


# UNITHERM™ 2240 SERIES SINGLE LINE JACKETED TUBING

## Industrial Tubing

UNITHERM 2240 series tubing is comprised of a standard metal instrument tube with an extruded polymer outer jacket. This product is used in instrumentation applications where additional corrosion protection or slight mechanical protection is required. This product is not heated or insulated.

### Tubing

A variety of tube materials and sizes are available for use in the 2240 series product.

	<b>Stainless Steel:</b>	Welded Stainless Steel Type 316 ASTM A-269 Seamless Stainless Steel Type 316 ASTM A-269 Welded Stainless Steel Type 316L ASTM A-269 Seamless Stainless Steel Type 316L ASTM A-269
	<b>Copper:</b>	#122 DHP Seamless
	<b>Exotic Metals (Examples):</b>	Hastelloy C-276 (Sticks) Incoloy Monel 400
	<b>Jacket Material</b>	UNITHERM's standard jacketing material is a weather resistant 105°C Rated Black Flame Retardant Polyvinyl Chloride (FR PVC). This is suitable for most applications.
	<b>Minimum installation temperature</b>	+15°F (-9.4°C) for products with FR PVC jackets. -20°F (-29°C) for products with low temperature FR-PVC -30°F (-35°C) for products with FR PE or FR TPE jackets
	<b>For other applications</b>	Low Temperature Flame Retardant Polyvinyl Chloride (LT FR PVC), Flame Retardant Polyethylene (FRP) or Flame Retardant Thermoplastic Elastomer (FRTPE) may be used.

### Application Benefits

This product is designed to transport fluids at room temperature.

The typical use for this product is where pneumatic or hydraulic signals are used for sensing or control. It is designed and engineered for use in instrumentation and process control lines. The outer jacket protects the metal tube from chemical attack in corrosive atmospheres. It also provides excellent protection from galvanic corrosion, which occurs when dissimilar metals remain in contact with each other. Especially in moist areas. The tube jacket acts as a cushion when vibration occurs. This product is available in long continuous lengths creating favorable economies gained by less unions and connection in the installation.

### Installation Information

Remove the outer jacket prior to attaching any fittings.

Remove the minimum jacket necessary to attach the fitting. Cover any unjacketed tubing with a material suitable for the application.

A tubing bender or properly sized forming mandrel is recommended for making tight bends. Long, sweeping bends can be made by hand if proper care is taken to insure the tube is not kinked. Slight kinking of the tube jacket is normal and does not affect tube performance.

Minimum clamp bearing width: 0.5 inches (1.3 Cm).

### Safety Issues

Your personal safety may be directly or indirectly affected if the 2240 tube has been physically abused. Each tube should be inspected prior to its use in the field and removed IMMEDIATELY if you note any of the following physical characteristics:

- The tube is kinked or twisted.
- The outer jacket is damaged or missing.
- **DO NOT** kink the tube
- This product is not to be used to transport steam or other hot fluids.
- Any part of the tube appears damaged.
- **DO NOT** exceeds the maximum recommended working pressure of the tube.
- **DO NOT** expose to temperatures in excess of the maximum temperature rating of the jacket or the fluid being conveyed through the tube.
- This product is not designed to transport cryogenic fluids or fluids requiring dual containment.

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**UNITHERM™ 2240 SERIES SINGLE LINE JACKETED TUBING**

**Technical Information and Specifications**

Tube Material	Tube O.D. x Wall Thickness	Max. Working Pressure @ 80°F	Max. Pulling Tension lbs.	*Min. Bend Radius Inches
Copper – Type DHP Alloy No. 122 - Bright – Annealed-Soft-ASTM B68/B75	1/4" O.D. x .030" Wall Thickness	1590	90	1.0
	3/8" O.D. x .032 Wall Thickness	1100	155	1.5
	1/2" x .035 Wall Thickness	890	290	2.0
	6 mm O.D. x 1 mm Wall Thickness	1700	90	1.0
	10 mm O.D. x 1mm Wall Thickness	1000	155	1.5
	12 mm O.D. x 1 mm Wall Thickness	825	290	2.0
Welded or Seamless Stainless Steel Type 316 Conditioned; Fully Annealed per ASTM A269	1/4" O.D. x .030" Wall Thickness	5360	590	1.0
	3/8" O.D. x .032 Wall Thickness	3430	930	1.5
	1/2" x .035 Wall Thickness	2520	1275	3.0
	6 mm O.D. x 1 mm Wall Thickness	W: 5270/S: 6050	*Bend Radius shown using lever or gear type bending tool. Double radius shown for unsupported hand bending.	
	10 mm O.D. x 1mm Wall Thickness	W: 3370/S: 3625		
	12 mm O.D. x 1 mm Wall Thickness	W: 2470/S: 1500		

