



Pressure Transmitter MBS33M

Installation

Installation, inspection, maintenance, repairs, disassembly, adjustment and valve opening/closing should be carried out only by trained maintenance personnel.

1. The joint and the siphon tube are temporarily connected when shipped. Make sure to retighten when installing the product before use.



Make sure to retighten the joint and siphon tube.

If retightening is not carried out, steam or hot fluid may leak, resulting in malfunction of the product and leading to burns or other injury.

2. Make sure to use the siphon tube if the operating fluid temperature is 85 °C or more.
3. Make sure to use the joint, as the siphon tube cannot be installed without it.
4. Do not put any stress on the diaphragm inside the pressure receiving part.
5. Supply voltage of 10 to 30 V DC is required for operation. When the product is used with instruments that do not have a built-in sensor power supply (controller, recorder, indicator, etc.), provide the power supply for the sensor separately.
6. Ensure that the wiring is carried out with the correct polarity by referring to figures below.
7. Ensure that all the screws for the cover and the wiring connection are firmly tightened once the installation and the wiring are complete.

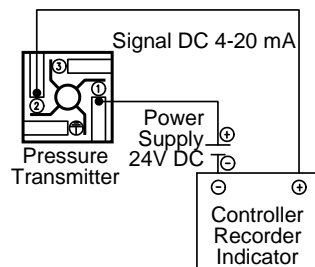
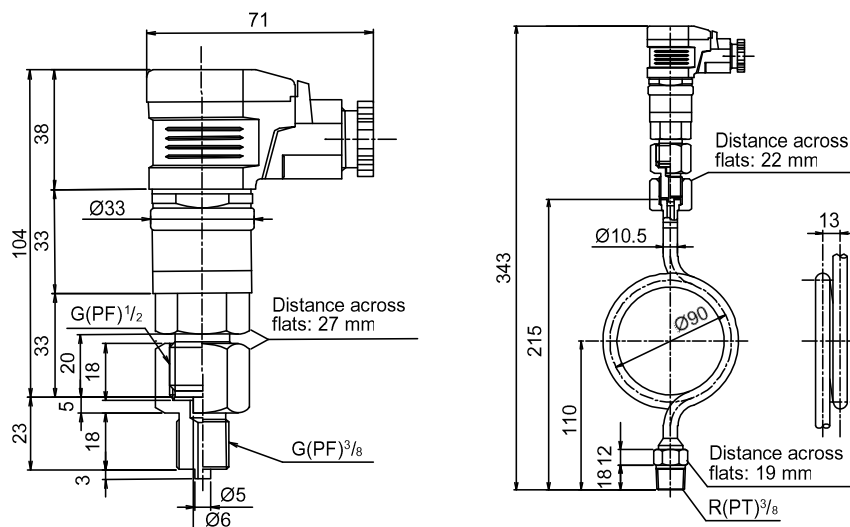


Figure 1 Electrical Wiring (Connected to controllers, indicators, recorders, etc.)

Outline Drawing



Specifications

 CAUTION	Install properly and DO NOT use this product outside the recommended operating pressure, temperature and other specification ranges. Improper use may result in such hazards as damage to the product or malfunctions which may lead to serious accidents. Local regulations may restrict the use of this product to below the conditions quoted.
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Model code, measuring range, operating pressure etc. are listed on the label affixed at the side of the product. (Gauge pressure type is listed as “Pe” and absolute pressure type is listed as “Pa” in the RANGE column on the label.)

1. Body Specifications

	Abs. Pressure Type	Gauge Pressure Type			
Model Code	060G1233	060G2160	060G3126	060G2159	060G3128
Pressure Range	0 to 400kPa abs (0 to 4 bar abs)	0 to 500 kPaG (0 to 5 barg)	0 to 1000 kPaG (0 to 10 barg)	0 to 2000 kPaG (0 to 20 barg)	0 to 2500 kPaG (0 to 25 barg)
Max. Allowable Press.	800 kPaG	800 kPaG	2000 kPaG	5000 kPaG	5000 kPaG
Applicable Fluids	Gases, Liquids		Weight	Approx. 400 g	
Accuracy	±0.3 % F.S. (Typical)		Temp. Characteristics	±0.02 % F.S./ °C	
Power Source	D.C. 10 to 30 V		Output Signal	D.C. 4 to 20 mA (2-wire)	
Load Resistance	250 to 1000 Ω (varies depending on power source voltage) 〔Equation: Load resistance (Ω) = $\frac{\text{Power source voltage (V)} - 10}{0.02 \text{ (A)}}$ 〕				
Pipe Connection	Screw: G(PF) ³ / ₈ (With a joint attached)		Wiring Connection	Plug construction: DIN43650 Applicable wire diameter: ø5 to 14 mm	
Wetted Part Material	AISI 316/W.No.1.4401		Body Material	AISI 316L/W.No.1.4404	
Joint Material	Brass		Pressure Sensing Construction	Semiconductor strain gauge	
Operating Fluid Temperature Range	-40 to 85 °C (Siphon tube must be used above 85 °C)		Transport/Storage Temperature Range	-50 to 85 °C	
Protection Class	Rain-proof (IP65)		Vibration Stability	20 G (20 Hz to 2 kHz)	
Marine Approvals	LR, DNV, GL, RINA, ABS, BV, NKK, PRS, MRS, KRS				

2. Attached Siphon Tube

Connection	Sensor side: G(PF) ³ / ₈	Pipe side: R(PT) ³ / ₈	(Body) Material	Stainless Steel SUS304
Max. Operating Press.	20 MPaG		Max. Operating Temp.	350 °C

Range Setting

When a pressure unit other than kPa is used with instruments such as controllers, etc., refer to the table below to set the pressure range on the instrument side.

Unit	kg/cm ² G	barg	psig	mmHg G
Product Range	kg/cm ² abs	bar abs	psi abs	mmHg abs
0 to 400kPa abs	-1.033 to 3.047 0 to 4.08	-1.013 to 2.987 0 to 4	-14.70 to 43.32 0 to 58.02	-760 to 2240 0 to 3000
0 to 500 kPaG	0 to 5.10 —	0 to 5.00 —	0 to 72.5 —	0 to 3751 —
0 to 1000 kPaG	0 to 10.20 —	0 to 10.00 —	0 to 145.0 —	0 to 7501 —
0 to 2000 kPaG	0 to 20.40 —	0 to 20.00 —	0 to 290.1 —	0 to 15002 —
0 to 2500 kPaG	0 to 25.50 —	0 to 25.00 —	0 to 362.6 —	0 to 18753 —

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