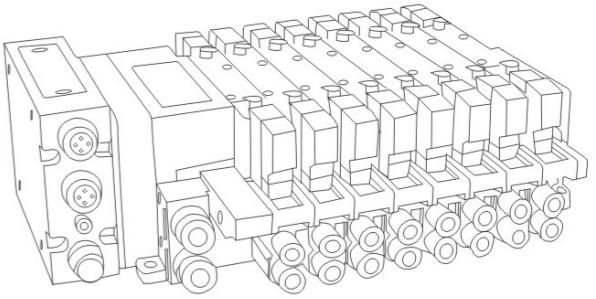




E/P CONTROL COMPONENTS



E/P Control Components

2026-2027

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🌐 www.xyelectron.com



3D Show room

2026-2027

PRODUCT CATALOGUE

XINGYU ELECTRON

01



VT Series Manifold

- The air circuit layout is simple and intuitive, reducing the wiring space
- More reliable air circuit structure design
- Less installation space and convenient installation
- Various types of solenoid valves can be installed optionally

29



XY Series Solenoid Valve

- Pilot structure, reliable quality
- High frequency and saving energy, 1W Rated power
- Space-saving, integrated installation possible
- High-speed and stable responsiveness

39



Micro Valve

- No need lubrication, long working life
- Small size, easy to install, low power
- Multiple combination to choose
- Suitable for PLC control

53



Two-way Three Position High Frequency Solenoid Valve

- Large flow and high working frequency, High working pressure, wide use, no need for oil lubrication
- Low power consumption, energy conservation and environmental protection, Sustainable work ED100%
- It is designed with manual button device, which can be debugged and used
- Lead type power connection is adopted, which is convenient for power connection and saves installation space
- Sliding column structure, good sealing and sensitive response
- The inner hole is processed by special process, with small friction resistance, low starting pressure and long service life

57



4V Series Valve

- Sliding column structure,
- Good sealing and sensitive response
- With Manual Lever, easy to install and test
- Variety of standard voltages are available valve group can be integrated with the base to save installation space

73



ERV High precision Pressure Regulator

- Digital Pressure Display
- Multi channel air pressure, It has 6 different air pressure selective outputs
- Multiple options, There are 4 pressure units to choose
- Industry innovation, The product performance is superior to similar products in the industry

79



EPV SERIES Proportional Pressure Regulator

- $\pm 0.2\%$ control accuracy
- Max 3000L/min large flow output
- Real-time display of actual output pressure
- 1bar/5bar/9bar multi-range selection
- IP65 level, suitable for various working conditions

87



EVP PROFINET TYPE

- Profinet digital communication with strong anti-interference performance
- Maximum flow rate up to 3000 L/min
- Valves can be networked with each other to enable long-distance transmission
- Real-time pressure value displayed on LCD screen

95



EPVX2 High Pressure Proportional Valve

- Pressure control accuracy: 0.3% F.S., with real-time pressure LCD display
- Pressure resistance up to 5 MPa, adjustable pressure range 0.01 MPa ~ 3 MPa
- Multiple input and output signal options available
- Valve body precisely machined by high-precision CNC equipment
- IP65 protection rating, suitable for various operating conditions

101



DFS1 Smart Digital Flow Meter

- Digital display of flow rate for clear flow visualization
- 3-color, 3-screen display for excellent visibility
- Rotatable display position, suitable for different installation orientations
- Flow ranges available: 500 L, 1000 L, 2000 L
- Multiple output signal options available
- Rich internal parameter settings to meet diverse application requirements

119



Hepv Series High-pressure E/P Regulator

- Compressed air, oxygen and inert gas can be switched at will.
- High precision, quick response, stepless pressure control.
- IP65 level, applied to various working conditions
- 3000L/min large flow output.
- Poppet valve structure, good sealing, maximum support for 30bar air pressure input and 28bar air pressure output.

115



ZKF Series Vacuum Generator

- Up to 12 optional types
- Manifold type products can be assembled up to 10 groups of single-piece products
- Widely working pressure range: 0.25~0.7Mpa
- Strong vacuum Preservation Ability
- Equipped with vacuum pressure switch to realize automatically control
- Various nozzle orifice, can be used in all kinds of occasions
- Two kinds of vacuum destroying function, short destroying time
- Vacuum destroying flow rate: 0~40L/min

131



ZKF-CL Series Multifunctional Protocol Vacuum Manifold

- Adopts a highly integrated design, featuring reliable structure and requiring minimal installation space.
- Wide operating pressure range: 0.2~0.8 MPa
- Lighter weight, with a single-piece weight of ≤ 120 g
- Supports both EtherCAT and Profinet communication protocols
- The air inlet is equipped with a 100-mesh filter, ensuring more reliable operation

139



DPS Series Digital Pressure Switch

- LCD displays output status in real time
- Three switching modes
- Multiple electrical signal output combinations to choose from
- Dual-row LCD display for set values
- Suitable for various environments (IP65, corrosion-resistant)

**PREMIER QUALITY
GLOBAL REPUTATION**

XINGYU ELECTRON(NINGBO)CO.LTD
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| VT Series Manifold

- The air circuit layout is simple and intuitive, reducing the wiring space
- More reliable air circuit structure design
- Less installation space and convenient installation
- Various types of solenoid valves can be installed optionally



VT340-VT540



Features

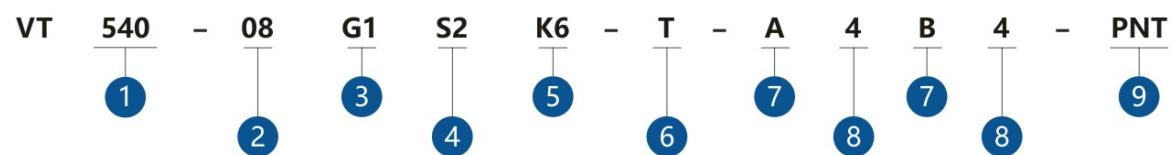
1. The air circuit layout is simple and intuitive, reducing the wiring space
2. More reliable air circuit structure design
3. Less installation space and convenient installation
4. Various types of solenoid valves can be installed optionally
5. Centralized air supply and exhaust
6. Modular design, any number of valve combinations

Specification

Model No.	VT540	VT340
Working ambient temperature	-5°C~+50°C (Not frozen)	
Working Pressure	1.5-7bar 5/2(NC) /2-7bar 5/3(NC)	
Working medium	Compressed Air (Filtered by 40μm filter screen)	
Rated voltage	DC24V±10%	
Solenoid valve Type	5/2(NC) 5/3(NC)	
Rated Power	1W/1.8W(0.5W)	
Number of combinations	2~24	
Manifold material	PA6+50GF	
Valve material	Aluminium	
IP Class	IP40	

Ordering Code

Valley Island Ordering Code



1. Product Series
 Code Description
 340 3 Series
 540 5 Series

2. Number of Stations
 Code: 02-24
 Number of stations: 2-24
 (Limited to a maximum total of 24 solenoid valves)

3. Intake interface
 Code Description
 G1 Both sides G1/4 female thread
 (only for multi-pin top-entry type)
 08 Left side No. 8 fitting + right side G1/4 female thread
 28 Both sides No. 8 fittings
 38 Left side No. 8 fitting + right side plug
 48 Right side No. 8 fitting + left side plug
 10 Left side No. 10 fitting + right side G1/4 female thread
 (5 Series only)
 20 Both sides No. 10 fittings (5 Series only)
 30 Left side No. 10 fitting + right side plug (5 Series only)
 40 Right side No. 10 fitting + left side plug (5 Series only)

4. Code Description
 S2 Silencers on both sides
 S3 Left-side silencer + right-side plug
 S4 Right-side silencer + left-side plug
 28 No. 8 fittings on both sides
 38 Left-side No. 8 fitting + right-side plug
 48 Right-side No. 8 fitting + left-side plug
 20 No. 10 fittings on both sides (5 Series only)
 30 Left-side No. 10 fitting + right-side plug (5 Series only)
 40 Right-side No. 10 fitting + left-side plug (5 Series only)

5. Working Port
 Code Description
 K4 No. 4 push-in fitting
 K6 No. 6 push-in fitting

6. Working Port Direction
 Code Description
 None Side exhaust
 T Top exhaust

7. Valve Type
 Code Description
 A 5/2 Single Coil
 B 5/2 Double Coil
 C 5/3 Double Coil, Center Closed Type
 D 5/3 Double Coil, Center Exhaust Type
 E 5/3 Double Coil, Center Pressure Type
 GB Blanking Plate
 AS 5/2 Single Solenoid Control (Low Power)
 BS 5/2 Double Solenoid Control (Low Power)
 CS 5/3 Center Closed Type (Low Power)
 DS 5/3 Center Exhaust Type (Low Power)
 ES 5/3 Center Pressure Type (Low Power)

8. Number of Valves
 Code: 2-24
 Number of valves: 2-24(Total number of solenoid valves in the complete valve manifold≤24)

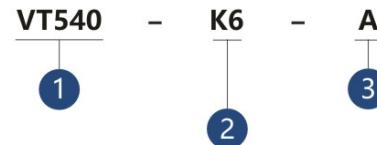
9. Communication Protocol
 Code Description
 None Multi-pin top exit
 LS Multi-pin left-side exit
 PNT ROFINET protocol
 ECT EtherCAT protocol
 IO IO-Link protocol, top exit
 LIO IO-Link protocol, left-side exit

VT Series Manifold

 XINGYU ELECTRON

Ordering Code

Valve + Manifold Ordering Code



1. Valve Series
Code Description
VT540 5 Series
VT340 3 Series

2. Working Port
Code Description
K4 No. 4 push-in fitting
K6 No. 6 push-in fitting

Valve Ordering Code



3. Valve Type
A 5/2 Single Coil
B 5/2 Double Coil
C 5/3 Double coil center close type
D 5/3 Double coil center exhaust type
E 5/3 Double coil center pressure type
GB Blanking plate

Wiring Cable Ordering Code

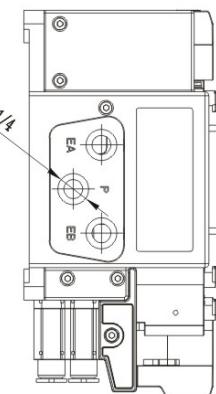
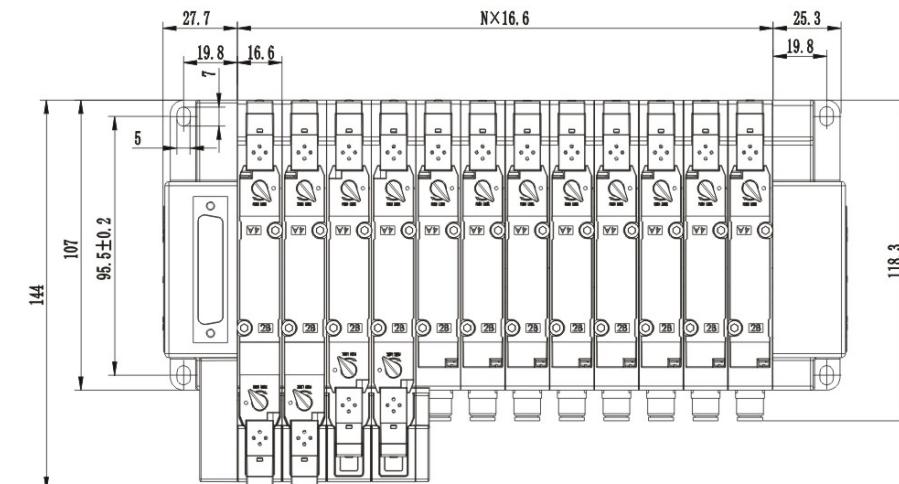
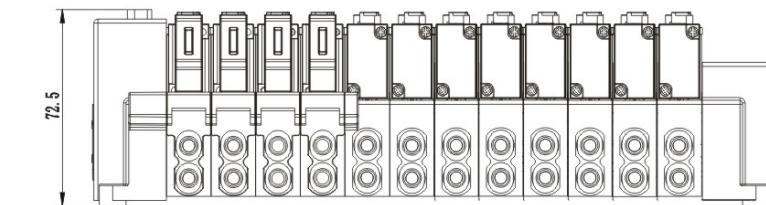


1. Cable Type
Code Description
M12 5-pin female connector cable (multi-pin power supply)
M12RJ45 M12 female connector + RJ45 plug (multi-pin PLC communication)
M12M12 M12 female + M12 male connector (mu/ti-pin power communication)
DSUB25 25-pin D-SUB female connector cable (mu/ti-pin cable)

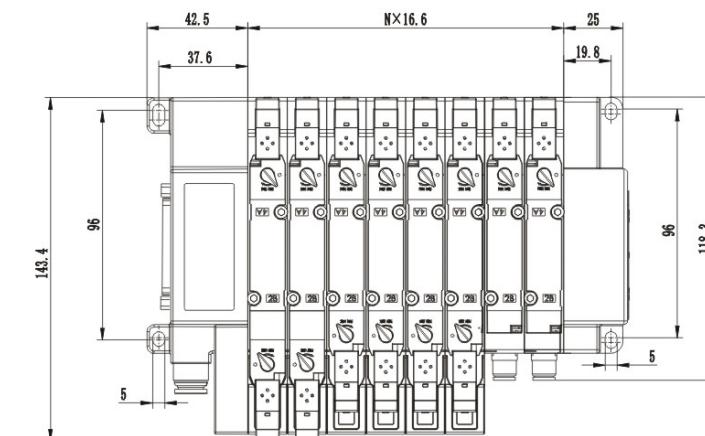
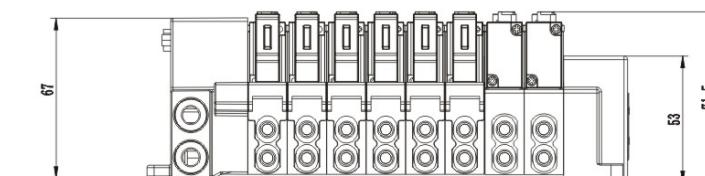
2. Cable Length
Code Description
020 2 meters
XXX Custom length, please contact us

Dimension Drawing

VT540 Graphy Multi-pin Top Exit



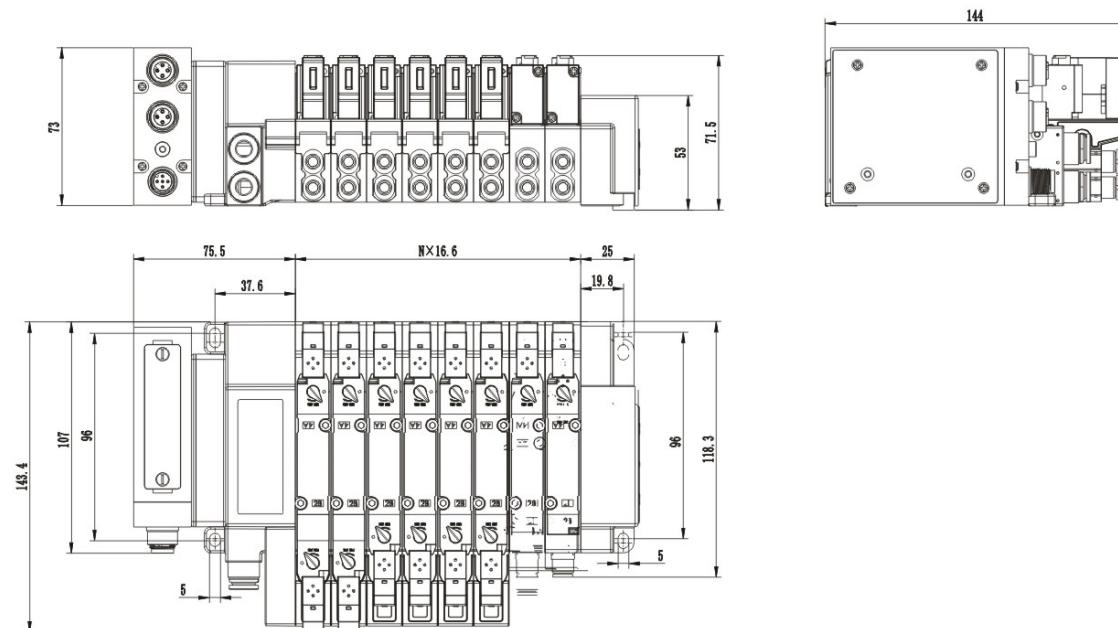
VT540 Graphy Multi-pin Left-side Exit



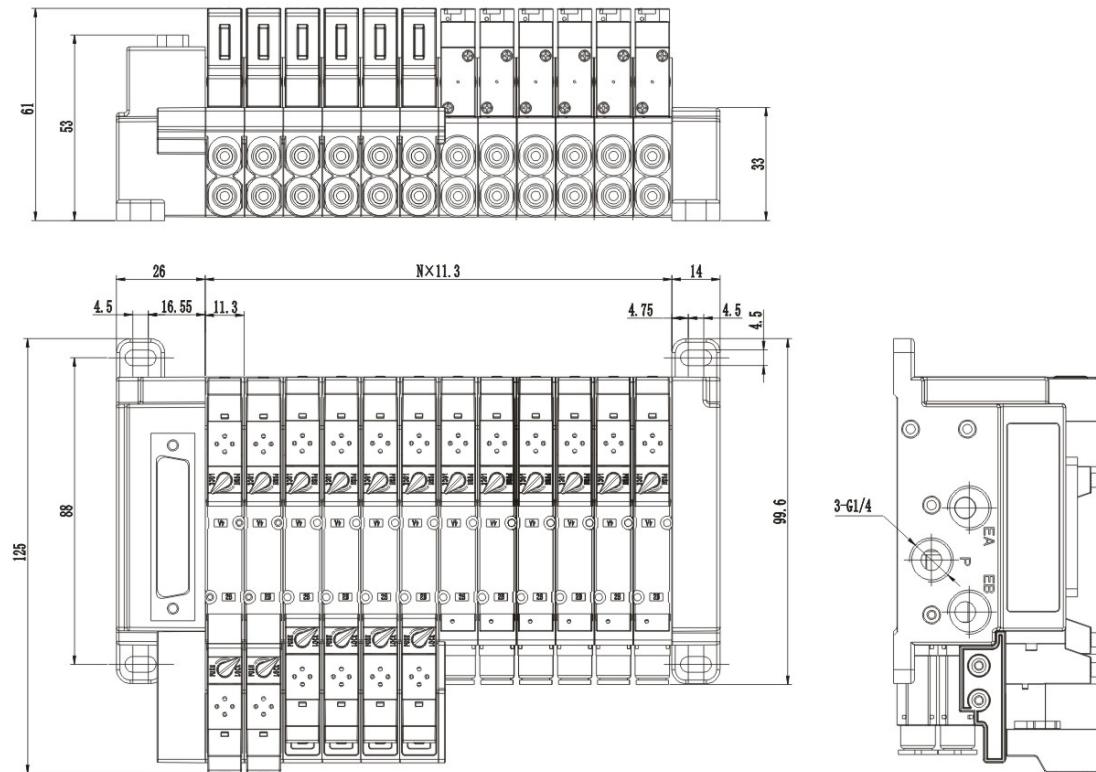
VT Series Manifold

Dimension Drawing

VT540 Graphy Bus Type



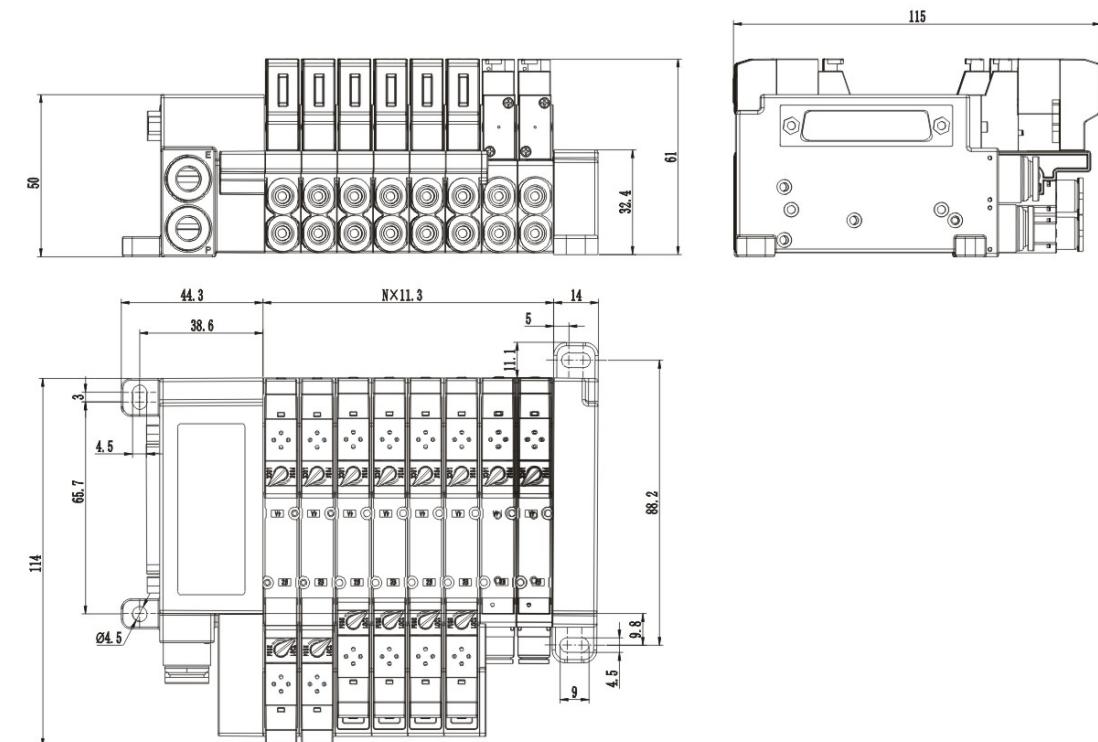
VT340 Graphy



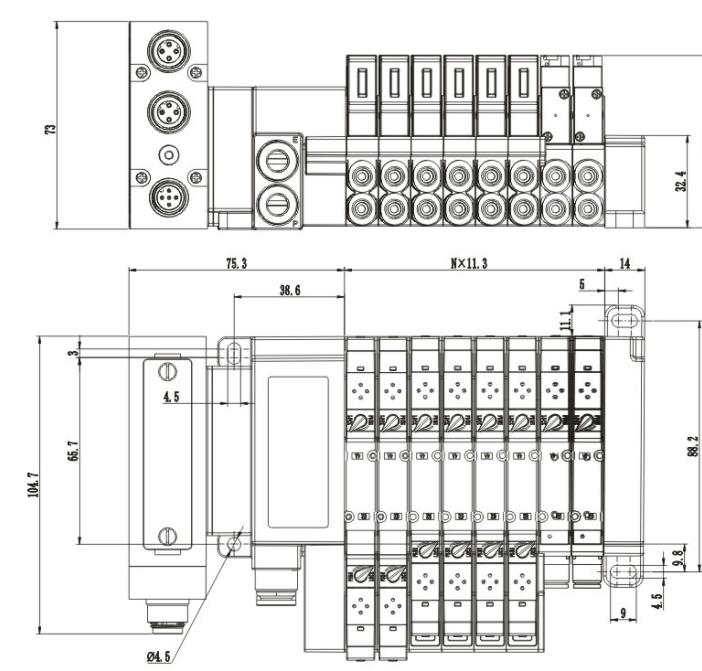
Dimension Drawing

VT340 Graphy

Multi-pin Left-side Exit

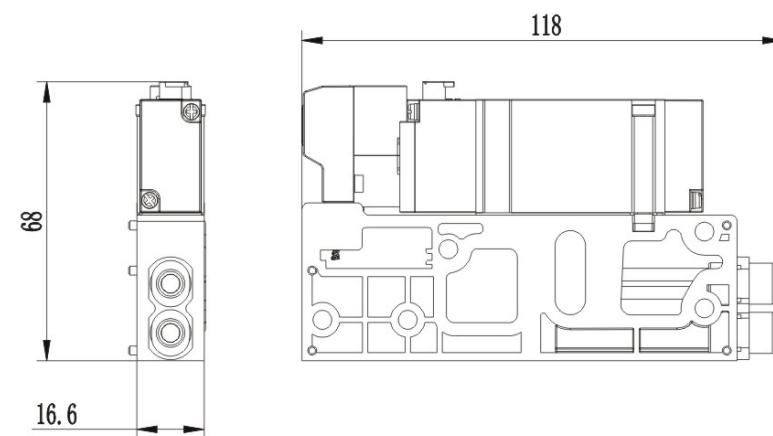


VT340 Graphy Bus Type

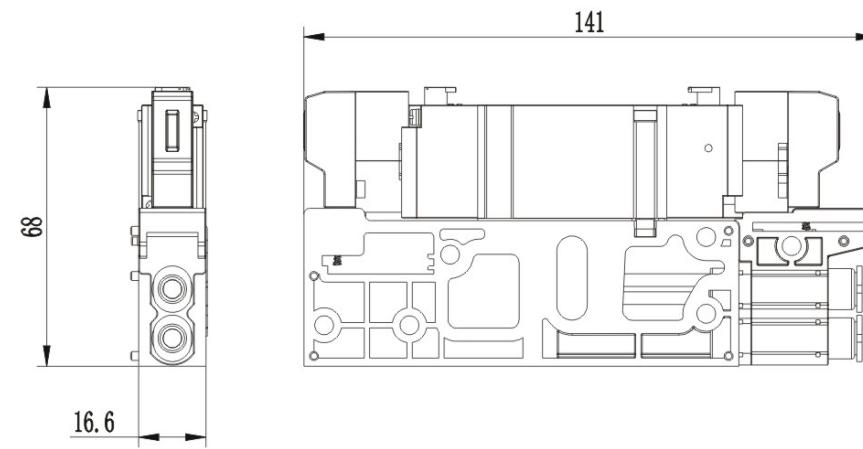


VT540 Outline Drawing - Single Valve

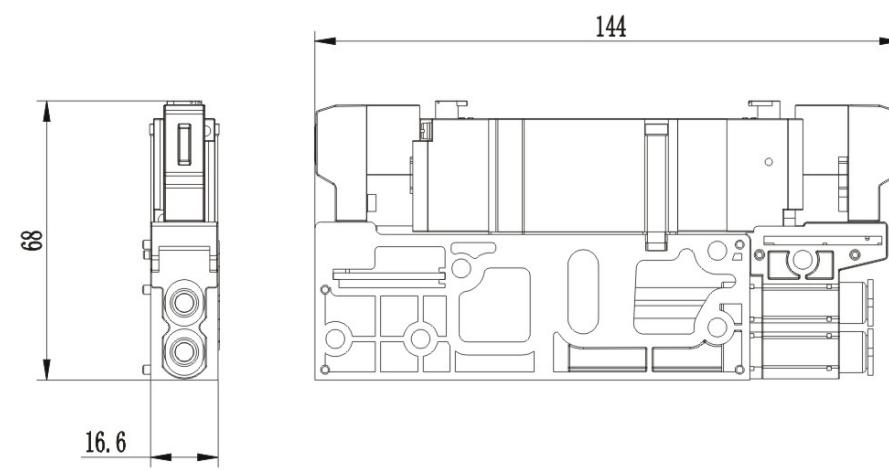
1. VT540-K6/K4-A



2. VT540-K6/K4-B

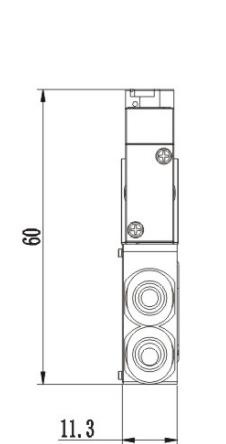


3. VT540-K6/K4-C/D/E

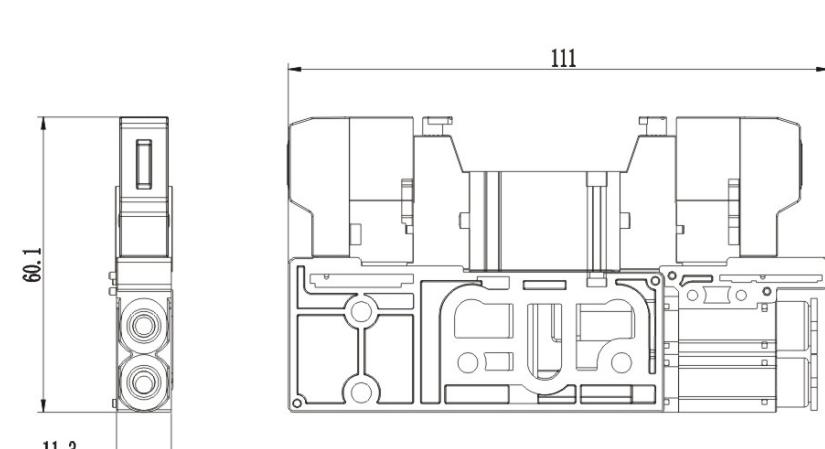


VT340 Outline Drawing - Single Valve

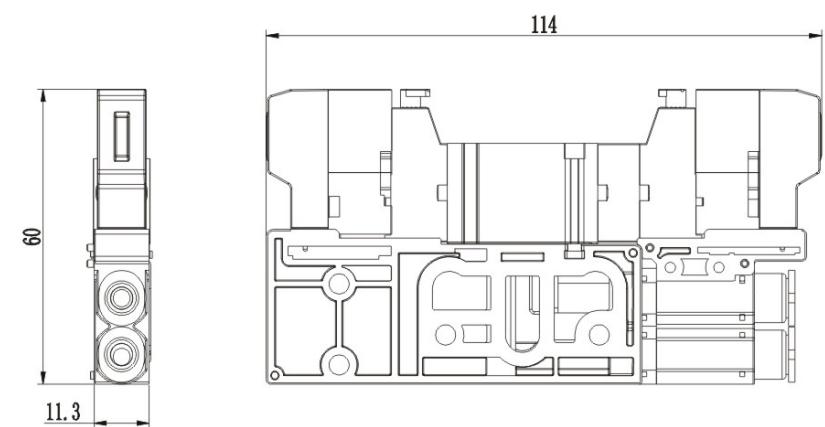
1. VT340-K6/K4-A



2. VT340-K6/K4-B

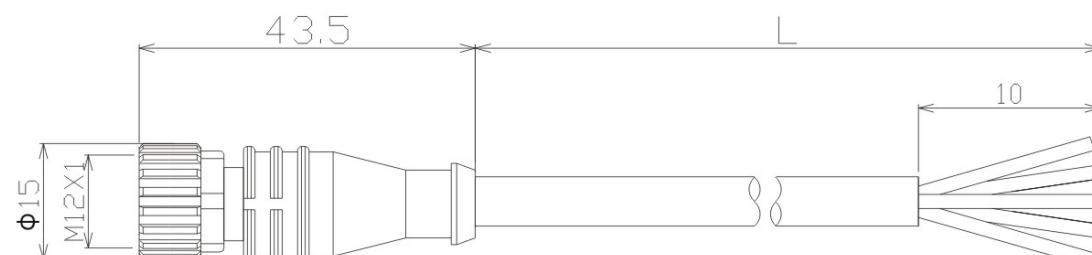


3. VT340-K6/K4-C/D/E

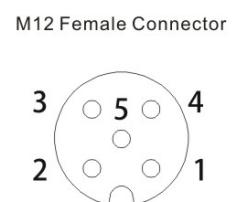


VT Series Outline Drawing - Wiring

Bus-Type Power Cable: XY-VT-M12-020



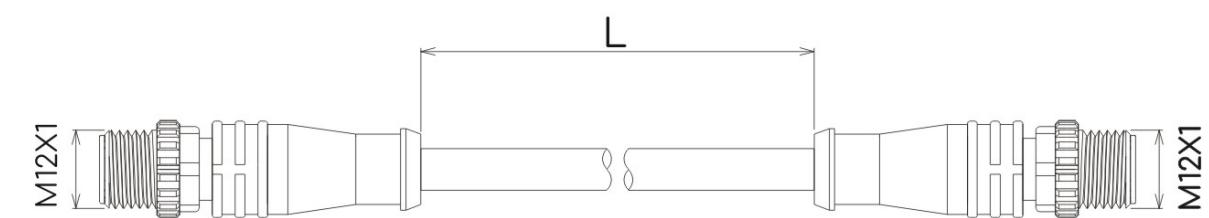
Schematic diagram



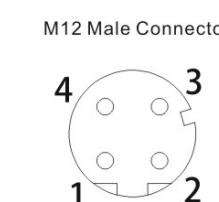
1	Brown
2	White
3	Blue
4	Black
5	Yellow/Green

VT Series Outline Drawing - Wiring

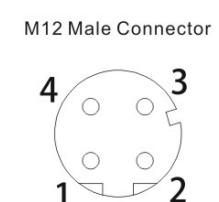
Bus-Type Serial Communication Cable: XY-VT-M12M12-020



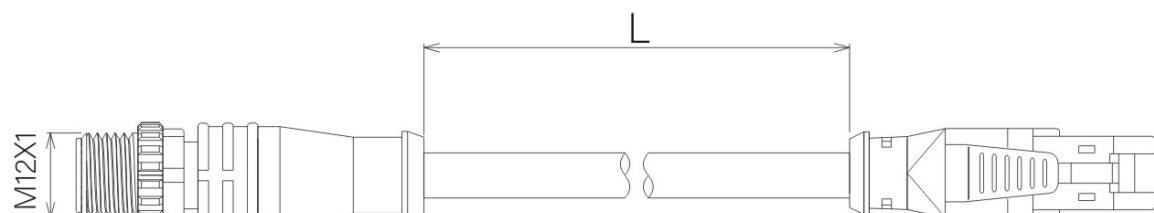
Schematic diagram



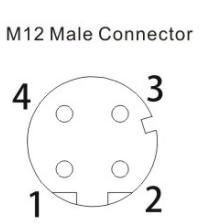
1	Yellow(TD+)
2	White(RD+)
3	Orange(TD-)
4	Blue(RD-)
5	Shield



Bus-Type PLC Communication Cable: XY-VT-M12RJ45-020

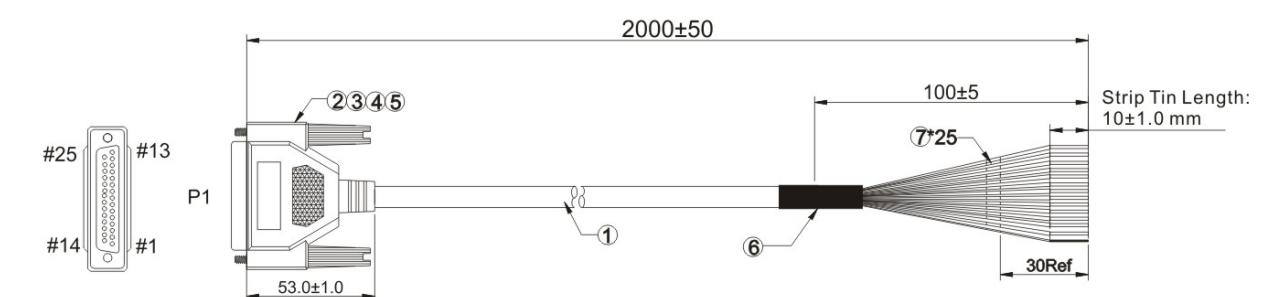


Schematic diagram



1	Yellow(TD+)	1	1
2	White(RD+)	3	3
3	Orange(TD-)	2	2
4	Blue(RD-)	6	6
5	Red		
6	Shield		

Multi-pin Power Cable: XY-VT-DSUB25-020

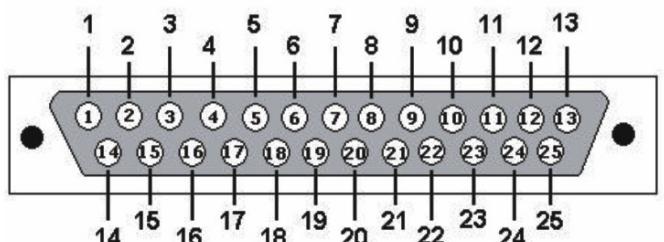


Schematic diagram

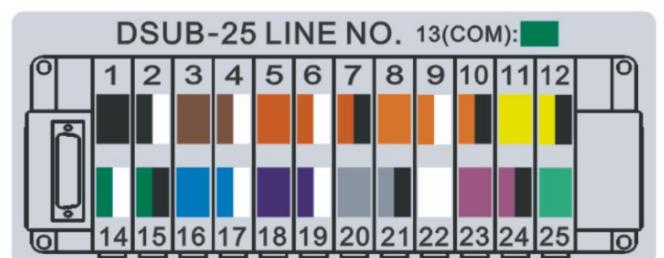
P1	Wiring Diagram	Wire Color Code	P1	Wiring Diagram	Wire Color Code	P1	Wiring Diagram	Wire Color Code
1	1	Black	11	11	Yellow	21	21	Gray / Black
2	2	Black / White	12	12	Yellow/ Black	22	22	White
3	3	Brown	13	13	Green	23	23	Pink
4	4	Brown / White	14	14	Green / White	24	24	Pink/ Black
5	5	Red	15	15	Green / Black	25	25	Light Green
6	6	Red / White	16	16	Blue	S		Earth / Ground Wire
7	7	Red / Black	17	17	Blue / White			
8	8	Orange	18	18	Purple			
9	9	Orange / White	19	19	Purple / White			
10	10	Orange / Black	20	20	Gray			

Wiring Instructions

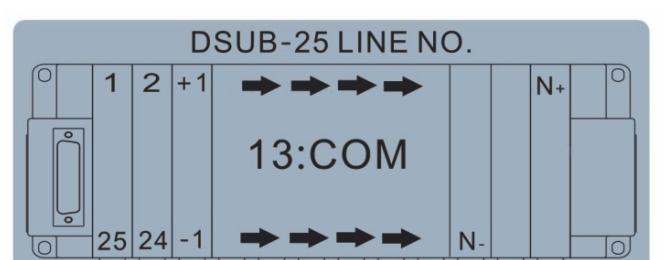
Multi-pin Wiring Instructions



DSUB-25 Pinout Diagram



Wiring Reference Diagram (Pins 2-12)



Wiring Reference Diagram (Pins 13-24)

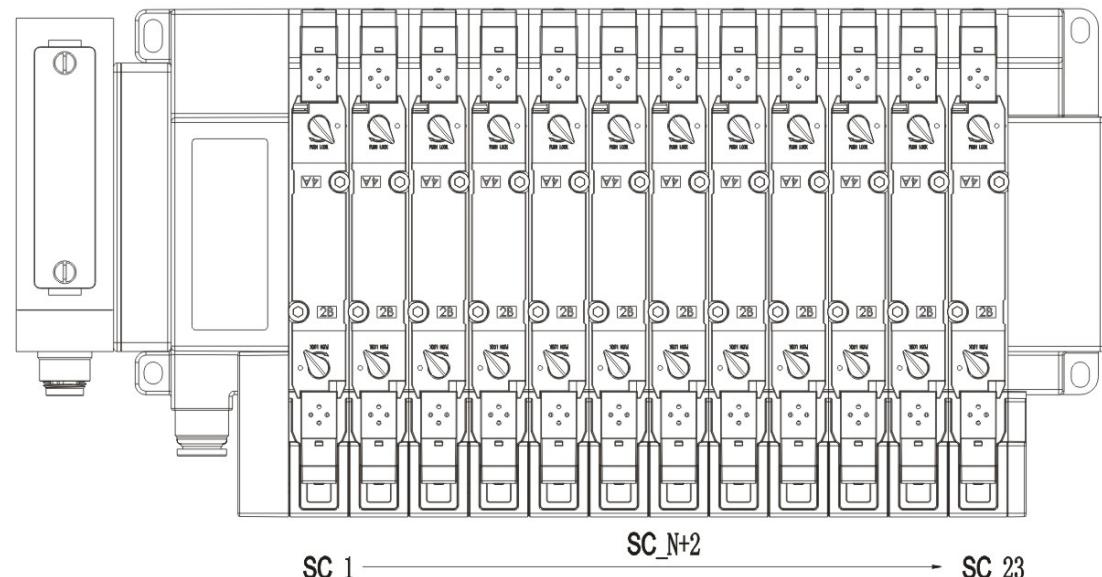
Wire No.	1	2	3	4	5	6	7	8	9	10	11	12
Color	Black	Black / White	Brown	Brown / White	Red	Red / White	Red / Black	Orange	Orange / White	Orange / Black	Yellow	Yellow / Black
Wire No.	14	15	16	17	18	19	20	21	22	23	24	25
Color	Green / White	Green / Black	Blue	Blue / White	Purple	Purple / White	Gray	Gray / Black	White	Pink	Pink / Black	Light Green
COM: 13 Color: Green												

Notes:

- Products wired from 2-12:
 - For single-solenoid control, terminals 1-12 correspond to the control wires of the valves at the respective positions.
 - For double-solenoid control, terminals 14-25 correspond to the control wires of the valves at the respective positions.
- Products wired from 13-24:
 - For single-solenoid control, the control terminals for the valves at the respective positions are P1 to P25 (depending on the number of single-solenoid positions).
 - For double-solenoid control, the control terminals for the valves at the respective positions are P25 to P14 (depending on the number of double-solenoid positions).
- Terminal P13 is the common (COM) terminal.

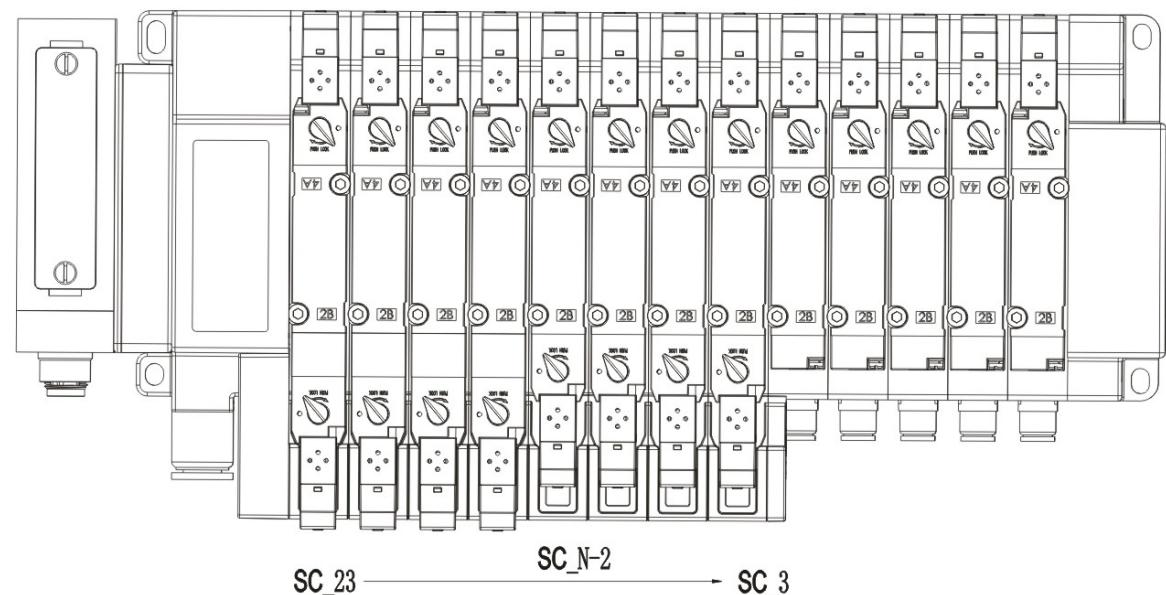
Bus-Type Output List & Valve Position Mapping Diagram

SC_0 → SC_N+2 → SC_22



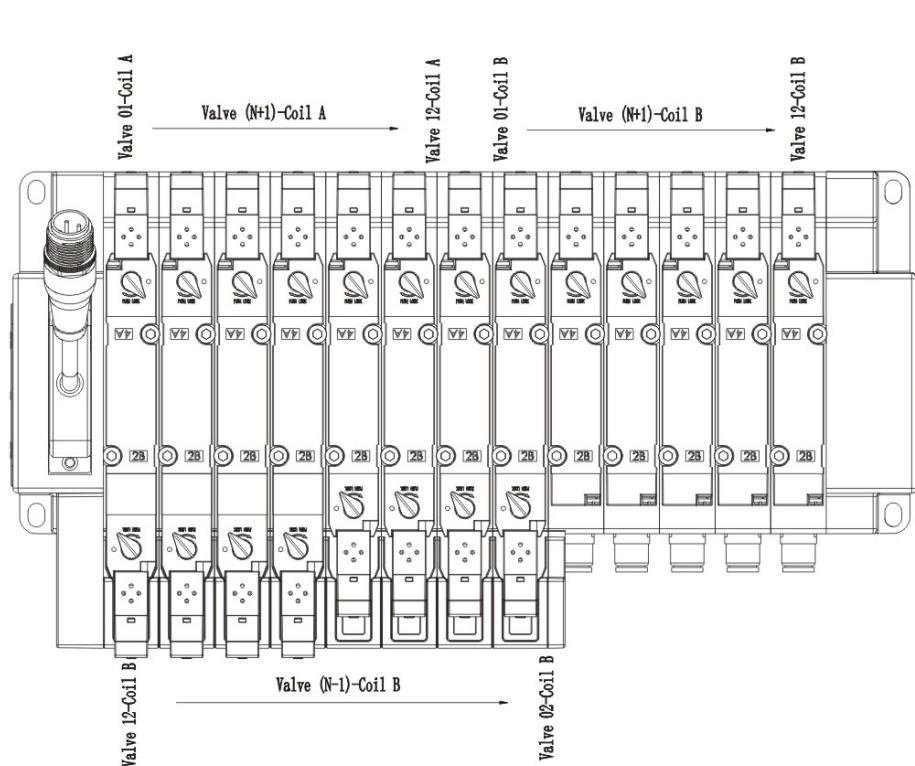
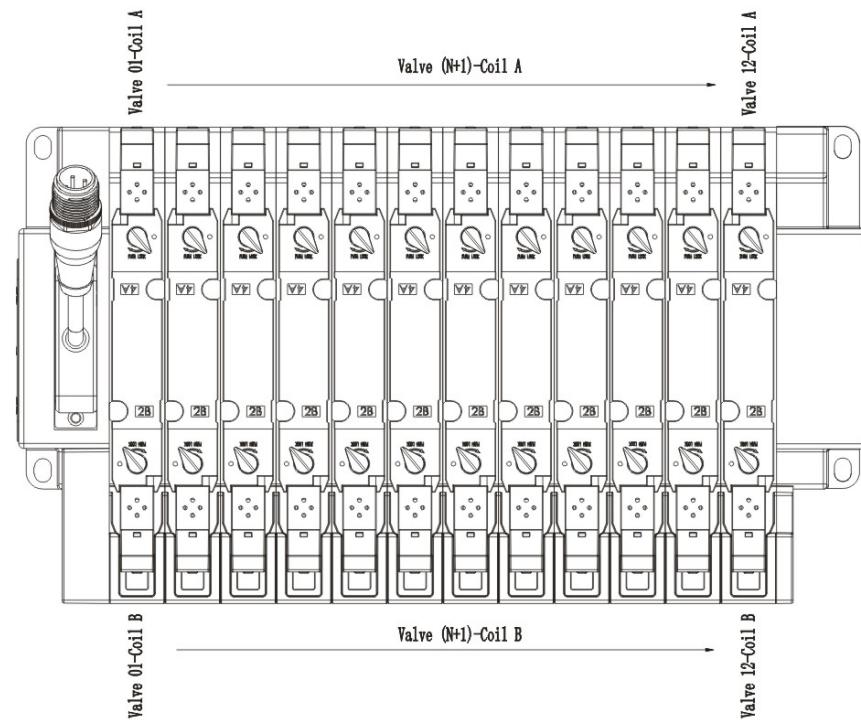
When Total Number of Stations≤12

SC_0 → SC_N+2 → SC_22 → SC_1 → SC_N+2 → SC_23



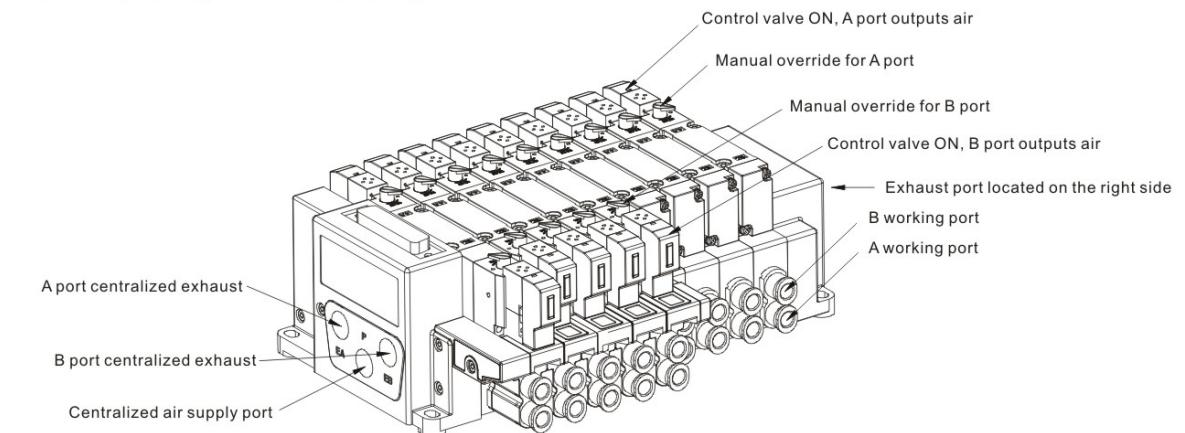
When Total Number of Stations 13~24

IoLink Valve Corresponding Position Diagram

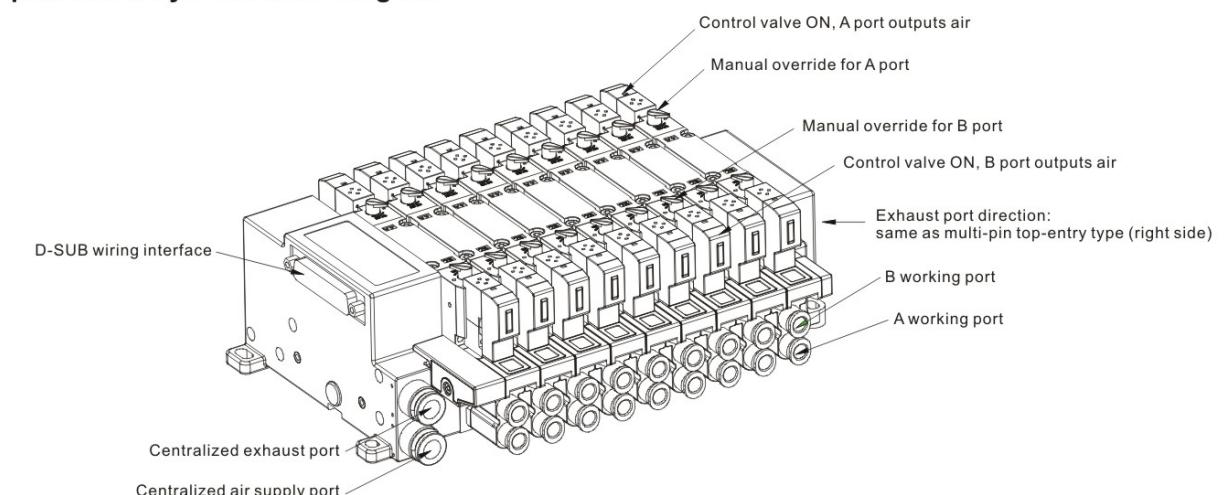


Function Description

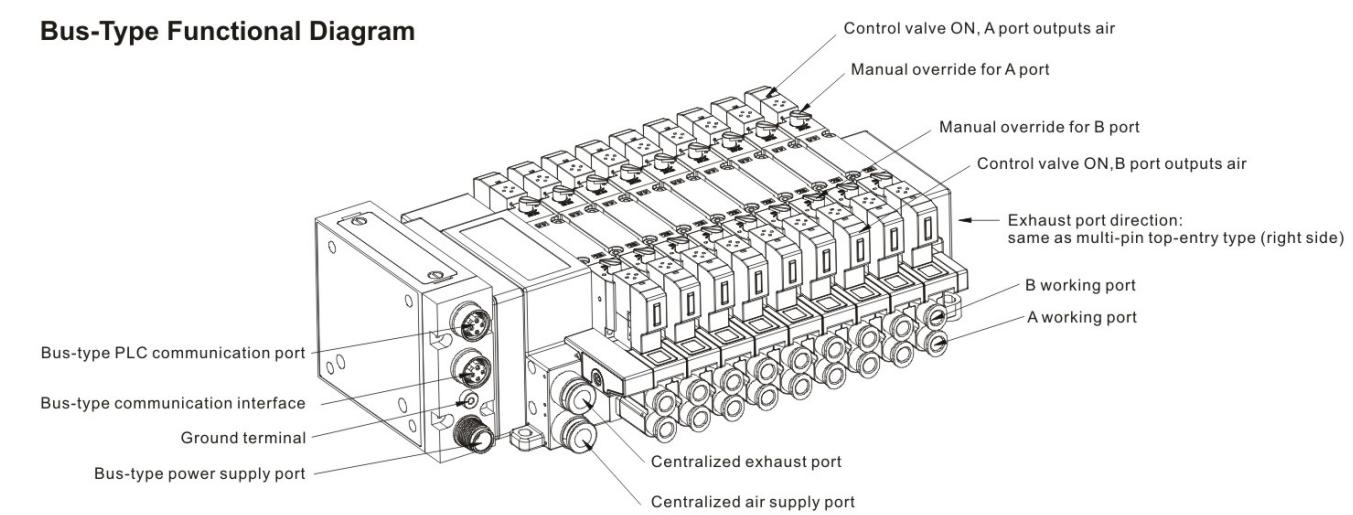
Multi-pin Top-Entry Functional Diagram



Multi-pin Left-Entry Functional Diagram

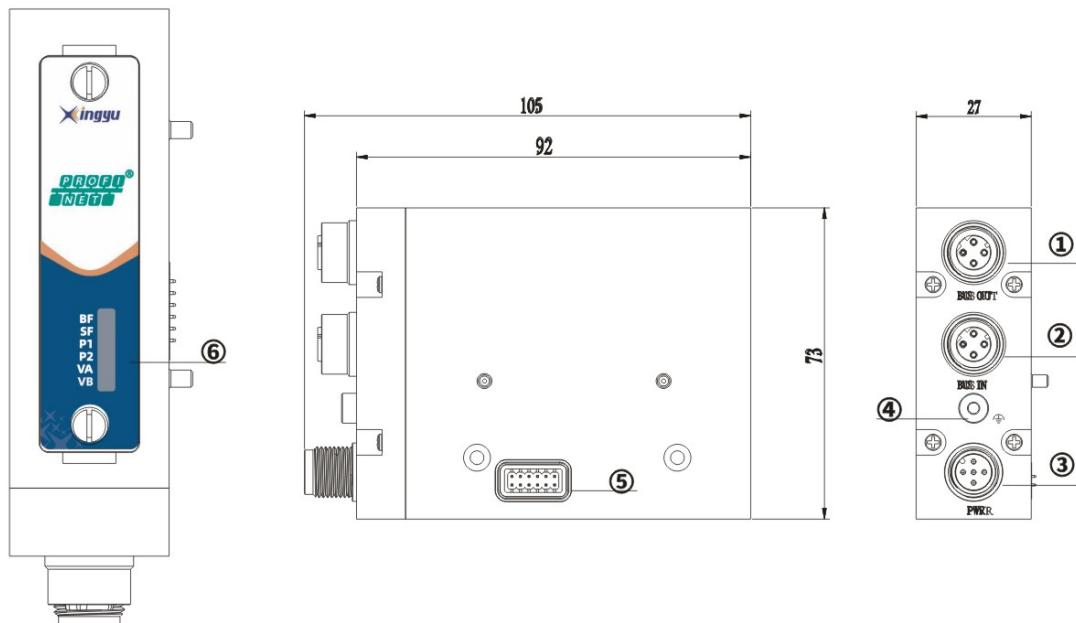


Bus-Type Functional Diagram



Valve Manifold Bus Module

PROFINET Module Outline & Interfaces



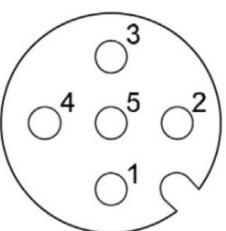
No.	Definition	Description
1	P1	Interface 1 PORT OUT, M12 Female, 4-pin, D-coded
2	P2	Interface 2 PORT IN, M12 Female, 4-pin, D-coded
3	Current	Input Power, M12 Male, 5-pin, A-coded
4	Ground Connection	Ground Terminal
5	Output	12PIN
6	Indicator Light	Status Display

P1\P2: M12 4PIN socket, D-coded



No.	Definition	Description
1	TD+	Transmit Data +
2	RD+	Receive Data +
3	TD-	Transmit Data -
4	RD-	Receive Data -

PWR: M12 5PIN plug, A-coded



No.	Definition	Description
1	V1 24V	+24V for solenoid valve
2	V1 0V	0V for solenoid valve
3	V2 24V	+24V for V2 unit operation
4	V2 0V	0V for V2 unit operation
5	FE	Function Ground Connection

PROFINET Module Functional Features

Project Specification	Profinet
Control Power Supply	DC24V +-10%
Output Power Supply	DC24V +-10%
Internal Friction Current	Less than 100 mA
Output Points	24 Points
Output Load	Single Valve 24V 1W Output, 24 Valves Maximum Output Current 1.5A
Output Polarity	PNP,-COM
Version	Version 2.4, Conformance Class CC-C
Addressing mode	DCP
Voltage Monitoring	Supported
Reverse Polarity & Overvoltage Protection	Supported
IRT (Isochronous Real Time)	Available
MRP (Media Redundancy Protocol)	Available
Diagnostics	Available
Communication Rate	100M bps
Communication Port	Use M12(Meet EthernetCAT Specification)
Communication Connection Type	Daisy Chain
Set File	GCD File
Authentication	EN 61000-6-4:2007+A1:2011, EN IEC 61000-6-2:2019
EMI	CLASS A
Power Interruptions	More than 10ms
Withstand Voltage	GB/T24344, 500 VAC for one minute
Insulation Resistance	GBT24343, 500VDCVoltage, Insulation at least 10 MΩ
Vibration Measurement	5G, 10~150Hz, Continuous Vibration test for 2 hours
Working Temperature	-10~50°C
Working Humidity	35-85%RH

PROFINET Module Indicator LED Description

No.	Definition	Indicator	Description
1	BF	Light Off	PROFINET software is not initialized
		Red Light Normally On	Equipment Offline
		Red Light Single Flash	Hardware Configuration and Parameterization are not reasonable
		Red Light Flash Three Times	IOPS = BAD (PLC Stop)
		Green Light Normally On	Communication is Normal
2	SF	Light Off	The device was not initialized
		Red Light Normally On	Hardware Failure
		Red Light Flash Slowly	Open circuit Fault
		Red Light Flash Swiftly	Short Circuit Fault
		Red Light Double Flash	Error , Internal Communication
		Red Light Flash Three Times	A Fatal Error
		Green Light Normally On	Module is Normal
3	P1	Light Off	Link Lost Connection
		Yellow Light On Green Light Flashes	Link Communication Activation
		Yellow Light On / Green Light ON	Link Communication Establishment
4	P2	Light Off	Link Lost Connection
		Yellow Light On / Green Light Flashes	Link Communication Activation
		Yellow Light On / Green Light ON	Link Communication Establishment
5	VA	Green Light Normally On	Manifold Power Supply , Normal
		Red Light Flashes	Manifold Power Supply , Under voltage
		Red Light Normally On	Manifold Power Supply, Over voltage
6	VB	Green Light Normally On	System Power Supply , Normal
		Red Light Flashes	System Power Supply , Under voltage
		Red Light Normally On	System Power Supply, Over voltage

Input and Output Data List

4.1 Input list

	bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
BYTE0		OC	SC	COR	UV_V2	OV_V2	UV_V1	OV_V1
BYTE1	SC_7	SC_6	SC_5	SC_4	SC_3	SC_2	SC_1	SC_0
BYTE2	SC_15	SC_14	SC_13	SC_12	SC_11	SC_10	SC_9	SC_8
BYTE3	SC_23	SC_22	SC_21	SC_20	SC_19	SC_18	SC_17	SC_16
BYTE4	OC_7	OC_6	OC_5	OC_4	OC_3	OC_2	OC_1	OC_0
BYTE5	OC_15	OC_14	OC_13	OC_12	OC_11	OC_10	OC_9	OC_8
BYTE6	OC_23	OC_22	OC_21	OC_20	OC_19	OC_18	OC_17	OC_16
BYTE7	COUNT_7	COUNT_6	COUNT_5	COUNT_4	COUNT_3	COUNT_2	COUNT_1	COUNT_0
BYTE8	COUNT_15	COUNT_14	COUNT_13	COUNT_12	COUNT_11	COUNT_10	COUNT_9	COUNT_8
BYTE9	COUNT_23	COUNT_22	COUNT_21	COUNT_20	COUNT_19	COUNT_18	COUNT_17	COUNT_16

BYTE0:

Indicator	Description	
bit7	Reserve	
bit6	1 Open Circuit Detected	0 No Open Circuit Detected
bit5	1 Short Circuit Detected	0 No Short Circuit Detected
bit5	1 The switch count has reached the upper threshold	0 The switch count donot reach the upper threshold
bit3:bit2	0:0	Electronics power supply Normal
	0:1	Electronics power supply Over Voltage
	1:0	Electronics power supply Under Voltage
bit1:bit0	0:0	Valves power supply Normal
	0:1	Valves power supply Over Voltage
	1:0	Valves power supply Under Voltage

BYTE1 BYTE3

Sc-0 corresponds to the short circuit of channel 0, SC-23 corresponds to the short circuit of channel 23, and so on to know the short circuit of each channel. Bit value: 1 Short circuit, 0 indicates no short circuit.

BYTE4 BYTE6

0C-0 corresponds to the open status of channel 0, OC-23 corresponds to the open status of channel 23, and so on to know the open status of each channel. The Bit value is 1 Open circuit, and 0 indicates no open circuit.

BYTE7 BYTE9

Count-0 indicates the open status of channel 0, count-23 indicates the open status of channel 23, and so on to know the open status of each channel. The Bit value is 1 Open circuit, and 0 indicates no open circuit.

4.2 Output List

	bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
BYTE0	SC_7	SC_6	SC_5	SC_4	SC_3	SC_2	SC_1	SC_0
BYTE1	SC_15	SC_14	SC_13	SC_12	SC_11	SC_10	SC_9	SC_8
BYTE2	SC_23	SC_22	SC_21	SC_20	SC_19	SC_18	SC_17	SC_16

O_0~O_23: O_0 indicates Channel 0, O_23 indicates Channel 23, and so on to know the location of other channels.

4.3 Error Code

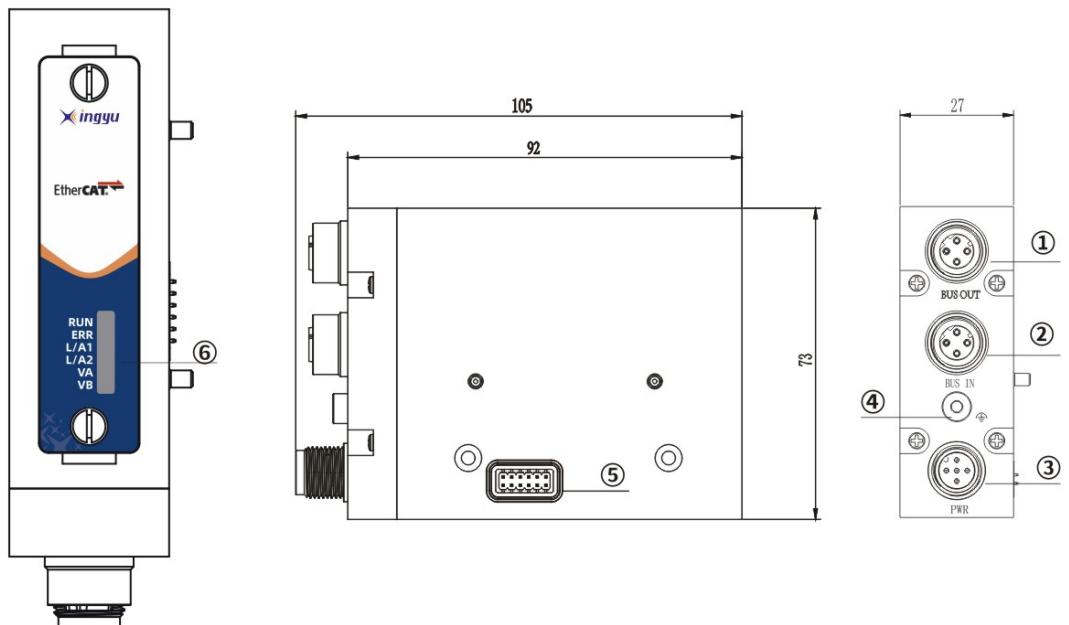
Error Code (Hexadecimal)	Error Description		LED State
0x00	0x00, Normal		"SF" LED, Green Light Normally On
0x01	Manifold , Coil Short circuit		"SF" LED, Red Light Flashes
0x06	Manifold, Coil Open Circuit		"SF" LED, Red Light Flashes
0x07	N/A		
0x100	The power supply to the module is under voltage		"V2" LED, Red Light Flashes
0x101	The power supply to the module is over voltage		"V2" LED, Red Light Normally On
0x102	The power supply to the manifold is under voltage		"V1" LED, Red Light Flashes
0x103	The power supply to the manifold is over voltage		"V1" LED, Red Light Normally On

Profinet Module
Environment Configuration
Scan for configuration video



Valve Manifold Bus Module

EtherCAT Module Outline & Interfaces



No.	Definition	Description
1	P1	Interface 1 PORT OUT, M12 Female, 4-pin, D-coded
2	P2	Interface 2 PORT IN, M12 Female, 4-pin, D-coded
3	Current	Input Power, M12 Male, 5-pin, A-coded
4	Ground Connection	Ground Terminal
5	Output	12PIN
6	Indicator Light	Status Display

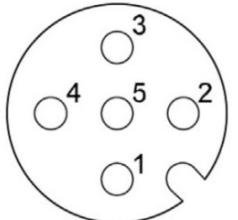
P1\|P2: M12 4PIN socket, D-coded

No.	Definition	Description
1	TD+	Transmit Data +
2	RD+	Receive Data +
3	TD-	Transmit Data -
4	RD-	Receive Data -



PWR: M12 5PIN plug, A-coded

No.	Definition	Description
1	V1 24V	+24V for solenoid valve
2	V1 0V	0V for solenoid valve
3	V2 24V	+24V for V2 unit operation
4	V2 0V	0V for V2 unit operation
5	FE	Function Ground Connection



EtherCAT Module Functional Features

Project Specification	Ethercat
Control Power Supply	DC24V +-10%
Output Power Supply	DC24V +-10%
Internal Friction Current	Less than 100 mA
Output Points	24 Points
Output Load	Single Valve 24V 1W Output, 24 Valves Maximum Output Current 1.5A
Output Polarity	PNP,-COM
Version	Test Record V1.2.8
EtherCAT Mode	Direct Mode
Address Setting	Automatic
DC Mode	Supported, Distributed Clocks
Voltage Monitoring	Supported
Reverse Polarity & Overvoltage Protection	Supported
Diagnostics	Open circuit, short circuit, and switch count diagnostics
Communication Rate	100M bps
Communication Port	Use M12(Meet EthernetCAT Specification)
Communication Connection Type	Daisy Chain
Set File	XML File
Authentication	EN 61000-6-4:2007+A1:2011, EN IEC 61000-6-2:2019
EMI	CLASS A
Power Interruptions	More than 10ms
Withstand Voltage	GB/T24344, 500 VAC for one minute
Insulation Resistance	GBT24343, 500VDCVoltage, Insulation at least 10 MΩ
Vibration Measurement	5G, 10~150Hz, Continuous Vibration test for 2 hours
Working Temperature	-10~50°C
Working Humidity	35-85%RH

EtherCAT Module Indicator LED Description

No.	Definition	Indicator	Description
1	RUN	Green Light Out	The device is in INIT state
		Green Light Flashes	The device is in SAFEOP state
		Green Light Single Flash	The device is in PREOP state
		Green Light Normally On	The device is in OP state
2	ERR	Red Light Out	Configuration Error
		Red Light Flashes	No Error
		Red Light Single Flash	Local Equipment Error
		Red Light Double Flash	The watchdog is out of time
3	L/A1	Light Out	Connection not established
		Green Light On	Connection Established , No Communication
		Green Light Flashes	Connection Established , Has Communication
4	L/A2	Light Out	Connection Established , No Communication
		Green Light On	Connection not established
		Green Light Flashes	Connection Established , Has Communication
5	VA	Green Light On	Manifold Power Supply , Normal
		Red Light Flashes	Manifold Power Supply , Under voltage
		Red Light On	Manifold Power Supply, Over voltage
6	VB	Green Light On	System Power Supply , Normal
		Red Light Flashes	System Power Supply , Under voltage
		Red Light On	System Power Supply, Over voltage

BYTE0:

Indicator	Description	
bit7	Reserve	
bit6	1 Open Circuit Detected	0 No Open Circuit Detected
bit5	1 Short Circuit Detected	0 No Short Circuit Detected
bit4	1 The switch count has reached the upper threshold	0 The switch count donot reach the upper threshold
bit3:bit2	0:0	Electronics power supply Normal
	0:1	Electronics power supply Over Voltage
	1:0	Electronics power supply Under Voltage
bit1:bit0	0:0	Valves power supply Normal
	0:1	Valves power supply Over Voltage
	1:0	Valves power supply Under Voltage

BYTE1 BYTE3

Sc-0 corresponds to the short circuit of channel 0, SC-23 corresponds to the short circuit of channel 23, and so on to know the short circuit of each channel. Bit value: 1 Short circuit, 0 indicates no short circuit.

