

Parker Legris
Technical Tubing & Hose

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding





For advice or more information, please do not hesitate to contact us. Visit our website today: **www.parkerlegris.com** or consult our general Catalogue.





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# Technical Tubing and Hose

#### **PA Tubing**

(P. 10)



Fluids: compressed air, industrial fluids

#### Materials:

- 2 polyamide grades (semi-rigid and rigid)
- -7 colours

Pressure: 58 bar

Temperature: -40°C to +100°C O.D. metric: 3 mm to 16 mm O.D. inch: on request

# Fireproof High Resistance PA Tubing

(P. 14)



Fluids: compressed air, coolants, lubricants

#### Materials:

- Polyamide with flame retardant additive
- -5 colours

Pressure: 50 bar

Temperature: -40°C to +100°C O.D. metric: 4 mm to 12 mm

# Anti-Spark PA or PU Tubing, with or without PVC Sheath (P. 16 & 24)



Fluids: compressed air, coolants, industrial fluids

#### Materials:

- Semi-rigid polyamide with PVC sheath
- Polyurethane ether with PVC sheath
- Single layer polyurethane ether
- -4 colours

Pressure: 36 bar max.

Temperature: -20°C to +80°C

O.D. metric: 4 mm to 12 mm

#### **PU Tubing**

(P. 18)



**Fluids:** compressed air and food industry fluids ("crystal")

#### Materials:

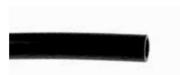
- Polyurethane ester or ether
- Polyurethane food-grade "crystal"
- -7 colours

Pressure: 12 bar

Temperature: -20°C to +70°C O.D. metric: 3 mm to 16 mm O.D. inch: on request

#### **Antistatic PU Tubing**

(P. 22)



Fluids: compressed air

#### Materials:

- Polyurethane with conductive particles
- Black (10<sup>2</sup> Ω.m)

Pressure: 10 bar

**Temperature:** -20°C to +70°C **O.D. metric:** 3 mm to 12 mm

# PE Tubing

(P. 26)



Fluids: many fluids

#### Materials:

- Low density polyethylene
- 50% reticulated polyethylene, food-grade
- -7 colours

Pressure: 20 bar

Temperature: -40°C to +95°C O.D. metric: 4 mm to 14 mm O.D. inch: 1/8" to 1/2"

# **FEP Tubing**

(P. 28)



Fluids: many fluids

#### Materials:

- Fluoropolymer: fluorinated ethylene propylene, food-grade
- Transparent

Pressure: 28 bar

Temperature: -40°C to +150°C O.D. metric: 4 mm to 12 mm

#### **PFA Tubing**

(P. 30)



Fluids: many fluids

#### Materials:

- -3 grades of perfluoroalkoxy
- High purity food-grade, clear
- Standard food-grade, 3 "crystal" colours
- Antistatic (0.2 Ω.m), black

Pressure: 36 bar

**Temperature:** -196°C to +260°C **O.D. metric:** 4 mm to 12 mm

# **PA Multi-Tubing**

(P. 32)



Fluids: compressed air, industrial fluids

#### Materials:

- Semi-rigid polyamide with PVC sheath
- -6 colours

Pressure: 24 bar

**Temperature:** -40°C to +80°C **O.D. metric:** 4 mm to 8 mm



# Technical Tubing and Hose

#### **Twin PU Tubing**

(P.32)



Fluids: compressed air

#### Materials:

- Polyurethane ester
- 1 to 2 colours

Pressure: 14 bar

Temperature: -20°C to +70°C O.D. metric: 4 mm to 8 mm

#### **Recoil PA Tubing**

(P. 34)



Fluids: compressed air, industrial fluids

#### Materials:

- Semi-rigid polyamide
- -2 colours
- Recoil tubing with fittings

Pressure: 20 bar

Temperature: -20°C to +80°C O.D. metric: 6 mm and 8 mm

# **Recoil PU Tubing**

(P. 36)



Fluids: compressed air

#### Materials:

- Polyurethane ester or ether
- -3 colours
- With or without fittings

Pressure: 10 bar

**Temperature:** -20°C to +70°C **O.D. metric:** 4 mm to 12 mm **I.D. inch:** 3/8" and 19/32"

#### **Braided PU Recoil Hose**

(P.40)



Fluids: compressed air, industrial fluids

#### Materials:

- Translucent blue polyurethane, reinforced with a polyester braid
- Assembled with threaded fittlings

Pressure: 15 bar

**Temperature:** -40°C to +75°C **I.D. inch:** 1/4" and 5/16"

#### **Braided PVC Hose**

(P. 42)



Fluids: compressed air, non-corrosive or alimentary fluids (translucent PVC)

#### Materials:

- Polyvinyl chloride with braided polyester
- Translucent (food-grade) or blue (industrial)

Pressure: 15 bar

Temperature: -25°C to +70°C I.D. metric: 4 mm to 19 mm

# **Self-Fastening NBR Hose**

(P. 44



Fluids: compressed air, coolants

#### Materials:

- Nitrile butadiene rubber reinforced with a polyamide braid
- 4 colours

Pressure: 16 bar

Temperature: -20°C to +100°C

I.D. inch: 1/4" to 3/4"

# Technical Tubing and Hose Range

#### **Flexible Calibrated Tubing**

#### **Polyamide Tubing**

Semi-Rigid PA



1025P 1100P 2005P 2010P Page 11 Rigid PA



1025L

Fireproof PA



1100P..R 2005P..R 2010P..R Page 15 Anti-Spark PA with PVC Sheath



1025P..V 1100P..V Page 17

#### **Polyurethane Tubing**

PU Ester



1025U 1100U 2003U 2005U **2010U** Page 19 PU Ether PU Ether Food-Grade "Crystal"



1025U..R 1100U..R 2003U..R 2005U..R 2010U..R Page 20

Antistatic PU



1025U..A 1100U..A PU Ether, Anti-Spark, Single Layer PU Ether, Anti-Spark with PVC Sheath



