

External pressure sensor PM100

Pressure measurement up to 70 MPa with the CA700!

NEW

Main features

The highest measurement accuracy in field type

Basic accuracy: 0.01% of reading

The highest resolution in class

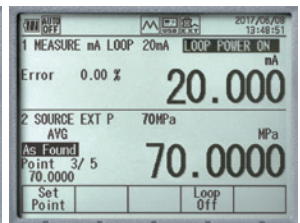
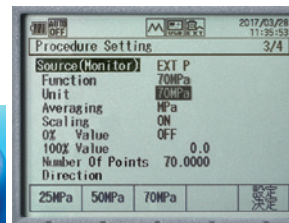
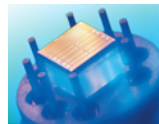
0.0001 MPa is achieved in each range

Multi range (Three pressure ranges in one unit)

- 7 MPa/10 MPa/16 MPa (-05)
- 25 MPa/50 MPa/70 MPa (-06)



Silicon Resonant Sensor



Basic Specifications

16 MPa Model (-05)

Items		Specifications		
Pressure type		Shield gauge		
Measurement Range		0 to 7 MPa sg	0 to 10 MPa sg	0 to 16 MPa sg
Measurement display range		to 8.4000 MPa	to 12.0000 MPa	to 19.2000 MPa
Measurement accuracy*1, *2	6 ⁺ 3 months after calibration (Test after zero calibration)*5	± (0.01% of reading + 2 kPa)	± (0.01% of reading + 3 kPa)	± (0.01% of reading + 5 kPa)
	1 ⁺ 4 year after calibration (Test after zero calibration)*5	± (0.01% of reading + 2.8 kPa)	± (0.01% of reading + 3.8 kPa)	± (0.01% of reading + 5.8 kPa)
Allowable input		2.7 kPa abs to 23 MPa sg		
Temperature coefficient		± (0.001% of reading + 0.16 kPa) / °C or less		

70 MPa Model (-06) **NEW**

Items		Specifications		
Pressure type		Shield gauge		
Measurement Range		0 to 25 MPa sg	0 to 50 MPa sg	0 to 70 MPa sg
Measurement display range		to 30.0000 MPa	to 60.0000 MPa	to 77.0000 MPa
Measurement accuracy*1, *2	6 ⁺ 3 months after calibration (Test after zero calibration)*5	± (0.01% of reading + 6 kPa)	± (0.01% of reading + 10 kPa)	± (0.01% of reading + 16 kPa)
	1 ⁺ 4 year after calibration (Test after zero calibration)*5	± (0.01% of reading + 9.5 kPa)	± (0.01% of reading + 13.5 kPa)	± (0.01% of reading + 19.5 kPa)
Allowable input		2.7 kPa abs to 98 MPa sg		
Temperature coefficient		± (0.001% of reading + 0.7 kPa) / °C or less		

Common Specifications

Items	Specifications
Resolution	0.0001 MPa (0.1 kPa)
Response time*6	2.5 s or less
Internal volume	Approx. 6 cm ³
Influence of positional setup	Zero point drift ±1 kPa or less
Measurement fluid	Gas and liquid (non-corrosive, non-flammable, non-explosive, and non-toxic fluids)
Measurement fluid temperature	-10 to 50°C (Liquid temperature 5 to 50°C)
Pressure sensor	Silicon resonant sensor
Pressure sensor element	Diaphragm
Input port	1/2 NPT female thread
Measurement unit material	Diaphragm: Hastelloy C276 and input port: SUS316

*1. Yokogawa's pressure standard accuracy is excluded *2. The value measured with the PM100 is in digital communication with the CA700, and there is no error between these instruments.

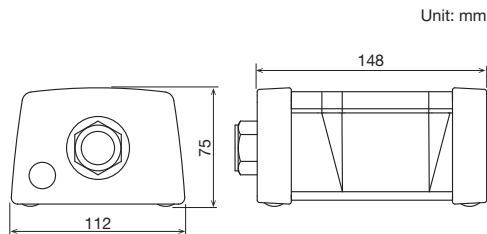
*3. 23°C±3°C, 6 months after calibration, Test after zero calibration *4. 23°C±3°C, 1 year after calibration, Test after zero calibration

*5. Zero-point calibration condition: Under atmospheric pressure *6. Time from 3.5 MPa to atmospheric release and from 0 MPa to ±3.5 kPa

General Specifications

Warm-up time	Approx. 5 minutes
Protection grade	IP54 dustproof and waterproof structure
Dimensions	Approx. 112 (W) × 75 (H) × 148 (D) mm
Weight	Approx. 1.2 kg
Compliance Standards	Safety: EN61010-1 (contamination class 2) EMC: EN61326-1 Class A, EN55011 Class A Group1
Operating temperature/humidity range	-10 to 50°C 20 to 80% (no condensation)
Storage temperature/humidity range	-20 to 60°C 20 to 80% (no condensation)
Accessories	Connection cable (1 m, Waterproof connector) 1/2" NPT male thread to 1/8" NPT female thread 1/2" NPT male thread to 1/4" NPT female thread 1/2" NPT male thread to Rc 1/4" female thread

PM100 External Dimensions



Unless otherwise specified, the dimensional tolerance is $\pm 3\%$ (but less than 10 mm is ± 0.3 mm).

Model and Suffix Code

Product name	Model	Suffix Code	
External Pressure sensor	PM100		General use type
		-E	All countries except Japan
		-05	Shield gauge Pressure (7 MPa/10 MPa/16 MPa Range switching)
		-06	Shield gauge Pressure (25 MPa/50 MPa/70 MPa Range switching)
		-P3	(1/2" NPT female thread)

PM100 Accessories

Product name	Model	Specification
Connection cable	95020	1 m
Connector	91083	1/2" NPT male thread to 1/8" NPT female thread conversion connector
Connector	91084	1/2" NPT male thread to 1/4" NPT female thread conversion connector (when -05 is selected)
Connector	91085	1/2" NPT male thread to Rc1/4" female thread conversion connector (when -05 is selected)
Connector	91086	1/2" NPT male thread to 1/4" NPT female thread conversion connector (when -06 is selected)
Connector	91087	1/2" NPT male thread to Rc1/4" female thread conversion connector (when -06 is selected)

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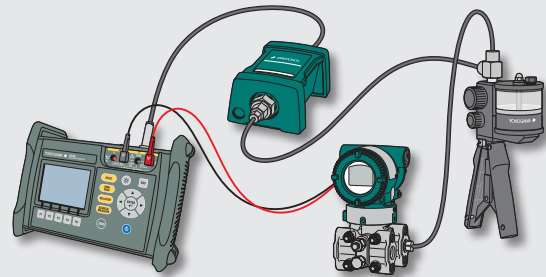
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Applications

Field calibration of pressure transmitter



Connection cable **95020**



Connector **91083**

1/2" NPT male thread to 1/8" NPT female thread



Connector **91084**

1/2" NPT male thread to 1/4" NPT female thread



Connector **91085**

1/2" NPT male thread to Rc1/4" female thread



Connector **91086**

1/2" NPT male thread to 1/4" NPT female thread



Connector **91087**

1/2" NPT male thread to Rc1/4" female thread



NOTICE

- Before operating the product, read the user's manual thoroughly for proper and safe operation.

Yokogawa's approach to preserving the global environment

- Yokogawa's electrical products are developed and produced in facilities that have received ISO14001 approval.
- In order to protect the global environment, Yokogawa's electrical products are designed in accordance with Yokogawa's Environmentally Friendly Product Design Guidelines and Product Design Assessment Criteria.

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