

PU Tubing

Polyurethane's **3 specific materials** - ether, ester and food-grade "crystal" - offer excellent flexibility and outstanding use in a wide range of applications, allowing for up to **50% space reduction** when compared to semi-rigid PA tubing.

Product Advantages

Excellent Mechanical Properties

- Consistent tensile strength for optimum longevity
- Optimal bend radius
- Good vibration absorption
- Unsurpassed abrasion resistance for a single layer tubing
- UV-resistant
- Superior vacuum capability due to surface hardness
- Remaining length marking
- Silicone-free



3 Material Grades

- PU ester: perfect for pneumatic applications
- PU ether: no water absorption ; superior chemical resistance to PU ester
- PU ether food-grade "crystal":
 - identification of fluids and circuits
 - chemical resistance superior to PU ether
 - improved longevity

Applications

- Food Process
- Robotics
- Cabling
- Pneumatics
- Automation
- In-Plant Automotive
- Rapid Cycles

Technical Characteristics

Compatible Fluids	Compressed air, industrial fluids (depending on the material type)
Working Pressure	Vacuum to 12 bar
Working Temperature	-20°C to +70°C
Component Materials	Polyurethane ester Polyurethane ether Polyurethane ether food-grade "crystal"

Regulations

Industrial

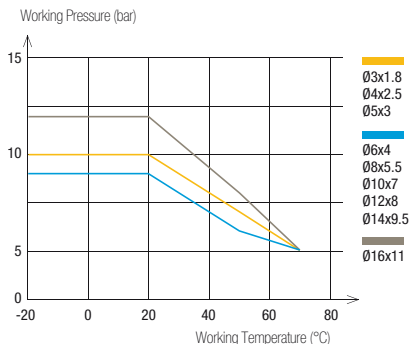
DI: 2002/95/EC (RoHS), 2011/65/EC
DI: 97/23/EC (PED)
RG: 1907/2006 (REACH)

Food (PU ether food-grade "crystal")

FDA: 21 CFR 177.2600, 178.3297, 176.170, 178.2010
RG: 1935/2004 EC

Reliable performance is dependent upon the type of fluid conveyed and fittings being used. Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

Performance of PU Tubing



Tube O.D.	Tube O.D. Tolerance
3 to 8 mm	+0.10 / -0.10
10 to 16 mm	+0.15 / -0.15

Packaging








Tube pack®: 25 m, 100 m
Drum: 300 m, 500 m, 1000 m

Connected to Parker Legris push-in fittings, the calibration of PU tubing ensures perfect sealing based on NF E49-101.

To calculate burst pressure, the values in this graph should be multiplied by 3.

1025U Polyurethane (PU) Ester Tubing








Tubepack® 25 m

O.D. (mm)	I.D. (mm)								kg
3	1.8	8	1025U03 01 18						0.020
4	2.5	10	1025U04 01	1025U04 02	1025U04 03	1025U04 04	1025U04 05	1025U04 06	0.310
5	3	13	1025U05 01			1025U05 04			0.522
6	4	15	1025U06 01	1025U06 02	1025U06 03	1025U06 04	1025U06 05	1025U06 06	0.591
8	5.5	20	1025U08 01	1025U08 02	1025U08 03	1025U08 04	1025U08 05	1025U08 06	0.971
10	7	25	1025U10 01	1025U10 02		1025U10 04	1025U10 05	1025U10 06	1.467
12	8	35	1025U12 01	1025U12 02		1025U12 04	1025U12 05	1025U12 06	2.406
14	9.5	45	1025U14 01 95			1025U14 04 95			2.815
16	11	45	1025U16 01 11	1025U16 02 11	1025U16 03 11	1025U16 04 11			2.815

Inch tubing available upon request

1100U Polyurethane (PU) Ester Tubing








Tubepack® 100 m

O.D. (mm)	I.D. (mm)								kg
4	2.5	10	1100U04 01	1100U04 02	1100U04 03	1100U04 04	1100U04 05	1100U04 06	1.092
5	3	13	1100U05 01			1100U05 04			1.092
6	4	15	1100U06 01	1100U06 02	1100U06 03	1100U06 04	1100U06 05	1100U06 06	2.064
8	5.5	20	1100U08 01	1100U08 02	1100U08 03	1100U08 04	1100U08 05	1100U08 06	3.610
10	7	25	1100U10 01			1100U10 04			6.105
12	8	35	1100U12 01			1100U12 04			8.610
14	9.5	45	1100U14 01 95			1100U14 04 95			11.215
16	11	45	1100U16 01 11	1100U16 02 11	1100U16 03 11	1100U16 04 11			12.176

