



# RTSX-A

## Rotary Torque & Angle Transducer

### KEY FEATURES

- Accuracy  $\pm .25\%$  of full scale.
- Ability to measure the rotation angle of a fastener. Joint rate and breakaway torque can be measured too.
- Angle Output: 2 channel quadrature, 360 pulses per rotation.
- Bi-directional.
- For use with most power tools or rotational measurement applications.
- Features "ARC" technology, an instant auto-recognition system of the RTSX-A connected to the TorqueMate® Plus.

CONNECT WITH A:



### TorqueMate® Plus

Torque Analyzer with three operation modes and seven units of torque measurement.  
SEE PAGE O1.6

### Torque Ranges

Model	Item #	Torque Ranges	
		American	S.I.
RTSX10i-HA	170039	1 - 10 lbf.in	11.3 - 113 cN.m
RTSX10i-A	170038	1 - 10 lbf.in	11.3 - 113 cN.m
RTSX50i-HA	170028	5 - 50 lbf.in	56.5 - 565 cN.m
RTSX50i-A	170026	5 - 50 lbf.in	56.5 - 565 cN.m
RTSX100i-HA	170022	10 - 100 lbf.in	113 - 1130 cN.m
RTSX100i-A	170021	10 - 100 lbf.in	113 - 1130 cN.m
RTSX200i-HA	170029	20 - 200 lbf.in	226 - 2260 cN.m
RTSX200i-A	170023	20 - 200 lbf.in	226 - 2260 cN.m
RTSX50F-A	170024	5 - 50 lbf.ft	6.8 - 67.8 N.m
RTSX100F-A	170025	10 - 100 lbf.ft	13.6 - 135.6 N.m
RTSX400F-A	170031	40 - 400 lbf.ft	54.2 - 542.4 N.m
RTSX800F-A	170032	80 - 800 lbf.ft	108.4 - 1084 N.m

### SPECIFICATIONS

- Output at Rated Capacity:  $\leq 6$  Nm [53 lbf.in] rated torque 1 mV/V  
 $> 6$  Nm [53 lbf.in] rated torque 2 mV/V
- Interchangeability: Matched for mv/v and Shunt Calibration + 0.3% FS
- Nonlinearity: +0.2% FS
- Excitation Recommended: 12V DC or AC RMS
- Bridge Resistance: 350 Ohms
- Usable Temperature Range: 41 - 122°F
- Mating Connector: Bendix PT06A-12
- Safe Overload: 125% of Rated Output



### RTSX-A CABLE

Item #065151  
For connecting to TorqueMate® Plus

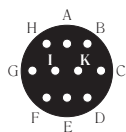
### CONNECTION

#### Torque Output

- A = Bridge Voltage (+)
- B = Bridge Voltage (-)
- C = Measured Signal (+)
- D = Measured Signal (-)
- E = Ground (Angle Voltage)
- F = +5V (Angle Voltage)

#### Angle Output

- G = Channel A (Load)
- H = Channel B (Lag)
- I = N/A
- K = 100% Control (Full Scale)

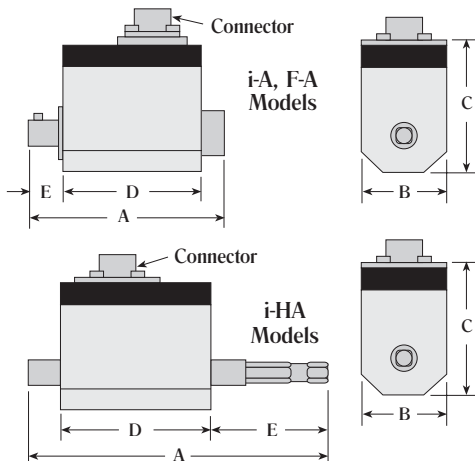


### mm DIMENSIONS

Model	A	B	C	D	E
RTSX10i-HA	101	28	52	58	28
RTSX10i-A	75	28	52	58	8.5
RTSX50i-HA	101	28	52	58	28
RTSX50i-A	75	28	52	58	8.5
RTSX100i-HA	101	28	52	58	28
RTSX100i-A	75	28	52	58	8.5
RTSX200i-HA	101	28	52	58	28
RTSX200i-A	75	28	52	58	8.5
RTSX50F-A	101	38	58	59	21.5
RTSX100F-A	106	38	58	59	26
RTSX400F-A	135	58	76	64	40
RTSX800F-A	177	73	90	73	57.5

### inches DRIVE SIZE

Model	Input	Output
RTSX10i-HA	1/4 Male/Hex	1/4 Female/Hex
RTSX10i-A	1/4 Female/Square	1/4 Male/Square
RTSX50i-HA	1/4 Male/Hex	1/4 Female/Hex
RTSX50i-A	1/4 Female/Square	1/4 Male/Square
RTSX100i-HA	1/4 Male/Hex	1/4 Female/Hex
RTSX100i-A	1/4 Female/Square	1/4 Male/Square
RTSX200i-HA	1/4 Male/Hex	1/4 Female/Hex
RTSX200i-A	1/4 Female/Square	1/4 Male/Square
RTSX50F-A	3/8 Female/Square	3/8 Male/Square
RTSX100F-A	1/2 Female/Square	1/2 Male/Square
RTSX400F-A	3/4 Female/Square	3/4 Male/Square
RTSX800F-A	1 Female/Square	1 Male/Square



### CERTIFIED

Supplied with NIST-Traceable Certification of Calibration



### WARNING!

Not recommended for impact wrenches.