



Stainless Steel Sensor versions MX2001-0x-SS-S



Titanium Sensor versions MX2001-0x-Ti-S



For use with HOBO MX2001 Bluetooth water level loggers, HOBO MicroRX Water Level Stations (RX2103 and RX2104), and the HOBO RX3000 Remote Monitoring Station, for accurate water pressure, temperature, and water level measurements. These sensors are available in four depth ranges, and come in stainless-steel or titanium (recommended for use in saltwater) models.

Features:

- Non-vented design reduces maintenance
- Durable, ceramic sensor can withstand freezing
- 3-point NIST-traceable calibration certificate

What's in the box

- HOBO MX2001-S water level sensor
- Protective cap

Technical Specifications:

Pressure (Absolute) and Water Level Measurements MX2001-01-SS-S and MX2001-01-Ti-S

Operation Range	: 0 to 207 kPa (0 to 30 psia); approximately 0 to 9 m (0 to 30 ft) of water depth at sea level, or 0 to 12 m (0 to 40 ft) of water at 3,000 m (10,000 ft) of altitude
Factory Calibrated Range	: 69 to 207 kPa (10 to 30 psia), 0 to 40C (32 to 104F)
Burst Pressure	: 310 kPa (45 psia) or 18 m (60 ft) depth
Water Level Accuracy*	: Typical error: 0.05% FS, 0.5 cm (0.015 ft) water
Maximum error	: 0.1% FS, 1.0 cm (0.03 ft) water
Raw Pressure Accuracy**	: 0.3% FS, 0.62 kPa (0.09 psi) maximum error
Resolution	: <0.02 kPa (0.003 psi), 0.21 cm (0.007 ft) water
Pressure Response Time (90%)***	: <1 second at a stable temperature
Dimensions	: 2.54 cm (1.0 inches) diameter, 9.91 cm (3.9 inches) length
Weight	: Stainless sensor (MX2001-0x-SS-S): Approximately 141.4 g (4.99 oz) in air; approximately 53.9 g (1.9 oz) in fresh water
Titanium sensor (MX2001-0x-Ti-S)	: Approximately 80 g (2.83 oz) in air; approximately 37 g (1.3 oz) in fresh water
Wetted Materials	: Stainless sensor (MX2001-0x-SS-S): Stainless steel housing; Viton and Buna-N O-rings; ceramic sensor in stainless steel end cap
Titanium sensor (MX2001-0x-Ti-S)	: Acetal housing, PVC end cap; Viton and Buna-N O-rings; ceramic sensor in Titanium end cap
Cable	: Polycarbonate top end connector, PVC end cap (sensor connection), nylon collar nut(s), Viton O-rings, polyurethane jacket
Environmental Rating	: IP68

Pressure (Absolute) and Water Level Measurements MX2001-02-SS-S

Operation Range	: 0 to 400 kPa (0 to 58 psia); approximately 0 to 30.6 m (0 to 100 ft) of water depth at sea level, or 0 to 33.6 m (0 to 111 ft) of water at 3,000 m (10,000 ft) of altitude
Factory Calibrated Range	: 69 to 400 kPa (10 to 58 psia), 0 to 40C (32 to 104F)
Burst Pressure	: 500 kPa (72.5 psia) or 40.8 m (134 ft) depth
Water Level Accuracy*	: Typical error: 0.05% FS, 1.5 cm (0.05 ft) water
Maximum error	: 0.1% FS, 3.0 cm (0.1 ft) water
Raw Pressure Accuracy**	: 0.3% FS, 1.20 kPa (0.17 psi) maximum error
Resolution	: <0.04 kPa (0.006 psi), 0.41 cm (0.013 ft) water
Pressure Response Time (90%)***	: <1 second at a stable temperature
Dimensions	: 2.54 cm (1.0 inches) diameter, 9.91 cm (3.9 inches) length
Weight	: Approximately 141.4 g (4.99 oz) in air; approximately 53.9 g (1.9 oz) in fresh water
Wetted Materials	: Stainless steel housing; Viton and Buna-N O-rings; ceramic sensor in stainless steel end cap
Cable	: Polycarbonate top end connector, PVC end cap (sensor connection), nylon collar nut(s), Viton O-rings, polyurethane jacket
Environmental Rating	: Ip68

