

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.

## Specifications

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

## Features



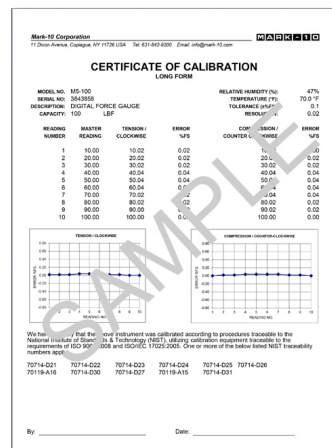
< Unique Plug & Test™ technology allows for interchangeable sensors to be used with any Mark-10 indicator. All calibration and configuration data is saved in the smart connector.



< 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.



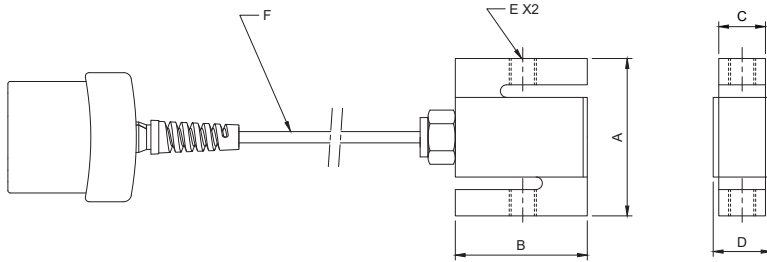
< Series R01 sensor with shortened cable is shown mounted to an ESM1500LC test stand.\*



< Included certificate of calibration contains 10 data points in each measuring direction.

## Dimensions

in [mm]



## Optional Items



### AC1062

#### Test stand mounting kit

Adapts a Series R01 sensor to an ESM303 test stand\*.



### AC1018

#### Test stand mounting kit

Adapts a Series R01 sensor to most test stands (except ESM303, ESM303H, ESM1500, ESM1500S, ESM750S, & TSB100)

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

## Capacity x Resolution

| Model No.  | With Models 7i & 5i indicators |            |            |            |            |              | With Model 3i 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 the 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 the ESM303 or ESM303H test stands.