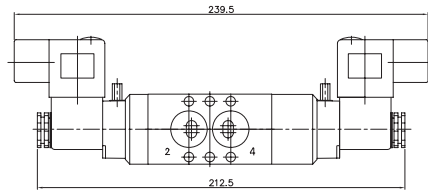
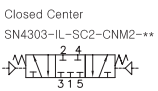


Solenoid & Pilot Actuated Spool Valves

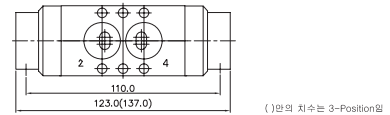
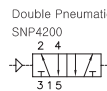
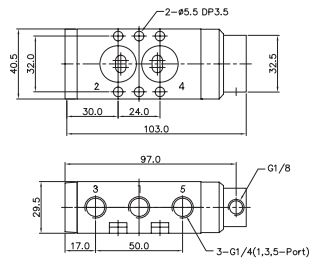
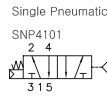
5Port 2Position Solenoid Valve



5Port 3Position Solenoid Valve

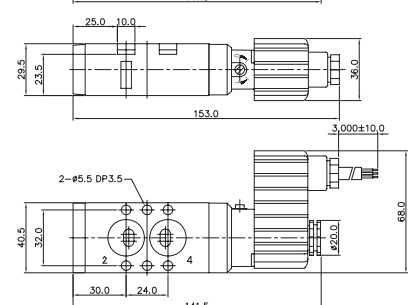
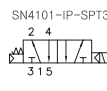
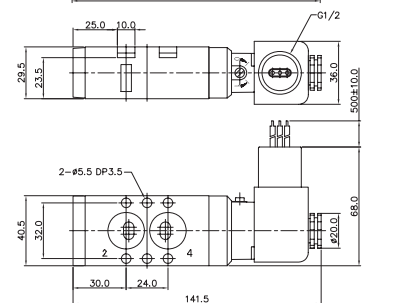
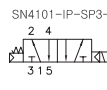
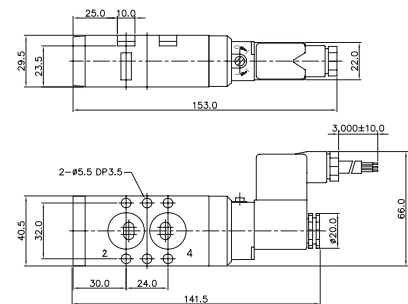
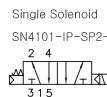


5Port 2Position & 3Position Pneumatic Valve

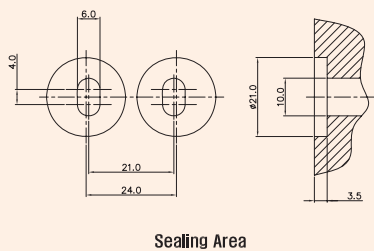


() 안의 치수는 3-Position일

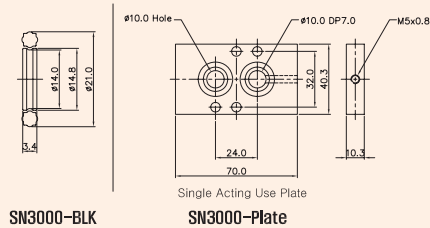
5Port 2Position Ex-proof Solenoid Valve



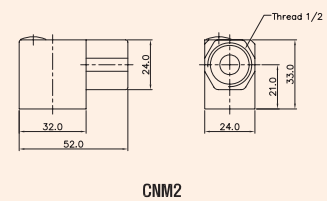
Sealing Part Dimension



3-Port Blanking Part (Material : AI)



Metal Connector (Material : ZnDC)



Solenoid Coil Series CHAPTER 08

- A Wide Range of Option
- Various Voltage Specification
- 15mm Coil Width
- 22mm Coil Width



SC1-**-
IP65(With Connector)



SC2-**-
IP65(With Connector)



SG1-**-
IP65



SG2-**-
IP65



SD1-**-
IP42
Indicator : LED



SD2-**-
IP42
Indicator : LED



SL1-**-
IP42
Indicator : LED



SM1-**-
IP42
Indicator : LED

** : Voltage Selection

SPECIFICATION

ITEM	FUNCTION	SOLENOID COIL		
		SC1	SC2	
Voltage Tolerances		±10% of Rated Voltage		
Coil Insulation Class		F-Class or Equivalent		
Temperature Range		5~60°C (41~140°F)		
Holding Power	AC	60Hz	3.5VA	5.5VA
		50Hz	4.5VA	6.5VA
	DC	2.5W	2.5W	

The Material of Parts

- Molding : Glass Pressure Nylon
- Lead Wire : AWC-no.22, no.24
- Lead Wire Packing : Viton
- Yoke : Carbon Iron
- Indicator Cap : Polycarbonate

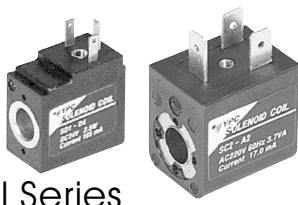
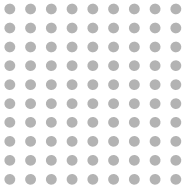
* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

SC1 - A2

Solenoid Coil Type	
SC1	15mm-3 Pin Connector Coil
SG1	15mm-Grommet/Flying Leads
SD1	15mm-Grommet/Flying Leads With LED
SL1	15mm-90 Degree Plug-in Wire Assembly LED
SM1	15mm-180 Degree Plug-in Wire Assembly LED
SC2	22mm-3 Pin Connector Coil
SG2	22mm-Grommet/Flying Leads
SD2	22mm-Grommet/Flying Leads With LED

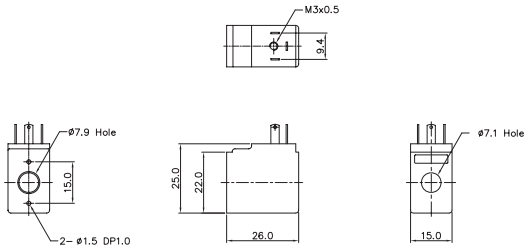
Voltage	
A2	AC 220V
A1	AC 110V
A4	AC 24V
D4	DC 24V
D2	DC 12V



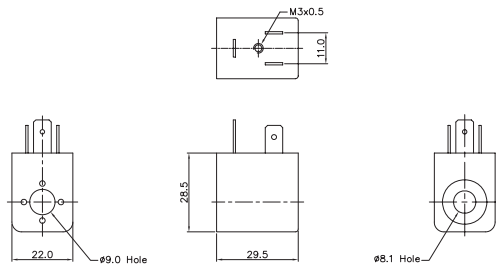
Solenoid Coil Series

15mm Width / 22mm Width

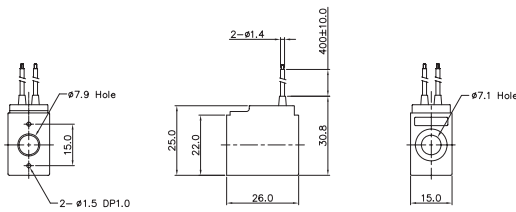
SC1--**
(3Pin Connector Coil)



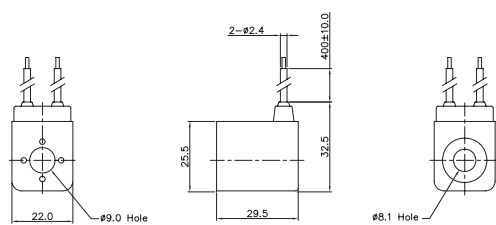
SC2--**
(3Pin Connector Coil)



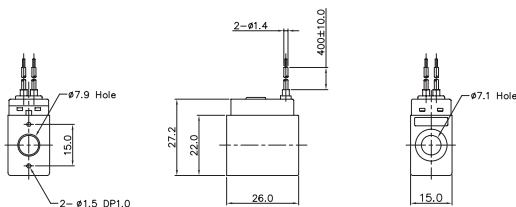
SG1--**
(Grommet/Flying Leads)



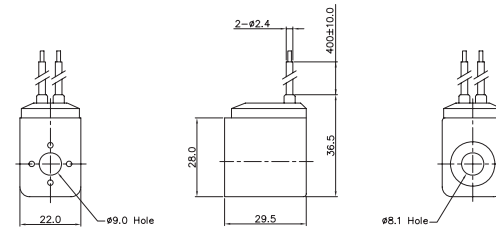
SG2--**
(Grommet/Flying Leads)



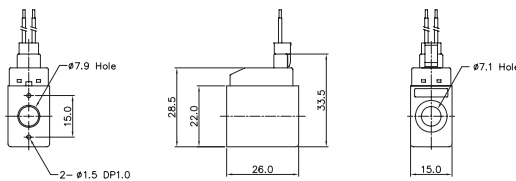
SD1--**
(180 Degree Plug-in Wire Assembly LED)



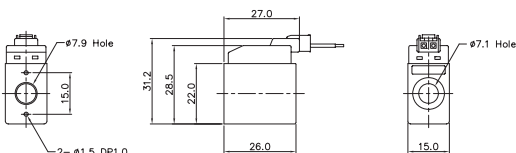
SD2--**
(Grommet/Flying Leads With LED)

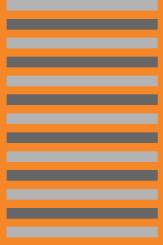


SL1--**
(90 Degree Plug-in Wire Assembly LED)



SM1--**
(180 Degree Plug-in Wire Assembly LED)





DIN Connector Series

- A Wide Range of Option
- Various Voltage Specification
- 15mm Coil Width
- 22mm Coil Width

SPECIFICATION

ITEM	FUNCTION	Connector	
		CN1	CN2
Voltage Tolerances		±10% of Rated Voltage	
Temperature Range		5~60°C (41~140°F)	
Max. Current		2.5A	
Protection Class		IP65(With Coil)	
Section Conductance		Max. 0.75mΩ	Max. 1.50mΩ

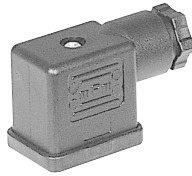
The Material of Parts

- Indicator : Glass Pressure Nylon, Polycarbonate
- Sealing Packing : NBR
- Jointing Bolt : Carbon Iron

※ The specification on each item can be amended without any prenotice to improve a performance.
 ※ The specification on each item can be different from actual specification.



CN1



CN2



CD1-**



CD2-**



CZ1-**



CZ2-**



** : Voltage Selection

ORDERING NO.

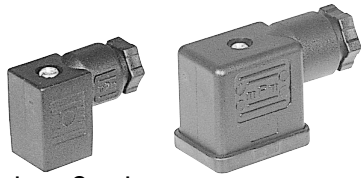
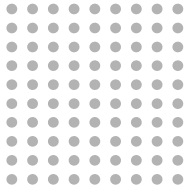
CD1 - A2

Connector Type

CN1	15mm-3 Pin Normal Connector
CD1	15mm-3 Pin Connector With LED
CZ1	15mm-3 Pin Connector With LED & Surge Suppressor
CN2	22mm-3 Pin Normal Connector
CD2	22mm-3 Pin Connector With LED
CZ2	22mm-3 Pin Connector With LED & Surge Suppressor
CNM2	24mm-3 Pin Metal Normal Connector
CDM2	24mm-3 Pin Metal Connector With LED
CZM2	24mm-3 Pin Metal Connector With LED & Surge Suppressor

Voltage

A2	AC 220V
A1	AC 110V
A4	AC 24V
D4	DC 24V
D2	DC 12V



DIN Connector Series

15mm Width / 22mm Width

CN1

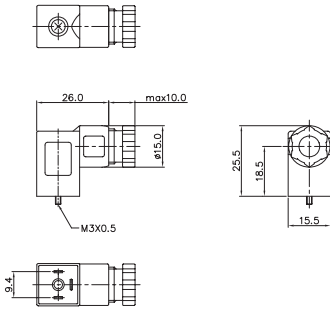
(Normal Connector)

CD1-**

(Connector With Connector)

CZ1-**

(Connector With Connector & Surge Suppressor)

**CN2**

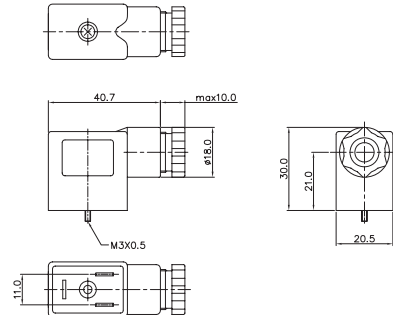
(Normal Connector)

CD2-**

(Connector With Connector)

CZ2-**

(Connector With Connector & Surge Suppressor)

**CNM2**

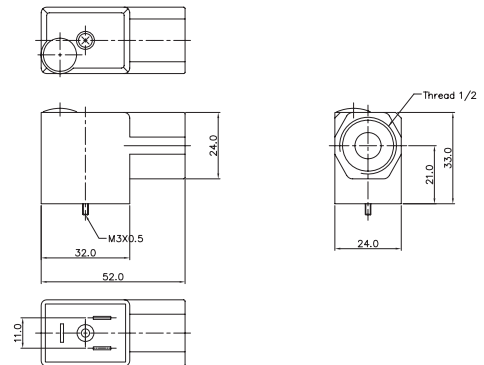
Metal Connector

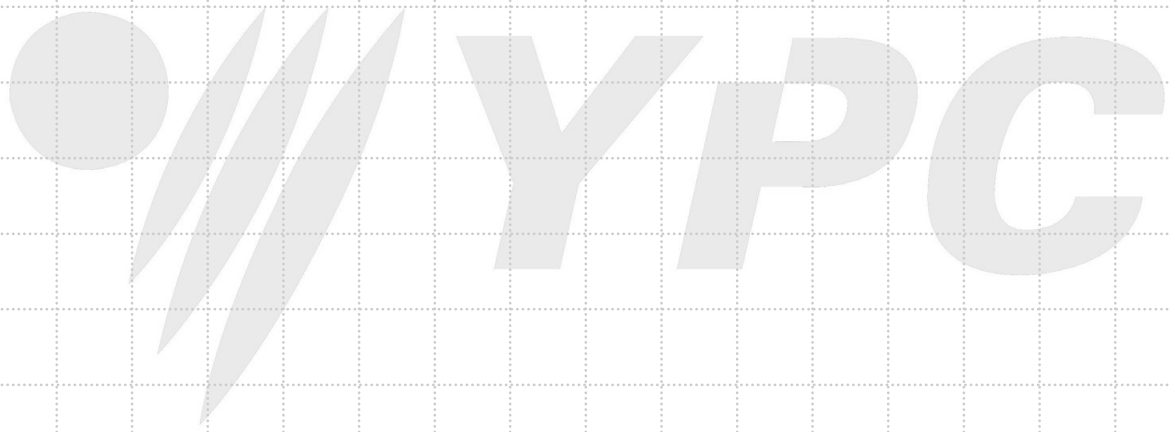
CDM2-**

Metal Connector With LED

CZM2-**

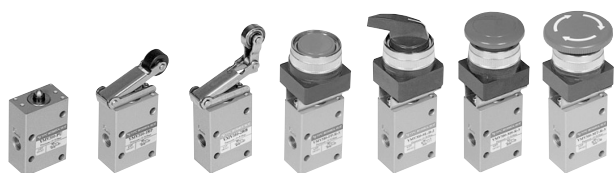
Metal Connector With LED & Surge Suppressor





