# 4. Differential-pressure sensor, industry (DPI)

TM04 4738 0509

## General data



Fig. 41 DPI sensor

#### **Technical overview**

The DPI differential-pressure sensor from Grundfos Direct Sensors™ is designed for industrial purposes.

The DPI sensor is fully compatible with aggressive liquids. The sensor is based on MEMS sensing technology in combination with the corrosion-resistant Silicoat® coating technology on the sensor chip.

This makes the DPI sensor very robust and ideal for pump integration and monitoring in harsh environments.

## **Applications**

- · Pump control
- · HVAC systems
- · temperature control and chiller systems
- renewable energies such as heat pumps, solar thermals, fresh water and micro-CHP systems
- · monitoring and control systems
- · water treatment plants
- · water utility and distribution systems
- · HPC and IT cooling systems.

## Features and benefits

- · MEMS technology
- · No wear and tear
- · plug and play for quick setup
- · smart system solution with Grundfos pump controls
- · compact and robust design
- · compatible with aggressive liquids
- · suitable for a wide range of applications.

#### Pressure range

| Pressure range |           |  |
|----------------|-----------|--|
| [bar]          | [psi]     |  |
| 0 - 0.6        | 0 - 8.7   |  |
| 0 - 1.0        | 0 - 14.5  |  |
| 0 - 1.2        | 0 - 17.4  |  |
| 0 - 1.6        | 0 - 23.2  |  |
| 0 - 2.5        | 0 - 36.3  |  |
| 0 - 4.0        | 0 - 58.0  |  |
| 0 - 6.0        | 0 - 87.0  |  |
| 0 - 10.0       | 0 - 145.0 |  |

### Certificates



#### **Electrical connections**

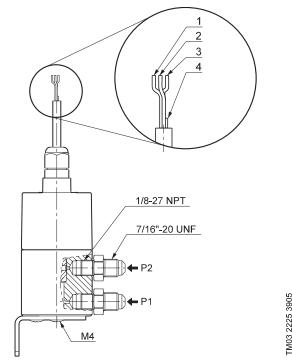


Fig. 42 Electrical connections

| Pin | Description   | Colour |
|-----|---|--------|
| 1   | 12-30 V supply voltage  | Brown  |
| 2   | GND (earth conductor)   | Yellow |
| 3   | Signal conductor  | Green  |
| 4   | Test conductor The conductor can be cut off during mounting. The conductor must not be connected to the power supply. | White  |