

SIV·SIE (ISO) Series

5/2, 5/3 Solenoid, Pneumatic Valve

CHAPTER 04



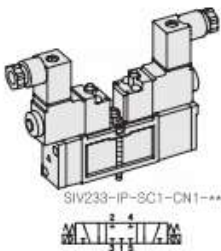
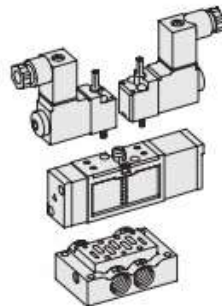
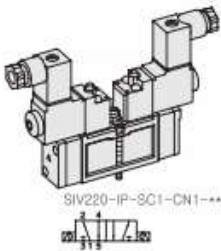
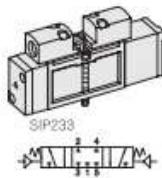
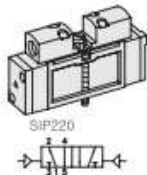
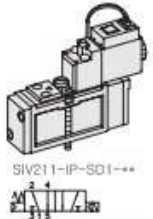
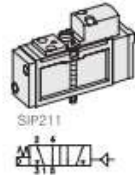
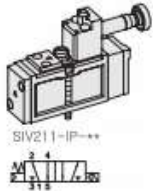
- SIV200
- SIV300
- SIV400
- SIV500

- SIE 200
- SIE 300

SIV200

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

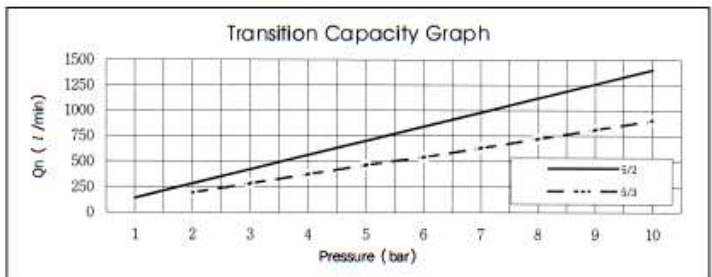
- 5/2, 5/3
- 18mm Body Width
- Sub-Base or Manifold Mounting Type
- Transition Flow 700 ℓ/min (5bar)



*** Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES FUNCTION	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	■ 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 pretence to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

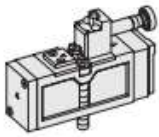
SIV2 1 1 - I P - SC1 - CN1 - A2

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	SC1 3 Pin Connector Coil	0 None	0 None
	2 5/2 Double	1 Air+Spring	E External Pilot	P Push Non-Locking	SC1 Grommet/Flying Leads	CN1 Normal Connector	A2 AC 220V
	3 5/3 Closed Center	2 Air		L Lever Locking	SD1 Grommet/Flying Leads With LED	OD1 Connector With LED	A1 AC 110V
	4 5/3 Open Center	3 Spring			SD1 Grommet/Flying Leads With LED	C21 Connector With LED & Surge Suppressor	A4 AC 24V
SIP2 : Pneumatic Valve	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

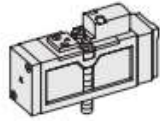
SIV300

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)



