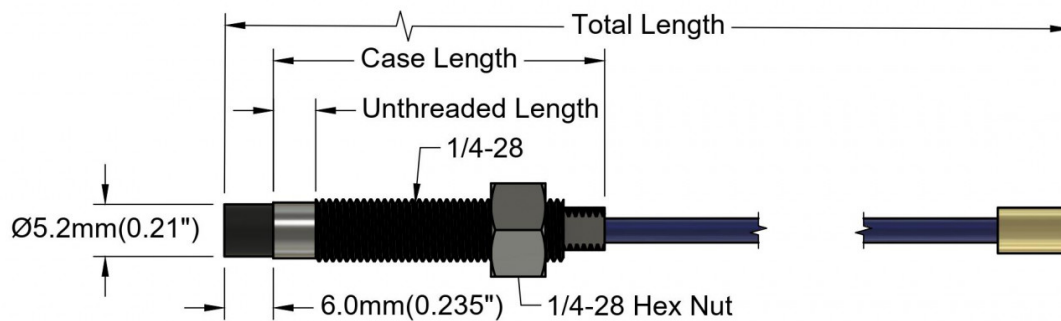


# 3300 5mm Specifications and Dimensions

<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



PROJECT  
**3300\_5MM**

TITLE  
**MS330171/MS330172**

APPROVED Leo Bach 5/10/2022

CHECKED Bryson Carroll 5/10/2022

DRAWN Luke Benjamin 5/10/2022

SIZE

A

SCALE

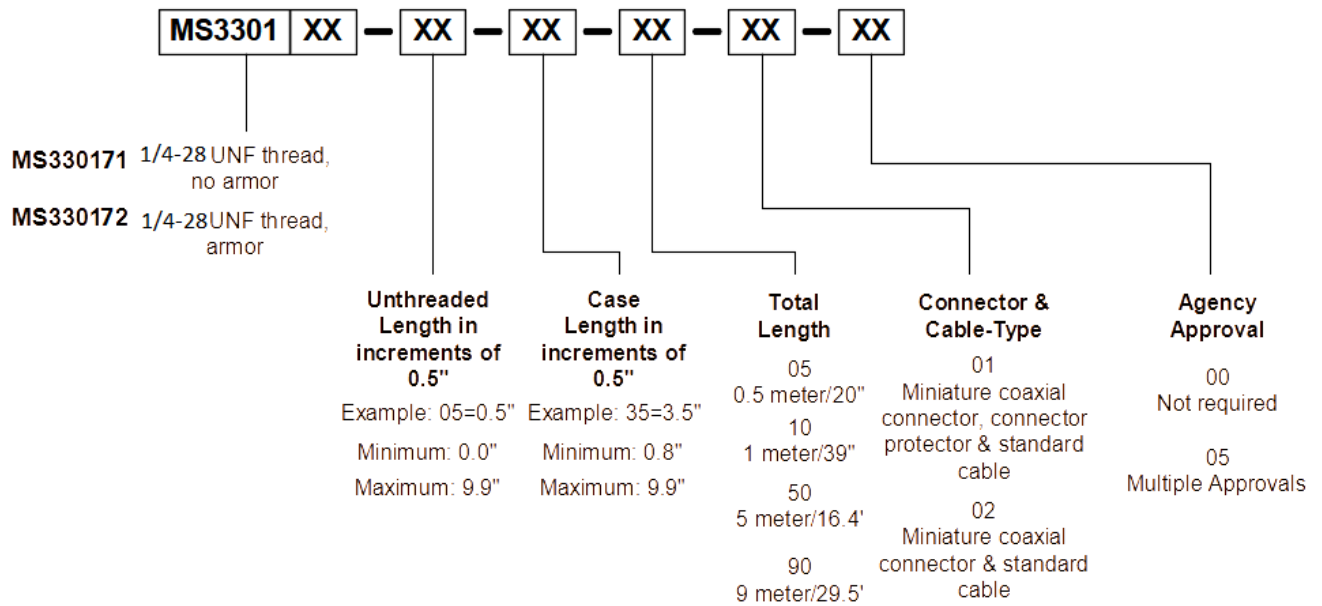
1:1

DWG NO

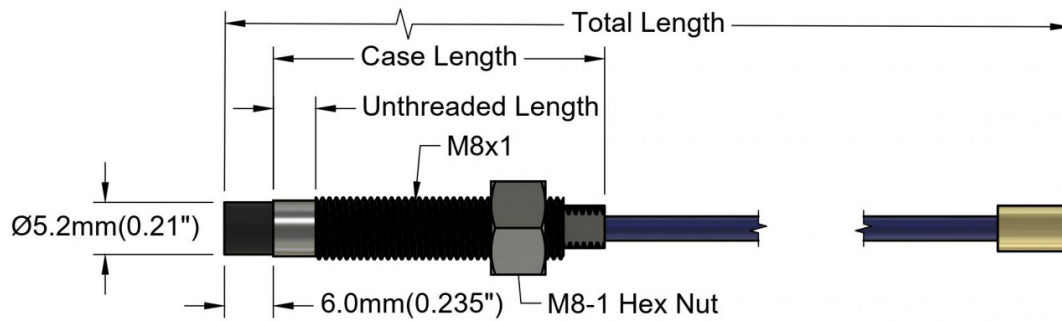
