



# 7S Series Integrated solenoid valve (5/2 way, 5/3 way)

## Compendium of 7S Series

### Various port type options

Port threads and push-in fittings options.

### With Manual Override

With manual override for easy installation and adjustment.

### Flexible installation and expansion

### Single Power Inlet

Two kinds of electricity are optional, easy to use in all kinds of environment.

### Transfer block design

Steady signal transmission by transfer block design.

### Centralized inlet and exhaust design

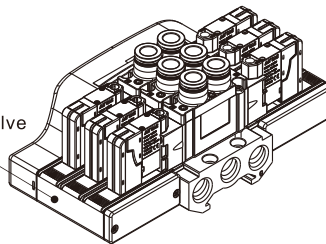
### Easily install on manifold

Easily install on manifold and could single assembly or install with a DIN rail.

### The Manifold is interchangeable

2-position/3-position solenoid valve can install on double controlled solenoid manifold at the same time.

2-position/3-position double solenoid valve could installed on same manifold



# Integrated solenoid valve (5/2 way, 5/3 way)

## 7S Series

### Specification(Integrated valves)

Model	7S0500	7S100	7S200
Fluid	Air(to be filtered by 40 μm filter element)		
Stations	Single solenoid	2 stations ~20 stations	
	Double solenoid	3 stations ~20 stations[Note1]	
Electrical direction	V: Vertical H: Horizontal		
Electrical entry	Terminal, 25pin D-Sub(Single control)		
	Terminal, 37pin D-Sub(Double control)		
Port size [Note2]	A/B Port	Thread	M5
	Push-in fitting	Φ4 Push-in fitting	Φ4/Φ6/Φ8 Push-in fitting
	P/R/S Port	1/8"	1/4"
The type of inlet and exhaust	Centralized inlet and exhaust		
Operating pressure	0.15~0.8MPa(21~114psi)		
Proof pressure	1.2MPa(175psi)		
Shock Resistance	50G		
Temperature	-20~70°C		

[Note 1] Allow Max. 6 stations double solenoid valve and single solenoid at the rest stations.  
 [Note1] PT thread and G thread and NPT thread are available.

### Specification(Coil)

Item	Specification
Standard voltage	DC24V; DC12V
Scope of voltage	DC: ±10%
Power consumption	DC: 0.9W
Protection	Dustproof
Temperature classification	F Class



### Ordering code of blank plate kit

P-7V100M -R2

① ②



① Model	7V0500M: 7V0500 Series manifold 7V100M: 7V100 Series manifold 7V200M: 7V200 Series manifold
② Code	R2: Blank plate for manifold

[Note] 1. Blank plate kits contains blank plate and screws.

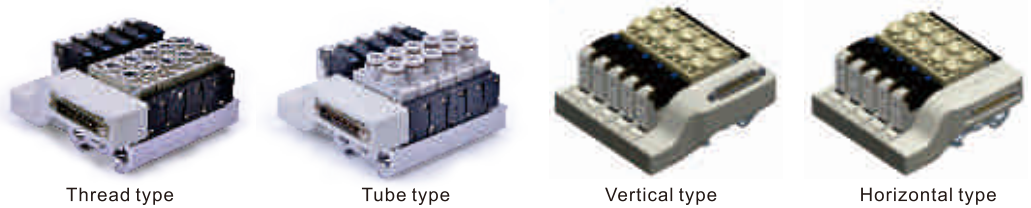
### Product feature

1. Integrated installation of air inlet/exhaust and power socket(25/37 pin D-SUB) to simplify wiring process and reduce the risk of mis-installation.
2. 7V valves are connected to the sub-base of 7V via a robust adapter with 50G shock resistance.
3. The manifold can be either installed on a working platform or with a DIN rail.
4. 2-position and 3-position solenoid valves can be installed on the same manifold without extra accessories.
5. Equipped with manual override for adjustment and troubleshooting.
6. Low starting voltage and long service life.

