



AC165 Series

Negative Voltage Accelerometer, Top Exit 3 Pin Connector, 100 mV/g, ±5%



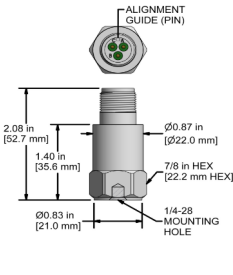
Product Features

- Comparable to Bently™ 330400
- 3 Wire Negative Voltage Sensor
- ▶ 100 mV/g Nominal Sensitivity
  - ▶ ± 5% Sensitivity Tolerance
  - ▶ ± 80 g, Peak Dynamic Range

AC165-1A

3 Pin Connector

| Connector Pin | Polarity           |
|---------------|--------------------|
| A             | (+) Signal         |
| B             | (-) Power-Negative |
| C             | (+) Common/Power   |

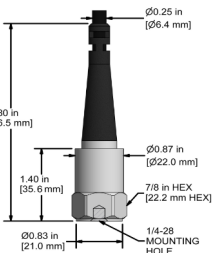


Stock Product

AC165-2C

CB105 Integral Cable

| Conductor | Polarity           |
|-----------|--------------------|
| Red       | (+) Signal         |
| Black     | (-) Power-Negative |
| White     | (+) Common/Power   |
| Shield    | Cable Drain Wire   |

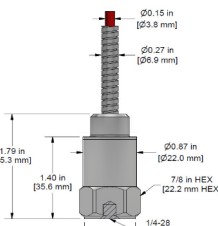


Built To Order

AC165-3C

CB218 Armored Integral Cable

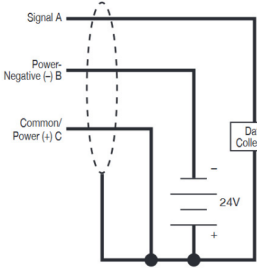
| Conductor | Polarity           |
|-----------|--------------------|
| Red       | (+) Signal         |
| Black     | (-) Power-Negative |
| White     | (+) Common/Power   |
| Shield    | Cable Drain Wire   |



Built To Order

AC165

Wiring Diagram



| Specifications                       | Standard                                  | Metric         | Specifications              | Standard                 | Metric        |
|--------------------------------------|-------------------------------------------|----------------|-----------------------------|--------------------------|---------------|
| Part Number                          | AC165                                     | M/ or M8/AC165 | <u>Environmental</u>        |                          |               |
| Sensitivity (±5%)                    | 100 mV/g                                  |                | Operating Temperature Range | -58 to 250 °F            | -50 to 121 °C |
| Frequency Response (±3dB)            | 300-900,000 CPM                           | 5,0-15000 Hz   | Maximum Shock Protection    | 5,000 g, peak            |               |
| Frequency Response (±10%)            | 600-600,000 CPM                           | 10,0-10000 Hz  | Sealing                     | Welded, Hermetic         |               |
| Dynamic Range                        | ± 60 g, peak<br>*Vsource ≤ -20V, 8.5Vbias |                | SIL Rating                  | SIL 2                    |               |
| <u>Electrical</u>                    |                                           |                | <u>Physical</u>             |                          |               |
| Settling Time                        | <2 Seconds                                |                | Sensing Element             | PZT Ceramic              |               |
| Voltage Source (IEPE)                | -20 to -28 VDC                            |                | Sensing Structure           | Shear Mode               |               |
| Constant Current Excitation          | <1 mA                                     |                | Weight                      | 3.2 oz                   | 90 grams      |
| Broadband Noise Floor (10 to 15k Hz) | .002 g RMS                                |                | Case Material               | 316L Stainless Steel     |               |
| Output Impedance                     | <5 ohm                                    |                | Mounting Thread             | 1/4-28 Blind Tapped Hole |               |
| Bias Output Voltage                  | -8.5 VDC                                  |                | Connector (Non-Integral)    | 3 Pin MIL-               |               |