

Transducers



BLRTSX-R/RA

Brushless Rotary Torque & Angle Shaft Transducer
with ARCII Technology

SPECIFICATIONS

Rated Output: $\pm 5\text{VDC} \pm 0.2\% \text{ FS}$
Excitation Recommended: 11VDC to 26VDC (pole secure)
Nonlinearity: + 0.2% FS
Usable Temperature Range: 41 - 122° F
Mating Connector: Tuscel Series 581 (98-2030-09-12)
Safe Overload: 150% of Rated Output

BLRTSX-RA PIN CONNECTION

A = Ground (Shunt Calibration)
B = Angle1 Speed
C = Torque Output
D = Ground (Torque Output)
E = Ground (Supply)
F = +12V (Supply)
G = Angle 2 (90 running after Angle 1)
H = +5V (Angle Voltage)
K = Shunt Calibration
M = Shield
J/L = N/A

BLRTSX-R/RA CABLE

Item #072001
For connecting a BLRTSX-R/RA to the PTT or LTT.

BLRTSX-R PIN CONNECTION

A = Ground (Shunt Calibration)
C = Torque Output
D = Ground (Torque Output)
E = Ground (Supply)
F = Supply, 11-26 VDC, 1 W
K = Shunt Calibration
M = Shield
B/G/H/J/L = N/A

KEY FEATURES

- Accuracy $\pm 0.2\%$ of full scale.
- Non-contact signal transfer and maintenance free.
- Compact design & bi-directional.
- Used in-line with rotating shafts or nutrunners for feed back control.
- Motor testings, high RPM Tools or rotational measurement applications.

RA Models:

- Angle output 2-channel quadrature
- 360 pulses per rotation
- Ability to measure the rotation angle of a fastener
- Joint rate & breakaway torque can be measured too

Features "ARCII" technology, an instant auto-recognition system of the BLRTSX-R/RA connected to the PTT or LTT.

Model	Item #	Torque Ranges	
		American	S.I.
BLRTSX140z-R	170260	25 - 140 ozf.in	18 - 98.8 cN.m
BLRTSX140z-RA	170261	25 - 140 ozf.in	18 - 98.8 cN.m
BLRTSX18i-R	170262	2 - 18 lbf.in	22.5 - 203 cN.m
BLRTSX18i-RA	170263	2 - 18 lbf.in	22.5 - 203 cN.m
BLRTSX44i-R	170264	4 - 44 lbf.in	45.2 - 497 cN.m
BLRTSX44i-RA	170265	4 - 44 lbf.in	45.2 - 497 cN.m
BLRTSX89i-R	170266	10 - 89 lbf.in	113 - 1005 cN.m
BLRTSX89i-RA	170267	10 - 89 lbf.in	113 - 1005 cN.m
BLRTSX177i-R	170268	18 - 177 lbf.in	203.4 - 2000 cN.m
BLRTSX177i-RA	170269	18 - 177 lbf.in	203.4 - 2000 cN.m
BLRTSX36F-R	170270	4 - 36 lbf.ft	5 - 50 N.m
BLRTSX36F-RA	170271	4 - 36 lbf.ft	5 - 50 N.m
BLRTSX73F-RA	170272	8 - 73 lbf.ft	10 - 100 N.m
BLRTSX148F-RA	170273	15 - 148 lbf.ft	20 - 200 N.m
BLRTSX368F-RA	170274	37 - 368 lbf. ft	50 - 500 N.m
BLRTSX738F-RA	170275	74 - 738 lbf.ft	100 - 1000 N.m

R models are Torque only transducers.

RA models are Torque & Angle transducers.

* With feather keyways (2x180°)

DIMENSIONS

Model	A	B	C	D	E	F	G	N
BLRTSX140z-R	92	28	52	10	16	17	58	Shaft
BLRTSX140z-RA	92	28	52	10	16	17	58	Shaft
BLRTSX18i-R	92	28	52	10	16	17	58	Shaft
BLRTSX18i-RA	92	28	52	10	16	17	58	Shaft
BLRTSX44i-R	92	28	52	10	16	17	58	Shaft
BLRTSX44i-RA	92	28	52	10	16	17	58	Shaft
BLRTSX89i-R	92	28	52	10	16	17	58	Shaft
BLRTSX89i-RA	92	28	52	10	16	17	58	Shaft
BLRTSX177i-R	108	38	58	19	30	32	44	*
BLRTSX177i-RA	104	38	58	16	20	23	59	*
BLRTSX36F-R	108	38	58	19	30	32	44	*
BLRTSX36F-RA	104	38	58	16	20	23	59	*
BLRTSX73F-RA	125	58	76	28	27	30.5	64	*
BLRTSX148F-RA	125	58	76	28	27	30.5	64	*
BLRTSX368F-RA	197	73	90	42	58	62	73	*
BLRTSX738F-RA	197	73	90	42	58	62	73	*

