

Description

The LCM Systems range of Pioden Transducers has been widely used for many years.

The BP16 range of pressure transducers combine the excellent performance of bonded foil strain gauge technology with a single piece stainless steel diaphragm construction, to provide an excellent price/performance ratio, suitable for use in many arduous measurement applications.

The BP16 construction makes it ideal for a wide range of applications, including, hydraulic lifting, mobile hydraulic vehicles, portable test gear, air frame test rigs amongst others.

The most popular version of the BP16 is the integral cable version, which is supplied with a 1 metre PVC cable length. However, an integral connector version is also available, as are versions with different cable lengths or different cable types.

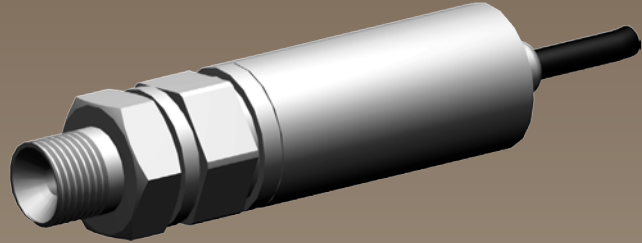
The BP16 offers a variety of amplified outputs in the same packaging arrangement (a separate data sheet is available detailing these).

LCM Systems can supply the BP16 on it's own or integrated with any of the wide range of strain gauge based instrumentation available from LCM Systems.

Typical Applications

- On-board vehicle weighing
- Earthmoving vehicle hydraulic system protection/weighing
- Portable hydraulic test sets
- Air frame test rigs
- Hydraulic system feedback control

BP16 Strain Gauge Pressure Transducer



Features

- Ranges 100psig to 15,000psig
- Stainless Steel Diaphragm (single piece construction)
- ¼" BSPF female pressure port (supplied as standard with bonded seal and ¼" male pressure port adaptor)
- 1000ohm bonded foil strain gauge bridge resistance as standard (option of 350ohm bridge available)
- Amplified voltage output version (refer to BP16UVW datasheet)
- Amplified current output version (refer to BP16EF datasheet)
- Supplied with 2 metre PVC cable (versions available with integral connector or modified cable lengths/type)

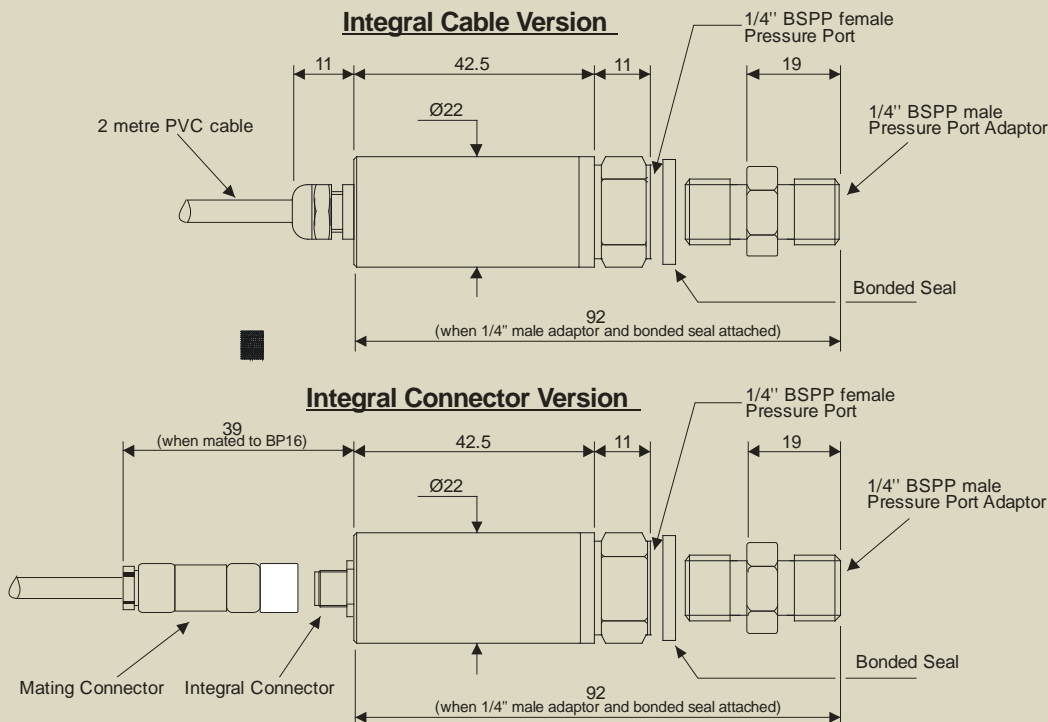
Strain Gauge Pressure Transducer

Specification

Pressure Range (FSO):	100, 150, 200, 500, 1000, 2000, 3000, 5000, 10000, 15000 psig
Overpressure Range:	200% with $< \pm 1\%$ calibration shift (125% for 15,000psi version)
Burst Pressure	400% (200% for 15,000psi version)
Output Sensitivity:	2mV/V nominally
Zero Offset:	$< \pm 4\%$ FSO
Accuracy:	$< \pm 0.1\%$ FSO ($\pm 0.7\%$ for 100-200psi versions)
Repeatability:	$< \pm 0.1\%$ FSO
Bridge resistance:	1000 Ω standard (350 Ω optional)
Insulation Resistance:	$> 1000M\Omega$ at 250vdc
Operating Temperature Range:	-20°C to +70°C
Compensated Temperature Range:	+10°C to +60°C
Zero Temperature Coefficient:	$< \pm 0.03\%$ FSO/°C ($< \pm 0.01\%$ FSO/°C optional)
Span Temperature Coefficient:	$< \pm 0.03\%$ FSO/°C ($< \pm 0.01\%$ FSO/°C optional)
Environmental Protection Level:	IP66
Connection Type:	2 metres 4-core screened PVC cable, or 4 pin Lumberg connector (c/w 5m PUR cable)
Wiring Connections:	+ve supply Red (Pin 1) -ve supply Blue (Pin 2) +ve signal Green (Pin 3) -ve signal Yellow (Pin 4)
Options Available:	Consult Factory Many Options and special versions available

Mechanical Dimensions

All dimensions in millimeters



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

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TYPE: BP16