BYTE4 BYTE6

OC-0 corresponds to the open status of channel 0, OC-23 corresponds to the open status of channel 23, and so on to know the open status of each channel. The Bit value is 1 Open circuit, and 0 indicates no open circuit.

BYTE7 BYTE9

Count-0 indicates the open status of channel 0, count-23 indicates the open status of channel 23, and so on to know the open status of each channel. The Bit value is 1 Open circuit, and 0 indicates no open circuit.

4.2 Output List

	bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
BYTE0	SC_7	SC_6	SC_5	SC_4	SC_3	SC_2	SC_1	SC_0
BYTE1	SC_15	SC_14	SC_13	SC_12	SC_11	SC_10	SC_9	SC_8
BYTE2	SC_23	SC_22	SC_21	SC_20	SC_19	SC_18	SC_17	SC_16

O_0~O_23: O_0 indicates Channel 0, O_23 indicates Channel 23, and so on to know the location of other channels.

Input and Output Data List

4.1 Input list

	bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
BYTE0	OC	SC	COR	UV_V2	OV_V2	UV_V1	OV_V1	
BYTE1	SC_7	SC_6	SC_5	SC_4	SC_3	SC_2	SC_1	SC_0
BYTE2	SC_15	SC_14	SC_13	SC_12	SC_11	SC_10	SC_9	SC_8
BYTE3	SC_23	SC_22	SC_21	SC_20	SC_19	SC_18	SC_17	SC_16
BYTE4	OC_7	OC_6	OC_5	OC_4	OC_3	OC_2	OC_1	OC_0
BYTE5	OC_15	OC_14	OC_13	OC_12	OC_11	OC_10	OC_9	OC_8
BYTE6	OC_23	OC_22	OC_21	OC_20	OC_19	OC_18	OC_17	OC_16
BYTE7	COUNT_7	COUNT_6	COUNT_5	COUNT_4	COUNT_3	COUNT_2	COUNT_1	COUNT_0
BYTE8	COUNT_15	COUNT_14	COUNT_13	COUNT_12	COUNT_11	COUNT_10	COUNT_9	COUNT_8
BYTE9	COUNT_23	COUNT_22	COUNT_21	COUNT_20	COUNT_19	COUNT_18	COUNT_17	COUNT_16

Ethercat Module Environment Configuration

Scan for configuration video



Manifold Adapters

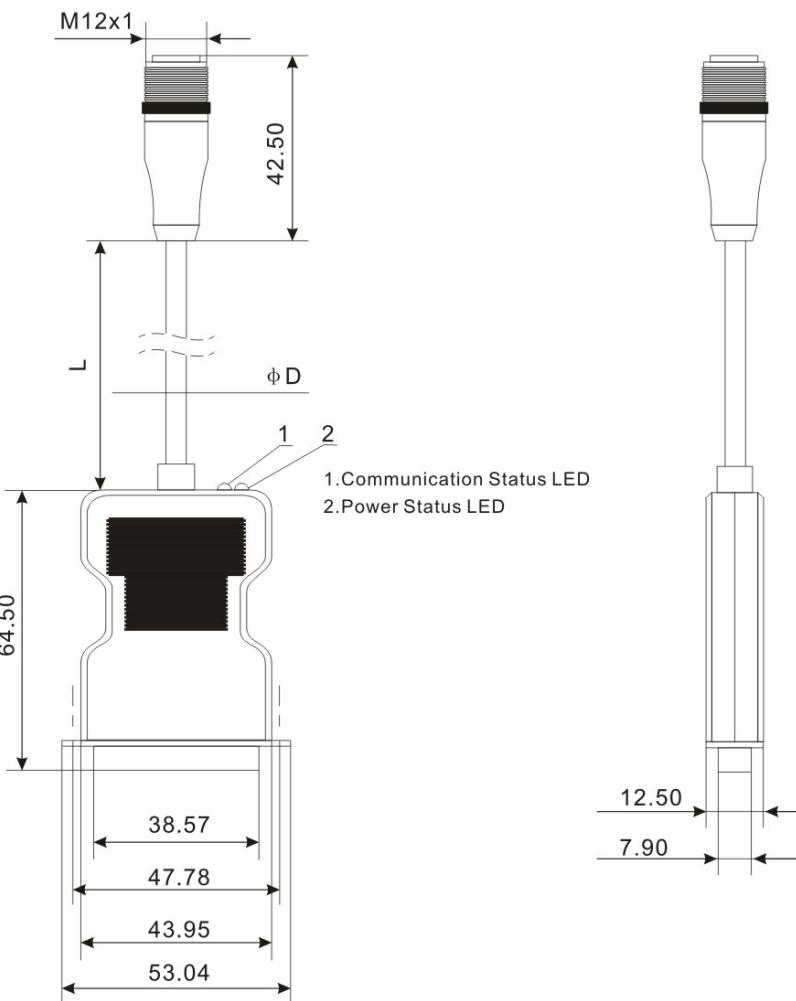
Features

The Valve Manifold Adapter VTA-H24-COM13 is an IO-Link device for installed on DB25-connected valve manifold. It is a signal conversion module that converts the DB25 connection into an IO-Link connection. It adopts a 3-wire connection with an IO-Link Type-A port, and supports the drive of 24 solenoid valves, with a total drive current of no more than 1.6A, and a maximum of 500mA for a single circuit. The adapter is powered from the IO-Link master. Applicable to valve terminals with 13-pin DB25 connector as the common end.

Specification

Model No.	VTA-H24-COM13
IO-Link version	V1.1.3
Rate	COM2(38.4k)
Min. cycle time	3.5ms
Process data	4 bytes
Display/Running	Green LED
Configurable Inputs & Outputs	NO
Working Voltage	DC18~30V
Total current (actuator)	1.6A
Quiescent current	30mA
Typical Working Voltage	DC24V
Actuator connection port	DB25
Sensor connection port	M12x1
Wire	0.6m*0.34mm ²
Shell material	PA
Sheath material	PUR
Protection class	IP40
Operating temperature	10~55°C
Storage temperature	25~70°C
Mechanical dimensions	62mm*52mm*12mm

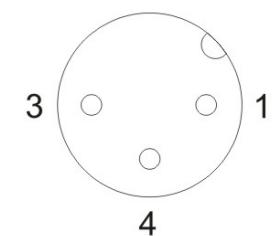
Dimension Graphy



Connection Method



PIN 1-2, 14-25:Output
PIN 13:0V



IO-Link Interface:
PIN1:24V(Controller +Valve)
PIN 3:0V
PIN 4: IO-Link

VT15 Manifold



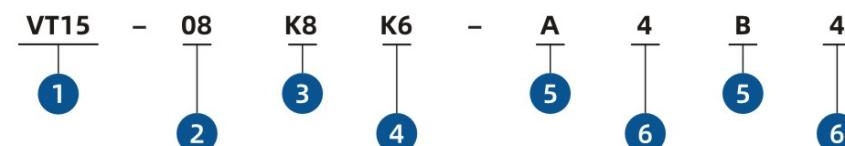
Features

1. The air circuit layout is simple and intuitive, reducing the wiring space
2. More reliable air circuit structure design
3. Less installation space and convenient installation
4. Centralized air supply and exhaust
5. Modular design, any number of valve combinations

Install And Operation

1. First connect air source to P port ($\phi 8$ quick connector), and adjust the pressure to 7 bar.
2. Checking the V port (working port) of each solenoid working or not (NC type solenoid no out of air with no power condition)
3. Press the manual device to check the solenoid working position (when press the manual device, NC type solenoid has air on working port)
4. Then connect the V port of each solenoid valve to the pneumatic actuator with an air pipe, and adjust it
5. Insert wire then through PLC to control the solenoids on manifold
6. Final step is put the manifold on the equipment fixed with screw

Ordering Code



1. Model Series
VT15

2. Combination
02-18

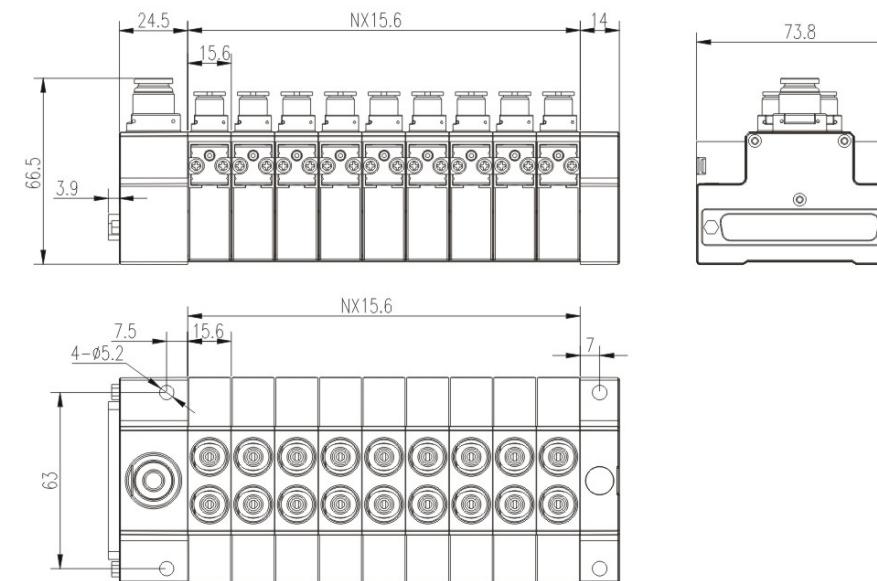
3. Input Port
K8: $\phi 8$ Quick Connector

4. Working Port
K4: $\phi 4$ Quick connector
K6: $\phi 6$ Quick connector

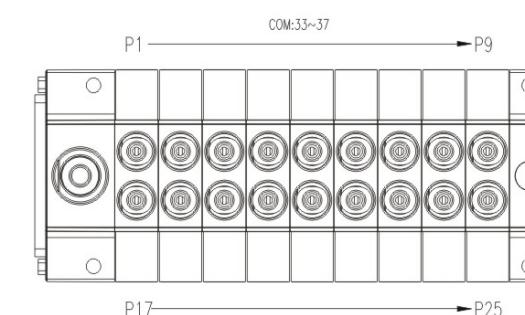
5. Valve Type
A: NC
B: NO

6. Valve Quantity
2-18

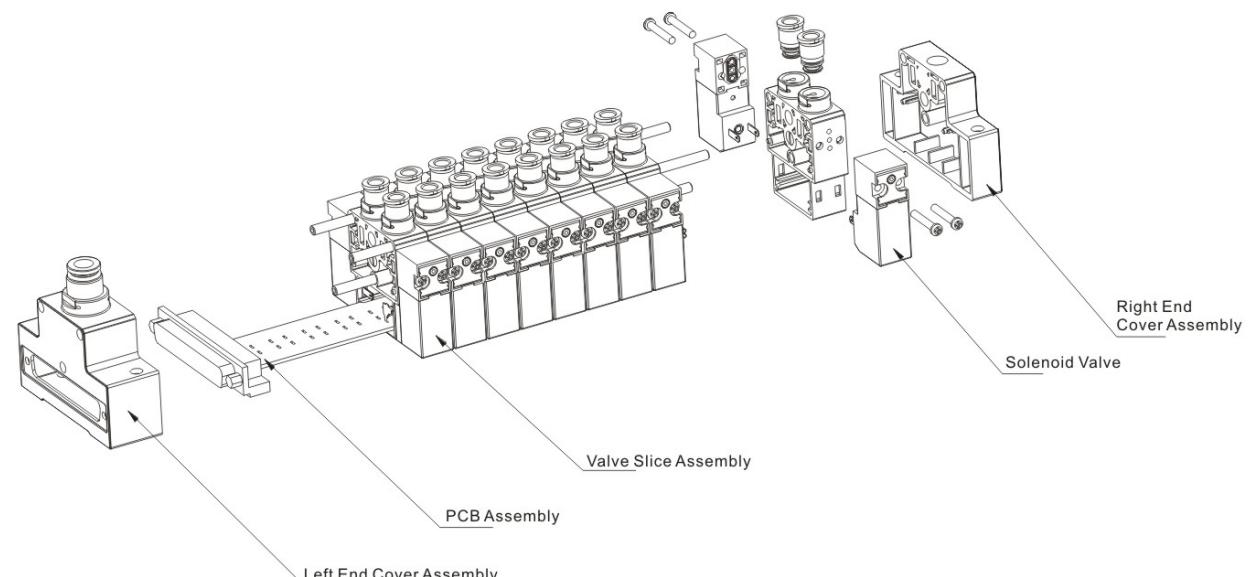
Dimension Drawing



Wiring Diagram

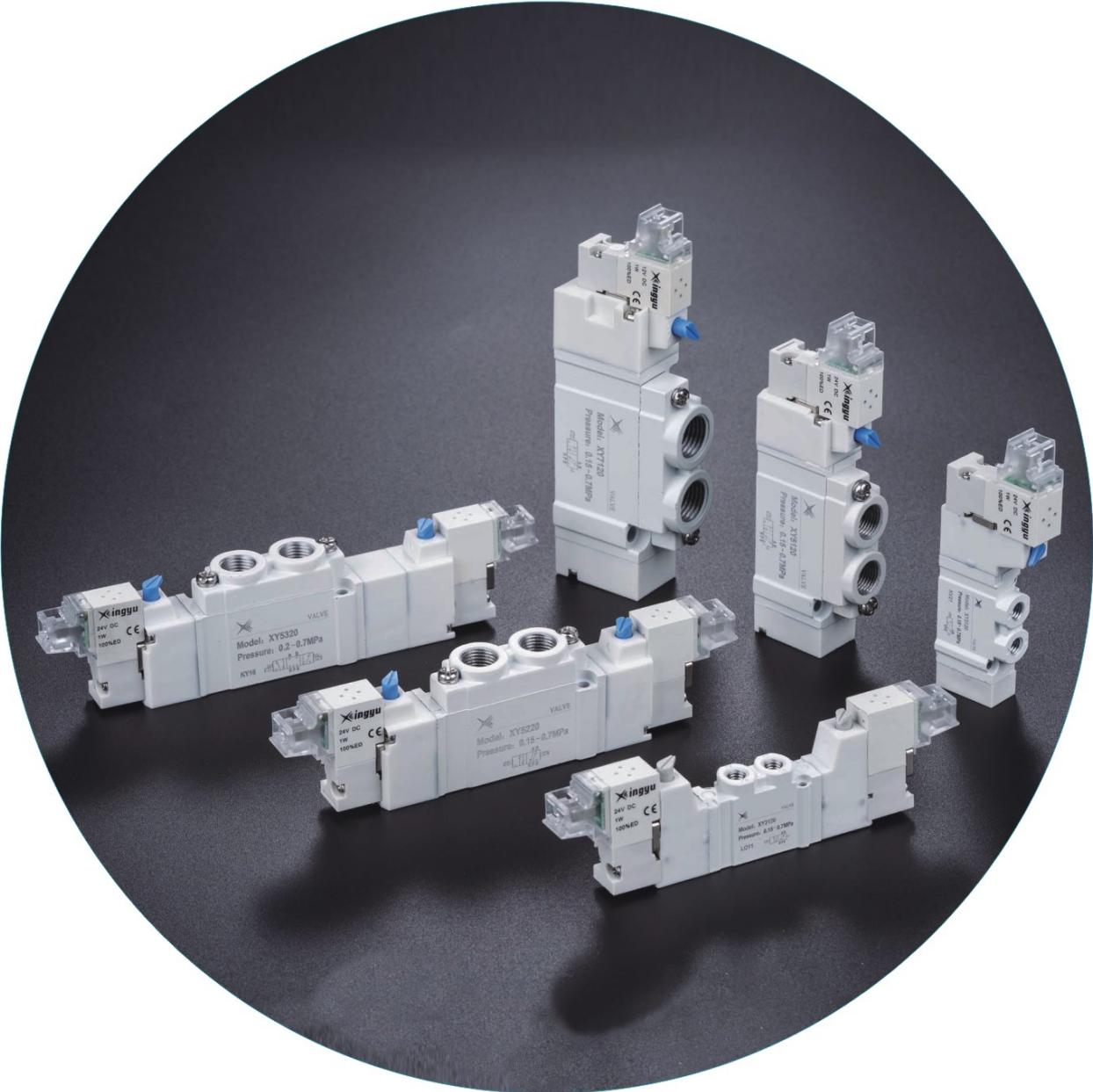


Exploded-views



**PREMIER QUALITY
GLOBAL REPUTATION**

XINGYU ELECTRON(NINGBO)CO.LTD
www.xyelectron.com



XY Directional Valve Series

- Pilot structure, reliable quality
- High frequency and saving energy, 1W Rated power
- Space-saving, integrated installation possible
- High-speed and stable responsiveness



XY Directional Valve Series

XINGYU ELECTRON

XY3000 Series



XY5000 Series



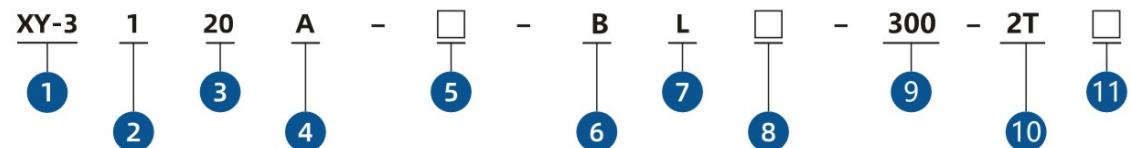
XY7000 Series



SPECIFICATION

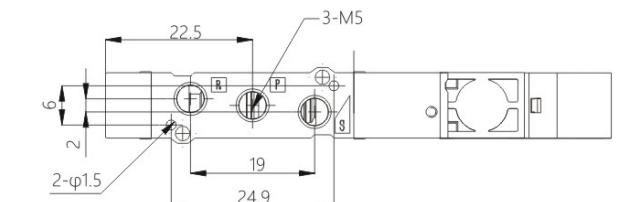
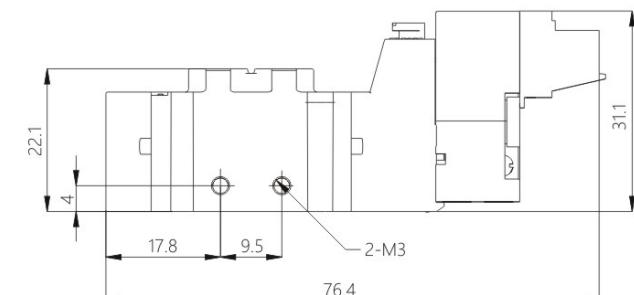
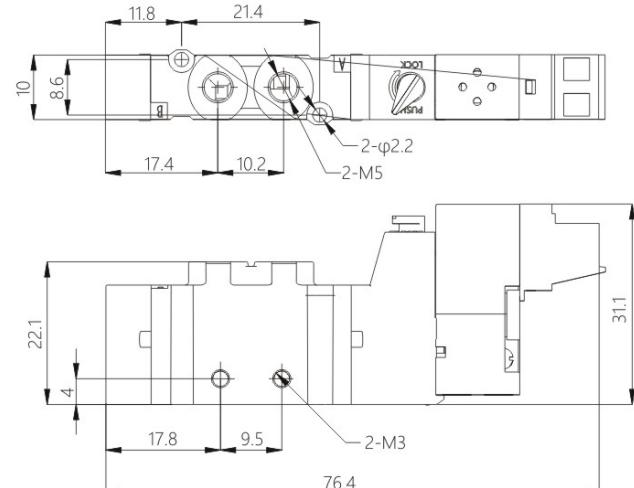
Product series		XY series 5-way solenoid valve		
Model No.		XY3000 / XY5000 / XY7000		
Product specifications		3000 Series	5000 Series	7000 Series
Operating pressure range (MPa)	5/2		0.15-0.7	
	5/3		0.2-0.7	
Working Medium		Compressed Air (filtered by 40μm filter screen)		
Operating Temperature		-5~50°C (not frozen)		
Port Size		Inlet=Outlet=Exhaust= M5	Inlet=Outlet=Exhaust= 1/8	Inlet=Outlet= 1/4 Exhaust= 1/8
Control Method		Internal pilot		
Pilot Exhaust Method		External centralized exhaust		
Max. Operating Frequency	2 positions single electronic control	10	5	5
	2 positions double electronic control	10	5	5
	3 positions	3	3	3
Manual Operation Mode		Manual press-down slew-lock type		
Connection Method		Vertical / Parallel / Vertical Parallel		
Coil Rated Voltage		DC 12/24V		
Voltage Range		Rated Voltage ± 10%		
Power Consumption	Standard	1W		
	With Power-saving Circuit	Starting power 0.8W / maintenance power 0.5W		
Overcharge protection circuit		Optional		
Indicator Light		Yes, with LED		
Insulation Class		F		

Ordering Code

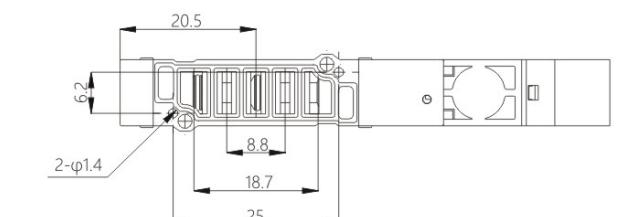
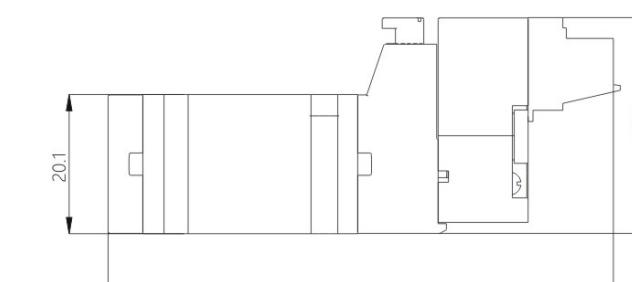
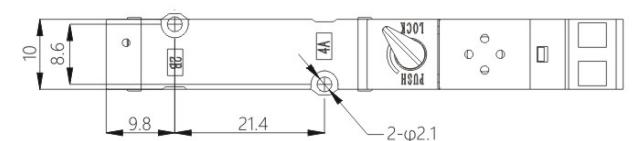


1. Model Series
3: XY3000
5: XY5000
7: XY7000
2. Switching Mode
1: 5/2 Single Coil
2: 5/2 Double Coil
3: 5/3 Double coil center close type
4: 5/3 Double coil center exhaust type
5: 5/3 Double coil center pressure type
3. Connection Method
20: Thread Type
40: Namur Type
4. Manual Operation
A: Press the lock button then turn
5. Thread type
Blank: G
R: RC
N: NPT
6. Voltage Type
B: DC24V
D: DC12V
7. Wire Lead Type
L: Vertical
M: Parallel
N: Vertical Parallel
E: Lead-wire type
8. Indicator light, surge, voltage protection circuit
Blank: With indicator light, no surge and voltage protection
R: With indicator light, surge and voltage protection
Z
9. Wire Length
300mm
Customized
10. Valve quantity
1T: one valve manifold
2T: two valves manifold
.....
20T: twenty valves manifold
11. Manifold thread type
Blank: G
R: RC
N: NPT

XY3120 2 positions single coil thread type



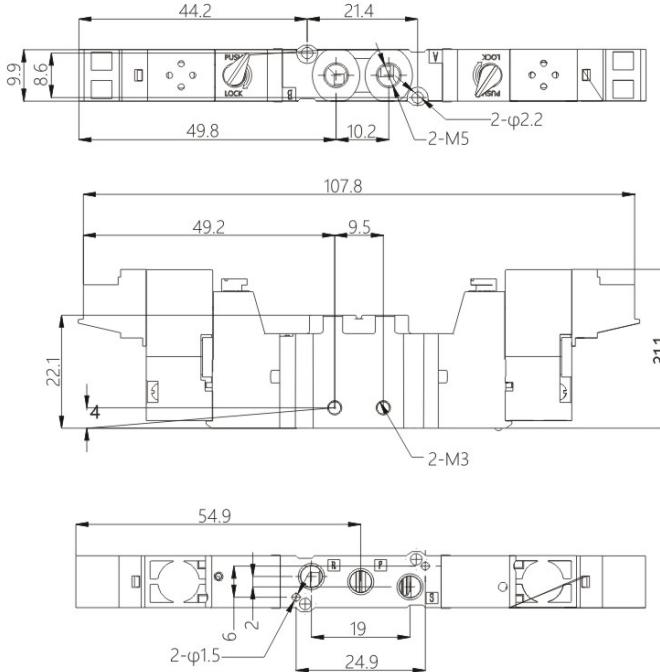
XY3140 2 positions single coil namur type



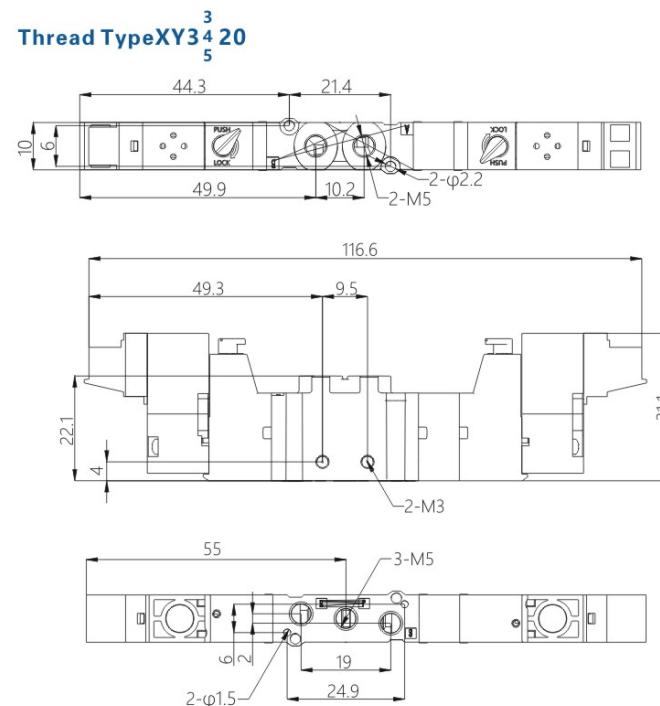
XY Directional Valve Series

 XINGYU ELECTRON

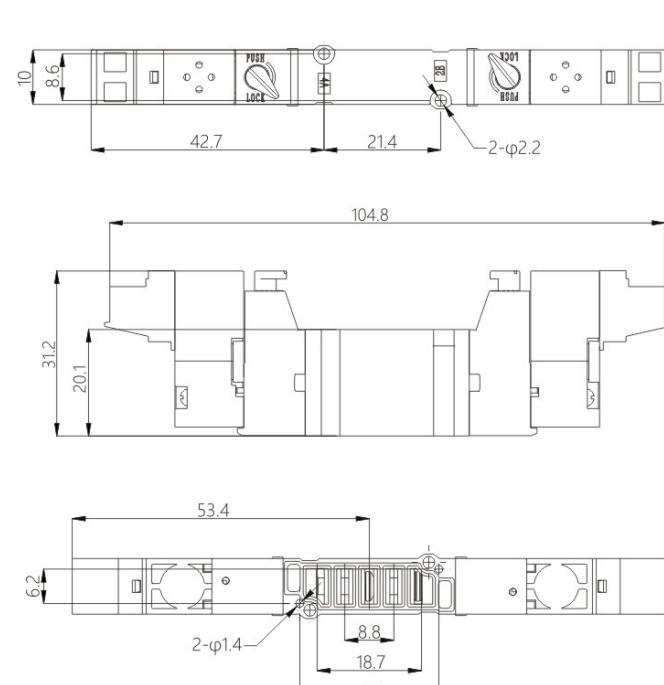
XY3220 2 positions double coil thread type



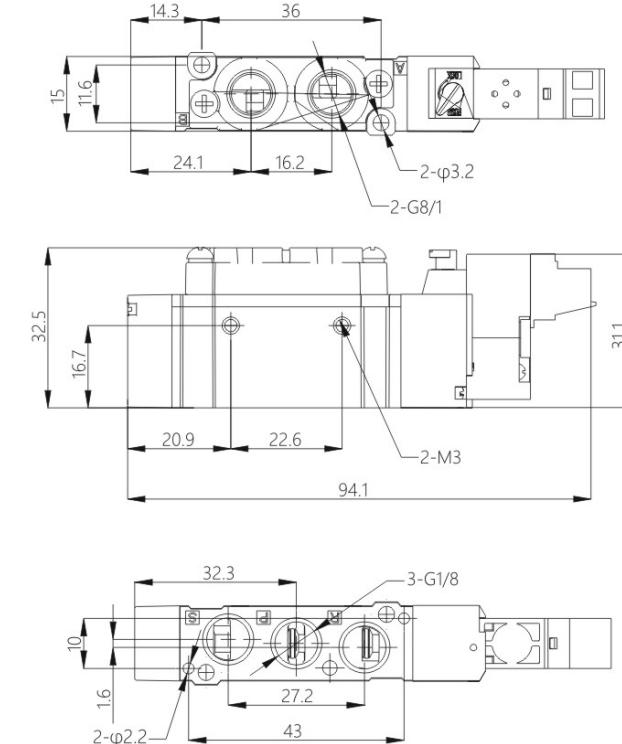
**3 positions center close type,
center exhaust type,center pressure type**



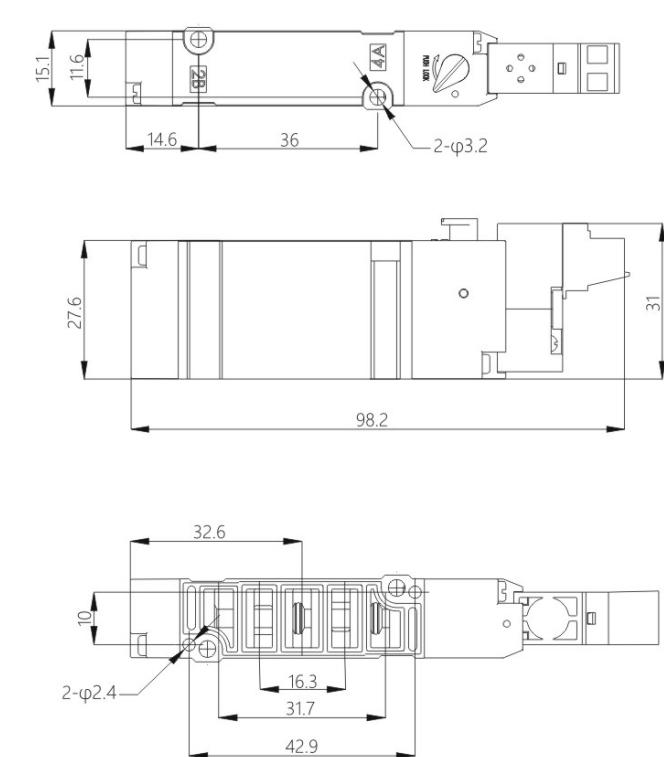
XY3240 2 positions double coil namur type



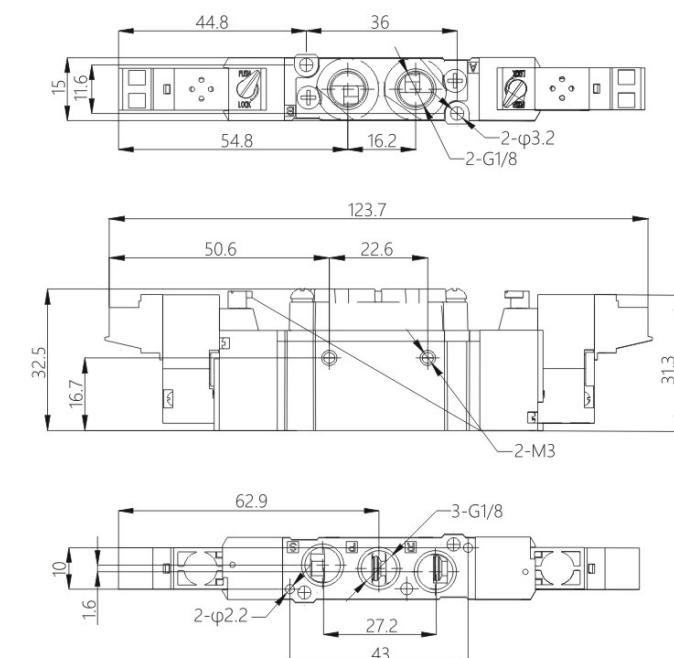
XY5120 2 positions single coil thread type



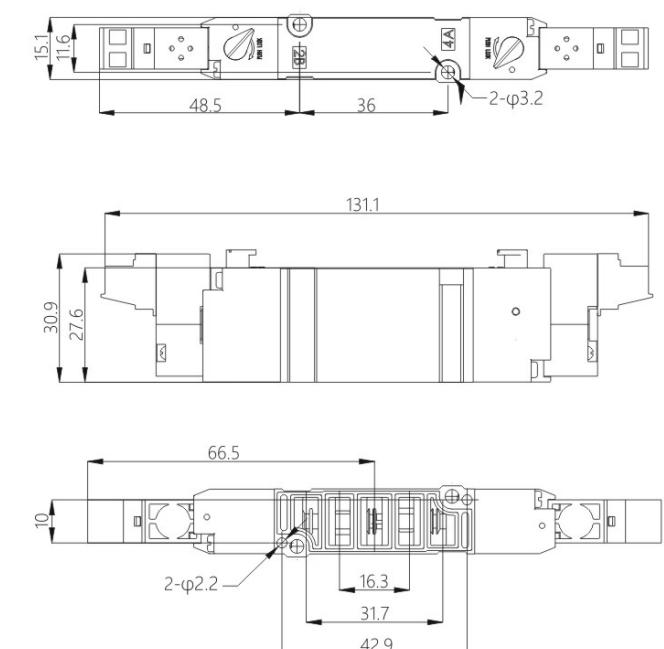
XY5140 2 positions single coil namur type



XY5220 2 positions double coil thread type



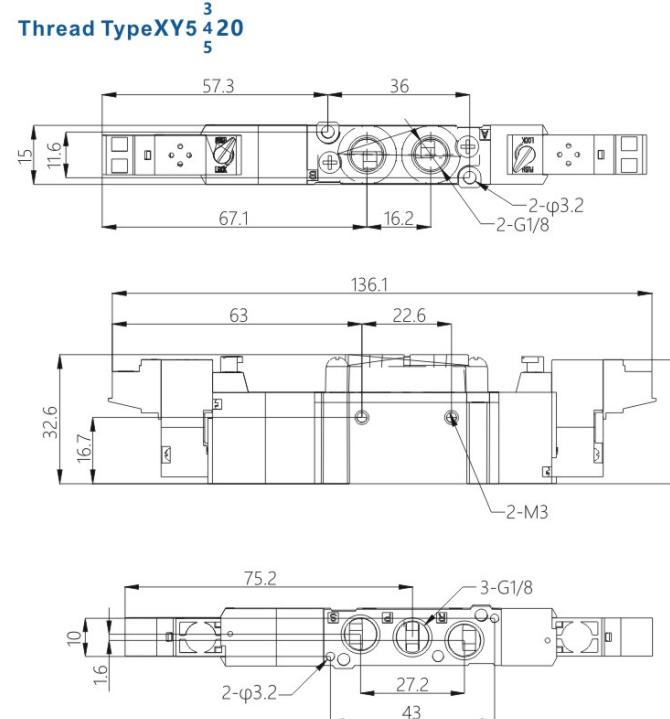
XY5240 2 positions double coil namur type



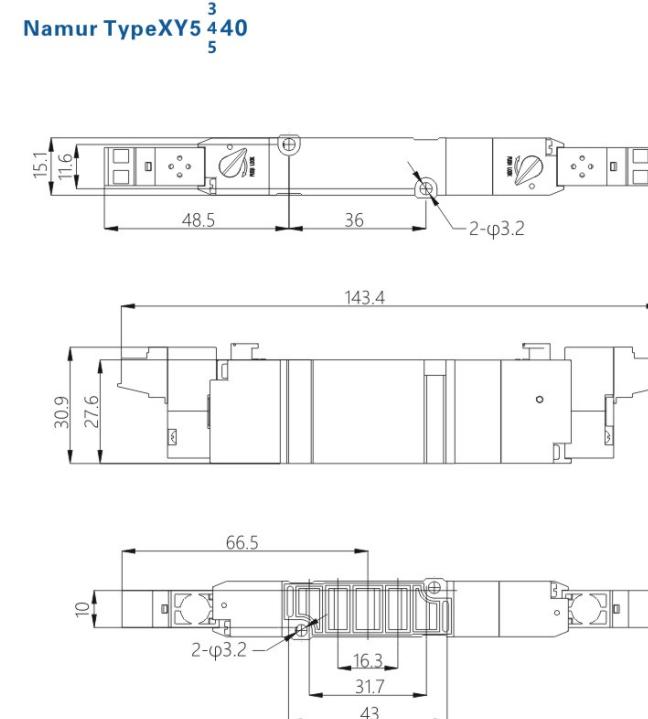
XY Directional Valve Series

 XINGYU ELECTRON

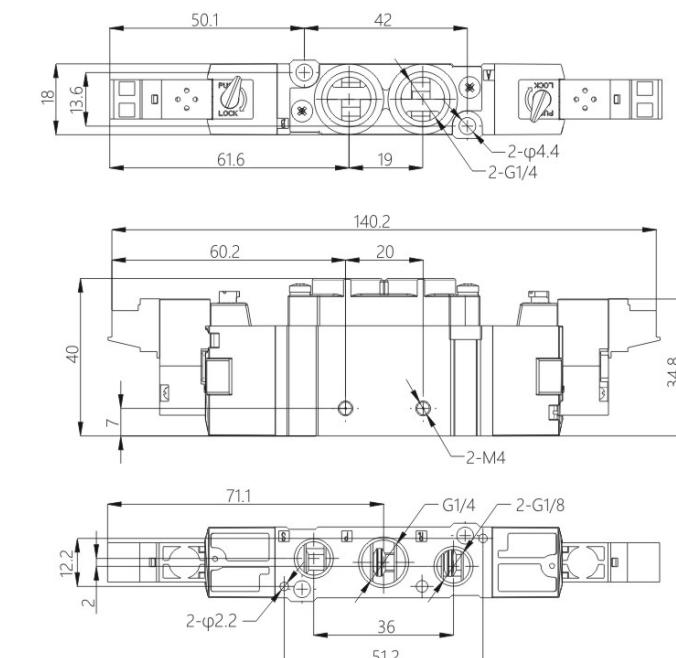
3 positions center close type,
center exhaust type,center pressure type



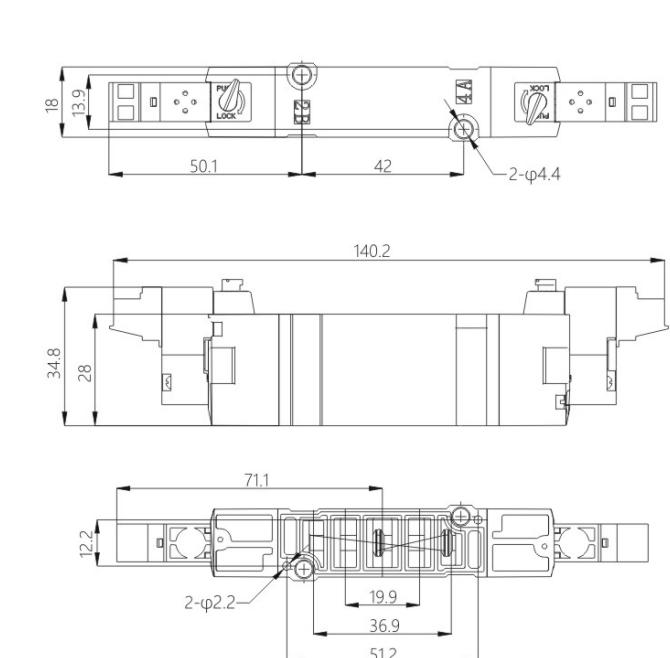
3 positions center close type,
center exhaust type,center pressure type



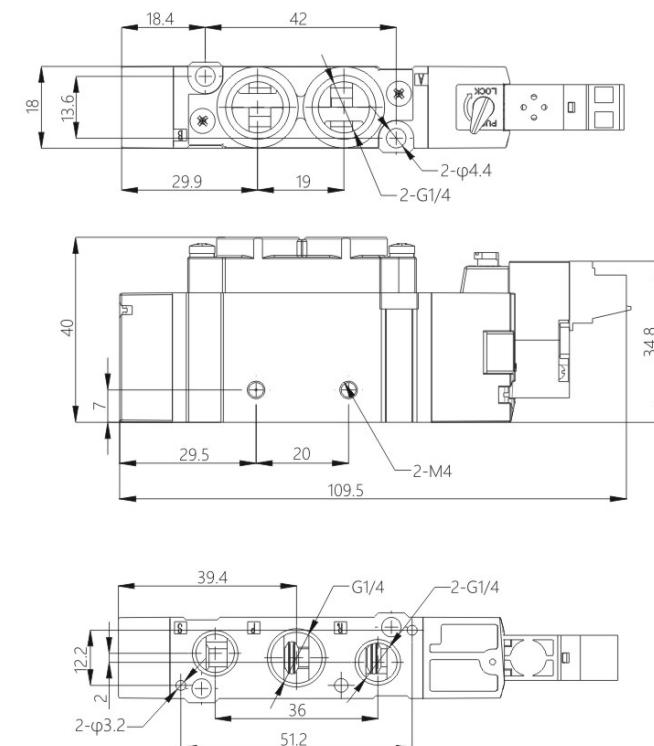
XY7220 2 positions double coil thread type



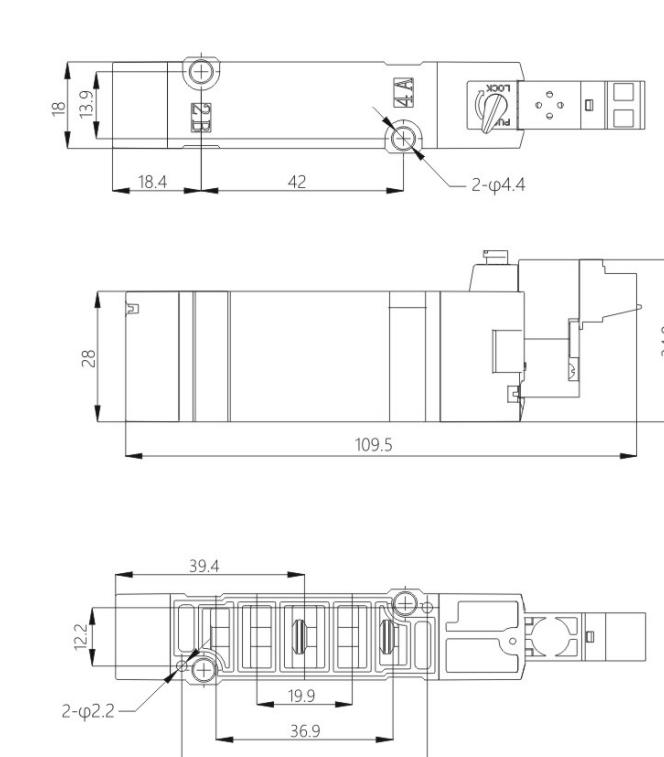
XY7240 2 positions double coil namur type



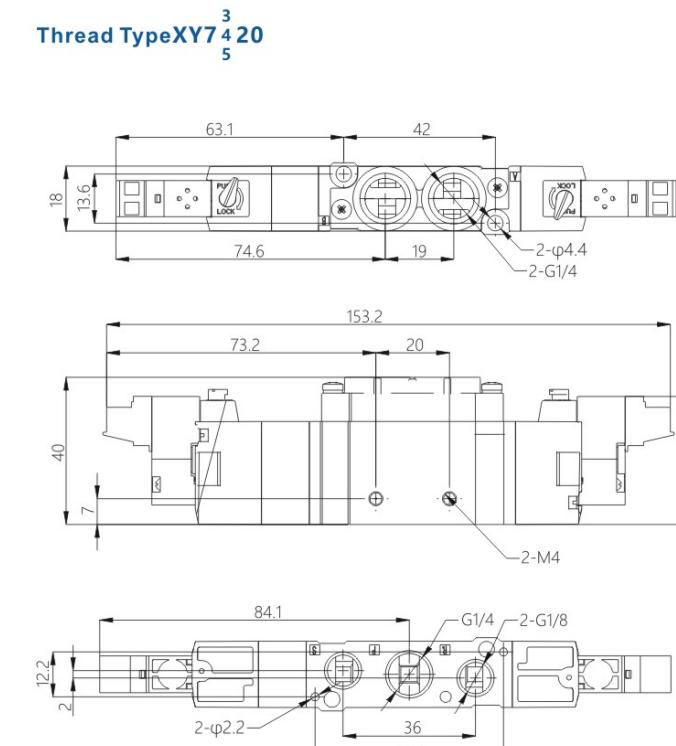
XY7120 2 positions single coil thread type



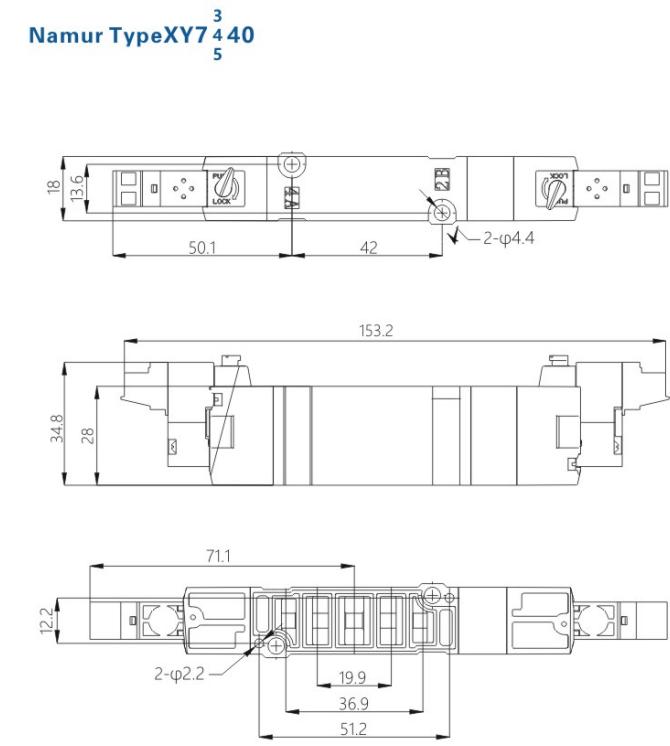
XY7140 2 positions single coil namur type



3 positions center close type,
center exhaust type,center pressure type



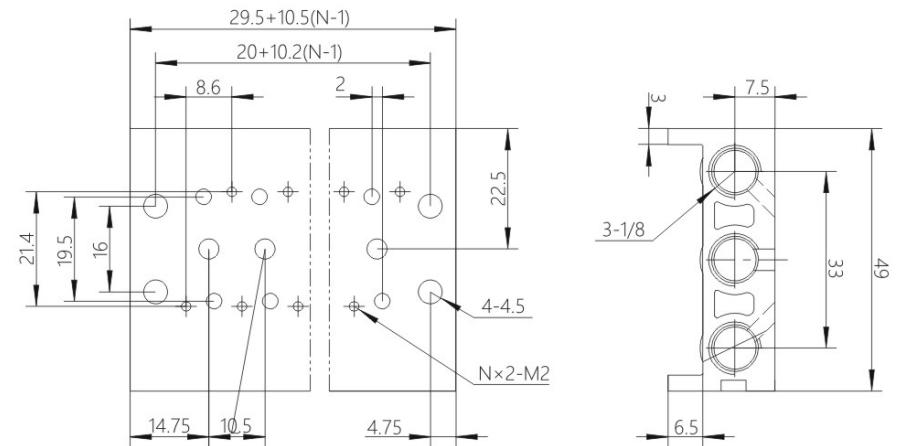
3 positions center close type,
center exhaust type,center pressure type



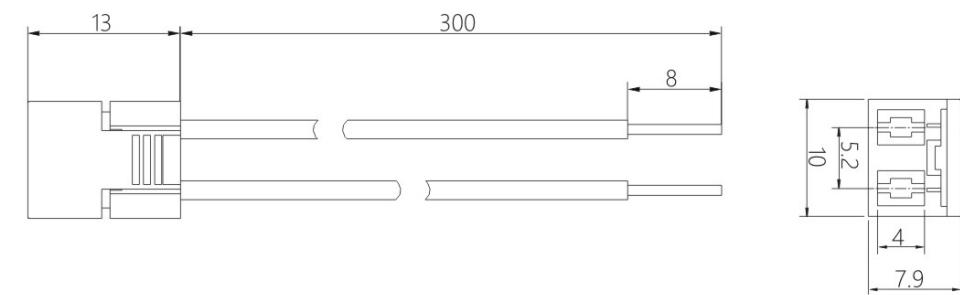
XY Directional Valve Series

 INGYU ELECTRON

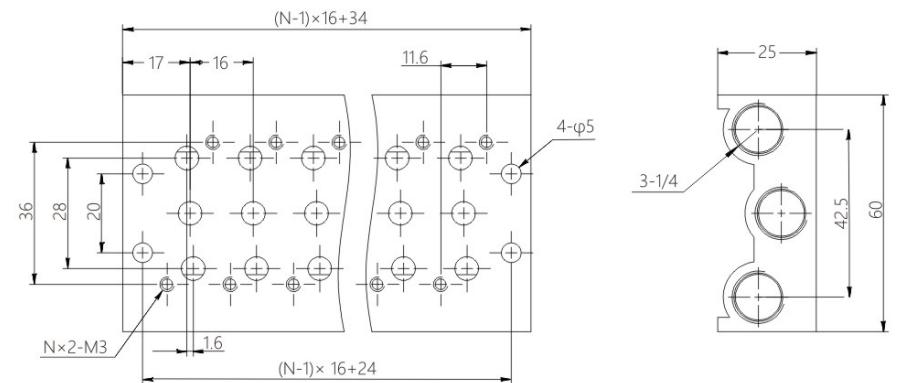
XY3000 with Manifold



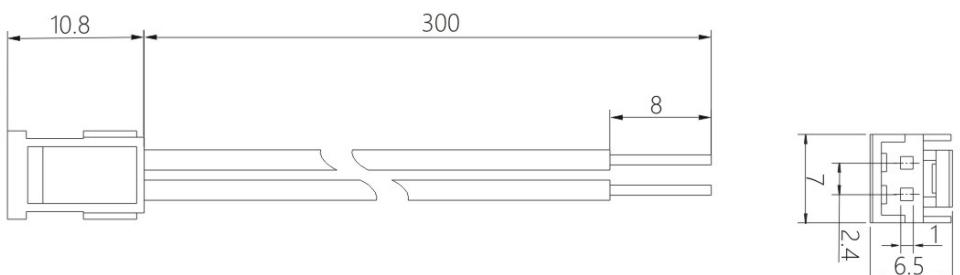
Vertical Parallel Connectors



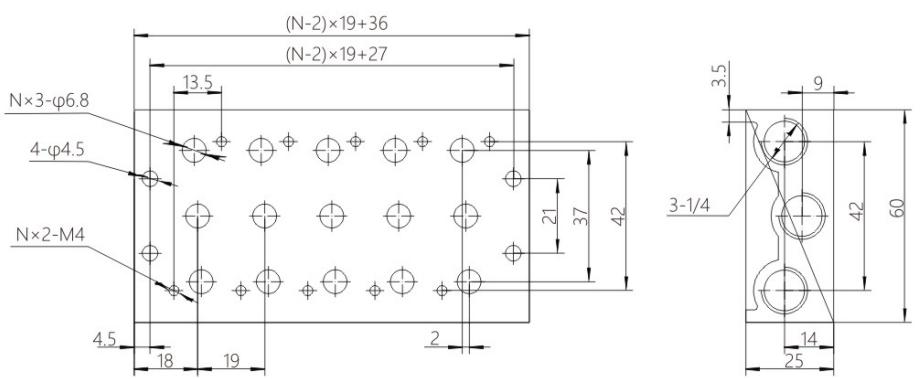
XY5000 with Manifold



Vertical/parallel Connectors



XY7000 with Manifold



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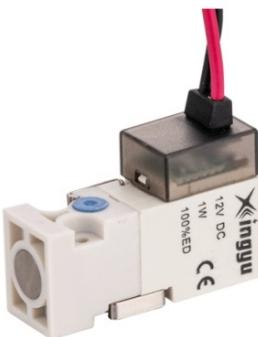


| Micro Valve

- No need lubrication, long working life
- Small size, easy to install, low power
- Multiple combination to choose
- Suitable for PLC control



XY-10 Series



Ordering Code

XY-10 AX - 1 B L - 300

1. Model Series

AX Port: 0.5mm Power: 1W
AH Port: 0.7mm Power: 1.2W
AD Port: 0.7mm Power: 1.8W/0.5W
* AR Port: 1mm Power: 3.2W/0.5W

2. Working Type

1:3/2 NC
2:2/2 NC

3. Voltage

B:DC24V
D:DC12V

4. Connection Type

E: Lead-wire type L: Vertical type



M: Parallel type N: Vertical parallel universal



T: Threaded type



5. Indicator light, surge voltage protection circuit

Blank: With indicator light and no surge voltage protection circuit

R: With indicator light and surge voltage protection circuit

6. Exhaust Type

Blank: Exhaust Directly
N: Indirect Exhaust

7. Manual Lever Mode

Blank: With Manual Lever
1: Without Manual Lever

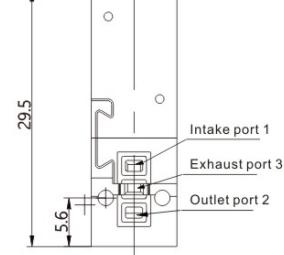
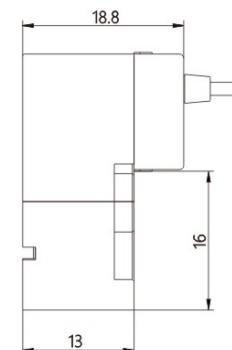
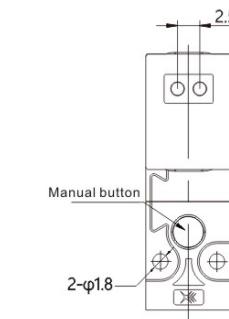
8. Wire Length

300mm
Customized

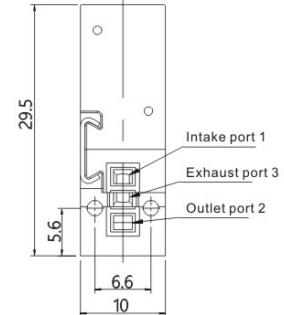
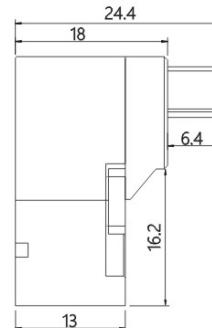
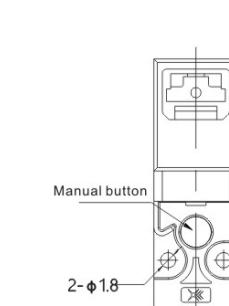
Specification

Model No.	XY-10AH	XY-10AX	XY-10AD	*XY-10AR
Working pressure(MPa)	0-0.7	0-0.7	0-0.7	0-0.7
Port size(mm)	0.7	0.5	0.7	1.0
Working medium	Compressed air(filtered by 40μm filter screen)			
Ambient temp and medium temp(°C)	-5~50(Unfrozen)			
Response time(ms)	ON: 6	OFF: 5	ON: 7	OFF: 6
Max.operating frequency(Hz)	35	20	35	50
Flow(L/min)	20	10	20	30
Wire lead type	Vertical type, parallel type, vertical-parallel universal type, Lead-wire type, threaded type			
Coil rated power(V)	DC12/DC24			
Allowable voltage	Rated power ±10%			
Power(W)	1.2	1	1.8/0.5	3.2/0.5
Coil temperature rise(°C)	50%ED: 25	50%ED: 25	50%ED: 20	50%ED: 20
	100%ED: 55	100%ED: 50	100%ED: 15	100%ED: 15
Action mode	Direct action			
Overcurrent protection circuit	Optional			
Indicator light	Yes, using LED display			
Manual operation mode	Optional			
Temperature resistance grade	H Class			
Protection grade	IP40			
Insulation voltage	1000VAC			
Insulation resistance	≥ 5MΩ			

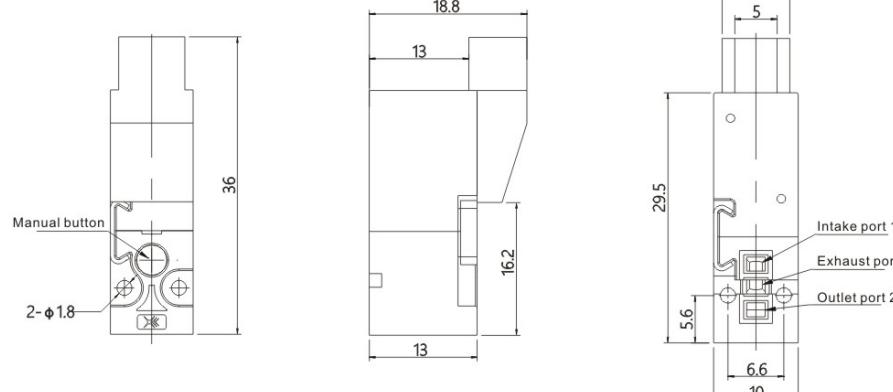
Lead-wire type XY-10A



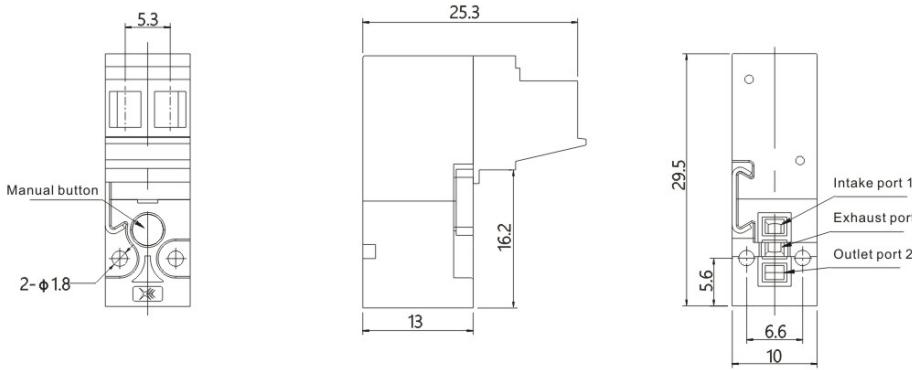
Vertical type XY-10A



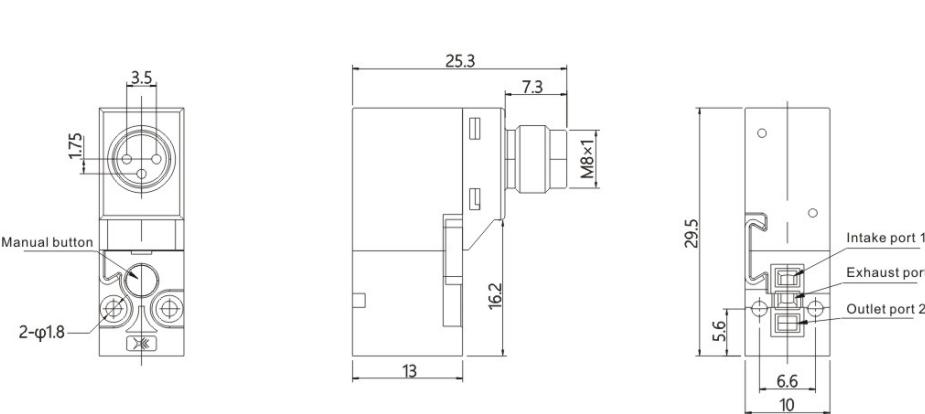
Micro Valve XY-10A



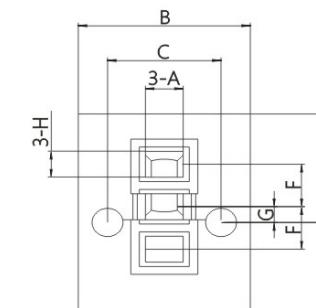
Vertical-parallel universal type XY-10A



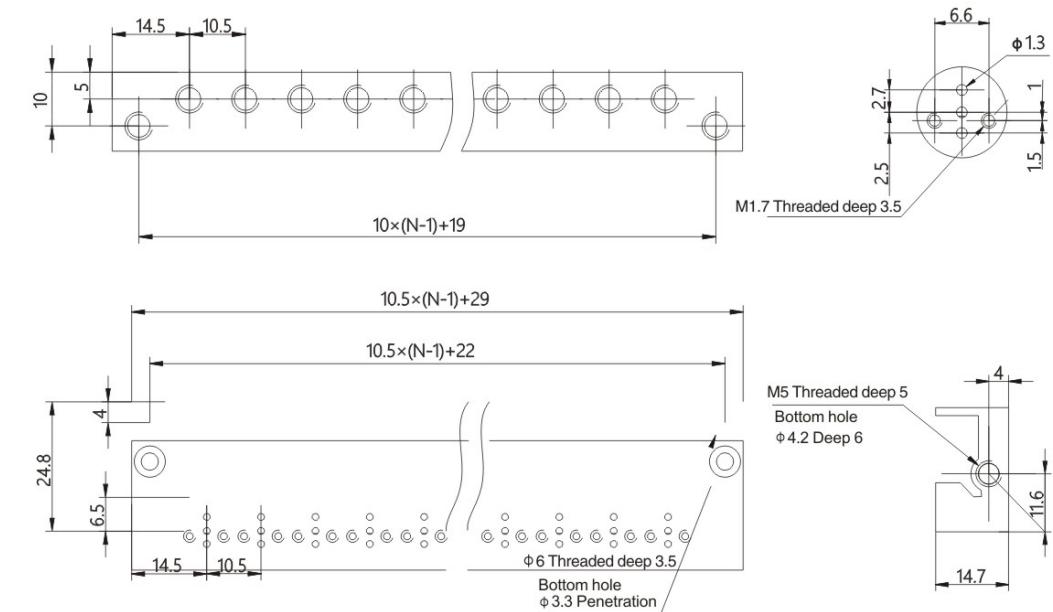
Threaded type XY-10A



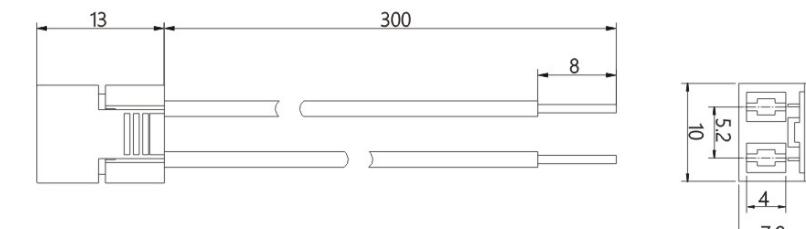
Seal Area Mounting Dimensions



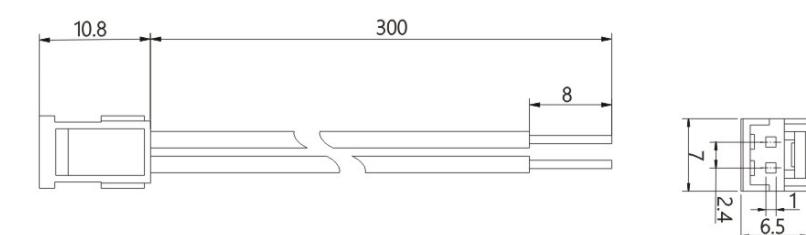
XY-10A Manifold



Vertical Parallel Connectors



Vertical/parallel Connectors



XY-10A Manifold



Specification

Working Medium	Compressed Air (filtered by 40μm filter screen)
Working Temp.	-5°C~50°C (Unfrozen)
Working Pressure	0~0.7MPa
Voltage	DC12V、DC24V
Connection Size	Φ4/Φ6

Features

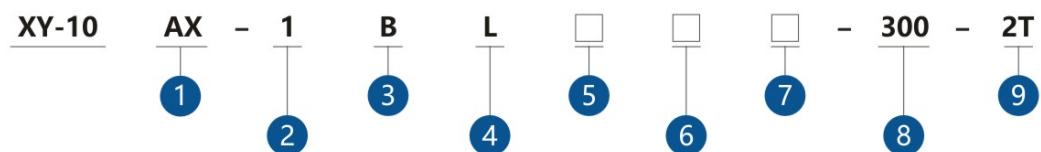
1. The number of connections is optional to meet various application scenarios.
2. The product adopts special seals with good sealing performance.
3. Centralized gas supply, simplified gas circuit, space saving and cost saving.
4. Unified air inlet and exhaust and unified wiring are convenient for installation and commissioning.

