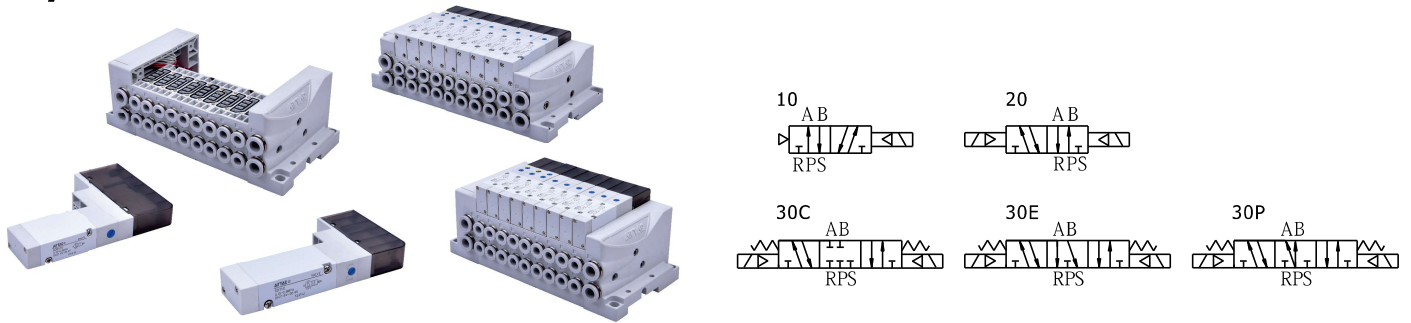


Integrated solenoid valve (5/2, 5/3 way)

6D/6DW Series



Manifold ports Ordering Code (With Valves, 25PIN)

6D1H 8F-N1/4 B S1 D2 C2 E2 P1

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩



Without communication module



Without communication module



With communication module

① Model	6D05H: 6D0500 Series integrated Solenoid valve	6D1H: 6D100 Series integrated Solenoid valve	6D2H: 6D200 Series integrated Solenoid valve	
② Number of stations	3F: 3 stations 4F: 4 stations 21F: 21stations			
③ Port size(A/B Port)	N5/32: Φ5/32 tube fitting N1/4: Φ1/4 tube fitting	N5/32: Φ5/32 tube fitting N1/4: Φ1/4 tube fitting N5/16: Φ5/16 tube fitting	N5/16: Φ5/16 tube fitting N3/8: Φ3/8 tube fitting	
④ Standard voltage	B:DC24V F:DC12V			
⑤ Single solenoid 5/2 way	Total number of valves	Blank: No S1: 1 piece S2: 2 pieces.....S21: 21 pieces		Total number of valves must be ≤ 21
⑥ Double solenoid 5/2 way		Blank: No D1: 1 piece D2: 2 pieces.....D12: 12 pieces		
⑦ Double solenoid 5/3 way closed center		Blank: No C1: 1 piece C2: 2 pieces.....C12: 12 pieces		
⑧ Double solenoid 5/3 way exhaust center		Blank: No E1: 1 piece E2: 2 pieces.....E12: 12 pieces		
⑨ Double solenoid 5/3 way pressure center		Blank: No P1: 1 piece P2: 2 pieces.....P12: 12 pieces		
⑩ Type of communication module	Blank: Without communication module CPN1: Profinet+PNP CPN2: Profinet+NPN CEN1: EtherNet/IP+PNP CEN2: EtherNet/IP+NPN CEA1: EtherCAT+PNP CEA2: EtherCAT+NPN CLK1: IO-Link+PNP			

Ordering code instruction:

- 6D series comes with D-SUB25PIN.
- Fill in spec, number of stations, port size, voltage in order code accordingly.
- Valve installation sequence : start from D-SUB side.
- Valve installation sequence : (1) Double solenoid 5/3 way(C→E→P). (2) Double solenoid 5/2 way. (3)Single solenoid.
- For empty position, please install provisional block.
- 0500 series in/outlet ports (P/R) is Ø5/16,, 100 series in/outlet ports (P/R) is Ø3/8, 200 series in/outlet ports (P/R) is Ø1/2.
- Less than 8 stations(inclusive):come with 1 plug type silencer and 2 plugs; More than 8 stations: come with 2 plug type silencers and 1 plug.
- Total number of single solenoids+double solenoids+5/3way(C) + 5/3way(E) + 5/3way(P) must be ≤21
- For station 3~12, total number of ⑥+⑦+⑧+⑨ must be ≤12 (come with double solenoid manifold)
 For station 13-15, total numbers of ⑥+⑦+⑧+⑨ must be ≤9 ;
 station 16-18, total numbers of ⑥+⑦+⑧+⑨ must be ≤6.
 station 19-21, total numbers of ⑥+⑦+⑧+⑨ must be ≤3.

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

6D/6DW Series

Manifold ports Ordering Code (With Valves,37PIN)

6DW1H 18F-N1/4 B S5 D8C2 E1 P2

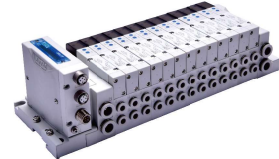
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩



Without communication module



Without communication module



With communication module

① Model	6DW05H: 6DW0500 Series integrated Solenoid valve		6DW1H: 6DW100 Series integrated Solenoid valve		6DW2H: 6DW200 Series integrated Solenoid valve		
② Number of stations	13F: 13 stations		14F: 14 stations	 33F: 33stations		
③ Port size(A/B Port)	N5/32: Φ5/32 tube fitting N1/4: Φ1/4 tube fitting		N5/32: Φ5/32 tube fitting N1/4: Φ1/4 tube fitting N5/16: Φ5/16 tube fitting		N5/16: Φ5/16 tube fitting N3/8: Φ3/8 tube fitting		
④ Standard voltage			B:DC24V		F:DC12V		
⑤ Single solenoid 5/2 way	Total number of valves	Blank: No S1: 1 piece S2: 2 pieces.....S33: 33 pieces					Total number of valves must be ≤ 33
⑥ Double solenoid 5/2 way		Blank: No D1: 1 piece D2: 2 pieces.....D18: 18 pieces					
⑦ Double solenoid 5/3 way closed center		Blank: No C1: 1 piece C2: 2 pieces.....C18: 18 pieces					
⑧ Double solenoid 5/3 way exhaust center		Blank: No E1: 1 piece E2: 2 pieces.....E18: 18 pieces					
⑨ Double solenoid 5/3 way pressure center		Blank: No P1: 1 piece P2: 2 pieces.....P18: 18 pieces					
⑩ Type of communication module	Blank: Without communication module CPN11: Profinet+PNP CPN22: Profinet+NPN CEN11: EtherNet/IP+PNP CEN22: EtherNet/IP+NPN CEA11: EtherCAT+PNP CEA22: EtherCAT+NPN CLK11: IO-Link+PNP						

Ordering code instruction:

- 6DW series comes with D-SUB37PIN.
- Fill in spec, number of stations, port size, voltage in order code accordingly.
- Valve installation sequence : start from D-SUB side.
- Valve installation sequence : (1) Double solenoid 5/3 way(C→E→P). (2) Double solenoid 5/2 way. (3)Single solenoid.
- For empty position, please install provisional block.
- 0500 series in/outlet ports (P/R) is Ø5/16,, 100 series in/outlet ports (P/R) is Ø3/8, 200 series in/outlet ports (P/R) is Ø1/2.
- 6DW series comes with 2 plug type silencers and 1 plug.
- Total number of single solenoids+double solenoids+5/3way(C) + 5/3way(E) + 5/3way(P) must be ≤33
- For station 13~18, total number of ⑥+⑦+⑧+⑨ must be ≤18 (come with double solenoid manifold)
 For station 19-21, total numbers of ⑥+⑦+⑧+⑨ must be ≤15.
 Station 22-24 of, total numbers of ⑥+⑦+⑧+⑨ must be ≤12.
 Station 25-27, total numbers of ⑥+⑦+⑧+⑨ must be ≤9.
 Station 28-30, total numbers of ⑥+⑦+⑧+⑨ must be ≤6.
 Station 31-33, total numbers of ⑥+⑦+⑧+⑨ must be ≤3.

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

6D/6DW Series

Manifold ports Ordering Code (Without Valves, 25PIN)



6D1H 8F N1/4

1

2

3

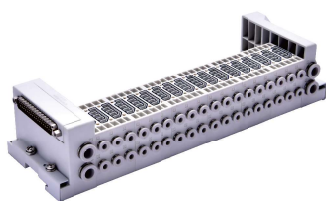


① Model	6D05H: 6D0500 Series manifold	6D1H: 6D100 Series manifold	6D2H: 6D200 Series manifold
② Number of stations	3F: 3 stations 4F: 4 stations 21F: 21stations		
③ Port size(A/B Port)	N5/32: Φ 5/32 tube fitting N1/4: Φ 1/4 tube fitting	N5/32: Φ 5/32 tube fitting N1/4: Φ 1/4 tube fitting N5/16: Φ 5/16 tube fitting	N5/16: Φ 5/16 tube fitting N3/8: Φ 3/8 tube fitting

Note:

- 6D series comes with D-SUB25PIN.
- For station 3~12, it comes with double solenoid type manifold.
On 13 to 15 station valve banks, only the first 9 positions can have double solenoid valves(2 or 3 positions)
On 16 to 18 station valve banks, only the first 6 positions can have double solenoid valves(2 or 3 positions)
On 19 to 21 station valve banks, only the first 3 positions can have double solenoid valves(2 or 3 positions)
- Valve installation sequence: start from D-SUB side.
- 0500 series in/outlet ports (P/R) is Φ 5/16, 100 series in/outlet ports (P/R) is Φ 3/8, 200 series in/outlet ports (P/R) is Φ 1/2.
- Less than 8 stations(inclusive): come with 1 plug type silencer and 2 plugs; More than 8 stations: come with 2 plug type silencers and 1 plug.

Manifold ports Ordering Code (Without Valves, 37PIN)

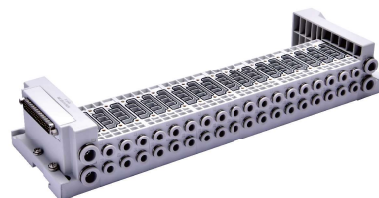


6DW1H 8F N1/4

1

2

3



① Model	6DW05H: 6DW0500 Series manifold	6DW1H: 6DW100 Series manifold	6DW2H: 6DW200 Series manifold
② Number of stations	13F: 13 stations 14F: 14 stations 33F: 33stations		
③ Port size(A/B Port)	N5/32: Φ 5/32 tube fitting N1/4: Φ 1/4 tube fitting	N5/32: Φ 5/32 tube fitting N1/4: Φ 1/4 tube fitting N5/16: Φ 5/16 tube fitting	N5/16: Φ 5/16 tube fitting N3/8: Φ 3/8 tube fitting

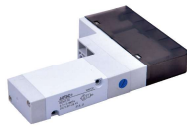
Note:

- 6DW series comes with D-SUB37PIN.
- For station 13~18, it comes with double solenoid type manifold.
On 19 to 21 station valve banks, only the first 15 positions can have double solenoid valves(2 or 3 positions).
On 22 to 24 station valve banks, only the first 12 positions can have double solenoid valves(2 or 3 positions).
On 25 to 27 station valve banks, only the first 9 positions can have double solenoid valves(2 or 3 positions).
On 28 to 30 station valve banks, only the first 6 positions can have double solenoid valves(2 or 3 positions).
On 31 to 33 station valve banks, only the first 3 positions can have double solenoid valves(2 or 3 positions).
- Valve installation sequence: start from D-SUB side.
- 0500 series in/outlet ports (P/R) is Φ 5/16, 100 series in/outlet ports (P/R) is Φ 3/8, 200 series in/outlet ports (P/R) is Φ 1/2.
- 6DW series comes with 2 plug type silencers and 1 plug.