#### **Polyethylene Tubing**

Advanced PE



1098Y..F 1099Y..F Low Density PE



1025Y 1100Y Page 27

#### **Fluoropolymer Tubing**

FEP



1005T 1025T Page 29 PFA



1010T..P 1050T..P 1100T..P Page 31

Antistatic PFA



1010T..A 1050T..A Page 31

#### **Calibrated Multi-Tubing**

**Polyamide Tubing with PVC Sheath** 

Semi-Rigid PA



1010P..M 1050P..M Page 33 Twin Polyurethane Tubing

Twin PU Ester



1420U Page 33

# Technical Tubing and Hose Range

#### **Calibrated Recoil Tubing**

#### Semi-Rigid Polyamide

Assembled with Fittings



1470P 1471P 1472P Page 35

#### **Polyurethane Ester and Ether Tubing**

Assembled with Fittings, Metallic Spring Guard

> 1470U 1471U 1472U Page 37

Assembled with Fittings, Plastic Spring Guard



Coiled without Fittings



1460U 1461U 1462U Page 37

#### **Braided Polyurethane Hose**

Assembled with Fittings, Plastic Spring Guard



# **Calibrated Braided Hose**

Clear Food-Grade PVC



1025V 1050V Page 43



Blue PVC

1025V..C 1050V..C Page 43 Self-Fastening NBR



1040H 1080H 1100H Page 45

#### **Accessories**

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**3000 71 11** Page 46

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3000 71

**6000 71** Page 46

**0127** Page 47

**1827** Page 47

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Clip Page 47 **0697** Page 47

# Packaging for Technical Tubing and Hose

# Tubepack®

- 5 m, 10 m, 25 m and 100 m lengths
- For polyamide, polyurethane, fluoropolymer, polyethylene and anti-spark tubing
- Optimisation of storage
- Immediate identification of the type of tubing
- Integrated winder for easy handling



# **Drums**

- Up to 1000 m long
- For polyamide, polyurethane, fluoropolymer tubing, etc.
- Immediate identification of the tubing for easy handling
- Adapted to workshop reels



#### Reels

- Up to 100 m
- Supplied with protective plastic film
- For braided tubing, special tubing (e.g. multi-tubing)



# **Plastic Bags**

- Ideal for merchandising
- Promotional tools
- · Recoil tubing or tubing cut to the required length



# **Tube Marking**

- Length indicated every metre:
  - time saved when cutting to exact length
  - remaining quantity is immediately identifiable (PA and PU)
- Custom marking upon request (marking, fluid identification, customer part number...)
- Traceability with marking of manufacturing batch



# **Tube Cutting to the Required Length**

- Upon request, cutting of your tube to the required length, from 5 cm to 3 m
- Precision +/- 3 mm
- · Ideal for optimising your installation costs

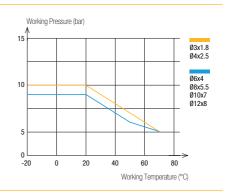


# Product Codes of Parker Legris Tubing and Hose

#### Material Type of Tubing H = Self-Fastening NBR P..A = Antistatic PA L = Rigid Polyamide P..R = Fireproof PA P = Semi-Rigid Polyamide P..V = Anti-Spark PA with PVC Sheath T = Fluoropolymer T..A = Antistatic PFA U = Polyurethane T...P = PFAV = PVC U...A = Antistatic PU Y = Polyethylene U..K = Anti-Spark Single Layer PU U..R = PU Ether U..V = Anti-Spark PU with PVC Sheath Y..F = Advanced PE (LIQUIfit\*) 2010 P 04 R 00 27 Packaging Length O.D. Code Colour Special I.D. **015** = 150 m 03 = 00 = ○ **18** = 1.8 mm 1 = Tubepackoor 3 mm clear LIQUIfit<sub>®</sub> Drum **020** = 20 m 04 = 4 mm01 = ● 27 = 2.7 mm**025** = 25 m **02** = • green $06 = 6 \, \text{mm}$ 33 = 3.3 mm**030** = 300 m **03** = • red **75** = 7.5 mm $08 = 8 \, \text{mm}$ **040** = 40 m **04** = • blue 95 = 9.5 mm**075** = 75 m 05 = • yellow 080 = 80 m06 = ● 1/4 = 56 mmgrey **100** = 100 m **07** = • orange .../... 08 = o crystal clear **09** = • purple **10** = 0 white 12 = • crystal green 003 = 300 m**10** = 10 mm 2 = Long Length 13 = o crystal red on Drum 005 = 500 m14 = o crystal blue **04** = 4 mm 17 = o crystal orange **06** = 6 mm 08 = 8 mm **10** = 10 mm 010 = 1000 m**04** = 4 mm **06** = 6 mm

# How to Read the Graphs

- In the graphs in this chapter, each curve represents the acceptable maximum pressure at a given temperature, by diameter.
- Technical characteristics of Parker Legris tubing depend on the type of connection used.
- The vacuum capability of all tubing is 755 mm Hg (99% vacuum).



**Tried-and-tested** for industrial or vehicle applications, PA tubing guarantees **excellent durability** due to its stable long-term mechanical properties.

Parker Legris' special grade of semi-rigid polyamide is manufactured according to our **Eco-Design** approach for higher performance.

# **Product Advantages**

Tried-&-Tested Material

Good chemical and humidity resistance

Excellent material stability (mechanical and chemical)

Continuous calibration during production for excellent reliability

Two material grades: rigid and semi-rigid

Bio-based semi-rigid material

Versatility & Performance

Wide range of working pressure and temperature

Good vibration absorption

Abrasion-resistant

Remaining length marking

Large choice of colours to facilitate circuit identification

Silicone-free



Packaging
Tooling
Compressed Air
Motion Technologies
Robotics
Industrial Machinery

# **Technical Characteristics**

Tubing	Semi-Rigid PA	Rigid PA
Compatible Fluids	Compressed air, other fluids	Compressed air, lubricants, other fluids
Working Pressure	Vacuum to 50 bar	Vacuum to 58 bar
Working Temperature	-40°C to +100°C	-40°C to +80°C
Component Materials	Bio-based polyamide (68 Shore D)	Polyamide (65 Shore D)

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).

