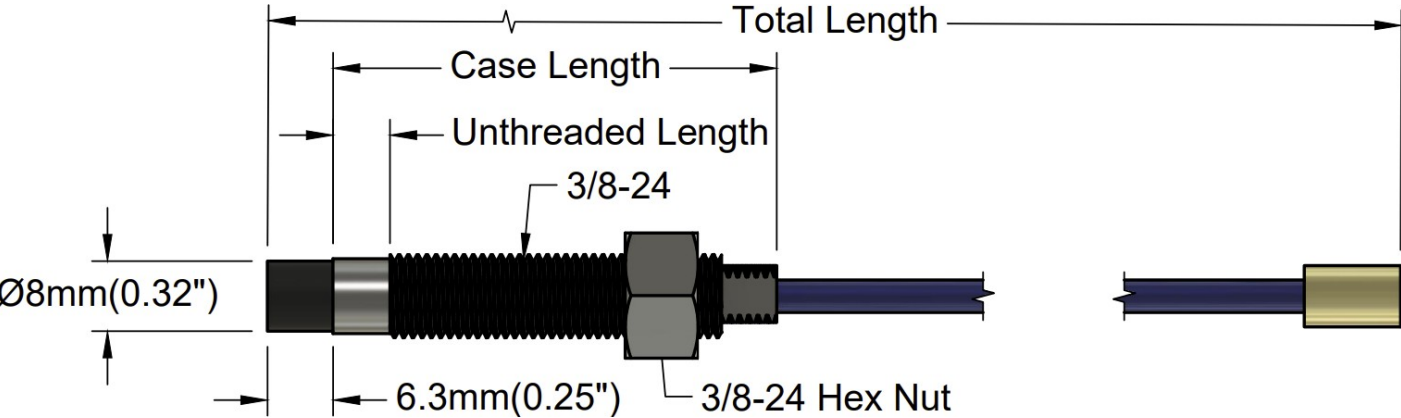


# 3300 8mm Specifications and Dimensions

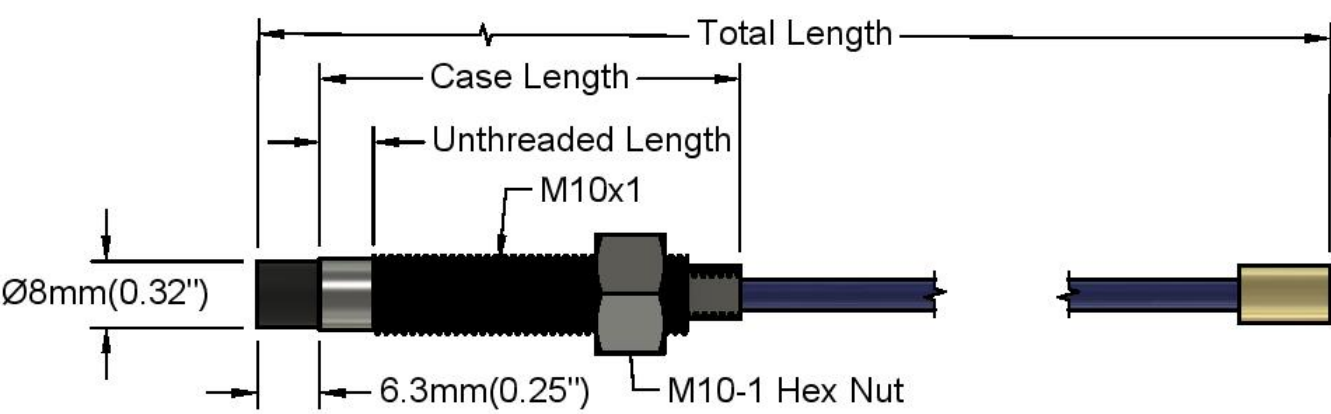
<b>Extension Cable Armor (optional)</b>	Flexible AISI 302 SST with/without FEP outer jacket
<b>Tensile Strength (maximum rated)</b>	220 N (50 lb) probe case to probe lead. 220 N (50 lb) at probe lead to extension cable connectors. 220 N (50 lb) probe case to stainless steel armor
<b>Connector material</b>	Gold-plated brass
<b>Recommended Connector Torque</b>	Hand tightened
<b>Maximum torque</b>	0.56 N•m (5 in•lb)
<b>Minimum bend Radius (with or without SS armor)</b>	25.4 mm (1.0 in)
<b>Probe Temperature Range Operating Temperature</b>	-34°C to +177°C (-30°F to +350°F)
<b>Storage Temperature</b>	-51°C to +177°C (-60°F to +350°F)
<b>Extension Cable Operating and Storage Temperature</b>	-51°C to +177°C (-60°F to +350°F)
<b>Relative Humidity</b>	100% condensing, non-submersible when connectors are protected

