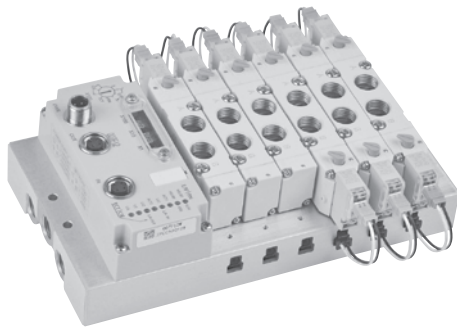


MVE2-100 / 156 / 188 / 220 series

FIELDBUS SYSTEM



EtherNet/IP™



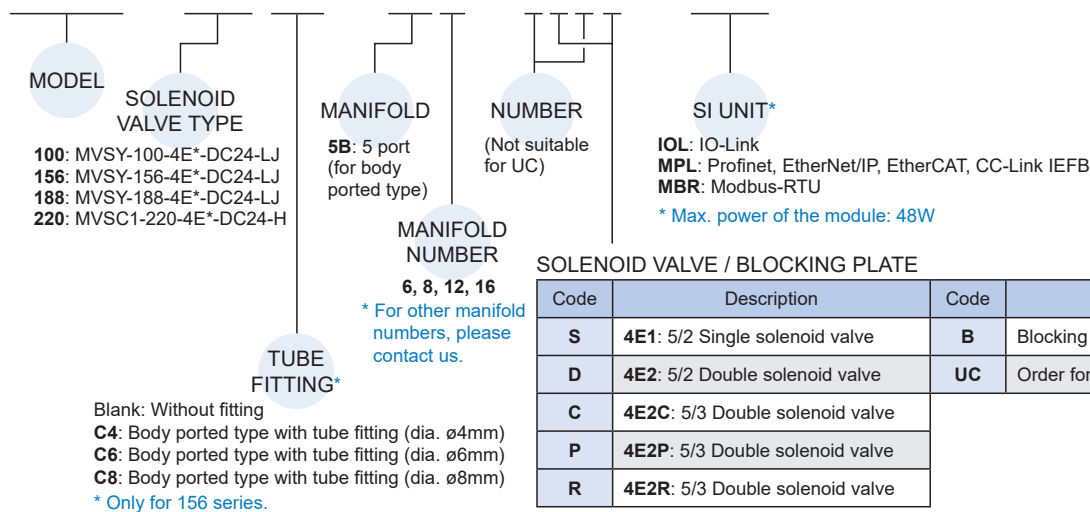
CC-Link IE Basic

Remark

- Maximum stations: 16 stations

Order example of fieldbus valve terminal

MVE2 – 156 C6 – 5B6 – 3S3D – MPL



Order example

MVE2-156-5B8-3S2B2D1C-IOL

IO-Link interface + 8 manifolds +
4E1 × 3 + Blocking plate × 2 + 4E2 × 2 + 4E2C × 1
(Solenoid valves are arranged from the communication module side : SSSBDDC)

MVE2-188-5B8-UC-MPL

Specific interface + 8 manifolds + MVSU-188 solenoid valves
Place an order according to the customized order form.

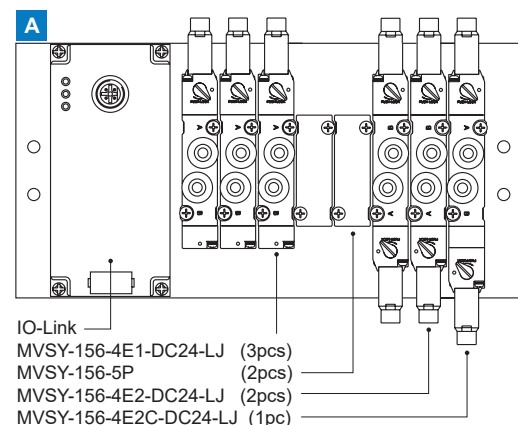
* The order of solenoid valves can be free combined, please refer to page 9 "Customized combination - Order form."

