

Product

Load Measuring Pin  
(Zone 1 & 2)



Load Measuring Pins are one of the simplest and most reliable methods of measuring loads. They can be used in a wide variety of situations, including the most severe of environments - heavy industry, offshore, subsea and aerospace. They can be incorporated easily into the load path by replacing any existing load bearing pins. Typically they are used in rope sheaves, fairleads, winches, cranes, mooring hooks and anchorages.

- **Easy to install, new or retrofitted**
- **Waterproof up to IP68 standard**
- **Single, dual or redundant bridges**
- **Certified to EEx sm for Zone 1 and Zone 2 hazardous areas. No Zener barriers needed**
- **Range of outputs**

The Load Measuring Pin (Zone 1 & 2) offers a lower cost alternative to the I.S. Load Measuring Pin for hazardous areas. It may include an extra measurement channel, either for redundancy or for load sensing in two planes.

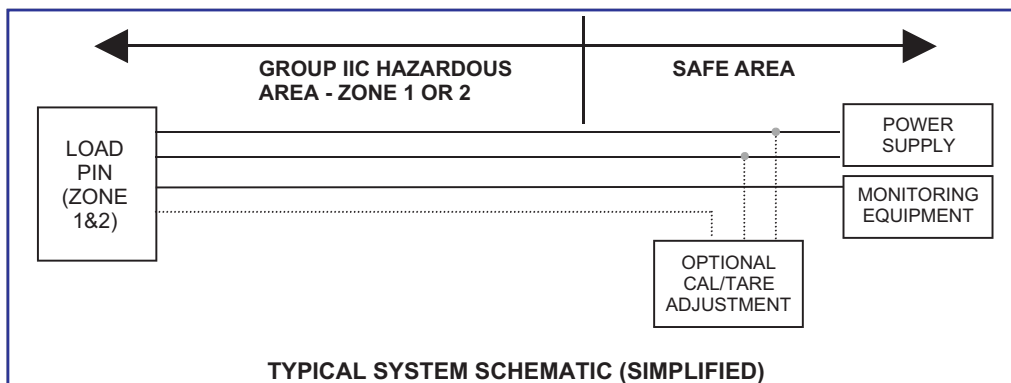
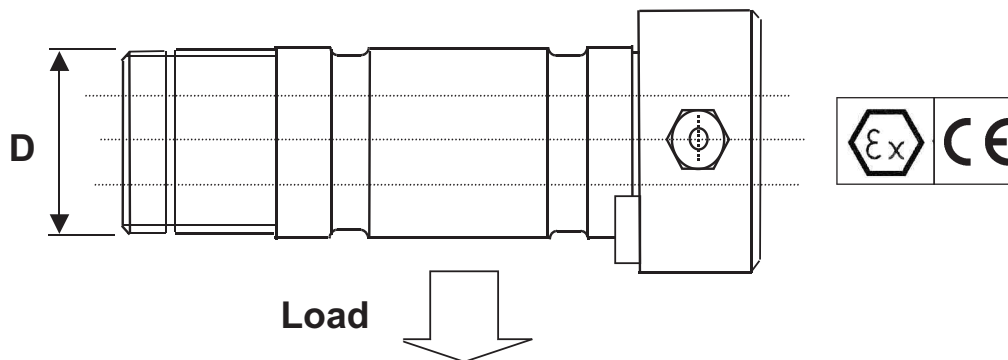
A wide choice of outputs are available, including strain gauge bridge, 4-20mA, voltage or serial (details overleaf).

The rules governing ATEX EEx sm certification for this load pin require the fitting of a permanently glanded cable, which can be connected directly to measuring equipment in a safe area, or in an EEx enclosure in the hazardous area. Zener barriers are not required.

As with all load cells, load pins can be used with Strainstall's range of standard and special instrumentation packages. Load cells and systems are supplied with full calibration certification.

**Typical Specification**

Rated Load	As required
Proof Load	150% of rated load
Safe Side Load	100% of rated load
Factor of Safety	4 - 6 depending on requirement
Supply/Output Options	10VDC for 700 ohm bridge excitation 13-28VDC for 4-20mA (2-wire or 3-wire) 8.5-14VDC for 0-5V 13-30VDC for 0-10V 5.5-18VDC for RS485 serial (ASCII, MODBUS RTU, CAN, CAN Open)
Electromagnetic Compatibility	CE0600
Certification	EEx sm II T6, or T5 with T <sub>amb</sub> -20° to + 60° C
Certificate Number	BAS01ATEX2279X
Designation	Type 5713-XXXX Load Pin
Ambient Temperature Range	-20° to + 60° C (-4° F to 140° F)
Typical minimum diameters for a range of load ratings are:	
Load (tonne)	5    10    20    50    100    200    500    1000
Diameter (mm)	28    35    48    70    96    130    200    290



**TYPICAL SYSTEM SCHEMATIC (SIMPLIFIED)**

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