Easy System Integration

Platform Size 350x350 mm



Retail and Bench Scales

MT1022 provides the best weighing performance with such a low profile design. This saves cost in the scale design and makes an attractive low-profile product possible without compromising on performance.



Off-Center compensation

One load cell can be used to support a weighing platform and, due to the off-center load compensation, the MT1022 will weigh within tolerance regardless of load application point.



Robustness

MT1022 allows 50% static overload without compromising the weighing performance. The passivated aluminum provides good corrosion resistance suitable for many industrial applications.



MT1022 Single Point Load Cell

The MT1022 load cell features:

- OIML R60 C3 approval
- NTEP 5000 III S/M approval
- ATEX Zone 1/2 and 21/22 approvals
- Off-center load compensation (R76)
- 350x350 mm platform size
- IP67 protection class
- Passivated aluminum
- 3-30kg capacity range

The MT1022 is the ideal solution for retail scales, small platform scales and packaging and process weighing. Due to the low profile the integration into any system is easy. The low capacity range (3-30kg) allows the construction of highly accurate low-capacity scales.



MT1022 Load Cell Specifications

Parameter		unit of measure	Specification						
Model No.			MT1022						
Rated Capacity (R.C.)		kg (lb, nominal)	3 (6.6)	5 (11)	7 (15.4)	10 (22)	15 (33)	20 (44.1)	30 (66.1)
Rated Output		mV/V @R.C.		•		2 ± 0.2			•
Zero load Output		%R.C.				≤ 10			
Combined Error 1) 2)		%R.C.	≤0.016						
Repeatability Error		%A.L. ³⁾	≤ 0.010						
Creep, 30 minute		%A.L.							
	(DD) 20 min	%A.L.	≤ 0.0167						
Min. Dead Load Output Return			≤ 0.0167						
Temperature Effect on	Min. Dead load Output	%R.C./°C (/°F)	≤ 0.0014 (0.0008)						
	Sensitivity 2)	%A.L./°C (/°F)	≤ 0.0007 (0.00036)						
Temperature Range	Compensated					~ +40 (+14 ~ -			-
	Operating	°C (°F)				~ +65 (-4 ~ +			
	Safe Storage		-20 ~ +80 (-4 ~ + 176)						
	OIML Cert. No.				R	60/1991-NL-99	.02		
	European Cert. No.		NMi TC5442						
	Class					C3			
	nmax					3000			
OIML / European Approval 4)	Vmin	g	0.5	1	1	2	2.5	4	6
Olivie / European Approval		9	0.5	1	'		2.0		
	PLC		 			0.7			-
	Humidity Symbol	Les (III)	1			none			
	Min. dead load	kg (lb)			-	0 (0)			-
	Z					3000			-
	Number					11-088			
	Class					III S, III M			
NTEP Approval 4)	nmax				-	5000			
	Vmin	g (lb)	0.45 (0.001)	0.9 (0.002)	0.9 (0.002)	2.2 (0.005)	2.2 (0.005)	2.2 (0.005)	4.4 (0.01)
	Min. dead load	kg (lb)	(,	1 0.0 (0.002)	1 010 (01002)	0 (0)	1 === (=====)		1 (0.0.)
-	Number, cat. 2	ng (ib)		,	K	EMA O9ATEXOOC	13 X		
	Number, cat. 3		KEMA O9ATEXOOO3 X KEMA O9ATEXOOO4 X						
	Number, cur. 3				, r	II 2 G Ex ib IIC T			
	Rating			-					
ATEX Approval 4)			II 2 D Ex ibD 21 IP66 T135°C						
PP						II 3 G Ex nA II T			
						II 3 G Ex nL IIC			
					II 3 D	Ex tD A22 IP6X	T100°C		
	Entity Parameters			l	Ji/Un=20V, Ii=60	00mA, Pi=1.25V	/, Ci=5nF, Li=30)μH	
Freihelten Mellene	Recommended	V 40/D0				5 ~ 15			
Excitation Voltage	Max.	V AC/DC				20			
	Excitation	_				410 ± 10			
Terminal Resistance	Output	Ω				350 ± 4			
Insulation Posistance @50\/D0	·	ΜΩ				> 5000			
Insulation Resistance @50VDC		V AC				> 5000			
Breakdown Voltage	Oneine Flament	V AC	-						
Material	Spring Element		1			Aluminium			
	Enclosure		ļ			none			
	Cable					PVC			
	Туре					potted			
Protection	IP Rating					IP 67			
	NEMA Rating					NEMA 6/6P			
	Safe	0/ D 0				150			
Load Limit	Ultimate	%R.C.				300			
Safe Dynamic Load		%R.C.			-	70			
Fatigue Life		cycles @R.C.				> 1000000	-		
		-,0.00 010.0.	1						
Direction of Loading		mm (in)	beam						
Deflection @ R.C., nominal			0.3 (0.012)						
Weight, nominal		kg (lb)	0.5 (1.1)						
Cable Length		m (ff)	1 (3.3), 3m (6.6)						
Barometric Pressure Effect on Zero Load Output		kg/kPa (lb/in.Hg)	none						
Safe Side Load		%R.C.				100			
Overload Protection						none			
Mounting Screw	Grade					12.9			
	Size/thread	mm (in)				M6x1			
	Engaged Length	mm (in)			-	12 (0.47)			
	Torque, nominal	N.m (ff-lb)	1			10 (7.5)			
Max Platter Size		cm x cm (in x in)				35 x 35 (14 x 1	4)		
Off Center Load Error, R76-1	-		+			0.0057 (0.014)			
On Center Loud Effor, R76-1		%A.L./cm (/in)	1			0.0007 (0.014	J)		