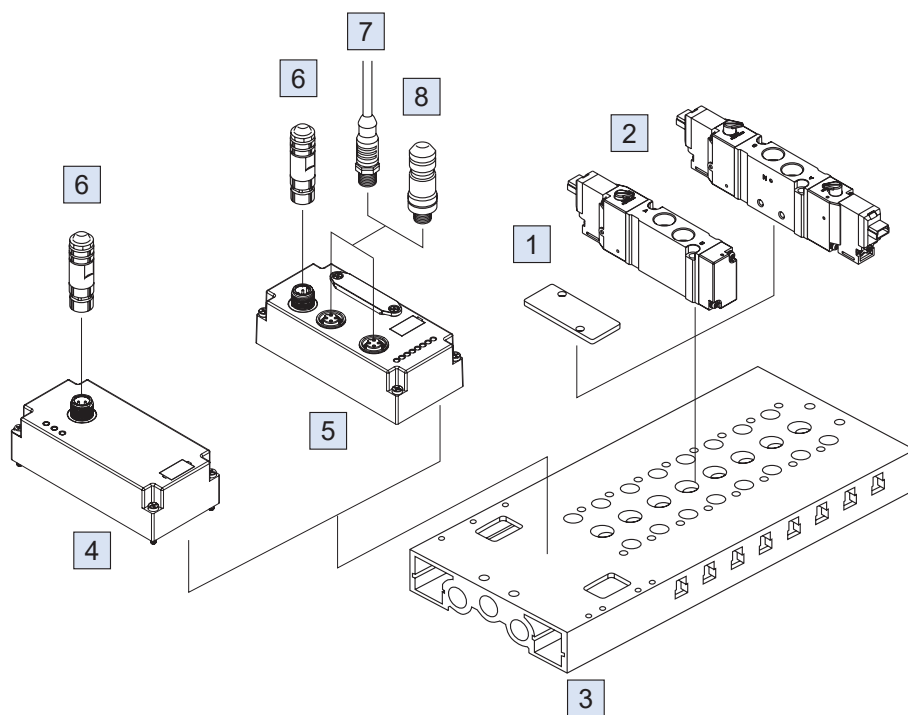
Features

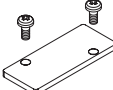
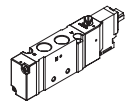
- Solenoid valve can match different modules, like IO-Link, MRL, Modbus-RTU.
- Quick tube fittings can be installed.
- Fast troubleshooting thanks to multi-angle LED display.
- It is easy to repair due to solenoid valves can be replaced simple and fast.
- Labor cost can be reduced.
- Reduce error of wiring.
- Web server function.
- The voltage is DC24V.

Specification

Model		MVE2			
Solenoid valve		100	156	188	220
Medium		Air			
Operating pressure range (MPa)	2 position	0.2~0.7	0.15~0.7		0.2~0.8
	3 position	0.2~0.7	0.2~0.7		0.3~0.8
Proof pressure		1 MPa			
Intake & exhaust		Centralized			
Port size	A,B port	M5	Rc1/8	Rc1/4	Rc1/4
	P,R port	G1/8	G1/4	G1/4	G1/4

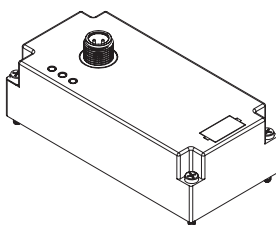
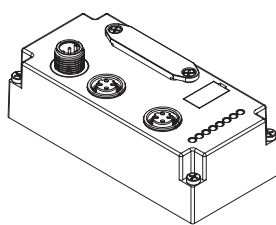




No.	Part	Order number	Page
1	Blocking plate 	MVSY-100-5P	5
		MVSY-156-5P	6
		MVSY-188-5P	7
		MVSC-220-5P	8
2	Solenoid valve 	MVSY-100-4E*-DC24-LJ	5
		MVSY-156*-4E*-DC24-LJ	6
		MVSY-188-4E*-DC24-LJ	7
		MVSC1-220-4E*-DC24-H	8

