

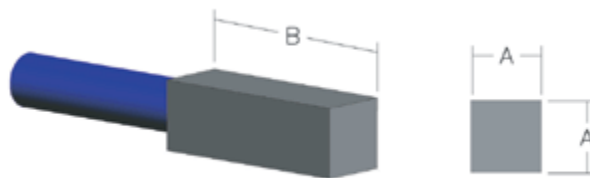


Housing Styles

AB



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Square Aluminum Block

- General purpose temperature sensing
- Accomodate a variety of sensing elements

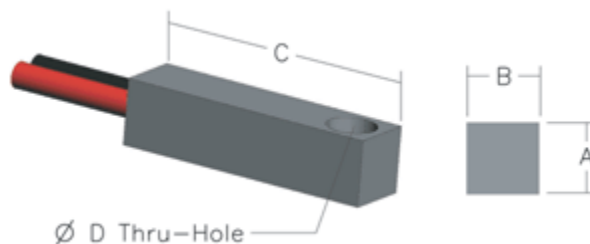
| Type | A | B | Customize |
|------|--------|-------|-----------|
| AB1 | 0.187" | 0.75" | |
| AB2 | 0.250" | 0.75" | |
| AB3 | 0.250" | 1.25" | |

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AS






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Square Aluminum Block with Mounting Hole

- Useful for air temp or surface sensing
- Fast thermal response

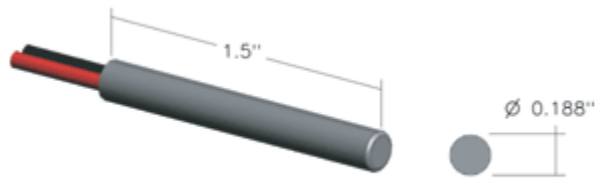
| Type | A | B | C | D | Customize |
|------|--------|--------|-------|--------|-------------------------------------------------------------------------------------|
| AS1 | 0.250" | 0.250" | 1.0" | 0.142" |  |
| AS2 | 0.250" | 0.75" | 1.0" | 0.189" |  |
| AS3 | 0.125" | 1.25" | 0.75" | 0.125" |  |

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AT



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Closed End Aluminum Tube

- Air, surface or immersion sensing
- Thin wall for excellent thermal response
- Available with clear or black anodized finish

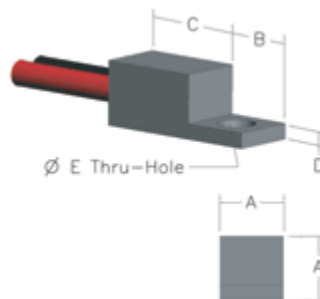
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AX









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Square Aluminum Surface Sensor

- Useful for air temp or surface sensing
- Rugged housing with good thermal properties
- Easy to mount
- Shape allows for good

thermal contact
to flat surfaces

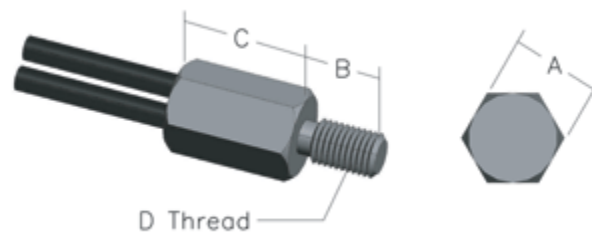
| Type | A | B | C | D | E | Customize |
|------|--------|--------|--------|--------|--------|-------------------------------------------------------------------------------------|
| AX1 | 0.250" | 0.400" | 0.85" | 0.115" | 0.172" |  |
| AX2 | 0.250" | 0.265" | 0.400" | 0.062" | 0.147" |  |
| AX3 | 0.250" | 0.265" | 0.625" | 0.062" | 0.147" |  |
| AX4 | 0.250" | 0.265" | 0.735" | 0.062" | 0.147" |  |
| AX5 | 0.312" | 0.350" | 0.400" | 0.062" | 0.147" |  |
| AX6 | 0.312" | 0.475" | 0.400" | 0.062" | 0.203" |  |