Inch tubing available upon request








2003U Polyurethane (PU) Ester Tubing

Drum 300 m

O.D. (mm)	I.D. (mm)								kg
10	7	25	2003U10 01	2003U10 02	2003U10 03	2003U10 04	2003U10 05	2003U10 06	16.600








2005U Polyurethane (PU) Ester Tubing

Drum 500 m

O.D. (mm)	I.D. (mm)								kg
8	5.5	20	2005U08 01	2005U08 02	2005U08 03	2005U08 04	2005U08 05		17.100

2010U Polyurethane (PU) Ester Tubing




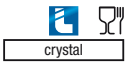




Drum 1000 m

O.D. (mm)	I.D. (mm)								kg
4	2.5	12	2010U04 01	2010U04 02	2010U04 03	2010U04 04	2010U04 05	2010U04 06	9.840
6	4	15	2010U06 01	2010U06 02	2010U06 03	2010U06 04	2010U06 05	2010U06 06	20.460

PU Tubing




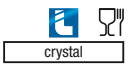




1025U..R Polyurethane (PU) Ether Tubing

Tubepack® 25 m

O.D. (mm)	I.D. (mm)									kg
4	2.5	12	1025U04R01	1025U04R04	1025U04R08	1025U04R12	1025U04R13	1025U04R14	1025U04R17	0.310
5	3	13			1025U05R08					0.522
6	4	15	1025U06R01	1025U06R04	1025U06R08	1025U06R12	1025U06R13	1025U06R14	1025U06R17	0.591
8	5.5	20	1025U08R01	1025U08R04	1025U08R08	1025U08R12	1025U08R13	1025U08R14	1025U08R17	0.971
10	7	25	1025U10R01	1025U10R04	1025U10R08			1025U10R14		1.467
12	8	35	1025U12R01	1025U12R04	1025U12R08			1025U12R14		2.406
14	9.5	45		1025U14R01 95	1025U14R04 95					2.815
16	11	45			1025U16R08 11					2.815




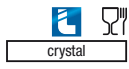
1100U..R Polyurethane (PU) Ether Tubing

Tubepack® 100 m

O.D. (mm)	I.D. (mm)									kg
4	2.5	12	1100U04R01	1100U04R04	1100U04R08	1100U04R12	1100U04R13	1100U04R14	1100U04R17	1.092
6	4	15	1100U06R01	1100U06R04	1100U06R08	1100U06R12	1100U06R13	1100U06R14	1100U06R17	2.064
8	5.5	20	1100U08R01	1100U08R04	1100U08R08	1100U08R12	1100U08R13	1100U08R14	1100U08R17	3.610
10	7	25			1100U10R08			1100U10R14		6.109
12	8	35			1100U12R04			1100U12R08		8.610
14	9.5	45			1100U14R08 95					11.215
16	11	45			1100U16R08 11					12.176




