

2653 Mini-manometer MT10



MT10 Housed in Carrying Case



MT10 (265302)
72 × 174 × 60 mm
700g (including batteries)
(2-7/8 × 6-7/8 × 2-3/8" 1.54lbs)

MT10 is the mini-manometer with high reliability.

The pressure measurement sensor uses a silicon-resonant sensor for which YOKOGAWA received the Ogouchi Memorial Prize and also the Prize of the Chairman of Federation of Economic Organizations. Compared to the conventional metal sensor, it has high reproducibility and long-term stability of characteristics, thus ensuring highly stable measurement.

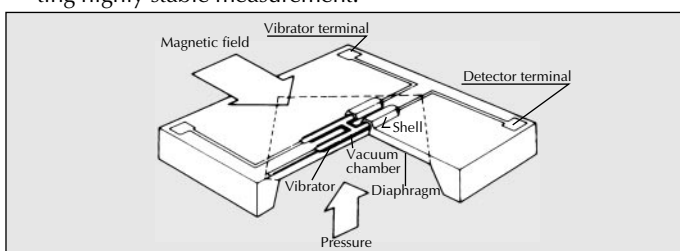
MT10 is small and has a mass of about 700 g. It is thus suitable for use at the process industry site and for diagnosing factory equipment as well as for research and development.

FEATURES

- **High reliability (with Silicon-Resonant Sensor)**
- **Compact**
- **Accuracy:**
±(0.04% of rdg + 0.03% of F.S.) (130 kPa model)
- **Available in 3 models: 130 kPa, 700 kPa, and 3000 kPa**
- **Data hold function**
- **RS-232-C interface**
- **Comes with a convenient carrying case.**

Silicon-Resonant Sensor

The pressure sensor employs a silicon-resonant sensor which was developed using YOKOGAWA's most up-to-date silicon micro-forming technology. The detector, which uses a silicon monocrystal, has superior reproducibility and undergoes less secular change than the conventional metal sensor, thus permitting highly stable measurement.



Overall Structure of Resonator

SPECIFICATIONS

Model	265302	265303	265304
Kind of Pressure	Gauge pressure		
Range (accuracy guarantee range)	0 to 130kPa	0 to 700kPa	0 to 3000kPa
	0 to 1.3256kgf/cm ²	0 to 7.138kgf/cm ²	0 to 30.59kgf/cm ²
	0 to 13256mmH ₂ O	—————	—————
	0 to 975.1mmHg	0 to 5250mmHg	—————
	0 to 521.9 inH ₂ O	0 to 2810 inH ₂ O	0 to 12044 inH ₂ O
	0 to 38.39 inHg	0 to 206.7 inHg	0 to 885.9 inHg
	0 to 18.85 psi	0 to 101.5 psi	0 to 435.1 psi
	0 to 1300 mbar	0 to 7000 mbar	0 to 30.00 bar
Measurement Indication Range	-2.5 to 110% of FS		
Accuracy (Horizontally mounted, 23±3°C, zero point adjusted)	±(0.04% of rdg + 0.03% of FS)	±0.1% of FS	
Resolution	0.01kPa	0.1kPa	1kPa
Max Allowable input	500kPa	1000kPa	4500kPa
Internal Volume	Approx. 2 cm ³		
Effect of Temperature	Zero Point	±0.02% of FS/10°C max	
	Span	±0.02% of FS/10°C max	
Effect of Mounting Direction	±0.1% of FS	±0.02% of FS	±0.01% of FS
Gas Leakage	10 ⁻⁶ cm ³ /s max		
Measurement Fluid	Gas only (non-flammable, non-explosive, non-toxic, non-corrosive)		
Measurement Fluid Temperature	5 to 50°C		
Pressure Sensor	Silicon resonant sensor		
Pressure Sensing Element	Diaphragm		
Pressure Display Unit	kPa, kg/cm ² , mmH ₂ O, mmHg, inH ₂ O, inHg, psi, mbar(bar)		
Calibration Interval	1 year		
Input Connection	Rc1/4 or NPT 1/4		
Material of Measurement Section	SUS316 stainless steel, Hastelloy C276		

Common Specifications

Power source: UM-3 (AA or R6) batteries

Primary battery 1.5 V x four, or secondary battery 1.2 V x four [Continuous operation: Approx. 100 hours (when alkaline batteries are used)]

AC adapter (100 to 120/220 to 240 VAC, 50/60 Hz, Output 15 V/1.33 A) (optional)

Communication: RS-232-C

Transmission method: Half-duplex transmission brain protocol
Transmission rate: 1200 bits/s

Display: LCD display

Display update interval: Approx. 0.5 s/update

Response time: Approx. 4 s (until the accuracy falls within the accuracy range)

Other functions: Comes with data hold function that holds indicated pressure value, and zero adjustment function.