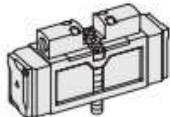
SIV311-IP***



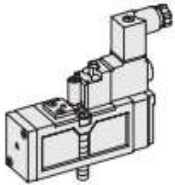
SIP311



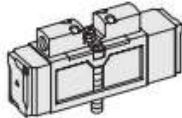
SIV311-IP-SD1***



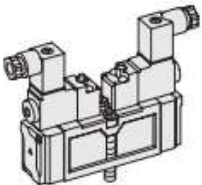
SIP320



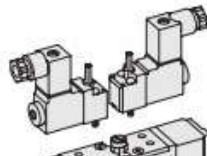
SIV311-EP-SC1-CN1***



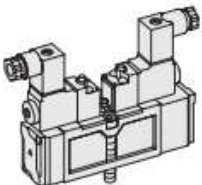
SIP333



SIV320-IP-SC1-CN1***



SIV333-IP-SC1-CN1***

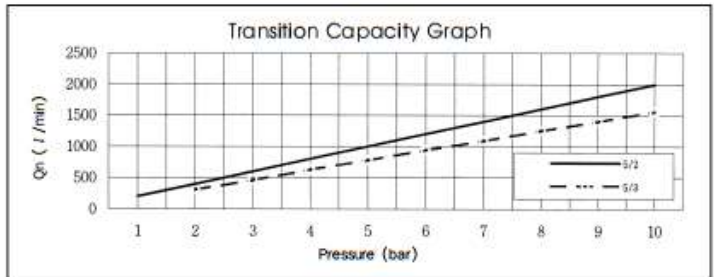


SIV333-IP-SC1-CN1***

***: voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES FUNCTION	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(ml) -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	I Internal Pilot	0 None	0 None	0 None	0 None
	2 5/2 Double	1 Air+Spring	E External Pilot	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	SC1 Grommet/Flying Leads	CD1 Connector With LED	A1 AC 110V
SIP3 : 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

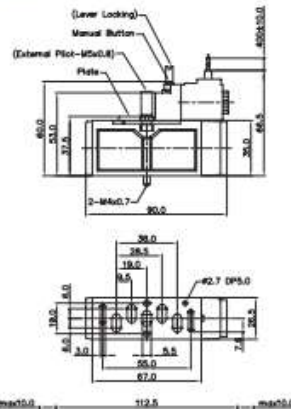


5Port 2Position Solenoid Valve

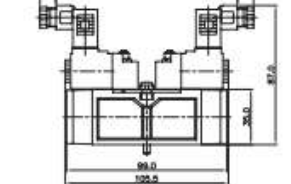
Single Solenoid
SV311-IP-SG1-***



External Pilot
SV311-EP-SG1-***

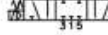


Double Solenoid
SV330-IP-SG1-CN1-***

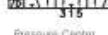


5Port 3Position Solenoid Valve

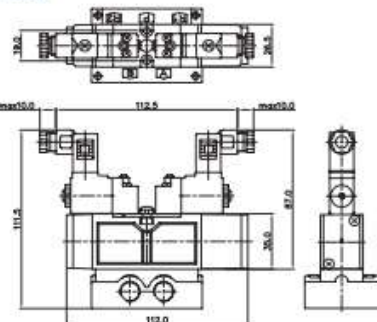
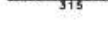
Closed Center
SV333-IP-SC1-CN1-***



Exhaust Center
SV343-IP-SC1-CN1-***



Pressure Center
SV353-IP-SC1-CN1-***

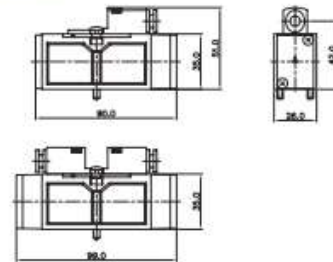
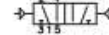


5Port 2Position Pneumatic Valve

Single Pneumatic
SP311

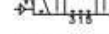


Double Pneumatic
SP320

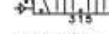


5Port 3Position Pneumatic Valve

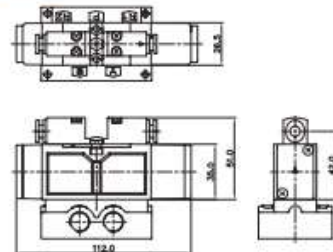
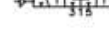
Closed Center
SP333



