



## HPC- 75 Cylindrical Probe Temperature Ranges A and E

### Specifications

#### Temperature Ranges:

##### Temperature Range A

Low: 32° F [0° C]

High: 302° F [150° C]

##### Temperature Range E

Low: -100° F [-73° C]

High: 400° F [205° C]

**Linear Range:** 0.050 inches [1.27 millimeters]  
with a 5 foot [1.52 meters] long Capacitec L2  
cable. For cables longer than 5ft consult factory.

**Maximum Range:** 0.075 inches [1.91 millimeters]

#### Calibration:

- A 20 point archived calibration record of voltage output versus nominal displacement is provided standard with every probe.
- Several NIST traceable calibrations are available.

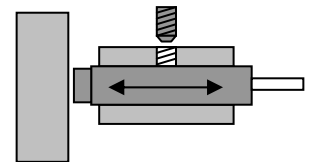
**Material:** Case, guard, and sensor are 303 stainless steel

**Driven Guard:** The guard element is driven with an electronic voltage of 2V to 20V peak to peak. Note, the guard must not be grounded.

**Dip Coating:** "-D" epoxy dip coatings are optional to prevent accidental earth grounding or shorting of the elements.

#### Mounting:

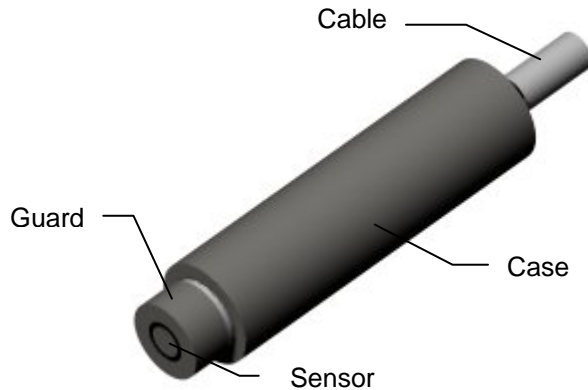
- Probe is designed to be mounted into a 0.250 (1/4) +0.001/-0.000 inch diameter hole.
- It is usually held in place with a set screw.
- Distance to target is adjusted by sliding the probe to the desired distance from the target and locking it in place with the set screw.



#### Cable:

- Coaxial Capacitec L2 or L3 cable is standard.
- Probe must be calibrated with the cable type and length selected.
- Cable must not be cut or spliced.

**Probe Lengths:** There are 3 standard probe lengths, and 6 non-standard probe lengths. See drawing for dimensions.





## HPC- 75 High Temperature Cylindrical Probe Temperature Ranges V and S

### Specifications

#### Temperature Ranges:

##### Temperature Range V

Low: -100° F [-73° C]

High: 1600° F [871° C]

##### Temperature Range S

Low: -100° F [-73° C]

High: 1832° F [1000° C]

**Linear Range:** 0.050 inches [1.27 millimeters] with a 5 foot [1.52 meters] long Capacitec T cable. For cables longer than 5ft consult factory.

**Maximum Range:** 0.075 inches [1.91 millimeters]

#### Calibration:

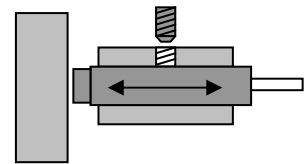
- A 20 point archived calibration record of voltage output versus nominal displacement is provided standard with every probe.
- Several NIST traceable calibrations are available.

**Material:** Case, guard, and sensor are Inconel 600<sup>®</sup> (range V) or Haynes 230<sup>®</sup> (range S)

**Driven Guard:** The guard element is driven with an electronic voltage of 2V to 20V peak to peak. Note, the guard must not be grounded.

#### Mounting:

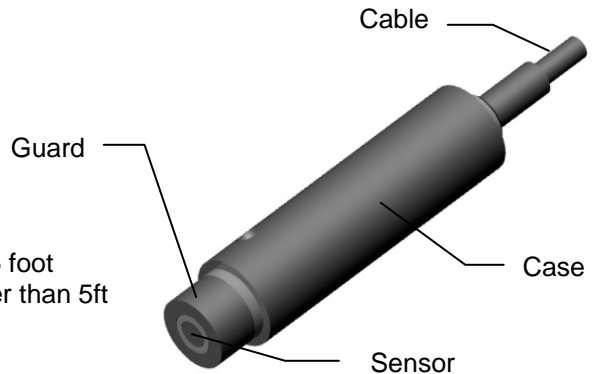
- Probe is designed to be mounted into a 0.250 (1/4) +0.002/-0.000 inch diameter hole.
- It is usually held in place with a set screw.
- Distance to target is adjusted by sliding the probe to the desired distance from the target and locking it in place with the set screw.