YMV Series
PMEV Series
RLV Series
HLV Series
KMV Series
TMV Series
FT Series

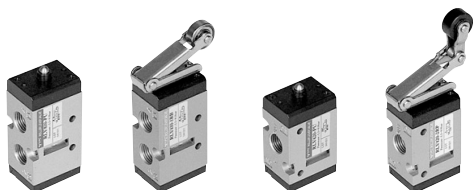
CHAPTER 09



YMV Series (3/2 Mechanically Valve)



PMEV Series
 (5/2, 3/2 Panel Mounted Mechanically Valve)



RLV Series
 (5/2, 3/2 Roller Lever Mechanically Valve)



HLV Series
 (5/2, 5/3, 3/2 Hand Lever Operated Spool Valve)



KMV Series
 (5/2, 3/2 Knob push / Pull Manually Valve)



TMV Series
 (5/2, 3/2 Toggle Lever Mechanically Valve)



FT Series
 (5/2 Foot Treadle Operated Spool Valve)

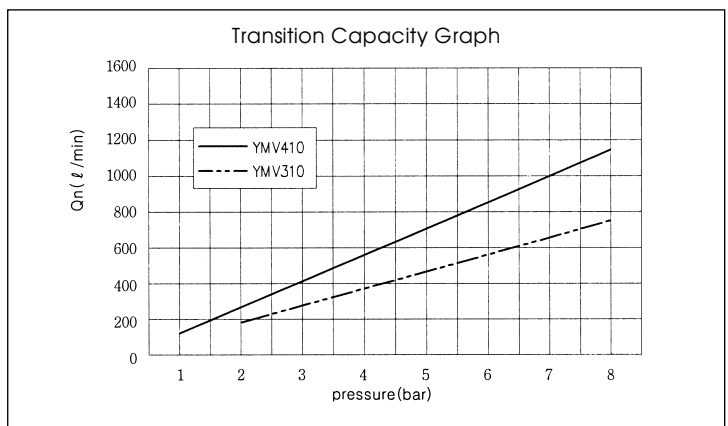
YMV Series

Manually & Mechanically Actuated Spool Valves

- 3/2
- Direct Operation Type
- A Wide Range of Option available
- Simple Panel Mounting

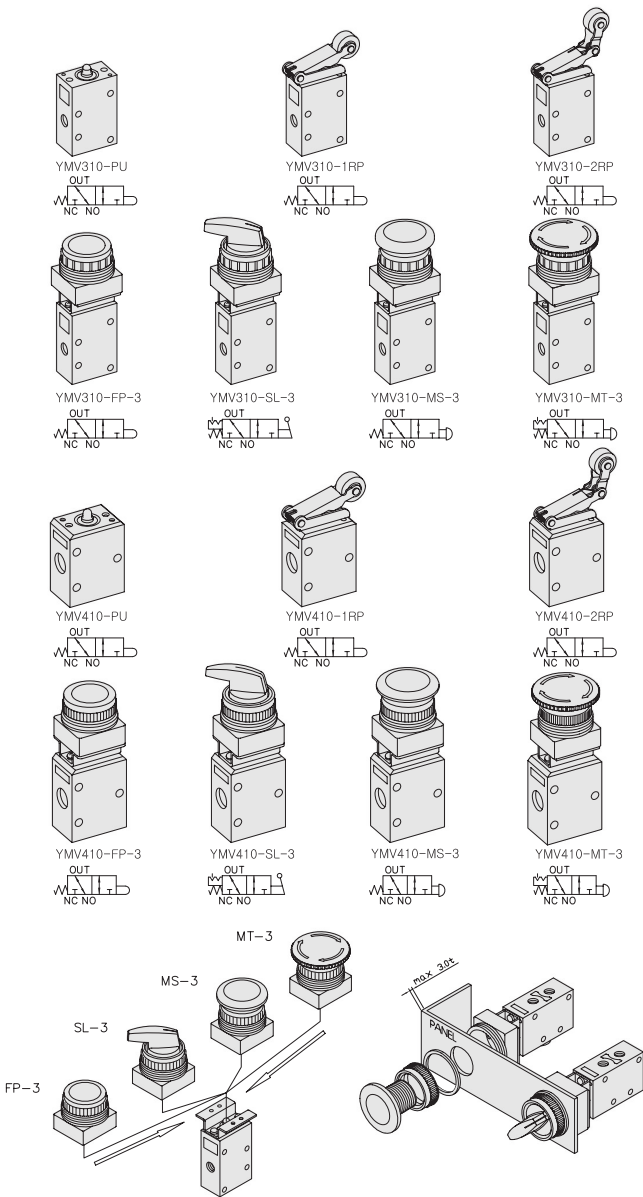
SPECIFICATION

ITEM	SERIES	YMV310	YMV410
FUNCTION		3/2-Way	
Fluids		Compressed Air & Inert Gases	
Port Size		1/8	1/4
Pressure(bar)		0~8.0	
Eff. Sectional Area(mm ²)-5bar		10.5	16.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Lubrication		Not Required(Use ISO VG32#)	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Button Parts : Stainless Steel, POM
 - Switch Parts : Glass Filled Nylon, POM

※ The specification on each item can be amended without any prenotice to improve a performance.
 ※ The specification on each item can be different from actual specification.

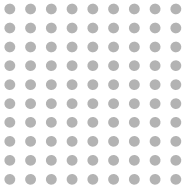


ORDERING NO.

YMV3 1 0 - FP - 3

Valve Series	Function	Port Size & Thread	Switch Type	Mounting Holes
YMV3: 1/8-Port Body	1 3/2 - Spring Return	0 G 1 NPT	PU Pushrod 1RP Two-way Plastic Roller Lever 1RB Two-way Bearing Roller Lever 2RP One-way Plastic Roller Lever 2RB One-way Bearing Roller Lever FP Flush, Push Button (R) SL 2-Position Selector (B) MS Mushroom 40mm dia Spring Return (R) MT Mushroom 40mm dia Turn to Unlock (R)	3 30mm

() Standard Color



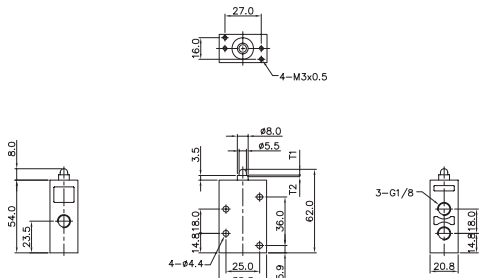
Manually & Mechanically Actuated Spool Valves

Port Thread 1/8, 1/4

3/2-Way, Direct Pushrod Operation Thread-1/8

T ₁	Valid Operation Dist	3.5mm
T ₂	Invalid Operation Dist	1.0mm
F ₁	Pressure for Valid Operation	3.5kg _f
F ₂	Pressure for Invalid Operation	

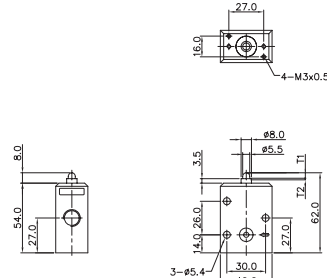
YMV310-PU



3/2-Way, Direct Pushrod Operation Thread-1/4

T ₁	Valid Operation Dist	3.5mm
T ₂	Invalid Operation Dist	1.0mm
F ₁	Pressure for Valid Operation	3.5kg _f
F ₂	Pressure for Invalid Operation	

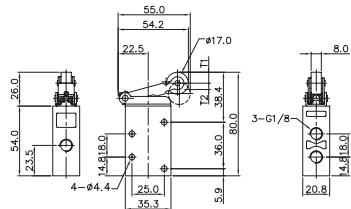
YMV410-PU



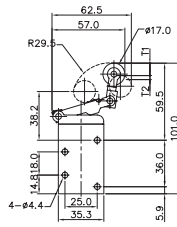
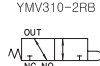
3/2-Way, Direct Roller Lever Operation Thread-1/8

	YMV310-1RP	YMV310-2RP
T ₁	Valid Operation Dist	8.5mm 9.0mm
T ₂	Invalid Operation Dist	3.0mm 3.5mm
F ₁	Pressure for Valid Operation	2.0kg _f 2.0kg _f
F ₂	Pressure for Invalid Operation	

YMV310-1RP



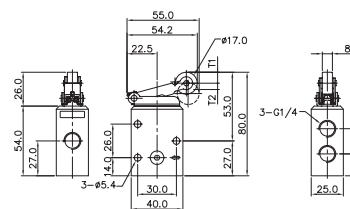
YMV310-2RP



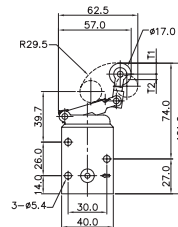
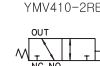
3/2-Way, Direct Roller Lever Operation Thread-1/4

	YMV410-1RP	YMV410-2RP
T ₁	Valid Operation Dist	8.0mm 9.0mm
T ₂	Invalid Operation Dist	3.0mm 3.5mm
F ₁	Pressure for Valid Operation	2.0kg _f 2.0kg _f
F ₂	Pressure for Invalid Operation	

YMV410-1RP



YMV410-2RP



3/2-Way, Direct Pushrod & Selector Operation Thread-1/8

T ₁	Valid Operation Dist	5.5mm
T ₂	Invalid Operation Dist	1.0mm
F ₁	Pressure for Valid Operation	3.5kg _f
F ₂	Pressure for Invalid Operation	

YMV310-FP-3



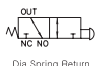
Flush, Push Button

YMV310-SL-3



2-Position Selector

YMV310-MS-3

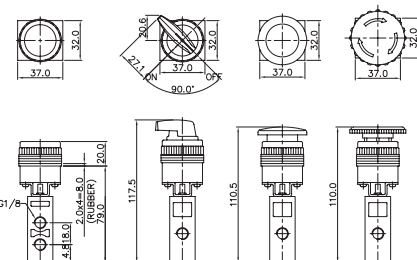


Dia Spring Return

YMV310-MT-3



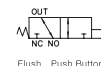
Turn to unlock



3/2-Way, Direct Pushrod & Selector Operation Thread-1/4

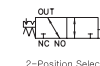
T ₁	Valid Operation Dist	5.5mm
T ₂	Invalid Operation Dist	1.0mm
F ₁	Pressure for Valid Operation	3.5kg _f
F ₂	Pressure for Invalid Operation	

YMV410-FP-3



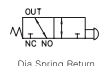
Flush, Push Button

YMV410-SL-3



2-Position Selector

YMV410-MS-3

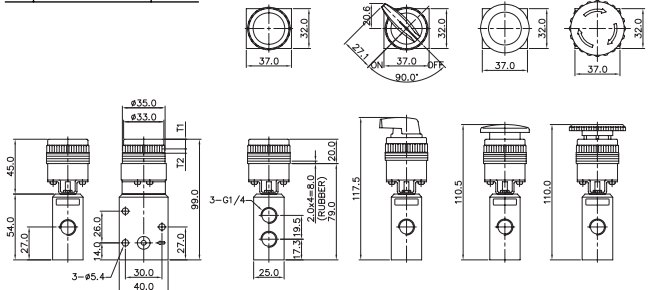


Dia Spring Return

YMV410-MT-3



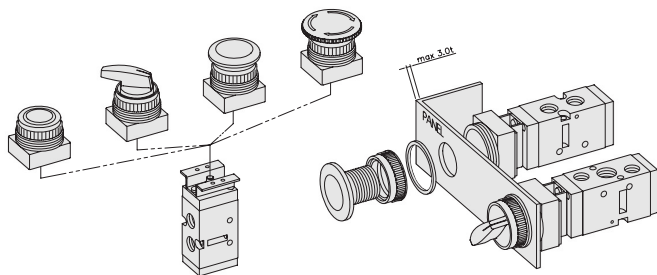
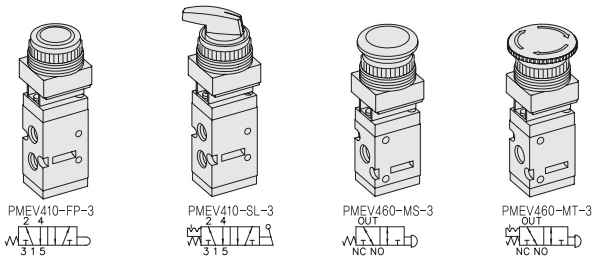
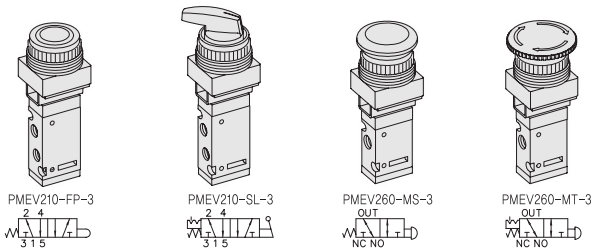
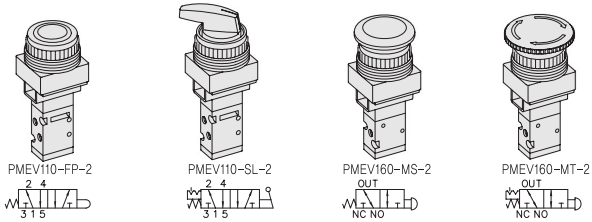
Turn to unlock



PMEV Series

Panel Mounting Mechanically
Actuated Spool Valves

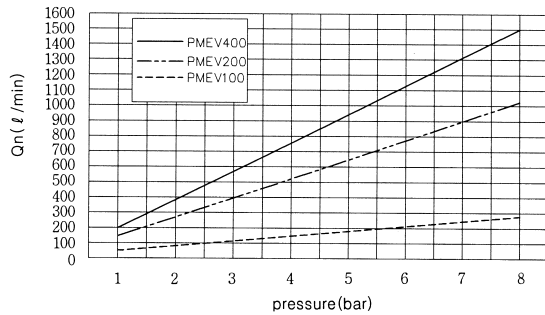
- 5/2, 3/2 - M5, 1/8, 1/4
- A Wide Range of Option Available
- Direct Operation Type
- Simple Panel Mounting



