A United Kingdom company

TYPE: LPW

LPW Stainless Steel Wireless Load Measuring Pin

Features

- Ratings: 3.5 to 1500 tonne
- Stainless steel construction
- Environmentally sealed to IP67
- Anti-rotation plate supplied if required
- Design support software available

Typical Applications

- Crane overload protection
- Winch force monitoring
- Cable and wire dynamometers
- Hoist overload protection
- Mooring load tension measurement

Description

The LCM range of wireless load measuring pins are designed for general use. They are a simple and versatile type of load cell that are used in a large variety of applications such as cranes, winches, hoists, load shackles and bearing blocks. They are easily installed into machines by replacing any existing load bearing pin to provide accurate, real time monitoring of load forces.

Machined from high tensile stainless steel and normally supplied complete with an anti-rotation plate, all our load measuring pins are built to exacting standards and proof loaded to 150% of normal rated load. Our standard wireless load pin range covers ratings between 3.5 and 1500 tonnes, and can be provided as shown on this data sheet or can be modified to meet a particular application requirement (see LPB data sheet)

The unique wireless housing is manufactured from semi-aromatic polyamide plastic making the load cell far more compact and reducing the overall product weight. Located in the housing are two AAA alkaline batteries which can be easily accessed by removing the telemetry housing cover, while the internal electronics underneath remain completely sealed. The antenna is also internally mounted, protecting it from accidental damage during use and handling. The batteries are standard AAA alkaline batteries, which are readily available and low cost.

The LPW is supplied as standard without any additional wireless devices to enable greater flexibility with the configuration and ordering of the product. The LPW can be used with any of the T24 range of wireless instrumentation, whether this be for a simple display system using the T24-HS-LS, or more complex systems using multiple load cells and multiple wireless devices.

For more sophisticated systems, including datalogging or monitoring/reporting requirements, we are able to offer a robust tablet PC with installed software for use with single or multiple load cell installations. Our sales team will be happy to discuss the best wireless system configuration to suit your requirements.

Specification

Rated load (tonne)		3.5, 6.5, 15, 25, 50, 100, 250, 500, 750, 1000, 1500
Proof load		150% of rated load
Ultimate breaking load		>300% of rate load
Non-linearity		<±1.0% of rated load (typically)
Non-repeatability		<±0.1% of rated load
Transmission distance		Up to 600 metres (clear line of sight)
Battery life		>300 hours (continuous with 1.2Ah batteries)
Battery	Standard	AAA Alkaline x 2 (supplied with 1.2Ah batteries)
	Ex i	AAA L92 Lithium x 2 (supplied with 1.2Ah batteries)
Operating temperature range		-20 to +55°C (-20 to +50°C for Ex i versions)
ATEX certification details		II 2G Ex ib IIC T4 Gb
Environmental protection level		IP67
Telemetry housing		Polyamide resin

Available Options

- Special ratings and sizes (see LPB data sheet)
- Hazardous Area certified - Intrinsically Safe (Ex i)
- Various wireless accessories available. See T24 range of wireless products

Ex i

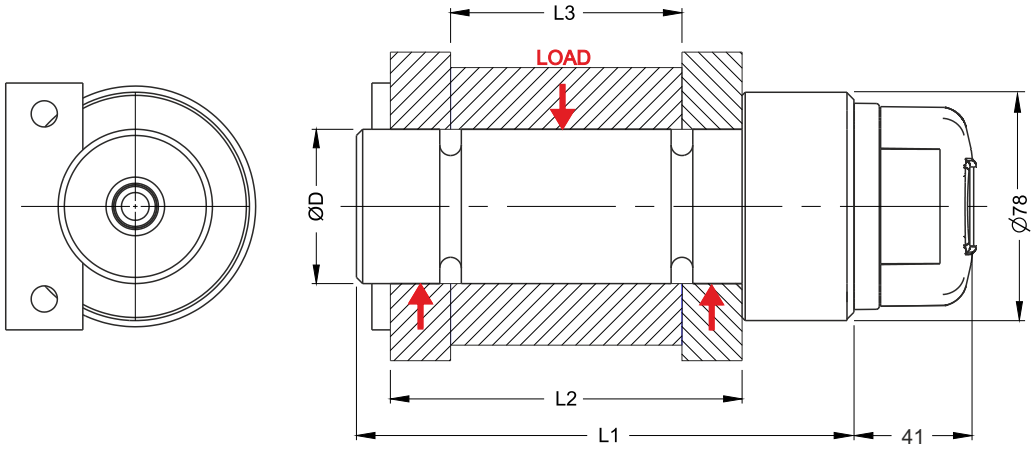
LCM SYSTEMS
Solutions in Load Cell Technology

