

**TEESING**

**TUBING**

[WWW.TEESING.COM](http://WWW.TEESING.COM)

# ABOUT TEESING




## WE ENGINEER FROM SOURCE TO PROCESS

### TECHNICAL SUPPLIER SINCE 1952

Since 1952 Teesing is `The right connection` as the international supplier of fittings, valves, tubing, systems and assemblies for industrial applications in four sectors: pneumatics, hydraulics, instrumentation and transport of media. With offices in the Netherlands (Rijswijk), U.S.A. (New Jersey), China (Beijing) and Zhubei City (Taiwan) we are globally active in several specialized niche markets, such as semiconductor, railway, alternative fuels, pharmaceutical and (Petro) chemical industries.

We supply a complete package of products and services you require for your connection applications. Through our specialized knowledge of our products and markets we are capable in responding quickly to all your questions regarding the transport of gases and liquids to your point of use connection. Thanks to our engineering department we are also capable of delivering customized products and assemblies that are developed to meet the specifications of your critical process demands.

### OUR BUSINESS UNITS

 <b>TEESING</b> INDUSTRIAL APPLICATIONS	 <b>TEESING</b> SUBMICRON TECHNOLOGIES	 <b>TEESING</b> ALTERNATIVE ENERGY
International supplier of fittings, valves, tubing, systems and assemblies.	International supplier of HP/UHP components and assemblies from source to process.	International supplier of components, systems and assemblies for CNG/H2 projects.

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# LOW DENSITY POLYETHYLENE (LDPE) - TUBING



## COLORS AVAILABLE

- Neutral
- Black
- Blue
- Green
- Yellow
- Red

## CHEMICAL RESISTANCE

- Aqueous solutions of acids, lyes and salts
- Organic solvents

## APPLICATION

- Compressed air for control technology
- Sampling lines
- Flexible pneumatic lines
- Flexible fuel and lubricant systems
- Environments with high humidity

## PROPERTIES

- Good flexibility
- Impact resistant
- Non-toxic
- Good chemical resistance
- Colour black: UV resistant
- Also available: HDPE

Is available on request in other lengths than the standard coil.

## TECHNICAL SPECIFICATIONS

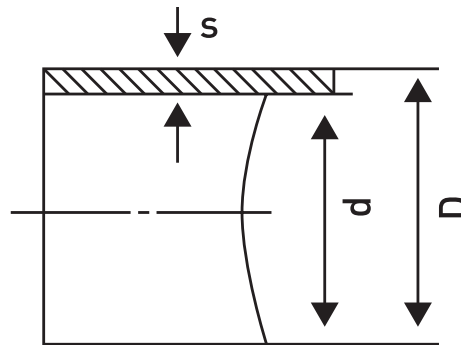
Temperature Range °C	-40 to +80
Material	LDPE

## PRODUCT INFORMATION

Size	P	D	d	s	Bending radius	MOQ	kg/100m
4/2x1	21	4.00	2.00	1.00	18.0	100m	1.180
5/3x1	14	5.00	3.00	1.00	20.0	100m	1.470
6/4x1	12	6.00	4.00	1.00	30.0	100m	1.540
6/4x1	12	6.00	4.00	1.00	30.0	250m	1.540
6.35/4.35x1	10	6.35	4.35	1.00	30.0	100m	2.050
8/6x1	8	8.00	6.00	1.00	40.0	100m	2.640
9.52/6.52x1.5	10	9.52	6.52	1.50	40.0	100m	3.000
10/8x1	6	10.00	8.00	1.00	60.0	50m	3.230
10/7x1.5	11	10.00	7.00	1.50	40.0	50m	3.740
12/10x1	6	12.00	10.00	1.00	80.0	50m	4.620
12/9x1.5	9	12.00	9.00	1.50	65.0	50m	4.620
16/13x1.5	6	16.00	13.00	1.50	80.0	50m	7.000

Bar= operating pressure at 23 °C

- MOQ = Minimum order quantity
- P = pressure (bar)
- D = tube outside diameter (mm)
- d = tube inside diameter (mm)
- s = wall thickness (mm)



# POLYAMIDE (PA) - TUBING



## COLORS AVAILABLE

- Neutral
- Black
- Blue
- Green
- Yellow
- Red

## CHEMICAL RESISTANCE

- Oils and fats, fuels, lubricants
- Hydraulic fluids
- Non-chlorine cleaning agents and solvents
- Diluted organic acids
- Very mild mineral acids, bases and salt solutions

## APPLICATION

- Compressed air
- Hydraulics
- Negative pressure
- Cooling lines fuel and lubricant systems

## PROPERTIES

- Wide temperature and application range
- Colour black: UV resistant
- Pressure and impact resistant
- Good chemical resistance
- Smooth surface
- Also available in PA6 (high pressure)

Is available on request in other lengths than the standard coil.

## TECHNICAL SPECIFICATIONS

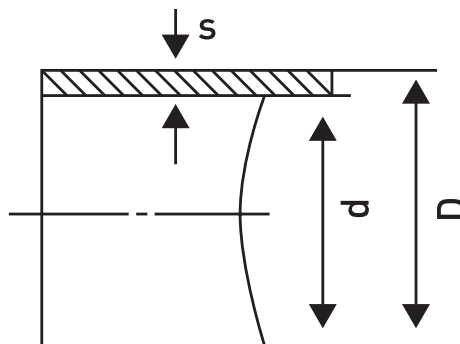
Temperature Range °C	-40 to + 100
Material	PA

## PRODUCT INFORMATION

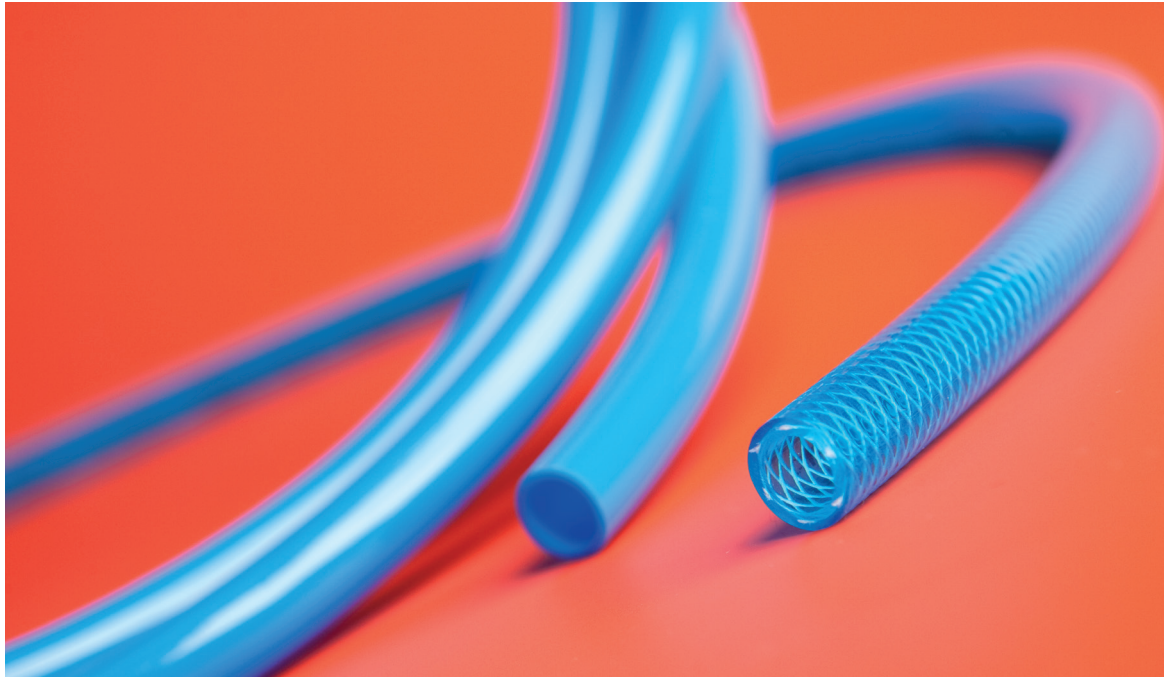
Size	P	D	d	s	Bending radius	MOQ	kg/100m
4/2x1	44	4.00	2.00	1.00	15.0	100m	0.970
5/3x1	33	5.00	3.00	1.00	30.0	100m	1.140
6/4x1	26	6.00	4.00	1.00	27.0	100m	1.620
6/4x1	26	6.00	4.00	1.00	27.0	500m	1.620
6.35/4.35x1	26	6.35	4.35	1.00	27.0	100m	1.810
8/6x1	19	8.00	6.00	1.00	40.0	100m	2.270
10/8x1	19	10.00	8.00	1.00	60.0	50m	2.910
10/7x1.5	24	10.00	7.00	1.50	45.0	50m	3.540
12/10x1.5	12	12.00	10.00	1.00	85.0	50m	4.000
12/9x1.5	19	12.00	9.00	1.50	70.0	50m	5.100
15/12x1.5	15	15.00	12.00	1.50	100.0	50m	6.570