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AY






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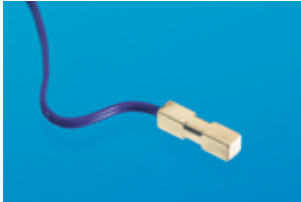
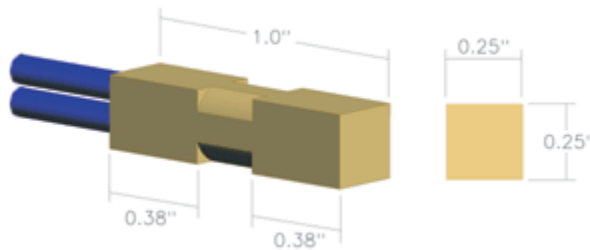
Hex Aluminum
Surface Sensor

- Surface sensing
- Typically used on power transistors in place of a mounting screw

| Type | A | B | C | D | Customize |
|------|--------|--------|--------|------|---------------------------------------------------------------------------------------|
| AY1 | 0.250" | 0.250" | 0.400" | 6-32 |  |
| AY2 | 0.312" | 0.250" | 0.400" | 6-32 |  |
| AY3 | 0.312" | 0.375" | 0.75" | 8-32 |  |

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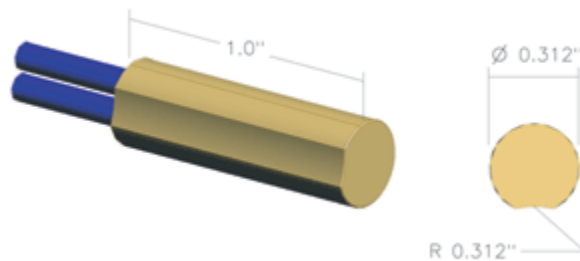
BB


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Brass Surface Mount

- General-purpose surface sensor
- Designed to be connected to surface with mounting clip or strap

BC


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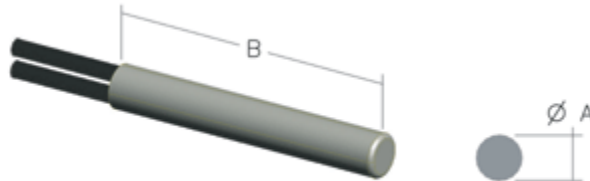
Brass Curved Surface Sensor

- Surface sensing
- Designed to fit curvature of 3/8" to 5/8" tubing
- Accurate and fast response to temperature changes
- Mounting clip can be purchased separately

BT



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Closed End Brass Tube

- General-purpose, low-cost housing
- Can accommodate a wide variety of sensors
- Brass shell offers strength and responds quickly to temperature changes
- Available as nickel-plated or with no plating

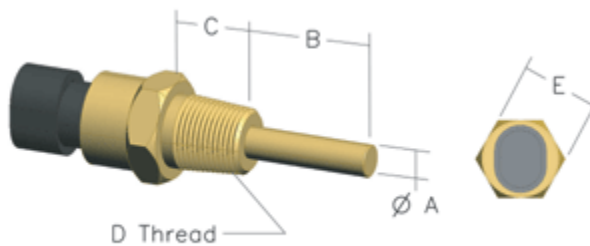
| Type | Plating | A | B | Customize |
|------|---------|--------|-------|-----------|
| BT1 | Nickel | 0.185" | 1.25" | |
| BT2 | Nickel | 0.200" | 1.25" | |
| BT3 | Nickel | 0.231" | 1.25" | |
| BT4 | Nickel | 0.250" | 1.75" | |
| BT5 | None | 0.250" | 1.75" | |
| BT6 | Nickel | 0.375" | 1.75" | |

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BX





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Brass Housing with Integral Connector

- Designed for immersion sensing via threaded hole

- Integral connectors allow for compact size
- Mating cable assembly can also be provided
- Options include other connector types

| Type | A | B | C | D | E | Customize |
|------|--------|-------|--------|---------------|------|-------------------------------------------------------------------------------------|
| BX1 | 0.250" | 1.0" | 0.620" | 1/4-18 NPT | 3/4" |  |
| BX2 | 0.188" | 0.75" | 0.400" | 1/8-27 NPT | 7/8" |  |

