

PRODUCT INFO SHEET

Nanmac Corporation

Quality • Performance • Solutions

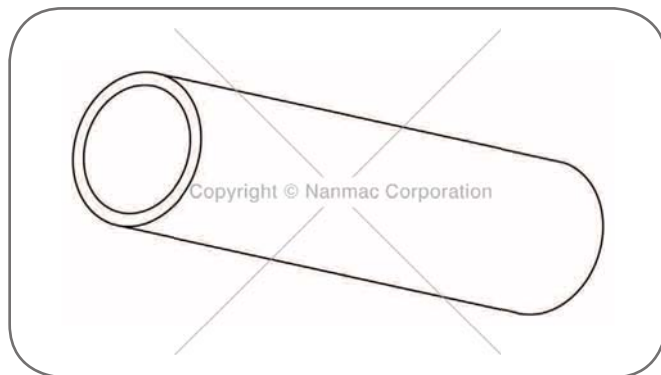
Protection Tubes Ceramic and Refractory Metal A31 Series

We offer high purity Zirconia and Alumina ceramic protection tubes along with Molybdenum and Tantalum metal tubing for high temperature applications. In addition to the size specifications, additional performance information is available; as well as, other diameters and types of protection tubes (contact the factory with your specific requirement).

NOTES:

- For ceramic protection tubes order by Part No. (*Example: A31-1*, specifies a six inch long 1/8 OD x 1/16 ID alumina tube).
- All ceramic tubes come closed end, for ceramic tubes open both ends, specify as follows *Example: A31-12-9-OBE*
- Tubes are typically made in six inch increments. You must specify a base Part No. longer than your required cut lengths when ordering (OBE - open both ends). *Example: 12 inch tube open both ends requires an 18 inch tube to be cut down.*
- For refractory tubing with one end welded closed and leak tested to 80 PSI (contact factory).
- For refractory tubing, list Part No. and length of the tube (*Example: A31-92-24*, specifies molybdenum tubing, 1/4 inch OD with 0.030 thick wall, 24 inches long, open both ends).

Special Note: Various lengths and diameter sizes are available.



| Specifications | | | |
|---|------------|---------------|--------------|
| Part No. | Material | OD x ID (in.) | Length (in.) |
| A31-1 | Alumina | 1/8 x 1/16 | 6 |
| A31-2 | | | 12 |
| A31-3 | | | 18 |
| A31-4 | | | 24 |
| A31-5 | Alumina | 5/32 x 5/64 | 6 |
| A31-6 | | | 12 |
| A31-7 | | | 18 |
| A31-8 | | | 24 |
| A31-9 | Alumina | 1/4 x 3/16 | 6 |
| A31-10 | | | 12 |
| A31-11 | | | 18 |
| A31-12 | | | 24 |
| A31-40 | Alumina | 3/8 x 1/4 | 6 |
| A31-41 | | | 12 |
| A31-42 | | | 18 |
| A31-43 | | | 24 |
| A31-44 | | | 30 |
| A31-45 | | | 36 |
| A31-50 | Alumina | 1/2 x 3/8 | 6 |
| A31-51 | | | 12 |
| A31-52 | | | 18 |
| A31-53 | | | 24 |
| A31-54 | | | 30 |
| A31-55 | | | 36 |
| A31-61 | Zirconia | 1/4 x 3/16 | 12 |
| A31-62 | | | 18 |
| A31-63 | | | 24 |
| A31-70 | Zirconia | 3/8 x 1/4 | 6 |
| A31-71 | | | 12 |
| A31-72 | | | 18 |
| A31-73 | | | 24 |
| | | | |
| Refractory Metal Tubing Open Both Ends | | | |
| Part No. | Material | OD x ID (in.) | Length (in.) |
| A31-80 | Tantalum | 0.125 x 0.015 | 108 |
| A31-81 | | 0.187 x 0.020 | 108 |
| A31-82 | | 0.250 x 0.030 | 108 |
| A31-90 | Molybdenum | 0.125 x 0.015 | 98 |
| A31-91 | | 0.187 x 0.020 | 98 |
| A31-92 | | 0.250 x 0.030 | 98 |
| A31-93 | | 0.250 x 0.050 | 98 |
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