

ESI - HP1000 - HIGH PRESSURE SENSOR

HP1003EX1000DE

4-20mA, 0..1000 bar, 9/16-18UNF-2B, DIN, Ex



- Silicon-on-sapphire sensor technology
- High pressure integrity for safe use due to unique sensor design
- Pressure ranges up to 5,000 bar
- Pressure diaphragm and process connection is machined from one piece of Titanium with no seals or welds.



PRODUCT DESCRIPTION

The ESI Technology HP1000 high pressure sensors extends the ESI pressure range up to 4000 bar whilst still maintaining an high performance level.

For pressures over 1000 bar the wetted parts and diaphragm are machined from a single piece of titanium alloy which gives this sensor its high pressure integrity and overload capacity. The HP1000 starts from 0 - 600 bar up to the impressive 4000 bar with a total of six standard pressure ranges, four options of outputs including 4-20mA and 0-10V and also four different electrical connections including a DIN connector and M12.

Application examples

- Aerospace
- Laboratory and test
- Oil and gas monitoring systems
- Presses
- Test benches

TECHNICAL DATA

Ambient temperature	-40..85°C
Approvals	CE, DNV, IEC
ATEX approved	Yes

Electrical connection	DIN A 43650
EMC	EN61000-6-4, EN61000-6-2
EX approvals	Ex II 1 D Ex ia IIIC T135 °C Da, Ex II 1 G Ex ia IIC T4 Ga, Ex I M 1 Ex ia I Ma
Linearity	≤±0.25% BSFL
Material of wetted parts	Titanium alloy, Stainless steel 316
Media temperature	-50..125°C
Output	4-20 mA
Overpressure protection	1,500 bar
Pressure range max	1000 bar
Pressure range min	0 bar
Pressure reference	Gauge
Process connection	Autoclave F-250-C female
Sensor technology	Silicon-on-Sapphire
Storage temperature	5..40°C
Supply voltage	10-36 V DC

