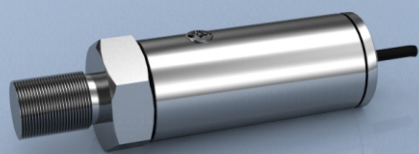




TYPE: BP70



BP70 High Range Strain Gauge Pressure Transducer

Description

The LCM Systems range of Pioden transducers has been widely used for many years. The BP70 has been specifically developed for high pressure applications where a robust and accurate sensor is required. The accuracy achieved with the BP70, and the high quality that comes as standard with LCM system products, makes it the first choice for many applications.

The BP70 can be further enhanced to meet specific application requirements including improved temperature compensation or matched outputs.

LCM Systems can also supply the BP70 with any one of the many instruments in our range, offering a complete integrated instrumentation package from a single source.

Specification

Pressure Range (bar)	1000, 2000, 3000
Over pressure range	150% (110% for 3000 bar version)
Burst pressure	5400 bar
Output sensitivity	1000 bar = 0.5mV/V 2000 bar = 1mV/V 3000 bar = 1.5V/V
Zero offset	<±0.01mV/V
Accuracy	<±0.25% of full scale output (FSO)
Repeatability	<±0.1% FSO
Excitation voltage	10vdc recommended, 15vdc maximum
Bridge resistance	1000Ω
Operating temperature range	-20 to +70°C
Compensated temperature range	+10 to +70°C
Zero temperature coefficient	<±0.01% of FSO/°C
Span temperature coefficient	<±0.01% of FSO/°C
Environmental protection level	IP67
Connection type	Cable version: 3 metres PUR 4-core cable Connector version: MIL-26482
Wiring connections	+supply: Red (Pin A) -supply: Blue (Pin B) +signal: Green (Pin C) -signal: Yellow (Pin D)
Pressure port	1/2" BSPP male

Available Options

- 1000Mohm @ 1000vdc insulation resistance
- <±0.005@FSO/°C temperature coefficient
- Output rationalised to <±0.2%
- TEDS option (when used with TR150 handheld display)
- Other special versions available

Features

- Ranges: 1000, 2000, 3000 bar
- Stainless steel single piece diaphragm
- 1/2" BSPP male pressure port
- High insulation resistance, making it suitable for intrinsically safe applications
- 1000ohm bridge resistance
- Cable gland or integral connector output versions available

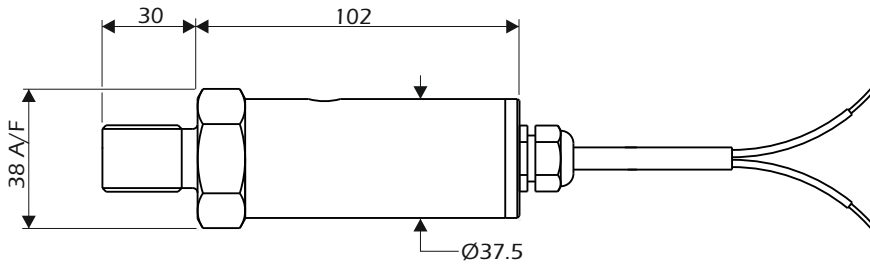
Typical Applications

- Engine test stand
- Brake testing
- Pipeline instrumentation
- Water jets (cleaning & blasting)
- Hydraulic control systems

BP70 High Range Strain Gauge Pressure Transducer

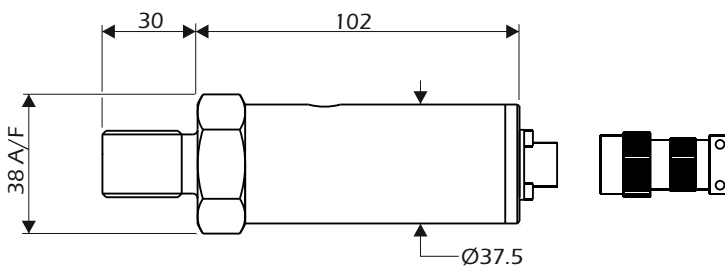
Dimensions

Integral Cable Version



All dimensions are in mm

Integral Connector Version



Rating (bar)	Weight (g)	Resolution (bar)
1000	100	2
2000	100	5
3000	100	5



LCM Systems Ltd

Unit 15, Newport Business Park, Barry Way
Newport, Isle of Wight PO30 5GY UK
Tel: +44 (0)1983 249264
sales@lcmsystems.com
www.lcmsystems.com

LCM Systems (România)

Strada Ștefan Cel Mare 26a,
Tunari, cod.077180, Ilfov, România
Tel: +40 (0)77 4641899
ro@lcmsystems.com
www.lcmsystems.ro

Due to continual product development, LCM Systems Ltd reserves the right to alter product specifications without prior notice.

Issue No. 1

Issue date: 05/12/2014
APPROVED
(unapproved if printed)