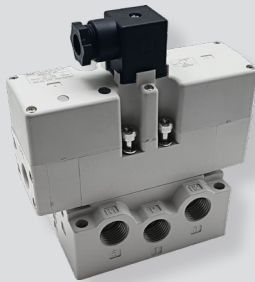
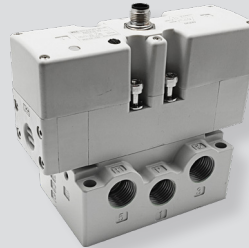


KIS series



EN175301-803:2006
(The older model DIN 43650 A) Connector V/V



M12xP1 A Code (4Pin) Plug V/V



EN175301-803:2006 Type
(The older model DIN 43650 A) Connector



M12xP1 A Code (4Pin) Plug

How to order

KIS 2 - S - 2 D - SB - A04

① ② ③ ④ ⑤ ⑥ ⑦

① Series

1	Size1 (Valve width:40mm)
2	Size1 (Valve width:50mm)

② Valve type

Valve type	Symbol
S Single	
D Double	
H Closed center	
I Pressure center	
J Exhaust center	

③ Voltage

1	AC100V 50Hz/110V 60Hz
2	AC200V 50Hz/220V 60Hz
3	DC 24V
4	DC 12V

④ Electrical connection

D	EN175301-803:2006(Standard) (The older model DIN43650A) Connector
C	M12xP1 A cord plug(Order)

⑤ Sub Base

Nil	None
SB	With sub base

⑥ Thread type

Nil	Rc(PT) (Standard)
G	G(PF)
N	NPT

⑦ Port size

Code	Port	Thread size		Remark
		1(P),2(B),4(A)	3(R2),5(R1)	
A02	Side port	1/4	3/8	Size1
A03		3/8		Size1,2
A04		1/2		Size2
B02	Bottom port	1/4	3/8	Size1
B03		3/8		Size1,2
B04		1/2		Size2

※ KIS1(Size1) Sub base is not A04, B04 model.
※ KIS2(Size2) Sub base is not A02, B02 model.

Specifications

Code	KIS1(Size1)			KIS2(Size2)		
	S	D	H/I/J	S	D	H/I/J
Valve type	S	D	H/I/J	S	D	H/I/J
Fluid	Air, Inert gas					
Port size	Rc(PT) 1/4			Rc(PT) 1/2		
Effective sectional area Smm ² (Cv)	20.2mm ² (1.1)	20.2mm ² (1.1)	16.6mm ² (0.9)	52mm ² (2.8)	52mm ² (2.8)	48mm ² (2.6)
Operating pressure	0.2~1.0MPa	0.2~1.0MPa	0.2~1.0MPa	0.2~1.0MPa	0.2~1.0MPa	0.2~1.0MPa
Max. operating frequency	5cycle/sec	5cycle/sec	3cycle/sec	5cycle/sec	5cycle/sec	3cycle/sec
Response time: 0.5MPa(5kgf/cm ²)	Below 45ms					
Lubrication	Non-lubrication (when refueling Turbine oil ISO VG32 or equivalent)					
Operation method	Internal pilot					
Manual override	Non lock push type					
Pilot exhaust method	Main valve · pilot valve collective exhaust type					
Normal voltage	AC110/220V 60Hz, DC12/24V					
Apparent power	AC110V 60Hz			3VA		
	AC220V 60Hz			3VA		
Power consumption	DC12/24V			2.6W		
Allowable voltage fluctuation	±10% rated voltage					
Ambient temperature	-5°C ~ +50°C(Without freezing)					
Coil insulation	Class F					

Weight table

Solenoid valve Ass'y

Part	EN175301-803:2006 (DIN Terminal type)		M12 Plug type	
	Size1	Size2	Size1	Size2
Single(S)	490g	640g	490g	640g
Double(D)	570g	690g	570g	690g
Closed center(H)	600g	715g	600g	715g
Pressure center(I)				
Exhaust center(J)				

Manifold block Ass'y

Part	Size1	Size2
1 Station	1,210g	1,960g
2 Station	1,750g	2,810g
3 Station	2,290g	3,660g
4 Station	2,830g	4,510g
5 Station	3,380g	5,360g
6 Station	3,920g	6,210g
7 Station	4,460g	7,060g
8 Station	5,010g	7,910g
9 Station	5,550g	8,760g
10 Station	6,090g	9,610g

Manifold block accessories

Part	Size1	Size2
Base Ass'y	500g	850g
End cover R Ass'y	320g	320g
End cover L Ass'y	340g	390g
Blanking plate Ass'y	76g	130g

Connector shaft(1set=2ea)

Part	Size1	Size2
Additional 1 station set	40g	53g
1 Station	42g	36g
2 Station	85g	94g
3 Station	127g	153g
4 Station	170g	213g
5 Station	213g	272g
6 Station	256g	331g
7 Station	299g	390g
8 Station	342g	449g
9 Station	385g	508g
10 Station	428g	567g

Sub base

Part	Size1	Size2
Weight	360g	650g

M12 Connector cable

Weight	80g
--------	-----

Structure

5/3-Way Single

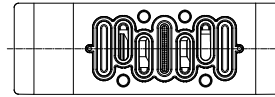
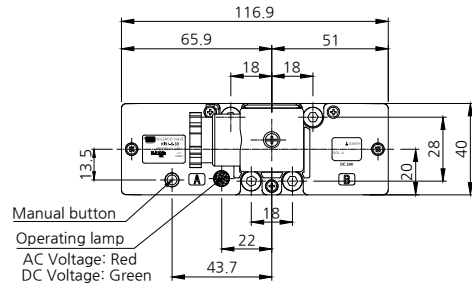
5/3-Way Double

5/3-Way H/I/J(3Position)

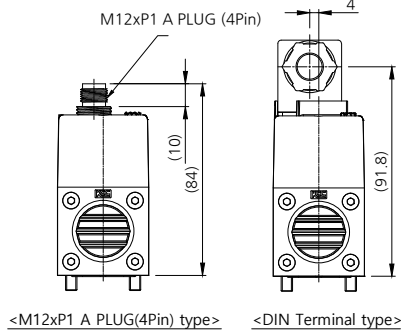
No.	Parts	Material
1	BODY	AL
2	SPOOL ASS'Y	AL, Rubber
3	PILOT	Resin
4	COVER	Resin
5	SOLENOID VALVE	-
6	CASE	Resin
7	CONNECTOR ASS'Y	Resin

Dimensions(KIS1 series)

2-position single (Solenoid valve)

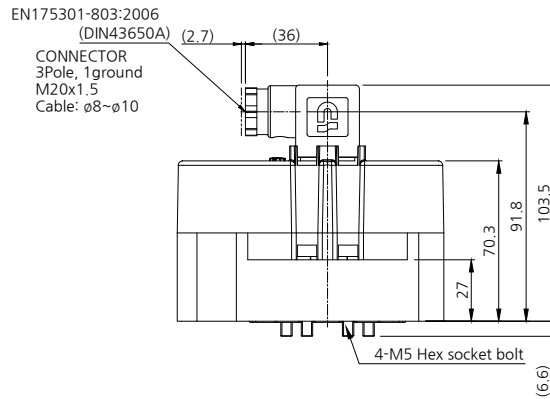


Manual button
Operating lamp
AC Voltage: Red
DC Voltage: Green



<M12xP1 A PLUG(4Pin) type> <DIN Terminal type>

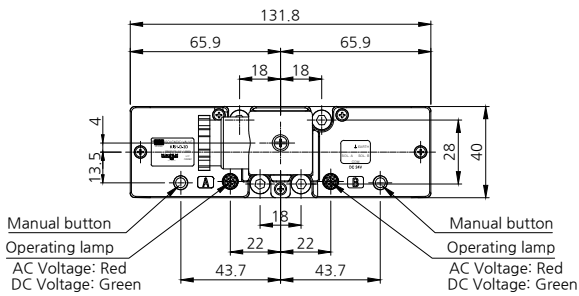
※Power connection method:
Refer to electrical wiring method



