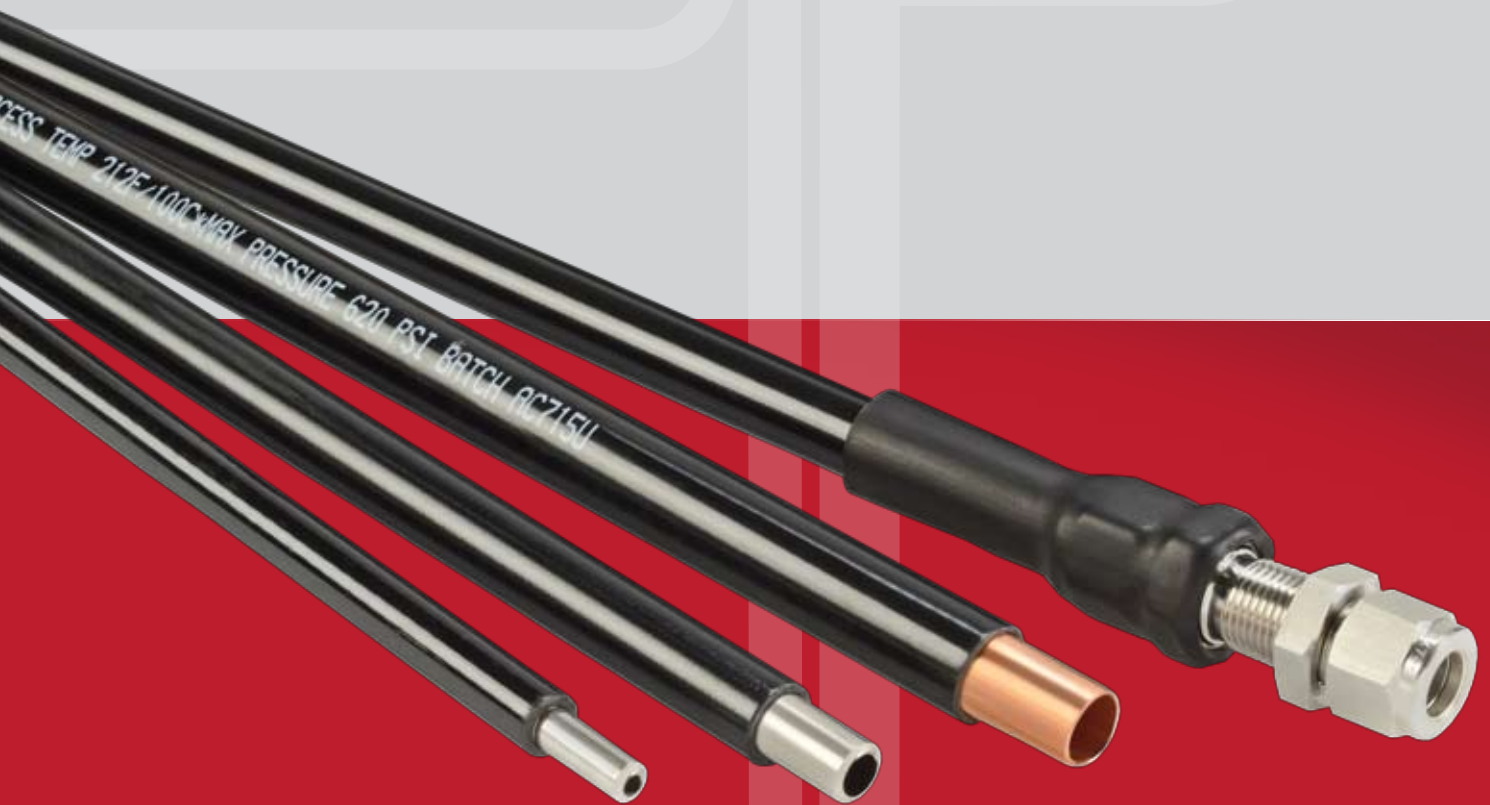




Single-Jacketed Tubing



- COILED
- STICK
- CUT TO LENGTH



Single-Jacketed Tubing

UTC Single Jacketed tube Protect the tube against corrosion and pitting in a diverse changing environment and climates.

The phenomenon of Chloride Stress Corrosion Cracking (SCC) where AISI 316L suffers external corrosion mostly occurs above 60 °C in the offshore and coastal areas where salty and humidity conditions apply at all times. Installers and end users are seeking to use the UTC Single coated tube as a solution to overcome this phenomenon.

