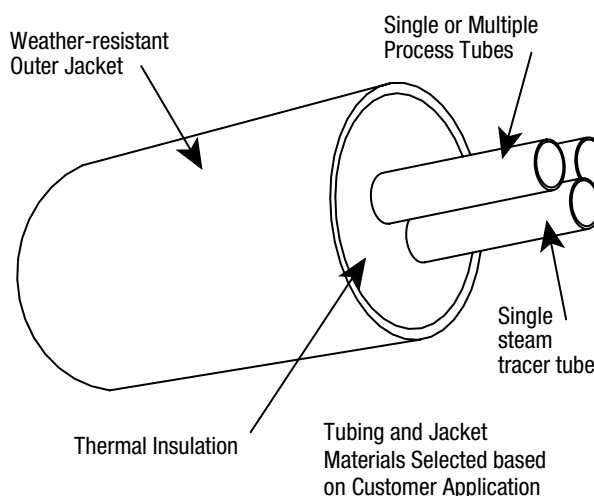


2211-2213

Single & Multiple Process Tube Heavy Steam Traced Bundles for High Temperature Applications

- Preinsulated and prefabricated for fast, easy installation.
- Low heat loss
- Personnel Protection



Description

Chromalox 2211/2213 pre-insulated steam traced tubing consists of single or multiple process tubes; a single tracer tube; thermal insulation and covered by a weather resistant, flame retardant outer jacket.

These products are designed for heavy tracing of process, sampling and impulse lines to help prevent freezing, to decrease fluid viscosity, and to protect against low temperature degradation.

The bundles are designed to maintain an average jacket temperature below 160°F at continuous operating temperatures up to 700°F.

Bundles can be designed for applications up to 1100°F. Tubing size and materials are limited in applications above 700°F.

Applications

- Analyzer and Instrument lines
- Small diameter Process lines
- Impulse lines - D/P Cells

Material Selections

Tubing:

- Welded or Seamless Type 316 and Type 316L meeting ASTM A-269
- Seamless Type 316 meeting ASTM A-213 (except average wall)

Materials available by special order:

- Seamless Type 316 and Type 316H meeting ASTM A-213

Jacket Material:

- Standard material is a 105°C rated PVC. This is also available in a low temperature version for applications where installation temperature could be as low as -20°F.
- For 700°F and higher process tube temperatures, a 125°C rated Thermoplastic Elastomer is recommended.
- Thermoplastic Polyurethane is also available for special applications.
- All jacket materials are UV and weather resistant as well as flame retardant.

Heating Cable

2211-2213

Single & Multiple Process Tube Heavy Steam Traced Bundles for High Temperature Applications

(cont'd.)

Technical Specifications

Typical Bundle Properties

Process Tube OD (In.)	Bundle OD (In)	Weight/Ft (lbs/ft ²)	Min. Bend Radius (In) ²	Avg. Temp Jacket °F	Tube Working Pressure (psig) ⁴
500°F (Continuous) Rated Bundles					
3/8	1.82	0.75	11	<140	3600
2 x 3/8	2.05	0.95	13	<140	3600
1/2	2.15	0.95	13	<140	2650
2 x 1/2	2.35	1.25	14	<140	2650
700°F (Continuous) Rated Bundles					
3/8	3.05	1.30	19	145	3250
2 x 3/8	3.10	1.45	19	145	3250
1/2	3.20	1.45	20	150	2400
2 x 1/2	3.35	1.70	21	155	2400
1000°F (Continuous) Rated Bundles					
3/8	3.20	1.55	25	180	3050
2 x 3/8	3.45	1.60	25	185	3050
1/2	3.40	1.55	25	190	2250
2 x 1/2	3.55	1.90	25	200	2250

1. Weight does not include shipping reel.

2. Minimum unsupported bend with standard jacket

3. Average calculated at maximum continuous operating temperature and 80°F ambient.

4. Working pressure from ASME B31.3 Tables for 0.035" wall seamless T316 tubing at maximum operating temperature, rounded to nearest 50 psi.

Product Specifications 2256/2266 LTM/HTM

Tube O.D.	Standard Wall Thickness***	Material (1)	ASTM	Working Pressure @200°F	Nominal Bundle O.D.	Nom. Wt Lbs/ft.	Max. Bend Radius
1/4"	.030"	#122 DHP Copper	B-68 B-75	1270 psi	1.35"	0.4	8"
3/8"	.032"	#122 DHP Copper	B-68 B-75	880 psi	1.40"	0.5	9"
1/2"	.035"	#122 DHP Copper	B-68 B-75	710 psi	1.50"	0.6	10"
3/4"	.049"	#122 DHP Copper	B-68 B-75	660 psi	1.65"	0.9	12"
1/4"	.035"	316/316L-S/S WLD	A-269	4470 psi**	1.35"	0.56	8"
3/8"	.035"	316/316L-S/S WLD	A-269	2860 psi**	1.40"	0.60	9"
1/2"	.035"	316/316L-S/S WLD	A-269	2100 psi**	1.50"	0.65	10"
1/4"	.040"	PFA	D-6867	75 psi**	1.35"	0.50	8"
3/8"	.062"	PFA	D-6867	50 psi**	1.40"	0.53	9"
1/2"	.062"	PFA	D-6867	75 psi**	1.50"	0.60	10"

Notes:

Minimum recommended installation temperature for PVC -25°F (-32°C)

** Values given are for welded, seamless slightly higher

*** Heavier wall thickness available upon request

(1) Other tube materials available

Standard Jacket is Black, 105°C lead free, LT-FRPVC

Alternate Jacket Materials – 125°C FR-TPE, FRPE, FR-Urethane

LTM Product Rating: 185°F (85°C)

HTM Product Rating: 250°F (121°C)