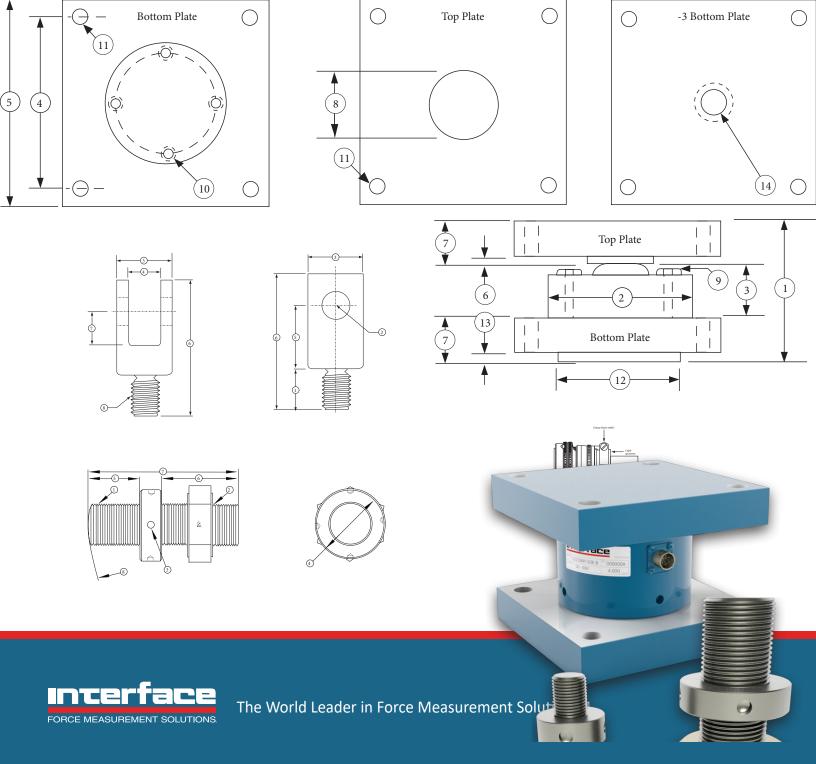
# **Interface** Accessories



## Interface accessories are made from the highest quality components to ensure your Interface products perform to meet their published specifications.

Interface provides shielded cable and mating connectors to calibration adapters and resistors. Our top and bottom plates distribute a load over the support structure foundation and provides a prepared surface for the load cell. Precisely machined clevises, jam nuts, thread adapters, and rod end bearings provide rigid connections and reduce alignment error. Load cell and torque transducer accessories are available in many design configurations and will help you complete your project design with the highest performance and the least amount of trouble possible.

#### **Cable Assemblies**

- Interface uses the highest grade cables and connectors to ensure the performance of your force and torque systems are at the highest level.
  - For connecting transducers to instrumentation
  - Standard and custom lengths
  - Shielded cable

#### **Calibration Adapters**

- Interface uses high grade alloy steel/stainless steel, heat treatment, and machining practices to ensure that the performance of your transducer is maintained to factory standards.
  - Improves accuracy
  - Spherical end for compression loading
  - Metric sizes available

#### Clevises

- Interface provides high grade clevises that will perform in your application as needed while maintaining the level of
  performance you expect from Interface products.
  - Precision machined
  - Commonly used with REBs
  - Male threads

#### Jam Nuts

- Interface Jam Nuts are manufactured to ensure strength and performance of your solution is maintained.
  - Used with REBs, clevises and calibration adapters
  - Flat, parallel surfaces
  - Standard thread sizes



#### Load Buttons

- Interface Load Buttons are made from high grade alloy steel/Stainless steel, heat treated, and precision machined to ensure that the performance of your transducer matches the calibrated at the factory.
  - Converts universal cell to compression only
  - Spherical loading surface
  - For Low Profile, "S" type and Minibeam

#### **Mating Connectors**

- Interface uses the highest grade mating connectors to ensure that the performance of your force and torque solutions are not compromised.
  - Mating connector and cable
  - Dressed pigtails
  - Interconnects between load cell and instruments

#### **Mounting Plates**

- Interface mounting plates are made from the best grade alloy steel/stainless steel, machined to the tightest specifications and are designed specifically to maintain the performance of the load cell in your application.
  - Distributes the load over the foundation of the supporting structure
  - Provides a prepared surface for the load cell
  - Eliminates the requirement for expansion assemblies in most installations