Bar= operating pressure at 23 °C

- MOQ = Minimum order quantity
- P = pressure (bar)
- D = tube outside diameter (mm)
- d = tube inside diameter (mm)
- s = wall thickness (mm)



# POLYURETHANE (PU) - TUBING



## COLORS AVAILABLE

- Neutral
- Black
- Blue
- Gray
- Yellow

## CHEMICAL RESISTANCE

- Most oils and greases
- Aliphatic hydrocarbons
- Oxygen
- Ozone

## APPLICATION

- Measurement and control technology
- Pneumatics
- Hydraulics
- Machine and motorbuilding

## PROPERTIES

- Excellent bending
- Little deformation even with long-term stress
- High cold flexibility
- Abrasion resistant

Also available:

PU tubing for ultraclean application  
Cleaned and double packed according to customer specifications

## TECHNICAL SPECIFICATIONS

Temperature Range °C	-60 to +80
Material	PU

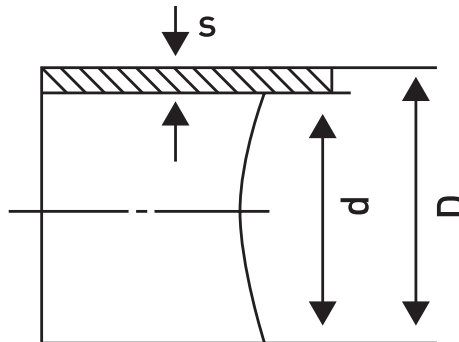


## PRODUCT INFORMATION

Size	P	D	d	s	Bending radius	MOQ	kg/100m
4/2.5x1	6	4.00	2.50	1.25	8.0	100m	0.940
6/4x1	13	6.00	4.00	1.00	20.0	100m	1.167
8/6x1	10	8.00	6.00	1.00	25.0	100m	3.400
8/5x1	6	8.00	5.00	1.50	15.0	100m	3.770
10/6.5x1	6	10.00	6.50	1.75	22.0	100m	3.650
10/8x1	7	10.00	8.00	1.00	35.0	100m	5.200
12/8x2	6	12.00	8.00	2.00	29.0	100m	5.100

Bar= operating pressure at 23 °C

- MOQ = Minimum order quantity
- P = pressure (bar)
- D = tube outside diameter (mm)
- d = tube inside diameter (mm)
- s = wall thickness (mm)



# POLYTETRAFLUORETHYLENE (PTFE) - TUBING



## COLORS AVAILABLE

- Neutral
- Black
- Blue
- Green
- Yellow
- Red

## CHEMICAL RESISTANCE

- Against hydrochloric acid
- Fuming nitric acid
- Hot sodium hydroxide solutions
- Chlorine gas, hydrazine
- Nitric oxides, alcohols, ester
- Ketones or acidic chlorides

## APPLICATION

- Laboratory
- Chemical
- Pharmaceutical
- Industrial

## PROPERTIES

- Extensive universal chemical resistance
- Harmless physiologically
- Anti-adhesive properties
- Superior flexibility, fine tolerances
- Smooth surfaces
- 100% UV resistant

Is available on request in other lengths than the standard coil.

## TECHNICAL SPECIFICATIONS

Temperature Range °C	-200 to + 200
Material	PTFE

## PRODUCT INFORMATION

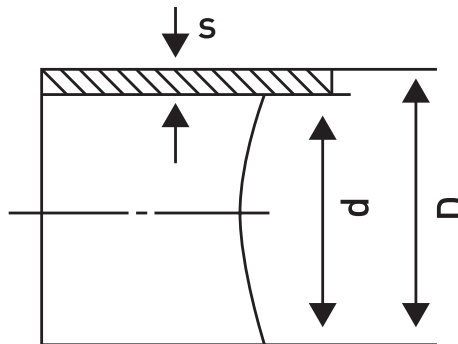
Size	P	D	d	s	Bending radius	MOQ	kg/100m
2/1x0,5	47	2.00	1.00	0.50	20.0	50m	1.200
3/2x0,5	23	3.00	2.00	0.50	25.0	50m	1.520
4/2x1	47	4.00	2.00	1.00	30.0	50m	2.100
5/3x1	31	5.00	3.00	1.00	35.0	50m	2.900
6/4x1	23	6.00	4.00	1.00	50.0	50m	3.700
8/6x1	8	8.00	6.00	1.00	70.0	50m	5.120
8/5x1,5	15	8.00	5.00	1.50	75.0	50m	8.200
10/8x1	6	10.00	8.00	1.00	120.0	50m	5.760
10/7x1,5	17	10.00	7.00	1.50	80.0	50m	8.800
12/10x1	9	12.00	10.00	1.00	150.0	50m	7.360
12/9x1,5	14	12.00	9.00	1.50	110.0	50m	11.040
15/13	6	15.00	13.00	1.00	170.0	50m	8.000
15x12	13	15.00	12.00	1.50	125.0	50m	10.200
16/13x1.5	6	16.00	13.00	1.50	200.0	50m	7.340

Bar= operating pressure at 23 °C

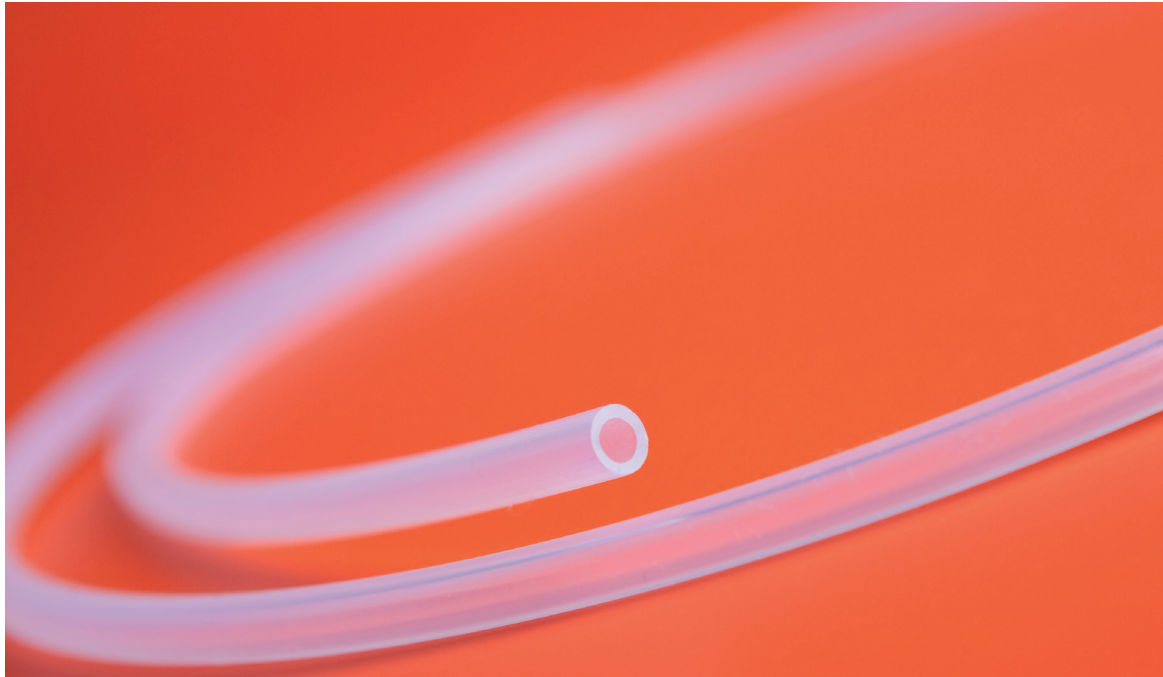
Size	P	D	d	s	Bending radius	MOQ	kg/100
1/16" 1.6x0.3	80	1.60	0.30	0.65	18.0	On request	0.25
1/16" 1.6x0.5	100	1.60	0.50	0.55	15.0	On request	0.28
1/16" 1.6x0.8	120	1.60	0.80	0.40	10.0	On request	0.3
1/8" 3.2x1.5	110	3.20	1.50	0.85	15.0	On request	1.25
1/8" 3.2x1.6	120	3.20	1.60	0.80	15.0	On request	1.3
1/8" 3.2x2.4	40	3.20	2.40	0.40	25.0	On request	0.8
1/4" 6.35x4.75	40	6.35	4.75	0.80	50.0	On request	3.0
1/4" 6.35x4.35	55	6.35	4.35	1.00	40.0	On request	3.6
1/4" 6.35x3.95	70	6.35	3.95	1.20	35.0	On request	4.2
1/4" 6.35x3.2	120	6.35	3.20	1.575	25.0	On request	5.1
3/8" 9.55x7.00	50	9.55	7.00	1.20	70.0	On request	8.4
3/8" 9.55x6.38	60	9.55	6.38	1.585	60.0	On request	8.6
1/2" 12.7x9.55	40	12.70	9.55	1.575	105.0	On request	12

Bar= operating pressure at 23 °C

- MOQ = Minimum order quantity
- P = pressure (bar)
- D = tube outside diameter (mm)
- d = tube inside diameter (mm)
- s = wall thickness (mm)



# FLUORINATED ETHYLENE PROPYLENE (FEP) - TUBING



## COLORS AVAILABLE

- Transparant

## CHEMICAL RESISTANCE

- Universally resistant

## APPLICATION

- Semiconductor
- Chemical industry
- Laboratory technology
- Medical
- Food industry

## PROPERTIES

- Excellent di-electric properties
- Chemical-resistant
- Toughness at low temperatures
- Low coefficient of friction
- Anti-stick properties and resistance to the effects of aging and weather
- FDA-approved for use with foods
- 100% UV resistant
- High transparency

Is available on request in other lengths than the standard coil.