Installation and Use

1. It is recommended that the user assign a dedicated person to be responsible for use and maintenance.
2. Please pay attention to the direction of medium flow during installation.
3. After installation, the medium must be introduced and tested several times to confirm normal operation before putting it into use.
4. Please pay attention to dust prevention. When not in use, dust plugs should be installed on the inlet and outlet.
5. If not used for an extended period, store in a relatively dry place.

Ordering Code

XY-10 AX - 1 B L - 300 - 2T



1. Model Series

AX Port: 0.5mm Power: 1W
AH Port: 0.7mm Power: 1.2W
AD Port: 0.7mm Power: 1.8W/0.5W
* AR Port: 1mm Power: 3.2W/0.5W

2. Working Type

1:3/2 NC
2:2/2 NC

3. Coil voltage

B:DC24V
D:DC12V

4. Connection Type

E: Lead-wire type L: Vertical type



M: Parallel type



T: Threaded type



5. Indicator light, surge voltage protection circuit
Blank: With indicator light and no surge voltage protection circuit

R: With indicator light and surge voltage protection circuit

6. Exhaust Type

Blank : Exhaust Directly
N: Indirect Exhaust

7. Manual Lever Mode

Blank: With Manual Lever
1: Without Manual Lever

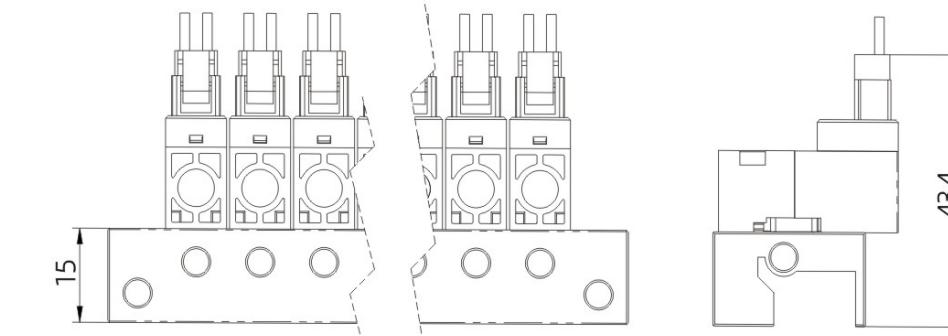
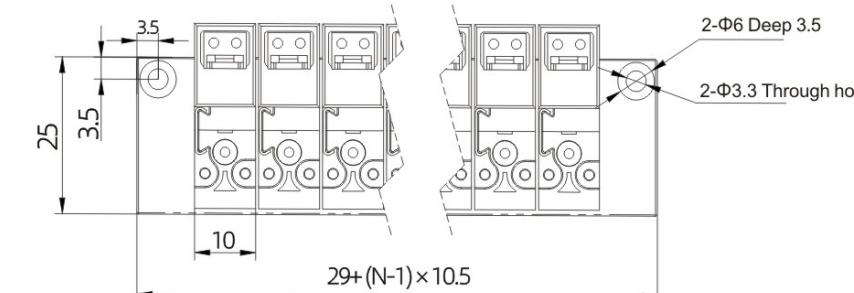
8. Wire Length

300mm
Customized

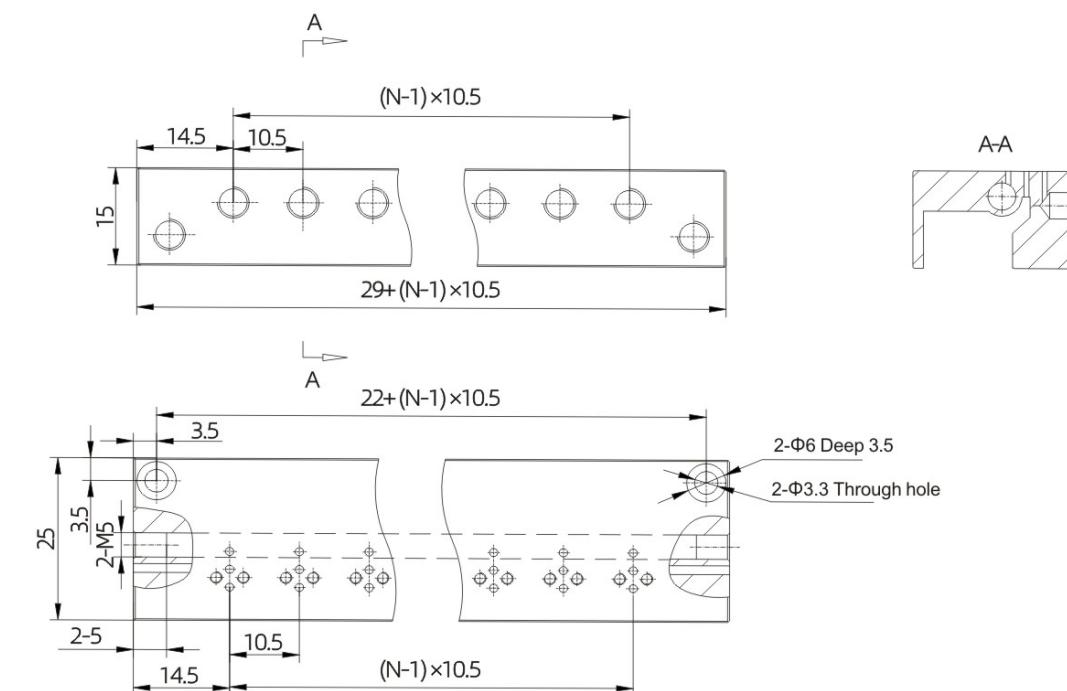
9. Valve quantity

1T: One valve manifold
.....
20T: Twenty valves manifold

XY-10A Manifold Valve appearance drawing



XY-10A Manifold appearance drawing



XY-015



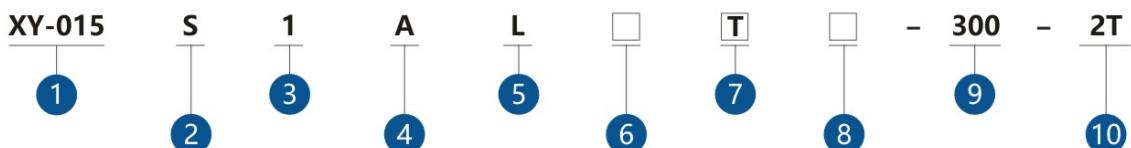
Features

- 1. Small size and convenient installation.
- 2. Energy saving, high frequency, sustainable work, ED100%.
- 3. Large flow and wide application industry.
- 4. Fast response time and multiple uses.
- 5. Various power connection modes.
- 6. Low starting voltage, suitable for use under harsh Conditions.
- 7. Long life, more lasting.

Installation and Use

1. Before install, PIs be noted the service conditions of the valve, such as working pressure range and power supply conditions (AC and DC voltage).
2. Before install, conduct ventilation and power on test on the test bench to check whether the reversing performance is normal.
3. Before install, the rust, dust and other dirt in the pipeline shall be completely removed.
4. When installing the solenoid valve, pay attention to the installation position and the indicated air flow direction, and do not connect it wrongly. A water separation air filter, a pressure reducing valve and an oil mist lubricator must be installed upstream of the valve air source port to ensure that the supply valve has a certain pressure of dry, clean and lubricated air.

Ordering Code



1. Model Series

2. Pressure range

S: 0-7 bar port size: ϕ 1.4mm
T: 0-10bar bar port size: ϕ 1.2mm

3. Product type

1:3/2 NC 2:3/2 NO



4. Coil voltage Notice①

A: AC220V
B: DC24V
C: AC110V
D: DC12V

①: The pin type and wire type do not include AC220V and AC110V specifications

5. Connection Type

E: Lead-wire type L: Vertical type



M: Parallel type



N: Vertical parallel universal



Q: Pin type



7. Vent direction

T: Vent and pin direction are the same
F: Vent and pin direction are opposite

8. Manual Lever Mode

Blank: Without Manual Lever
1: With Manual Lever

9. Wire Length

300mm
Customized

10. Valve quantity

1T: One valve manifold
.....
20T: Twenty valves manifold

6. Indicator light, surge voltage protection circuit

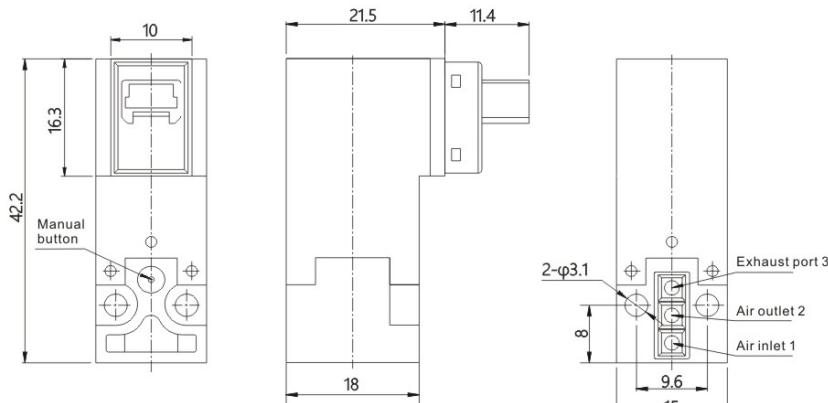
Blank: With indicator light and no surge voltage protection circuit

R: With indicator light and surge voltage protection circuit

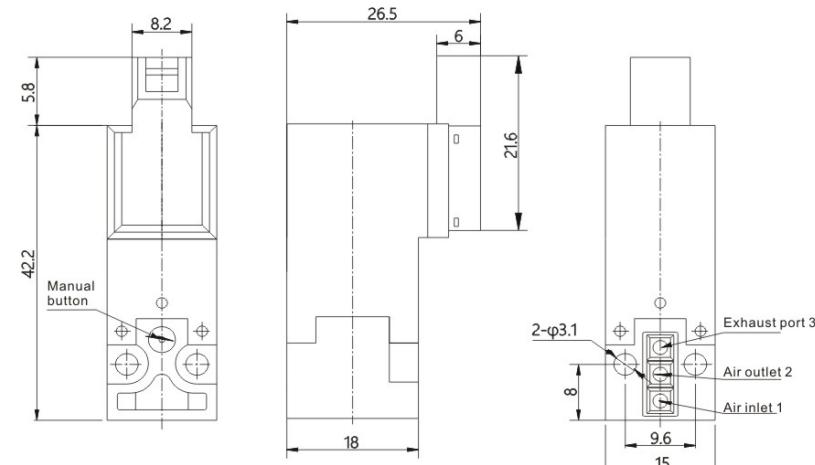
Specification

Model NO.		XY-015
Port size(mm)	1.2	1.4
Operating pressure range(MPa)	0-0.7	0-1.0
Sonic conductance C value $m^3/(s \cdot Pa)$ (ANR)	0.16×10^{-8}	0.17×10^{-8}
Working medium	-5~50(Unfrozen)	
Ambient temp and medium temp°C	Compressed air(filtered by 40μm filter screen)	
Response time(ms)	ON < 10; OFF < 10	
Action mode	Direct action	
Max.operating frequency(Hz)	30	
Manual operation mode	Non-locking push type	
Connection type	Vertical type, parallel type, vertical-parallel universal type, Lead-wire type, pin type	
Rated power (V)	DC	DC12/24V
	AC	AC110/220
Allowable voltage	DC $\pm 10\%$ AC $\pm 15\%$	
Power(W)	2.5	
Indicator light	Yes, using LED display	
Temperature resistance grade	F	
Protection grad	IP40	

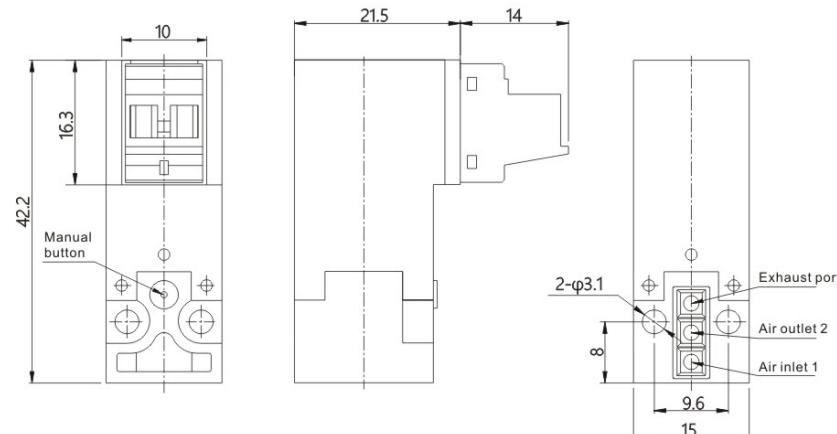
Vertical type XY-015



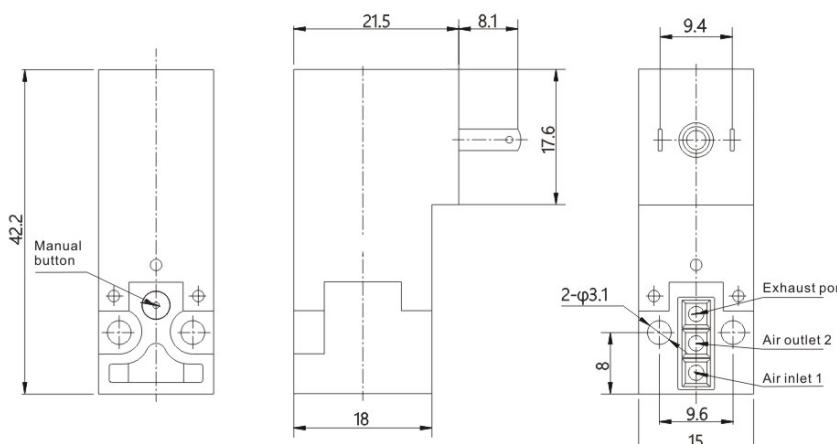
Parallel type XY-015



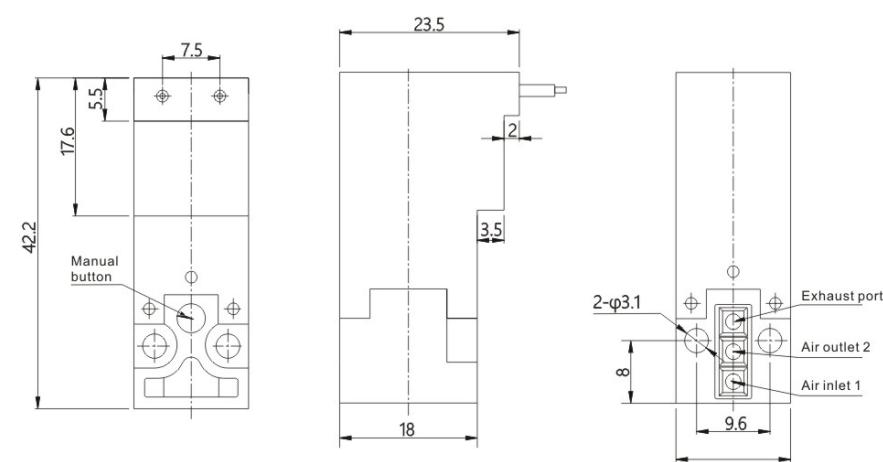
Vertical-parallel universal type XY-015



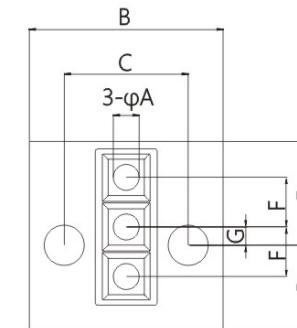
Pin type XY-015



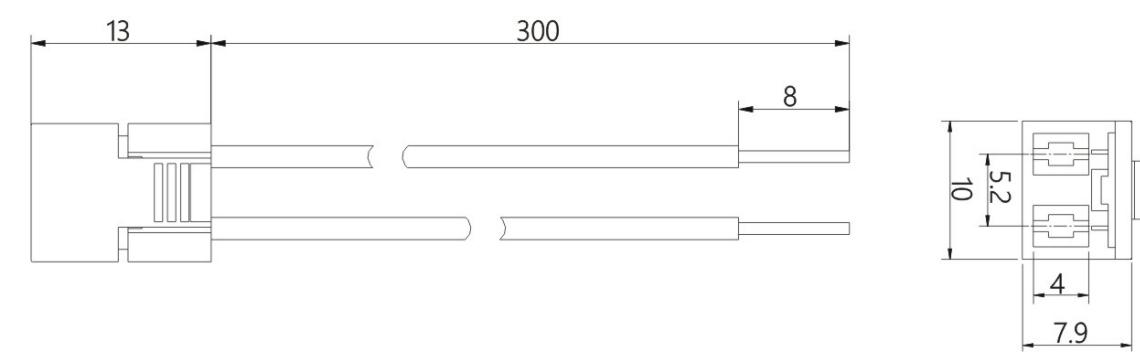
Lead-wire type XY-015



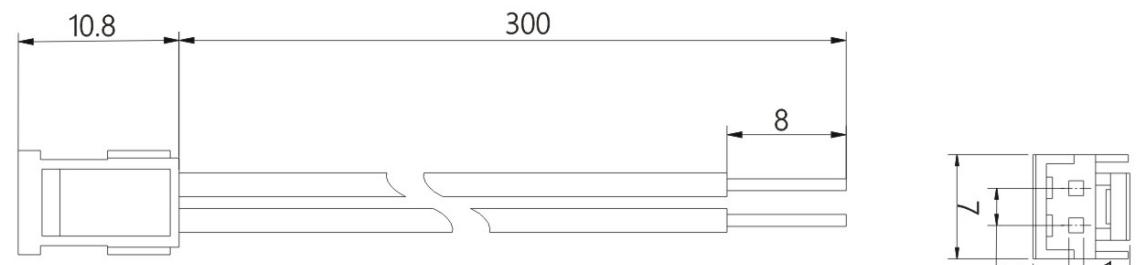
Sealing area installation dimensions



Vertical/parallel universal connector



Vertical/parallel connector



XY-015 Manifold



Specification

Working Medium	Compressed Air (filtered by 40μm filter screen)
Working Temp.	-5°C~50°C (Unfrozen)
Working Pressure	0~0.7MPa
Voltage	DC12V, DC24V, AC110V, AC220V
Connection Size	Φ4/Φ6

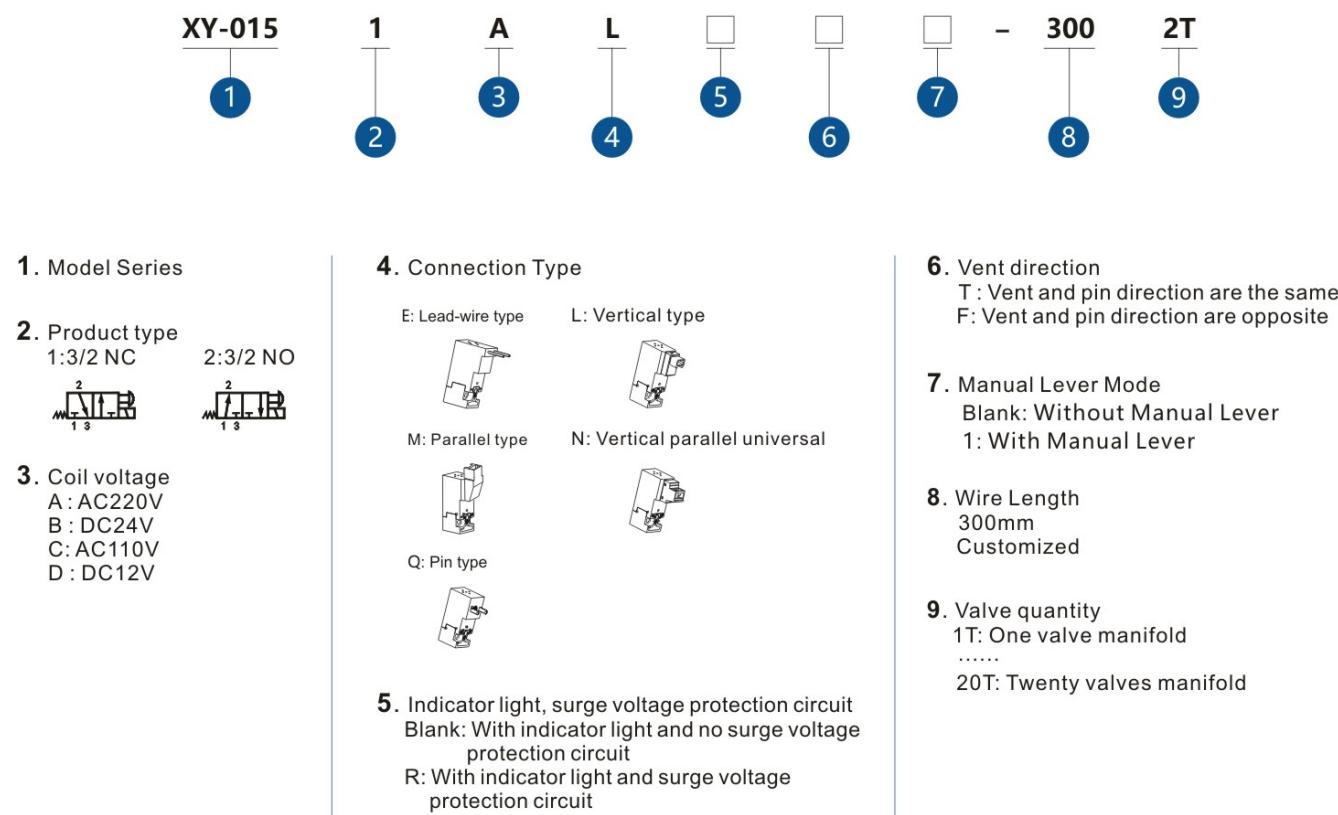
Features

1. The number of connections is optional to meet various application scenarios.
2. The product adopts special seals with good sealing performance.
3. Centralized gas supply, simplified gas circuit, space saving and cost saving.
4. Unified air inlet and exhaust and unified wiring are convenient for installation and commissioning.

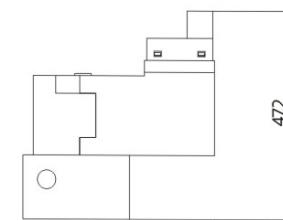
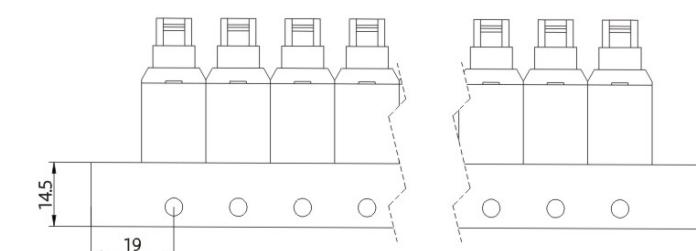
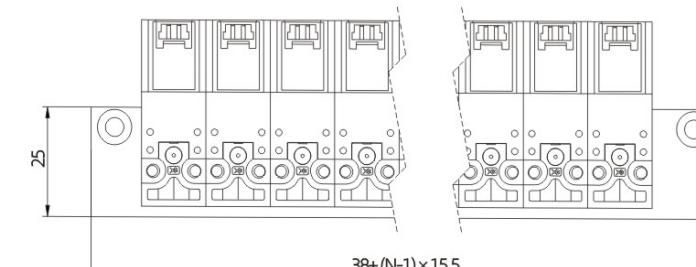
Installation and Use

1. It is recommended that the user assign a dedicated person to be responsible for use and maintenance.
2. Please pay attention to the direction of media flow during installation.
3. After installation, the medium must be introduced and tested several times to confirm normal operation before putting it into use.
4. Please pay attention to dust prevention. When not in use, dust plugs should be installed on the inlet and outlet.
5. If not used for an extended period, store in a dry place.

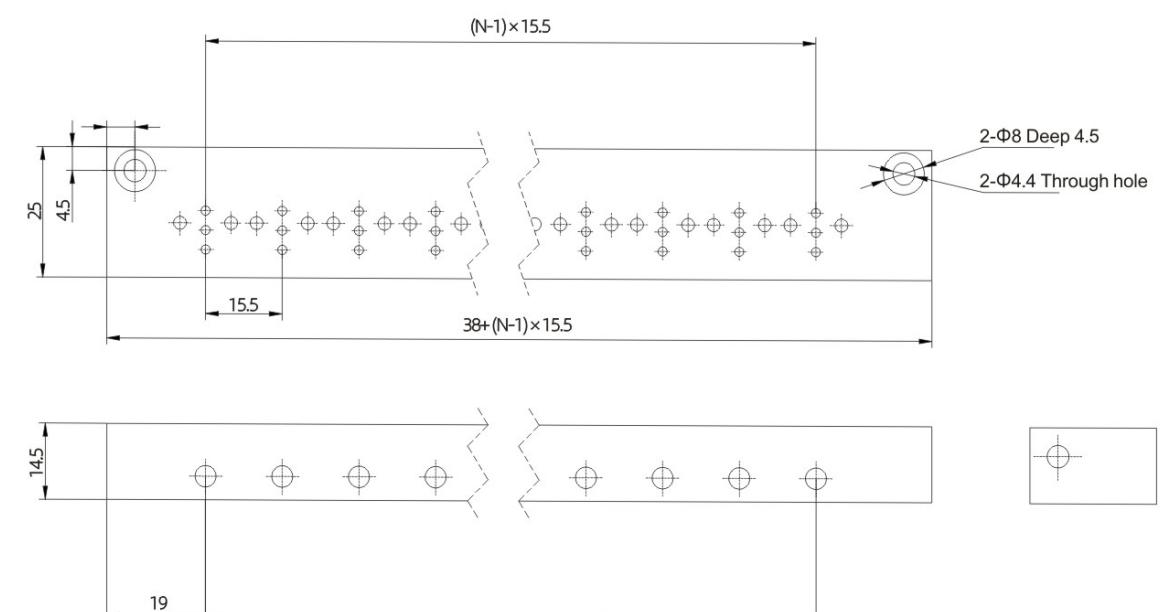
Ordering Code



XY-15 Manifold Valve appearance drawing



XY-15A Manifold appearance drawing





Two-way Three Position High Frequency Solenoid Valve

- Large flow and high working frequency, High working pressure, wide use, no need for oil lubrication
- Low power consumption, energy conservation and environmental protection, Sustainable work ED100%
- It is designed with manual button device, which can be debugged and used
- Lead type power connection is adopted, which is convenient for power connection and saves installation space
- Sliding column structure, good sealing and sensitive response
- The inner hole is processed by special process, with small friction resistance, low starting pressure and long service life

3/2 High Frequency Solenoid Valve

 INGYU ELECTRON

3PA



Features

1. Large flow and high working frequency, High working pressure, wide use, no need for oil lubrication
2. Can be used under low vacuum conditions
3. Low power consumption, energy conservation and environmental protection, Sustainable work ED100%
4. It is designed with manual button device, which can be debugged and used
5. Lead type power connection is adopted, which is convenient for power connection and saves installation space
6. Sliding column structure, good sealing and sensitive response
7. The inner hole is processed by special process, with small friction resistance, low starting pressure and long service life

INSTALL AND OPERATION

1. Check all parts in fine conditions before operation carefully
2. Pay much attention to the medium flow direction, which must be filtered by 40 μm element, and exact matched piping threads
3. Pay attention the installation specifications comply with technical requirements(such as,for voltage/frequency/ pressure/ ambient temp. range...)and keep a balanced mounting
4. Do not use in heavy vibration conditions and take frostproof measures in low temperature as well.
5. Before piping connection,keep coiling sealant tape not exceed to the threads top and prevent chips/dust/other debris from into valve body as well.

Specification

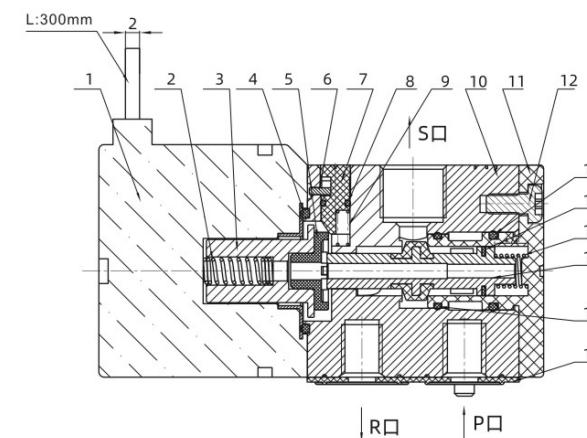
Product model	3PA119	3PA219
Valve Body		
Connection	Thread(M5)	Thread(G1/8")
Port Size	Input=Output=Exhaust =M5	Input=Output=Exhaust =G1/8"
Working Medium		
Working Type		
Medium Temp.(°C)	5°C~50°C	
Power connection	Leading Wire Type	
Power	2.5W	
Voltage	DC24V	
Working Pressure	-1~6bar	-1~7bar
Max.Pressure	1.0MPa	
Lubrication	No oil	
Ambient Temp.(°C)	-5°C ~50°C (Not frozen)	
Use environment	Do not use in corrosive gas environment	
Protection Class	IP65	
Response Time	≤ 20ms	
Applicable cylinder	Φ16-Φ40	
Note: the response time is the value tested under the condition of providing pressure of 5bar and no oil supply.		

Ordering Code

3PA - 119 - 06 - 1 - B - YL - □ - 1

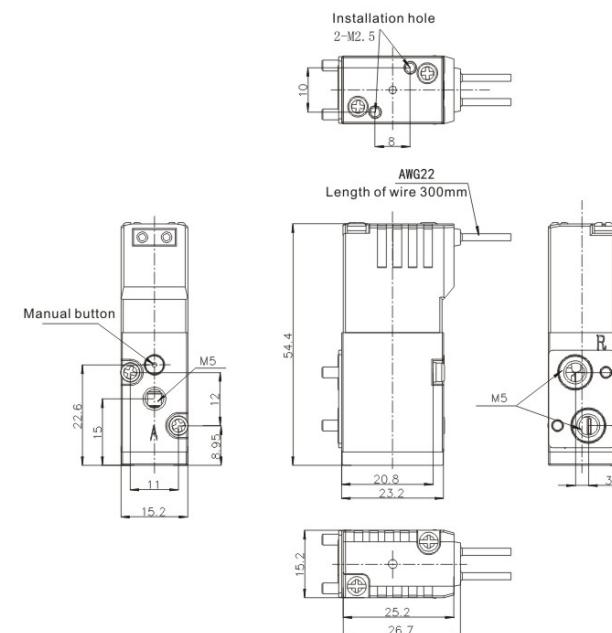
1. Product model	4. Manual Lever Mode 1: With Manual Lever 2: Without Manual Lever	5. Voltage B:DC24V D:PDC12V	7. Thread Type Blank:G N:NPT
2. Product Series 1: 119 2: 219	3. Connection Port M5:M5119 Series 06:1/8"219 Series	6. Connection Type YL:Leading Wire type	8. Accessories 1: With rubber mounting plate 2: Without rubber mounting plate

3PA Profile

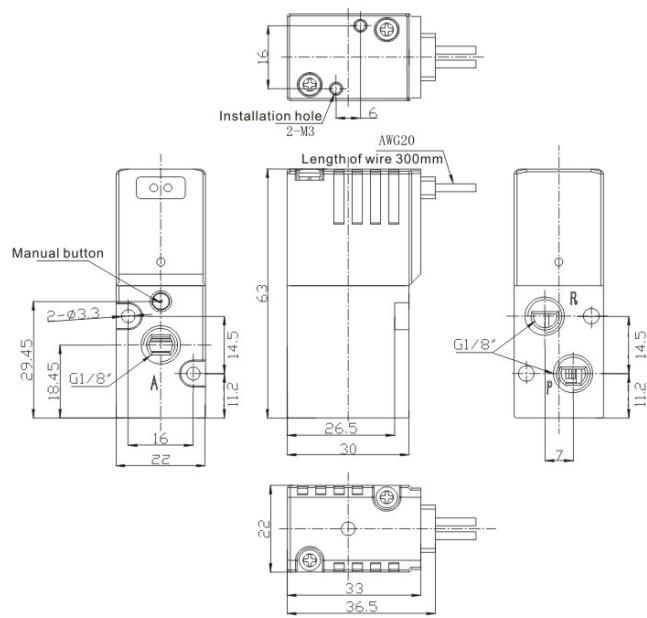


No.	Description	Material	No.	Description	Material
1	Solenoid Coil	Resin	10	Valve Body	Aluminum
2	Spring	S.S	11	Back cover	Resin
3	Plunger	Electromagnetic stainless steel	12	Screw	S.S
4	O-ring	NBR	13	O-ring	NBR
5	Base	POM	14	O-ring	NBR
6	Fixing pin	S.S	15	Spring	S.S
7	Manual Lever	POM	16	Piston rod	Aluminum
8	O-ring	NBR	17	O-ring	NBR
9	Spring	S.S	18	SEAL	NBR

3PA119 Drawing



3PA219 Drawing



**PREMIER QUALITY
GLOBAL REPUTATION**

XINGYU ELECTRON(NINGBO)CO.LTD
www.xyelectron.com



| 4V Series Valve

- Sliding column structure,
- Good sealing and sensitive response
- With Manual Lever ,easy to install and test
- Variety of standard voltages are available
valve group can be integrated with the base
to save installation space



4V Series Valve

4V100



4V200



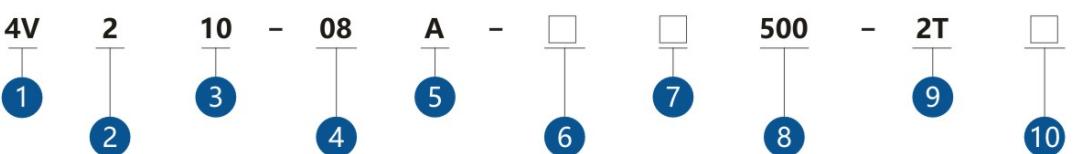
4V400



4V300



ORDERING CODE



1. Specification
4V : 5/2(5/3) Solenoid Valve
3V : 3/2 Solenoid Valve

2. Series
1 : 100 Series
2 : 200 Series
3 : 300 Series
4 : 400 Series

3. Coil & Position
10 : Single Coil Double Position
20 : Double Coil Double Position
30C : Double Coil Three Position Center Close type
30E : Double Coil Three Position Center Exhaust type
30P : Double Coil Three Position Center Pressure type

4. Pipe Size
M5 : M5 100 Series
06 : 100/200 Series
08 : 200/300 Series
10 : 300/400 Series
15 : 400 Series

5. Voltage
A: AC220V
B: DC24V
C: AC110V
D: DC12V
E: AC24V

6. Wire connection
No symbol : Standard terminal type
W : Lead Type
F : Explosion-proof type

7. Thread type
Blank: G
R: RC
N: NPT

8. Wire Length
500mm
Customized

9. Valve quantity
1T: one valve manifold
.....
20T: twenty valves manifold

10. Manifold thread type
Blank: G
R: RC
N: NPT

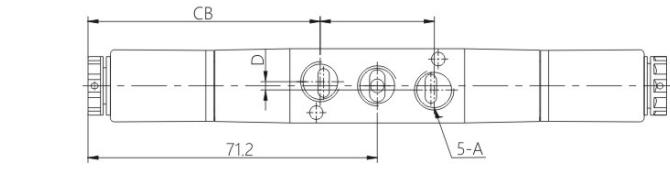
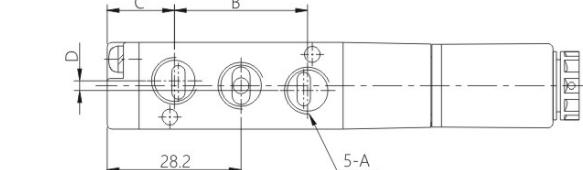
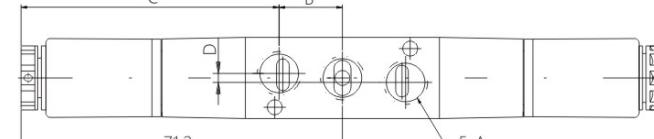
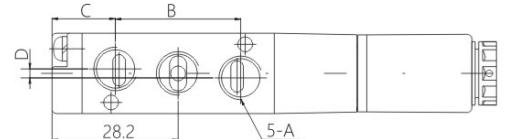
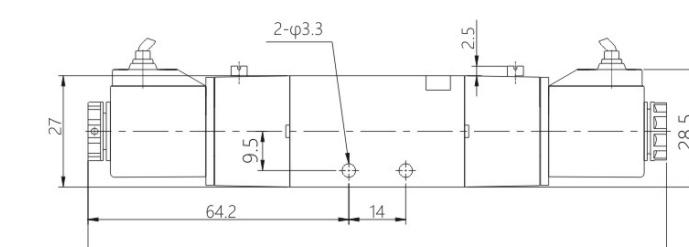
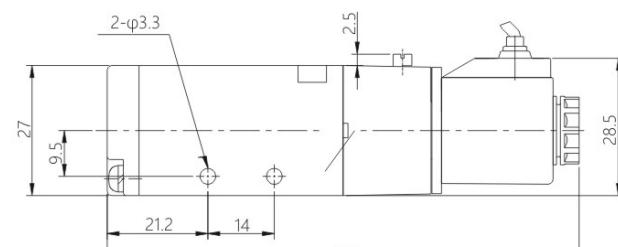
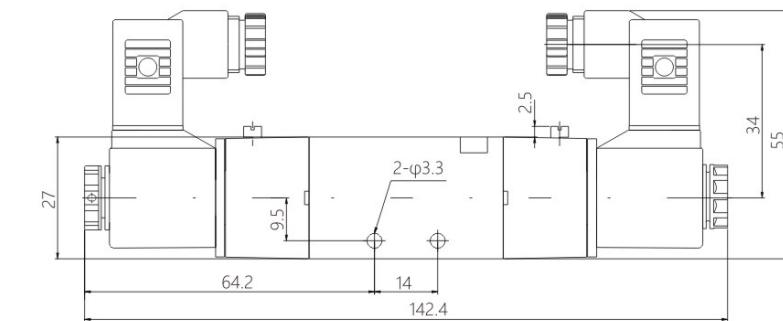
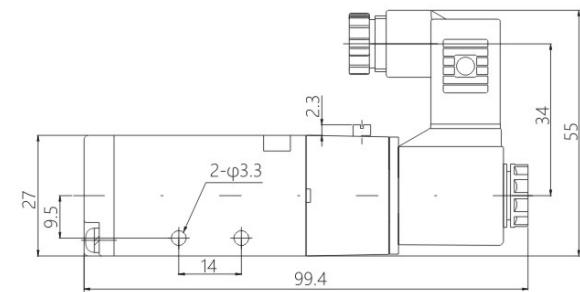
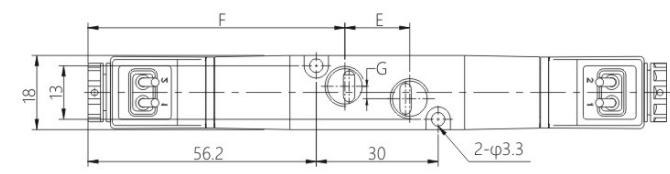
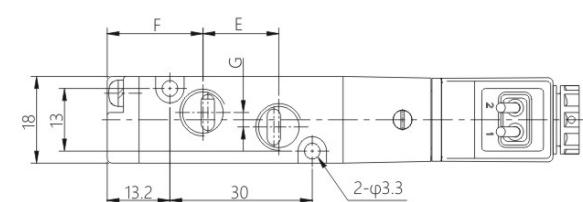
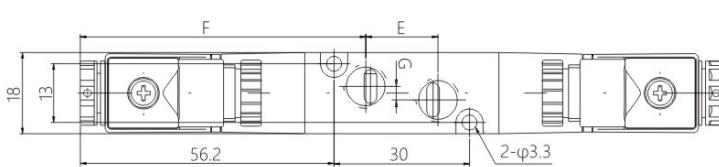
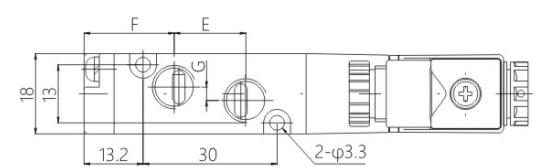
Specification

4V 5 Port Valve Specification				
Item No.	4V100-M5/06	4V200-06/08	4V300-08/10	4V400-10/15
Working Pressure MPa	0.15 - 0.8			
Working Medium	Compressed Air (filtered by 40μm filter screen)			
Ambient Temp. °C	Regular type :-5 to 50°C (but not frozen) High-temperature version :-5 to 150°C (but not frozen)			
Connection Port	M5: Input=Output=Exhaust=M5 06: Input=Output=Exhaust=1/8" 08: Input=Output=Exhaust=1/4" 10: Input=Output=Exhaust=3/8"	06: Input=Output=Exhaust=1/8" 08: Input=Output=1/4, Exhaust=1/8" 10: Input=Output=3/8, Exhaust=1/4" 15: Input=Output=Exhaust=1/2"	08: Input=Output=Exhaust=1/4" 10: Input=Output=3/8, Exhaust=1/4" 15: Input=Output=Exhaust=1/2"	
Working Type	Pilot type			
Max. Pressure MPa	1.2			
Max. Frequency Hz	Two Position Five Way Two Position Five Way	5	5	4
Effective Cross-Sectional Area mm²	Three Position Five Way Three Position Five Way	M5: 5.5 / 06: 12 M5: 5 / 06: 9	06: 14 / 08: 16 12	08: 25 / 10: 30 18
Terminal	Standard terminal type / Lead type / Explosion-proof type			
Coil Rated Voltage V	DC AC	12 / 24 24 / 110 / 220	DC ± 10% AC ± 15%	
Voltage Tolerance				
Power Consumption W/V/A	Coil/ Voltage 100 Coil 200 Coil	DC12 2.8 3.0	DC24 5.0 5.5	AC24 AC110 AC220
Protection Class	IP65			

3V 3 Port Valve Specification				
Item No.	3V100-M5/06	3V200-06/08	3V300-08/10	3V400-10/15
Working Pressure MPa	0.15 - 0.8			
Working Medium	Compressed Air (filtered by 40μm filter screen)			
Ambient Temp. °C	Regular type :-5 to 50°C (but not frozen) High-temperature version :-5 to 150°C (but not frozen)			
Connection Port	M5: Input=Output=Exhaust=M5 06: Input=Output=Exhaust=1/8" 08: Input=Output=Exhaust=1/4" 10: Input=Output=Exhaust=3/8"	06: Input=Output=Exhaust=1/8" 08: Input=Output=Exhaust=1/4" 10: Input=Output=Exhaust=3/8" 15: Input=Output=Exhaust=1/2"	08: Input=Output=Exhaust=1/4" 10: Input=Output=Exhaust=3/8" 15: Input=Output=Exhaust=1/2"	
Working Type	Pilot type			
Max. Pressure MPa	1.2			
Max. Frequency Hz	5	5	5	3
Effective Cross-Sectional Area mm²	M5: 5 / 06: 12	06: 14 / 08: 16	08: 25 / 10: 30	10: 42 / 15: 50
Terminal	Standard terminal type / Lead type / Explosion-proof type			
Coil Rated Voltage V	DC AC	12 / 24 24 / 110 / 220	DC ± 10% AC ± 15%	
Voltage Tolerance				
Power Consumption W/V/A	Coil/ Voltage 100 Coil 200 Coil	AC12 2.8 3.0	DC24 5.0 5.5	AC24 AC110 AC220
Protection Class	IP65			

4V Series Valve

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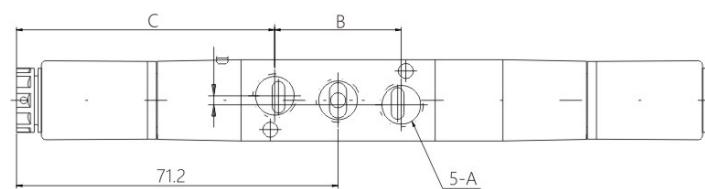
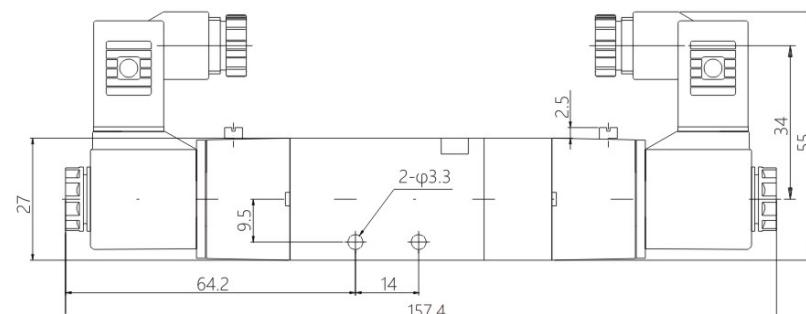
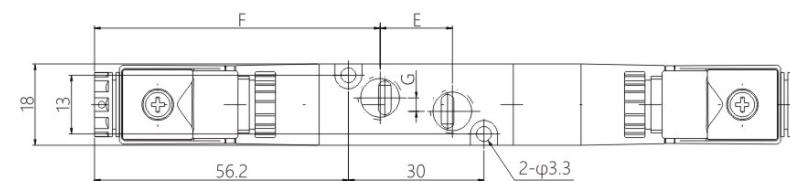


Model	A	B	C	D	E	F	G
4V110-M5	M5×0.8	27	14.7	0	14	21.2	0
4V110-06	G1/8	28	14.2	1	16	20.2	3

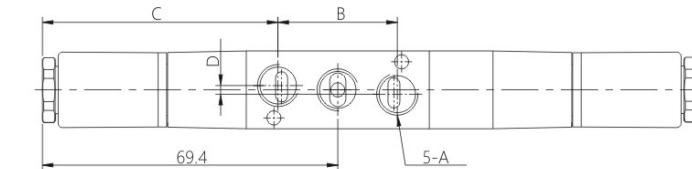
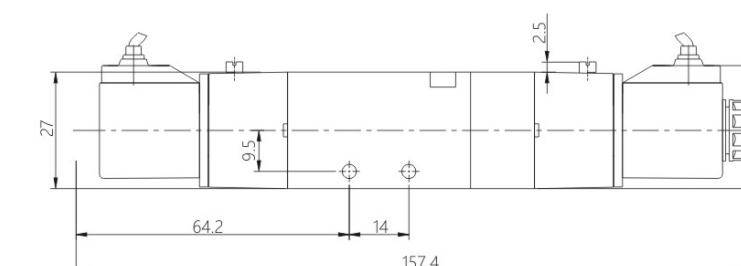
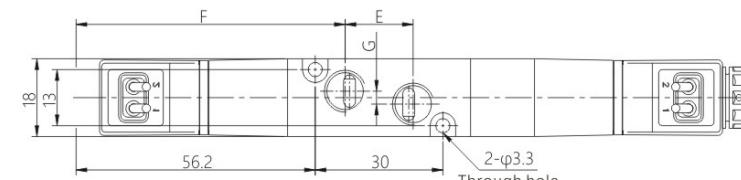
Model	A	B	C	D	E	F	G
4V120-M5	M5×0.8	27	57.7	0	14	64.3	0
4V120-06	G1/8	28	57.2	1	16	63.2	3

Model	A	B	C	D	E	F	G
4V110-M5	M5×0.8	27	14.7	0	14	21.2	0
4V110-06	G1/8	28	14.2	1	16	20.2	3

Model	A	B	C	D	E	F	G
4V120-M5	M5×0.8	27	57.7	0	14	64.3	0
4V120-06	G1/8	28	57.2	1	16	63.2	3



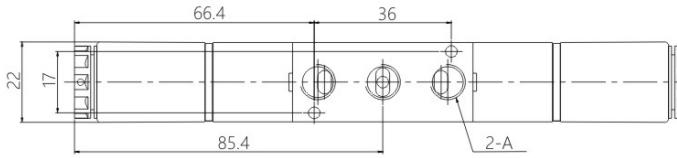
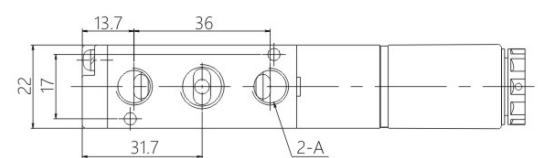
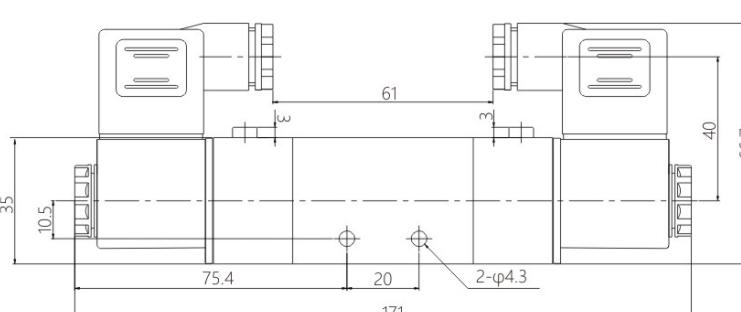
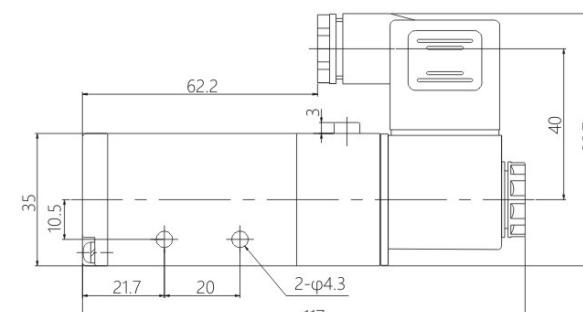
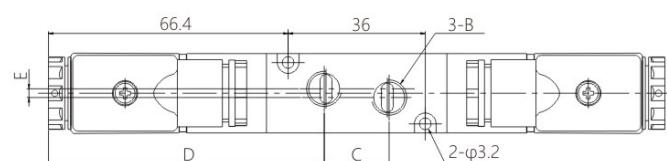
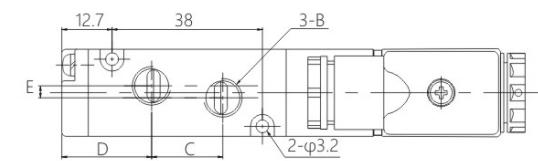
Model	A	B	C	D	E	F	G
4V130-M5	M5×0.8	27	57.7	0	14	64.3	0
4V130-06	G1/8	28	57.2	1	16	63.2	3



Model	A	B	C	D	E	F	G
4V130-M5	M5×0.8	27	57.7	0	14	64.3	0
4V130-06	G1/8	28	57.2	1	16	63.2	3

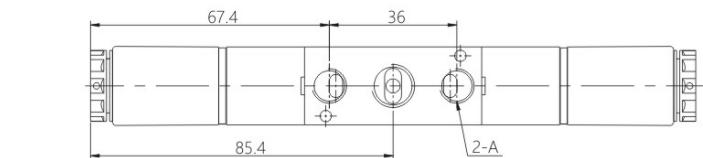
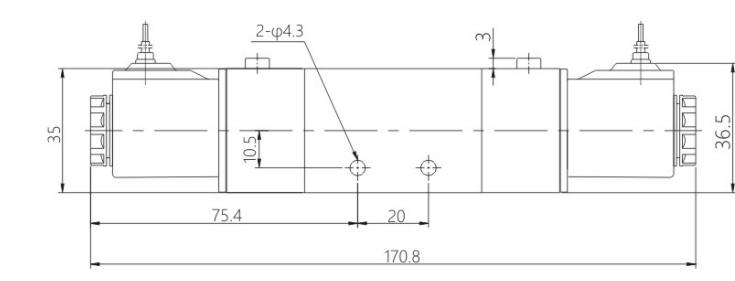
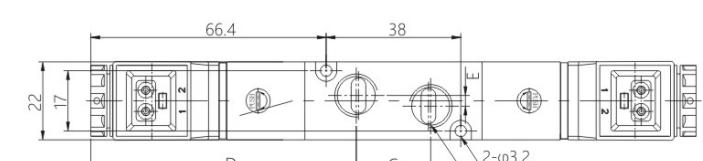
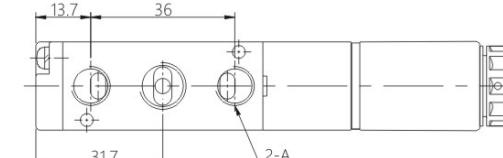
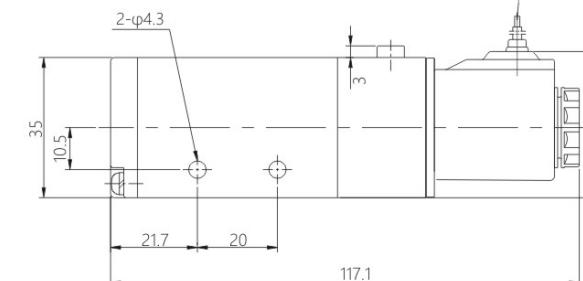
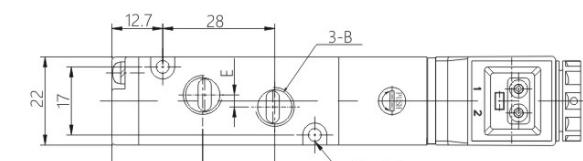
4V Series Valve

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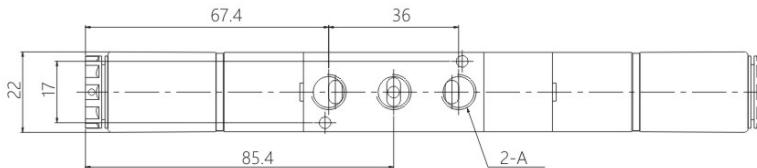
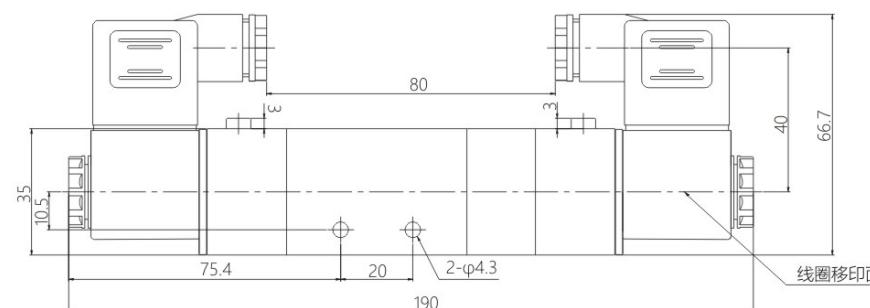
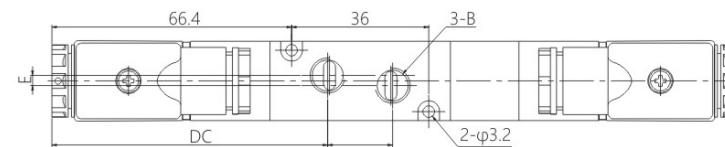
Model	A	B	C	D	E
4V210-06	G1/8	G1/8	18	22.7	0
4V210-08	G1/8	G1/4	21	21.2	3

Model	A	B	C	D	E
4V220-06	G1/8	G1/8	18	76.4	0
4V220-08	G1/8	G1/4	21	74.9	3

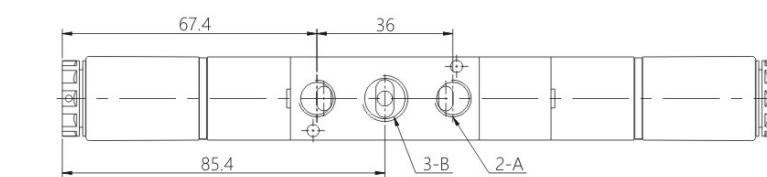
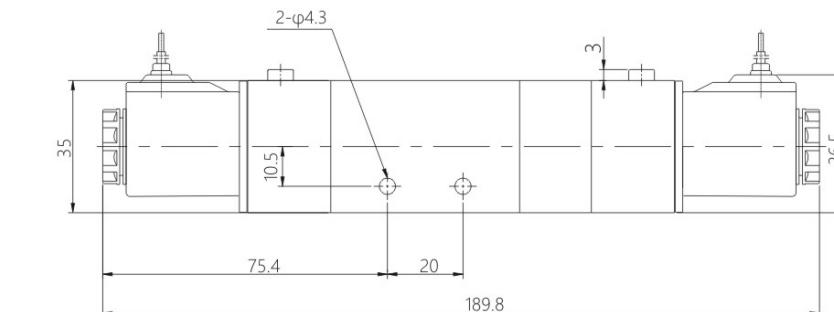
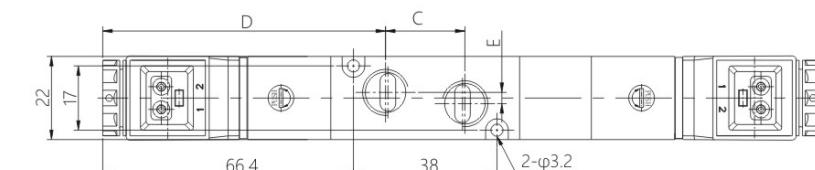


Model	A	B	C	D	E
4V210-06	G1/8	G1/8	18	22.7	0
4V210-08	G1/8	G1/4	21	21.2	3

Model	A	B	C	D	E
4V220-06	G1/8	G1/8	18	76.4	0
4V220-08	G1/8	G1/4	21	74.9	3



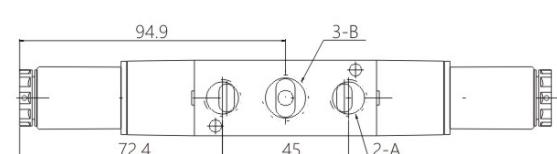
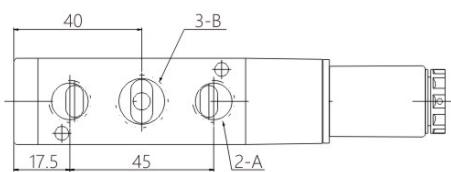
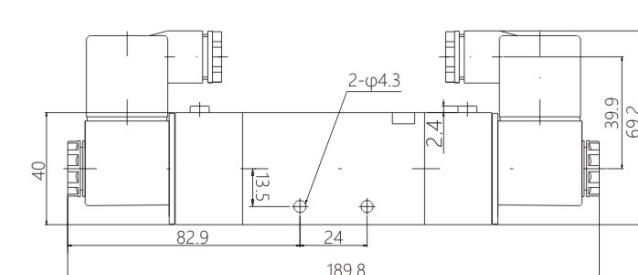
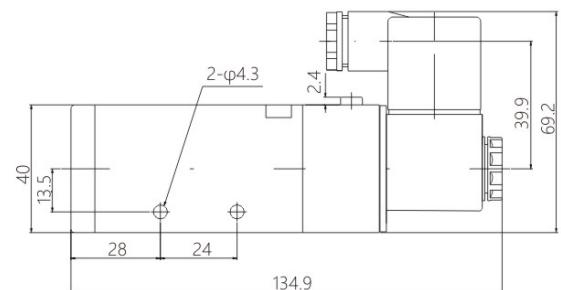
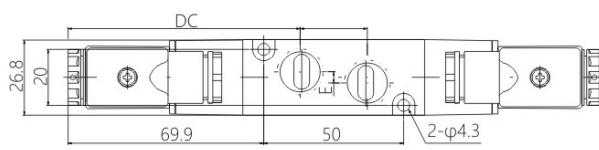
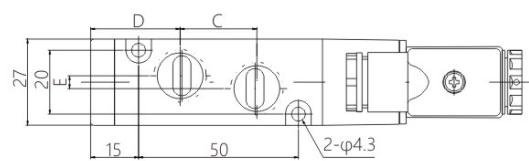
Model	A	B	C	D	E
4V230-06	G1/8	G1/8	18	76.4	0
4V230-08	G1/8	G1/4	21	74.9	3



Model	A	B	C	D	E
4V230-06	G1/8	G1/8	18	76.4	0
4V230-08	G1/8	G1/4	21	74.9	3

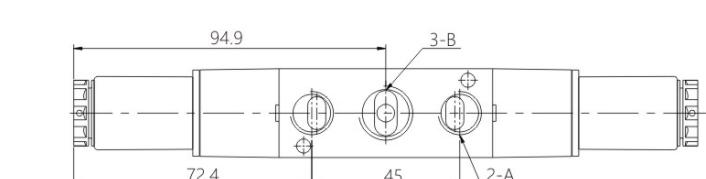
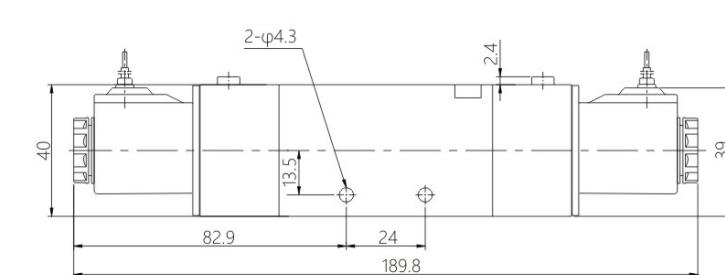
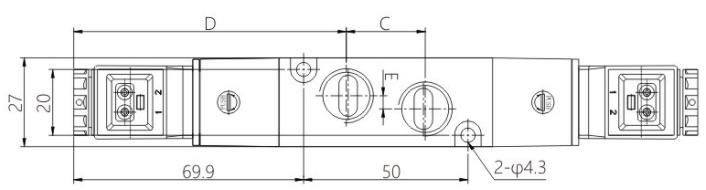
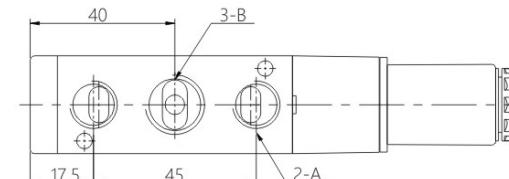
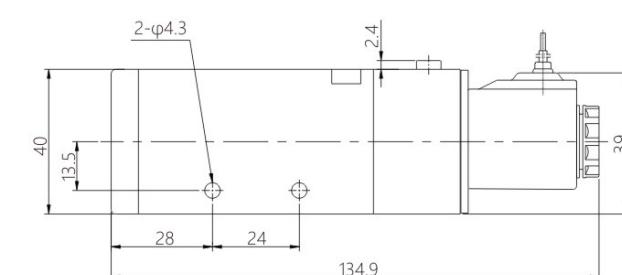
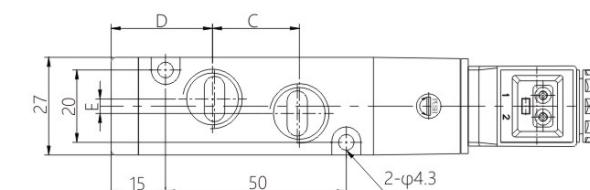
4V Series Valve

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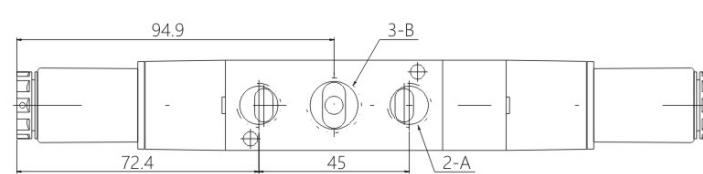
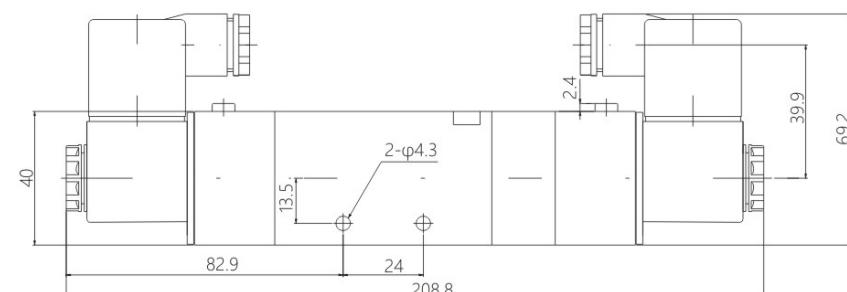
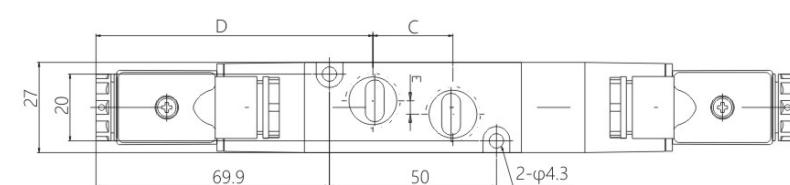
Model	A	B	C	D	E
4V310-08	G1/4	G1/4	22	29	0
4V310-10	G1/4	G3/8	24	28	4

Model	A	B	C	D	E
4V320-08	G1/4	G1/4	22	83.9	0
4V320-10	G1/4	G3/8	24	82.9	4

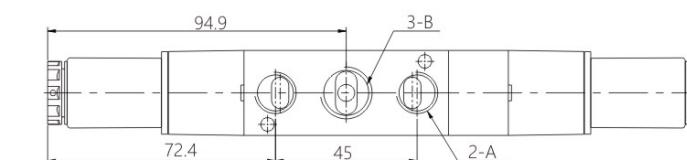
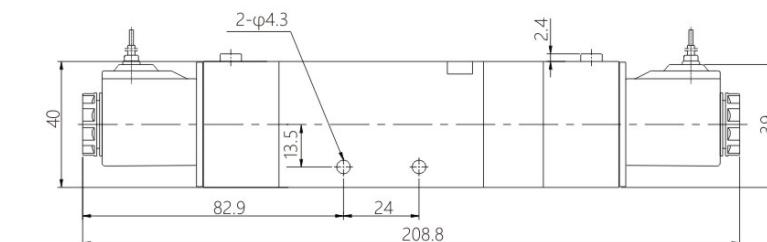
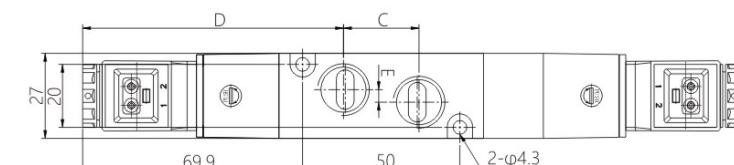


Model	A	B	C	D	E
4V310-08	G1/4	G1/4	22	29	0
4V310-10	G1/4	G3/8	24	28	4

Model	A	B	C	D	E
4V320-08	G1/4	G1/4	22	83.9	0
4V320-10	G1/4	G3/8	24	82.9	4



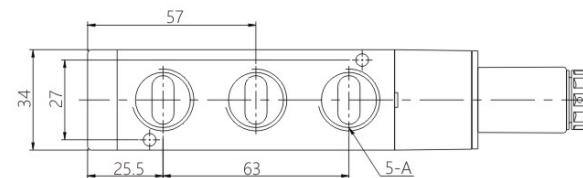
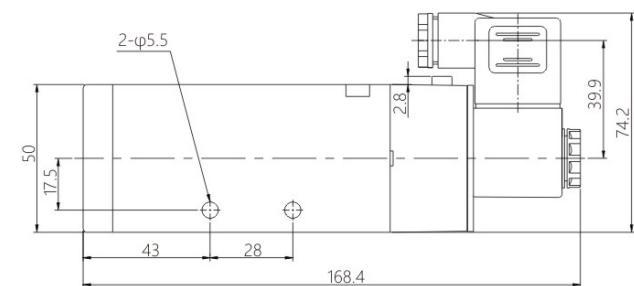
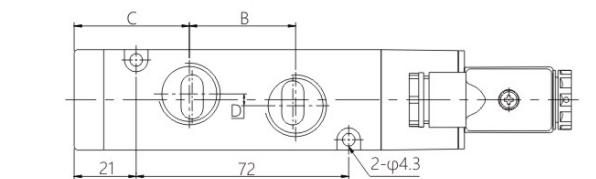
Model	A	B	C	D	E
4V330-08	G1/4	G1/4	22	83.9	0
4V330-10	G1/4	G3/8	24	82.9	4