#### **RCAL Resistors**

- Interface RCAL Resistors are high precision components and provide an effective, method for checking the calibration of a load cell system in the field or when a means of applying actual forces is unavailable.
  - Precision wire-wound
  - 5 ppm/°C, 0.01%
  - Used for shunt calibration

#### **Rod End Bearings**

- Interface provides high grade Rod End Bearings that will help couple your load cell to your application solution while maintaining the performance of your load cell.
  - For tension applications
  - Reduces alignment error
  - Metric sizes available

#### **Thread Adapters**

- Interface thread adapters are manufactured with the best practices to ensure that the performance of your transducer is maintained when attached to your force transducer application.
  - Adapts male to female
  - Common Interface thread sizes
  - Adapts one thread size to another

#### **Transducer Electronic Data Sheet (TEDS)**

- Interface TEDS option provides a force or torque transducer with electronic identification, allows sensor/instrument to be "Plug and Play Ready", meets IEEE 1451.4 Standard for Smart Transducer Interface and is available on new or existing sensors.
  - Provides sensor with electronic identification
  - Plug and Play Ready
  - Meets IEEE 1451.4 standard for smart transducer interface
  - Contains sensor information and calibration data
  - Available on new or existing sensors



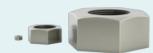
Cable Assemblies Interconnectors Standard and custom lengths



CA Calibration Adapters Metric sizes available



CLV Clevises Male threads



JN Jam Nuts Standard thread sizes



LB Load Buttons Converts universal cell to compression only



MC/CN Mating Connectors Interconnects between load cell and instruments



TP/BP Mounting Plates Bottom Plates Top Plates



**RS RCAL Resistors** Used for shunt calibration



Metric sizes available



TA/THD Thread Adapters Common Interface thread sizes



TEDS Transducer Electronic Data Sheet Contains Sensor Information and Calibration Data



JB104SS 4-Channel Stainless Steel Junction Box 4-Channel Summing

#### **TEDS IEEE 1451.4**

Interface has offered load cells with various types of SELF-ID for many years. The SELF-ID feature eliminates the need to enter data via a keyboard or key panel from a paper calibration sheet into the instrument used with the load cell. This feature offers the following benefits:

- Eliminates potential for data entry error
- Cuts time in half to set up instrument
- Makes swapping of load cells easy
- Increases safety by making certain that system has the correct capacity of the load cell
- Can be used to identify location of load cell
- No need to store calibration sheets, no more paper, no more concern about lost sheets
- Makes inventory control of your load cells easy
- Load cells can be changed out without jeopardizing integrity of system

Now TEDS (Transducer Electronic Data Sheet) provides additional advantages over proprietary SELF-ID because it is an industry standard (IEEE 1451.4) which has the potential to permit mix and matching of load cells and instruments from different manufacturers. IEEE1451.4 specifies a table of identifying parameters that are stored in the load cell in the form of a TEDS. TEDS is a table of parameters that identify the transducer and is held in the transducer on a EEprom for interrogation by external electronics.

- Transducer Electronic Data Sheet (TEDS) SELF-ID Load Cell
- Load cell with electronic identification inside
- Meets IEEE 1451.4 standard for smart transducer interface
- Available on new or existing load cells
- Plug & Play Ready
- Cuts instrument setup time
- Eliminates data entry error
- Sensor information and calibration data

#### Mounting Plates for Low Profile<sup>™</sup> Load Cells

The installation of a compression load cell under a weigh bridge, tank, or other structure normally requires that mounting plates be used. The bottom plate, ground flat to 0.0002 T.I.R. to mate with the load cell and fabricated of mild steel, distributes the load over the foundation or supporting structure and provides a prepared surface for the load cell.

The top plate distributes the load to the weighing structure and provides a hard (Rc 45) surface for the load button. The top plate will move on the button due to thermal expansion, load shifting, wind loading, and other side loads. The high side load capacity of the Interface load cell eliminates the requirement for expansion assemblies in most installations. Mounting plates are suitable for compression loads only; they will not properly support a universal load cell used in tension.

### Interface Accessories

- Cable Assemblies
- Calibration Adapters
- Clevises
- Jam Nuts
- Load Buttons
- Mating Connectors
- Mounting Plates
- RCAL Resistors
- Rod End Bearings
- Thread Adapters
- TEDS

Interface force measurement accessories 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.

