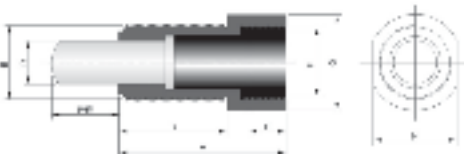


Shock Absorber–Accessories

Angle Converter

Model	Storke	A	B	C	D	E	F	G	H
SCL1410	10	34	18	10	8	M14×1.5	M14×1.5	19	17
SCL1415	15	39	23	10	8	M14×1.5	M14×1.5	19	17
SCL2016	16	48	30.5	12	12	M20×1.5	M20×1.5	25	22
SCL2020	20	51	33.5	12	12	M20×1.5	M20×1.5	25	22
SCL2525	25	62	40	14	16	M25×1.5	M25×1.5	35	31
SCL2725	25	62	40	14	16	M27×1.5	M27×1.5	35	31
SCL3325	25	69	47	15	20	M33×1.5	M33×1.5	45	40
SCL3625	25	69	47	15	20	M36×1.5	M36×1.5	45	40



Stop Collars

Model	Dimensions	Applicable for shock absorber model	Model	Dimensions	Applicable for shock absorber model
SC08		AC0806	SC20		AC2020 AD2016 AC2030 AD2020 AC2050 AD2025
SC10		AC1005 AC1008	SC25		AC2525 AD2525 AC2550 AD2530 AC2580
SC12		AC1210	SC40		AC2540 AD2540
SC14		AC1412 AD1410 AC1416 AD1425 AC1420 AC1425	SC50		AC3660 AD3625 AD3650

Mounting Flange

Model	Dimensions	Applicable for shock absorber model	Model	Dimensions	Applicable for shock absorber model
F36		AC3660	F64		AD64050 AD64100 AD64150
F42		AD4225 AD4250 AD4275			

PS30

Digital Display Pressure Switch



Product Features

- Compact appearance and easy to assemble.
- The current value and reference value are displayed simultaneously, and the reference value can be directly set.
- Dual screen, three color display of red, green, and orange.
- Digital display, more recognizable.

How to Order?

Series No.	Pressure Type	Output Type	Port Size
PS30: Economical type	P: Positive pressure C: Continuous pressure	NP: 1-circuit switching value, adjustable, its factory default NPN NPV: 1-circuit switching value, adjustable, its factory default NPN)+ 1-analog voltage output(1~5V) NPA: 1-circuit switching value, adjustable, its factory default NPN)+ 1-analog current output(4~20mA)	01: PT1/8(M5)

Installation Accessories: Sold Separately

Panel Installation bracket	MS-PS-01	PS30 and PS42 are interchangeable
Front protective cover	MS-PS-02	
Front protective cover	MS-PS-03	
L-shaped bracket	MS-PS-04	
Z-shaped bracket	MS-PS-05	

Product Profile

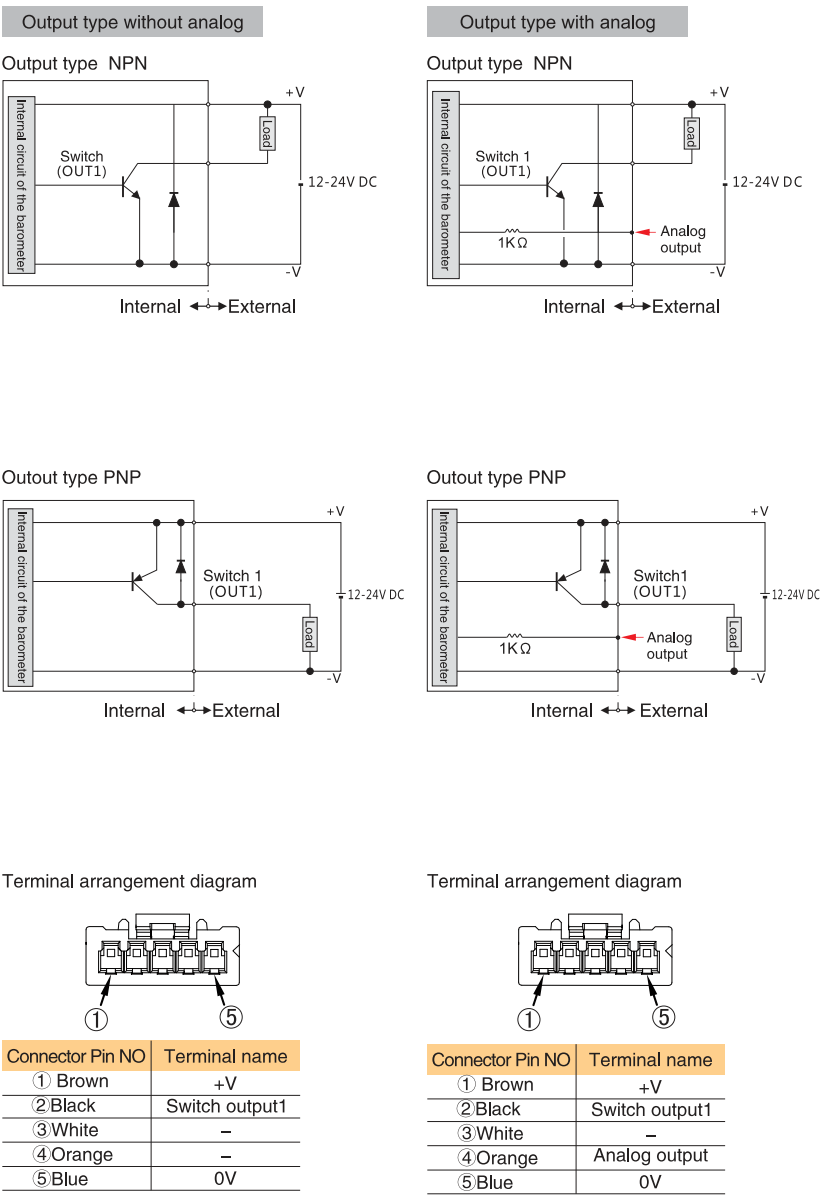
Type	Positive pressure	Continuous pressure
1000kPa		
100kPa		
-100kPa		
Rated pressure range	-0.1MPa~1.0MPa	-100kPa~100kPa
Set pressure range	-0.1MPa~1.0MPa	-100kPa~100kPa

Specifications

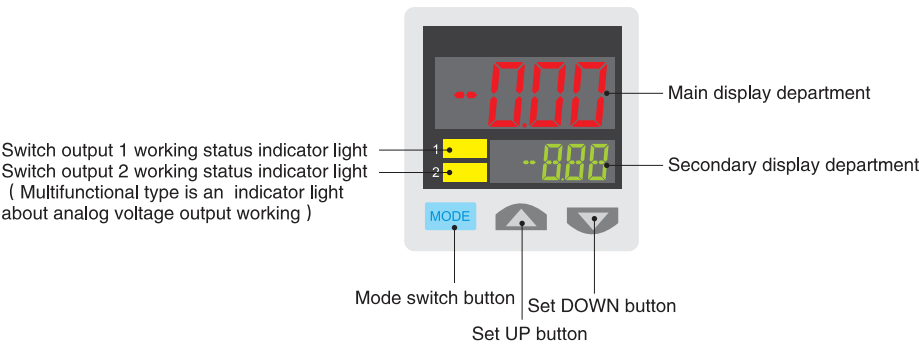
Models	Positive Pressure	Continuous Pressure
Type of pressure	Standard pressure	
Rated pressure range*	-0.1MPa~1.0MPa	-100kPa~100kPa
Set pressure range*	-0.1MPa~1.0MPa	-100kPa~100kPa
Pressure resistance	1.5MPa	500kPa
Applicable fluid	Non corrosive gas	
Supply voltage	12~24V DC ± 5%	
Consumption current	24V 30mA Max	12V 60mA Max
Switch output	NPN O.C output:80mA/24VDCMax or PNP O.C output :80mA/24VDC	
Repetitive accuracy	± 0.2%F.S.	± 0.5%F.S.
Reaction time	Select through key operation:2.5ms,5ms,10ms,25ms,50ms,100ms,250ms,500ms,1000ms,5000ms	
Analog output	Voltage output	0.6V~5V (or slightly lower) Linearity: ± 1%F.S. Output impedance: 1KΩ
	Current output	2.4mA~20mA(or slightly lower) Linearity: ± 1%F.S. Maximum load impedance, when the supply voltage is 12V :300Ω; 24V power supply: 600Ω minimum load impedance :50Ω
		4mA~20mA(or slightly lower)
		Linearity: ± 1%F.S. Maximum load impedance, when the supply voltage is 12V :300Ω; 24V power supply: 600Ω minimum load impedance :50Ω
Range of temperature	Working temperature :0~50℃ Storage temperature : -10~60℃(no condensation, no icing)	
Range of humidity	35~85%RH	
Temperature characteristics	± 1%F.S.(25℃)	
Protection level	IP40	
Material	Outer shell: Nylon + glass fiber LCD display: Propylene Pressure port: External thread POM+ inlaid N5 copper Seal ring: H-NBR Keys: Silicone rubber	
Overall dimensions	30 x 30 x 25mm(plastic part)/30 x 30 x 43mm (including connectors)	
Weight	Approx 80g (barometer body + user interface connector)	

※ Note: Due to the influence of temperature and linear compensation, there may be slight fluctuation near the upper/lower range of the barometer, which is positive Panel description