No.	Part	Description	Page
3	Manifold	-	5~8
4	Communication module	IOL: IO-Link	3,4
5		MPL: Profinet, Ethernet/IP, EtherCAT, CC-Link IEFB	3,4
		MBR: Modbus-RTU	3,4
6	Connector	Straight plug, M12×1, 4 pin, A-coded	3
7	Connector with cable	Straight plug, M12×1, 4 pin, D-coded	3
8	Connector	Straight plug, M12×1, 4 pin, D-coded	3

Specification of SI unit (Communication module)

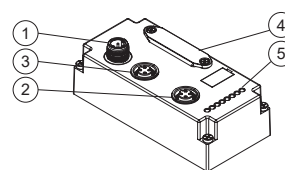
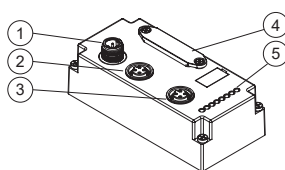
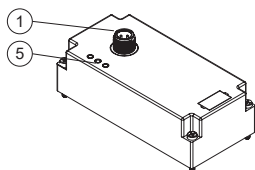
Specification		IOL	MPL		MBR
Exterior					
Interface	Interface type	IO-Link	Profinet EtherCAT	EtherNet/IP CC-Link IEFB	Modbus-RTU
	Serial transmission speed (kbps)	COM2: 38.4 kbps COM3: 230.4 kbps	100 Mbps	10 Mbps/ 100 Mbps	9600/ 19200/ 38400/ 115200 baud rate
Power	Power type	M12 plug, 4-pin, A-coded	M12 plug, 4-pin, A-coded		
	Intrinsic power consumption, operational power (PS)	30 mA	-		
	Intrinsic power consumption, load power (PL)	30 mA	-		
	Communication module	-	0.1 A		
	Solenoid valve	-	4 A		
Solenoid valve output	Output	NPN (+com)			
	Max. manifold number	16			
	Output points	32			
Environment	Operating temp. range	-5~50 °C			
	Operating humidity range	35~85% RH (no condensation)			
	Protection	IP65	IP54		
	weight	49 g	85 g		85 g

MVE2-100 / 156 / 188 / 220 Accessories

FIELDBUS SYSTEM



Exterior



No.	Specification	IOL	MPL	MBR
1	Power interface	M12 plug, A-coded (Male)	M12 plug, A-coded (Male)	M12 plug, A-coded (Male)
2	Fieldbus communication module (OUT)	–	M12 socket, D-coded (Female)	M12 socket, D-coded (Female)
3	Fieldbus communication module (IN)	–	M12 socket, D-coded (Female)	M12 socket, D-coded (Female)
4	Dial switch	–	Protocol switching, IP address and coil settings	8-bit dial code, baud rate setting, 485 communication load resistance selection, coil number setting, slave station address setting.
5	LED indicator	Indicates operating status	Indicates operating status	Indicates operating status

Interface pin

IOL ① Power interface			
Fig	Pin	Distribute	Description
	1	24V EL/SEN	Operational power (Electronic component, Sensor switch/ Input)
	2	24V VAL/OUT	Load power (Valve / Output)
	3	0V GND	Grounding
	4	C/Q	Data communication

MPL, MBR ① Power interface			
Fig	Pin	Distribute	Description
	1	24V VAL	Solenoid valve power
	2	0V GND	Grounding
	3	24V EL	Module power
	4	0V GND	Grounding

MPL Fieldbus Communication module ② (OUT) ③ (IN)			
Fig	Pin	Distribute	Description
	1	Tx+	Send data +
	2	Rx+	Receive data +
	3	Tx-	Send data -
	4	Rx-	Receive data -

MBR 485 Communication module ② (OUT) ③ (IN)			
Fig	Pin	Distribute	Description
	1	NC	NC
	2	RS485_A	RS485 interface
	3	NC	NC
	4	RS485_B	RS485 interface