## TECHNICAL SPECIFICATIONS

Temperature Range °C	-200 to + 200
Material	FEP

## PRODUCT INFORMATION

Size	P	D	d	s	Bending radius	MOQ	kg/100m
4/2.5x0,75	23	4.0	2.50	0.75	30.0	On request	1.700
4/2x1	37	4.0	2.00	1.00	30.0	On request	2.100
6/4x1	19	6.0	4.00	1.00	40.0	On request	3.550
6/3,6x1,2	22	6.0	3.60	1.20	40.0	On request	3.500
6/3x1,5	28	6.0	3.00	1.50	35.0	On request	4.600
8/6x1	12	8.0	6.00	1.00	65.0	On request	4.850
8/5,6x1,2	14	8.0	5.60	1.20	40.0	On request	5.200
10/8x1	9	10.0	8.00	1.00	100.0	On request	5.800
10/6,8x1,6	12	10.0	6.80	1.60	50.0	On request	8.500
12/10x1	7	12.0	10.0	1.00	120.0	On request	6.400
12/9x1,5	9	12.0	9.00	1.50	90.0	On request	7.200
12/8,8x1,6	10	12.0	8.80	1.60	70.0	On request	10.500

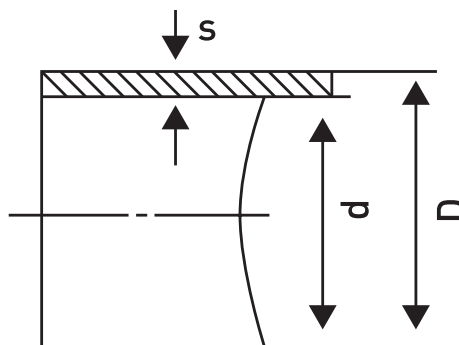
Bar= operating pressure at 23 °C

## PRODUCT INFORMATION

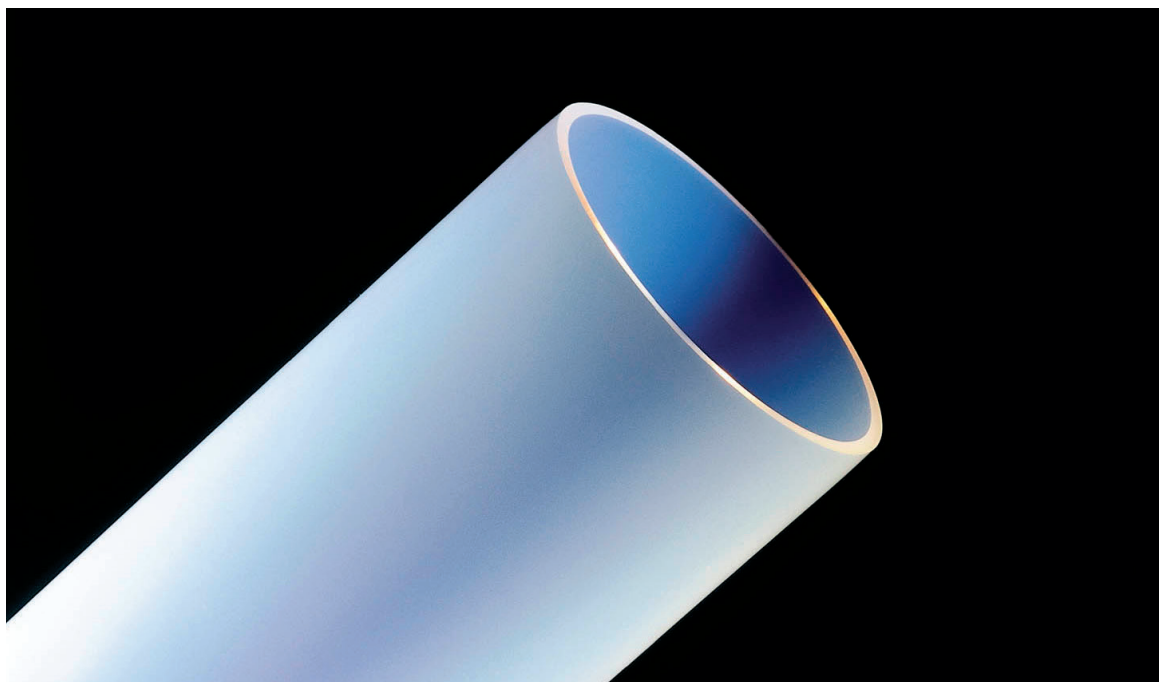
Size	P	D	d	s	Bending radius	MOQ	kg/100m
1/16" 1.57x0.81	10	1.57	0.81	0.38	10.0	On request	1.000
1/8" 3.17x1.65	14	3.17	1.65	0.76	15.0	On request	1.200
3/16" 4.75x3.23	8	4.75	3.23	0.76	25.0	On request	2.300
1/4" 6.35x3.2	12	6.35	3.20	1.57	40.0	On request	4.000
1/4" 6.35x3.96	10	6.35	3.96	1.19	40.0	On request	3.400
1/4" 6.35x4.83	6	6.35	4.83	0.76	50.0	On request	3.300
7/16" 7.92x5.54	8	7.92	5.54	1.19	40.0	On request	4.800
7/16" 7.92x6.4	5	7.92	6.40	0.76	60.0	On request	4.800
3/8" 9.53x6.38	7	9.53	6.38	1.57	50.0	On request	5.600
3/8" 9.53x8	4	9.53	8.00	0.76	90.0	On request	5.500
1/2" 12.7x9.55	5	12.70	9.55	1.57	60.0	On request	7.500
1/2" 12.7x11.18	2	12.70	11.18	0.76	130.0	On request	8.000
3/4" 19.05x15.9	1	19.05	15.90	1.57	230.0	On request	10.000
1" 25.4x22.25	1	25.40	22.25	1.57	280.0	On request	12.000

Bar= operating pressure at 23 °C

- MOQ = Minimum order quantity
- P = pressure (bar)
- D = tube outside diameter (mm)
- d = tube inside diameter (mm)
- s = wall thickness (mm)



# PERFLUOROALKOXY (PFA) - TUBING



## COLORS AVAILABLE

- Neutral

## CHEMICAL RESISTANCE

- Universally resistant except perchloric acid

## SPECIAL PROPERTIES

- Semiconductor Grade
- PFA 450 HP
- Available for ultra clean applications

## APPLICATION

- Semiconductor
- Chemical industry
- Lab and medical technology
- Food industry

## PROPERTIES

- Universal chemical resistance
- No-toxic, excellent anti-stick properties
- Outstanding flexibility
- Highly transparent, natural colour
- Very low tolerances, smooth surfaces
- 100% UV resistant

Is available on request in other lengths than the standard coil.

## TECHNICAL SPECIFICATIONS

Temperature Range °C	-200 to + 200
Material	PFA

## PRODUCT INFORMATION

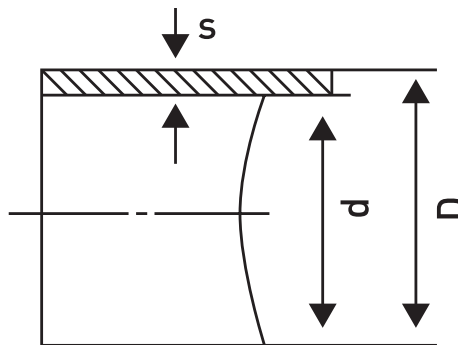
Size	P	D	d	s	Bending radius	MOQ	kg/100m
6/4x1	23	6.00	4.00	1.00	40.0	100m	3.370
6/3x1.5	35	6.00	3.00	1.50	35.0	100m	4.680
8/6x1	16	8.00	6.00	1.00	65.0	100m	4.730
10/8 x1	9	10.00	8.00	1.00	100.0	100m	5.800
12/10 x1	7	12.00	10.00	1.00	120.0	100m	6.400
12/9x1,5	9	12.00	9.00	1.50	90.0	100m	7.200