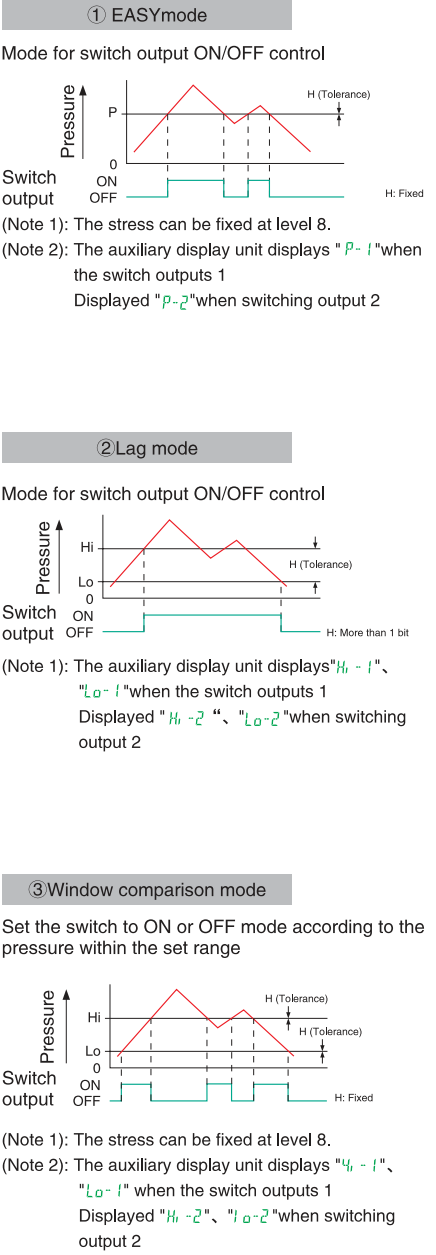
I/O Circuit Diagram and Wiring Diagram



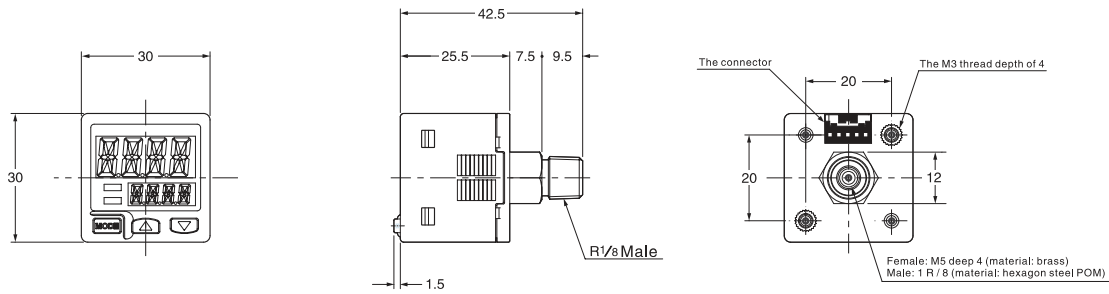
Panel Description



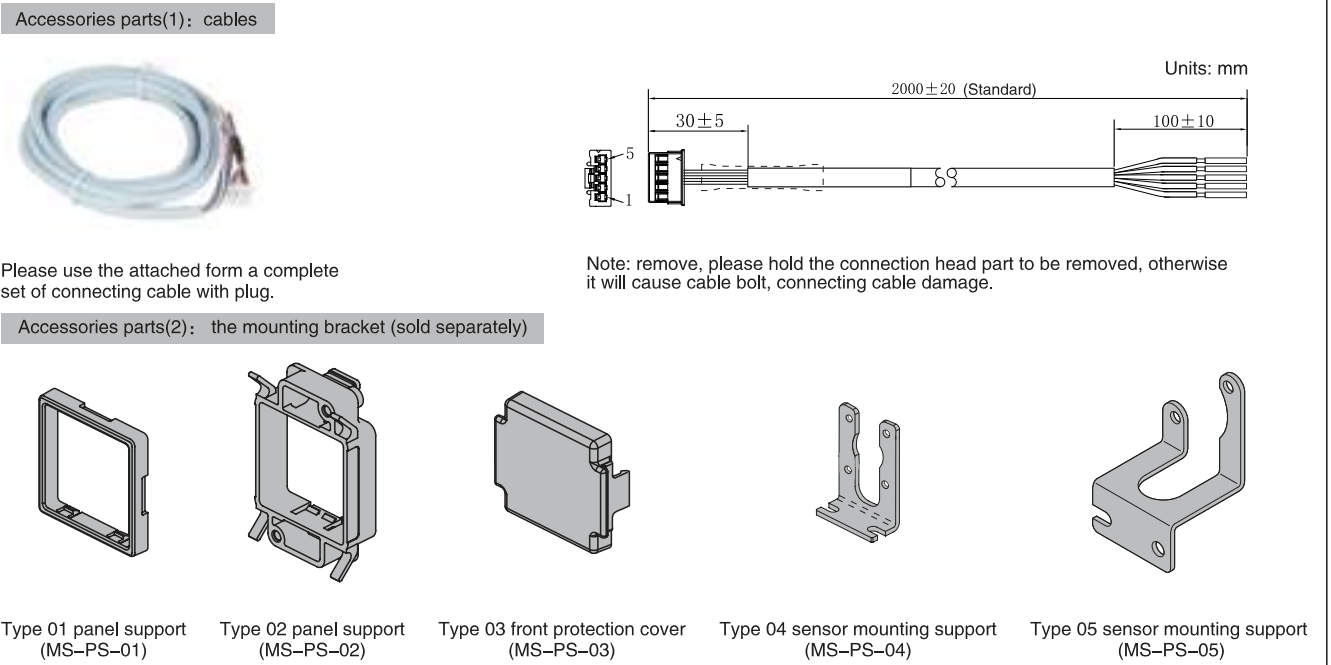
Input Mode and Output Mode



Outline Dimensional Drawing

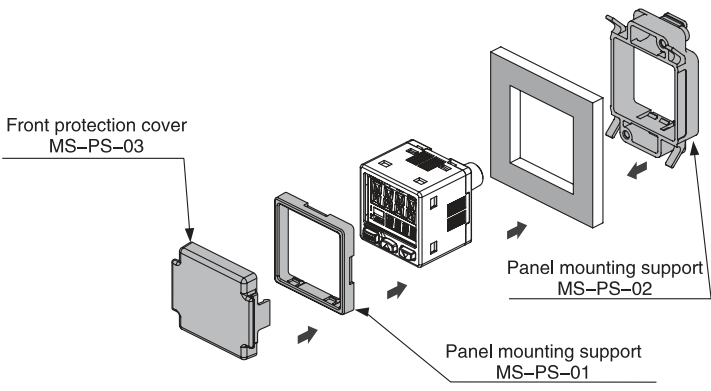


Accessories Parts

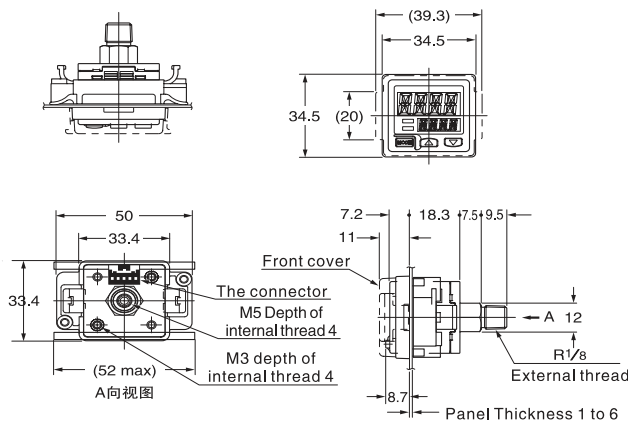


Product name	Type number	Type number
Sensor mounting bracket	MS-PS-04	Sensors can be mounted on the bottom or top side, or multiple sensors can be installed closely.
	MS-PS-05	The sensor can be mounted in the rear direction, or multiple sensors can be installed closely.
Panel mounting bracket	MS-PS-02	When used together, the sensor can be mounted on a panel with a thickness of 1 to 6mm, or multiple sensors can be installed closely.
Panel mounting bracket	MS-PS-01	Protect the adjusting surface of the sensor. (This protective cover can be installed when mounting the bracket using the panel.)

Insyallation Instruction



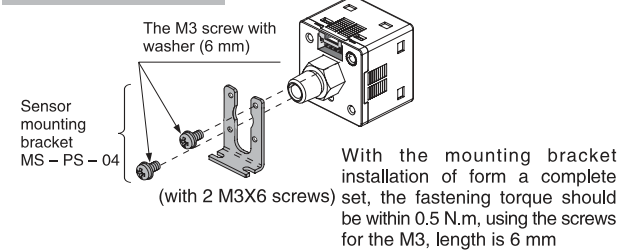
Bracket Size



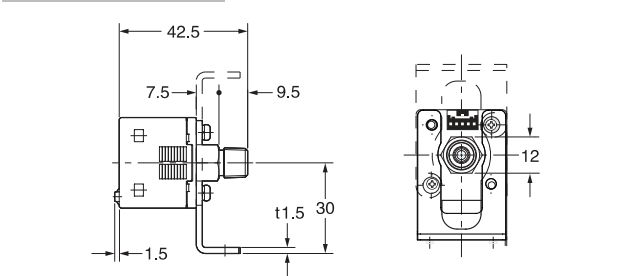
Material: POM panel mounting support
Polycarbonate (front protection cover)

Bracket Installation (MS – PS – 04)

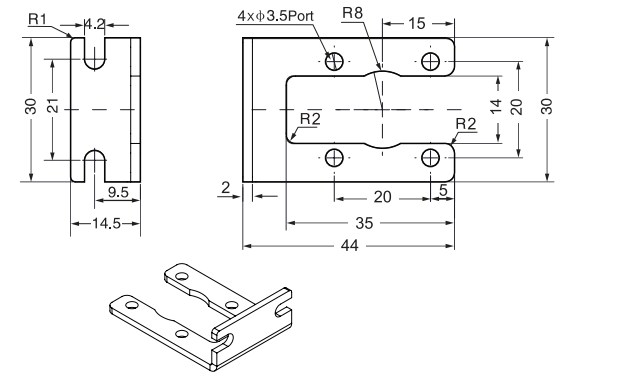
Installation instructions



Installation effect

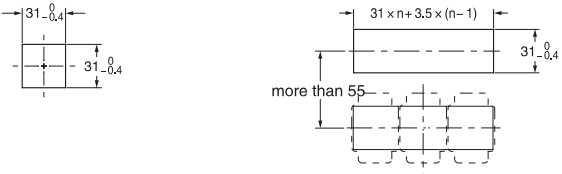


Bracket size

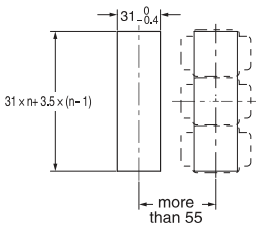


Panel Dimensions

When installing one panel When continuous installing n Horizontally



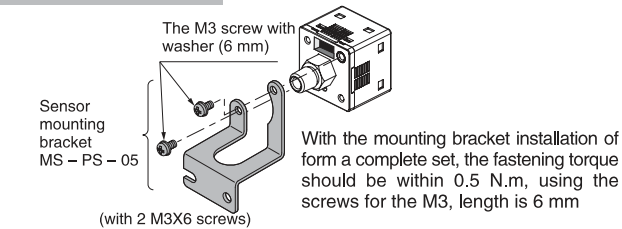
When continuous installing n Longitudinally



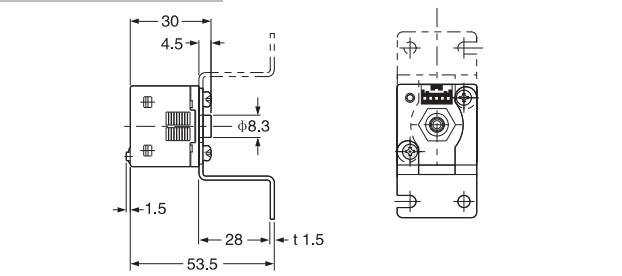
Note: The thickness of the panel should be 1~6mm.

Bracket Installation (MS – PS – 05)

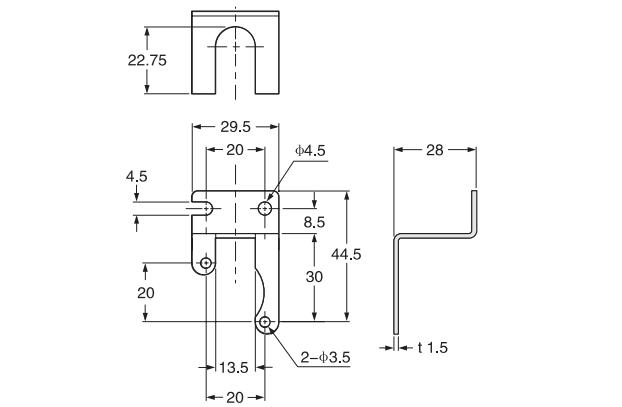
Installation instructions



Installation effect



Bracket size



PS42

Digital Display Pressure Switch (RS485)



Product Features

- RS485 communication.
- Compact shape,easy installation.
- "Current value" and "reference value" display at the same time, reference value can be directly set.
- Double screen, 3 color display (red, green, orange).
- Digital display,More legible.

How to Order?