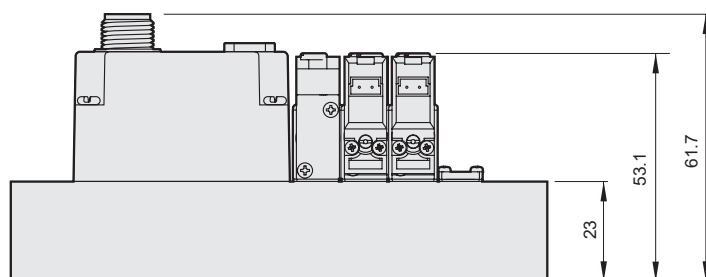
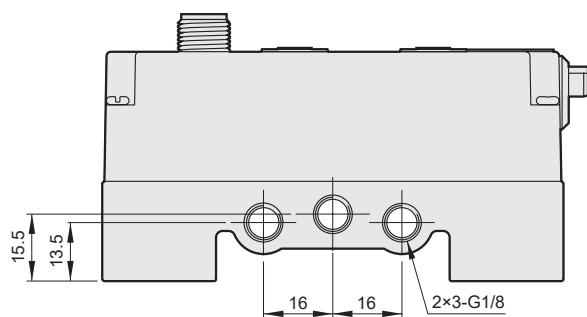
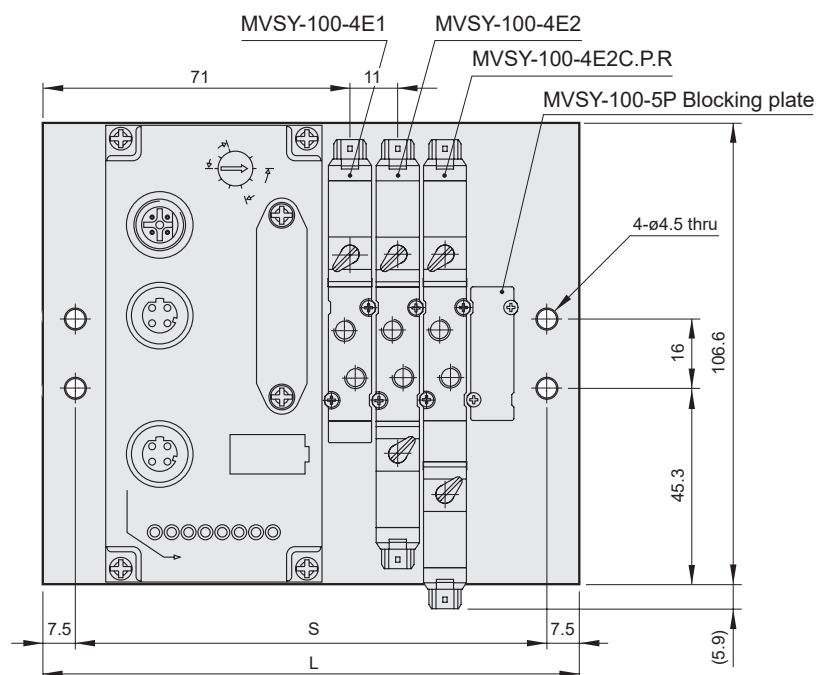
Fig	Description
Connection location ①	
	Straight plug, M12, 4-pin, A-coded
Connection location ② ③	
	Straight plug, M12x1, 4-pin, D-coded, for communication connection
	Straight plug, M12x1, 4-pin, D-coded, for communication connection with cable.