#### Regulations

#### Industrial

**DI:** 2002/95/EC (RoHS), 2011/65/EC

**DI:** 97/23/EC (PED) **RG:** 1907/2006 (REACH)

#### Transportation

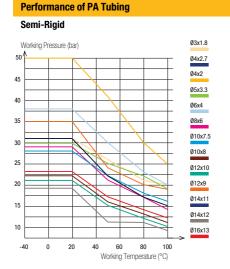
Chemical performance and resistance tested according to

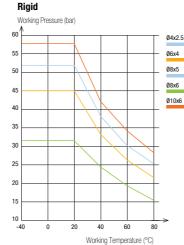
DIN 74324 -1 / DIN 73378 / ISO 7628

#### **Packaging**

Tubepack®: 25 m, 100 m Drum: 500 m, 1000 m

being usea.	use is guara	anteed with a	vacuum or	755 mm





Tube O.D.	Tube O.D. Tolerance
3 to 5 mm	+0.05 / -0.08
6 to 16 mm	+0.05 / -0.10

Connected to Parker Legris push-in fittings, the calibration of Parker Legris tubing ensures perfect sealing in accordance with NF E49-100.

# 1025P Semi-Rigid Polyamide (PA) Tubing

Tubepack® 25 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	$\mathcal{C}_{R}$	Clear	<b></b>	€	<b></b>	<b>E</b>	[	<b>E</b>	kg
3	1.8	6	1025P03 00 18				1025P03 04 18			0.020
4	2	10	1025P04 00	1025P04 01	1025P04 02	1025P04 03	1025P04 04	1025P04 05	1025P04 06	0.318
4	2.7	10	1025P04 00 27	1025P04 01 27	1025P04 02 27	1025P04 03 27	1025P04 04 27	1025P04 05 27	1025P04 06 27	0.254
5	3.3	15	1025P05 00 33	1025P05 01 33			1025P05 04 33			0.420
6	4	15	1025P06 00	1025P06 01	1025P06 02	1025P06 03	1025P06 04	1025P06 05	1025P06 06	0.535
8	6	25	1025P08 00	1025P08 01	1025P08 02	1025P08 03	1025P08 04	1025P08 05	1025P08 06	0.748
10	7.5	42	1025P10 00 75	1025P10 01 75			1025P10 04 75			1.135
10	8	50	1025P10 00	1025P10 01	1025P10 02	1025P10 03	1025P10 04	1025P10 05	1025P10 06	0.989
12	9	47	1025P12 00 09	1025P12 01 09			1025P12 04 09			1.769
12	10	90	1025P12 00	1025P12 01			1025P12 04			1.345
14	11	80	1025P14 00 11	1025P14 01 11			1025P14 04 11			2.226
14	12	116	1025P14 00	1025P14 01			1025P14 04			1.734
16	13	90	1025P16 00 13	1025P16 01 13	1025P16 02 13	1025P16 03 13	1025P16 04 13			2.500

Inch version tubing available upon request

# 1100P Semi-Rigid Polyamide (PA) Tubing

Tubepack<sub>®</sub> 100 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Clear	Ē	Į.		Ĺ	Ĺ		kg
4	2	10	1100P04 00	1100P04 01	1100P04 02	1100P04 03	1100P04 04	1100P04 05	1100P04 06	1.152
4	2.7	10	1100P04 00 27	1100P04 01 27	1100P04 02 27	1100P04 03 27	1100P04 04 27	1100P04 05 27	1100P04 06 27	0.893
5	3.3	15	1100P05 00 33	1100P05 01 33			1100P05 04 33			1.274
6	4	15	1100P06 00	1100P06 01	1100P06 02	1100P06 03	1100P06 04	1100P06 05	1100P06 06	1.799
8	6	25	1100P08 00	1100P08 01	1100P08 02	1100P08 03	1100P08 04	1100P08 05	1100P08 06	2.898
10	7.5	42	1100P10 00 75	1100P10 01 75			1100P10 04 75			4.400
10	8	50	1100P10 00	1100P10 01	1100P10 02	1100P10 03	1100P10 04	1100P10 05		3.667
12	9	47	1100P12 00 09	1100P12 01 09			1100P12 04 09			5.600
12	10	90	1100P12 00	1100P12 01			1100P12 04		1100P12 06	5.052
14	11	80	1100P14 00 11	1100P14 01 11			1100P14 04 11			5.200
14	12	116	1100P14 00	1100P14 01			1100P14 04			4.800
16	13	90	1100P16 00 13	1100P16 01 13	1100P16 02 13	1100P16 03 13	1100P16 04 13			7.800

Inch version tubing available upon request

# 2005P Semi-Rigid Polyamide (PA) Tubing

Drum 500 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>C</b> R	Clear							kg
8	6	25	2005P08 00	2005P08 01	2005P08 02	2005P08 03	2005P08 04	2005P08 05	2005P08 06	12.100
10	8	50	2005P10 00	2005P10 01	2005P10 02	2005P10 03	2005P10 04	2005P10 05		15.600

# 2010P Semi-Rigid Polyamide (PA) Tubing

Drum 1000 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>C</b> R	Clear				Ē			kg
4	2.7	10	2010P04 00 27	2010P04 01 27	2010P04 02 27	2010P04 03 27	2010P04 04 27	2010P04 05 27	2010P04 06 27	7.630
6	4	15	2010P06 00	2010P06 01	2010P06 02	2010P06 03	2010P06 04	2010P06 05	2010P06 06	16.600

# **Tube Cutting to the Required Length**

- Cutting of your tubing upon request, from 5 cm to 3 m
- Precision +/- 3 mm
- Ideal for optimising your installation costs