# Imperial/US



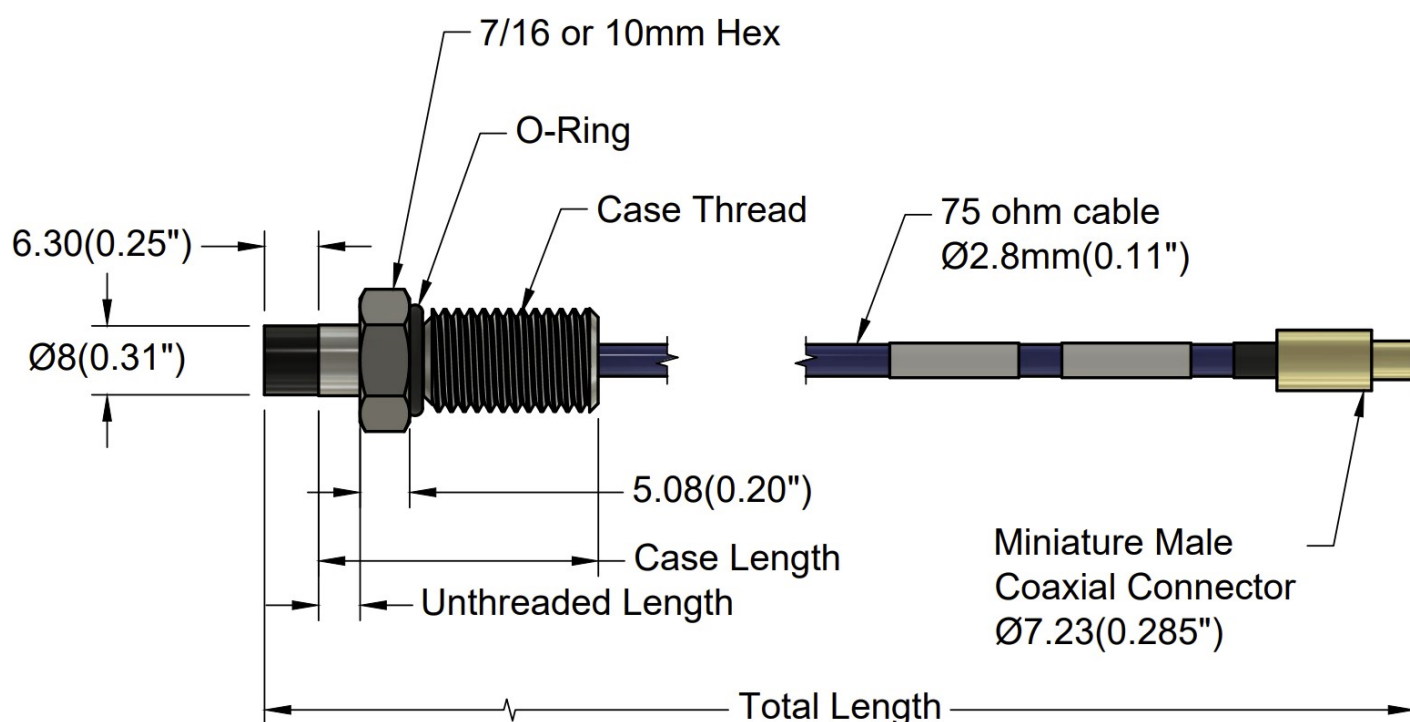
MS3301	XX	XX	XX	XX	XX	XX
<b>MS330101</b>	3/8-24 UNF thread, no armor					
<b>MS330102</b>	3/8-24 UNF thread, armor					
<b>Unthreaded Length in increments of 0.5"</b>		<b>Case Length in increments of 0.5"</b>		<b>Total Length</b>	<b>Connector &amp; Cable-Type</b>	<b>Agency Approval</b>
Example: 05=0.5"		Example: 35=3.5"		05 0.5 meter/20"	01 Miniature coaxial connector, connector protector & standard cable	00 Not required
Minimum: 0.0"		Minimum: 0.8"		10 1 meter/39"		05 Multiple Approvals
Maximum: 9.9"		Maximum: 9.9"		50 5 meter/16.4'	02 Miniature coaxial connector & standard cable	
				90 9 meter/29.5'		