Bar= operating pressure at 23 °C

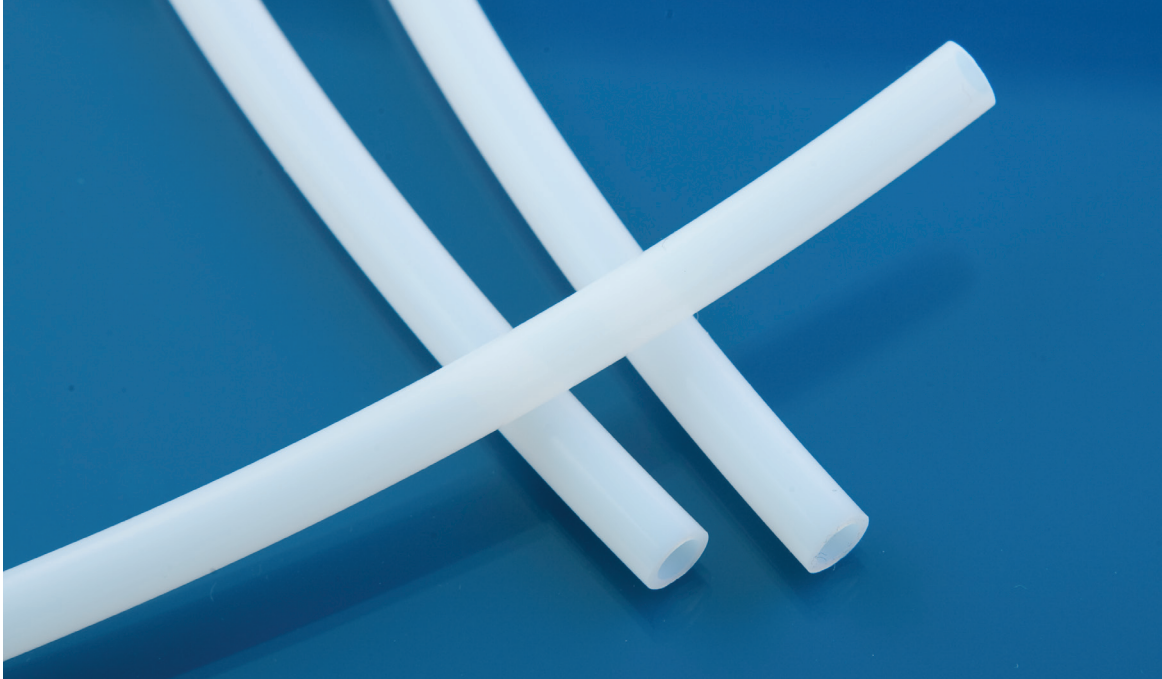
Size	P	D	d	s	Bending radius	MOQ	kg/100m
1/16" 1.57x0.81	10	1.57	0.81	0.38	10.0	On request	1.000
1/8" 3.17x1.65	14	3.17	1.65	0.76	15.0	On request	1.200
3/16" 4.75x3.23	8	4.75	3.23	0.76	25.0	On request	2.300
1/4" 6.35x3.96	12	6.35	3.96	1.19	40.0	On request	3.400
1/4" 6.35x3.2	10	6.35	3.20	1.57	40.0	On request	4.000
1/4" 6.35x4.83	6	6.35	4.83	0.76	50.0	On request	3.300
7/16" 7.92x5.54	8	7.92	5.54	1.19	40.0	On request	4.800
7/16" 7.92x6.4	5	7.92	6.40	0.76	60.0	On request	4.800
3/8" 9.53x6.38	7	9.53	6.38	1.57	50.0	On request	5.600
3/8" 9.53x8	4	9.53	8.00	0.76	90.0	On request	5.500
1/2" 12.7x9.55	5	12.70	9.55	1.57	60.0	On request	7.500
1/2" 12.7x11.18	2	12.70	11.18	0.76	130.0	On request	8.000
3/4" 19.05x15.9	1	19.05	15.90	1.57	230.0	On request	10.000
1" 25.4x22.25	1	25.40	22.25	1.57	280.0	On request	12.000

Bar= operating pressure at 23 °C

- MOQ = Minimum order quantity
- P = pressure (bar)
- D = tube outside diameter (mm)
- d = tube inside diameter (mm)
- s = wall thickness (mm)



# POLYVINYLIDENEFLUORIDE (PVDF) - TUBING



## COLORS AVAILABLE

- Milk white

## CHEMICAL RESISTANCE

At high temperatures, PVDF is severely attacked by sulphur trioxide, fuming sulphuric acid, acetane hydride, cyclic ether, amino compounds and hot alkali

## APPLICATION

- Medicine
- Chemical engineering
- Analysis technology

## PROPERTIES

- Excellent chemical resistance
- High strength, rigidity and toughness
- Outstanding ageing characteristics
- Good weather resistance
- Suitable for sterile use
- Compatible with welding systems
- Fine tolerances
- 100% UV resistant

Is available on request in other lengths than the standard coil.

## TECHNICAL SPECIFICATIONS

Temperature Range °C	-20 to + 120
Material	PVDF

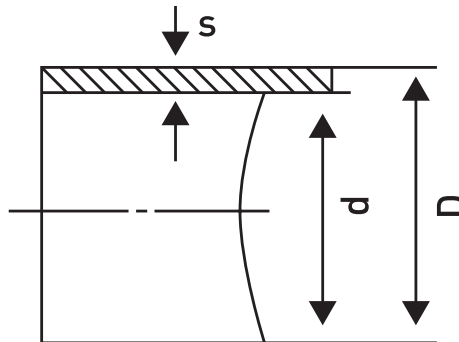


## PRODUCT INFORMATION

Type	P	D	d	s	Bending radius	MOQ	kg/100m
4/2x1	50	4.00	2.00	1.00	30.0	On request	2.100
6/4x1	37	6.00	4.00	1.00	50.0	On request	2.800
8/6x1	24	8.00	6.00	1.00	70.0	On request	3.850
10/8x1	18	10.00	8.00	1.00	120.0	On request	5.000
12/10x1	15	12.00	10.00	1.00	180.0	On request	6.000
12/9x1.5	22	12.00	9.00	1.50	120.0	On request	8.200
16/13x1,5	19	16.00	13.00	1.50	160.0	On request	9.500

Bar= operating pressure at 23 °C

- MOQ = Minimum order quantity
- P = pressure (bar)
- D = tube outside diameter (mm)
- d = tube inside diameter (mm)
- s = wall thickness (mm)



# DEKABON - TUBING



## COLORS AVAILABLE

- Black

## CHEMICAL RESISTANCE

- UV resistant

## APPLICATION

- Pneumatics
- Humid and wet environments

## DEBURRING TOOL

To use Dekabon properly we advise to use the deburring tool



## PROPERTIES

- Multilayer tube of PE and aluminium core
- Can be bent manually
- Retains shape
- Lightweight yet sturdy

## TECHNICAL SPECIFICATIONS

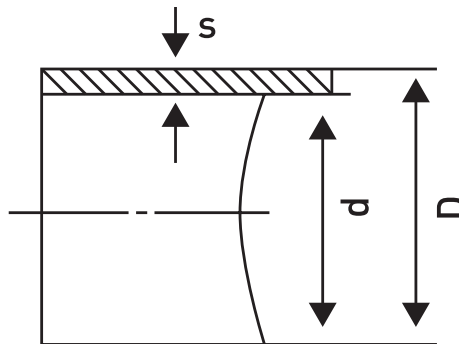
Temperature Range °C	-20 to +80
Material	DEKA

