

Easy System Integration

Platform Size 400x400 mm



Bench Scales, Packaging

MT1041 provides best weighing performance with a low profile design optimized for the popular 10-100kg capacity range. Thus 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 MT1041 will weigh within tolerance regardless of load application point.



Robustness

MT1041 allows 50% static overload without compromising the weighing performance. The passivated aluminium provides good corrosion resistance suitable for many industrial applications.

MT1041 Single Point Load Cell

The MT1041 load cell features:

- OIML R60 C3 approval
- Off-center load compensation (R76)
- 400x400 mm platform size
- IP67 protection class
- Passivated aluminum
- 10-100kg capacity range

The MT1041 is the ideal solution for retail scales, small platform scales, packaging and process weighing.

Due to the low profile the integration into any system is easy. With a capacity range of 10-100kg and allowable platform size of 400x400mm, the MT1041 is the ideal solution for many scale applications.

MT1041 Load Cell Specifications

Parameter		unit of measure	Specification						
Model No:			MT1041						
Rated Capacity (R.C.)		kg (lb, nominal)	10 (22)	15 (33)	20 (44)	30 (66)	50 (110)	75 (165)	100 (220)
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. ²⁾	≤ 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)	≤ 0.0028 (0.0014)						
	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 / European Approval ³⁾	OIML Cert. No.		R60/1991-NL 98.16						
	European Cert. No.		NMI TC5366						
	Class		C3						
	n _{max}		3000						
	Y		5000						
	Z		3000						
	Plc		0.7						
	Humidity Symbol		none						
	Min. dead load	kg (lb)	0 (0)						
	Excitation Voltage	Recommended	V AC/DC	5-15					
Maximum		V AC/DC	20						
Terminal Resistance	Excitation	Ω	410 ± 10						
	Output	Ω	350 ± 4						
Insulation Resistance @50VDC		MΩ	≥ 5000						
Breakdown Voltage		V AC	> 500						
Material	Spring Element		Aluminum						
	Enclosure		none						
	Cable entry fitting		none						
	Cable		PVC						
Protection	Type		silicone cover						
	IP Rating		IP 67						
Load Limit	Safe	%R.C.	150						
	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 (0.012typ)						
Weight		kg (lb)	0.9 (2)						
Cable Length		m (ft)	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						
Mounting Screw	Grade		12.9						
	Size/thread		M6x1						
	Engaged Length	mm (in)	12 (0.5)						
	Torque	N.m (ft-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 (0.0125)						

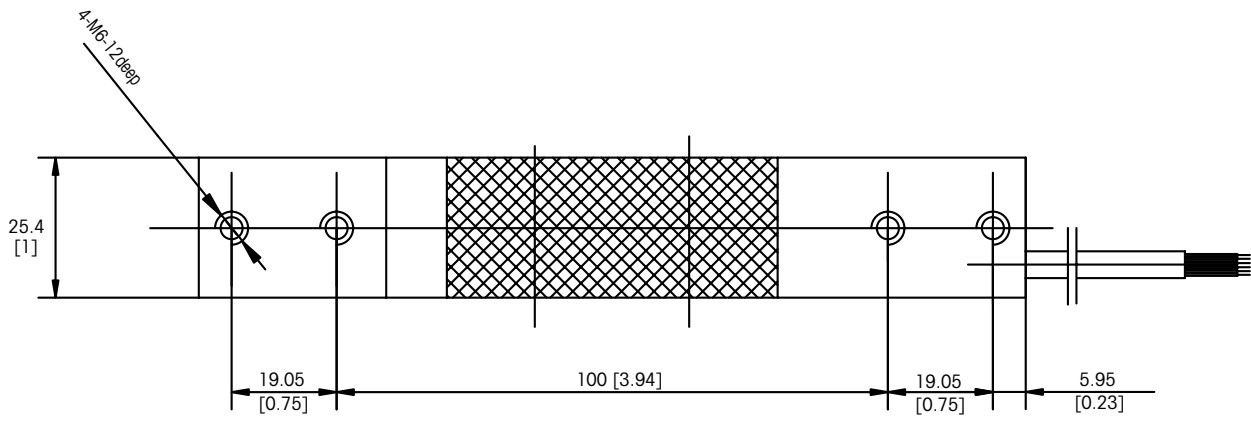
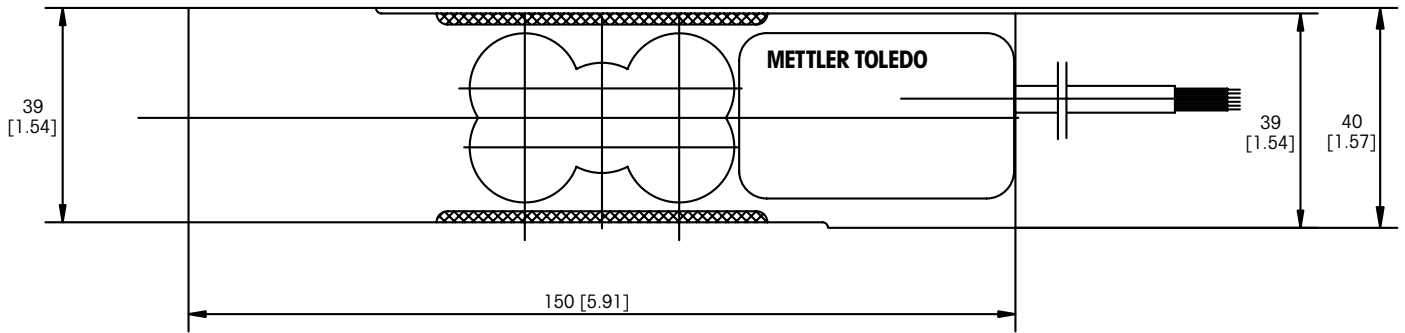
¹⁾ Error due to the combined effect of non-linearity and hysteresis

²⁾ A.L. = Applied Load

³⁾ See certificate for complete information.



MT1041 Load Cell Dimensional Drawings mm [inch]



MT1041 Load Cell Order Information

Description	Item No.
Load Cell MT1041-10kg-2M	71201832
Load Cell MT1041-15kg-2M	71201833
Load Cell MT1041-20kg-2M	71201834
Load Cell MT1041-30kg-2M	71201835
Load Cell MT1041-50kg-2M	71201836
Load Cell MT1041-75kg-2M	71201837
Load Cell MT1041-100kg-2M	71201838
Load Cell MT1041-10KG-6M	72208499
Load Cell MT1041-15KG-6M	72208500
Load Cell MT1041-20KG-6M	72208501
Load Cell MT1041-30KG-6M	72208502
Load Cell MT1041-50KG-6M	72208503
Load Cell MT1041-75KG-6M	72208504
Load Cell MT1041-100KG-6M	72208505

MT1041 Load Cell Cable Colours

Colour	Function
Green	+ Excitation
Black	- Excitation
Red	+ Signal
White	- Signal
Blue	+ Sense
Brown	- Sense
Yellow	+ 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 MT1041 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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