**Design Properties for various materials used by UNITHERM**

Physical Properties	FR PVC	LT FR PVC	FR PE	FR TPE	FR URETHANE
Abrasion Resistance	Good	Good	Excellent	Good	Good
Mechanical Resistance	Good	Good	Excellent	Good	Good

**Temperature Characteristics**

Physical Properties	FR PVC	LT FR PVC	FR PE	FR TPE	FR URETHANE
Max. Continuous Service, Deg. °C	105	105	70	125	105
Low Temperature Brittleness, Deg °C	-15	-45	-60	-45	-55
Recommended Min. Installation, Deg °C	-10	-35	-50	-35	-58

**Environmental Resistance**

Physical Properties	FR PVC	LT FR PVC	FR PE	FR TPE	FR URETHANE
Aliphatic Hydrocarbons	Good	Good	Good	Good	Poor
Aromatic Hydrocarbons	Fair	Fair	Fair	Fair	Good
Halogenated Solvents	Fair	Poor	Poor	Poor	Poor
Acids	Fair	Good	Good	Good	Fair
Alkalis	Excellent	Excellent	Excellent	Excellent	Fair
Oils	Good	Good	Good	Good	Good
Water	Good	Excellent	Excellent	Excellent	Good
Weathering	Good	Good	Good	Good	Excellent

Physical Properties	FR PVC	LT FR PVC	FR PE	FR TPE	FR URETHANE
Oxygen Index	27	30	25	25	24.5
UL 94 Vertical Flame Test	V0	V0	V2	V0	V2

<b>IEEE 383 Vertical Tray</b>	<b>Pass</b>	<b>Pass</b>	<b>Fail</b>	<b>Pass</b>	<b>N/A</b>
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Jacket Material	Material Standard
<b>PVC</b>	A black, polyvinyl chloride compound which is Flame Retardant and has a 105°C Max. Temperature rating.
<b>Polyethylene</b> (Special Request)	Black, linear, low-density polyethylene which has a 65°C Max. Temperature rating.

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**UNITHERM™ 2240 INDUSTRIAL TUBING (SINGLE LINE)**

**COPPER TUBE FLAME RETARDANT (FR PVC) JACKET**

Part Number	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Approx. Shipping Wt./lb	Product Wt./100 ft. /lb
2240-21300-100	1/4"OD x .030"WalI , 100'	0.31	7.9	c= 24"x24"X5"	14	10.2
2240-21300-500	1/4"OD x .030"WalI , 500'	0.31	7.9	r= 16"X8"X8"	56	10.2
2240-21300	1/4"OD x .030"WalI , 1000'	0.31	7.9	r= 24"X12"X8"	113	10.2
2240-31320-100	3/8"OD x .032"WalI , 100'	0.44	11.2	c=24"X24"X5"	20	16.4
2240-31320-500	3/8"OD x .032"WalI , 500'	0.44	11.2	r= 24"X12"X8"	93	16.4
2240-31320	3/8"OD x .032"WalI , 1000'	0.44	11.2	r= 30"X20"X16"	204	16.4
2240-41350-100	1/2"OD x .035"WalI , 100'	0.56	14.3	c= 24"X24"X5"	26	22.7
2240-41350-500	1/2"OD x .035"WalI , 500'	0.56	14.3	r= 30"X20"X16"	154	22.7
2240-41350	1/2"OD x .035"WalI , 1000'	0.56	14.3	r= 30"X20"X16"	267	22.7

