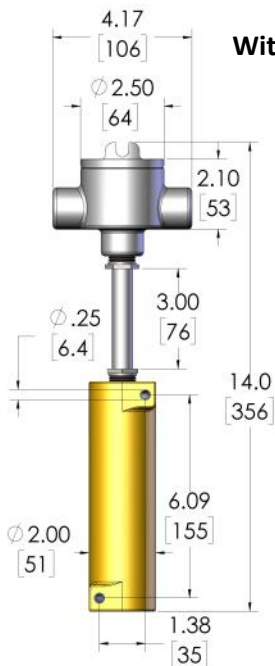
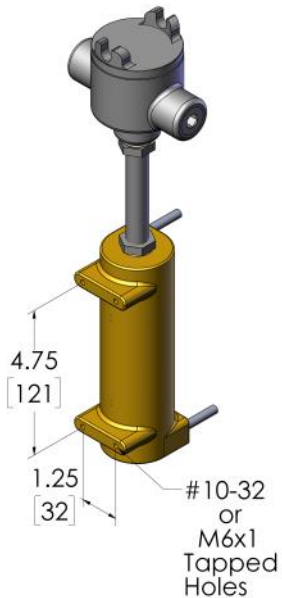


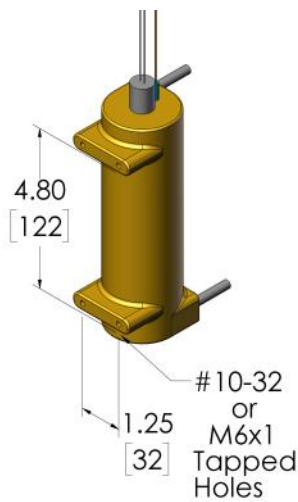
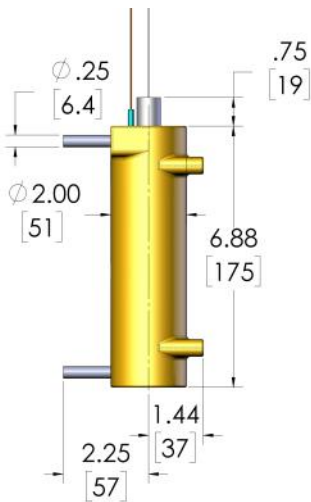
# CAST-X High Temp 500 Circulation Heater



With Explosion-Proof Rated Enclosure



Without Enclosure



## SPECIFICATIONS:

### Power:

- Up to 1500 W
- Voltage Range: 120 - 480 V

### Tubing:

- .250" OD (1/4") (6.3 mm) .035" Wall (.88 mm)
- Overall Process Tube Length: 84" (213 cm)
- Inconel 600 material
- Max Pressure: See below chart

| Flow-Tube Max Operating Pressures                  |        |      |     |
|----------------------------------------------------|--------|------|-----|
| Pressure ratings vary depending on operating temp. |        |      |     |
| °F                                                 | °C     | psi  | bar |
| 200-800                                            | 93-427 | 5506 | 379 |
| 900                                                | 482    | 4405 | 304 |
| 1000                                               | 538    | 2918 | 201 |
| 1100                                               | 593    | 826  | 57  |

Note: Data taken from Circor/Hoke Flareless Tube Fittings Tubing Data Charts.

### Heater Body Material:

- Cast Bronze

### Enclosures:

- Explosion-Proof Enclosure, certified to:  
Class 1, Div 1 & 2, Grp. B, C, D; (Explosionproof)  
Class 2, Div 1, Grp. E, F, G; (Dust-Ignitionproof)  
Class 2 Div 2, Grp. F, G; (Raintight)  
Class 3 (Wet Locations)  
NEMA 3, 4, 7CD, 9EFG
  - No Enclosure Option Also Available
- Certifications are for enclosure only.

