

BLRTSX

Brushless Rotary Torque Transducer

TRANSDUCERS



| Model | Item # | Torque Ranges | |
|--------------|--------|-----------------|-----------------|
| | | American | S.I. |
| BLRTSX28z-H | 170041 | 10 - 28 ozf.in | 7 - 20 cN.m |
| BLRTSX70z-H | 170044 | 10 - 70 ozf.in | 7 - 49 cN.m |
| BLRTSX140z-H | 170046 | 25 - 140 ozf.in | 18 - 98.8 cN.m |
| BLRTSX18i-H | 170048 | 2 - 18 lbf.in | 22.5 - 203 cN.m |
| BLRTSX50i-H | 170050 | 5 - 50 lbf.in | 56.5 - 565 cN.m |
| BLRTSX50i | 170052 | 5 - 50 lbf.in | 56.5 - 565 cN.m |
| BLRTSX100i-H | 170054 | 10 - 100 lbf.in | 113 - 1130 cN.m |
| BLRTSX100i | 170056 | 10 - 100 lbf.in | 113 - 1130 cN.m |
| BLRTSX160i-H | 170058 | 16 - 160 lbf.in | 180 - 1807 cN.m |
| BLRTSX160i | 170060 | 16 - 160 lbf.in | 180 - 1807 cN.m |
| BLRTSX18F | 170062 | 2 - 18 lbf.ft | 2.5 - 25 N.m |
| BLRTSX36F | 170064 | 4 - 36 lbf.ft | 5 - 50 N.m |
| BLRTSX73F | 170066 | 8 - 73 lbf.ft | 10 - 100 N.m |
| BLRTSX118F | 170068 | 12 - 118 lbf.ft | 16 - 160 N.m |
| BLRTSX184F | 170070 | 19 - 184 lbf.ft | 25 - 250 N.m |
| BLRTSX368F | 170072 | 37 - 368 lbf.ft | 50 - 500 N.m |
| BLRTSX738F | 170074 | 74 - 738 lbf.ft | 100 - 1000 N.m |

DRIVE SIZE

| Model | Input | Output |
|--------------|-------------------|-----------------|
| BLRTSX28z-H | 1/4 Male/Hex | 1/4 Female/Hex |
| BLRTSX70z-H | 1/4 Male/Hex | 1/4 Female/Hex |
| BLRTSX140z-H | 1/4 Male/Hex | 1/4 Female/Hex |
| BLRTSX18i-H | 1/4 Male/Hex | 1/4 Female/Hex |
| BLRTSX50i-H | 1/4 Male/Hex | 1/4 Female/Hex |
| BLRTSX50i | 1/4 Female/Square | 1/4 Male/Square |
| BLRTSX100i-H | 1/4 Male/Hex | 1/4 Female/Hex |
| BLRTSX100i | 1/4 Female/Square | 1/4 Male/Square |
| BLRTSX160i-H | 1/4 Male/Hex | 1/4 Female/Hex |
| BLRTSX160i | 1/4 Female/Square | 1/4 Male/Square |
| BLRTSX18F | 3/8 Female/Square | 3/8 Male/Square |
| BLRTSX36F | 3/8 Female/Square | 3/8 Male/Square |
| BLRTSX73F | 1/2 Female/Square | 1/2 Male/Square |
| BLRTSX118F | 1/2 Female/Square | 1/2 Male/Square |
| BLRTSX184F | 3/4 Female/Square | 3/4 Male/Square |
| BLRTSX368F | 3/4 Female/Square | 3/4 Male/Square |
| BLRTSX738F | 1 Female/Square | 1 Male/Square |



CERTIFIED

Supplied with NIST-Traceable Certification of Calibration

SPECIFICATIONS

| |
|---|
| Rated Output: $\pm 5\text{VDC} \pm 0.2\%$ FS |
| Excitation Recommended: 11 to 26VDC (pole secure) |
| Nonlinearity: $\pm .2\%$ FS |
| Usable Temperature Range 41 to 122°F |
| Mating Connector: Tuchel Series 581 (98-2030-09-12) |
| Safe Overload: 125% of Rated Output |



RUN DOWN ADAPTERS

Provides consistent and reliable torque readings for use with power driven torque control tools.

SEE PAGE 01.20

ANALYZERS

SEE PAGES 01.3 - 01.6



BLRTSX CABLE

Item #065158

For connecting to TorqueLab®

Item #065134

For connecting to TorqueMate® Plus

CONNECTION

A = Ground (Shunt Calibration)

C = Torque Output

D = Ground (Torque Output)

E = Ground (Supply)

F = + 12V (Supply)

K = Shunt Calibration

M = Shield

B/G/H/J/L = N/A



KEY FEATURES

Accuracy $\pm .2\%$ of full scale.

Non-contact signal transfer and maintenance free.

The common "brush bounce" that plagues the accuracy testing of pulse tools is cured when using a BLRTSX.

Bi-directional.

Compact Design.

For use with most power tools, high RPM tools, or rotational measurement applications.

DIMENSIONS

| Model | A | B | C | D | E |
|--------------|------|----|----|----|------|
| BLRTSX28z-H | 101 | 28 | 52 | 58 | 28 |
| BLRTSX70z-H | 101 | 28 | 52 | 58 | 28 |
| BLRTSX140z-H | 101 | 28 | 52 | 58 | 28 |
| BLRTSX18i-H | 101 | 28 | 52 | 58 | 28 |
| BLRTSX50i-H | 101 | 28 | 52 | 58 | 28 |
| BLRTSX50i | 75 | 28 | 52 | 58 | 8.5 |
| BLRTSX100i-H | 101 | 28 | 52 | 58 | 28 |
| BLRTSX100i | 75 | 28 | 52 | 58 | 8.5 |
| BLRTSX160i-H | 101 | 28 | 52 | 58 | 28 |
| BLRTSX160i | 75 | 28 | 52 | 58 | 8.5 |
| BLRTSX18F | 74.5 | 38 | 58 | 44 | 18 |
| BLRTSX36F | 74.5 | 38 | 58 | 44 | 18 |
| BLRTSX73F | 79 | 38 | 58 | 44 | 22.5 |
| BLRTSX118F | 79 | 38 | 58 | 44 | 22.5 |
| BLRTSX184F | 97 | 58 | 76 | 50 | 30 |
| BLRTSX368F | 97 | 58 | 76 | 50 | 30 |
| BLRTSX738F | 112 | 73 | 90 | 57 | 34.5 |

