

# High frequency, integral cable accelerometer

## 907F

### SPECIFICATIONS

<b>Sensitivity, <math>\pm 10\%</math>, 25°C</b>	100 mV/g
<b>Acceleration range</b>	50 g peak
<b>Amplitude nonlinearity</b>	1%
<b>Frequency response:</b>	$\pm 10\%$ 2.0 - 12,000 Hz $\pm 3$ dB 1.0 - 16,000 Hz
<b>Resonance frequency, mounted, nominal</b>	$\geq 30$ kHz
<b>Transverse sensitivity, max</b>	5% of axial
<b>Power requirement:</b>	
Voltage source	18 - 30 VDC
Current regulating diode	2 - 10 mA
<b>Electrical noise, equiv. g:</b>	
Broadband, 2.5 Hz to 25 kHz, nominal:	900 $\mu$ g
Spectral	
10 Hz	14 $\mu$ g/ $\sqrt{\text{Hz}}$
100 Hz	6 $\mu$ g/ $\sqrt{\text{Hz}}$
1,000 Hz	6 $\mu$ g/ $\sqrt{\text{Hz}}$
10,000 Hz	8 $\mu$ g/ $\sqrt{\text{Hz}}$
<b>Output impedance, max at 4 mA CCD</b>	850 $\Omega$
<b>Bias output voltage, 4 mA CCD</b>	12 VDC
<b>Grounding</b>	case isolated
<b>Operational temperature range</b>	-50° to +120°C
<b>Vibration limit</b>	500 g peak
<b>Shock limit</b>	2,500 g peak
<b>Electromagnetic sensitivity, equiv. g</b>	70 $\mu$ g/gauss
<b>Sealing</b>	IP68
<b>Weight</b>	30 grams (without cable)
<b>Case material</b>	316L stainless steel
<b>Mounting</b>	10-32 tapped hole or adhesive mount
<b>Mounting stud</b>	10-32 to 1/4-28 UNF
<b>Integral cable</b>	two conductor shielded, polyurethane jacket, 125°C, 16 ft.

**Note:** For optimum performance, sensor housing to be stud or conductive adhesive mounted. To prevent electrical noise, sensor head must be grounded at machine.

**Accessories supplied:** 10-32 to 1/4-28 UNF mounting stud



### Key features

- Wide frequency range
- Compact, low-profile construction
- Stud or adhesive mounting
- High resistance to electrical noise
- Standardized sensitivity
- Manufactured in ISO 9001 facility

See reverse for drawings and dimensions.

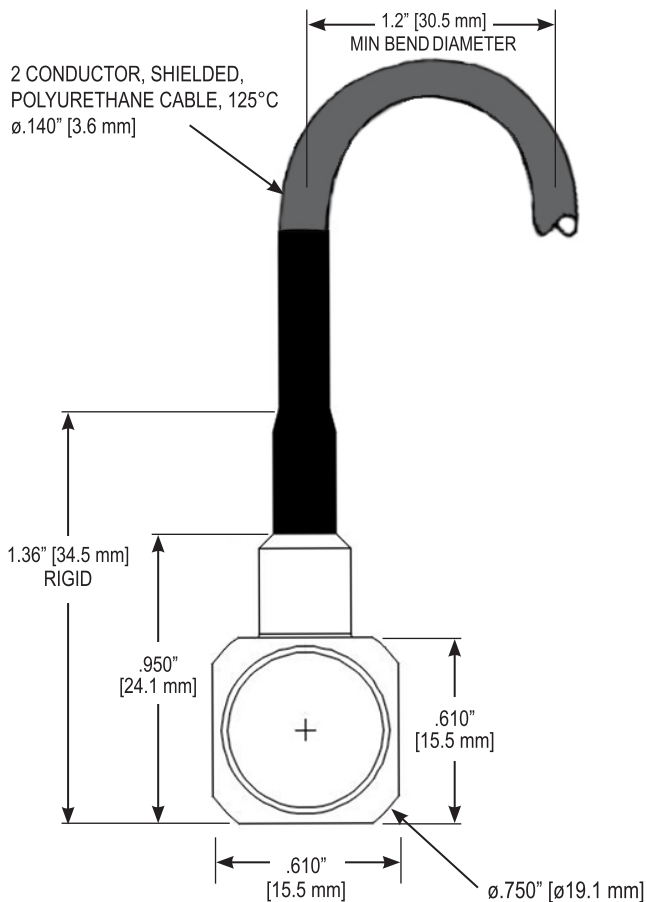
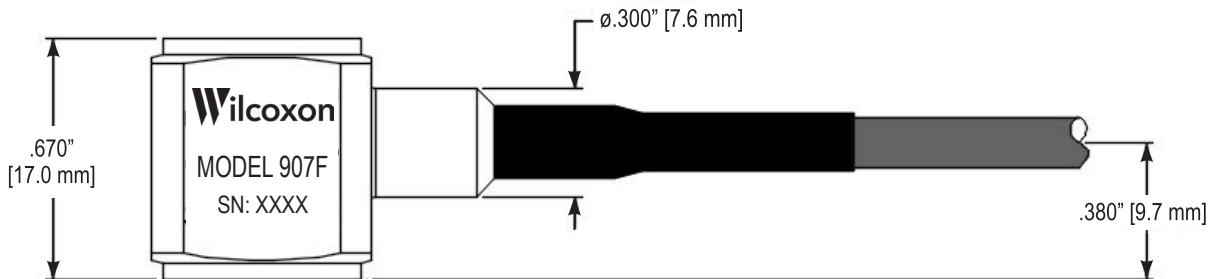


Connections	
Function	Cable conductor color
power/signal	white
common	black
cable shield	no connection at sensor

Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.

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10-32 UNF-2B,  $.130''$  [ $3.3\text{ mm}$ ] MIN THD  
C°BORE  $\varnothing.265''$  [ $6.7\text{ mm}$ ] x  $.023''$  [ $0.6\text{ mm}$ ] DEEP  
10-32 / 1/4-28 MOUNTING STUD



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