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

6D/6DW Series

Solenoid Valve Ordering Code



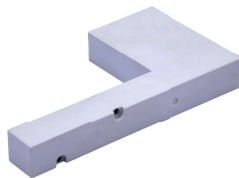
6D 1 20 B

① ② ③ ④



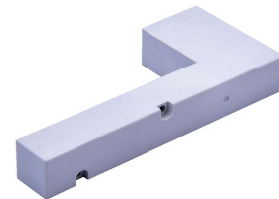
① Model	6D: 5-port, 2/3-position solenoid valve		
② Code	05: 0500 Series	1: 100 Series	2: 200 Series
③ Valve type	10: Single solenoid(5/2 Way)	20: Double solenoid(5/2 Way)	30C: Double solenoid(5/3 way closed center)
	30E: Double solenoid(5/3 way exhaust center)	30P: Double solenoid(5/3 way pressure center)	
④ Standard Voltage	B: DC24V F: DC12V		

Provisional Block Ordering Code



P - 6D100M - R2

① ② ③



① Accessories	P : Accessories		
② Model	6D0500M : 0500 Series	6D100M : 100 Series	6D200M : 200 Series
③ Provisional block code	R2: 6D series Provisional block		

Note:Orders come with screw bolts.

DIN Rail Ordering Code

F - DINX140

① ②



① Accessories	F-DIN : DIN Rail		
② Length of DIN rail	140 : 140mm	175 : 175mm	210 : 210mm1000 : 1000mm

Note: DIN rail add length is 35mm each step.

6D/6DW Series

Specification

Model	6D0500/6DW0500	6D100/6DW100	6D200/6DW200
Fluid	Air(to be filtered by 40μm filter element)		
Acting	Pilot		
Operating pressure	5/3 way	0.2~0.8MPa(29~114psi)	
	Others	0.15~0.8MPa(21~114psi)	
Proof pressure	1.2MPa(175psi)		
Temperature	-20~70°C		
Type of inlet and exhaust	Centralized inlet and exhaust		
Numbers of station	6D	3-21 stations	
	6DW	13-33 stations	
Port size	A, B ports	Φ5/32, Φ1/4 tube fitting	Φ5/32, Φ1/4, Φ5/16 tube fitting
	P, R ports	Φ5/16 tube fitting	Φ3/8 tube fitting
Electrical entry	Terminal , 25pinD-SUB/37pinD-SUB		

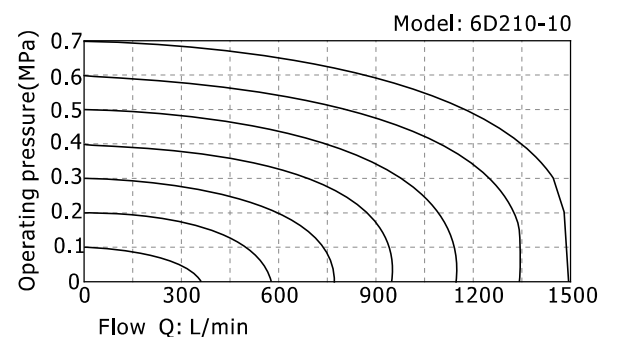
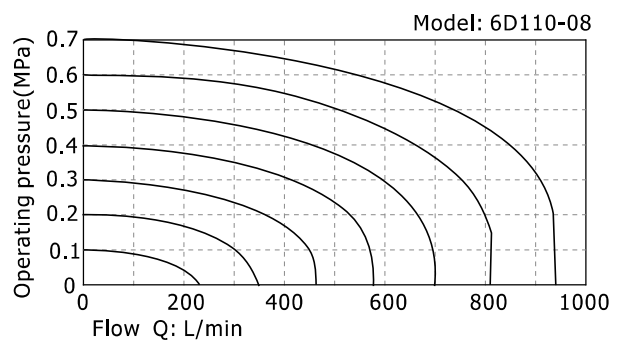
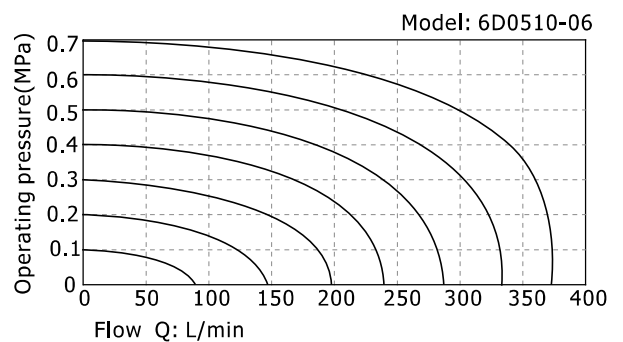
Coil specification

Item	Specification	
Standard voltage	DC24V	DC12V
Scope of voltage	DC : ±10%	
Power of consumption	DC : 0.7W	
Protection	Dustproof	
Temperature classification	F Class	
Electrical entry	Terminal	
Activating time	0.05 sec and below	

Product feature

1. Centralized inlets, outlets and signal input(25pin D-SUB or 37pin D-SUB) make it highly simplifies installation and reduces risk during mounting.
2. Flexible combination for various applications.
3. Convenient installation, can be fixed on panel or DIN rail without other accessory.
4. 2 position and 3 position valves can be installed on the same manifold without further accessories.
5. Affiliated manual devices are equipped to facilitate installation and debugging.
6. Low starting voltage and long service life.

Flow chart



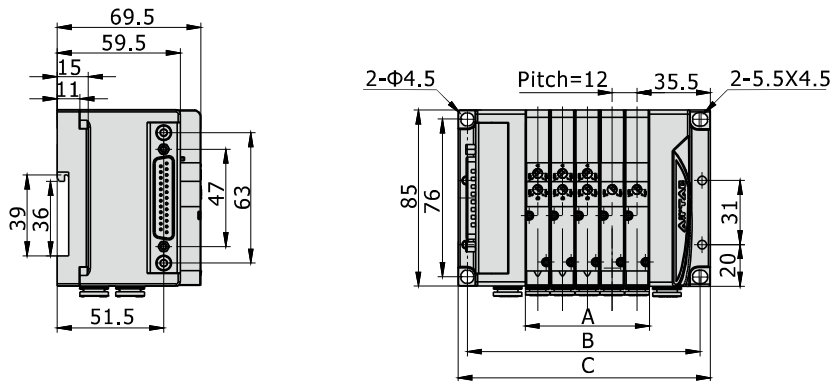
Flow rate data obtained from the AirTAC R&D Lab.

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

6D/6DW Series

Dimensions

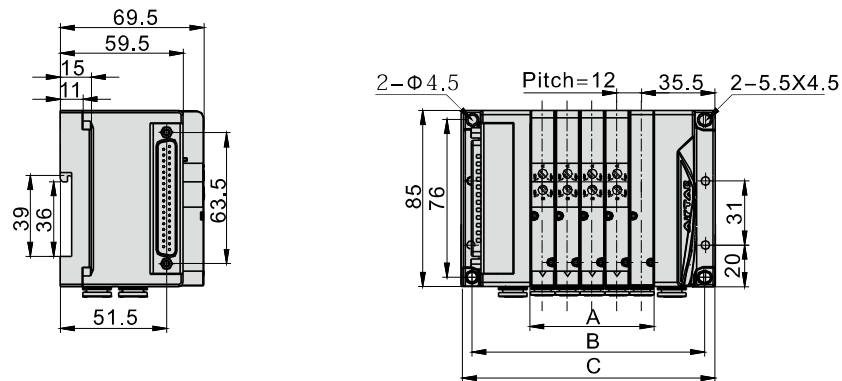
6D0500



Unit:mm

Item\Stations	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F	21F
A	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252
B	88.5	100.5	112.5	124.5	136.5	148.5	160.5	172.5	184.5	196.5	208.5	220.5	232.5	244.5	256.5	268.5	280.5	292.5	304.5
C	98	110	122	134	146	158	170	182	194	206	218	230	242	254	266	278	290	302	314

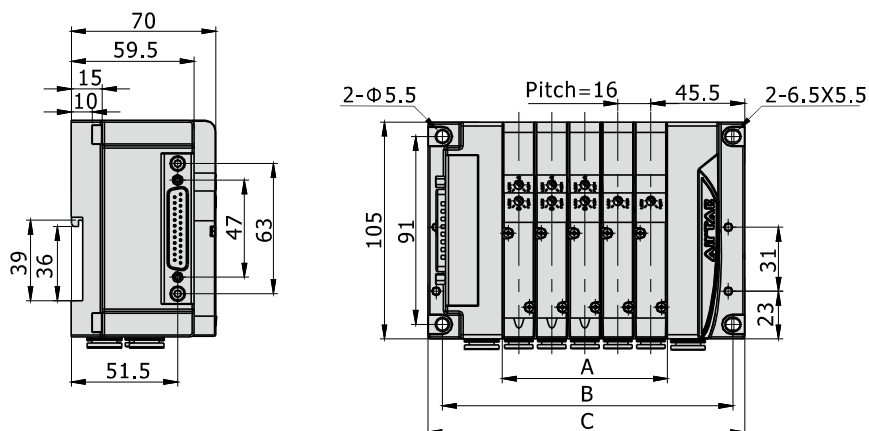
6DW0500



Unit:mm

Item\Stations	13F	14F	15F	16F	17F	18F	19F	20F	21F	22F	23F	24F	25F	26F	27F	28F	29F	30F	31F	32F	33F
A	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	272	384	396
B	208.5	220.5	232.5	244.5	256.5	268.5	280.5	292.5	304.5	316.5	328.5	340.5	352.5	364.5	376.5	388.5	400.5	412.5	424.5	436.5	448.5
C	218	230	242	254	266	278	290	302	314	326	338	350	362	374	386	398	410	422	434	446	458

6D100



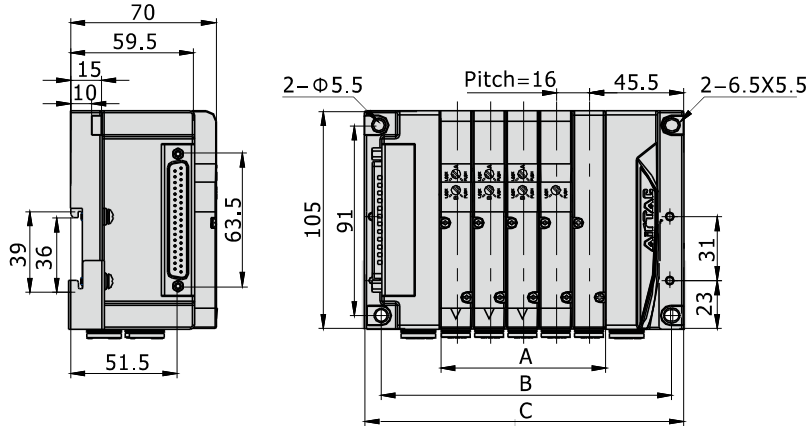
Unit:mm

Item\Stations	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F	21F
A	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336
B	108.5	124.5	140.5	156.5	172.5	188.5	204.5	220.5	236.5	252.5	268.5	284.5	300.5	316.5	332.5	348.5	364.5	380.5	396.5
C	121.5	137.5	153.5	169.5	185.5	201.5	217.5	233.5	249.5	265.5	281.5	297.5	313.5	329.5	345.5	361.5	377.5	393.5	409.5

