

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]

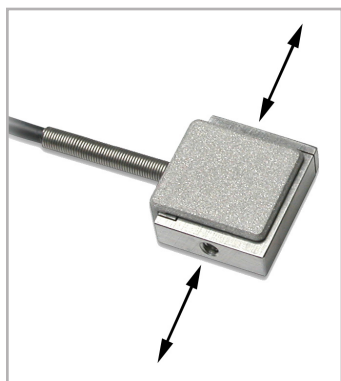
Features



< 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.

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CERTIFICATE OF CALIBRATION

LONG FORM

MODEL NO.	100-100	RELATIVE HUMIDITY (%)	47%			
SERIAL NO.	28-02058	TEMPERATURE (°F)	70.0 °F			
DESCRIPTION:	DIGITAL FORCE GAUGE	TOLERANCE (MAX)	± 0.1			
CAPACITY:	100 LBF	RESOLUTION	0.02			
READING NUMBER	WEIGHT READING	TENSION/COMPRESSION	ERROR	CONF. CODE	SIGN	ERROR
1	10.00	10.02	0.02			0.0
2	20.00	20.02	0.02			0.02
3	30.00	30.02	0.02			0.02
4	40.00	40.04	0.04			0.04
5	50.00	50.04	0.04			0.04
6	60.00	60.04	0.04			0.04
7	70.00	70.02	0.02			0.04
8	80.00	80.02	0.02			0.02
9	90.00	90.00	0.00			0.02
10	100.00	100.00	0.00			0.00

Two graphs showing force vs. reading for tension and compression. The tension graph shows a linear relationship with a slope of 1.00. The compression graph shows a linear relationship with a slope of 1.00.

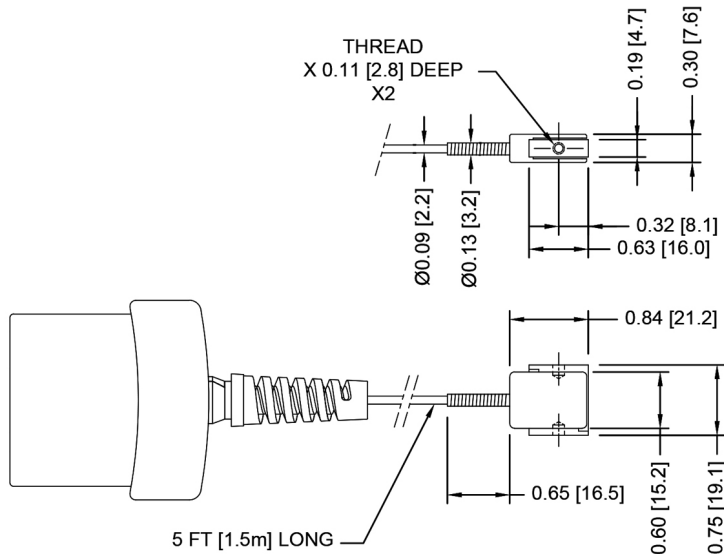
We have calibrated this force sensor according to procedures traceable to the National Institute of Standards and Technology (NIST) using calibration equipment traceable to the requirements of ISO 9001 and ISO/IEC 17025:2005. One or more of the below listed NIST Traceability numbers apply:

70714-021 70714-022 70714-023 70714-024 70714-025 70714-026
70718-A10 70714-020 70714-027 70718-A15 70714-031

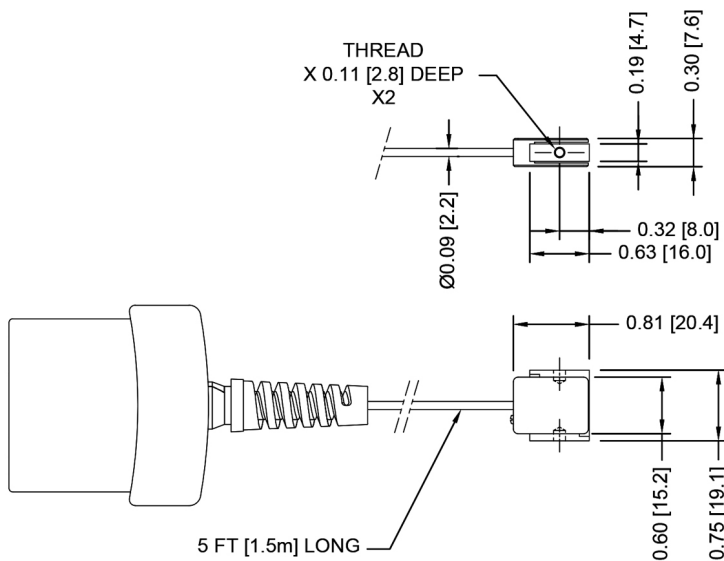
By: _____ Date: _____

< 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