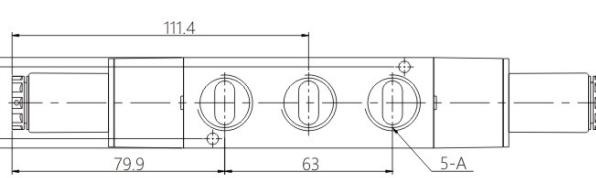
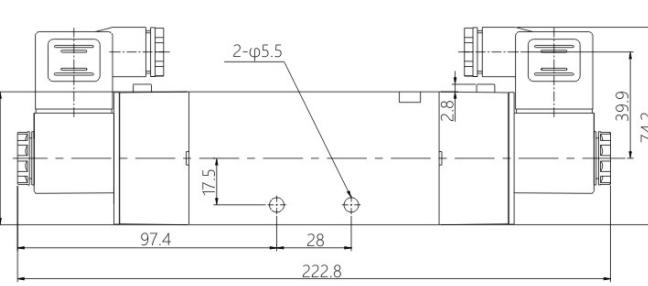
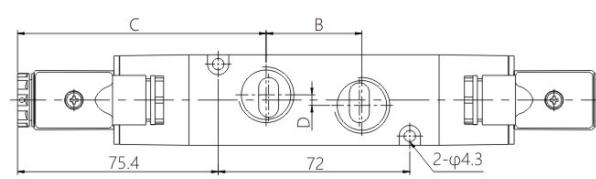
Model	A	B	C	D	E
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4V330-10	G1/4	G3/8	24	82.9	4

4V Series Valve

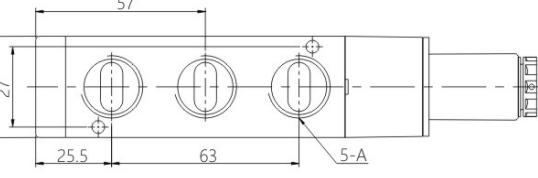
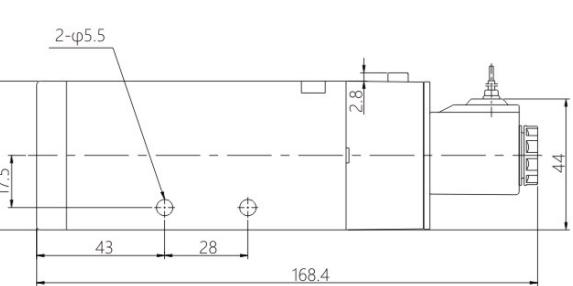
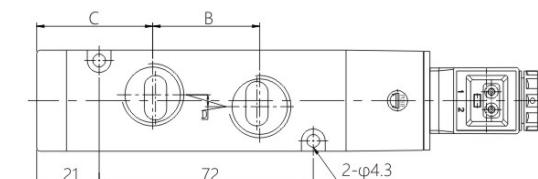
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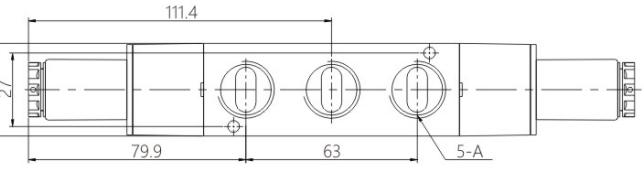
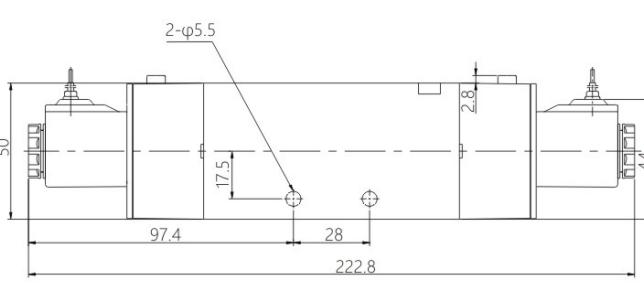
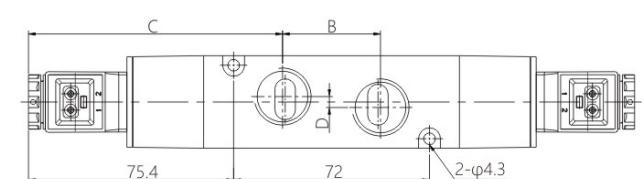
Model	A	B	C	D
4V410-15	G1/2	36	39	4



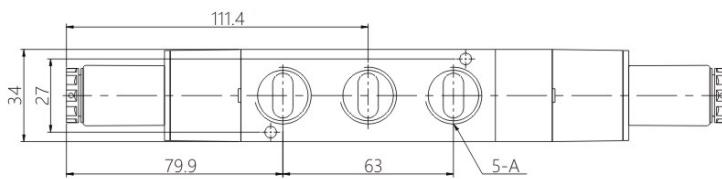
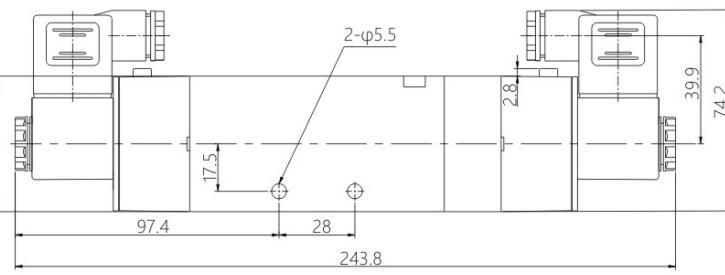
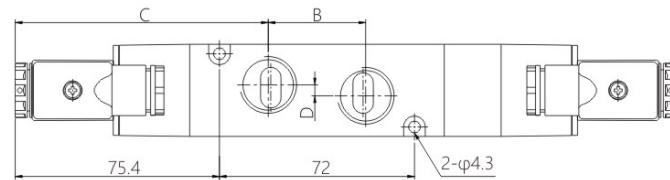
Model	A	B	C	D
4V410-15	G1/2	36	93.4	4



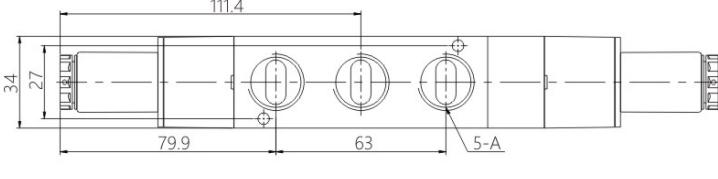
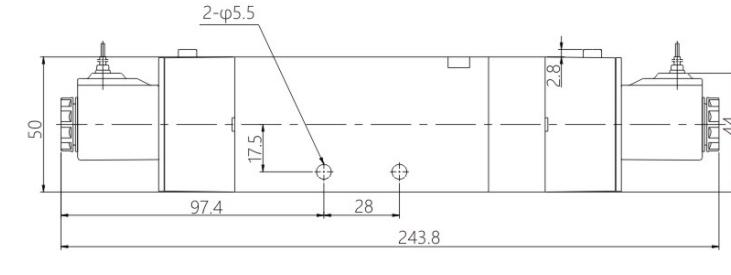
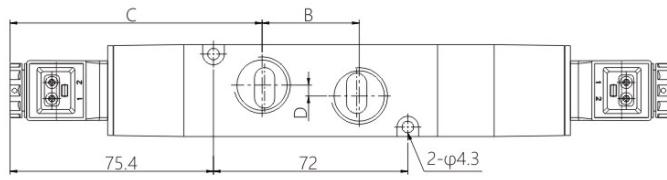
Model	A	B	C	D
4V410-15	G1/2	36	39	4



Model	A	B	C	D
4V410-15	G1/2	36	93.4	4



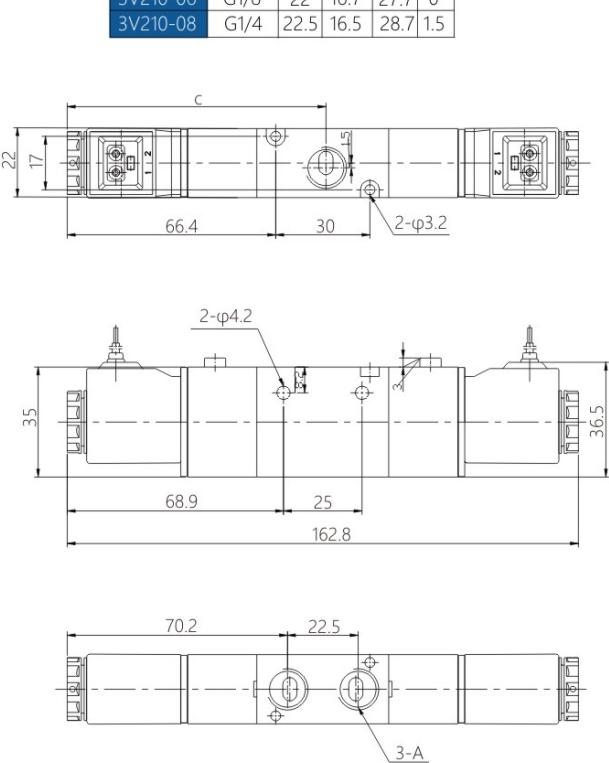
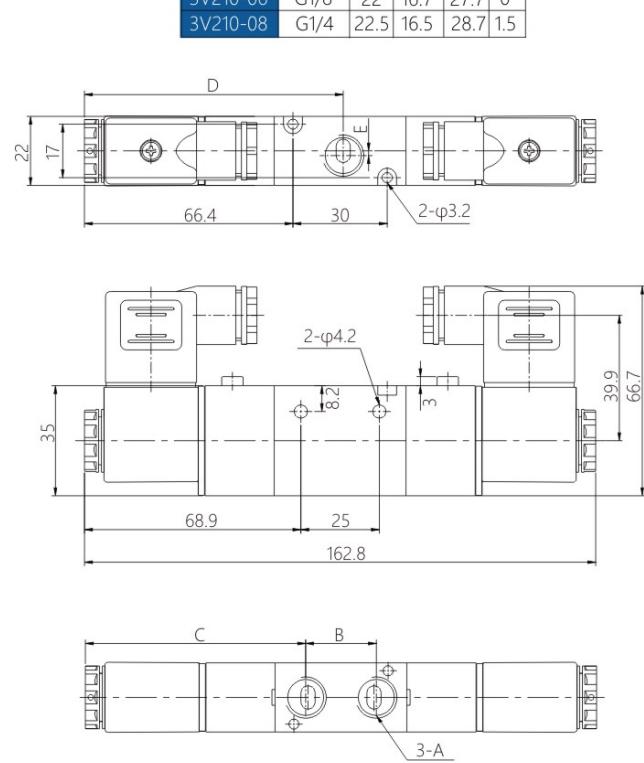
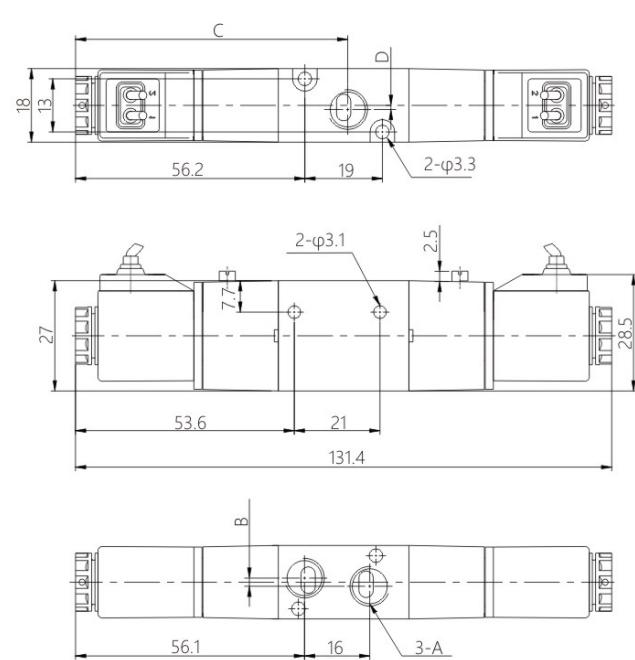
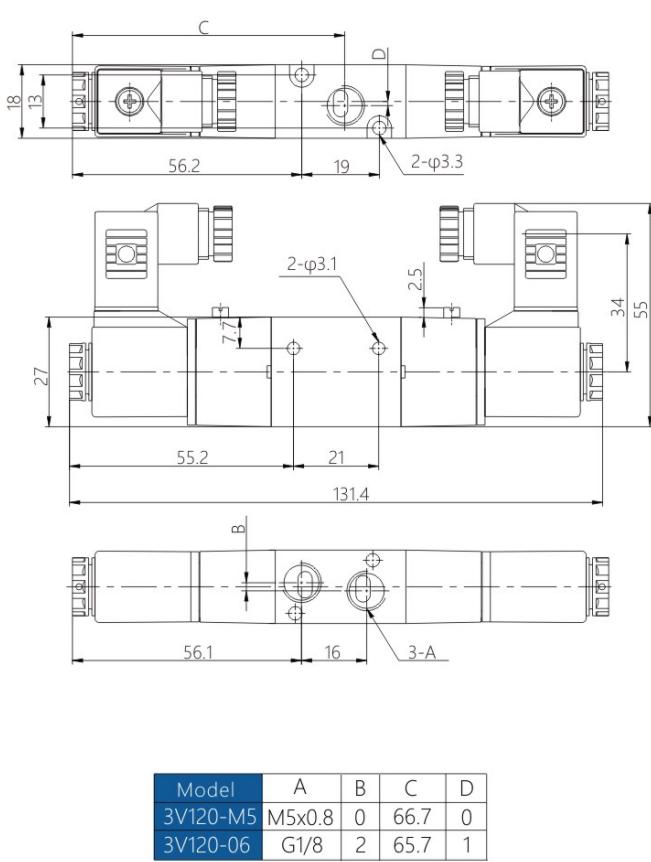
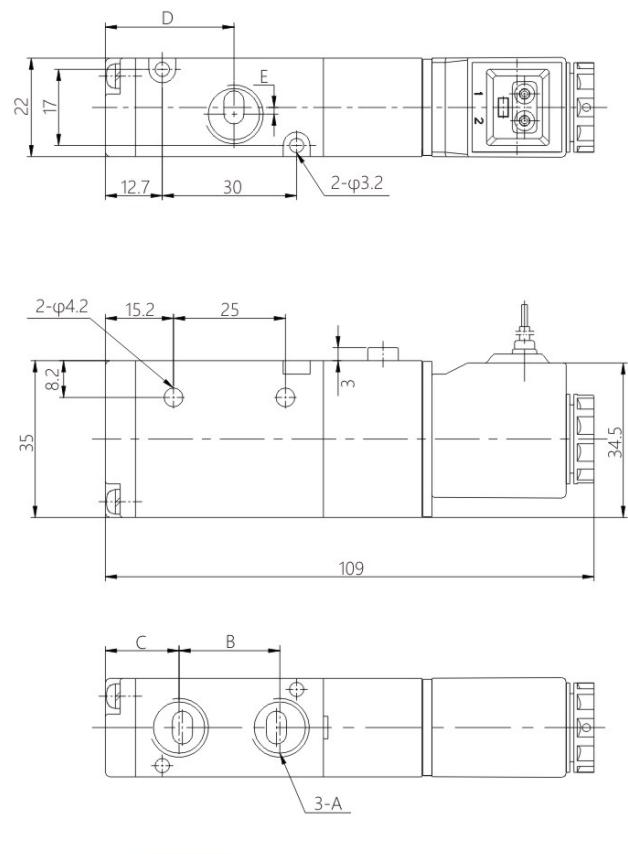
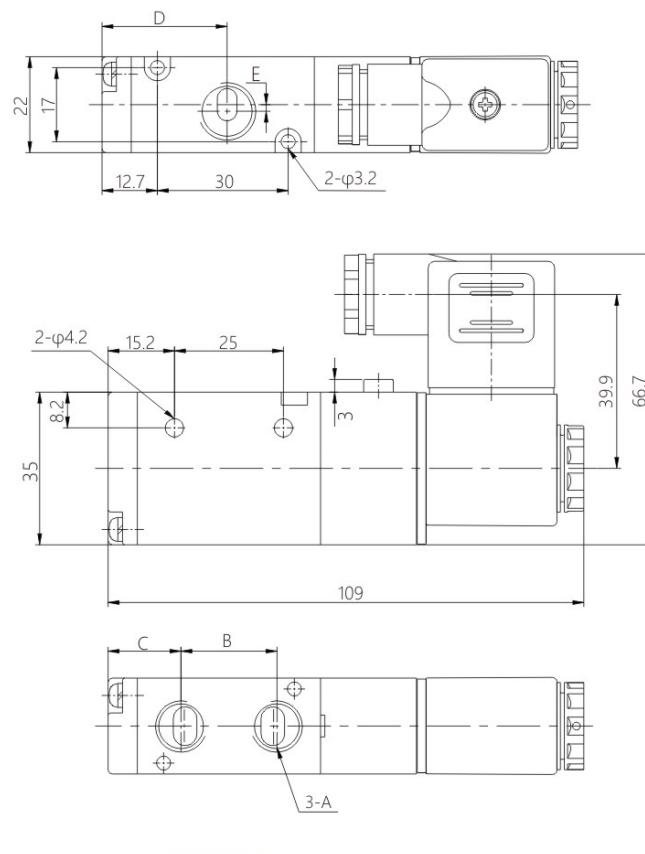
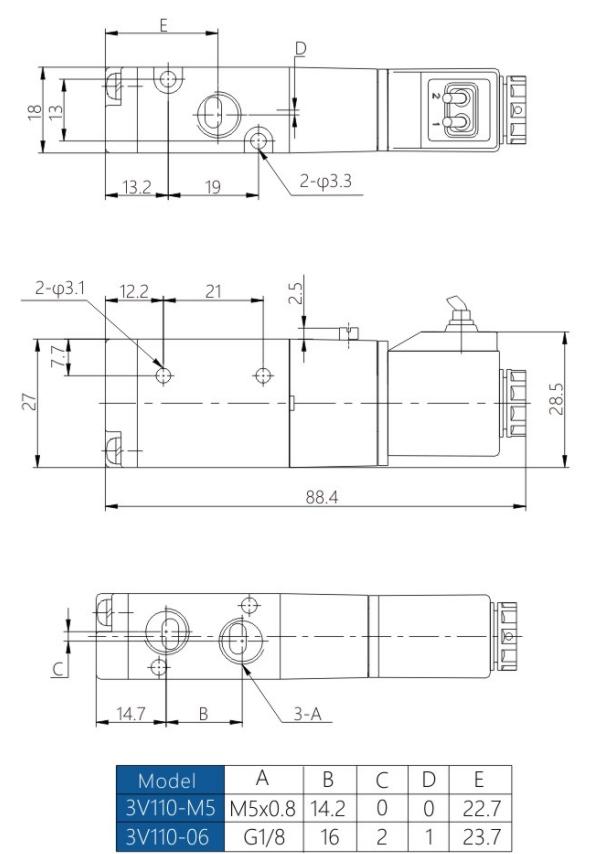
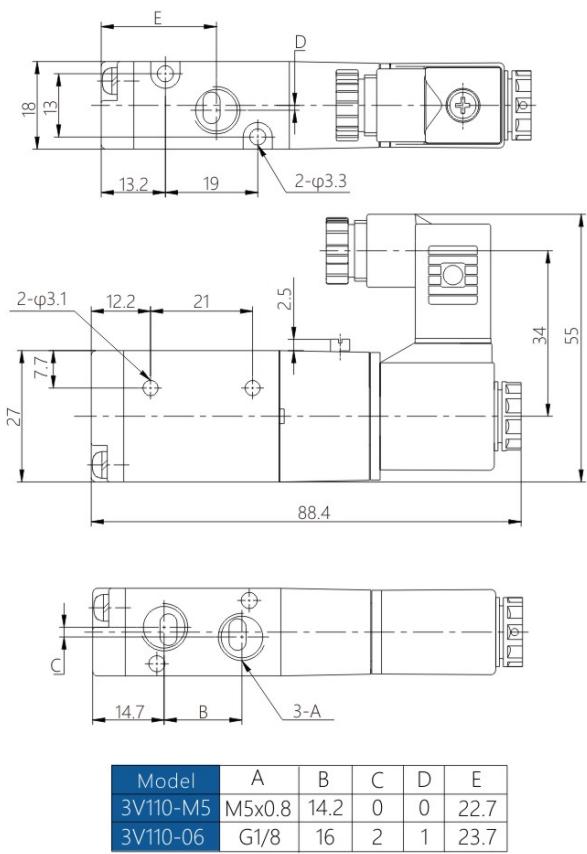
Model	A	B	C	D
4V410-15	G1/2	36	93.4	4



Model	A	B	C	D
4V410-15	G1/2	36	93.4	4

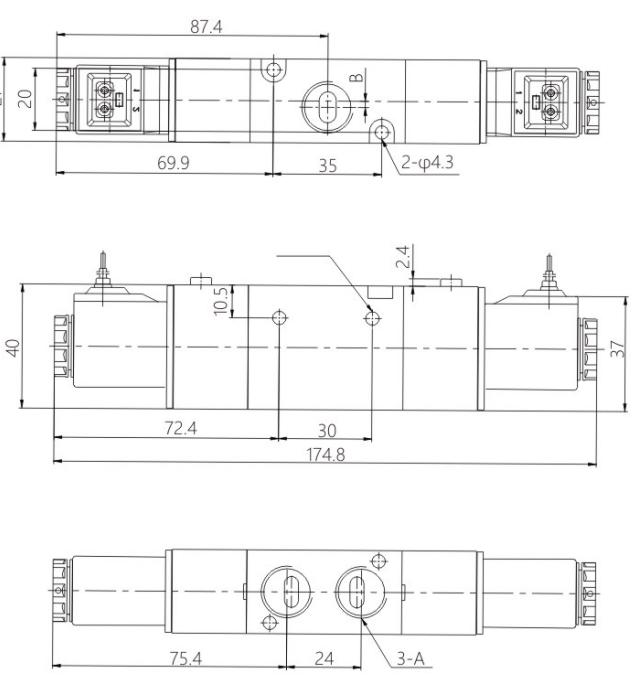
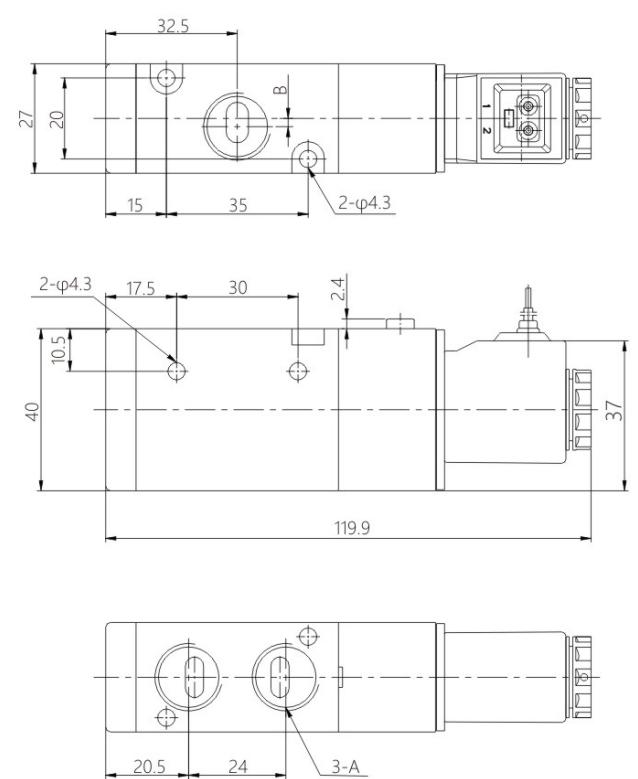
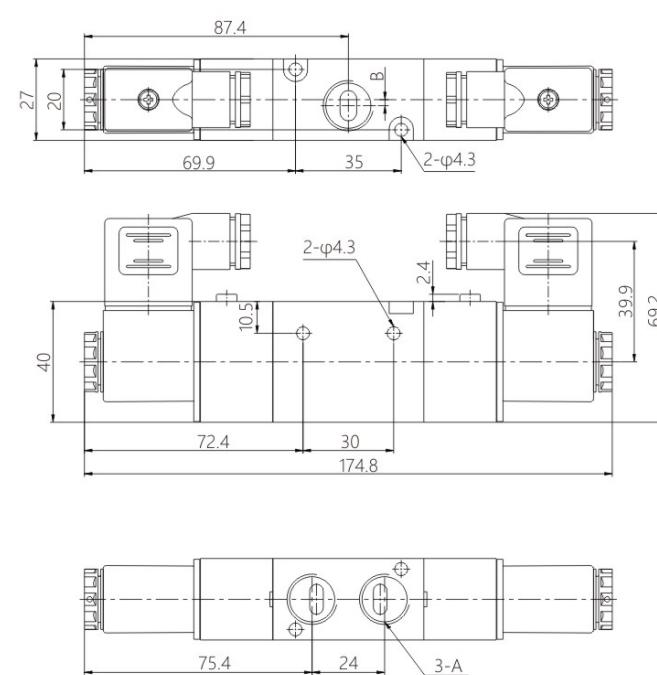
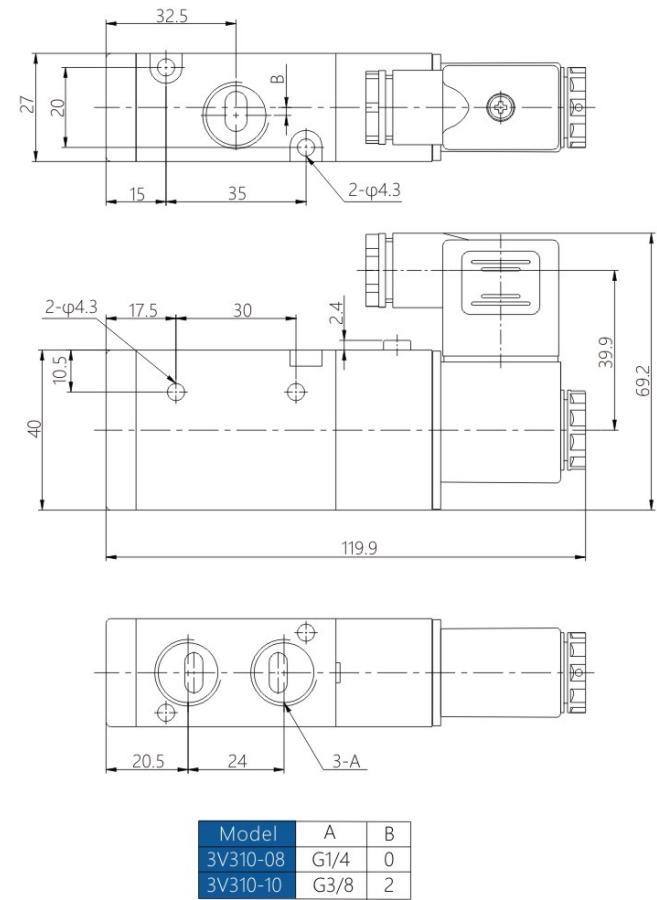
4V Series Valve

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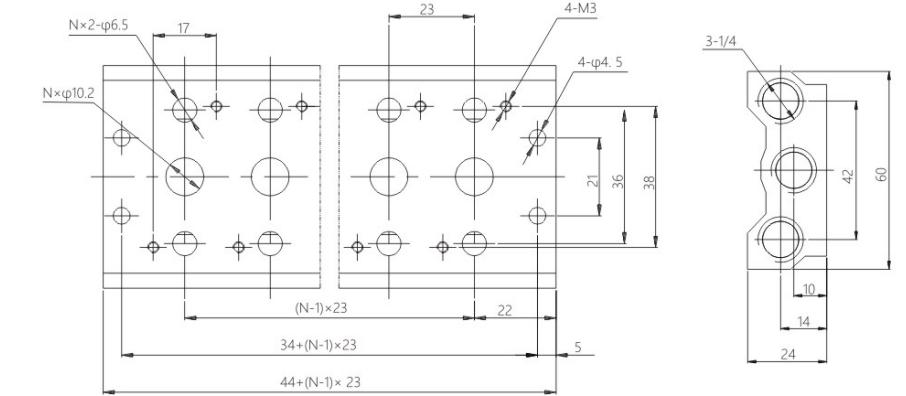
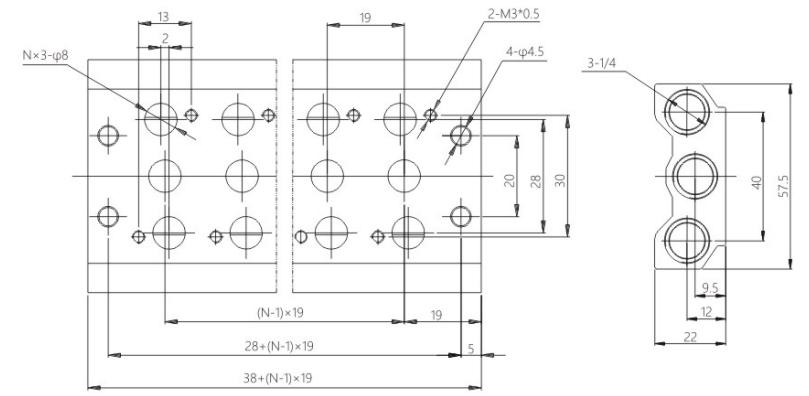


4V Series Valve

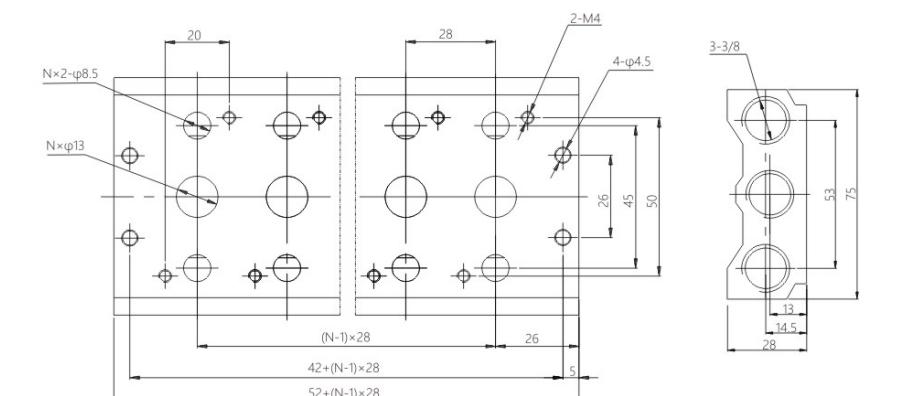
 XINGYU ELECTRON



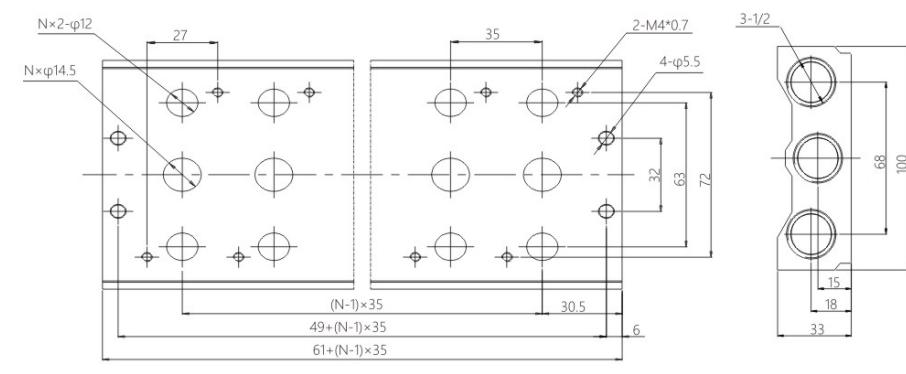
4V100 Series Manifold



4V300 Series Manifold



4V400 Series Manifold



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ERV High precision Pressure Regulator

- Digital Pressure Display
- Multi channel air pressure,It has 6 different air pressure selective outputs
- Multiple options,There are 4 pressure units to choose
- Industry innovation,The product performance is superior to similar products in the industry



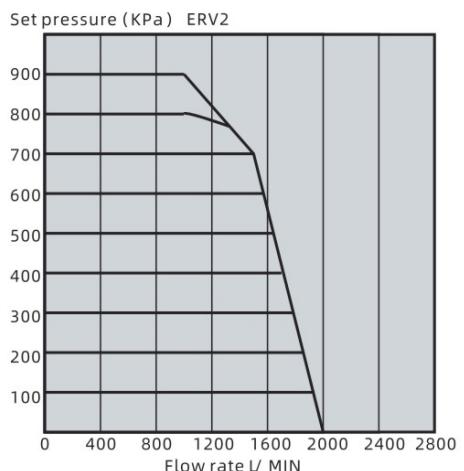
ERV2



Features

1. Small size, lightweight design.
2. Low consumption.
3. High efficiency and fast response.
4. IP65.

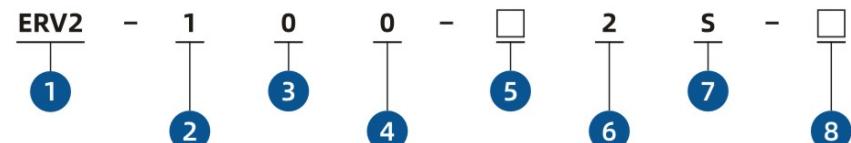
Flow Characteristics



Specification

Item No.	ERV2-5
Min. input pressure	Set Pressure + 0.1MPa
Max. input pressure	1MPa
Setting Range	0~0.9MPa
Power Supply	DC24V ±10%
Current	0.12A or less
Nonlinear	1%F.S.
Hysteresis	0.5%F.S.
Repeatability	0.5%F.S.
Working Temp.	0~50°C
Protection Class	IP65

Ordering Code



1. Series
ERV1
ERV2
ERV3

2. Setting Range
1: 0.1 Mpa
1: 0.9 Mpa

3. Voltage
0: DC24V

4. Output Signal
0: Without Feedback

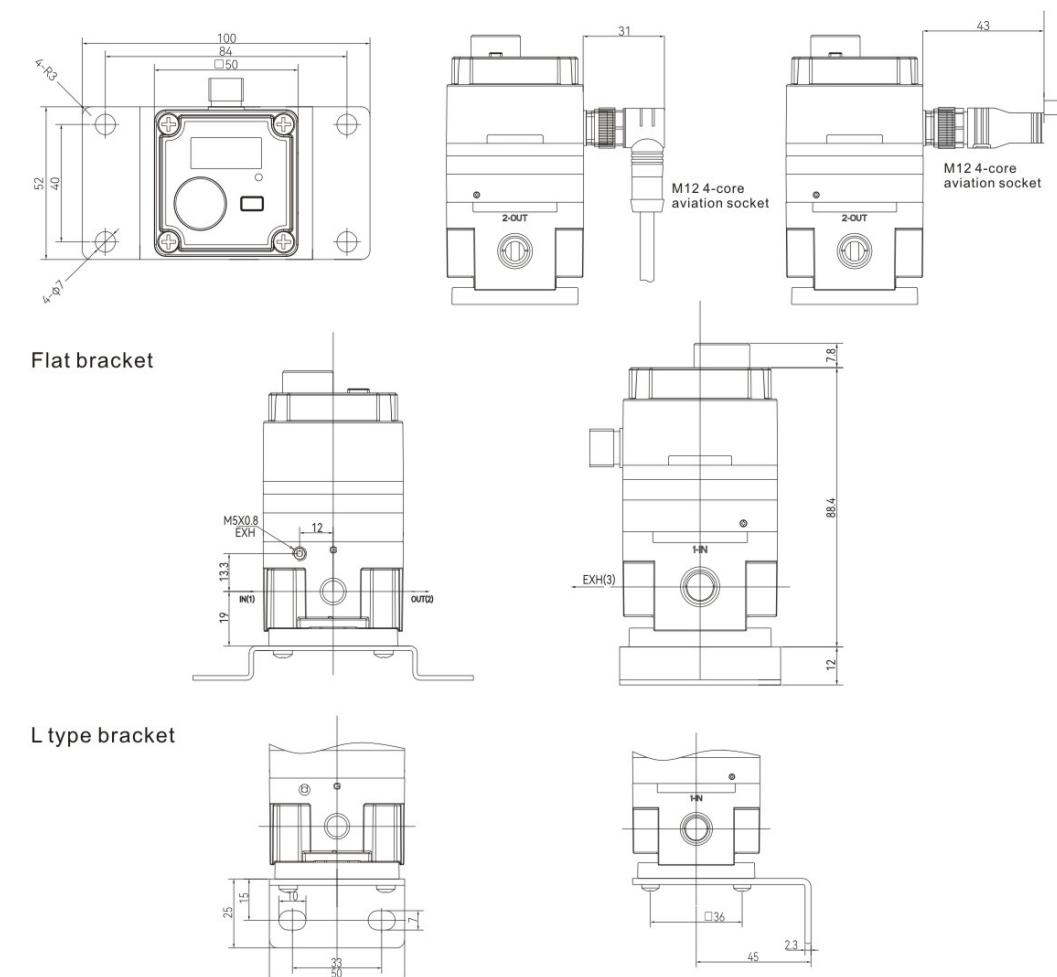
5. Thread Type
Blank: Rc
N: NPT
F: G

6. Port Size
1: 1/8"(1 Type)
2: 1/4"(1,2Type)
3: 3/8"(2,3Type)
4: 1/2"(3Type)

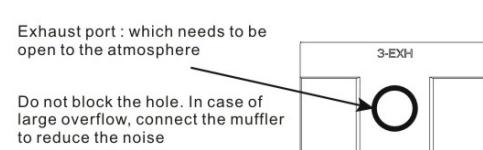
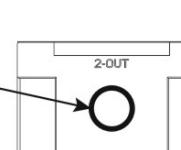
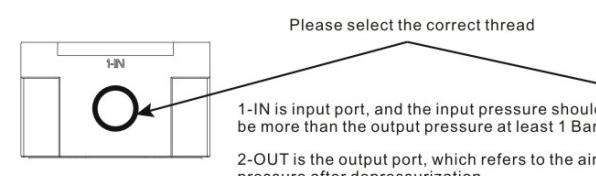
7. Cable Type
S: Straight 3m Cable
L: Right Angle 3m Cable
N: No Cable

8. Bracket
Blank: No Bracket
B: Flat Bracket
C: L type Bracket

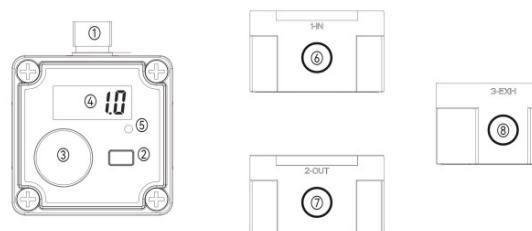
ERV2 Dimensions (UNIT:mm)



Air Connection

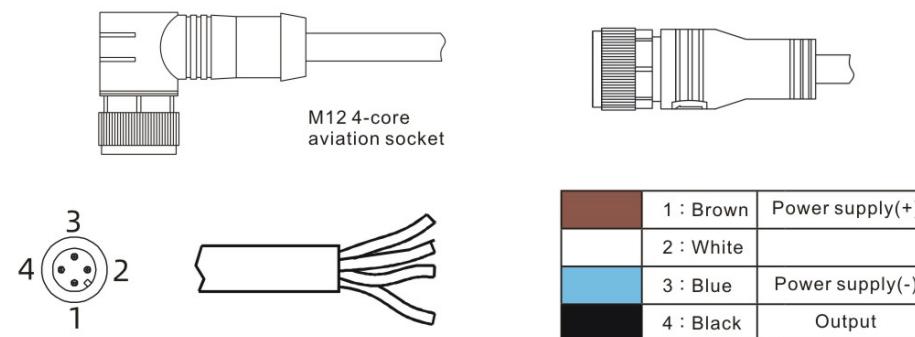


Display



No.	Name	No.	Name
①	M12 Cable	⑤	Mode display LED
②	Set Key	⑥	Input Port
③	Knob	⑦	Output Port
④	Display	⑧	Exhaust Port

Power Connection



Panel Introduction

Part	Remark
Display	Pressure value display, setting display
Status indicator	Constant light- adjustable mode 0, flashing- normal pressure mode 1-6
Knob	Counter clockwise to decrease, clockwise to increase
Set Key	In the normal mode, setting bottom is for circuit switch

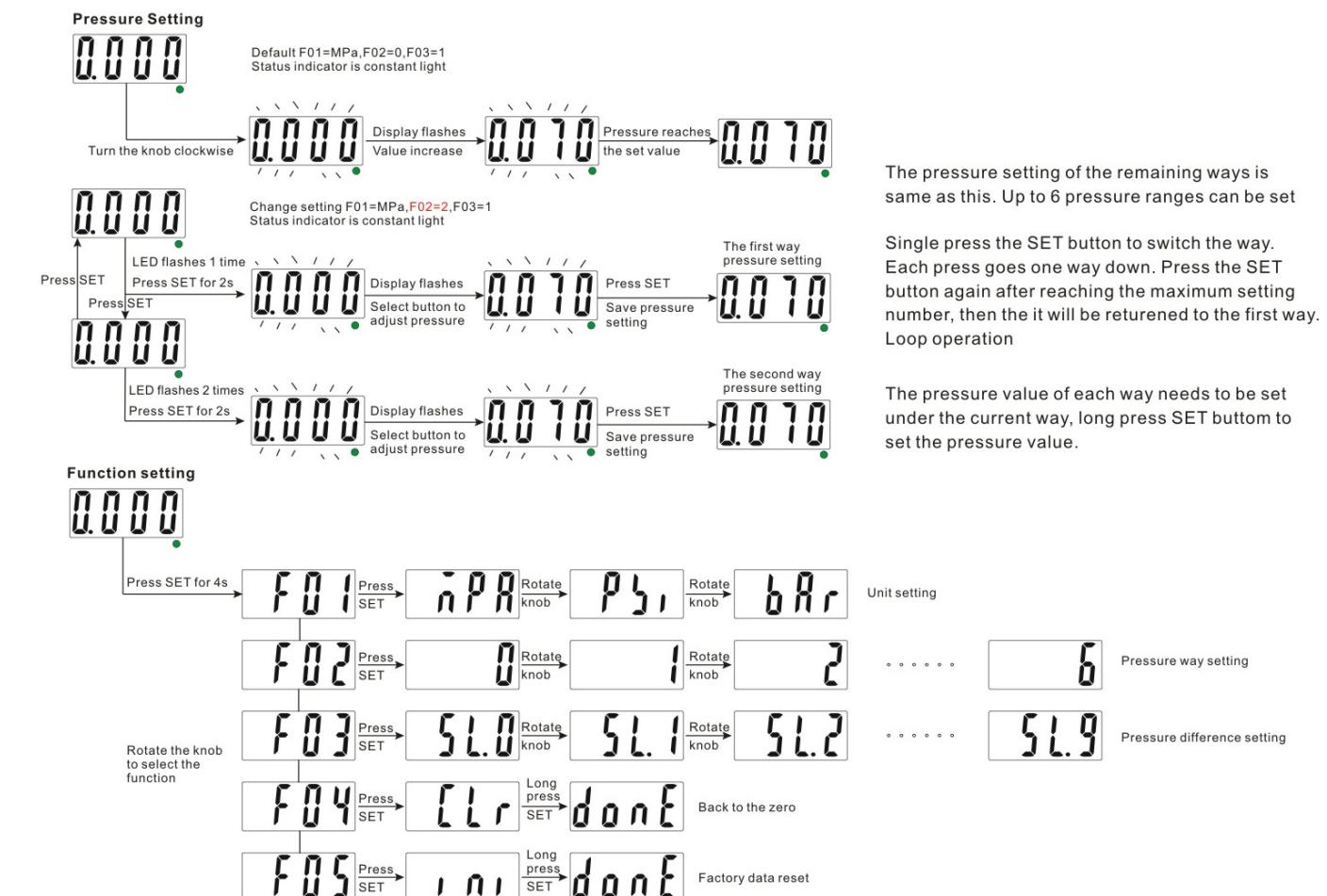
Status indicator introduction

Label	Description	Remark
Constant light	Adjustable mode 0	The pressure value can be adjusted directly through the knob
Intermittent flashing (1 time)	Normal pressure mode 1	1 way pressure output, switch pressure cyclically through SET key
Intermittent flashing (2 time)	Normal pressure mode 2	2 way pressure output, switch pressure cyclically through SET key
Intermittent flashing (3 time)	Normal pressure mode 3	3 way pressure output, switch pressure cyclically through SET key
Intermittent flashing (4 time)	Normal pressure mode 4	4 way pressure output, switch pressure cyclically through SET key
Intermittent flashing (5 time)	Normal pressure mode 5	5 way pressure output, switch pressure cyclically through SET key
Intermittent flashing (6 time)	Normal pressure mode6	6 way pressure output, switch pressure cyclically through SET key

Knob setting introduction

Label	Description
Turn left slowly	Decrease by 1 unit
Turn right slowly	Increase by 1 unit
Turn left quickly	Quickly reduce
Turn right quickly	Quickly increase

Software Introduction



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EPV SERIES Proportional Pressure Regulator

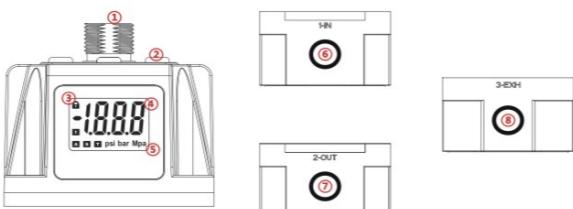
- ±0.2% control accuracy
- Max 3000L/min large flow output
- Real-time display of actual output pressure
- 1bar/5bar/9bar multi-range selection
- IP65 level, suitable for various working conditions



EPV



Technical Information



No	Name	No	Name
①	M12 aviation plug	⑤	Unit display
②	Water-proof key	⑥	Air supply port
③	Locking key	⑦	Air out port
④	Main display section	⑧	Air EXH port

Specification

Model	EPV1-1	EPV1-3	EPV1-5		
Min.supply Pressure	EPV2-1	EPV2-3	EPV2-5		
Max.supply Pressure	0.2MPa	Set pressure + 0.1MPa	1.0MPa		
Set Pressure Range					
Power Supply	0.005~0.1MPa	0.005~0.5MPa	0.005~0.9MPa		
Voltage	DC : 24V±10%				
Current	DC : 24V 0.12A or less				
Input Signal	Current Type	DC4~20mA, DC0~20mA			
Voltage Type	DC0~5V, DC0~10V				
Digital Signal	RS485-MODBUS				
Input Impedance	Current Type	250Ω or less			
Voltage Type	Approx6.5KΩ				
Output Signal	Analog Output	DC1-5V (load impedance : over 1KΩ) DC4-20mA (Load impedance : below 250Ω) Output precision within range of 1% F.S.			
Switch Output	NPN-OC output type:30mA PNP-OC output type:30mA				
Nonlinear					
Hysteresis	±1%F.S.				
Repeatability	0.5%F.S.				
Temperature Characteristic	±0.5%F.S.				
Display	Precision	±2%F.S.			
Division	1000 division				
Ambient Temperature	0~50°C				
Protection Class	IP65				
浪涌等级 (电源)	IEC 61000-4-5 (1000V)				

Ordering Code

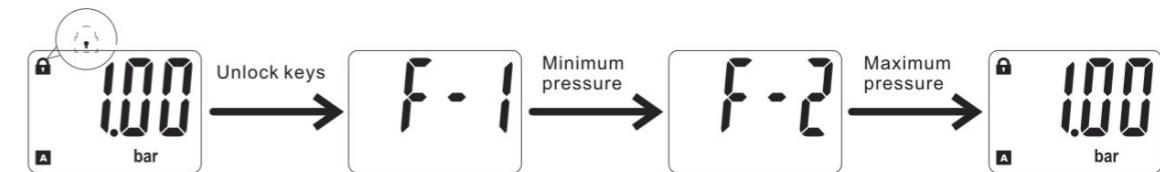
EPV2 - 5 0 3 1 - □ 2 L - □ 9

- | | | | |
|---|---|---|--|
| 1. Model
EPV1
EPV2
EPV3 | 4. Input
0: Current DC 4-20mA
1: Current DC 0-20mA
2: Voltage DC 0-5V
3: Voltage DC 0-10V | 6. Connection thread
BLANK : Rc
N : NPT
T : NPTF
F : G | 8. Cable connector
S: Straight 3m
L: Right angle 3m
N: no cable |
| 2. Range
1: 0.1MPa
3: 0.5MPa
5: 0.9MPa | 5. Output
1: Analog DC 1-5V
2: Switch NPN output
3: Switch PNP output
4: Analog: DC4-20mA | 7. Size
1: 1/8" (1 type)
2: 1/4" (1,2 type)
3: 3/8" (2,3 type)
4: 1/2" (3 type) | 9. Bracket
Blank: no bracket
B: flat bracket
C: L type bracket |
| 3. Voltage
0: DC 24V | MD:RS485 | EXH 口尺寸: EPV1: 1/8
EPV2: 1/4
EPV3: 1/2 | |

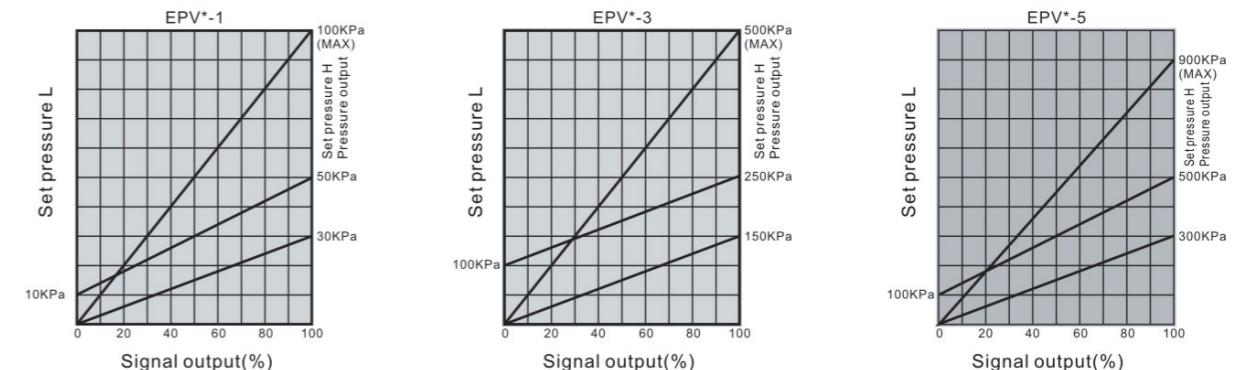
Wiring Method



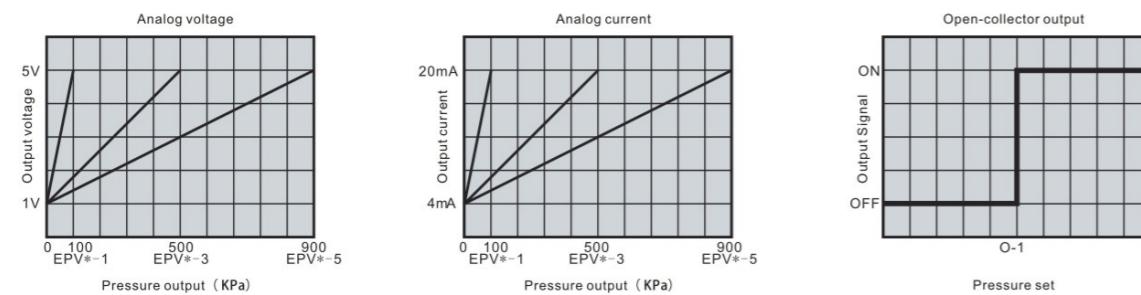
Setting Method



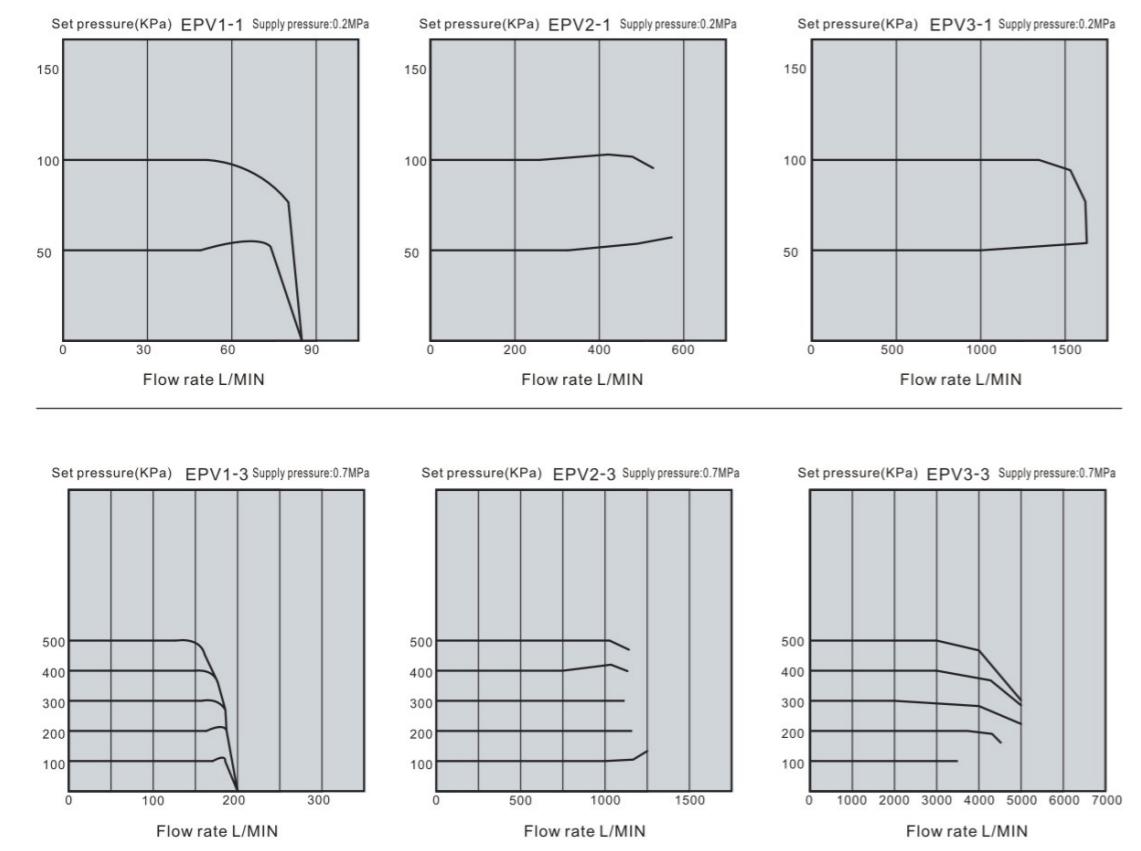
Pressure Output Signal Input



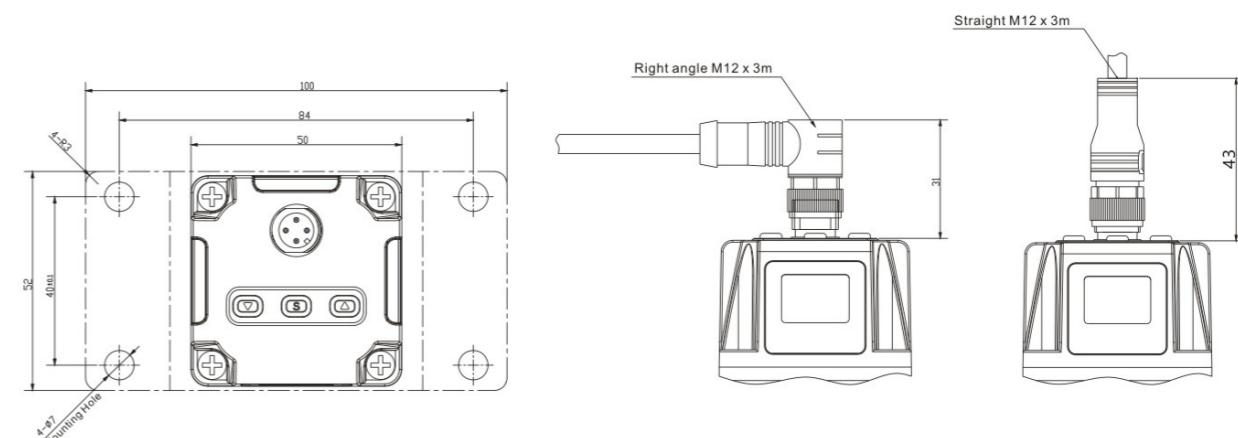
Pressure Output Signal Output



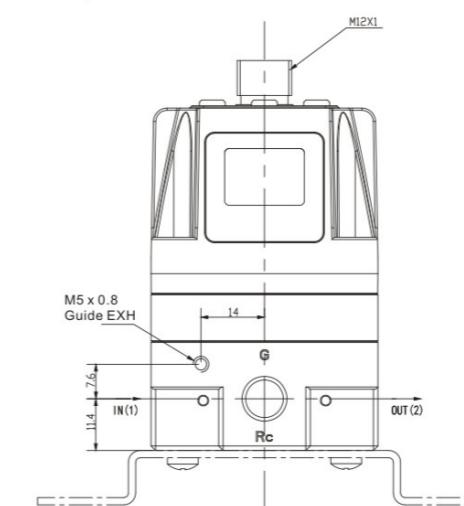
Flow Characteristics



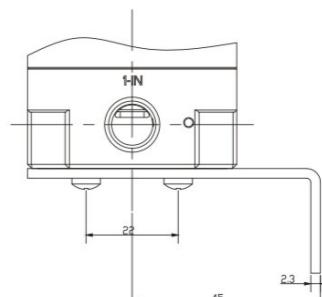
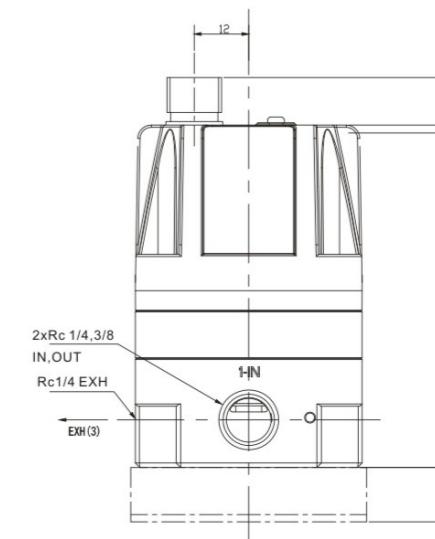
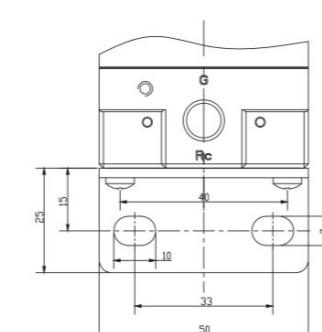
EPV1 Dimension (mm)



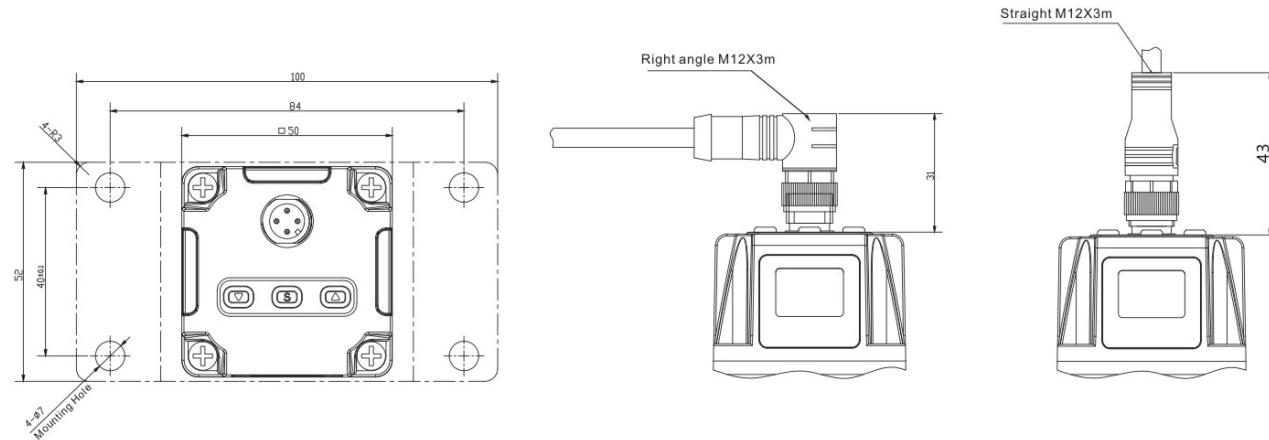
Flat Bracket assembly



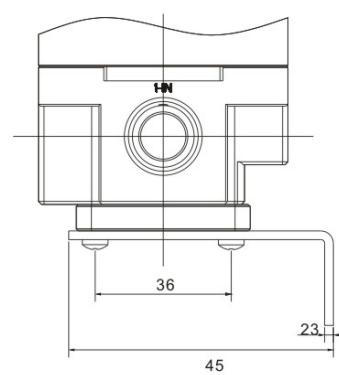
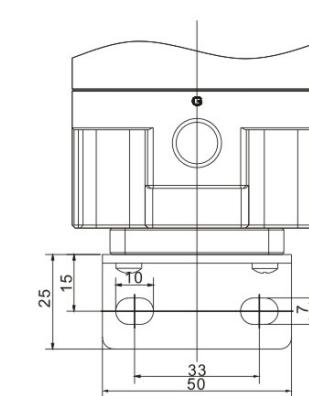
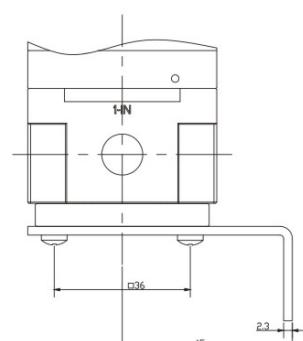
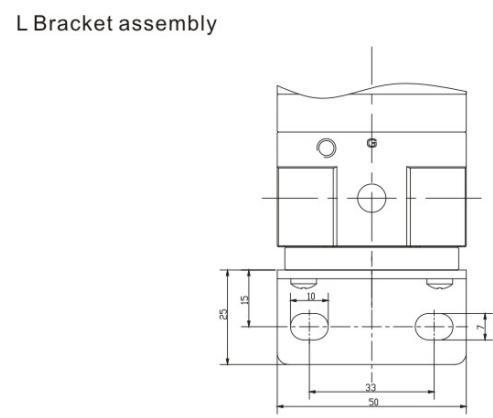
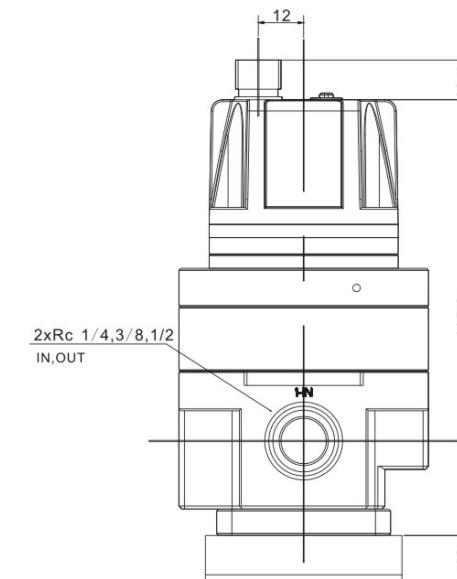
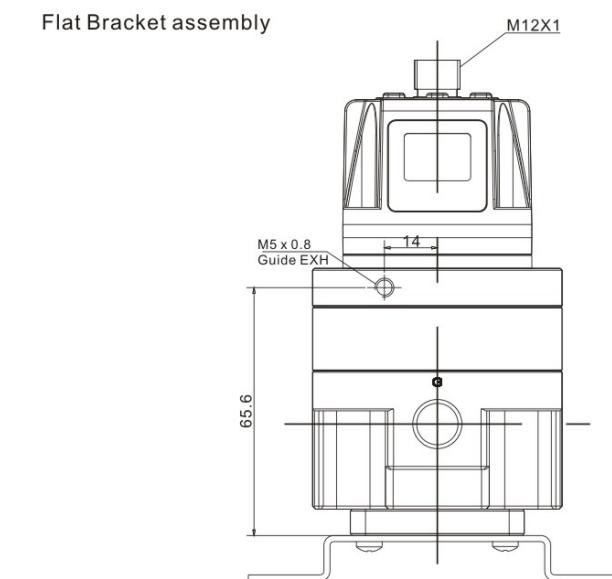
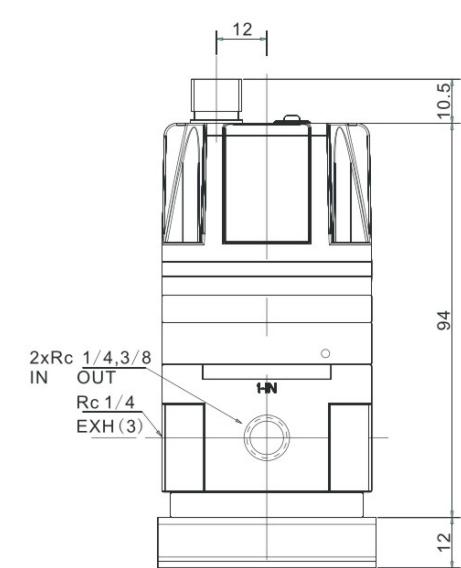
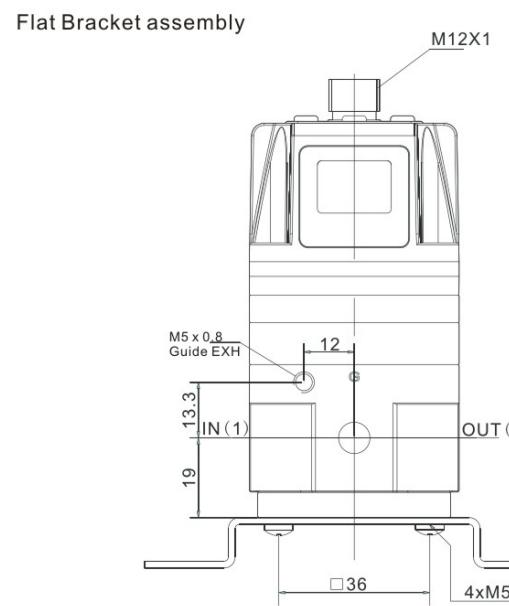
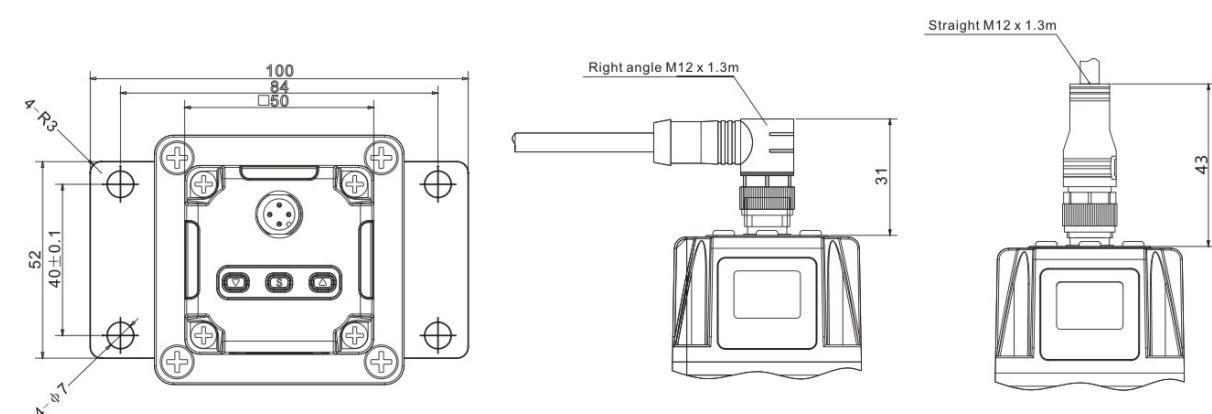
L Bracket assembly