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

6D/6DW Series

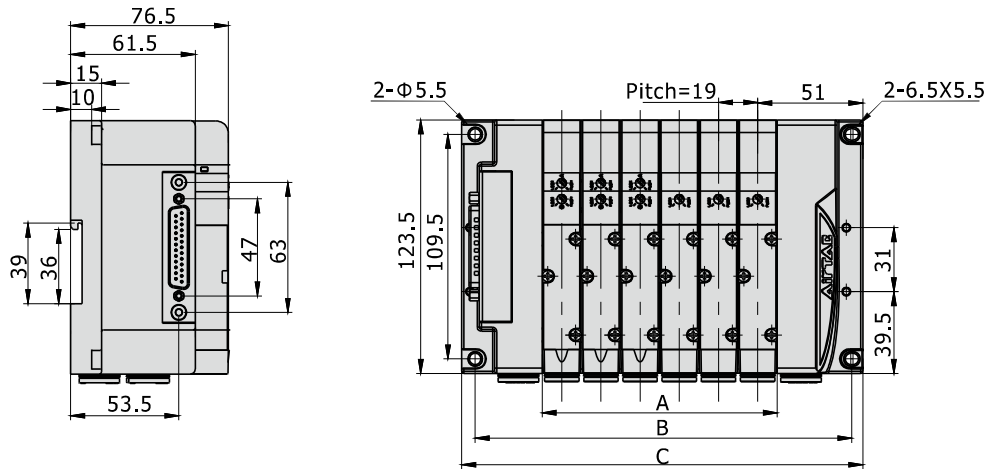
6DW100



Unit:mm

Item\Stations	13F	14F	15F	16F	17F	18F	19F	20F	21F	22F	23F	24F	25F	26F	27F	28F	29F	30F	31F	32F	33F
A	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432	448	464	480	496	512	528
B	268.5	284.5	300.5	316.5	332.5	348.5	364.5	380.5	396.5	412.5	428.5	444.5	460.5	476.5	492.5	508.5	524.5	540.5	556.5	572.5	588.5
C	281.5	297.5	313.5	329.5	345.5	361.5	377.5	393.5	409.5	425.5	441.5	457.5	473.5	489.5	505.5	521.5	537.5	553.5	569.5	585.5	601.5

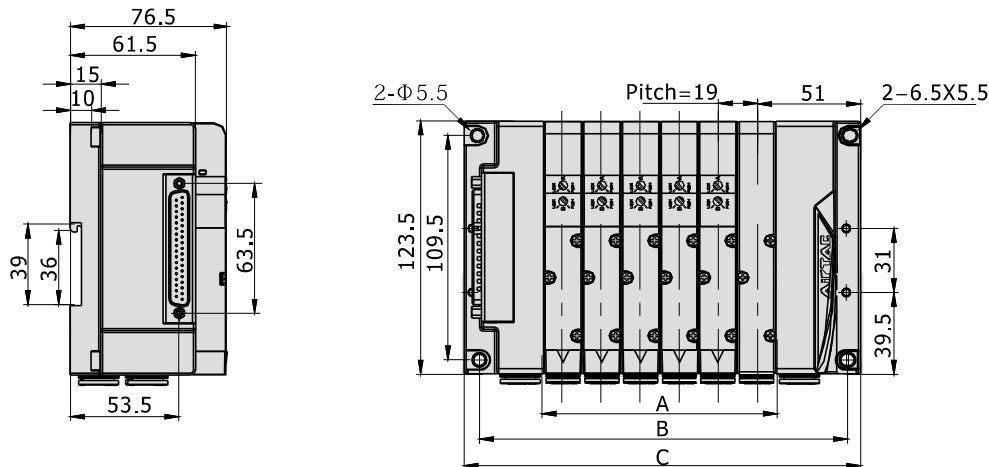
6D200



Unit:mm

Item\Stations	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F	21F
A	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323	342	361	380	399
B	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	410.5	429.5	448.5	467.5
C	137.5	156.5	175.5	194.5	213.5	232.5	251.5	270.5	289.5	308.5	327.5	346.5	365.5	384.5	403.5	422.5	441.5	460.5	479.5

6DW200



Unit:mm

Item\Stations	13F	14F	15F	16F	17F	18F	19F	20F	21F	22F	23F	24F	25F	26F	27F	28F	29F	30F	31F	32F	33F
A	247	266	285	304	323	342	361	380	399	418	437	456	475	494	513	532	551	570	589	608	627
B	315.5	334.5	353.5	372.5	391.5	410.5	429.5	448.5	467.5	486.5	505.5	524.5	543.5	562.5	581.5	600.5	619.5	638.5	657.5	676.5	695.5
C	327.5	346.5	365.5	384.5	403.5	422.5	441.5	460.5	479.5	498.5	517.5	536.5	555.5	574.5	593.5	612.5	631.5	650.5	669.5	688.5	707.5

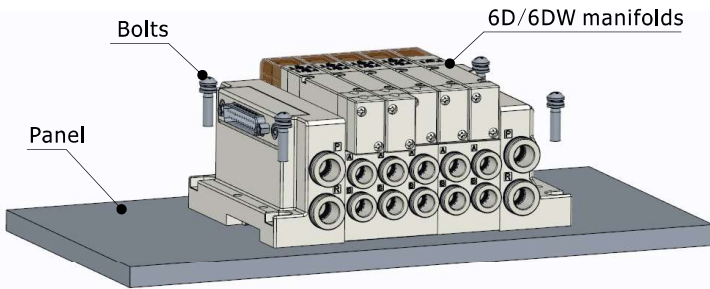
Integrated solenoid valve (5/2, 5/3 way)

6D/6DW Series

Installation and application

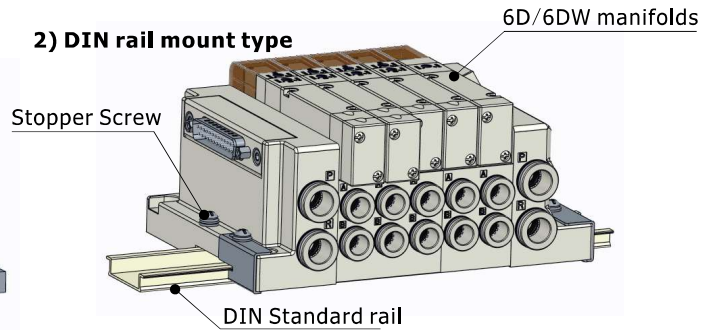
1. Two types of installation are available, choose appropriate type based on working environment.

1) Panel mount type



Four counterbore holes for screw bolts, suitable for panel installation.

2) DIN rail mount type



Compatible with standard DIN rail.

6D manifolds can be fixed at any position of rail by stop screw.

2. P\R ports connection: Please select the appropriate tube diameter according to the following specification table.

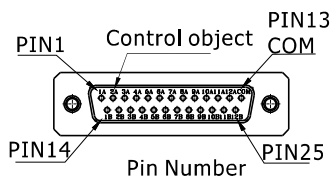
Series	Port (P)	Port (R)
6D0500/6DW0500	Φ5/16	Φ5/16
6D100/6DW100	Φ3/8	Φ3/8
6D200/6DW200	Φ1/2	Φ1/2

3. A\B ports connection: Please select the appropriate tube diameter according to the following specification table.

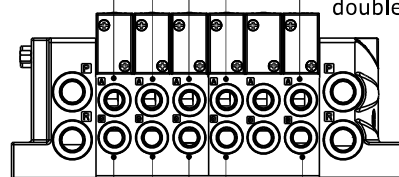
Series\Ports(A\B ports)	Φ5/32	Φ1/4	Φ5/16	Φ3/8
6D0500/6DW0500	•	•		
6D100/6DW100	•	•	•	
6D200/6DW200			•	•

4. PIN assignment of 6D series:

Explanation of 3-12 stations connection pin.



Definition of stations : 1A 2A 3A 4A.....12A Can be used for double solenoid valve



Definition of stations : 1B 2B 3B 4B.....12B

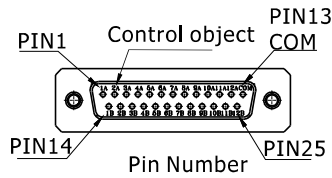
Pin NO.	Polarity		Control object	Pin NO.	Polarity		Control object
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1B	14	(+)	(-)	1A
2	(+)	(-)	2B	15	(+)	(-)	2A
3	(+)	(-)	3B	16	(+)	(-)	3A
4	(+)	(-)	4B	17	(+)	(-)	4A
5	(+)	(-)	5B	18	(+)	(-)	5A
6	(+)	(-)	6B	19	(+)	(-)	6A
7	(+)	(-)	7B	20	(+)	(-)	7A
8	(+)	(-)	8B	21	(+)	(-)	8A
9	(+)	(-)	9B	22	(+)	(-)	9A
10	(+)	(-)	10B	23	(+)	(-)	10A
11	(+)	(-)	11B	24	(+)	(-)	11A
12	(+)	(-)	12B	25	(+)	(-)	12A
13	(-)	(+)	COM	When mounted with single solenoid valves, A signal is empty			

Note: Gauge number of cable connecting to D-Sub pin No.13(COM) must be ≤22AWG

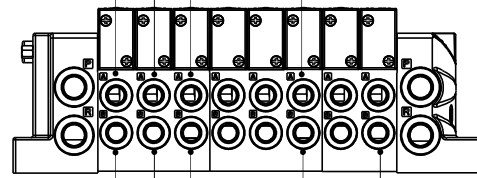
Integrated solenoid valve (5/2, 5/3 way)

6D/6DW Series

Explanation of 13-15 stations connection pin.



Can be used for
Definition of stations : 1A 2A 3A 9A double solenoid valve

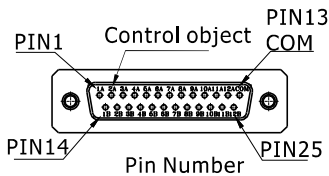


Definition of stations : 1B 2B 3B 9B.....15B

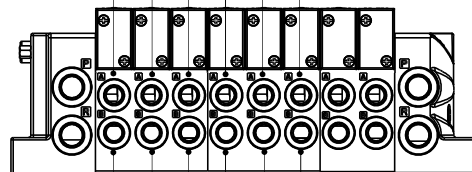
Pin NO.	Polarity		Control object	Pin NO.	Polarity		Control object
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1B	14	(+)	(-)	1A
2	(+)	(-)	2B	15	(+)	(-)	2A
3	(+)	(-)	3B	16	(+)	(-)	3A
4	(+)	(-)	4B	17	(+)	(-)	4A
5	(+)	(-)	5B	18	(+)	(-)	5A
6	(+)	(-)	6B	19	(+)	(-)	6A
7	(+)	(-)	7B	20	(+)	(-)	7A
8	(+)	(-)	8B	21	(+)	(-)	8A
9	(+)	(-)	9B	22	(+)	(-)	9A
10	(+)	(-)	10B	23	(+)	(-)	11B
11	(+)	(-)	12B	24	(+)	(-)	13B
12	(+)	(-)	14B	25	(+)	(-)	15B
13	(-)	(+)	COM	When mounted with single solenoid valves, A signal is empty			

Note: Gauge number of cable connecting to D-Sub pin No.13(COM) must be ≤22AWG

Explanation of 16-18 stations connection pin.