### 7S Integrated Single Solenoid Valves Ordering code

7S 05 H 20F □ - J04 B S20

① ② ③ ④ ⑤ ⑥ ⑦ ⑧



① Model	7S: Integrated solenoid valve(5/2, 5/3 way)		
② Code	05: 0500 Series	1: 100 Series	2: 200 Series
③ Electrical direction	V: Vertical H: Horizontal		
④ Number of stations	2F: 2 Stations	3F: 3 Stations	4F: 4 Stations ..... 20F: 20 Stations
⑤ Thread type	Blank: PT / G: G Thread / T: NPT Thread		
⑥ Port size	Thread	M5: M5	06: 1/8" 08: 1/4"
	Tube	J04: Φ4mm	J04: Φ4mm/J06: Φ6mm/J08: Φ8mm J08: Φ8mm/J10: Φ10mm
⑦ Voltage	B: DC24V F: DC12V		
⑧ Number of valves(Single solenoid)	S1: 1 Piece	S2: 2 Pieces	S3: 3 Pieces ..... S20: 20 Pieces

#### Ordering instructions:

1. Select voltage, thread type, port size, and fill in the quantity of the required solenoid valve in sequence.
2. Shipment solenoid valve arrangement sequence: sorted by D-SUB direction.
3. Blank plate and dust-proof cover will be installed when solenoid valve is not installed.
4. The 100 and 200 series inlet and exhaust ports are 1/4", the 0500 series inlet and exhaust ports are 1/8".

# Integrated solenoid valve (5/2 way, 5/3 way)

## 7S Series

### 7S Integrated Double Solenoid Valves Ordering code

7S 05 H 20F □ - J04 B C1 E1 P1 D1 S16

① ② ③ ④ ⑤ ⑥ ⑦ ⑧



① Model	7S: Integrated solenoid valve(5/2, 5/3 way)		
② Code	05: 0500 Series	1: 100 Series	2: 200 Series
③ Electrical direction	V: Vertical H: Horizontal		
④ Number of stations	3F: 3 Stations	4F: 4 Stations	20F: 20 Stations
⑤ Thread type	Blank: PT / G: G Thread / T: NPT Thread		
⑥ Port size	Thread	M5: M5	06: 1/8" 08: 1/4"
	Tube	J04: Φ4mm	J04: Φ4mm/J06: Φ6mm/J08: Φ8mm J08: Φ8mm/J10: Φ10mm
⑦ Voltage	B: DC24V F: DC12V		
⑧ Number of valves [Note]	30C	Blank: No	C1: 1 Piece C2: 2 Pieces ..... C6: 6 Pieces
	30E	Blank: No	E1: 1 Piece E2: 2 Pieces ..... E6: 6 Pieces
	30P	Blank: No	P1: 1 Piece P2: 2 Pieces ..... P6: 6 Pieces
	Double solenoid	Blank: No	D1: 1 Piece D2: 2 Pieces ..... D6: 6 Pieces
	Single solenoid	Blank: No	S1: 1 Piece S2: 2 Pieces S3: 3 Pieces ..... S20: 20 Pieces

[Note]: The number of stations is up to 20 stations. Double solenoid valve's numbers is up to 6 stations.

#### Ordering instructions:

1. Select voltage, thread type, port size, and fill in the quantity of the required solenoid valve in sequence.
2. Order of solenoid valve arrangement: A) Double solenoid 5/3 Way: C→E→P; B) Double solenoid 5/2 Way; C) Single solenoid 5/2 Way.
3. Blank plate and dust-proof cover will be installed when solenoid valve is not installed.
4. The 100 and 200 series inlet and exhaust ports are 1/4", the 0500 series inlet and exhaust ports are 1/8".

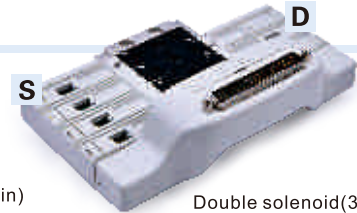
### Manifold(without 7S valve)Ordering code

7S 05 H D 20F D6 G

① ② ③ ④ ⑤ ⑥ ⑦



Single solenoid(25pin)



Double solenoid(37pin)

① Model	7S: Integrated solenoid valve(5/2, 5/3 way)		
② Code	05: 0500 Series	1: 100 Series	2: 200 Series
③ Electrical direction	V: Vertical H: Horizontal		
④ Control type	S: Single solenoid D: Double solenoid		
⑤ Number of total stations	2F: 2 Stations	3F: 3 Stations	4F: 4 Stations.....20F: 20 Stations
⑥ Number of double solenoid stations	Blank: Single solenoid D3: 3 Stations D6: 6 Stations		
⑦ Port size	Blank: PT / G: G Thread / T: NPT Thread		

