

# COMPRESSION COLUMN LOAD CELL FOR WEIGHBRIDGES/TRUCK SCALES

capacities 10t - 60t



Upper and lower attachment plates to be supplied by customer Protective gaiter is removed for clarity

This stainless steel self-centering rocker column load cell is fully welded and hermetically sealed, with protection to IP68/IP69K. It is an ideal solution for weighbridges/truck scales thanks to its approvals to OIML C4 (4000 divisions) and NTEP Class III L, as well as lightning surge arrestors and a tough, durable polyurethane cable.

Corner correction at the junction box is minimised because the T34 is pre-corner adjustment optimised at +/- 0.05% by output current calibration (in  $\text{mV/V/}\Omega$ ). This saves a significant amount of time during commissioning.

For use in weighbridges/truck scales, a range of mounting cup accessory sets are available as optional items, in either stainless steel or nickel plated alloy steel, along with a rubber gaiter, sealing clip and a set of centering discs. The T34 load cell also has application in silo, vessel and tank weighing, for which the T34 Silo Mount version is preferable.

For applications in aggressive environments where stress corrosion or acid attack could be an issue, a special Parylene coating can be specified as an option. Also available are ATEX and High Temperature versions. While the ATEX certification allows use in all zones, in dust zones 20, 21, 22 and gas zone 2 there is no need for safety barriers.

- Stainless steel load sensor
- Fully welded and hermetically sealed to IP68/IP69K
- In-built surge arrestors for lightning protection
- Calibrated in mV/V/ $\Omega$  for pre-corner adjustment optimisation
- Simple installation
- 3 year warranty

- Self-centering rocker column design with anti-rotation pin
- Approval to OIML R60 C4 (4000 divisions)
- Approval to NTEP Class III L
- Mounting cup accessories available
- ATEX and High Temperature options available





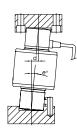


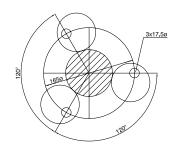


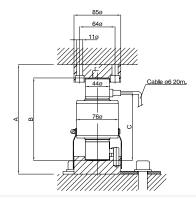
## T34

### technical specification...









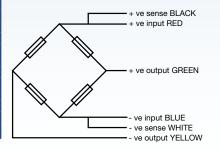
#### **T34 Load Cell**

		Load cell specification	Units	
Load Cell Capacities		10, 15, 20, 30, 40, 60	tonnes	
Rated Output		2	mV/V **	
Accuracy Class		4000	n.OIML	
Combined error		< +/- 0.013	%*	
Non-repeatability		< +/- 0.015	%*	
Creep (30 minutes)		< +/- 0.012	%*	
Temperature Effect on Zero Balance		< +/- 0.002	%* / °C	
Temperature Effect on Span		< +/- 0.0012	%* / °C	
Compensated Temperature Range		-10 to +40	°C	
Operating Temperature Range		-50 to +70	°C	
Safe Overload		150	%*	
Ultimate Overload	Ultimate Overload		%*	
Zero Balance		< +/-2	%*	
Input Resistance		800	Ω +/- 5	
Output Resistance		705	Ω +/- 5	
Insulation Resistance		> 5000	MΩ @100v DC	
Recommended Supply Voltage		5-15	V	
Maximum Supply Vo	Maximum Supply Voltage		V	
Cable Length		20	m	
Cable Material		Polyurethane		
Protection Class		IP68/IP69K		
Nominal Shipping Weight	10t, 15t, 20t	2.5	kg	
	30t	2.6	kg	
	40t	2.8	kg	
	60t	3.8	kg	
	Mounting Accessories	3	kg	

#### **Dimensions**

Capacity	10t, 15t, 20t	30t	40t	60t
Α	200	200	200	260
В	150	150	150	210
С	123	123	123	153
d max.	13	13	13	11
e° max.	5°	5°	5°	3°
r sph. radius	130	160	180	220

All dimensions are in mm



#### Model T34 ATEX Certification

Code	Temperature Class	Parameters	Application	
	T6 for Gas Zones 0, 1, 2 85°C for Dust Zones 20, 21, 22	Pi = 1.3W	Gas Zones 0, 1, 2 with safety barriers. Dust Zones 20, 21, 22 without safety barriers.	
II 1 G D Ex ia IIC T4T6 Ga Ex ia IIIC T135 °CT85°C Da Ex ta IIIC T85 °C Da	T5 for Gas Zones 0, 1, 2 100°C for Dust Zones 20, 21, 22	Pi = 0.6W		
LA tu iiio 100 ° Du	T4 for Gas Zones 0, 1, 2 135°C for Dust Zones 20, 21, 22	Pi = 0.2W		
II 3G D Ex nA T6 Ex tD A22 IP65 T85°C	T4 for Gas Zones 0, 1, 2 135°C for Dust Zones 20, 21, 22	Umax = 25 V	Gas Zone 2 and Dust Zone 22 <b>without</b> safety barriers. Maximum excitation voltage 25 V	

#### **Electrical Connections**

Via 6 wire, 5.7mm diameter, screened polyurethane cable.

Screen not connected electrically to load cell.

#### Construction

Load cell manufactured from stainless steel

#### Options

Mounting accessory set comprising stainless steel or nickel plated alloy steel top and bottom mounting cups, rubber gaiter and centering discs

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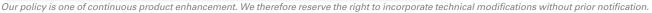
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<sup>\*</sup> All percentages are related to Rated output

<sup>\*\*</sup> Pre-corner adjustment optimised at +/- 0.05% by output current calibration