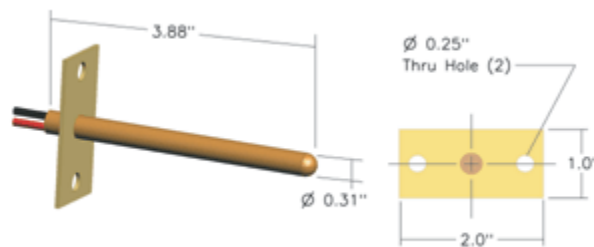
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Copper Tube with Flange

CF



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- General-purpose housing used primarily for air sensing
- Rugged copper tube construction with brass flange
- Length from flange bottom to housing tip is 3.4" (TYP)

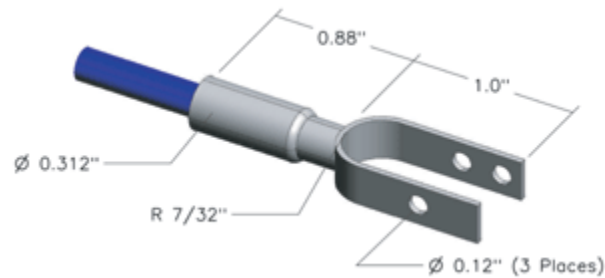
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CP



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Clamp-On Tube Housing

- Designed to be mounted directly onto a metal tube
- Fits 3/8" tubes as well as 1/2" tubes
- Utilizes a standard #4-40 screw with a tinnerman fastener or hex nut
- Housing material is Tin-Plated Copper

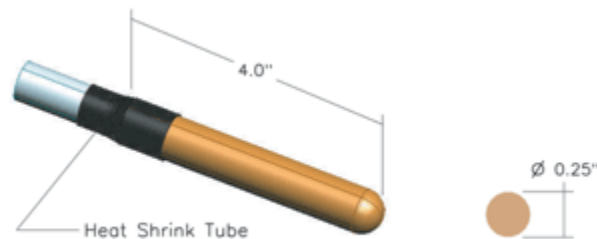
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CT



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Closed End Copper Tube

- General-purpose low-cost housing
- Can accommodate a wide variety of sensors

- Heat shrink tube is optional

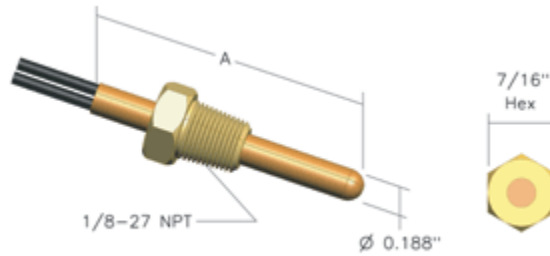
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CX



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Copper Tube with Brass Thread and Hex

- Designed for low-cost immersion sensing
- Brass hex and threads provide for a strong housing
- Copper tube minimizes cost
- Optional hex and thread sizes

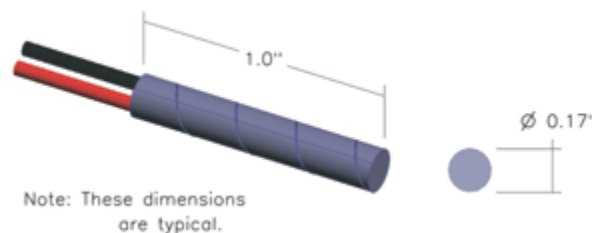
| Type | A | Customize |
|------|--------|-----------|
| CX1 | 0.138" | |
| CX2 | 9.0" | |

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ET



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Epoxy Filled Tube

- Low cost, general-purpose design
- Small size allows for

- sensing in close areas such as motor windings
- Useful in areas where metal shell is not feasible
- Available in various sizes and materials according to sensor size and temperature specifications
- Can be assembled as a moisture resistant unit

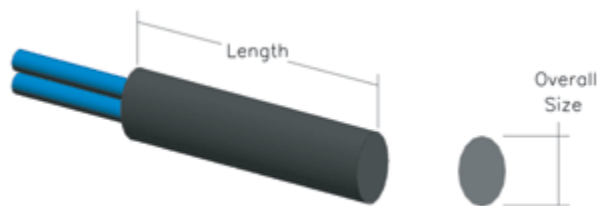
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HS



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Heat Shrink Sleeve

- Low cost, general-purpose sensor
- Tubing can be shrunk to the sensor or epoxy filled for strength
- Optional diameters, tubing lengths, and temperature ratings available