[Note]:

1. The number of manifold's stations is up to 20 stations.
2. Number of double solenoid stations ≤ 6 stations. The ordering type is : 3 stations, 6 stations.
3. The 100 and 200 series inlet and exhaust ports are 1/4", the 0500 series inlet and exhaust ports are 1/8".
4. Can be used M5 stop screw or M4 standard screw to fix the manifold.
5. Please refer the "group diagram" to assembly the S side of single solenoid control / double solenoid control valve's manifold.
6. Manifold has only S side when control type is single solenoid.

### Ordering code for 7S valve

7S 1 10 06 B □

① ② ③ ④ ⑤ ⑥



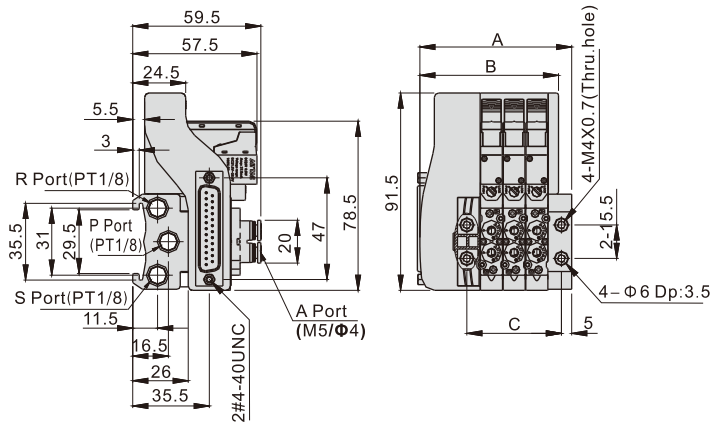
① Model	7S: Solenoid valve (5/2, 5/3 way)		
② Code	05: 0500 Series	1: 100 Series	2: 200 Series
③ Valve type	10: Single solenoid 5/2 way		20: Double solenoid 5/2 way
	30C: Double solenoid 5/3 way closed center		30E: Double solenoid 5/3 way exhaust center
	30P: Double solenoid 5/3 way pressure center		
④ Port size	Thread	M5: M5	06: 1/8" 08: 1/4"
	Tube	J04: Φ4mm	J04: Φ4mm/J06: Φ6mm/J08: Φ8mm J08: Φ8mm/J10: Φ10mm
⑤ Voltage	B: DC24V F: DC12V		
⑥ Thread type	Blank: PT / G: G Thread / T: NPT Thread		

# Integrated solenoid valve (5/2 way, 5/3 way)

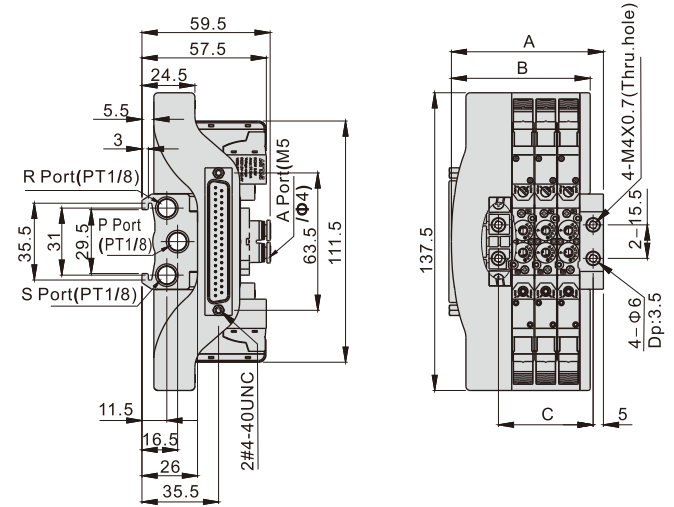
## 7S Series

### Dimensions

7S0500(Single solenoid/H type)



