# **Easy System Integration**

# Platform Size 400x400 mm



#### **Bench and Floor Scales**

MT1241 provides the best weighing performance for bench scales and smaller floor scales in its capacity range. With a low profile design, cost optimization and an attractive product appearance can be achieved.



#### Off-Center compensation

One load cell can be used to support a weighing platform and, due to the off-center load compensation, the MT1241 will weigh within tolerance regardless of load application point.





#### **Robustness**

MT1241 allows 50% static overload without compromising the weighing performance. The passivated aluminium provides good corrosion resistance suitable for many industrial applications.

### MT1241 Single Point Load Cell

The MT1241 load cell features:

- OIML R60 C3 approval
- Off-center load compensation (R76)
- 400x400 mm platform size
- IP67 protection class
- Passivated aluminum
- 30-250kg capacity range

The MT1241 is the ideal solution for small floor scales and hoppers. Due to the low profile the integration into any system is easy. The broad capacity range allows wide application in industrial weighing applications.



## MT1241 Load Cell Specifications

Parameter Model No:		unit of measure	Specification						
					MT1:	241			
Rated Capacity (R.C.)		kg (lb, nominal)	30 (66)	50 (110)	100 (220)	150 (331)	200 (441)	250 (551)	
Rated Output		mV/V @R.C.	2 ± 0.2						
Zero load Output		%R.C.	≤ 10						
Combined Error 1)		%R.C.	≤ 0.018						
Repeatability Error		%R.C.	≤ 0.01						
Creep, 30 minute		%A.L. <sup>2)</sup>	≤ 0.0167						
Min. Dead Load Output Return (DR), 30 min		%A.L.	≤ 0.0167						
Temperature Effect on	Min Dead load Output	%R.C./°C (/°F)	≤ 0.0023 (0.0011)						
	Sensitivity	%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 to +80 (-4 to +176)						
	OIML Cert. No.	` '	R60/2000-NL 1-06.04						
	European Cert. No.		NMi TC5382						
OIML / European Approval <sup>3)</sup>	Class		C3.5						
	Nmax		3500						
	Y		6000						
	Z		3500						
	PLC			0.7					
	Humidity Symbol		none						
	Min. dead load	kg (lb)	0 (0)						
	Recommended	V AC/DC			5~				
Excitation Voltage	Maximum	V AC/DC		20					
	Excitation	Ω			410 :				
Terminal Resistance	Output	Ω							
Inculation Projetance @50VDC		MΩ	350 ± 4						
Insulation Resistance @50VDC		V AC	≥ 5000						
Breakdown Voltage	Carina Flament	V AC	> 500						
	Spring Element Enclosure		Aluminum						
Material			none						
	Cable entry fitting		none						
	Cable		PVC						
Protection	Type		silicone cover						
	IP Rating	0/ 0 0	IP 67						
Load Limit	Safe	%R.C.	150						
2 ( 5	Ultimate	%R.C.	300						
Safe Dynamic Load		%R.C.	70						
Fatigue Life		cycles @R.C.	>1,000,000						
Direction of Loading			compression						
Deflection @ R.C.		mm (in)	0.3 typ (0.012 typ)						
Weight		kg (lb)	1.2 (2.7)						
Cable Length		m (ff)	2 (6.6); 6 (20)						
Barometric Pressure Effect on Zero Load Output		kg/kPa (lb/in.Hg)	none						
Safe Side Load		%R.C.	100						
Overload Protection			No No						
Mounting Screw	Grade				12				
	Size/thread		M6x1						
	Engaged Length	mm (in)	12 (0.5)						
	Torque	N.m (ff-lb)	10 (7.4)						
Max Platter Size		cm x cm (in x in)		40x40 (15.7x15.7)					
Off Center Load Error @33%R.C.		%A.L./cm (/in)	0.0049 (0.012)						

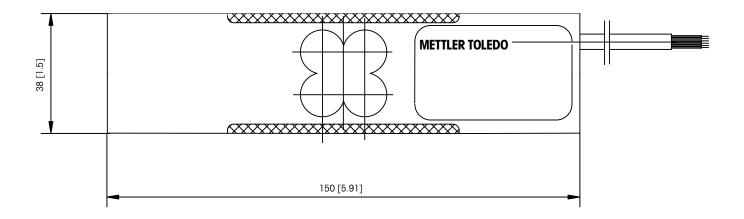
 $<sup>^{\</sup>rm 1)}$  Error due to the combined effect of non-linearity and hysteresis

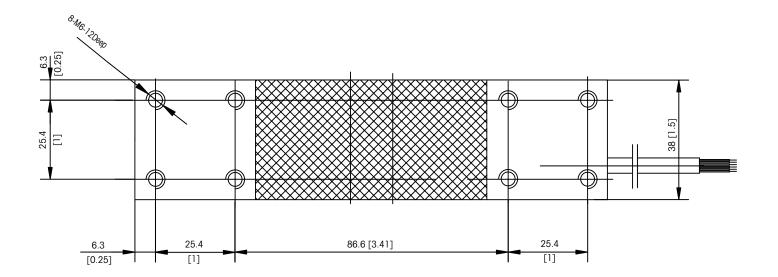
 $<sup>^{\</sup>rm 3)}$  See certificate for complete information.



<sup>&</sup>lt;sup>2)</sup> A.L. = Applied Load

## MT1241 Load Cell Dimensional Drawings mm [inch]





# MT1241 Load Cell Order Information

Description	Item No.
Load Cell MT1241-30kg-2M	71207451
Load Cell MT1241-50kg-2M	71207452
Load Cell MT1241-100kg-2M	71207453
Load Cell MT1241-150kg-2M	71201841
Load Cell MT1241-200kg-2M	71201842
Load Cell MT1241-250kg-2M	71207454
Load Cell MT1241-30KG-6M	72208493
Load Cell MT1241-50KG-6M	72208494
Load Cell MT1241-100KG-6M	72208495
Load Cell MT1241-150KG-6M	72208496
Load Cell MT1241-200KG-6M	72208497
Load Cell MT1241-250KG-6M	72208498

# MT1241 Load Cell Cable Colours

Function
+ Excitation
<ul><li>Excitation</li></ul>
+ Signal
— Signal
+ Sense
- Sense
+ 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 MT1241 is provided with C3.5 approval acc. to OIML R60. Thus best weighing performance is guaranteed at all specified conditions. Benefit from METTLER TOLEDO experience.



## ServiceXXL®

#### **Worldwide Services**

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



Quality certificate ISO 9001 Environment certificate ISO 14001

## 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.

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