## PRODUCT INFORMATION

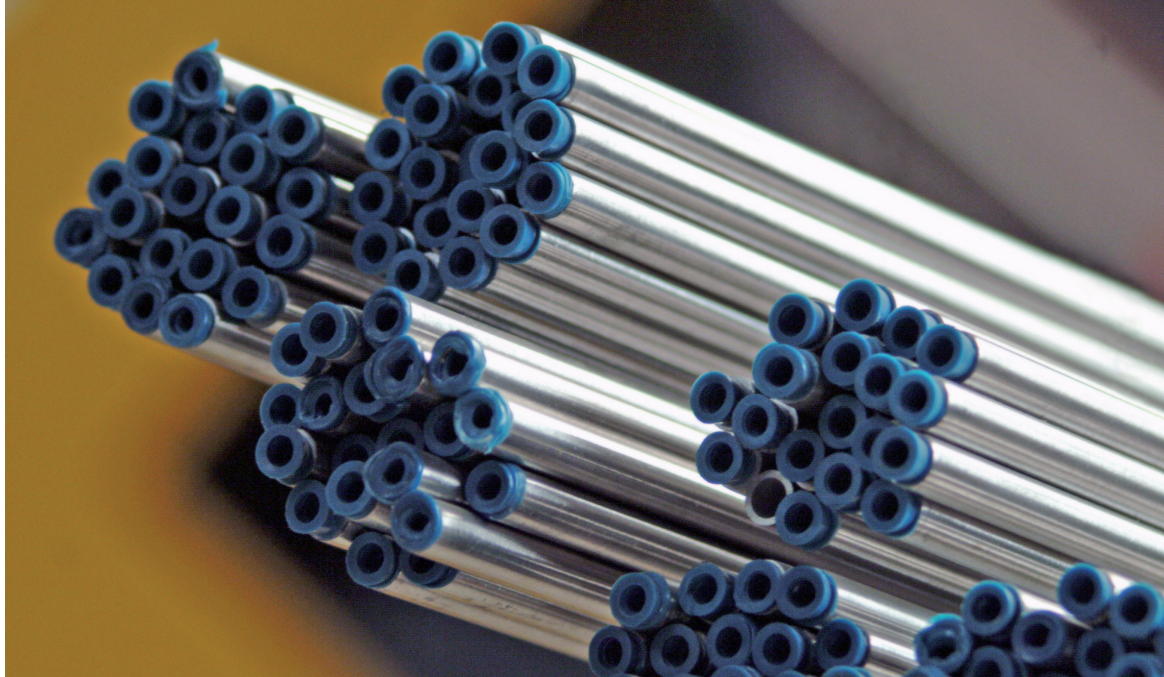
Size	P	D	d	s	Bending radius	MOQ	kg/100m
6	34	6.00	3.90	1.05	19.0	100m	2.000
6	34	6.00	3.90	1.05	19.0	300m	2.000
6.35	34	6.35	4.30	1.00	19.0	100m	2.400
6.35	34	6.35	4.30	1.00	19.0	300m	2.400
8	34	8.00	5.30	1.35	25.0	100m	3.200
8	34	8.00	5.30	1.35	25.0	300m	3.200
9,52(3/8)	34	9.52	6.30	4.62	32.0	75m	5.200
10	34	10.00	6.20	1.90	32.0	100m	5.700
10	34	10.00	6.20	1.90	32.0	300m	5.700
12	20	12.00	8.20	1.90	40.0	100m	7.500
12,7(1/2)	20	12.70	9.50	1.60	40.0	75m	7.300
14	20	14.00	9.80	2.10	63.0	100m	9.600
15	16	15.00	10.70	2.15	70.0	100m	10.600

Bar= operating pressure at 23 °C

- MOQ = Minimum order quantity
- P = pressure (bar)
- D = tube outside diameter (mm)
- d = tube inside diameter (mm)
- s = wall thickness (mm)



# STAINLESS STEEL (1.4404(AISI 316L)) - TUBING



## CHEMICAL RESISTANCE

- High chemical resistance

## APPLICATION

- Steam press machines
- Superheated steam installations
- Wash-and cleaning stations
- Vulcanising presses-high power burners
- Laboratories-pharmaceutical applications
- Aerospace engineering, foodstuff industry, etc.

## PROPERTIES

- High chemical resistance
- Excellent thermal stability-non-toxic hose
- High operating safety in combination with a long lifetime
- Delivery: on length  
on coil
- 3.1 B certificate available
- UHP tubing electro-polished to RA < 0.13 µm available

## TECHNICAL SPECIFICATIONS

Temperature Range °C	-110 to + 300
Material	1.4404(AISI 316L)
Material according to	ASTM A269 A213
Quality	316-316L 316Ti also available in Incoloy, Hasteloy, Inconel
Execution	Seamless

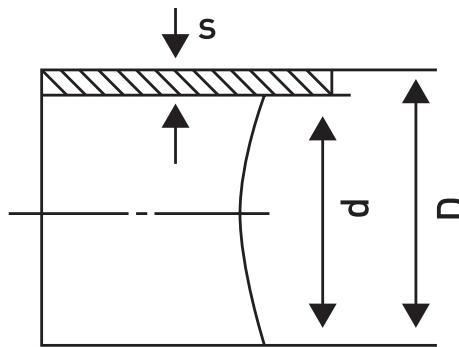
# 1.4404(AISI 316L)

## PRODUCT INFORMATION

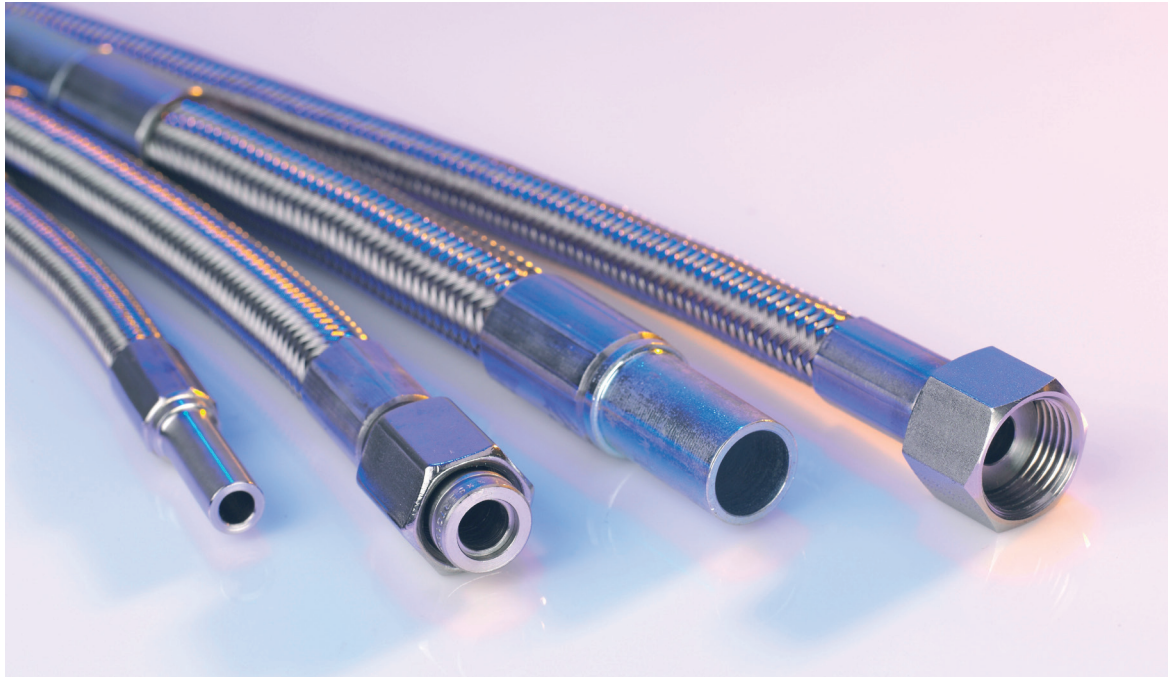
Size	P	D	d	s	kg/m	MOQ	length
4x1	600	4.00	2.00	1.00	0.075	On request	6 m
6x1	543	6.00	4.00	1.00	0.125	On request	6 m
8x1	407	8.00	6.00	1.00	0.175	On request	6 m
10x1	326	10.00	8.00	1.00	0.225	On request	6 m
12x1	271	12.00	10.00	1.00	0.275	On request	6 m
12x1.5	407	12.00	9.00	1.50	0.394	On request	6 m
15x1	217	15.00	13.00	1.00	0.351	On request	6 m
18x1.5	271	18.00	15.00	1.50	0.620	On request	6 m
22x1.5	222	22.00	19.00	1.50	0.770	On request	6 m
{1/8} 3.2x 0.89	718	3.20	1.42	0.89	0.051	On request	6 m
{1/4} 6.35x 0.89 and 1.24	360	6.35	4.57	0.89	0.122	On request	6 m
{3/8} 9.53x 0.89 and 1.24	240	9.53	7.75	0.89	0.193	On request	6 m
{1/2} 12.7x 0.89 and 1.24	180	12.70	10.92	0.89	0.263	On request	6 m
{3/4} 19.05x 1.65 and 2.11	222	19.05	15.75	1.65	0.719	On request	6 m

Bar= operating pressure at 23 °C

- MOQ = Minimum order quantity
- P = pressure (bar)
- D = tube outside diameter (mm)
- d = tube inside diameter (mm)
- s = wall thickness (mm)



# JACOFLON - TUBING



## CHEMICAL RESISTANCE

Excellent resistance to nearly all chemicals, detergents and solvents

## APPLICATIONS

- Plant and equipment construction
- Airconditioning equipment
- Food and beverage industry
- Laboratory and medical technology
- Water technology
- Aerospace industry-automotive industry

## PROPERTIES

- UV and weather-proof, resistant to ageing
- High temperature resistance
- Non flammable-extremely low internal friction coefficient and therefore very low flow resistance-absolutely non-toxic
- High operational reliability
- Long service life
- High abrasion resistance
- High strength under alternating flexural stress

