

# 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 and IP69K. It's an ideal solution for weighbridges (truck scales) thanks to its approval to OIML C4 (4000 divisions) and integral lightning surge arrestors. As well as being extremely tough, the cable's halogen-free Polyurethane sheath has high resistance to rats, chemical attack, cuts, ultraviolet light and temperature changes.

Corner adjustment time is minimised because the T34 has optimized pre-corner adjustment (calibrated in mV/V/Ohm by output current matching at  $\pm 0.05\%$ ).

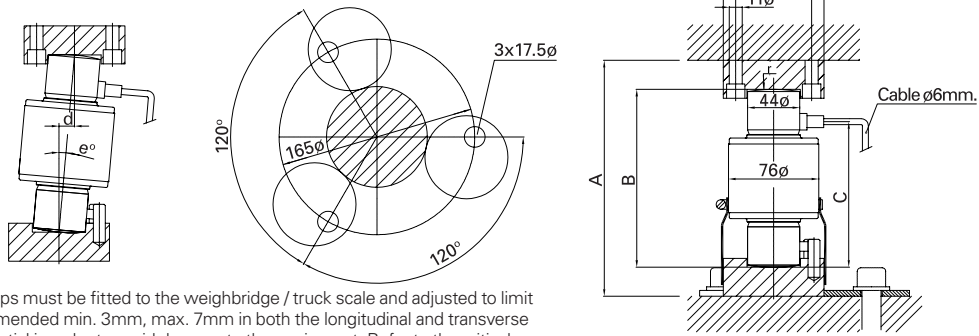
For use in weighbridges (truck scales) a range of mounting cup accessory sets (LA34) are available as optional items, in either stainless steel or nickel plated alloy steel, together with a rubber gaiter, sealing clip and three centering discs. For high accuracy, cost effective, OIML approved silo, vessel and tank weighing the T34 load cell can be used with the LA34-SILO mounting accessory. Refer to the T34 SILO datasheet for more information.

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

- Stainless steel load cell, fully welded and hermetically sealed
- Protected to IP68 and IP69K
- In-built surge arrestors for lightning protection
- Industry standard height and mounting pattern
- Calibrated in mV/V/Ohm, by output current matching at  $\pm 0.05\%$ , to minimise corner adjustment
- PU cable is highly resistant to rats and other forms of attack
- Approval to OIML R60 C4 (4000 divisions)
- Wide operating temperature range
- ATEX, High Temperature and Parylene coating options available
- 3 Year Warranty

# T34

technical specification...



Important: Bumper stops must be fitted to the weighbridge / truck scale and adjusted to limit movement to a recommended min. 3mm, max. 7mm in both the longitudinal and transverse directions. This is essential in order to avoid damage to the equipment. Refer to the critical dimensions d and e below (\*\*).

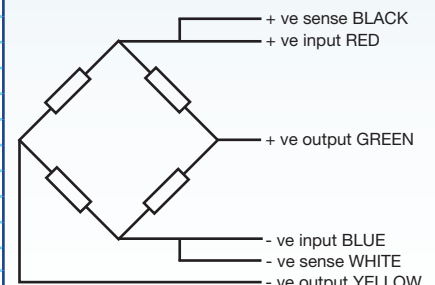
## T34 Load Cell

	Load cell specification	Units
Load Cell Capacity ( $E_{max}$ )	10, 15, 20, 30, 40, 60	tonnes
Rated Output ( $S_n$ )	2	mV/V *
Accuracy Class	4000 (See Note 1)	n.OIML
Combined error	$< \pm 0.013$	% $S_n$
Non-repeatability	$< \pm 0.01$	% $S_n$
Creep (30 minutes)	$< \pm 0.012$	% $S_n$
Minimum load cell verification interval ( $v_{min}$ ) = $E_{max} / Y$	$E_{max} / 10000$	tonnes
Temperature Effect on Zero Balance	$< \pm 0.002$	% $S_n / ^\circ C$
Temperature Effect on Span	$< \pm 0.0012$	% $S_n / ^\circ C$
Compensated Temperature Range	-10 to +40	$^\circ C$
Operating Temperature Range	-50 to +80	$^\circ C$
Safe Overload	150	% $E_{max}$
Ultimate Overload	350	% $E_{max}$
Zero Balance	$< \pm 2$	% $S_n$
Input Resistance	$800 \pm 5$	$\Omega$
Output Resistance	$705 \pm 5$	$\Omega$
Insulation Resistance	$> 5000$	M $\Omega$ @100V
Recommended Supply Voltage	5-15	V
Maximum Supply Voltage	15	V
Environmental Protection	IP68 and IP69K	-
Maximum deflection at $E_{max}$	0.6 - 1	mm
Cable Length	10t - 30t	Options of 15m or 20m
	40t - 60t	20m
Cable Type	Polyurethane, 6-core	-
Nominal Shipping Weight	10t, 15t, 20t	2.5
	30t	2.6
	40t	2.8
	60t	3.8
	Mounting Accessories	3

## Dimensions

Capacity	10t - 20t	30t	40t	60t
A	200	200	200	260
B	150	150	150	210
C	123	123	123	153
d max. **	13	13	13	11
e max. permitted tilting **	5 $^\circ$	5 $^\circ$	5 $^\circ$	3 $^\circ$
r sph. radius	130	160	180	220

All dimensions are in mm



## Electrical Connections

Via 6 wire, 6mm diameter, screened Polyurethane cable with high toughness and high resistance to rats.

## Accessories

Mounting accessory set comprising top & bottom mounting cups, 3 centering discs, nitrile rubber protective gaiter and securing clip.

Part numbers: LA34-40-NP (10t-40t, nickel plated alloy steel), LA34-40T-SS (10t-40t, stainless steel) or LA34-60T-SS (60t, stainless steel).

\* Optimized pre-corner adjustment (calibrated in mV/V/Ohm by output current matching at  $\pm 0.05\%$ )

1. OIML C4 (4000 divisions) approval is available for capacities from 15t to 60t inclusive

## Model T34 ATEX Certification

Code	Specific parameters of protection types	Application
II 1 G D Ex ia IIC T4...T6 Ga Ex ia IIIC T85 $^\circ$ C Da Ex ta IIIC T85 $^\circ$ C Da	Protection type "Ex i" Ex ia IIC T4 / Ex ia IIIC	$P_i = 1.3W$
	Protection type "Ex i" Ex ia IIC T5	$P_i = 0.6W$
	Protection type "Ex i" Ex ia IIC T6	$P_i = 0.2W$
	Protection type "Ex ta"	$U_{max} = 25V$
		Dust Zones 20, 21, 22 <b>without</b> safety barriers. Maximum supply voltage 25V.

DISTRIBUTED BY:



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



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