Exhaust Center
SP343



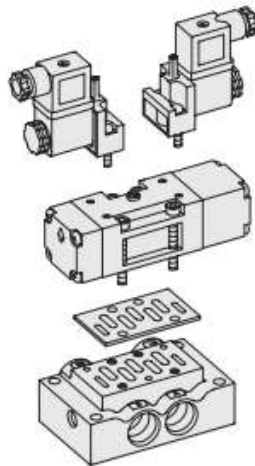
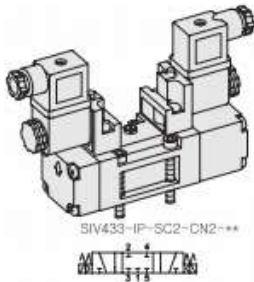
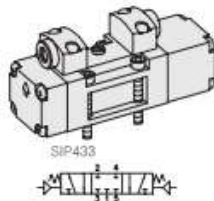
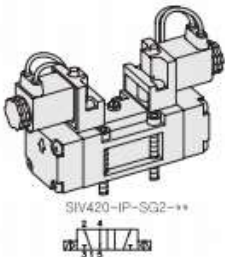
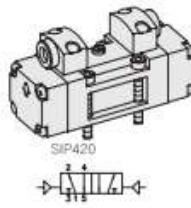
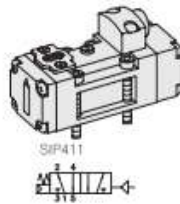
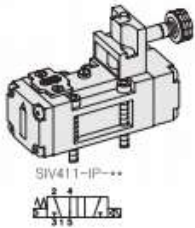
Pressure Center
SP353



SIV400

ISO-1
Solenoid / Pneumatic Valves

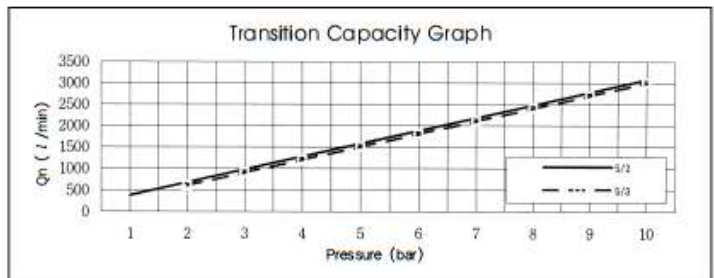
- 5/2, 5/3 ■ 40mm Body Width
- 30mm CNOMO pilot
- Sub-Base Mounting Type
- Transition Flow 1600ℓ/min (5bar)



** : Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		FUNCTION	
		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	



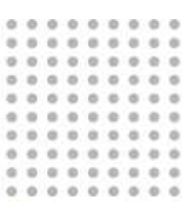
- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast
 - Pilot Parts : Glass Filled Nylon
 - Armature : Stainless Steel
 - Armature Seals : Viton

* The specification on each item can be amended without any pretence 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	0 None
	2	5/2 Double	1 Air + Spring	E External Pilot	P Push Non-Locking	ON2 Normal Connector	A2 AC 230V
	3	5/3 Closed Center	2 Air		L Lever Locking	CG2 Connector With LED	A1 AC 110V
	4	5/3 Open Center	3 Spring			C22 Connector With LED & Surge Suppressor	A4 AC 24V
SIP4 : Pneumatic Valve	5	5/3 Pressure Center			SG2 Grammet/Flying Leads With LED	D4 DC 24V	D2 DC 12V



5Port 2Position Solenoid Valve

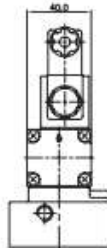
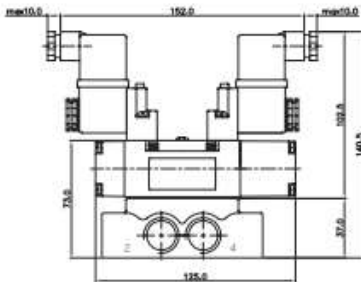
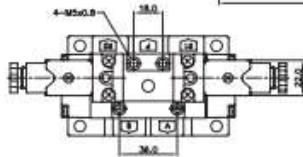
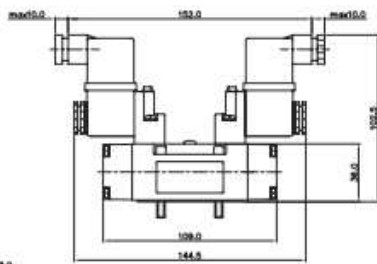
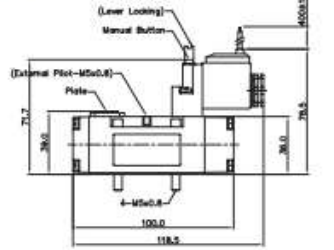
Single Solenoid
SIV411-IP-SC2-***