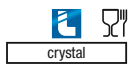
2003U..R Polyurethane (PU) Ether Tubing

Drum 300 m

O.D. (mm)	I.D. (mm)					kg
10	7	25	2003U10R01	2003U10R04	2003U10R08	16.600




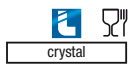
2005U..R Polyurethane (PU) Ether Tubing

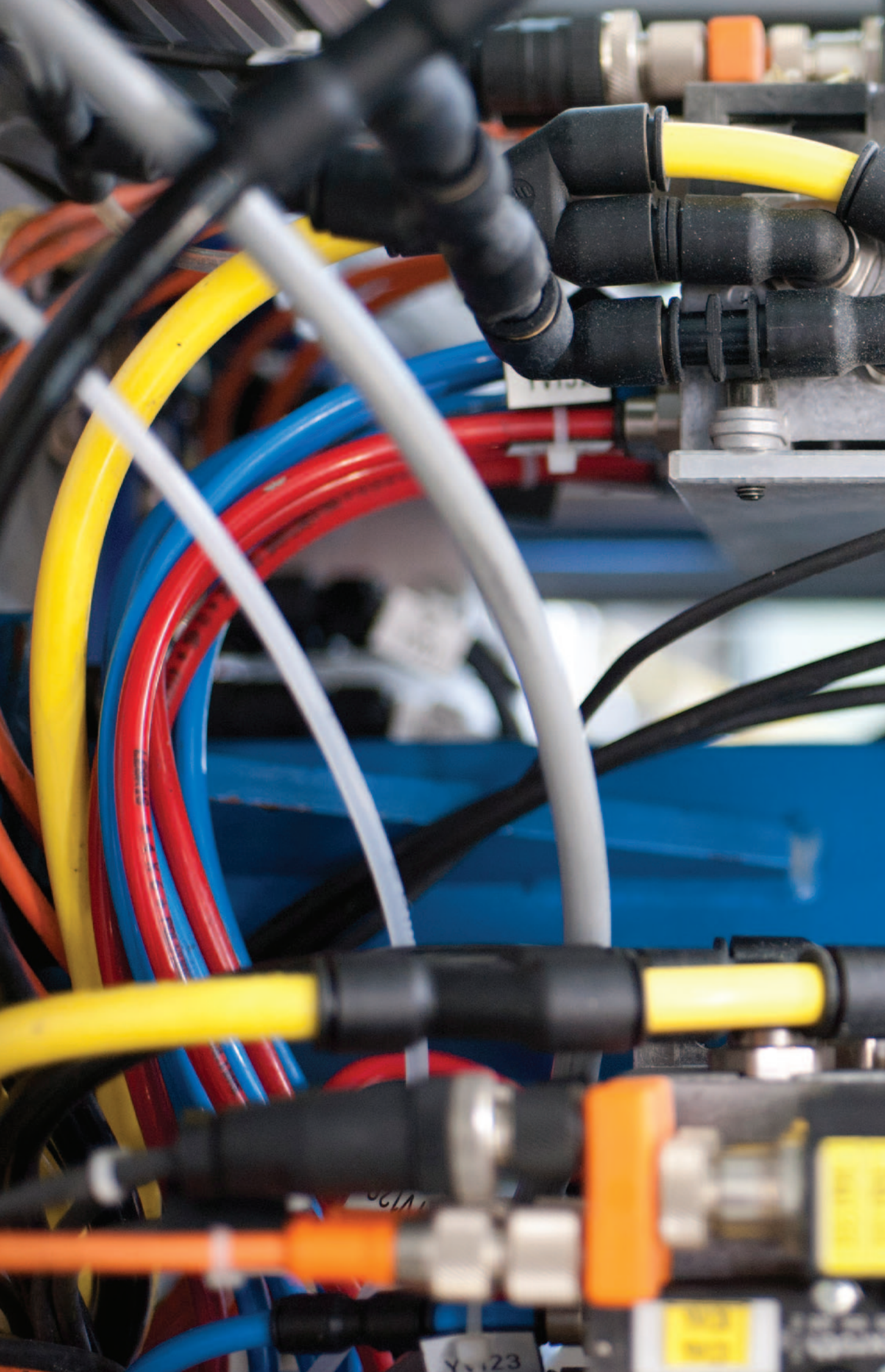
Drum 500 m

O.D. (mm)	I.D. (mm)					kg
8	5.5	20	2005U08R01	2005U08R04	2005U08R08	15.600

2010U..R Polyurethane (PU) Ether Tubing

Drum 1000 m

O.D. (mm)	I.D. (mm)					kg
4	2.5	12	2010U04R01	2010U04R04	2010U04R08	8.670
6	4	15	2010U06R01	2010U06R04	2010U06R08	18.600



Flexible Calibrated Tubing

Technical Tubing & Hose

Antistatic PU Tubing

With a constant **10² Ω.m resistivity** across the entire thickness of the tubing wall, this tubing guarantees **perfect dissipation of accumulated static electricity**, thereby increasing safety.