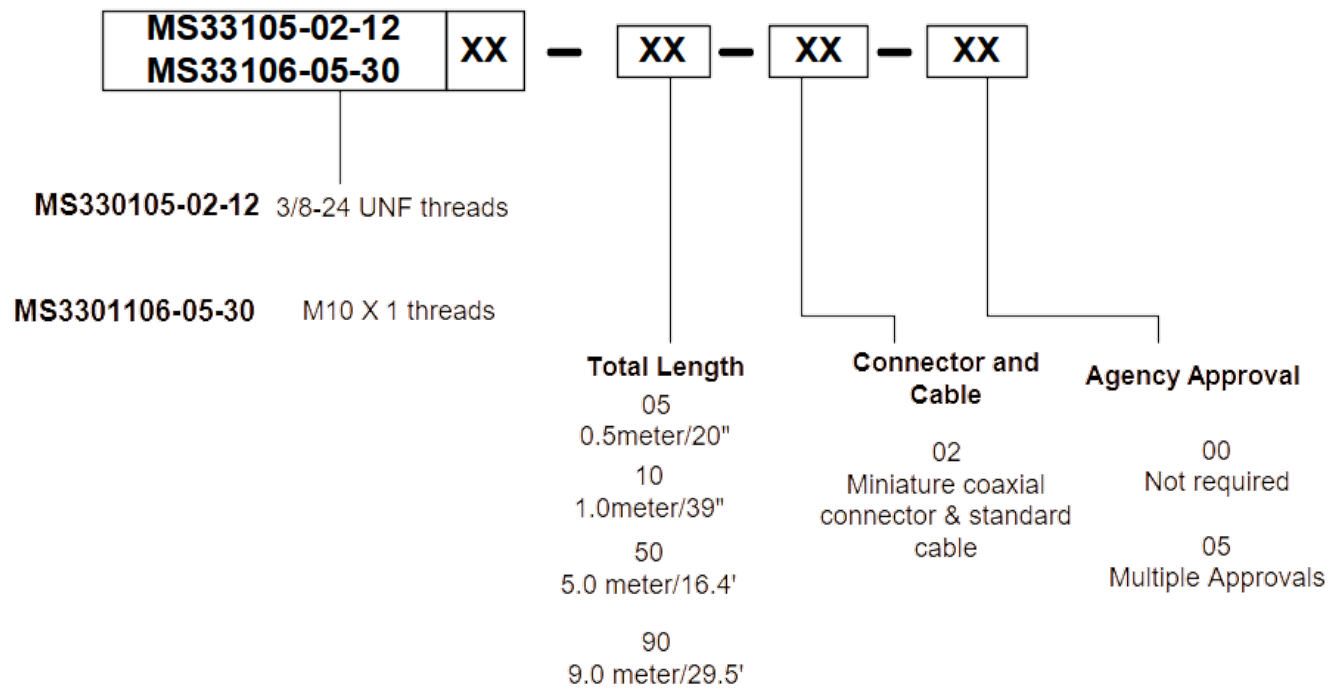
Metric



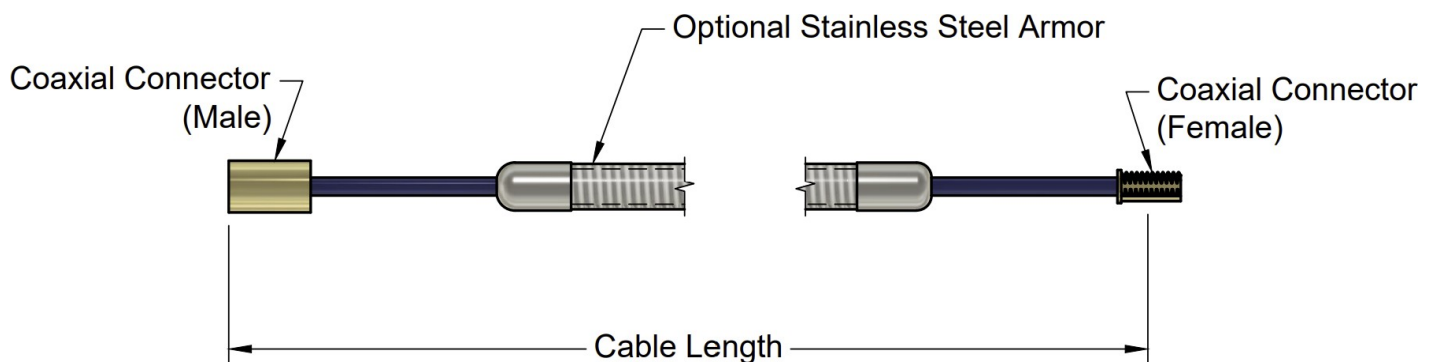
<b>MS3301</b>		<b>XX</b>	<b>XX</b>	<b>XX</b>	<b>XX</b>	<b>XX</b>	<b>XX</b>
<b>MS330103</b>	M10 x 1 thread, no armor						
<b>MS330104</b>	M10 x 1 thread, with armor						
<b>Unthreaded Length</b>		<b>Overall Case Length</b>		<b>Total Length</b>	<b>Connector &amp; Cable-Type</b>		<b>Agency Approval</b>
Order in increments of 10 mm		Order in increments of 10 mm		05	01		00
Example: 06 = 60 mm		Example: 06 = 60 mm		0.5 meter/20"	Miniature coaxial connector, connector protector & standard cable		Not required
Minimum unthreaded length: 0 mm		Minimum unthreaded length: 20 mm		10			05
Maximum unthreaded length: 230 mm		Maximum unthreaded length: 250 mm		1 meter/39"	02		Multiple Approvals
				50	Miniature coaxial connector & standard cable		
				5 meter/16.4'			
				90			
				9 meter/29.5'			