EPV2 Dimension (mm)



EPV3 Dimension (mm)



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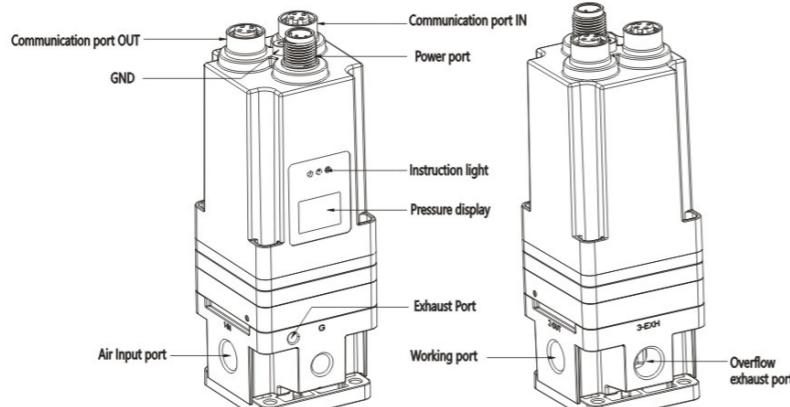
| EVP PROFINET TYPE

- Profinet digital communication with strong anti-interference performance
- Maximum flow rate up to 3000 L/min
- Valves can be networked with each other to enable long-distance transmission
- Real-time pressure value displayed on LCD screen



EPV2-50PN

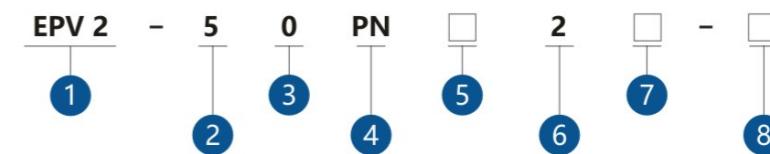
Function of the parts



Specification

Model	EPV1-1	EPV1-3	EPV1-5		
	EPV2-1	EPV2-3	EPV2-5		
	EPV3-1	EPV3-3	EPV3-5		
Fluid	Compressed Air、O ₂ 、N ₂				
Max. supply pressure	Set pressure-1.2MPa				
Min. supply pressure	+0.1MPa				
Max. supply pressure	0.2MPa	1MPa			
Set pressure range	0.005 ~ 0.1MPa	0.005 ~ 0.5MPa	0.005 ~ 0.9MPa		
Power supply	Voltage	DC24V±10%			
	Current	≤ 0.12A			
Communication type	Profinet				
Power port	M12 5 PIN				
Communication port IN	M12 4 PIN				
Communication port OUT	M12 4 PIN				
Linearity	±1%F.S.				
Hysteresis	0.5%F.S.				
Repeatability	±0.5%F.S.				
Sensitivity	0.2%F.S.				
Output pressure display	Accuracy	±2%F.S.			
	Display resolution	1000 Counts			
Ambient and fluid temperatures	0 ~ 50°C(No condensation)				
Protection	IP65				

Ordering Code



1. Model
EPV1
EPV2
EPV3

2. Range
1: 0.1MPa
3: 0.5MPa
5: 0.9MPa

3. Voltage
0: DC 24V

4. Communication mode
PN: Profinet

5. Thread type
Blank: Rc
F: G
N: NPT

6. Port size
1: 1/8"(EPV1)
2: 1/4"(EPV1、EPV2)
3: 3/8"(EPV2、EPV3)
4: 1/2"(EPV3)

7. Cable connector
S: Straight 2m
L: Right angle 2m
N: No cable

8. Bracket
B: Flat bracket
C: L type bracket
Blank: Without bracket

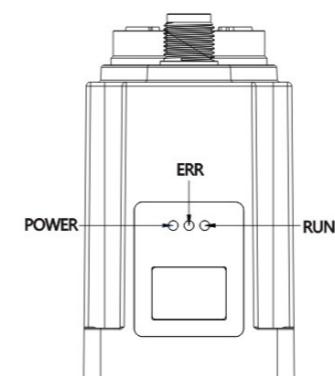
Communication cables code



1. Cable Model
M12: Power cable
M12RJ45: M12 To RJ45 (PLC)
MT2MT2: M12 To M12 (Chain communication)

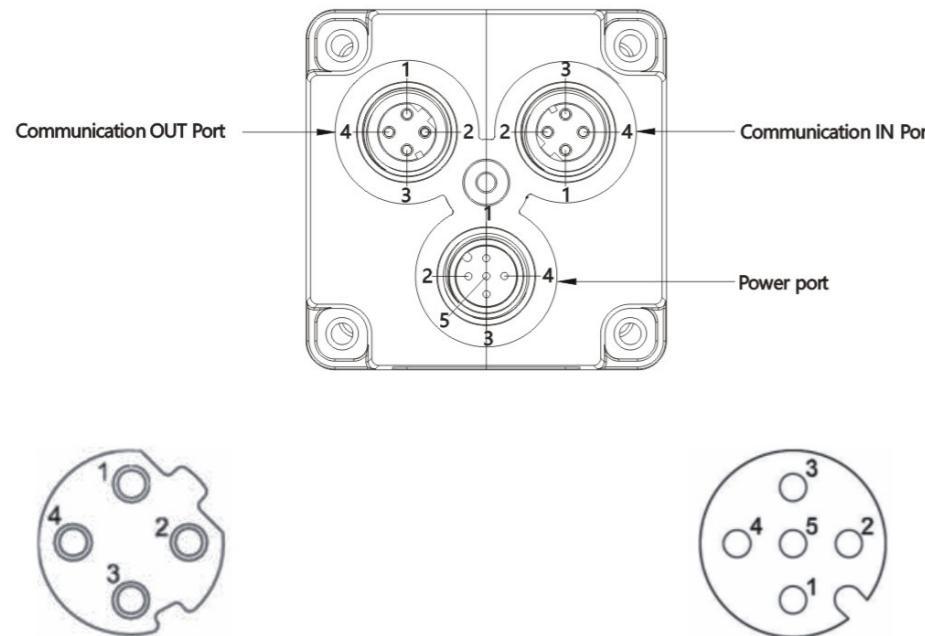
2. Cable length
020: 2 meters
XXX: Customized

Meaning of light



Code	PWR	RUN	ERR
Light On	ON	PN ON	PN OFF
Light Off	Off	—	—
Blink	—	—	PN Not connect

Electrical Interface Definition



Communication port A/B: M12 4PIN socket,D-coded

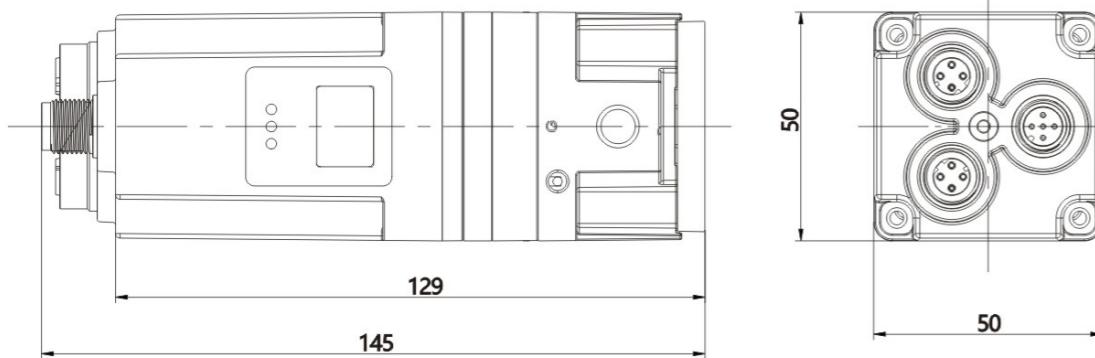
No.	Meaning	Description
1	TD+	TransmitData+
2	RD+	ReceiveData+
3	TD-	TransmitData-
4	RD-	ReceiveData-

Power port: M12 5PIN plug, A-coded

No.	Meaning	Description
1	V124V	+24Vforsolenoidvalve
2	V10V	0Vforsolenoidvalve
3	V224V	+24VforV2unitoperation
4	V20V	0VforV2unitoperation
5	FE	Ground

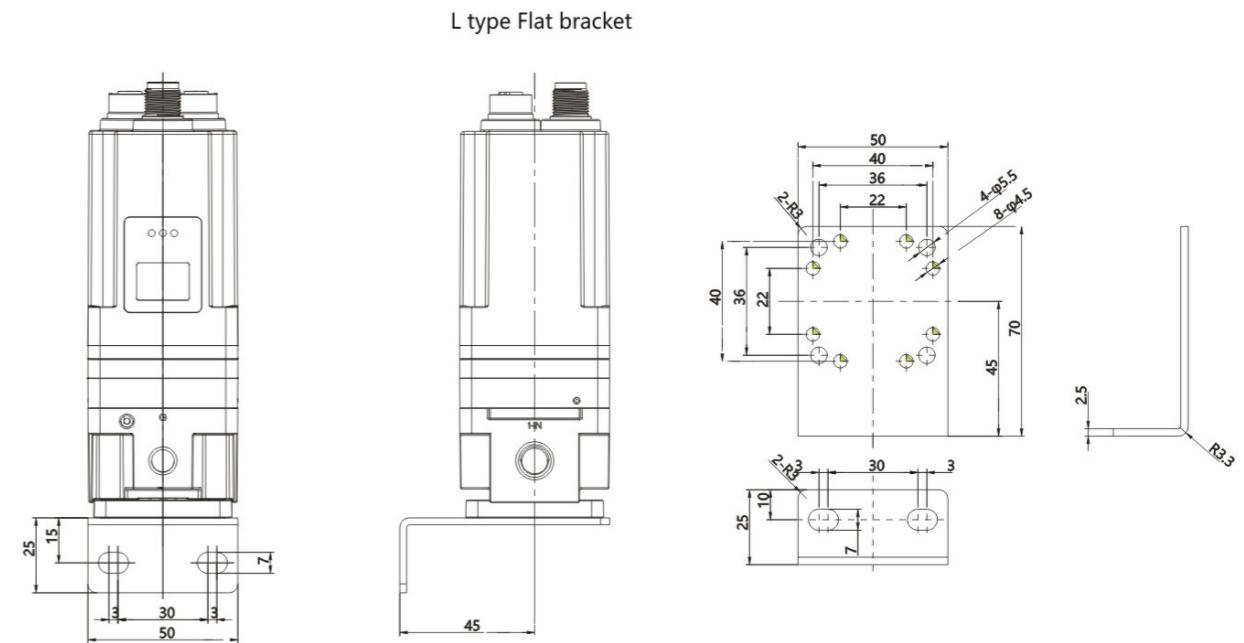
Dimension Drawing

Dimension size

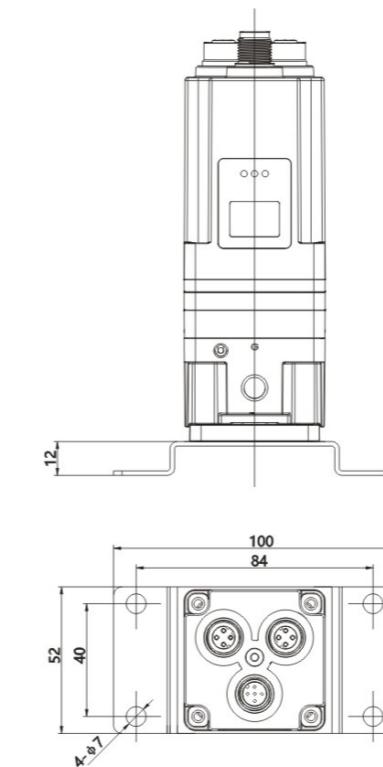


Dimension Drawing

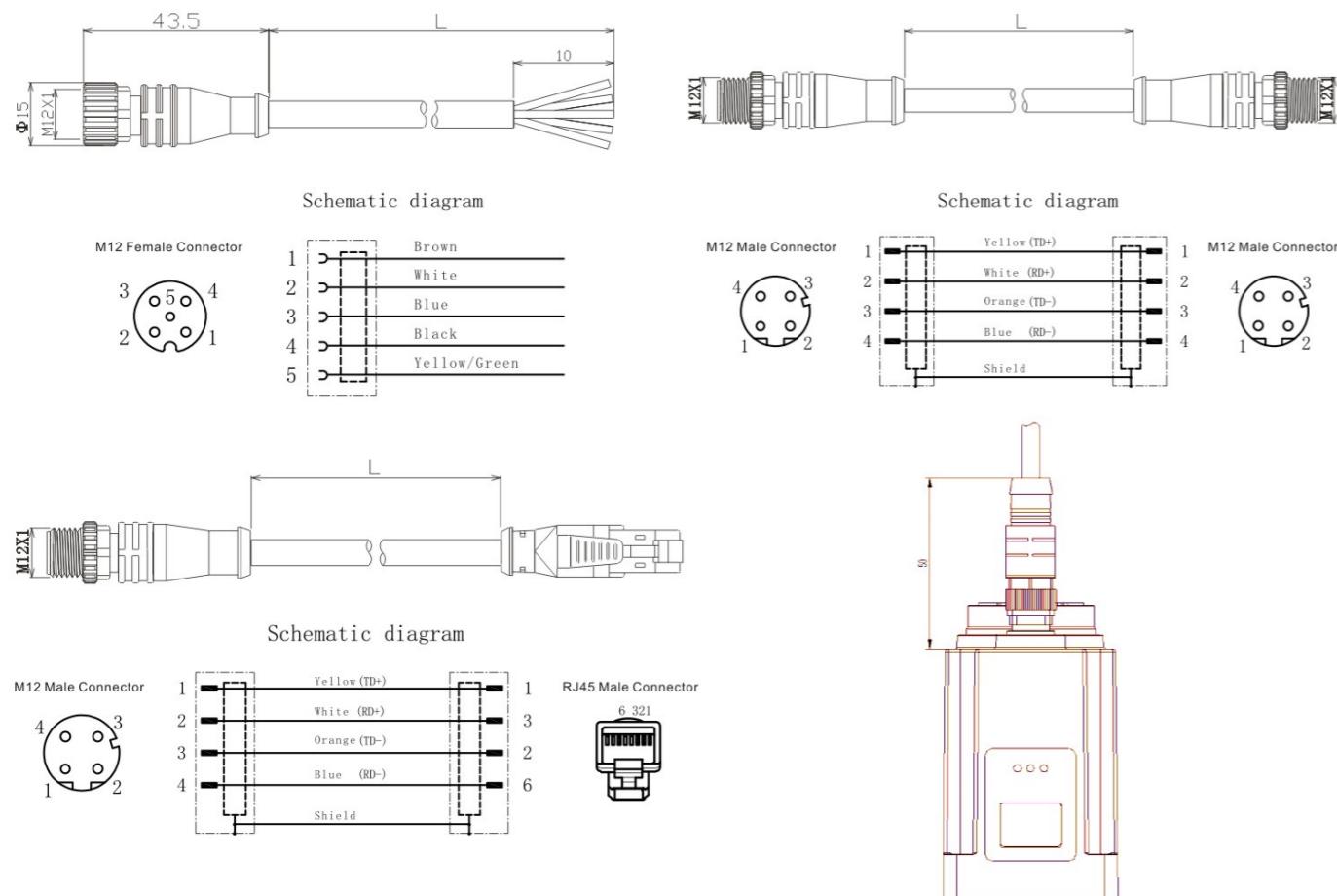
Bracket dimension



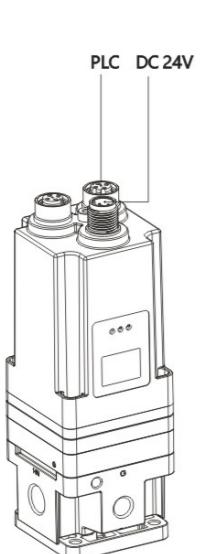
B type flat bracket



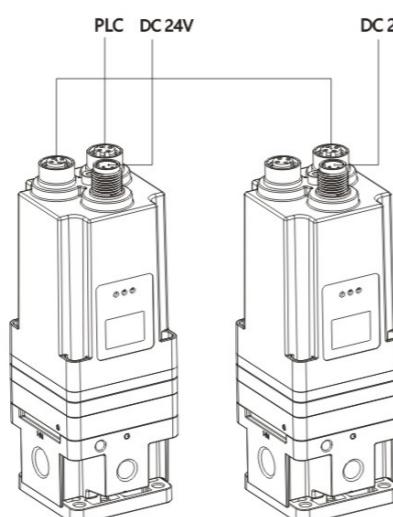
Wire Dimension Drawing



Product Connection Guidelines

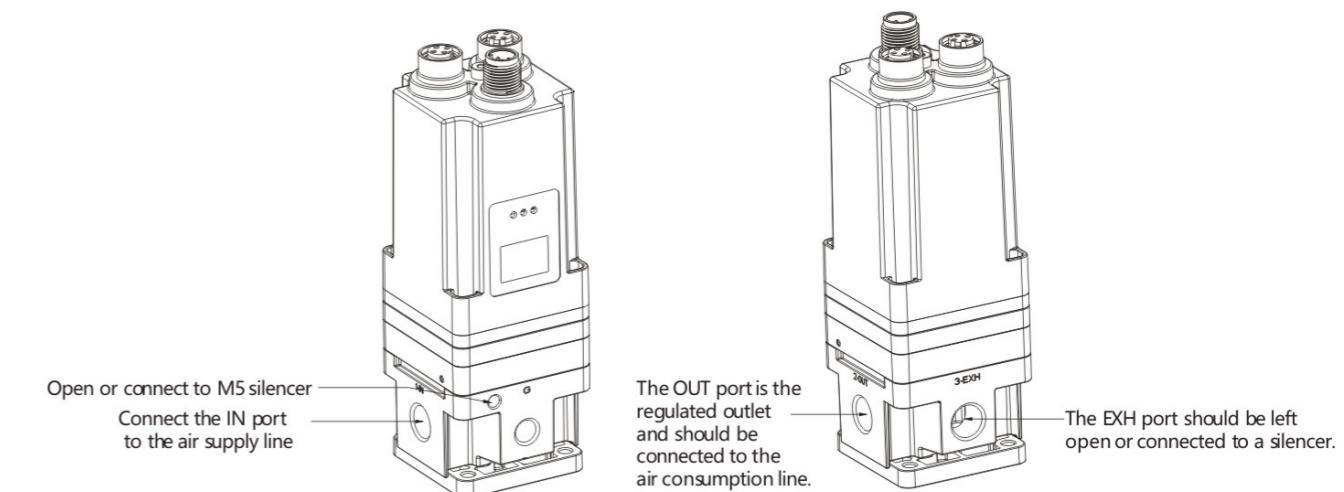


Single



Multiple Series Connection

Product Connection Guidelines



① When tightening the piping, please hold the internal threaded side firmly and apply the recommended torque

Insufficient tightening torque may result in loosening or poor sealing, while excessive torque may cause thread damage. In addition, if the internal threaded side is not held during tightening, excessive force may be directly applied to the piping bracket or other components, potentially leading to damage.

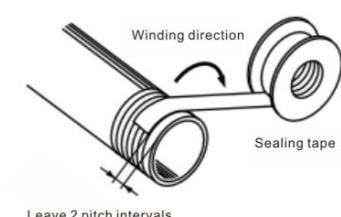
Thread	1/8	1/4	3/8	1/2
Torque	3~5	8~12	15~20	20~25

② Pre-installation Processing

Before piping, please thoroughly blow out or wash the pipes to remove cutting debris, cutting oil, and other impurities inside the pipes. If cutting seal materials, debris, or other foreign substances enter the interior of this product, the solenoid valve may produce a squeaking noise or the output pressure may not be properly maintained.

③ Sealing Tape Wrapping Method

For piping and fittings connected by threaded joints, please be careful to prevent cutting debris or fragments of sealing tape from entering the interior of the solenoid valve. In addition, when using sealing tape, leave 1.5 to 2 thread pitches exposed on the threaded section.



Single unit usage requires: 1- power cable 1-PLC communication cable

When multiple units are connected in series: Power cable per unit: 1 PCS PLC communication cable per unit: 1 PCS

Network communication cable: (N-1) PCS

For 24V power wiring: Brown and blue wires connect to 24V+; Black and white wires connect to 24V

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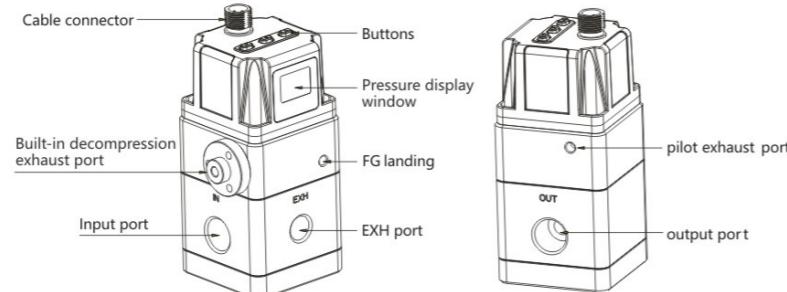
EPVX2 High Pressure Proportional Valve

- Pressure control accuracy: 0.3% F.S., with real-time pressure LCD display
- Pressure resistance up to 5 MPa, adjustable pressure range 0.01 MPa ~ 3 MPa
- Multiple input and output signal options available
- Valve body precisely machined by high-precision CNC equipment
- IP65 protection rating, suitable for various operating conditions



EPVX2

Function of the parts



F.G.(landing)

Please use the thread on the front of the main body to connect the F.G. terminal for grounding. Otherwise, the action may be abnormal due to noise interference.

Ordering Code

EPVX2 - 3 0 3 1 - □ 3 L - □

1. Model

2. Range
3: 0.01~3MPa

3. Voltage
0: DC 24V

4. Input signal
0: Current DC 4-20mA
1: Current DC 0-20mA
2: Voltage DC 0-5V
3: Voltage DC 0-10V

5. Output signal
1: Analog DC 1-5V
2: NPN
3: PNP
4: Analog DC 4-20mA

6. Thread type
Blank: Rc
F: G
N: NPT

7. Port size
3: 3/8"

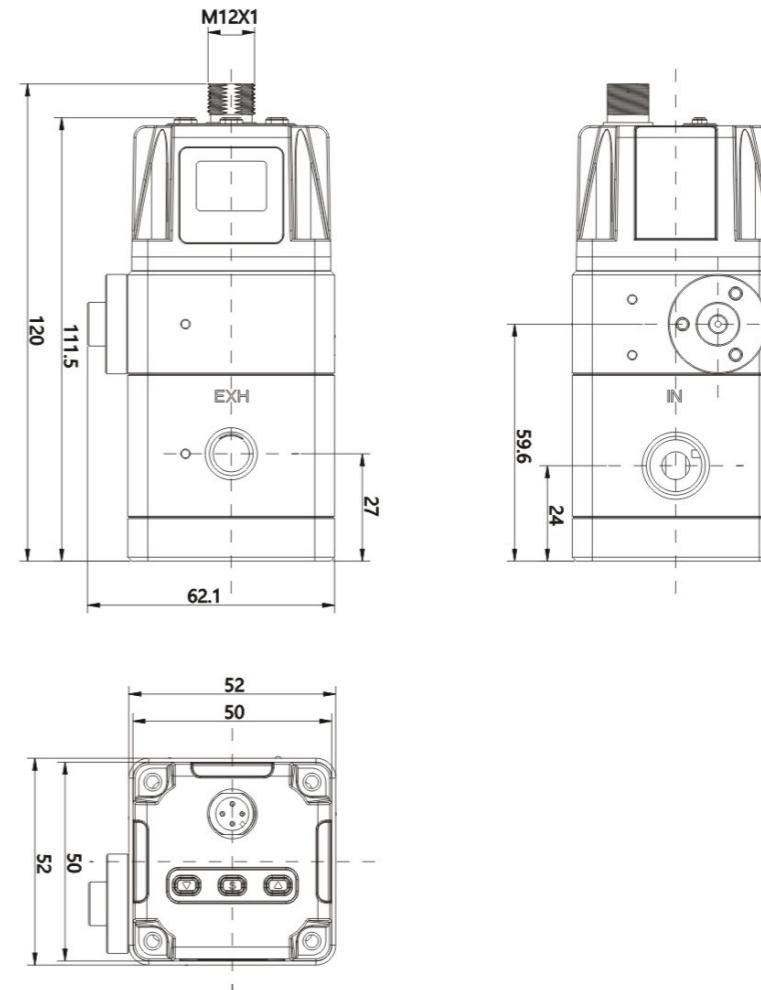
8. Cable
S: Straight 3m
L: Right angle 3m
Blank: No cable

9. Bracket type
B: Flat bracket
C: L bracket
Blank: No bracket

Specification

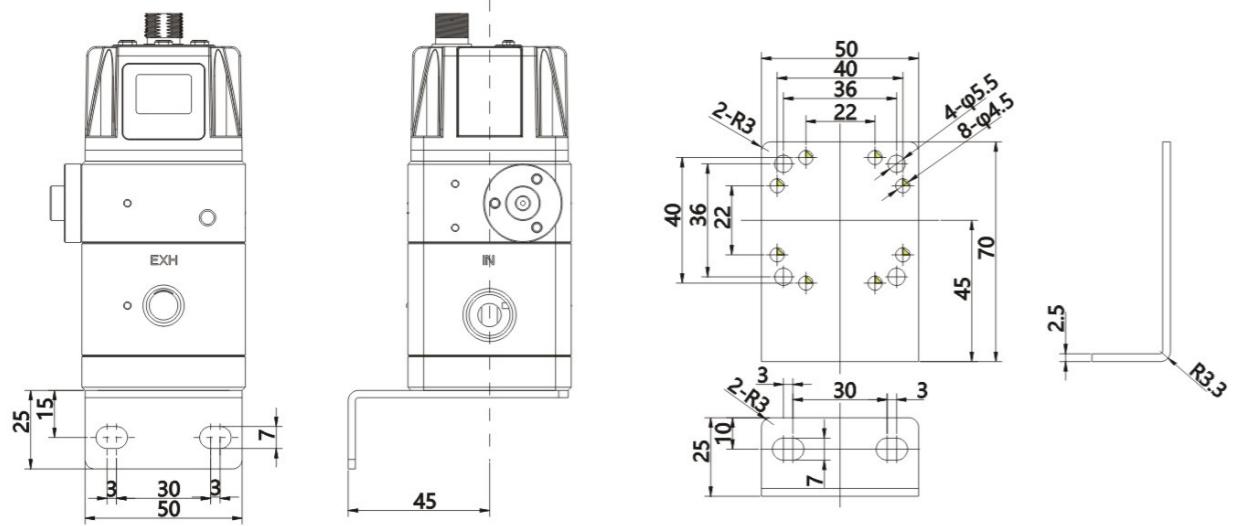
Model		EPVX2
Min. supply pressure		0.5MPa, or +0.2MPa above set pressure
Max. supply pressure		5MPa
Setting pressure range		0.01~3.0MPa
Power	Voltage	DC24V±10%
	Current	Static≤0.1A; max.≤0.3A
Input Signal	Voltage type	DC0 ~ 5V, DC0 ~ 10V
	Current type	DC4 ~ 20mA, DC0 ~ 20mA
Input Impedance	Voltage type	6.6kΩ 以下
	Current type	250Ω(at room temperature)
Output Signal	Analog output	DC 1~5V(load impedance 1kΩ or more) DC 4~20mA(load impedance 250Ω or less)
	Switching output	NPN-OC output:30mA PNP-OC output:30mA
Linearity		±1%FS or less
Hysteresis accuracy		1%FS or less
Repeatability		±1%FS or less
Temperature behaviour		±1%FS or less
Pressure accuracy		±2%FS or less
Unit		MPa; bar; psi
Working medium		Air, O ₂ , N ₂ , Ar
Ambient and Fluid temp.		0~50°C
Weight		590g

Dimension Drawing

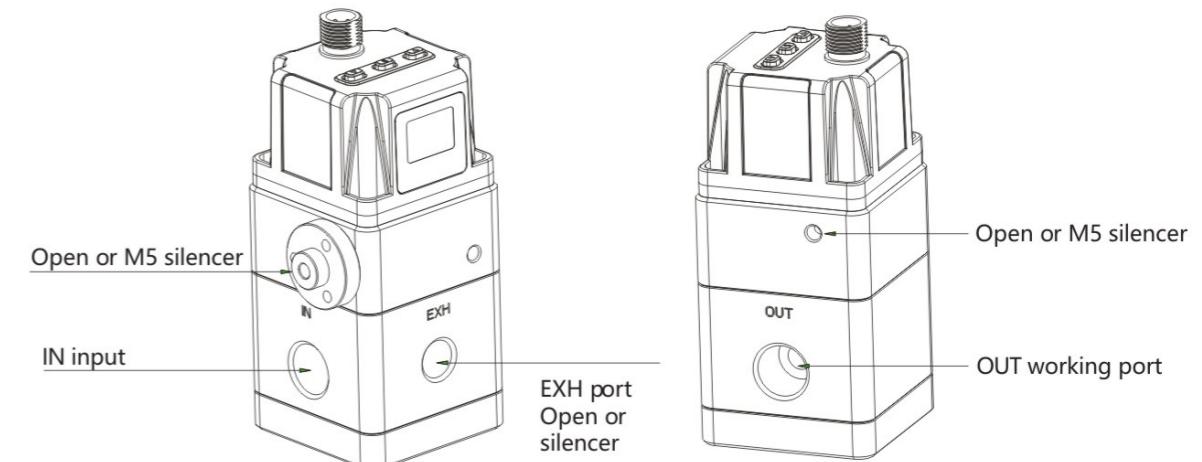


● Dimension Drawing

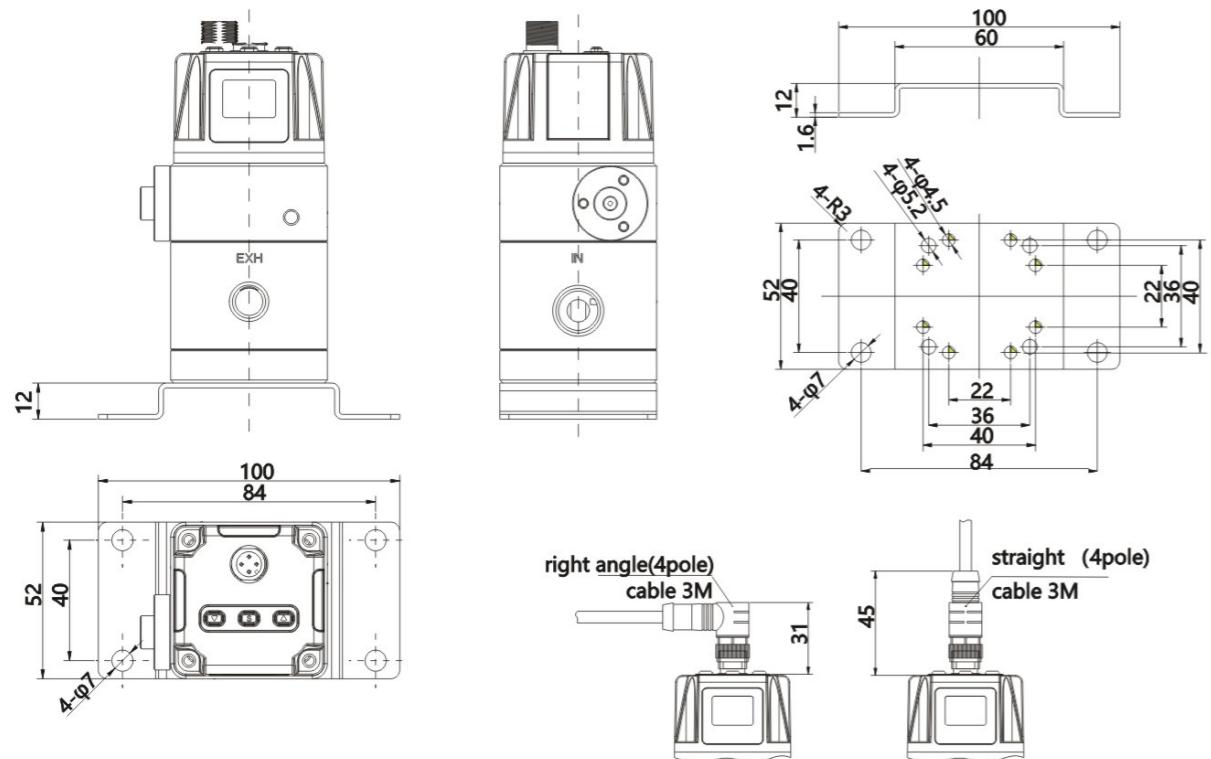
L type bracket



● Description of product Using



B type flat bracket



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DFS1 Smart Digital Flow Meter

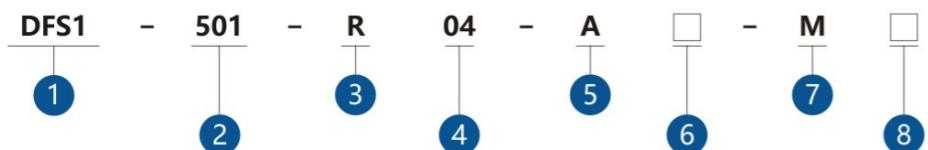
- Digital display of flow rate for clear flow visualization
- 3-color, 3-screen display for excellent visibility
- Rotatable display position, suitable for different installation orientations
- Flow ranges available: 500 L, 1000 L, 2000 L
- Multiple output signal options available
- Rich internal parameter settings to meet diverse application requirements



DFS1



Ordering Code



1. Model

2. Rated Flow Range
501: 5~500L/min
102: 10~1000L/min
202: 20~2000L/min

3. Thread type
R: Rc
N: NPT
F: G

4. Port Size
04: 1/2"(Flow Range: 501,102)
06: 3/4"(Flow Range: 202)

5. Output Type

A: 2*NPN(PNP available)
B: 2*PNP(NPN available)
C: 1*NPN(PNP available) + 1*1-5V or 0-10V
D: 1*NPN(PNP available) + 1*4-20mA
E: 1*PNP(NPN available) + 1*1-5V or 0-10V
F: 1*PNP(NPN available) + 1*4-20mA

6. Lead wire

Nil: With M8 cable (3m)
N: None

7. Unit

Nil: Unit selection function
M: SI unit only

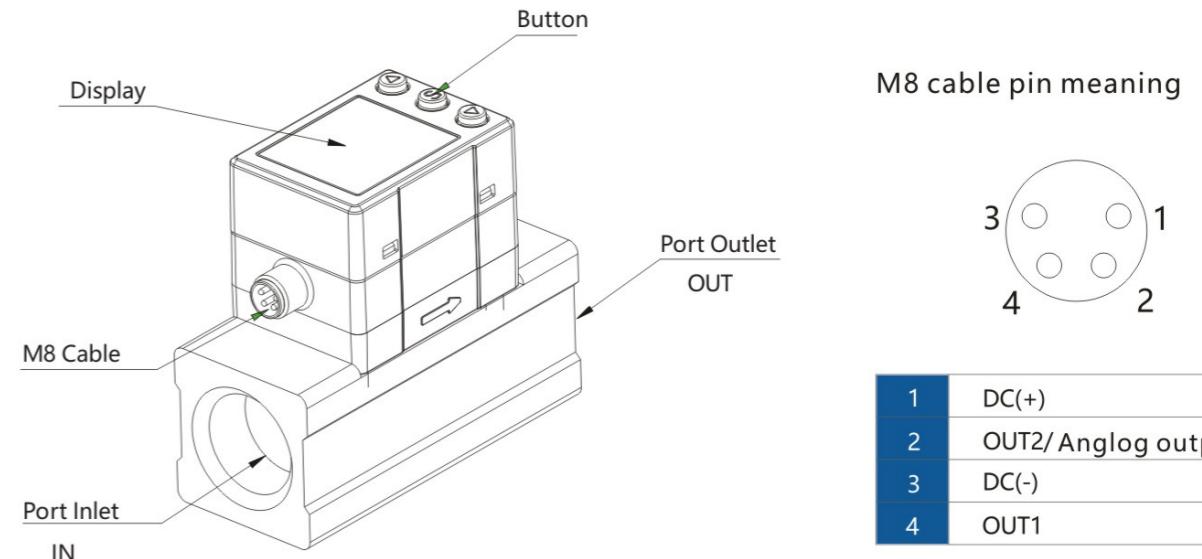
8. Bracket option

Nil: None
R: With bracket

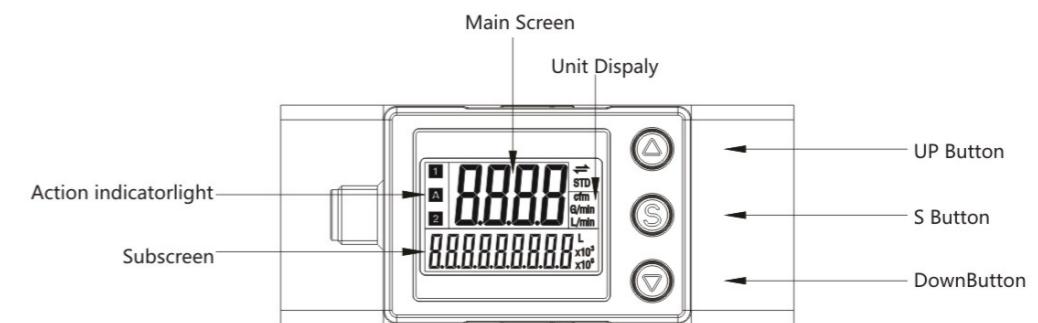
Individual wire order code: DFS1-M8-030

① (Remark: Length customizable)

Brief function introduction



Introduction of Display Screen



Name	Function
Main screen	Displaying flow rate value, setting mode status, alarm codes, etc.
Sub screen	Display cumulative value, set value, peak/valley values, and line name in measurement mode.
Unit display	Displaying current unit
Indicator LED	LED ON when switch output is ON (OUT1/OUT2: Orange)
UP button	Function Select Key (Setting Mode)
S button	Enter/Confirm Key (Setting Mode)
Down button	Function Select Key (Setting Mode)

Specification

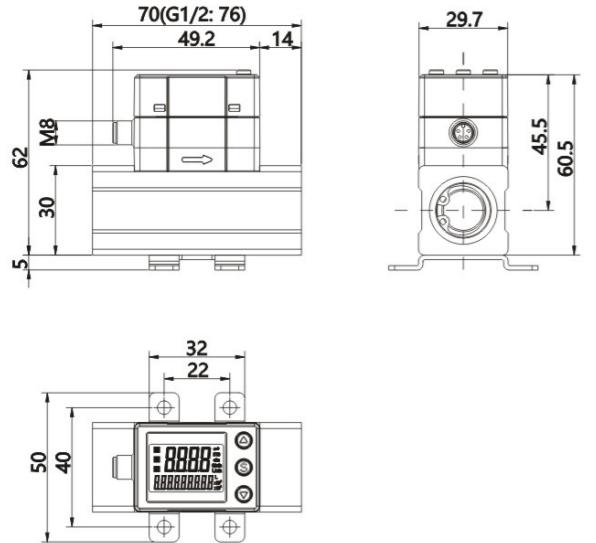
Model		DFS1-501	DFS1-102	DFS1-202		
Fluid	Applicable fluid	Dry air				
	Fluid Temperature Range	0~50°C				
	Detection method	Thermal type				
	Rated flow range	5 ~ 500L/min	10 ~ 1000L/min	20 ~ 2000L/min		
Flow	Set point range	Instantaneous flow	5 ~ 525L/min	10 ~ 1050L/min		
		Accumulated flow	0 ~ 999, 999, 999L			
	Smallest settable increment	Instantaneous flow	1L/min			
		Accumulated flow	1L			
	Accumulated volume per pulse Pulse width=50 ms	1L/Pulse	10L/Pu			
	Accumulated value hold function	Intervals of 2 or 5 minutes can be selected				
Pressure	Rated pressure range	0 ~ 0.8MPa				
	Proof pressure	1.2MPa				
	Pressure loss	Refer to the "Pressure Loss" graph				
	Pressure characteristics	±5%F.S.(25°C standard)F.S. (0 ~ 0.8MPa, 0.6MPa standard)				
Electrical	Power supply voltage	DC12 ~ 24V±10%				
	Current consumption	55 mA or less				
	Protection	Polarity protection				
Accuracy	Display accuracy	±3%F.S.				
	Analog output accuracy	±3%F.S.				
	Repeatability	±1%F.S.(±2%F.S. when the response time is set to 0.05s)				
	Temperature characteristics	±5%F.S.(0 ~ 50°C, 25°C standard)				
Switch Output	Output type	Select from NPN or PNP open collector output				
	Output mode	Select from Hysteresis, Window comparator, Accumulated output, Accumulated pulse output, Error output, or Switch output OFF modes.				
	Switch operation	Select from Normal or Reversed output				
	Max. load current	80mA				
	Max. applied voltage	28V (NPN output)				
	Internal voltage drop	1.5V or less (at load current of 80 mA)				
	Digital filter	Select from 0.05s / 0.1s / 0.5s / 1.0s / 2.0s / 5.0s				
	Delay time	Variable from 0 to 60 s / 0.01 s increments				
	Hysteresis	Variable from 0				
	Protection	Short circuit protection				

Specification

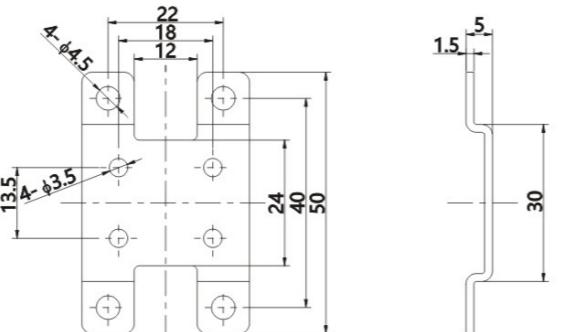
Model		DFS1-501	DFS1-102	DFS1-202
Anglog Output	Output type	Voltage output: 1 to 5V (0 to 10 V can be selected, only when the power supply is 24VDC) Current output: 4 to 20 mA		
	Impedance	Voltage output	Output impedance: Approx. 1KΩ	
		Current output	Max. load impedance: 600Ω at power supply voltage of 24V, 300Ω at power supply voltage of 12V	
	Response time	Linked to the set value of the digital filter		
	Reference condition	Select from standard condition (STD) or normal condition (NOR).		
Display	Unit	Instantaneous flow	L/min, G/min, cfm	
		Accumulated flow	L	
	Display range	Instantaneous flow	-25 ~ 525L/min (Display [0] when value is within the -4 to 4L/min range)	-50 ~ 1050L/min (Display [0] when value is within the -9 to 9L/min range)
		Accumulated flow	0 ~ 999, 999, 999L	
	Min.display unit	Instantaneous flow	1L/min	
		Accumulated flow	1L	
	Display type	LCD		
		LCD, 3-screen display (Main screen / Sub screen) Main Screen: Red/Green Sub screen: White Main screen: 4 digits, 7 segments, Sub screen: 9 digits, 7 segments		
	Indicator Led	LED ON when switch output is ON (OUT1/OUT2: Orange)		
	Enclosure	IP65		
	Withstand voltage	AC 250V for 1 min between external terminals and housing		
	Insulation resistance	2MΩ or more(50VDC via megohmmeter)between external terminals and housing		
	Operating temperature range	Operating: 0 to 50°C, Stored: -10 to 60°C (No condensation or freezing)		
	Operating humidity range	35 ~ 85%R.H. (No condensation or freezing)		
	Standards	CE(EMC instruction, RoHS instruction)		
	Piping specification	Rc1/2, NPT1/2, G1/2		Rc3/4, NPT3/4, G3/4
Weight	Main material of parts in contact with fluid	SUS304, PPS, Aluminum alloy, EPDM, Si, Au, FR4		
	Sensor	165g		240g
	Lead wire	100g		
	Bracket	15g		22g

Dimension Drawing

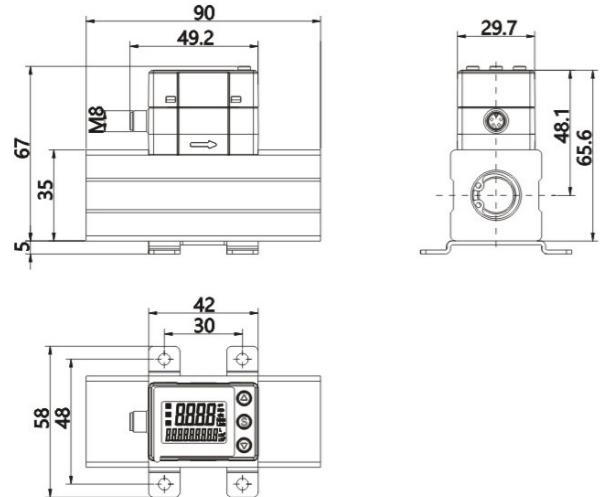
DFS1-501,DFS1-102 Dimensions



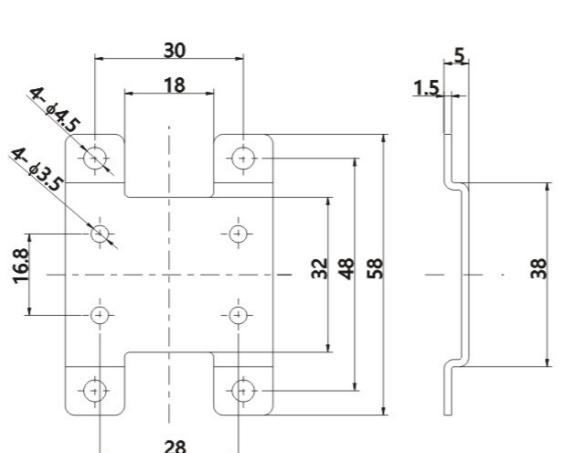
DFS1-501,DFS1-102 Bracket Dimensions



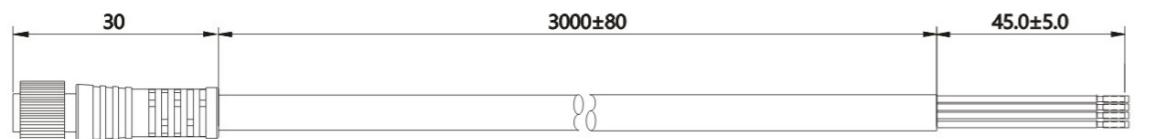
DFS1-202 Dimensions



DFS1-202 Bracket Dimensions



Wire dimension



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HEPV SERIES HIGH-PRESSURE E/P REGULATOR

- Compressed air, oxygen and inert gas can be switched at will.
- High precision, quick response, stepless pressure control.
- IP65 level, applied to various working conditions
- 3000L/min large flow output.
- Poppet valve structure, good sealing, maximum support for 30bar air pressure input and 28bar air pressure output.

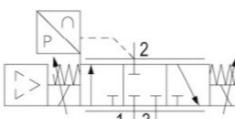


HEPV



Technical Information

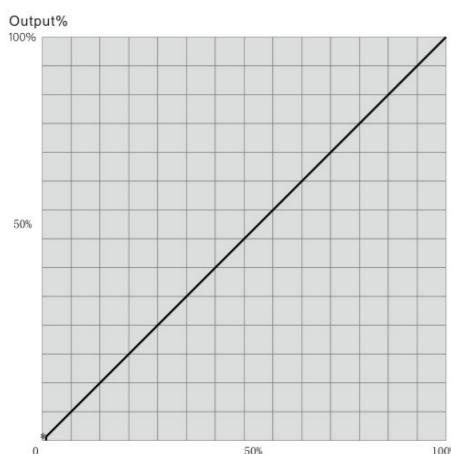
1. Signal/power separation design
2. M12 standard interface
3. 1kPa resolution
4. Fast and stable



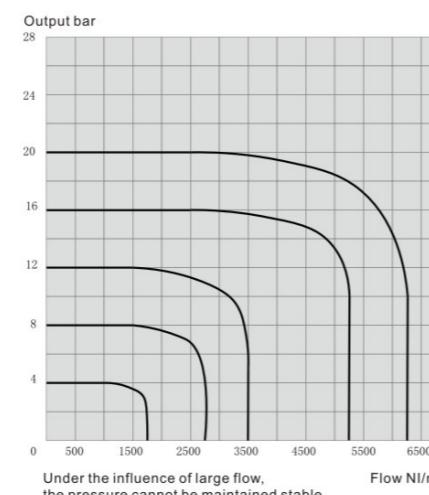
Specification

Version	Poppet valve
Mounting orientation	$\alpha = 0 \dots 90^\circ \pm \beta = 0 \dots 90^\circ$
Working pressure max	30 bar
Working pressure min	0.5 bar + required secondary pressure
Ambient temperature min./max.	5 ... 50°C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 1 mg/m³
Precision	0.1 % F.S.
Division	1 kPa
Nominal flow Qn	1300 l/min *Input 7bar,output 6bar
Control	Analog
Input Voltage	DC 24V
Voltage tolerance DC	-20% / +30%
Permissible ripple	5%
Max. power consumption	1400 mA
Protection class	IP65

Characteristic Curve

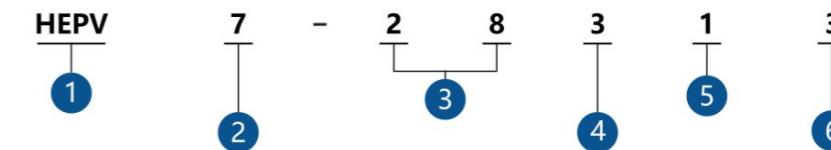


*Minimum regulated pressure 3kPa
linearity 0.1%
Repeatability<0.1%,
Hysteresis<0.1%



Under the influence of large flow,
the pressure cannot be maintained stable

Ordering Code

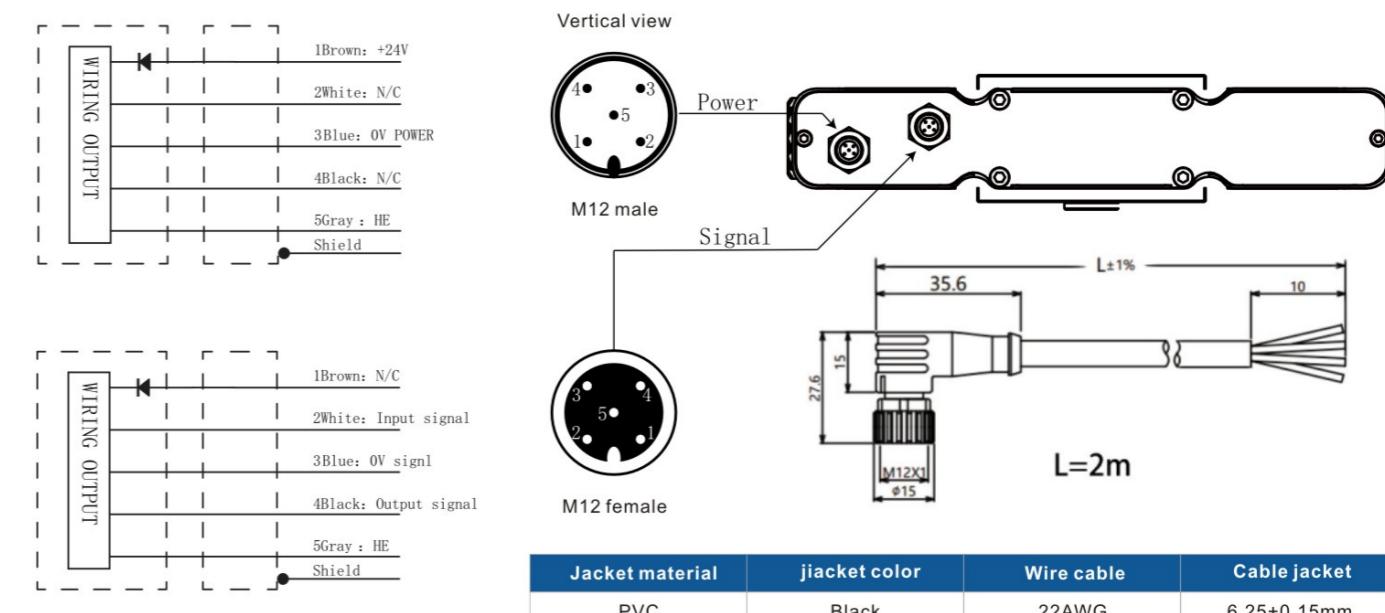


- 1. High-pressure E/P Regulator
- 2. 7: 7# Poppet valve
8: Poppet valve
- 3. Setting Pressure
- 4. Input Signal
0: 4...20mA
3: 0...10V
- 5. Output Signal
1: 1...5V
4: 4...20mA
- 6. Ancillary
3: R3/8
4: R1/2
F3: G3/8
F4: G1/2
N3: NPT3/8
N4: NPT1/2
X: Non

Example

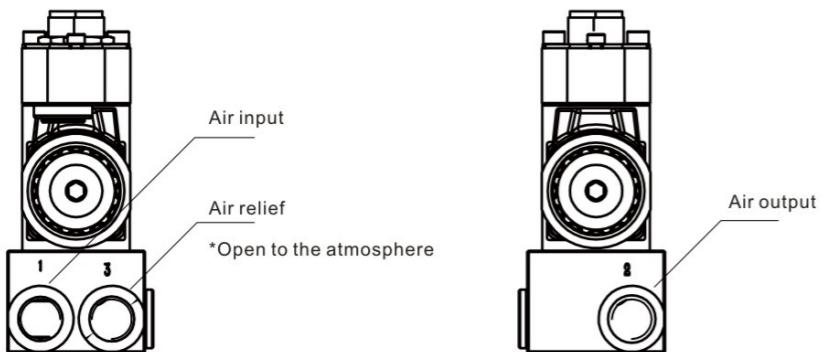
Ordering code	Ancillary	Setting pressure	Input signal	Output signal
HEPV7-2831-3	R3/8	0...28 bar	0...10 V	1...5 V
HEPV7-2804-F4	G1/2	0...28 bar	4...20 mA	4...20 mA

Circuit diagram

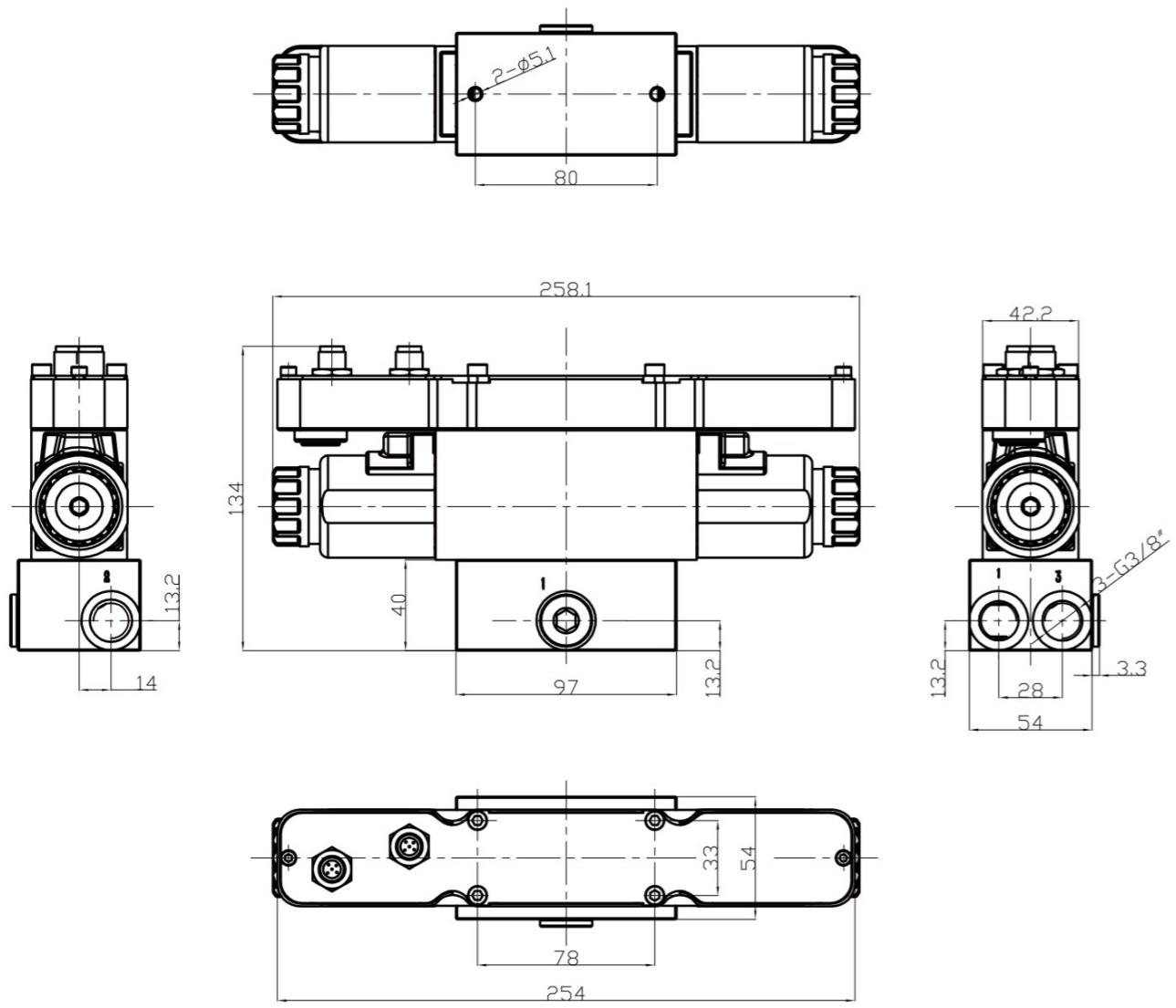


Jacket material	jiacket color	Wire cable	Cable jacket
PVC	Black	22AWG	6.25+0.15mm

 **AIR CONNECTION DIAGRAM**



 **MOUNTING DIMENSIONS (mm)**



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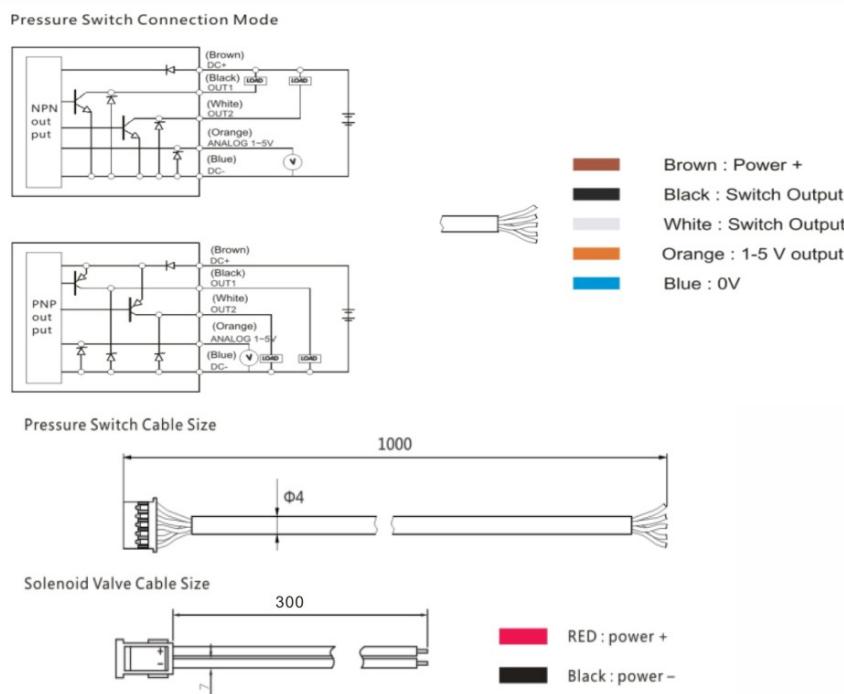


ZKF Series Vacuum Generator

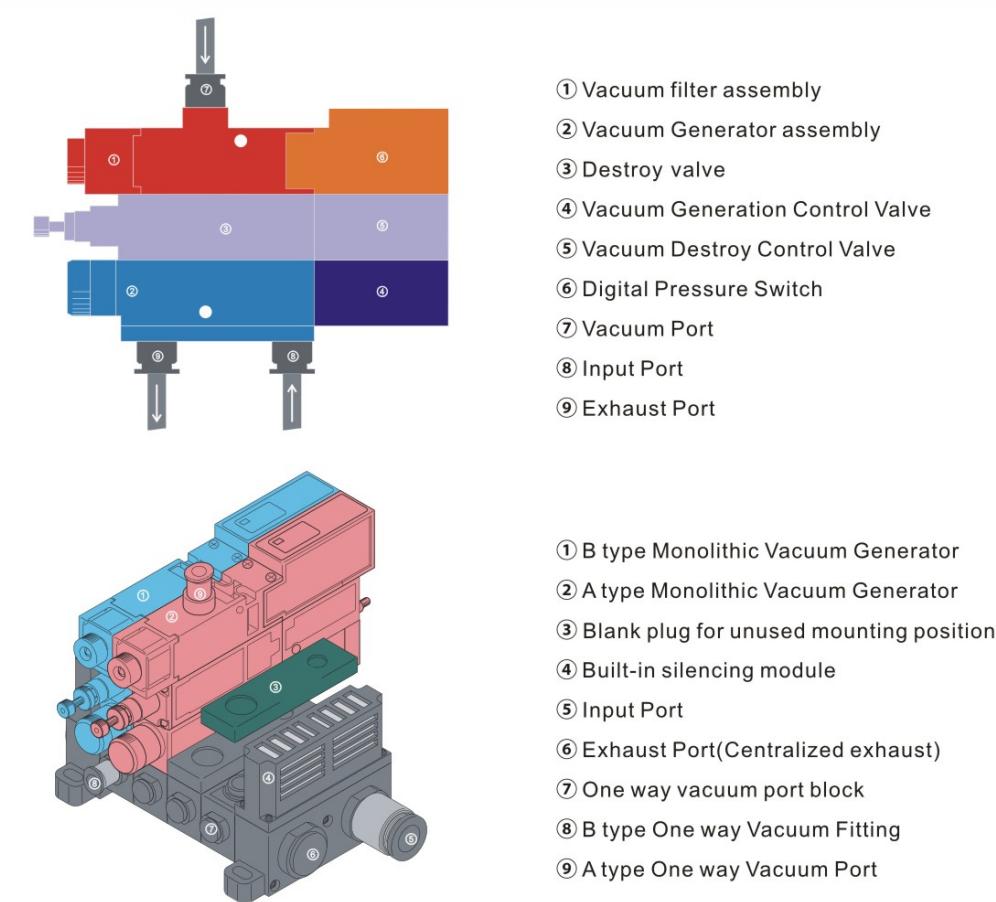
- Up to 12 optional types
- Manifold type products can be assembled up to 10 groups of single-piece products
- Widely working pressure range: 0.25~0.7Mpa
- Strong vacuum Preservation Ability
- Equipped with vacuum pressure switch to realize automatically control
- Various nozzle orifice, can be used in all kinds of occasions
- Two kinds of vacuum destroying function, short destroying time
- Vacuum destroying flow rate: 0~40L/min



Connection Mode



Product Characteristics



Ordering Code

Monolithic type	XYZKF - CT		A	GZ	07	W	—	06	06	08	E	—	NV
	CT series	Vacuum Generator	1	2	3	4	—	5	6	7	8	—	9

① Product Form		② Vacuum Characteristic												
Code	Code description	Code	Code description											
A	Monolithic type two side port (Ex&P:same side)	GZ	High vacuum Medium flow rate (0.5MPa)											
B	Monolithic type one side	ZD	Middle vacuum High flow rate (0.5MPa)											
③ Nozzle diameter(combination type :A、E、G、L、P、R、S、W、X、Y)														
Code	code description	GZ type vaccum degree	ZD type vaccum degree	GX type vaccum degree	Consumption									
07	0.7mm	-93KPa 13L/min	-67KPa 26L/min	-91KPa 10L/min	23L/min									
10	1.0mm	-93KPa 27L/min	-67KPa 40L/min	-91KPa 21L/min	46L/min									
12	1.2mm	-93KPa 38L/min	-67KPa 50L/min	-91KPa 27L/min	70L/min									
④ Combination type														
Code	A	B	E	F	G	H	L	M	P	R	Y	S	X	W
Vacuum Generator	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Filter	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Vacuum Generator Solenoid valve	○	○	○	○	●	●	●	●	●	●	●	●	●	●
Check valve	○	●	○	●	○	●	○	●	○	●	○	○	●	●
Digital pressure switch	○	○	●	●	○	○	●	●	○	●	○	○	●	●
Air timing destroy valve	○	○	○	○	○	○	○	○	●	●	○	○	○	○
Solenoid destroy valve	○	○	○	○	○	○	○	○	○	○	●	●	●	●
⑤ Vacuum Port Diameter(monolithic type)														
code	Code description													
04	Ø 4 Quick connector (mm)													
06	Ø 6 Quick connector (mm)													
08	Ø 8 Quick connector (mm)													
⑥ Input port diameter (monolithic type)														
code	Code description													
04	Ø 4 Quick connector (mm)													
06	Ø 6 Quick connector (mm)													
08	Ø 8 Quick connector (mm)													
⑦ Exhaust port diameter(monolithic type)														
code	Code Description													
S	Silencer													
08	Ø 8 Quick connector (mm)													
⑧ Solenoid valve type(only choose if youselect solenoid)														
code	Code description													
E	DC24 NC Vacuum generator solenoid valve (solenoid destroy valve default normal close)													
⑨ Pressure switch output(only choose if you select pressure switch)														
code	Code description													
NV	2 lines NPN+ 1~5V output													
PV	2 lines PNP+ 1~5V output													

ZKF Series Vacuum Generator

 XINGYU ELECTRON

Ordering Code

Manifold	XYZKF - CT CT series Vacuum Generator	C	GZ	07	W	—	S4	18	18	E	—	08	—	NV
① Product Form														
Code							Code							
C							Code description							
② Vacuum Characteristic														
GZ							High vacuum Medium flow rate (0.5MPa)							
ZD							Middle vacuum High flow rate (0.5MPa)							
GX							High vacuum low flow rate (0.35MPa)							
③ Nozzle diameter(combination type :A、E、G、L、P、R、S、W、X、Y)														
code	code description	GZ type vaccum degree	ZD type vaccum degree	GX type vaccum degree	Consumption									
07	0.7mm	-93KPa 13L/min	-67KPa 26L/min	-91KPa 10L/min	23L/min									
10	1.0mm	-93KPa 27L/min	-67KPa 40L/min	-91KPa 21L/min	46L/min									
12	1.2mm	-93KPa 38L/min	-67KPa 50L/min	-91KPa 27L/min	70L/min									
④ Combination type														
Code	A	B	E	F	G	H	L	M	P	R	Y	S	X	W
Vacuum Generator	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Filter	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Vacuum Generator Solenoid valve	○	○	○	○	●	●	●	●	●	●	●	●	●	●
Check valve	○	●	○	●	○	●	○	●	○	○	●	○	●	●
Digital pressure switch	○	○	●	●	○	○	●	●	○	●	○	○	●	●
Air timing destroy valve	○	○	○	○	○	○	○	○	●	●	○	○	○	○
Solenoid destroy valve	○	○	○	○	○	○	○	○	○	○	●	●	●	●
⑤ Vacuum port diameter(manifold)														
Code	Code description			Code	Code description									
S4	Side φ4 Quick Connector (mm)			T4	Top φ4 Quick Connector (mm)									
S6	Side φ6 Quick Connector (mm)			T6	Top φ6 Quick Connector (mm)									
S8	Side φ8 Quick Connector (mm)			T8	Top φ8 Quick Connector (mm)									
⑥ Input port diameter manifold														
Input port diameter(manifold type)			Straight pipe				Elbow pipe							
Code	Right Side		18	10	12	48	40	42						
	Both Side		28	20	22	58	50	52						
	Left Side		38	30	32	68	60	62						
Size (mm)			φ8	φ10	φ12	φ8	φ10	φ12						

⑦ Exhaust port diameter (manifold)																									
Port Position		Silencer		Straight Pipe					Elbow pipe																
Code	Right Side	S1		18			10			12			48												
	Both Side	S2		28			20			22			58												
	Left Side	S3		38			30			32			68												
Size (mm)				φ8			φ10			φ12			φ8												
⑧ Solenoid valve type (only choose if you select solenoid valve)																									
Code		Code description																							
E		DC24 NC Vacuum generator solenoid valve (solenoid destroy valve default normal close)																							
⑨ Manifold combination (only choose if you select manifold type)																									
Code	02	03	04	05	06	07	08	09	10																
No	2	3	4	5	6	7	8	9	10																
⑩ Pressure switch output (only choose if you select pressure switch)																									
Code		Code description																							
NV		2 lines NPN+ 1~ 5V output																							
PV		2 lines PNP+ 1~ 5V output																							

For example:

Monolithic type XYZKF-CT A _① GZ _② 07 _③ A _④ — 06 _⑤ 06 _⑥ 08 _⑦

- ① : Monolithic type 2 side port
- ② : High vacuum,middle flow rate
- ③ : 0.7mm nozzle diameter
- ④ : A type (only with filter)
- ⑤ : Vacuum port diameter φ 6
- ⑥ : Input port diameter φ 6
- ⑦ : Exhaust port diameter φ 8

Manifold type XYZKF-CT C _① GZ _② 07 _③ W _④ — S4 _⑤ 18 _⑥ 18 _⑦ E _⑧ — 05 _⑨ — NV _⑩

- ① :

Product Specification

Working Conditions

Working Media	Compressed Air
Working Pressure	0.25-0.7mpa
Air Supply	GZ, ZD Series;0.5mpa, GX Series;0.35mpa
Working Temp	5-50°C
Lubrication	No Need

Vacuum Characteristic

Model No	Nozzle diameter (mm)	Air supply (Mpa)	Vacuum degree (-kpa)	Inhalation (L/min)	Consumption (L/min)
CT □ GZ07...	0.7	0.5	93	13	23
CT □ ZD07...		0.35	73		17
CT □ GX07...		0.5	67	26	23
CT □ GZ10...		0.35	91	10.5	17
CT □ ZD10...	1.0	0.5	93	27	46
CT □ GX10...		0.35	73		34
CT □ GZ12...		0.5	67	40	46
CT □ ZD12...		0.35	91	21	34
CT □ GX12...	1.2	0.5	93	38	70
CT □ ZD12...		0.35	73	36	47
CT □ GX12...		0.5	67	50	70
CT □ GZ12...		0.35	91	27	47

Solenoid Valve Specification

Model No	Vacuum generated solenoid valve	Vacuum destroy solenoid valve
Voltage		DC24V
Voltage range		DC24V10%
Power		0.7W
Working mode		Indicate valve action
Manual operation		Press-type manual lever
Operational indication		Red LED
Max pressure		1.05MPa
Valve type		N.C.

