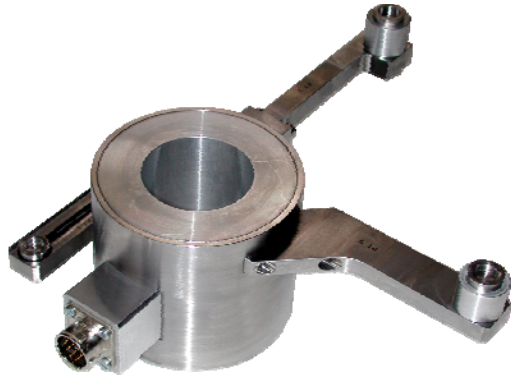


FN7384 Multiaxial Load Cell



- 3 Components Load Cell
- High accuracy
- Multiple designs possible
- Measures force in independent location
- Optional high level output with integrated amplifier

DESCRIPTION

The multi-axial FN7384 is designed for force measurement for tool calibration. Designed for an automotive application, the complete sensor replaces with corresponding dimensions and tolerances, the piece the machine will produce. On strategic places of the mechanic, the arms are equipped with accurate compression load cells.

In production, the customer uses this sensor to adjust the machine before starting his production. All elements are controlled and can be related to national references. It assures the component's manufacturer of its process quality and repeatability.

For a new example of similar application, which uses a sensor designed as a copy of a complex component, please read also the datasheet of FN6115, gearbox transducer.

With many years of experience as a designer and manufacturer of sensors, Measurement Specialties, Inc. often works with customers to design or customize sensors for specific uses and testing environments.

FEATURES

- Exact design of the piece it replaces
- High sensor accuracy (CNL&H < 1% FS)
- Optional integrated amplifier
- Minimal cross effects

APPLICATIONS

- Process machine control
- Calibration tool
- Automotive and aeronautic industries

STANDARD RANGES

| | |
|------------------------|-------------|
| Model | FN7384 |
| Range in N [in lbf] | 25k [5k] |

FN7384 Multiaxial Load Cell

PERFORMANCE SPECIFICATIONS

All values are typical at temperature 20±1°C

| PARAMETERS | |
|---------------------------------------|----------------------------------|
| Operating Temperature Range (OTR) | -20 to 80° C [-4 to 176° F] |
| Compensated Temperature Range (CTR) | 0 to 60° C (32 to 140° F) |
| Zero Shift in CTR | <1% F.S. / 50° C [100° F] |
| Sensitivity Shift in CTR | < 2% of reading / 50° C [100° F] |
| Ranges (F.S.) | 25 kN |
| Over-Range | |
| Without Damage | 1.2 x F.S. |
| Accuracy | |
| Combined non-linearity and hysteresis | ±1% F.S. |