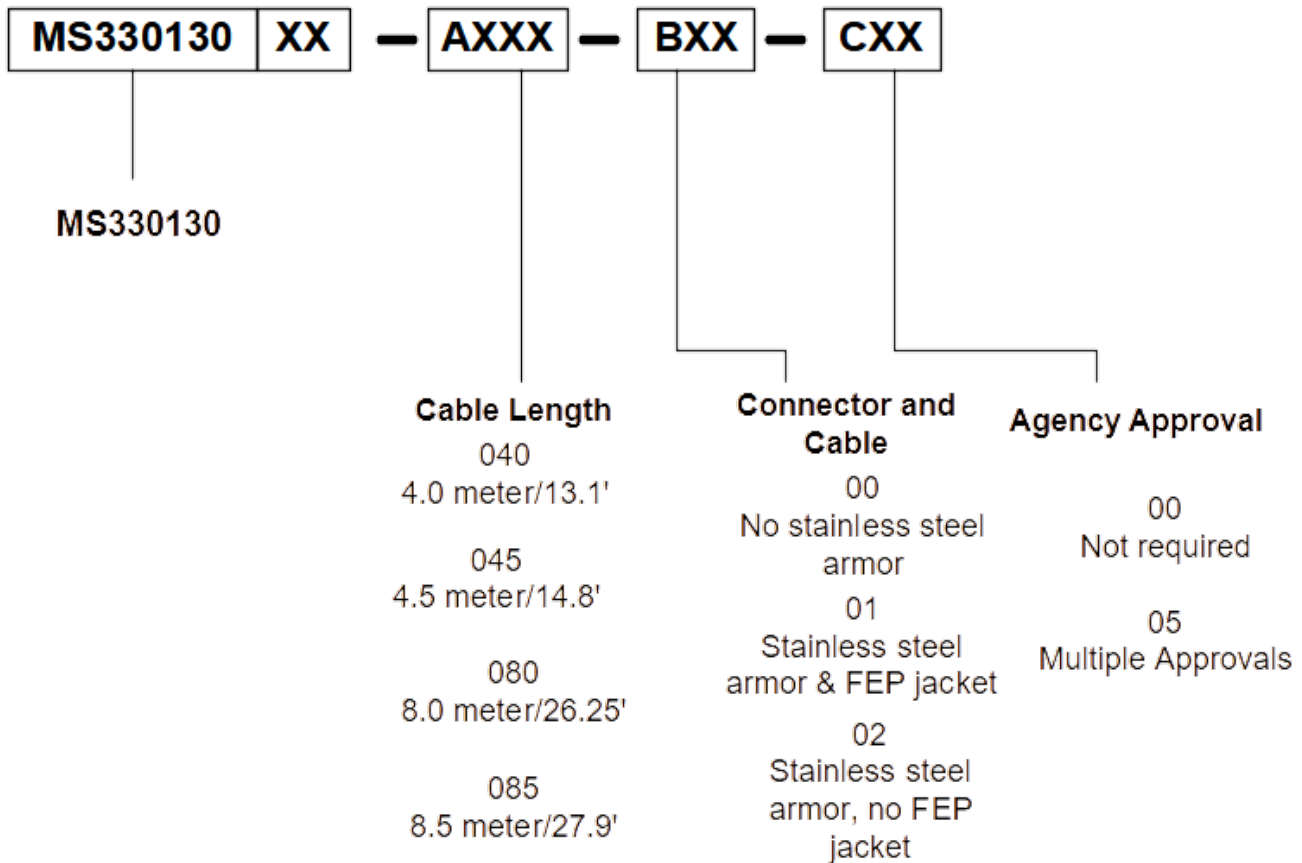
## Reverse Mount - Metric or Imperial





## Extension Cables





## Electrical

### Linear Range:

2.0 mm (80 mils). Linear range begins at 0.38 mm (15 mils) from target and is from 0.38 to 2.41 mm (15 to 95 mils).

### Incremental Scale Factor (ISF):

7.87 V/mm (200 mV/mil) +/-6.5% error (including interchangeability error) when measured in 10 mil increments when measured in increments of 0.25 mm (10 mils) over the 2.0 mm (80 mils) linear range.

### Deviation from best fit straight line (DSL):

1 to 5 meter system length is less than  $\pm 0.025$  mm ( $\pm 1$  mil).

9 meter system length is less than  $\pm 0.038$  mm ( $\pm 1.5$  mil).

### Frequency response:

0 to 10kHz (-3 dB) typical, with up to 100 meters (300 feet) of field wiring.

### Target Size:

Minimum flat: 25 mm (1.0 in) diameter.

Minimum perpendicular to shaft 50mm (2 in.).

Recommended perpendicular to shaft 75mm (3 in.).

## Mechanical

### Probe Tip Material:

Polyphenylene sulfide (PPS).

**Probe Case Material:**

AISI 303 or 304 stainless steel (SST).

**Probe Cable Specifications:**

75  $\Omega$  coaxial, fluoroethylene propylene (FEP) insulated probe cable in the following total probe lengths: 0.5, 1, 5, or 9 meters.

**Extension Cable Material:**

75  $\Omega$  coaxial, fluoroethylene propylene (FEP) insulated.

