



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



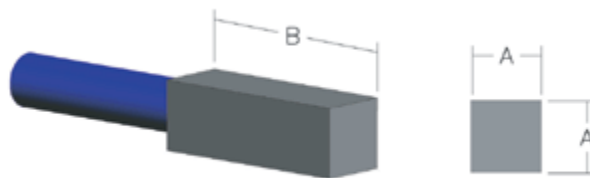


Housing Styles

AB



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Square Aluminum Block

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

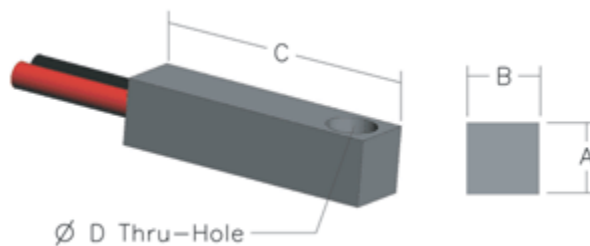
Type	A	B	Customize
AB1	0.187"	0.75"	
AB2	0.250"	0.75"	
AB3	0.250"	1.25"	

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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

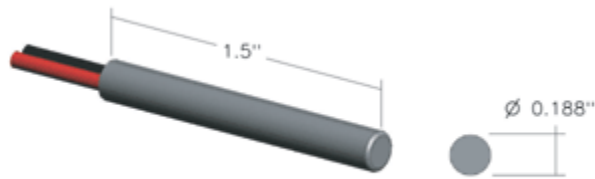
Type	A	B	C	D	Customize
AS1	0.250"	0.250"	1.0"	0.142"	
AS2	0.250"	0.75"	1.0"	0.189"	
AS3	0.125"	1.25"	0.75"	0.125"	

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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

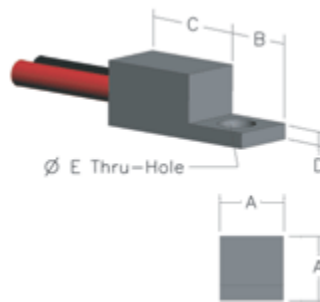
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AX









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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

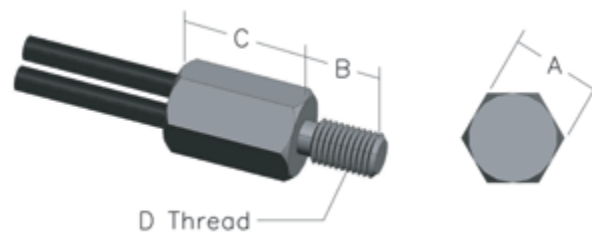
Type	A	B	C	D	E	Customize
AX1	0.250"	0.400"	0.85"	0.115"	0.172"	
AX2	0.250"	0.265"	0.400"	0.062"	0.147"	
AX3	0.250"	0.265"	0.625"	0.062"	0.147"	
AX4	0.250"	0.265"	0.735"	0.062"	0.147"	
AX5	0.312"	0.350"	0.400"	0.062"	0.147"	
AX6	0.312"	0.475"	0.400"	0.062"	0.203"	

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AY






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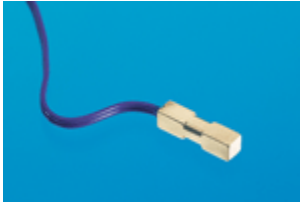
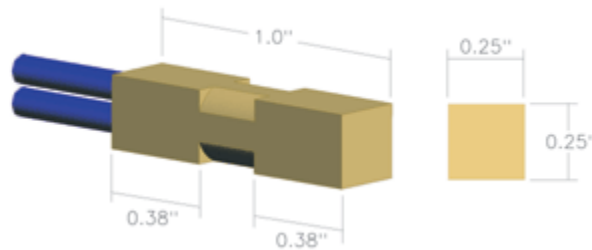
Hex Aluminum
Surface Sensor

- 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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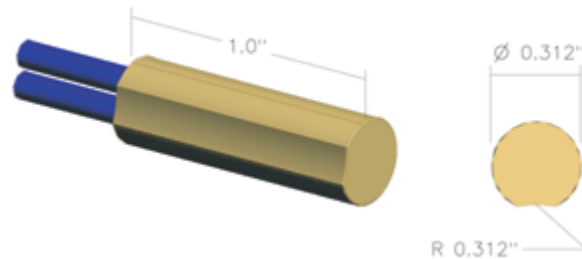
BB