Can be used for
Definition of stations : 1A 2A 3A 4A 5A 6A double solenoid valve



Definition of stations : 1B 2B 3B 4B 5B 6B.....18B

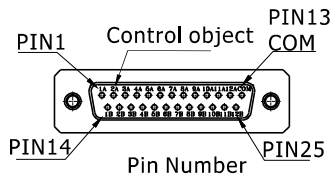
Pin NO.	Polarity		Control object	Pin NO.	Polarity		Control object
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1B	14	(+)	(-)	1A
2	(+)	(-)	2B	15	(+)	(-)	2A
3	(+)	(-)	3B	16	(+)	(-)	3A
4	(+)	(-)	4B	17	(+)	(-)	4A
5	(+)	(-)	5B	18	(+)	(-)	5A
6	(+)	(-)	6B	19	(+)	(-)	6A
7	(+)	(-)	7B	20	(+)	(-)	8B
8	(+)	(-)	9B	21	(+)	(-)	10B
9	(+)	(-)	11B	22	(+)	(-)	12B
10	(+)	(-)	13B	23	(+)	(-)	14B
11	(+)	(-)	15B	24	(+)	(-)	16B
12	(+)	(-)	17B	25	(+)	(-)	18B
13	(-)	(+)	COM	When mounted with single solenoid valves, A signal is empty			

Note: Gauge number of cable connecting to D-Sub pin No.13(COM) must be ≤22AWG

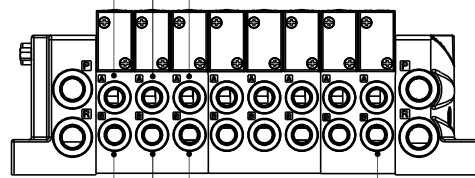
Integrated solenoid valve (5/2, 5/3 way)

6D/6DW Series

Explanation of 19-21 stations connection pin.



Can be used for
Definition of stations : 1A 2A 3A double solenoid valve



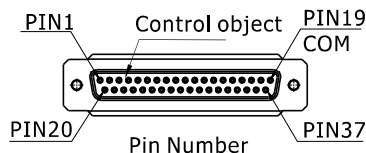
Definition of stations : 1B 2B 3B 21B

Pin NO.	Polarity		Control object	Pin NO.	Polarity		Control object
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1B	14	(+)	(-)	1A
2	(+)	(-)	2B	15	(+)	(-)	2A
3	(+)	(-)	3B	16	(+)	(-)	3A
4	(+)	(-)	4B	17	(+)	(-)	5B
5	(+)	(-)	6B	18	(+)	(-)	7B
6	(+)	(-)	8B	19	(+)	(-)	9B
7	(+)	(-)	10B	20	(+)	(-)	11B
8	(+)	(-)	12B	21	(+)	(-)	13B
9	(+)	(-)	14B	22	(+)	(-)	15B
10	(+)	(-)	16B	23	(+)	(-)	17B
11	(+)	(-)	18B	24	(+)	(-)	19B
12	(+)	(-)	20B	25	(+)	(-)	21B
13	(-)	(+)	COM	When mounted with single solenoid valves, A signal is empty			

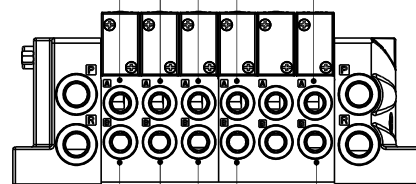
Note: Gauge number of cable connecting to D-Sub pin No.13(COM) must be ≤ 22 AWG

5. PIN assignment of 6DW series:

Explanation of 13-18 stations connection pin.



Can be used for
Definition of stations : 1A 2A 3A 4A18A double solenoid valve



Definition of stations : 1B 2B 3B 4B18B

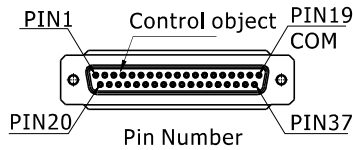
Pin NO.	Polarity		Control object	Pin NO.	Polarity		Control object
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1B	20	(+)	(-)	1A
2	(+)	(-)	2B	21	(+)	(-)	2A
3	(+)	(-)	3B	22	(+)	(-)	3A
4	(+)	(-)	4B	23	(+)	(-)	4A
5	(+)	(-)	5B	24	(+)	(-)	5A
6	(+)	(-)	6B	25	(+)	(-)	6A
7	(+)	(-)	7B	26	(+)	(-)	7A
8	(+)	(-)	8B	27	(+)	(-)	8A
9	(+)	(-)	9B	28	(+)	(-)	9A
10	(+)	(-)	10B	29	(+)	(-)	10A
11	(+)	(-)	11B	30	(+)	(-)	11A
12	(+)	(-)	12B	31	(+)	(-)	12A
13	(+)	(-)	13B	32	(+)	(-)	13A
14	(+)	(-)	14B	33	(+)	(-)	14A
15	(+)	(-)	15B	34	(+)	(-)	15A
16	(+)	(-)	16B	35	(+)	(-)	16A
17	(+)	(-)	17B	36	(+)	(-)	17A
18	(+)	(-)	18B	37	(+)	(-)	18A
19	(-)	(+)	COM	When mounted with single solenoid valves, A signal is empty			

Note: Gauge number of cable connecting to D-Sub pin No.19(COM) must be ≤ 22 AWG

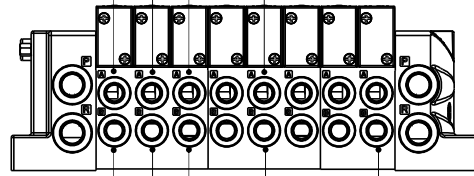
Integrated solenoid valve (5/2, 5/3 way)

6D/6DW Series

Explanation of 19-21 stations connection pin.



Definition of stations : 1A 2A 3A15A Can be used for double solenoid valve

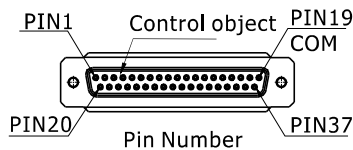


Definition of stations : 1B 2B 3B15B 21B

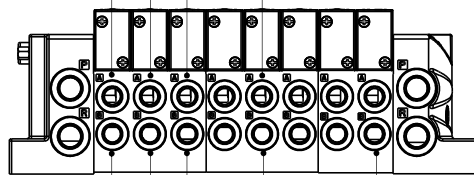
Pin NO.	Polarity		Control object	Pin NO.	Polarity		Control object
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1B	20	(+)	(-)	1A
2	(+)	(-)	2B	21	(+)	(-)	2A
3	(+)	(-)	3B	22	(+)	(-)	3A
4	(+)	(-)	4B	23	(+)	(-)	4A
5	(+)	(-)	5B	24	(+)	(-)	5A
6	(+)	(-)	6B	25	(+)	(-)	6A
7	(+)	(-)	7B	26	(+)	(-)	7A
8	(+)	(-)	8B	27	(+)	(-)	8A
9	(+)	(-)	9B	28	(+)	(-)	9A
10	(+)	(-)	10B	29	(+)	(-)	10A
11	(+)	(-)	11B	30	(+)	(-)	11A
12	(+)	(-)	12B	31	(+)	(-)	12A
13	(+)	(-)	13B	32	(+)	(-)	13A
14	(+)	(-)	14B	33	(+)	(-)	14A
15	(+)	(-)	15B	34	(+)	(-)	15A
16	(+)	(-)	16B	35	(+)	(-)	17B
17	(+)	(-)	18B	36	(+)	(-)	19B
18	(+)	(-)	20B	37	(+)	(-)	21B
19	(-)	(+)	COM	When mounted with single solenoid valves, A signal is empty			

Note: Gauge number of cable connecting to D-Sub pin No.19(COM) must be ≤22AWG

Explanation of 22-24 stations connection pin.



Definition of stations : 1A 2A 3A12A Can be used for double solenoid valve



Definition of stations : 1B 2B 3B12B 24B

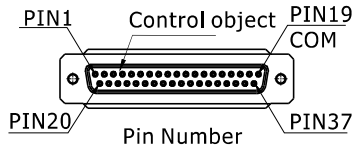
Pin NO.	Polarity		Control object	Pin NO.	Polarity		Control object
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1B	20	(+)	(-)	1A
2	(+)	(-)	2B	21	(+)	(-)	2A
3	(+)	(-)	3B	22	(+)	(-)	3A
4	(+)	(-)	4B	23	(+)	(-)	4A
5	(+)	(-)	5B	24	(+)	(-)	5A
6	(+)	(-)	6B	25	(+)	(-)	6A
7	(+)	(-)	7B	26	(+)	(-)	7A
8	(+)	(-)	8B	27	(+)	(-)	8A
9	(+)	(-)	9B	28	(+)	(-)	9A
10	(+)	(-)	10B	29	(+)	(-)	10A
11	(+)	(-)	11B	30	(+)	(-)	11A
12	(+)	(-)	12B	31	(+)	(-)	12A
13	(+)	(-)	13B	32	(+)	(-)	14B
14	(+)	(-)	15B	33	(+)	(-)	16B
15	(+)	(-)	17B	34	(+)	(-)	18B
16	(+)	(-)	19B	35	(+)	(-)	20B
17	(+)	(-)	21B	36	(+)	(-)	22B
18	(+)	(-)	23B	37	(+)	(-)	24B
19	(-)	(+)	COM	When mounted with single solenoid valves, A signal is empty			

Note: Gauge number of cable connecting to D-Sub pin No.19(COM) must be ≤22AWG

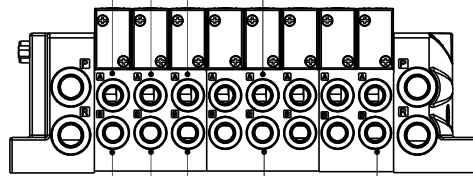
Integrated solenoid valve (5/2, 5/3 way)

6D/6DW Series

Explanation of 25-27 stations connection pin.