### Max Heater Operating Temperatures:

- With Explosion-Proof Rated Enclosure: 1112°F (600°C)
- With No Enclosure: 1112°F (600°C)

### Temperature Sensors:

- TC is integrated into heating element
- K or J Type Single Thermocouple Available

### Available Accessories:

- Insulating Jacket
- Compression Fittings

CAST-X High Temp 500  
With Optional  
Insulating Jacket



# CAST-X High Temp 500 Circulation Heater

## *Features and Benefits*

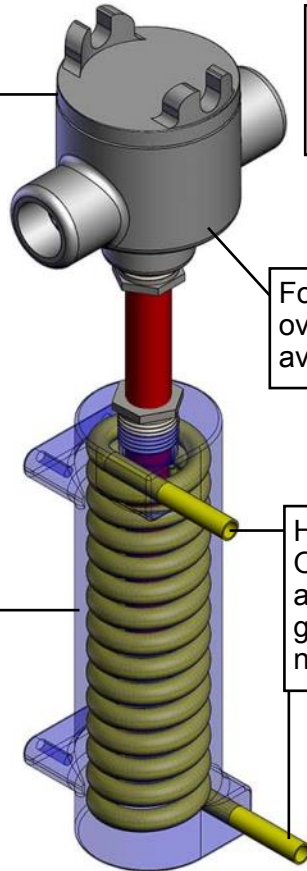
CAST-X HT 500 is available with a certified explosion-proof terminal enclosure, positioned in a "standoff" position. HT 500 is also available without an enclosure.

**600°C / 1112°F Max Operating Temp:** CAST-X High Temp 500 is one of very few circulation heaters capable of achieving such temperatures.

For optimal temperature control and over-temp protection, CAST-X HT 500 is available with a built-in thermocouple.

CAST-X HT heater bodies are made from cast bronze, to maintain thermal and structural integrity over a long lifespan.

**High Pressure Compatible Flow-Tubes:** Our Inconel 600 seamless flow-tubes are compatible with many high pressure gas processing applications, including natural gas and cryogas vaporization.



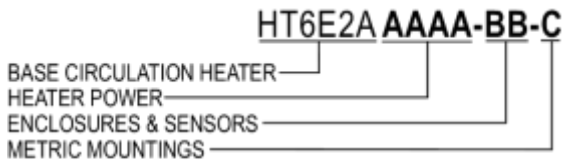
# SOUTHEAST THERMAL SYSTEMS

WWW.SETHERMAL.COM

SALES@SEETHERMAL.COM

phone: 704-399-4248

## CAST-X High Temp 500 Circulation Heater



Electropolished Flow-Tubes = Add "EP" to end of Part Number  
Passivated Flow-Tubes = Add "P" to end of Part Number  
For both, add "EP-P"

Building a CAST-X 500 Part Number  
Assigning numbers for sections AAAA and BB.  
For metric mountings, assign "M" to section C.  
If metric mounts are not needed, leave sec. C blank.  
For assistance or special orders, contact CAS directly.

| VOLTAGE, POWER, CIRCUIT TYPE                                              |                                          |           |                      |          |
|---------------------------------------------------------------------------|------------------------------------------|-----------|----------------------|----------|
| <i>Volts refers to line volts (VL). Amps refers to line current (IL).</i> |                                          |           |                      |          |
| Section "AAAA"                                                            | Circuit Type<br>(all are single circuit) | Volts (V) | Watts (W)            | Amps (A) |
| 300A                                                                      | SINGLE PHASE                             | 240       | 1200                 | 5.0      |
|                                                                           |                                          | 230       | 1100                 | 4.8      |
|                                                                           |                                          | 208       | 900                  | 4.3      |
|                                                                           |                                          | 120       | 300                  | 2.5      |
| 300B                                                                      | SINGLE PHASE                             | 120       | 1500                 | 12.5     |
| 300C                                                                      | SINGLE PHASE                             | 240       | 300                  | 1.3      |
|                                                                           |                                          | 230       | 275                  | 1.2      |
|                                                                           |                                          | 208       | 225                  | 1.1      |
|                                                                           |                                          | 120       | 75                   | 0.6      |
| 300D                                                                      | SINGLE PHASE                             | 240       | 500                  | 2.1      |
|                                                                           |                                          | 230       | 460                  | 2.0      |
|                                                                           |                                          | 208       | 375                  | 1.8      |
|                                                                           |                                          | 120       | 125                  | 1.0      |
| 300E                                                                      | SINGLE PHASE                             | 240       | 750                  | 3.1      |
|                                                                           |                                          | 230       | 690                  | 3.0      |
|                                                                           |                                          | 208       | 560                  | 2.7      |
|                                                                           |                                          | 120       | 185                  | 1.6      |
| 300F                                                                      | SINGLE PHASE                             | 240       | 1000                 | 4.2      |
|                                                                           |                                          | 230       | 920                  | 4.0      |
|                                                                           |                                          | 208       | 750                  | 3.6      |
|                                                                           |                                          | 120       | 250                  | 2.1      |
| 300G                                                                      | SINGLE PHASE                             | 240       | 1200<br>same as 300A | 5.0      |
| 300H                                                                      | SINGLE PHASE                             | 240       | 1500                 | 6.3      |
|                                                                           |                                          | 230       | 1380                 | 6.0      |
|                                                                           |                                          | 208       | 1125                 | 5.4      |
|                                                                           |                                          | 120       | 375                  | 3.1      |
| 300J                                                                      | SINGLE PHASE                             | 208       | 1125<br>Same as 300H | 5.4      |
| 300K                                                                      | SINGLE PHASE                             | 208       | 900<br>Same as 300A  | 4.3      |
| 300L                                                                      | SINGLE PHASE                             | 208       | 750<br>Same as 300F  | 3.6      |
| 300M                                                                      | SINGLE PHASE                             | 208       | 565                  | 2.7      |
|                                                                           |                                          | 120       | 190                  | 1.6      |
| 300N                                                                      | SINGLE PHASE                             | 120       | 1250                 | 10.5     |
| 300P                                                                      | SINGLE PHASE                             | 380       | 1500                 | 3.9      |
|                                                                           |                                          | 240       | 600                  | 2.5      |