# **PA Tubing**

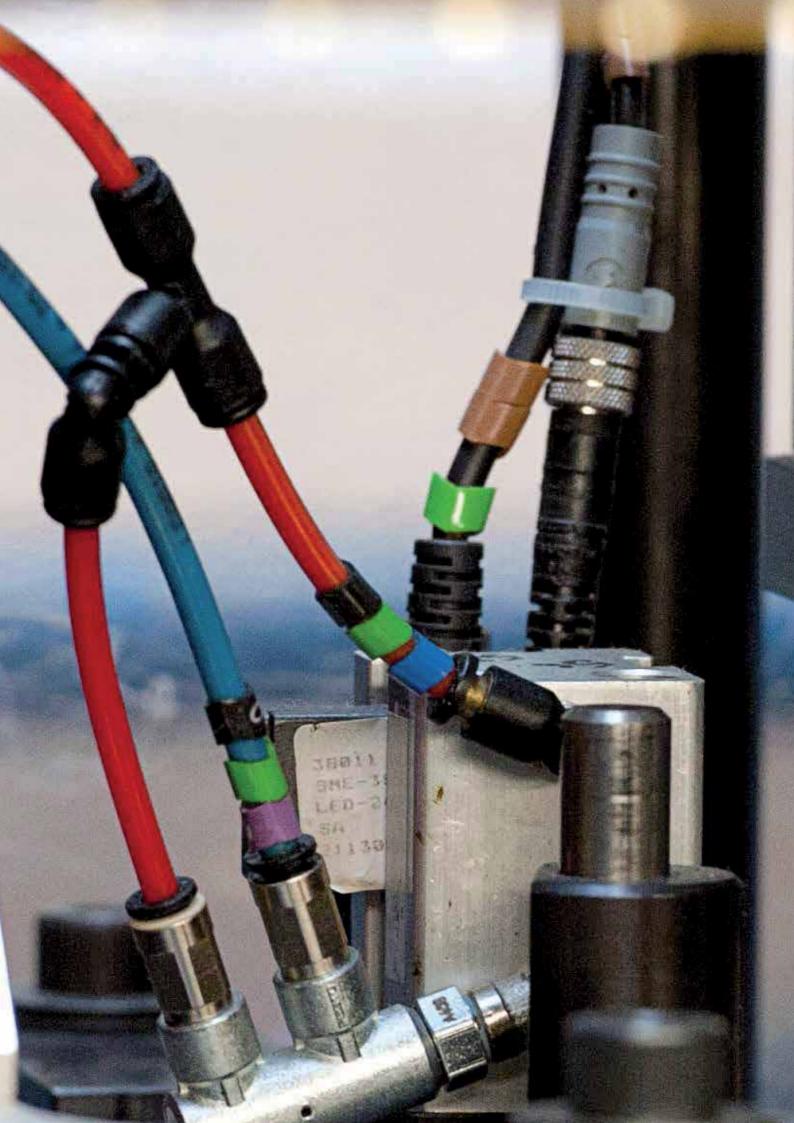
# 1025L Rigid Polyamide (PA) Tubing

Tubepack<sub>®</sub> 25 m

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	$\mathcal{C}_{R}$		kg
4	2.5	35	1025L04 01 25	0.190
6	4	45	1025L06 01	0.400
8	5	70	1025L08 01 05	0.760
8	6	65	1025L08 01	0.760
10	6	85	1025L10 01 06	1.330

 $PA \ tubing \ can \ be \ connected \ to \ various \ fittings \ which \ you \ can \ find \ in \ our \ general \ catalogue \ or \ on \ our \ website, \ {\it www.parkerlegris.com}.$ 





# Fireproof High Resistance PA Tubing

This **single layer fireproof** tubing not only combines excellent resistance to pressure, temperature and flame, but also guarantees non-toxic smoke resulting from burn-off. This tubing eliminates the need for a stripping tool, thus preventing the risk of tube damage prior to connection.

# **Product Advantages**

Safety for On-Board Railway Equipment

Designed for on-board equipment

Excellent flame-resistance: self-extinguishing

Very little smoke generation

Non-toxic combustion gases

**UV-resistant** 

Extremely resistant to high pressure and temperature

Single-Layer Solution

**Innovative** Developed for demanding industrial applications

Excellent spark resistance

Economical alternative to PA tubing with PVC sheath

Combines technical advantages of rigid and semi-rigid

PA tubing

5 colours available

Flow direction marking

Silicone-free



Railway Air Horns Industrial Machinery Pneumatic Doors Step-Units Centralised Lubrication

Welding

# **Technical Characteristics**

Compatible Fluids	Compressed air, lubricants Other fluids: please consult us
Working Pressure	Vacuum to 50 bar
Working Temperature	-40°C to +100°C
Component Materials	Polyamide (63 Shore D)

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)

#### Regulations

Railway

Pr EN 45545-2: HL3, R22, R24, R25

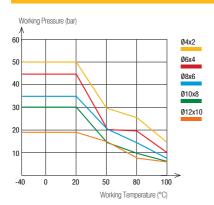
NF F16101: I3 F2, DIN 5510-2: S4, SR2, ST2

**ISO** 4892 Industrial

DI: 97/23/EC (PED)

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

#### **Performance of Fireproof High Resistance PA Tubing**



Tube O.D.	Tube O.D. Tolerance
4 mm	+0.05 / -0.08
6 to 12 mm	+0.05 / -0.10

Connected to Parker Legris push-in fittings, the calibration of PA tubing ensures perfect sealing based on NF E49-100. Packaging Tubepacke: 100 m Drum: 500 m, 1000 m

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



# 1100P...R Fireproof High Resistant Polyamide (PA)

# Tubepack<sub>®</sub> 100 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Clear		Ē.		E	kg
4	2	17	1100P04R00	1100P04R01	1100P04R02	1100P04R03	1100P04R04	1.308
6	4	29	1100P06R00	1100P06R01	1100P06R02	1100P06R03	1100P06R04	1.308
8	6	40	1100P08R00	1100P08R01	1100P08R02	1100P08R03	1100P08R04	2.122
10	8	77	1100P10R00	1100P10R01	1100P10R02	1100P10R03	1100P10R04	2.725
12	10	92	1100P12R00	1100P12R01			1100P12R04	5.052

# **2005P..R** Fireproof High Resistant Polyamide (PA)

#### Drum 500 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Clear			[3]		kg
8	6	40	2005P08R00	2005P08R01	2005P08R02	2005P08R03	2005P08R04	17.500
10	8	77	2005P10R00	2005P10R01	2005P10R02	2005P10R03	2005P10R04	22.800

500 m and 1000 m drums are available upon request with minimum order quantity.

# **2010P...R** Fireproof High Resistant Polyamide (PA)

#### Drum 1000 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Clear					kg
4	2	17	2010P04R00	2010P04R01	2010P04R02	2010P04R03	2010P04R04	14.300
6	4	29	2010P06R00	2010P06R01	2010P06R02	2010P06R03	2010P06R04	23.000

500 m and 1000 m drums are available upon request with minimum order quantity.

## **Related Products**

Fireproof high resistance tubing can be connected to various fittings presented in our general catalogue or on our website, www.parkerlegris.com.

# Push-In Fittings LF 3000° LF 3600 LF 3800/LF 3900 LF 6100 Brass Brass Tube Support

# Anti-Spark PA Tubing with PVC Sheath

A range of **flame and spark-resistant** PA tubing with superior resistance to impact and abrasion, improving equipment **durability**, particularly in areas subject to weld spatter.