Pressure (Absolute) and Water Level Measurements MX2001-03-SS-S

Operation Range	: 0 to 850 kPa (0 to 123.3 psia); approximately 0 to 76.5 m (0 to 251 ft) of water depth at sea level, or 0 to 79.5 m (0 to 262 ft) of water at 3,000 m (10,000 ft) of altitude
Factory Calibrated Range	: 69 to 850 kPa (10 to 123.3 psia), 0 to 40C (32 to 104F)
Burst Pressure	: 1,200 kPa (174 psia) or 112 m (368 ft) depth
Water Level Accuracy*	: Typical error: 0.05% FS, 3.8 cm (0.125 ft) water
Maximum error	: 0.1% FS, 7.6 cm (0.25 ft) water
Raw Pressure Accuracy**	: 0.3% FS, 2.55 kPa (0.37 psi) maximum error
Resolution	: <0.085 kPa (0.012 psi), 0.87 cm (0.028 ft) water
Pressure Response Time (90%***)	: <1 second at a stable temperature
Dimensions	: 2.54 cm (1.0 inches) diameter, 9.91 cm (3.9 inches) length
Weight	: Approximately 141.4 g (4.99 oz) in air; approximately 53.9 g (1.9 oz) in fresh water
Wetted Materials	: Stainless steel housing; Viton and Buna-N O-rings; ceramic sensor in stainless steel end cap
Cable	: Polycarbonate top end connector, PVC end cap (sensor connection), nylon collar nut(s), Viton O-rings, polyurethane jacket
Environmental Rating	: IP68

Pressure (Absolute) and Water Level Measurements MX2001-04-SS-S and MX2001-04-Ti-S

Operation Range	: 0 to 145 kPa (0 to 21 psia); approximately 0 to 4 m (0 to 13 ft) of water depth at sea level, or 0 to 7 m (0 to 23 ft) of water at 3,000 m (10,000 ft) of altitude
Factory Calibrated Range	: 69 to 145 kPa (10 to 21 psia), 0 to 40C (32 to 104F)
Burst Pressure	: 310 kPa (45 psia) or 18 m (60 ft) depth
Water Level Accuracy*	: Typical error: 0.075% FS, 0.3 cm (0.01 ft) water
Maximum error	: 0.15% FS, 0.6 cm (0.02 ft) water
Raw Pressure Accuracy**	: 0.3% FS, 0.43 kPa (0.063 psi) maximum error
Resolution	: <0.014 kPa (0.002 psi), 0.14 cm (0.005 ft) water
Pressure Response Time (90%***)	: <1 second at a stable temperature
Dimensions	: 2.54 cm (1.0 inches) diameter, 9.91 cm (3.9 inches) length
Weight	: Stainless sensor (MX2001-0x-SS-S): Approximately 141.4 g (4.99 oz) in air; approximately 53.9 g (1.9 oz) in fresh water
Titanium sensor (MX2001-0x-Ti-S)	: Approximately 80 g (2.83 oz) in air; approximately 37 g (1.3 oz) in fresh water
Wetted Materials	: Stainless sensor (MX2001-0x-SS-S): Stainless steel housing; Viton and Buna-N O-rings; ceramic sensor in stainless steel end cap
Titanium sensor (MX2001-0x-Ti-S)	: Acetal housing; Viton and Buna-N O-rings; ceramic sensor in Titanium end cap
Cable	: Polycarbonate top end connector, PVC end cap (sensor connection), nylon collar nut(s), Viton O-rings, polyurethane jacket
Environmental Rating	: Ip68

Temperature (Water Level Sensors MX2001-0x-SS-S and MX2001-0x-Ti-S)

Operation Range	: -20 to 50C (-4 to 122F)
Accuracy	: 0.44C from 0 to 50C (0.79F from 32 to 122F), see Plot A
Resolution	: 0.1C at 25C (0.18F at 77F), see Plot A
Response Time (90%)	: 5 minutes in water (typical)
Stability (Drift)	: 0.1C (0.18F) per year
Dimensions	: 2.54 cm (1.0 inches) diameter, 9.91 cm (3.9 inches) length
Weight	: Stainless sensor (MX2001-0x-SS-S): Approximately 141.4 g (4.99 oz) in air; approximately 53.9 g (1.9 oz) in fresh water
Titanium sensor (MX2001-0x-Ti-S)	: Approximately 80 g (2.83 oz) in air; approximately 37 g (1.3 oz) in fresh water
Wetted Materials	: Stainless sensor (MX2001-0x-SS-S): Stainless steel housing; Viton and Buna-N O-rings; ceramic sensor in stainless steel end cap
Titanium sensor (MX2001-0x-Ti-S)	: Acetal housing; Viton and Buna-N O-rings; ceramic sensor in Titanium end cap
Cable	: Polycarbonate top end connector, PVC end cap (sensor connection), nylon collar nut(s), Viton O-rings, polyurethane jacket
Environmental Rating	: Ip68