Series No.	Category Code	Output Type	Port Size
PS42: Compact type	P: Positive pressure (–0.1MPa~1.0MPa) Continuous pressure (–100kPa~100kPa)		01: PT1/8(M5)
2NPV: 2 channel switching quantity (NPN/PNP adjustable, factory default NPN)+1 channel analog voltage output (1–5V) 2NPA: 2 channel switching quantity (NPN/PNP adjustable, factory default NPN)+1 channel analog current output (4–20mA) NPR: 1 channel switching quantity (NPN/PNP adjustable, factory default NPN)+RS485 communication			

Specifications

Models		Positive Pressure	Continuous Pressure
Type of pressure		Standard pressure	
Rated pressure range※		–0.1MPa~1.0MPa	–100kPa~100kPa
Set pressure range※		–0.1MPa~1.0MPa	–100kPa~100kPa
Resistance to pressure		1.5MPa	500kPa
Applicable fluid		Non corrosive gas	
Non-corrosive gases		12~24V DC ± 5%	
Consumption current		24V 30mA Max	12V 60mA Max
Switch output		NPN O.C Output: 80mA/24VDC Max or PNP O.C output:	
Repeat accuracy		± 0.2%F.S.	± 0.5%F.S.
Reaction time		Select through key operation:2.5ms,5ms,10ms,25ms,50ms,100ms,250ms,500ms,1000ms,5000ms	
Analog quantity output	Voltage output	0.6V~5V(or slightly lower)	1V~5V(or slightly lower)
	Current output	2.4mA~20mA(or slightly lower)	4mA~20mA(or slightly lower)
Linearity: ± 1%F.S. Maximum load impedance, power supply voltage 12V: 300 Ω ; 24V power supply: 600 Ω minimum load impedance: 50 Ω		Straightness: ± 1%F.S. Output impedance: 1K Ω	
Temperature range		Operating temperature: 0~50℃ Storage temperature: –10~60℃(no condensation, no icing)	
Humidity range		35~85%RH	
Temperature characteristic		± 0.5%F.S.(25℃)	
Protection class		IP40	
Material		1 Case: Nylon + fiberglass 2 LCD Display: Propylene 3 pressure port: External thread POM+ inlaid N5 Copper nut 4 seal ring :H-NBR 5 Keys: Silicone rubber	
Overall dimensions		30x 30x25mm(plastic part) /30x30x43mm (including fittings)	
Weight		About 80g (barometer body + user interface connector)	

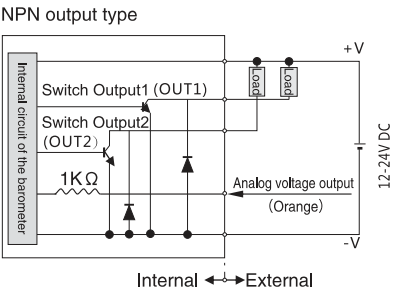
※ Note: Due to the influence of temperature and linear compensation, there may be slight fluctuations around the upper/lower range of the barometer, which is normal.

Product Profile

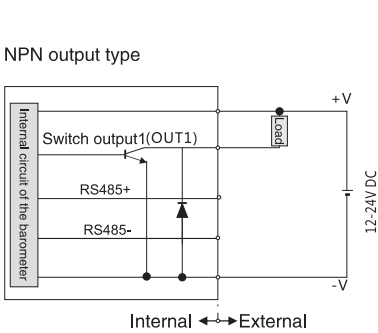
Type	Positive pressure	Continuous pressure
1000kPa		
100kPa		
–100kPa		
Rated pressure range	–0.1MPa~1.0MPa	–100kPa~100kPa
Set pressure range	–0.1MPa~1.0MPa	–100kPa~100kPa

I/O Circuit Diagram and Circuit Diagram

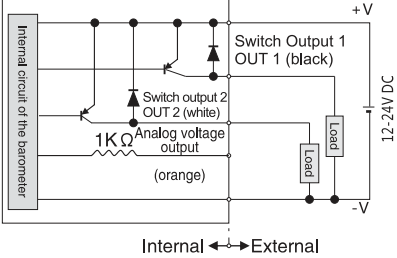
Non-RS485 models



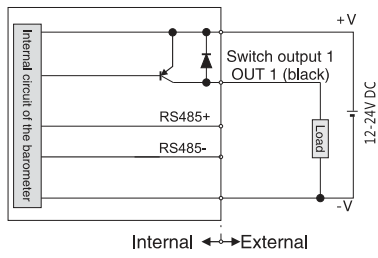
RS485 model



PNP output type



PNP output type



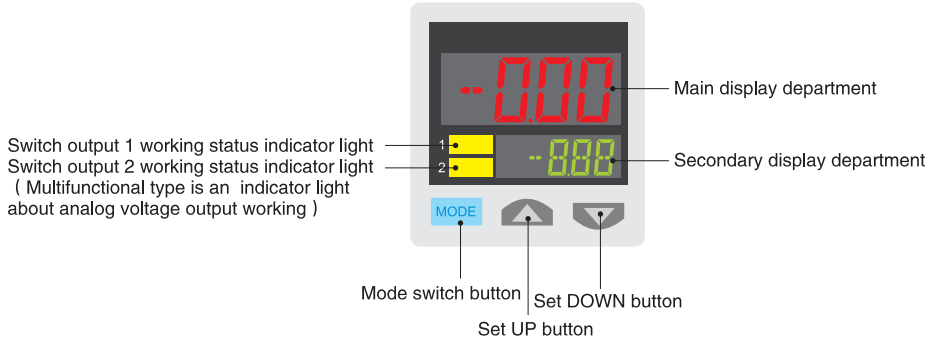
Terminal arrangement diagram

Connector needle	Terminal name
① Brown	+V
② Black	OUT1
③ White	OUT2
④ Orange	Analog quantity output
⑤ Blue	0V

Terminal arrangement diagram

Connector needle	Terminal name
① Brown	+V
② Black	OUT1
③ White	RS485+
④ Orange	RS485-
⑤ Blue	0V

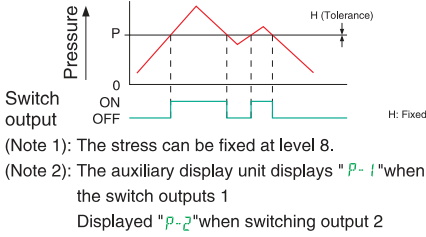
Panel Description



Input Mode and Output Mode

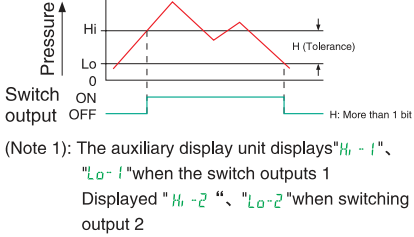
① EASYmode

Mode for switch output ON/OFF control



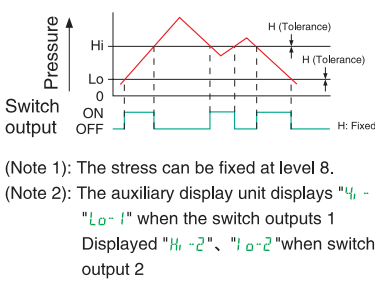
② Lag mode

Mode for switch output ON/OFF control

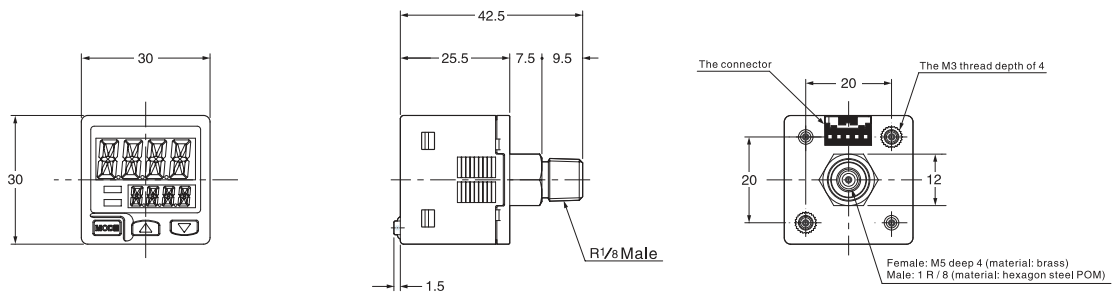


③ Window comparison mode

Set the switch to ON or OFF mode according to the pressure within the set range

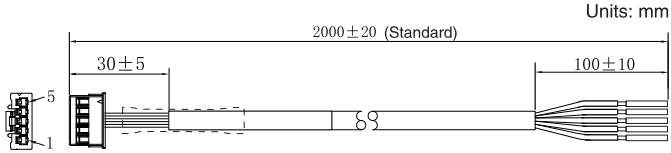


Outline Dimensional Drawing



Accessories Parts

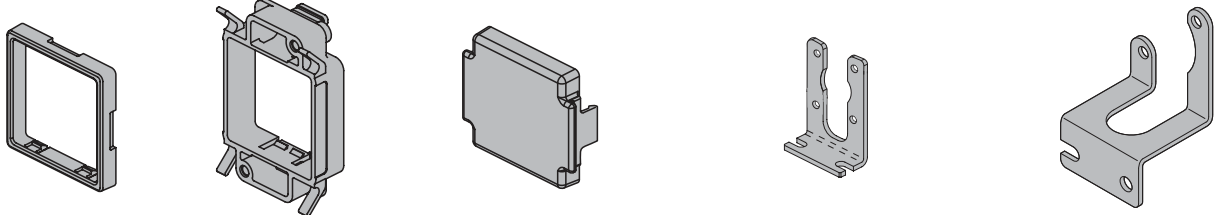
Accessories parts(1): cables



Please use the attached form a complete set of connecting cable with plug.

Note: remove, please hold the connection head part to be removed, otherwise it will cause cable bolt, connecting cable damage.

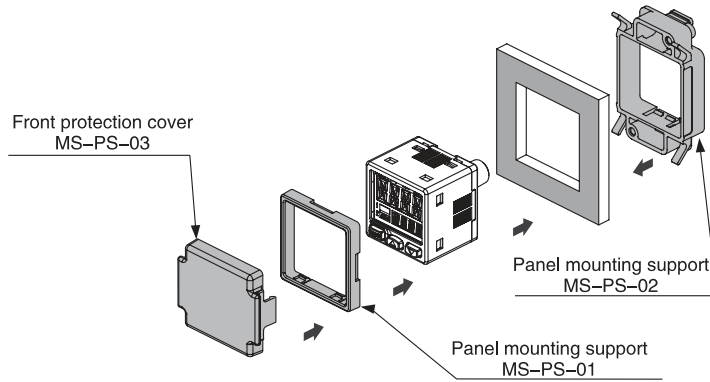
Accessories parts(2): the mounting bracket (sold separately)



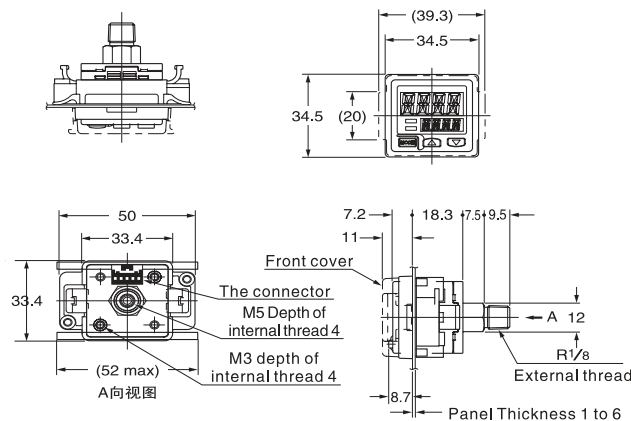
Type 01 panel support (MS-PS-01) Type 02 panel support (MS-PS-02) Type 03 front protection cover (MS-PS-03) Type 04 sensor mounting support (MS-PS-04) Type 05 sensor mounting support (MS-PS-05)

Product name	Type number	Type number
Sensor mounting bracket	MS-PS-04	Sensors can be mounted on the bottom or top side, or multiple sensors can be installed closely.
	MS-PS-05	The sensor can be mounted in the rear direction, or multiple sensors can be installed closely.
Panel mounting bracket	MS-PS-02	When used together, the sensor can be mounted on a panel with a thickness of 1 to 6mm, or multiple sensors can be installed closely.
Panel mounting bracket	MS-PS-01	
Panel mounting bracket	MS-PS-03	Protect the adjusting surface of the sensor. (This protective cover can be installed when mounting the bracket using the panel.)

