

Ceramic Band Standard Specifications and Tolerances

PERFORMANCE RATINGS

Maximum Temperature: 1400°F (760°C)
Nominal Watt Density: 20-45 W/in² (3-7 W/cm²)
Maximum Watt Density: 45 W/in² (7 W/cm²)

ELECTRICAL RATINGS

Maximum Voltage: 480 VAC per termination
Dual Voltage: Available depending on heater configuration
Maximum Amperage per circuit:
 lead wire termination: 12.5 amp
 screw terminations: 25 amp
Resistance Tolerance: +10%, -5%
Wattage Tolerance: +5%, -10%



Exposed electrical wiring on band heater installations is a violation of Electrical Safety Codes including O.S.H.A.

PHYSICAL SIZE CONSTRUCTION LIMITATIONS

Sheath Material: Stainless Steel
Insulation Material: Ceramic Fiber Blanket
 Standard Thickness: 1/4" (6.4 mm)
 Double Thickness: 1/2" (12.7 mm)

Overall Thickness:

Insulation Type	Dia. less than 4"		Dia. 4" or greater	
	Standard	Standard	Standard	Optional
Standard	1/2" (12.7 mm)	5/8" (15.9 mm)	1/2" (12.7 mm)	
Double	11/16" (17.5 mm)	3/4" (19.1 mm)	11/16" (17.5 mm)	
Ribcage (Uninsulated)	11/32" (8.7 mm)	1/2" (12.7 mm)	11/32" (8.7 mm)	

Minimum Width: 1" (25.4 mm)

Standard Width Increments: 1/8" (3.2 mm)
 Consult Tempco for non-standard widths.

Maximum Width:

One-Piece & Two-Piece:

Dependent upon the ratio of diameter to width
 Maximum Width to Diameter Ratio is 3:1
 Maximum Width for 5" or greater ID is 15"

Reverse Band: 4" (101.6 mm)

Width Tolerance:

1" (25.4 mm) to 3-1/2" (88.9 mm): ±1/16" (±1.6 mm)
 4" (101.8 mm) to 6-1/2" (165.1 mm): ±1/8" (±3.2 mm)
 Over 6-1/2" (165.1 mm): ±1/4" (6.4 mm)

Minimum Diameter:

One-Piece: 2" (50.8 mm)
Two-Piece: 4" (101.6 mm)
Reverse Band: 5-1/2" (139.7 mm)

Maximum Diameter

One-Piece: 21" (533.4 mm)
Two-Piece & Reverse Band: 44" (1,117.6 mm)

Nominal Gap: 3/8" (9.5 mm) — If a larger gap is required for probes or thermocouples, specify when ordering.

If tighter tolerances are required consult Tempco.

Construction Clamp	Min. ID		Min. Width		Max. ID	
	in	mm	in	mm	in	mm
One-Piece	2	50.8	1	25.4	21	533.4
Two-Piece	4	101.6	1	25.4	44	1117.6
Reverse Band	5.5	139.7	1	25.4	44	1117.6
Standard Insulation	2	50.8	1	25.4		N/A
Double Insulation	2	50.8	1	38.1		N/A
Rib Cage (RCC)	3	76.2	1	114.3		N/A
Built-In Bracket	2	50.8	1	25.4		N/A
Built-In Bracket Spring Loaded	2	50.8	1	25.4		N/A
Latch and Trunnion	4	101.6	1	25.4		N/A
Bent-Up Flange	2	50.8	1	25.4		N/A
Shell Overlap	3	76.2	1	38.1	20	508.0



Note: Refer to individual construction and termination descriptions on pages 1-66 through 1-74 for further information. Actual heater minimums and maximums will depend upon the combination of construction/clamp, termination styles and electrical ratings.