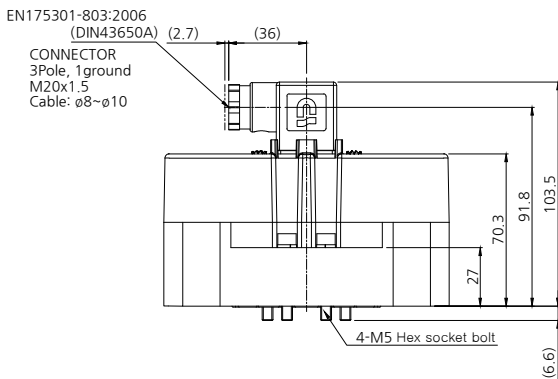
EN175301-803:2006
(DIN43650A) (2.7) (36)
CONNECTOR
3Pole, 1ground
M20x1.5
Cable: ø8~ø10

4-M5 Hex socket bolt
(6.6)

2-position double (Solenoid valve)



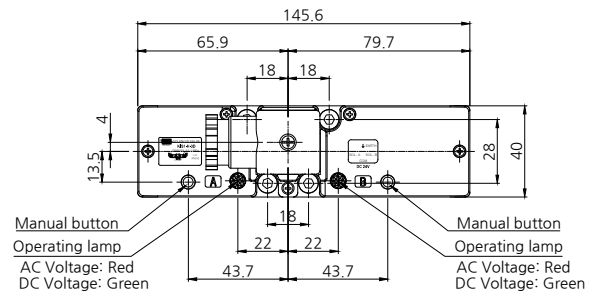
Manual button Manual button
Operating lamp Operating lamp
AC Voltage: Red AC Voltage: Red
DC Voltage: Green DC Voltage: Green



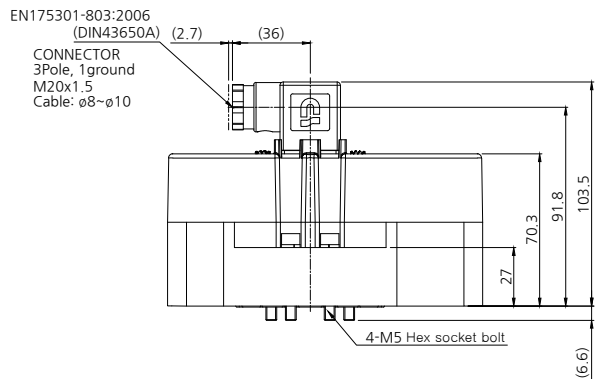
EN175301-803:2006
(DIN43650A) (2.7) (36)
CONNECTOR
3Pole, 1ground
M20x1.5
Cable: ø8~ø10

(6.6)

3-position H, I, J (Solenoid valve)



Manual button Manual button
Operating lamp Operating lamp
AC Voltage: Red AC Voltage: Red
DC Voltage: Green DC Voltage: Green

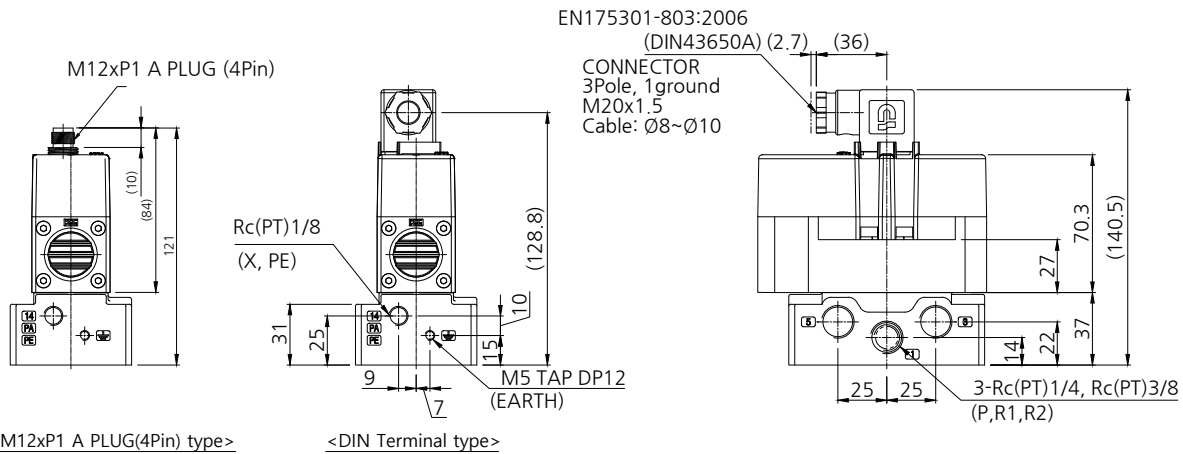
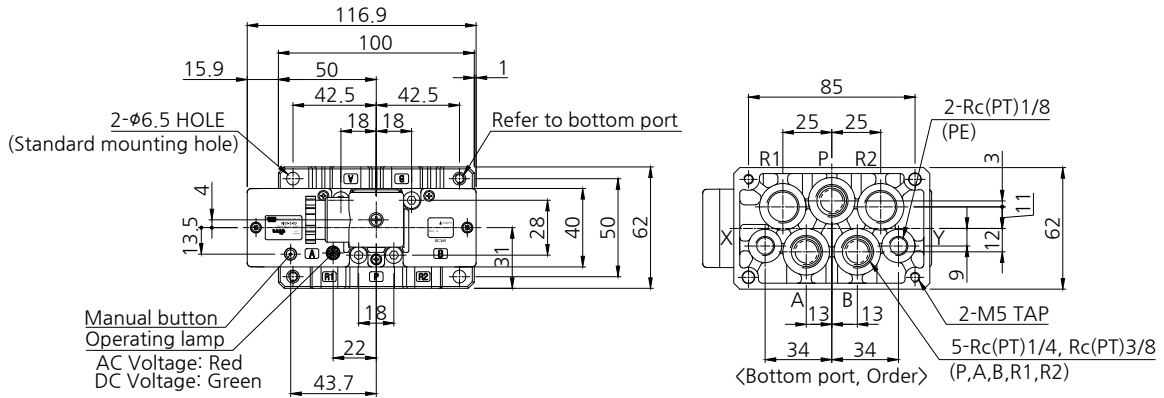


EN175301-803:2006
(DIN43650A) (2.7) (36)
CONNECTOR
3Pole, 1ground
M20x1.5
Cable: ø8~ø10

(6.6)

Dimensions(KIS1 series)

2-position single (Solenoid valve + sub-base)

