# **CAST-X High Temp 500 Circulation Heater**



#### 4.17 With Enclosure 106 Ø 2.50 64 2.10 53 3.00 Ø.25 76 6.4 14.0 356 4.75 121 6.09 155 Ø 2.00 1.25 #10-32 51 32 or M6x1 Tapped 1.38 Holes 35 .75 $\emptyset.25$ 19 6.4 4.80 Ø 2.00 122 51 6.88 175 #10-32 or 1.44 M6x1 2.25 Tapped Holes 57 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

#### Heater Body Material:

• Cast Bronze

#### **Enclosures:**

- Certified NEMA 3, 4, 7CD, 9EFG
   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)
- No Enclosure Option Also Available

#### Max Heater Operating Temperatures:

- No Enclosure: 1112°F (600°C)
- NEMA 7 Enclosure: 1112°F (600°C)

#### Temperature Sensors:

- K or J Type Thermocouple Available (Qty. 1)
- TC is integrated into heating element

#### Available Accessories:

- Insulating Jacket: Part Number 307-0-27-1
   Temp Rating: 1482°F (800°C)
- Compression Fittings: Part Number 274-55-6-1
   High Pressure Pair (shipped loose), by Swagelok,
   1/4" union compression fitting on each end.



CAST-X High Temp 500 With Optional Insulating Jacket



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# Features and Benefits

CAST-X HT 500 is available with a certified NEMA 7 explosion-proof electric enclosure, positioned in a "standoff" position. It is also available without a housing.

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 capable of high pressures, perfect for many gas processing applications.

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## **CAST-X High Temp 500 Circulation Heater**

HT6E2A AAAA-BB-C

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					
	Volts refers to line volts (VL). Amps refers to line current (IL).					
Section "AAAA"	Circuit Type (all are single circuit)	Volts (V)	Watts (W)	Amps (A)		
300A		240	1200	5.0		
	SINGLE PHASE —	230	1100	4.8		
	SINGLE FITASE	208	900	4.3		
		120	300	2.5		
300B	SINGLE PHASE	120	1500	12.5		
		240	300	1.3		
300C	SINGLE PHASE —	230	275	1.2		
0000	SINGLE FILASE	208	225	1.1		
		120	75	0.6		
		240	500	2.1		
300D	SINGLE PHASE	230	460	2.0		
3000	SINGLE PHASE	208	375	1.8		
		120	125	1.0		
		240	750	3.1		
0005	OINOLE BLIAGE	230	690	3.0		
300E	SINGLE PHASE —	208	560	2.7		
		120	185	1.6		
		240	1000	4.2		
		230	920	4.0		
300F	SINGLE PHASE -	208	750	3.6		
		120	250	2.1		
300G	SINGLE PHASE	240	1200 same as 300A	5.0		
		240	1500	6.3		
		230	1380	6.0		
300H	SINGLE PHASE	208	1125	5.4		
		120	375	3.1		
300J	SINGLE PHASE	208	1125 Same as 300H	5.4		
300K	SINGLE PHASE	208	900 Same as 300A	4.3		
300L	SINGLE PHASE	208	750 Same as 300F	3.6		
14000	SINGLE PHASE	208	565	2.7		
300M		120	190	1.6		
300N	SINGLE PHASE	120	1250	10.5		
		380	1500	3.9		
300P	SINGLE PHASE -	240	600	2.5		

ENCLOSURES AND TEMPERATURE SENSORS						
	All thermocouples are ungrounded, for optimal performance.					
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	NEMA 7			
EJ	J-TYPE THERMOCOUPLE IN CARTRIDGE HEATER	1	NEMA 7			
EK	K-TYPE THERMOCOUPLE IN CARTRIDGE HEATER	1	NEMA 7			

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

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

ACCESSORIES		
These PNs are totally separate from the PNs for the heater		
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	
For these options, please call a CAS Representative for a quote.	
THICK WALL TUBES FOR HIGH PRESSURE APPLICATIONS	
SPECIAL TUBE FITTINGS	