

E-series Strain Gauge Base-mounted Torque Transducers



The E-series Strain Gauge Base-mounted Transducer takes advantage of TorqView®, our new virtual instrumentation display system technology. Each transducer in the family contains an embedded non-volatile memory chip storing data on parameters, calibration etc., which are passed to the interface/readout module (E101 or E102) and then as an option to a host PC running under Windows® software. This provides the user with a very cost-effective solution to measuring, recording and displaying data from a wide variety of applications.

A substantial easily-mounted body houses the shaft and strain gauge assembly. The shaft is mounted on its outer end in a ball race, ensuring accurate torque transmission. A chuck accommodates simple adapters which can be supplied having standard square dimensions (see table), or machined to suit specific applications.

Cable length:	2 metres standard.
Power supply:	From E101 or E102 module (±5V).
Outputs:	See data sheets for E101 and E102.
Accuracy:	± 0.5% standard; ±0.1% to order.
Linearity:	± 0.25% standard; ± 0.1% to order.
Safe mechanical overload:	200% of rating.
Temperature range:	0-50 °C standard. Others to order.
Temperature coefficient:	Less than 0.05% per °C. Others to order.
Hysteresis:	Better than 0.1%

Mechanical parameters



E100SBT/ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Torque range			interchangeable sample disc A/F
	S.I.	F.P.S.	M.K.S.	
	0-200 mN.m	0-20 ozf.in	0-2000 gf.cm	0.250 in.
	0-500 mN.m	0-50 ozf.in	0-5000 gf.cm	0.250 in.
	----	0-100 ozf.in	----	0.250 in.
	0-1 N.m	0-10 lbf.in	0-10 kgf.cm	0.250 in.
	0-2 N.m	0-20 lbf.in	0-20 kgf.cm	0.250 in.
	0-5 N.m	0-50 lbf.in	0-50 kgf.cm	0.250 in.
	0-10 N.m	0-100 lbf.in	0-100 kgf.cm	0.375 in.
	0-20 N.m	0-200 lbf.in	0-200 kgf.cm	0.375 in.
	0-50 N.m	0-500 lbf.in	0-500 kgf.cm	0.500 in.
	0-100 N.m	0-100 lbf.ft	0-10 kgf.m	0.500 in.
	0-200 N.m	0-200 lbf.ft	0-20 kgf.m	0.750 in.
	0-500 N.m	0-500 lbf.ft	0-50 kgf.m	0.750 in.
	0-1000 N.m	0-1000 lbf.ft	0-100 kgf.m	1.000 in.
	0-2000 N.m	0-2000 lbf.ft	0-200 kgf.m	1.500 in.
	0-5000 N.m	0-5000 lbf.ft	0-500 kgf.m	1.500 in.

Sample discs can also be supplied blank, or drilled and tapped to required thread.



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