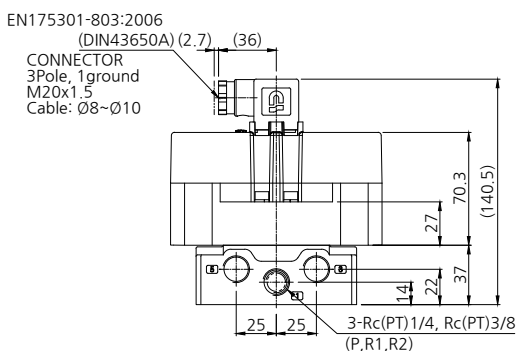
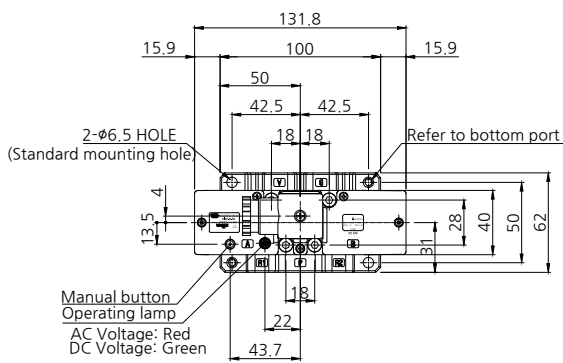


<M12xP1 A PLUG(4Pin) type>

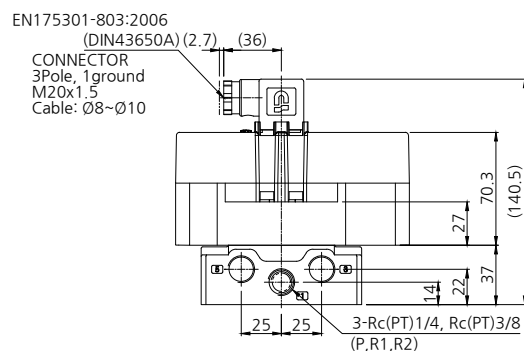
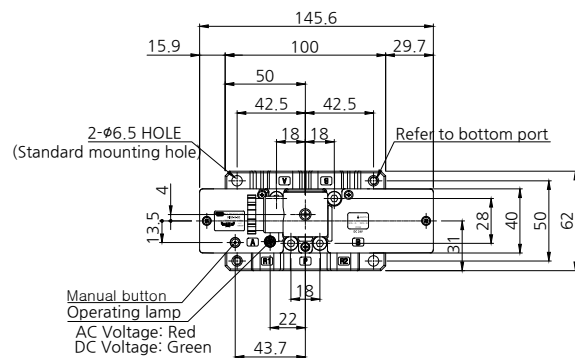
<DIN Terminal type>

※Power connection method:
Refer to wiring specification table

2-position double (Solenoid valve + sub-base)

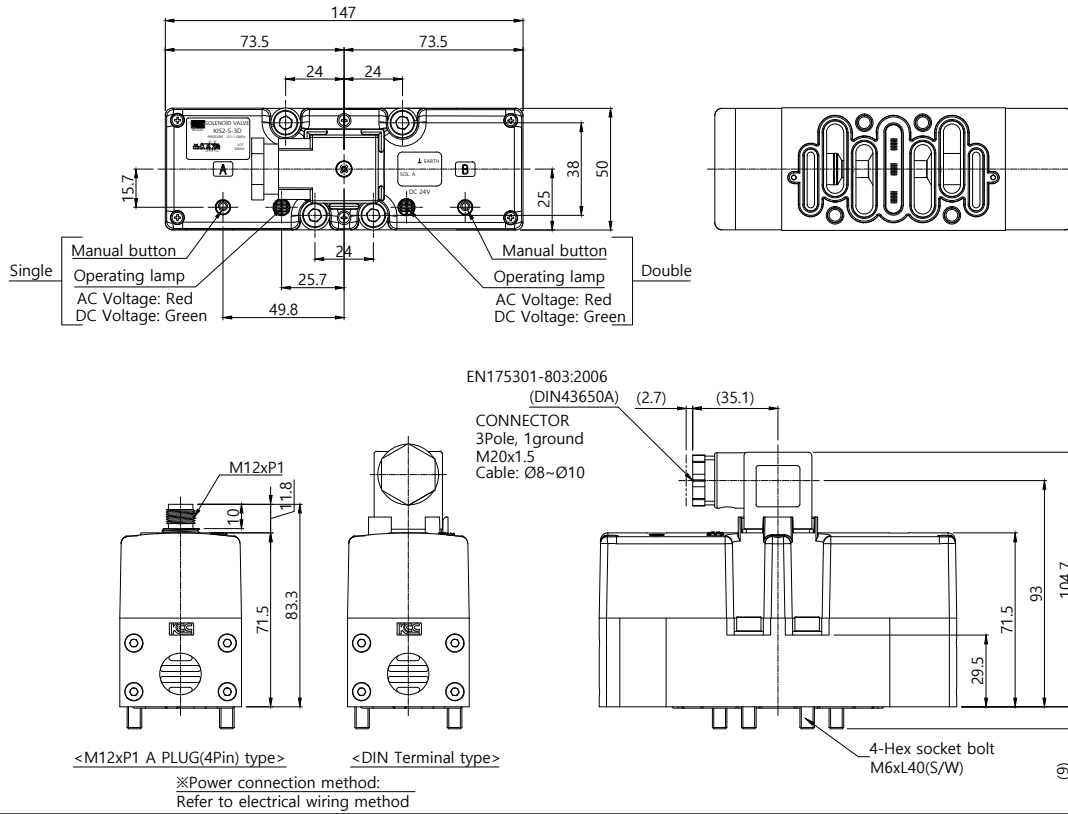


3-position H, I, J (Solenoid valve + sub-base)

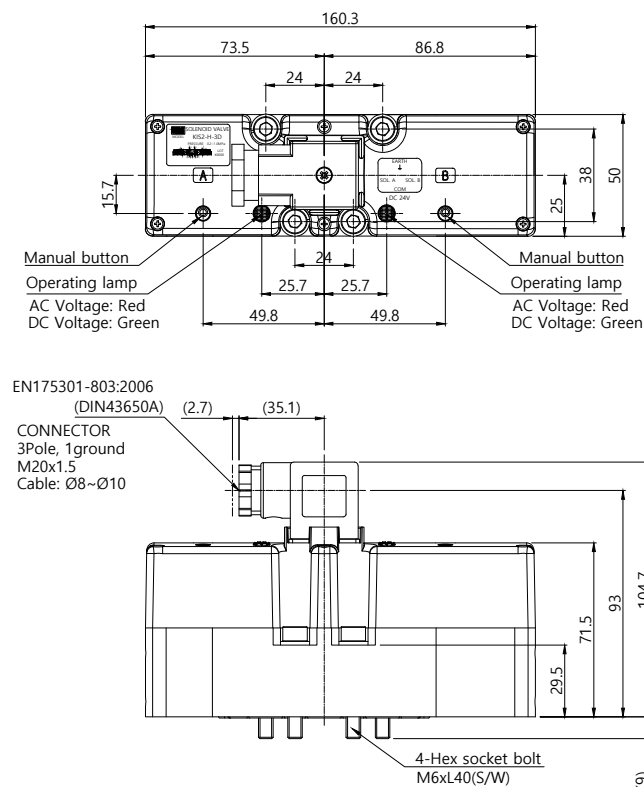


Dimensions(KIS2 series)

2-position single, double (Solenoid valve)

