

Description

The LCM range of Load Measurement Pins are designed for general use. They are machined from high tensile stainless steel and are normally supplied complete with an anti-rotation plate.

They are built to exacting standards and are suitable for use in exposed situations and can be supplied to withstand immersion in seawater. This range of load cells is Proof Loaded to 150% of the normal rated load.

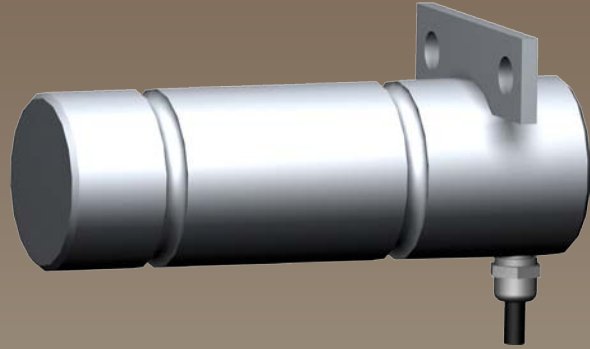
We offer a standard range of pins, covering the ranges between 0.5tonne to 1500tonne. However the nature of this style of product means that most pins are manufactured to meet customers' specific dimensional requirements.

The LMP range can be supplied as shown in this datasheet or can be modified to meet a particular application requirement. We are always pleased to discuss any special requirements that can be accommodated. The LMP series can be supplied on it's own or combined with our extensive range of instrumentation to provide a complete load monitoring system.

Typical Applications

- Crane Overload Protection
- Winch Force Monitoring
- Cable and Wire Dynamometers
- Hoist Overload Protection
- Mooring Tension Measurement

LMP Load Measuring Pin



Features

- Ranges 500kg to 1500tonne
- Stainless Steel Construction
- Environmentally Sealed to IP67 (IP68 can also be offered)
- Anti-rotation plate supplied, if required
- Many special design options available
- Can be supplied with integral connector
- Versions available with integral signal conditioning; providing 0-10v, 0-5v, 4-20mA, RS485 outputs
- Versions available to meet Offshore and Marine specifications
- Application/Technical Sheet & design support Software available

TYPE: LMP

www.lcmsystems.com

Load Measuring Pin

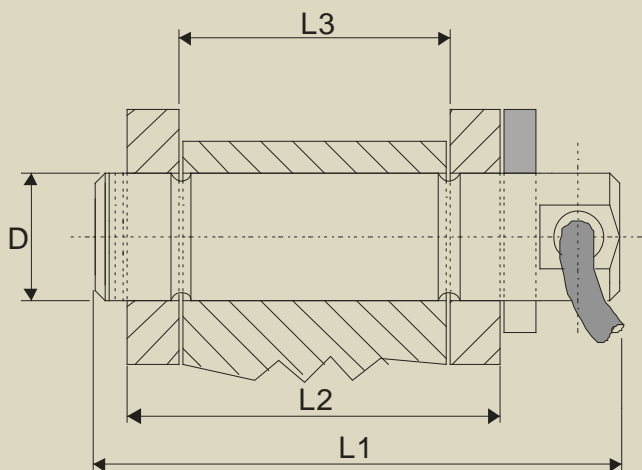
Specification

Rated Load (tonne):	0.5, 1, 2.5, 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		
Output:	1.5 mV/V at Rated Load (nominal)		
Non-Linearity:	<±0.50% of Rated Load (typically)		
Non-Repeatability:	<±0.04% of Rated Load		
Excitation Voltage:	10vdc recommended, 15vdc maximum		
Bridge Resistance:	350Ω		
Insulation Resistance:	>500MΩ @ 500vdc		
Operating Temperature Range:	-20 to +70°C		
Compensated Temperature Range:	-10 to +50°C		
Zero Temperature Coefficient:	<±0.010% of Rated Load/°C		
Span Temperature Coefficient:	<±0.010% of Rated Load/°C		
Environmental Protection Level:	IP67		
Connection Type:	5 metre 4-core screened PUR cable		
Wiring Connections:	Red +ve supply	Blue -ve supply	
	Green +ve signal	Yellow -ve signal	
Options Available:	Special ranges and sizes available Special electrical connections Integral signal conditioning Submersible versions available Hose protected cable		

Note: Non-linearity and Non-repeatability performance may vary due to geometry of the LMP. This is normally dictated by the location and application. For more specific details on accuracy, please request the separate LMP Application & Technical Sheet

Mechanical Dimensions

All dimensions in millimeters



Range	Part Number	ØD	L1	L2	L3
0.5	LMP-20-36	20	70	36	24
1	LMP-20-49	20	80	49	35
2.5	LMP-25-70	25	100	70	45
3.5	LMP-30-75	30	105	75	50
6.5	LMP-40-95	40	125	95	63
15	LMP-50-114	50	150	114	75
25	LMP-63-152	63	195	152	89
50	LMP-75-175	75	225	178	102
100	LMP-88-190	88	230	190	110
250	LMP-125-220	125	300	220	130
500	LMP-170-370	170	440	370	225
750	LMP-200-500	200	590	500	295
1000	LMP-250-612	250	712	612	360
1500	LMP-275-731	275	832	731	430

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

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