Definition of stations : 1A 2A 3A9A Can be used for double solenoid valve

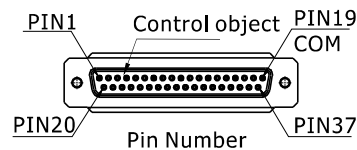


Definition of stations : 1B 2B 3B9B 27B

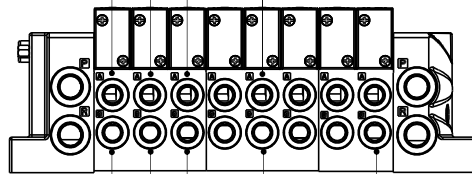
Pin NO.	Polarity		Control object	Pin NO.	Polarity		Control object
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1B	20	(+)	(-)	1A
2	(+)	(-)	2B	21	(+)	(-)	2A
3	(+)	(-)	3B	22	(+)	(-)	3A
4	(+)	(-)	4B	23	(+)	(-)	4A
5	(+)	(-)	5B	24	(+)	(-)	5A
6	(+)	(-)	6B	25	(+)	(-)	6A
7	(+)	(-)	7B	26	(+)	(-)	7A
8	(+)	(-)	8B	27	(+)	(-)	8A
9	(+)	(-)	9B	28	(+)	(-)	9A
10	(+)	(-)	10B	29	(+)	(-)	11B
11	(+)	(-)	12B	30	(+)	(-)	13B
12	(+)	(-)	14B	31	(+)	(-)	15B
13	(+)	(-)	16B	32	(+)	(-)	17B
14	(+)	(-)	18B	33	(+)	(-)	19B
15	(+)	(-)	20B	34	(+)	(-)	21B
16	(+)	(-)	22B	35	(+)	(-)	23B
17	(+)	(-)	24B	36	(+)	(-)	25B
18	(+)	(-)	26B	37	(+)	(-)	27B
19	(-)	(+)	COM	When mounted with single solenoid valves, A signal is empty			

Note: Gauge number of cable connecting to D-Sub pin No.19(COM) must be ≤22AWG

Explanation of 28-30 stations connection pin.



Definition of stations : 1A 2A 3A6A Can be used for double solenoid valve



Definition of stations : 1B 2B 3B6B 30B

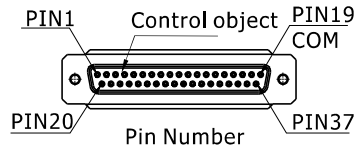
Pin NO.	Polarity		Control object	Pin NO.	Polarity		Control object
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1B	20	(+)	(-)	1A
2	(+)	(-)	2B	21	(+)	(-)	2A
3	(+)	(-)	3B	22	(+)	(-)	3A
4	(+)	(-)	4B	23	(+)	(-)	4A
5	(+)	(-)	5B	24	(+)	(-)	5A
6	(+)	(-)	6B	25	(+)	(-)	6A
7	(+)	(-)	7B	26	(+)	(-)	8B
8	(+)	(-)	9B	27	(+)	(-)	10B
9	(+)	(-)	11B	28	(+)	(-)	12B
10	(+)	(-)	13B	29	(+)	(-)	14B
11	(+)	(-)	15B	30	(+)	(-)	16B
12	(+)	(-)	17B	31	(+)	(-)	18B
13	(+)	(-)	19B	32	(+)	(-)	20B
14	(+)	(-)	21B	33	(+)	(-)	22B
15	(+)	(-)	23B	34	(+)	(-)	24B
16	(+)	(-)	25B	35	(+)	(-)	26B
17	(+)	(-)	27B	36	(+)	(-)	28B
18	(+)	(-)	29B	37	(+)	(-)	30B
19	(-)	(+)	COM	When mounted with single solenoid valves, A signal is empty			

Note: Gauge number of cable connecting to D-Sub pin No.19(COM) must be ≤22AWG

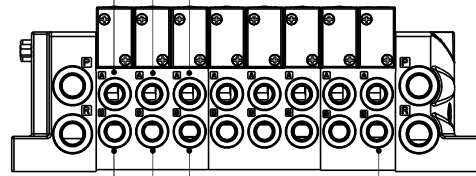
Integrated solenoid valve (5/2, 5/3 way)

6D/6DW Series

Explanation of 31-33 stations connection pin.



Definition of stations : 1A 2A 3A
Can be used for double solenoid valve

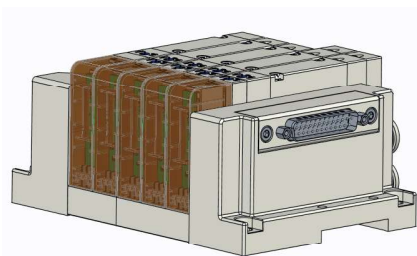


Definition of stations : 1B 2B 3B 33B

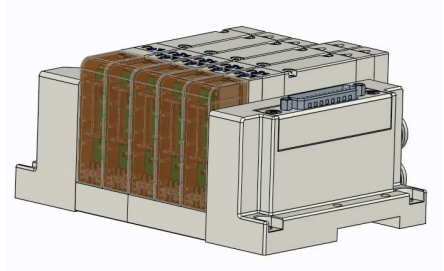
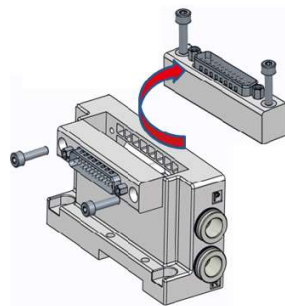
Pin NO.	Polarity		Control object	Pin NO.	Polarity		Control object
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1B	20	(+)	(-)	1A
2	(+)	(-)	2B	21	(+)	(-)	2A
3	(+)	(-)	3B	22	(+)	(-)	3A
4	(+)	(-)	4B	23	(+)	(-)	5B
5	(+)	(-)	6B	24	(+)	(-)	7B
6	(+)	(-)	8B	25	(+)	(-)	9B
7	(+)	(-)	10B	26	(+)	(-)	11B
8	(+)	(-)	12B	27	(+)	(-)	13B
9	(+)	(-)	14B	28	(+)	(-)	15B
10	(+)	(-)	16B	29	(+)	(-)	17B
11	(+)	(-)	18B	30	(+)	(-)	19B
12	(+)	(-)	20B	31	(+)	(-)	21B
13	(+)	(-)	22B	32	(+)	(-)	23B
14	(+)	(-)	24B	33	(+)	(-)	25B
15	(+)	(-)	26B	34	(+)	(-)	27B
16	(+)	(-)	28B	35	(+)	(-)	29B
17	(+)	(-)	30B	36	(+)	(-)	31B
18	(+)	(-)	32B	37	(+)	(-)	33B
19	(-)	(+)	COM	When mounted with single solenoid valves, A signal is empty			

Note: Gauge number of cable connecting to D-Sub pin No.19(COM) must be ≤22AWG

6. Flip-able D-SUB portZ: horizontal and vertical side are optional.



Horizontal plug-in



Vertical plug-in

Communication module



Ordering Code of communication module



C - 6D PN 1

1

2

3



① Model	6D : 6D series communication module			
② Protocol type	PN : Profinet	EN : EtherNet/IP	EA : EtherCAT	LK : IO-Link
③ Output type	1 : PNP+24 outputs	2 : NPN+24 outputs	11 : PNP+36 outputs	22 : NPN+36 outputs

Note: IO-Link module doesn't have NPN type.

Ordering Code of communication cable

C - M12 RJ PN □ 050

1

2

3

4

5

M12 male connector
D-coded



M12 to M12



RJ45



M12 to RJ45



M12 to wire



① Model	C-M12 : Communication cable (M12male connector)	
② Connector type	Blank : M12 male connectors on both end RJ : M12 male connector+RJ45 terminal	M : M12 female connector+M12 male connector S : M12 female connector+wire
③ Protocol type	PN : Applicable to Profinet, EtherNet/IP, EtherCAT	LK : Applicable to IO-Link
④ Cable type	Blank: Cable	
⑤ Cable length	050: 0.5m 100: 1m 200: 2m 300: 3m 500: 5m	

Ordering Code of power supply cable

F - M12 PN □ 150

1

2

3

4



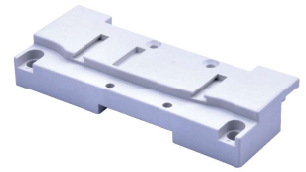
① Model	F-M12 : Power supply cable (M12 female connector)	
② Protocol type	PN : Applicable to Profinet, EtherNet/IP, EtherCAT	
③ Cable type	Blank : Cable	
④ Cable length	150 : 1.5m 300 : 3m 500 : 5m	

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

Communication module

Ordering Code of mounting bracket

F - 6D0500 PN - R2



① Model	F: Mounting accessory		
② Code	6D0500:6D0500 Series	6D100:6D100 Serie	6D200:6D200 Serie
③ Protocol type	PN: For 6D module installation		
④ Output type	R2: Mounting bracket for communication module		

Note: Product comes with mounting screws.

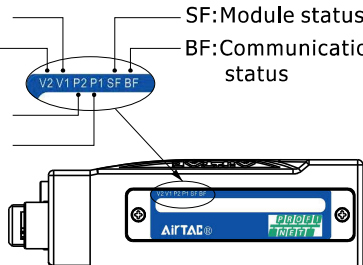
Specification

Protocol	PROFINET	EtherNet/IP	EtherCAT	IO-Link
Number of outputs	24 outputs/36 outputs			
Communication speed	100Mbps			COM3/COM2
Configuration file	GSDML file	EDS file	XML file	IODD file
Input power	Voltage			DC24V ± 10%
	Current consumption			<100mA
Voltage output	DC24V ± 10%			
Output type	PNP or NPN			PNP
Power connector	M12 plug 5 pins A-coded			M12 plug 5 pins A-coded
Bus connector	2XM12 socket 4 pins D-coded			
Protection	Dust proof			
Working temperature	-10~60°C			
Working humidity	35~85% RH			
Withstand voltage	AC500V 1min Between terminals and housing			
Insulation resistance	>10MΩ (DC500V), Between terminals and housing			
Communication connection	Daisy-chain wiring			No

LED indicator

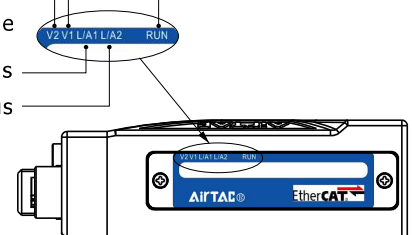
Profinet(C-6DPN□)

- V1: Status of power supply for valves
- V2: Status of power supply for module
- P2: BUS OUT status
- P1: BUS IN status
- SF: Module status
- BF: Communication status



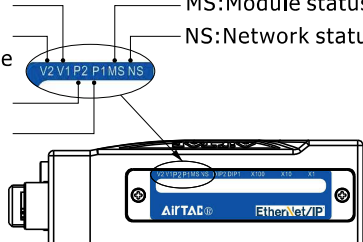
EtherCAT(C-6DEA□)

- V1: Status of power supply for valves
- V2: Status of power supply for module
- L/A1: BUS IN status
- L/A2: BUS OUT status
- RUN: Operating status



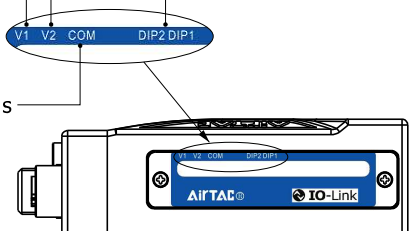
EtherNet/IP(C-6DEN□)

- V1: Status of power supply for valves
- V2: Status of power supply for module
- P2: BUS OUT status
- P1: BUS IN status
- MS: Module status
- NS: Network status



IO-Link(C-6DLK□)

- V2: Status of power supply for module
- V1: Status of power supply for valves
- COM: Network status
- DIP1/DIP2: Baud rate status

