

CERAMIC TERMINAL TUBES FOR STARBAR HEATING ELEMENTS

The element terminal holes in the furnace walls must be in line and be large enough in size to prevent the element or terminal tube from being pinched at all furnace temperatures. Terminal tubes are optional but recommended for use with the SER and TSR elements and with fiber wall furnaces. Some furnaces have a potential problem of electrical conduction to ground. The ceramic terminal tubes have superior electrical resistance properties and can prevent this from occurring.

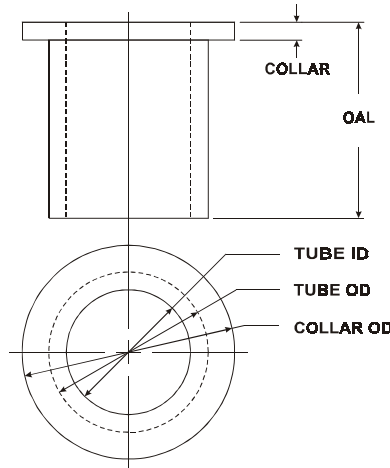
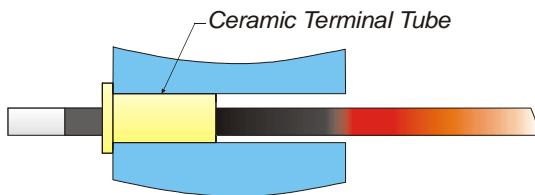
The tubes protect the furnace wall insulation and provide a constant clearance. They also are recommended in applications where product vapors may condense in the furnace terminal holes. This can cause the element to stick to the wall. When sticking, the element may break from mechanical forces caused by thermal expansion and contraction. The tubes can prevent this from occurring, for if the element sticks to the tubes, the tubes can move.

When vapors depositing on the elements are a problem it is recommended that ceramic fiber pads be placed beneath the element cold ends and the terminal tubes where they enter the furnace.

Tucking ceramic fiber around the circumference of the element where it enters the terminal hole is also recommended to reduce heat losses from radiation and convection.

STANDARD SIZES

Terminal tubes are available for Starbar diameters 1/2" (13mm) through 2-1/8" (54mm) in a standard length of 4-1/8" (105mm). Longer lengths available upon request.



STARBAR TERMINAL TUBES

Starbar Diameter		Tube P/N	Tube OD x ID		Tube OAL		Collar Diameter x Thickness	
mm	Inch		mm	Inch	mm	inch	mm	inch
13	0.50	2024-1	35 x 20	1.37 x 0.81	105	4.12	50 x 10	2.00 x 0.38
16	0.63	2024-1	35 x 20	1.37 x 0.81	105	4.12	50 x 10	2.00 x 0.38
19	0.75	2024-3	44 x 30	1.75 x 1.18	105	4.12	60 x 10	2.38 x 0.38
22	0.88	2024-3	44 x 30	1.75 x 1.18	105	4.12	60 x 10	2.38 x 0.38
25	1.00	2024-5	51 x 37	2.00 x 1.44	105	4.12	70 x 10	2.75 x 0.38
32	1.25	2024-5	51 x 37	2.00 x 1.44	105	4.12	70 x 10	2.75 x 0.38
35	1.38	2024-7	57 x 43	2.25 x 1.69	105	4.12	75 x 10	3.00 x 0.38
38	1.50	2024-7	57 x 43	2.25 x 1.69	105	4.12	75 x 10	3.00 x 0.38
44	1.75	2024-9	64 x 49	2.50 x 1.94	105	4.12	83 x 10	3.25 x 0.38
54	2.12	2024-11	76 x 62	3.00 x 2.44	105	4.12	95 x 10	3.75 x 0.38

Special OD, ID and Overall lengths available upon request.



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