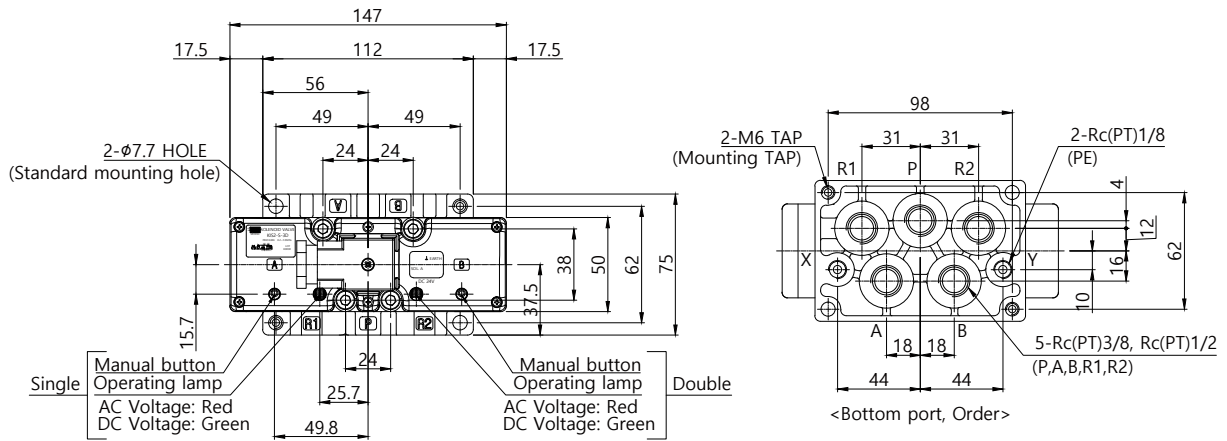


3-position H, I, J (Solenoid valve)



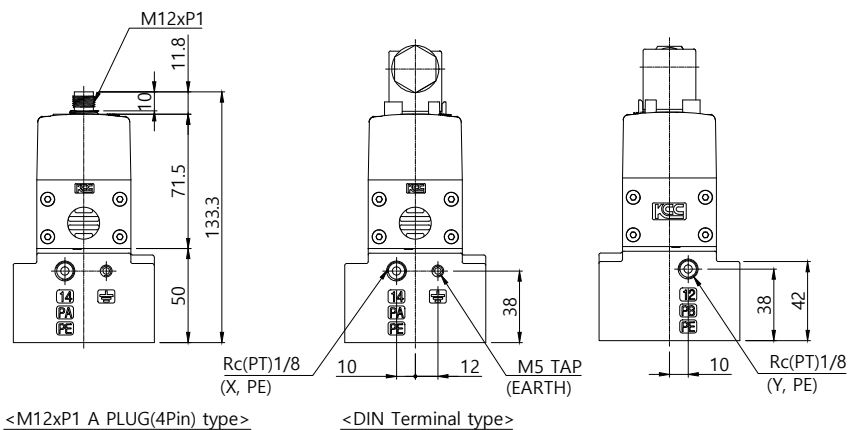
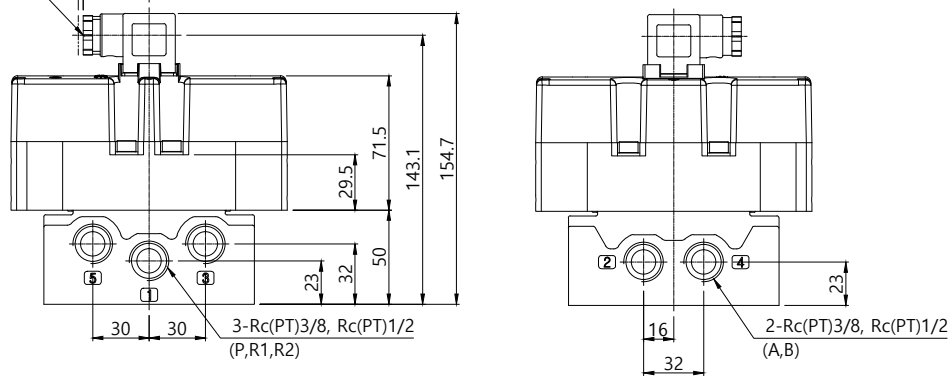
Dimensions(KIS2 series)

2-position single, double (Solenoid valve + sub-base)



CONNECTOR
EN175301-803:2006
(DIN43650A) (2.7) (35.1)

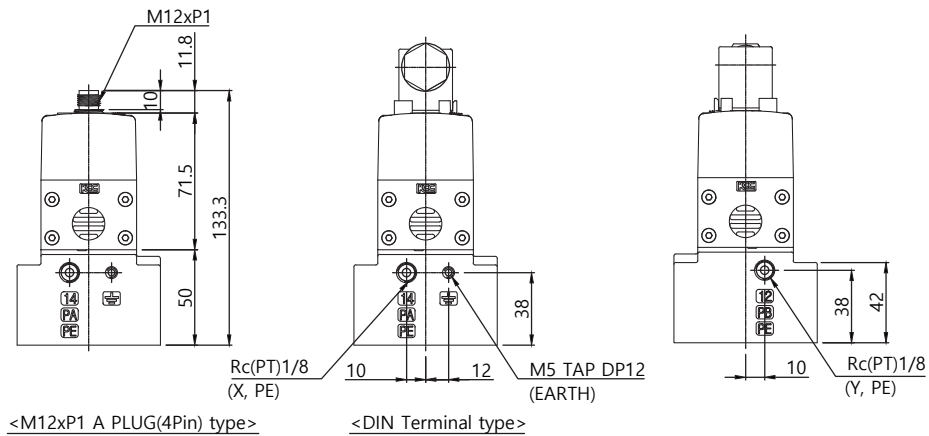
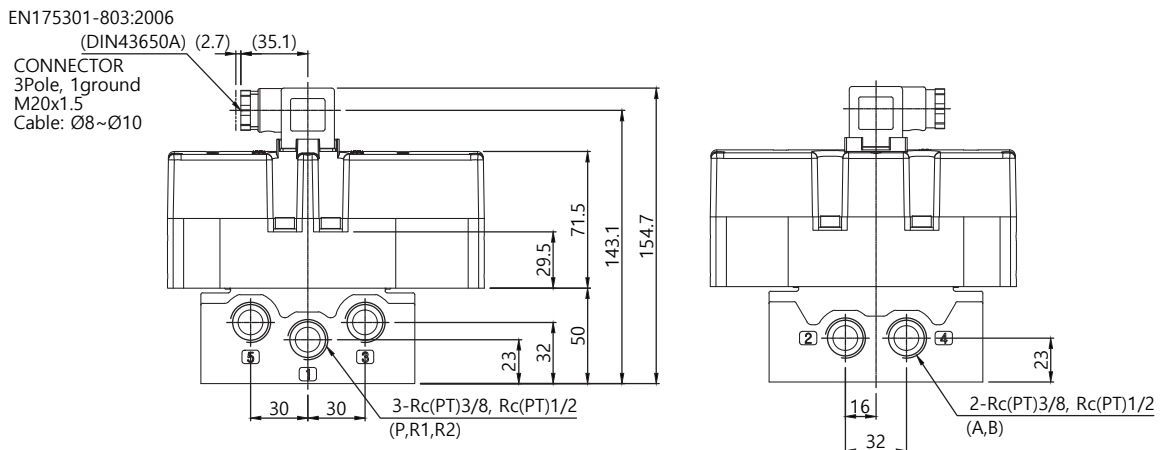
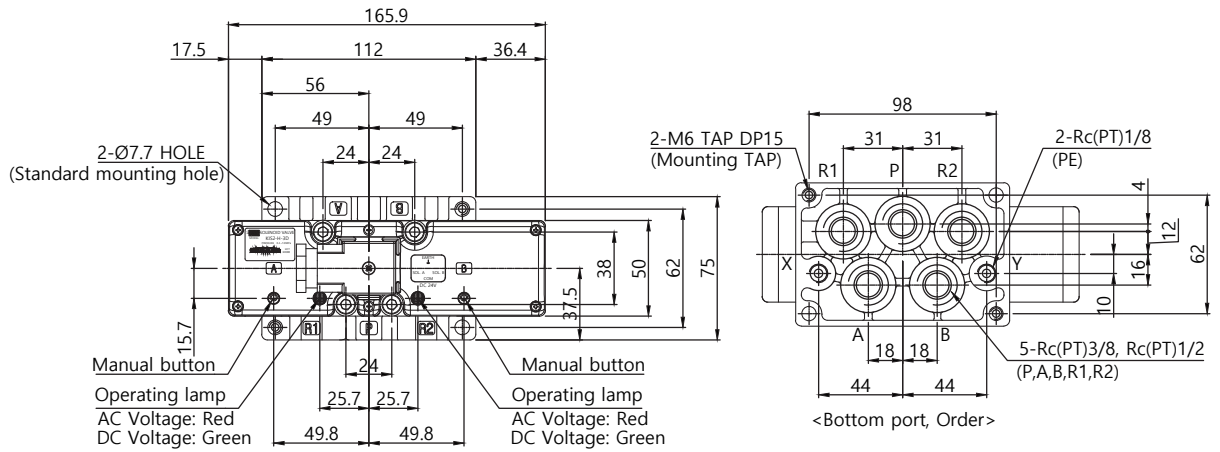
3Pole, 1ground
M20x1.5
Cable: ϕ 8~ ϕ 10



