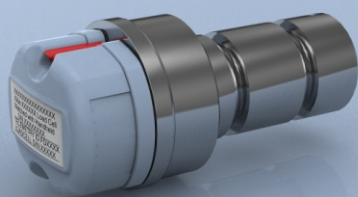




TYPE: LPW



LPW Stainless Steel Wireless Load Measuring Pin

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 also supplied as standard with a handheld battery powered display (T24-HS-LS) which can display in both tonnes or lbs, or alternatively, for multi load pin applications, a single display (T24-HA) can address up to 12 load pins for individual monitoring, or for summation/balancing applications. The built in wireless electronics operates on the 2.4GHz license free frequency, with a robust proprietary protocol, providing interference free communications.

For more complex systems, including data logging 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.

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

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 rated 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 / II 2D Ex ib IIIC T135°C Db	
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

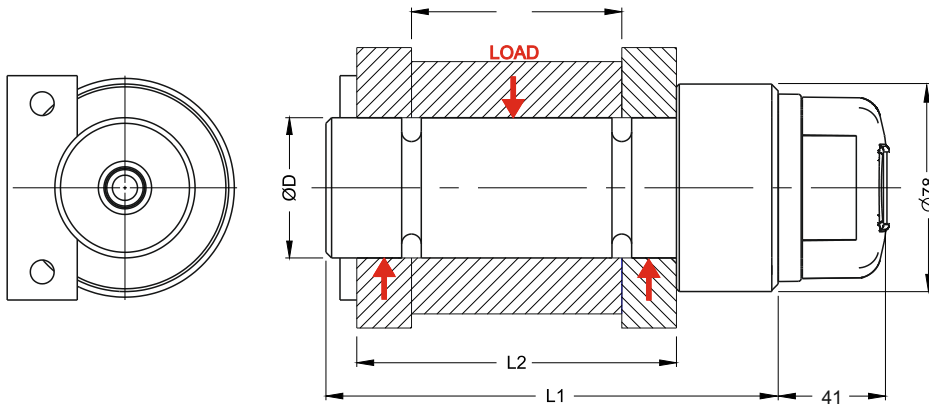


LPW Stainless Steel Wireless Load Measuring Pin

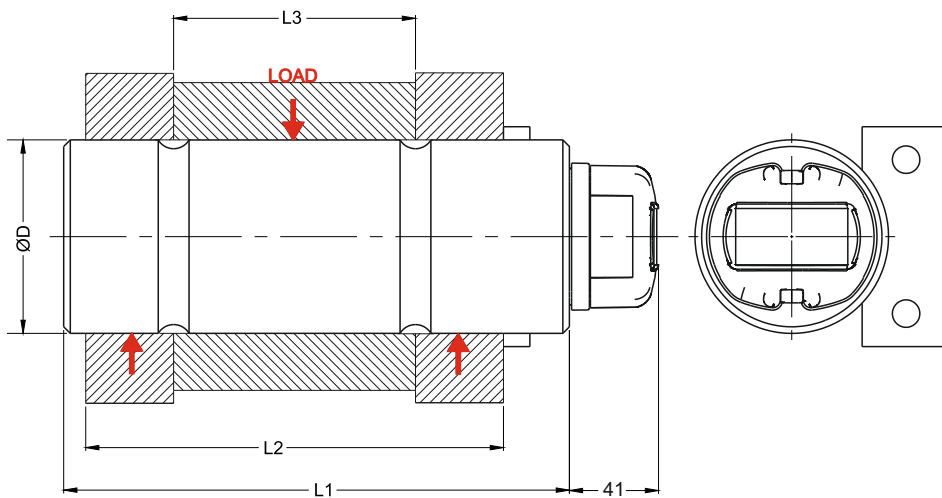
Dimensions

3.5 to 50 tonnes

All dimensions are in mm



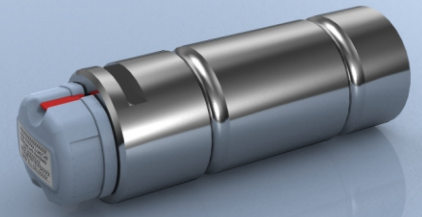
100 to 1500 tonnes



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.



www.lcmsystems.com

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.

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APPROVED

(unapproved if printed)