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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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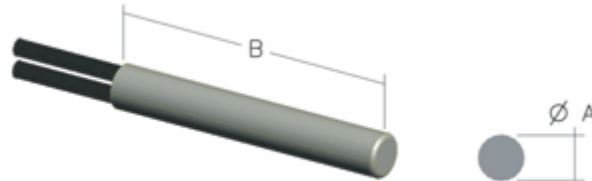
Brass Curved Surface Sensor

- 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

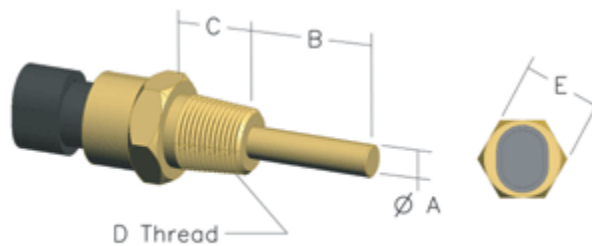
Type	Plating	A	B	Customize
BT1	Nickel	0.185"	1.25"	
BT2	Nickel	0.200"	1.25"	
BT3	Nickel	0.231"	1.25"	
BT4	Nickel	0.250"	1.75"	
BT5	None	0.250"	1.75"	
BT6	Nickel	0.375"	1.75"	

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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"	

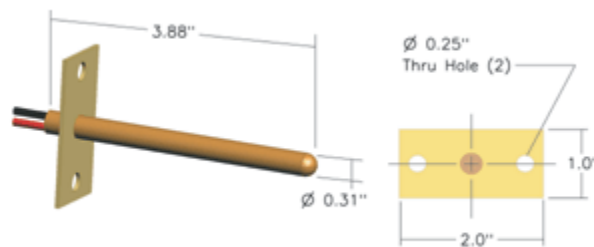
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Copper Tube with Flange

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)

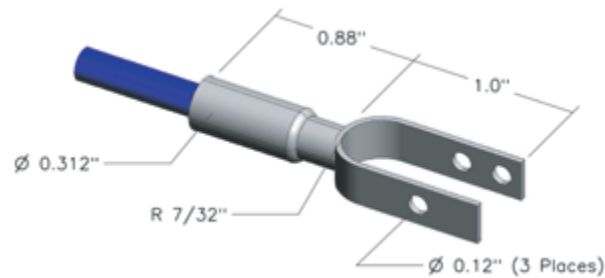
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CP



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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

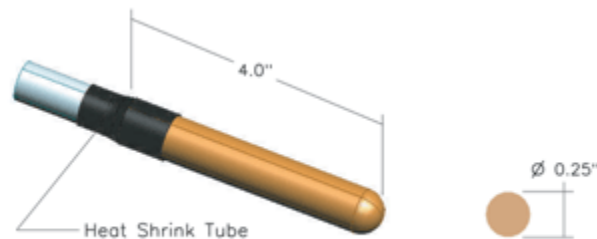
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CT



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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

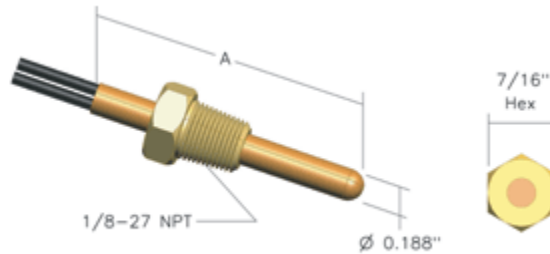
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CX



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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

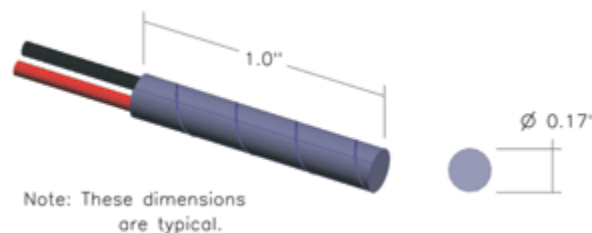
Type	A	Customize
CX1	0.138"	
CX2	9.0"	

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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

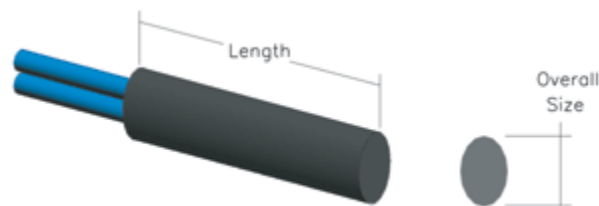
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HS