- Can be assembled as a moisture resistant unit

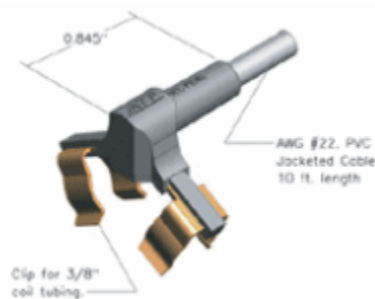
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MC



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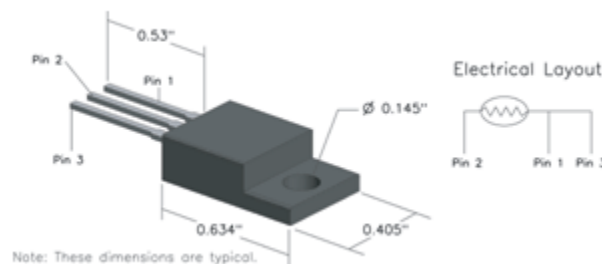
Sens-A-Coil Temperature Sensor

- Available to fit standard return bends to 3/8" coil tubing
- Easy installation - just snaps on
- Excellent thermal tracking

PS



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TO220 Plastic Surface Sensor

- Utilizes industry standard TO-220 package
- Ideal for automated assembly processes
- Can be used as a through-hole device or

mounted to a
heat sink

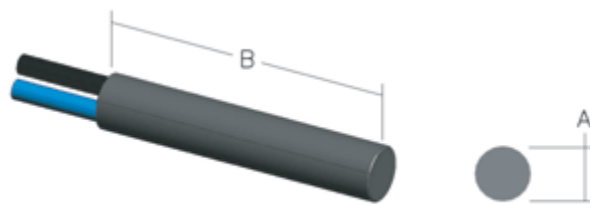
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PT



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Closed End Plastic Tube

- General-purpose design
- Utilizes a molded plastic shell to house sensor
- Optional material types are available upon request

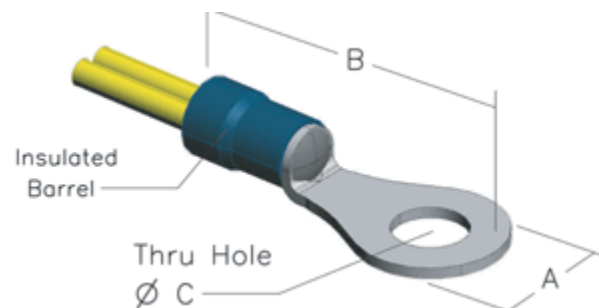
| Type | A | B | Customize |
|------|--------|-------|-----------|
| PT1 | 0.150" | 1.0" | |
| PT2 | 0.250" | 0.75" | |
| PT3 | 0.250" | 2.0" | |
| PT4 | 0.280" | 1.5" | |

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RC



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Closed End Ring Terminal

- Low-cost surface sensor design
- Large variety of sensors can be potted into a

closed-end ring
terminal

- Variety of barrel sizes and lengths available

| Type | Barrel | A | B | C | Customize |
|------|-----------|--------|--------|----------|-------------------------------------------------------------------------------------|
| RC1 | Short | 0.285" | 0.625" | #4 - #6 |  |
| RC2 | Short | 0.375" | 0.78" | #6 - #10 |  |
| RC3 | Short | 0.530" | 1.0" | 5/16" |  |
| RC4 | Insulated | 0.250" | 0.80" | #6 |  |
| RC5 | Long | 0.406" | 1.5" | #10 |  |
| RC6 | Long | 0.500" | 1.75" | 1/4" |  |

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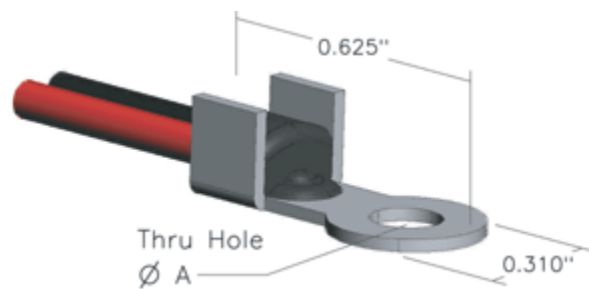
Open End Ring Terminal



