LowProfile®

Interface Load Cells

DETAIL A
SCALE 4:1

TENSION UPSCALE

PT02E-10-6P

R 59.4 (R 2.34)

22.5°

3

0.4 (.02)

8.0 H9 (.315)

8X 6.6 THRU EQ SP (.26)

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80.00 (.315)

22.5°

30.00 (1.18)

31.00 (.75)

95.0 (3.74)

92.1 (3.63)

74.9 (2.95)

71.8 (2.83)

40.0 (1.58)

19.4 (.76)

41.0 (.158)

1.0 (.04)

7.0 (.28)

30.0 (1.18)

4.0 (.16)

1.0 (.04)

1.0 (.04)

3

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The World Leader in Force Measurement Solutions™
We manufacture more than 60 different types of load cells and mini load cells at Interface.

We have capacities ranging from 1 lbf / 500 gf to 2 million lbf / 9,000 kN. Our facility produces them in several shapes and sizes. Models include pancake load cell and donut load cell in our LowProfile® load cell and thru-hole load cell. Additionally, our canister, rod end, downhole, column, coil tubing, load buttons, and load washers all use our proprietary alloy strain gages. This helps us produce the most accurate and reliable data possible in test and measurement. With the wide variety of load cell specs in stock, most customers are able to use an off-the-shelf application. However, our engineers can also work with you to design a custom load cell to fit your exact needs. Contact us so that we can help you find a solution that fits your requirements.

In-House CNC Machining
- Total control of manufacture and quality standards

Moment Compensated during Production
- Reduces the effects of off-axis loads

TRUE Fatigue Specification
- Fully reversed cycles through zero at full capacity

Class Leading Performance
- Published accuracy (Static Error Band) specification as low as ±0.02%FS and actual performance as low as ±0.01%FS on a regular basis
- Will never be less accurate than published spec

High Quality Threads
- 0.002” perpendicularity
- 0.003” concentrically

Proprietary High Output Strain Gages
- Matched to flexure for best performance
- 8-16 Strain Gages per bridge

Temperature Compensated Strain Gages
- No signal loss from compensation resistors
- Measures temperature at the strain gage

Accurate Machined Base (0.0002” flatness)
- Provides excellent mounting surface

Proprietary Strain Gages
- Higher output
- Higher signal to noise ratio
- Higher resolution
- Superior fatigue life

Rm = Modulus compensating resistor
Rmsh = Fine trim for Rm
Ri = Bridge input resistance trim
Calibration
- Every LowProfile® load cell is individually calibrated in tension and compression with no additional charge
- Allows for the comparison of rated output in tension to the rated output in compression
- We do system calibrations of most load cell brands

Performance Parameters that Set Us Apart from Our Competitors
- **Creep.** Interface is ±0.025%/20 minutes
- **Symmetry.** Interface is less than 0.1% in comparing included tension & compression calibration data
- **Minimum Shift in Zero Balance.** Toggle from complete cycle of tension & compression
- **Parallelism.** 0.002” between top and bottom load surfaces
- **Concentricity.** 0.003” variance between top thread and base thread
- **Surface flatness.** Interface load cell and base maintains 0.0002” flatness

**Made in the USA**
Temperature Effects
- Industry leading temperature performance (0.0004-0.0008%RO/°F)
- Hot and cold temperature compensation to reduce thermal effects
- We test and adjust each sensor at each temperature extreme
- Multiple runs in temperature chamber to validate adjusted final accuracy

Interface Load Cells
- Eccentric Load Compensated
- Low Profile
- Tension & Compression
- Wireless
- Fatigue Rated
- Compression Only
- Amplified
- Flange Mount
- Calibration Grade
- Canister
- Sealed
- Column and Rod End
- Stainless
- Pedal
- Load Button
- Overload Protected
- Load Washer
- Beam Type
- S-Type
- Tension Only
- Single Point

Interface force measurement load cells are available in many design configurations for project designs requiring the highest performance.

To learn more about the Interface products or force measurement solutions call 480-948-5555.
Interface is the world’s trusted leader in technology, design and manufacturing of force measurement solutions. Our clients include a “who’s who” of the aerospace, automotive and vehicle, medical device, energy, industrial manufacturing, test and measurement industries.

Interface engineers around the world are empowered to create high-level tools and solutions that deliver consistent, high quality performance. These products include load cells, torque transducers, multi-axis sensors, wireless telemetry, instrumentation and calibration equipment.

Interface, Inc., was founded in 1968 and is a US-based, woman-owned technology manufacturing company headquartered in Scottsdale, Arizona.