External Pilot
SIV411-EP-SC2-***

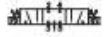


Double Solenoid
SIV420-IP-SC2-CN2-***



5Port 3Position Solenoid Valve

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



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

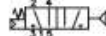


Pressure Center
SIV453-IP-SC2-CN2-***

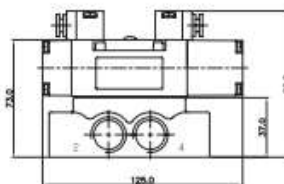
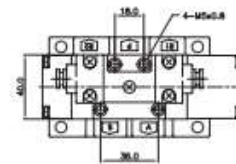
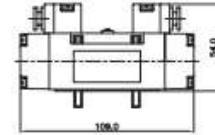
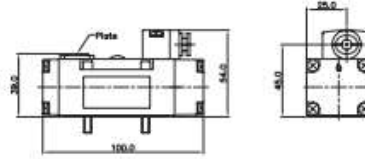
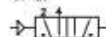


5Port 2Position Pneumatic Valve

Single Pneumatic
SIP411



Double Pneumatic
SIP420



5Port 3Position Pneumatic Valve

Closed Center
SIP433



Exhaust Center
SIP443



Pressure Center
SIP453



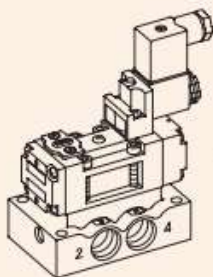
Sub Base Ordering Code

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	
	2 G 3/8	
	3 G 1/2	SP Single Station Sub Base, With Pilot Ports
	6 NPT 1/4	
	7 NPT 3/8	
	8 NPT 1/2	

SIB40 SINGLE SUB BASE

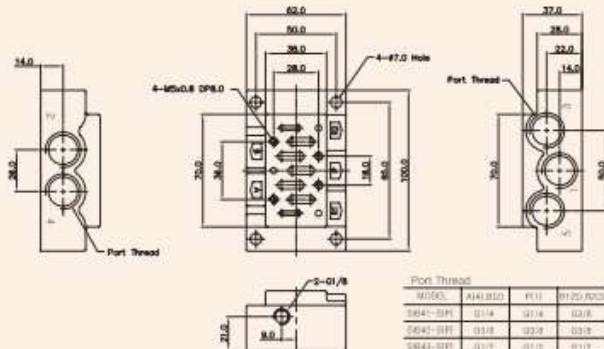
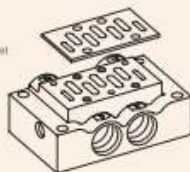
(SIV400 Solenoid & Pneumatic Valve Use Sub Base)

Single Station Sub Base Dimension



Sub Base Gasket
(Material: NBR)

Sub Base
(Material: AL)

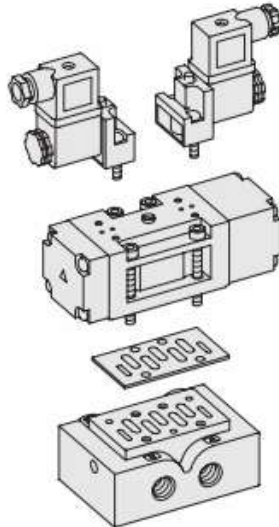
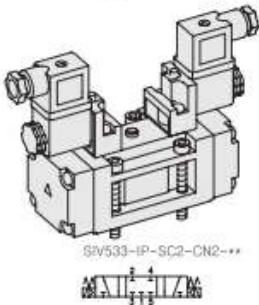
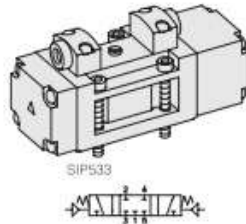
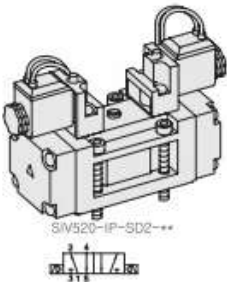
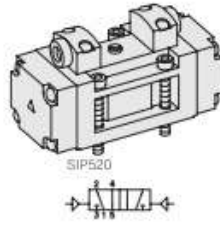
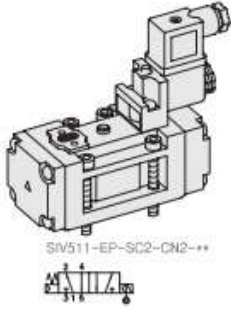
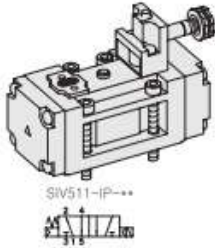