SPECIFICATION

ITEM	SERIES	PMEV100	PMEV200	PMEV400
FUNCTION		5/2, 3/2-Way		
Fluids		Compressed Air & Inert Gases		
Port Size		M5	1/8	1/4
Pressure(bar)		0~8.0		
Eff. Sectional Area(mm ²)-5bar		3.5	12.6	19.0
Ambient & Fluid Temp.		5~60°C (41~140°F)		
Lubrication		Not Required(Use ISO VG32#)		

Transition Capacity Graph



The Material of Parts

- Valve Body : Die-Cast Aluminium
- Spool : Aluminium
- Seals : NBR
- Spring : Stainless
- Button Parts : Stainless Steel, POM
- Switch Parts : Glass Filled Nylon, POM

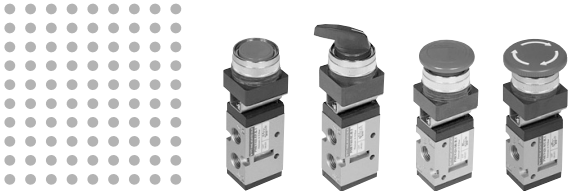
* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

PMEV1 1 0 - FP - 2

Valve Series	Function	Port Size & Thread	Switch Type	Mounting Holes
PMEV1 : M5×0.8-Port Body	1 5/2 - Spring Return 6 3/2 - Spring Return	0 G 1 NPT	FP Flush, Push Button (R) SL 2-Position Selector (B) MS Mushroom 40mm dia Spring Return (R) MT Mushroom 40mm dia Turn to Unlock (R)	2 25mm 3 30mm

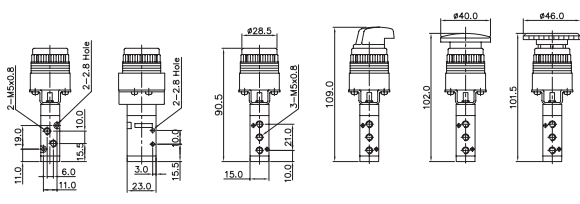
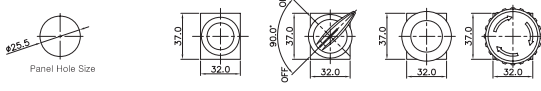
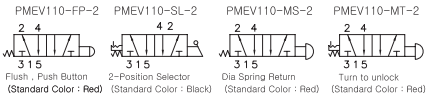
() Standard Color



Panel Mounting Mechanically Actuated Spool Valves **Port Thread M5, 1/8, 1/4**

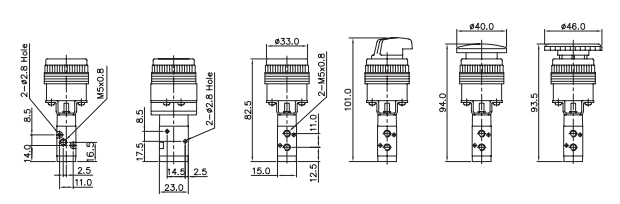
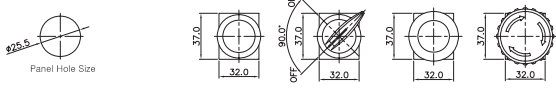
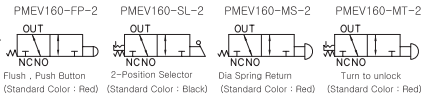
5/2-Way, Pushrod & Selector Operation Thread-M5 × 0.8

OPERATION SPEC.	
T ₁ Valid Operation Dist	5.5mm
T ₂ Invalid Operation Dist	1.0mm
F ₁ Pressure for Valid Operation	2.5kg
F ₂ Pressure for Invalid Operation	



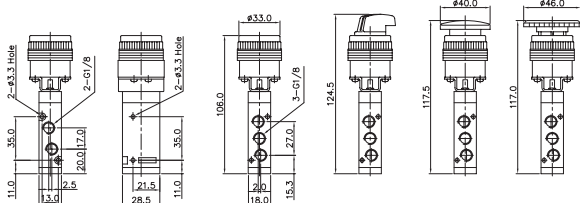
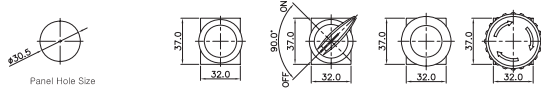
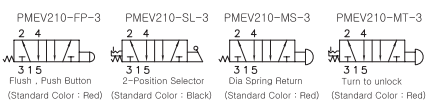
3/2-Way, Pushrod & Selector Operation Thread-M5 × 0.8

OPERATION SPEC.	
T ₁ Valid Operation Dist	5.5mm
T ₂ Invalid Operation Dist	1.0mm
F ₁ Pressure for Valid Operation	2.5kg
F ₂ Pressure for Invalid Operation	



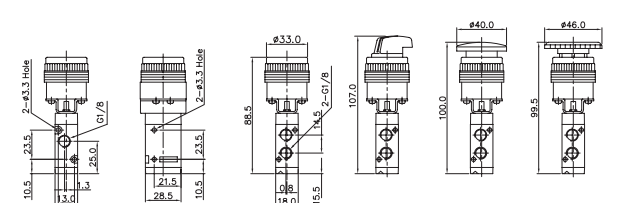
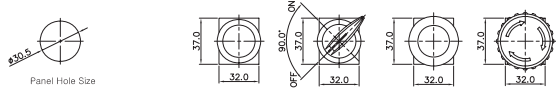
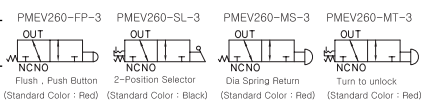
5/2-Way, Pushrod & Selector Operation Thread-1/8

OPERATION SPEC.	
T ₁ Valid Operation Dist	5.5mm
T ₂ Invalid Operation Dist	1.0mm
F ₁ Pressure for Valid Operation	3.0kg
F ₂ Pressure for Invalid Operation	



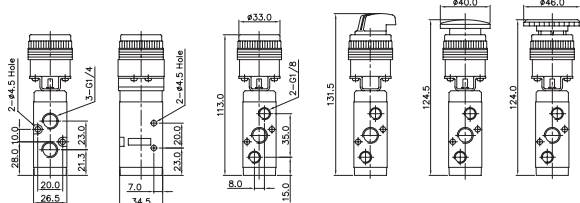
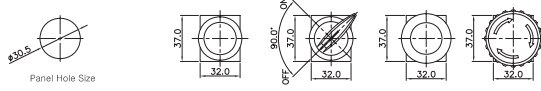
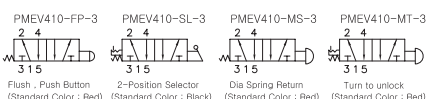
3/2-Way, Pushrod & Selector Operation Thread-1/8

OPERATION SPEC.	
T ₁ Valid Operation Dist	5.5mm
T ₂ Invalid Operation Dist	1.0mm
F ₁ Pressure for Valid Operation	3.0kg
F ₂ Pressure for Invalid Operation	



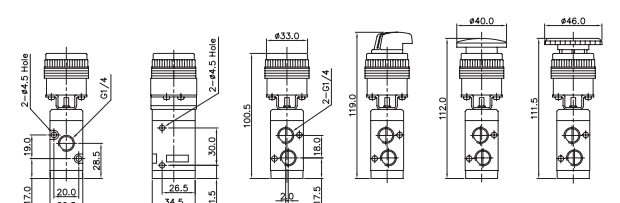
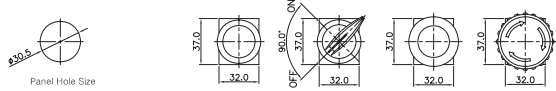
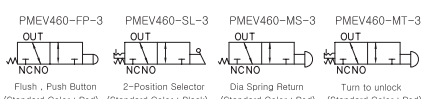
5/2-Way, Pushrod & Selector Operation Thread-1/4

OPERATION SPEC.	
T ₁ Valid Operation Dist	5.5mm
T ₂ Invalid Operation Dist	1.0mm
F ₁ Pressure for Valid Operation	4.0kg
F ₂ Pressure for Invalid Operation	



3/2-Way, Pushrod & Selector Operation Thread-1/4

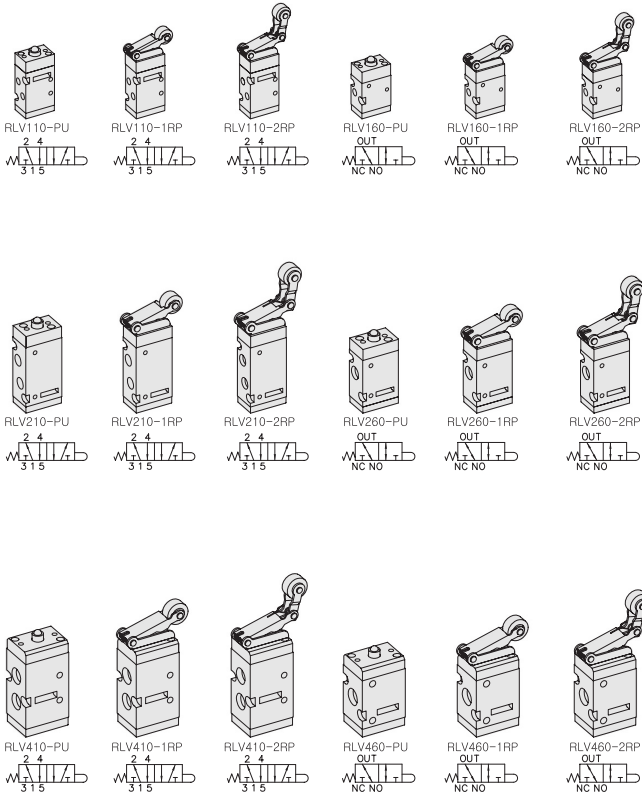
OPERATION SPEC.	
T ₁ Valid Operation Dist	5.5mm
T ₂ Invalid Operation Dist	1.0mm
F ₁ Pressure for Valid Operation	4.0kg
F ₂ Pressure for Invalid Operation	



RLV Series

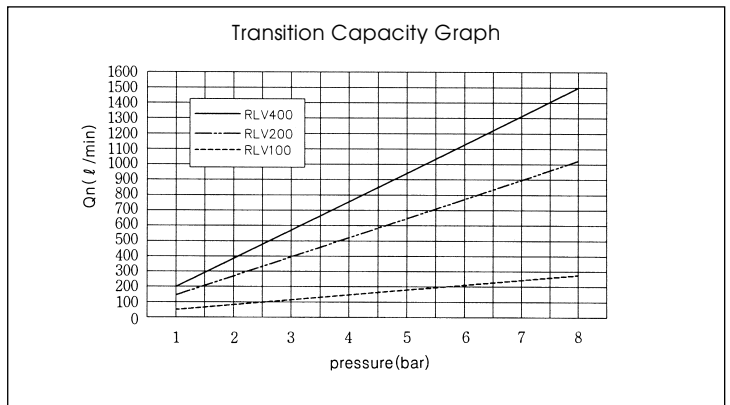
Roller Lever Mechanically Actuated Spool Valves

- 5/2, 3/2 - M5, 1/8, 1/4
- Excellent Durability
- Convenient Installation
- Direct Type, Quick Response



SPECIFICATION

ITEM	SERIES	RLV100	RLV200	RLV400
FUNCTION		5/2, 3/2-Way		
Fluids		Compressed Air & Inert Gases		
Port Size		M5	1/8	1/4
Pressure(bar)		0~8.0		
Eff. Sectional Area(mm ²)-5bar		3.5	12.6	19.0
Ambient & Fluid Temp.		5~60°C (41~140°F)		
Lubrication		Not Required(Use ISO VG32#)		



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Lever Parts : Steel Plate, POM
 - Spool : Aluminium
 - Pilot Parts : Glass Filled Nylon
 - Seals : NBR
 - Cap : Zinc Pressure Die-Cast
 - Spring : Stainless
 - Button Parts : Stainless Steel

* The specification on each item can be amended without any prenotice to improve a performance.
 * The specification on each item can be different from actual specification.

ORDERING NO.

RLV1 1 0 - PU

Valve Series	Function	Port Size & Thread	Operator / Function
RLV1 : M5×0.8-Port Body	1 5/2 - Spring Return 6 3/2 - Spring Return	0 G 1 NPT	PU Pushrod 1RP Two-way Roller Plastic Lever 1RB Two-way Roller Bearing Lever 2RP One-way Roller Plastic Lever 2RB One-way Roller Bearing Lever
RLV2 : 1/8-Port Body			
RLV4 : 1/4-Port Body			

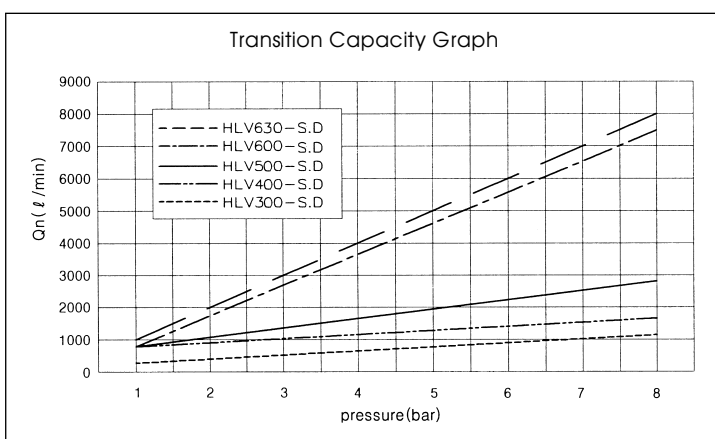
HLV Series

Hand Lever Operated
Spool Valves

- Direct Operation Type
- 5/2, 5/3, 3/2
- 1/8, 1/4, 3/8, 1/2
- High Flow Capacity

SPECIFICATION

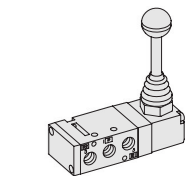
ITEM	SERIES	HLV300	HLV400	HLV500	HLV600
FUNCTION		5/2, 5/3-Way	5/2, 5/3, 3/2-Way		5/2, 5/3-Way
Fluids	Compressed Air & Inert Gases				
Port Size		1/8	1/4	3/8	1/2
Pressure(bar)	0~8.0				
Eff. Sectional Area(mm ²)-5bar		13.5	18.0	35.0	90.0
Ambient & Fluid Temp.	5~60°C (41~140°F)				
Lubrication	Not Required(Use ISO VG32#)				



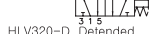
The Material of Parts

- Valve Body : Die-Cast Aluminium
- Spool : Aluminium
- Seals : NBR
- Spring : Stainless
- Lever Parts : Steel, NBR, Plastic

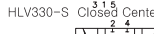
* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.