Vacuum Filter Specification

Filter material	Polyvinyl methylal
Filter degree	10um
Filter area	1130mm ²
Ordering code	CT-PVF

Air Timing Damage Valve

Type	Mechanical Timing Module
Damage time	After Vacuum Generated Solenoid Valve Closed About 0.3-3s
Breaking flow	0~40l/min (air Supply 0.5mpa)
Time setting mode	External Knob Setting

Vacuum protection function(combination B、F、M、S、W)

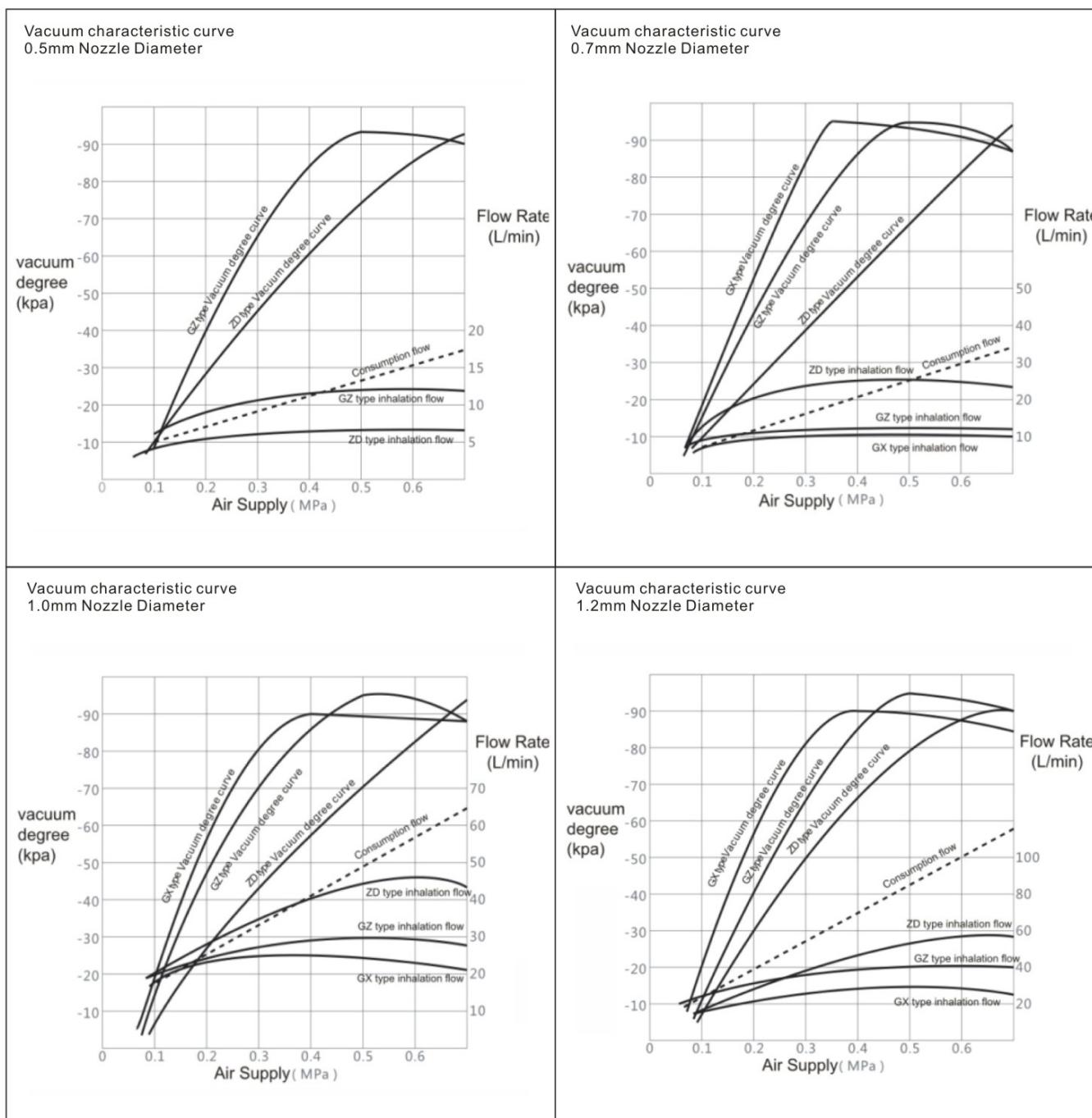
Vacuum Leak	Max 1kpa/10S
-------------	--------------

Remark: if need to keep vacuum for a long time,pls consider above specification.

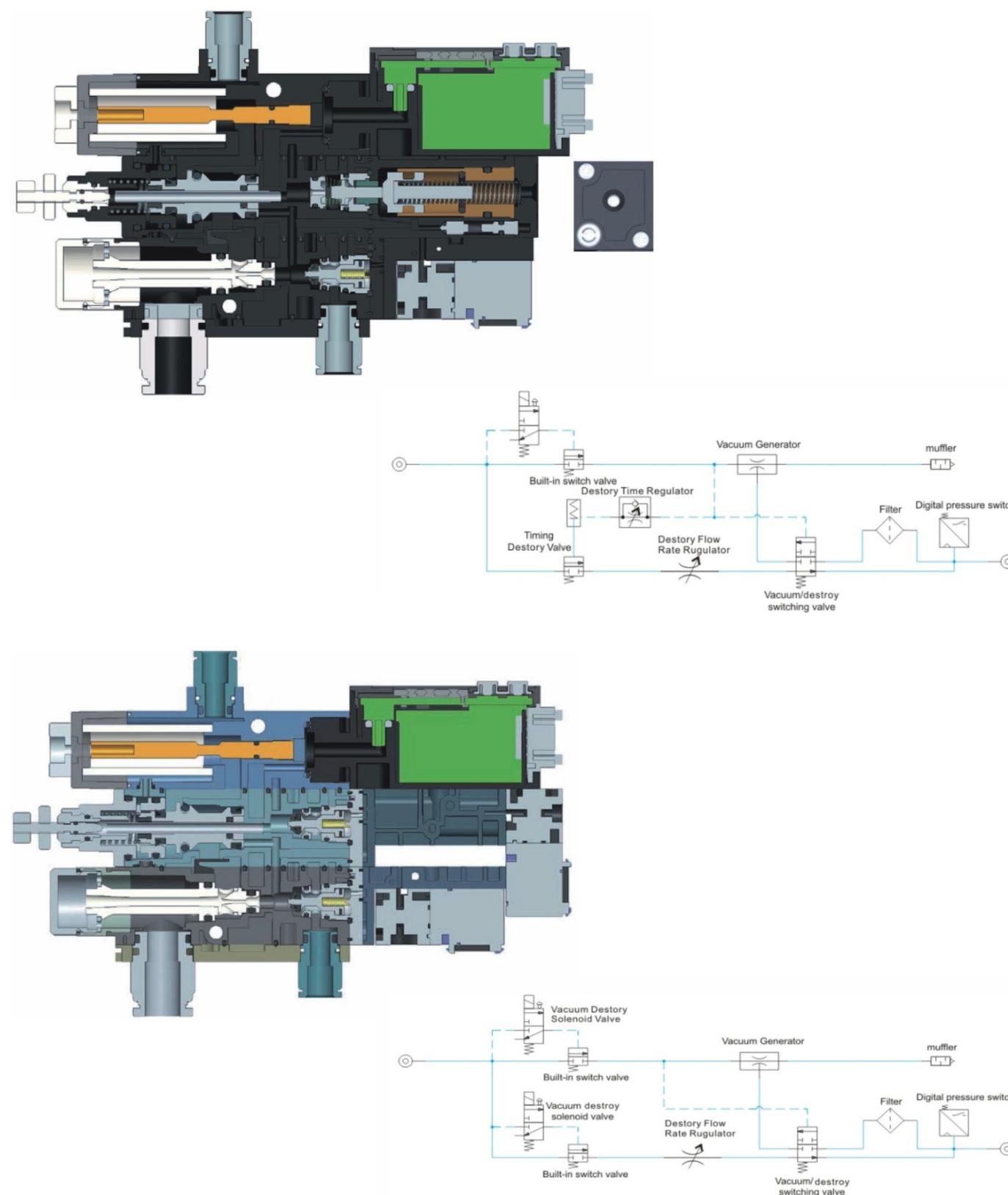
Digital pressure switch (DPS-CT)

Specification	Measuring range	-99~+99kPa
	Setting Range	-99~+0kPa
	Pressure-resistance	0.2MPa
	Pressure Type	Non-flammable ,no-corrosive gas ,gauge pressure measurement
	Pressure Measurement	MEMS silicon pressure sensor,NBR / Silicon seal
	Measurement Accuracy	< ±2%F.S. (Ambient temperature 25°C)
	Temperature Err	< ±3%F.S. (Ambient temperature0~50°C)
	Measurement Patten	Hysteresis mode
	Pressure Display	Compare mode
	Pressure Unit	Kpa (option display multiple 1、0.75、0.01、0.145)
Power supply	Voltage	DC12-24V10%
	Current	< 30mA
	Switch Output	2 lines switch output
	Output Model	NPN/PNP optional (corresponding to low or high efficiency signal receiving)
	Output current	80mA MAX
Switch signal output	Voltage Drop	1V MAX
	Response time	2.5ms 25ms 250ms
	Signal Level	1-5V
	Load Capacity	Load resistance >1KΩ
	Output Accuracy	3%F.S.
Analog signal	Response time	60ms

FEATURES

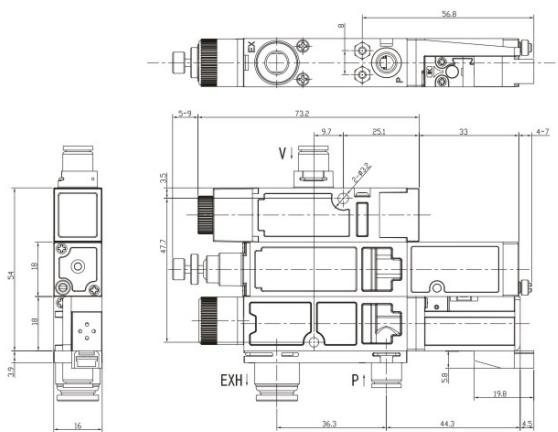


1. Air supply of above diagrams is rated pressure of vacuum Generator
2. Before the Maximum vacuum Degree of vacuum generator , there is a special pressure point will cause unstable phenomena like beep noise , pressure must be adjusted to jump out of this range
3. When select pipeline and component , pipe diameter should be greater than nozzle diameter 3 times , if air supply or exhaust is insufficient , it can't meet the vacuum characteristic, and cause unstable phenomena like beep noise.

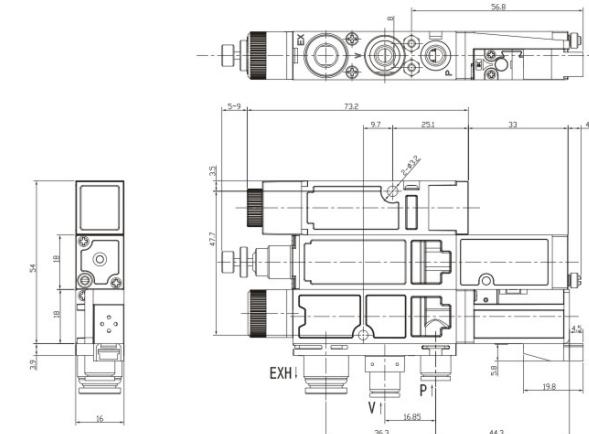


STRUCTURE SIZE AND PNEUMATIC SCHEMATIC DIAGRAM

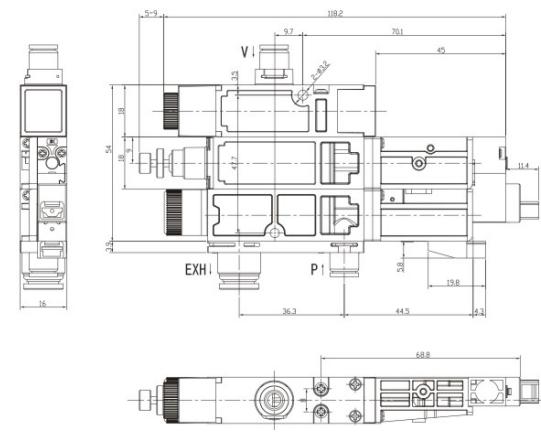
CTAP type**



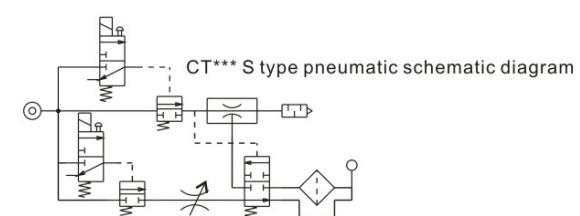
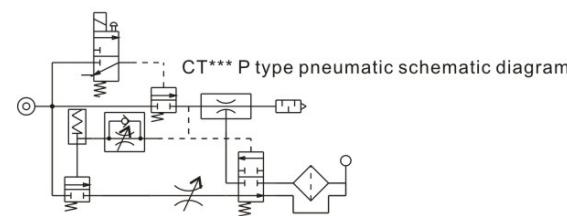
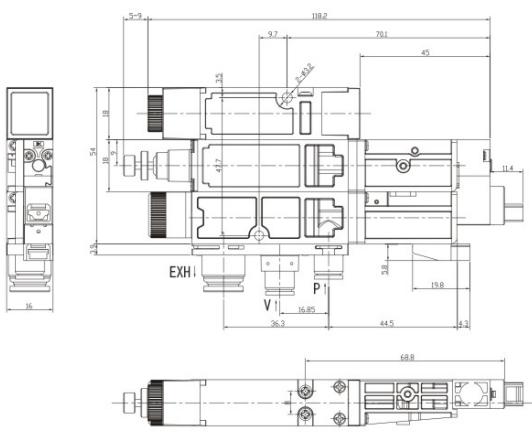
CTBP type**



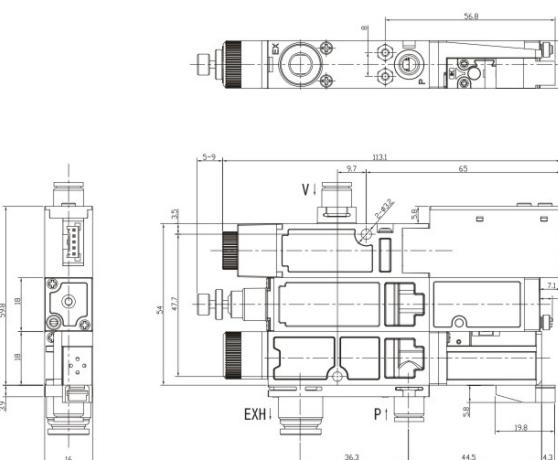
CTAS/Y type**



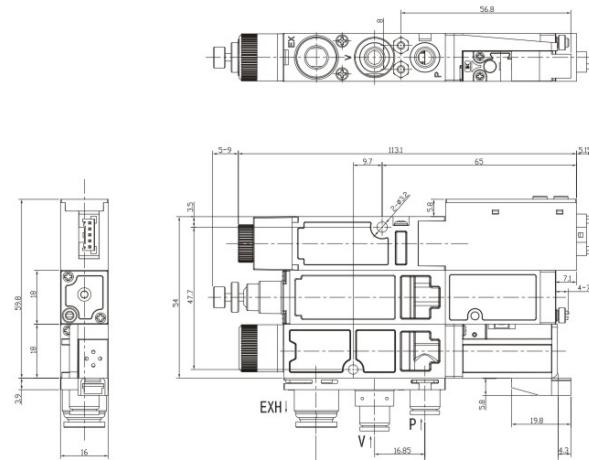
CTBS/Y type**



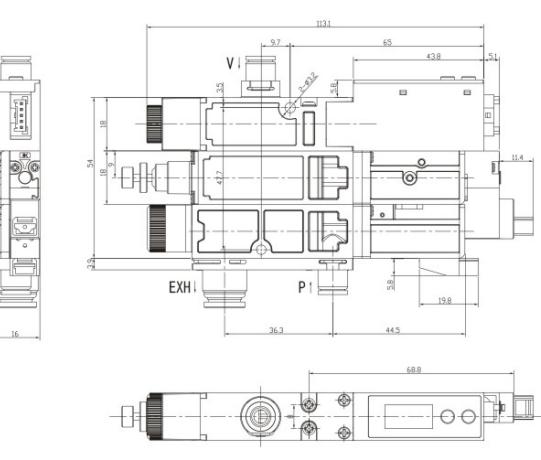
CTAR type**



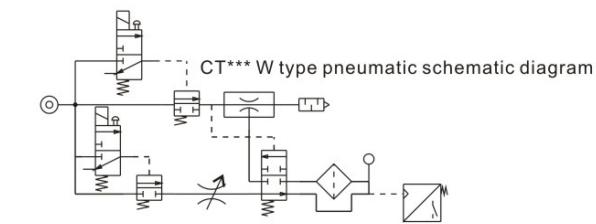
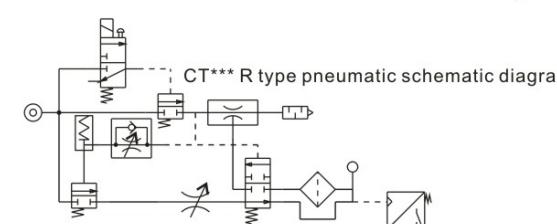
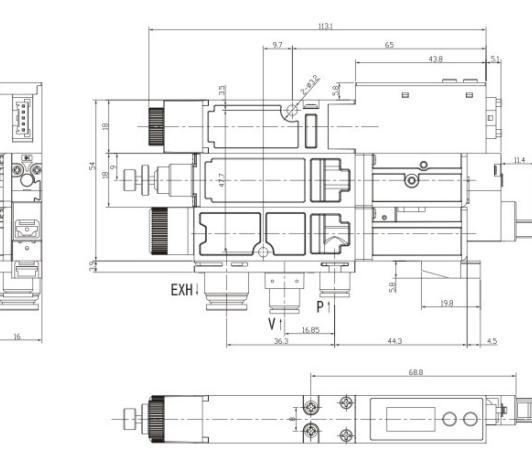
CTBR type**



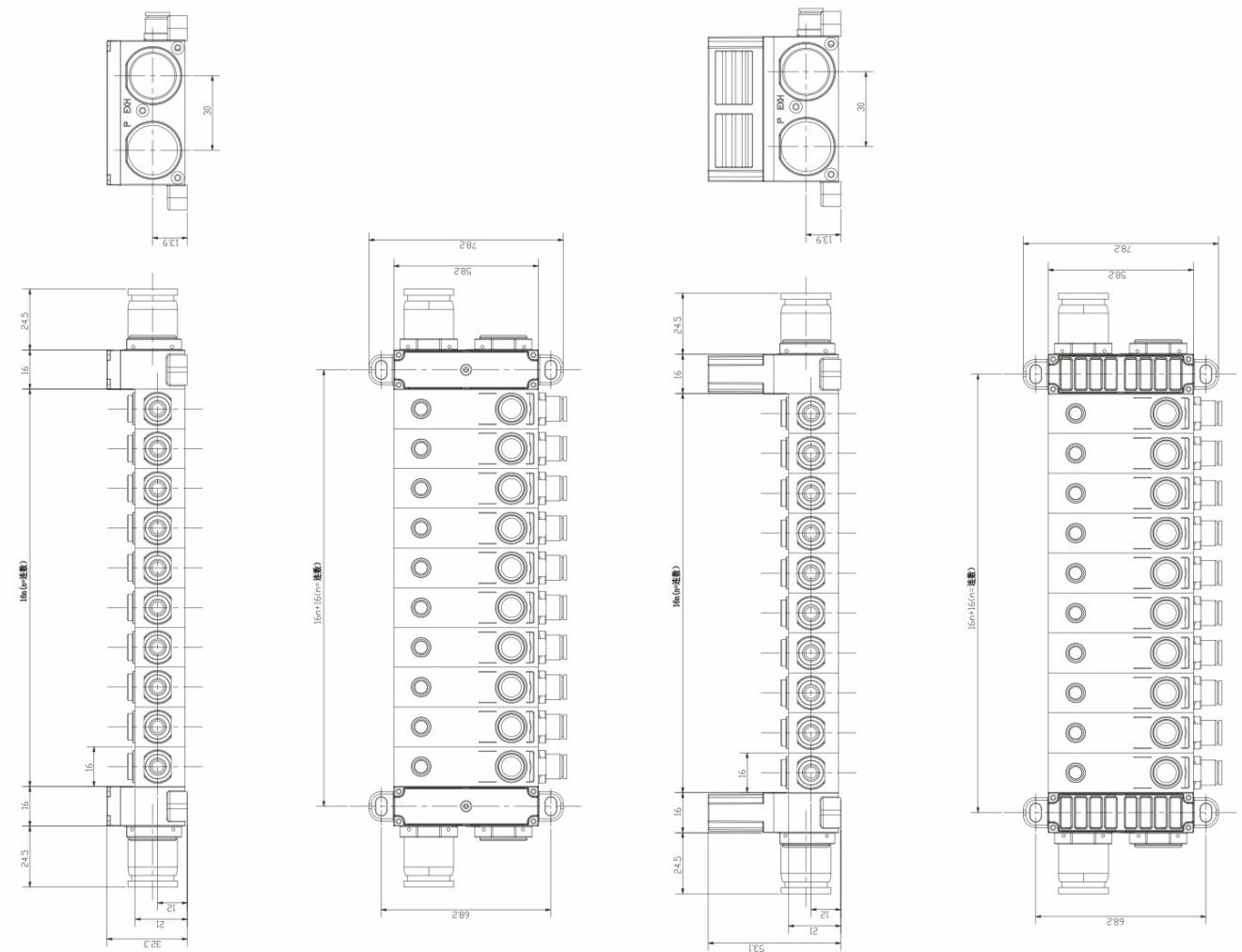
CTAW/X type**



CTBW/X type**

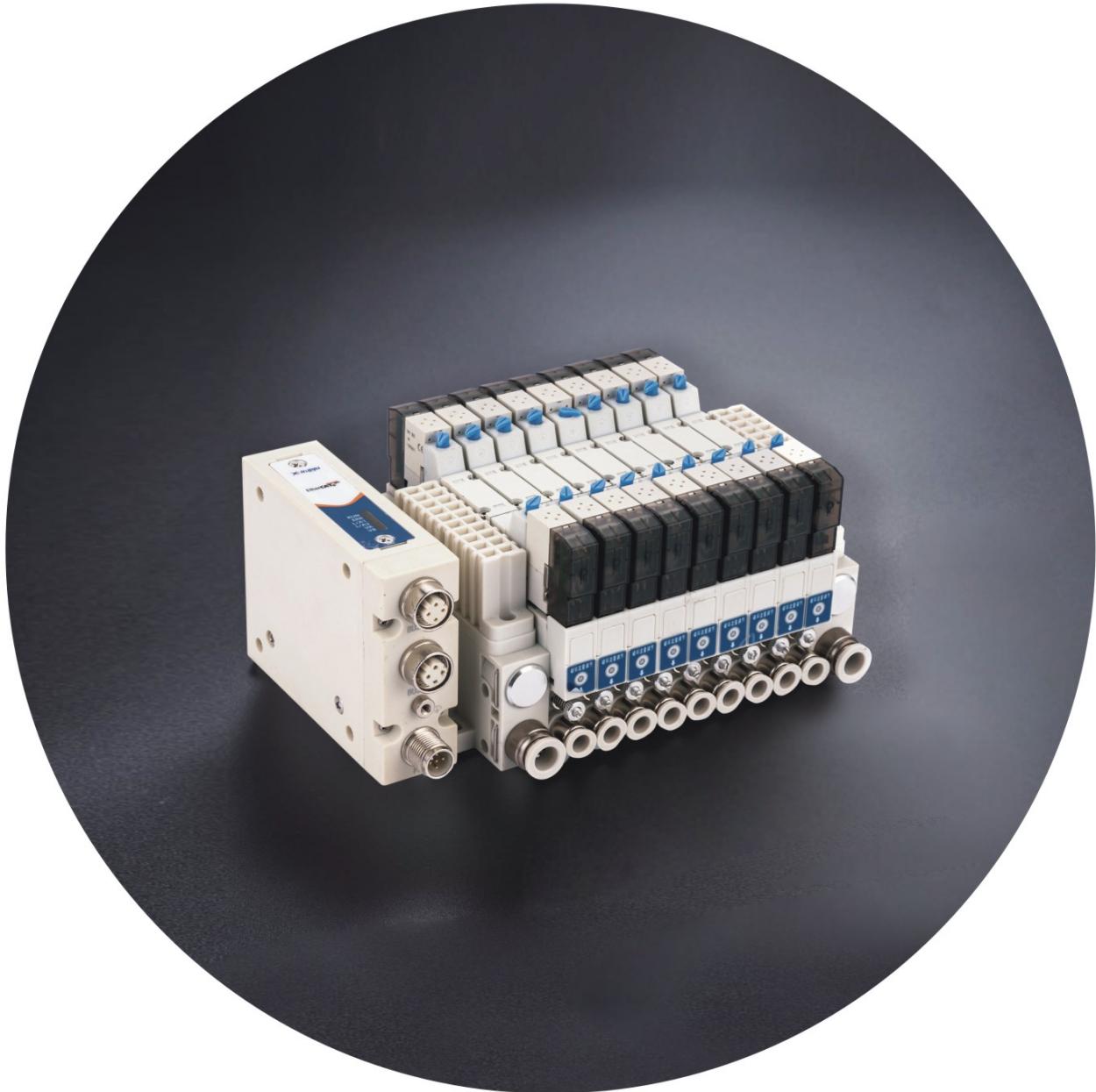


BASE SIZE CHART



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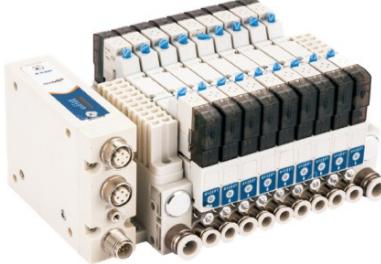


**ZKF-CL Series
Multifunctional Protocol
Vacuum Manifold**

- Adopts a highly integrated design, featuring reliable structure and requiring minimal installation space.
- Wide operating pressure range: 0.2-0.8 MPa
- Lighter weight, with a single-piece weight of ≤ 120 g
- Supports both EtherCAT and Profinet communication protocols
- The air inlet is equipped with a 100-mesh filter, ensuring more reliable operation



ZKF-CL



Features

- Adopts a highly integrated design with reliable structure and minimal installation space.
- Wide operating pressure range: 0.2–0.8MPa.
- Lightweight design, with a single module weighing ≤ 120g.
- Supports EtherCAT protocol for bus control, enabling simple wiring and easy installation.
- The supply air and operating air share the same air inlet, improving pipeline layout and making air management more convenient.
- Lower air consumption and a more efficient vacuum generation system.
- Real-time pressure feedback to the PLC via EtherCAT.
- The vacuum generator is made of aviation-grade aluminum alloy, offering greater durability and longer service life.
- The air inlet is equipped with a 100-mesh filter, ensuring enhanced reliability.
- Supports sensor-free vacuum pressure point setting with one-click teaching via the PLC.
- Provides rich self-diagnosis functions.

Specification

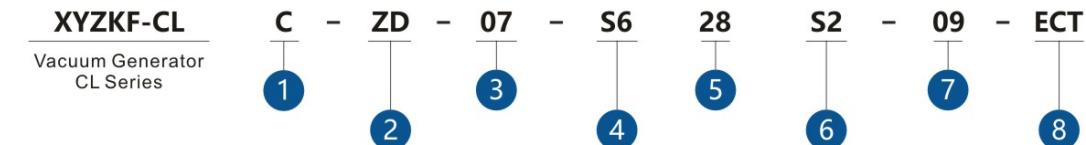
Product Model	ZKF-CL Series	
Ambient Temperature	0 ~ 50°C	
Medium Temperature	0 ~ 50°C	
Storage Temperature	-10 ~ 60°C	
Withstand Pressure	1MPa	
Working Pressure	0.2 ~ 0.8MPa	
Rated Pressure	0.5MPa	
Working Medium	Compressed Air	
Filtration Accuracy	Supply Air Filtration: 200 pm	Supply Filtration: 10μm
Rated Voltage	DC24V±10%	
Single-chip Rated Power	1.5W	
Communication Method	EtherCAT	
Air Supply Port	Φ8 Quick Fitting / Φ10 Quick Fitting	
Exhaust Port	Φ8 Quick Fitting / Φ10 Quick Fitting / Dual Silencer Straight Exhaust	
Vacuum Port	Φ6 Quick Fitting / Φ4 Quick Fitting	
Power Port	M12 5-pin Connector	
Number of Combinations	2~14	
Body Material	Reinforced Nylon + Die-cast Aluminum	
Protection Level	IP40	

Nozzle Specifications

Nozzle Type	Supply Pressure	Vacuum Level	Suction Flow Rate	Consumption Flow Rate
GZ07	0.5MPa	-93kPa	13L/min	23L/min
ZD07	0.5MPa	-65kPa	26L/min	23L/min
GX07	0.35MPa	-91kPa	11L/min	15L/min
GZ10	0.5MPa	-93kPa	27L/min	47L/min
ZD10	0.5MPa	-65kPa	40L/min	47L/min
GX10	0.35MPa	-91kPa	21L/min	37L/min

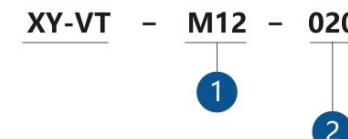
Ordering Code

Vacuum Island Ordering Code



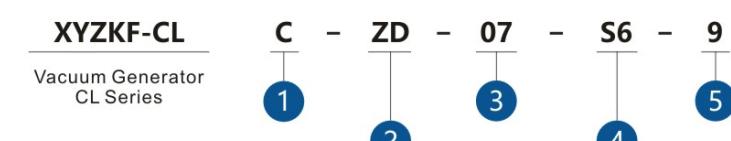
1. Product Type	Code Description	5. Air Supply Method	Code Description
	C Multi-chip modular type	18 Left side 8mm quick fitting	Left side 8mm quick fitting
		28 Dual 8mm quick fittings	Dual 8mm quick fittings
		38 Right side 8mm quick fitting	Right side 8mm quick fitting
		10 Left side 10mm quick fitting	Left side 10mm quick fitting
		20 Dual 10mm quick fittings	Dual 10mm quick fittings
		30 Right side 10mm quick fitting	Right side 10mm quick fitting
2. Nozzle Type	Code Description	6. Air Supply Method	Code Description
	ZD Medium vacuum, large flow (0.5 MPa)	S1 Left side silencer exhaust	Left side silencer exhaust
	GZ High vacuum, medium flow (0.5 MPa)	S2 Dual silencer exhaust	Dual silencer exhaust
	GX High vacuum, small flow (0.35 MPa)	S3 Right side silencer exhaust	Right side silencer exhaust
3. Nozzle Diameter	Code Description	18 Left side 8mm quick fitting exhaust	Left side 8mm quick fitting exhaust
	07 0.7mm nozzle diameter	28 Dual 8mm quick fitting exhaust	Dual 8mm quick fitting exhaust
	10 1.0mm nozzle diameter	38 Right side 8mm quick fitting exhaust	Right side 8mm quick fitting exhaust
4. Vacuum Port	Code Description	10 Left side 10mm quick fitting exhaust	Left side 10mm quick fitting exhaust
	S4 Side 4mm quick fitting	20 Dual 10mm quick fitting exhaust	Dual 10mm quick fitting exhaust
	S6 Side 6mm quick fitting	30 Right side 10mm quick fitting exhaust	Right side 10mm quick fitting exhaust

Leader Order Code



1. Cable Type	Code Description	2. Cable Length	Code Description
	M12 M12 Female to Bare Wire (Power Cable)	020 Cable Length 2m	
	M12RJ45 M12 Male to RJ45 Male (PLC Communication Cable)	030 Cable Length 3m	
	M12M12 M12 Male to M12 Male (Fieldbus Communication Cable)	050 Cable Length 5m	
		100 Cable Length 10m	

Used Only When Replacing Units in a Vacuum Island

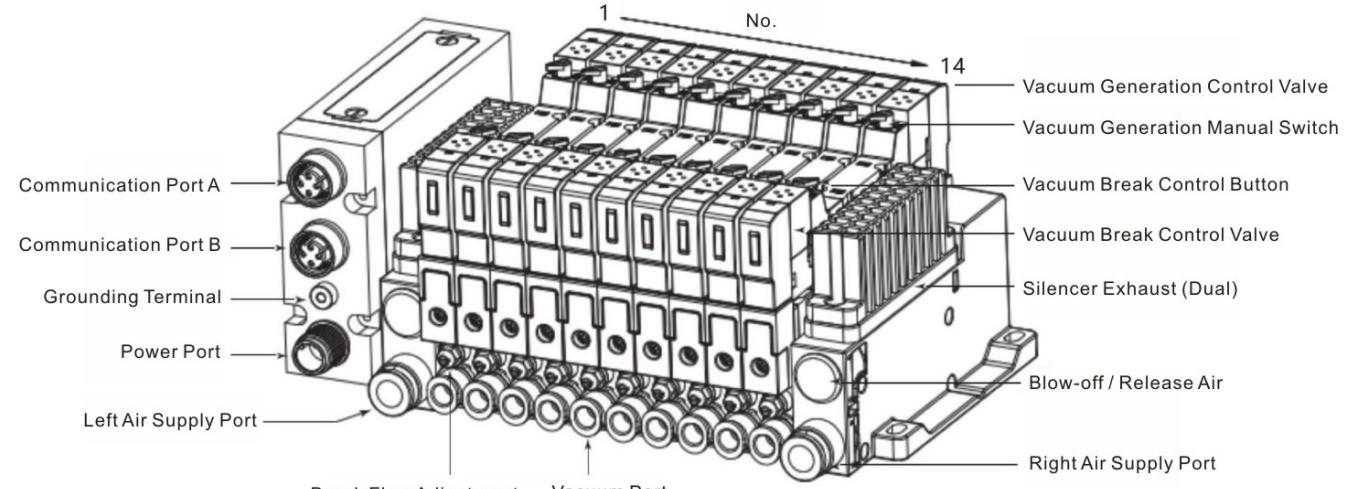


1. Product Type	Code Description	3. Nozzle Diameter	Code Description
	C Multi-chip modular type	07 0.7mm nozzle diameter	0.7mm nozzle diameter
		10 1.0mm nozzle diameter	1.0mm nozzle diameter
2. Nozzle Type	Code Description	4. Vacuum Port	Code Description
	ZD Medium vacuum, large flow (0.5 MPa)	S4 Side 4mm quick fitting	Side 4mm quick fitting
	GZ High vacuum, medium flow (0.5 MPa)	S6 Side 6mm quick fitting	Side 6mm quick fitting
	GX High vacuum, small flow (0.35 MPa)		
7. Position Number	Code Description		
	1-14 Position number of the single vacuum unit within the vacuum island		

ZKF-CL Series Multifunctional Protocol Vacuum Manifold

 INGYU ELECTRON

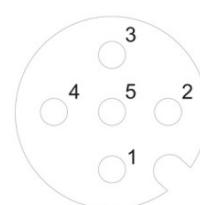
Functional Diagram



Electrical Interface Definition

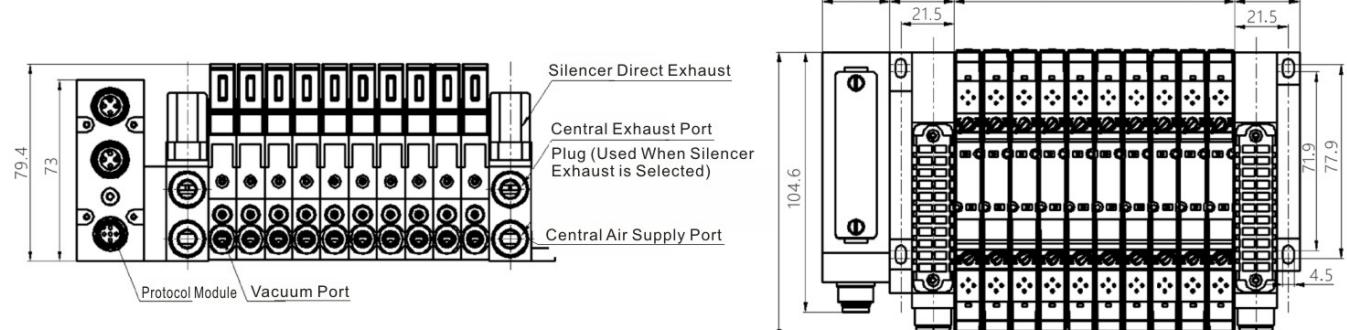


Pin No.	Definition	Description
1	TD+	TransmitData+
2	RD+	ReceiveData+
3	TD-	TransmitData-
4	RD-	ReceiveData-



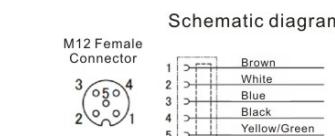
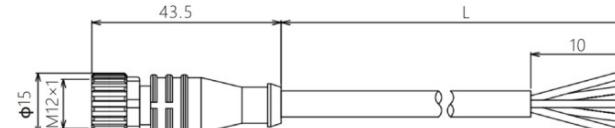
Pin No.	Definition	Description
1	V124V	+24Vfor solenoid valve
2	V10V	0Vfor solenoid valve
3	V224V	+24Vfor V2unit operation
4	V20V	0Vfor V2unit operation
5	FE	Functional Earth

Dimension - Vacuum Island

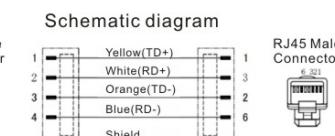
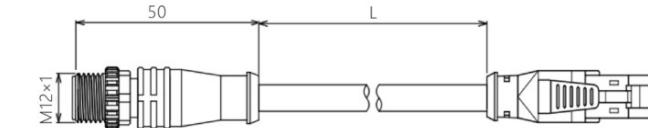


Dimension - Leading Wire

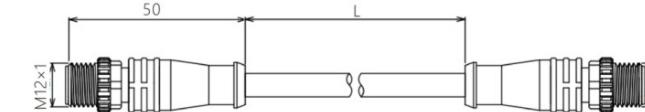
Power Cable: XY-VT-M12-020(Ordering Code)



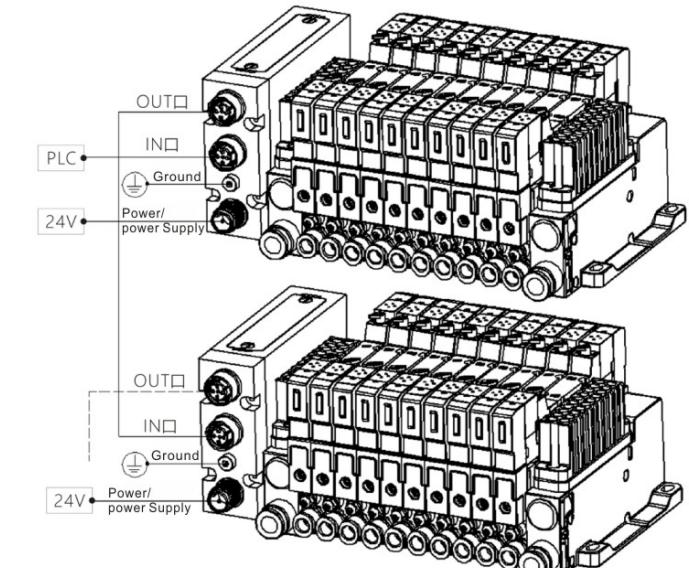
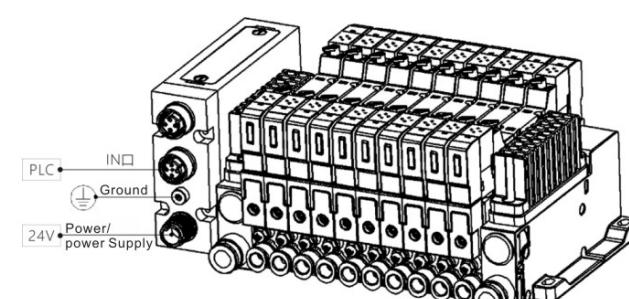
PLC Communication Cable: XY-VT-M12RJ45-020(Ordering Code)



Fieldbus Communication Cable: XY-VT-M12M12-020 (Ordering Code)



Connection Instructions



Single Group Usage

When using a single group:

- Power cable: 1 PCS
- PLC communication cable: 1 PCS

24V Power Wiring:

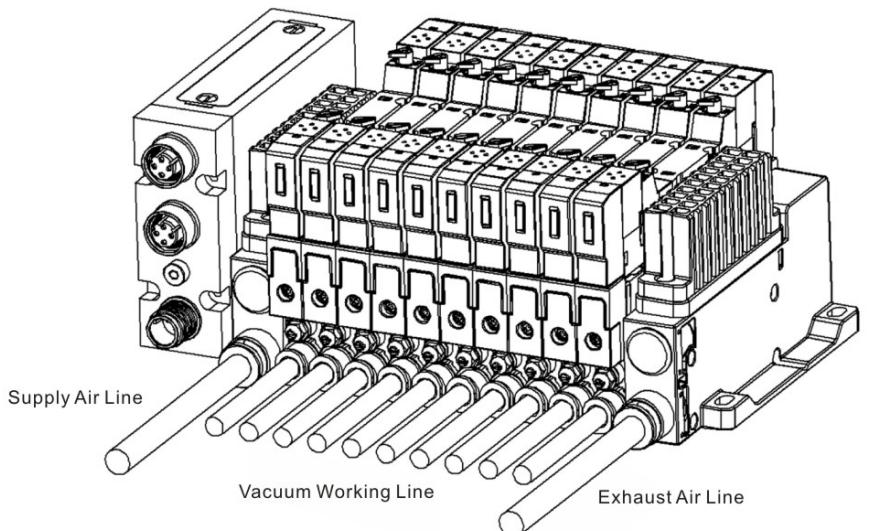
- Brown24+
- Blue24-
- (Only applicable when using our company's power cable)

Multiple Groups (Daisy Chain) Usage

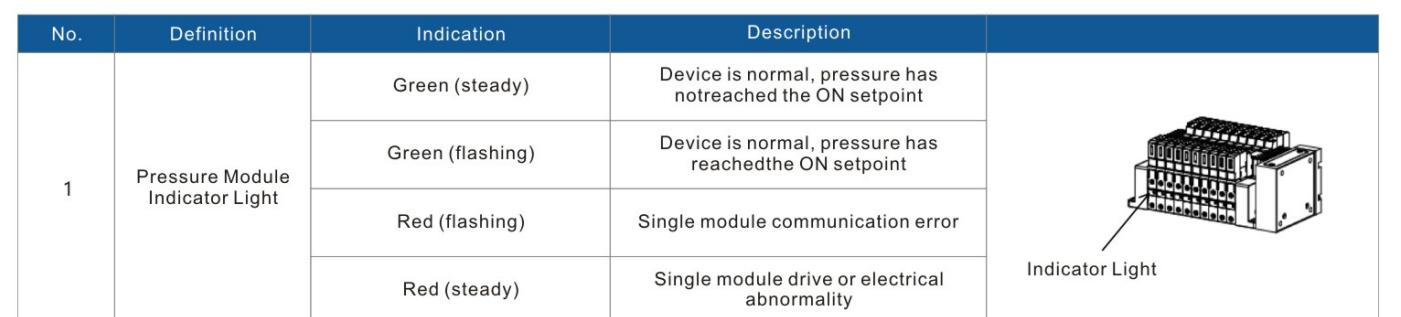
When multiple groups are daisy-chained:

- Power cable for each group: 1 PCS
- PLC communication cable: 1 PCS
- Fieldbus communication cable: 1 PCS(depending on actual configuration)
- 24v Power Wiring:
- Brown24+
- Blue24-
- (Only applicable when using our company's power cable)

Air Connection Instructions



Pressure Module Indicator Light Description

No.	Definition	Indication	Description	
1	Pressure Module Indicator Light	Green (steady)	Device is normal, pressure has not reached the ON setpoint	 <p>Indicator Light</p>
		Green (flashing)	Device is normal, pressure has reached the ON setpoint	
		Red (flashing)	Single module communication error	
		Red (steady)	Single module drive or electrical abnormality	

Notes

1. This product is only suitable for compressed air as the working medium and must not be used with corrosive or flammable gases.
2. The air supply must be clean and dry.
3. Installation, operation, and maintenance must follow this manual to ensure proper function and personnel safety.
4. When installing the pressure module, avoid foreign matter entering the air passages to prevent damage or malfunction.
5. Ensure the wiring is correct. Incorrect power input may cause damage to the module.

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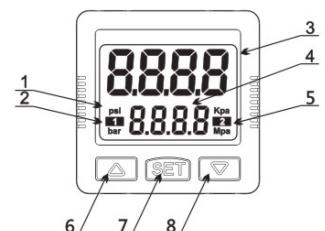
DPS Series Digital pressure switch

- LCD displays output status in real time
- Three switching modes
- Multiple electrical signal output combinations to choose from
- Dual-row LCD display for set values
- Suitable for various environments (IP65, corrosion-resistant)



DPS-2 Series

Panel

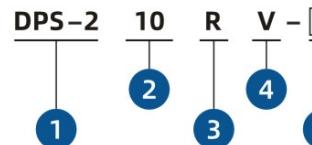


No	Name
1	Pressure Unit
2	Ouput 1 Indicator
3	Main Display Section
4	Sub-display Section
5	Ouput 2 Indicator
6	Up Button
7	Setting Button
8	Down Button
9	Electric Interface
10	Pressure Port

Specification

Model	DPS-201(Compound)	DPS-210(Positive)
Pressure measure	Range Of Measure	-100kPa~100kPa
	Setting Range	-100kPa~100kPa
	Withstand Pressure	500kPa
	Pressure Type	Non-flammable ,Non-corrosive gas, Gauge pressure measurement
	Measure Accuracy	≤ ±2%F.S.(Ambient temperature 25°C)
	Temperature Error	≤ ±3%F.S. (Temperature range 0~ 50°C)
	Measure Pattern	Hysteresis model Compare mode of upper and lower bounds
Display	Port size	External R1/8、NPT1/8、G1/8 option , internal thread M5
	Brief Description	Double LCD display
	Status Display	4-digital measurement value ,unit display,output status display
Input Power	Display Model	Adjustable backlight ,4 groups of dispaly models
	Voltage Range	24VDC ±10%
Output Signal	Power Comsuption	40mA MAX(Non-load)
	Transistor Output	NPN open-collector oupt Output current :80mA MAX Voltage drop : ≤ 1V
Environmental Resistance	Analog Output	Voltage output Signal amplitude:1~5V Load resistance >1kΩ
	Response Time	Adjustable : 2.5ms、 20ms、 100ms、 500ms、 1000ms、 2000ms
	Short-circuit Protection	Yes
	Ip Class	IP40
	Ambient Temperature	Operating temperature 0~50°C ,storage temperature -20~60°C
	Ambient Humidity	Operating humidity 35~ 80%RH
	Insulation Voltage	1000VAC 1min
	Insulation Resistance	≥ 50MΩ (500VDC)
	Shock	Max100m/s²,3time seach in 6 directions of x,y,z
	Vibration	10~150HZ, 1.5 mm full amplitude, 2 hours each direction of x,y,z

Ordering Code



1. DPS-2 Series

2. Range
10: -100~1000kpa
01: -100~100kpa

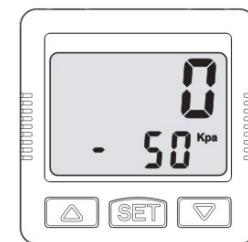
3. Port
R: R1/8(M5 female thread)
N: NPT1/8 (M5 female thread)
G: G1/8 (M5 female thread)

4. Output
N: NPNx2
P: PNPx2
A: NPN+Analog 4~20mA
V: NPN+Analog 1~5V
B: PNP+Analog 4~20mA
W: PNP+Analog 1~5V

5. Mounting
M : Panel
N : Panel+shield
Z : L bracket
S : S bracket

Quick Setting

● Zero point setting



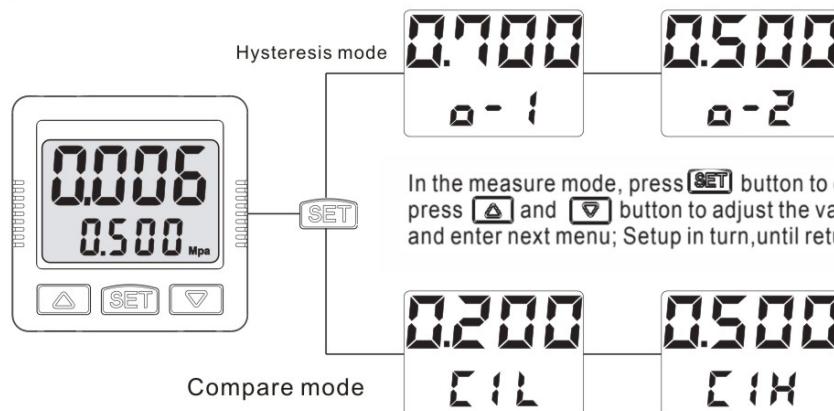
In the measuremode,press + - button at the same time,untildisplay "0",release the button;
PS:resetrange:±10%F.S.

● key lock and unlock



Lock: in the measure mode, press + + button at the same time until "LOCK ON" shown,release the buttons;
Unlock: in the measure mode, press + + button at the same time until "LOCK OFF" shown,release the buttons.

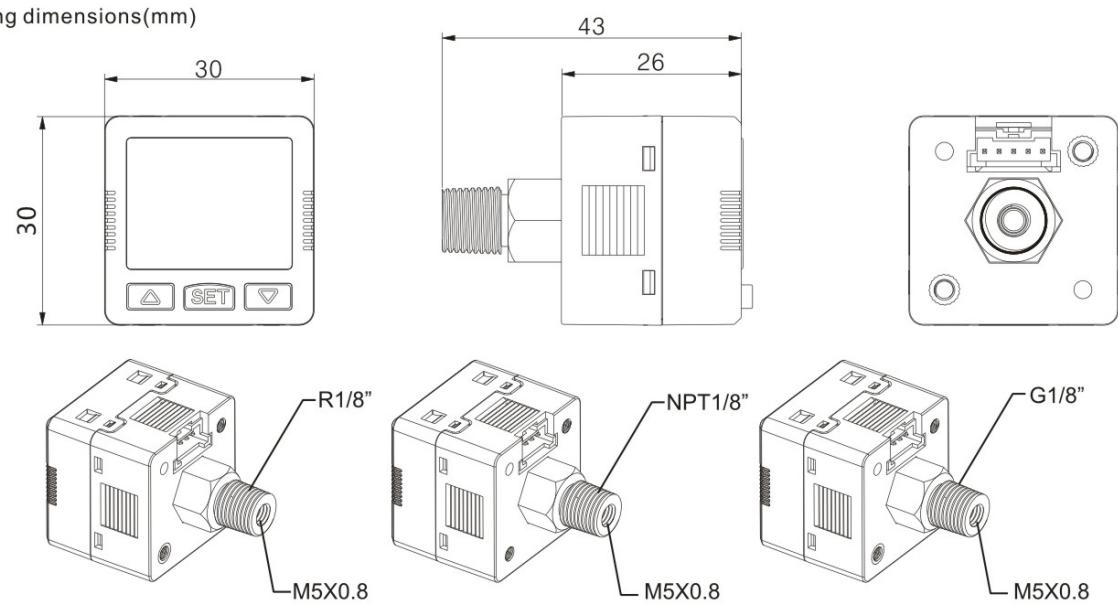
● Easy setup



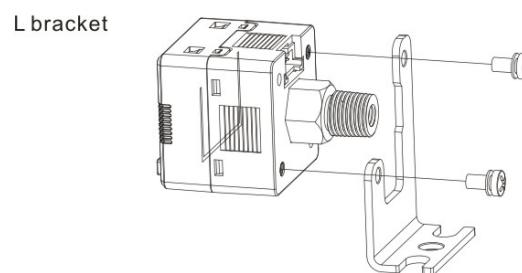
In the measure mode, press button to enter easy setting mode,
press and button to adjust the value; press button and enter next menu; Setup in turn,until return to measurement interface.

Mounting Dimensions(mm)

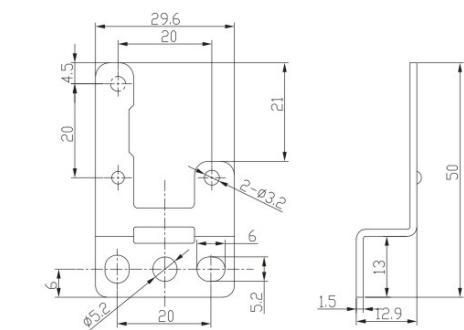
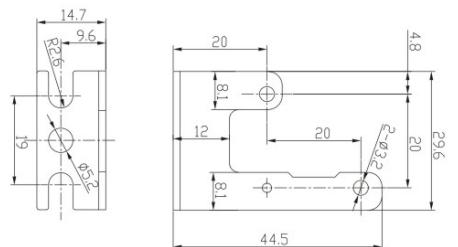
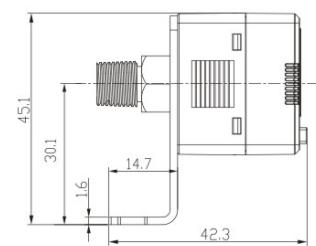
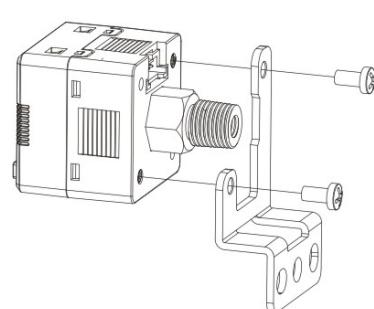
Mounting dimensions(mm)



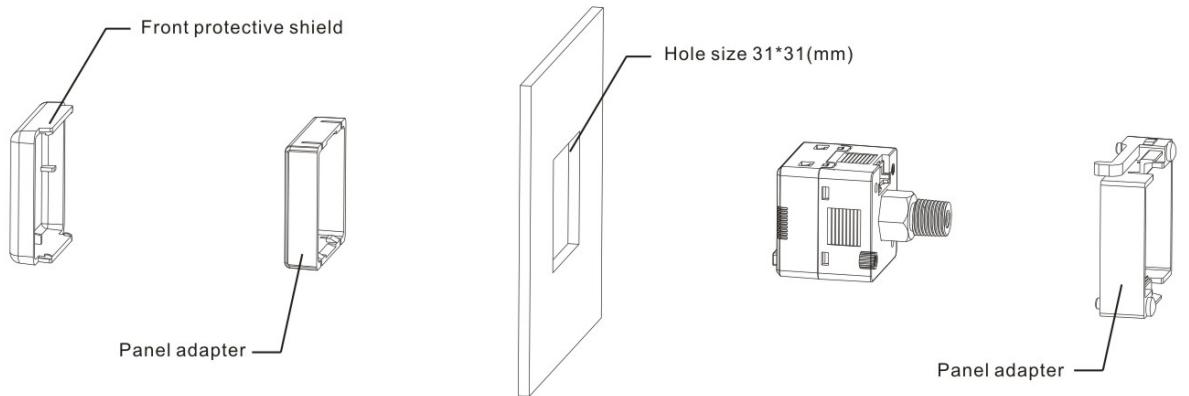
Mounting Bracket



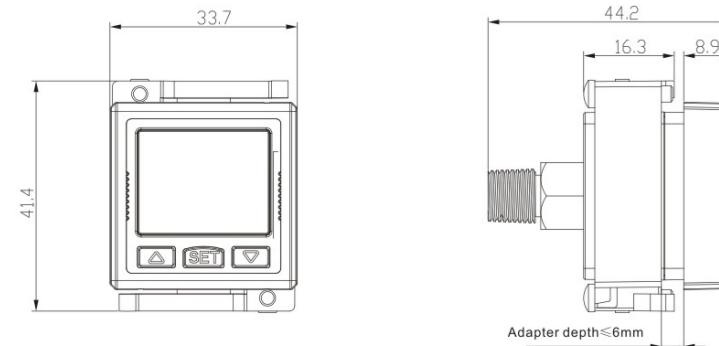
S bracket



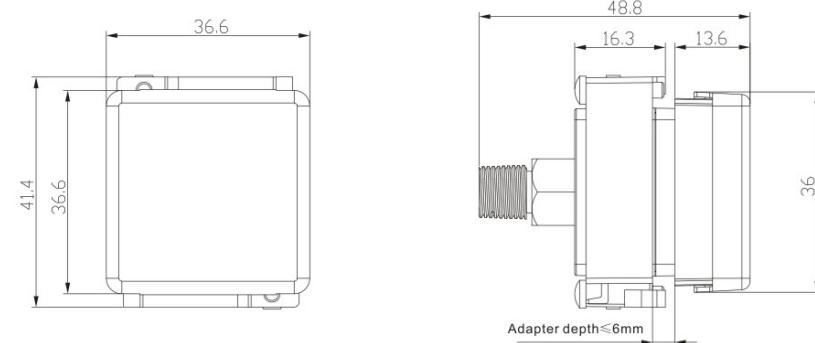
Panel bracket



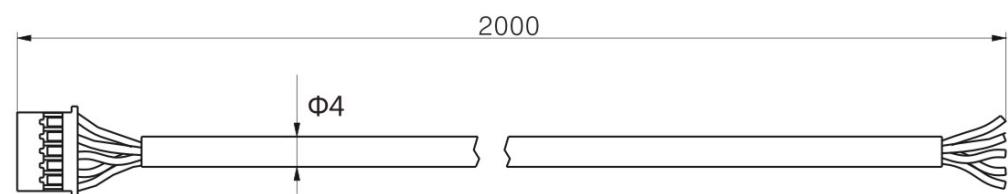
Panel mount



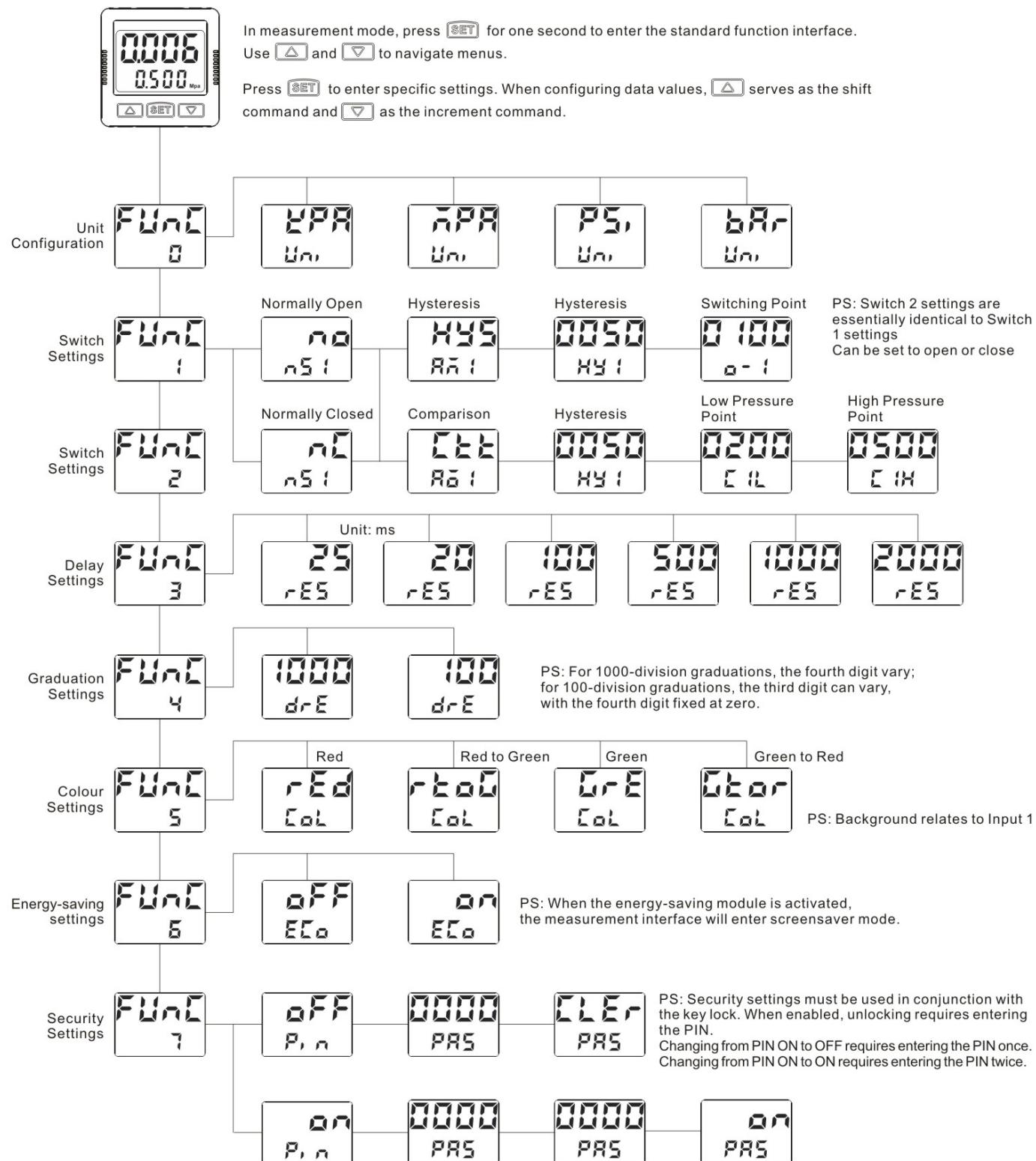
Add dust cover installation



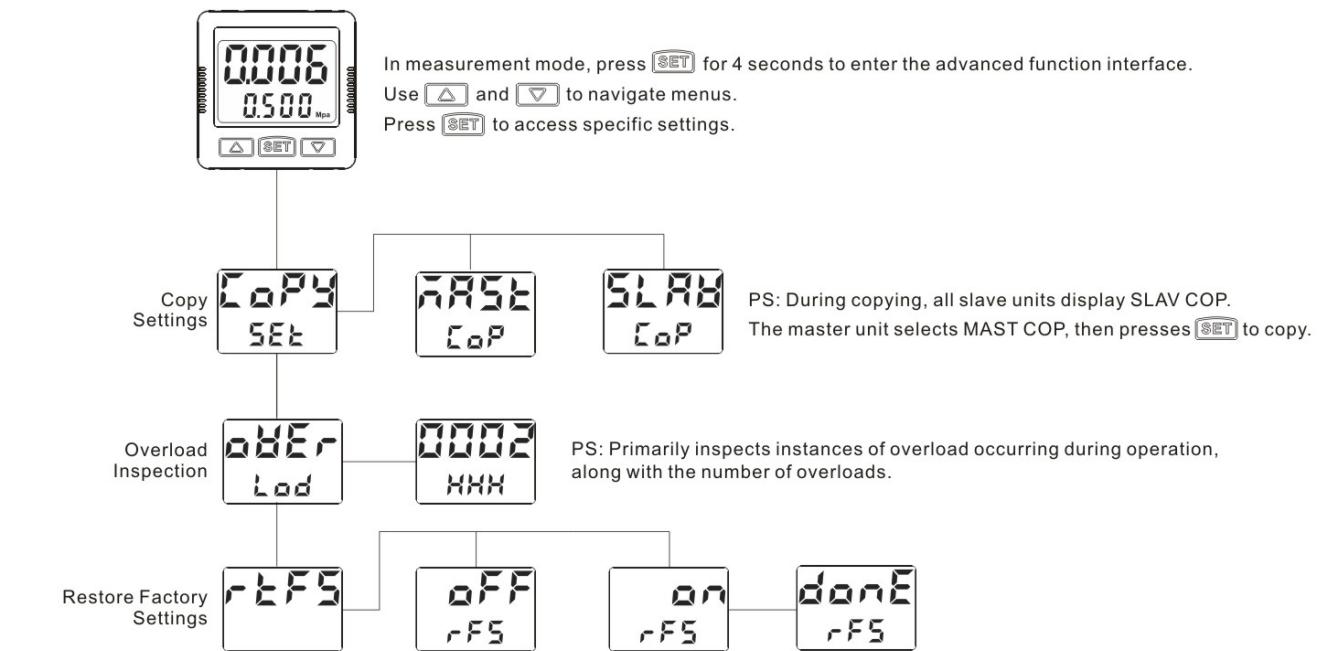
Wire dimension



Operating Instructions (Standard Function Interface)



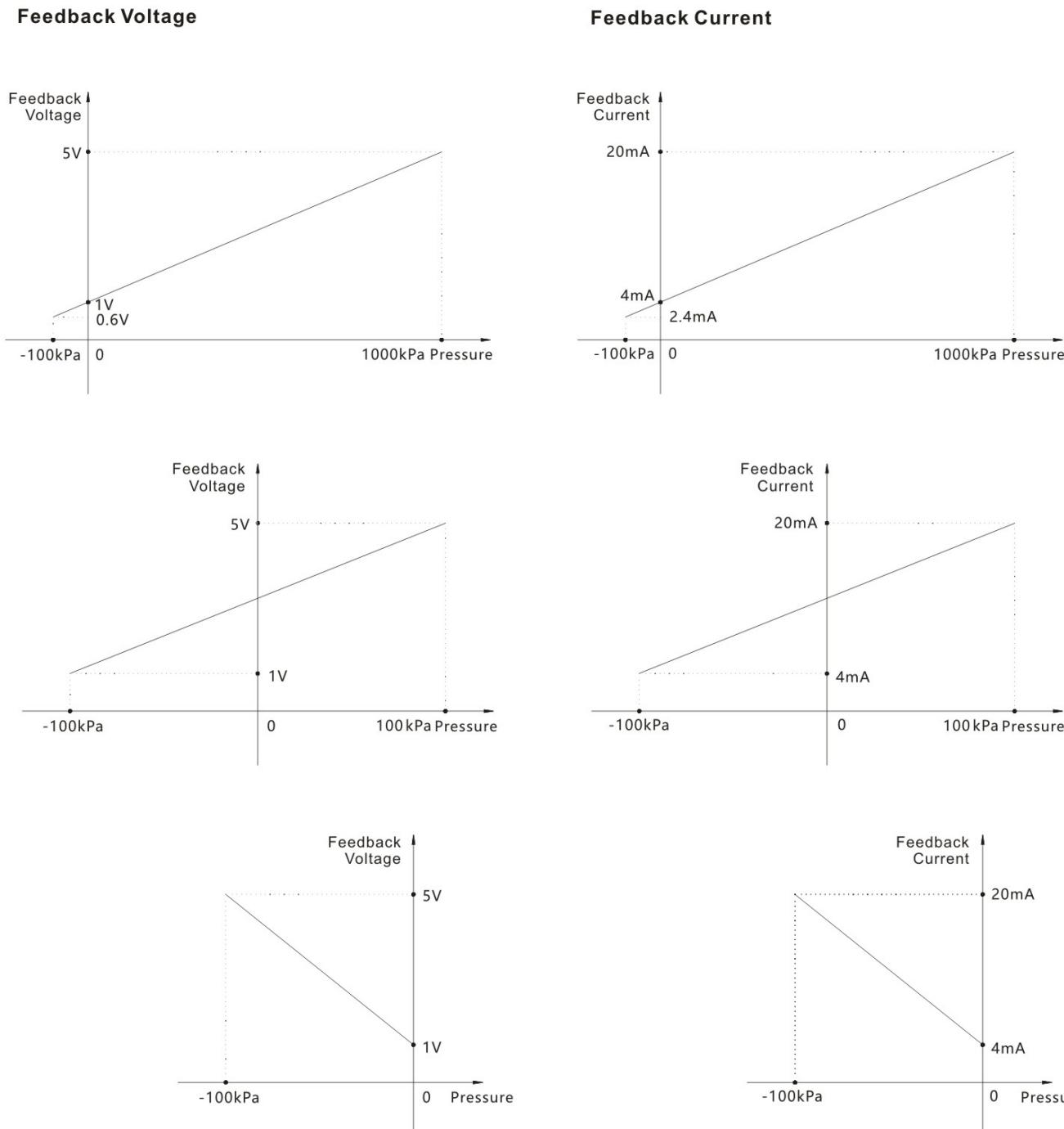
Operating Instructions (Standard Function Interface)



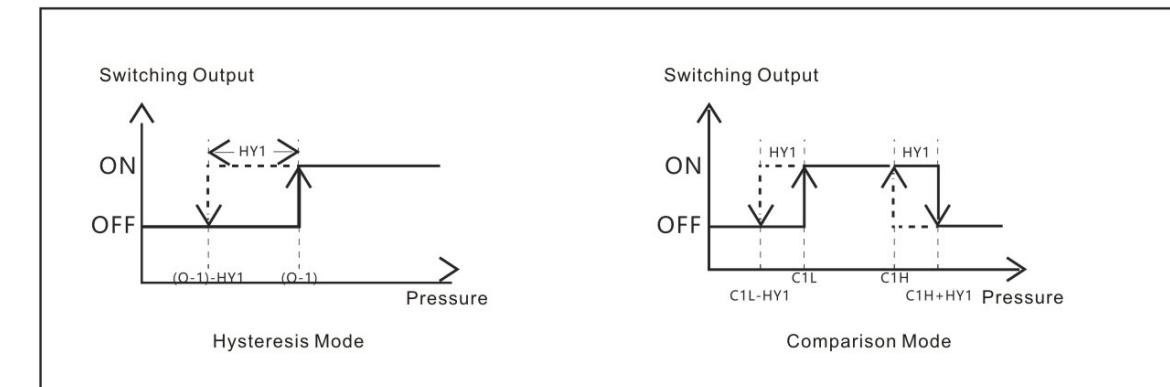
Error Code Description

Error Prompt	Cause	Resolution
Err 1	Zeroing range exceeded	Zeroing range restricted to 10% F.S. Do not set beyond this value.
Err 2	Switch output current is excessive	Please inspect the output connection cables for issues such as short circuits or excessive load.
Err 4	Incorrect pressure setting logic	Hysteresis mode: HY S value < 0-1 Comparison mode: HY S value < C1L < C1H
Err 5	Abnormal stored data	Chip malfunction – repair required
Err 6	Incorrect password entered	Please input the correct password
Err 7	Communication error during copying	Data verification error - please copy again
HHHH	Pressure exceeds measurement range	Please reduce the air supply pressure to within the specified range

Pressure-Electrical Signal Feedback Curve Diagram



Output Function Diagram for Each Mode in Normally Open State



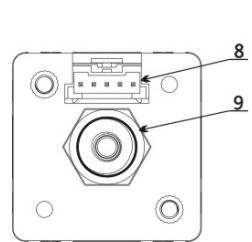
From	To	Pa	kPa	MPa	kgf/cm ²	mmHg	psi	bar	inHg
1Pa	1	0.001	0.000001						
1kPa	1000	1	0.001	0.010197	7.500616	0.145038	0.01	0.2953	
1MPa	1000000	1000	1	1	10.197	7500.616	145.038	10	295.2998
1kgf/cm ²	98066.5	98.0665	0.098066	1	735.559	14.2233	0.980665	28.95979	
1mmHg	133.32	0.13332	0.000133	0.001359	1	0.019336	0.001333	0.03937	
1psi	6895	6.985	0.006895	0.07031	51.7157	1	0.06895	2.036074	
1bar	100000	100	0.1	1.01972	750.062	14.5038	1	29.52998	
1inHg	3386.388	3.386388	0.003386	0.034530	25.4	0.491141	0.033863	1	

Precautions

- This product is intended solely for measuring gas pressure; the medium must not contain corrosive or flammable gases.
- The operating environment avoid high temperatures and humidity.
- When installing or removing this product, ensure the pressure source is shut off and the output cable is disconnected from the controller to safeguard both the product and personnel. Secure the pressure connection using a hex key; do not rotate the main body directly.
- During installation, connect using components matching the pressure port dimensions and verify proper sealing to prevent measurement errors or gas leakage.
- Before powering on, confirm correct wiring connections. Avoid excessive voltage input to prevent product damage.

