

MODELS 3169 AND 3169-106

Tension and compression 500 lbs. to 3,000 lbs.



3169—English Thd.
3169-106—Metric Thd.

MODELS 3169-108 AND 3169-111

Tension and compression 500 lbs. to 3,000 lbs.



3169-108—English Thd.
3169-111—Metric Thd.

FEATURES :

- Stainless steel
- Hermetically sealed
- Barometrically compensated
- Low deflection
- Proven design and performance
- Tension and compression
- Low sensitivity to extraneous loads

The 3169 stainless steel load cell offers sealed, barometrically compensated construction. It is ideally suited for scales and other critical weighing applications. This compact load cell's temperature compensation circuit is located in close proximity to the strain gage bridge which provides more effective compensation where the internal and external load cell temperature can vary. Precision performance as well as the structural integrity required to withstand extraneous loads are also features of this rugged load cell.

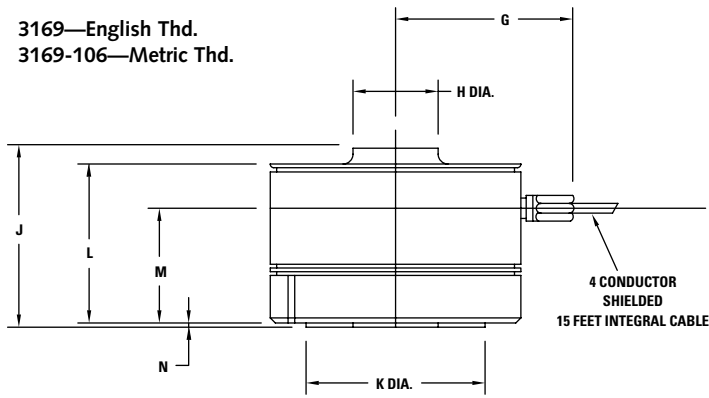
PERFORMANCE SPECS : 3169, 3169-106, 3169-108 AND 3169-111 SPECIFICATIONS

| | |
|--|-------------|
| Output at rated capacity: <i>millivolts per volt, terminal</i> | 2 |
| Nonlinearity: <i>of rated output</i> | ± 0.05% * |
| Hysteresis: <i>of rated output</i> | ± 0.05% * |
| Repeatability: <i>of rated output</i> | ± 0.02% |
| Zero balance: <i>of rated output</i> | ± 5.0% |
| Creep: <i>in 20 minutes of rated output</i> | <± 0.02% |
| Bridge resistance: <i>ohms nominal</i> | 350 |
| Temperature range, compensated: °F | +70 to +170 |
| Temperature range, compensated: °C | +21 to +77 |
| Temperature range, usable: °F | -65 to +200 |
| Temperature range, usable: °C | -54 to +93 |
| Temperature effect on output: <i>of reading per °F</i> | ± 0.002% |
| Temperature effect on output: <i>of reading per °C</i> | ± 0.0036% |
| Temperature effect on zero: <i>of rated output per °F</i> | ± 0.002% |
| Temperature effect on zero: <i>of rated output per °C</i> | ± 0.0036% |
| Excitation voltage, maximum: <i>volts DC or AC rms</i> | 20 |
| Insulation resistance, bridge/case: <i>megohms at 50 VDC</i> | >5,000 |
| Number of bridges: | 1 |

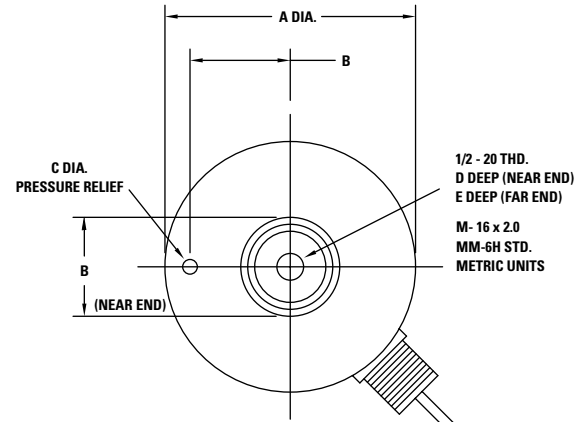
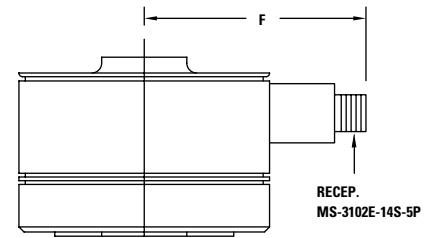
*Model 3169-106, -111: ± 0.1%



3169—English Thd.
3169-106—Metric Thd.



3169-108—English Thd.
3169-111—Metric Thd.



| 3169 | IN. | CM. |
|----------|------|------|
| A | 3.50 | 8.89 |
| B | 1.38 | 3.51 |
| C | 0.13 | 0.33 |
| D | 0.75 | 1.91 |
| E | 0.69 | 1.75 |
| F | 3.31 | 8.41 |
| G | 2.50 | 6.35 |
| H | 1.19 | 3.02 |
| J | 2.50 | 6.35 |
| K | 2.50 | 6.35 |
| L | 2.22 | 5.64 |
| M | 1.53 | 3.89 |
| N | 0.06 | 0.15 |

SENSOR CHARACTERISTICS: 3169

| MODEL NUMBER | NOMINAL LOAD LIMIT CAPACITY F_z | | STATIC OVERLOAD CAPACITY % OF NOM. CAPACITY | STATIC EXTRANEIOUS LOAD LIMITS | | | DEFLECTION AT NOM. LOAD LIMIT INCHES | RINGING FREQUENCY H_z |
|--------------|-----------------------------------|---------|---|--------------------------------|-----------------------------------|-------------------------|--------------------------------------|-------------------------|
| | LBS. | NEWTONS | | SHEAR F_x OR F_y LBS. | BENDING M_x OR M_y LB. INCHES | TORQUE M_z LB. INCHES | | |
| 3169 | 500 | 2K | 150 | 2,619 | 4,583 | 2,895 | 0.003 | 1,950 |
| | 1K | 5K | 150 | 2,619 | 4,583 | 2,895 | 0.003 | 2,440 |
| | 2K | 10K | 150 | 2,619 | 4,583 | 2,895 | 0.003 | 3,900 |
| | 3K | 15K | 150 | 2,619 | 4,583 | 2,895 | 0.003 | 5,000 |