# **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.					IL			
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.			≤ 1			
Combined Error 1), 2)		%R.C.			≤ 0.02			
Repeatability Error		%A.L. <sup>3)</sup>			≤ 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			
	Υ				5000			
	PLC				0.7			
	Humidity Symbol		none					
	Recommended	V AC/DC			5 ~ 15			
Excitation Voltage	Max.	V AC/DC			20			
	Excitation	Ω	387±4					
Terminal Resistance	Output	V			350±1			
Insulation Resistance @50VDC		MΩ	≥ 5000					
Breakdown Voltage		V AC	> 500					
	Spring Element		Nickel plated alloy steel					
	Enclosure		none					
Material	Cable entry fitting		304					
	Cable				PVC			
	Type				potted			
Protection	IP Rating		IP67					
	Safe	%R.C.	150					
Load Limit	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)					
	Length	m (ff)			5 (16.6)			
Cable	Diameter	mm (in)	5.8 (0.23)					
Barometric Pressure Effect on 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	.5.900/	cm x cm (in x in)			80X80 (3.15x3.15)		100X100 (3.93x3.93)	
Off Center Load Error @33%R.	C.	%A.L./cm (/in)				0.0035 (0.0087)		
1) -					0.00.0 (0.011)		0.0000 (0.0007)	

<sup>1)</sup> Error due to the combined effect of non-linearity and hysteresis

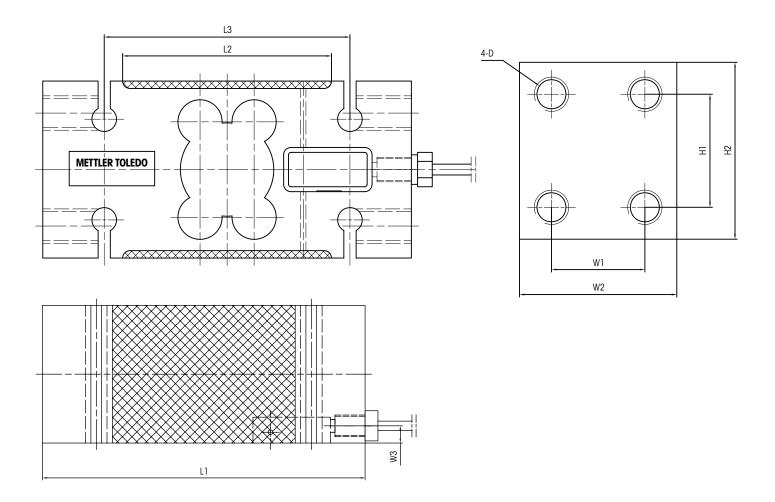
<sup>&</sup>lt;sup>4)</sup> See certificate for complete information



<sup>2)</sup> 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.

<sup>3)</sup> A.L. = Applied Load

## IL Load Cell Dimensional Drawings mm [inch]



Ognacity	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	<ul><li>Excitation</li></ul>
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.













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.



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weighing to application solutions for filling, stock control, batching,

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