HLV310-S Single Detented



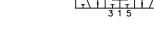
HLV320-D Detented



HLV330-S Closed Center



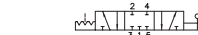
HLV340-S Exhaust Center



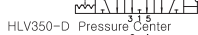
HLV350-S Pressure Center



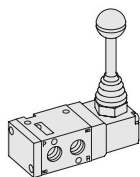
HLV330-D Closed Center



HLV340-D Exhaust Center



HLV350-D Pressure Center



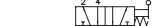
HLV460-S Single OUT



HLV460-D Detented OUT



HLV410-S Single



HLV420-D Detented



HLV430-S Closed Center



HLV440-S Exhaust Center



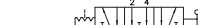
HLV450-S Pressure Center



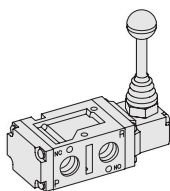
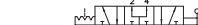
HLV430-D Closed Center



HLV440-D Exhaust Center



HLV450-D Pressure Center



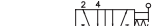
HLV560-S Single OUT



HLV560-D Detented OUT



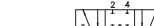
HLV510-S Single



HLV520-D Detented



HLV530-S Closed Center



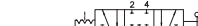
HLV540-S Exhaust Center



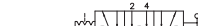
HLV550-S Pressure Center



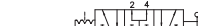
HLV530-D Closed Center



HLV540-D Exhaust Center



HLV550-D Pressure Center



HLV610-S Single



HLV620-D Detented



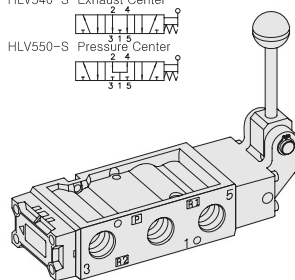
HLV630-S Closed Center



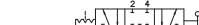
HLV640-S Exhaust Center



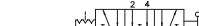
HLV650-S Pressure Center



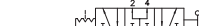
HLV630-D Closed Center



HLV640-D Exhaust Center



HLV650-D Pressure Center



ORDERING NO.

HLV3 1 0 - S

Valve Series

HLV3 :
1/8-Port Body
HLV4 :
1/4-Port Body
HLV5 :
3/8-Port Body
HLV6 :
1/2-Port Body

Function

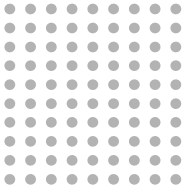
1	5/2 Single
2	5/2 Double
3	5/3 Closed Center
4	5/3 Open Center
5	5/3 Pressure Center
6	3/2 Normally Closed

Port Size & Thread

0	G
1	NPT

Return Method

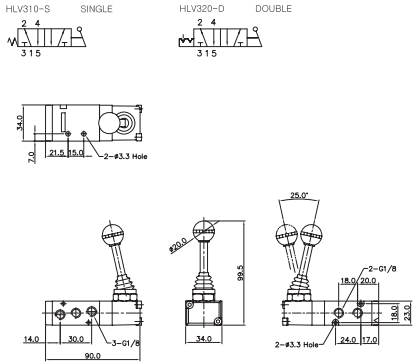
S	Single Spring Return
D	Double Detented



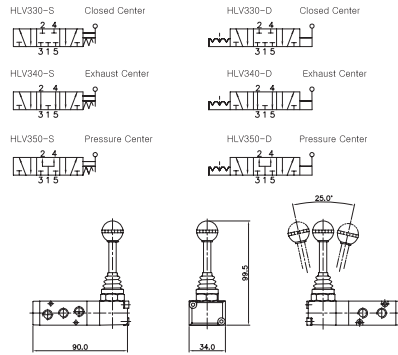
Hand Lever Operated Spool Valves

Port Thread 1/8, 1/4, 3/8, 1/2

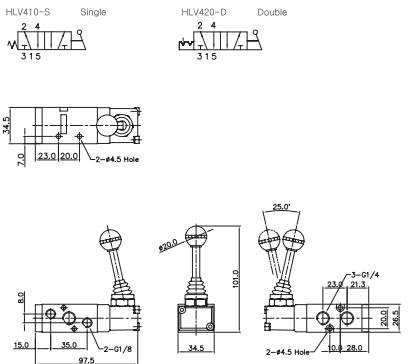
5/2-Way, Hand Lever Manually Actuated Valve Thread-G1/8



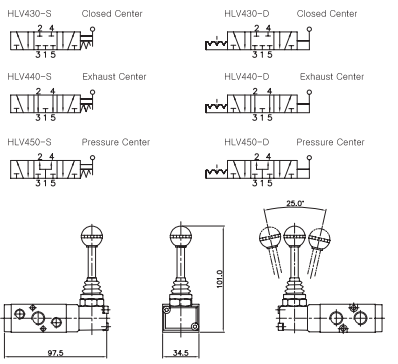
5/3-Way, Hand Lever Manually Actuated Valve Thread-G1/8



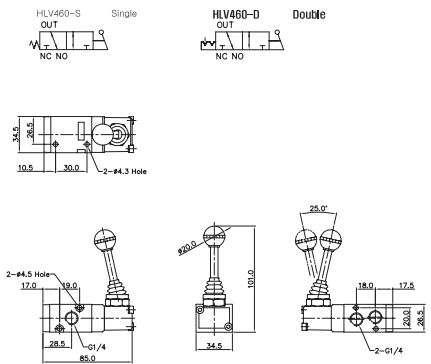
5/2-Way, Hand Lever Manually Actuated Valve Thread-G1/4



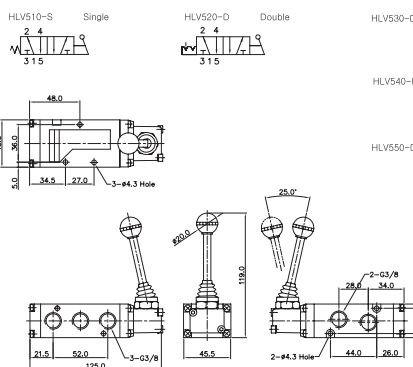
5/3-Way, Hand Lever Manually Actuated Valve Thread-G1/4



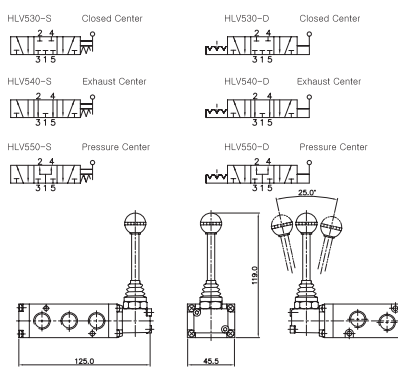
3/2-Way, Hand Lever Manually Actuated Valve Thread-G1/4



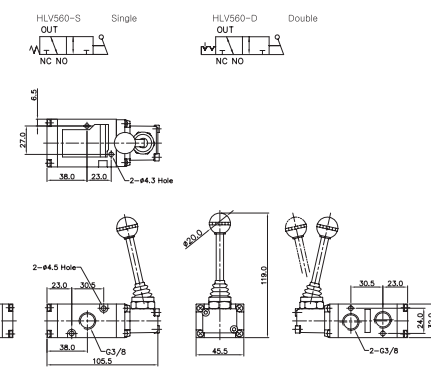
5/2-Way, Hand Lever Manually Actuated Valve Thread-G3/8



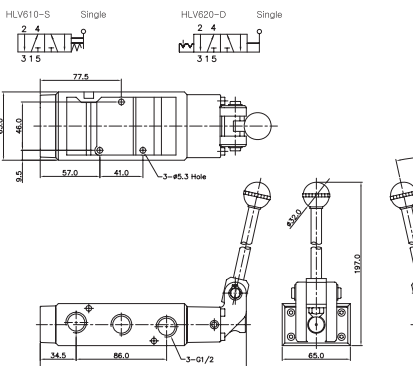
5/3-Way, Hand Lever Manually Actuated Valve Thread-G3/8



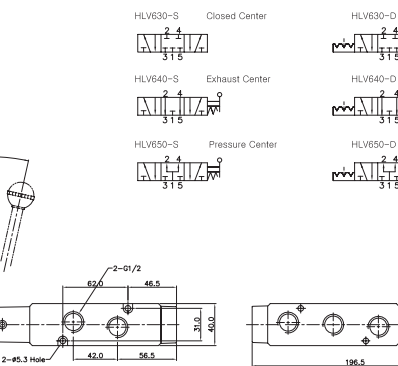
3/2-Way, Hand Lever Manually Actuated Valve Thread-G3/8



5/2-Way, Hand Lever Manually Actuated Valve Thread-G1/2



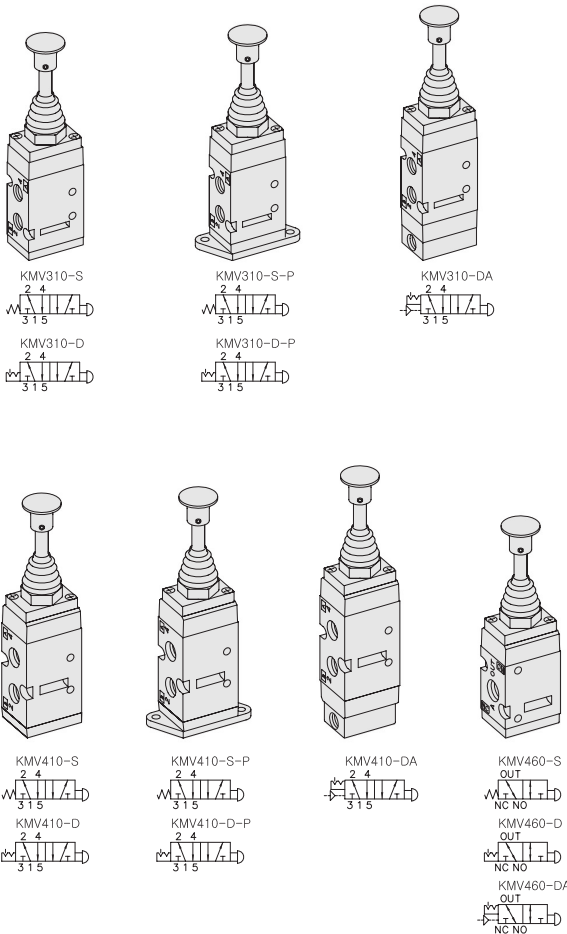
5/3-Way, Hand Lever Manually Actuated Valve Thread-G1/2



KMV Series

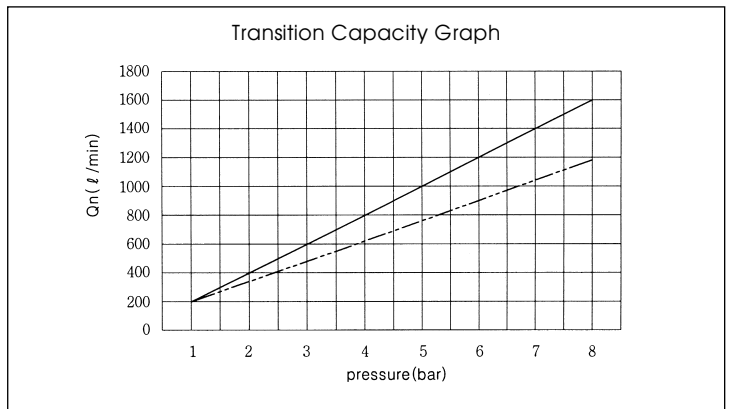
Knob Push / Pull Manually Actuated Spool Valves

- 5/2, 3/2 - 1/8, 1/4
- Direct Operation Type
- Simple Operation
- Space Economy Type

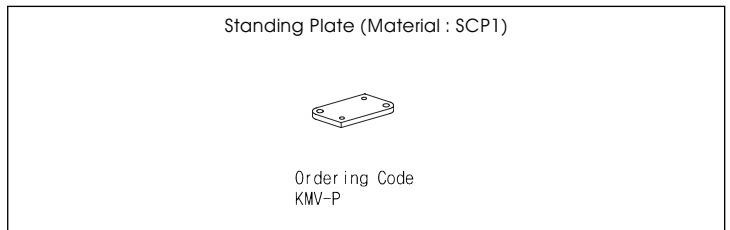


SPECIFICATION

ITEM	FUNCTION	KMV300	KMV400
	FUNCTION		5/2-Way
Fluids		Compressed Air & Inert Gases	
Port Size		1/8	1/4
Pressure(bar)		0~8.0	
Eff. Sectional Area(mm ²)-5bar		13.5	18.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Lubrication		Not Required(Use ISO VG32#)	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Cap : Zinc Pressure Die-Cast
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Lever Parts : Steel, NBR, Aluminium
 - Standing Plate : Steel Plate

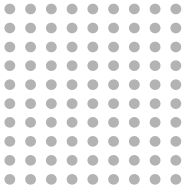


※ The specification on each item can be amended without any prenotice to improve a performance.
 ※ The specification on each item can be different from actual specification.

ORDERING NO.

