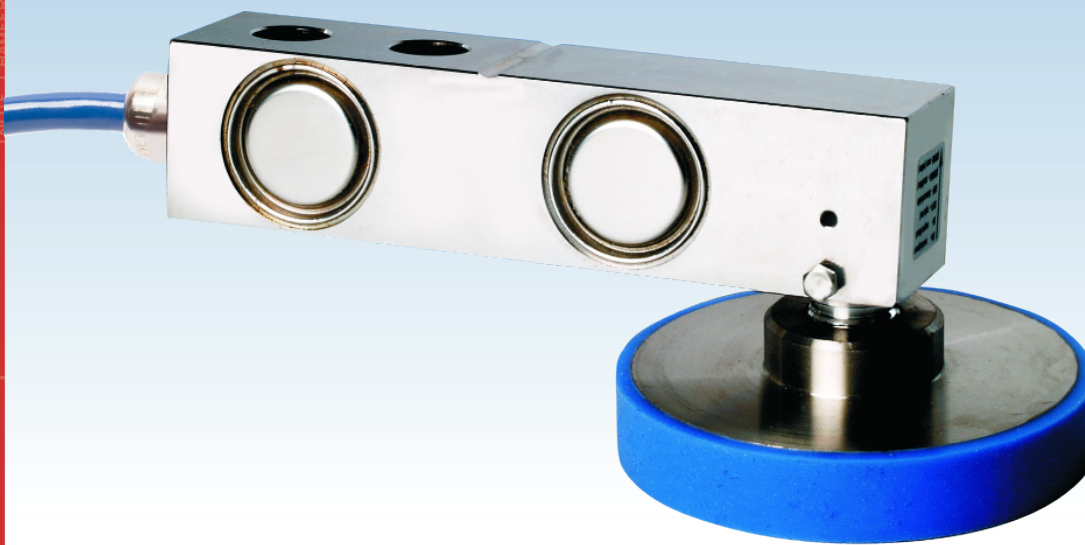


# SHEAR BEAM LOAD CELL FOR PLATFORM SCALES IN HARSH ENVIRONMENTS

capacities 300kg - 2000kg



*Load foot is optional*

The T85-T stainless steel shear beam load cell is fully welded and hermetically sealed to IP68/IP69K and has been designed for use in high accuracy 4-cell platform scales in the harshest industrial environments. Calibration in  $mV/V/\Omega$  (by output current matching) minimises the need for time consuming platform corner correction. It is approved to OIML R60 Class C3, with a blind loading hole and a durable polyurethane cable. Polyurethane provides greater resistance than PVC to chemicals, UV radiation, temperature changes and impacts.

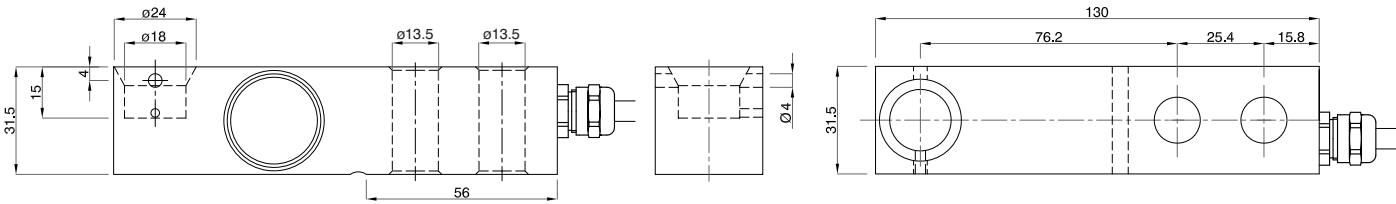
For high accuracy platform scale applications, the T85-T can be used with the stainless steel load foot T85-LOADFOOT-35916 (ordered separately).

ATEX approval is available for all zones. The certification for dust zones 20, 21 and 22 does not require safety barriers, which creates a large cost saving. For applications in aggressive environments where stress corrosion or acid attack is an issue, a special Parylene coating can be specified as an option to provide greater protection of the load cell.

- Stainless steel load sensor
- Hermetically sealed, fully welded construction IP68 / IP69K
- 3000 divisions (C3) OIML R60 Class C approval
- Calibration in  $mV/V/\Omega$  by output current matching
- 5 year warranty
- High integrity cable gland
- Optional load foot for use in platform scales
- High durability Polyurethane cable
- Option of  approval

# T85-T

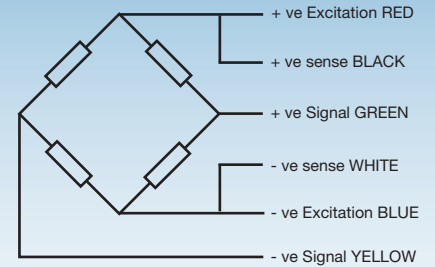
technical specification...



All dimensions in mm

## T85-T Load Cell ATEX Certification

Code	Temperature Class	Parameters	Application
II 1 GD	T4	Pi = 1.3W	Gas Zones 0, 1, 2 with safety barriers Dust Zones 20, 21, 22 <b>without</b> safety barriers
Ex ia II CT4..T6 Ga IP68T85°C	T5	Pi = 0.8W	
Ex ia IIICT135°C T85°C Da Ex ta IIICT85°C Da	T6	Pi = 0.53W	



## T85-T Load Cell

	Load cell specification	Units
Load Cell Capacity ( $E_{max}$ )	300, 500, 750, 1000, 1500, 2000	kg
Rated Output ( $S_n$ )	2	mV/V *
Accuracy Class according to OIML R60: number of verification intervals (n)	3000	n.OIML
Combined Error	< +/- 0.017	% $S_n$
Non-repeatability	< +/- 0.015	% $S_n$
Minimum load cell verification interval ( $V_{min}$ ) = $E_{max} / Y$	$E_{max} / 10\ 000$	kg
Creep (30 minutes)	< +/- 0.016	% $S_n$
Temperature Effect on Zero Balance	< +/- 0.002	% $S_n / ^\circ C$
Temperature Effect on Span	< +/- 0.0012	% $S_n / ^\circ C$
Compensated Temperature Range	-10 to +40	$^\circ C$
Operating Temperature Range	-30 to +70	$^\circ C$
Safe Load Limit ( $E_{lim}$ )	200	% $E_{max}$
Zero Balance	< +/- 2	% $S_n$
Input Resistance	400	$\Omega \pm 20$
Output Resistance	350	$\Omega \pm 3$
Insulation Resistance	> 5000	M $\Omega$ @ 100V
Recommended Supply Voltage	5-15	V
Maximum Supply Voltage	15	V
Environmental protection according to EN 60529	IP68 ; IP69K	-
Cable Length	5	m
Cable Material	Polyurethane	-
Maximum deflection at $E_{max}$	0.2-0.4	mm
Nominal Shipping Weight	0.9	kg

\* Pre-corner adjustment optimised at  $\pm 0.05\%$  by output current calibration

## Electrical Connections

Via 6 core, 5.7mm diameter, screened polyurethane cable.  
Screen not connected electrically to load cell.

## Optional item

Stainless steel/rubber load foot for use with platform scales.  
Includes spherical joint and height adjustment.  
Part number T85-LOADFOOT-35916

DISTRIBUTED BY:

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**THAMES SIDE SENSORS LTD**



Issue: T85-T.03.17

Our policy is one of continuous product enhancement. We therefore reserve the right to incorporate technical modifications without prior notification.