**COPPER TUBE FLAME RETARDANT (FR PVC) JACKET**

Part Number	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Approx. Shipping Wt./lb./ME	Product Wt./ME/lb.
2240-N1390-100	6 mm OD x 1 mm WalI, 30ME	0.33	8.4	c= 24"x24"X5"	15	.32
2240-N1390-500	6 mm OD x 1 mm WalI, 150ME	0.33	8.4	r= 16"X8"X8"	95	.32
2240-N1390	6 mm OD x 1 mm WalI, 304ME	0.33	8.4	r= 24"X12"X8"	146	.32
2240-Q1390-100	10mm OD x 1 mm WalI, 30ME	0.48	12.2	c=24"X24"X5"	21	.50
2240-Q1390-500	10mm OD x 1 mm WalI, 150ME	0.48	12.2	r= 24"X12"X8"	123	.50
2240-Q1390	10mm OD x 1 mm WalI, 304ME	0.48	12.2	r= 30"X20"X16"	204	.50
2240-R1390-100	12mm OD x 1 mm WalI, 30ME	0.56	14.2	c= 24"X24"X5"	28	.72
2240-R1390-500	12mm OD x 1 mm WalI, 150ME	0.56	14.2	r= 30"X20"X16"	158	.72
2240-R1390	12mm OD x 1 mm WalI, 304ME	0.56	14.2	r= 30"X20"X16"	273	.72

**WELDED STAINLESS STEEL TUBE FLAME RETARDANT (FR PVC) JACKET**

Part Number	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Approx. Shipping Wt./lb	Product Wt./100 ft. /lb
2240-20350-100	1/4"OD x .035"WalI , 100'	0.31	7.9	c= 24"x24"X5"	14	10.1
2240-20350-500	1/4"OD x .035"WalI , 500'	0.31	7.9	r= 16"X8"X8"	55	10.1
2240-20350	1/4"OD x .035"WalI , 1000'	0.31	7.9	r= 24"X12"X8"	112	10.1
2240-30350-100	3/8"OD x .035"WalI , 100'	0.44	11.2	c=24"X24"X5"	19	15.7
2240-30350-500	3/8"OD x .035"WalI , 500'	0.44	11.2	r= 24"X12"X8"	89	15.7
2240-30350	3/8"OD x .035"WalI , 1000'	0.44	11.2	r= 30"X20"X16"	197	15.7
2240-40350-100	1/2"OD x .035"WalI , 100'	0.56	14.3	c= 24"X24"X5"	25	21.2
2240-40350-500	1/2"OD x .035"WalI , 500'	0.56	14.3	r= 30"X20"X16"	146	21.2
2240-40350	1/2"OD x .035"WalI , 1000'	0.56	14.3	r= 30"X20"X16"	252	21.2

**WELDED STAINLESS STEEL TUBE FLAME RETARDANT (FR PVC) JACKET**

Part Number	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Approx. Shipping Wt./lb./ME	Product Wt./ME/lb.
2240-N0390-100	6 mm OD x 1 mm WalI, 30ME	0.33	8.4	c= 24"x24"X5"	20	.52
2240-N0390-500	6 mm OD x 1 mm WalI, 150ME	0.33	8.4	r= 16"X8"X8"	122	.52
2240-N0390	6 mm OD x 1 mm WalI, 304ME	0.33	8.4	r= 24"X12"X8"	201	.52
2240-Q0390-100	10mm OD x 1 mm WalI, 30ME	0.48	12.2	c=24"X24"X5"	27	.75
2240-Q0390-500	10mm OD x 1 mm WalI, 150ME	0.48	12.2	r= 24"X12"X8"	156	.75
2240-Q0390	10mm OD x 1 mm WalI, 304ME	0.48	12.2	r= 30"X20"X16"	271	.75
2240-R0390-100	12mm OD x 1 mm WalI, 30ME	0.56	14.2	c= 24"X24"X5"	20	.52
2240-R0390-500	12mm OD x 1 mm WalI, 150ME	0.56	14.2	r= 30"X20"X16"	122	.52
2240-R0390	12mm OD x 1 mm WalI, 304ME	0.56	14.2	r= 30"X20"X16"	201	.52