#### Cable:

- High temperature insulated coaxial Capacitec T cable is used standard.
- Probe must be calibrated with the cable type and length selected.
- Cable must not be cut or spliced.

**Probe Lengths:** There are 3 standard probe lengths, and 6 non-standard probe lengths. See drawing for dimensions.



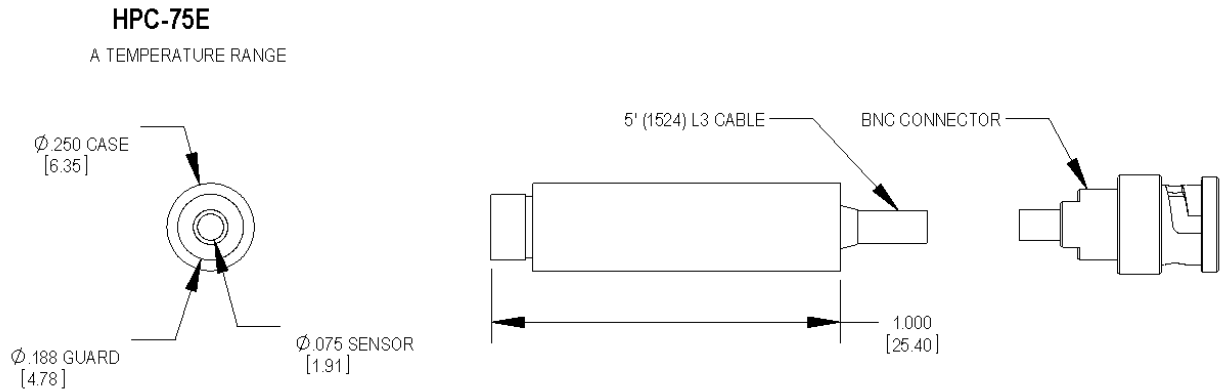


## HPC- 75 Cylindrical Probe Part Number Reference Guide

HPC – 75	X	-	X	-	XX	-	XX	-	X
PROBE LENGTH	OPERATING TEMPERATURE	CABLE TYPE	CABLE LENGTH	CONNECTOR TYPE					
A - .500" (12.70)	A - 32 to 302°F (0 to 150°C)	L2 - .093" coax (2.36)	5 - 5' Standard (1524)	M – 10-32 Microdot					
B - .625" (15.88)	E - -100 to 400°F (-73 to 205°C)	L3 - .063" coax (1.60)	X - Other in ft.	B – BNC					
C - .750" (19.05)	V - -100 to 1600°F (-73 to 371°C)	T – (High Temp) .063" coax (1.60)		MCX – MCX					
D - .850" (21.59)	S - -100 to 1832°F (-73 to 1000°C)	N3 – (High Temp) .080" coax (2.03)							
E - 1.000" (25.40)									
F - 1.250" (31.75)									
G - 1.500" (38.10)									
H - 1.750" (44.45)									
I - 2.000" (50.80)									

(DIMENSIONS) IN MILLIMETERS

### EXAMPLE: HPC-75E-A-L3-5-B



US Email: [sales@capacitec.com](mailto:sales@capacitec.com)  
 EU Email: [eurosales@capacitec.com](mailto:eurosales@capacitec.com)  
 Web: [www.capacitec.com](http://www.capacitec.com)