LPW Stainless Steel Wireless Load Measuring Pin

Dimensions

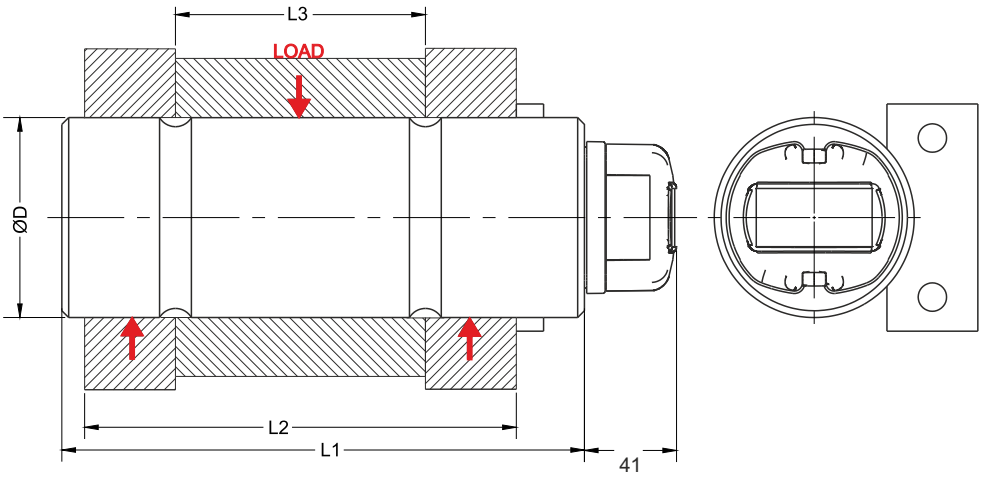
3.5 to 50 tonnes

All dimensions are in mm



100 to 1500 tonnes

All dimensions are in mm



Rating (tonnes)	Part No.	ØD	L1	L2	L3	Weight (kgs)	Resolution (tonnes)
3.5	LPW-30-75	30	129	75	50	1.4	0.02
6.5	LPW-40-95	40	149	95	63	2	0.02
15	LPW-50-114	50	174	114	75	3.1	0.05
25	LPW-63-152	63	219	152	89	5.6	0.1
50	LPW-75-175	75	249	178	102	8.6	0.2
100	LPW-88-190	88	230	190	110	11.8	0.5
200	LPW-125-220(200)	125	300	220	130	29.8	1
250	LPW-125-220	125	300	220	130	29.8	1
500	LPW-170-370	170	440	370	225	79.2	2
750	LPW-200-500	200	590	500	295	146	2
1000	LPW-250-612	250	712	612	360	275	5
1500	LPW-275-731	275	832	731	430	389	5

Note 1: Part numbers for ATEX versions will be suffixed with -ATEX-I e.g. LPW-30-75-ATEX-I.
Note 2: Dimensions may change for hazardous area versions.

A summary of available wireless devices that can be used to enhance the LPW in your application can be viewed on the next page of this datasheet.

For further assistance on system configuration, please call us or email your requirements to sales@lcmsystems.com.

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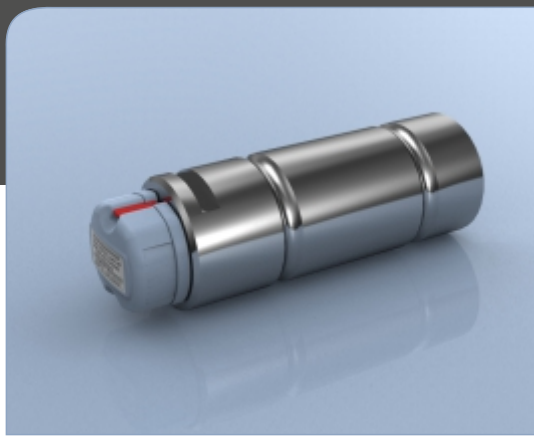

Wireless Receivers/Display Options

T24-HS-LS
Simple wireless display for connecting to 1 load cell

T24-HA
Wireless display for connection to up to 12 load cells

T24-HR
Wireless display for connecting to multiple load cells

X24-HD
ATEX Wireless display for connection to up to 24 load cells

Wireless Base Station Options

T24-BSu
Wireless USB connected base station

T24-BSd
Wireless compact USB connected dongle base station

T24-BSue
Wireless USB extended range base station

T24-BSi
Wireless USB, RS485, RS232 connected base station

Wireless Output Module Options

T24-RM1
Wireless relay, switch output module

T24-SO
Wireless serial ASCII output module

T24-AO1
Wireless analogue output module

T24-PR1
Wireless surface mounting tally roll printer

T24-AR
Wireless range extender repeater module

Wireless Software Options

LCM Systems are able to offer various software solutions for our wireless range of load cells. We encourage you to speak to our sales team to discuss any standalone software requirements you may have.

The solutions we regularly offer include centre of gravity weighing and reporting, multiple load cell display & reporting and PC based datalogging. Other solutions can also be offered.

For more detailed information regarding wireless instrumentation visit www.lcmsystems.com/T24

LCM SYSTEMS
Solutions in Load Cell Technology

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