

Package contents

1x HyPremo vented hydrostatic pressure probe
1x sealed, vented cable: typ. 10 m, or as ordered

Specifications summary

The technical specifications listed below are only binding if no other agreements have been made.

Type:

Transducer: piezoelectric pressure transducer
Pressure ranges (check type label):
0...5 | 0...10 | 0...30 | 0...100 mH₂O
Pressure range: either 0...1 bar or 0...0.5 bar
Over-pressure: 4x pressure range

Long-term stability:

Typ. ± 0.1 % FS, max. ± 0.2 % FS
(for pressure ranges < 1.5 bar: ± 3 mbar)

Power consumption:

SDI-12 Low-Power Mode:
– SDI-12 measurement: < 4 mA for approx. 300 msec
– Sleep between measurements: < 0.015 mW
SDI-12 in continuous mode (sensor constantly powered):
– Constant power draw: < 4 mA

Operating temperature range:

Diaphragm/Pressure cell:
– Compensated temp. range: -5 °C ... 50 °C; non icing
– Operational range: -20 ... +85; non icing
Electronics designed to operate between -40 °C ... +85 °C.

Materials/Rating/Signal cable

Diaphragm: Edelstahl AISI 316 Ti (1.4571)
O-ring: Viton® Shore A
Body: stainless steel AISI 316 Ti (DIN 1.4571), corrosion resistant
Protective Cap: POM
Signal cable: open-ended wires + venting capillary

Dimensions:

Approx. 100 mm x 25 mm (3.94" x 0.98")

Compliance

CE, RoHS

Main parts



- 1 KISTERS HyPremo Piezo-Electrical Sensor
- 2 Vented cable with capillary
- 3 Protective Cap (pre-mounted, removable)

SDI-12 wiring

1	2	3
SDI-12 DATA	VCC – DC supply voltage, in	SDI-12 GND



Power Input Protection

The power input features diodes that offer limited protection against voltage surges. Note: The input is not protected against reverse polarity.

Maximum recommended input current: 100 mA

⚠ Caution: Damage caused by reverse polarity is not covered under warranty.

Configuration Software

HyComm is the KISTERS software used for local communication between a computer or portable device and the HyPremo hydrostatic pressure sensor. With HyComm it is possible to configure the parameters of the logger and display the measured values directly.

To connect:

- 1 Turn on Bluetooth® on your computer/portable device.
- 2 Launch the HyComm software.
- 3 Note: Bluetooth® communication range is 2 m. Preferred method to configure installed sensors is SDI-12.
- 4 HyComm will pair with the HyPremo.
- 5 Enter the Bluetooth®-PIN. See the accompanying FAT sheet for the PIN.
- 6 Once the PIN has been entered correctly, a Bluetooth® connection is automatically established between the data logger and your PC or laptop. You can now access the data and make settings on the logger.



SDI-12 Commands

The command set is based on standard SDI12 (V1.3)

- **aAn!**: Change address from 'a' to 'n'. (use '?' as wild card).
- **all!**: Identify Node
- **aM!**: Start measurement (also 'aMC!').
„D“- command: ≤ 2 data values
a) Pressure b) Temperature
- **aM1!**: Start measurement (also 'aMC1!').
„D“- command: ≤ 3 data values
a) Pressure b) Temperature c) Voltage
- **aDO!**: reads 1 to 3 measured values; always after „M“

Sensor internal error codes:

- 1101 – 1102: no reply
- 1103: timeout
- 1104: busy
- 1105: memory error
- 1106: no coefficients

Mounting instructions

Ensure that the sensor is not subjected to any mechanical stress during installation.

Install the level probe without mechanical tension.

Connect the device according to the electrical connections specified on the label.

Avoid kinking the cable.

When installing the cable, it is imperative to adhere to the minimum bending radius.

For capillary cables, the minimum bend radius is 15-fold cable diameter.

To prevent ground loops that can cause defects in the level probe, avoid potential differences between measuring and connection points.

For cable lengths over 50 m, the use of a retaining cable is required for safe installation.

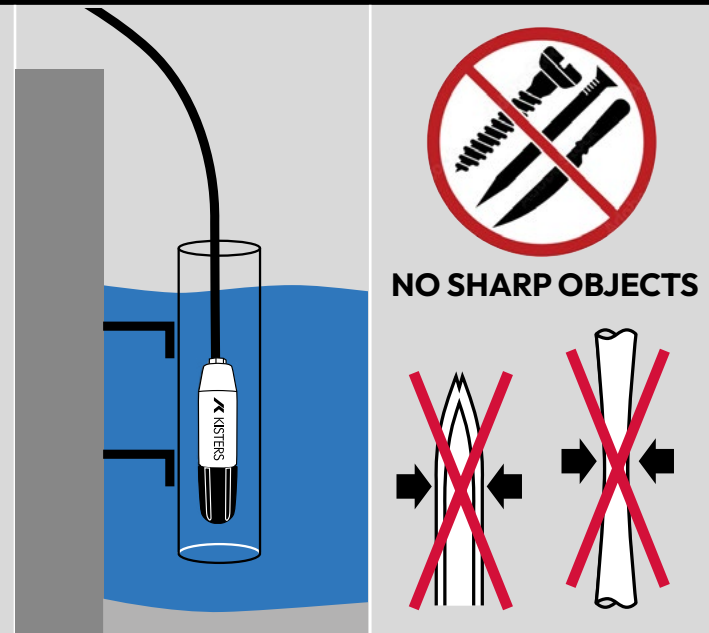
The metal diaphragm is extremely thin (approx. 20 µm). Never handle the unit with hard or sharp objects. Even slight deformations can affect the pressure signal.

Positioning:

1. preferably upright with pressure transducer pointing downwards
2. recommended: protection tube made of synthetic material, steel or stainless steel

Interference/Distortion:

To ensure accurate readings and prevent damage to the sensor, do not install it near motors, pumps, valves, heat sources, or any other sources of interference that may cause excessive vibrations or pressure peaks.



⚠ Safety instructions

- 1 **Installation Guide:** Read the installation guide before installing the HyPremo.
- 2 **Support:** Contact the manufacturer or reseller if you have trouble understanding the IG.
- 3 **Intended use:** HyPremo is a hydrographic or environmental datalogger.
- 4 **Safety:** Do not install in hazardous or explosive areas.
- 5 **Warranty:** Modifications void the warranty.
- 6 **Standards:** Follow electrical safety standards.
- 7 **Regulations:** Comply with health, safety and environment regulations.
- 8 **Water safety:** Provide and ensure the use of life jackets or buoyancy aids for workers at risk of falling into water during installation or maintenance near water bodies. Life jacket should be thoroughly checked by the user prior to use.

For detailed safety instructions, please refer to the user manual available for download from the product website:

