1000 Series

GE Druck

OEM Customised Pressure Sensor Product Guide

- High performance, low cost
- Flexible mechanical configuration
- Ranges 70 mbar to 700 bar
- Accuracy up to 0.15%
- Performance tailoring
- Customised branding

Pressure Sensors

Total Capability for a World of Pressure

High performance technologies

Established in 1972, GE Druck specialises in the design and manufacture of high performance pressure sensors for a wide range of industries and applications, using proven micromachined silicon and related technologies.

GE Druck has its own comprehensive and technologically advanced silicon processing facility. It is one of only a few companies worldwide converting raw silicon into finished products, using techniques such as advanced micromachining. This ensures high sensor performance.

Multi-disciplined engineering teams are experienced in the use of hybrids, ASICs, microprocessors and surface mount technology. Together with packaging design and other facets of engineering, GE Druck provides a complete solution for the world of pressure measurement.

The GE Druck 1000 Series concept

This flexible product is aimed at OEM manufacturers who require a high quality, cost effective pressure sensor, designed to meet their own specific application requirements at an economical cost. It is manufactured in high volumes using a standard "core" principle which readily enables variation of the final product configuration.

Flexibility for all applications

Using just a few established core sensor elements, a comprehensive range of customised sensors has been established to meet a wide spectrum of industrial applications. In excess of 2000 individual configurations are available and just a small selection is shown on the centre pages of this document. Whatever sensor configuration or enhancement you may require, the 1000 Series provides a cost effective solution.

Build quality

GE Druck is committed to producing the highest quality products. This commitment extends from initial concept and development through to manufacturing, testing and despatch.

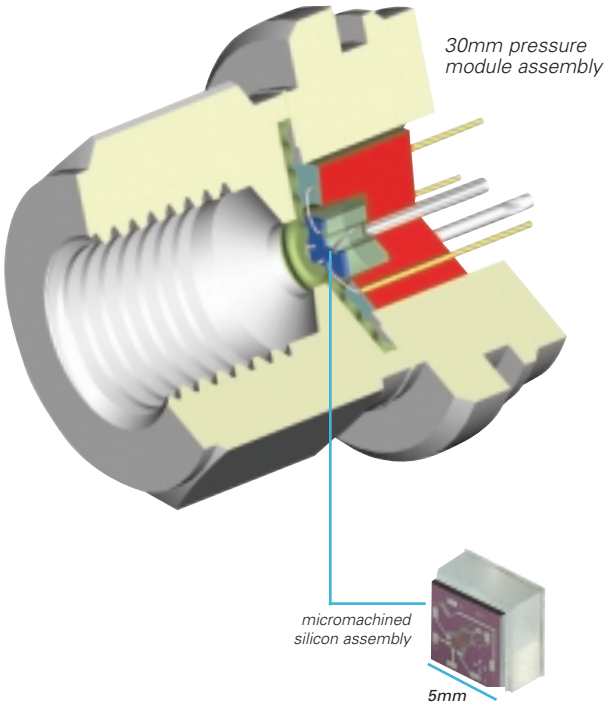
GE Druck is approved to the highest international quality standards, including ISO 9001 and many industry specific standards. It is also approved by many companies who apply their own specific, detailed QA requirements.

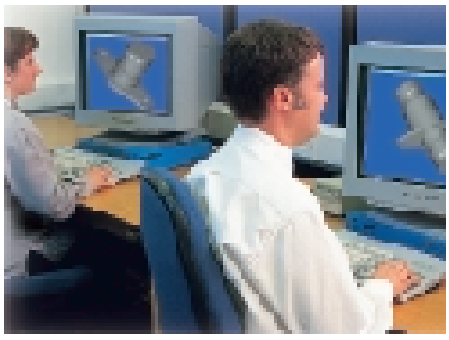
In addition, UKAS accredited GE Druck Laboratories provide traceability to International Standards for pressure, electrical and temperature measurements.