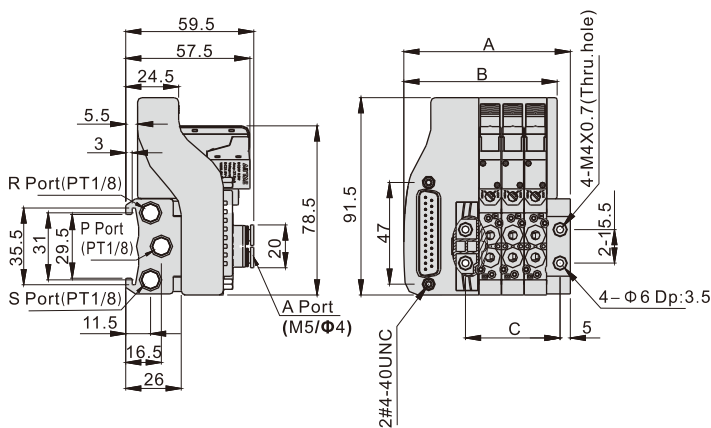
7S0500(Double solenoid/H type)



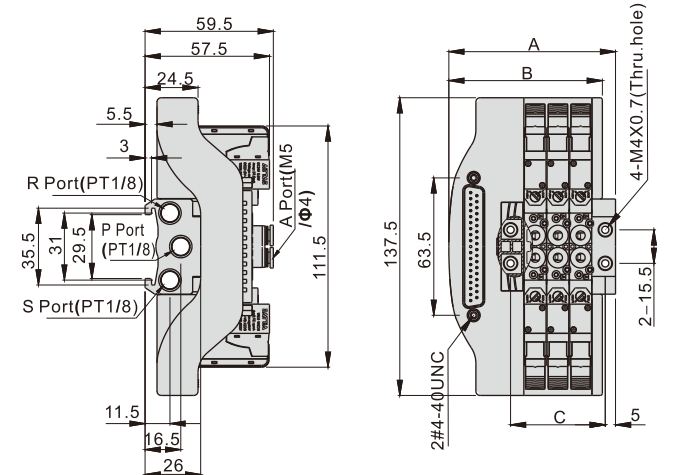
Item\Stations	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
A	59.8	70.3	80.8	91.3	101.8	112.3	122.8	133.3	143.8	154.3	164.8	175.3	185.8	196.3	206.8	217.3	227.8	238.3	248.8
B	53.7	64.2	74.7	85.2	95.7	106.2	116.7	127.2	137.7	148.2	158.7	169.2	179.7	190.2	200.7	211.2	221.7	232.2	242.7
C	33.3	43.8	54.3	64.8	75.3	85.8	96.3	106.8	117.3	127.8	138.3	148.8	159.3	169.8	180.3	190.8	201.3	211.8	222.3

Note : Single solenoid stations is 2~20 stations; Double solenoid stations is 3~20 stations.

7S0500(Single solenoid/V type)



7S0500(Double solenoid/V type)



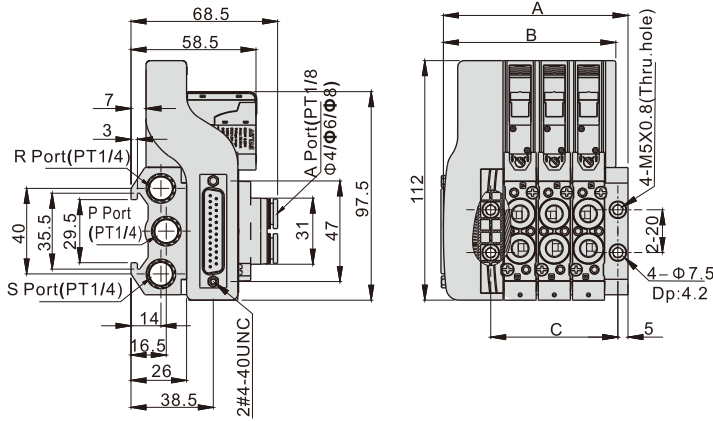
Item\Stations	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
A	66.6	77.1	87.6	98.1	108.6	119.1	129.6	140.1	150.6	161.1	171.6	182.1	192.6	203.1	213.6	224.1	234.6	245.1	255.6
B	60.5	71	81.5	92	102.5	113	123.5	134	144.5	155	165.5	176	186.5	197	207.5	218	228.5	239	249.5
C	33.3	43.8	54.3	64.8	75.3	85.8	96.3	106.8	117.3	127.8	138.3	148.8	159.3	169.8	180.3	190.8	201.3	211.8	222.3

Note : Single solenoid stations is 2~20 stations; Double solenoid stations is 3~20 stations.

