

# Model 3419

## Seat Belt Load Cell

### DESCRIPTION

The seat belt sensor's design and calibration method essentially make it independent of belt thickness, which may change under load. It provides excellent repeatability without the need for the extensive belt wrap.

### FEATURES

- Up to .1 in of belt thickness
- Small size
- Installs without "threading"
- Low sensitivity to belt thickness change

# Model 3419

## PERFORMANCE SPECIFICATIONS

| Characteristic          | Measure                         |
|-------------------------|---------------------------------|
| Load range              | 3500 lb                         |
| Non-linearity           | ±2 % of rated output            |
| Hysteresis              | ±4 % of rated output            |
| Repeatability           | ±1.0 % of rated output          |
| Output @ rated capacity | 2 mV/V (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   | ±0.003 % of rated output/°F        |
| Temperature effect, output | ±0.003 % 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                      |
| Zero balance                  | ±2.0 %                       |
| Electrical termination        | 6 ft of four-conductor cable |

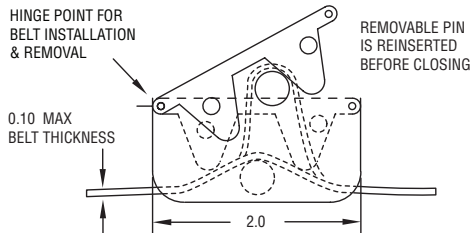
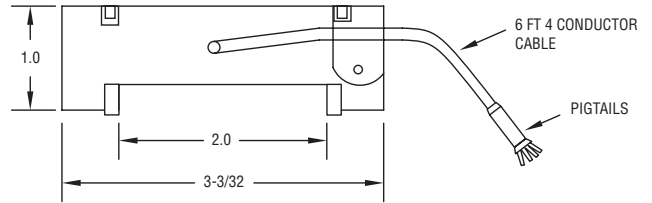
## MECHANICAL SPECIFICATIONS

| Characteristic           | Measure                   |
|--------------------------|---------------------------|
| Static overload capacity | 150 % of nominal capacity |
| Weight                   | 8 oz                      |
| Band thickness           | 2,54 mm [0.10 in]         |
| Band width               | 50,8 mm [2.0 in]          |

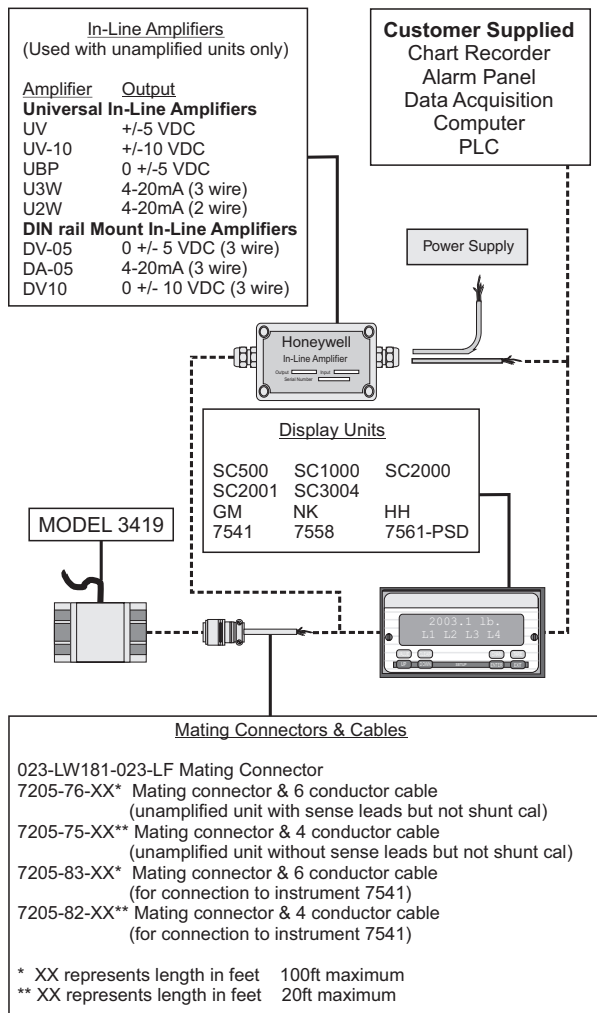
## RANGE CODES

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

## MOUNTING DIMENSIONS



## TYPICAL SYSTEM DIAGRAM



**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.**

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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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