KMV3 1 0 - S - P

Valve Series	Function	Port Size & Thread	Return Method	Plate
KMV3 : 1/8-Port Body	1 5/2 Single 6 3/2 Normally Closed	0 G 1 NPT	S Push, Spring Return D Push, Full DA Push, Air Return	P Standing Plate
KMV4 : 1/4-Port Body				

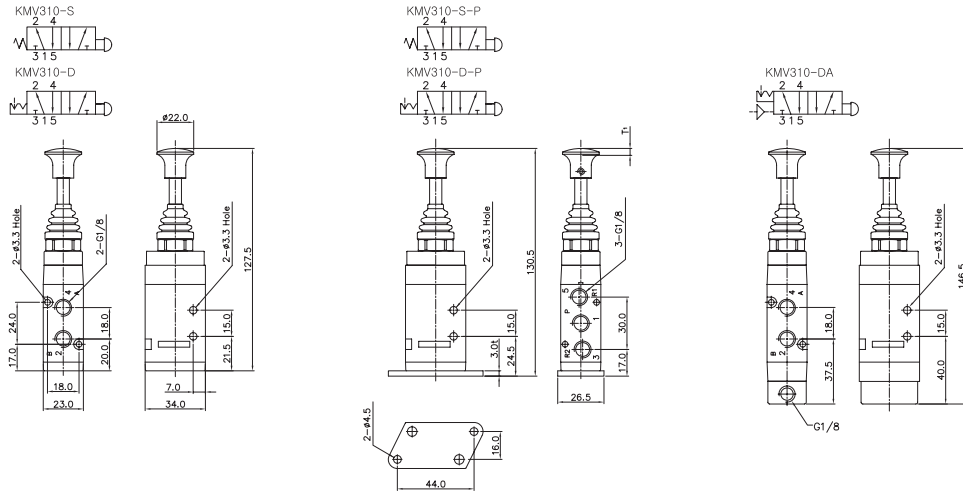


Knob Push / Pull Manually Actuated Valves

Port Thread 1/8, 1/4

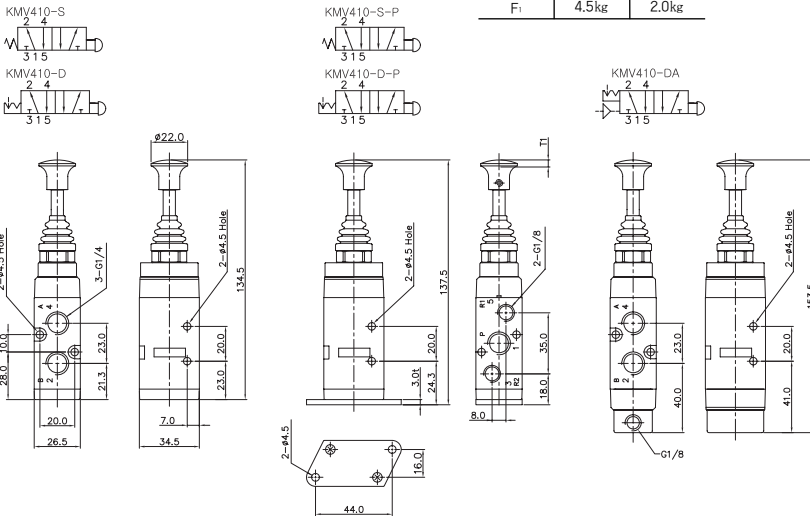
5/2-Way, Spring Return & Push Pull & Air Return Operation Thread-G1/8

ITEM	KMV310-S	KMV310-D
T ₁	4.0mm	4.0mm
F ₁	4.5kg	2.0kg

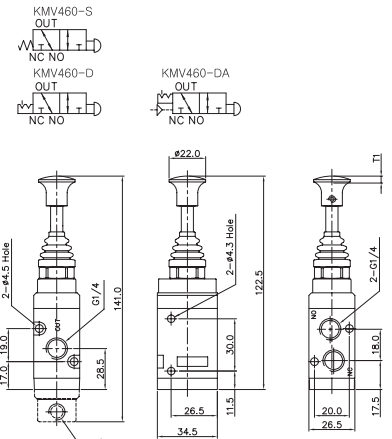


5/2-Way, Spring Return & Push Pull & Air Return Operation Thread-G1/4

ITEM	KMV410-S	KMV420-D
T ₁	4.0mm	4.0mm
F ₁	4.5kg	2.0kg



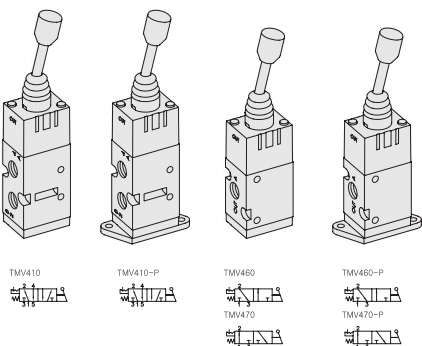
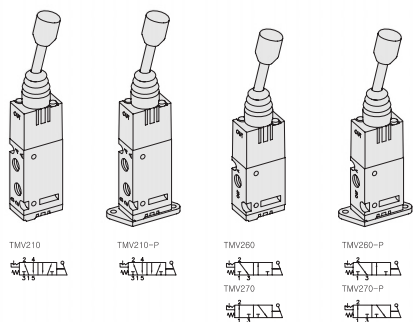
3/2-Way, Spring Return & Push Pull & Air Return Operation Thread-G1/4



TMV Series

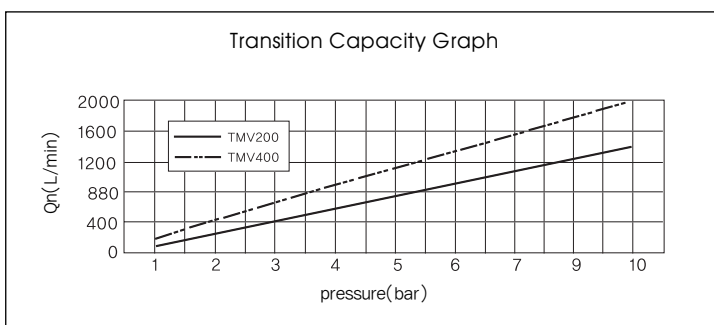
Toggle Lever operated Mechanically Actuated Spool Valves

- 5/2, 3/2 - 1/8, 1/4
- Direct Operation Type
- Simple Operation
- Manifold Mounting Type



SPECIFICATION

ITEM	SERIES	TMV200	TMV400
	FUNCTION	5/2, 3/2-Way	
Fluids	Compressed Air & Inert Gases		
Port Size		1/8	1/4
Pressure(bar)		2.0~10.0	0~8.0
Eff. Sectional Area(mm ²)-5bar		9.0	18.0
Ambient & Fluid Temp.	5~60°C (41~140°F)		
Lubrication	Not Required(Use ISO VG32#)		



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Cap : Zinc Pressure Die-Cast
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Lever Parts : Steel, NBR, Aluminium

Standing Plate (Material : SCP1)

Ordering Code
TMV-P

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

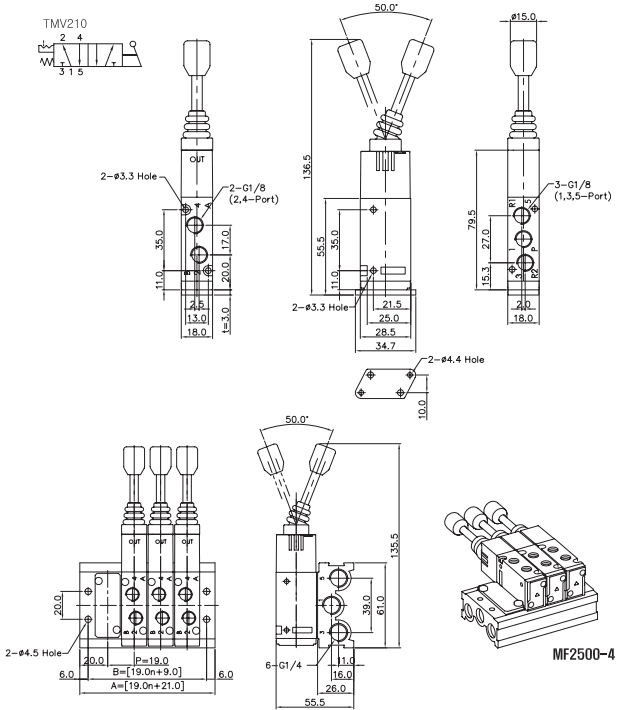
TMV2 1 - 0 - P

Valve Series	Function	Port Size & Thread	Plate
TMV2 : 1/8-Port Body	1 5/2 Single 6 3/2 Normally Closed 7 3/2 Normally Open	0 G 1 NPT	P Standing Plate
TMV4 : 1/4-Port Body			



Toggle Lever Operated Mechanically Actuated Spool Valves **Port Thread 1/8, 1/4**

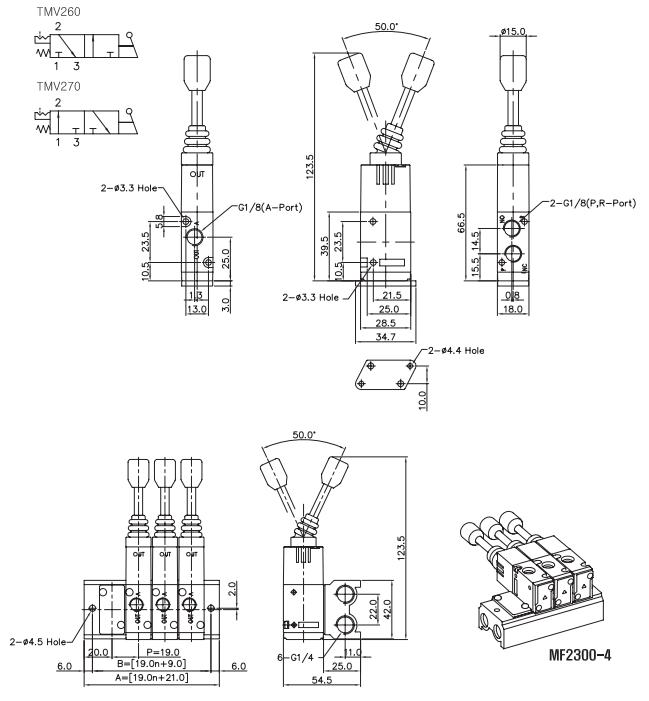
**5/2-Way, Toggle Lever Manually Actuated Valve
Thread-G1/8**



5 PORT MANIFOLD BLOCK DIMENSION n=STATION

ITEM	n	2	4	6	8	10	12	14
B		47.0	85.0	123.0	161.0	199.0	237.0	275.0
A		59.0	97.0	135.0	173.0	211.0	249.0	287.0

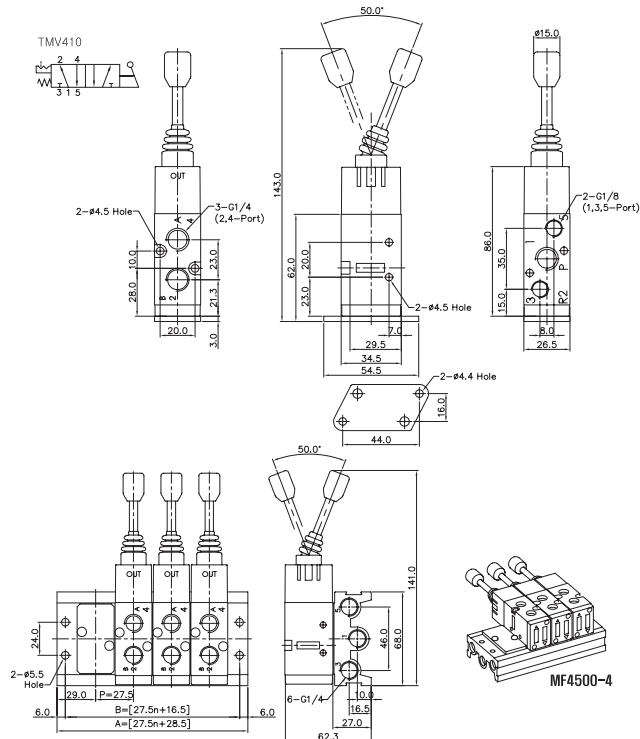
**3/2-Way, Toggle Lever Manually Actuated Valve
Thread-G1/8**



3 PORT MANIFOLD BLOCK DIMENSION n=STATION

ITEM	n	2	4	6	8	10	12	14
B		47.0	85.0	123.0	161.0	199.0	237.0	275.0
A		59.0	97.0	135.0	173.0	211.0	249.0	287.0

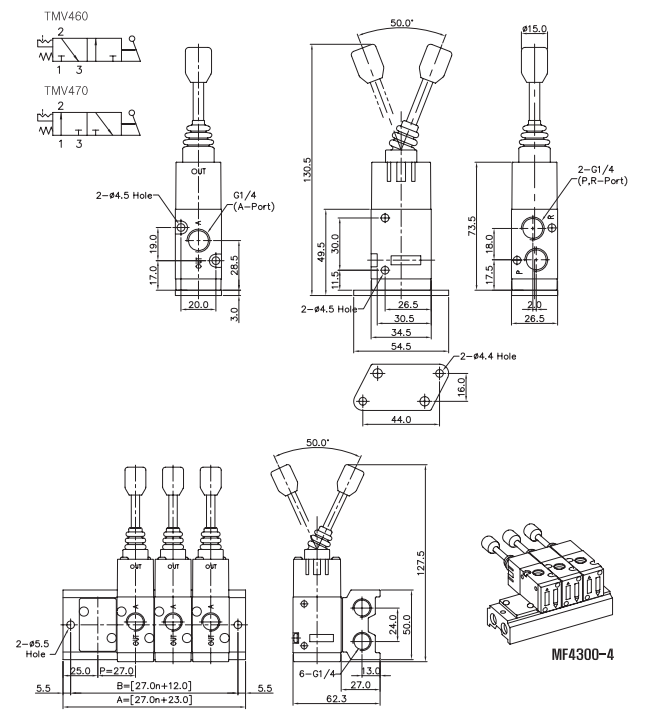
**5/2-Way, Toggle Lever Manually Actuated Valve
Thread-G1/4**



5 PORT MANIFOLD BLOCK DIMENSION n=STATION

ITEM	n	2	4	6	8	10	12	14
B		71.5	126.5	181.5	236.5	291.5	346.5	401.5
A		83.5	138.5	193.5	248.5	303.5	358.5	413.5

**3/2-Way, Toggle Lever Manually Actuated Valve
Thread-G1/4**



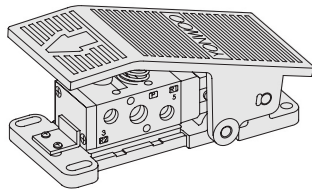
3 PORT MANIFOLD BLOCK DIMENSION n=STATION