※ Power connection method:
Refer to electrical wiring method

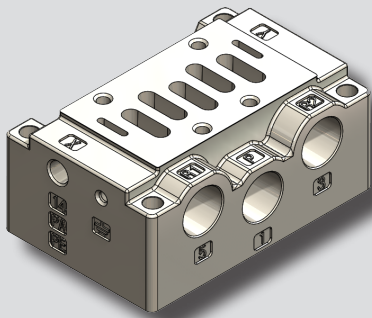
Dimensions(KIS2 series)

3-position H, I, J (Solenoid valve + sub-base)



※Power connection method:
Refer to wiring specification table

Sub Base



How to order

KIS 2 - SB -

①

②

③

① Series

1	Size1 (Valve width:40mm)
2	Size2 (Valve width:50mm)

② Thread type(A,B,P,R1,R2)

Nil	Rc(PT) (Standard)
G	G(PF)
N	NPT

③ Port size

Code	Direction	Thread size		Remark
		1(P),2(B),4(A)	3(R2),5(R1)	
A02	Side port	1/4	3/8	Size1
A03		3/8		Size1,2
A04		1/2		Size2
B02	Bottom port	1/4	3/8	Size1
B03		3/8		Size1,2
B04		1/2		Size2

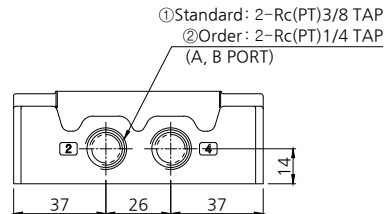
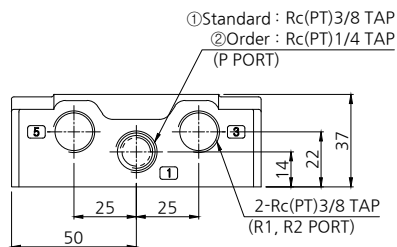
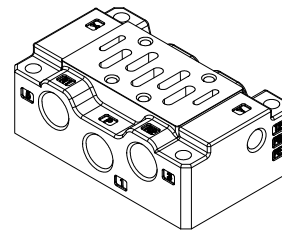
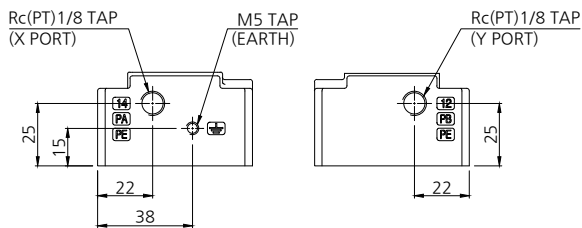
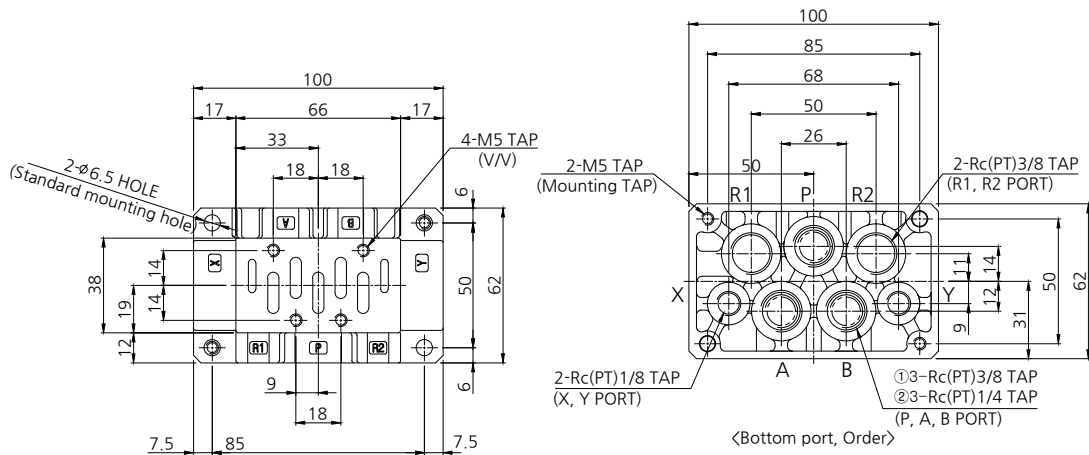
Bottom port accessories

Code	Use	Specifications
B02	PT Plug	PT1/4(Coating): 3ea
B03		PT3/8(Coating): 2ea
B03		PT1/2(Coating): 5ea
B04		PT3/8(Coating): 5ea

* KIS1(Size1) Sub base is not A04, B04 model.
* KIS2(Size2) Sub base is not A02, B02 model.

