

LMP

Load Measuring Pin

- Measurement ranges 0 ... 0.5 t to 0 ... 1500 t
- Tension
- Non-linearity 0.5 % FS
- Output signal nom. 1.5 mV/V, optional in-built amplifier
- Supply voltage 10 VDC, max. 15 VDC



The range of LMP Load Measurement Pins is 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 0.5 t to 1500 t. 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.

■ More Features

- 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 ... 10 V, 0 ... 5 V, 4 ... 20 mA, RS485 outputs
- Versions available to meet Offshore and Marine specifications
- Application/Technical Sheet & design support Software available

■ Typical Applications

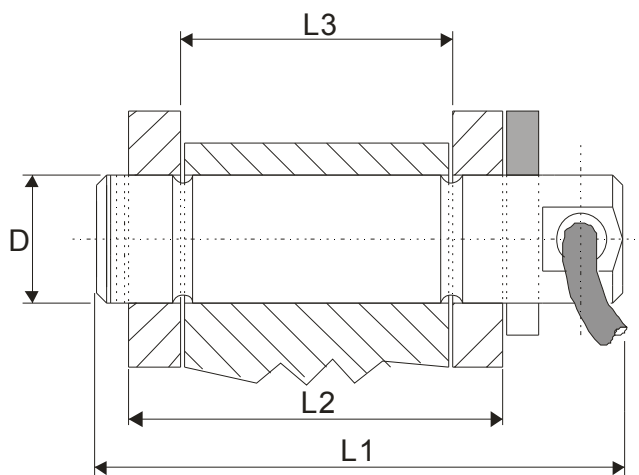
- Crane Overload Protection
- Winch Force Monitoring
- Cable and Wire Dynamometers
- Hoist Overload Protection
- Mooring Tension Measurement

■ Specification

Rated load (RL)	0.5 / 1 / 2.5 / 3.5 / 6.5 / 15 / 25 / 50 / 100 / 250 / 500 / 750 / 1000 / 1500 t (approx. 5 kN to 15 MN)	
Proof load	150 % of RL	
Ultimate breaking load	>300 % of RL	
Output	1.5 mV/V at RL(nom.)	
Non-linearity*:	<±0.50 % of RL (typ.)	
Repeatability*:	<±0.04 % of RL	
Supply voltage:	10 VDC recommended., 15 VDC maximum	
Bridge resistance:	350 Ω	
Insulation resistance	>500 MΩ at 500 VDC	
Operating temperature range:	-20 ... +70 °C	
Compensated temperature range:	-10 ... +50 °C	
Temperature effect zero:	<±0.010 % of RL/K	
Temperature effect span:	<±0.010 % of RL/K	
Environmental sealing:	IP67	
Electrical connection:	5 m 4-wire, screened PUR cable	
Wiring:	red: + supply voltage green: + signal	blue: - supply voltage yellow: - signal
Available Options:	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



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

All dimensions in millimeters

Drawings are for information only, for construction use ask for detailed CAD-drawing.

Due to continual product development, we reserve the right to vary the foregoing details without prior notice.