Installation Instructions



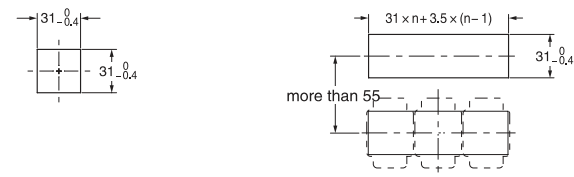
○ Bracket Size



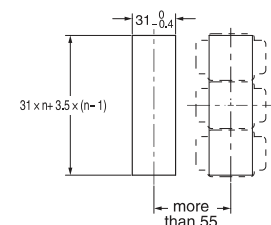
Material: POM panel mounting support
Polycarbonate (front protection cover)

Panel Dimensions

When installing one panel When continuous installing n Horizontally



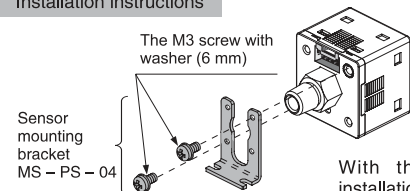
When continuous installing n Longitudinally



Note: The thickness of the panel should be 1~6mm.

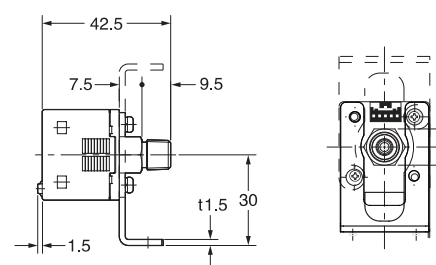
© Bracket Installation (MS – PS – 04)

Installation instructions

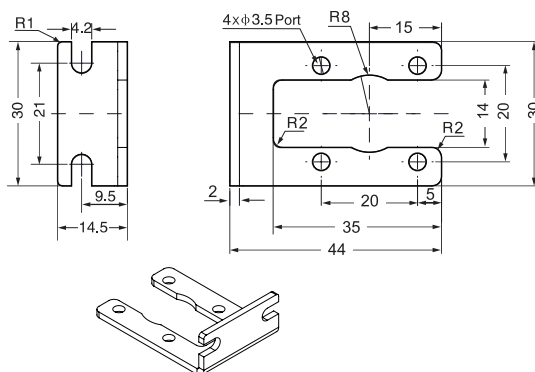


With the mounting bracket installation of form a complete set, the fastening torque should be within 0.5 N.m, using the screws for the M3, length is 6 mm

Installation effect

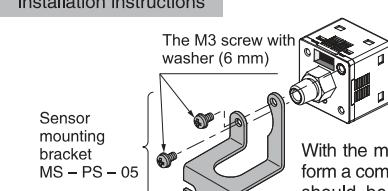


Bracket size



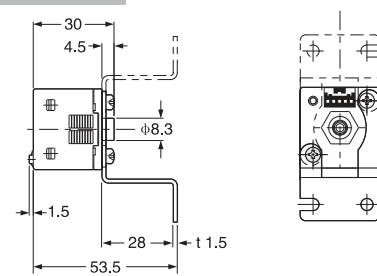
◎ Bracket Installation(MS-PS-05)

Installation instructions

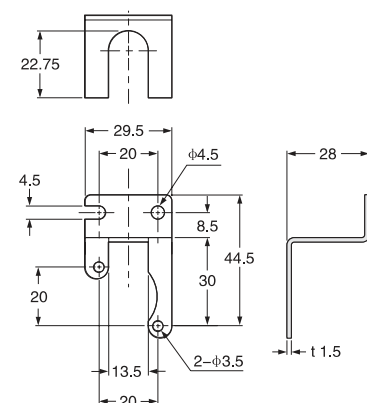


With the mounting bracket installation of form a complete set, the fastening torque should be within 0.5 N.m, using the screws for the M3, length is 6 mm

Installation effect



Bracket size



PS43

Digital Display Pressure Switch (RS485)



Product Features

- RS485 communication.

- Product features; Use HD display, highlighting no ghosting.
- Using imported chip, higher stability.
- Ultra-thin design, easy to install.
- Three color digital intelligent LCD display, easy to distinguish.
- Copy the function, operation more convenient.
- Built-in four units, show more clearly Lash, show more intuitive.
- Picture in Picture, show more intuitive; Can be set up power saving mode.
- Key lock, non-professional personnel operation.
- Multiplexed output, can be individually controlled multiplexing equipment.
- Single-channel output current is 200 ma, can control large load.
- Built-in over current, short circuit protection function.
- Built-in automatic fault diagnosis and fault code alarm.

How to Order?

⦿ **Installation Accessories: Sold Separately**

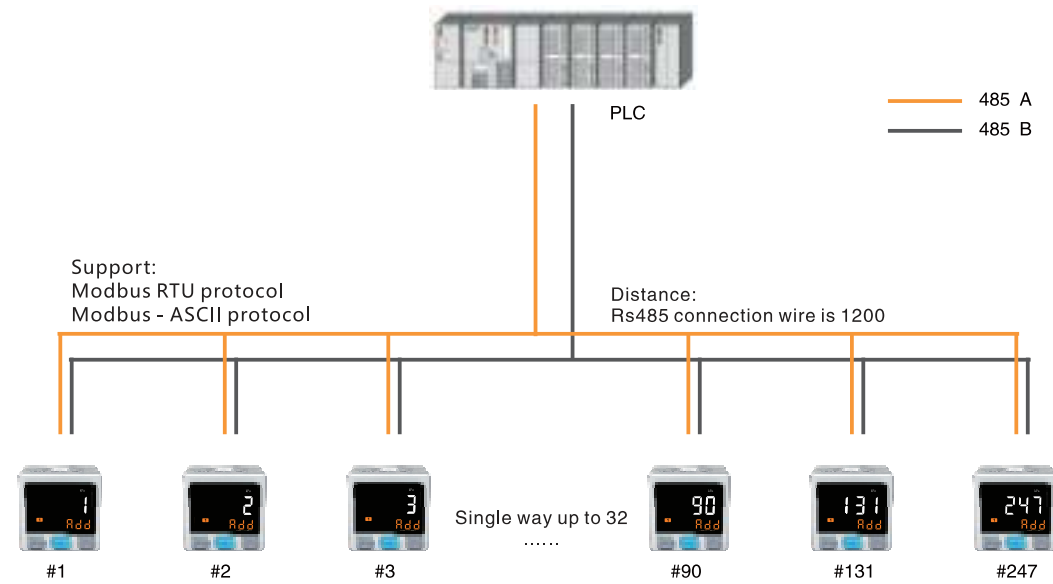
Series No.	Pressure Type	Output type	Port Size
PS43: Standard Type	C: Continuous pressure (−100 Kpa~100 kpa) P: Positive pressure (−0.1MPa~1.0MPa) V: Negative pressure (−100kPa~0kPa) M: micro pressure (−10kPa~10kPa)		01: PT1/8(M5) 06: NPT1/8(10~32UNF) 04: M5
	N: 1 way NPN output NV: 1 channel NPN+1 channel analog voltage output (1~5V) 2N: 2 channel NPN output 2NV: 2 channel NPN+1 channel analog voltage output (1~5V) NA: 1 channel NPN+1 channel analog current output (4~20mA) P: 1 channel PNP output PV: 1 channel PNP+1 channel analog voltage output (1~5V) 2P: 2 channel PNP output 2PV: 2 channels PNP+1 channel analog voltage output (1~5V) PA: 1 channel PNP+1 channel analog current output (4~20mA) NR: One NPN+RS485 communication PR: 1 channel PNP+RS485 communication		

Panel mounting bracket:	MS-PS43-01	PS43 special
Panel mounting bracket:	MS-PS43-02	
Front cover:	MS-PS43-03	
L-shaped support:	MS-PS43-04	
Z-bracket:	MS-PS43-05	