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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

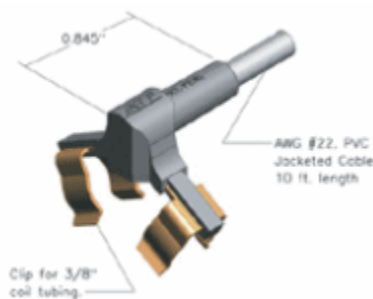
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MC



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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

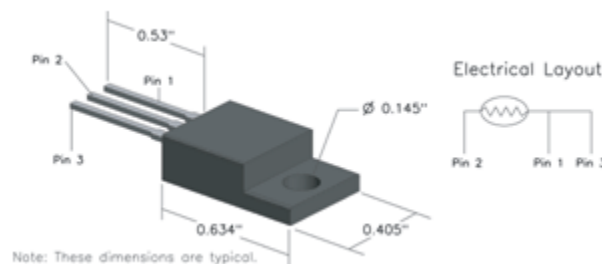
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PS



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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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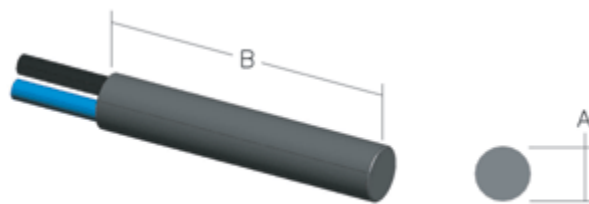
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Closed End Plastic Tube

PT



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

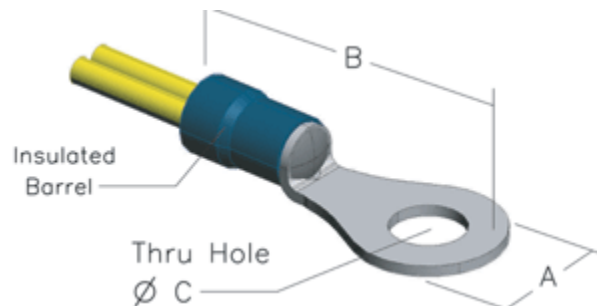
Type	A	B	Customize
PT1	0.150"	1.0"	
PT2	0.250"	0.75"	
PT3	0.250"	2.0"	
PT4	0.280"	1.5"	

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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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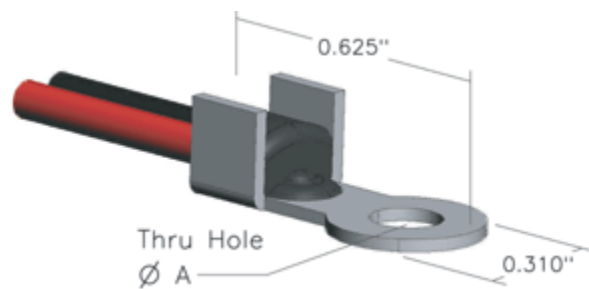
Open End Ring Terminal



- 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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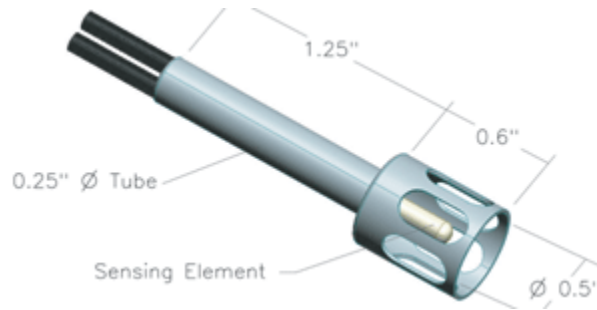
Type	A	Customize
RT1	#6	
RT2	#10	

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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

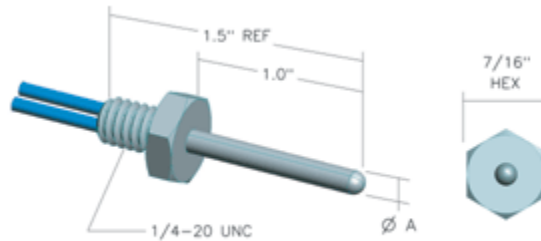
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SB





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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

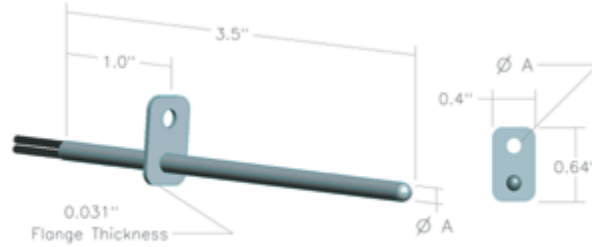
Type	A	Customize
SB1	0.125"	
SB2	0.156"	

