IL Load Cell

Steel Single Point Platform Size 1000x1000 mm



Tank and Hoppers

IL provides the best weighing performance for smaller tanks and wall mounted hoppers. Due to its mounting schema it can be easily used for general bin weighing as well.

Off-Center compensation

One load cell can be used to support a weighing platform and, due to the off-center load compensation, the IL will weigh within tolerance regardless of load application point.





High Robustness

IL allows for 50% static overload without compromising the weighing performance. The nickel plated steel material provides good corrosion resistance suitable for most industrial applications.

IL Single Point Load Cell

The IL load cell features:

- OIML R60 C3 approved
- Off-center load compensated (R76)
- Up to 1000x1000 mm platform size
- IP67 protection class
- Nickel plated Steel

The IL is the ideal solution for hopper and bin weighing due to high capacities and large possible platform sizes. The mounting schema allows for direct bolting to a wall. The variety of capacities allows for wide application range.



IL Load Cell Specifications

Parameter		unit of measure	Specification						
Model No.			L						
Rated Capacity (R.C.)		kg (lb, nominal)	150 (331) 250 (441) 500 (1102) 1000 (2204) 2000 (4408)						
Rated Output		mV/V @R.C.	2 ± 0.002						
Zero load Output		%R.C.	≤]						
Combined Error 1), 2)		%R.C.	≤ 0.02						
Repeatability Error		%A.L. ³⁾	≤ 0.01						
Creep, 30 minute		%A.L.	≤ 0.02						
Min. Dead Load Output Return	(DR), 30 min	%A.L.	≤ 0.016						
Temperature Effect on	Min. Dead load Output	%R.C./°C (/°F)	≤ 0.002 (0.001)						
	Sensitivity 2)	%A.L./°C (/°F)	≤ 0.0009 (0.0005)						
Temperature Range	Compensated	°C (°F)	-10 to +40 (+14 to +104)						
	Operating	°C (°F)	-20 to +65 (-4 to +150)						
	Safe Storage	°C (°F)	-20 ~ +80 (-20 to +176)						
	OIML Cert. No.		R60/2000-NL-02.11						
	European Cert. No.		TC 6042						
	Class		C3						
OIML / European Approval 4)	nmax		3000						
	Y		5000						
	PLC		0.7						
	Humidity Symbol		none						
	Recommended	V AC/DC	5 ~ 15						
Excitation Voltage	Max.	V AC/DC	20						
	Excitation	Ω							
Terminal Resistance	Output	V	350±1						
Insulation Resistance @50VD0		MΩ	≥ 5000						
Breakdown Voltage	5	V AC	> 500						
bleakaowii vollage	Spring Element	V AC	Nickel plated alloy steel						
	Enclosure		none						
Material	Cable entry fitting		304						
	Cable		PVC						
Protection	Type IP Rating		potted						
	0	0/ D O	IP67						
Load Limit	Safe	%R.C.	150						
Orfe Dumania Land	Ultimate	%R.C.	300						
Safe Dynamic Load		%R.C.	70						
Fatigue Life		cycles @R.C.	>1.000.000						
Direction of Loading			compression						
Weight, nominal		kg (lb)	4.15 (9.2) 5.4 (12)						
Cable	Length	m (ff)	5 (16.6)						
Diameter		mm (in)	5.8 (0.23)						
Barometric Pressure Effect on 2	Zero Load Output	kg/kPa (lb/in.Hg)	none						
Safe Side Load		%R.C.	100						
Overload Protection			no						
Mounting Screw	Grade		12.9						
	Size/thread	mm	M14 M16						
	Engaged Length	mm (in)	25 1)						
	Torque, nominal	N.m (ff-lb)	98 (72) 196 (143)						
Max Platter Size		cm x cm (in x in)	80X80 (3.15x3.15) 100X100 (3.93						
Off Center Load Error @33%R.C.		%A.L./cm (/in)	0.0045 (0.011) 0.0035 (0.008						

¹⁾ Error due to the combined effect of non-linearity and hysteresis

²⁾ Typical values only. The sum of errors due to Combined Error and Temperature Effect on Sensitivity comply with the requirements of OIML R60 and NIST HB44.

³⁾ A.L. = Applied Load

⁴⁾ See certificate for complete information



IL Load Cell Dimensional Drawings mm [inch]





Canacity	Dimensions and locations									
Capacity	D	H1	H2	L1	L2	L3	W1	W2	W3	
150kg-1000kg	M14	46	72	15 0	85	100	38	64	8	
[330-2204lb]		[1.81]	[2.83]	[5.91]	[3.35]	[3.94]	[1.50]	[2.52]	[0.31]	
2000kg	M16	55	80	150	85	100	42	72	8	
[4409lb]		[2.17]	[3.15]	[5.91]	[3.35]	[3.94]	[1.65]	[2.83]	[0.31]	

IL Load Cell Order Information

Description	Item No.
Load cell, model no. IL-150KG-5M	71209638
Load cell, model no. IL-250KG-5M	71209639
Load cell, model no. IL-500KG-5m	71209635
Load cell, model no. IL-1000KG-5M	71209640
Load cell, model no. IL-2000KG-5M	71210636

IL Load Cell Cable Colours

Colour	Function
Green	+ Excitation
Black	 Excitation
White	+ Signal
Red	— Signal
Yellow	+ Sense
Blue	- Sense
Yellow (long)	Shield

Full Connectivity

METTLER TOLEDO supplies various data communication interfaces that enable our sensors and instruments to communicate with your PLC, MES, or ERP systems.









OIML Approvals

The IL is provided with C3 approval acc. to OIML R60. Thus best weighing performance is guaranteed at all specified conditions. Benefit from METTLER TOLEDO experience.



Worldwide Services

Our extensive service network is among the best in the world and ensures maximum availability and service life of your product.

Weighing Electronics

METTLER TOLEDO offers a complete family of electronics from simple weighing to application solutions for filling, stock control, batching, formulation, counting, and checkweighing.



Quality certificate ISO 9001 Environment certificate ISO 14001

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