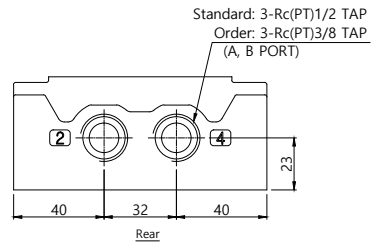
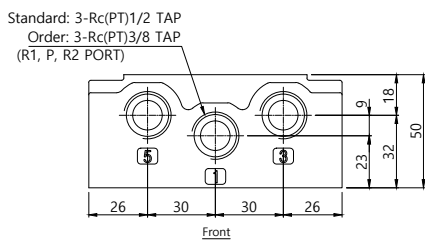
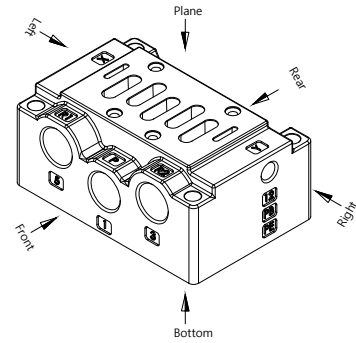
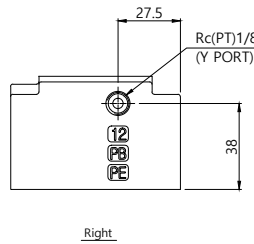
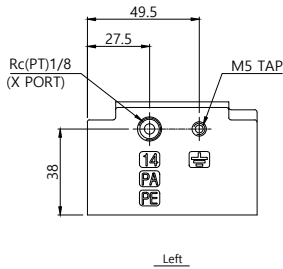
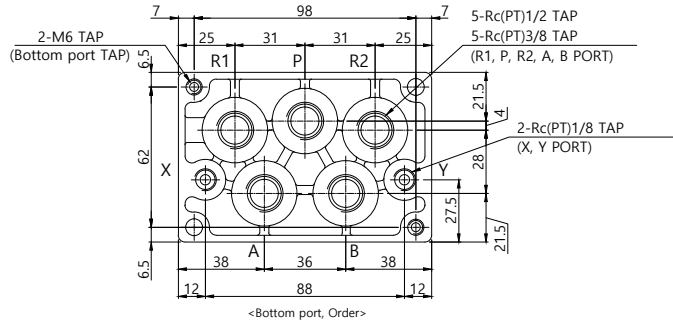
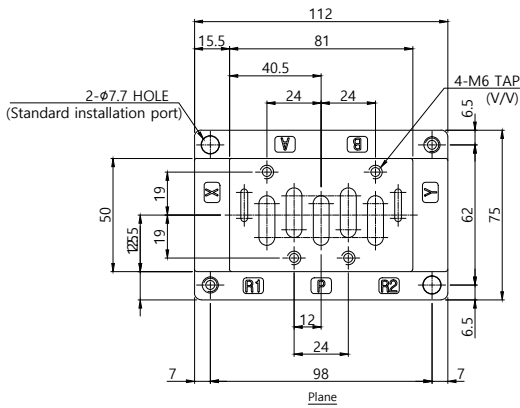
Dimensions(KIS1-SB series)

Sub base

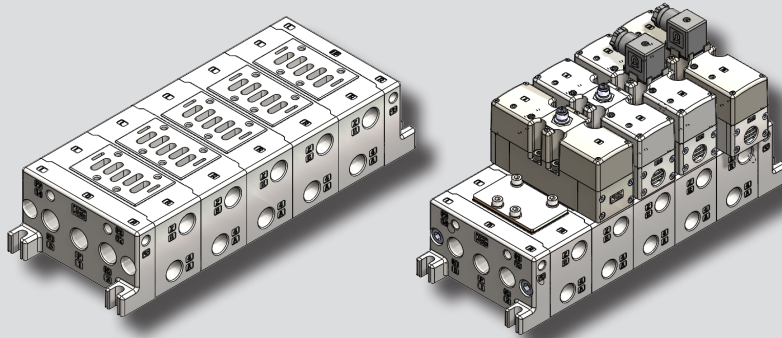


Dimensions(KIS2-SB series)

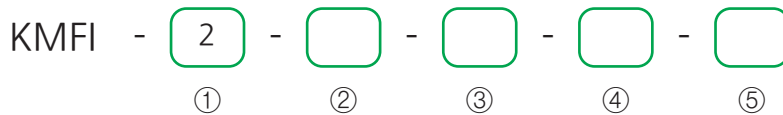
Sub base



Manifold block



How to order



① Series

1	Size1 (Valve width:40mm)
2	Size2 (Valve width:50mm)

② Thread type(A,B,P,R1,R2)

Nil	Rc(PT) (Standard)
G	G(PF)
N	NPT

③ A, B Port Port size(Base)

Code	Thread type		Remark
	Size	Direction	
02R	1/4	Right	Size1
03R	3/8		Size1, 2
04R	1/2		Size2
02L	1/4	Left	Size1
03L	3/8		Size1, 2
04L	1/2		Size2
02B	1/4	Back	Size1
03B	3/8		Size1, 2
04B	1/2		Size2

※ KMF1-1(Size1) is not 04R, 04L, 04B model.
 ※ KMF1-2(Size2) is not 02R, 02L, 02B model.
 ※ TSelected when selecting TAP specification (direction) Blocks TAP PT PLUG other than TAP specification.

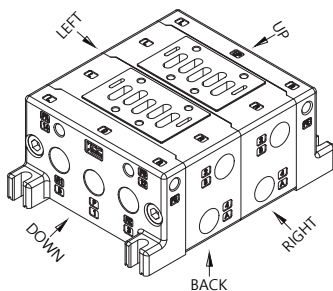
④ P, R1, R2 Port Direction(End Cover)

Code	Thread type		Remark
	Size	Direction	
02A	1/4	All	Both side
02D		Down	
02U		Up	Only one side
03A	3/8	All	Both side
03D		Down	
03U		Up	Only one side
04A	1/2	All	Both side
04D		Down	
04U		Up	Only one side

※ KMF1-1(Size1) is not 04A, 04D, 04U model.
 ※ KMF1-2(Size2) is not 02A, 02D, 02U model.
 ※ When selecting direction, plugs that are not selected are blocked.