DPS-3 Series (Anti-corrosion)

Panel

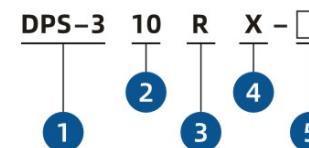


序号	名称
1	Locking indicator
2	Output indicator
3	Pressure unit
4	Main display section
5	Up button
6	Setting button
7	Down button
8	Electric interface
9	Pressure port

Specification

Model	DPS-301(Compound)	DPS-310(Positive)
Pressure measure	Range Of Measure -100kPa~100kPa	-0.100MPa~1.000MPa
	Setting Range -100kPa~100kPa	0.000MPa~1.000MPa
	Withstand Pressure 500kPa	1.500MPa
	Pressure Type Non-flammable ,Non-positive gas, Gauge pressure measurement	
	Measure Accuracy ≤ ±2% f.s.(ambient temperature 25°C)	
	Temperature Error ≤ ±3% f.s. (temperature range 0~ 50°C)	
	Hysteresis mode	
Measure Pattern	Single point mode	
	Window mode	
Port size	External R1/8- NPT1/8- G1/8 option , internal thread M5	
Display	Status Display LCD display,4-digital measurement value ,unit display ,output status display	
	Display Model Adjustable backlight ,4 groups of dispaly models	
Input Power	Voltage Range 24VDC ±10%	
	Power Comsuption 40ma max(non-load)	
Output Signal	Transistor Output NPN open-collector oupt Output current :80ma max Voltage drop : ≤ 1v	PNP open-collector oupt Output current :80ma max Voltage drop : ≤ 1v
	Response Time Adjustable : 2.5ms、20ms、100ms、500ms、1000ms、2000ms	
	Short-circuit Protection Yes	
	IP Class IP40	
Ambient Temperature	Operating temperature 0~50°C,storage temperature -20~60°C	
Ambient Humidity	Operating humidity 35~ 80%rh	
Insulation Voltage	1000vac 1min	
Insulation Resistance	≥ 50mΩ (500vdc)	
Shock	Max100m/s ² ,3time seach in 6 directions of x,y,z	
Vibration	10~150HZ, 1.5 mm full amplitude, 2 hours each direction of x,y,z	

Ordering Code



1. DPS-3 Series

2. Range
10:-100~1000kPa
01:-100~100kPa

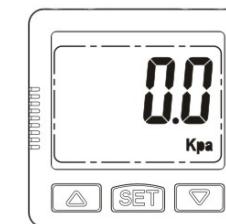
3. Port
R: R1/8(M5 female thread)
N: NPT1/8 (M5 female thread)
G: G1/8 (M5 female thread)

4. Output
X:NPN+PNP
Explanation 1: Product single-channel setting,
Optional NPN or PNP output channel ,
the black wire is NPN and the white wire is PNP

5. Mounting
M : Panel
N : Panel+shield
Z : L bracket
S : S bracket

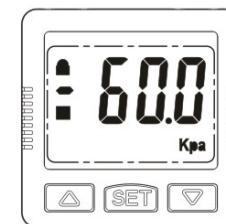
Quick Setting

Zero point setting



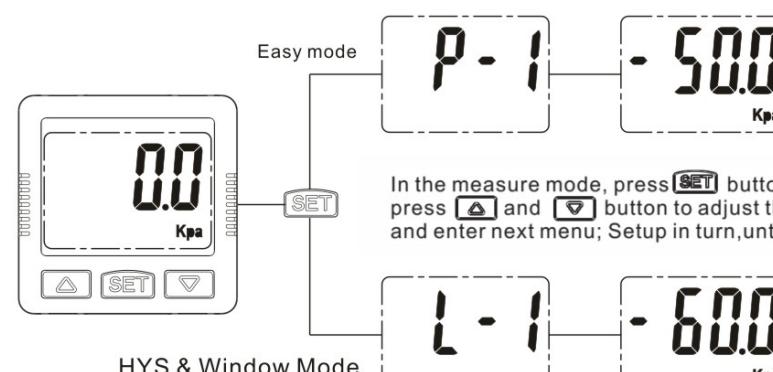
In the measure mode,press + button at the same time, until display "0", release the button;
PS: reset range: +/-10% F.S.

key lock and unlock



Lock: in the measure mode, press + + button at the same time until "LOCK ON" shown,release the buttons;
Unlock: in the measure mode, press + + button at the same time until "LOCK OFF" shown,release the buttons.

Easy setup



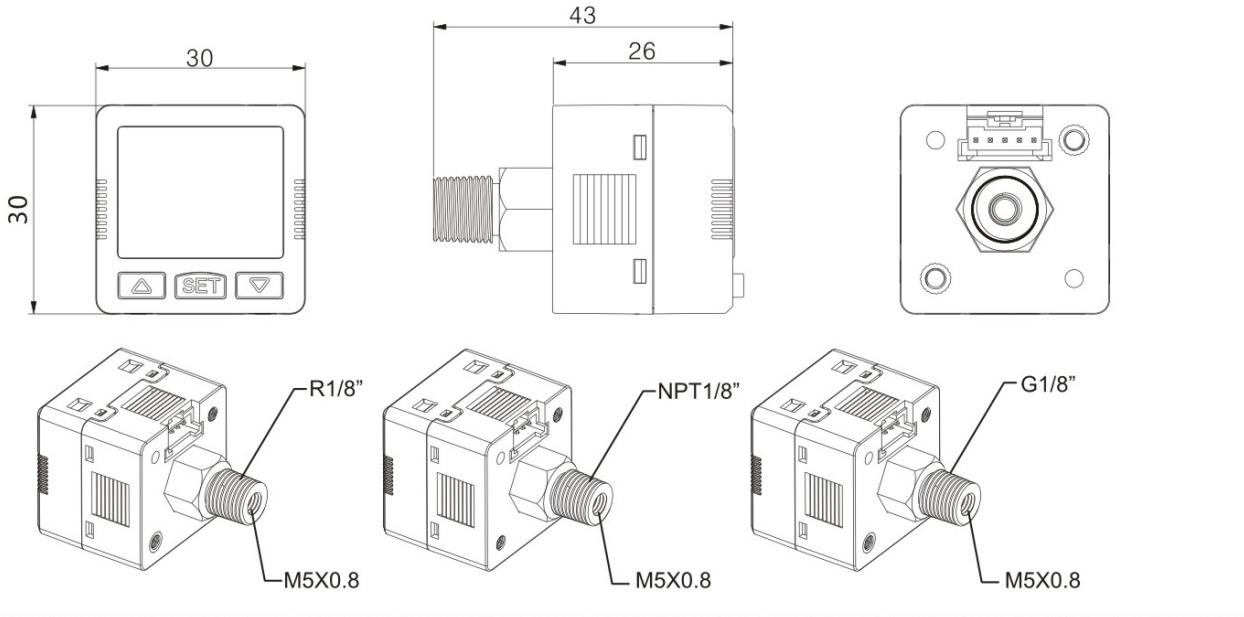
In the measure mode, press button to enter easy setting mode, press and button to adjust the value; press and enter next menu; Setup in turn,until return to measurement interface.

DPS series digital pressure switch

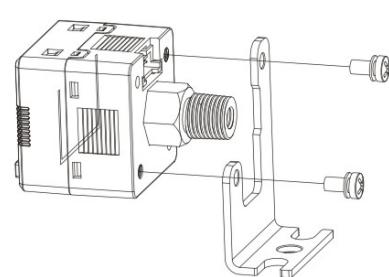
 XINGYU ELECTRON

MOUNTING DIMENSIONS(mm)

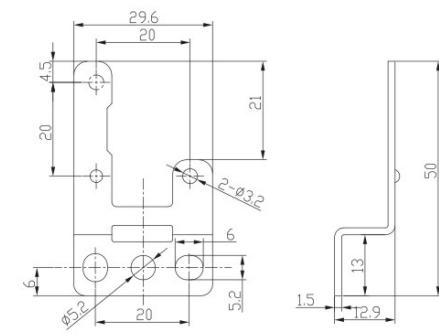
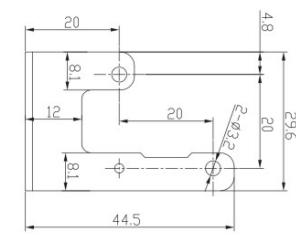
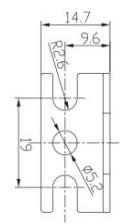
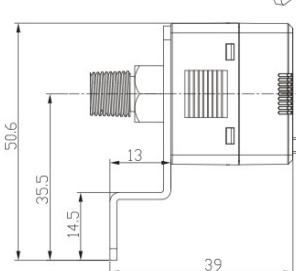
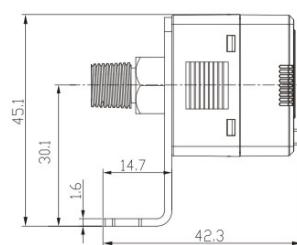
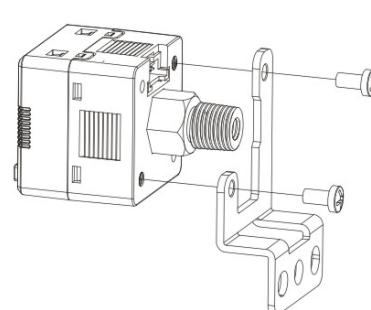
Mounting dimensions(mm)



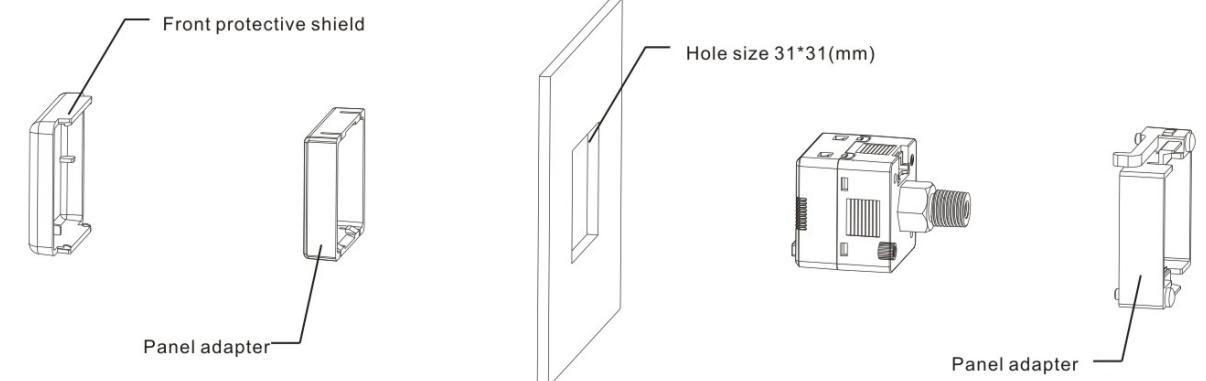
Mounting Bracket



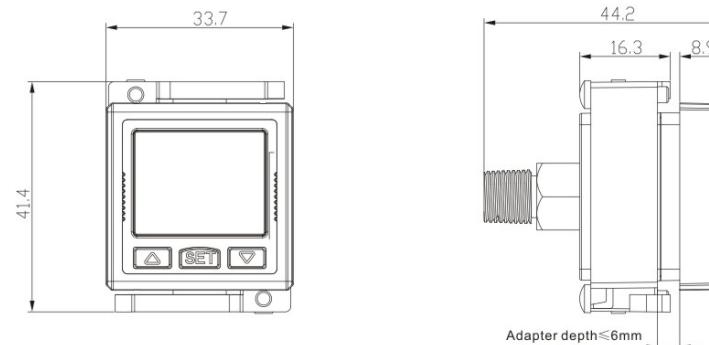
S bracket



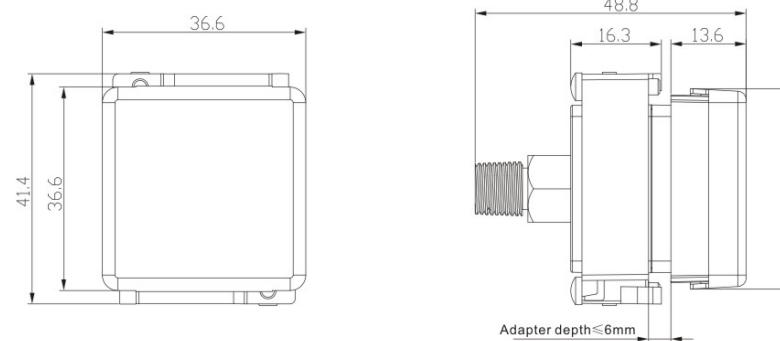
Panel bracket



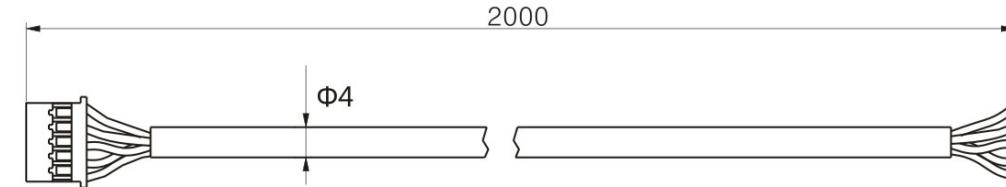
Panel mount



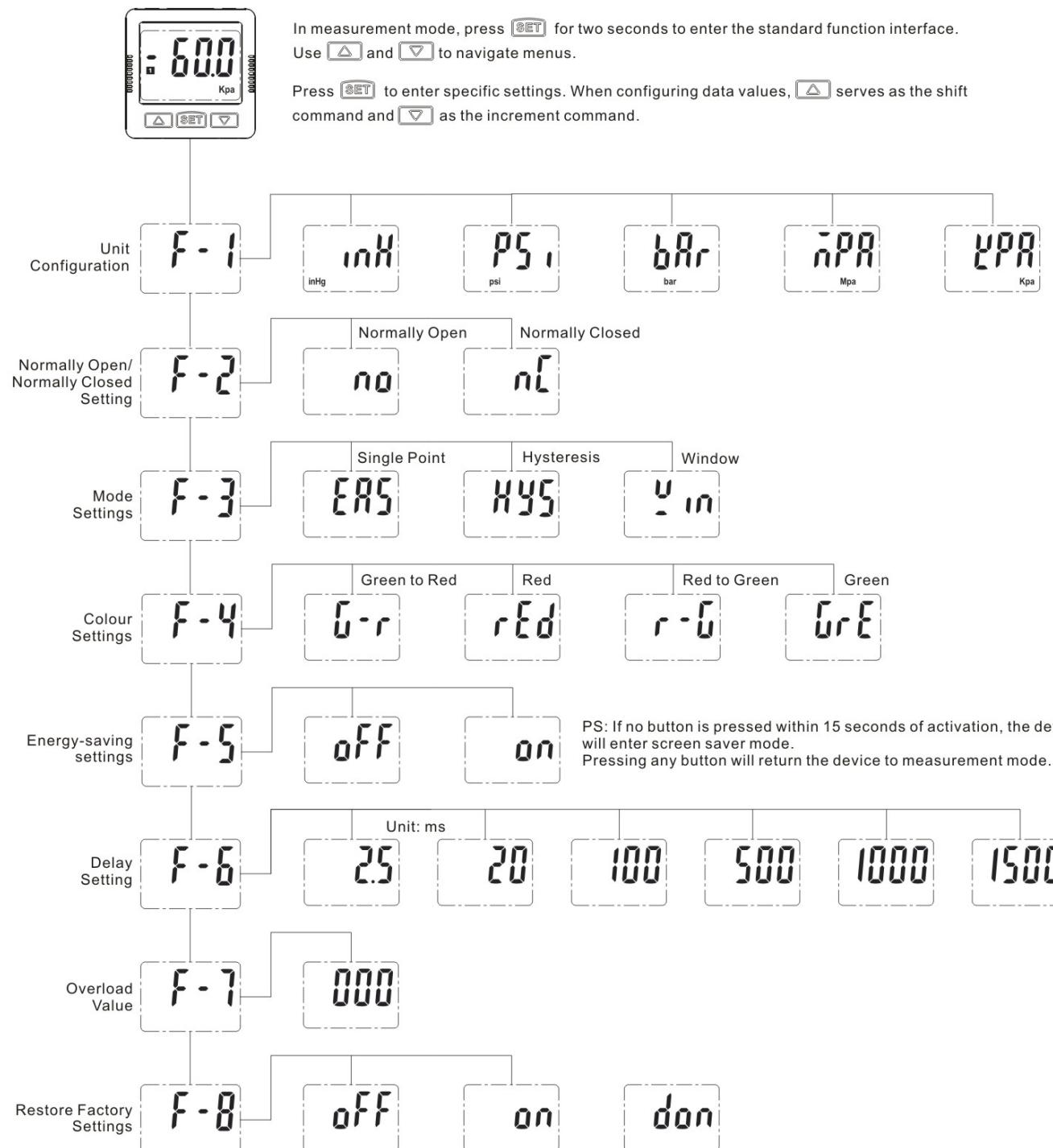
Add dust cover installation



Wire dimension



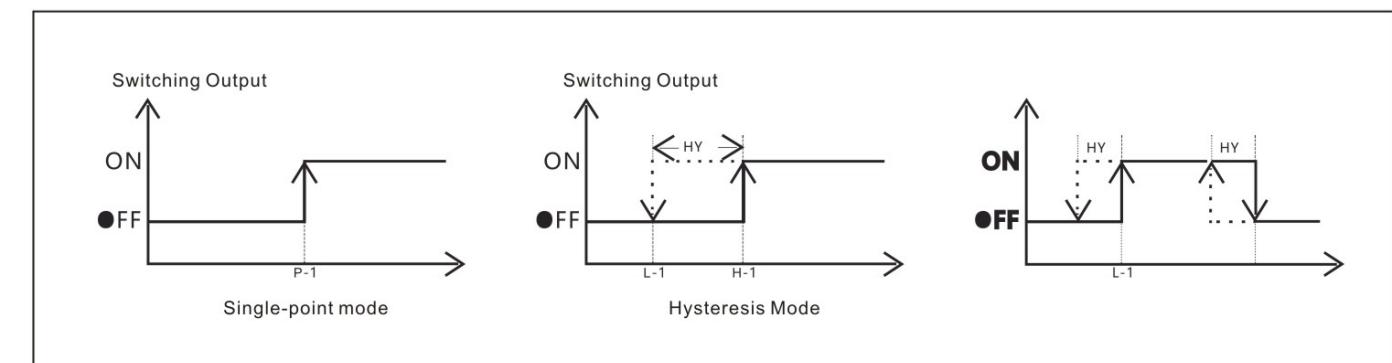
Operating Instructions (Standard Function Interface)



Error Code Description

Error Prompt	Cause	Resolution
Err 1	Zeroing range exceeded	Zeroing range restricted to 10% F.S. Do not set beyond this value.
Err 2	Switch output current is excessive	Please inspect the output connection cables for issues such as short circuits or excessive load.
Err 4	Incorrect pressure setting logic	Hysteresis mode: HY S value < O-1 Comparison mode: HY S value < C1L < C1H
Err 5	Abnormal stored data	Chip malfunction – repair required
HHHH	Pressure exceeds measurement range	Please reduce the air supply pressure to within the specified range

Output Function Diagram for Each Mode in Normally Open State



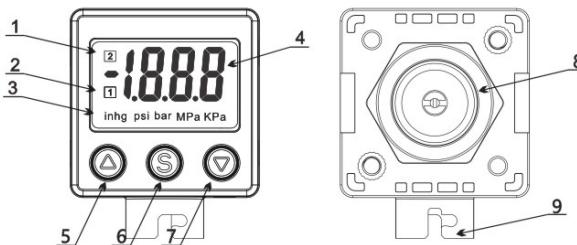
From \ To	Pa	kPa	MPa	kgf/cm ²	mmHg	psi	bar	inHg
1Pa	1	0.001	0.000001					
1kPa	1000	1	0.001	0.010197	7.500616	0.145038	0.01	0.2953
1MPa	1000000	1000	1	10.197	7500.616	145.038	10	295.2998
1kgf/cm ²	98066.5	98.0665	0.098066	1	735.559	14.2233	0.980665	28.95979
1mmHg	133.32	0.13332	0.000133	0.001359	1	0.019336	0.001333	0.03937
1psi	6895	6.985	0.006895	0.07031	51.7157	1	0.06895	2.036074
1bar	100000	100	0.1	1.01972	750.062	14.5038	1	29.52998
1inHg	3386.388	3.386388	0.003386	0.034530	25.4	0.491141	0.033863	1

Precautions

- This product is intended solely for measuring gas pressure; the medium must not contain corrosive or flammable gases.
- The operating environment avoid high temperatures and humidity.
- When installing or removing this product, ensure the pressure source is shut off and the output cable is disconnected from the controller to safeguard both the product and personnel. Secure the pressure connection using a hex key; do not rotate the main body directly.
- During installation, connect using components matching the pressure port dimensions and verify proper sealing to prevent measurement errors or gas leakage.
- Before powering on, confirm correct wiring connections. Avoid excessive voltage input to prevent product damage.

DPS-5 Series (Anti-corrosion)

Panel

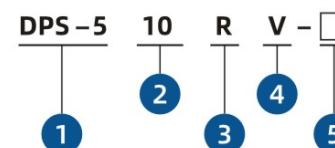


No	Name
1	Output indicator
2	Output indicator
3	Pressure unit
4	Main display section
5	Up button
6	Section button
7	Down button
8	Pressure port
9	Electric interface

Specification

Model	DPS-501	DPS-510	DPS-520
Range Of Measure	-100KPa~100KPa	-0.1MPa~1MPa	-0.1MPa~2MPa
Setting Range	-100KPa~100KPa	-0.1MPa~1MPa	-0.1MPa~2MPa
Withstand Pressure	300KPa	3MPa	
Pressure Type	Any flow which do not react with sus316L		
Measure Accuracy	≤±2%F.S.(ambient temperature 25°C)		
Temperature Error	≤±3%F.S. (temperature range 0~ 50°C)		
Measure Pattern	Easy Mode Hysteresis model Window mode.		
Port size	Male thread R1/4, NPT1/4, G1/4, female thread M5		
Display	Status Display LCD, 4-digit measurement value, unit display, output status display Display Model Adjustable backlight, 4 groups of display modes		
Input Power	Voltage Range 24VDC ±10% Power Consumption 40mA max(non-load)		
Output Signal	Transistor Output NPN open-collector output Output current :80mA MAX Voltage drop : ≤1V Analog Output Voltage output Signal amplitude:1~5V Load resistance ≥1KΩ Response Time Adjustable : 2.5ms、20ms、100ms、500ms、1000ms、1500ms Short-circuit Protection Yes	PNP open-collector output Output current :80mA MAX Voltage drop : ≤1V Current output Signal amplitude:4~20mA Load resistance ≤400Ω	
Environmental Resistance	IP Class IP65 Ambient Temperature Operating temperature 0~50°C ,storage temperature -20~60°C Ambient Humidity Operating humidity 35~ 80%RH Insulation Voltage 1000VAC 1min Insulation Resistance ≥ 50mΩ(500VDC) Shock Max100m/s²,3time seach in 6 directions of x,y,z Vibration 10~150HZ, 1.5 mm full amplitude, 2 hours each direction of x,y,z		

Ordering Code



1. DPS-5 Series

2. Range
10: -100~1000kpa
20: -100~2000kpa
01: -100~100kpa

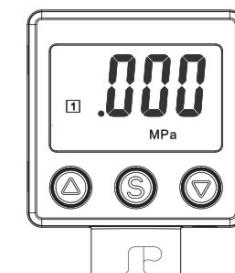
3. Port
R: R1/4" (M5 female thread)
N: NPT1/4"(M5 female thread)
G: G1/4" (M5 female thread)

4. Output
V: 2*NPN+Analog 1~5V
W: 2*PNP+Analog 1~5V
A: 2*NPN+Analog 4~20mA
B: 2*PNP+Analog 4~20mA

5. Mounting
M : Panel
N : Panel+shield
Z : L bracket
S : S bracket

Quick Setting

● Zero point setting



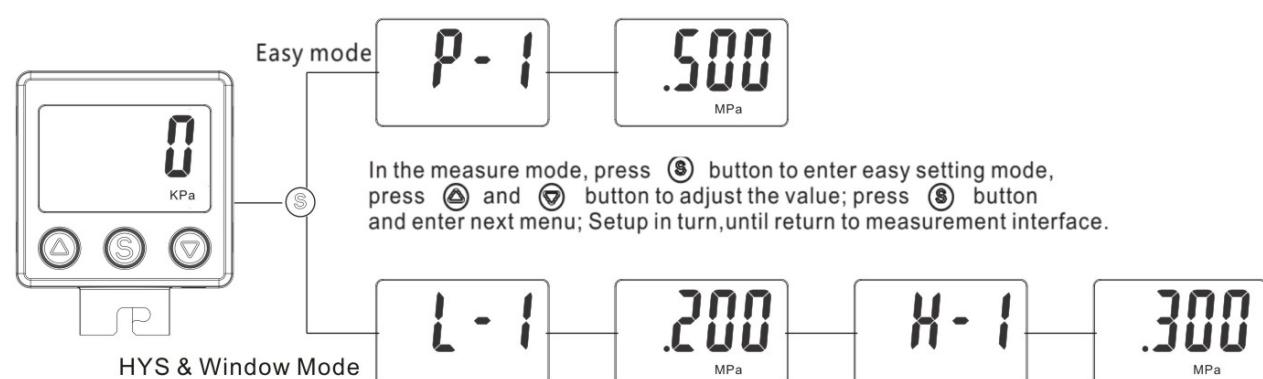
In the measure mode, press + button at the same time, until display "0", release the button;
PS: reset range: +/-10%F.S.

● key lock and unlock



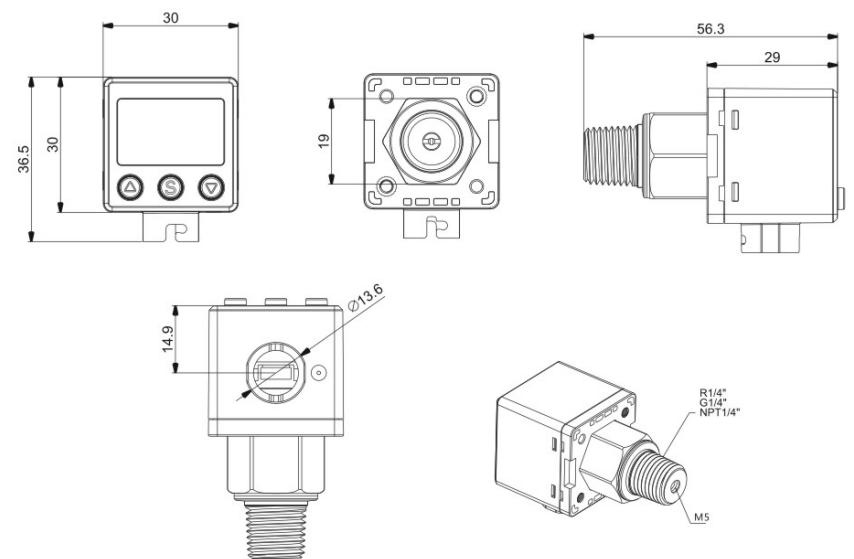
Lock: in the measure mode, press + + button at the same time until "LOC" shown,release the buttons;
Unlock: in the measure mode, press + + button at the same time until "UNL" shown,release the buttons.

● Easy setup

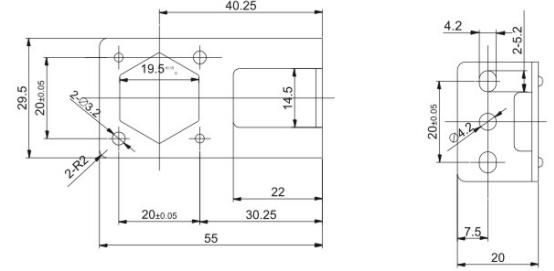
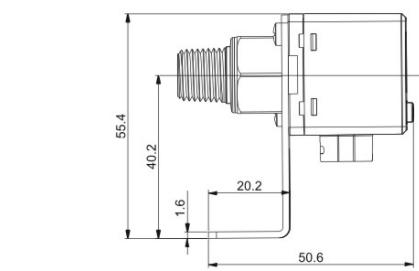
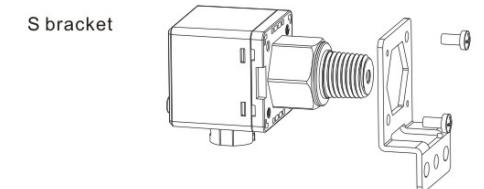
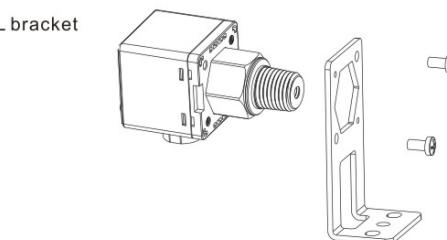


MOUNTING DIMENSIONS(mm)

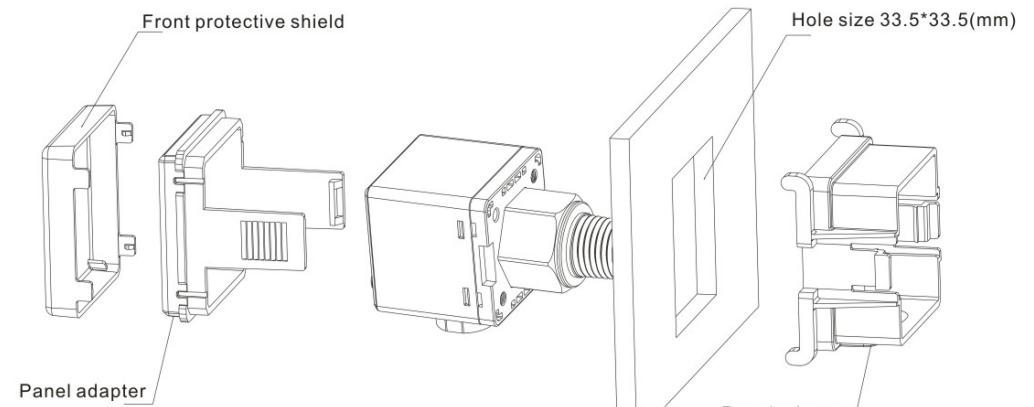
Overall dimension& connection port



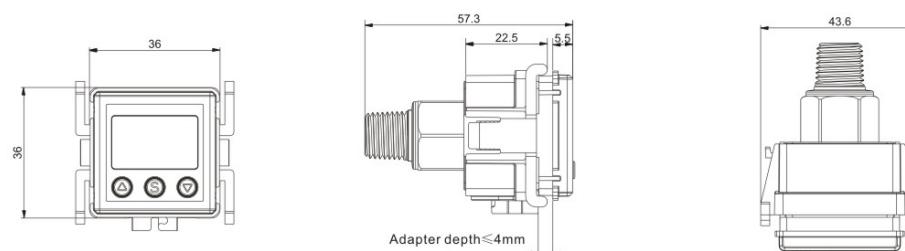
Mounting bracket



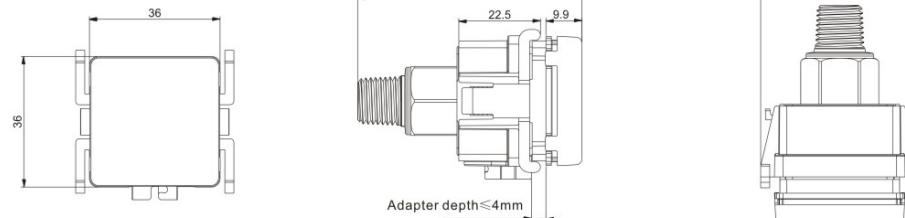
Panel bracket



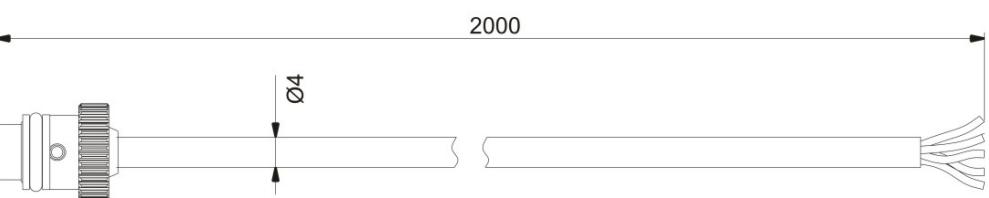
Panel mount



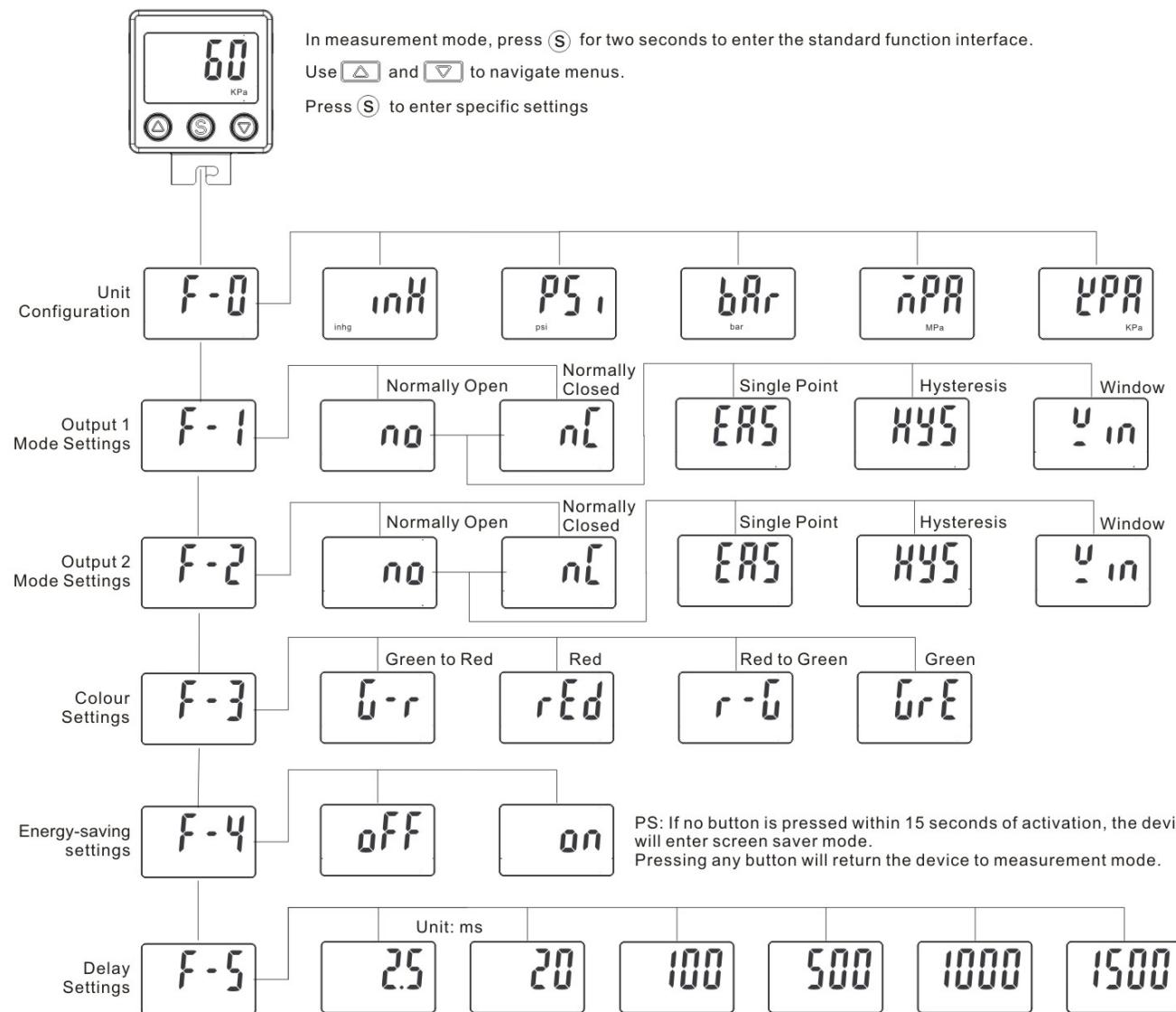
Add dust cover installation



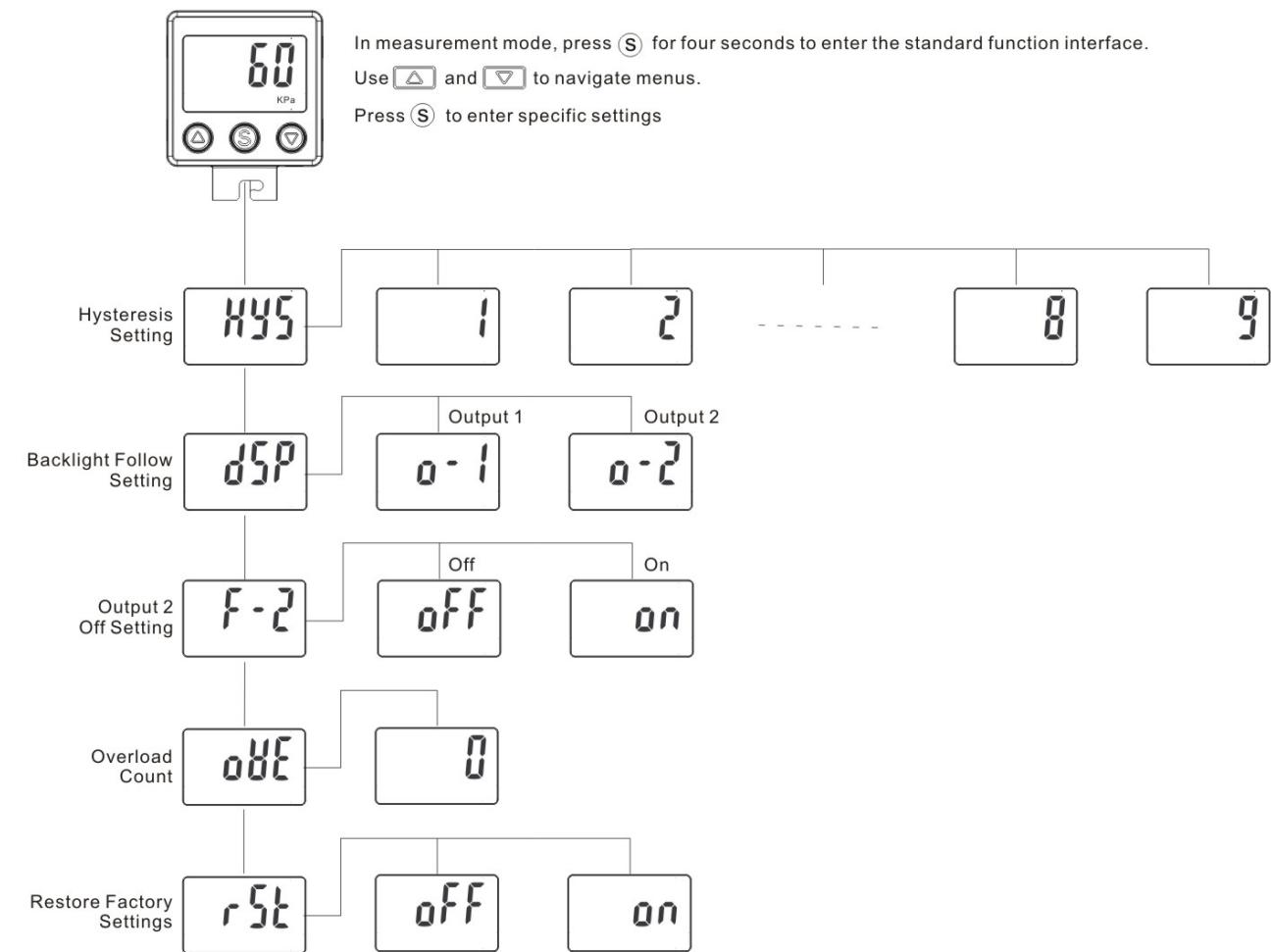
wire dimension



Operating Instructions (Standard Function Interface)



Operating Instructions (Standard Function Interface)

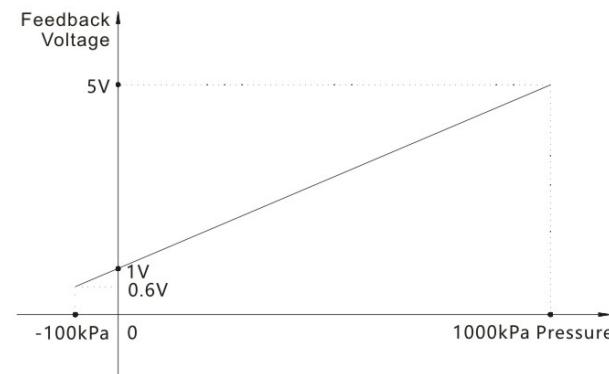


Error Code Description

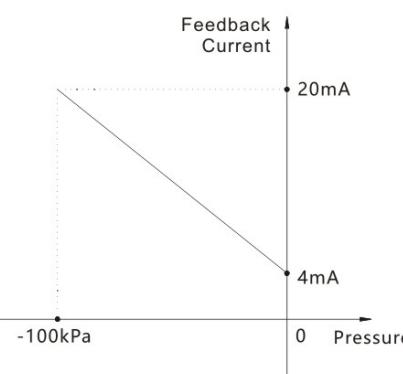
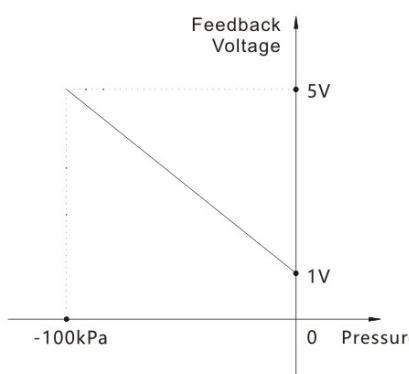
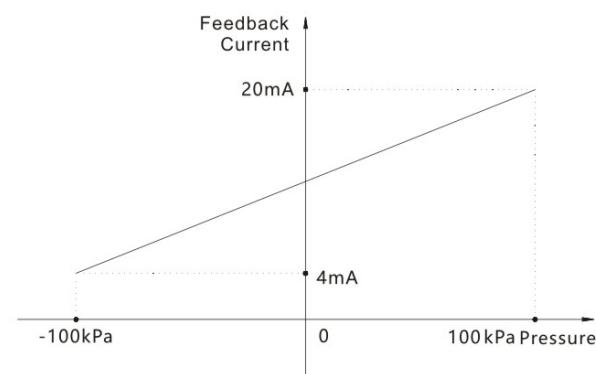
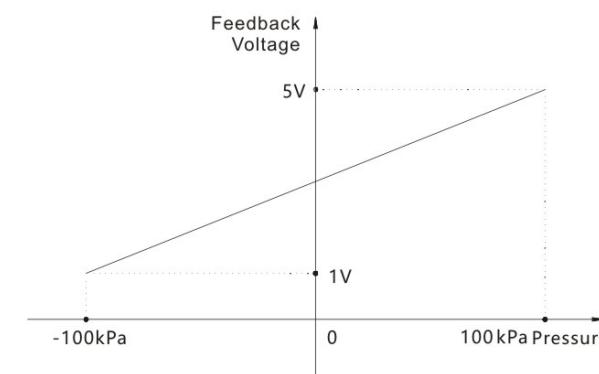
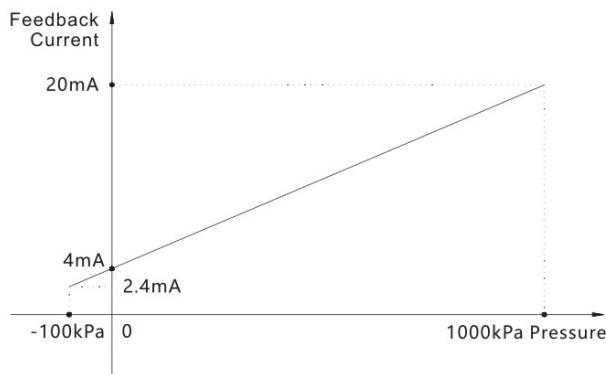
Error Prompt	Cause	Resolution
Err 1	Zeroing range exceeded	Zeroing range restricted to 10% F.S. Do not set beyond this value.
Err 2	Switch output current is excessive	Please inspect the output connection cables for issues such as short circuits or excessive load.
Err 4	Incorrect pressure setting logic	Hysteresis mode: HY S value < O-1 Comparison mode: HY S value < C1L < C1H
Err 5	Abnormal stored data	Chip malfunction – repair required
HHHH	Pressure exceeds measurement range	Please reduce the air supply pressure to within the specified range

Pressure-Electrical Signal Feedback Curve Diagram

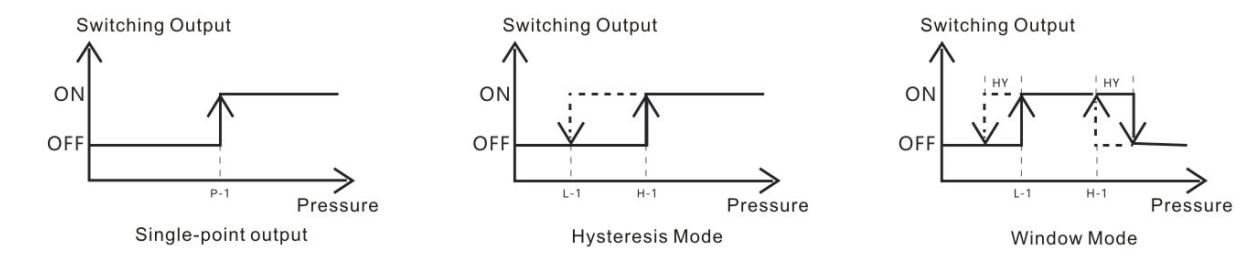
Feedback Voltage



Feedback Current



Output Function Diagram for Each Mode in Normally Open State



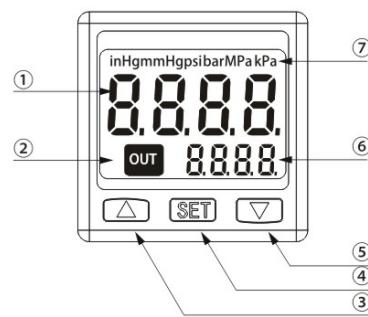
From \ To	Pa	kPa	MPa	kgf/cm ²	mmHg	psi	bar	inHg
1Pa	1	0.001	0.000001					
1kPa	1000	1	0.001	0.010197	7.500616	0.145038	0.01	0.2953
1MPa	1000000	1000	1	10.197	7500.616	145.038	10	295.2998
1kgf/cm ²	98066.5	98.0665	0.098066	1	735.559	14.2233	0.980665	28.95979
1mmHg	133.32	0.13332	0.000133	0.001359	1	0.019336	0.001333	0.03937
1psi	6895	6.985	0.006895	0.07031	51.7157	1	0.06895	2.036074
1bar	100000	100	0.1	1.01972	750.062	14.5038	1	29.52998
1inHg	3386.388	3.386388	0.003386	0.034530	25.4	0.491141	0.033863	1

Precautions

- This product is suitable for media that do not corrode SUS 316L.
- The operating environment avoid high temperatures and humidity.
- When installing or removing this product, ensure the pressure source is shut off and the output cable is disconnected from the controller to safeguard both the product and personnel. Secure the pressure connection using a hex key; do not rotate the main body directly.
- During installation, connect using components matching the pressure port dimensions and verify proper sealing to prevent measurement errors or gas leakage.
- Before powering on, confirm correct wiring connections. Avoid excessive voltage input to prevent product damage.

DPS-6 Series

Panel

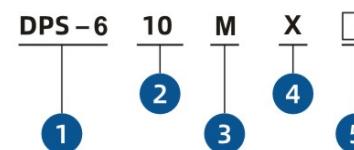


No	Name
1	Main display area
2	Output indicator
3	Up button
4	Set button
5	Down button
6	Sub-display section
7	Pressure unit

Specification

Model	DPS-601 Mixed pressure	DPS-610 Positive pressure
Pressure measure	Range of Measure -100KPa~+100KPa	-100KPa~+1000KPa
	Setting Range -100KPa~+100KPa	-100KPa~+1000KPa
	Withstand Pressure 500KPa	1500KPa
	Pressure Type Non flammable, non-corrosive gas, gauge pressure measurement	
	Measure Accuracy $\leq \pm 2\%$ F.S.(ambient temperature 25°C)	
	Temperature Error $\leq \pm 3\%$ F.S. (temperature range 0~ 50°C)	
	Measure Pattern Easy mode	
	Hysteresis model	
	Compar mode of upper and lower bounds	
Port size	Internal thread M5	
Input Power	Voltage Range 12~24VDC $\pm 10\%$	
	Power Consumption 40mA max(non-load)	
Output Signal	Transistor output NPN\PNP open-collector output Output current: 80mA MAX	
	Response time Adjustable:MIN 2.5mS	
	Analog output Voltage output Signal amplitude:1~5V Load resistance: >1KΩ	
Environment Resistance	IP Class IP40	
	Ambient Temperature Operating temperature 0~50°C ,storage temperature -20~60°C	
	Ambient Humidity Operating humidity 35~ 80%RH	
	Insulation Voltage 1000VAC 1min	
	Insulation Resistance $\geq 50M\Omega$ (500VDC)	
	Shock Max100m/s ² ,3time seach in 6 directions x,y,z	
	Vibration 10~150HZ, 1.5 mm full amplitude, 2 hours each direction of x,y,z	

Ordering Code



1. DPS-6 Series

2. Range
10: -100~1000kpa
01: -100~100kpa

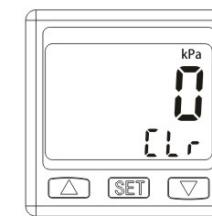
3. Port
R: R1/8 (M5 female thread)
N: NPT1/8 (M5 female thread)
G: G1/8 (M5 female thread)
M: M5 Thread

4. Output
X: 1*NPN+1*PNP
V: 1*NPN+1*PNP&
Analog 1-5V

5. Mounting
M: Panel
Z: L Bracket
M: S Bracket

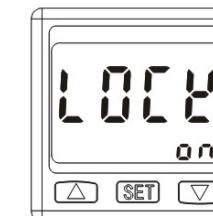
Quick Setting

Zero point setting



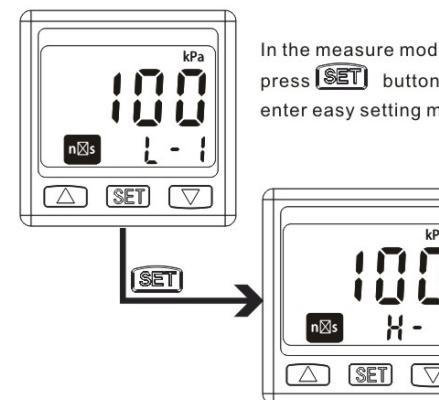
In the measure mode, press button at the same time, until display "0" release the button

key lock and unlock

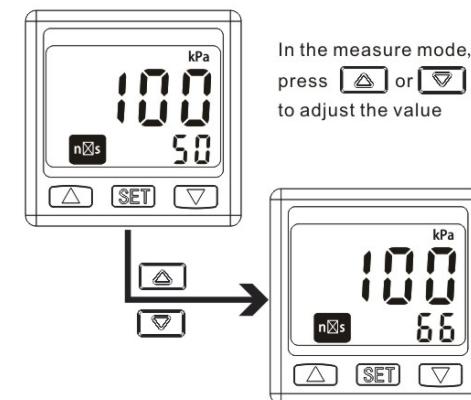


Lock: in measure mode, press until "LOCK ON" shown;
Unlock: press + until "LOCK OFF" shown;

Easy setup



In the measure mode,
press button to
enter easy setting mode



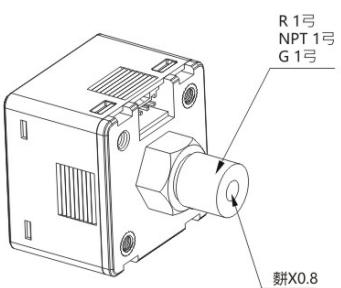
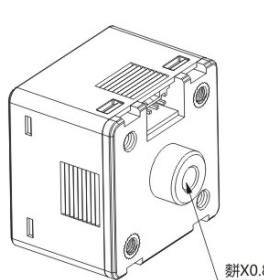
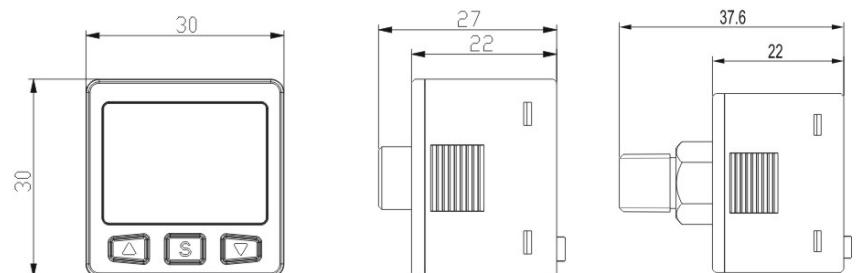
In the measure mode,
press or button
to adjust the value

DPS series digital pressure switch

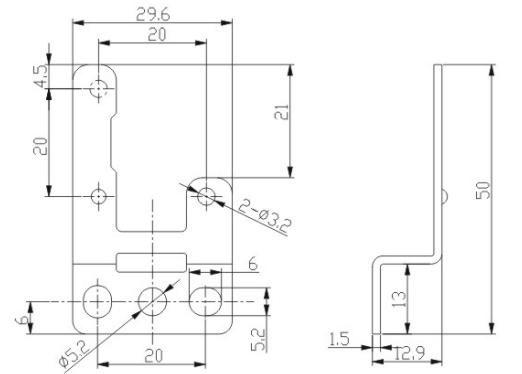
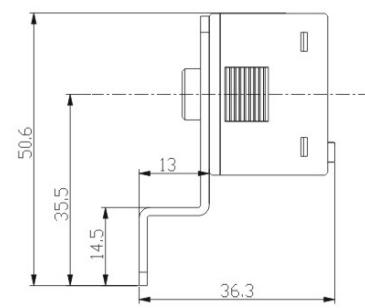
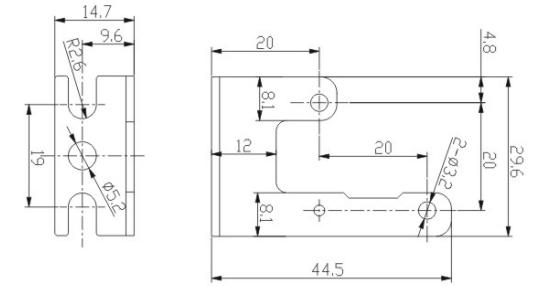
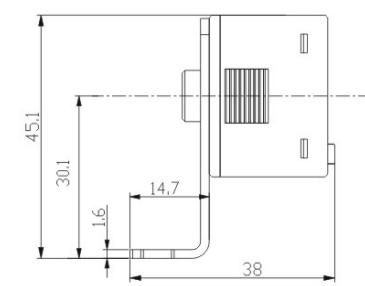
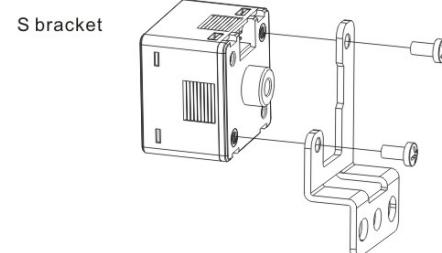
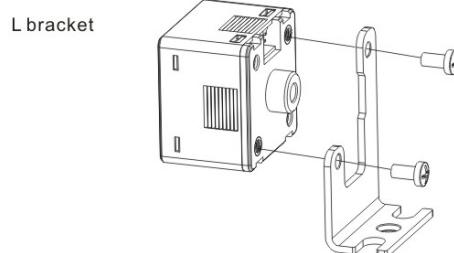
 XINGYU ELECTRON

MOUNTING DIMENSIONS(mm)

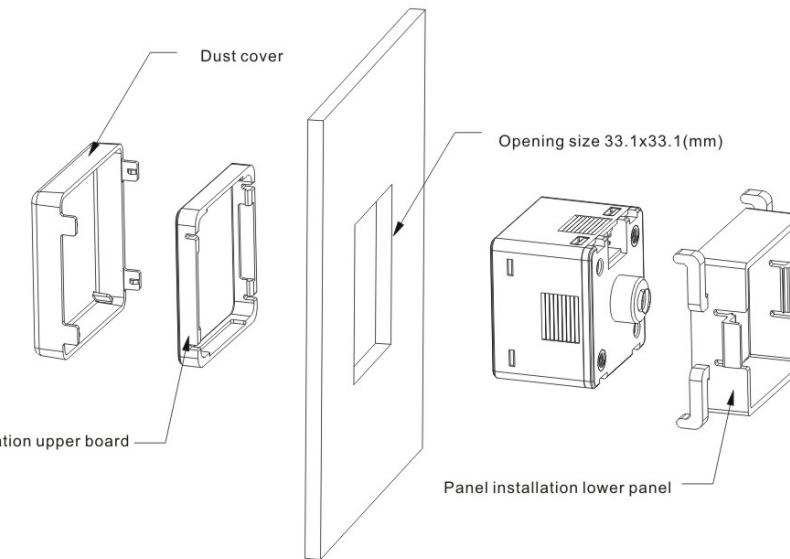
Overall dimension& connection port



Mounting bracket

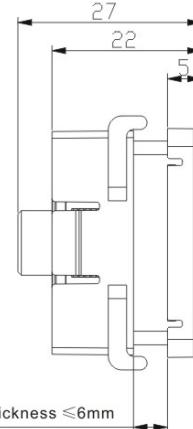
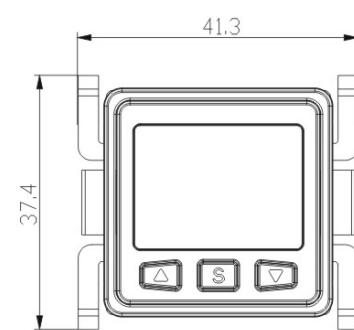