MVE2-100 Dimensions

FIELD BUS SYSTEM



No. of stations	L	S
6	146	131
8	168	153
12	212	197
16	256	241

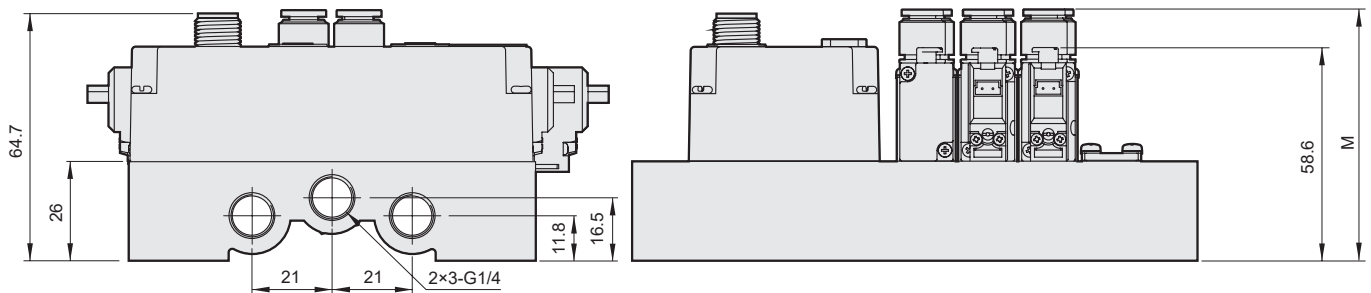
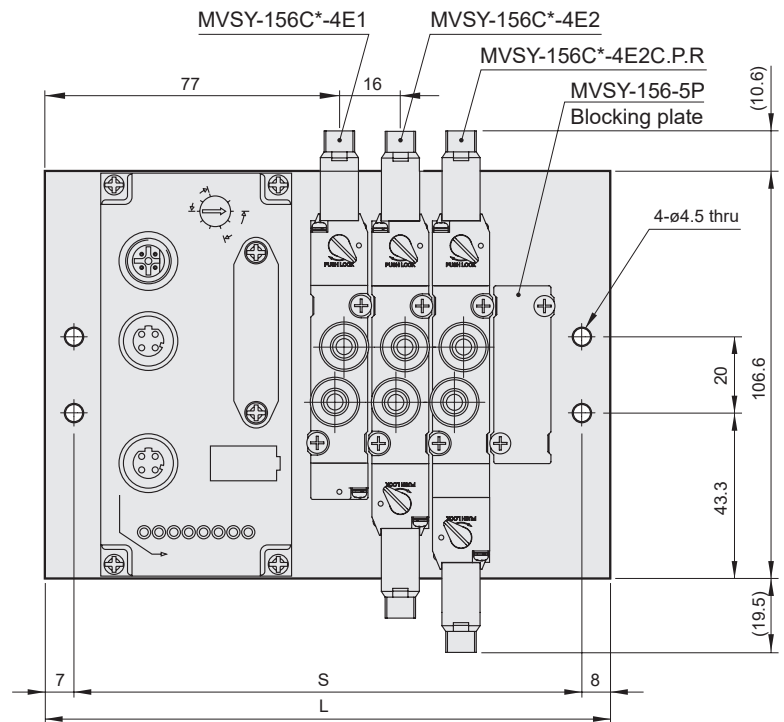


MVE2-156 Dimensions

FIELD BUS SYSTEM



No. of stations	L	S
6	180	165
8	212	197
12	276	261
16	340	325
Code	M	
Tube fitting		
C4 (ø4)	(68.1)	
C6 (ø6)	(69)	
C8 (ø8)	(73.6)	



