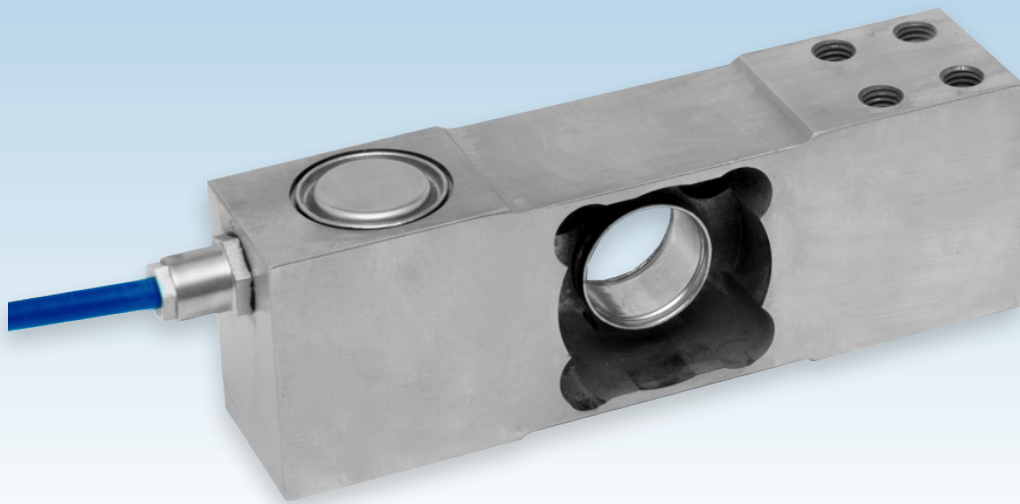


STAINLESS STEEL SINGLE POINT LOAD CELL FOR HARSH ENVIRONMENTS

capacities 15kg - 400kg




The T12 double bending beam, stainless steel single point load cell is ideal for high accuracy weight measurement with off-centre loads in harsh industrial environments. Its hermetically sealed and fully welded construction, with protection class IP68 and IP69K, is essential for use in applications involving regular wash-down at high temperatures and pressures, such as the food and pharmaceutical industries. It is approved to 3000 divisions OIML R60 Class C. The screened polyurethane cable with 6-wires (including sense wires) ensures that this load cell design is particularly insensitive to electrical noise.

Typical applications include weighing platforms with dimensions up to 800mm x 800mm; bagging, filling and dosing machines; medical scales; checkweighers; small bucket and hopper systems.

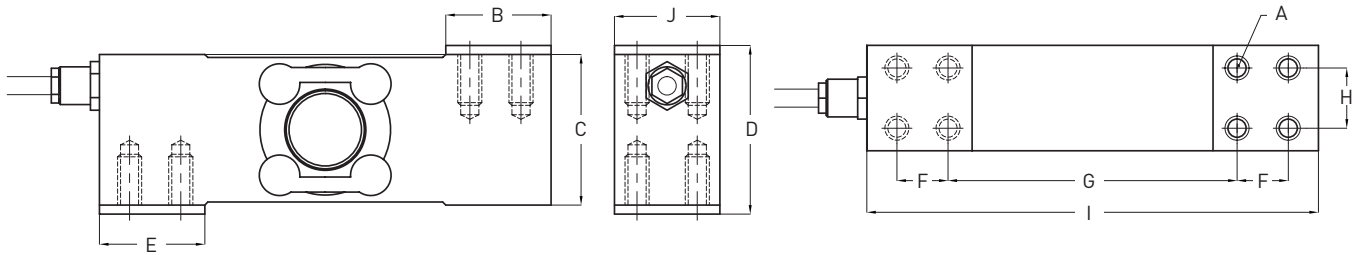
The T12 is available with optional ATEX certification for all Gas and Dust zones. The ATEX certification for dust zones 20, 21 and 22 does not require safety barriers, which saves substantial cost.

For applications in aggressive environments where stress corrosion or acid attack is a potential problem, a special Parylene coating can be specified as an option.

