interface

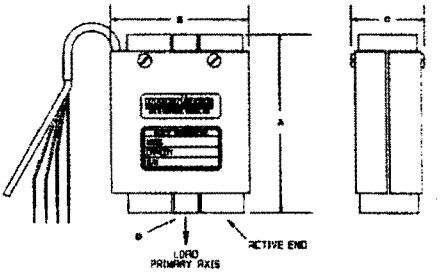
ADVANCED FORCE MEASUREMENT

SMT

CALIBRATION CERTIFICATE
INSTALLATION INFORMATION

INSTALLATION DIMENSIONS

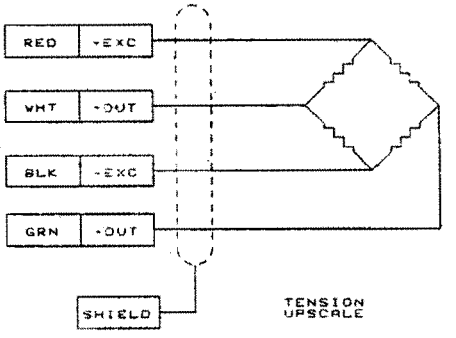
MODEL	units	A	B	C	D (top & bottom)
SMT1-					
1.1, 2.2, 11, 22 (lbf)	in	2.48	2.28	0.75	0.25-28 UNF X 0.31 deep
5N, 10N, 50N, 100N	mm	63	57.9	19.1	M6 X 1.0-6H X 8.0 deep
SMT2-					
112, 225, 450 (lbf)	in	2.98	2.28	1.26	0.50-20 UNF X 0.57 deep
500N, 1000N, 2000N	mm	75.7	57.9	32.0	M12 X 1.75-6H X 14.5 deep



ELECTRICAL INFORMATION

The SMT1 through SMT2 Model load cells are supplied with a 4-conductor shielded cable (AWG28) 5ft (1.5m) long.

CABLE (ALL MODELS)	
COLOR	**FUNCTION**
Red	+Excitation
Green	+Output
White	-Output
Black	-Excitation
Shield	No Connection



Wiring Code Complies with ISA S37.8 "Specification and Tests for Strain Gage Force Transducers" and SMA Load Cell Terminology.

APPLICATION NOTES

1. **MOUNTING TORQUE SPECIFICATIONS**
   At least one diameter thread engagement is desirable for mounting of the load cell. Jam nuts may be used but are not required. React torque only on the load cell structure adjacent to the mounting surface or jam nut and limit torque to the following recommended specifications.

CAPACITY	1.1lbf, 5N	2.2lbf, 10N	11lbf, 50N	22lbf, 100N	112lbf, 500N	225lbf, 1000N	450lbf, 2000N
inch-lb	5	5	20	20	100	200	300
N-m	0.6	0.6	2	2	11	22	33

2. The SMT Model load cells incorporate a unique overload protection system which provides up to ten times rated load in both tension and compression without degradation of performance. This feature makes SMT's very useful in process, medical and pharmaceutical weighing, as well as automotive, aircraft, dynamometer, and small rocket engine test applications where forces need to be measured under comparatively large overload conditions.

3. The force to be measured should be applied to the active end of the cell to eliminate possible errors due to cable interaction. The above figure can be utilized to identify the active end of the load cell.

PERFORMANCE DATA

SMT MODEL LOAD CELL

Rated Output-mV/V Nominal 2.0
Input Resistance-ohms ..... 350 +50/-3.5
Output Resistance-ohms ..... 350 ±3.5
Recommended Excitation-VDC 10
Nonlinearity-% Full Scale ..... < ±0.05
Hysteresis-% Full Scale ..... < ±0.03
Compensated Temperature Range ..... 0 - 125°F
(-15 - 50°C)
Temperature effect on Zero-% Rated Output/100°F (55.6°C) ..... < ±0.15
Zero Balance-%Rated Output ..... < ±3.0

INTERFACE, INC.
7401 E. BUTHERUS Dr.
Scottsdale, Arizona 85260 U.S.A.
Telephone: (602) 948-5555 • Fax: (602) 948-1924

WARRANTY & CERTIFICATION STATEMENT ON OTHER SIDE