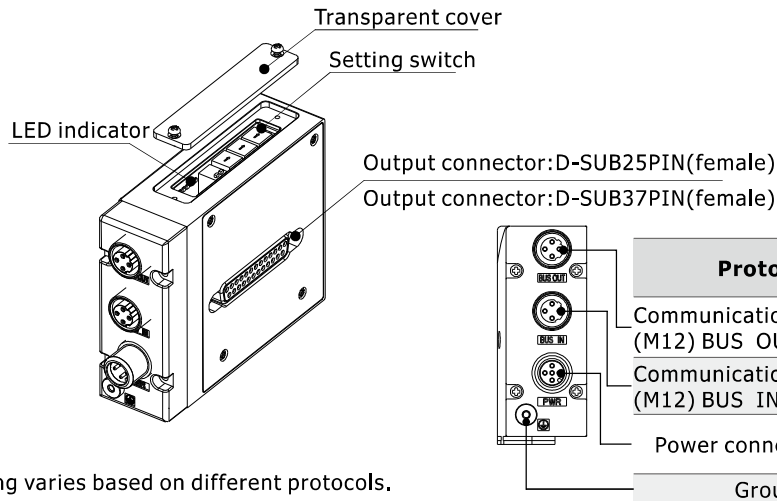


Integrated solenoid valve (5/2, 5/3 way)

Communication module

Construction and function

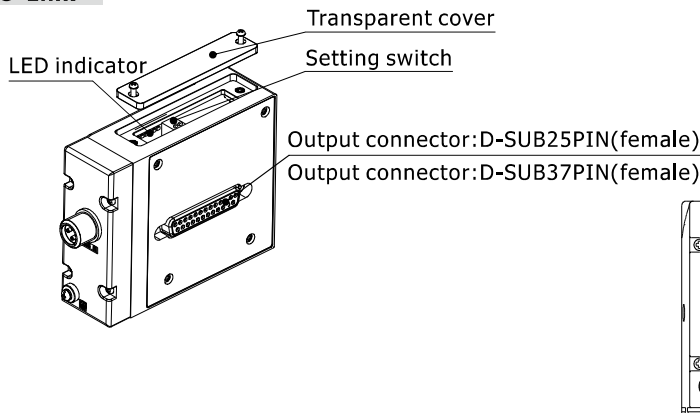
- Profinet
- EtherNet/IP
- EtherCAT



Protocols	PROFINET	EtherNet/IP EtherCAT
Communication connector (M12) BUS OUT	4 pins, socket D-coded(SPEEDCON)	
Communication connector (M12) BUS IN	4 pins, socket D-coded(SPEEDCON)	
Power connector(M12)	5 pins, plug A-coded(SPEEDCON)	
Ground		M2.5

Note: The setting varies based on different protocols.

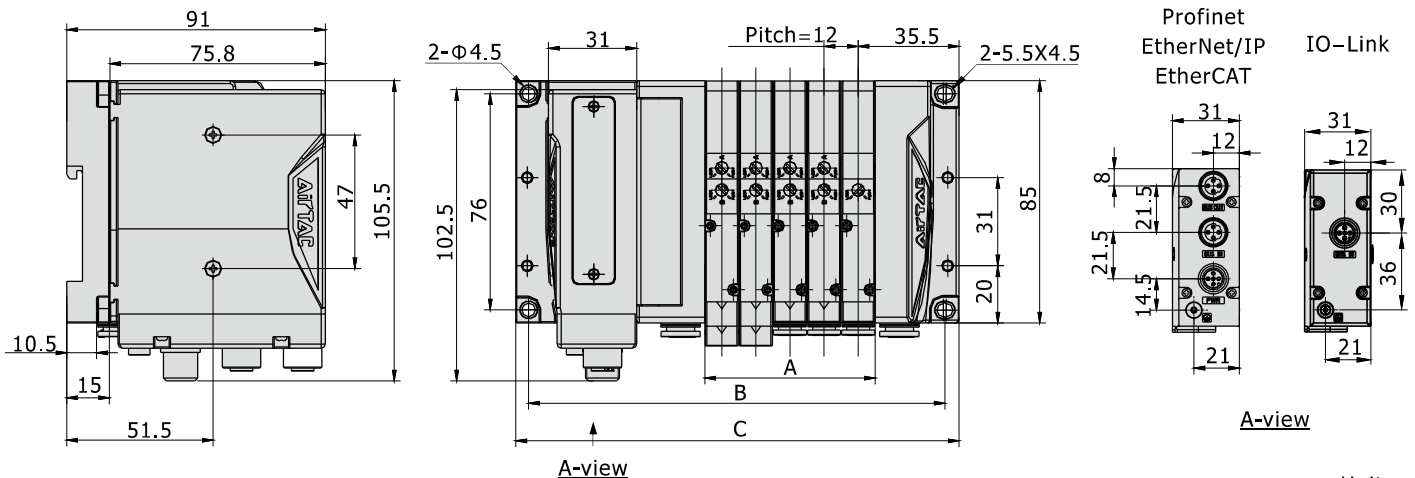
IO-Link



Protocols	IO-Link
Communication connector (M12)BUS IN	5 pins, plug A-coded(SPEEDCON)
Ground	M2.5

Dimensions

6D0500 series with communication module



Unit:mm

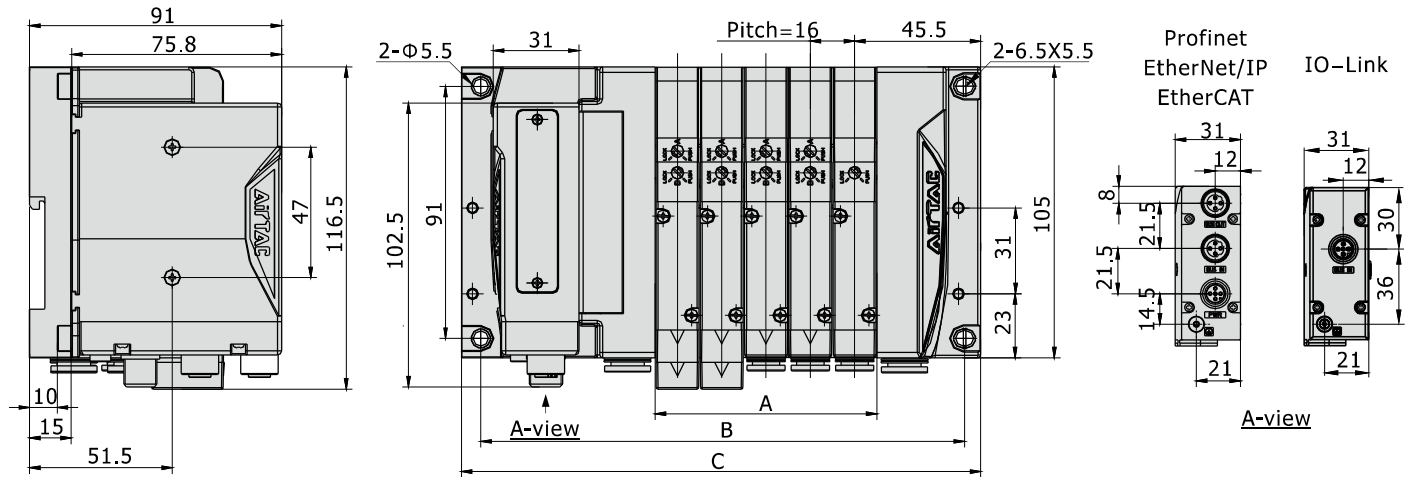
Item\Stations	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F	21F
A	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252
B	122.5	134.5	146.5	158.5	170.5	182.5	194.5	206.5	218.5	230.5	242.5	254.5	266.5	278.5	290.5	302.5	314.5	326.5	338.5
C	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348



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

Communication module

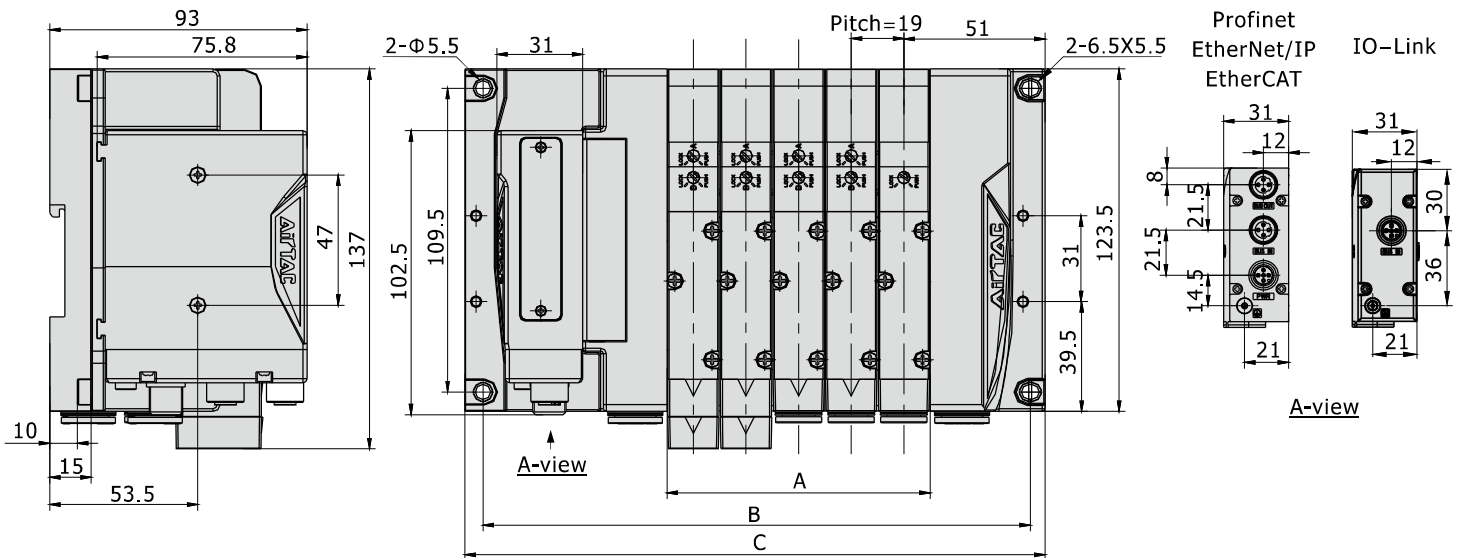
6D100 series with communication module



Unit:mm

Item\Stations	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F	21F
A	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336
B	142.5	158.5	174.5	190.5	206.5	222.5	238.5	254.5	270.5	286.5	302.5	318.5	334.5	350.5	366.5	382.5	398.5	414.5	430.5
C	155.5	171.5	187.5	203.5	219.5	235.5	251.5	267.5	283.5	299.5	315.5	331.5	347.5	363.5	379.5	395.5	411.5	427.5	443.5

