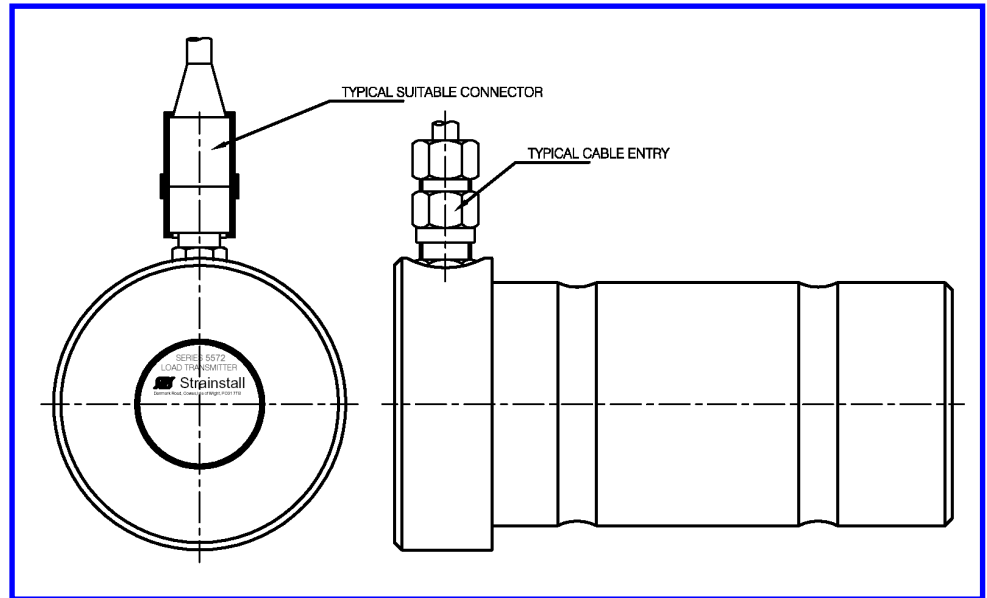


Product

Load Measuring Pin
Type 5572



Load Measuring Pins are the simplest and most reliable method of measuring loads. They can be used in a great number of situations, including the most severe of environments - heavy industry, mining, offshore, subsea and aerospace. They can be incorporated easily and economically 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.

- **Weighing and load measurement**
- **Easy to install new or retrofitted**
- **Waterproof and sealed to IP67 standard**
- **Single, dual or redundant bridges**
- **Intrinsically safe for use in hazardous areas**

The 5572 Series Load Measuring Pin is fitted with an in-built Intrinsically Safe Amplifier. It may include an additional amplifier, either for redundancy or for load sensing in two planes, in which case a second set of straingauges will be installed in the pin.

The Amplifier has a 4-20mA output and normally uses three connection wires (supply, output and 0V common). It also has an external calibration facility that provides not only for the usual CAL signal, but also for tare zero adjustment.

The combination of load pin, interconnecting cable (permanently glanded or weatherproof connector), intrinsically safe interface (eg Zener barriers) and items of simple apparatus (Cal switch, Tare adjustment, etc) constitutes an intrinsically safe system suitable for all zones and gas groups, with the temperature category T4.

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% or rated load
Factor of Safety	4-6 depending on requirement
Rated Output	4-20mA into 680Ω max. *
Working Voltage	12-24V DC*
Electromagnetic compatibility	CE0600
Certification	BS EN50014 and BS EN50020
Certificate Number	BAS02ATEX1158
Category/Code	ExII1G / EEx 'ia' IIC T4
Ambient Temperature Range	-20°C to + 50°C (-4°F to 140°F)

* Operating voltages below 24V will restrict the choice of Zener Barriers and the output load range.

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

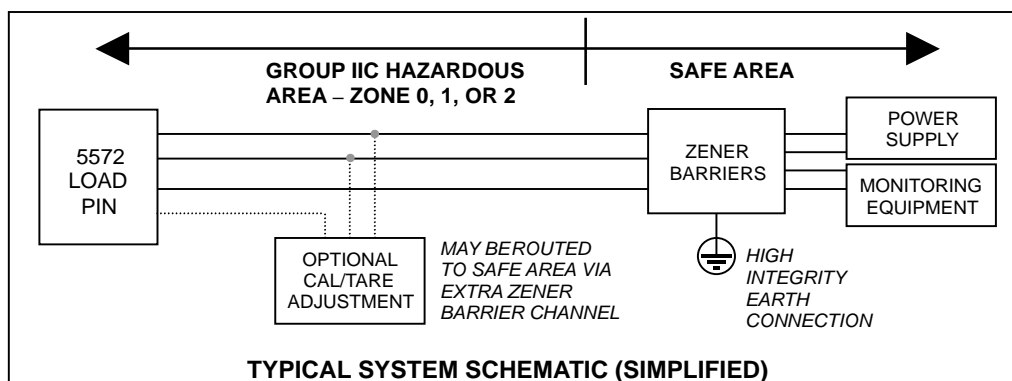
Zener Barriers

The supply interface will normally be a 28V300R or a 28V240R (234R) Zener barrier channel. In either case, the signal return channel will be a 28V diode return (normally part of a double-channel barrier). Where the tare (zero) adjust facility is taken to the safe area, the 28V300R with diode return is used, together with a further channel such as 12V240R or 12V1K.

Detailed characteristics governing the choice of barriers are given in drawings SYS 5572-11-1 and SYS 5572-11-2. Connection details for Isolation Interfaces (alternative to Zener barriers) are given in SYS 5572-11-3.

Typical Zener barriers include:

	RTK	P&F	MTL
28V300R/28Vdiode return	S965POS	Z787	7787+
28V240R(234R)/28Vdiode	S985POS	Z787.H	7787P+
28V300R/12V1K	S935POS		
12V240R	S929POS		
12V1K/12V1K		Z764	7764+
28Vdiode/28Vdiode	S963POS	Z786	



TYPICAL SYSTEM SCHEMATIC (SIMPLIFIED)

Due to continuous development, Strainstall UK reserve the right to change specification without notice.

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