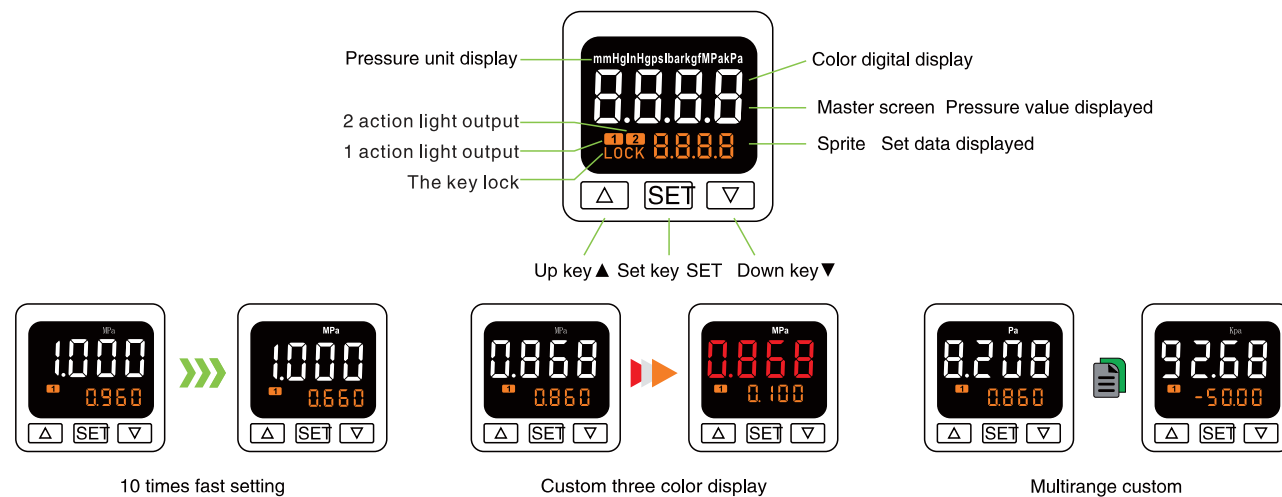
Specifications

Models	Micropress	Continuous press	Positive pressure
Rated pressure range	-10~10KPa	-100~-100kPa	-0.1~1.0MPa
Set pressure range	-10~10KPa	-103~103KPa	-0.103~1.03MPa
Resistance to pressure	30KPa	500KPa	1.5MPa
Protection class	IP40		
Display refresh rate	5 times per second		
Environment temperature	0~50℃		
Load current	≤200mA		
Internal voltage drop	≤1.0V		
Consumes current	≤40mA without load		
Linearity	±1F.s		
Weight	About 28g (without cable)		
Unit minimum scale value	KPa(0.01) mmHg(1) kgfa/cm²(0.01) bar(0.001) psi(0.01) inHg(0.1) MPa(0.001) kgfa/cm²(0.01) bar(0.01) psi(0.1)		
Shock resistance	The vibration amplitude is 1.5mm,10Hz~55Hz~10Hz per minute, 2 hours in each direction X, Y and Z		
RS485 communication distance	Connection for maximum distance <1200 m		
Color	3 colors (white, red, orange)		
Humidity	Action and preservation: 35~85%(no water dew)		
Wire specification	Oil resistant PVC Cable (0.15mm)		
Repeat accuracy	0.3%F.S Idigit		
Action indication	Orange OUT1		
Applicable gases	Air, non-storage, non-combustible (normal type)		
Storage temperature	Storage:-10℃~60℃(without water dew and non-freezing state)		
Temperature characteristics	3%F.s comparison reference temperature 25℃(0~50℃ temperature range)		
Baud rate	9600bps, 19200bps, 38400bps, 57600bps, 115200bps		
Insulation resistance	50MΩ 以上 (DC 500V)(between the lead and the plastic case)		
Output voltage	0.6V~5V 2%FS(rated voltage)		
Display accuracy	%FS Idigit(temperature 25 ±3℃)		
Voltage resistance	AC1000V1 min (between lead and plastic case)		
Impact resistance	100m/s(10G)x, Y, Z 3 times in each direction		
Output type	Open collector output (NPN or PNP, up to 1 way output)		
Port size	PT1/8"×M5 NPT1/8"×10~32UNF M5		
Response time	≤2.5ms(25, 100, 250, 500, 1000, 1500ms) can be set up		

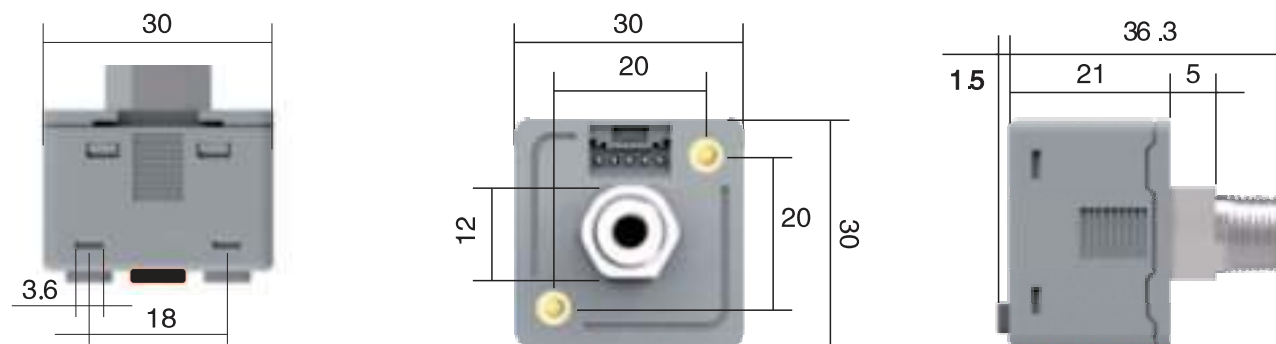
○ Connection Diagram



Panel Description



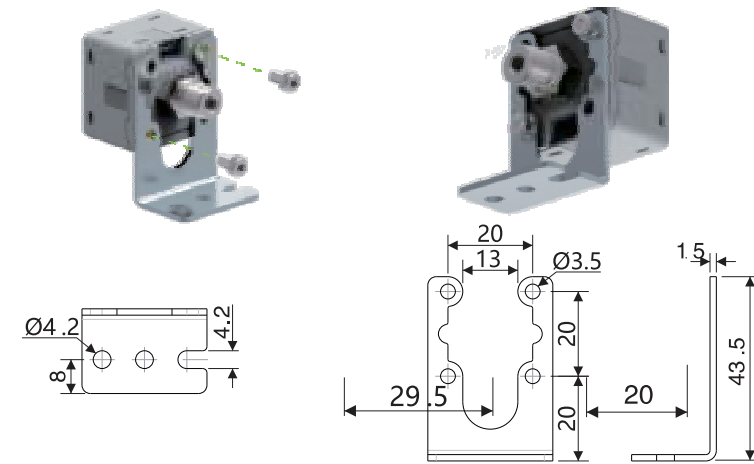
○ Main Dimensions



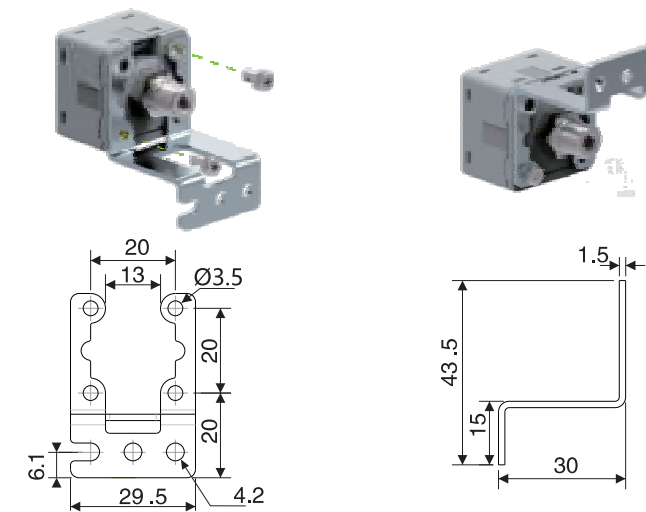
Optional Accessories

Fixing bracket installation mode

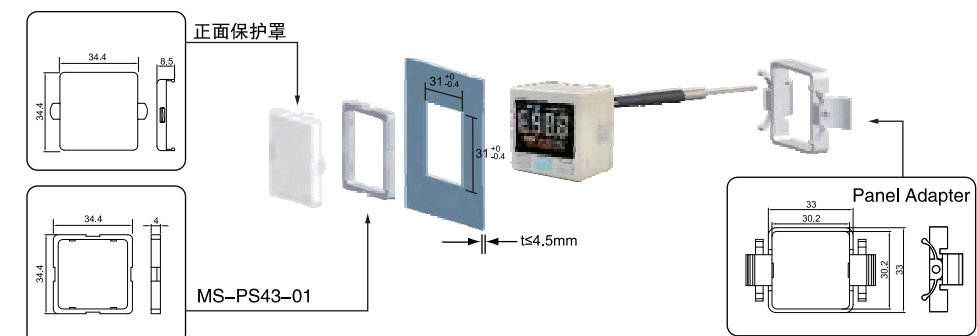
L-Bracket



Z-Bracket



Panel Installation



PS40
Digital Display Pressure Switch



Product Features

- Protection Level:IP65.
- Small size, easy installation.
- Pressure Unit Convertible:psi, bar, kgf, kPa, MPa.
- Setup and Ease of Use.
- Analog output available.
- Fault Code Alarms.
- Key lockout.

How to Order?

Series No.	Pressure Type	Output Type	Port Size
PS40:	P: Positive pressure Waterproof Type (-0.1MPa ~ 1.0MPa C: Compound pressure (-100kPa ~ 100kPa)		07: PT1/8 (Internal Thread)
2NV:2NPN+1Analog Voltage Output(1 ~ 5V) 2NA:2NPN+1Analog Current Output(4 ~ 20mA) 2PV:2PNP+1Analog Voltage Output(1 ~ 5V) 2PA:2PNP+1Analog Current Output(4 ~ 20mA)			

Installation Accessories: Sold Separately

L-shaped Bracket:	MS-PS40-04	For PS40
Z-shaped Bracket:	MS-PS40-05	

Specifications

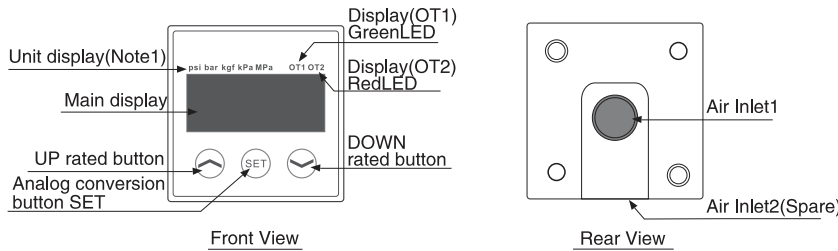
Models	Positive Pressure	Compound Pressure
Working pressure range	Standard pressure	
Regulating pressure range※	-0.1MPa~1.0MPa	-100kPa~100kPa
Rated pressure range※	-0.1MPa~1.0MPa	-100kPa~100kPa
Extended analog output range	1.5MPa	500kPa
Applicable fluid	Non corrosive gas	
Power supply voltage	12~24V DC ± 5%	
Current consumption	30mA@24V Max.55mA@1.2V Max	
Switch output	NPN O.C output:80mA/24V DC MAX or PNP O.C output:80mA/24V DC	
Digital output repeatability	±0.5%F.S.	
Actuation response time	Different options by button operating:2.5ms,5ms,10ms,25ms,50ms,100ms,250ms,500ms,1000ms,5000ms	
Analog output	【 AP2 】 Output Voltage:1.0 ~ 5.0VDC(or slightly smaller);Zero Point:1.0V ± 5%F.S. Amplitude:4V ± 5%F.S.;Linearity: ± 1%F.S.;Output Impedance:1KΩ	
	【 AP5 】 Output Voltage:1.0 ~ 5.0VDC(or slightly smaller);Zero Point:3.0V ± 5%F.S. Amplitude:4V ± 5%F.S.;Linearity: ± 1%F.S.;Output Impedance:1KΩ	
Operating Temperature range	Operating:0 ~ 50℃;Stored:-10 ~ 60℃(No freezing or condensation	
Operating Humidity range	35~85%RH	
Temperature characteristics	± 0.5%F.S.(25℃)	
Protective class	IP65(Dustproof and Waterproof)	
Material	Shell:ABS+Nylon; Pressure Hole:Die-cast Zinc Alloy; Gold Seal:H-NBR; Switch:Waterproof Face Sticker+Silicone Rubber+Micro Switch	
Dimensions	30 × 30 × 38mm(With Adapter)	
Weight	About 115g(Barometer Body + User Connects to CI Connector)	
Standards	Terminal Wire 2.0m、One Box、One Bubble bag(Or choose according to the " Selection Guide ")	
Optional	Hardware Bracket	

※Note:Due to the influence of temperature and linear compensation, there may be slight fluctuations near the upper/lower range of the barometer, which is normal.

Product Profile

Type	Positive Pressure	Compound Pressure
1000kPa		
100kPa		
-100kPa		
Rated pressure range	-0.1MPa~1.0MPa	-100kPa~100kPa
Set pressure range	-0.1MPa~1.0MPa	-100kPa~100kPa

Description of Each Part



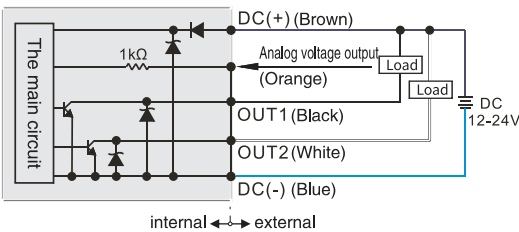
(Note1):When setting different units, the corresponding LED lights up.