- Low-cost surface sensor design
- Open ended ring terminal with epoxy that contains the sensing element
- Sensor is normally electrically isolated from the ring terminal

RT



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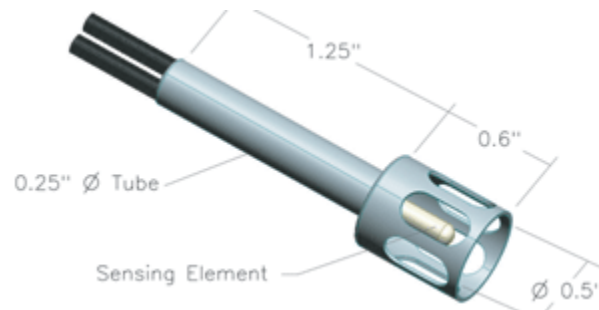
| | | |
|------|-----|-----------------------------------------------------------------------------------|
| Type | A | Customize |
| RT1 | #6 |  |
| RT2 | #10 |  |

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SA



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Gas/Air Flow Sensor

- Designed for gas/air flow sensing
- Stainless steel construction
- Allows sensing element to be protected when directly exposed

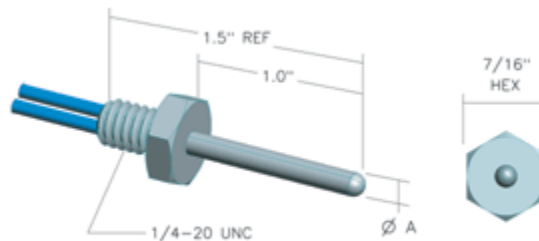
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SB





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Hex Head Bolt with Stainless Steel Tube

- Primarily intended for immersion applications
- Stainless steel housing with threads on backside of hex

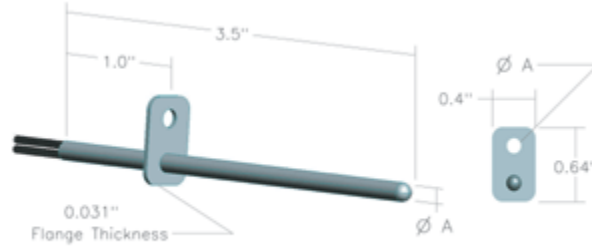
| | | |
|------|--------|-------------------------------------------------------------------------------------|
| Type | A | Customize |
| SB1 | 0.125" |  |
| SB2 | 0.156" |  |

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SF



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Flange Mount
Stainless Steel Tube

- General-purpose flanged design
- Allows the assembly to securely attach to a mounting hole

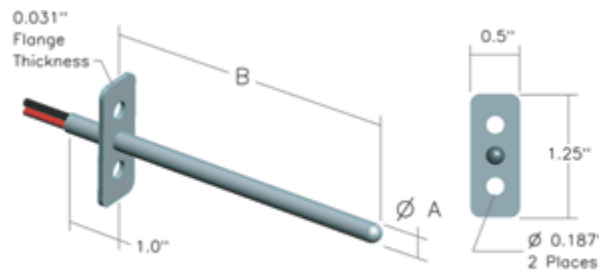
| Type | A | Customize |
|------|--------|-----------|
| SF1 | 0.137" | |
| SF2 | 0.156" | |

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SG



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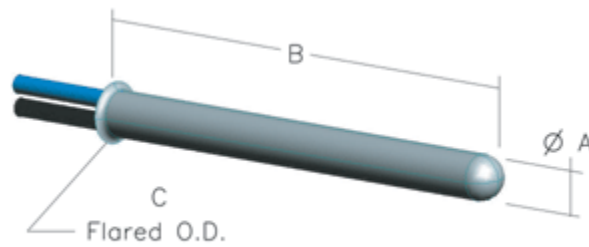
Two Hole Flange
Mount Stainless Steel
Tube

- General-purpose flanged design with 2 mounting holes for attachment

| Type | A | B | Customize |
|------|--------|--------------|-----------|
| SG1 | 0.187" | 1.0" - 12.0" | |
| SG2 | 0.250" | 1.0" - 12.0" | |