Model	4x1/2	1/1	1/2	1/2
SIB4-SPI	31.4	31.4	31.4	31.4
SIB4-SPI	31.4	31.4	31.4	31.4
SIB4-SPI	31.4	31.4	31.4	31.4

SIV500

ISO-2
Solenoid / Pneumatic Valves

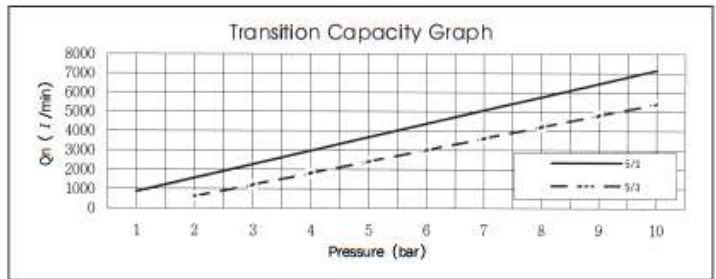
- 5/2, 5/3 ■ 50mm Body Width
- 30mm CNOMO PILOT
- Sub-Base Mounting Type
- Transition Flow 3500ℓ/min (5bar)



***:Voltage Selection (see page 80)

SPECIFICATION

ITEM	SERIES	SOLENOID, PNEUMATIC	
		FUNCTION	
		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(ml)-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(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:5.5VA(60Hz) / DC:2.5W	



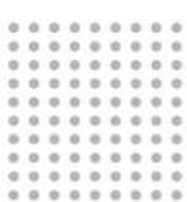
- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Pilot Parts : Glass Filled Nylon
 - Spool : Aluminium
 - Armature : Stainless Steel
 - Seals : NBR
 - Armature Seals : Viton
 - Spring : Stainless
 - Cap : Zinc Pressure Die-Cast

* 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.

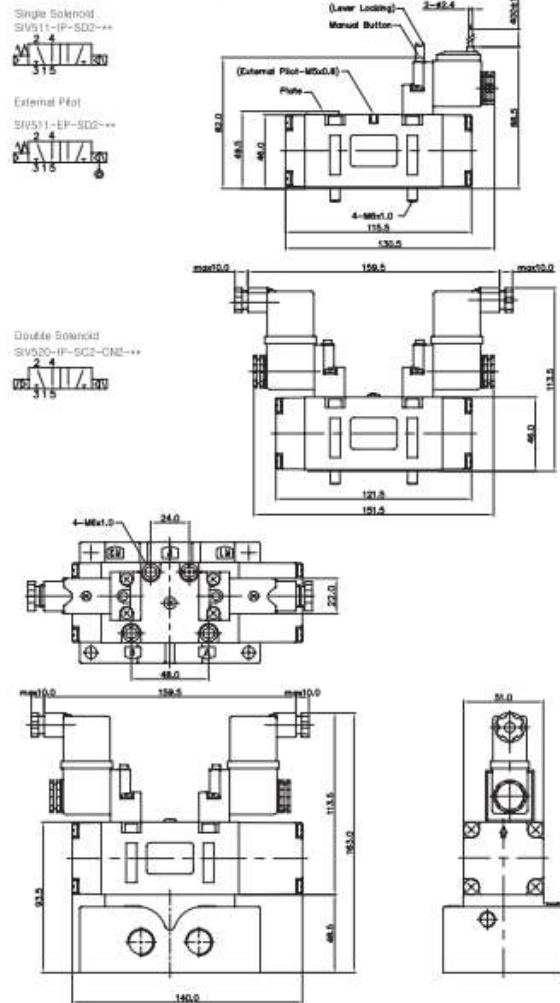
ORDERING NO.

