

# Model 3632

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## Compression Donut Load Cell



### DESCRIPTION

Model 3632 Compression Donut Load Cell features a smooth thru-hole design for use in applications which require the load structure to pass through the cell. The hollow load cells are

available for compression only loads in capacities of 25K, 50K and 100K lbs. For optimum performance, this load cell must be mounted between load surfaces which are flat and parallel.

### FEATURES

- 25000 lb to 100000 lb range
- Thru-hole design
- Compact column construction
- mV/V output
- 0.15 % linearity

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## PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Load range <sup>1</sup>	25000, 50000, 100000 lb
Non-linearity	±0.15 % of rated output
Hysteresis	±0.15 % of rated output
Repeatability	±0.15 % of rated output
Output @ rated capacity	2 mV/V (nominal)
Operation	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, 25K lb, 50K lb	480 ohm
Bridge resistance, 100K lb	240 ohm
Number of bridges	1
Zero balance	±1.0 %
Electrical termination	PT02E-10-6P

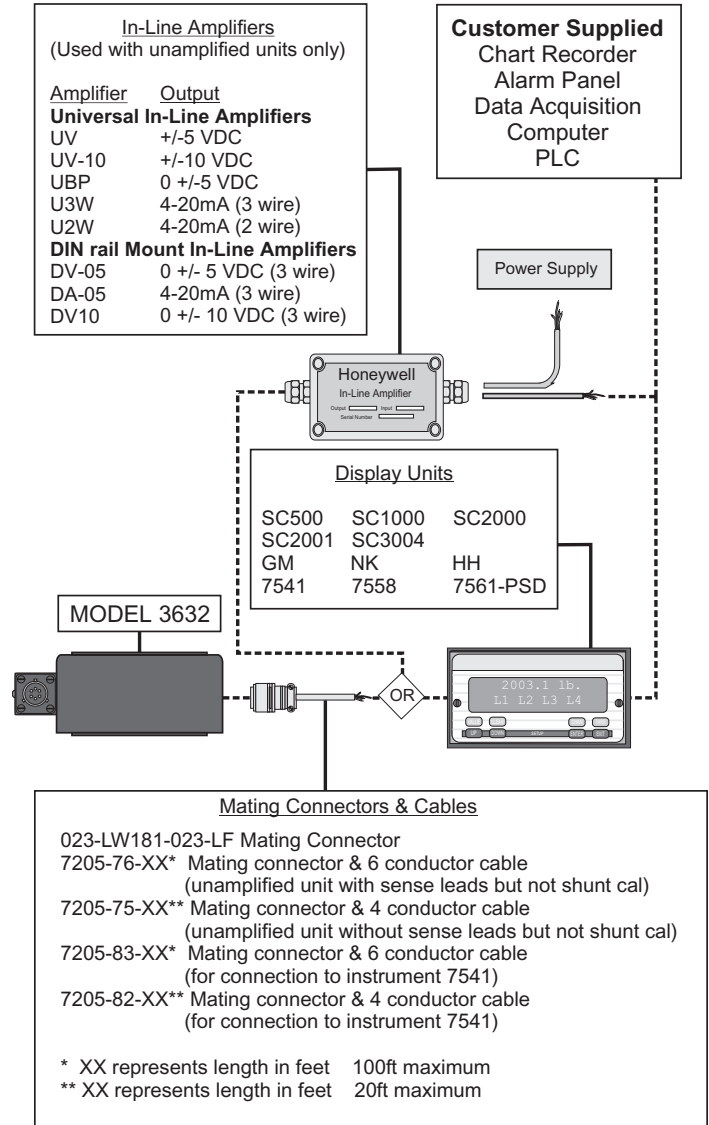
## MECHANICAL SPECIFICATIONS

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



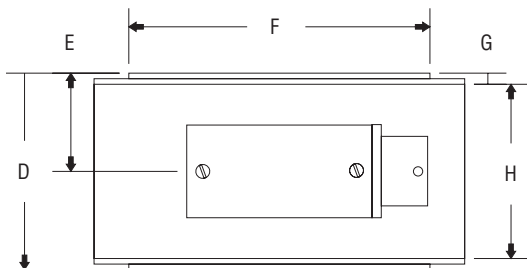
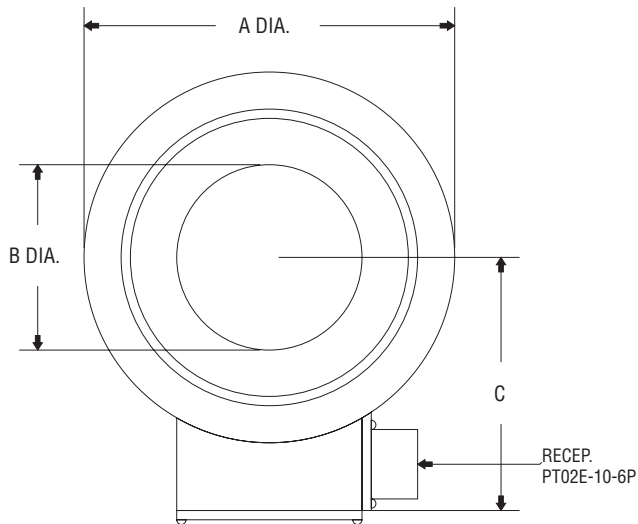
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## NATURAL FREQUENCY

Nominal load limit capacity $F_z$		Static extraneous 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)	Ringling frequency (Hz)
25K	125K	150	2750	18K	3K	0.005	5000
50K	200K	150	5500	36K	13K	0.005	7000
100K	500K	150	13K	91K	27K	0.005	10000

## MOUNTING DIMENSIONS

Model	A cm [in]	B cm [in]	C cm [in]	D cm [in]	E cm [in]	F cm [in]	G cm [in]	H cm [in]
3632	10,16 [4]	5,08 [2]	7,62 [3]	5,08 [2]	2,54 [1]	8,26 [3.25]	0,15 [0.06]	4,78 [1.88]



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## NOTES

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

**Warranty.** Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

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.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

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Email inquiries to [info.sc@honeywell.com](mailto:info.sc@honeywell.com)

 **WARNING**  
**PERSONAL INJURY**

- 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.**

 **WARNING**  
**MISUSE OF DOCUMENTATION**

- 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.

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

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