**UNITHERM™ 2240 INDUSTRIAL TUBING (SINGLE LINE)**

**SEAMLESS STAINLESS STEEL TUBE FLAME RETARDANT (FR PVC) JACKET**

Part Number	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Approx. Shipping Wt./lb	Product Wt./100 ft. /lb
2240-27350-100	1/4"OD x .035"Wall , 100'	0.31	7.9	c= 24"x24"X5"	14	10.1
2240-27350-500	1/4"OD x .035"Wall , 500'	0.31	7.9	r= 16"X8"X8"	55	10.1
2240-27350	1/4"OD x .035"Wall , 1000	0.31	7.9	r= 24"X12"X8"	112	10.1
2240-37350-100	3/8"OD x .035"Wall , 100'	0.44	11.2	c=24"X24"X5"	19	15.7
2240-37350-500	3/8"OD x .035"Wall , 500'	0.44	11.2	r= 24"X12"X8"	89	15.7
2240-37350	3/8"OD x .035"Wall , 1000'	0.44	11.2	r= 30"X20"X16"	197	15.7
2240-47350-100	1/2"OD x .035"Wall , 100'	0.56	14.3	c= 24"X24"X5"	25	21.2
2240-47350-500	1/2"OD x .035"Wall , 500'	0.56	14.3	r= 30"X20"X16"	146	21.2
2240-47350	1/2"OD x .035"Wall , 1000'	0.56	14.3	r= 30"X20"X16"	252	21.2

**SEAMLESS STAINLESS STEEL TUBE FLAME RETARDANT (FR PVC) JACKET**


Part Number	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Approx. Shipping Wt./lb./ME	Product Wt./ME/lb.
2240-N1390-100	6 mm OD x 1 mm Wall, 30ME	0.33	8.4	c= 24"x24"X5"	20	.52
2240-N1390-500	6 mm OD x 1 mm Wall, 150ME	0.33	8.4	r= 16"X8"X8"	122	.52
2240-N1390	6 mm OD x 1 mm Wall, 304ME	0.33	8.4	r= 24"X12"X8"	201	.52
2240-Q1390-100	10mm OD x 1 mm Wall, 30ME	0.48	12.2	c=24"X24"X5"	27	.75
2240-Q1390-500	10mm OD x 1 mm Wall, 150ME	0.48	12.2	r= 24"X12"X8"	156	.75
2240-Q1390	10mm OD x 1 mm Wall, 304ME	0.48	12.2	r= 30"X20"X16"	271	.75
2240-R1390-100	12mm OD x 1 mm Wall, 30ME	0.56	14.2	c= 24"X24"X5"	20	.52
2240-R1390-500	12mm OD x 1 mm Wall, 150ME	0.56	14.2	r= 30"X20"X16"	122	.52
2240-R1390	12mm OD x 1 mm Wall, 304ME	0.56	14.2	r= 30"X20"X16"	201	.52

**UNITHERM™ 2241 SERIES MULTIPLE TUBES/JACKETED  
Industrial Tubing**

UNITHERM 2241 series tubing is comprised of a standard metal instrument tube with an extruded polymer outer jacket. This product is used in instrumentation applications where additional corrosion protection or slight mechanical protection is required. This product is not heated or insulated.

**Tubing**

A variety of tube materials and sizes are available for use in the 2241 series product.

	Material Characteristics		Maximum Working Pressure PSI (80°F)
	Tube Material	Tube O.D. (inches)	
	Copper	1/4" OD x .030" Wall Thickness	1590
	Type DHP Alloy	3/8" OD x .032" Wall Thickness	1100
	#122 – Bright –	1/2" OD x .035" Wall Thickness	890
	Annealed-Soft	6 mm OD x 1 mm Wall Thickness	1700
	ASTM B68/B75	10 mm OD x 1 mm Wall Thickness	1000
		12 mm OD x 1 mm Wall Thickness	825
	Stainless Steel	1/4" OD x .035" Wall Thickness	5360
	Type 316 Welded	3/8" OD x .035" Wall Thickness	3430
	Conditioned	1/2" OD x .035" Wall Thickness	2520
	Fully Annealed per ASTM A269	6 mm OD x 1 mm Wall Thickness	6050
	10 mm OD x 1 mm Wall Thickness	3625	
	12 mm OD x 1 mm Wall Thickness	1500	
Stainless Steel	1/4" OD x .035" Wall Thickness	5360	
Type 316	3/8" OD x .035" Wall Thickness	3430	
Seamless	1/2" OD x .035" Wall Thickness	2520	
Conditioned	6 mm OD x 1 mm Wall Thickness	5270	
Fully Annealed per ASTM A269	10 mm OD x 1 mm Wall Thickness	3370	
	12 mm OD x 1 mm Wall Thickness	2470	

**Application**

Cabled metal tubing provides an organized package that aids in an efficient, effective method of installation where multiple tubes are required. In pneumatic or hydraulic applications. UNITHERM can provide many tube sizes with various wall thicknesses and a broad selection of tube materials for different pressure and environmental conditions. Long continuous length are available.

