

Pressure sensor for harshest conditions „Hammer Union“

Model P3450



Description

Robust and long-term stability during operation are the advantages of this pressure sensor for harsh environments. The used materials and technologies make this sensor insensitive to chemically aggressive media and mechanical stress.

Applications for these extremely robust sensors are the offshore industry, different areas of natural gas production as well as various applications in the cement industry.

The wetted parts of these pressure sensors are made of Inconel X-750. All metallic compounds are welded so that the inner life of the sensor is protected. The electrical connection with the Bendix PTIH-10-6P plug is a guarantee for the robustness of the complete construction.

The sensors are attached to the process in a Wing Union or Hammer Union. The pressure sensors correspond to the electro-magnetic compatibility (EMC) to EN 61326.

Features

- Wetted parts made of Inconel X-750
- Highest shock and vibration resistance
- Wide temperature range
- High accuracy (0.25% of F.S.)

Measuring ranges

0 ... 5,000 psi
0 ... 10,000 psi
0 ... 15,000 psi
0 ... 20,000 psi
others on request

Applications

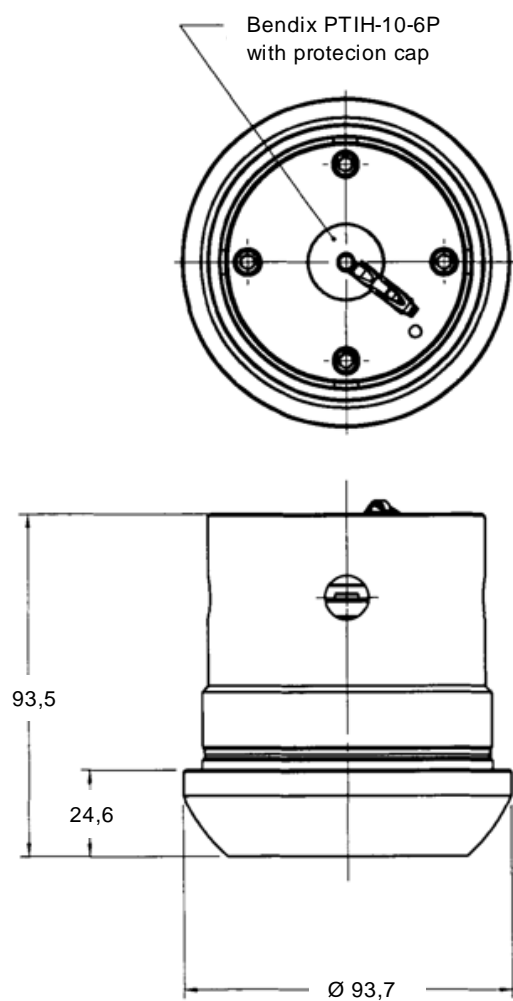
Offshore
Petrochemical industry
Blow out preventer (BOPs)
Gas exploration (Hydraulic Fracturing)
Cement industry

Technical data

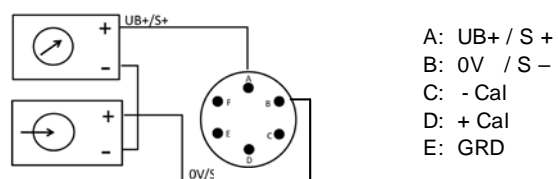
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|------------------------|--|---|
| Model | P3450 | |
| Pressure | Gauge pressure | |
| Measuring range | 0 ... 5,000 psi (0 ... 345 bar) 0 ... 10,000 psi (0 ... 690 bar) 0 ... 15,000 psi (0 ... 1,034 bar) 0 ... 20,000 psi (0 ... 1,379 bar) others on request | |
| Max. Overload | 1.5 x of F.S. (max. 22,500 psi) | |
| Burst pressure | 3 x of F.S. (max. 22,500 psi) | |
| Sensor element | Bonded foil strain gauge | |
| Output signal | 4...20 mA, 2 wire | |
| Accuracy ¹⁾ | ±0.25% BFSL | |
| Materials | | |
| Housing | Stainless steel | |
| Wetted parts | Inconel X-750 | |
| Pressure connection | Wing Union 1502 | |
| Electrical connection | Bendix PTIH-10-6P others on request | |
| Power supply / Burden | 10...28 VDC | $R_A [\Omega] \leq (U_B [V] - 10V) / 0.02A$ |
| Certification | CSA | |
| CE conformity | 2004/108/EWG interference emission and immunity see EN 61326 | |
| Temperature influence | | |
| Zero point | ±0.02% of F.S. / °C | |
| Span | ±0.02% of span / °C | |
| Temperature range | | |
| Compensated range | +5°C ... +60°C | |
| Storage | -40...85°C | |
| Media | -40...85°C | |
| Ambient | -40...85°C | |
| Resistance | | |
| Shock(mechanical) | 100g | |
| Weight | 2.65kg | |

¹⁾ Including non-linearity, hysteresis, zero point and full scale error (corresponds to error of measurement per IEC 61298-2).

Dimensions (mm)



Electrical connection



Subject of technical changes