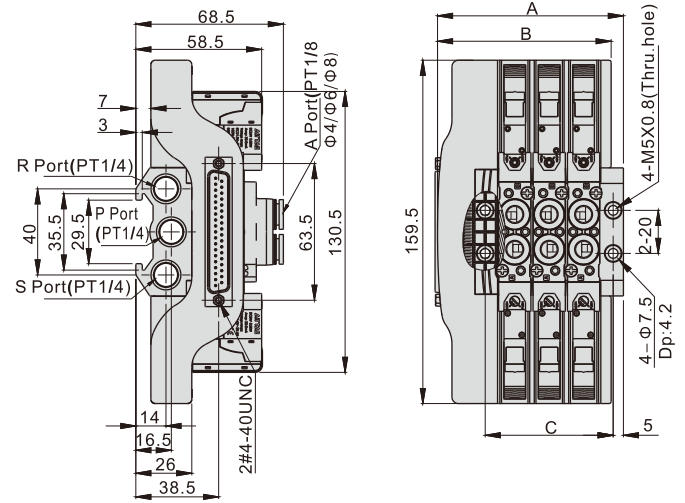
# Integrated solenoid valve (5/2 way, 5/3 way)

## 7S Series

7S100(Single solenoid/H type)



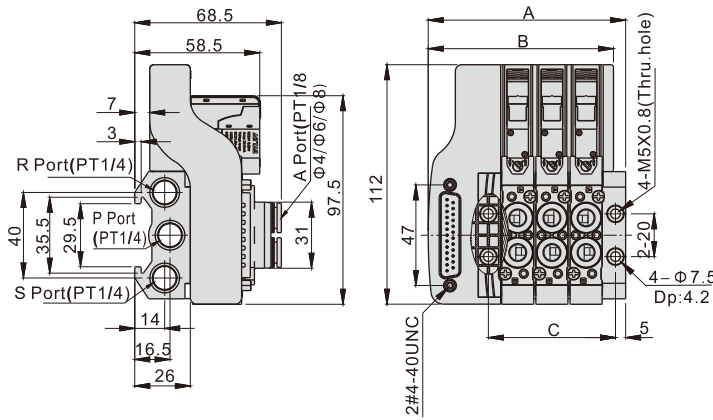
7S100(Double solenoid/H type)



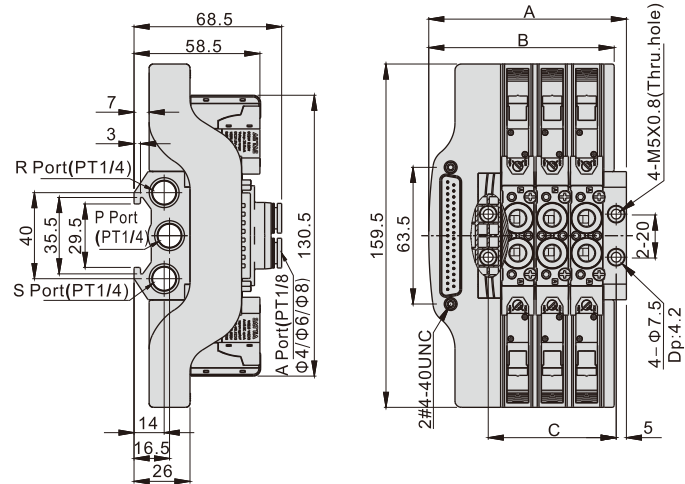
Item\Stations	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
A	70.4	86.4	102.4	118.4	134.4	150.4	166.4	182.4	198.4	214.4	230.4	246.4	262.4	278.4	294.4	310.4	326.4	342.4	358.4
B	64.7	80.7	96.7	112.7	128.7	144.7	160.7	176.7	192.7	208.7	224.7	240.7	256.7	272.7	288.7	304.7	320.7	336.7	352.7
C	43.5	59.5	75.5	91.5	107.5	123.5	139.5	155.5	171.5	187.5	203.5	219.5	235.5	251.5	267.5	283.5	299.5	315.5	331.5

Note : Single solenoid stations is 2~20 stations; Double solenoid stations is 3~20 stations.