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

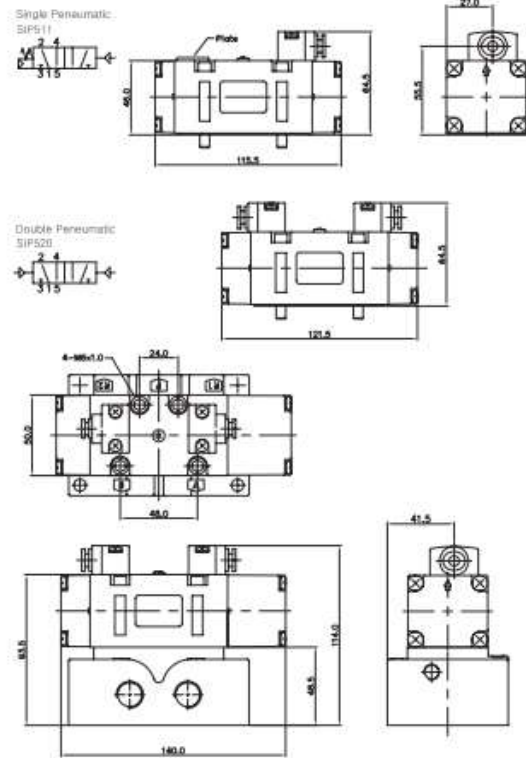
Valve Series	Function	Return Method	Int/Ext. Pilot	Manual Operator	Solenoid Coil Type	Connector Type	Voltage
SIV5 : Solenoid Valve	1 5/2 Single	0 None	I Internal Pilot	0 None	0 None	0 None	0 None
	2 5/2 Double	1 Air+Spring	E External Pilot	P Push Non-Locking	SC2 3 Pin Connector Coil	CN2 Normal Connector	A2 AC 220V
	3 5/3 Closed Center	2 Air		L Lever Locking	SG2 Grammet/Ryng Leads	CQ2 Connector With LED	A1 AC 110V
SIP5 : Pneumatic Valve	4 5/3 Open Center	3 Spring			SD2 Grammet/Ryng Leads With LED	CQ2 Connector With LED & Surge Suppressor	A4 AC 24V
	5 5/3 Pressure Center						D4 DC 24V
							D2 DC 12V



5Port 2Position Solenoid Valve



5Port 2Position Pneumatic Valve



5Port 3Position Pneumatic Valve



5Port 3Position Solenoid Valve



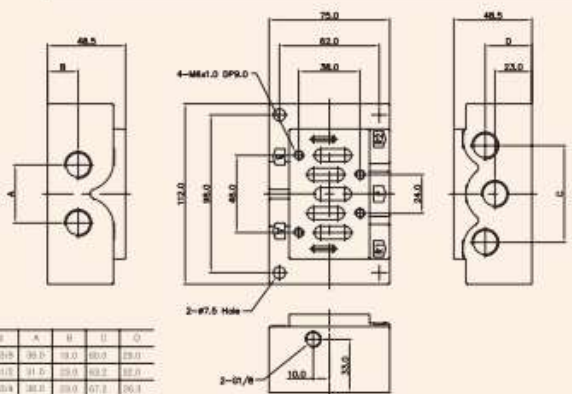
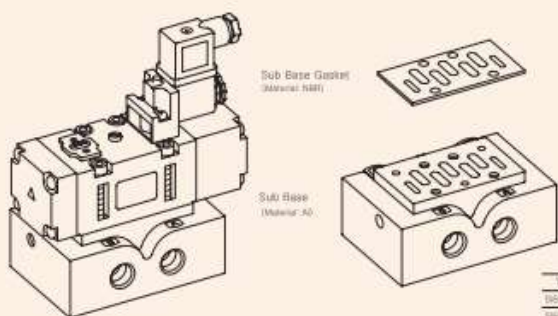
Sub Base Ordering Code

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	H	D
SIB5-G1/8	36.0	19.0	60.0	29.0
SIB5-G1/2	31.0	23.0	63.0	32.0
SIB5-G3/4	38.0	23.0	67.0	36.0