Panel bracket

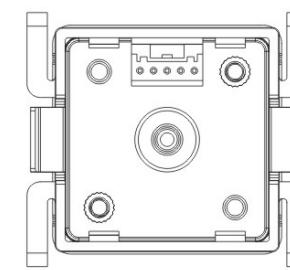
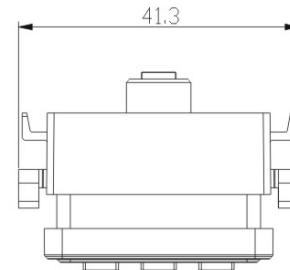


Panel installation upper board —

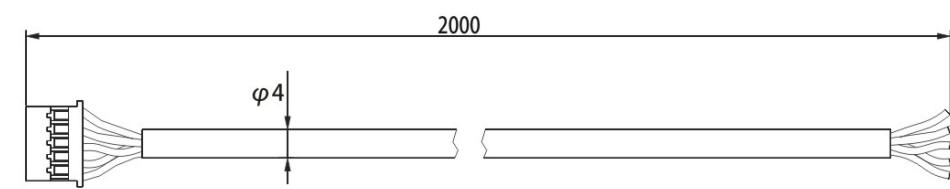
Panel installation lower panel



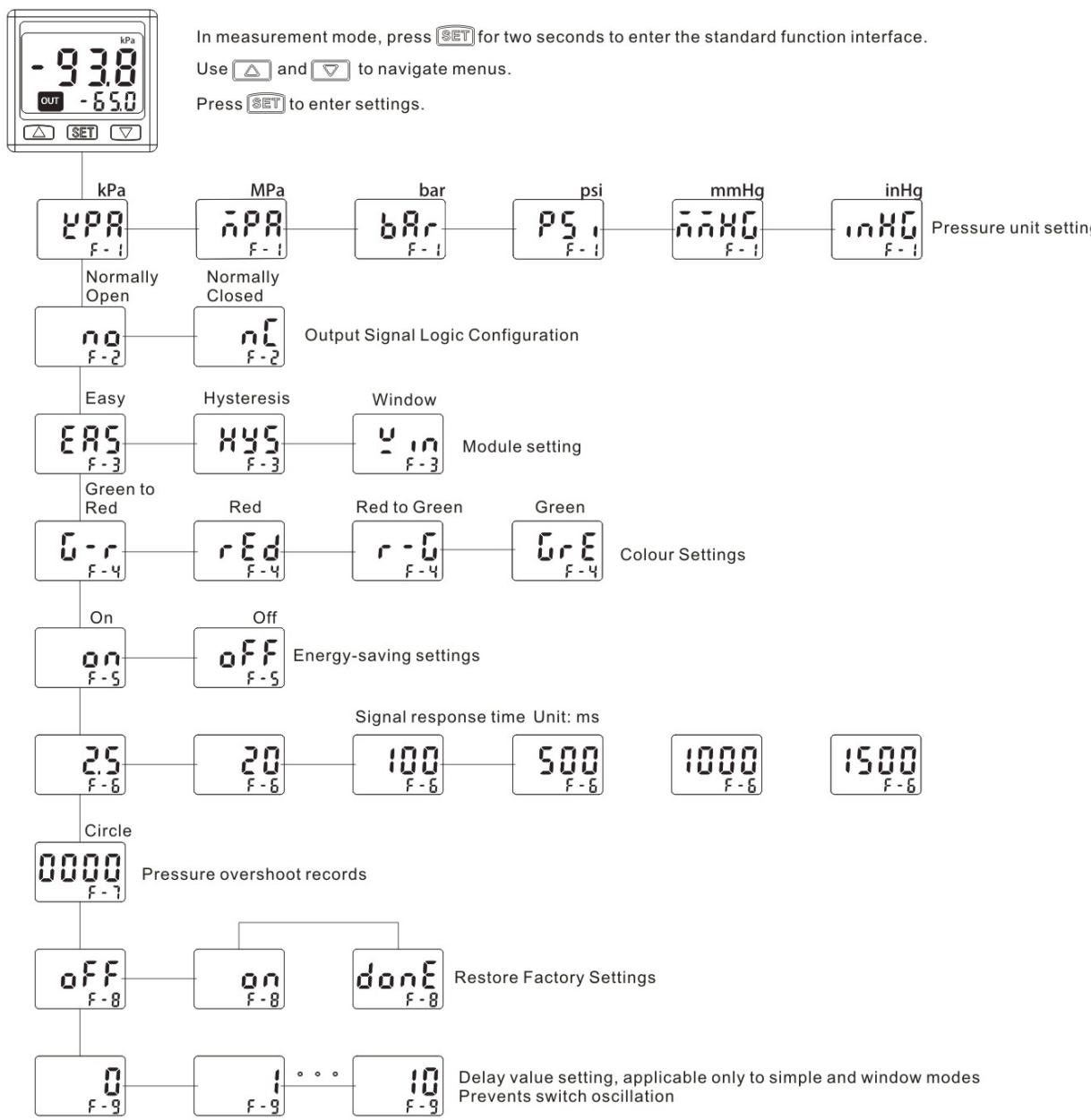
Panel thickness $\leq 6\text{mm}$



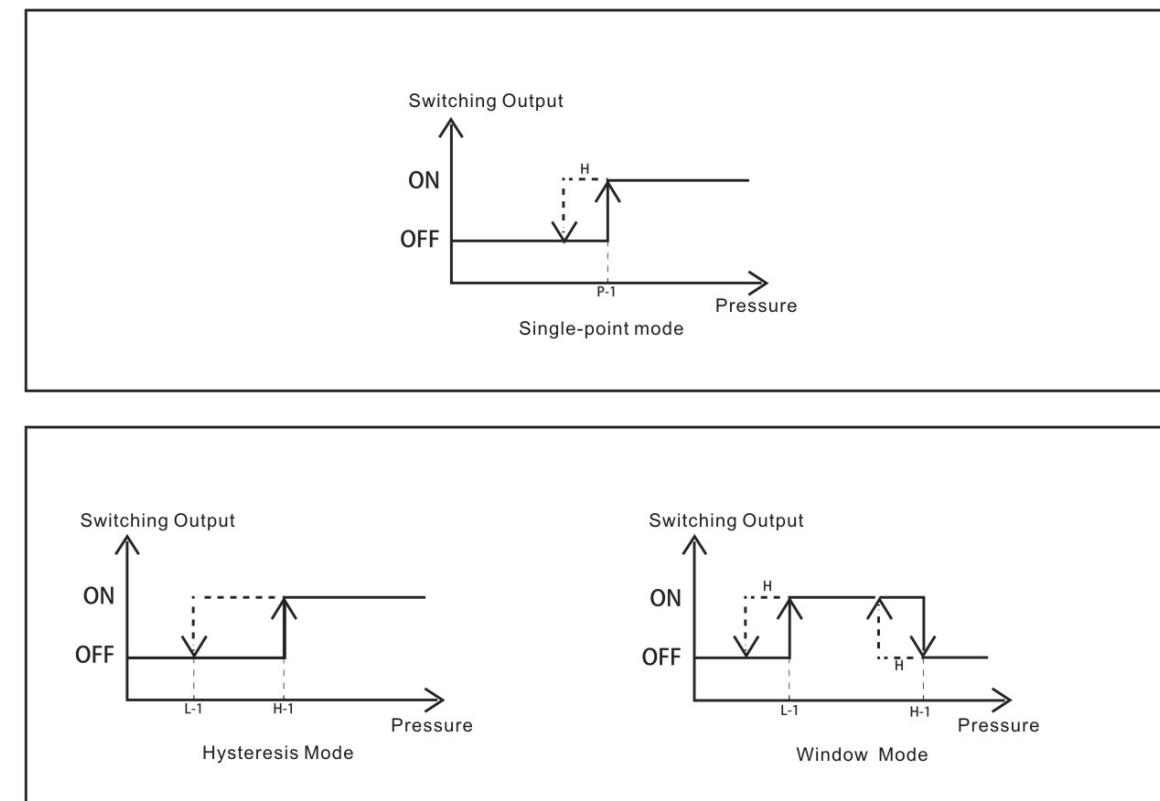
Wire size



Operating Instructions (Standard Function Interface)



Output Function Diagram for Each Mode in Normally Open State



From	To	Pa	kPa	MPa	kgf/cm ²	mmHg	psi	bar	inHg
1Pa	1	0.001	0.000001						
1kPa	1000	1	0.001	0.010197	7.500616	0.145038	0.01	0.2953	
1MPa	1000000	1000	1	10.197	7500.616	145.038	10	295.2998	
1kgf/cm ²	98066.5	98.0665	0.098066	1	735.559	14.2233	0.980665	28.95979	
1mmHg	133.32	0.13332	0.000133	0.001359	1	0.019336	0.001333	0.03937	
1psi	6895	6.985	0.006895	0.07031	51.7157	1	0.06895	2.036074	
1bar	100000	100	0.1	1.01972	750.062	14.5038	1	29.52998	
1inHg	3386.388	3.386388	0.003386	0.034530	25.4	0.491141	0.033863	1	

Error Code Description

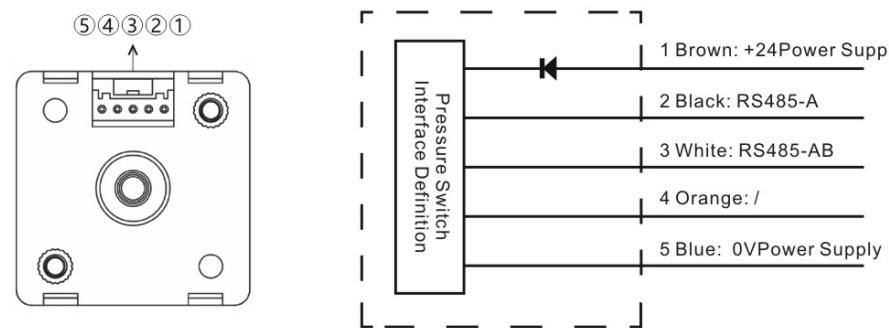
Error Prompt	Cause	Resolution
Err 1	Zeroing range exceeded	Zeroing range restricted to 10% F.S. Do not set beyond this value.
Err 4	Incorrect pressure setting logic	Hysteresis mode: HY S value < O-1 Comparison mode: HY S value < C1L < C1H
Err 5	Abnormal stored data	Chip malfunction – repair required
HHHH	Pressure exceeds measurement range	Please reduce the air supply pressure to within the specified range

Precautions

- This product is intended solely for measuring gas pressure; the medium must not contain corrosive or flammable gases.
- The operating environment avoid high temperatures and humidity.
- When installing or removing this product, ensure the pressure source is shut off and the output cable is disconnected from the controller to safeguard both the product and personnel. Secure the pressure connection using a hex key; do not rotate the main body directly.
- During installation, connect using components matching the pressure port dimensions and verify proper sealing to prevent measurement errors or gas leakage.
- Before powering on, confirm correct wiring connections. Avoid excessive voltage input to prevent product damage.

MODBUS Communication Protocol - Operating Instructions

Wiring Method

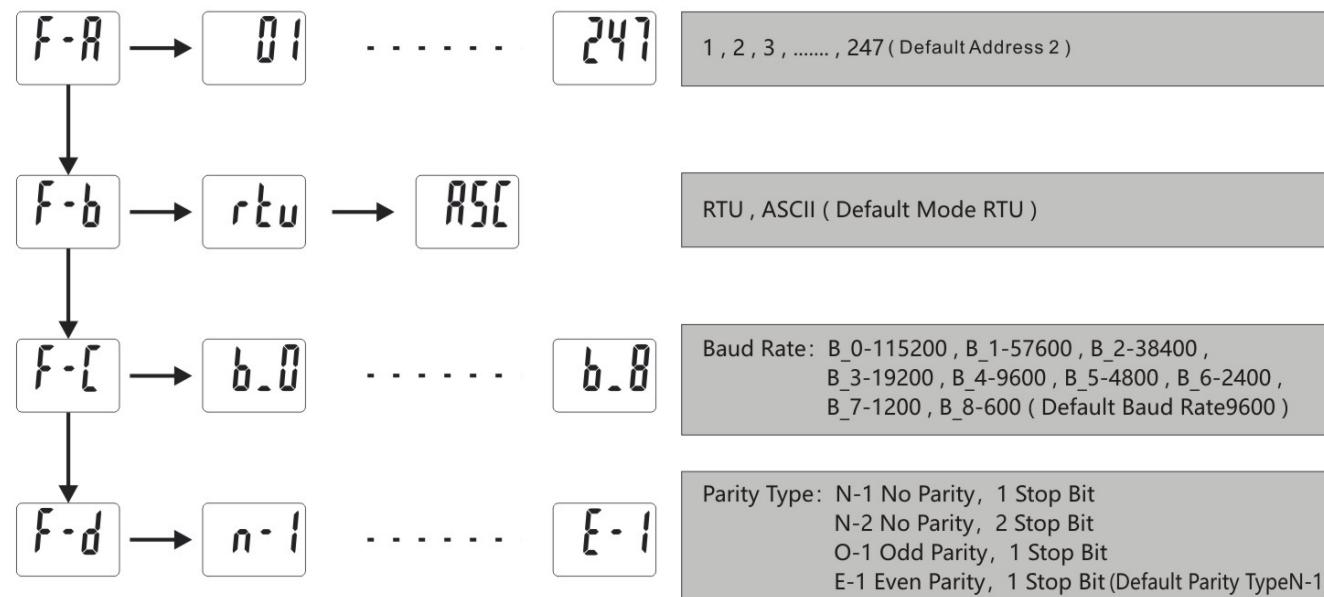


Note: The colour of the line indicates the attributes of the wire accessories configured by our company.

Slave Configuration

In measurement mode, press and hold the S key for 2 seconds to enter the standard function interface settings. Use the or keys to switch between options, then press the key to enter the configuration menu. The F-A/F-B/F-C/F-D menus correspond to MODBUS-related function settings.

MODBUS Settings Menu



Register Specification

Name	Function Description	Internal Address	Protocol Address	Function Code
Zero Reset	Write 1 to reset pressure display on pressure switch Pressure zero reset range: 10% of full scale	40004	0x03	Read/write (03, 06)
Read Pressure	Read actual pressure of pressure switch	30001	0x00	Read-only (04)

Communication Example

DPS MODBUS Communication Settings

Address: 02(RS485)

Mode: RTU

Baud Rate: B_4 9600

Parity Type: O_1 Odd Parity Stop Bit

(1) Read actual pressure (instance reads pressure value of 100 kPa)

Host transmits data

Device address	Function code	Register address	Number of registers	Checksum
02	04	00 00	00 01	31 F9

Return data from machine

Device address	Function code	Register address	Data	Checksum
02	04	02	00 64	FC DB

(2) Display zero pressure

Host transmits data

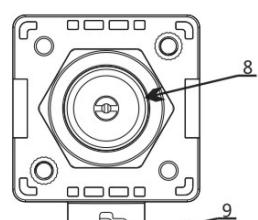
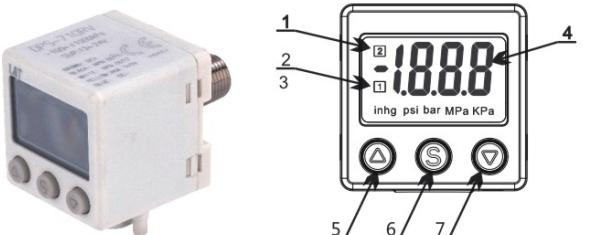
Device address	Function code	Register address	Data	Checksum
02	06	00 03	00 01	B8 39

Return data from machine

Device address	Function code	Register address	Data	Checksum
02	06	00 03	00 01	B8 39

DPS-7 Series

Panel

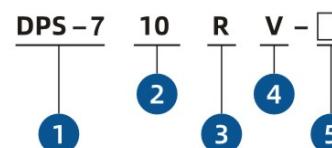


No	Name
1	Output indicator
2	Output indicator
3	Pressure unit
4	Main display section
5	Up button
6	Section button
7	Down button
8	Pressure port
9	Electric interface

Specification

Model	DPS-701	DPS-702	DPS-710	
Range Of Measure	-100KPa~100KPa	-100KPa~0KPa	-0.1MPa~1MPa	
Setting Range	-100KPa~100KPa	-100KPa~0KPa	-0.1MPa~1MPa	
Withstand Pressure	500KPa	500KPa	1.5MPa	
Pressure Type	Gauge pressure test			
Measure Accuracy	$\leq \pm 2\%$ F.S.(ambient temperature 25°C)			
Temperature Error	$\leq \pm 3\%$ F.S. (temperature range 0~ 50°C)			
Measure Pattern	Easy Mode Hysteresis model Window comparator mode			
Display	Status Display LCD, 4-digit measurement value, unit display, output status display			
Display Model	Adjustable backlight, 4 groups of display modes			
Input Power	24VDC $\pm 10\%$			
Power Comsumption	40mA max(non-load)			
Output Signal	Transistor Output NPN open-collector output Output current :80mA MAX Voltage drop : $\leq 1V$		PNP open-collector output Output current :80mA MAX Voltage drop : $\leq 1V$	
Analog Output	Voltage output Signal amplitude:1~5V Load resistance $\geq 1K\Omega$		Current output Signal amplitude:4~20mA Load resistance $\leq 400K\Omega$	
Response Time	Adjustable : 2.5ms、20ms、100ms、500ms、1000ms、1500ms			
Short-circuit Protection	Yes			
IP Class	IP65			
Ambient Temperature	Operating temperature 0~50°C ,storage temperature -20~60°C			
Ambient Humidity	Operating humidity 35~ 80%RH			
Insulation Voltage	1000VAC 1min			
Insulation Resistance	$\geq 50m\Omega$ (500VDC)			
Shock	Max100m/s ² ,3time seach in 6 directions of x,y,z			
Vibration	10~150HZ, 1.5 mm full amplitude, 2 hours each direction of x,y,z			

Ordering Code



1. DPS-7 Series IP65 Waterproof

2. Range
10: -100~1000kpa
01: -100~100kpa
02: -100~0kpa

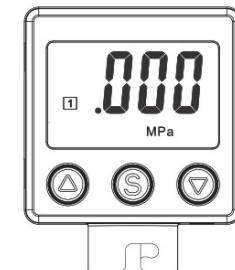
3. Port
R: R1/8 (M5 female thread)
N: NPT1/8 (M5 female thread)
G: G1/8 (M5 female thread)

4. Output
V: 2*NPN+Analog 1~5V
W: 2*PNP+Analog 1~5V
A: 2*NPN+Analog 4~20mA
B: 2*PNP+Analog 4~20mA

5. Mounting
M : Panel
N : Panel+shield
Z : L bracket
S : S bracket

Quick Setting

Zero point setting



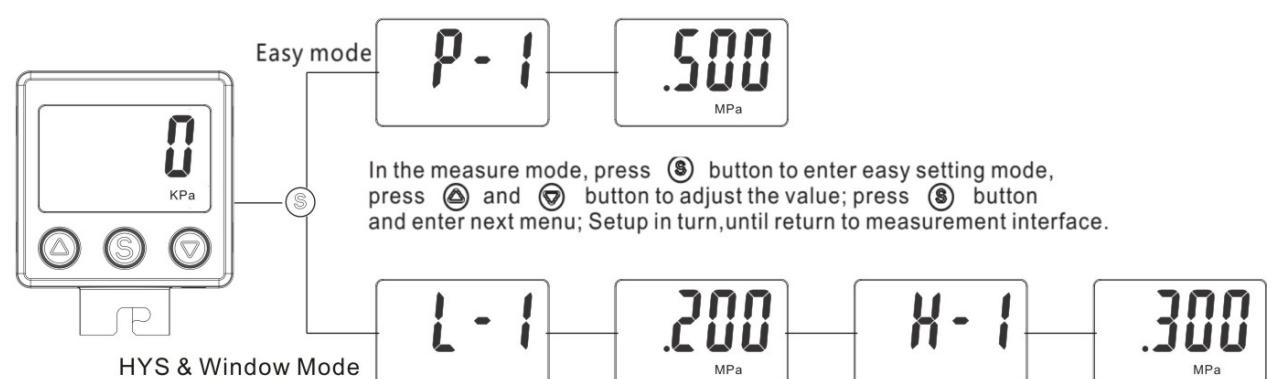
In the measure mode, press Δ + ∇ button at the same time, until display "0", release the button;
PS: reset range: $\pm 10\%$ F.S.

key lock and unlock



Lock: in the measure mode, press Δ + ∇ + S button at the same time until "LOC" shown,release the buttons;
Unlock: in the measure mode, press Δ + ∇ + S button at the same time until "UNL" shown,release the buttons.

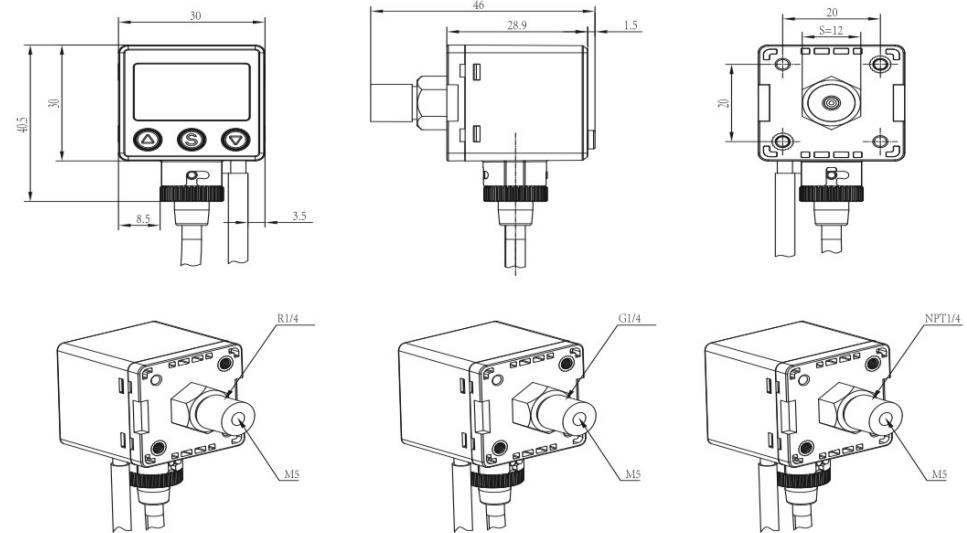
Easy setup



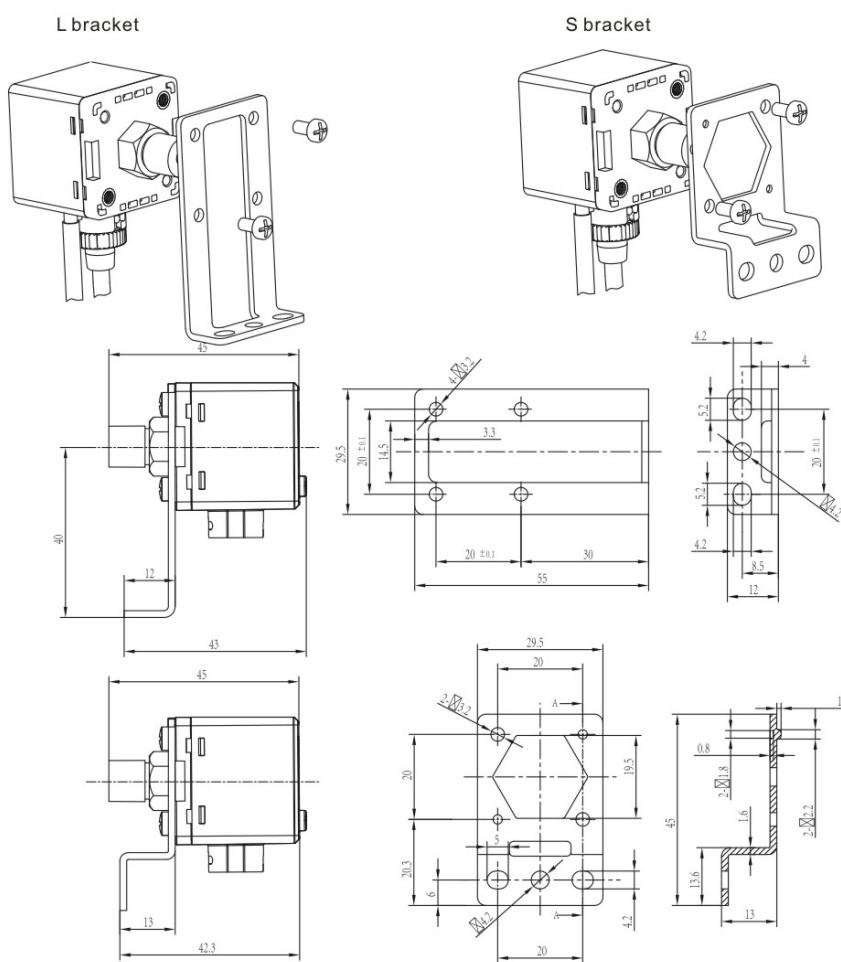
In the measure mode, press S button to enter easy setting mode, press Δ and ∇ button to adjust the value; press S button and enter next menu; Setup in turn,until return to measurement interface.

MOUNTING DIMENSIONS(mm)

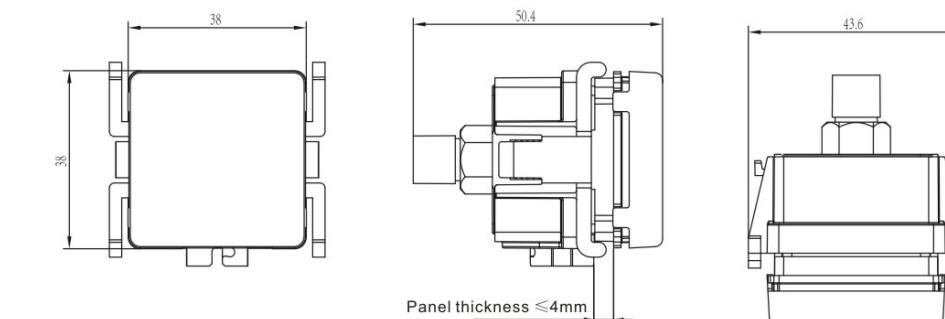
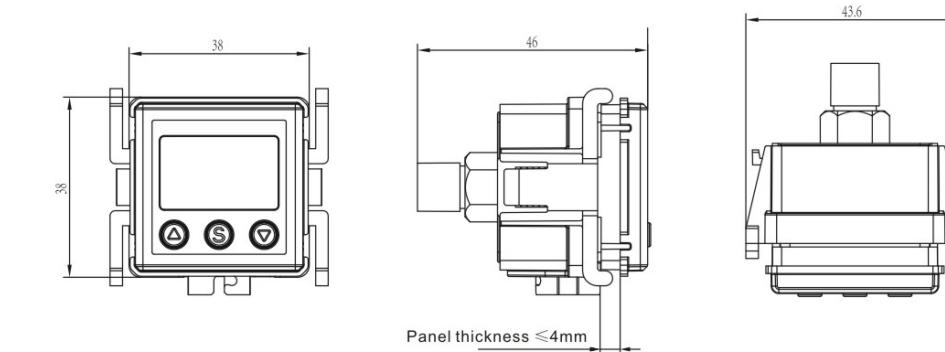
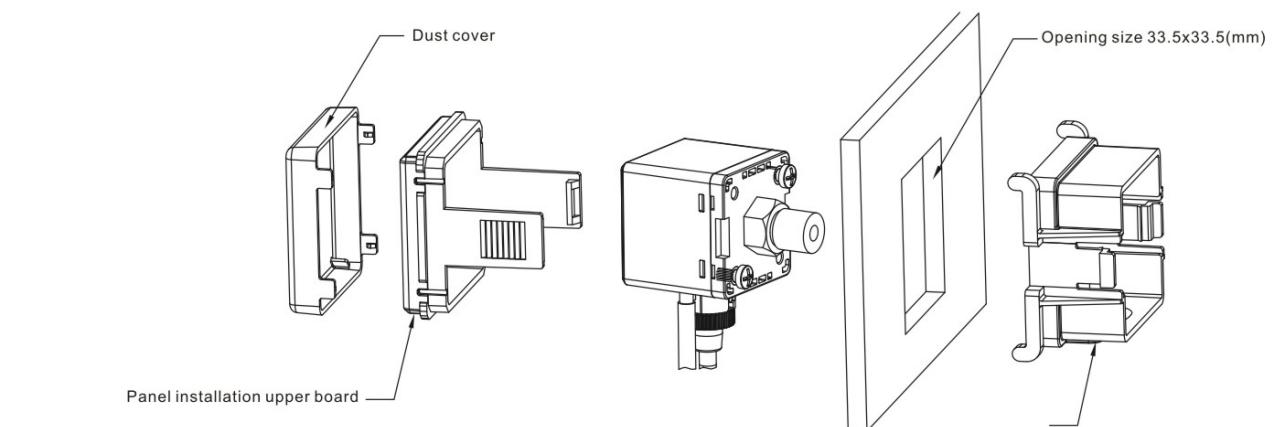
Overall dimension& connection port



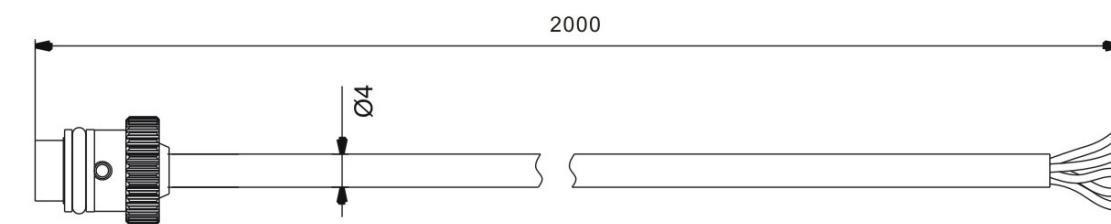
Mounting bracket



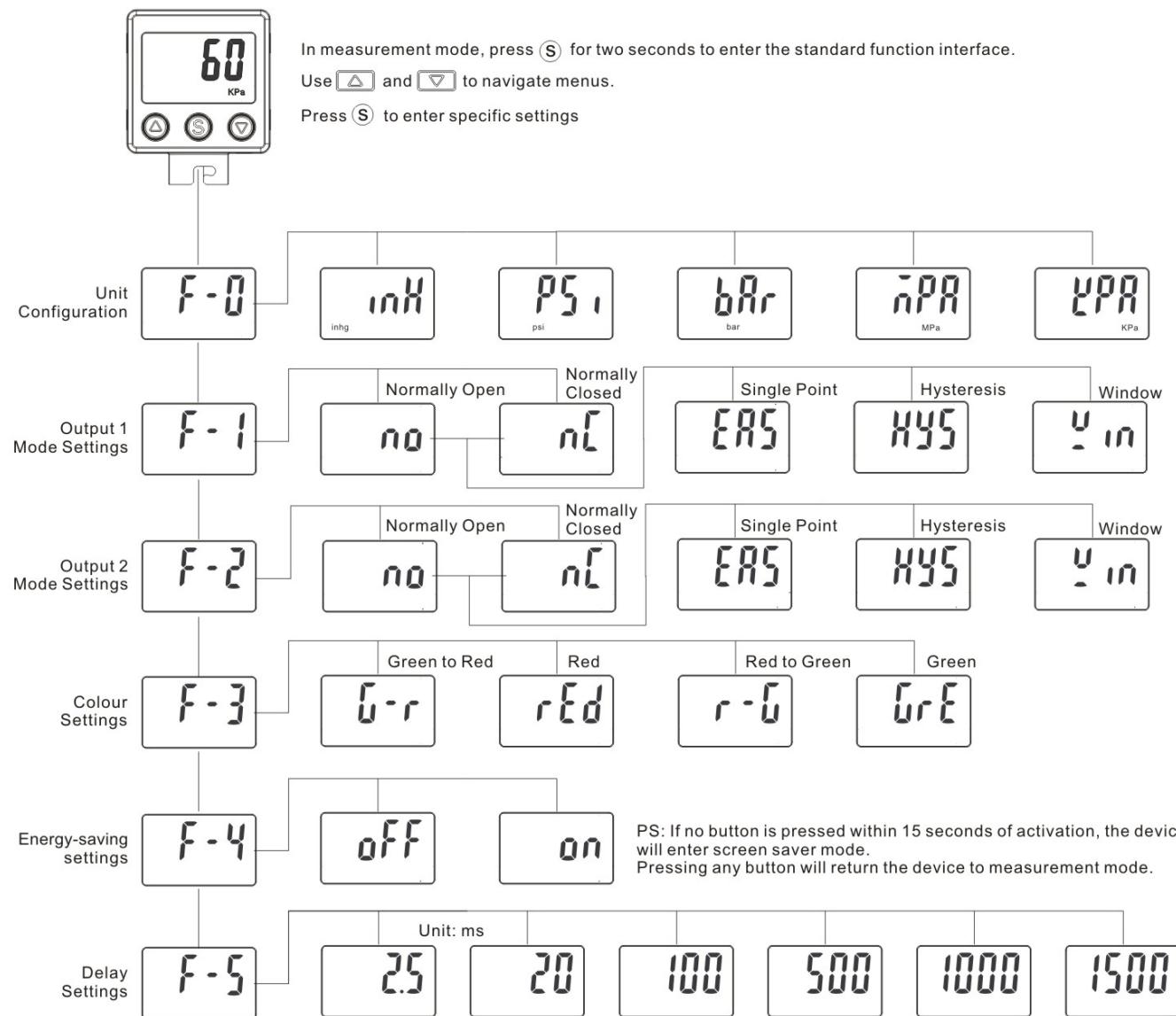
Panel bracket



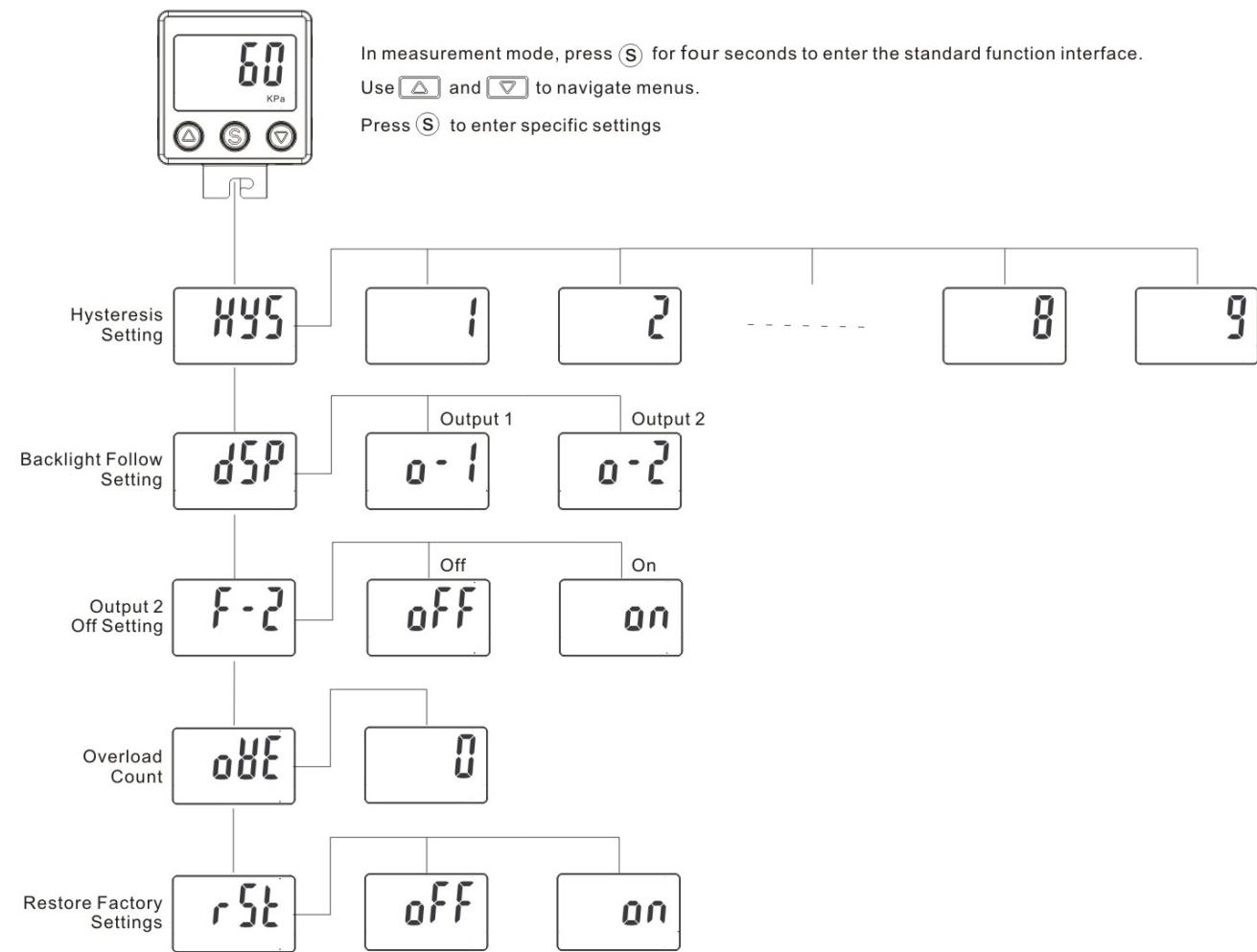
Wire size



Operating Instructions (Standard Function Interface)



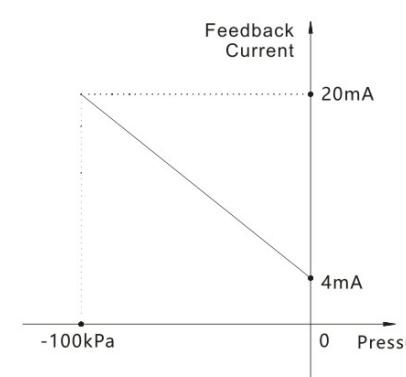
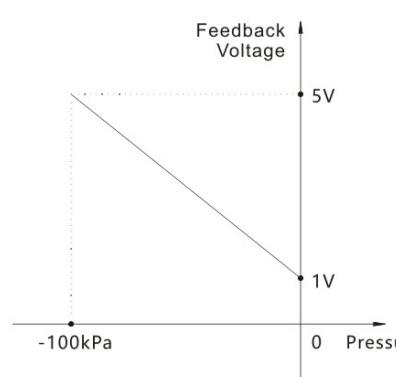
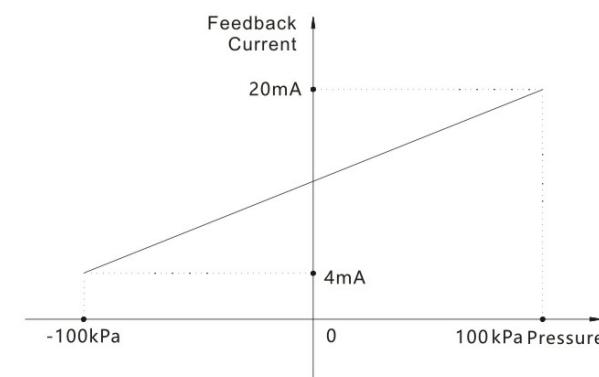
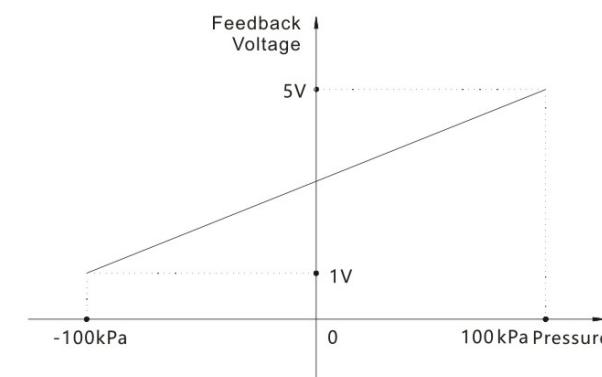
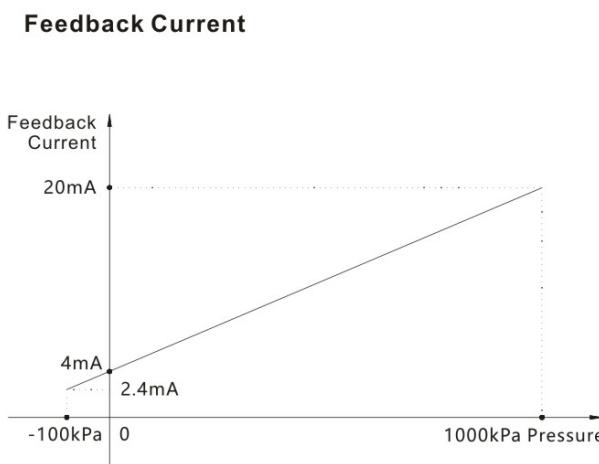
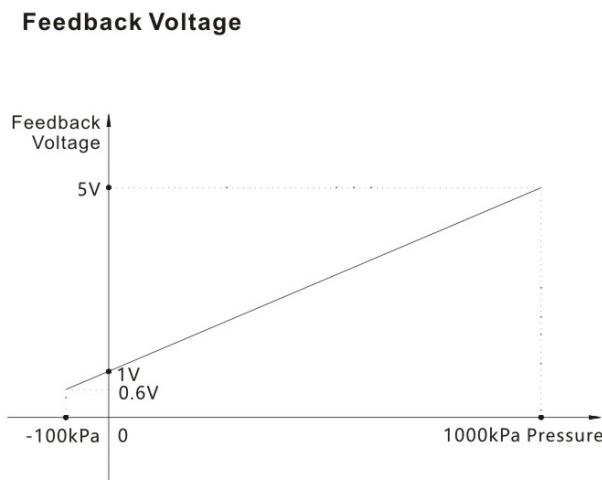
Operating Instructions (Standard Function Interface)



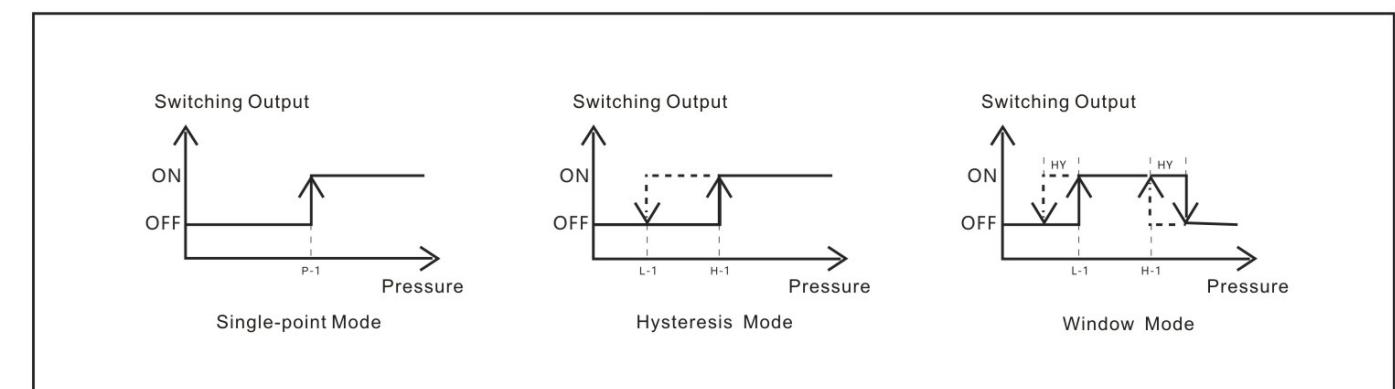
Error Code Description

Error Prompt	Cause	Resolution
E-1	Zeroing range exceeded	Zeroing range restricted to 10% F.S. Do not set beyond this value.
E-2	Switch output current is excessive	Please inspect the output connection cables for issues such as short circuits or excessive load.
E-3	Incorrect pressure setting logic	Hysteresis mode: HY S value < O-1 Comparison mode: HY S value < C1L < C1H
E-5	Abnormal stored data	Chip malfunction – repair required
HHH	Pressure exceeds measurement range	Please reduce the air supply pressure to within the specified range

Pressure-Electrical Signal Feedback Curve Diagram



Output Function Diagram for Each Mode in Normally Open State



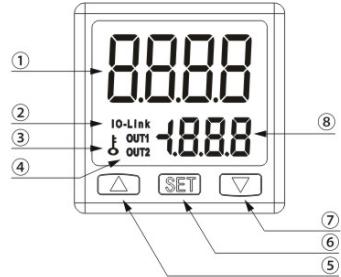
From \ To	Pa	kPa	MPa	kgf/cm ²	mmHg	psi	bar	inHg
1Pa	1	0.001	0.000001					
1kPa	1000	1	0.001	0.010197	7.500616	0.145038	0.01	0.2953
1MPa	1000000	1000	1	10.197	7500.616	145.038	10	295.2998
1kgf/cm ²	98066.5	98.0665	0.098066	1	735.559	14.2233	0.980665	28.95979
1mmHg	133.32	0.13332	0.000133	0.001359	1	0.019336	0.001333	0.03937
1psi	6895	6.985	0.006895	0.07031	51.7157	1	0.06895	2.036074
1bar	100000	100	0.1	1.01972	750.062	14.5038	1	29.52998
1inHg	3386.388	3.386388	0.003386	0.034530	25.4	0.491141	0.033863	1

Precautions

- The operating environment avoid high temperatures and humidity.
- When installing or removing this product, ensure the pressure source is shut off and the output cable is disconnected from the controller to safeguard both the product and personnel. Secure the pressure connection using a hex key; do not rotate the main body directly.
- During installation, connect using components matching the pressure port dimensions and verify proper sealing to prevent measurement errors or gas leakage.
- Before powering on, confirm correct wiring connections. Avoid excessive voltage input to prevent product damage.

DPS-8 Series IO-Link

Panel

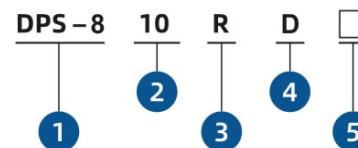


No	Name
1	Main display area (pressure/function menu)
2	Communication indication
3	Frequency lock indicator
4	Switch output indicator
5	Up adjustment button
6	Set function keys
7	Lower adjustment button
8	Auxiliary display area (pressure setpoint)

Specification

Model	DPS-801 Compound pressure	DPS-810 Positive pressure
Pressure measure	Range of Measure -100KPa~+100KPa	-100KPa~+1000KPa
	Setting Range -100KPa~+100KPa	-100KPa~+1000KPa
	Withstand Pressure 500KPa	1500KPa
	Pressure Type Non flammable, non-corrosive gas, gauge pressure measurement	
	Measure Accuracy $\leq \pm 2\%$ F.S.(ambient temperature 25°C)	
	Temperature Error $\leq \pm 3\%$ F.S. (temperature range 0~ 50°C)	
	Measure Pattern Single point mode	
	Hysteresis model	
	Window comparator mode	
Port size	R1/8, G1/8, NPT1/8, M5	
Input Power	Voltage Range 12~24VDC $\pm 10\%$	
	Power Consumption 40mA max(non-load)	
Output Signal	Switch output NPN / PNP MAX CURRENT: 250mA	
	Response time Adjustable Lowest 2.5mS	
Communication method	Model: IO-Link Version: V1.1 Communication speed:COM238.4kbps Settings file: IODDfile	Minimum cycle time! 2.5mS Process data length: Input 2bytes, output 8bytes Vendor ID: 1524 (0x5F4)
Environmental Resistance	IP Class IP40	
	Ambient Temperature Use temperature 0~50°C ,storage temperature -20~60°C	
	Ambient Humidity Operating humidity 35~ 80%RH	
	Insulation Voltage 1000VAC 1min	
	Insulation Resistance $> 50\text{M}\Omega$ (500VDC)	
	Shock Max100m/s ² ,3time seach in 6 directions x,y,z	
	Vibration 10~150HZ, 1.5 mm full amplitude, 2 hours each direction of x,y,z	

Ordering Code



1. DPS-8 Series Digital Pressure Switch

2. Range
10: -100~1000kpa
01: -100~100kpa

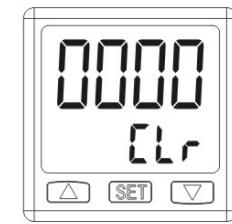
3. Port
R: R1/8 M5
G: G1/8 M5
N: NPT1/8 M5

4. Output
D: 2 Line Switch
With M12 aviation plug

5. Mounting
M : Panel
Z : L bracket
S : S bracket

Quick Setting

Zero point setting



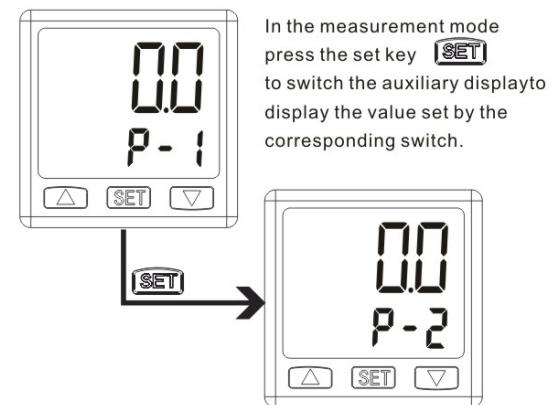
In the measure mode, Press button at the same time.until display "O",release the button
PS: Reset range: 10% F.S.

key lock and unlock

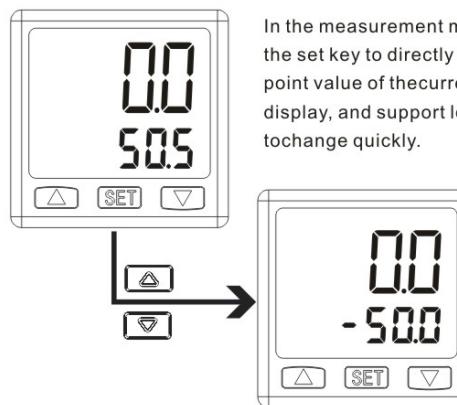


Lock: In the measure mode press at the same time until "LOCK ON" shown, release the buttons
Unlock: Press same button. until "Lock off"

Easy setup



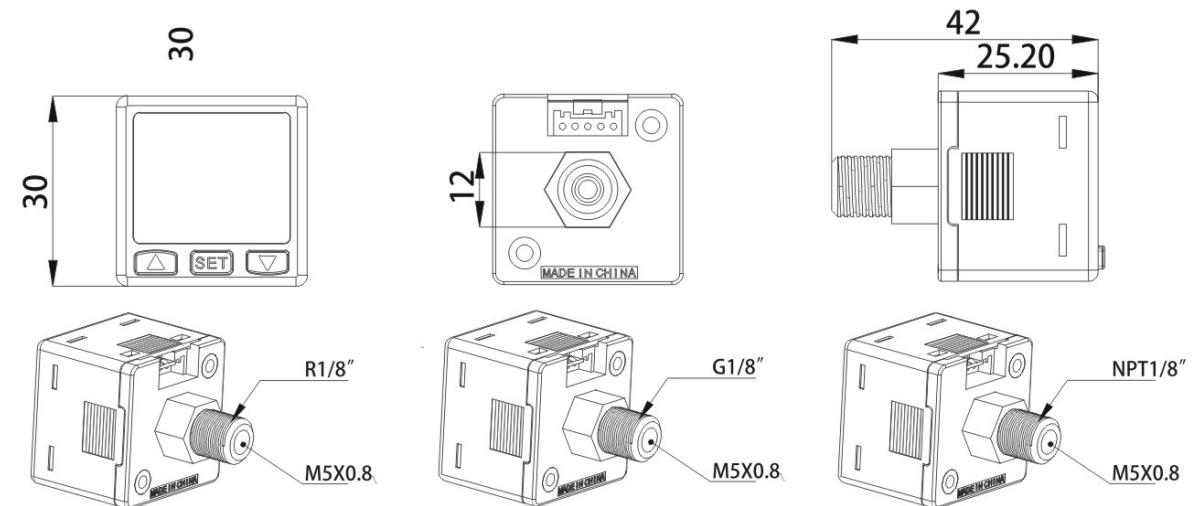
In the measurement mode press the set key to switch the auxiliary display to display the value set by the corresponding switch.



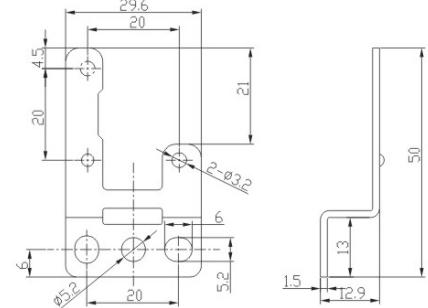
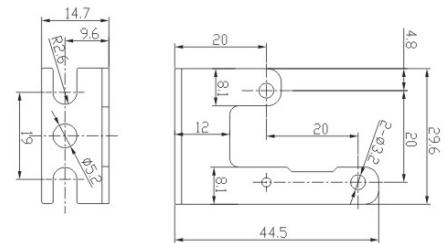
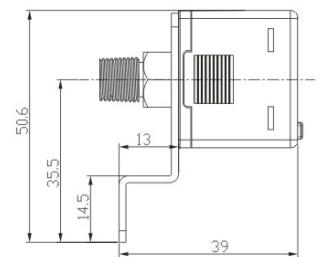
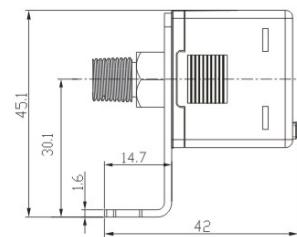
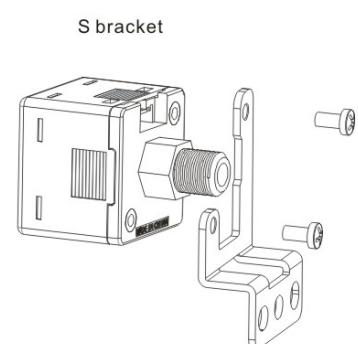
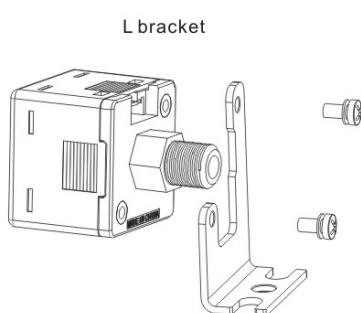
In the measurement mode press the set key to directly set the switch point value of the current auxiliary display, and support long press to change quickly.

MOUNTING DIMENSIONS(mm)

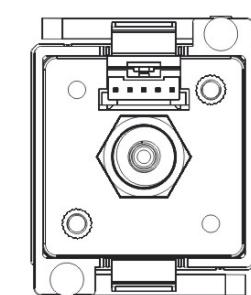
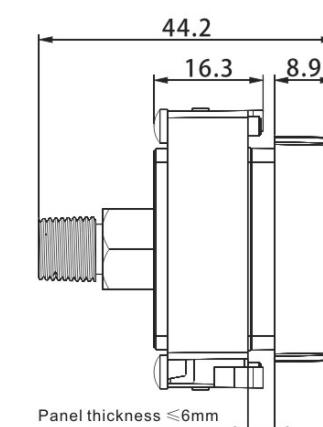
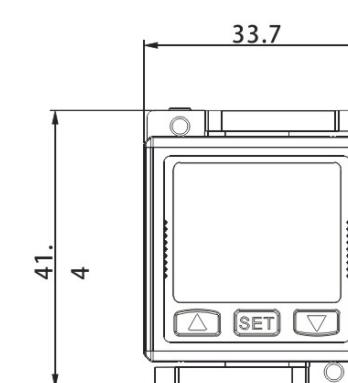
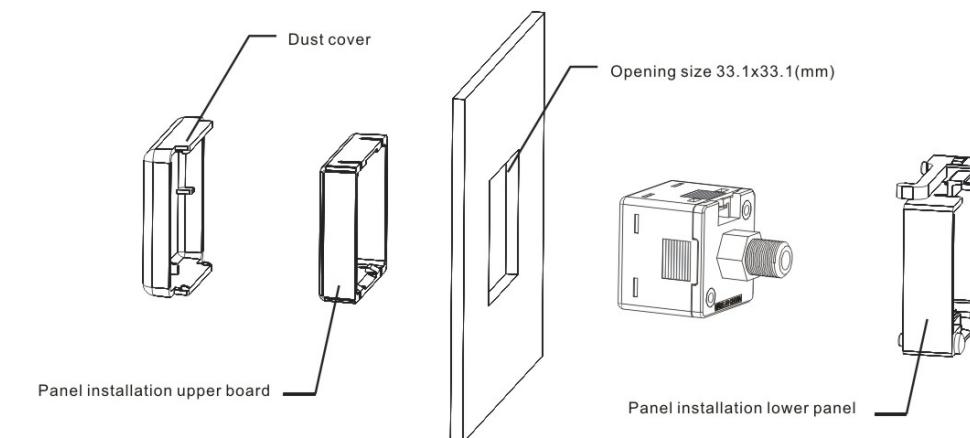
Overall dimension& connection port



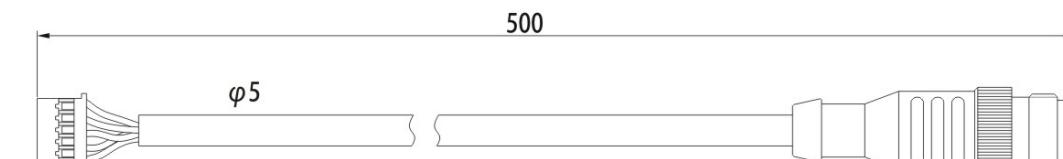
Mounting bracket



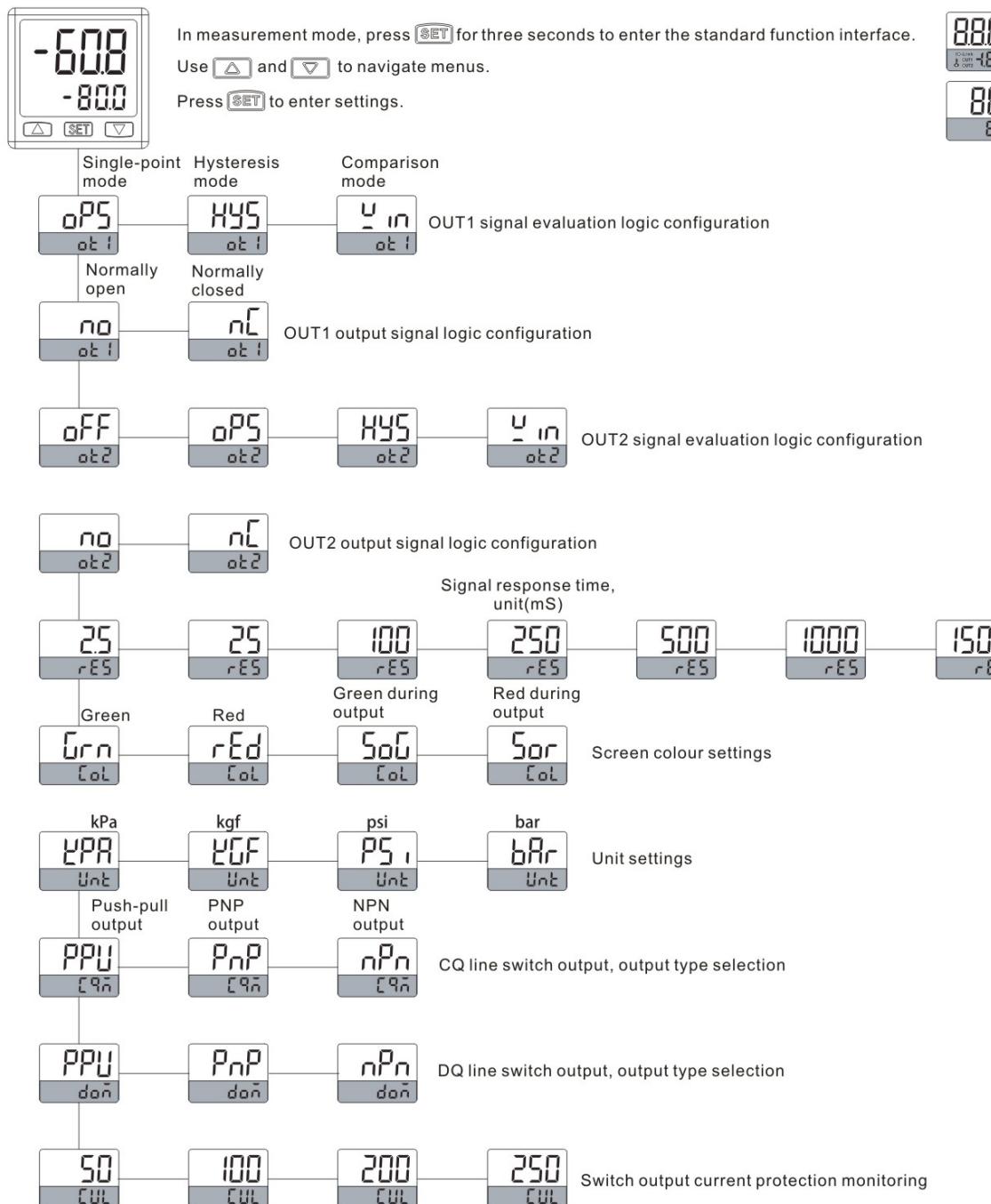
Panel bracket



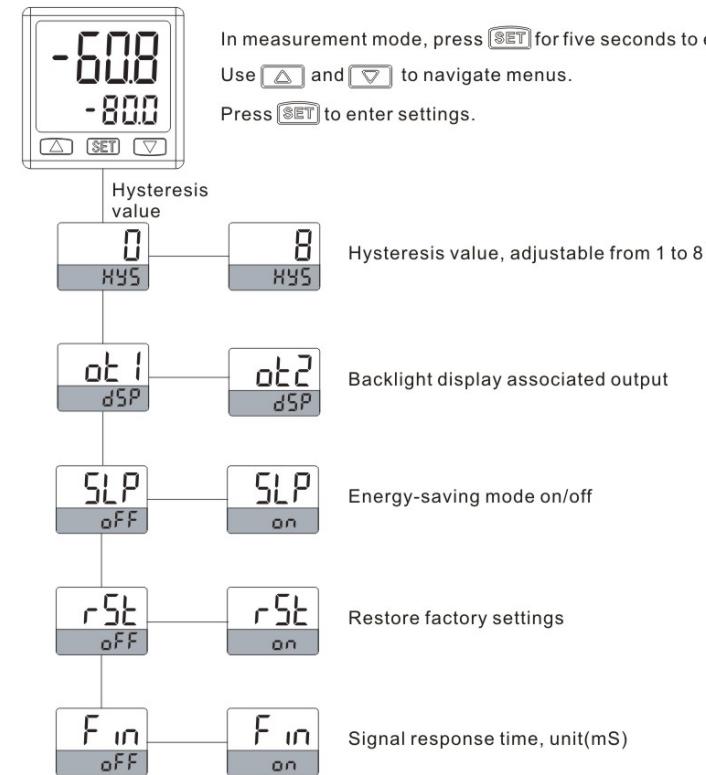
Wire size



Operating Instructions (Standard Function Interface)



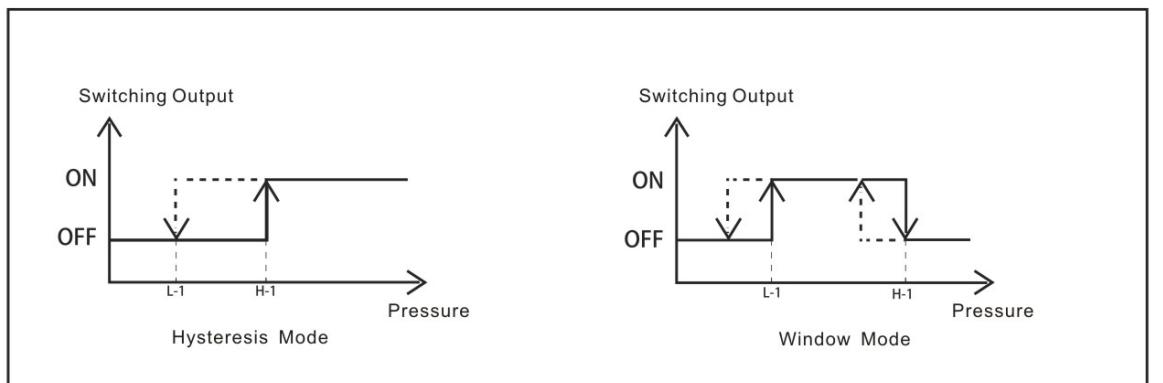
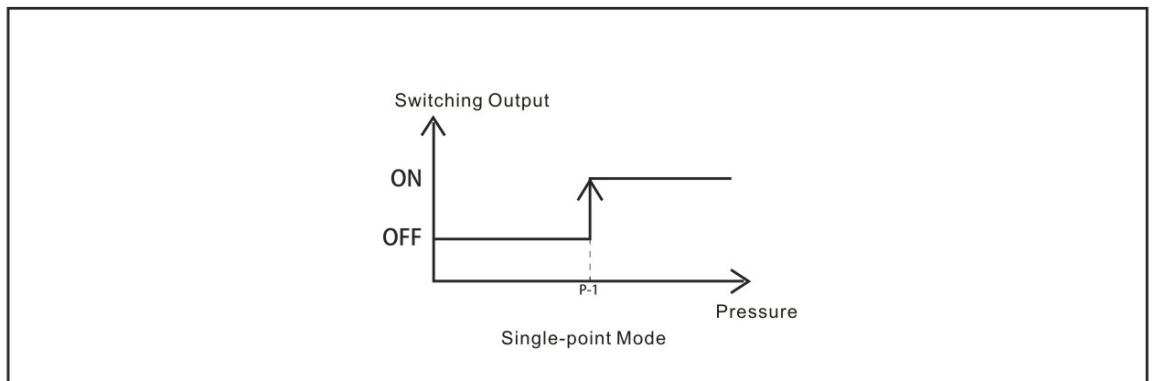
Operating Instructions (Standard Function Interface)



Error Code Description

Error Prompt	Cause	Resolution
ER1	Output 1 Short Circuit/Overcurrent	Switch off power supply, inspect output circuitry
ER2	Output 2 Short Circuit/Overcurrent	Switch off power supply, inspect output circuitry
ER3	Return-to-Zero Operation Out of Range	Check for external pressure sources
HHH/LLL	Pressure Out of Range	Operate within permissible pressure limits
ER6~9	System Error	Power cycle unit, should issue persist, contact after-sales service for factory analysis.

Output Function Diagram for Each Mode in Normally Open State



Precautions

1. This product is intended solely for measuring gas pressure; the medium must not contain corrosive or flammable gases.
2. The operating environment avoid high temperatures and humidity.
3. When installing or removing this product, ensure the pressure source is shut off and the output cable is disconnected from the controller to safeguard both the product and personnel. Secure the pressure connection using a hex key; do not rotate the main body directly.
4. During installation, connect using components matching the pressure port dimensions and verify proper sealing to prevent measurement errors or gas leakage.
5. Before powering on, confirm correct wiring connections. Avoid excessive voltage input to prevent product damage.