7S100(Single solenoid/V type)



7S100(Double solenoid/V type)



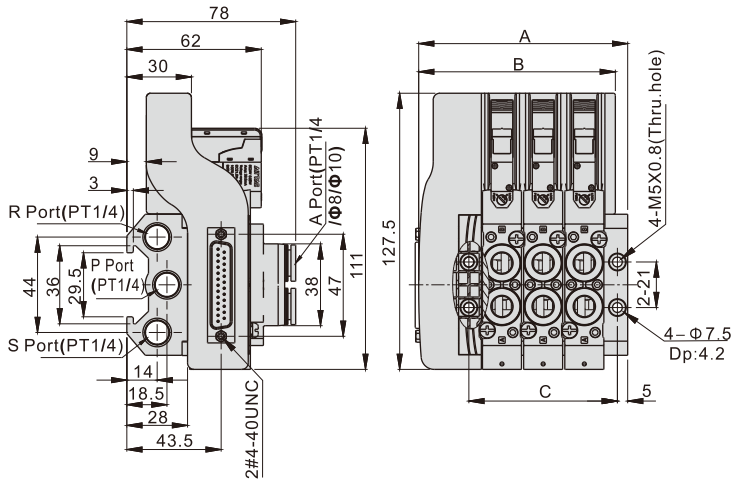
Item\Stations	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
A	75.9	91.9	107.9	123.9	139.9	155.9	171.9	187.9	203.9	219.9	235.9	251.9	267.9	283.9	299.9	315.9	331.9	347.9	363.9
B	70.2	86.2	102.2	118.2	134.2	150.2	166.2	182.2	198.2	214.2	230.2	246.2	262.2	278.2	294.2	310.2	326.2	342.2	358.2
C	43.5	59.5	75.5	91.5	107.5	123.5	139.5	155.5	171.5	187.5	203.5	219.5	235.5	251.5	267.5	283.5	299.5	315.5	331.5

Note : Single solenoid stations is 2~20 stations; Double solenoid stations is 3~20 stations.

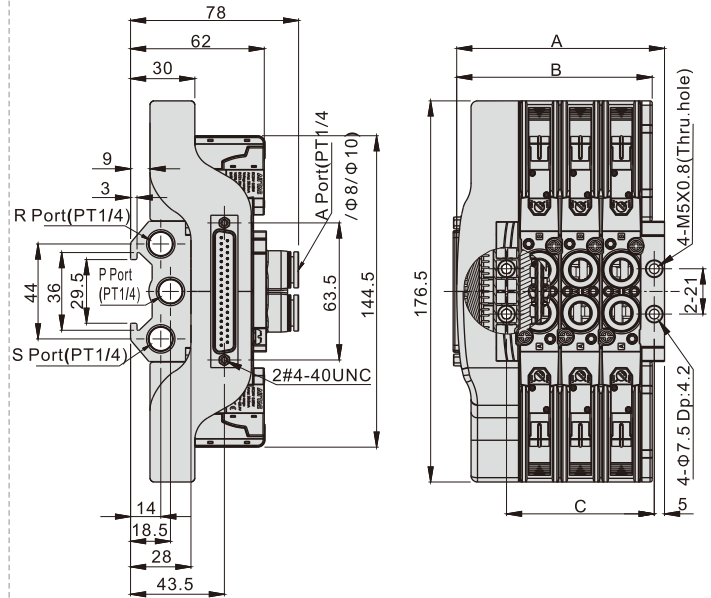
# Integrated solenoid valve (5/2 way, 5/3 way)

## 7S Series

7S200(Single solenoid/H type)



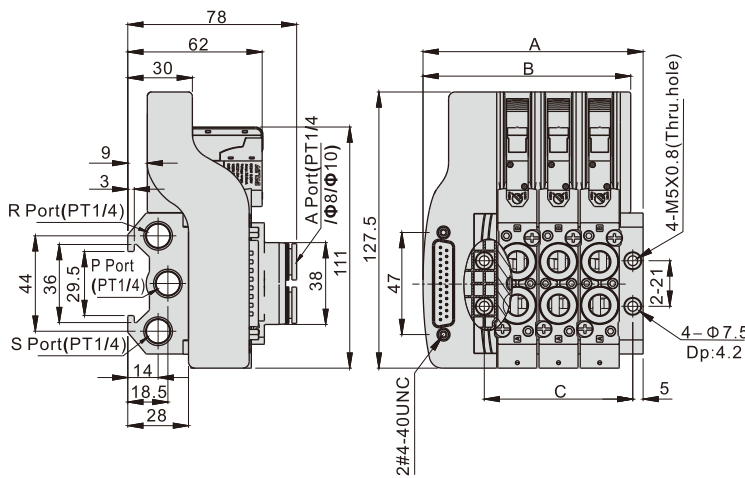
7S200(Double solenoid/H type)