Product Advantages

Security | Low resistivity throughout the material
 Suitable for ATEX* areas
 Superior longevity
 Excellent vibration absorption
 UV-resistant
 Silicone-free

Machinery Optimisation | Minimum bend radius allowing maximum space saving
 Good chemical resistance
 Wide temperature range
 Stable chemical characteristics throughout tubing



Antistatic Packaging
 Pneumatics
 Electronics
 Spray Painting
 Electrical Converters

Applications

Technical Characteristics

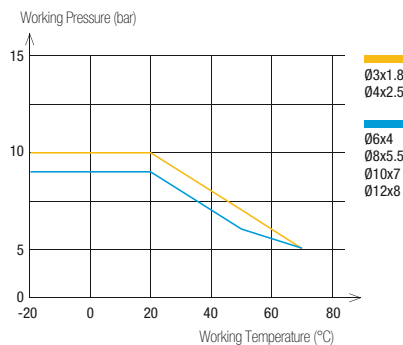
Compatible Fluids	Compressed air, industrial fluids
Working Pressure	Vacuum to 10 bar
Working Temperature	-20°C to +70°C
Component Materials	Polyurethane with conductive additive (50 shore D)

Regulations

DI: 94/9/EC (ATEX*)
 DI: 1907/2006 (REACH)
 DI: 2002/95/EC (RoHS), 2011/65/EC
 *For ATEX areas, please consult us

Reliable performance is dependent upon the type of fluid conveyed and fittings being used. Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

Performance of Antistatic PU Tubing



Tube O.D.	Tube O.D. Tolerance
3 to 8 mm	+0.10 / -0.10
10 to 12 mm	+0.15 / -0.15



Packaging
 Tubepack*: 25 m, 100 m

Connected to Parker Legris push-in fittings, the calibration of Parker Legris tubing ensures perfect sealing based on NF E49-101.

To calculate burst pressure, the values in this graph should be multiplied by 3.



1025U..A Anti-Static Polyurethane (PU) Ester Tubing

Tubepack® 25 m

O.D. (mm)	I.D. (mm)			kg
4	2.5	12	1025U04A01	0.310
6	4	15	1025U06A01	0.591
8	5.5	25	1025U08A01	0.971

1100U..A Anti-Static Polyurethane (PU) Ester Tubing

Tubepack® 100 m

O.D. (mm)	I.D. (mm)			kg
3	1.8	10	1100U03A01	0.836
4	2.5	12	1100U04A01	1.092
6	4	15	1100U06A01	2.064
8	5.5	25	1100U08A01	3.610
10	7	35	1100U10A01	6.105
12	8	45	1100U12A01	8.610

Related Products

To maintain the antistatic properties throughout the circuit, it is recommended that this tubing be used with metallic fittings.

Push-In Fittings

[LF 3600](#) P. 1-65



[LF 3800](#) P. 1-77



[LF 3900](#) P. 1-77



Compression Fittings

[Brass](#) P. 5-5



[Stainless Steel](#) P. 5-31



Anti-Spark PU Tubing

Combining **outstanding spark resistance** with superb **flexibility**, this range is perfectly suited for welding applications.

Two types of PU - ether with PVC sheath or single layer ether - are available and allow **rapid installation** with Parker Legris push-in fittings.

Product Advantages

PU with PVC Sheath

- High resistance to kinking and abrasion
- Non-adhesive jacket facilitating sheath removal
- Fluid direction marking
- Self-extinguishing sheath, protecting the inner tubing
- Silicone-free

Single Layer PU

- Minimum bend radius for maximum space saving
- Significant flexibility for rapid cycling
- Good chemical resistance
- Flow direction marking
- Fireproof material
- Silicone-free



- Applications
- Industrial Machinery
 - Compressed Air
 - Robotics
 - Mechanical Constraints
 - Cooling
 - Welding
 - Cabling

Technical Characteristics

Compatible Fluids	Industrial fluids, compressed air, coolants
Working Pressure	Vacuum to 14 bar
Working Temperature	-20°C to +70°C
Component Materials	PU ether with PVC sheath PU ether single layer

O.D. of Tube	Sheath Removal Length for LF 3600 (mm)
4 mm	15± 1
6 mm	18± 1
8 mm	19± 1
10 mm	24± 1
12 mm	25± 1

Regulations

UL94 V-0 (Fire resistance)
 DI: 2002/95/EC (RoHS),
 2011/65/EC
 RG: 1907/2006 (REACH)