# **Product Advantages**

Resistance

Spark | Flame-retardant PVC jacket protects inner tubing Non-adhesive jacket facilitates sheath removal Excellent pressure resistance at high temperature

**Durability** 

Robustness & Highly kink and crush-resistant Excellent compatibility with coolants Flow direction marking Silicone-free



Industrial Machinery Welding Robots Cooling Aggressive Environments

# **Technical Characteristics**

Compatible Fluids	Hot and cold water, refrigerated fluids, compressed air
Working Pressure	0 to 36 bar
Working Temperature	-20°C to +80°C
Component Materials	Polyamide & PVC Sheath

Reliable performance is dependent upon the type of fluid conveyed and fittings being used.

#### Regulations

Industrial

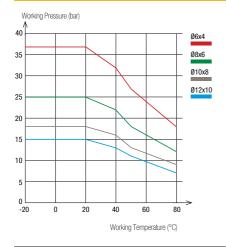
DI: 2002/95/EC (RoHS), 2011/65/EC

**DI:** 97/23/EC (PED) RG: 1907/2006 (REACH) UL94 V-0 (Fire resistance)

**Packaging** 

Tubepack®: 25 m, 100 m

#### Performance of Anti-Spark PA Tubing with PVC Sheath



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

0.D.	Tube O.D. Tolerance	PVC Sheath Thickness
PVC Sheath 8 to 14 mm	+0.10 / -0.10	1 mm
Inner Tubing 6 to 12 mm	+0.05 / -0.10	1 mm

Connected to Parker Legris push-in fittings, the calibration of PA tubing ensures perfect sealing based on NF E49-100 (semi-rigid PA inner tubing).

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

For other fitting ranges, please consult us.



# 1025P...V Anti-Spark Polyamide (PA) Tubing

Tubepack<sub>®</sub> 25 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R		Ē	[	Ē	kg
6	4	25	1025P06V01	1025P06V02	1025P06V03	1025P06V04	1.238
8	6	30	1025P08V01	1025P08V02	1025P08V03	1025P08V04	1.693
10	8	55	1025P10V01	1025P10V02	1025P10V03	1025P10V04	2.029
12	10	70	1025P12V01	1025P12V02	1025P12V03	1025P12V04	2.970

Green and red colour tubing are available upon request with minimum order quantity.

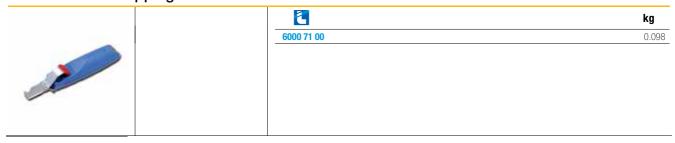
# 1100P..V Anti-Spark Polyamide (PA) Tubing

Tubepack® 100 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	E	[	[3]		kg
6	4	25	1100P06V01	1100P06V02	1100P06V03	1100P06V04	2.338
8	6	30	1100P08V01	1100P08V02	1100P08V03	1100P08V04	3.767
10	8	55	1100P10V01	1100P10V02	1100P10V03	1100P10V04	4.767
12	10	70	1100P12V01	1100P12V02	1100P12V03	1100P12V04	6.567

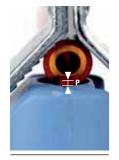
Green and red colour tubing are available upon request with minimum order quantity.

# 6000 71 00 Stripping Tool



# **Working Principle**

Stripping Tool **6000 71 00** 



1. Place tube in stripping tool to adjust the blade height to the tube thickness.



2. Blade height is adjusted using the wheel at the bottom of the handle.



3. Once adjustments have been made, perform a 360° rotation around the tube with the tool.



 $\textbf{4.} \ \text{Push down firmly on} \\$ the metal part of the tool in order to hold tube properly.



5. Move the tool to the end of the tube to create an axial opening of the sheath.



6. The tube is correctly

# 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

**Excellent** 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

3 Material 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

Tube

0.D.

3 to 8 mm

• improved longevity



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 (52 Shore D) Polyurethane ether (52 Shore D) Polyurethane ether food-grade "crystal" (52 Shore D)

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).

#### Regulations

Industrial

DI: 2002/95/EC (RoHS), 2011/65/EC

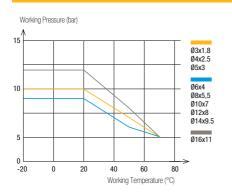
DI: 97/23/EC (PED) RG: 1907/2006 (REACH)

Food (PU ether food-grade "crystal")

FDA: 21 CFR 177.2600, 178.3297, 176.170, 178.2010

RG: 1935/2004 EC

#### Performance of PU Tubing



10 to 16 mm	+0.15 / -0.15							
Connected to Parker Legris push-in fittings, the calibration of PU tubing ensures perfect sealing based on NF E49-101.								

Tube O.D.

**Tolerance** 

+0.10 / -0.10

Packaging Tubepacke: 25 m, 100 m Drum: 300 m, 500 m, 1000 m

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



Applic

# 1025U Polyurethane (PU) Ester Tubing

Tubepack<sub>®</sub> 25 m

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	$\mathcal{C}_{R}$	<b>E</b>	E .	<b>E</b>	E .		<b>E</b>	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

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	<b>E</b>	E			[		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

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R		<b>E</b>	<b>E</b>	<b>E</b>	<b>[</b>		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

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R			[3]		1	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

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Į.						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<sub>®</sub> 25 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	[	Ē	crystal	crystal	crystal	crystal	crystal	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		1025U14R04 95	1025U14R08 95					2.815
16	11	45			1025U16R08 11					2.815

# 1100U ...R Polyurethane (PU) Ether Tubing

Tubepack® 100 m

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	<b>E</b>	Ē	crystal	crystal	crystal	crystal	crystal	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			1100U12R08			1100U12R14		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

<b>O.D.</b> (mm)	I.D. (mm)	<b>€</b> R			crystal	kg
10	7	25	2003U10R01	2003U10R04	2003U10R08	16.600

