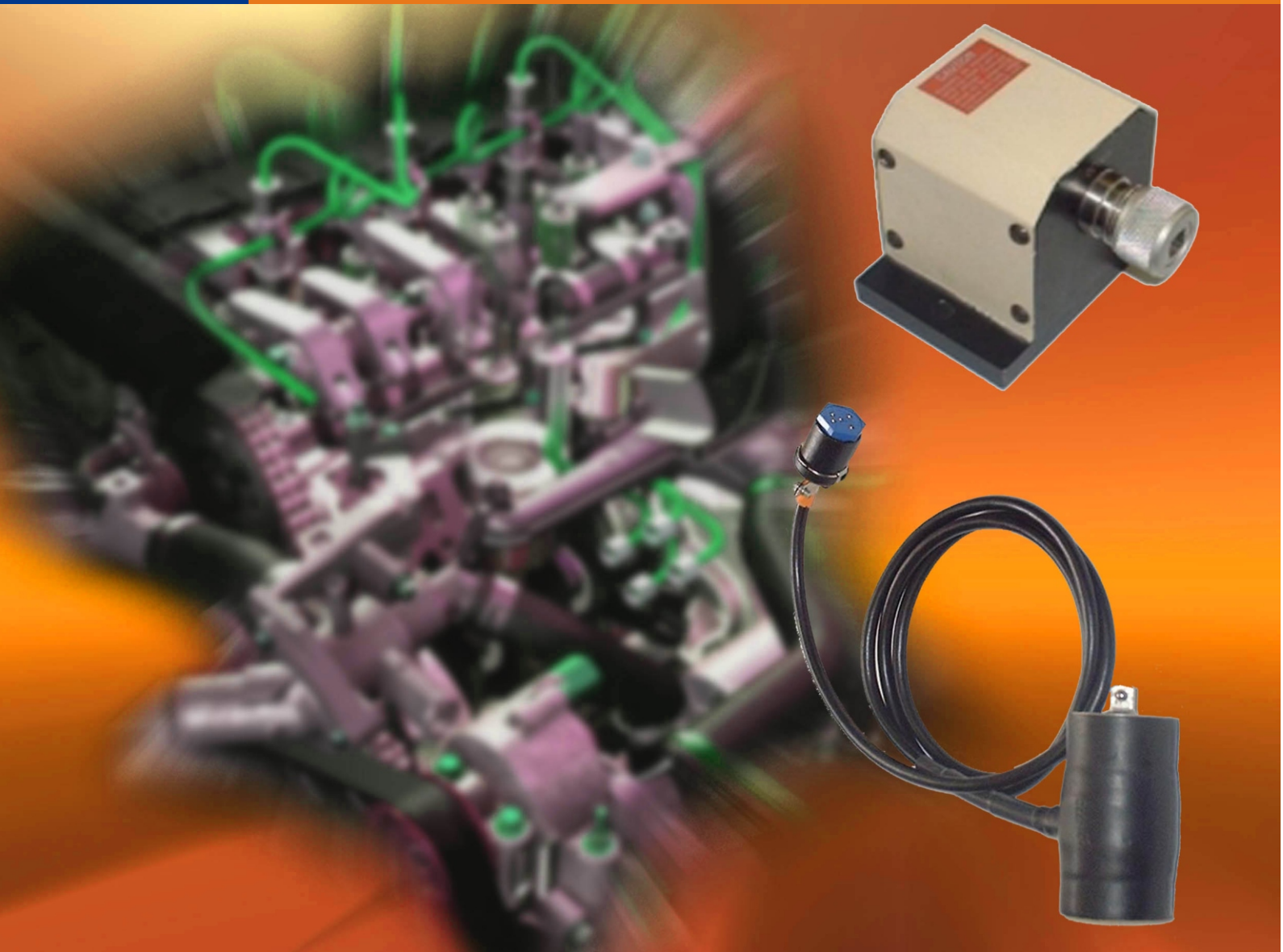


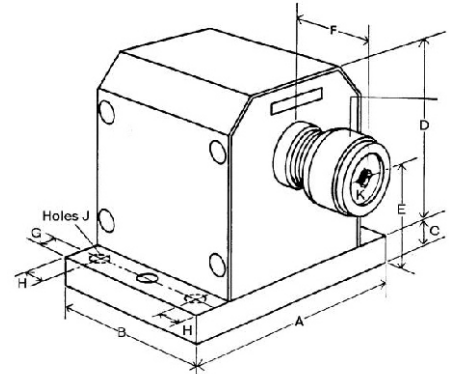
E100 SBT/SIT series
Torque Transducer
200mNm to 5000Nm



Strain Gauge Base-Mounted Torque Transducer [SBT]

General Description

The E100 SBT (Strain Gauge Base-Mounted) Transducer has a substantial easily mounted body, which 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 with standard square dimensions (see table), or machined to suit specific applications. Transducers can be used with customers own strain gauge amplifier system, or with our E101/2 Transducer Display interface.



Standard Specifications

Model E100SBT	Full Scale Deflection (Calibration in any of the units below is possible)					Interchangeable sample disc A/F (in.)	
	S.I. units	F.P.S units		M.K.S units			
E100SBT-1	0-200	mNm	0-20	ozf.in	0-2	kgf.cm	0.250
E100SBT-2	0-500	mNm	0-50	ozf.in	0-5	kgf.cm	0.250
E100SBT-3			0-100	ozf.in			0.250
E100SBT-4	0-1	Nm	0-10	lbf.in	0-10	kgf.cm	0.250
E100SBT-5	0-2	Nm	0-20	lbf.in	0-20	kgf.cm	0.250
E100SBT-6	0-5	Nm	0-50	lbf.in	0-50	kgf.cm	0.250
E100SBT-7	0-10	Nm	0-100	lbf.in	0-100	kgf.cm	0.375
E100SBT-8	0-20	Nm	0-200	lbf.in	0-200	kgf.cm	0.375
E100SBT-9	0-50	Nm	0-500	lbf.in	0-500	kgf.cm	0.500
E100SBT-10	0-100	Nm	0-100	lbf.ft	0-10	kgf.m	0.500
E100SBT-11	0-200	Nm	0-200	lbf.ft	0-20	kgf.m	0.750
E100SBT-12	0-500	Nm	0-500	lbf.ft	0-50	kgf.m	0.750
E100SBT-13	0-1000	Nm	0-1000	lbf.ft	0-100	kgf.m	1.000
E100SBT-14	0-2000	Nm	0-2000	lbf.ft	0-200	kgf.m	1.500
E100SBT-15	0-5000	Nm	0-5000	lbf.ft	0-500	kgf.m	1.500

Mechanical Parameters

Model	Dimensions (mm)									
	A	B	C	D	E	F	G	H	J	
E100SBT-1 - E100SBT-9	127	76	13	78	51	32	10	--	8mm Ø (two holes)	
E100SBT-10 - E100SBT-13	146	124	16	106	70	51	13	24	13mm Ø (four holes)	
E100SBT-14 - E100SBT-15	307	153	25	180	127	51	13	51	19mm Ø (four holes)	

Cable length	2 metres
Outputs	See E101/2 data sheets
Power supply	From E101/2 module ($\pm 4V$)
Accuracy	$\pm 0.5\%$ FSD; $\pm 0.1\%$ to order
Linearity	$\pm 0.25\%$; $\pm 0.1\%$ to order
Temperature range	-10°C to + 50°C
Temperature coefficient	Less than 0.05% per °C.
Hysteresis	Better than 0.1%
Safe mechanical overload	400% of rating
Memory	Embedded non-volatile memory chip contains calibration data