

DIGITAL COMPRESSION COLUMN LOAD CELL FOR WEIGHBRIDGES/TRUCK SCALES AND SILOS

capacities 15t - 60t



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

This **digital** 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 approval to OIML C4 (4000 divisions) – available on special request – as well as lightning surge arrestors and a tough, durable Polyurethane cable. It has an **open communications protocol**, so it could be used with several brands of weight indicator.

Digital load cells possess many advantages, compared with analogue load cells – such as **much faster and simpler corner adjustment, as well as individual load cell fault diagnostics**.

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 T34D digital load cell can also be used for the weighing of **silos, vessel and tanks** weighing when individual load cell fault diagnostics are required, for these applications the Silo Mount accessory 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 as an option is a High Temperature version.

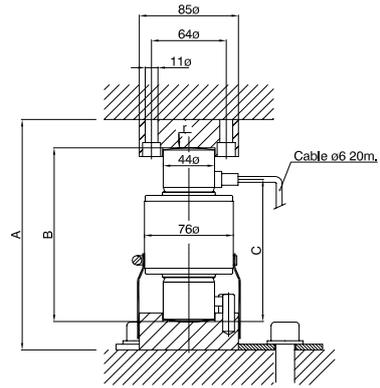
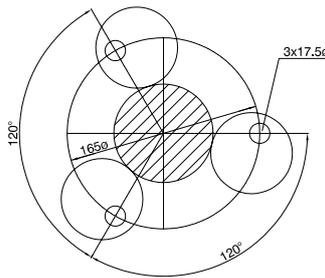
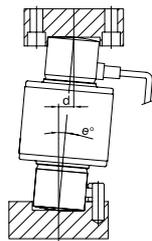
- Open digital protocol
- Fully welded and hermetically sealed to IP68/ IP69K
- In-built surge arrestors for lightning protection
- Simple and fast installation
- Configuration and software can be updated using serial interface
- Self-centering rocker column design with anti-rotation pin
- Approval to OIML R60 C4 (4000 divisions) – on special request only
- Mounting cup accessories available, as well as silo mount
- Digital interface RS485 (full duplex)
- 3 year warranty

Advantages of the digital T34D load cell over the analogue T34 load cell:

- Higher resolution (up to 1,000,000 steps from zero to full scale)
- Intelligent compensation for each individual load cell
- Easier, faster maintenance with continuous, individual self-diagnosis
- Direct PC connection via RS485 bus and RS232 converter, up to 1200 metres away
- Internal signal filtering
- Higher protection against EMC interference
- Simpler and faster corner adjustment
- Remote diagnostics via modem using direct PC connection

T34D

technical specification...



T34D Load Cell

	Load cell specification	Units	
Load Cell Capacities (E_{max})	15, 30, 40, 60	tonnes	
Rated Output (S_n)	200000 ± 0.05%	counts*	
Accuracy Class	4000**	n.OIML	
Combined Error	< ± 0.013	%S _n	
Non-repeatability	< ± 0.01	%S _n	
Minimum load cell verification interval (V_{min}) = Capacity / Y	Capacity / 12000	kg	
Creep (30 minutes)	< ± 0.012	%S _n	
Temperature Effect on Zero Balance	< ± 0.002	%S _n / °C	
Temperature Effect on Span	< ± 0.0012	%S _n / °C	
Compensated Temperature Range	-10 to +40	°C	
Operating Temperature Range	-30 to +70	°C	
Safe Overload	150	%S _n	
Ultimate Overload	350	%S _n	
Zero Balance	< ± 0.1	%S _n	
RS485 Serial Interface Output	Full Duplex		
Max. transmission cable length	1200	m	
Insulation Resistance	> 5000	MΩ @100v	
Recommended Supply Voltage	8 - 18	V	
Maximum Supply Current	60	mA	
Cable Material	Polyurethane		
Protection Class	IP68 / IP69K		
Nominal Shipping Weight	15t	2.5	kg
	30t	2.6	kg
	40t	2.8	kg
	60t	3.8	kg
	Mounting Accessories	3	kg

* User programmable

** OIML C4 approval is available with special version 740D

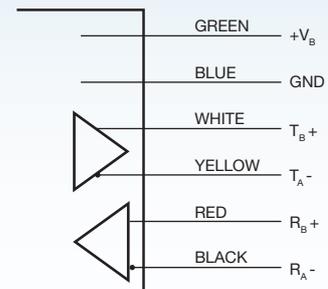
T34D Silo Weighing Configuration with Silo Mount Accessory



Dimensions

Capacity	15t	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.	5°	5°	5°	3°
r sph. radius	130	160	180	220

All dimensions are in mm



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

- For weighbridge / truck scale use: mounting accessory set comprising stainless steel or nickel plated alloy steel top and bottom mounting cups, rubber gaiter and centering discs. Part number for stainless steel set is LA34-40T-SS (up to 40t) or LA34-60T-SS (60t). Part number for nickel plated steel set is LA34-40T-NP (available up to 40t only)
- For silo / tank weighing use: T34 SILO Accessory in zinc plated alloy steel. Part number for accessory is LA34-40T-SILO (up to 40t) or LA34-60T-SILO (60t). See data sheet for "T34 SILO" for more details.

DISTRIBUTED BY:



THAMES SIDE SENSORS LTD

Unit 10, io Trade Centre, Deacon Way, Reading, Berkshire RG30 6AZ, UK

tel: +44 (0) 118 941 1387

fax: +44 (0) 118 941 2004

sales@thames-side.co.uk

www.thames-side.com



Issue: T34D.04.19

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



www.thames-side.com