ITEM	n	2	4	6	8	10	12	14
B		66.0	120.0	174.0	228.0	282.0	336.0	390.0
A		77.0	131.0	185.0	239.0	293.0	347.0	401.0

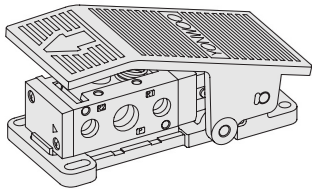
FT Series

Foot Treadle Operated
Air Return & Spring Return Spool Valves

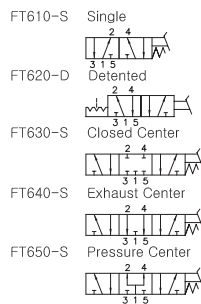
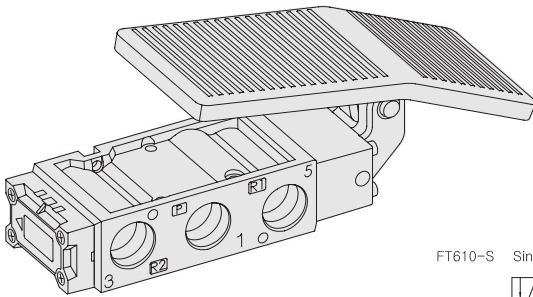
- 5/2, 5/3
- Pilot Type - 1/4, 3/8
- Direct Operation Type - 1/2
- Excellent Durability



FT410-S
2 4
3 1 5

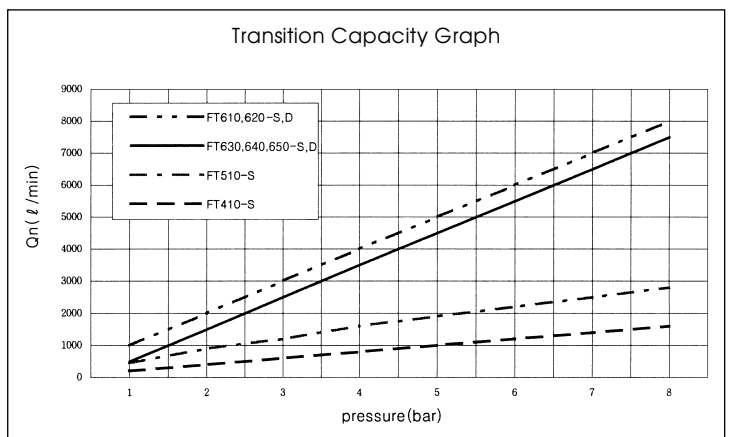


FT510-S
2 4
3 1 5



SPECIFICATION

ITEM	SERIES	FT410-S	FT510-S	FT600-S, D
	FUNCTION	5/2-Way		5/2, 5/3-Way
Fluids	Compressed Air & Inert Gases			
Port Size		1/4	3/8	1/2
Pressure(bar)		1.5~8.0		0~8.0
Eff. Sectional Area(mm ²)-5bar		19.0	35.0	90.0
Ambient & Fluid Temp.	5~60°C (41~140°F)			
Lubrication	Not Required(Use ISO VG32#)			



The Material of Parts

- Valve Body : Die-Cast Aluminium
- Spool : Aluminium
- Seals : NBR
- Spring : Stainless
- Cap : Zinc Pressure Die-Cast
- Pilot parts : Glass Filled Nylon
- Foot Upper Plate : Die-Cast Aluminium
- Foot Low Plate : Zinc Pressure Die-Cast

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

FT4 1 0 - S

Valve Series

FT4 :
1/4-Port Body
FT5 :
3/8-Port Body
FT6 :
1/2-Port Body

Function

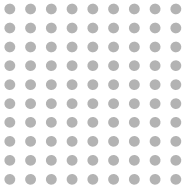
1	5/2 Single
2	5/2 Double
3	5/3 Closed Center
4	5/3 Open Center
5	5/3 Pressure Center

Port Size & Thread

0	G
1	NPT

Return Method

S	Spring Return
D	Detented

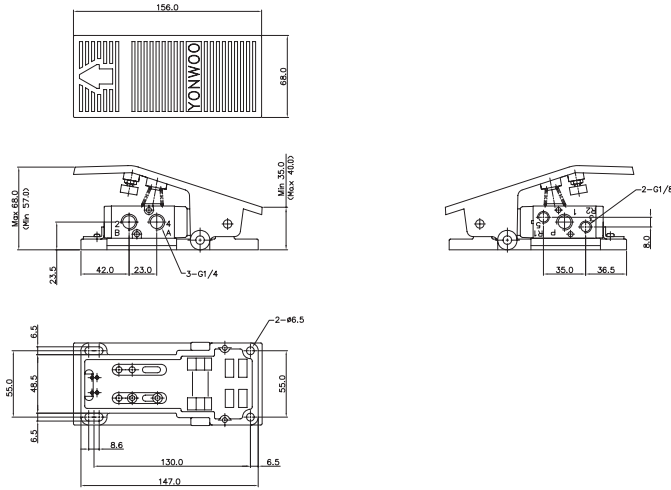
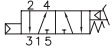


Foot Treadle Operated Spool Valves

Port Thread 1/4, 3/8, 1/2

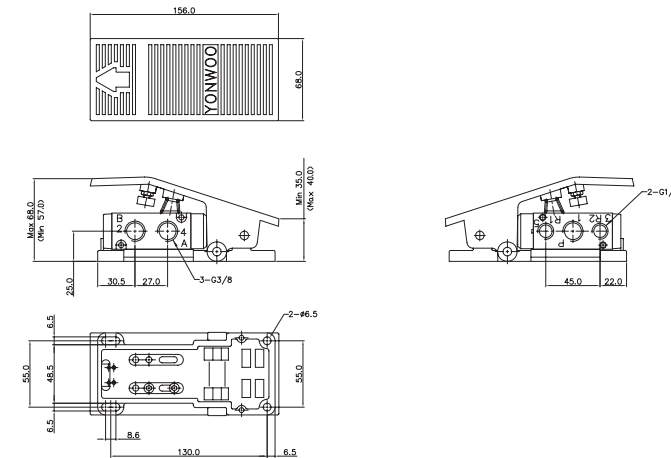
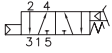
5/2-Way, Foot Valve, Air Return Operation Thread-G1/4

FT410-S



5/2-Way, Foot Valve, Air Return Operation Thread-G3/8

FT510-S

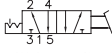


5/2-Way, Foot Valve, Spring Return & Detented Operation Thread-G1/2

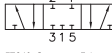
FT610-S



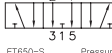
FT620-D



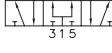
FT630-S



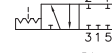
FT640-S



FT650-S



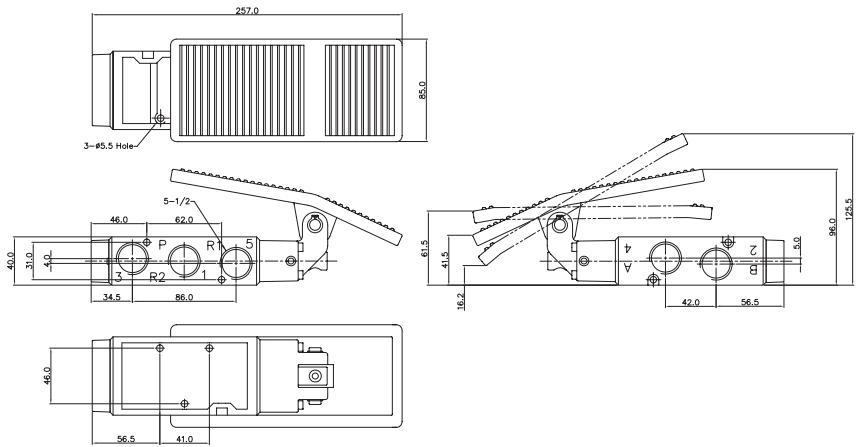
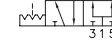
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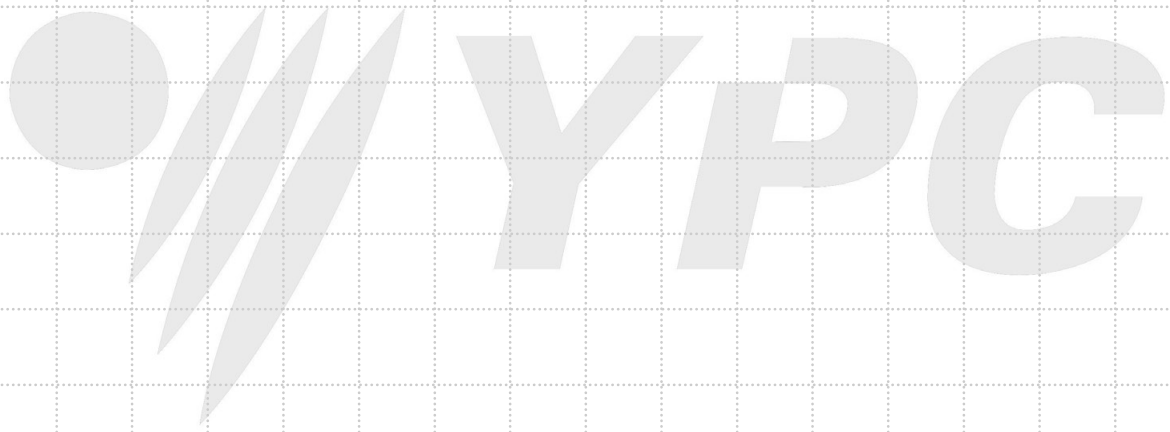


FT640-D



FT650-D





COMPACT CYLINDER Series
SPEED CONTROLLER Series
AIR SILENCER Series
AIR HYDRO CONVERTER Series
BOOSTER CYLINDER Series

CHAPTER 10



Compact Cylinder



Speed Controller



Metal Silencer



Plastic Silencer



Air Hydro Converter



Direct Compressed Type
Booster Cylinder

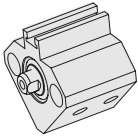


Precompressed Type
Booster Cylinder

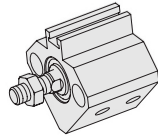
YC(D)Q2 Series

Compact Cylinder

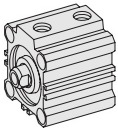
- In Magnet, Without Magnet
- Female(Standard), Male Thread



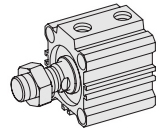
YQ2B-12x5D~YQ2B-12x30D
YCDQ2B-12x5D~YCDQ2B-12x30D
(ø12, ø16, ø20, ø25)



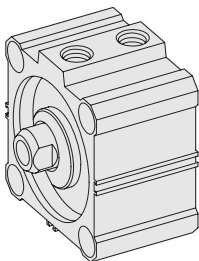
YQ2B-12x5DM~YQ2B-12x30DM
YCDQ2B-12x5DM~YCDQ2B-12x30DM
(ø12, ø16, ø20, ø25)



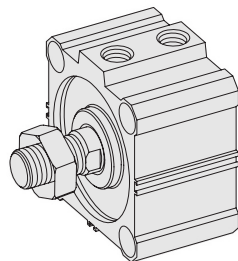
YQ2B-32x5D~YQ2B-32x50D
YCDQ2B-32x5D~YCDQ2B-32x50D
(ø32, ø40)



YQ2B-32x5DM~YQ2B-32x50DM
YCDQ2B-32x5DM~YCDQ2B-32x50DM
(ø32, ø40)



YQ2B-50x10D~YQ2B-50x50D
YCDQ2B-50x10D~YCDQ2B-50x50D
(ø50, ø63, ø80)



YQ2B-50x10DM~YQ2B-50x50DM
YCDQ2B-50x10DM~YCDQ2B-50x50DM
(ø50, ø63, ø80)

SPECIFICATION

Fluids	Air
Certified Pressure	15bar
Maximum Operation Pressure	10bar
Minimum Operation Pressure	0.5bar (ø12, ø16 : 0.7bar)
Ambient & Fluid Temp.	5~60°C (41~140°F)
Lubrication	Not Required(Use ISO VG32#)
Cussion	None
Rod End Screw	Female Nut(standard), male Nut(option)
Tolerance of Screw	2nd grade of KS
Allowance of Stroke Distance	+1
Supporting Type	Standard
Mounting	Pierce(Basic), Both Ends Tap(Optional)

The Material of Parts

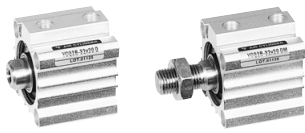
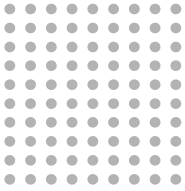
- Tube : Aluminium Extruding
- Piston : Aluminium
- Piston Rod : ø12~ø25-ST304
ø32~ø80-Carbon Iron
- Seals : NBR
- Snap Ring : HSWR1
- Hex Nut : Carbon Iron
- Bush : DU Bush
- Head Cover : Aluminium
- Magnet : Rubber Magnet

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

YCDQ2 **B** - 20 × 30 **D** **M**

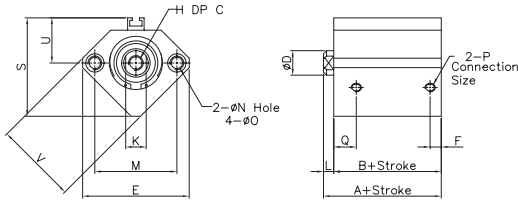
Magnet is Attached or Not		Mounting		Tube Diameter	Cylinder Stroke			Operating Method		Rod Type	
YQ2	Non Built-in	A	Both Ends Tap	12 : 12mm	Cylinder diameter	Cylinder Stroke(mm)	Port Size & Thread	D	Double-acting type	Non-marked	Nut(Basic)
YCDQ2	Built-in	B	Pierce	16 : 16mm	ø12, ø16	5, 10, 15, 20, 25, 30	M5×0.8			M	Screw of rod tap (Option)
				20 : 20mm	ø20, ø25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50					
				25 : 25mm	ø32, ø40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100	G 1/8				
				32 : 32mm	ø50, ø63	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100	G 1/4				
				40 : 40mm	ø80	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100	G 3/8				
				50 : 50mm							
				63 : 63mm							
				80 : 80mm							