⑤ Station

01	1 Station
02	2 Station
03	3 Station
04	4 Station
⋮	⋮
10	10 Station



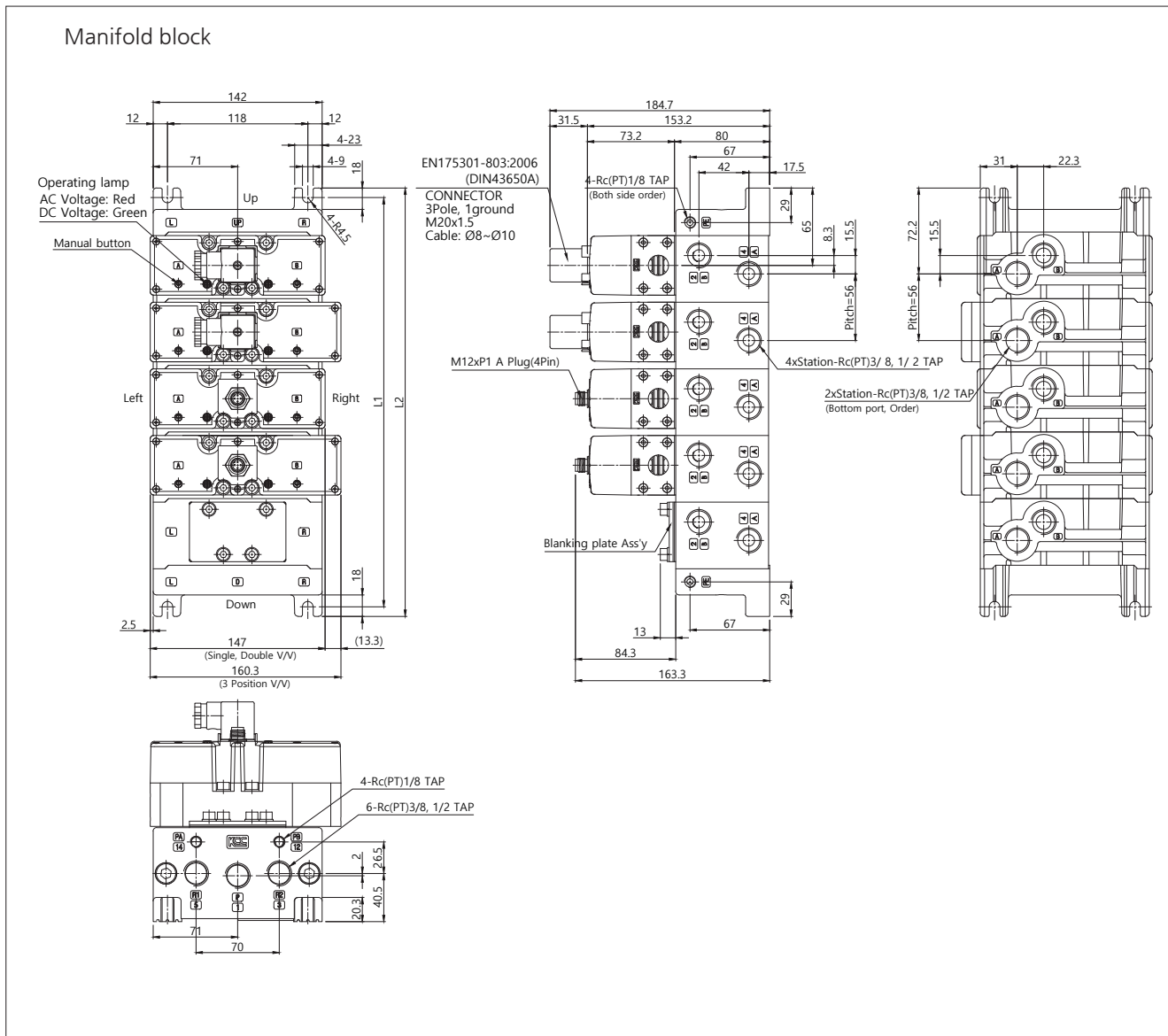
Specifications

Part name	ISO Valve manifold block Ass'y
Part No.	KMF1-1, 2
Station	1 Station ~ 10 Station
Port size	KIS1: Rc(PT)1/4, Rc(PT)3/8
	KIS2: Rc(PT)3/8, Rc(PT)1/2
Thread clearance	Compatible with SMC社 VV72
	Compatible with TPC社 DXM

Accessories

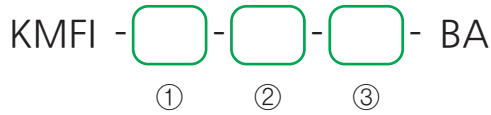
No	Use	Specifications	
1	Manifold attachment	Size2	M8xL35(S/W) Hexagon socket bolt : 4ea
		Code	Specifications
2	PT Plug	02	PT1/4(Coating): Stationx2 + 3ea
		03	PT3/8(Coating): Stationx2 + 3ea
		04	PT1/2(Coating): Stationx2 + 3ea

Dimensions(KMFI-2 series)



Station(n)	1 Station	2 Station	3 Station	4 Station	5 Station	6 Station	7 Station	8 Station	9 Station	10 Station
L1	120	176	232	288	344	400	456	512	568	624
L2	136	192	248	304	360	416	472	528	584	640

Base Ass'y



① Series

1	Size1 (Valve width:40mm)
2	Size2 (Valve width:50mm)

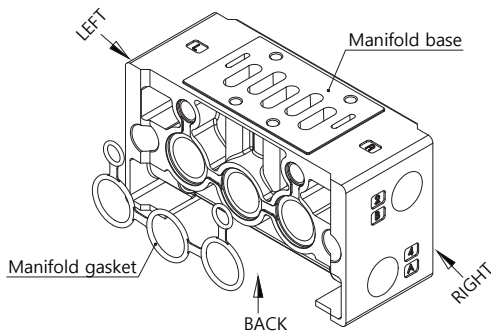
② Thread type(A,B,P,R1,R2)

Nil	Rc(PT) (Standard)
G	G(PF)
N	NPT

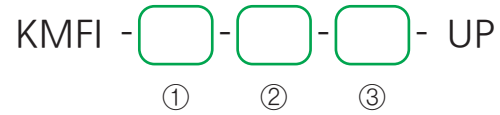
③ A, B Port size(Base)

Code	Thread type		Remark
	Size	Direction	
02R	1/4	Right	Size1
03R	3/8		Size1, 2
04R	1/2		Size2
02L	1/4	Left	Size1
03L	3/8		Size1, 2
04L	1/2		Size2
02B	1/4	Back	Size1
03B	3/8		Size1, 2
04B	1/2		Size2

※ KMFI-1(Size1) is not 04R, 04L, 04B model.
 ※ KMFI-2(Size2) is not 02R, 02L, 02B model.
 ※ When selecting direction, plugs that are not selected are blocked.



End cover R Ass'y, Up side



① Series

1	Size1 (Valve width:40mm)
2	Size2 (Valve width:50mm)

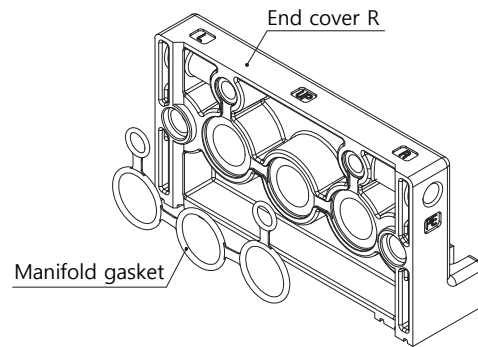
② Thread type(A,B,P,R1,R2)

Nil	Rc(PT) (Standard)
G	G(PF)
N	NPT

③ P, R1, R2 Port size(End cover Up(R), Up side)

Code	Thread type	Remark
02	1/4	Size1
03	3/8	Size1, 2
04	1/2	Size2

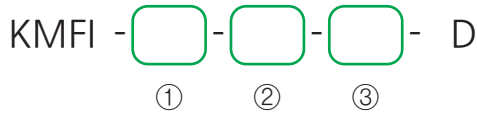
※ KMFI-1(Size1) is not 04 model.
 ※ KMFI-2(Size2) is not 02 model.



Accessories

No	Use	Specifications	
1	Manifold attachment	Size2	M8xL35(S/W) Hexagon socket bolt: 2ea
1	End cover fixing	Size2	M10xL25(S/W) Hexagon socket bolt: 2ea
2	PT Plug	Code	Specifications
		02	PT1/4(Coating): 3ea
		03	PT3/8(Coating): 3ea
		04	PT1/2(Coating): 3ea

End cover L Ass'y, Down side



① Series

1	Size1 (Valve width:40mm)
2	Size2 (Valve width:50mm)

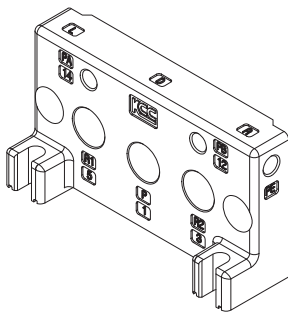
② Thread type(A,B,P,R1,R2)

Nil	Rc(PT) (Standard)
G	G(PF)
N	NPT

③ P, R1, R2 Port size(End cover D(L), Down side)

Code	Thread type	Remark
02	1/4	Size1
03	3/8	Size1, 2
04	1/2	Size2

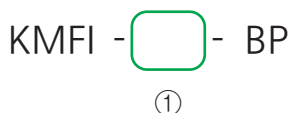
※ KMFI-1(Size1) is not 04 model.
※ KMFI-2(Size2) is not 02 model.



