

Ceramic Insulated Strip Heaters



U.L. Recognized-E56973 C.S.A. Certified – 016386-0-000

Applications

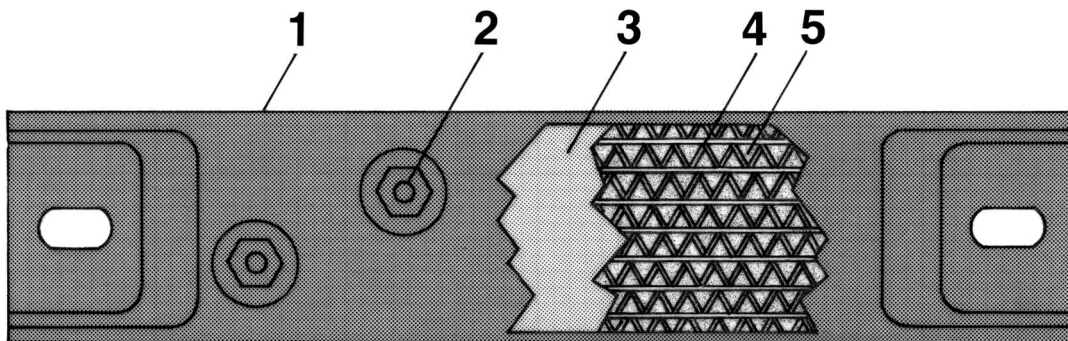
Dies, Molds, Plastic Forming and Sealing. Tank and Kettle Heating. For specific applications, correctly rated elements should be used to prevent overheating and to ensure long life. A guide to correct watt densities for specific applications is shown on the next page.

Features

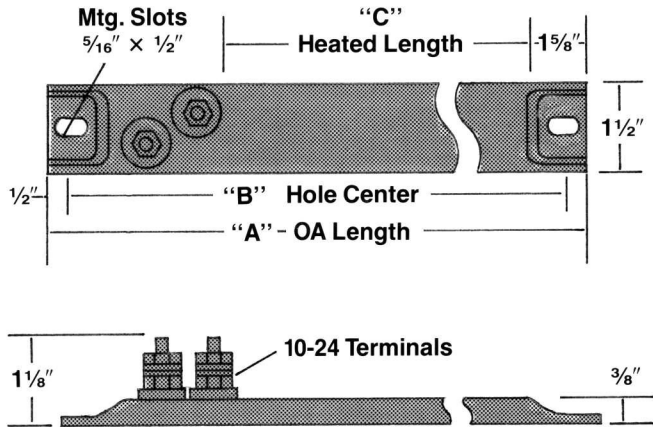
- The Hotwatt Stainless Steel Strip Heater provides clean, dependable heat with sheath temperatures up to 1200°F (649°C) and watt densities up to 40 watts per square inch.
- Because of the seamless stainless steel sheath, Hotwatt Ceramic Insulated Strip Heaters are dimensionally stable in milled slots.
- Made in U.S.A.

Construction

- 1 Seamless stainless steel sheath.
- 2 Post terminals.
- 3 Ceramic element support.
- 4 Element wire situated in close proximity to outside surface for maximum heat transfer and minimum internal temperature while preserving good dielectric qualities.
- 5 Magnesium oxide packing.

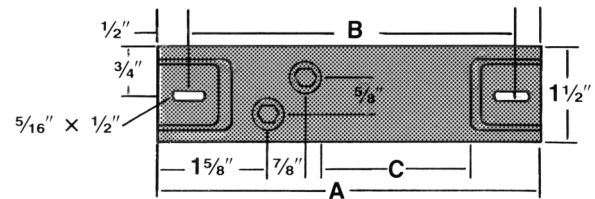


Ceramic Insulated Strip Heaters



Standard Termination

Type OF: Offset at one end.



▼ Manufactured Items ▼

Cat.No.	"A"	"B"	"C"	Min. Watts	Max. Watts
CS-5.5	5 1/2"	4 1/2"	1"	50	180
CS-7.5	7 1/2"	6 1/2"	3"	50	360
CS-8	8"	7"	2 3/4"	50	430
CS-9.5	9 1/2"	8 1/2"	4 1/4"	50	510
CS-10.5	10 1/2"	9 1/2"	5 1/4"	50	630
CS-12	12"	11"	7 1/4"	50	810
CS-14	14"	13"	9 1/4"	50	1050
CS-15.2	15 1/4"	14 1/4"	10"	50	1200
CS-16.2	16 1/4"	15 1/4"	11"	50	1320
CS-18	18"	17"	12 3/4"	50	1530
CS-19.5	19 1/2"	18 1/2"	14 1/4"	50	1710
CS-21	21"	20"	15 3/4"	50	1890
CS-23.7	23 3/4"	22 3/4"	18 1/2"	50	2220
CS-25.5	25 1/2"	24 1/2"	20 1/4"	50	2430
CS-26.7	26 3/4"	25 3/4"	21 1/2"	50	2580
CS-28.2	28 1/4"	27 1/4"	23"	75	2760
CS-30	30"	29"	24 3/4"	75	2970
CS-30.5	30 1/2"	29 1/2"	25 1/4"	75	3030
CS-33.5	33 1/2"	32 1/2"	28 1/4"	75	3390
CS-35.7	35 3/4"	34 3/4"	30 1/2"	75	3660
CS-38.5	38 1/2"	37 1/2"	33 1/4"	100	3990
CS-42.5	42 1/2"	41 1/2"	37 1/4"	100	4320
CS-47.7	47 3/4"	46 3/4"	42 1/2"	100	4320
CS-50.5	50 1/2"	49 1/4"	45 1/4"	100	4320
CS-53.7	53 3/4"	52 3/4"	48 1/2"	100	4320
CS-63.7	63 3/4"	62 3/4"	50 1/2"	100	4320

