

LOW PROFILE LOAD CELL FOR SILO, TANK AND VESSEL WEIGHING

capacities 1t to 30t



This Stainless Steel Low Profile Compression Load Cell T20 is fully welded and hermetically sealed to IP68 and IP69K as standard. It can therefore be used in the harshest industrial environments.

The T20 Load Cell is specifically designed as a reliable, simple, low cost solution for weighing of tanks, silos and process vessels where 'level measurement' is the main requirement. The unique pan cake type design facilitates low profile, extremely compact mounting and as a result load cell can be used even in very low headroom spaces. T20 offers an excellent compromise between accuracy and cost. Other application includes Universal Testing Machines, Platform Scales and Special Purpose Machines (SPMs).

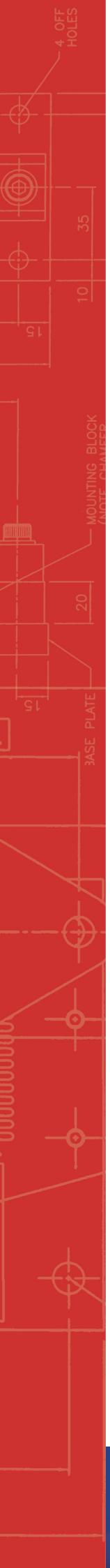
Capacities range from 1t to 30t.

The Polyurethane cable provides excellent protection against chemicals, UV radiation, rodents and damage from cuts/impacts. ATEX approval for all Gas and Dust zones is available as an option. 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. High temperature variants for continuous operation in environments up to 150°C are also available.

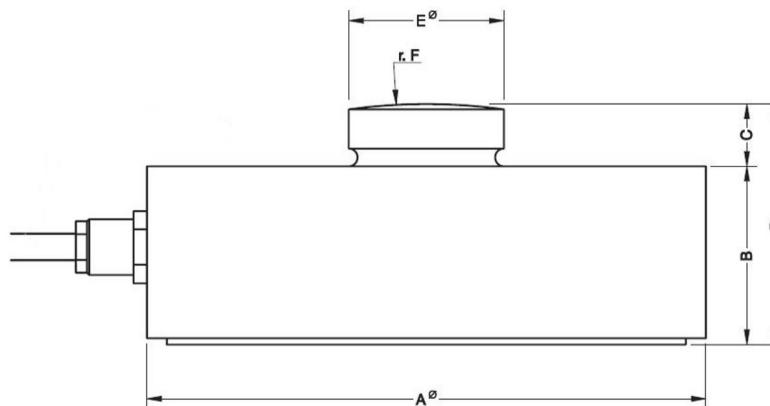
- Stainless steel compression load cell
- Fully welded and hermetically sealed construction to IP68/IP69K
- 1000 division accuracy
- Durable polyurethane cable with high resistance to chemicals, impacts and UV radiation
- Wide operating temperature range
- 5 year warranty against manufacturing defects
- Available in Ex version (optional) for use in Gas zone 0, 1 and 2 & Dust zone 20, 21 and 22
- Optional Parylene coating for aggressive environments
- High Temperature version available (up to 150°C) as option
- Low profile, extremely compact loading assembly
- Easy Installation





T20

technical specification...



Dimensions

Capacity (t)	1, 2.5, 5, 10	20, 30
ØA	82	126
B	32	40
C	12	14
D	44	54
ØE	22	35
r.F	130	200
Transport Weight (kg)	1.1	2.8

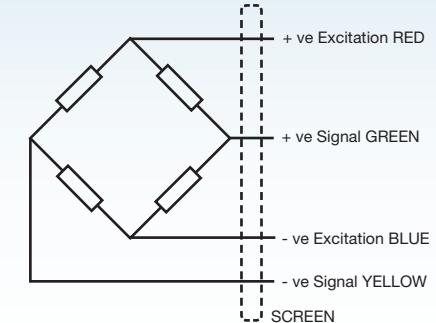
All dimensions in mm

T20 Load Cell

	Load cell specification	Units
Load Cell Capacity (E_{max})	1, 2.5, 5, 10, 20, 30	tonnes (t)
Rated Output (S_n)	2.0	mV/V $\pm 0.1\%$
Combined Error	$< \pm 0.05$	% S_n
Non-repeatability	$< \pm 0.015$	% S_n
Minimum load cell verification interval (v_{min}) = E_{max} / Y	$E_{max} / 10000$	kg
Creep (30 minutes)	$< \pm 0.048$	% S_n
Temperature Effect on Zero Balance	$< \pm 0.002$	% $S_n / {}^\circ C$
Temperature Effect on Span	$< \pm 0.0036$	% $S_n / {}^\circ C$
Compensated Temperature Range	0 to +50	{}^\circ C
Operating Temperature Range	-50 to +70	{}^\circ C
Safe Load Limit (E_{lim})	200	% S_n
Zero Balance	± 2.0	% S_n
Input Resistance	800 ± 30	Ω
Output Resistance	700 ± 5	Ω
Insulation Resistance	> 5000	M Ω
Recommended Supply Voltage	5-15	V
Maximum Supply Voltage	15	V
Environmental Protection according to EN 60529	IP68 / IP69K	
Cable Length	10	m
Maximum deflection at E_{max}	< 0.6	mm
Nominal Shipping Weight (Load Cell with Accessory)	1t -10t 20t -30t	kg
	7.0 15.8	kg

T20 Load Cell ATEX Certification

Code	Temperature Class	Parameters	Application
II 1 GD Ex ia IIC T4...T6 Ga IP68 T85°C Ex ia IIIC T85°C Da Ex ta IIIC T85°C Da	T4	$P_i = 1.3W$	Gas Zones 0, 1, 2 with safety barriers
	T5	$P_i = 0.5W$	Dust Zones 20, 21, 22 without safety barriers
	T6	$P_i = 0.2W$	



Electrical Connections

Via 4 core, 5.7mm diameter, screened polyurethane cable.

Screen not connected electrically to load cell.

Construction

Load cell T20
Stainless steel

Optional

Mounting accessory LA20

- Zinc plated version LA20-***-ZINC
Upper plate, lower plate, hardware: zinc plated alloy steel
- Stainless steel version LA20-***-SS
Upper plate, lower plate, hardware: stainless steel

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CIN U31908MH2011FTC219481

Issue: IN/T20.02.18



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



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