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# Capacitec

## HPC-75

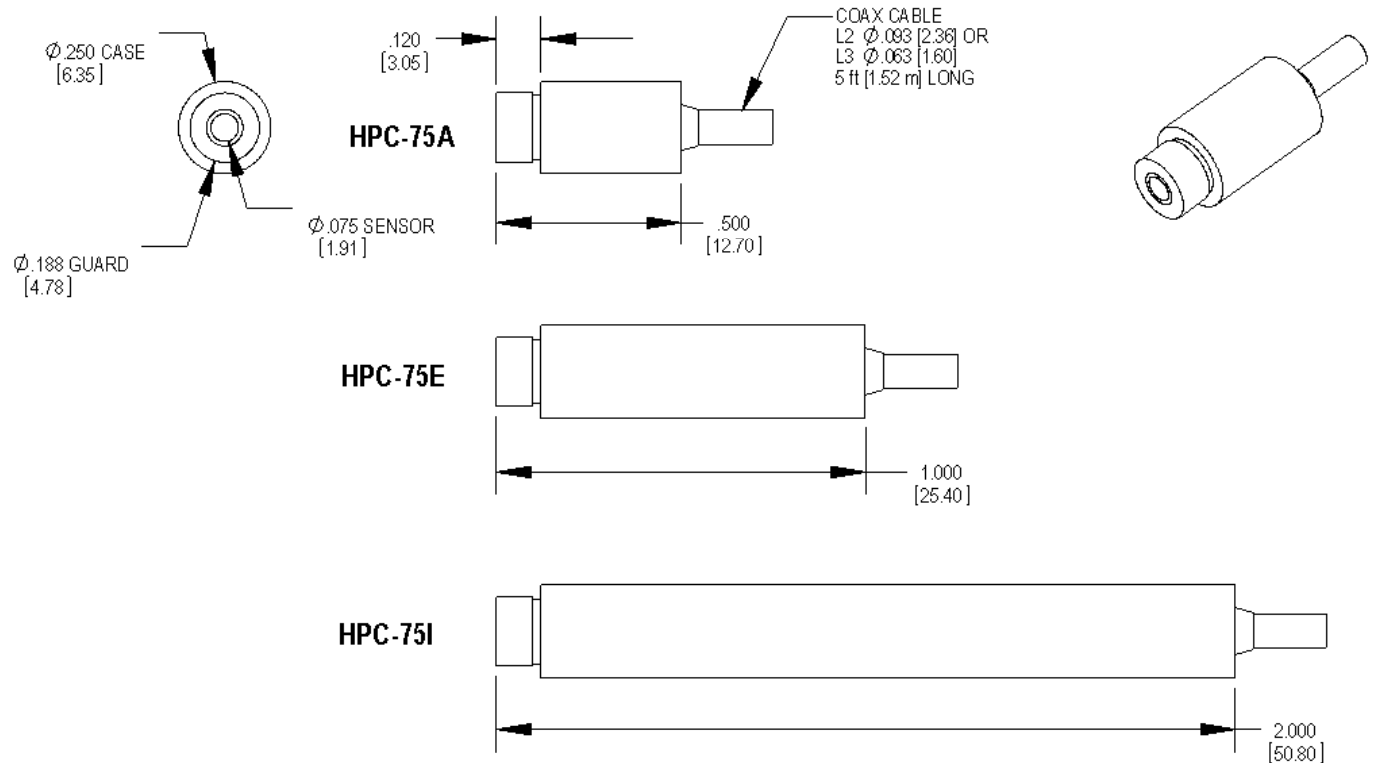
### Standard Cylindrical Probes

Temperature Ranges A and E  
Lengths A, E, and I

DIMENSIONS ARE NOMINAL VALUES

CUSTOM LENGTH OPTIONS	
OPTION	LENGTH
B	.625 [15.88]
C	.750 [19.05]
D	.875 [22.23]
F	1.250 [31.75]
G	1.500 [38.10]
H	1.750 [44.45]

TEMPERATURE RANGE				
OPTION	RANGE (°F)		RANGE (°C)	
	LOW	HIGH	LOW	HIGH
A	32°	302°	0°	150°
E	-100°	400°	-73°	205°



# Capacitec

## HPC-75

### Standard High Temperature Cylindrical Probes Temperature Ranges V and S Lengths A, E, and I

DIMENSIONS ARE NOMINAL VALUES

CUSTOM LENGTH OPTIONS	
OPTION	LENGTH
B	.625 [15.88]
C	.750 [19.05]
D	.875 [22.23]
F	1.250 [31.75]
G	1.500 [38.10]
H	1.750 [44.45]

TEMPERATURE RANGE				
OPTION	RANGE (°F)		RANGE (°C)	
	LOW	HIGH	LOW	HIGH
V	-100°	1600°	-73°	871°
S	-100°	1832°	-73°	1000°