Warmup time: 1 minute max

Insulation resistance: 500 VDC/20 MΩ or higher (between AC line and case) (when dedicated power kit is used)

Withstand voltage: 1500 VAC/minute (between AC line and case) (when dedicated power kit is used)

Operating temperature/humidity range: 5 to 40°C, 20 to 80% RH (No condensation allowed)

Storage temperature/humidity range: 25 to 70°C, 5 to 95% RH

External dimensions, mass: Approx. 72 (W) x 174 (H) x 60 (D) mm, (excluding input connection section)

Approx. 700 g (including batteries)

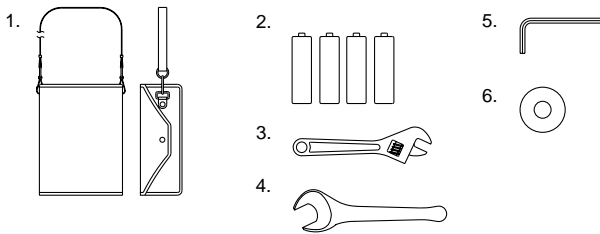
MT10

Accessories: Carrying case (B9926CZ) x one
 UM-3 (AA or R6) batteries (A1070EB) x four
 Sealing tape (X9910DG) x one
 Wrench (H19) (B9926CW) x one
 Monkey wrench (150 mm) (B9926CX) x one
 Allen wrench (H2.5) (B9926CY) x one
 Instruction manual x one

● Standard Accessories

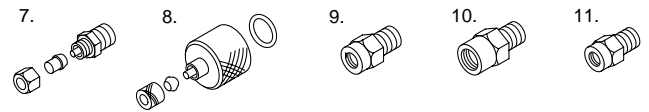
	Accessory	Part or Model No.	Quantity	Specification(s)
1.	Carrying Case	B9926CZ	1	
2.	Alkaline AA-Size Battery	A1070EB*	4	1.5 V DC
3.	Monkey Spanner	B9926CX	1	150 mm
4.	Single-ended Wrench	B9926CW	1	H19
5.	Hexagon Wrench	B9926CY	1	H2.5
6.	Duct Tape	X9910DG	1	
—	User's Manual	IM 265301-01E	1	

* Part no. A1070EB specifies only one AA battery.



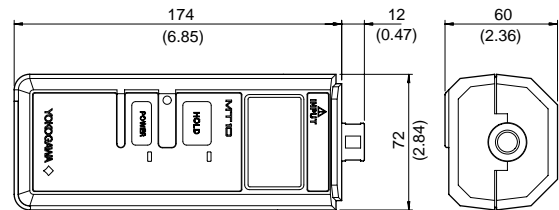
● Optional Accessories

	Accessory	Part or Model No.	Quantity	Specification Code
—	AC Power Supply Kit	366969	(1)	-D: UL/CSA Standard -F: VDE Standard -R: SAA Standard -Q: BS Standard
7.	Connector Assembly (for a vinyl tube with inner diameter of 4 mm and outer diameter of 6 mm)	B9310RR	1	
8.	Simple Connector Assembly (for a vinyl tube with inner diameter of 4 mm and outer diameter of 6 mm)	B9310ZH	1	
9.	Adapting Connector (JIS, R1/4-to-Rc1/8)	G9612BG	1	
10.	Adapting Connector (ANSI, R1/4-to-1/4NPT female thread)	G9612BJ	1	
11.	Adapting Connector (ANSI, R1/4-to-1/8NPT female thread)	G9612BW	1	



DIMENSIONS

Unit: mm (inch)



AVAILABLE MODELS

Model	Suffix code	Description
265302		0 to 130 kPa gauge
265303		0 to 700 kPa gauge
265304		0 to 3000 kPa gauge
Pressure Display unit *	-U1	kPa
	-U2	kgf/cm ²
	-U3	mmH ₂ O
	-U4	mmHg
	-U5	inH ₂ O
	-U6	inHg
	-U7	psi
	-U8	mbar
Input Connection	-P1	Rc1/4
	-P2	NPT 1/4 female

* -U3 cannot be specified for 265303 and -U3 and -U4, cannot be specified for 265304.