Accessories

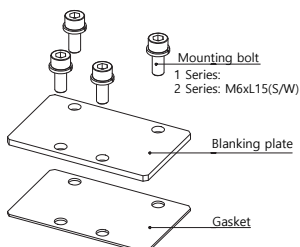
No	Use	Specifications	
1	Manifold attachment	Size2	M8xL35(S/W) Hexagon socket bolt: 2ea
1	End cover fixing	Size2	M10xL25(S/W) Hexagon socket bolt: 2ea
2	PT Plug	Code	Specifications
		02	PT1/4(Coating): 3ea
		03	PT3/8(Coating): 3ea
		04	PT1/2(Coating): 3ea

Blanking plate Ass'y

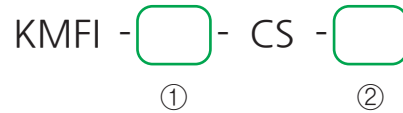


① Series

1	Size1 (Valve width:40mm)
2	Size2 (Valve width:50mm)



Connector shaft



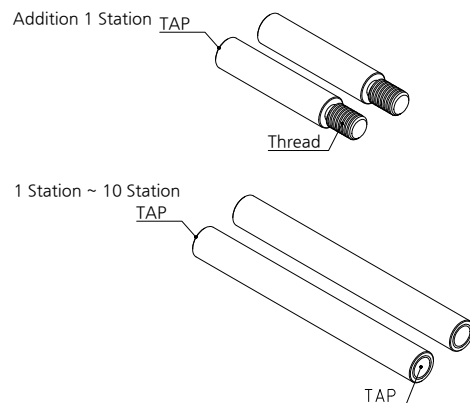
① Series

1	Size1 (Valve width:40mm)
2	Size2 (Valve width:50mm)

② Application station

00	Addition 1 Station
01	1 Station
02	2 Station
03	3 Station
04	4 Station
⋮	⋮
10	10 Station

※ Set basis, 1Set is 2ea.

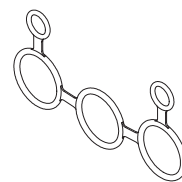


Manifold gasket



① Series

1	Size1 (Valve width:40mm)
2	Size2 (Valve width:50mm)

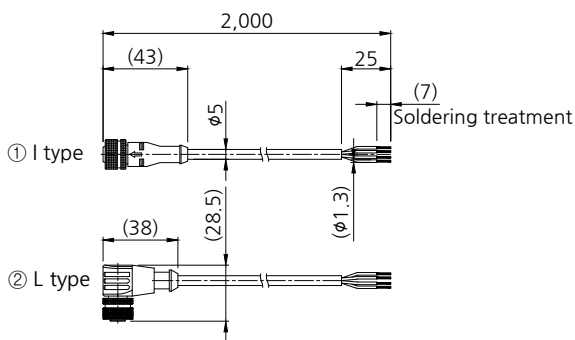
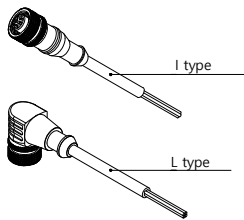


M12 Connector cable

KIS - M12 - 2M -  ①


① Shape

1	(-)Straight shaped
2	L-shaped



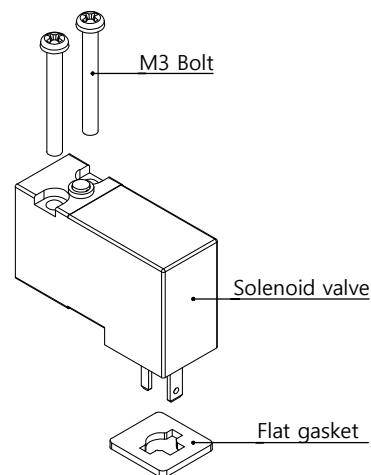
M12 CONNECTOR CABLE(OPTION PART)

15mm Solenoid valve

KIS - 15V -  ①

① Voltage

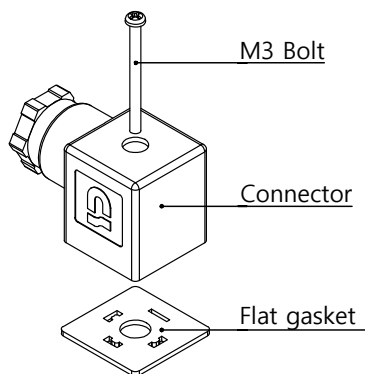
1	AC100V 50Hz/110V 60Hz
2	AC200V 50Hz/220V 60Hz
3	DC24V
4	DC12V



DIN Terminal connector

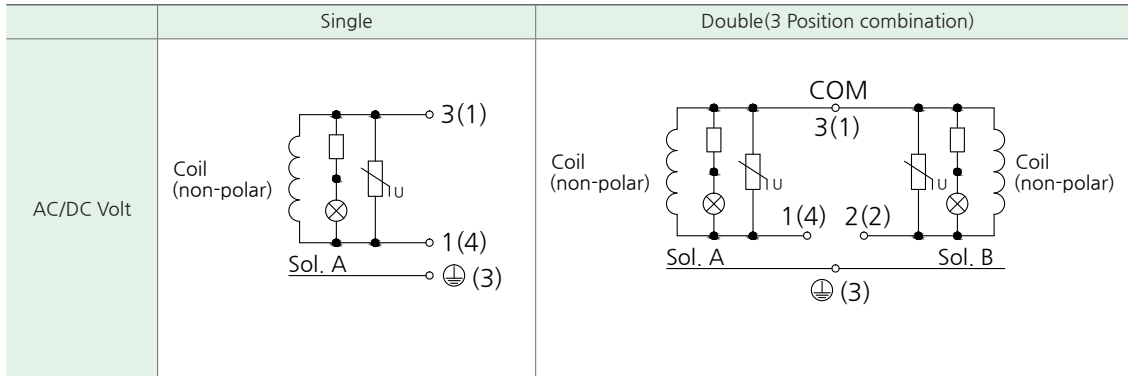
K30 Connector

EN175301-803:2006(DIN43650A)
3Pole, 1ground, M20x1.5
Cable: Ø8 ~ Ø10



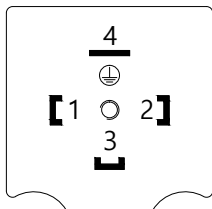
Electrical wiring method

Internal circuit diagram(The terminal number is DIN connector, ()The inner number is the M12 plug connector pin number.)



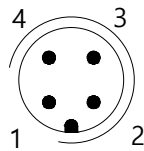
- Lamp color: AC Volt (Red), DC Volt (Green)

DIN Connector wiring specifications M12 Plug pin wiring specifications



EN175301-803:2006
(DIN43650A)

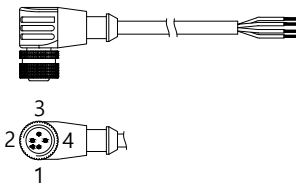
Terminal number :
1: A side SOL.
2: B side SOL.
3: COM. Terminals
4: Grounding



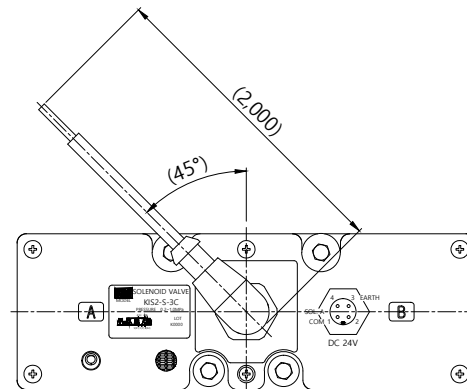
M12xP1 A code (4Pin)

Pin number :
1: COM. Pin
2: B side SOL.
3: Grounding
4: A side SOL.

When using our M12 connector cable (M12xP1, A code (4Pin))



M12 connector cable		KIS V/V Wiring
Pin No.	Line color	
1	Brown	Com. Pin
2	White	B side
3	Blue	
4	Black	



Wiring direction when using our M12 "L" shaped connector cable