# 2005U...R Polyurethane (PU) Ether Tubing

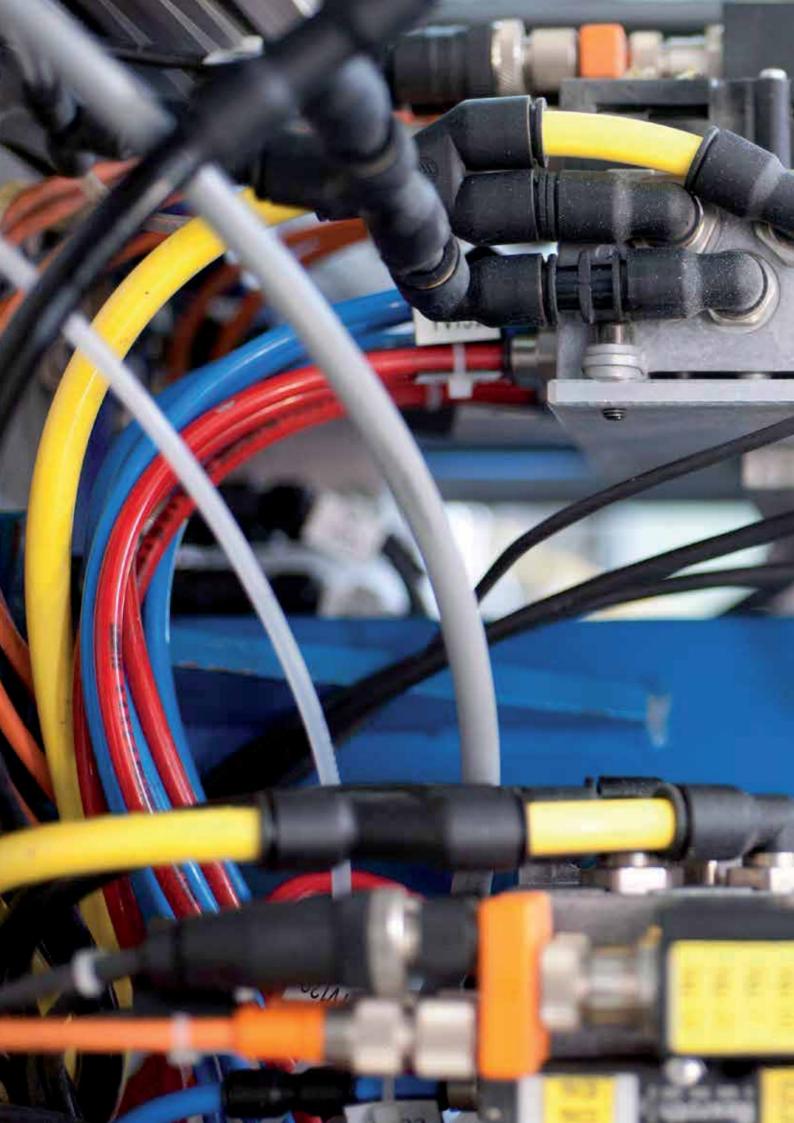
Drum 500 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	E	E	crystal	kg
8	5.5	20	2005U08R01	2005U08R04	2005U08R08	15.600

# 2010U...R Polyurethane (PU) Ether Tubing

Drum 1000 m

<b>O.D.</b> (mm)	I.D. (mm)	<b>€</b> R		Ē	crystal	kg
4	2.5	12	2010U04R01	2010U04R04	2010U04R08	8.670
6	4	15	2010U06R01	2010U06R04	2010U06R08	18.600



# **Antistatic PU Tubing**

With a constant  $10^2 \Omega$ .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

**Optimisation** 

Machinery | Minimum bend radius allowing maximum space saving

Good chemical resistance

Wide temperature range

Stable chemical characteristics throughout tubing



Antistatic Packaging

Pneumatics Spray Painting Electrical Converters

# **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)

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).

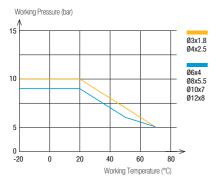
#### Regulations

DI: 94/9/EC (ATEX\*) DI: 1907/2006 (REACH)

DI: 2002/95/EC (RoHS), 2011/65/EC

\*For ATEX areas, please consult us

#### **Performance of Antistatic PU Tubing**



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

Tube O.D.	Tube O.D. Tolerance
3 to 8 mm	+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.

**Packaging** 

Tubepacko: 25 m, 100 m

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

Tubepack<sub>®</sub> 25 m

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R		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

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>C</b> R		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. These products can be found in our general catalogue, or on our website, **www.parkerlegris.com**.

Push-In Fittings			Compression Fittings	
LF 3600	LF 3800	LF 3900	Brass	Stainless Steel
	9		The state of the s	WE !

# **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



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

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).

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

For other fitting ranges, please consult us.

#### Regulations

UL94 V2 to V0 (Fire resistance, depending on the type of tubing) DI: 2002/95/EC (RoHS), 2011/65/FC

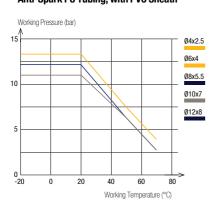
RG: 1907/2006 (REACH)

**Packaging** 

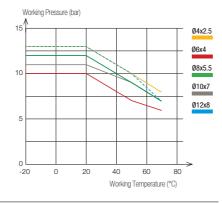
Tubepacke: 25 m, 100 m

#### **Tubing Performance**

# Anti-Spark PU Tubing, with PVC Sheath



#### **Anti-Spark PU Tubing, Single Layer**



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

Tube 0.D.	Tube O.D. Tolerance	Thickness and Tolerances of PVC Sheath
4 to 8 mm	+0.10 / -0.10	1mm
10 to 12 mm	+0.15 / -0.15	+0.10 / -0.10

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 tubina).

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

Tubepack<sub>®</sub> 25 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R				Ē	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<sub>®</sub> 100 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	[	E		£ .	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

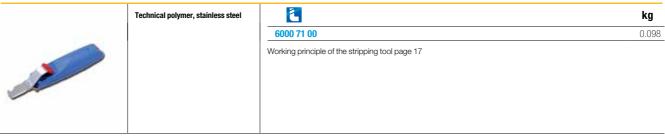
<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	[]			Ē.	kg
4	2.5	12	1025U04K01	1025U04K02	1025U04K03	1025U04K04	0.230
6	4	15	1025U06K01	1025U06K02	1025U06K03	1025U06K04	0.580
8	5.5	20	1025U08K01	1025U08K02	1025U08K03	1025U08K04	0.860
10	7	25	1025U10K01	1025U10K02	1025U10K03	1025U10K04	1.230
12	8	35	1025U12K01	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<sub>®</sub> 100 m

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R				Ē	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



# PE Tubing

Parker Legris offers two types of polyethylene tubing: "Advanced PE" 50% reticulated and Low Density PE. Our range of "Advanced PE" is designed for demanding environments, especially that of water treatment, without compromising operator safety.

