STELLAR TECHNOLOGY

ISO 9001/AS9100 Certified

YOUR ENGINEERED SOLUTION SOURCE SM

BEM980

LOW PROFILE BEAM LOAD CELL

DESCRIPTION

The Series BEM980 load cells are high accuracy, low profile force sensors for tension and compression applications. Constructed of stainless steel, these bonded foil strain gaged force sensors provide reliable performance for demanding applications.

Features include shock and vibration protection. BEM980 load cells are ideal for force measurement applications in factory automation, robotics, and structural analysis where space limitations require a low profile force sensor. These load cells are often used in combination with our LVDT's for force versus displacement measurements. Each unit is shipped with a 5 point calibration record traceable to NIST as standard.

STANDARD FEATURES

- Ultra Low Profile
- 0.10% Accuracy
- Tension and Compression
- 2 mV/V
- Stainless Steel
- -40°F to 250°F Standard Temperature
- Shock and Vibration Resistant
- 5 Point Calibration Record Traceable to NIST

OPTIONAL FEATURES

- Multiple Bridges
- Special Full Scale Ranges
- Metric Versions
- Special Calibration
- Customer Specified Cable Lengths
- -65°F to +400°F Operating Temperature

PERFORMANCE

STANDARD RANGES
500, 1000, 2500, 5000 lbs.

OUTPUT
2mV/V nominal.

ACCURACY
0.10% BFSL.

TEMPERATURE EFFECT ON ZERO
0.005% FSO/°F.

TEMPERATURE EFFECT ON SPAN
0.005% Reading/°F.

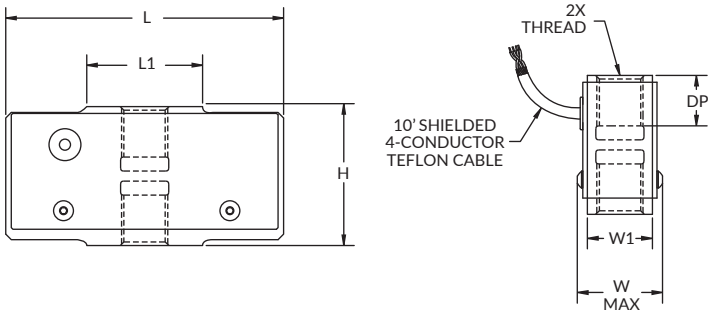
ZERO BALANCE
1% FSO.

ENVIRONMENTAL CHARACTERISTICS

OPERATING TEMPERATURE RANGE
-40°F to 250°F.
(-65°F to 400°F optional.)

COMPENSATED TEMPERATURE RANGE
70°F to 170°F.
(-40°F to 400°F optional.)

A US Manufacturer of: Pressure, Temperature, Load/ Force/Torque, and Displacement Sensors.



CAPACITY (LBS)	L	L1	W	W1	H	THREAD	DP	NATURAL RINGING FREQUENCY (HZ)	DEFLECTION	WT (OZ)
500	3.00	1.25	1.00	0.70	1.50	1/2-20 UNF	0.53	2100	0.003	12
1000	3.00	1.25	1.00	0.70	1.50	1/2-20 UNF	0.53	2850	0.003	12
2000	3.00	1.25	1.25	0.95	1.63	1/2-20 UNF	0.53	5000	0.003	17
3000	4.00	1.79	1.50	1.20	1.75	1/2-20 UNF	0.53	4500	0.005	34
5000	4.12	1.79	1.88	1.62	2.00	3/4-16 UNF	0.75	6250	0.005	43

MECHANICAL CHARACTERISTICS

STATIC OVERLOAD WITHOUT DAMAGE
150% FSO.

STANDARD CALIBRATION
Tension only:
5 points (0, 50%, 100%, 50%, 0 of FSO).

OPTIONAL CALIBRATIONS
- Compression only:
  5 points (No charge option)
- Tension and Compression:
  5 points in each direction
- Special multipoint calibration
  (customer specified):
  in tension or compression or
  both tension and compression.

MATERIAL
Stainless steel environmentally protected.

THREADS
See table.

ELECTRICAL CHARACTERISTICS

BRIDGE RESISTANCE
350 Ohms nominal.

EXCITATION
10 Vdc or Vac.

INSULATION RESISTANCE
Greater than 5000 megaohms at 50 Vdc.

ELECTRICAL TERMINATION
10', 4 Conductor Shielded Teflon Cable.

CONNECTOR PINS (STANDARD)

RED	+EXE	GREEN	+SIG
BLACK	- EXE	WHITE	- SIG

Customer specified wiring codes
are available.

CE

MODIFICATIONS AND WARRANTY
MODIFICATIONS: We realize transducer applications vary greatly and as such our designs are flexible. Choice of pressure port, electrical termination, material compatibility and performance characteristics are a few of the many options available. Specifications on this datasheet represent the standard configuration only. Product and company names listed are trademarks of their respective companies. Specifications subject to change without notice.
WARRANTY: Stellar Technology warrants that its product shall be free from defective workmanship and/or material for a twelve month period from the date of shipment, provided that Stellar Technology's obligation hereunder shall be limited to correcting any defective material FOB our factory. No allowance will be made for any expenses incurred for correcting any defective workmanship and/or material without written consent by Stellar Technology. This warranty is in lieu of all other warranties expressed or implied.

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Due to the nature of technology, changes are inevitable. For latest technical specifications, see our website.