Description of Each Part

When using the analog voltage output, please pay attention to the external device that the connector has suitable input impedance. Also, when extending the cable, be careful of the voltage N due to voltage drop of the cable.

NPN Standard Type

I/O Circuit Diagram

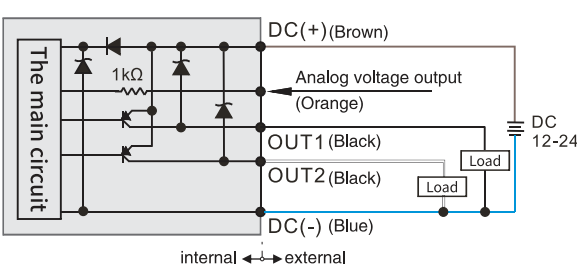


Wiring

Cable Color	Terminal Name
Brown	+V
Orange	Analog Output
Black	Switch Output1
White	Switch Output2
Blue	0V

NPN Standard Type

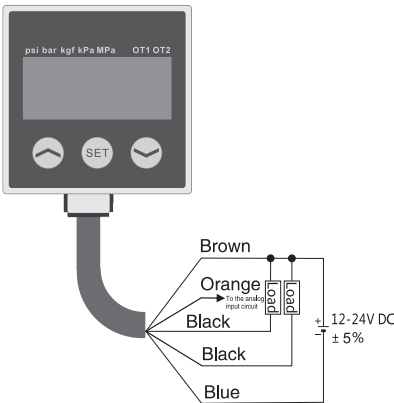
I/O Circuit Diagram



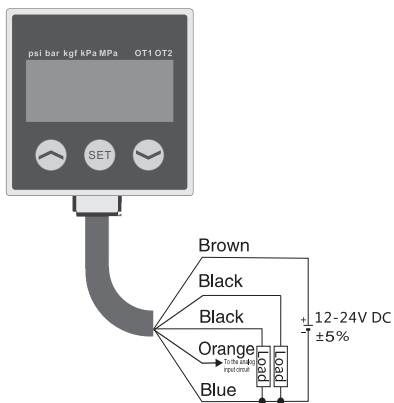
Wiring

Cable Color	Terminal Name
Brown	+V
Orange	Analog Output
Black	Switch Output1
White	Switch Output2
Blue	0V

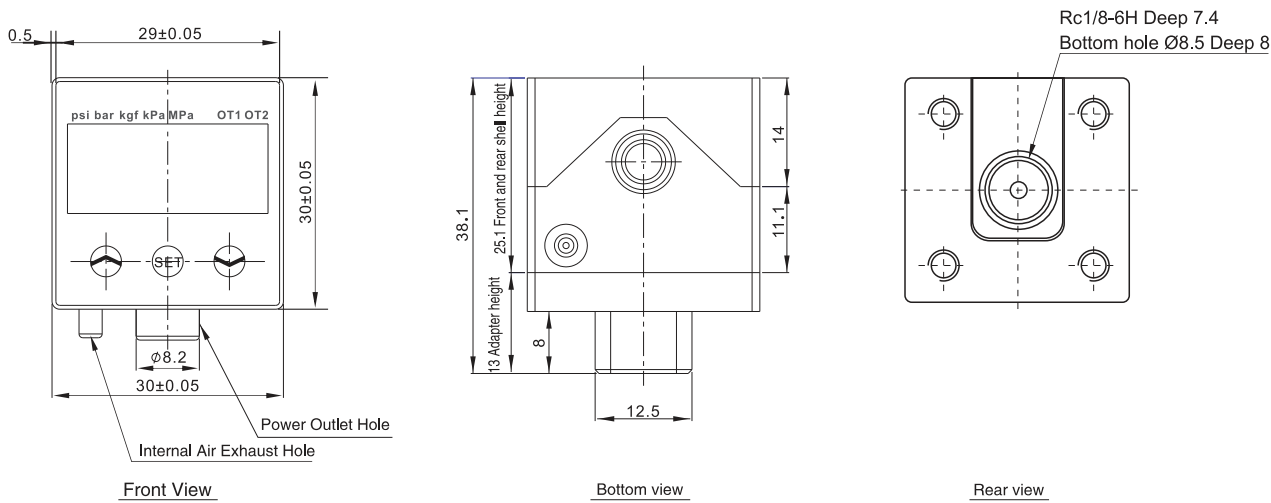
Circuit diagram



Circuit diagram



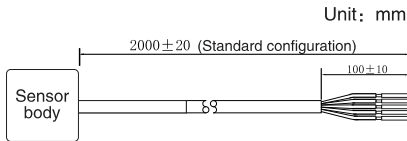
Main Dimensions



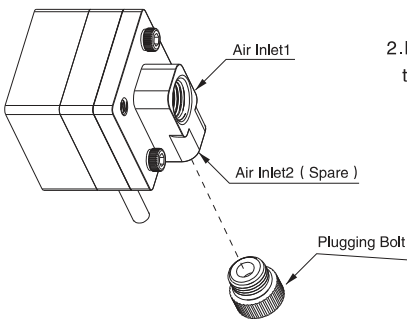
Accessories Parts

Cable

Note: In order to ensure the waterproof performance of the sensor, the plug-in terminal of the AP barometer cable is designed with an embedded body. Do not pull the cable excessively when using it

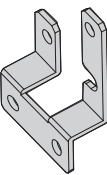


Inlet Description

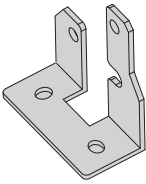


1. There are two inlet holes behind this product. When installing the pressure conduit, please select the easier to install air hole direction.
2. Do not use the air intake hole, please use the plugged stud with a sealing ring to block the air intake hole to avoid pressure leakage.

Mounting Bracket (sold separately)



Z bracket
(MS-PS40-05)

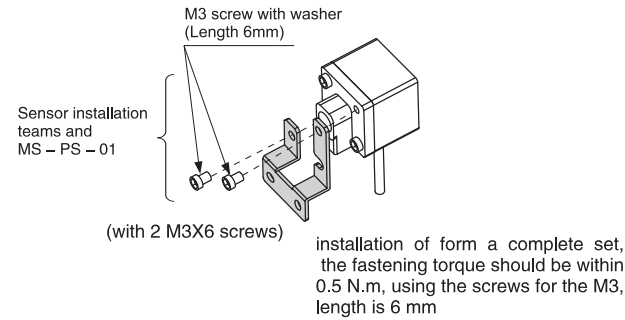


L bracket
(MS-PS40-04)

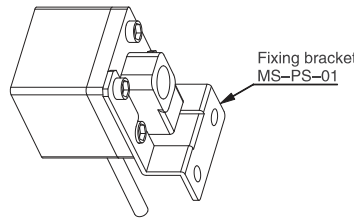
Product Name	Models	Illustrate
Sensor Mounting Bracket	MS-PS40-05	The sensor can be installed in the bottom or top direction, and multiple sensors can be installed closely.
	MS-PS40-04	Sensors can be installed in the rear direction, or multiple sensors can be installed closely.

Bracket Installation (MS-PS40-05)

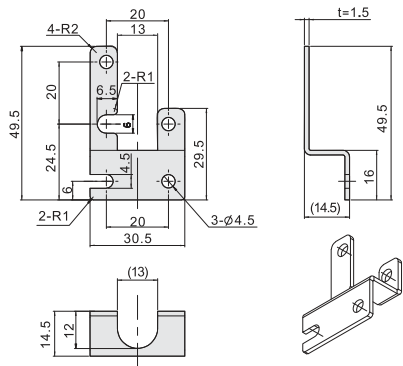
Installation instruction



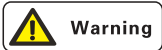
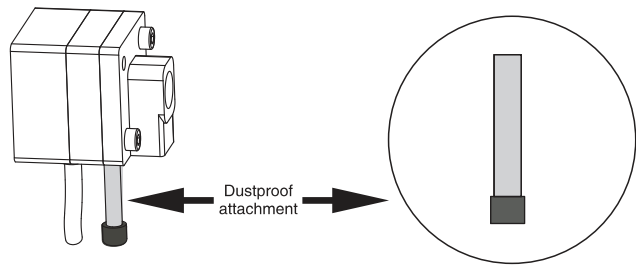
Installation effect



Bracket size



Dustproof Attachment

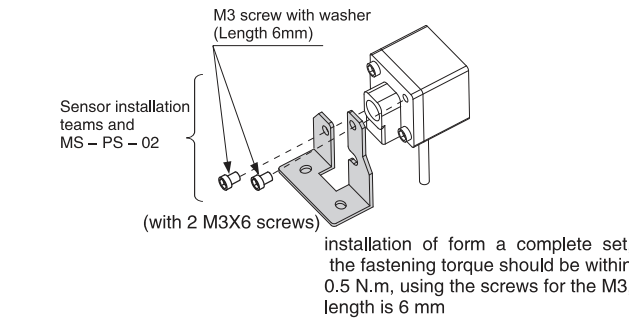


Warning

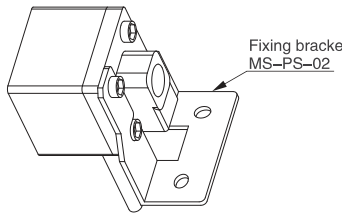
If this accessory is not installed, the AP series barometer will not meet the protection level of IP65

Bracket Installation (MS-PS40-04)

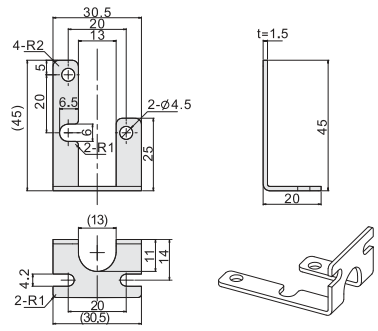
Installation instruction



Installation effect



Bracket size



PS80

Digital Display Pressure Switch



Product Features

- Products can be used in SUS316 no corrosive fluid environment
- Induction and over stainless steel 316L
- Waterproof design, protection grade IP65
- Using imported chip, higher stability
- Intelligent LED display, easy to distinguish
- Large font display, clearly visible
- Built-in switching multiple units
- Can be set up power saving mode
- Key lock, operation by professional staff excluded
- Multiplexed output operation, Control multiple devices separately
- Single-channel output current is 200 mA, can control large load
- Built-in over current, short circuit protection function
- Built-in automatic fault diagnosis and fault code alarm

How to Order?