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

⁴⁾ See certificate for complete information.

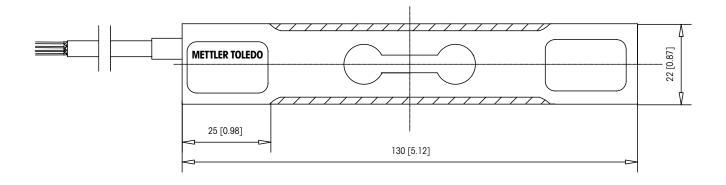


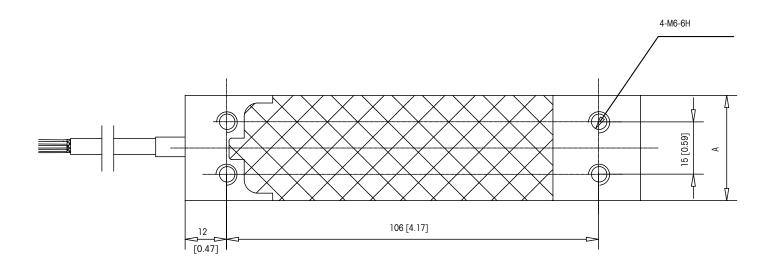




²⁾ Typical values only. The sum of errors due to Combined Error and Temperature Effect on Sensitivity comply with the requirements of OIML R60 and NIST HB44.
³⁾ A.L. = Applied Load

MT1022 Load Cell Dimensional Drawings mm [inch]





Load Cell Capacity	А
3, 5, 7 kg	25.4 (1.0)
10 , 15, 20, 30 kg	30 (1.18)

MT1022 Load Cell Order Information

Description		Item No.
Load cell, model no. MT1022-3kg	1m Cable	71201825
Load cell, model no. MT1022-5kg	1m Cable	71201826
Load cell, model no. MT1022-7kg	1m Cable	71201827
Load cell, model no. MT1022-10kg	1m Cable	71207450
Load cell, model no. MT1022-15kg	1m Cable	71201829
Load cell, model no. MT1022-20kg	1m Cable	71201830
Load cell, model no. MT1022-30kg	1m Cable	71207741
Load cell, model no. MT1022-3kg	3m Cable	72208506
Load cell, model no. MT1022-5kg	3m Cable	72208507
Load cell, model no. MT1022-7kg	3m Cable	72208508
Load cell, model no. MT1022-10kg	3m Cable	72208509
Load cell, model no. MT1022-15kg	3m Cable	72208510
Load cell, model no. MT1022-20kg	3m Cable	72208511
Load cell, model no. MT1022-30kg	3m Cable	72208512

Bolded entries are stocked

MT1022 Load Cell **Cable Colours**

Colour	Function
Green	+ Excitation
Black	Excitation
Red	+ Signal
White	— Signal
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 MT1022 is provided with C3 approval acc. to OIML R60. Thus best weighing performance is guaranteed at all specified conditions. Benefit from METTLER TOLEDO experience.



ensures maximum availability and service life of your product.





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