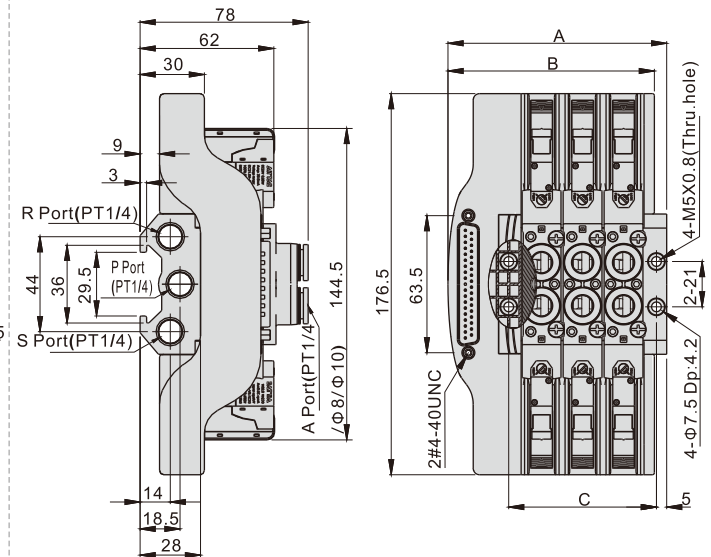
Item\Stations	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
A	77.4	96.4	115.4	134.4	153.4	172.4	191.4	210.4	229.4	248.4	267.4	286.4	305.4	324.4	343.4	362.4	381.4	400.4	419.4
B	71.7	90.7	109.7	128.7	147.7	166.7	185.7	204.7	223.7	242.7	261.7	280.7	299.7	318.7	337.7	356.7	375.7	394.7	413.7
C	49.5	68.5	87.5	106.5	125.5	144.5	163.5	182.5	201.5	220.5	239.5	258.5	277.5	296.5	315.5	334.5	353.5	372.5	391.5

Note : Single solenoid stations is 2~20 stations; Double solenoid stations is 3~20 stations.

7S200(Single solenoid/V type)



7S200(Double solenoid/V type)



Item\Stations	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
A	82.5	101.5	120.5	139.5	158.5	177.5	196.5	215.5	234.5	253.5	272.5	291.5	310.5	329.5	348.5	367.5	386.5	405.5	424.5
B	76.8	95.8	114.8	133.8	152.8	171.8	190.8	209.8	228.8	247.8	266.8	285.8	304.8	323.8	342.8	361.8	380.8	399.8	418.8
C	49.5	68.5	87.5	106.5	125.5	144.5	163.5	182.5	201.5	220.5	239.5	258.5	277.5	296.5	315.5	334.5	353.5	372.5	391.5

Note : Single solenoid stations is 2~20 stations; Double solenoid stations is 3~20 stations.

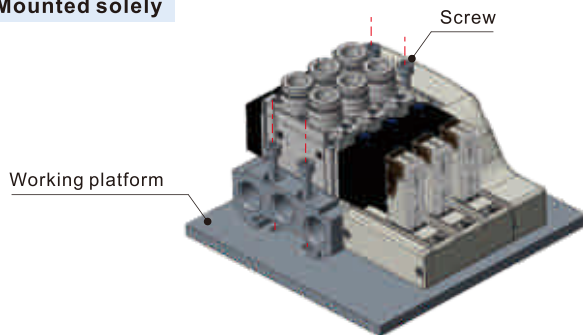
# Integrated solenoid valve (5/2 way, 5/3 way)

## 7S Series

### Installation and Application

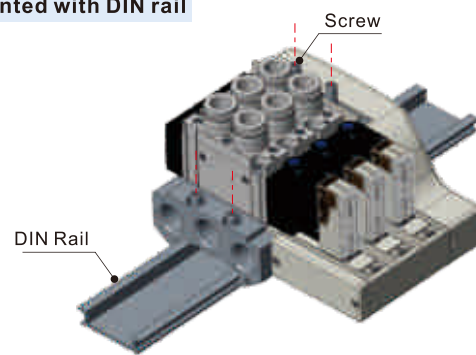
1. How to mount manifold: Can be mounted solely or be mounted with DIN rail.