6D200 series with communication module



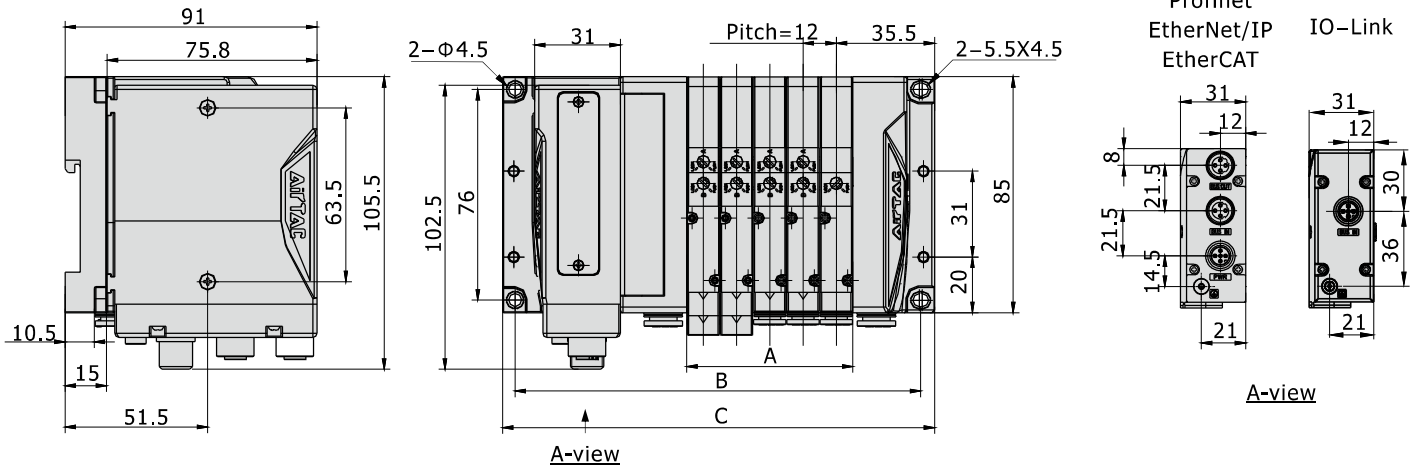
Unit:mm

Item\Stations	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F	21F
A	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323	342	361	380	399
B	159.5	178.5	197.5	216.5	235.5	254.5	273.5	292.5	311.5	330.5	349.5	368.5	387.5	406.5	425.5	444.5	463.5	482.5	501.5
C	171.5	190.5	209.5	228.5	247.5	266.5	285.5	304.5	323.5	342.5	361.5	380.5	399.5	418.5	437.5	456.5	475.5	494.5	513.5

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

Communication module

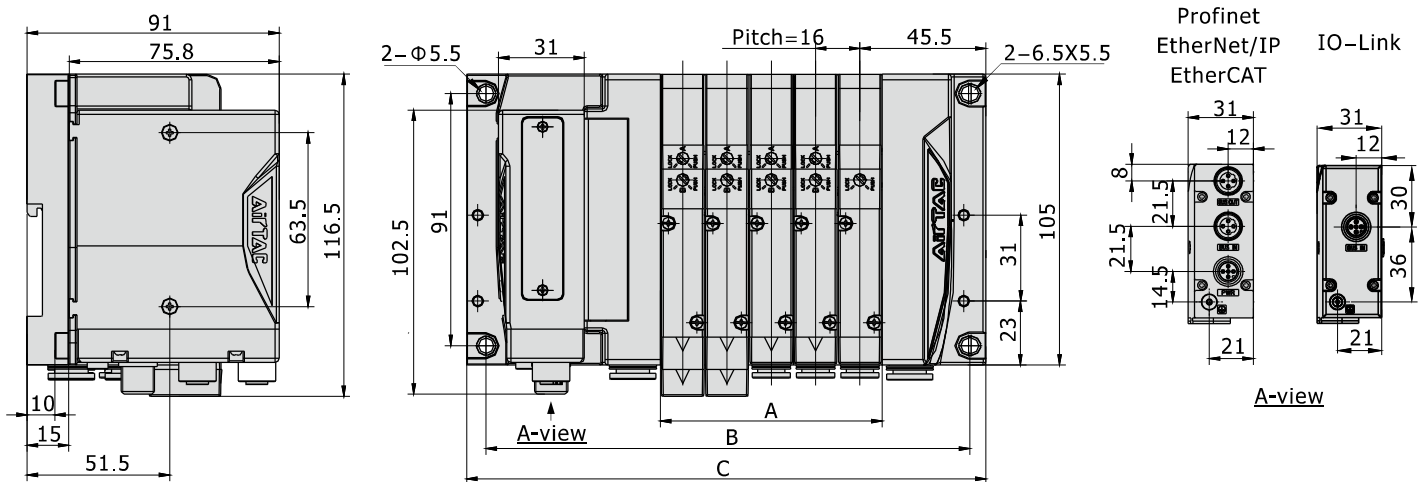
6DW0500 series with communication module



Unit:mm

Item\Stations	13F	14F	15F	16F	17F	18F	19F	20F	21F	22F	23F	24F	25F	26F	27F	28F	29F	30F	31F	32F	33F
A	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	272	384	396
B	242.5	254.5	266.5	278.5	290.5	302.5	314.5	326.5	338.5	350.5	362.5	374.5	386.5	398.5	410.5	422.5	434.5	446.5	458.5	470.5	482.5
C	252	264	276	288	300	312	324	336	348	360	372	384	396	408	420	432	444	456	468	480	492

6DW100 series with communication module



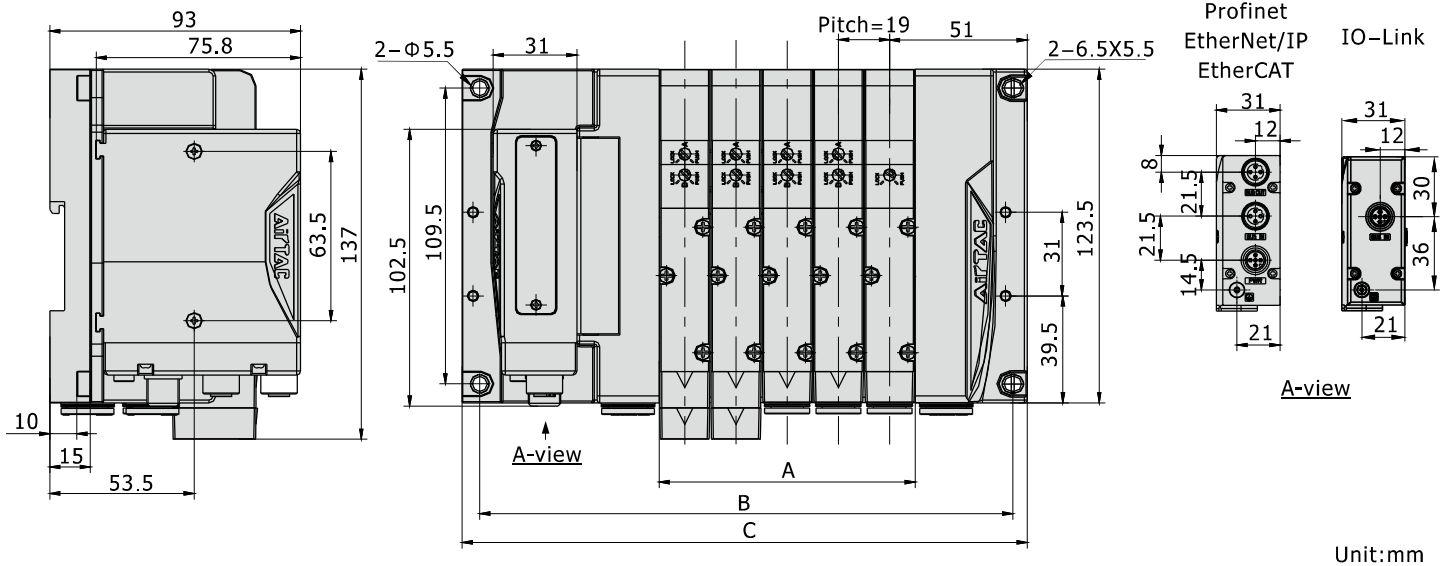
Unit:mm

Item\Stations	13F	14F	15F	16F	17F	18F	19F	20F	21F	22F	23F	24F	25F	26F	27F	28F	29F	30F	31F	32F	33F
A	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432	448	464	480	496	512	528
B	302.5	318.5	334.5	350.5	366.5	382.5	398.5	414.5	430.5	446.5	462.5	478.5	494.5	510.5	526.5	542.5	558.5	574.5	590.5	606.5	622.5
C	315.5	331.5	347.5	363.5	379.5	395.5	411.5	427.5	443.5	459.5	475.5	491.5	507.5	523.5	539.5	555.5	571.5	587.5	603.5	619.5	635.5

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

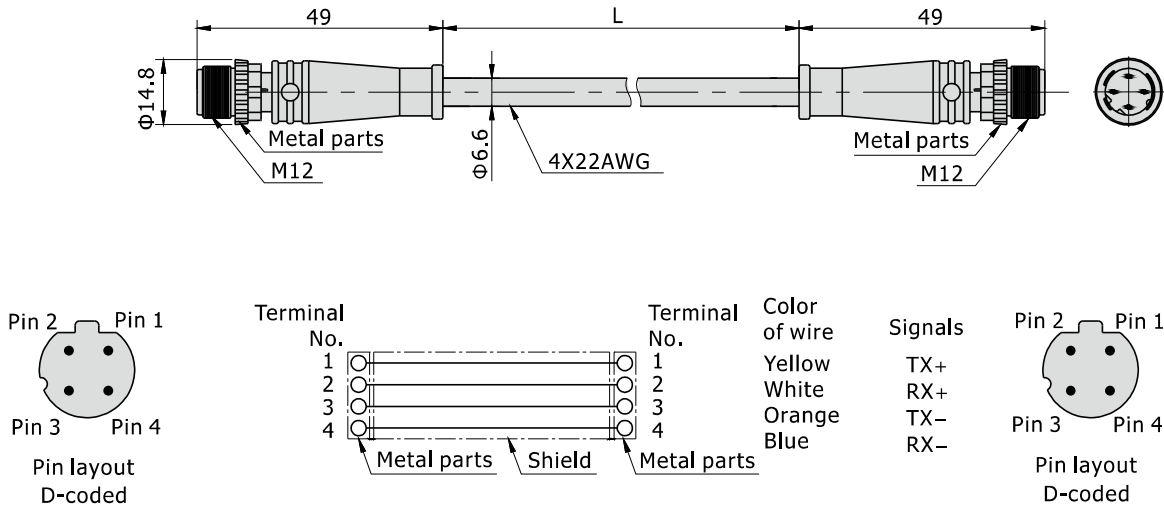
Communication module

6DW200 series with communication module



Item\Stations	13F	14F	15F	16F	17F	18F	19F	20F	21F	22F	23F	24F	25F	26F	27F	28F	29F	30F	31F	32F	33F
A	247	266	285	304	323	342	361	380	399	418	437	456	475	494	513	532	551	570	589	608	627
B	349.5	368.5	387.5	406.5	425.5	444.5	463.5	482.5	501.5	520.5	539.5	558.5	577.5	596.5	615.5	634.5	653.5	672.5	691.5	710.5	729.5
C	361.5	380.5	399.5	418.5	437.5	456.5	475.5	494.5	513.5	532.5	551.5	570.5	589.5	608.5	627.5	646.5	665.5	684.5	703.5	722.5	741.5