**Chemical Resistance**

UNITHERM offers several jacket compounds that protect the bare tubing from most corrosive conditions. FR (Flame Retardant) PVC, Low Temperature FR PVC, FR Polyethylene, and FR Thermoplastic Elastomer (TPE) are readily available.

**Tube Identification**

Color-coded tubes will identify tubes in each bundle allowing for simplified installation and hook-up.

**Cabled Construction Benefits**

- Bundles can be bent in any plane
- Tubes remain in contact throughout bundle to provide consistent O.D.
- Long cabling lays eliminate work hardening of tubes during process
- Bundles are easily placed in cable trays
- Many styles of standard clamps and grips locally available for attachment
- Standard seals that are used in wire & cable applications work well with cabled tubing bundles

**Dependability**

UNITHERM selects and uses only top quality, tested and certified tubing and high quality jacket compounds to provide worry free resilience in extreme environments.

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**UNITHERM™ 2241 INDUSTRIAL TUBING (MULTIPLE TUBE)**

**1/4" O.D. x 0.030" Wall Thickness Copper with Flame Retardant (FR) PVC Jacket**

Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. Feet per Reel	*Approx. Shipping Wt./lb. 100 ft.	Reel only Weight
2241-21020	2	1/4" O.D. x0.030"	0.630	16	54"x40"x16"	2641	23	193
2241-21030	3	Wall Thickness	0.670	17	54"x40"x16"	2335	32	193
2241-21040	4	Copper with	0.730	19	54"x40"x16"	1967	41	193
2241-21050	5	Flame Retardant	0.800	20	54"x40"x16"	1638	50	193
2241-21070	7	(FR) PVC Jacket	0.880	22	54"x40"x16"	1354	67	193

\* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment

**6 mm O.D. x 1 mm Wall Thickness Copper with Flame Retardant (FR) PVC Jacket**

Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. meters per Reel	*Approx. Shipping Wt./lb. P/me.	Reel only Weight Lb.
2241-N1020	2	6 mm x 1 mm	.56x.33	14.0x8.4	54"x40"x16"	762	.75	193
2241-N1030	3	Wall Thickness	.60x.53	15.2x13.5	54"x40"x16"	701	1.08	193
2241-N1040	4	Copper with	.66x.53	16.8x13.5	54"x40"x16"	549	1.41	193
2241-N1050	5	Flame Retardant	.73x.69	18.5x17.5	54"x40"x16"	427	1.74	193
2241-N1070	7	(FR) PVC Jacket	.80x.74	20.3x18.8	54"x40"x16"	335	2.37	193

\* Minimum order quantity is 30 meters Allow 1-2 weeks for shipment

**3/8" O.D. x 0.032" Wall Thickness Copper with Flame Retardant (FR) PVC Jacket**

Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. Feet per Reel	*Approx. Shipping Wt./lb. 100 ft.	Reel only Weight
2241-31020	2	3/8" O.D. x0.032"	0.880	22	54"x40"x16" (500 ft.)	1354	37	193
2241-31030	3	Wall Thickness	0.940	24	54"x40"x16" (500 ft.)	1186	51	193
2241-31040	4	Copper with	1.030	26	54"x40"x16" (500 ft.)	1000	66	193
		Flame Retardant (FR) PVC Jacket	* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment					

**10 mm O.D. x 1 mm Wall Thickness Copper with Flame Retardant (FR) PVC Jacket**

Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. meters per Reel	*Approx. Shipping Wt./lb. P/me.	Reel only Weight Lb.
2241-Q1020	2	10 mm x 1 mm	.88x.48	22.3x12.2	54"x40"x16"	396	1.31	193
2241-Q1030	3	Wall Thickness	.94x.83	23.9x21.1	54"x40"x16"	290	1.90	193
2241-Q1040	4	Copper with Flame Retardant (FR) PVC Jacket	1.04x.88	26.4x22.4	54"x40"x16"	221	2.49	193
			* Minimum order quantity is 30 meters Allow 1-2 weeks for shipment					