## TECHNICAL SPECIFICATIONS

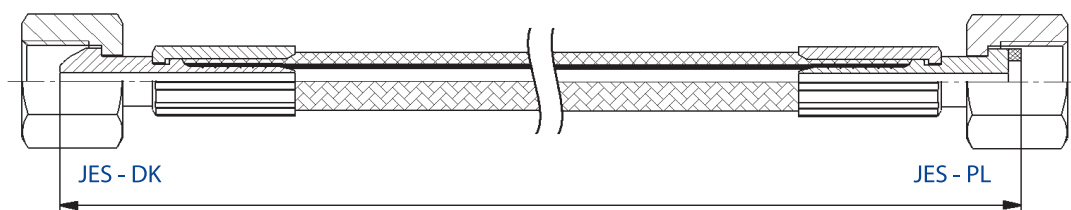
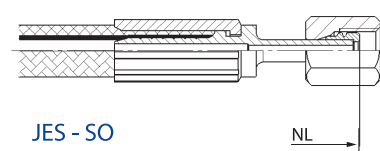
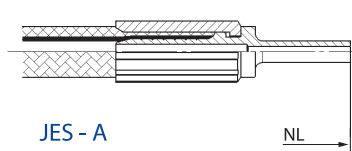
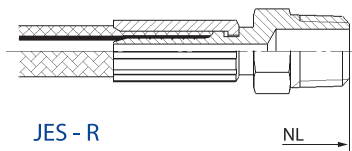
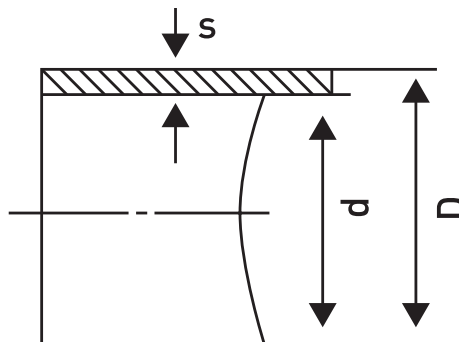
Temperature Range °C	-60 to + 250
Material	Jacoflon

## PRODUCT INFORMATION

Type-DN	P	D	d	Bending Radius	L	MOQ	Kg/m
PTFE-1 AQ-1/8"konf.	300	6.50	3.50	25.0	160.0	On request	0.070
PTFE-1 AQ-3/16"konf.	280	8.00	5.00	50.0	160.0	On request	0.080
PTFE-1 GQ-1/8"konf.	300	6.50	3.50	25.0	160.0	On request	0.090
PTFE-1 HQ-1/2"konf.	70	20.00	12.00	75.0	210.0	On request	0.300
PTFE-1 HQ-3/4"konf.	70	28.00	20.00	95.0	230.0	On request	0.400
PTFE-1 HQ-1"konf.	70	33.00	25.00	125.0	250.0	On request	0.600
PTFE-1 SQ-1/4"konf.	250	9.00	6.00	80.0	160.0	On request	0.100
PTFE-1 SQ-3/8"konf.	175	12.00	9.00	115.0	180.0	On request	0.150
PTFE-1 SQ-1/2"konf.	145	15.50	12.00	125.0	180.0	On request	0.210
PTFE-1 SQ-5/8"konf.	115	18.50	15.00	150.0	180.0	On request	0.280
PTFE-2 SQ-3/16"konf.	310	9.00	5.00	45.0	160.0	On request	0.120
PTFE-2 SQ-1/4"konf.	300	10.00	6.00	65.0	160.0	On request	0.160
PTFE-2 SQ-3/8"konf.	200	13.00	9.00	100.0	180.0	On request	0.260
PTFE-2 SQ-1/2"konf.	180	17.00	12.00	115.0	180.0	On request	0.350
PTFE-2 SQ-5/8"konf.	160	20.00	15.00	135.0	180.0	On request	0.500
PTFE-2 SQ-3/4"konf.	105	23.50	19.00	170.0	190.0	On request	0.670
PTFE-2 SQ-1"konf.	85	30.00	25.50	280.0	190.0	On request	0.860

Bar= operating pressure at 23 °C

- MOQ = Minimum order quantity
- P = pressure (bar)
- D = tube outside diameter (mm)
- d = tube inside diameter (mm)
- s = wall thickness (mm)
- L = min. length assembled



NL = Nominal length of tube as per drawing

# MULTICORE TUBING - TUBING



## SINGLE AND MULTICORE TUBING

With the still ever-increasing computerization trend, the pneumatic or hydraulic measurement and regulation technique becomes more and more important. Moreover, the use of multicore tubes instead of multiple single cables is on the increase for the transmission of the measurement and regulation impulses over longer distances. These cables reduce the assembly time and save considerably on inspection costs and furthermore, take up less space.

From 1 to 37 tubes in one bundle

The single and multicore tubes are available in the following versions:

- Soft and hard polyethylene
- Nylon
- Teflon
- Copper
- Copper-nickel
- Aluminum
- Stainless steel

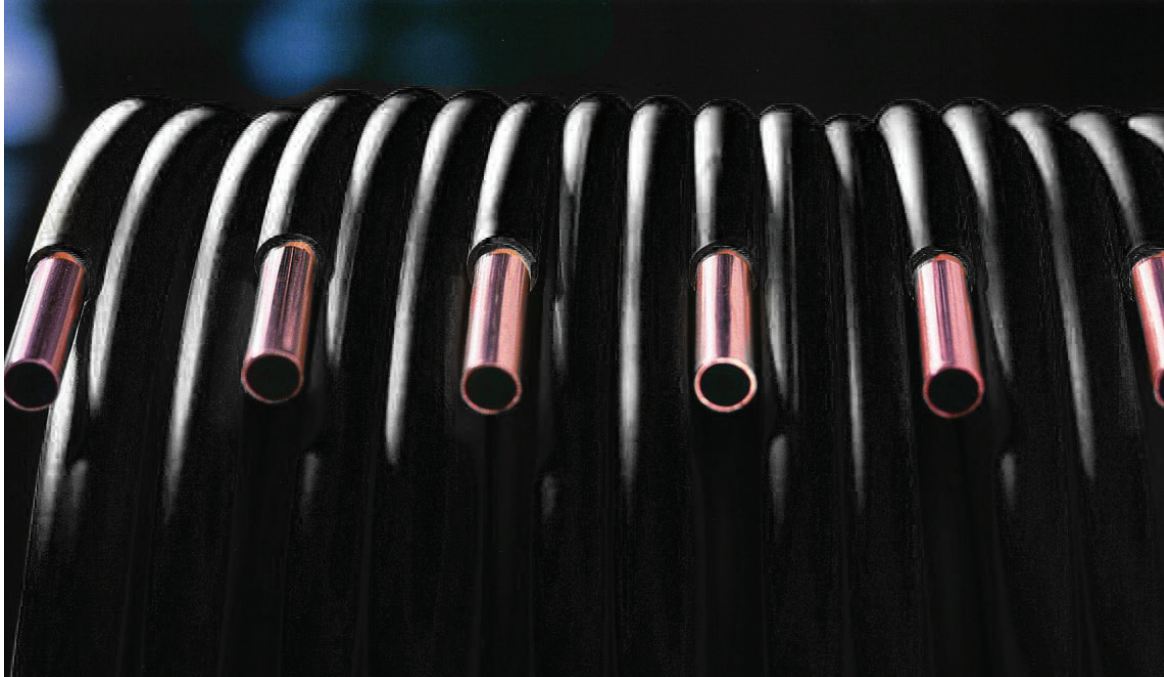




## SINGLE AND MULTICORE TUBING

- Silicon hose
- PVC tube
- Fireresistant tubing FR
- PU reinforced
- Vacuum hose
- Pre-assembled NGV hose
- Breathing air hose
- Anti static hose
- Stainless steel welded tube

# COPPER / POLYVINYLCHLORIDE (CU/PVC) - TUBING



## APPLICATIONS

- Gases
- Liquids

## TECHNICAL SPECIFICATIONS

Temperature Range °C	max +1083
Material	CU/PVC
Material according to	ASTM B68 DIN 1787
Tolerances according to	ASTM B251 DIN 1754
Color	black

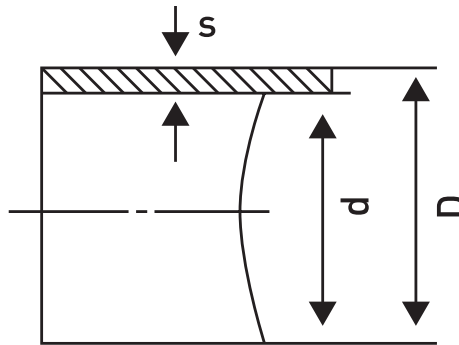
## PRODUCT INFORMATION

Copper (pvc)	P	D	d	s	MOQ	Kg/ 1 m
6 x 4	140	8.00	6.00	1.00	50m	0.17
8 x 6	100	10.00	8.00	1.00	250m	0.25
10 x 8	80	12.00	10.00	1.00	100m	0.32
12 x 10	65	13.00	12.00	1.00	100m	0.38
1/4" od	120	8.35	6.35	1.00	300m	0.18
3/8" od	85	11.52	9.52	1.00	600m	0.3
1/2" od	60	14.70	12.70	1.00	100m	0.4

