

HPC 375

HPC-375 Series Cylindrical Probes for Precision Dimensional Measurement

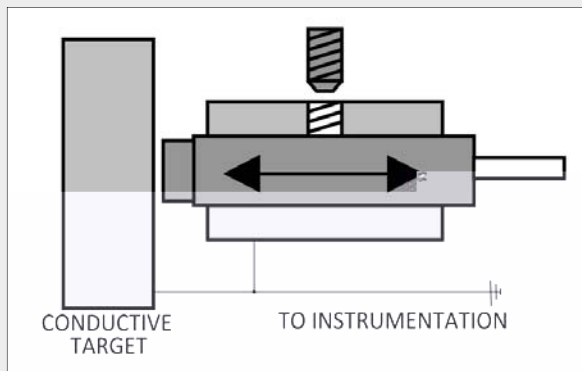
Capacitec's HPC non-contact probes are our most popular line of capacitive sensors. The sensor and guard elements are provided in a protective metal case. The HPC family of probes supports cable lengths of up to 10 meters in standard applications.

Built in wrench flats allow for easy installation and adjustments. A set screw or split clamp housing typically holds the assembly in place for easy installation and adjustments. Capacitec also offers custom configurations. Please consult the Capacitec technical support team for more information.



These probes have the largest displacement to sensor diameter ratio in the industry, yielding twice the linear range of competitors.

HPC cylindrical probes are available in a wide operational temperature range for precise measurements from cryogenic to 1000°C.



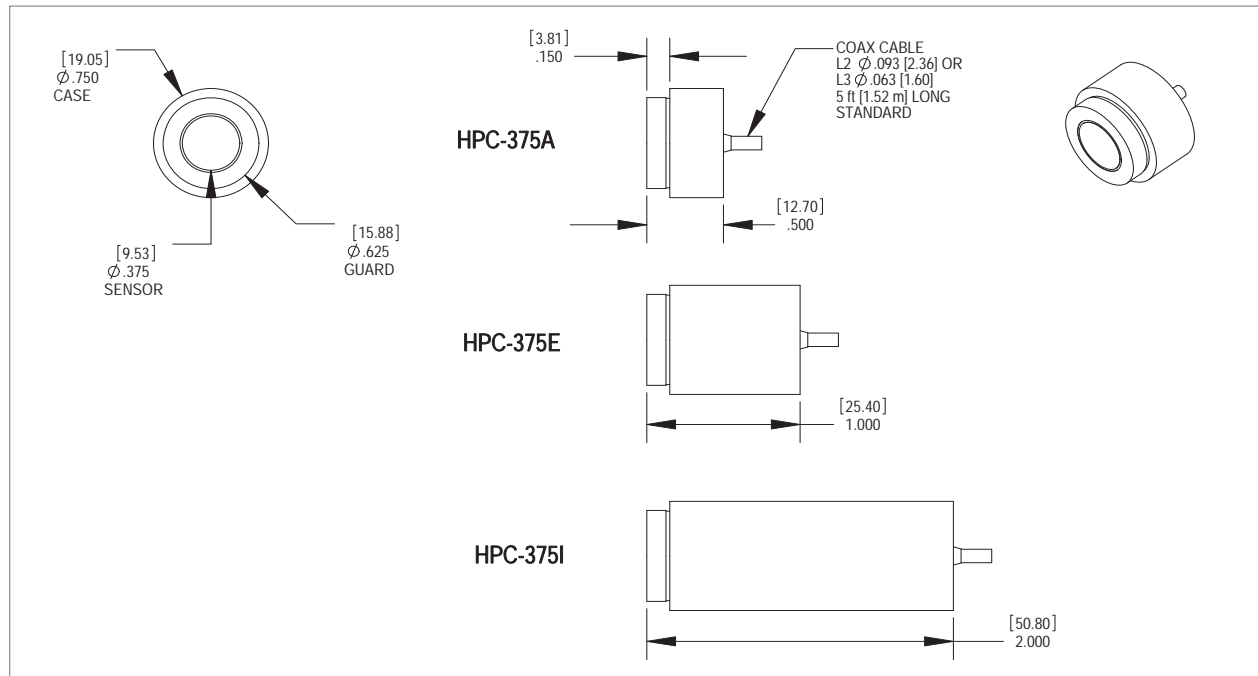
Adjust probe to desired distance and set screw in place