MS330171-MS330172

REV

1.01



## Metric



PROJECT  
**3300\_5MM**

TITLE  
**MS330173/MS330174**

APPROVED Leo Bach 5/10/2022

CHECKED Bryson Carroll 5/10/2022

DRAWN Luke Benjamin 5/10/2022

SIZE

A

SCALE

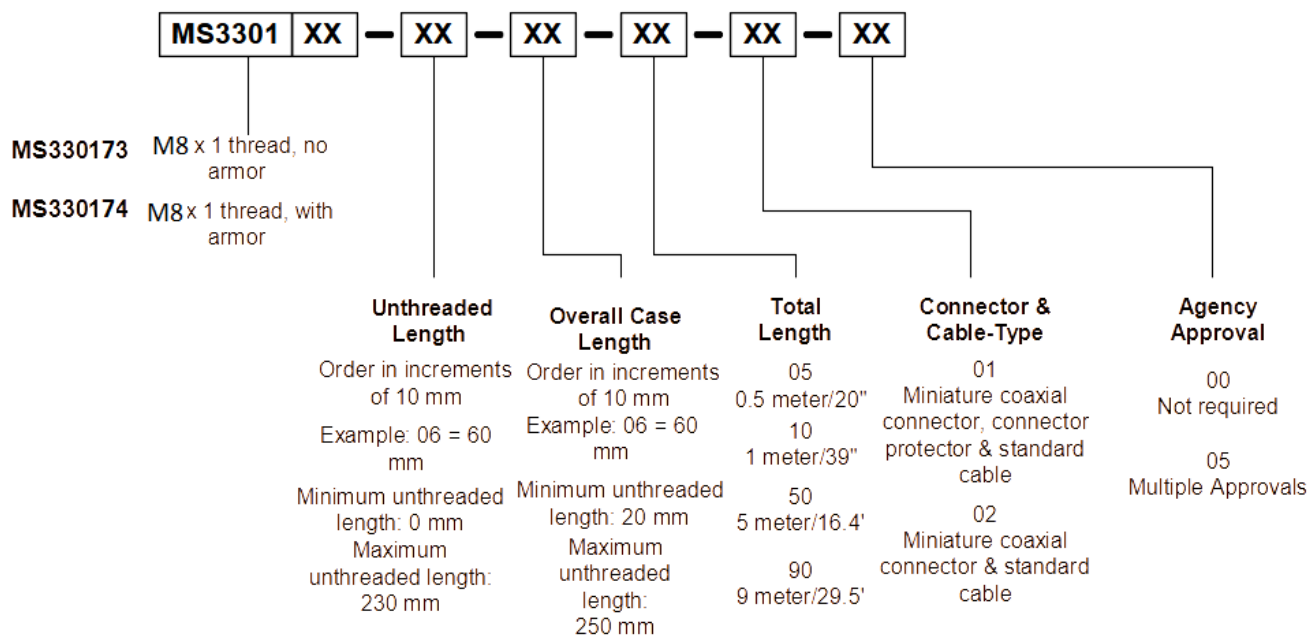
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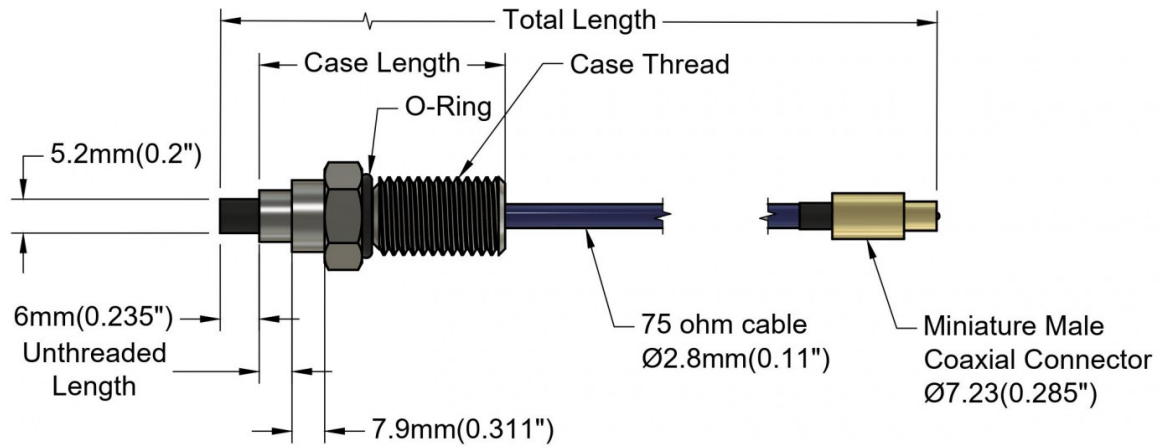
MS330173-MS330174