Bar = operating pressure at 23 °C

Other dimensions on request

- MOQ = Minimum order quantity
- P = pressure (bar)
- D = tube outside diameter (mm)
- d = tube inside diameter (mm)
- s = wall thickness (mm)



# COPPER (CU) - TUBING



## APPLICATIONS

- Gases
- Liquids

## TECHNICAL SPECIFICATIONS

Temperature Range °C	max +1083
Material	CU
Material according to	ASTM B68 DIN 1787
Tolerances according to	ASTM B251 DIN 1754
Color	black
Burst Pressure	1.5 x operating pressure

PRODUCT INFORMATION

Copper pipe (soft, on coil)	P	D	d	s	MOQ	Kg/ 1 m
4 x 2	180	4.00	2.00	1.00	On request	0.1
6 x 4	140	6.00	4.00	1.00	On request	0.14
8 x 6	100	8.00	6.00	1.00	On request	0.2
10 x 8	80	10.00	8.00	1.00	On request	0.25
12 x 10	65	12.00	10.00	1.00	On request	0.31
14 x 12	33	14.00	12.00	1.00	On request	0.37
15 x 13	30	15.00	13.00	1.00	On request	0.39

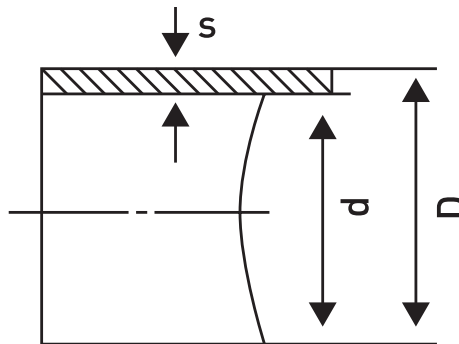
1/4" od	100	6.35	4.83	0.76	On request	0.119
3/8" od	65	9.52	7.92	0.80	On request	0.198
1/2" od	40	12.7	10.90	0.90	On request	0.27

Bar = operating pressure at 23 °C

Copper pipe (on length)	P	D	d	s	MOQ	Kg/ 1 m
6 x 4	200	6.00	4.00	1.00	On request	0.14
8 x 6	135	8.00	6.00	1.00	On request	0.2
10 x 8	100	10.00	8.00	1.00	On request	0.25
12 x 10	81	12.00	10.00	1.00	On request	0.31
14 x 12	73	14.00	12.00	1.00	On request	0.37
15 x 13	66	15.00	13.00	1.00	On request	0.39
18 x 15	60	18.00	15.00	1.50	On request	0.7
22 x 19	41	22.00	19.00	1.50	On request	0.87
28 x 25	30	28.00	25.00	1.50	On request	0.12

Bar = operating pressure at 23 °C

- MOQ = Minimum order quantity
- P = pressure (bar)
- D = tube outside diameter (mm)
- d = tube inside diameter (mm)
- s = wall thickness (mm)



# TUBETRACE® TYPE SE/ME - TUBING

## TUBETRACE® TYPE SE/ME

Electrically Heated Instrument Tubing  
BSX™ Self-Regulating Heat Tracing

### APPLICATION

Freeze Protection or Process Temperature Maintenance Range: 5°C to 65°C  
TubeTrace, with “cut-to-length” BSX self-regulating heat tracing, is designed to provide freeze protection or temperature maintenance for tubing where no “steam out” of the tubing is possible. BSX withstands temperature exposures of 85°C.

### Self-regulating BSX heat tracing

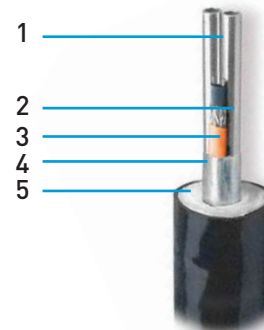
- Varies in response to the surrounding conditions along the entire length of a circuit.
- Lower risk of overheating the tube or product.
- Installed cost is lower because “cut-to-length” BSX makes end connections easy with minimal waste.
- Is approved for use in ordinary (nonclassified) areas and are certified to the ATEX directive for use in Category 2 and 3 (Zone 1 and 2) classified areas.

### CONSTRUCTION

- 1 Process tube
- 2 BSX Self-regulating electrical heat tracing
- 3 Heat Reflective Tape
- 4 Non-Hygroscopic glass fiber insulation
- 5 Polymer outer jacket (ATP or TPU available)

### BSX PRODUCT FEATURES

- Self-regulating
- Low inrush current
- “Cut-to-length”
- Hazardous area approvals



### RATINGS/SPECIFICATIONS

BSX	Ratings
Available watt densities	9, 15, 25, 32 W/m @ 10°C
Supply voltage	230 Vac
Tube temperature range	5°C to 65°C
Max. continuous exposure temperature Power-off	85°C
T-rating* <sup>1</sup>	
9, 15, 25 W/m	T6 85°C
32 W/m	T5 100°C
Based on stabilised design* <sup>2</sup>	T6 65°C

\*<sup>1</sup>T-rating per internationally recognised testing agency guidelines.  
\*<sup>2</sup>Thermon heating cables are approved for the listed T-ratings using the stabilised design method. This enables the cable to operate in hazardous areas without limiting thermostats. The T-rating may be determined using CompuTrace® Electric Heat Tracing Design Software or contact Thermon for design assistance.

# ELECTRICALLY HEATED INSTRUMENT TUBING FOR FREEZE PROTECTION AND TEMPERATURE MAINTENANCE

## TUBETRACE® TYPE SE/ME

Electrically Heated Instrument Tubing with HPT™ Power-Limiting Heat Tracing

### APPLICATION

Freeze Protection or Process Temperature Maintenance Range: 5°C to 204°C TubeTrace, with “cut-to-length” HPT power-limiting heat tracing, is designed to provide freeze protection or temperature maintenance for tubing where high temperature exposure capability is possible. HPT withstands temperature exposures of 260°C. The composite construction of the heating element and fiber substrate, plus an additional fiber cushion layer, make HPT an exceptionally durable heating cable. Durability has made TubeTrace with HPT the industry standard for high temperature emissions and process analyzer applications.

### Power-Limiting HPT heat tracing

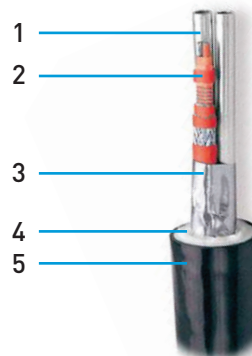
- Varies in response to the surrounding conditions along the entire length of a circuit.
- Lower risk of overheating the tube or product than with constant watt designs.
- HPT cables are certified for use in ordinary (nonclassified) areas and in potentially explosive atmospheres in accordance with the ATEX Directive and the IEC Ex Scheme

### CONSTRUCTION

- 1 Process tube(s)
- 2 HPT Power-limiting electrical heat tracing
- 3 Heat reflective tape
- 4 Non-Hygroscopic glass fiber insulation
- 5 Polymer outer jacket (ATP or TPU available)

### HPT PRODUCT FEATURES

- Power-limiting
- Low start-up current
- “Cut-to-length”
- Hazardous area approvals



### RATINGS/SPECIFICATIONS

HPT	Ratings
Available watt densities	14, 28, 42, 57 W/m @ 10°C
Supply voltage	230 Vac
Tube temperature range	5°C to 204°C
Max. continuous exposure* <sup>1</sup> temperature Power-off	260°C
T-rating* <sup>2</sup> Based on stabilised design* <sup>3</sup>	T2 to T6

\*<sup>1</sup>This reflects maximum exposure for heater. If bundle jacket is to remain below 60°C in +27°C ambient (in consideration of personnel burn risk) tube temperature must remain below 205°C. Alternative designs to keep jacket below 60°C in higher ambients and/or with higher tube temperatures are available. Contact Thermon.

\*<sup>2</sup>T-rating per internationally recognised testing agency guidelines.

\*<sup>3</sup>Thermon heating cables are approved for the listed T-ratings using the stabilised design method. This enables the cable to operate in hazardous areas without limiting thermostats. The T-rating may be determined using CompuTrace® Electric Heat Tracing Design Software or contact Thermon for design assistance

# TUBETRACE® TYPE SI/MI - SP/MP- TUBING

## TUBETRACE® TYPE SI/MI

“Light” Steam Traced Instrument Tubing

### APPLICATION

Freeze Protection or Process Temperature Maintenance Tube Temperature Range: 5°C to 121°C. TubeTrace Type SI and MI is designed to provide freeze protection or temperature maintenance for metallic and non-metallic tubing with “light” steam trace. TubeTrace Type SI and MI are suitable for use with process analyzers, emissions analyzers, and impulse lines to flow or pressure transmitters where steam or hot liquid is the preferred heating media.

TubeTrace Type SI and MI “light” steam trace is a metallic tracer tube that is isolated from direct contact with the process tube(s). The tracer tube and process tube(s) benefit from consistent heat transfer and performance along the entire length of the bundle.