#### Mounted solely



Fastened to the platform by 4-M4X0.7(7S100,7S200) or M3X0.5(7S0500) screws

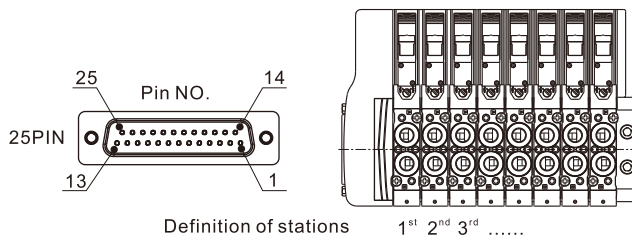
#### Mounted with DIN rail



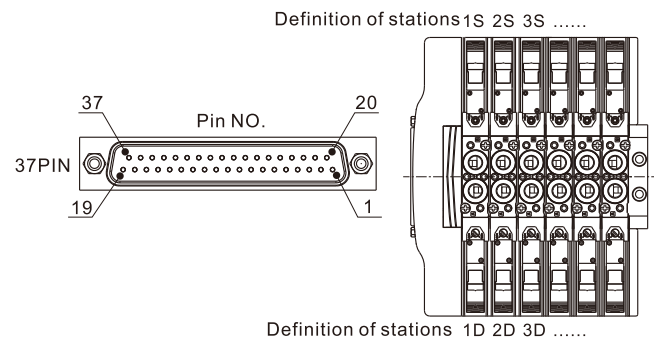
Fastened to the DIN rail by 4-M5X0.8(7S100,7S200) or M4X0.7(7S0500) screws

2. Pin Assignment:

#### Single solenoid



#### Double solenoid



Pin No.	Polarity		Control target	Pin No.	Polarity		Control target
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1 Station	14	(+)	(-)	2 Station
2	(+)	(-)	3 Station	15	(+)	(-)	4 Station
3	(+)	(-)	5 Station	16	(+)	(-)	6 Station
4	(+)	(-)	7 Station	17	(+)	(-)	8 Station
5	(+)	(-)	9 Station	18	(+)	(-)	10 Station
6	(+)	(-)	11 Station	19	(+)	(-)	12 Station
7	(+)	(-)	13 Station	20	(+)	(-)	14 Station
8	(+)	(-)	15 Station	21	(+)	(-)	16 Station
9	(+)	(-)	17 Station	22	(+)	(-)	18 Station
10	(+)	(-)	19 Station	23	(+)	(-)	20 Station
11		Void		24		Void	
12		Void		25		Void	
13	(-)	(+)	COM				

[Note] Gauge number of cable connection to D-SUB pin No.13(COM) must be  $\leq 22$ AWG.

Pin No.	Polarity		Control target	Pin No.	Polarity		Control target
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1S	20	(+)	(-)	1D
2	(+)	(-)	2S	21	(+)	(-)	2D
3	(+)	(-)	3S	22	(+)	(-)	3D
4	(+)	(-)	4S	23	(+)	(-)	4D
5	(+)	(-)	5S	24	(+)	(-)	5D
6	(+)	(-)	6S	25	(+)	(-)	6D
7	(+)	(-)	7S	26			Void
8	(+)	(-)	8S	27			Void
9	(+)	(-)	9S	28			Void
10	(+)	(-)	10S	29			Void
11	(+)	(-)	11S	30			Void
12	(+)	(-)	12S	31			Void
13	(+)	(-)	13S	32	(+)	(-)	14S
14	(+)	(-)	15S	33	(+)	(-)	16S
15	(+)	(-)	17S	34	(+)	(-)	18S
16	(+)	(-)	19S	35	(+)	(-)	20S
17		Void		36			Void
18		Void		37			Void
19	(-)	(+)	COM				

[Note] Gauge number of cable connection to D-SUB pin No.19(COM) must be  $\leq 22$ AWG.