Complete Standard Capacitec HPC family

Standard Temperature Probes

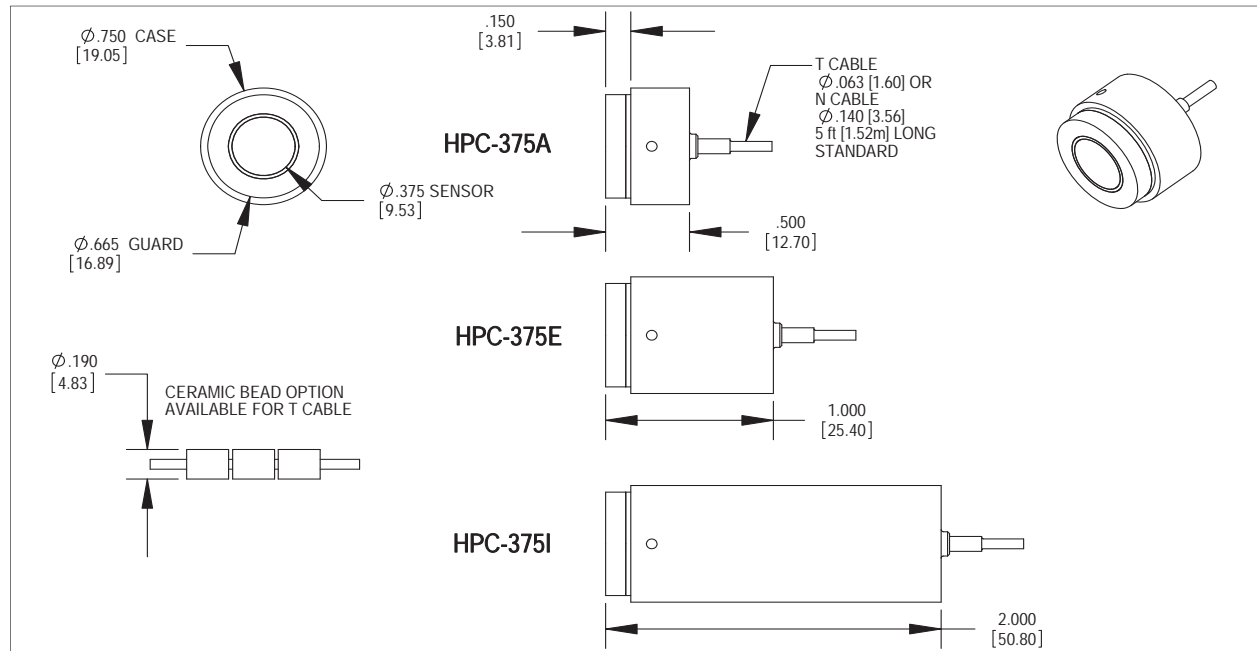
Temperature Ranges A & E



| | | |
|-----------------------------------|---------------------------------|---|
| Linear Range | | 0.225Ž [5.72] |
| Maximum Range | | 0.375Ž [9.53] |
| Material (Case, Guard and Sensor) | | 303 stainless steel |
| Standard Probe Lengths | A | 0.500Ž [12.70] |
| | E | 1.000Ž [25.40] |
| | I | 2.000Ž [50.80] |
| | Custom lengths B to H available | |
| | Custom | B .625Ž [15.88], C .750Ž [19.05], D .875Ž [22.23], F 1.250Ž [31.75], G 1.500Ž [38.10], H 1.750Ž [44.45], please consult factory |
| Temperature Ranges | A | 32°F [0°C] to 302°F [150°C], please consult factory for cryogenic |
| (Continuous Use) | E | -100°F [-73°C] to 400°F [205°C], please consult factory for cryogenic |
| Sensor OD | | 0.375Ž [9.53] |
| Case OD | | 0.750Ž [19.05] |
| Connector Options | | Microdot, BNC or MCX, (microdot and MCX not compatible with cable) |
| Cable Options OD | | L2 0.093Ž [2.36], L3 0.063Ž [1.60] or 0.125Ž [3.18], all cable must not be cut or spliced |
| Dip Coating | | Optional protective epoxy dip coating available |
| Calibration | NIST traceable | 20 point archived calibration record of nominal displacements vs voltage standard Several sensitivities available |
| Mounting Hole | | 0.750Ž +0.002/-0.000, [19.05 +0.051/-0.000] |