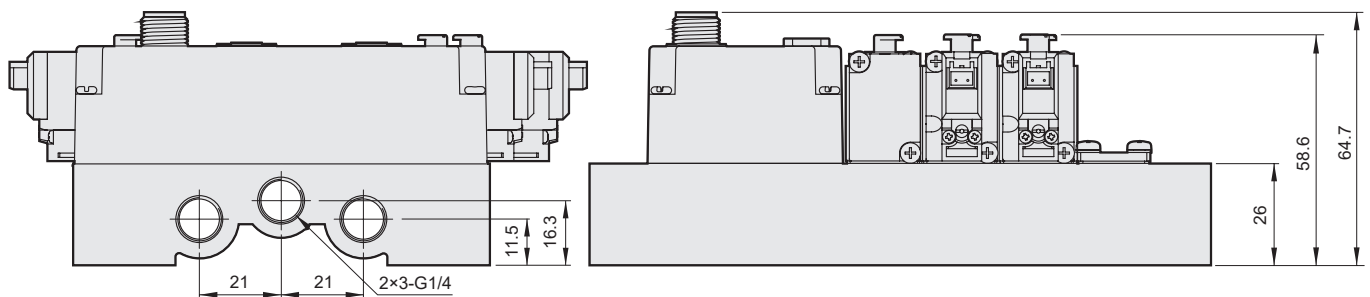
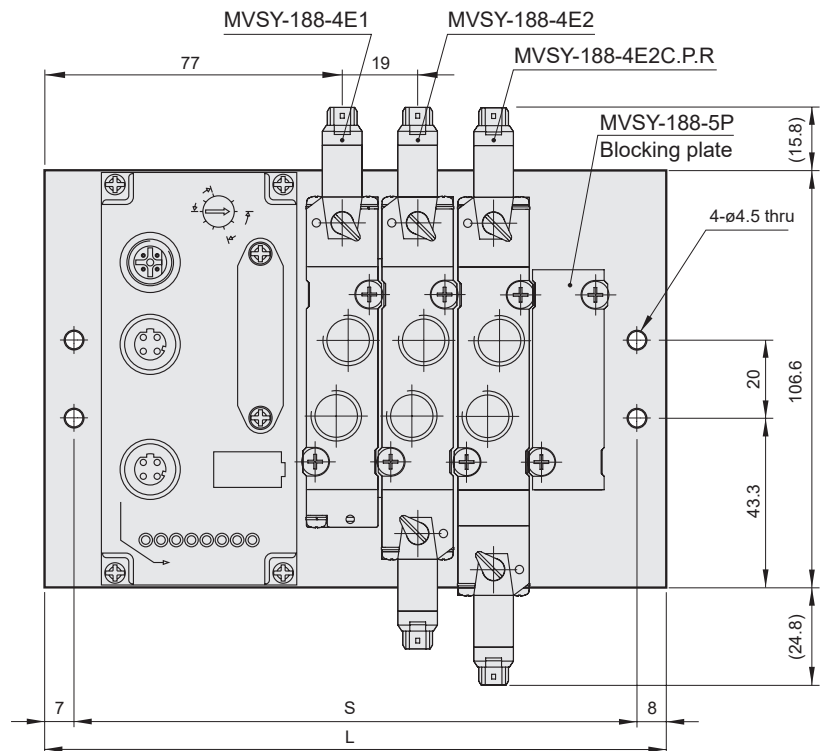
MVE2-188 Dimensions