Communication cable M12 to M12

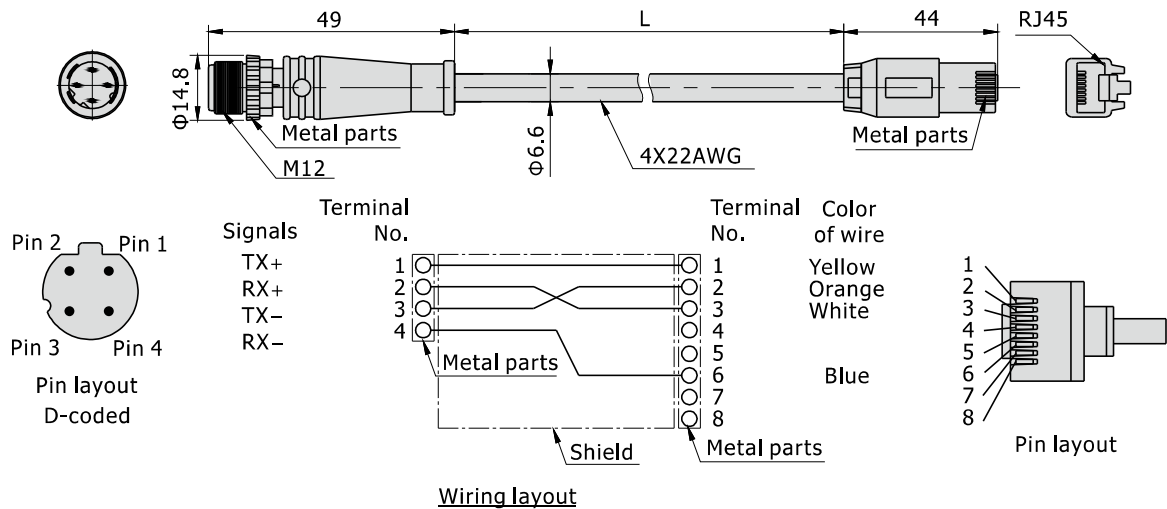


Wiring layout

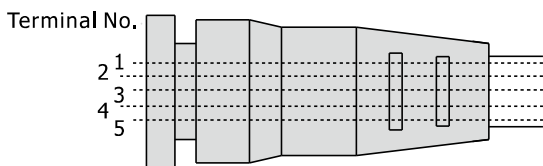
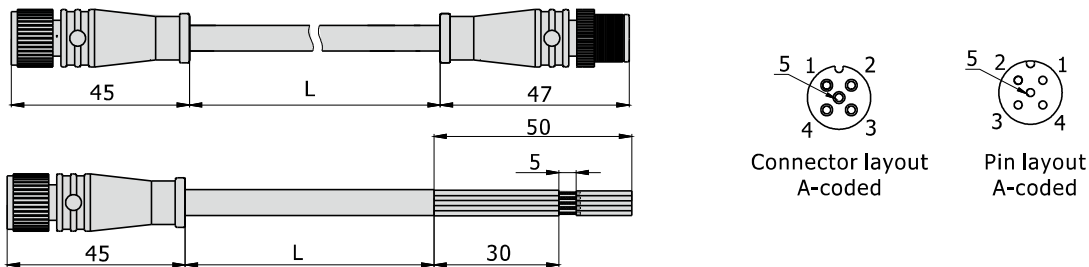
Integrated solenoid valve (5/2, 5/3 way)

Communication module

Communication cable M12 to RJ45

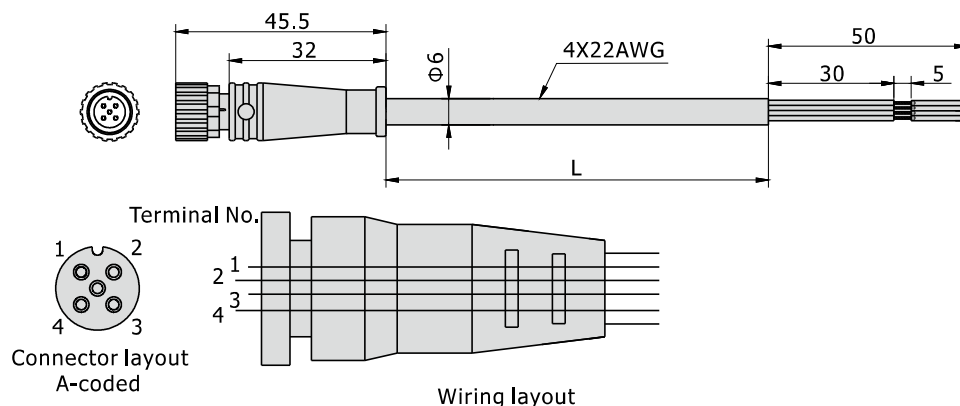


Communication cable M12 to M12/M12 to wires(IO-Link)



Wire layout instruction			
Terminal No.	Gauge(AWG)	Description	Color
1	22	DC24V±10%(Power supply)	Brown
2	22	DC24V±10%(Power supply for solenoid valve)	White
3	22	0V(Power supply)	Blue
4	22	IO-Link communication	Black
5	22	0V(Power supply for solenoid valve)	Gray

Power supply cable M12 to wires



Wire layout instruction			
Terminal No.	Gauge(AWG)	Description	Color
1	22	DC24V±10%(Power supply for solenoid valve)	Brown
2	22	0V(Power supply for solenoid valve)	White
3	22	DC24V ± 10%(Power supply)	Blue
4	22	0V(Power supply)	Black






F-DSUB25/F-DSUB37



Cable ordering code

F - DSUB 25 F 200

① ② ③ ④

① Model	DSUB: D-SUB Cable		
② Pin Number	25: 25PIN 	37: 37PIN 	
③ Terminal type	F: Two Females 	M: One Female + another male 	S: One Female+another wire 
④ Wire length	200: 2m	300: 3m 500: 5m	150: 1.5m 200: 2m 300:3m

Specification

1. Flame resistant grade: UL94 VW-1.
2. Rated temperature: 80°C.
3. Rated voltage: 300V.

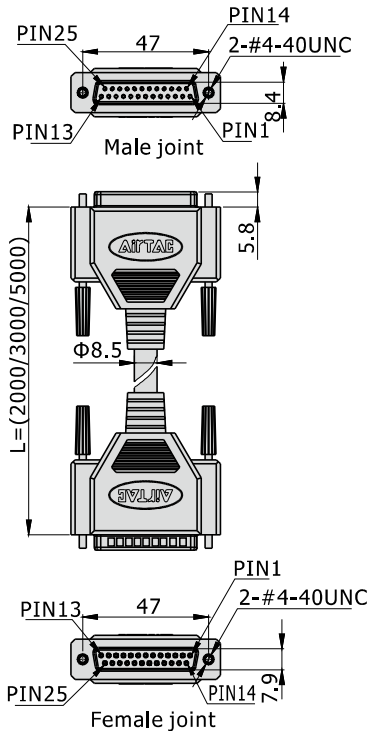
How to select cable

Cable type\Valve type	CPV10S	CPV15S	6D	6DW
F-DSUB25	•	•	•	
F-DSUB37				•

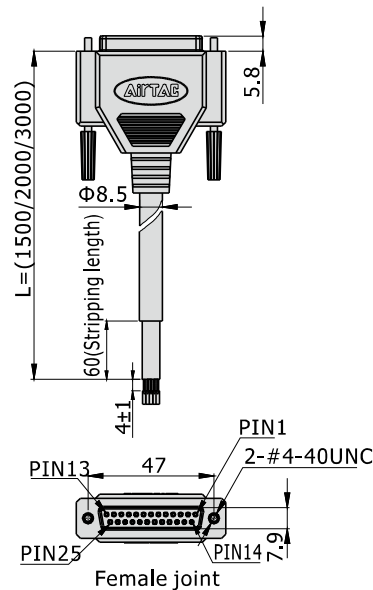
F-DSUB25/F-DSUB37

Dimensions and wire's assignment

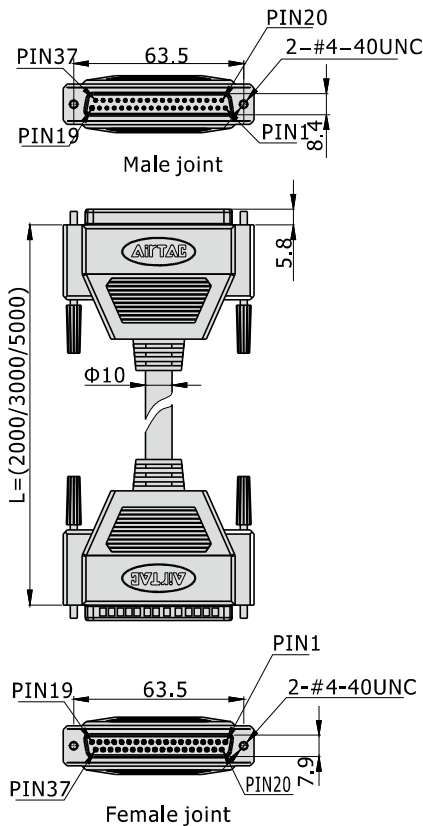
F-DSUB25F(M)



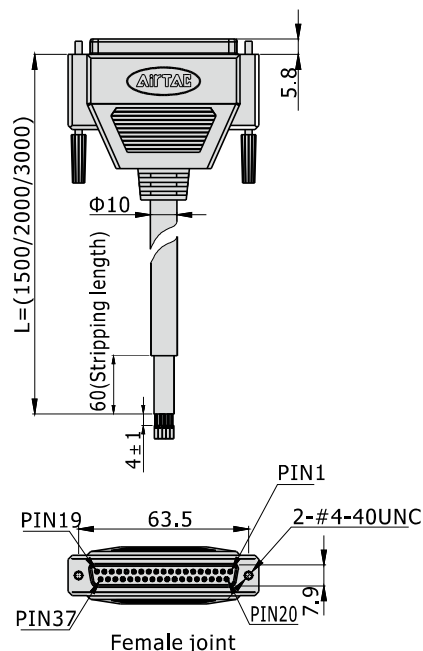
F-DSUB25S



F-DSUB37F(M)



F-DSUB37S



Wire's assignment

PIN	Color
1	Black
2	Tawny
3	Red
4	Orange
5	Yellow
6	Pink
7	Blue
8	Violet+White
9	Gray+Black
10	White+Black
11	White+Red
12	Yellow+Red
13	Orange+Red
14	Yellow+Black
15	Pink+Black
16	Blue+White
17	Violet
18	Gray
19	Orange+Black
20	Red+White
21	Tawny+White
22	Pink+Red
23	Gray+Red
24	Black+White
25	White

Wire's assignment

PIN	Color
1	Red+Black
2	Gray+Black
3	Brown+Black
4	Orange+Black
5	Yellow+Black
6	Green+Black
7	Blue+Black
8	White+Black
9	Violet+Red
10	Silt green+Black
11	Pink blue+Black
12	Pink+Black
13	Red
14	Gray
15	Brown
16	Orange
17	Yellow
18	Green
19	Black
20	Blue
21	White
22	Violet
23	Silt green
24	Pink blue
25	Pink
26	Red+White
27	Gray+White
28	Brown+White
29	Orange+White
30	Yellow+White
31	Green+White
32	Blue+White
33	Violet+White
34	Silt green+White
35	Pink blue+White
36	Pink+White
37	Red+Green