YC(D)Q2 Series

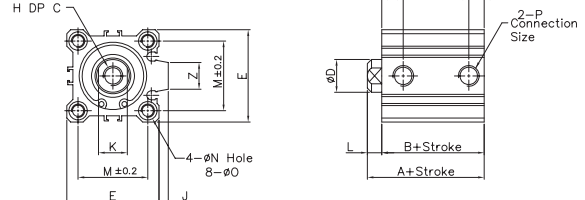
Non Built-in Magnet Dimension

YCQ2B-00 × 00D(M) ϕ 12, ϕ 16, ϕ 20, ϕ 25



Non Built-in Magnet Dimension

YCQ2B-00 × 00D(M) ϕ 32, ϕ 40, ϕ 50, ϕ 63, ϕ 80

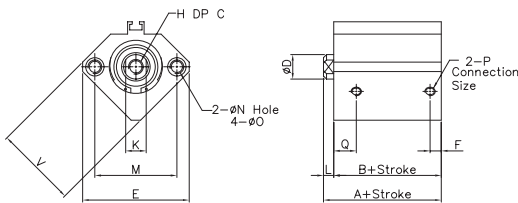


Outside Dimension

Bore Size (mm)	Stroke Range (mm)	A	B	ϕ D	E	F	H	C	ϕ I	J	K	L	M	ϕ N	ϕ O	P	Q	S	U	V	Z	B'	C'	E'	G'	H'	L'	X'
YCQ2-12	5~30	20.5	17.0	6	32.0	5.0	M3×0.5	6	-	-	5	3.5	22	3.5	6.5 DP 3.5	M5×0.8	10.5	-	-	25	-	8	9.0	9.2	4	M5×0.8	14.0	10.5
YCQ2-16	5~30	22.0	18.5	8	38.0	5.5	M4×0.7	8	-	-	6	3.5	28	3.5	6.5 DP 3.6	M5×0.8	10.0	-	-	29	-	10	10.0	9.2	5	M6×1.0	15.5	12.0
YCQ2-20	5~50	24.0	19.5	10	46.8	5.5	M5×0.8	7	-	-	8	4.5	36	5.5	9.0 DP 7.0	M5×0.8	10.5	-	-	36	-	13	12.0	15.0	5	M8×1.25	18.5	14.0
YCQ2-25	5~50	27.5	22.5	12	52.0	5.5	M6×1.0	12	-	-	10	5.0	40	5.5	9.0 DP 7.0	M5×0.8	11.0	-	-	40	-	17	15.0	19.6	6	M10×1.25	22.5	17.5
YCQ2-32	5~100	30.0	23.0	16	45.0	7.5	M8×1.25	13	60	4.5	14	7.0	34	5.5	9.0 DP 7.0	G1/8	10.5	49.5	-	-	18	22	20.5	25.4	8	M14×1.5	28.5	23.5
YCQ2-40	5~100	36.5	29.5	16	52.0	8.0	M8×1.25	13	69	5.0	14	7.0	40	5.5	9.0 DP 7.0	G1/8	12.0	57.0	-	-	18	22	20.5	25.4	8	M14×1.5	28.5	23.5
YCQ2-50	10~100	38.5	30.5	20	64.0	10.5	M10×1.5	15	86	7.0	17	8.0	50	6.6	11.0 DP 8.0	G1/4	11.5	71.0	-	-	22	27	26.0	31.5	11	M18×1.5	33.5	28.5
YCQ2-63	10~100	44.0	36.0	20	77.0	10.5	M10×1.5	15	103	7.0	17	8.0	60	9.0	14.0 DP 10.5	G1/4	15.0	84.0	-	-	22	27	26.0	31.2	11	M18×1.5	33.5	28.5
YCQ2-80	10~100	53.0	43.5	25	98.0	12.5	M16×2.0	21	132	6.0	22	10.0	77	11.0	17.5 DP 13.5	G3/8	16.0	104.0	-	-	26	32	32.5	37.0	13	M22×1.5	43.5	35.5

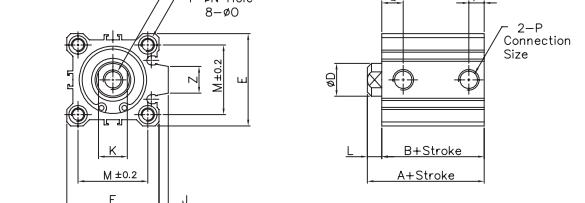
Built-in Magnet Dimension

YCDQ2B-00 × 00D(M) ϕ 12, ϕ 16, ϕ 20, ϕ 25



Built-in Magnet Dimension

YCDQ2B-00 × 00D(M) ϕ 32, ϕ 40, ϕ 50, ϕ 63, ϕ 80

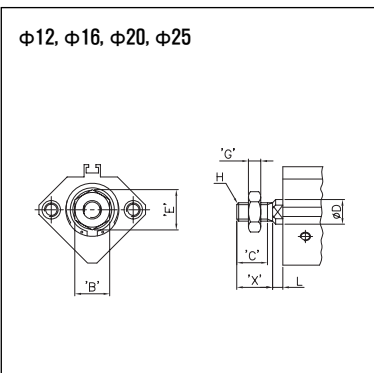


Outside Dimension

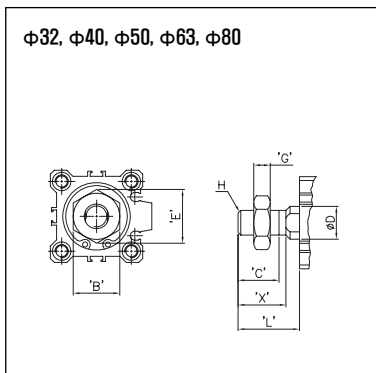
Bore Size (mm)	Stroke Range (mm)	A	B	ϕ D	E	F	H	C	ϕ I	J	K	L	M	ϕ N	ϕ O	P	Q	S	U	V	Z	B'	C'	E'	G'	H'	L'	X'
YCDQ2-12	5~30	31.5	28.0	6	32.0	5.0	M3×0.5	6	-	-	5	3.5	22	3.5	6.5 DP 3.5	M5×0.8	10.5	35.5	19.5	25	-	8	9.0	9.2	4	M5×0.8	14.0	10.5
YCDQ2-16	5~30	34.0	30.0	8	38.0	5.5	M4×0.7	8	-	-	6	3.5	28	3.5	6.5 DP 3.6	M5×0.8	10.0	41.5	22.5	29	-	10	10.0	9.2	5	M6×1.0	15.5	12.0
YCDQ2-20	5~50	36.0	31.5	10	46.8	5.5	M5×0.8	7	-	-	8	4.5	36	5.5	9.0 DP 7.0	M5×0.8	10.5	48.0	24.5	36	-	13	12.0	15.0	5	M8×1.25	18.5	14.0
YCDQ2-25	5~50	37.5	32.5	12	52.0	5.5	M6×1.0	12	-	-	10	5.0	40	5.5	9.0 DP 7.0	M5×0.8	11.0	53.5	27.5	40	-	17	15.0	19.6	6	M10×1.25	22.5	17.5
YCDQ2-32	5~100	40.0	33.0	16	45.0	7.5	M8×1.25	13	60	4.5	14	7.0	34	5.5	9.0 DP 7.0	G1/8	10.5	58.5	31.5	-	18	22	20.5	25.4	8	M14×1.5	28.5	23.5
YCDQ2-40	5~100	46.5	39.5	16	52.0	8.0	M8×1.25	13	69	5.0	14	7.0	40	5.5	9.0 DP 7.0	G1/8	12.0	66.0	35.0	-	18	22	20.5	25.4	8	M14×1.5	28.5	23.5
YCDQ2-50	10~100	48.5	40.5	20	64.0	10.5	M10×1.5	15	86	7.0	17	8.0	50	6.6	11.0 DP 8.0	G1/4	11.5	80.0	41.0	-	22	27	26.0	31.5	11	M18×1.5	33.5	28.5
YCDQ2-63	10~100	54.0	46.0	20	77.0	10.5	M10×1.5	15	103	7.0	17	8.0	60	9.0	14.0 DP 10.5	G1/4	15.0	93.0	47.5	-	22	27	26.0	31.2	11	M18×1.5	33.5	28.5
YCDQ2-80	10~100	63.5	53.5	25	98.0	12.5	M16×2.5	21	132	6.0	22	10.0	77	11.0	17.5 DP 13.5	G3/8	16.0	112.5	57.5	-	26	32	32.5	37.0	13	M22×1.5	43.5	35.5

Male Screw Outside Dimension

ϕ 12, ϕ 16, ϕ 20, ϕ 25

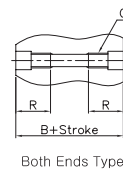


ϕ 32, ϕ 40, ϕ 50, ϕ 63, ϕ 80



Both Ends Tap Dimension

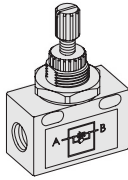
Bore Size	O	R
12	M4×0.7	10
16	M4×0.7	10
25	M6×1.0	17
30	M6×1.0	17
32	M6×1.0	17
40	M6×1.0	17
50	M8×1.25	20
63	M10×1.5	20
80	M12×1.75	25



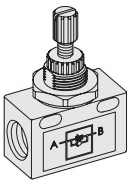
YSC Series

Speed Controller

- 1/8, 1/4
- Precise Flow Adjustment
- Elegant External View



YSC02-1



YSC02-2

SPECIFICATION

ITEM	SERIES	
	YSC02	
PORT SIZE	1/8	1/4
Inside Pressure(bar)	15.0	
Pressure Range(bar)	0.5~9.9	
Ambient & Fluid Temp.	5~60°C (41~140°F)	
Rotation Frequency	8 Cycle	
Weight(g)	80	
Free	Flux(Nl/min)	340
Flowing	Effective Profile Area mm ²	5
Control	Flux(Nl/min)	250
Flowing	Effective Profile Area mm ²	3.7
Applicable Syylinder Diameter(∅)	12, 16, 20, 25, 32, 40, 50, 63, 80	

The Material of Parts

- Valve Body : Zinc Pressure Die-Cast
- Lock Nut : Brass
- Housing : Brass
- Controll Bar : Brass
- Hex Nut : Carbon Iron
- Seals : NBR

* The specification on each item can be amended without any prenotice to improve a performance.
 * The specification on each item can be different from actual specification.

ORDERING NO.

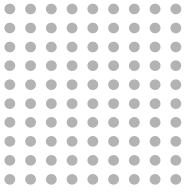
YSC 02 - 1

Model

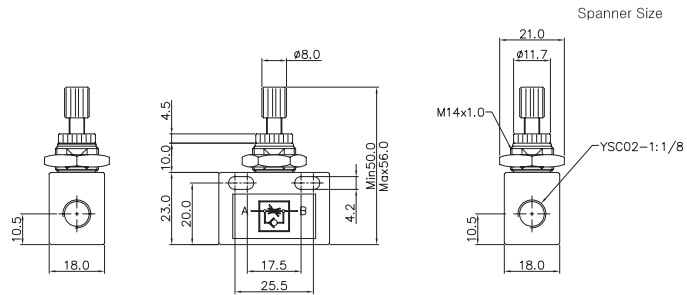
YSC 02

Port Size & Thread

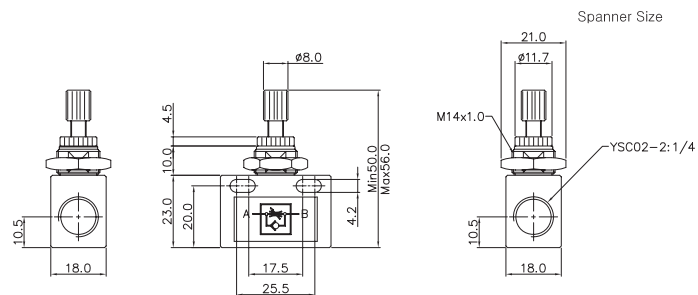
1	G 1/8
2	G 1/4
3	NPT 1/8
4	NPT 1/4



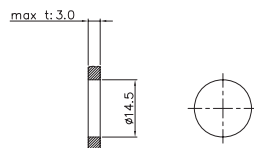
Pipe Type Speed Controller
Thread- 1/8

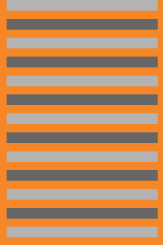


Pipe Type Speed Controller
Thread- 1/4



PANEL HOLE





Air Silencer Series

- M5, PT 1/8, 1/4, 3/8, 1/2
- Space Economy Type
- Long Life Time

SPECIFICATION

METAL SILENCER

Type	PORT SIZE	WEIGHT (g)	DIAMETER			
	PT		A	B	C	D
ASS 1000	M5	2	4	18	7	7
ASS 2000	1/8	6	7	24	8	11
ASS 4000	1/4	17	8	32	10.5	15
ASS 5000	3/8	28	10	39	12	19
ASS 6000	1/2	35	14	44	15	22

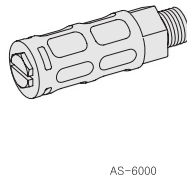
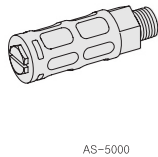
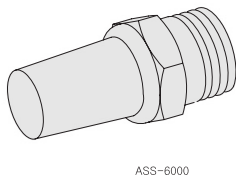
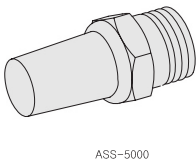
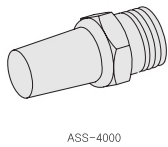
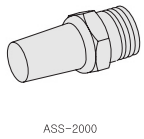
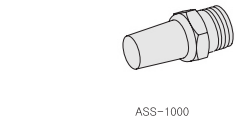
PLASTIC SILENCER

Type	PORT SIZE	WEIGHT (g)	DIAMETER			
	PT		A	B	C	D
AS 2000	1/8	5	40	16	14	7
AS 4000	1/4	14	65	21	20	10
AS 5000	3/8	22	85	25	22	13
AS 6000	1/2	32	95	26	26	14

The Material of Parts

- Metal Silencer
 - Body : Copper
 - Element : Powder
- Plastic Silencer
 - Body, Cap : POM
 - Resin Element

※ The specification on each item can be amended without any prenotice to improve a performance.
 ※ The specification on each item can be different from actual specification.



ORDERING NO.

