Honeywell

Model 3397

Tension/Compression Pancake Load Cell



DESCRIPTION

These general purpose designs have exceptional structural capability to withstand extraneous loads, such as torque, bending moments, and side loads.

Available in capacities of 25 lb to 300 lb, they offer maximum performance and enhanced accuracy.

Minimum deflection and compactness make these generalpurpose load cells easy to install and use.

FEATURES

- Up to 0.05 % accuracy
- 25 lb to 300 lb range
- Low sensitivity to extraneous loads
- Low deflection
- Built-in temperature compensation

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PERFORMANCE SPECIFICATIONS

| Characteristic | Measure |
|-------------------------|---------------------------------|
| Load range ¹ | 25, 50, 100, 200, 300 lb |
| Non-linearity | ±0.05 % of rated output |
| Hysteresis | ±0.05 % of rated output |
| Repeatability | ±0.02 % of rated output |
| Output @ rated capacity | 2 mV/V ±0.25 % (nominal) |
| Operation | Tension/compression |
| Resolution | Infinite |
| Standard calibration | Tension (+) and compression (-) |

ENVIRONMENTAL SPECIFICATIONS

| Characteristic | Measure |
|----------------------------|------------------------------------|
| Temperature, operating | -54 °C to 93 °C [-65 °F to 200 °F] |
| Temperature, compensated | 21 °C to 77 °C [70 °F to 170 °F] |
| Temperature effect, zero | ±0.002 % of rated output/°F |
| Temperature effect, output | ±0.002 % of reading/°F |

ELECTRICAL SPECIFICATIONS

| Characteristic | Measure |
|-------------------------------|------------------------------------|
| Strain gage type | Foil |
| Excitation (maximum) | 20 Vdc or Vac RMS |
| Insulation resistance | > 5000 mOhm @ 50 Vdc |
| Bridge resistance (tolerance) | 350 ohm |
| Number of bridges | 1 or 2 |
| Zero balance | ±5.0 % |
| Electrical termination | PT02E-10-6P mates with PT06W-10-6S |

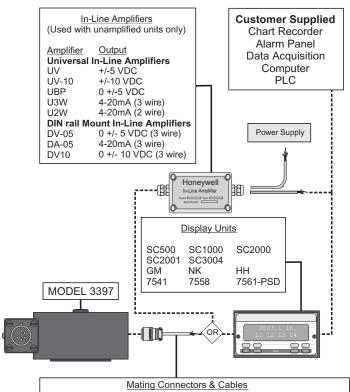
MECHANICAL SPECIFICATIONS

| Characteristic | Measure |
|--------------------------|---------------------------|
| Static overload capacity | 150 % of nominal capacity |
| Material | Carbon steel |
| Natural frequency | See table |

WIRING CODES

| Cable | |
|-------|----------------|
| Red | (+) excitation |
| Black | (-) excitation |
| Green | (+) output |
| White | (-) output |

TYPICAL SYSTEM DIAGRAM



023-LW181-023-LF Mating Connector

7205-76-XX* Mating connector & 6 conductor cable (unamplified unit with sense leads but not shunt cal)

7205-75-XX** Mating connector & 4 conductor cable (unamplified unit without sense leads but not shurit cal) 7205-83-XX* Mating connector & 6 conductor cable

(for connection to instrument 7541)
7205-82-XX** Mating connector & 4 conductor cable
(for connection to instrument 7541)

* XX represents length in feet 100ft maximum
 ** XX represents length in feet 20ft maximum

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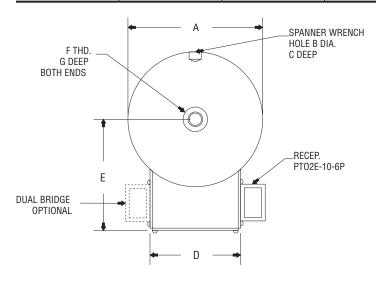
NATURAL FREQUENCY

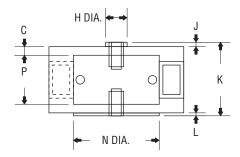
| Nominal load limit capacity F _z | | | Static extraneo | ous load limits | | | |
|--|------|---|---|--|----------------------------------|---|------------------------|
| lb | N | Static over- load capacity (% of nominal capacity) | Shear F _x or F _y (lb) | Bending M _x or M _y (lb-in) | Torque M _z (lb-in) | Deflection at nominal load limit (in) | Ringing frequency (Hz) |
| 25 | 125 | 150 | 150 | 150 | 40 | 0.003 | 2100 |
| 50 | 200 | 150 | 150 | 150 | 40 | 0.003 | 2800 |
| 100 | 500 | 150 | 250 | 180 | 40 | 0.003 | 3800 |
| 200 | 1K | 150 | 250 | 180 | 40 | 0.003 | 5400 |
| 300 | 1.5K | 150 | 250 | 180 | 40 | 0.003 | 7000 |

MOUNTING DIMENSIONS

| Model | A cm [in] | B cm [in] | C cm [in] | D cm [in] | E cm [in] | F cm [in] |
|-------|-------------|-------------|-------------|-------------|-------------|------------|
| 3397 | 6,98 [2.75] | 0,55 [0.22] | 0,32 [0.13] | 4,44 [1.75] | 5,60 [2.22] | - [1/4-28] |

| G cm [in] | H cm [in] | J cm [in] | K cm [in] | L cm [in] | N cm [in] | P cm [in] |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 1,27 [0.50] | 1,10 [0.44] | 0,24 [0.09] | 3,80 [1.50] | 0,16 [0.06] | 4,44 [1.75] | 2,54 [1.00] |





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NOTES

1. This unit calibrated to Imperial (non-Metric) units.

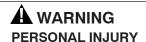
Tension/Compression Pancake Load Cell

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While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

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For more information about Sensing and Control products, visit www.honeywell.com/sensing or call +1-815-235-6847 Email inquiries to info.sc@honeywell.com



• DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.



- The information presented in this catalogue is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

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