

Series R01 rugged smart sensors are designed for measuring tension and compression force, with applications in virtually every industry. Durable S-Beam design with threaded holes on two sides allows for many configurations. The sensor can be integrated into an existing system or mounted to a Mark-10 test stand. A shortened cable is available for mounting to certain test stand models (when equipped with optional AC1062 mounting kit)*. Capacities available from 50 to 10,000 lbf [250 N to 50 kN]. Compatible with Mark-10 indicators (sold separately) through unique Plug & Test® technology. Includes a certificate of calibration with data. A combined certificate for the sensor and an indicator is available at time of order, part no. CERT-SI.

Specifications

Accuracy:	±0.15% of full scale + indicator
Safe Overload:	150% of full scale
Weight:	1.9 to 3.0 lb [0.9 to 1.4 kg], depending on model

Features



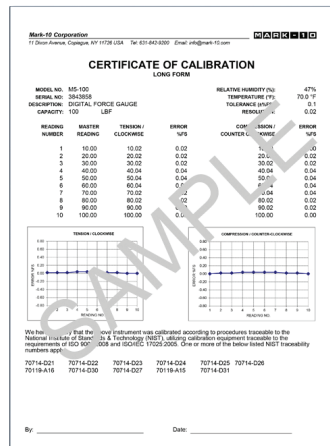
- Unique Plug & Test® technology allows for interchangeable sensors to be used with any Mark-10 indicator. All calibration and configuration data is saved in the smart connector.



- The Plug & Test® connector locks into the receptacle in the indicator when fully inserted. Dual buttons on the indicator housing release the connector for easy removal. Gold plated spring contacts ensure long lasting and reliable connection.

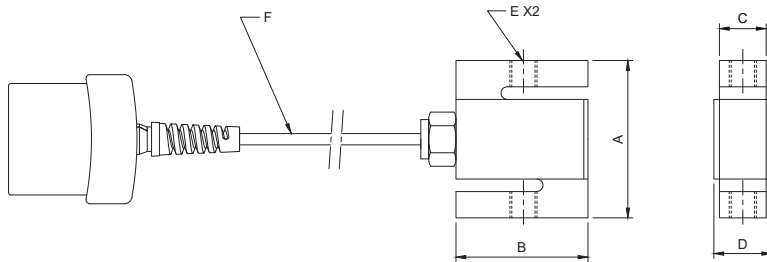


- Series R01 sensor with shortened cable is shown mounted to a legacy ESM1500LC test stand.*



- Included certificate of calibration contains 10 data points in each measuring direction. A combined certificate for the sensor and an indicator is available at time of order, part no. CERT-SI.

Dimensions in [mm]



Optional Items

**AC1062****Test stand mounting kit**

Adapts a Series R01 sensor to a legacy ESM303 test stand*.

**AC1018****Test stand mounting kit**

Adapts a Series R01 sensor to most test stands (except TSB100 and legacy models ESM303, ESM303H, ESM1500, ESM1500S, ESM750, and ESM750S)

Model No.	A	B	C	D	E	F			
MR01-50	2.40 [61.0]	2.00 [50.8]	0.46 [11.7]	0.90 [22.9]	1/4-28 UNF	MR01-XXXXX: 20 ft [6 m] MR01-XXXX-1* 10 in [254 mm]*			
MR01-100			0.71 [18.0]	1.10 [27.9]	1/2-20 UNF				
MR01-200									
MR01-300									
MR01-500									
MR01-750									
MR01-1000			3.90 [99.1]	3.00 [76.2]	0.96 [24.4]		1.40 [35.6]	3/4-16 UNF	
MR01-1500									
MR01-2000	1.21 [30.7]	1.63 [41.4]							
MR01-5000									
MR01-10000									

Capacity x Resolution

Model No.	With Models M71 & M51 indicators						With Model M31 indicator			
	lbF	ozF	gF	kgF	N	kN	lbF	kgF	N	kN
MR01-50	50 x 0.02	800 x 0.5	25000 x 10	25 x 0.01	250 x 0.1	-	50 x 0.05	25 x 0.02	250 x 0.2	-
MR01-100	100 x 0.05	1600 x 1	50000 x 20	50 x 0.02	500 x 0.2	-	100 x 0.1	50 x 0.05	500 x 0.5	-
MR01-200	200 x 0.1	3200 x 2	-	100 x 0.05	1000 x 0.5	1 x 0.0005	200 x 0.2	100 x 0.1	1000 x 1	-
MR01-300	300 x 0.2	4800 x 5	-	150 x 0.1	1500 x 1	1.5 x 0.001	300 x 0.5	150 x 0.2	1500 x 2	-
MR01-500	500 x 0.2	8000 x 5	-	250 x 0.1	2500 x 1	2.5 x 0.001	500 x 0.5	250 x 0.2	2500 x 2	-
MR01-750	750 x 0.5	12000 x 10	-	375 x 0.2	3750 x 2	3.75 x 0.002	750 x 0.5	375 x 0.2	3750 x 2	-
MR01-1000	1000 x 0.5	16000 x 10	-	500 x 0.2	5000 x 2	5 x 0.002	1000 x 1	500 x 0.5	5000 x 5	-
MR01-1500	1500 x 1	24000 x 20	-	750 x 0.5	7500 x 5	7.5 x 0.005	1500 x 2	750 x 1	7500 x 10	-
MR01-2000	2000 x 1	32000 x 20	-	1000 x 0.5	10000 x 5	10 x 0.005	2000 x 2	1000 x 1	10000 x 10	-
MR01-5000	5000 x 2	-	-	2500 x 1	25000 x 10	25 x 0.01	5000 x 5	2500 x 2	-	25 x 0.02
MR01-10000	10000 x 5	-	-	5000 x 2	50000 x 25	50 x 0.02	10000 x 10	5000 x 5	-	50 x 0.05

* Add suffix "-1" for shortened cable, for use on legacy ESM1500LC, ESM1500SLC, ESM750SLC, ESM303, and ESM303H test stands. Ex: MR01-1000-1.

Test stand mounting hardware is included with "-1" versions.

Note that MR01-5000 and MR01-10000 cannot be mounted to legacy ESM303 or ESM303H test stands.