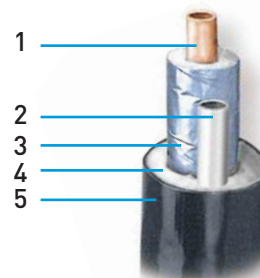
Unlike field fabricated and insulated tubing, TubeTrace engineered pre-insulated tubing provides superior weather proofing and long term reliability.

### CONSTRUCTION

- 1 Process tube(s)
- 2 Trace tube (isolated from process tube(s))
- 3 Heat Reflective Tape
- 4 Non-Hygroscopic glass fiber insulation
- 5 Polymer outer jacket

### PRODUCT FEATURES

- Consistent heat tracing and thermal performance
- Superior weather proofing
- Long coils minimize waste



### RATINGS/SPECIFICATIONS

SI and MI “Light” Trace	Ratings
Available tracer tube diameters	1/4”, 3/8”, 1/2”, 6, 10, 12 mm
Available tracer tube materials	Copper and Stainless Steel
Typical process tube temperature	5°C to 121°C
Maximum steam temperature*	205°C/1690 kPa
Typical temperature difference tracer tube vs. process tube	66°C

\*If bundle jacket is to remain below 60°C in 27°C ambient (in consideration of personnel burn risk) tube temperature must remain below 205°C. Alternative designs to keep jacket below 60°C in higher ambients and/or with higher tube temperatures are available. Contact Thermon.



# STEAM HEATED INSTRUMENT TUBING FOR FREEZE PROTECTION AND TEMPERATURE MAINTENANCE

## TUBETRACE® TYPE SP/MP

“Heavy” Steam Traced Instrument Tubing

### APPLICATION

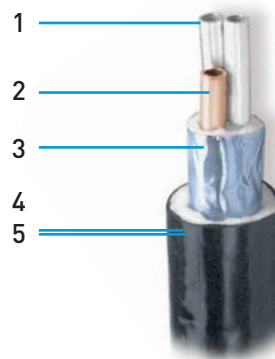
Freeze Protection or Process Temperature Maintenance Tube Temperature Range: 5°C to 205°C. TubeTrace Type SP and MP with “heavy” steam trace is designed to provide freeze protection or temperature maintenance for metallic and nonmetallic tubing. TubeTrace Type SP and MP heavy steam trace is suitable for use with process analyzers, emissions analyzers, and impulse lines to pressure transmitters where steam or hot liquid is the preferred heating media. TubeTrace Type SP and MP “heavy” steam trace is a metallic tracer tube in direct contact with the process tube. “Heavy” steam trace provides predictable heat output along the traced tube. The tracer tube and process tubes are cabled together thereby mechanically binding the tubes. This ensures consistent heat transfer and performance along the entire length by preventing separation or tube migration within the bundle. Unlike field fabricated and insulated tubing, TubeTrace pre-engineered factory insulated tubing provides superior weather proofing and long term reliability.

### CONSTRUCTION

- 1 Process tubes
- 2 Tracer Tube
- 3 Non-Hygroscopic glass fiber insulation
- 4 Heat reflective tape
- 5 Polymer outer jacket

### HPT PRODUCT FEATURES

- Consistent heat transfer and thermal performance
- Superior weather proofing
- Long coils minimize waste



### RATINGS/SPECIFICATIONS

SP and MP “Heavy” Trace	Ratings
Available tracer tube diameters	1/4”, 3/8”, 1/2”, 6, 10, and 12 mm
Available tracer tube materials	Copper and Stainless Steel
Typical process tube temperature	5°C to 205°C
Maximum steam temperature	205°C/1690 kPa
Typical temperature difference tracer tube vs. process tube	Less than 14°C

# TUBETRACE® TYPE SEI/MEI - HT - TUBING

## TUBETRACE® TYPE SEI/MEI - HT

Electrically Heat Traced (EHT) Tubing with EHT Isolated from High Temperatures (HT)

### APPLICATION

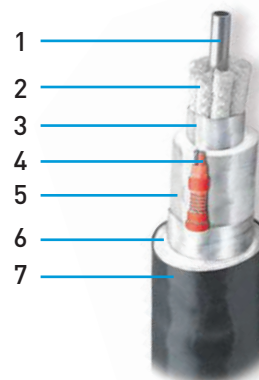
Freeze protection 5°C of steam lines. (Continuous exposure to 399°C) TubeTrace HT is a pre-engineered electric traced tube bundle for steam sample lines and impulse lines to pressure transmitters. TubeTrace HT will provide water freeze protection in ambient conditions down to -45°C with 40 kph wind conditions. HT will withstand continuous steam exposure temperatures up to 399°C. In the past, tubing subject to high temperature exposure was heat traced with series resistance mineral insulated (MI) heat trace. MI heaters are custom made to fit each application, so long lead times are often required. TubeTrace HT solves this with Thermon parallel resistance HPT heat trace isolated from direct contact with high temperature tubing. TubeTrace HT bundles are designed to withstand continuous 399°C steam exposure temperature even when power is applied to the heat trace during ambient conditions of 5°C.

### CONSTRUCTION

- 1 Process tube(s)
- 2 High temperature woven glass fiber thermal insulation
- 3 Heat reflective foil
- 4 HPT heat trace
- 5 Thermal diffusion foil
- 4 Non-Hygroscopic glass fiber insulation
- 5 Polymer outer jacket (ATP or TPU)

### PRODUCT FEATURES

- “Touch Safe” Jackets Protect Personnel
- “Cut-to-Length” for Faster Installation
- Rated for 399°C Continuous Exposure Temperatures
- Designed for Ambient Sensing Control at 5°C
- Freeze Protect in Ambient of -45°C



### RATINGS/SPECIFICATIONS

Watt Density	33 W/m @ 10°C
Supply voltages*	230 Vac Nominal
Maintain temperature	5°C (Freeze protection)
Minimum design ambient	-45°C
Max. continuous exposure temp.	399°C
Minimum bend radius	406 mm

\*Higher voltages up to 480 Vac may be possible: contact Thermon for design assistance

# PROBLEM SOLVED

Teesing has more 60 years of experience in very diverse markets. Thanks to this extensive technical know-how, we are able to offer extra services in addition to a broad and deep range of products. Because we have our own engineering department we are able to respond quickly and efficiently to any connection problems and can supply client-specific assemblies that are tuned to your needs.



## PRE-BEND ASSEMBLING

We can assemble pipe work with fittings according to your specifications. Pipes with our fittings can be removed in a radial direction, without difficulty.



## MATERIALS

Pre-bend pipes don't have to be made of copper! We can also offer you brass or high grade steel pipes in a variety of different forms. Or do you require hotformed plastic pipes? We can meet your expectations. Give us a try!



## CUSTOM ASSEMBLED HOSE ASSEMBLIES

Hoses are most of the time assembled to comply with the specific application. Do you require stainless steel or aramid braid, pipe ends or fittings, flexible or smooth inner liners? We stock various parts to assemble on demand with the required hose size and length.



## COMPLETE PRODUCT RANGE

- Ball valves
- Cleanroom assemblies
- CNG systems
- Engineered products
- Fittings
- Heat tracing
- High purity filters
- Instrumentation
- Manifolds
- Pipe connectors & flanges
- Quick connect couplings
- Sub ppb gas purifiers
- Systems and assemblies
- Test- and fillconnectors
- Tubing
- UHP pressure measurement
- UHP/HP Valves & fittings
- Valves and regulators



Contact our sales engineers to receive detailed product information.  
We recommend to visit our website for regularly updated product information.

**TEESING B.V.**  
Verrijn Stuartlaan 7  
2298 EK Rijswijk  
The Netherlands

Tel +31 70 413 07 00  
Fax +31 70 413 07 30

info@teesing.com  
www.teesing.com

**CHINA OFFICE**  
Hong Kong Macau Center  
Suite 418  
4Th Floor, Office Tower  
2 Chao Yang Men Bei Da Jie  
100028 Beijing, China

Tel +86 10 659 590 74  
Fax +86 10 650 142 48

teesingchina@teesing.com  
www.teesing.com.cn

**USA OFFICE**  
10 Millpond Drive Unit 7  
Lafayette, NJ 07848  
United States of America

Tel +1 973 383 0691  
Fax +1 973 383 4672

teesingusa@teesing.com  
www.teesing.com

**TAIWAN OFFICE**  
4F.-15, No.36, Taiyuan St.  
Zhubei City  
Hsinchu County 302  
Taiwan

Tel +886 3 560 05 60  
Fax +886 3 560 05 25

teesingtaiwan@teesing.com  
www.teesing.tw

**ASPRO TIS (BEIJING) CO. LTD.**  
Xi Tuo Cun, Ma Chi Kou Zhen  
Chang Ping District  
Beijing 102206  
China

Tel +86 10 807 221 65

info@aspro-tis.com.cn  
www.aspro-tis.com.cn

WWW.TEESING.COM