Application	Max. Watts/sq. in.
Water heating	40
Low viscosity Liquid heating	16
Light oil heating	10 - 12.5
Heavy oil heating	6.25 - 10
Semi solid heating	5 - 6.25
Platen heating	
Up to 300°F (149°C)	40
300° - 600°F (149°C-316°C)	20
600° - 800°F (316°C-427°C)	15

Formulas for Determination of Watt Density

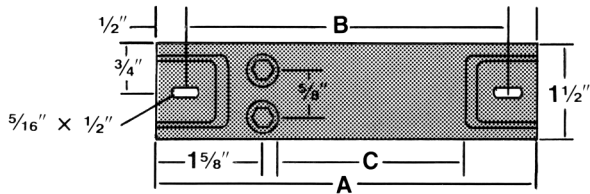
$$\text{Watts/sq in} = \frac{\text{Total unit wattage}}{\text{C (heated length)} \times 3}$$

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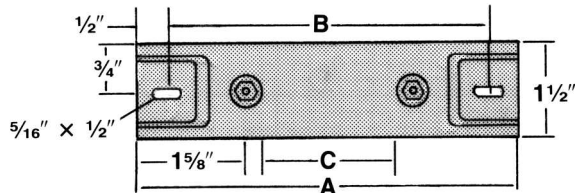
Optional Terminations

Type SSA: Parallel at one end.

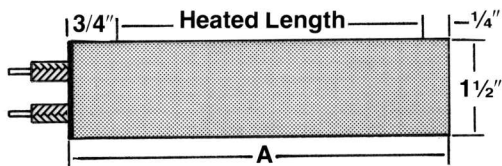
Heated length ("C") is $\frac{3}{4}$ " longer



Type SO: One each end. Heated length ("C") is 1" shorter.

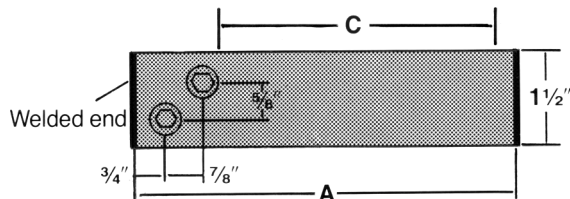


Type SF1: Flexible high temperature insulated leads. Specify length. Opposite end of unit may be standard closure with mounting hole or any of the optional closures. (Blunt end, XS54, shown.) Suitable for use to 480V. Lead end may be sealed for moisture resistance.

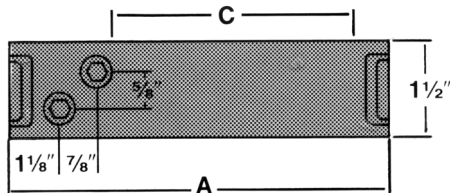


Optional End Closures

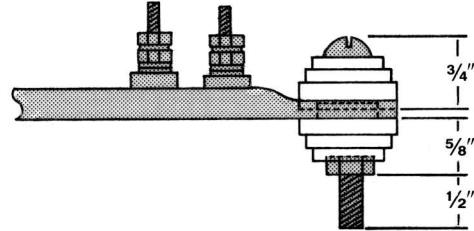
XS-54: Blunt end. Welded each end with no mounting holes. May be used with Type OF, SSA, or SO terminals. Heated length ("C") is 3" longer.



XS-83: Short crimp. At each end with no mounting holes. May be used with Type OF, SSA, or SO terminals. Heated length ("C") is 1" longer.



XS-84: Secondary insulating bushings. Required when units are connected in series on voltages above 300V. Sheath must be isolated. Requires enlarged ($\frac{1}{2}$ " or $\frac{3}{4}$ ") mounting hole each end. May be used with Type OF, SSA, or SO terminals.



Tolerances

Width: 1.500, +.010

Length: Up to 24", $\pm \frac{1}{6}$ "
24" and over, $\pm \frac{1}{8}$ "

Thickness: .375, $\pm .005$

Wattage tolerances are held to +5%, -10% at rated voltage.

Voltage

Standard voltages are either 120V or 240V. Other voltages are available.