Features

1. 1/4 to 1 in. and 6 to 25mm tubing sizes available in 316/316L Stainless Steel and Copper. Other tubing materials may be offered on request.
2. Seamless, welded tubing and set tube stick available in Stainless Steel and Copper.
3. Coating materials available: Thermoplastic Polyurethane TPU, PVC.
Other coating materials available, please contact our customer service for more details.

Technical Data

Metric

Tube OD mm	Wall Thickness mm	Working Pressure bar		Max Process Temperature C°	Min Service and Installation Temperature C°	Min Jacket Tube OD* mm	Support Centers m		Min Bend Radius cm
		Seamless	Welded				Horizontal	Vertical	
Annealed 316 Stainless Steel Tubing complying with ASTM A213 or A269									
6	1.0	420	336	105 PVC Jacket	-34 Service	8.60	1.80	4.60	20.00
	1.2	540	432						
	1.5	710	568						
10	1.0	240	192						
	1.2	300	240						
	1.5	400	320						
12	1**	200	160		125 TPU Jacket***	-23 Installation	14.60		
	1.2	250	200						
	1.5	330	264						
	2.0	470	376						
18	1.2**	150	120			20.60			
	1.5	200	160						
	2.0	290	232						
25	1.8**	180	144	27.60					
	2.0	200	160						
Annealed Copper Tubing complying with ASTM B68, B75									
6	1.0	90	105 PVC Jacket	-34 Service	8.60	1.80	4.60	20.00	
	1.2	150							
	1.5	200							
10	1.0	60			12.60				
	1.2	100							
	1.5	140							
12	1**	50		125 TPU Jacket***	-23 Installation	14.60			
	1.2	75							
	1.5	100							
	2.0	130							
18	1.2**	40			20.60				
	1.5	60							
	2.0	80							
25	1.8**	40	27.60						
	2.0	50							

*** Maximum process temperature NOT continuous temperature rating which is 105 Deg C according to UL 1581.
Please contact us for more information about heat tolerance.

Fractional

Tube OD in.	Wall Thickness in.	Working Pressure		Max Process Temperature °F	Min Service and Installation Temperature °F	Min Jacket Tube OD* in.	Support Centers		Min Bend Radius in.
		Seamless psig	Welded				Horizontal ft	Vertical	
Annealed 316 Stainless Steel Tubing complying with ASTM A213 or A269									
1/4	0.035	5200	4160	221 PVC Jacket 257 TPU Jacket***	-30 Service -10 Installation	0.35	6.00	15.00	8.00
	0.049	7600	6080						
	0.065	10150	8120						
3/8	0.035	3350	2680						
	0.049	4850	3880						
	0.065	6525	5220						
1/2	0.035**	2650	2120						
	0.049	3750	3000						
	0.065	5150	4120						
3/4	0.083	6525	5220						
	0.049**	2450	1960						
	0.065	3350	2680						
1	0.083	4250	3400						
	0.065**	2100	1680						
1	0.083	2700	2160						
Annealed Copper Tubing complying with ASTM B68, B75									
1/4	0.035	1400		221 PVC Jacket 257 TPU Jacket***	-30 Service -10 Installation	0.35	6.00	15.00	8.00
	0.049	2175							
	0.065	2900							
3/8	0.035	900							
	0.049	1450							
	0.065	2030							
1/2	0.035**	800							
	0.049	1088							
	0.065	1450							
3/4	0.083	1885							
	0.049**	580							
	0.065	870							
1	0.083	1160							
	0.065**	580							
1	0.083	725							

* Note: Standard Coating Wall Thickness 1.3mm (0.052")

**Note: Not recommended to use with Gas service

*** Maximum process temperature NOT continuous temperature rating which is 105 Deg C according to UL 1581.

Please contact us for more information about heat tolerance.

WARNING! For Your Safety the system designer have the sole responsibility to select the products suitable for their special application requirements and to ensure the proper installation, operation and maintenance of the product. Please consider application details, material compatibility and product ratings when making your selection. Improper selection or use of products can cause property damage and or personal injury



UTC special service – Your Tube, Our Jacket*

UTC offers its customers the unique coating service. We accept coiled (on or without reel) and straight tubes that request jacketing service. We will pick up the tubes from the customer location, coat it and ship it back. Our coating materials also include the special TPU cover, high quality low temperature PVC as well as other coating materials that may be offered on customer request.