- Stainless steel load sensor
- Hermetically sealed and fully welded to IP68/IP69K
- OIML R60 Class C 3000 divisions (C3)
- Noise-insensitive 6-wire connection with sense wires
-  option
- 5 year warranty
- High accuracy with off-centre loads
- 600x600mm or 800x800mm platform size (with load cell placed centrally under the platform)
- High durability Polyurethane cable provides higher resistance to chemicals than PVC

T12

technical specification...



Qty. 2 spacer plates supplied with load cell, as shown above

T12 Load Cell

| | Load cell specifications | Units |
|--|---|--------------------|
| Load Cell Capacities (E_{max}) | 15, 20, 30, 50, 75, 120, 200, 250, 350, 400 | kg |
| Rated Output (S_n) | 2 | mV/V \pm 10% |
| Accuracy Class | 3000 | n.OIML |
| Combined Error | $< \pm 0.017$ | % S_n |
| Non-repeatability | $< \pm 0.01$ | % S_n |
| Creep (30 minutes) | $< \pm 0.016$ | % S_n |
| 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 | -20 to +70 | $^\circ C$ |
| Minimum Dead Load | 0 | % S_n |
| Safe Overload | 150 | % S_n * |
| Ultimate Overload | 200 | % S_n * |
| Zero Balance | $< \pm 2$ | % S_n |
| Maximum Deflection at Nominal Capacity | 0.3 to 0.5 | mm |
| Input Resistance | 400 | $\Omega \pm 20$ |
| Output Resistance | 350 | $\Omega \pm 3$ |
| Insulation Resistance | > 5000 | M Ω @ 100V |
| Recommended Supply Voltage | 5-15 | V |
| Maximum Supply Voltage | 15 | V |
| Environmental Protection to EN 60529 | IP68 / IP69K | |
| Cable Length | 5 | m |
| Cable Material | Polyurethane | |
| Maximum Platform Size* | 15, 20, 30, 50, 75, 120, 200, 350 kg | 600 x 600 |
| | 250, 400 kg | 800 x 800 |
| Nominal Shipping Weight | 15, 20, 30, 50, 75, 120, 200, 350 kg | 1.8 |
| | 250, 400 kg | 4.3 |

* Only applies to central loads on the load cell. Not for off-centre loads.
 † The load cell must be placed centrally under the platform.

Dimensions

| Capacity (kg) | 15, 20, 30, 50, 75, 120, 200, 350 | 250, 400 |
|---------------|-----------------------------------|----------------------|
| A | 8 off M8 x 1.25 x 14 | 8 off M10 x 1.5 x 20 |
| B | 35 | 50 |
| C | 50 | 60 |
| D | 56 | 66 |
| E | 35 | 50 |
| F | 17 | 30 |
| G | 96 | 100 |
| H | 20 | 40 |
| I | 150 | 180 |
| J | 35 | 60 |

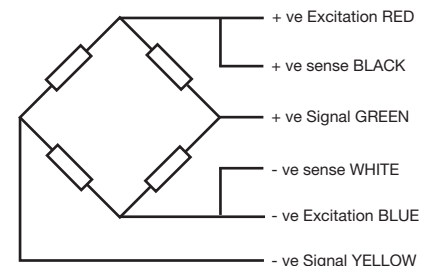
Dimensions in mm

T12 Load Cell ATEX Certification

| Code | Temp Class | Parameters |
|--|------------|------------|
| II 1 GD Ex ia IICT4...T6 Ga IP68T85°C Ex ia IIICT135°C T85°C Da Ex ta IICT85°C Da | T4 | Pi = 2.6W |
| | T5 | Pi = 1.7W |
| | T6 | Pi = 0.56W |

Application

- Gas Zones 0, 1, 2 with safety barriers
- Dust Zones 20, 21, 22 **without** safety barriers (using "Ex ta" protection type)



Electrical Connections

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

DISTRIBUTED BY:



THAMES SIDE SENSORS LTD

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

tel: +44 (0) 118 941 1387
 fax: +44 (0) 118 941 2004

sales@thames-side.co.uk
www.thames-side.com



Issue: T12.10.17

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