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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

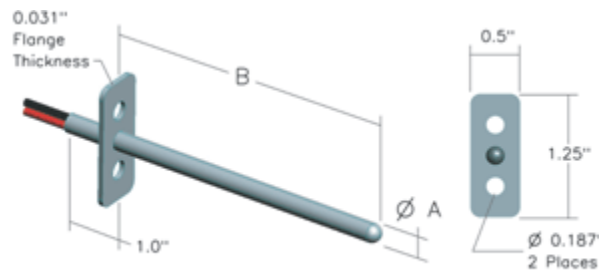
Type	A	Customize
SF1	0.137"	
SF2	0.156"	

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SG



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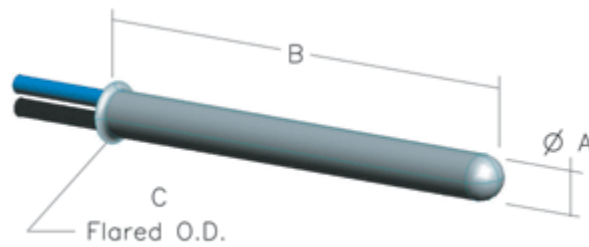
Two Hole Flange
Mount Stainless Steel
Tube

- 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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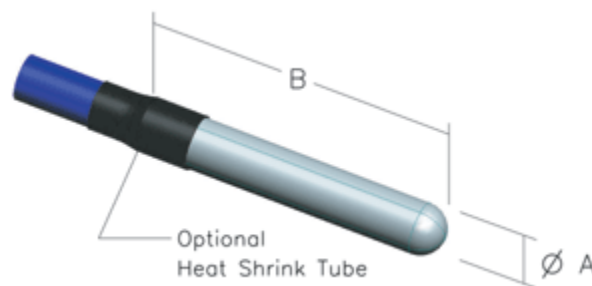
Closed End Flared Stainless Steel Tube

- 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

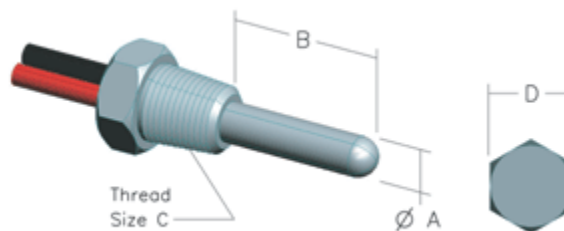
Type	A	B	Customize
ST1	0.125"	0.5" - 6.0"	
ST2	0.156"	1.0" - 9.0"	
ST3	0.187"	1.0" - 12.0"	
ST4	0.205"	1.0" - 12.0"	
ST5	0.250"	1.0" - 12.0"	
ST6	0.375"	1.0" - 12.0"	

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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

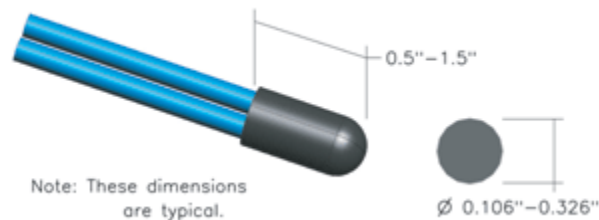
Type	A	B	C	D	Customize
SX1	0.125"	0.5" - 6.0"	1/8 - 27 NPT	7/16"	
SX2	0.156"	1.0" - 9.0"	1/8 - 27 NPT	7/16"	
SX3	0.187"	1.0" - 12.0"	1/8 - 27 NPT	7/16"	
SX4	0.250"	1.0" - 12.0"	1/8 - 27 NPT	7/16"	
SX5	0.125"	0.5" - 3.0"	1/4 - 18 NPT	9/16"	
SX6	0.156"	1.0" - 9.0"	1/4 - 18 NPT	9/16"	
SX7	0.187"	1.0" -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

328 State Street
St. Marys, PA 15857

 814-834-1541  814-834-1556

Precision Position Products Operations

424 Crown Point Circle
Grass Valley, CA 95945

 530-273-4608  530-273-0769

Precision Inertial Products Operations

2236 N. Cleveland-Massillon Road
Akron, OH 44333

 330-659-3312  330-659-3298

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