

Series R04 smart sensors are designed for tension and compression measurement applications with tight space constraints. These extremely compact force sensors feature threaded holes on two sides, which can accept a variety of hooks and implements. Capacities available from 0.25 to 100 lbf [1 to 500 N]. Compatible with Mark-10 indicators (sold separately) through unique Plug & Test® technology. Includes a certificate of calibration with data.

Specifications

| | |
|-----------------------|---------------------------------|
| Accuracy: | ±0.2% of full scale + indicator |
| Safe Overload: | 200% of full scale |
| Weight: | 0.015 lb [0.007 kg] |

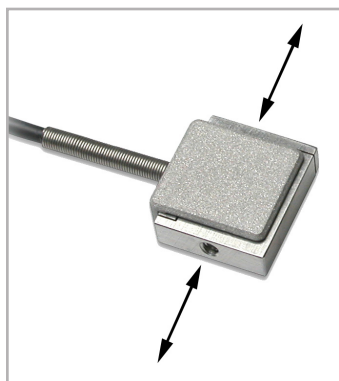
Features



< 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.



< Force is applied to these surfaces. Threaded holes are supplied on both sides to accommodate various mounting configurations and attachments.

Mark-10 Corporation
11 Deer Avenue, Croydon, NY 11732 USA Tel: 631-842-9200 Email: info@mark-10.com

CERTIFICATE OF CALIBRATION

LONG FORM

| MODEL NO. | 100-100 | RELATIVE HUMIDITY (%) | 47% | | |
|----------------|---------------------|-----------------------|---------|--------------|-------|
| SERIAL NO. | 28-0205 | TEMPERATURE (°F) | 70.0 °F | | |
| DESCRIPTION: | DIGITAL FORCE GAUGE | TOLERANCE (MAX) | ± 0.1 | | |
| CAPACITY: | 100 LBF | RESOLUTION | 0.02 | | |
| READING NUMBER | READING | TENSION / COMPRESSION | ERROR | COY. TYPICAL | ERROR |
| 1 | 10.00 | 10.02 | 0.02 | 20.00 | 0.02 |
| 2 | 20.00 | 20.02 | 0.02 | 30.00 | 0.02 |
| 3 | 30.00 | 30.02 | 0.02 | 40.00 | 0.04 |
| 4 | 40.00 | 40.04 | 0.04 | 50.00 | 0.04 |
| 5 | 50.00 | 50.04 | 0.04 | 60.00 | 0.04 |
| 6 | 60.00 | 60.04 | 0.04 | 70.00 | 0.04 |
| 7 | 70.00 | 70.02 | 0.02 | 80.00 | 0.02 |
| 8 | 80.00 | 80.02 | 0.02 | 90.00 | 0.02 |
| 9 | 90.00 | 90.00 | 0.00 | 100.00 | 0.00 |
| 10 | 100.00 | 100.00 | 0.00 | | |

MARK-10 CORPORATION

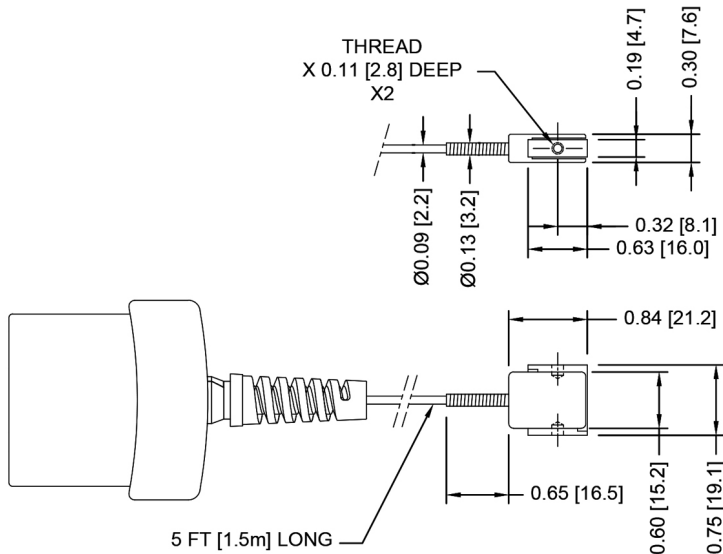
We have tested this Force Sensor and found it to be in compliance with the requirements of ISO 9001:2008 and ISO/IEC 17025:2005. One or more of the below listed NIST Traceability numbers apply.

