

External pressure sensor PM100 (16 MPa Range)

Pressure measurement up to 16 MPa with the CA700!

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

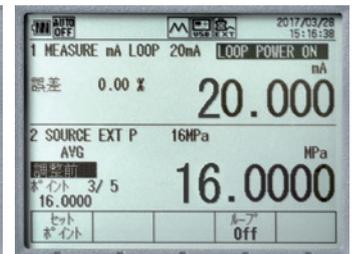
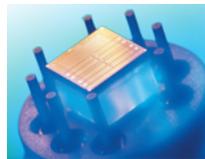
Three ranges of 7 MPa/10 MPa/16 MPa are built into one unit



PM100

CA700

Silicon Resonant
Sensor



Basic Specifications (Measurement Unit) 23°C ±3°C

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)
Resolution		0.0001 MPa (0.1 kPa)		
Allowable input		2.7 kPa abs to 23 MPa sg		
Response time*6		2.5 s		
Internal volume		Approx. 6 cm ³		
Temperature coefficient		± (0.001% of reading + 0.16 kPa) / °C or less		
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 PM 100 is in digital communication with CA700, and there is no error during this time.

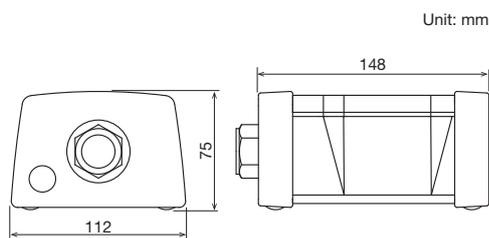
*3. 23°C±3°C, 6 months after calibration, Test after zero calibration *4. 23°C±3°C, 1 year after calibration, Test after zero calibration

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

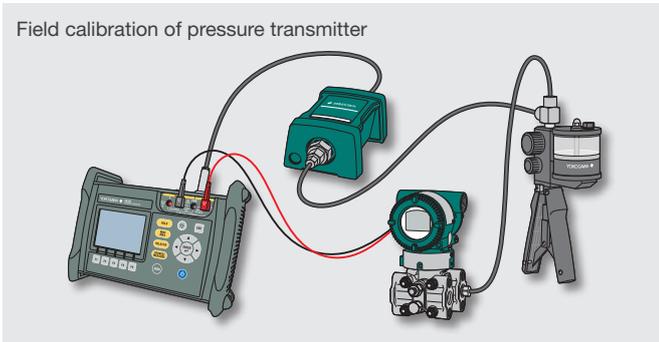
PM100 External Dimensions



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

Applications

Field calibration of pressure transmitter



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)
		-P3 (1/2" NPT female thread)

Related Product



Pressure Calibrator
CA700

Hydraulic Hand Pump
91061

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 (for PM 100)
Connector	91084	1/2" NPT male thread to 1/4" NPT female thread conversion connector (for PM 100)
Connector	91085	1/2" NPT male thread to Rc1/4" female thread conversion connector (for PM 100)

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



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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