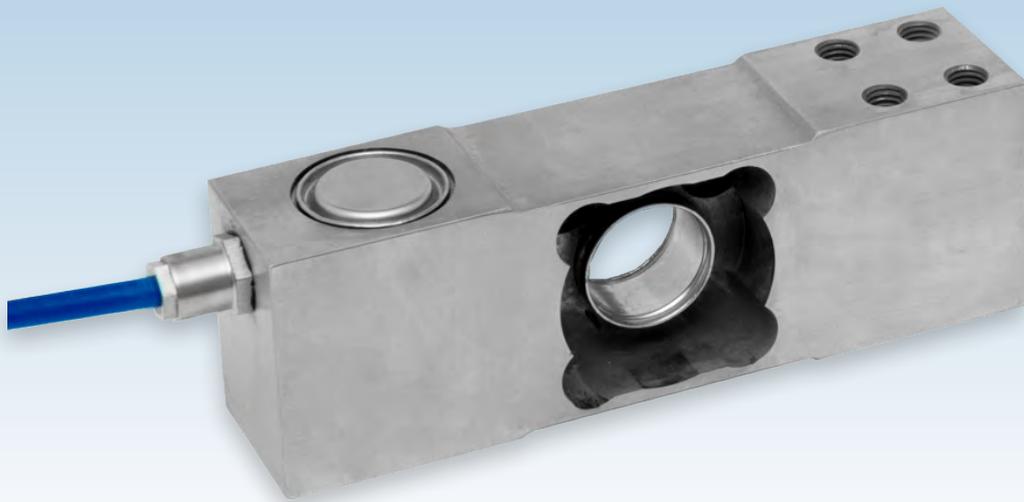


# STAINLESS STEEL SINGLE POINT LOAD CELL FOR HARSH ENVIRONMENTS

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 up to 350 kg. 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.

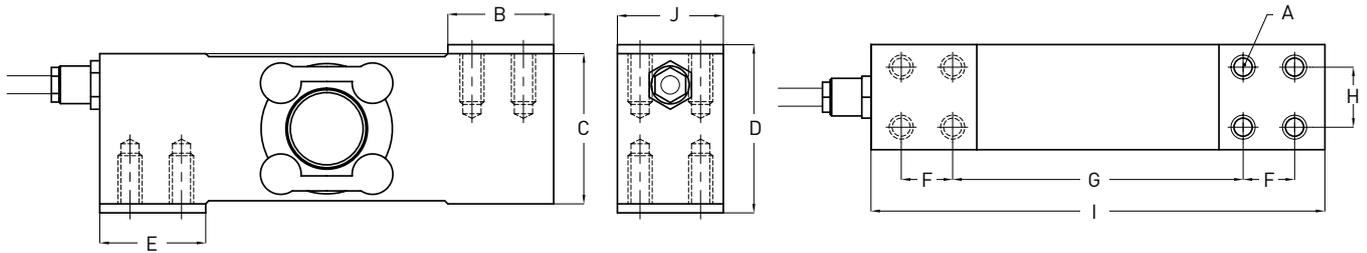
The T12 is available with optional ATEX certification for all Gas and Dust zones. The ATEX certification for dust zones 20, 21 and 22 does not require safety barriers, which saves substantial cost.

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 and IP69K
- OIML R60 Class C 3000 divisions (C3)
- Rated Output ( $S_n$ ) tolerance is  $\pm 0.1\%$  as standard
-  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	
<b>Load Cell Capacities (<math>E_{max}</math>)</b>	15, 20, 30, 50, 75, 120, 200, 250, 350, 400	kg	
<b>Rated Output (<math>S_n</math>)</b>	2	mV/V $\pm$ 0.1 %	
<b>Accuracy Class</b>	3000 (See Note 1)	n.OIML	
<b>Combined Error</b>	$< \pm 0.017$	% $S_n$	
<b>Non-repeatability</b>	$< \pm 0.01$	% $S_n$	
<b>Creep (30 minutes)</b>	$< \pm 0.016$	% $S_n$	
<b>Minimum load cell verification interval (<math>v_{min}</math>) = <math>E_{max} / Y</math></b>	$E_{max} / 10000$	kg	
<b>Temperature Effect on Zero Balance</b>	$< \pm 0.002$	% $S_n / ^\circ C$	
<b>Temperature Effect on Span</b>	$< \pm 0.0012$	% $S_n / ^\circ C$	
<b>Compensated Temperature Range</b>	-10 to +40	$^\circ C$	
<b>Operating Temperature Range</b>	-20 to +70	$^\circ C$	
<b>Minimum Dead Load</b>	0	% $S_n$	
<b>Safe Overload</b>	150	% $S_n$ **	
<b>Ultimate Overload</b>	200	% $S_n$ **	
<b>Zero Balance</b>	$< \pm 2$	% $S_n$	
<b>Maximum Deflection at Nominal Capacity</b>	0.3 - 0.5	mm	
<b>Input Resistance</b>	400	$\Omega \pm 20$	
<b>Output Resistance</b>	350	$\Omega \pm 3$	
<b>Insulation Resistance</b>	$> 5000$	M $\Omega$ @ 100V	
<b>Recommended Supply Voltage</b>	5-15	V	
<b>Maximum Supply Voltage</b>	15	V	
<b>Environmental Protection to EN 60529</b>	IP68 and IP69K		
<b>Cable Length</b>	5	m	
<b>Cable Material</b>	Polyurethane		
<b>Maximum Platform Size*</b>	15, 20, 30, 50, 75, 120, 200, 350 kg	600 x 600	mm
	250, 400 kg	800 x 800	
<b>Nominal Shipping Weight</b>	15, 20, 30, 50, 75, 120, 200, 350 kg	1.8	kg
	250, 400 kg	4.3	

1. OIML C3 (3000 divisions) approval is available for capacities from 15kg to 350kg inclusive  
 \*\* Only applies to central loads on the load cell. Not for off-centre loads.  
 + The load cell must be placed centrally under the platform.

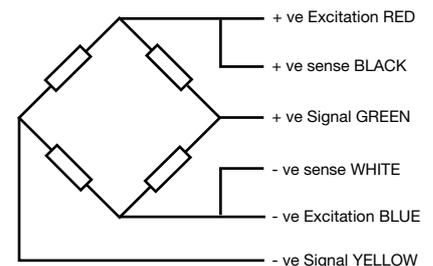
## Dimensions

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

## Model T12 ATEX Certification

Code		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		
Specific parameters of protection types		
Protection type "Ex i" Ex ia IIC T4 / Ex ia IIIC	Pi = 1.3W	Gas Zones 0, 1, 2 with safety barriers
Protection type "Ex i" Ex ia IIC T5	Pi = 0.6W	
Protection type "Ex i" Ex ia IIC T6	Pi = 0.2W	
Protection type "Ex ta"	Umax = 25V	Dust Zones 20, 21, 22 <b>without</b> safety barriers. Maximum supply voltage 25V.



## Electrical Connections

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

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.