ASS - 1000

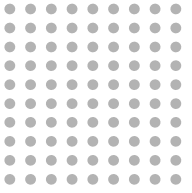
Silencer Type

ASS:
Metal Silencer

AS:
Plastic Silencer

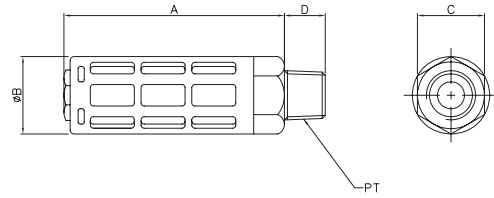
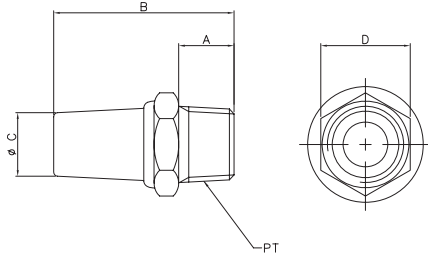
Connection Size

1000	M5×0.8
2000	PT 1/8
4000	PT 1/4
5000	PT 3/8
6000	PT 1/2



Air Silencer Series

M5, 1/8, 1/4, 3/8, 1/2



MODEL NO.	PORT SIZE	WEIGHT (g)	DIAMETER			
	PT		A	B	C	D
ASS 1000	M5	2	4	18	7	7
ASS 2000	1/8	6	7	24	8	11
ASS 4000	1/4	17	8	32	10,5	15
ASS 5000	3/8	28	10	39	12	19
ASS 6000	1/2	35	14	44	15	22

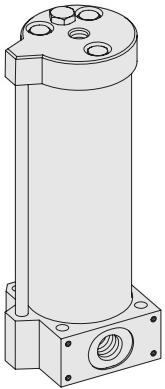
MODEL NO.	PORT SIZE	WEIGHT (g)	DIAMETER			
	PT		A	φB	C	D
AS 2000	1/8	5	40	16	14	7
AS 4000	1/4	14	65	21	20	10
AS 5000	3/8	22	85	25	22	13
AS 6000	1/2	32	95	26	26	14

YCT Series

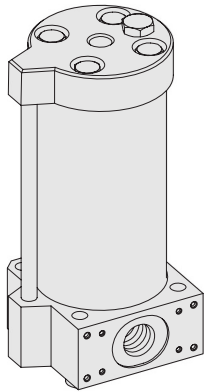
Air Hydro Converter

■ Usage Pressure 3~7bar

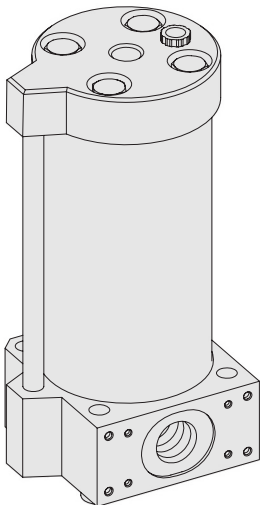
■ Guaranteed Internal Pressure 10.5bar



YCT 63x100



YCT 100x100



YCT 160x100

SPECIFICATION

Usage Pressure	3~7bar
Guaranteed Internal Pressure	10.5bar
Ambient & Fluid Temp.	5~50°C
Fluid	Tubin Oil, Hydercting Diameter(40~100cst)

The Material of Parts

- Base : Die-Cast Aluminium
- Tube : Aluminium Extruding
- Indicator Tube : Polycarbonate
- Floot : Bubble Resin
- Tie Rod : Carbon Iron
- Nut Part : STS304

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

YCT 63 - 100

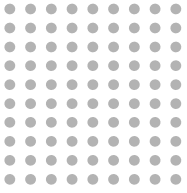
Diameter of Converter

63	63mm
100	100mm
160	160mm

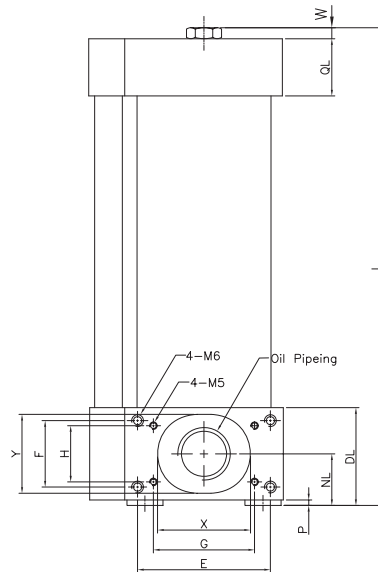
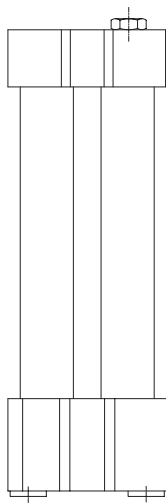
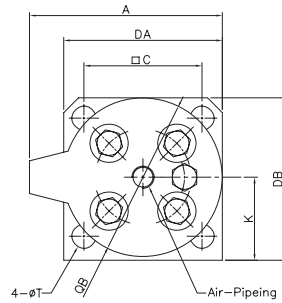
Standard Effective Stroke(Str)

	50	100	150	200	250	300	350	400	500	600	700	800
63	○	○	○	○	○	○	○	○	○	×	×	×
100	×	○	○	○	○	○	○	○	○	○	×	×
160	×	×	×	○	○	○	○	○	○	○	○	○

*Except to the above stroke statements, stroke design can be according to a quotation.



Air Hydro Converter



MODEL NO.\ITEM	AIR PIPE (PT)	OIL PIPE (PT)	A	C	DA	DB	DL	E
YCT 63	3/8	3/4	104	64	86	89	53	72
YCT 100	1/2	1	139	92	117	124	61	100
YCT 160	3/4	1 1/4	202	144	180	183	59	100

MODEL NO.\ITEM	F	G	H	K	NL	P	QB	QL	ø T	W	X	Y
YCT 63	36	72	36	45	28	3	86	31	11	6	35	35
YCT 100	40	72	36	65	33	5	118	32	13	6	53	45
YCT 160	40	72	36	93	29	0	180	48	18	6	44	44

L' Dimension

MODEL NO.\STROKE	50	100	150	200	250	300	350	400	500	600	700	800
YCT 63	224	294	344	394	444	494	544	594	694	-	-	-
YCT 100	-	304	354	404	454	504	554	604	704	804	-	-
YCT 160	-	-	-	414	464	514	564	614	714	814	914	1014

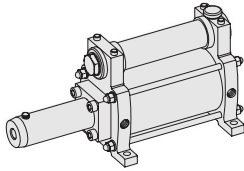
Booster Series

Direct Compressed Type
Precompressed Type

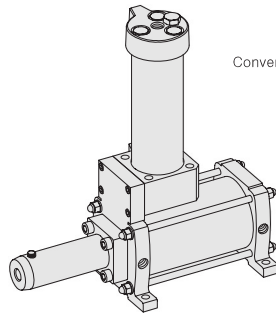
■ Heavy Pressure Rate - 11 : 1
25 : 1

■ Overflowing Oil Gauge
70cm³ (70cc)

Direct Compressed Type
YNBH3-40 (11:1)
YNBH3-60 (25:1)



Precompressed Type
YNPH3-40 (11:1)
YNPH3-60 (25:1)



Converter is Optional

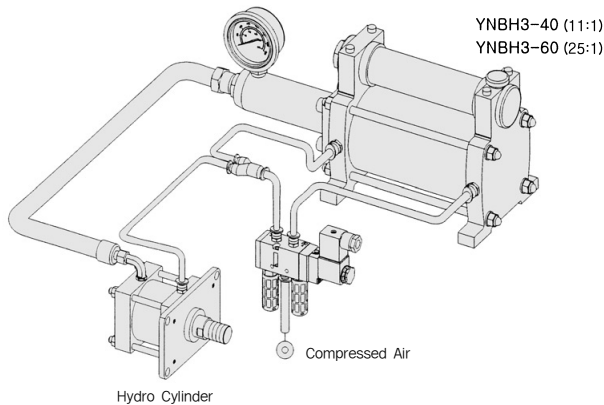
SPECIFICATION

ITEM	SERIES	YNBH3-40 YNPH3-40	YNBH3-60 YNPH3-60
Heavy Pressure Rate		11 : 1	25 : 1
Overflowing Oil Gauge		70cm ³ (70cc)	70cm ³ (70cc)
Overflowing Oil Pressure at the Time of Application Maximum air Pressure Temperature		77kgf/cm ²	175kgf/cm ²
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Operation Oil		Cosmomiter 10(cosmo gasolin), Tough spendux oil(made in Julkwang Tongsan Co.)	
Air Pressure Department	Fluid	Air	
	Oil-Feeding	Not Require	
	Pressure	3~7bar	
	Oil	Tubin oil, Oil Equivalent to ISO VG 32#	
Weight(direct pressure)		8.0kgf	10.0kgf

The Material of Parts

- Rod Cover : Die-Cast Aluminium
- Tie Rod : Carbon Iron
- Head Cover : Die-Cast Aluminium
- Hex Nut : Carbon Iron
- Tube : Aluminium Extruding

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

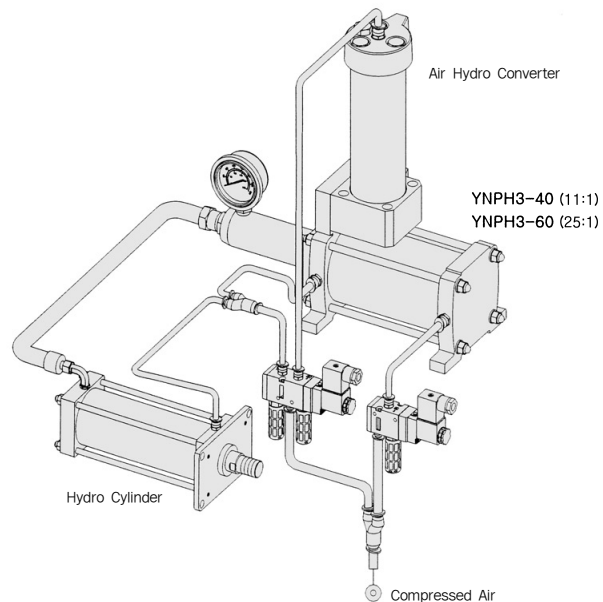


Hydro Cylinder

YNBH3-40 (11:1)
YNBH3-60 (25:1)

Compressed Air

Direct Compressed Type



Air Hydro Converter

YNPH3-40 (11:1)
YNPH3-60 (25:1)

Hydro Cylinder

Compressed Air

Precompressed Type

ORDERING NO.

YNBH 3 - 40 - 70

Booster Series

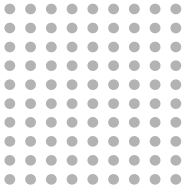
YNBH3	Direct Compressed Type
YNPH3	Precompressed Type

Heavy Pressure Rate

40	(11:1)
60	(25:1)

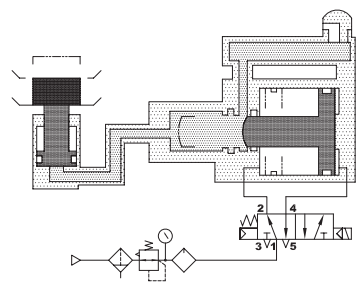
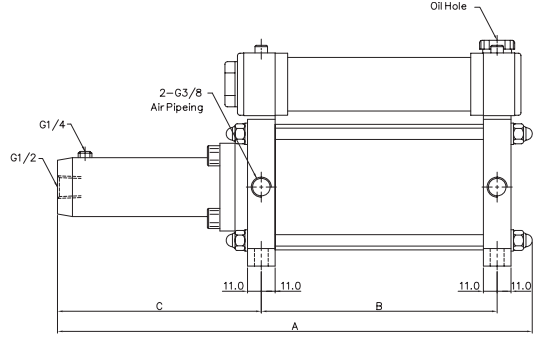
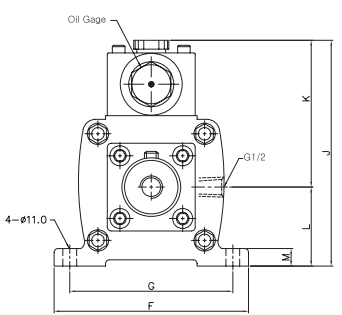
Overflowing

70	70CC
100	100CC



Booster Cylinder

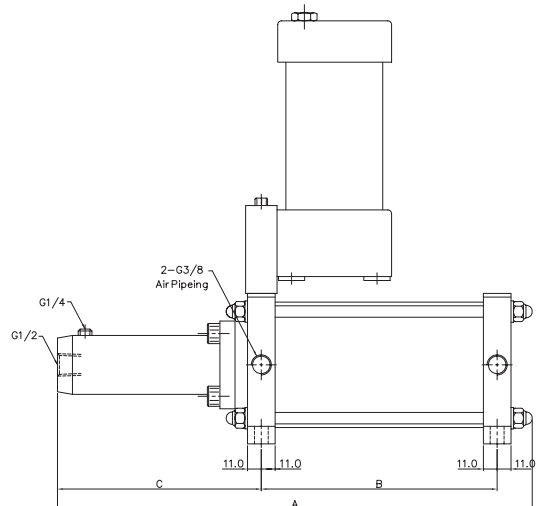
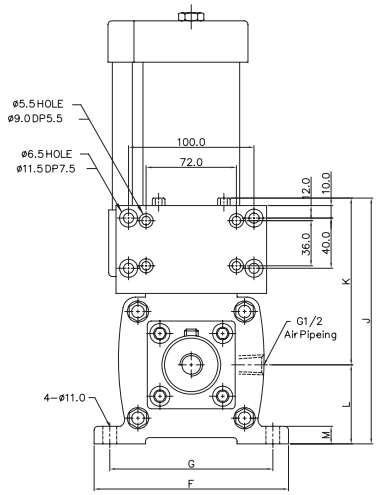
11 : 1, 25 : 1



MODEL NO.	A	B	C	F	G	J	K	L	M
YNBH3-40-70	378	188	162.5	155	130	180	120	60	14
YNBH3-40-100	478	238	212.5						
YNBH3-60-70	378	188	162.5	225	190	227	137	90	16
YNBH3-60-100	478	238	212.5						

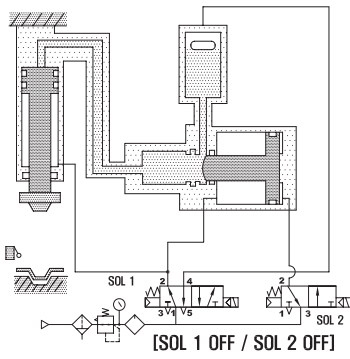
Precompressed Type

MODEL NO.	A	B	C	F	G	J	K	L	M
YNPH3-40-70	378	188	162.5	155	130	196	136	60	14
YNPH3-40-100	478	238	212.5						
YNPH3-60-70	378	188	162.5	225	190	245	156	90	16
YNPH3-60-100	478	238	212.5						



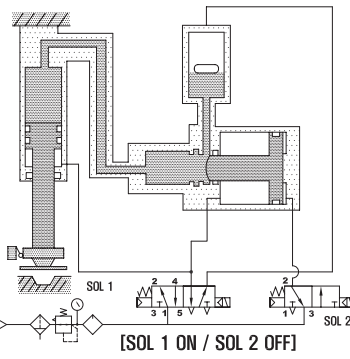
► Ending stroke

After finished work, compressor of oil cylinder has been restored to air pressure by converting valve, and all the stroke is returned original state, then is prepared to travel stroke.



► Precompressed Travelling stroke

By using compressor, high compressed oil should be travelled to the hydraulic to get output.



► Travelling stroke

By using common converter it has been changed from "low-compressed air pressure" to "oil pressure" at the time of 1:1 pressure.