REV

1.01



# Reverse Mount - Metric or Imperial



PROJECT  
3300\_5mm\_Series\_Proximity

TITLE  
MS330175-330176

APPROVED Leo Bach 8/1/2022

CHECKED Bryson Carroll 8/1/2022

DRAWN Luke Benjamin 8/1/2022

SIZE

A

SCALE

1:2

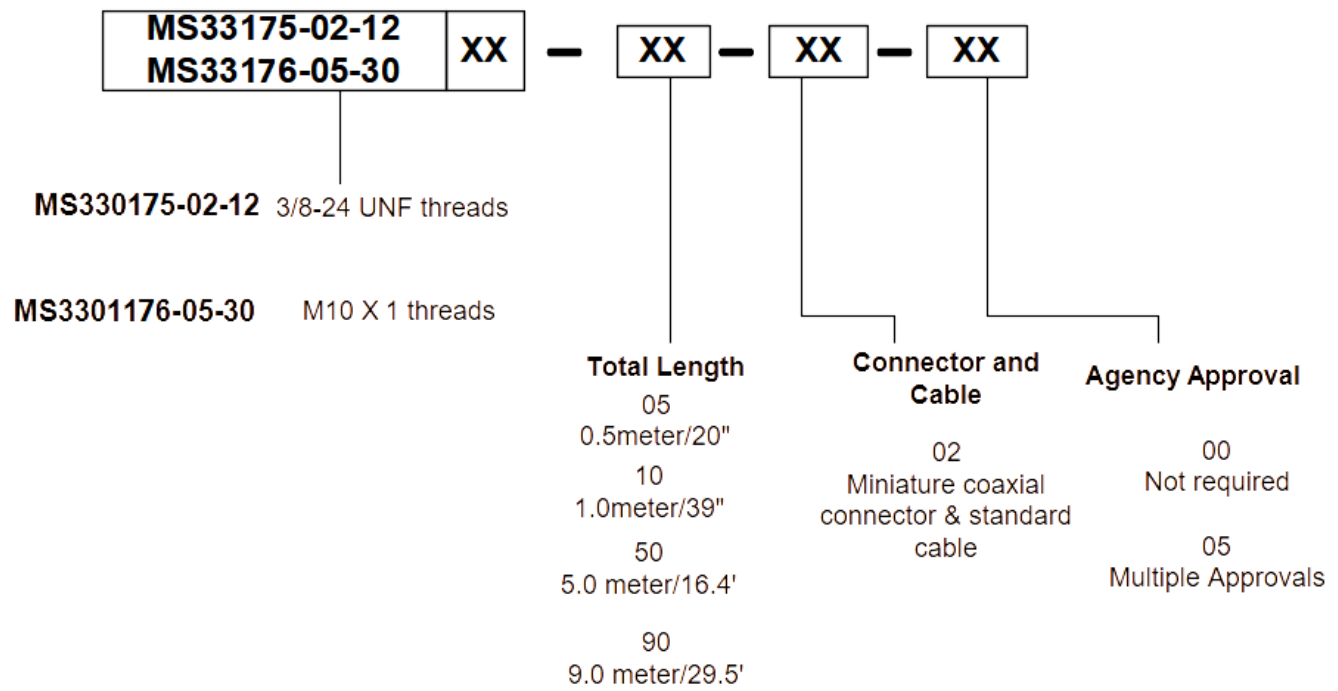
DWG NO

MS330175-MS330176