FIELD BUS SYSTEM



Mindman

No. of stations	L	S
6	197	182
8	235	220
12	311	296
16	387	372



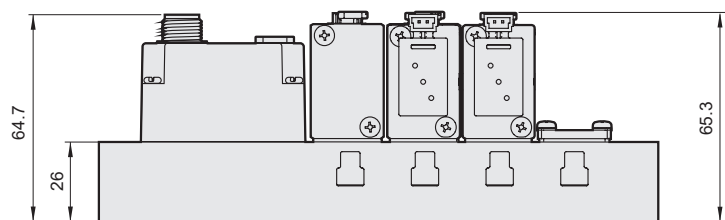
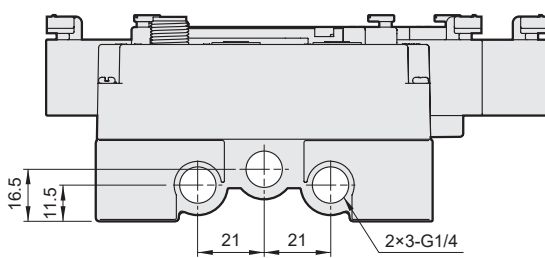
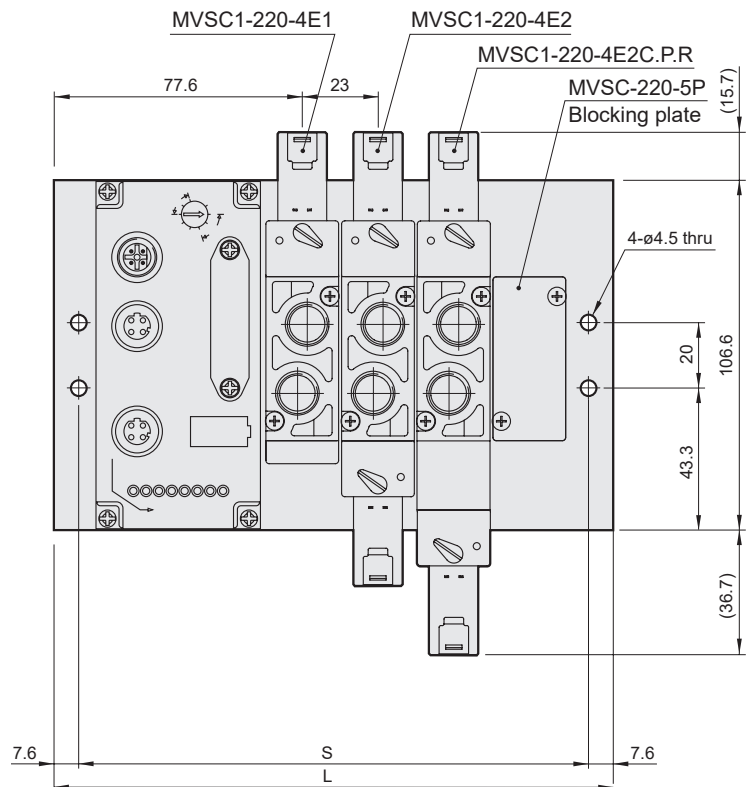
MVE2-220 Dimensions

FIELD BUS SYSTEM



Mindman

No. of stations	L	S
6	218.2	203
8	264.2	249
12	356.2	341
16	448.2	433



MVE2-UC Example of Customized combination - Order form

FIELD BUS SYSTEM



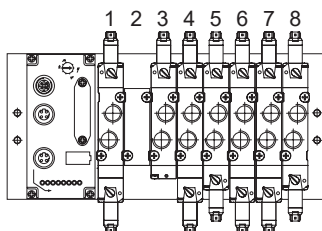
Customer information

Date Issued _____
 Company _____
 Contact _____ Mr. /Ms.

Quantity _____
 Delivery Dat _____
☐ Complete the quotation, and place an order.

Order taker _____

Order Number	Version
MVE2 — 188 — 5B 8 — UC — MPL Solenoid valve Tube fitting (156 series only) Manifold Manifold number Customized combination SI unit	



Solenoid valves/ Accessories (specification)	Qty	Installation Position								Note
		1	2	3	4	5	6	7	8	
MVSY-188-4E1-DC24-LJ	1			√						
MVSY-188-4E2-DC24-LJ	2					√			√	
MVSY-188-4E2C-DC24-LJ	1						√			
MVSY-188-4E2P-DC24-LJ	2				√			√		
MVSY-188-4E2R-DC24-LJ	1	√								
MVSY-188-5P	1		√							

Solenoid valves/ Accessories (specification)	Qty	Installation Position								Note
		9	10	11	12	13	14	15	16	

Cable connector	Qty

Special Note

MVE2-UC Customized combination - Order form

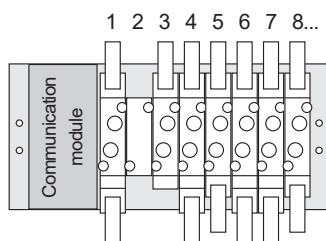
FIELD BUS SYSTEM



Customer information

Date Issued	Quantity	Order taker
Company	Delivery Dat	
Contact Mr. /Ms.	☐ Complete the quotation, and place an order.	

Order Number	Version
MVE2 — — 5B — UC — 	
Solenoid valve Tube fitting (156 series only) Manifold Manifold number Customized combination SI unit	



Solenoid valves/ Accessories (specification)	Qty	Installation Position								Note
		1	2	3	4	5	6	7	8	

Solenoid valves/ Accessories (specification)	Qty	Installation Position								Note
		9	10	11	12	13	14	15	16	

Cable connector	Qty

Special Note