70714-021 70714-022 70714-023 70714-024 70714-025 70714-026
70718-A10 70714-020 70714-027 70718-A15 70714-028

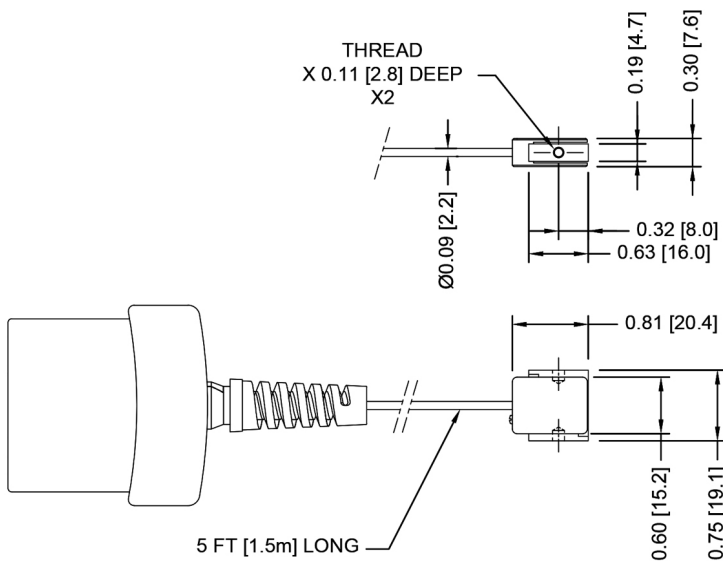
By: _____ Date: _____

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

Dimensions in [mm]



| Model No. | Thread |
|-----------|-----------|
| MR04-025M | M3 x 0.5 |
| MR04-2 | #4-40 UNC |
| MR04-5 | |
| MR04-10 | |
| MR04-20 | |
| MR04-50 | |
| MR04-100 | |



| Model No. | Thread |
|-----------|----------|
| MR04-05M | M3 x 0.5 |
| MR04-2M | |
| MR04-5M | |
| MR04-10M | |
| MR04-20M | |
| MR04-50M | |
| MR04-100M | |

Capacity x Resolution

| Model No. | With Models 7i & 5i indicators | | | | | | With Model 3i indicator | | | |
|----------------------|--------------------------------|-----------|------------|-------------|-------------|------------|-------------------------|-----------|-------------|-------------|
| | lbF | ozF | gF | kgF | N | mN | lbF | gF | kgF | N |
| MR04-025M | 0.25 x 0.0001 | 4 x 0.002 | 100 x 0.05 | - | 1 x 0.0005 | 1000 x 0.5 | 0.25 x 0.0002 | 100 x 0.1 | - | 1 x 0.001 |
| MR04-05M | 0.5 x 0.0002 | 8 x 0.005 | 250 x 0.1 | - | 2.5 x 0.001 | 2500 x 1 | 0.5 x 0.0005 | 250 x 0.2 | - | 2.5 x 0.002 |
| MR04-2 / MR04-2M | 2 x 0.001 | 32 x 0.02 | 1000 x 0.5 | 1 x 0.0005 | 10 x 0.005 | - | 2 x 0.002 | - | 1 x 0.001 | 10 x 0.01 |
| MR04-5 / MR04-5M | 5 x 0.002 | 80 x 0.05 | 2500 x 1 | 2.5 x 0.001 | 25 x 0.01 | - | 5 x 0.005 | - | 2.5 x 0.002 | 25 x 0.02 |
| MR04-10 / MR04-10M | 10 x 0.005 | 160 x 0.1 | 5000 x 2 | 5 x 0.002 | 50 x 0.02 | - | 10 x 0.01 | - | 5 x 0.005 | 50 x 0.05 |
| MR04-20 / MR04-20M | 20 x 0.01 | 320 x 0.2 | 10000 x 5 | 10 x 0.005 | 100 x 0.05 | - | 20 x 0.02 | - | 10 x 0.01 | 100 x 0.1 |
| MR04-50 / MR04-50M | 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 |
| MR04-100 / MR04-100M | 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 |