**1/2" O.D. x 0.035" Wall Thickness Copper with Flame Retardant (FR) PVC Jacket**

Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. Feet per Reel	*Approx. Shipping Wt./lb. 100 ft.	Reel only Weight
2241-41020	2	1/2" O.D. x0.035"	1.130	29	54"x40"x16" (500 ft.)	821	53	193
2241-41030	3	Wall Thickness	1.220	31	54"x40"x16" (500 ft.)	704	78	193
2241-41040	4	Copper with Flame Retardant (FR) PVC Jacket	1.350	34	54"x40"x16" (500 ft.)	575	101	193
			* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment					

**12 mm O.D. x 1 mm Wall Thickness Copper with Flame Retardant (FR) PVC Jacket**

Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. meters per Reel	*Approx. Shipping Wt./lb. P/me.	Reel only Weight lb
2241-R1020	2	12 mm x 1 mm	1.04x.56	26.4x14.2	54"x40"x16" (500 ft.)	290	1.60	193
2241-R1030	3	Wall Thickness	1.11x.97	28.2x24.6	54"x40"x16" (500 ft.)	213	2.31	193
2241-R1040	4	Copper with Flame Retardant (FR) PVC Jacket	1.23x1.04	31.2x26.4	54"x40"x16" (500 ft.)	152	3.03	193
			* Minimum order quantity is 30 meters Allow 1-2 weeks for shipment					

**UNITHERM™ 2241 INDUSTRIAL TUBING (MULTIPLE TUBE)**

<b>1/4" O.D. x 0.035" Wall Thickness 316 Welded Stainless Steel with Flame Retardant (FR) PVC Jacket</b>								
Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. Feet per Reel	*Approx. Shipping Wt./lb. 100 ft.	Reel only Weight
2241-20020	2	1/4" O.D. x0.030" Wall Thickness Wld SS with Flame Retardant (FR) PVC Jacket	0.630	16	54"x40"x16"	2641	23	193
2241-20030	3		0.670	17	54"x40"x16"	2335	32	193
2241-20040	4		0.730	19	54"x40"x16"	1967	41	193
2241-20050	5		0.800	20	54"x40"x16"	1638	50	193
2241-20070	7		0.880	22	54"x40"x16"	1354	67	193

\* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment

<b>6 mm O.D. x 1 mm Wall Thickness 316 Welded Stainless Steel with Flame Retardant (FR) PVC Jacket</b>								
Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. ME per Reel	*Approx. Shipping Wt./lb. meter	Reel only Weight
2241-N0020	2	6 mm x 1 mm Wall Thickness Wld SS with Flame Retardant (FR) PVC Jacket	.56 x .33	14.0 x 8.4	54"x40"x16"	762	0.70	193
2241-N0030	3		.60 x .53	15.2 x 13.5	54"x40"x16"	701	.99	193
2241-N0040	4		.66 x .53	16.8 x 13.5	54"x40"x16"	549	1.29	193
* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment								

<b>3/8" O.D. x 0.035" Wall Thickness 316 Welded Stainless Steel with Flame Retardant (FR) PVC Jacket</b>								
Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. Feet per Reel	*Approx. Shipping Wt./lb. 100 ft.	Reel only Weight
2241-30020	2	3/8" O.D. x0.032" Wall Thickness Wld SS with Flame Retardant (FR) PVC Jacket	0.880	22	54"x40"x16" (500 ft.)	1354	37	193
2241-30030	3		0.940	24	54"x40"x16" (500 ft.)	1186	51	193
2241-30040	4		1.030	26	54"x40"x16" (500 ft.)	1000	66	193
* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment								

<b>10 mm O.D. x 1 mm Wall Thickness 316 Welded Stainless Steel with Flame Retardant (FR) PVC Jacket</b>								
Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. ME per Reel	*Approx. Shipping Wt./lb. meter	Reel only Weight
2241-Q0020	2	10 mm x 1 mm Wall Thickness Wld SS with Flame Retardant (FR) PVC Jacket	.88 x .48	22.3 x 14.2	54"x40"x16"	396	1.19	193
2241-Q0030	3		.94 x .83	23.9 x 21.1	54"x40"x16"	290	1.71	193
2241-Q0040	4		1.04 x .88	26.4 x 22.4	54"x40"x16" (152 ME)	221	2.23	193
* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment								