# **Product Advantages**

Advanced

50% reticulated material

Best balance between flexibility and pressure/temperature

Resistant to a wide range of aggressive chemicals

UV-stabilised: ideal for outdoor applications

Approved for permanent contact with food and beverages

Silicone-free

Low Density

Excellent resistance to aggressive and corrosive agents

Good technical trade-off

Food-grade material

Silicone-free



Beverage Chemical Petrochemical Food Process Water Water Treatment

# **Technical Characteristics**

Tube	Advanced PE	Low Density PE
Compatible Fluids	Water, beverages and other fluids	Industrial fluids
Working Pressure	Vacuum to 16 bar	Vacuum to 20 bar
Working Temperature	-40°C to +95°C	-40°C to +60°C
Component Materials	High quality polyethylene: 50% reticulated PE 50% low density PE (44 Shore D)	Low Density Polyethylene (44 Shore D)

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).

#### Regulations

**Advanced PE Tubing** FDA: 21 OFR 177.1520 RG: 1935/2004/EC **DI:** 97/23/EC (PED)

DI: 2002/95/EC (RoHS), 2011/65/EC

NSF 42/58 (1/4" and 3/8" approved for 10 bar and 1/2" approved for 8 bar at

room temperature) NSF 51, 61 C-HOT ACS (except for purple colour)

**WRAS** 

RG: 1907/2006 (REACH) Low Density PE Tubing FDA: 21 CFR 177.1520 DI: 2002/95/EC (RoHS), 2011/65/EC

DI: 97/23/EC (PED)

#### **Tubing Performance**

# **Advanced PE Tubing** Working Pressure (bar Ø4x2.5 Ø6x4 Ø8x5.5 Ø1/4" 10 Ø3/8" Ø10x7 Ø12x9 Ø1/2" Working Temperature (°C)

#### **Low Density PE Tubing**



To coloulate hurst procesure	the velves in these areas	٥ بيط امونامنااييس مطاماييوطو
To calculate burst pressure,	the values in these graphs	s snould be multiplied by 3

Tube O.D.	Tube O.D. Tolerance
1/4" to 1/2"	+0.10 / -0.10
4 to 14 mm	+0.10 / -0.10

Connected to Parker Legris push-in fittings, the calibration of Parker Legris tubing ensures perfect sealing.

#### **Packaging**

Advanced PE Tubing

**Tubepack**®: 75 m, 150 m, 300 m 250 feet, 500 feet, 1000 feet

PE Tubing

Tubepack®: 25 m, 100 m

# 1015Y...F Advanced Polyethylene (APE) Tubing

Drum 150 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Clear	<b>E</b> 77	<b>E 2</b> "	<b>E ?</b> "	<b>E 2</b> "	<b>E 2</b> "	White	kg
4	2.5	16	1015Y04F00	1015Y04F01	1015Y04F02	1015Y04F03	1015Y04F04	1015Y04F05	1015Y04F10	1.760
6	4	32	1015Y06F00	1015Y06F01	1015Y06F02	1015Y06F03	1015Y06F04	1015Y06F05	1015Y06F10	2.580
8	5.75	40	1015Y08F00	1015Y08F01	1015Y08F02	1015Y08F03	1015Y08F04	1015Y08F05	1015Y08F10	4.050
10	7	40	1015Y10F00	1015Y10F01	1015Y10F02	1015Y10F03	1015Y10F04	1015Y10F05	1015Y10F10	6.200

# 1030Y...F Advanced Polyethylene (APE) Tubing

Drum 300 m

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Clear	<b>1</b> 77			<b>E</b> 5"	<b>5</b> 57	White	kg
4	2.5	16	1030Y04F00	1030Y04F01	1030Y04F02	1030Y04F03	1030Y04F04	1030Y04F05	1030Y04F10	2.860
6	4	32	1030Y06F00	1030Y06F01	1030Y06F02	1030Y06F03	1030Y06F04	1030Y06F05	1030Y06F10	4.800

# 1075Y...F Advanced Polyethylene (APE) Tubing

Drum 75 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>C</b> R	Clear	<b>E</b> 57	<b>E</b> 77	<b>E 9</b> 7	<b>E ?</b>	<b>E</b> 77	White	kg
12	9	55	1075Y12F00	1075Y12F01	1075Y12F02	1075Y12F03	1075Y12F04	1075Y12F05	1075Y12F10	5.550

# 1096Y...F Advanced Polyethylene (APE) Tubing

Drum 250 ft

O.D. (inch)	I.D. (inch)	<b>€</b> R	Clear	<b>5</b> 5"	<b>E</b> 5"	<b>5</b> 57	<b>E</b> 5"	<b>1</b> 57	White	kg
1/2	0.375	1.96	1096Y62F00	1096Y62F01	1096Y62F02	1096Y62F03	1096Y62F04	1096Y62F05	1096Y62F10	5.900

# 1098Y...F Advanced Polyethylene (APE) Tubing

Drum 500 ft

O.D. (inch)	I.D. (inch)	<b>C</b> R	Clear ST	<b>5</b> 77	<b>E</b> 5"	<b>5</b> 57	<b>E</b> 5"	<b>5</b> 57	White	kg
1/4	0.170	0.78	1098Y56F00	1098Y56F01	1098Y56F02	1098Y56F03	1098Y56F04	1098Y56F05	1098Y56F10	3.300
3/8	0.250	1.18	1098Y60F00	1098Y60F01	1098Y60F02	1098Y60F03	1098Y60F04	1098Y60F05	1098Y60F10	6.300

# 1099Y...F Advanced Polyethylene (APE) Tubing

Drum 1000 ft

O.D. (inch)	I.D. (inch)	<b>€</b> R	Clear	<b>5</b> 77	<b>5</b> 97		<b>E</b> 97	<b>[</b> ]	White	kg
1/4	0.170	0.78	1099Y56F00	1099Y56F01	1099Y56F02	1099Y56F03	1099Y56F04	1099Y56F05	1099Y56F10	5.500

# Low Density Polyethylene (LDPE) Tubing

1025Y

Tubepack<sub>®</sub> 25 m

1100Y

Tubepack<sub>®</sub> 100 m

O.D. (inch)	I.D. (inch)	<b>€</b> R	Clear	kg
1/8	0.062	13	1025Y53 00	0.270
1/4	0.170	32	1025Y56 00	0.400
3/8	0.250	50	1025Y60 00	0.760
1/2	0.375	64	1025Y62 00	1.330

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>C</b> R	Clear	kg
4	2	25	1100Y04 00	0.910
6	4	35	1100Y06 00	1.500
8	6	55	1100Y08 00	2.140
10	8	80	1100Y10 00	2.710
12	9	65	1100Y12 00	4.750
14	11	80	1100Y14 00	5.650

# Fluoropolymer Tubing - FEP

**FEP** (fluorinated ethylene propylene) tubing is a **robust engineering fluoropolymer** which provides excellent fluid visibility and is perfect for flow control monitoring.

