



TYPE: BP16UVW

BP16UVW Voltage Output Pressure Transducer



Features

- Ranges from 100psig to 15,000psig
- Stainless steel diaphragm (single piece construction)
- 1/4" BSPP female pressure port (supplied as standard with bonded seal and 1/4" male pressure port adaptor)
- 3-wire 0-5V or 0-10V
4-wire $\pm 10V$ output
- mV/V Wheatstone Bridge version available (refer to BP16 data sheet)
- Amplified current output version (refer to BP16EF data sheet)

Typical Applications

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

Description

The LCM Systems BP16UVW range of pressure transmitters combine the excellent performance of bonded foil strain gauge technology with a single piece stainless steel diaphragm construction. They provide an excellent price/performance ratio and are suitable for use in many arduous measurement applications, with integral signal conditioning providing a voltage output.

The BP16UVW construction makes it ideal for a wide range of applications, including hydraulic lifting, mobile hydraulic vehicles, portable test gear and air frame test rigs amongst others.

The most popular version of the BP16UVW is the integral cable version, which is supplied with a 2 metre PVC cable. An integral connector version is also available, as are versions with different cable lengths or different cable types.

The BP16 family of products offer a variety of amplified output formats (see the BP16 and BP16EF data sheets). We can supply the BP16UVW on its own or integrated with any of the wide range of instrumentation available from LCM Systems.

Specification

Pressure Range (psig)	100, 150, 200, 500, 1000, 2000, 3000, 5000, 10,000, 15,000
Over pressure range	150% with $\leq \pm 1\%$ calibration shift (125% with 15,000psi version)
Burst pressure	400% (200% for 15,000psi version)
Output Signal	BP16U: 3 wire 0.1-5.1 volt (5V span, $\pm 0.1\%$ tolerance) BP16V: 3 wire 0.1-10.1 volt (10V span, $\pm 0.1\%$ tolerance) BP16W: 4 wire 0-10 volt (10V span, $\pm 0.1\%$ tolerance)
Zero offset	$\leq \pm 1\%$ of full scale output (FSO)
Accuracy	$\leq \pm 0.1\%$ FSO ($\pm 0.7\%$ for 100-200psi versions)
Repeatability	$\leq \pm 0.1\%$ FSO
Supply voltage	BP16U: 8.5vdc to 28vdc BP16V: 13vdc to 28vdc BP16W: ± 13 vdc to ± 15 vdc
Maximum output load	BP16UVW: 5000ohms
Operating temperature range	-20 to +70°C
Compensated temperature range	+10 to +60°C
Zero temperature coefficient	$\leq \pm 0.03\%$ of FSO/°C ($\leq \pm 0.01\%$ FSO/°C optional)
Span temperature coefficient	$\leq \pm 0.03\%$ of FSO/°C ($\leq \pm 0.01\%$ FSO/°C optional)
Environmental protection level	IP66
Connection type	2 metre 4 core screened PUR cable or 4 pin Lumberg connector (c/w 5m PUR cable assembly)
Wiring connections	BP16UV: +supply: Red (Pin 1) -supply/-signal: Blue (Pin 2) +signal: Green (Pin 3) BP16W: +supply: Red (Pin 1) -supply: Blue (Pin 2) +signal: Green (Pin 3) -signal: Yellow (Pin 4)

Available Options

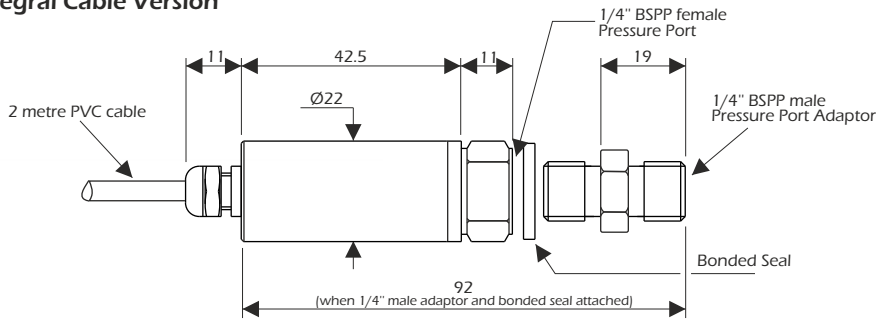
- Integral connector option
- Modified cable length/type options
- TEDS option (when used with TR150 handheld display)
- Other special versions available

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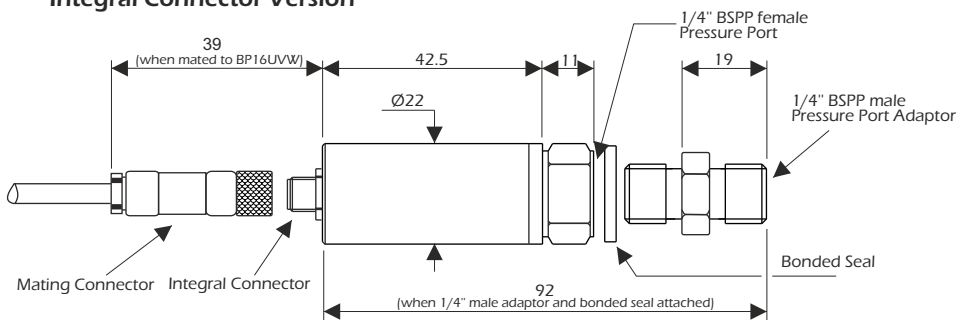
Dimensions



Integral Cable Version



Integral Connector Version



All dimensions are in mm

Rating (psi)	Weight (g)	Resolution (psi)
100	50	0.5
150	50	0.5
200	50	1
500	50	0.5
1000	50	1
2000	50	2
3000	50	2
5000	50	5
10000	50	10
15000	50	10

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

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APPROVED

(unapproved if printed)