Electrical Characteristics

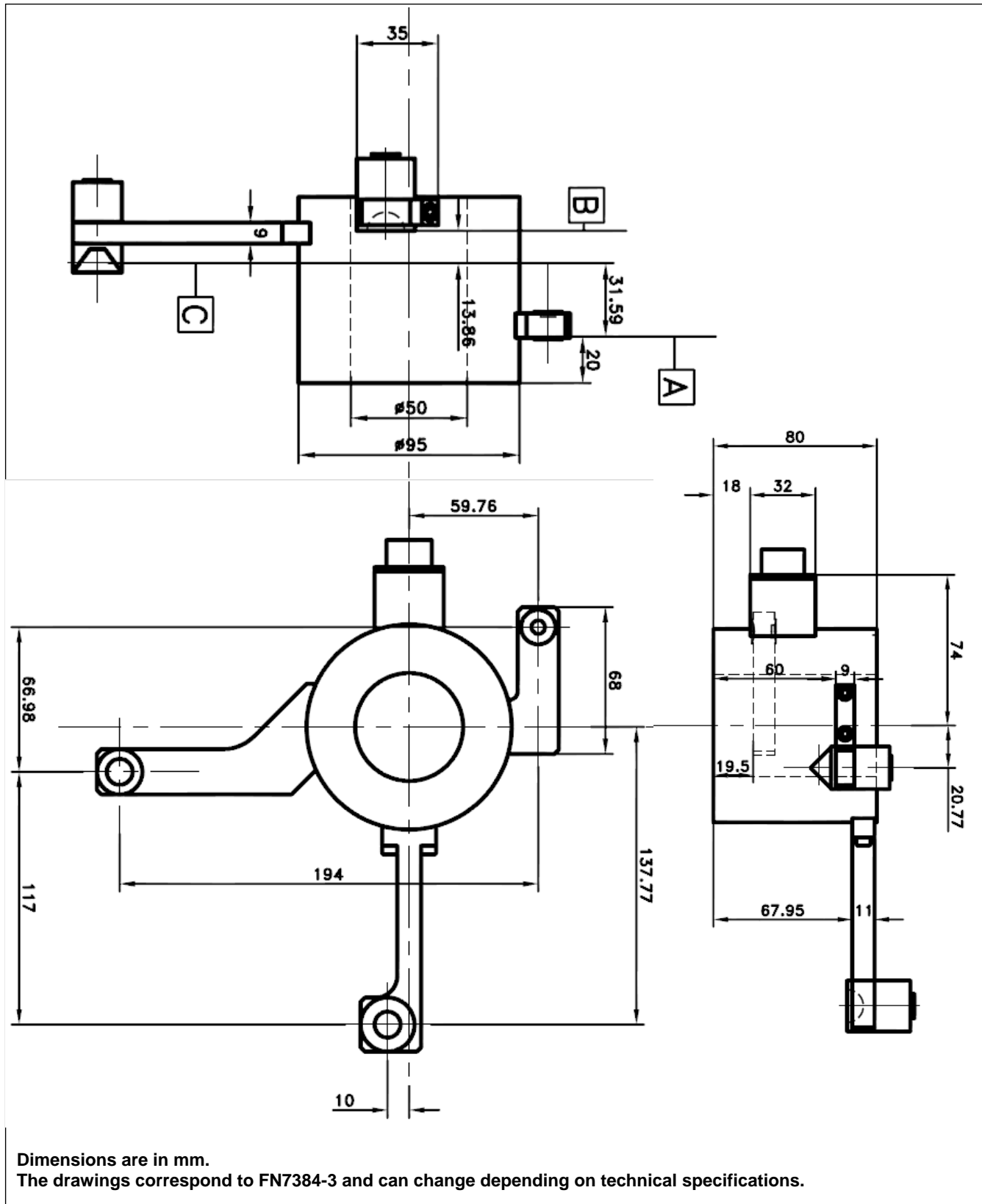
| Model | FN7384 | FN7384-A1 |
|------------------------|-----------|----------------|
| Supply Outage | 5 Vdc | 10 - 30 Vdc |
| F.S. Output | ±1.5 mV/V | 4V ±5% F.S. |
| Zero Offset | ±5% F.S. | 0.5 V ±5% F.S. |
| Insulation under 50Vdc | ≥100MΩ | |

Notes

1. Electrical Termination: Connector output including mate
2. Wiring schematic depends on the sensor and number of channels
3. Materials: Body in stainless steel cover in aluminium alloy
4. Protection index: IP50

FN7384 Multiaxial Load Cell

DIMENSIONS & WIRING SCHEMATIC (IN METRIC)

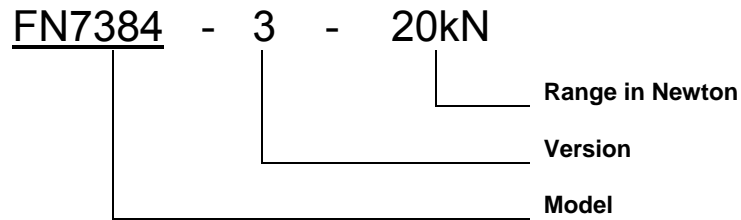


FN7384 Multiaxial Load Cell

OPTIONS

A1 : Amplified Tension output with unipolar power supply

ORDERING INFO



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