**System Length:**

1 (probe only), 5 or 9 meters including extension cable

**Extension Cable Armor (optional):**

Flexible AISI 302 SST with/without FEP outer jacket.

**Tensile Strength (maximum rated):**

220 N (50 lb) probe case to probe lead. 220 N (50 lb) at probe lead to extension cable connectors.

220 N (50 lb) probe case to stainless steel armor.

**Connector material:**

Gold-plated brass

**Recommended Connector Torque:**

Hand tightened

**Maximum torque:**

0.56 N•m (5 in•lb)

**Minimum bend Radius (with or without SS armor):**

25.4 mm (1.0 in)

## Environmental Limits

### Probe Temperature Range

**Operating Temperature:**

-34°C to +177°C (-30°F to +350°F)

**Storage Temperature:**

-51°C to +177°C (-60°F to +350°F)

### Extension Cable Temperature Range

**Operating and Storage Temperature:**

-51°C to +177°C (-60°F to +350°F)

**Storage Temperature:**

-51°C to +177°C (-60°F to +350°F)

### Proximity Sensor Temperature Range

**Operating Temperature:**

-35°C to +177°C (-31°F to +350°F)

**Storage Temperature:**

-51°C to +177°C (-60°F to +350°F)

**Relative Humidity:**

100% condensing, non-submersible when connectors are protected

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Revision #8

Created 23 June 2022 05:46:58 by Bach\_L

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