<b>1/2" O.D. x 0.035" Wall Thickness 316 Welded Stainless Steel with Flame Retardant (FR) PVC Jacket</b>								
Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. Feet per Reel	*Approx. Shipping Wt./lb. 100 ft.	Reel only Weight
2241-40020	2	1/2" O.D. x0.035" Wall Thickness Wld SS with Flame Retardant (FR) PVC Jacket	1.130	29	54"x40"x16" (500 ft.)	821	53	193
2241-40030	3		1.220	31	54"x40"x16" (500 ft.)	704	78	193
2241-40040	4		1.350	34	54"x40"x16" (500 ft.)	575	101	193
* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment								

<b>12 mm O.D. x 1 mm Wall Thickness 316 Welded Stainless Steel with Flame Retardant (FR) PVC Jacket</b>								
Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. ME per Reel	*Approx. Shipping Wt./lb. meter	Reel only Weight
2241-R0020	2	12 mm x 1 mm Wall Thickness Wld SS with Flame Retardant (FR) PVC Jacket	1.04 x .56	26.4 x 14.2	54"x40"x16"	290	1.43	193
2241-R0030	3		1.11 x .97	28.2 x 24.6	54"x40"x16"	213	2.07	193
2241-R0040	4		1.23 x 1.04	31.2 x 26.4	54"x40"x16"	152	2.70	193
* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment								

**UNITHERM™ 2241 INDUSTRIAL TUBING (MULTIPLE TUBE)**

**1/4" O.D. x 0.035" Wall Thickness 316 Seamless Stainless Steel with Flame Retardant (FR) PVC Jacket**

Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. ME per Reel	*Approx. Shipping Wt./lb. meter	Reel only Weight
2241-27020	2	1/4" O.D. x0.030" Wall Thickness Sml SS with Flame Retardant (FR) PVC Jacket	0.630	16	54"x40"x16"	2641	23	193
2241-27030	3		0.670	17	54"x40"x16"	2335	32	193
2241-27040	4		0.730	19	54"x40"x16"	1967	41	193
2241-27050	5		0.800	20	54"x40"x16"	1638	50	193
2241-27070	7		0.880	22	54"x40"x16"	1354	67	193

\* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment

**6 mm O.D. x 1 mm Wall Thickness 316 Seamless Stainless Steel with Flame Retardant (FR) PVC Jacket**

Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. ME per Reel	*Approx. Shipping Wt./lb. meter	Reel only Weight
2241-N7020	2	6 mm x 1 mm Wall Thickness Sml SS with Flame Retardant (FR) PVC Jacket	.56 x .33	14.0 x 8.4	54"x40"x16"	762	.70	193
2241-N7030	3		.60 x .53	15.2 x 13.5	54"x40"x16"	701	.99	193
2241-N7040	4		.66 x .53	16.8 x 13.5	54"x40"x16"	549	1.29	193

\* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment

**3/8" O.D. x 0.035" Wall Thickness 316 Seamless Stainless Steel with Flame Retardant (FR) PVC Jacket**

Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. Feet per Reel	*Approx. Shipping Wt./lb. 100 ft.	Reel only Weight
2241-37020	2	3/8" O.D. x0.032" Wall Thickness Sml SS with Flame Retardant (FR) PVC Jacket	0.880	22	54"x40"x16" (500 ft.)	1354	37	193
2241-37030	3		0.940	24	54"x40"x16" (500 ft.)	1186	51	193
2241-37040	4		1.030	26	54"x40"x16" (500 ft.)	1000	66	193

\* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment

**10 mm O.D. x 1 mm Wall Thickness 316 Seamless Stainless Steel with Flame Retardant (FR) PVC Jacket**

Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. ME per Reel	*Approx. Shipping Wt./lb. meter	Reel only Weight
2241-Q7020	2	10 mm x 1 mm Wall Thickness Sml SS with Flame Retardant (FR) PVC Jacket	.88 x .48	22.3 x 14.2	54"x40"x16"	396	1.19	193
2241-Q7030	3		.94 x .83	23.9 x 21.1	54"x40"x16"	290	1.71	193
2241-Q7040	4		1.04 x .88	26.4 x 22.4	54"x40"x16" 152 ME)	221	2.23	193

\* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment

**1/2" O.D. x 0.035" Wall Thickness 316 Seamless Stainless Steel with Flame Retardant (FR) PVC Jacket**

Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. Feet per Reel	*Approx. Shipping Wt./lb. 100 ft.	Reel only Weight
2241-47020	2	1/2" O.D. x0.035" Wall Thickness Sml SS with Flame Retardant (FR) PVC Jacket	1.130	29	54"x40"x16" (500 ft.)	821	53	193
2241-47030	3		1.220	31	54"x40"x16" (500 ft.)	704	78	193
2241-47040	4		1.350	34	54"x40"x16" (500 ft.)	575	101	193

\* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment

**12 mm O.D. x 1 mm Wall Thickness 316 Seamless Stainless Steel with Flame Retardant (FR) PVC Jacket**

Part Number	No. of Tubes	Description	Nominal O.D. Inches	Nominal O.D. MM	c= carton r= reel ctn/reel size r=Fl (Flange) x Dr (Drum) x Tr (Traverse)	Max. Feet per Reel	*Approx. Shipping Wt./lb. 100 ft.	Reel only Weight
2241-47020	2	12 mm x 1 mm Wall Thickness Sml SS with Flame Retardant (FR) PVC Jacket	1.04 x .56	26.4 x 14.2	54"x40"x16" (500 ft.)	290	1.43	193
2241-47030	3		1.11 x .97	28.2 x 24.6	54"x40"x16" (500 ft.)	213	2.07	193
2241-47040	4		1.23 x 1.04	31.2 x 26.4	54"x40"x16" (500 ft.)	152	2.70	193

\* Minimum order quantity is 100 ft Allow 1-2 weeks for shipment

## TERMS AND CONDITIONS OF SALE

<b>FREIGHT:</b>	Unless otherwise agreed upon by UNITHERM, all orders will be <b>FOB</b> UNITHERM Shipping Location.
<b>MINIMUM ORDER VALUE:</b>	<b>\$250.00</b> Orders less than minimum are subject to a <b>\$50.00</b> processing fee. Part numbers on list:
<b>MINIMUM ORDER QUANTITY:</b>	Minimum order quantity for a single tube stock item is 100 feet (30 Meter). Multiple tube bundles require a 250 ft. (76.2 Meter) minimum.  <b>INDUSTRIAL TUBING ORDER GUIDELINES Part number not on list:</b> <b>Tubing greater than 3/4" O.D. x .049" Wall</b> must be in stick form (random 17" to 24" length) only. <b>NO COILS.</b> <b>Tubing greater than .049" Wall thickness</b> will not be sold in any size <b>For make to order Items</b> Tubing is not stocked or not in stock, or not FR PVC jacket, the policy is 3,000 ft. minimum (915 Meter). For any items not on the price list and the bare tubing is stocked or in stock, \$1,000.00 order minimum, \$250.00 minimum per item.
<b>DROP SHIPMENTS:</b>	All drop shipments to customer locations require a \$35.00 service charge.
<b>SPECIFIED LENGTHS:</b>	Any specified length request may be subject to a \$20.00 cut & re-spool charge.
<b>PRICES:</b>	Prices are subject to change without notice. The effective date of a price change shall be the date stated on the applicable sections of UNITHERM price schedules. UNITHERM will strive to give 45 days written notice on any price change. In the event of a price decrease. On any orders accepted prior to the effective date of a price change, all goods delivered will be billed at the price in effect at the time of shipment.
<b>PAYMENT:</b>	Standard payment terms are thirty (30) days after invoice date. UNITHERM reserves the right to charge interest on any unpaid balance at a rate of 1-1/2% per month (or the highest rate permitted by applicable law (if lower) from the due date of invoice. UNITHERM may suspend or cancel deliveries of ordered products if the invoiced party fails to pay when due any amount to UNITHERM for any goods or services.
<b>CANCELLATION AND RETURNS:</b>	Any order may be cancelled or changed only with the written consent of UNITHERM. <b>No</b> product (whether or not it is defective or nonconforming) may be returned to UNITHERM without UNITHERM's written consent. All returns may be subject to a 25% restocking charge.  <b>Conditions of return:</b> a) Return Material Authorization ( <b>RMA</b> ) is obtained through a UNITHERM Customer Support Representative b) Material is in original packages, in resalable condition, as determined by UNITHERM c) Products are currently listed in UNITHERM price list, and have been paid for in full. d) Credits applied, are based on current price or price paid, whichever is lower. e) Transportation is prepaid on return shipments.  UNITHERM reserves the right to return whole or partial return shipments if determined to be in unacceptable condition. If unacceptable, UNITHERM will advise in writing as to the return shipment's disposition.