High Temperature Probes

Temperature Ranges V & S



| | | |
|-----------------------------------|----------------|---|
| Linear Range | | 0.250Ž [6.35] |
| Maximum Range | | 0.375Ž [9.53] |
| Material (Case, Guard and Sensor) | V | Inconel 600® |
| | S | Haynes 230® |
| Standard Probe Lengths | A | 0.500Ž [12.70] |
| | E | 1.000Ž [25.40] |
| | I | 2.000Ž [50.80] |
| | Custom | Custom lengths B to H available B .625Ž [15.88], C .750Ž [19.05], D .875Ž [22.23], F 1.250Ž [31.75], G 1.500Ž [38.10], H 1.750Ž [44.45], please consult factory |
| Temperature Ranges | V | -100°F [-73°C] to 1600°F [871°C], please consult factory for cryogenic |
| (Continuous Use) | S | -100°F [-73°C] to 1832°F [1000°C], please consult factory for cryogenic |
| Case OD | | 0.750Ž [19.05] |
| Sensor OD | | 0.375Ž [9.53] |
| Connector Options | | Microdot, BNC or MCX, (microdot and MCX not compatible with N cable) |
| Cable Options OD | | T 0.063Ž [1.60] or N 0.140Ž [3.56], all cable must not be cut or spliced |
| Dip Coating | | Custom coatings available, please consult factory |
| Calibration | NIST Traceable | 20 point archived calibration record of nominal displacements over voltage standard Several sensitivities available |
| Mounting Hole | | 0.750Ž +0.002/-0.000, [19.05 +0.051/-0.000] |

Ordering Format



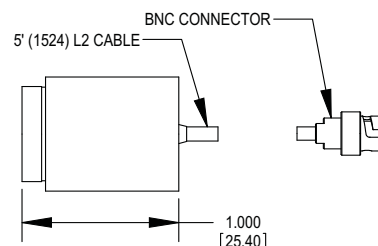
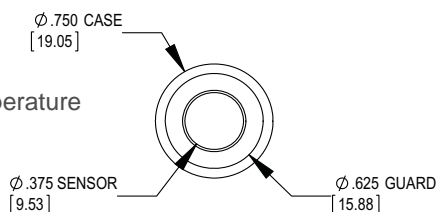
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|-----------------------|--|--|--|--|--|--|--|--|---|--|--|---|---|---|---|----|---|----|---|---|---|---|
| HPC – 375 | | | | | | | | | | | | X | - | X | - | XX | - | XX | - | X | - | X |
| PROBE LENGTH | | | OPERATING TEMPERATURE | | | CABLE TYPE | | | CABLE LENGTH | | | CONNECTOR TYPE | | | DIP COATING | | | | | | | |
| A - .500" (12.70) | | | Standard Temperature A - 32 to 302°F (0 to 150°C) E - 100 to 400°F (-73 to 205°C) | | | L2 - .093" coax (2.36) | | | 5 - 5' Standard (1524) | | | M - 10-32 Microdot (Not compatible with I2 or N cable) | | | D - For dip coating (only available for A and E temperature probes) Adds .002" (0.05) Leave blank for no coating | | | | | | | |
| B - .625" (15.88) | | | | | | L3 - .063" coax (1.60) | | | X - Other in ft. | | | B - BNC | | | | | | | | | | |
| C - .750" (19.05) | | | | | | I2 - .125" coax (3.18) | | | | | | MCX - MCX (Not compatible with I2 or N cable) | | | | | | | | | | |
| D - .850" (21.59) | | | | | | | | | | | | | | | | | | | | | | |
| E - 1.000" (25.40) | | | High Temperature V - 100 to 1600°F (-73 to 81°C) S - 100 to 1832°F (-73 to 1000°C) | | | T - High Temp .063" semi rigid coax (1.60) | | | Specify Beads or Over Braid if Desired (DIMENSIONS) IN MILLIMETERS | | | | | | | | | | | | | |
| F - 1.250" (31.75) | | | | | | N - High Temp .140" braided coax (3.56) | | | | | | | | | | | | | | | | |
| G - 1.500" (38.10) | | | | | | | | | | | | | | | | | | | | | | |
| H - 1.750" (44.45) | | | | | | | | | | | | | | | | | | | | | | |
| I - 2.000" (50.80) | | | | | | N2 – N cable with Nextel Over Braid | | | | | | | | | | | | | | | | |

Specify Beads or Over Braid if Desired

(DIMENSIONS) IN MILLIMETERS

EXAMPLE: HPC-375E-E-L2-5-B-D

HPC-375 with
€ 400°F [205°C] Max temperature
€ Dip coating option



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