Series No.	Pressure Type	Output Type	Port Size
PS80: anti-corrosion type	C: connect pressure (- 103 kpa to 103 kpa) P: positive pressure (0.1 MPa to 1.0 MPa) H: high pressure (0.1 MPa to 2.0 MPa)	N: 1 way NPN output 2N: 2 channel NPN output 2NV: 2 channel NPN+1 channel analog voltage output (1~5V) 2NA: 2 channel NPN+1 channel analog voltage output (4~20mA) P: 1 channel PNP output 2P: 2 channel PNP output 2PV: 2 channels PNP+1 channel analog voltage output (1~5V)PA: 1 channel PNP+1 channel analog current output (1~5V) 2PA: 2 channels PNP+1 channel analog voltage output (1~5V)PA: 1 channel PNP+1 channel analog current output (4~20mA) NR: 1 channel NPN+RS485 communication PR: 1 channel PNP+RS485 communication	07: PT1/8 (Internal Thread) 08: VCR1/4 09: PT1/4 (M5) 10: 1/4 (Bite type fitting)

Product Display



PT1/8 (The internal thread fitting)



VCR1/4 (End face seal fitting)

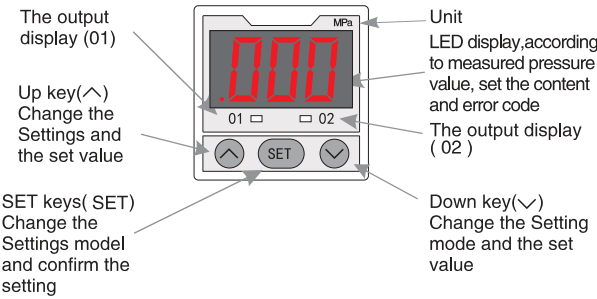


1/4 (Bite type fitting)

Installation Accessories (Sold Separately)

Panel Installation bracket:	MS-PS80-01	PS80
L-shaped bracket:	MS-PS80-04	special

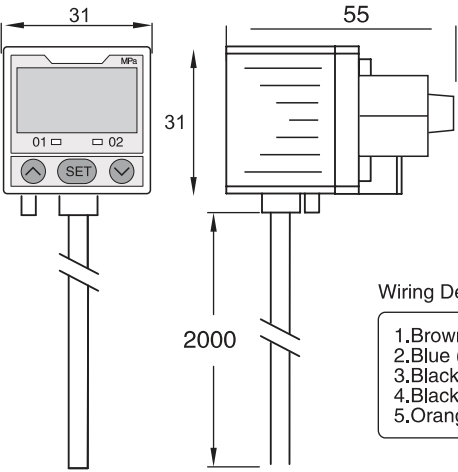
Panel Description



Specifications

Models		High pressure	Positive pressure	Continuous pressure
Rated pressure range		0.1~2.0MPa	-0.1~1.0MPa	0~1.0kPa
Set pressure range		-0.103~2.03MPa	-0.103~1.03MPa	-103~103kPa
Pressure resistance		3.0MPa	1.5MPa	300kPa
Applicable fluid		Non-corrosive fluid to SUS316, SUS304		
Supply voltage		less than 10% DC12~24V ± 10% Ripple peak value		
Current consumption		≤40mA when not loaded		
Minimum scale value of pressure unit	kPa	-	-	0.1
	MPa	0.001	0.001	-
	kgfa/cm2	0.01	0.01	0.001
	bar	0.01	0.01	0.001
	psi	0.1	0.1	0.01
	inHg	-	-	0.1
	mmHg	-	-	1
Switching output	Output type	Open collector output (NPN or PNP, up to 2 outputs)		
	Load current	Max 200mA		
	Internal voltage drop	1.0V		
	Response time	<2.5ms(can be set 25, 100, 250, 500, 1000, 1500ms)		
Linear voltage output	Output voltage	0.6V~5V ± 2.5%F.S	1V~5V ± 2.5%F.S(within rated voltage)	
	Output impedance	Approx 1 KΩ		
Linear current output	Linearity	± 1%F.S		
	Current output	4~20mA(± 2.5%F.S)(Impedance: DC12V maximum impedance 250 Ω, DC24 maximum impedance 600 Ω)		
Display	Color \ Speed	Red (Display refresh rate: 5 times/SEC)		
	Display accuracy	± 1%F.S ± 1 digit(temperature 25 ± 3 ° C)		
Hysteresis	Repeat accuracy	± 0.3%F.S± 1digit		
	Action Indication	OUT1 OUT2		
	Single point mode	1~8 adjustable		
	Window Mode	None		
Environment	Hysteresis Mode	IP65		
	Protection Class	0~ 50℃		
	Temperature around	Storage: -10℃~60℃(no water dew and no freezing state)		
	Storage Temperature	± 3%F.S comparison reference temperature 25℃(0~50℃ temperature range)		
	Temperature Characteristics	Action and storage :35~85%K dewless)		
	Humidity around	AC 1000V 1 min (between leads and plastic housing)		
	Voltage resistance	More than 50M2 (DC 500V)(between the lead and the plastic housing		
	Insulation resistance	Vibration amplitude 1.5mm,10Hv~55Hz~10Hz per minute, X, Y, Z each direction 2 hours		
	Shock resistance	100m/s(10G)X, Y, Z 3 times in each direction		
	Impact resistance	07: PT1/8(internal thread) 08: VCR1/4 09: PT1/4(M5) 10: 1/4(jacking type connector)		
Port size	Oil resistant PVC cable (0.2mm)			
Wire specifications	Approx 270g (including 2 meters of cable)			
Weight				

Product Size

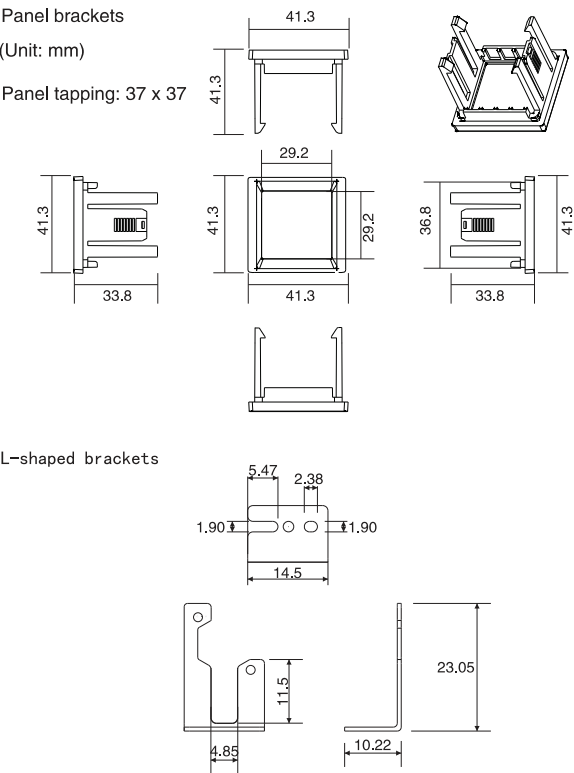


Wiring Definitions

1. Brown (+)
2. Blue (-)
3. Black (OUT1)
4. Black (OUT2)
5. Orange (V/A OUT)

Unit: mm

Optional Accessories



IO-Link Pressure Switch

Product Features



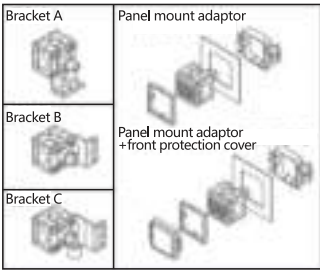
- 1. IO-Link V1.1 communication interface and COM2 communication rate are supported.
- 2. Dual switch output, support NPN, PNP and push-pull output mode.
- 3. Data batch menu setting is supported, convenient for parameter setting.
- 4. Save wiring and reduce long-distance installation costs.
- 5. Support traditional pressure switch, Basic, hysteresis and window comparison functions, response time < 3ms.
- 6. Different overcurrent values (50mA to 250mA) can be set.
- 7. Dual interface, red/green display process value.
- 8. Support hot swap, data parameters are stored in the IO-Link master station, no need to reconfigure parameters to replace the pressure switch. The newly replaced pressure switch is automatically recognized and put into work immediately, which can reduce equipment downtime and maintenance costs, and improve production efficiency.
- 9. IO-Link protocol is independent of Fieldbus, has strong industrial network compatibility, supports mainstream Fieldbus and industrial Ethernet.
- 10. The pressure value can be read without an external analog module, and the communication is completely digitally transmitted. Reducing the loss of analog-to-digital conversion accuracy, with strong anti-interference ability, and the max transmission distance is 20 meters.

How to Order?

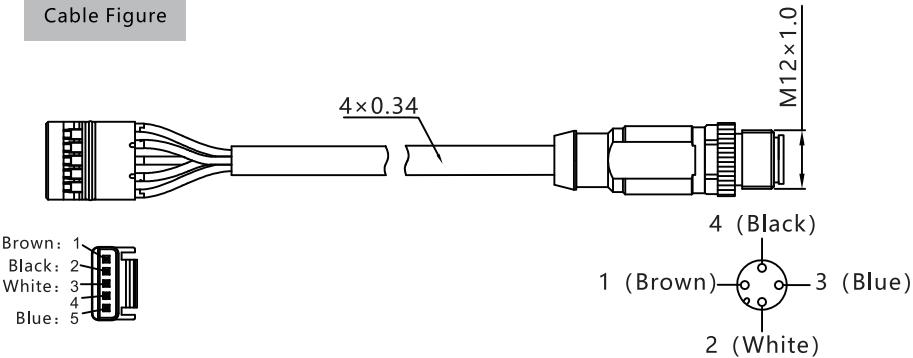
Pressure Type	Output Type	Port Size	Lead Wire
NISE20B: -0.1~1MPa (Positive pressure) NZSE20BF: -100~100KPa (Compound pressure)	LK:IO-Link / Switch 1 output+Switch 2 output(When switching output, NPN, PNP and push-pull output modes are supported.)	01:PT1/8+M5 02:G1/8+M5 03:NPT1/8+M5	Blank: Lead wire with M12 connector 0.3M 2M: Lead wire with M12 connector 2M 5M: Lead wire with M12 connector 5M (Other lengths can be customized)

How To Order (For Accessories)

Name	Model	Description
Bracket A	NZS-38-A1	Mounting bracket with 2 mounting screw (M3X5L)
Bracket B	NZS-38-A2	
Bracket C	NZS-38-A3	
Panel1	NZS-27-C	Panel mount adaptor with 2 mounting screw (M3X8L)
Panel2	NZS-27-D	Panel mount adaptor+Front protection cover with 2 mounting screw (M3X8L)
Lead Wire	NZS-20-2M	Lead wire with M12 connector 2M, straight, 4 Core
	NZS-20-5M	Lead wire with M12 connector 2M, straight, 4 Core