Packaging

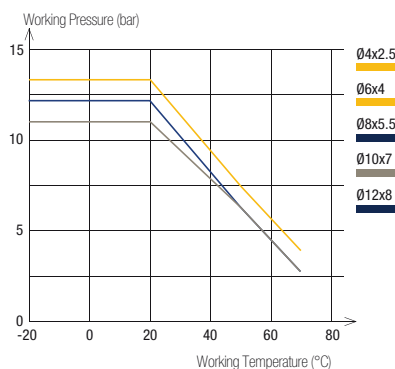
Tube pack*: 25 m, 100 m

Reliable performance is dependent upon the type of fluid conveyed and fittings being used. Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

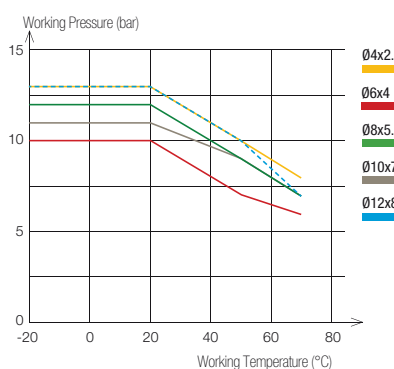
For other fitting ranges, please consult us.

Tubing Performance

Anti-Spark PU Tubing, with PVC Sheath



Anti-Spark PU Tubing, Single Layer








Tube O.D.	Tube O.D. Tolerance	Thickness and Tolerances of PVC Sheath
4 to 8 mm	+0.10 / -0.10	1mm +0.10 / -0.10
10 to 12 mm	+0.15 / -0.15	

Connected to Parker Legris push-in fittings, the calibration of Parker Legris tubing ensures perfect sealing based on NF E49-101 (inner tubing for sheathed or single layer tubing).

To calculate burst pressure, the values in these graphs should be multiplied by 3.






1025U..V Anti-Spark Sheath Polyurethane (PU) Ether Tubing

Tubepack® 25 m

O.D. (mm)	I.D. (mm)						kg
6	4	12	1025U06V01	1025U06V02	1025U06V03	1025U06V04	1.200
8	5.5	20	1025U08V01	1025U08V02	1025U08V03	1025U08V04	1.620
10	7	25	1025U10V01	1025U10V02	1025U10V03	1025U10V04	2.900
12	8	35	1025U12V01	1025U12V02	1025U12V03	1025U12V04	4.030






1100U..V Anti-Spark Sheath Polyurethane (PU) Ether Tubing

Tubepack® 100 m

O.D. (mm)	I.D. (mm)						kg
6	4	12	1100U06V01	1100U06V02	1100U06V03	1100U06V04	5.370
8	5.5	20	1100U08V01	1100U08V02	1100U08V03	1100U08V04	7.630
10	7	25	1100U10V01	1100U10V02	1100U10V03	1100U10V04	10.860
12	8	35	1100U12V01	1100U12V02	1100U12V03	1100U12V04	15.060






1025U..K Single Layer Anti-Spark Polyurethane (PU) Ether Tubing

Tubepack® 25 m



O.D. (mm)	I.D. (mm)						kg
4	2.5	12	1025U04K01	1025U04K02	1025U04K03	1025U04K04	0.230
6	4	15	1025U06K01	1025U06K02	1025U06K03	1025U06K04	0.580
8	5.5	20	1025U08K01	1025U08K02	1025U08K03	1025U08K04	0.860
10	7	25	1025U10K01	1025U10K02	1025U10K03	1025U10K04	1.230
12	8	35	1025U12K01	1025U12K02	1025U12K03	1025U12K04	2.080
14	9.5	45		1025U14K02 95	1025U14K03 95		2.620

1100U..K Single Layer Anti-Spark Polyurethane (PU) Ether Tubing

Tubepack® 100 m

O.D. (mm)	I.D. (mm)						kg
4	2.5	12	1100U04K01				0.900
6	4	15	1100U06K01	1100U06K02	1100U06K03	1100U06K04	2.320
8	5.5	20	1100U08K01	1100U08K02	1100U08K03	1100U08K04	3.030
10	7	25	1100U10K01	1100U10K02	1100U10K03	1100U10K04	5.100
12	8	35	1100U12K01	1100U12K02	1100U12K03	1100U12K04	8.600
14	9.5	45		1100U14K02 95	1100U14K03 95		10.676

6000 71 00 Stripping Tool for Anti-Spark Tubing

	Technical polymer, stainless steel		kg
		6000 71 00	0.098

Working principle of the stripping tool page 3-17