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SL


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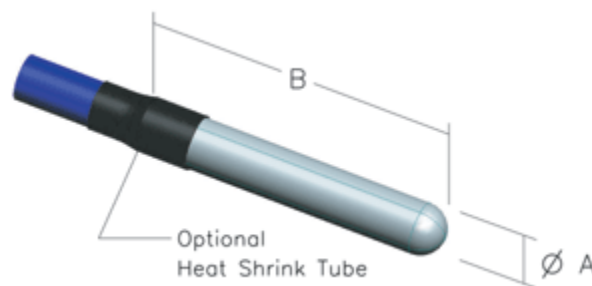
Closed End Flared Stainless Steel Tube

- General-purpose stainless steel housing
- Flared on open end
- Provides a defined stop in thru-hole applications

| Type | A | B | C | Customize |
|------|--------|--------------------|--------|-----------|
| SL1 | 0.187" | 1.0" - 12.0" | 0.250" | |
| SL2 | 0.250" | 1.0" - 12.0" | 0.288" | |

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ST








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Closed End Straight Stainless Steel Tube

- General-purpose housing
- Can accommodate a wide range of sensing elements
- Provides excellent protection to the sensing

element from various environmental conditions

- Wide range of wall thicknesses
- Various grades of stainless steel
- Tubing can be altered/bent for retention purposes in a thermowell

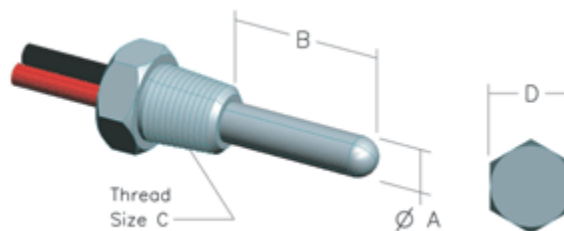
| Type | A | B | Customize |
|------|--------|--------------|-------------------------------------------------------------------------------------|
| ST1 | 0.125" | 0.5" - 6.0" |  |
| ST2 | 0.156" | 1.0" - 9.0" |  |
| ST3 | 0.187" | 1.0" - 12.0" |  |
| ST4 | 0.205" | 1.0" - 12.0" |  |
| ST5 | 0.250" | 1.0" - 12.0" |  |
| ST6 | 0.375" | 1.0" - 12.0" |  |

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SX











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Stainless Steel Hex Head Pipe Plug with Closed End Tube

- Designed primarily as an immersion type sensor
- Available in a wide variety of hex sizes,

threads, and lengths

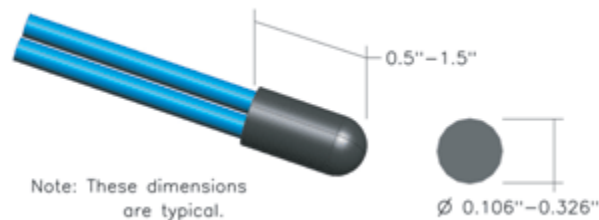
| Type | A | B | C | D | Customize |
|------|--------|--------------|--------------|-------|---------------------------------------------------------------------------------------|
| SX1 | 0.125" | 0.5" - 6.0" | 1/8 - 27 NPT | 7/16" |  |
| SX2 | 0.156" | 1.0" - 9.0" | 1/8 - 27 NPT | 7/16" |  |
| SX3 | 0.187" | 1.0" - 12.0" | 1/8 - 27 NPT | 7/16" |  |
| SX4 | 0.250" | 1.0" - 12.0" | 1/8 - 27 NPT | 7/16" |  |
| SX5 | 0.125" | 0.5" - 3.0" | 1/4 - 18 NPT | 9/16" |  |
| SX6 | 0.156" | 1.0" - 9.0" | 1/4 - 18 NPT | 9/16" |  |
| SX7 | 0.187" | 1.0" - 12.0" | 1/4 - 18 NPT | 9/16" |  |
| SX8 | 0.250" | 1.0" - 12.0" | 1/4 - 18 NPT | 9/16" |  |

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VC



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Closed End Vinyl Cap

- Low-cost, general-purpose design
- Suitable for narrow temperature ranges
- Allows for consistent profile for sensing element with minimal affect

on response
time

- Useful where the sensing unit needs protection from its environment, but not the strength of a metal shell
- Additional standard diameters and lengths available upon request

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