Cable Figure

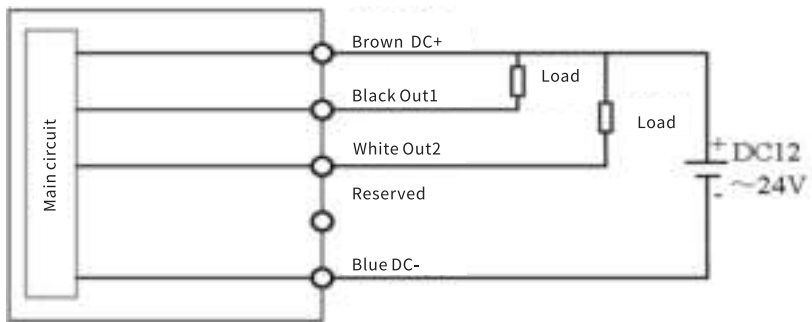


Specification

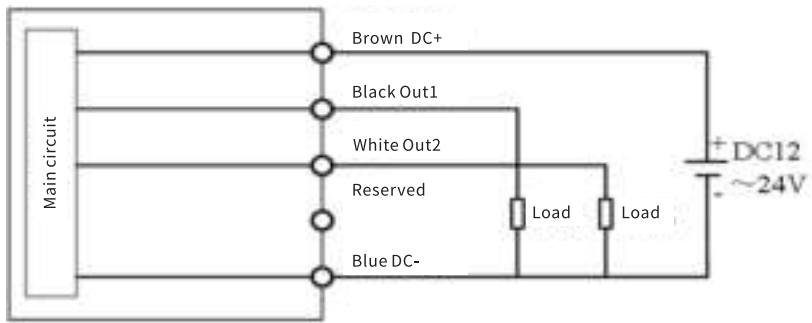
Model	NZSE20BF (Compound Pressure)	NISE20B (Positive Pressure)
Rated Pressure Range	-100.0~100.0KPa	0.000~1.000MPa
Set Pressure Range	-101.0~101.0KPa	-0.100~1.000MPa
Smallest Settable Increment	0.1KPa	0.001MPa
Withstand Pressure	200kPa	1.5MPa
Unit	kPa, kgf/cm ² , bar, psi, inHg, mmHg	MPa, kgf/cm ² , bar, psi
Fluid	Air, Non-corrosive gas, Non-flammable gas	
Power Supply Voltage	When Used As A Switch Output Device	12~24VDC±10% without isolation
	When Used As An IO-Link Device	18~30VDC±10%
Current Consumption	≤40mA (no load)	
Response Time	<3ms (Malfunction prevention function: 2.5, 25, 100, 250, 500, 1000, 1500ms optional)	
Switch output (SIO mode)	Output Type	NPN open collector, PNP open collector, PP push-pull output mode can be selected
	Output Mode	Basic Mode, Hysteresis Mode, Window Comparator Mode
	Switch Operation	N.O./N.C.
	Max. Load Current	125mA
	Max. Applied Voltage	30VDC (NPN output)
Internal Voltage Drop	≤1.5V	
	Yes	
Output Short Circuit Protection	Yes	
Display Accuracy	2%F.S.±1digit (Ambient temperature of 25±3°C)	
Repeatability	±0.2%F.S.±1digit	
Action Indicator	Lights up when switch output is turned ON (OUT1, OUT2: Orange)	
Display	4 digits, 7 segments LCD display (red/green/orange) (sampling rate: 5 times/sec)	
Environmental Resistance	Enclosure	IP40
	Withstand Voltage	AC1000V 1 minute (charging part and shelling)
	Insulation Resistance	≥50MQ (500VDC, between the charging part and the shell)
	Operating Temperature Range	-10~+50°C, storage environment -10~+60°C (without dew and freezing)
	Operating Humidity Range	35~85%RH (under the condition of no water and no freezing)
Communication Specifications (IO-Link Port Type mode)	IO-Link Type	Equipment
	IO-Link Version	V1.1
	Communication Speed	COM2(38.4kbps)
	Configuration File	IODD file
	Port Type	Class A
	Minimum Cycle Time	2.5ms
	Process Data Length	Input data: 4Byte, output data: 0Byte
Vendor ID	1084 (0x043C)	

Output Wiring Diagram

NPN Open Collector 1 and 2 Outputs:

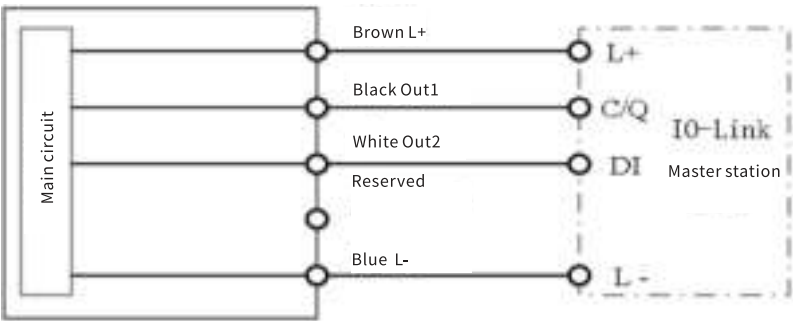


PNP Open Collector 1 and 2 Outputs:



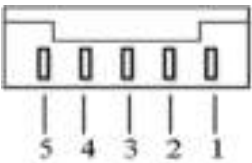
Output Wiring Diagram

When Used As An IO-Link Device:



Note: When the pressure switch is used as a common sensor, the C/Q output terminal is the same as the DO output terminal as a switching value output.

Terminal Arrangement Diagram

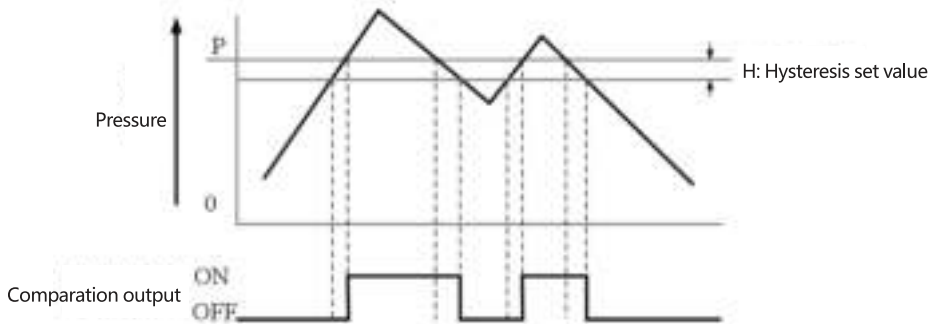


Terminal name	TerminalDefinition
1	24V+(Brown)
2	SwitchoutputOUT1orIO-Link(C/QLine)(Black)
3	SwitchoutputOUT2/DOsignal(White)
4	Reserve
5	OV(Blue)

Output Mode

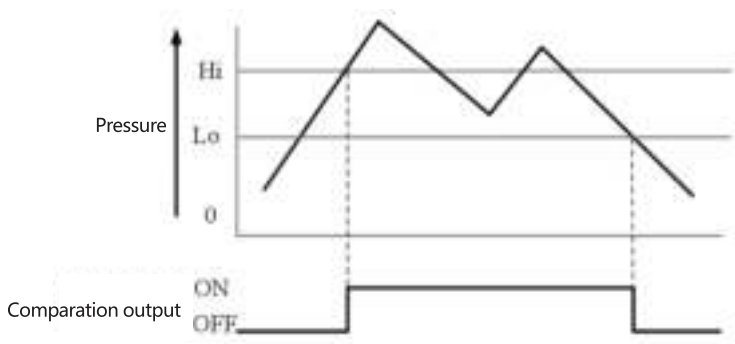
① Basic Mode

When the pressure is large than (P) value, the output is ON. When the pressure is less than the (P) value, the output is OFF.



② Hysteresis Mode

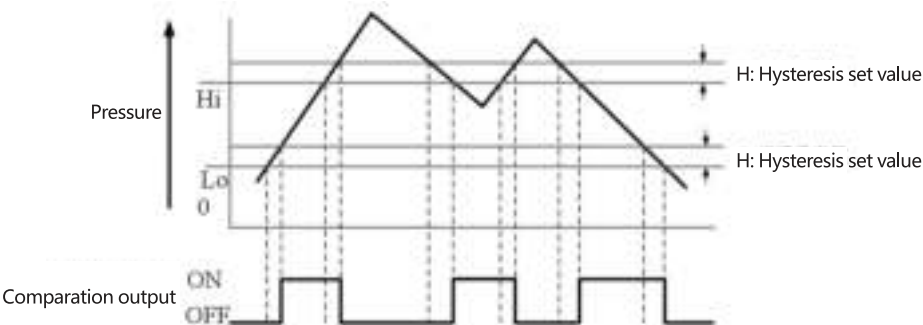
When the pressure is large than Hi value, the output is ON. When the pressure is less than the Lo value, the output is OFF.



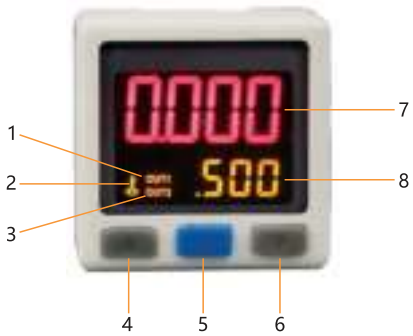
Output Mode

③ Window Comparator Mode

When the pressure large than value 'Hi' or less than value 'Lo', the output is 'OFF'. When pressure large than value 'Lo' and less than value 'Hi', the output is 'ON'.



Panel Description



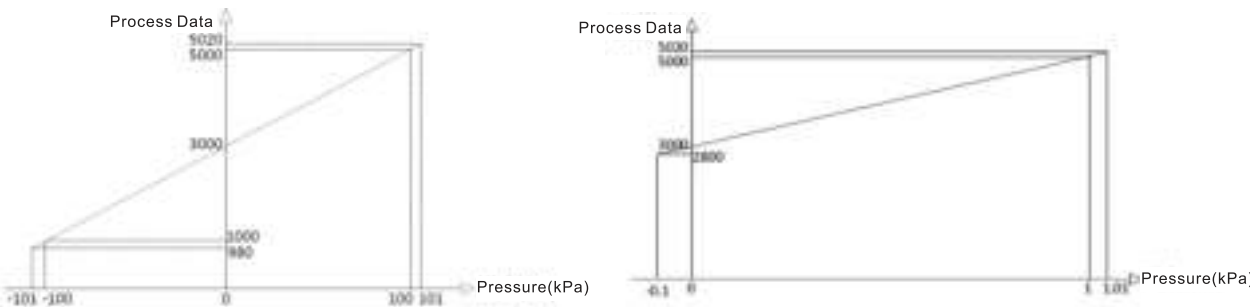
- 1. Output 1 Indicator
- 2. Lock
- 3. Output 2 Indicator
- 4. (▲) Button
- 5. Setting Button
- 6. (▼) Button
- 7. Main Display
- 8. Sub Display

IO-Link: Process Data

Relationship between the process data and pressure value

NZSE20BF (Compound Pressure)

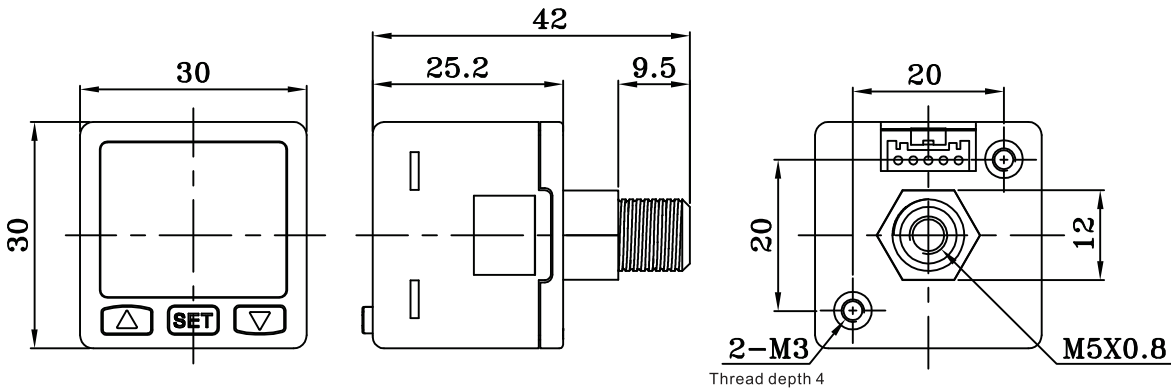
NISE20B (Postive Presure)



Function

Display value fine adjustment function.	Evens out deviations in the displayed value.
Power saving mode	Reduces power consumption.
Key-lock function	The keyboard can be locked to prevent the accidental operation of the operation switch.
Zero-clear function	The pressure display can be set to zero when the pressure is open to the atmosphere.
Maximum /minimum value indication function	Can record maximum or minimum output pressure valve.
Units selection function	Can convert the display value.

Main Dimension



Note: