## SERIES R51 - PLUG AND TEST™ TORQUE SENSOR

eries R51 smart sensors measure bi-directional torque for numerous applications across virtually all industries. Interchangeable Jacobs chucks and bit holder add flexibility for a variety of applications. The sensors can be used as hand held devices or mounted to a test stand. Superb overload protection adds peace of mind. Capacities available from 10 ozFin to 100 lbFin [7 to 1150 Ncm]. Compatible with Mark-10 model 5i and 3i indicators (sold separately) through unique Plug & Test<sup>TM</sup> technology.

- COMPATIBLE WITH THE 5i AND 3i DIGITAL **INDICATORS**
- UNIQUE PLUG & TEST™ CONNECTOR **HOLDS ALL CALIBRATION AND CONFIGURATION DATA**
- OUTSTANDING OVERLOAD PROTECTION
- INTERCHANGEABLE CHUCKS (ORDER SEPARATELY)
- NIST-TRACEABLE CERTIFICATE OF **CALIBRATION INCLUDED**
- ACCURACY: ± 0.20% OF FULL SCALE ±1 **DIGIT + INDICATOR**
- WEIGHT: FROM 1.4 LBS (0.6 KG)

## SPECIFICATIONS

ACCURACY: ±0.2% of full scale + indicator

CHUCK OPENING

RANGE:

G1016-1: 0.028 - 0.25 in [0.7 - 6.3 mm] G1016-2: 0.062 - 0.375 in [1.6 - 9.5 mm] G1016-3: 0.078 - 0.5 in [2.0 - 12.7 mm]

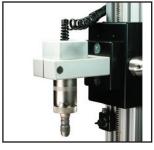
G1017: 0.25 in [6.3 mm] hex

SAFE OVERLOAD: MR51-10Z - MR51-50Z: 300% of full scale

MR51-12 - MR51-100: 150% of full scale

WEIGHT: From 1.4 lb [0.6 kg]





A Series R51 torque sensor is shown mounted to a model TSTM motorized torque test stand using optional AC1015 mounting kit.



Series R51 feature unique interchangeability with three chuck attachment sizes as well as a bit holder. The attachment is mated to the main sensor body with a pin, while a threaded ring holds the attachment in place.



The Plug & TestTM 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 llasting and reliable connection.

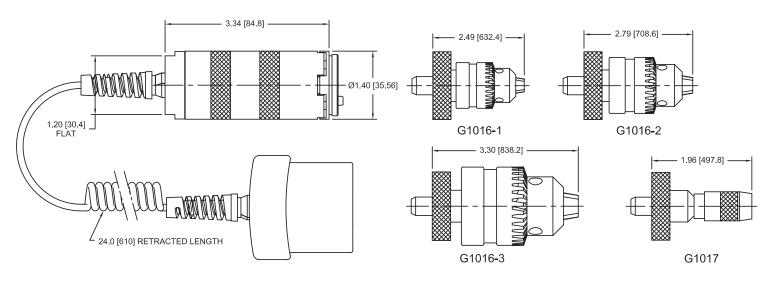
Unique Plug & Test<sup>TM</sup>

interchangeable sensors to be used with a Mark-10 model 5i or 3i indicator. All

smart connector.



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Optional Item						
G1016-1	Jacobs chuck for R51, 0.028 -0.25 in					
G1016-2 *	Jacobs chuck for R51, 0.062 - 0.375 in					
G1016-3 *	Jacobs chuck for R51, 0.078 - 0.5 in					
G1017	Bit holder for R51, 0.25 in					
AC1015	Mounting kit, R51 to torque test stand					

<sup>\*</sup> Due to the increased possibility of overload, these attachments are recommended for use only with an MR51-12 or higher capacity model.

	CAPACITY x RESOLUTION with Model 5i indicator								
Model No.	ozFin	lbFin	lbFft	gFcm	kgFmm	Nmm	Ncm	Nm	
MR51-10Z	10 x 0.005	-	-	700 x 0.5	7 x 0.005	70 x 0.05	7 x 0.005	-	
MR51-20Z	20 x 0.01	-	-	1400 x 1	14 x 0.01	140 x 0.1	14 x 0.01	-	
MR51-50Z	50 x 0.02	-	-	3600 x 2	36 x 0.02	350 x 0.2	35 x 0.02	-	
MR51-12	-	12 x 0.005	1 x 0.0005	-	140 x 0.1	-	135 x 0.1	1.35 x 0.001	
MR51-50	-	50 x 0.02	4 x 0.002	-	580 x 0.5	-	570 x 0.5	5.7 x 0.005	
MR51-100	-	100 x 0.05	8 x 0.005	-	1150 x 0.5	-	1150 x 0.5	11.5 x 0.005	

	CAPACITY x RESOLUTION with Model 3i indicator								
Model No.	ozFin	lbFin	kgFmm	Ncm					
MR51-10Z	10 x 0.01	-	7 x 0.005	7 x 0.005					
MR51-20Z	20 x 0.02	-	14 x 0.01	14 x 0.01					
MR51-50Z	50 x 0.05	-	36 x 0.05	35 x 0.05					
MR51-12	-	12 x 0.01	140 x 0.1	135 x 0.1					
MR51-50	-	50 x 0.05	580 x 0.5	570 x 0.5					
MR51-100	-	100 x 0.1	1150 x 1	1150 x 1					