* Service is offered according to the minimum length quantity policy, please contact our customer service for more details

Jacket Materials

UTC Special TPU is a part of the Thermoplastic Polyurethane family that has unique properties such as the ability to meet low temperature environment, excellent abrasion resistance and contains no chlorides.

The UTC special PVC outperform the standard PVC properties and its special composition allows to work in an extreme low temperature with high flame retardant resistance.

Jacket Properties	Standard 105C PVC	UTC TPU
Maximum temperature	105°C (221°F)	125°C(257°F)***
Minimum installation temperature	-10°C (-14°F)	-40°C (-40°F)
Minimum service temperature	-10°C (14°F)	-58°C (-72°F)
Hardness - Shore A	95 A	90 A
Tensile strength	2000 psi (137 bar)	4,655 psi (320 bar)
Water absorption	1,500-3,000ppm	5,000-7,000ppm
Flame retardant	V2	V0 (3mm)
UV resistance	F	E
Abrasion resistance	G	E
Halogenated (Chlorides)	YES	NO

P = Poor, F = Fair, G = Good, E = Excellent

PVC

Jacket Properties	UTC PVC	Test Method
Maximum temperature	105°C (221°F)	BS 6746
Minimum installation temperature	-10°C (-14°F)	
Minimum service temperature	-40°C (-40°F)	
Hardness - Shore A	93 A	ASTM D 2240
Tensile strength	2900 psi (194 bar)	ASTM D 638
Water absorption	1,500-3,000ppm	
Flame retardant	V0	UL 94
UV resistance	750 h	UL-1581
Abrasion resistance	200-300	
Halogenated (Chlorides)	Halogenated	

Superior Properties

- High Hardness
- Good in lower temperature
- Good Abrasion
- Coil ability
- UV Stabilized
- Flame retardant

UTC's PVC meet the following standards:

BS 6746 TYPE 5
 DIN/VDE 0207 Y18 , YM4
 MIL-W-16878
 UL 1581 - TYPE 105C

***Maximum process temperature NOT continuous temperature rating which is 105 Deg C according to UL 1581.

Please contact us for more information about heat tolerance.

TPU

Jacket Properties	UTC TPU	Test Method
Maximum temperature	125°C(257°F)***	ISO 868
Minimum installation temperature	-40°C (-40°F)	
Minimum service temperature	-58°C (-72°F)	
Hardness - Shore A	90 A	ISO 527
Tensile strength	4,655 psi (32.1 MPa)	
Water absorption	5,000-7,000ppm	UL 94
Flame retardant	V0 (3mm)	UL-1581
UV resistance	2000 h	ISO 4649
Abrasion resistance	65 (mm3 loss)	
Halogenated (Chlorides)	Zero Halogen	

Superior Properties

- Toughness
- Excellent Abrasion resistant
- Hydrolysis resistant
- Chemical and oil resistant
- Weather resistant
- Bacteria resistant
- Low friction
- Cold flexibility
- Matt surface
- Coil ability
- Flame retardant



How to order

Build a Single, Thermal insulated or Own customer jacket tubing ordering number by combining the designators in the sequence shown below.

I **II** **III** **IV** **V**
SJ - **SS** - **4-S-035** - **TP** - **250**

I Model

- SJ** = Single Jacket
- TJ** = Thermal-Insulated Jacket
- CT** = Customer Tube*

* UTC offers the unique coating services for the customer's bare tubes. We accept coiled (on or without reel) and straight tubes. Read more at our UTC special service section in this catalog.

II Material

- SS** = 316/316L Stainless Steel
 - CU** = Copper
- Other tubing materials may be offered on request

III Tube Data

- Size** Number per Inch, Number + M for MM size
MM= 6, 10, 12, 18, 25
Inch: 4=1/4, 6=3/8, 8=1/2, 12=3/4, 16=1
- Tube model** S (Seamless)
W (Welded)
ST (Stick of 6M / 19ft STD length)
- Wall Thickness** Number per Inch, Number +M for MM size

IV Jacket Raw Material

- TP** = TPU
- PV** = PVC

V Length Number per feet Number + M per Meter

Specifications are for reference only and are subject to change without notice
Actual product dimensions may vary from the catalog dimensions

Marking

On each jacket tube will be a marking of the following:
Manufacturer name, model, Coating material, Tube data, Process temperature, Batch No. (for traceability), Meter/Feet count
Optionally a Caution Notice





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