Product guide and selection

The "Customer Selection Guide" overleaf is designed to enable you to respond with your specific sensor requirements. You can faxback the completed page and view the complete guide on or website at www.ge druck.com.

Alternatively, simply contact us direct and we will be pleased to arrange for a specialist engineer to personally discuss your detailed requirements at your convenience.



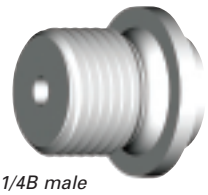


1000 Series

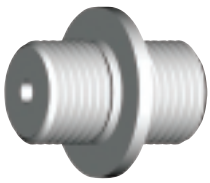
Cost effective flexibility and high performance

Pressure Adaptor

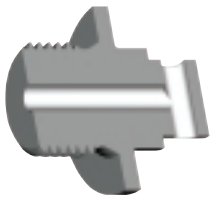
- Flexible thread configuration
- Screw in with bonded seal
- Push fit and welded direct connection
- Selection of materials available



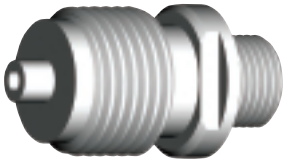
G1/4B male



G1/8 male



Special Cross Bore



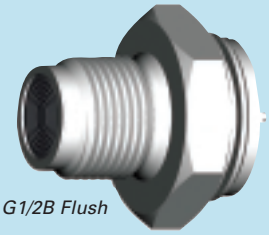
G1/2B male

Vacuum Fitting

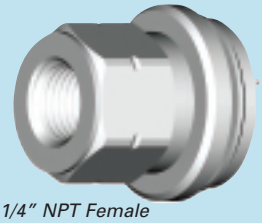
- Eliminates costly adaptors
- Reduces media leak potential
- Limits sensor length
- Minimises internal volume

Pressure Module

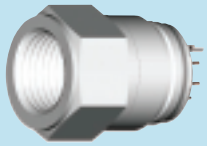
- Absolute, gauge and differential measurement
- Full scale ranges from 70 mbar to 700 bar
- Any pressure scale available
- Hastelloy C276/316 stainless steel or titanium wetted parts



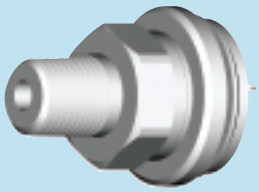
G1/2B Flush



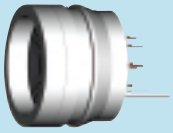
1/4" NPT Female



G1/4 female



1/4" NPT Male



17.5mm Open Face

- Wide range of media compatibility
- No 'O' ring sealing material
- High overpressure capability
- Open face pressure connections
- Excellent long term stability

Electronics

- Millivolt 17.5mm diameter
- Voltage and milliamp 30mm diameter
- Ambient temperature rated from -40° to 90°C
- Zero/span potentiometer available with side or end access
- Welded or push fit body tube sealing

Voltage

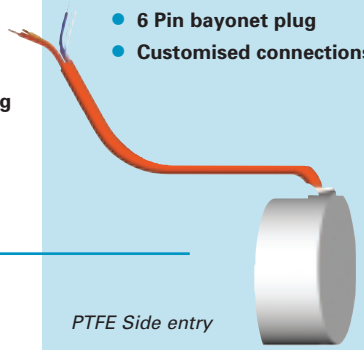
Millivolt

Milliamp

- Hazardous area approved
- Output signal to match application requirements
- Hermetic sealing up to IP 68 for harsh environments
- Encapsulated electronics for good shock/vibration performance
- Digital characterisation for ultra high performance