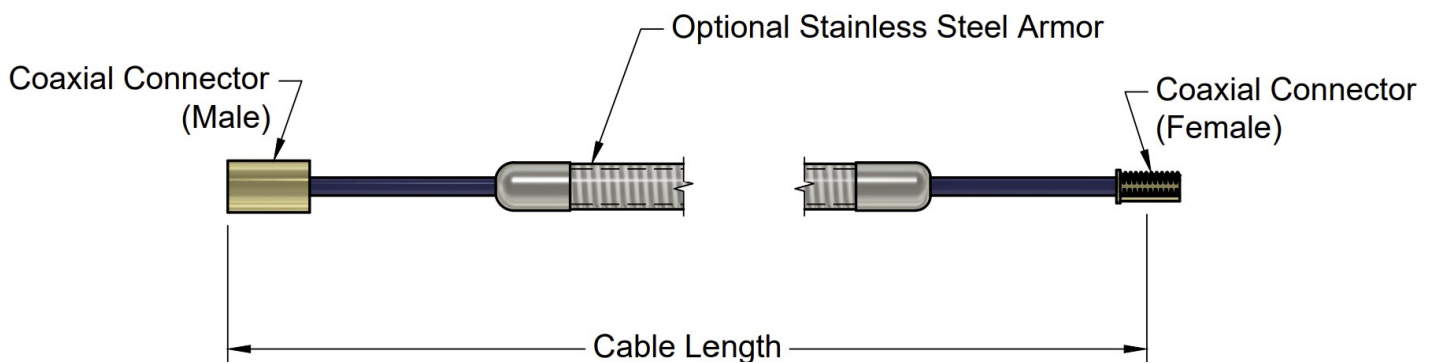
REV

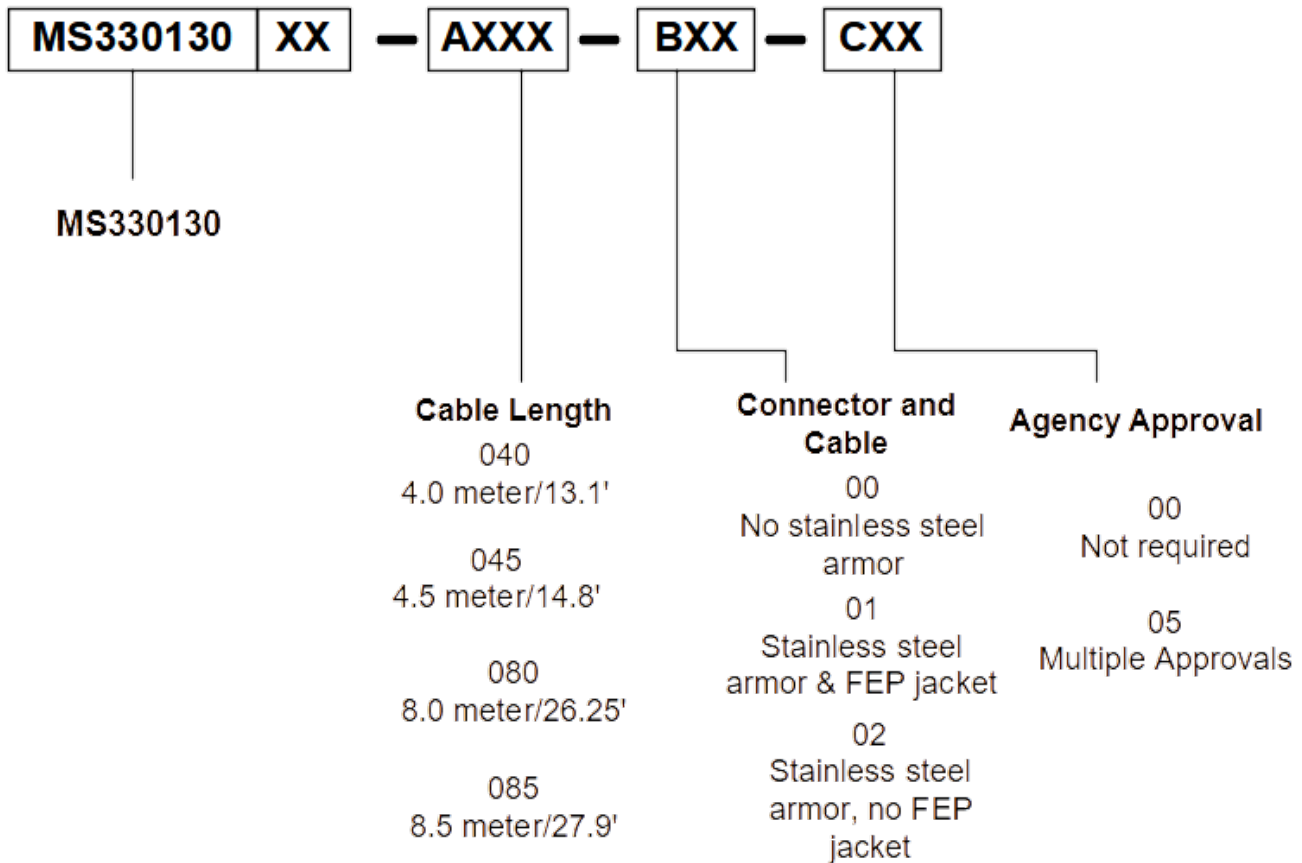
1.01





## 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 2.41mm (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 #6

Created 1 November 2022 00:48:23 by Bach\_L

Updated 9 May 2023 16:33:46 by Bach\_L