| ENCLOSURES AND TEMPERATURE SENSORS                                |                                         |                |                 |
|-------------------------------------------------------------------|-----------------------------------------|----------------|-----------------|
| <i>All thermocouples are ungrounded, for optimal performance.</i> |                                         |                |                 |
| Section "BB"                                                      | Description                             | No. of Sensors | Enclosure       |
| 00                                                                | NO SENSOR                               | 0              | NO ENCLOSURE    |
| 0J                                                                | J-TYPE THERMOCOUPLE IN THERMOWELL       | 1              | NO ENCLOSURE    |
| 0K                                                                | K-TYPE THERMOCOUPLE IN THERMOWELL       | 1              | NO ENCLOSURE    |
| E0                                                                | NO SENSOR                               | 0              | EXPLOSION PROOF |
| EJ                                                                | J-TYPE THERMOCOUPLE IN CARTRIDGE HEATER | 1              | EXPLOSION PROOF |
| EK                                                                | K-TYPE THERMOCOUPLE IN CARTRIDGE HEATER | 1              | EXPLOSION PROOF |

| METRIC MOUNTING HOLES                                                                                                                                 |                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <i>Place an "M" in section D if metric mounting holes are required.<br/>If standard Imperial mounting holes are desired, sec. D can be left blank</i> |                                        |
| Section "D"                                                                                                                                           | Metric Mounting Holes                  |
| M                                                                                                                                                     | M6 X 1.00 METRIC TAPPED MOUNTING HOLES |

| VALUE ADDED OPTIONS FOR FLOW-TUBES                                                                                                       |                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <i>If you need electropolished or passivated flow-tubes, add these letters to the end of your part number. For both, indicate "EP-P"</i> |                                                                       |
| PN Adder                                                                                                                                 | Additional Service                                                    |
| P                                                                                                                                        | PASSIVATION: TO CLEAN FLOW-TUBE ID (USES A DILUTED NITRIC ACID FLUSH) |
| EP                                                                                                                                       | ELECTROPOLISHED TUBE ID: RA VALUE: 10 MICROINCHES (.254 MICROMETERS)  |

| ACCESSORIES                                                       |                                                             |
|-------------------------------------------------------------------|-------------------------------------------------------------|
| <i>These PNs are totally separate from the PNs for the heater</i> |                                                             |
| Part Number                                                       | Component                                                   |
| 274-55-6-1                                                        | COMPRESSION FITTINGS (HIGH PRESSURE) / PAIR (SHIPPED LOOSE) |
| 307-0-27-1                                                        | INSULATION JACKET, MAXIMUM TEMPERATURE 1472°F (800°C)       |

| CUSTOM DESIGNS & COMPONENTS                                             |  |
|-------------------------------------------------------------------------|--|
| <i>For these options, please call a CAS Representative for a quote.</i> |  |
| THICK WALL TUBES FOR HIGH PRESSURE APPLICATIONS                         |  |
| SPECIAL TUBE FITTINGS                                                   |  |