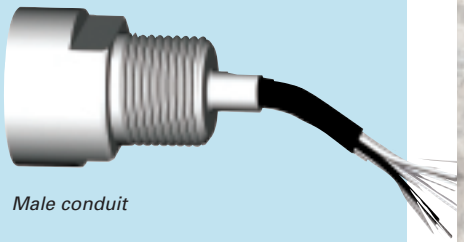
Electrical Connector

- Mini/Standard DIN plug/socket
- 5.7mm cable entry
- PTFE high temperature cable
- 1/2" NPT male conduit
- 6 Pin bayonet plug
- Customised connections

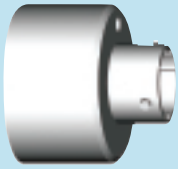


PTFE Side entry

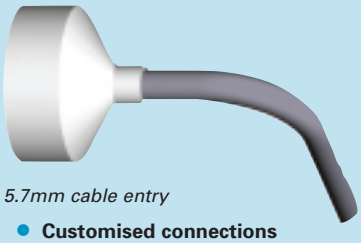
DIN plug/socket



Male conduit



6 Pin bayonet



5.7mm cable entry

- Customised connections
- Excellent strain relief
- Electrical connection to match application requirements
- Flexible cable lengths

Customer Selection Guide

To allow us to fully understand your requirements, please complete below and return to your GE Druck sales outlet or via www.druck.com.

		GUIDELINES
APPLICATION		Example - Compressor outlet pressure
CRITICAL PARAMETERS		Example - 100 million cycles Example - 6 months to production
WORKING PRESSURE RANGE		Min 70 mbar Max 700 bar
MAXIMUM OVERPRESSURE		Min x 2 FS Max x 4 FS
MAXIMUM CASE PRESSURE		6 x FS
PRESSURE SCALE UNITS		Any scale i.e. psi, kPa, etc.....
ACCURACY OVER PRESSURE RANGE		Up to 0.15% FS
MINIMUM/MAXIMUM PROCESS TEMPERATURE		-40°C to 90°C
PRESSURE MEDIA IN CONTACT WITH WETTED PARTS		example - mineral oil
AMBIENT ENVIRONMENTAL CONDITIONS		Sealing up to IP68
PREFERRED PRESSURE CONNECTION		Any type of standard assembly
PREFERRED ELECTRICAL CONNECTION		Any type of standard assembly
AVAILABLE POWER SUPPLY		mV - non-regulated V, mA - regulated
REQUIRED ELECTRICAL OUTPUT		mV, mA, V
AVAILABLE SPACE ENVELOPE		mV - 17.5mm, V/mA 30mm dia.
SPECIAL CERTIFICATION		Example - ATEX Intrinsically Safe
OTHER SPECIAL REQUIREMENTS		Example - Optimised temperature effects across working process temperature range.

Related Products

Industrial Pressure Sensor PTX/PMP 1400 Series

- Low cost / ex stock delivery
- Fixed ranges
- ±0.15% accuracy

Pressure Transmitter PTX 7500 Series

- Ranges from 70 mbar to 700 bar
- Diameter 30mm
- Intrinsically Safe

Low Pressure Transmitter LPX Series

- Ranges from 0.25 mbar to 15 mbar
- Gauge and differential
- Ideal for HVAC and cleanrooms

High Performance Pressure Sensor PDCR/PMP 4000 Series

- Ranges from 70 mbar to 700 bar
- Accuracy up to 0.04%
- Long term stability 0.1% per year

Slimline Process Transmitter PTX 7800 Series

- Range from 70mbar to 700 bar
- Choice of pressure connections
- Intrinsically Safe/Flameproof

Level Pressure Transmitter PTX 1830 Series

- 17.5mm diameter
- Titanium material
- Integral lightning arrestor

Rugged Low Cost Test Tools

- Test transmitters, transducers, loops
- Source pressure, mA, voltage
- Measure/simulate RTD's thermocouples

Rugged Portable Calibrators

- Pressure/temperature/electrical
- Measure, source, simulate
- Integral sensor and loop power

Digital Process Indicators

- Wide range of measured parameters
- Calibrated with sensors
- High accuracy

GE Druck

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