# **Product Advantages**

Flow Control

Transparent

Flexible and non-flammable material

Resistant to nearly all chemicals and solvents

Tried-&-Tested Properties

Tried-&-Tested Excellent transmission of UV light

Low friction coefficient

Food-grade material Low permeability

Easily weldable

Silicone-free



Instrumentation
Food Process
UV
Gas Sampling
Chemical
Temperature Cycling
Laboratory

# **Technical Characteristics**

Compatible Fluids	Industrial fluids
Working Pressure	0 to 28 bar
Working Temperature	-40°C to +150°C
Component Materials	Fluorinated ethylene propylene (pure) 55 Shore D

Reliable performance is dependent upon the type of fluid conveyed and fittings being used.

#### Regulations

Food

FDA: 21 CFR 177.1550 RG: 1935/2004

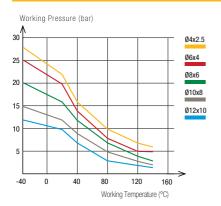
Industrial

UL94 V-0 (Fire resistance)

DI: 2002/95/EC (RoHS), 2011/65/EC

DI: 97/23/EC (PED) RG: 1907/2006 (REACH)

#### **Performance of FEP Tubing**



Tube 0.D.	Tube O.D. Tolerance
4 mm	+0.05 / -0.05
6 to 10 mm	+0.07 / -0.07
12 mm	+0.10 / -0.10

Connected to Parker Legris push-in fittings, the calibration of Parker Legris tubing ensures perfect sealing.

Packaging

Tubepack®: 5 m, 25 m, 100 m

# **1005T** Fluoropolymer (FEP) Tubing

Tubepack<sub>®</sub> 5 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Clear Clear	kg
4	2.5	40	1005T04 00 25	0.155
6	4	50	1005T06 00	0.250
8	6	70	1005T08 00	0.385
10	8	120	1005T10 00	0.524
12	10	180	1005T12 00	0.547

# **1025T** Fluoropolymer (FEP) Tubing

Tubepack<sub>®</sub> 25 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Clear	kg
4	2.5	40	1025T04 00 25	0.506
6	4	50	1025T06 00	1.025
8	6	70	1025T08 00	1.431
10	8	120	1025T10 00	1.693
12	10	180	1025T12 00	1.913

# **Related Products**

Parker Legris stainless steel fittings are perfectly suited for use with fluoropolymer tubing (PFA, FEP). These products can be found in our general catalogue or on our website, **www.parkerlegris.com**.

Push-In Fittings

LF 3800 LF 3900

N.

Compression Fittings

Stainless Steel



Parker Legris PFA (perfluoroalkoxy) tubing offers 10 times greater durability than other fluoropolymer tubings (PTFE, FEP and PVDF) under severe chemical and mechanical conditions. This tubing range is available in three material grades, offering perfect compatibility with all applications, even in extreme environments.

# **Product Advantages**

# Versatility

**Great** Exceptional chemical inertia

A flexible alternative to stainless steel tubing

Broad range of working temperatures, from cryogenic to extreme heat

Non-stick properties allowing conveyance of many fluids & gases

Outstanding resistance to ageing

Fluoropolymer with the lowest permeability

Non-flammable

**UV-transparent** 

Tube marking on request

Silicone-free



Food Process Fuel Cells Electrical/Electronics Aircraft

Oil/Gas Industry Pharmaceutical Medical

Chemical Clean Rooms

**Packaging** 

Tubepack®: 10 m, 50 m, 100 m

#### Three Material **Grades**

Clear High Purity PFA: to cover all applications, including those requiring maximum mechanical resistance

Coloured PFA: for circuit identification

Black Antistatic PFA: eliminates all risk of electrostatic

discharge

# **Technical Characteristics**

Compatible Fluids	Medical, bio-compatible, food process, gas, compressed air
Working Pressure	Vacuum to 36 bar
Working Temperature	-196°C to +260°C
Component Materials	Perfluoroalkoxy (55 Shore D) • High Purity PFA • Translucent coloured PFA • Antistatic PFA

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).

#### Regulations

#### Medical

USP: Class VI (A)

External communication devices

#### Industrial

UL94 V-0 (Fire resistance)

DI: 2002/95/EC (RoHS), 2011/65/EC

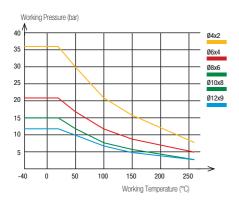
DI: 97/23/EC (PED) RG:1907/2006 (REACH)

DI: 94/09/EC (ATEX, black tubing)

**Food Industry** FDA: 21 CFR 177.1550 (clear, translucent coloured)

RG: 1935/2004

#### **Performance of PFA Tubing**



Tube O.D.	Tube O.D. Tolerance
4 to 8 mm	+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 F49-100

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



# **1010T...P** Fluoropolymer (PFA) Tubing

# Tubepack<sub>®</sub> 10 m

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	High purity	crystal	crystal	crystal	kg
4	2	12	1010T04P00	1010T04P12	1010T04P13	1010T04P14	0.087
6	4	34	1010T06P00	1010T06P12	1010T06P13	1010T06P14	0.237
8	6	60	1010T08P00	1010T08P12	1010T08P13	1010T08P14	0.410
10	8	95	1010T10P00	1010T10P12	1010T10P13	1010T10P14	0.723
12	9	120	1010T12P00	1010T12P12	1010T12P13	1010T12P14	1.148

Ø 10 mm and 12 mm: green, red and blue colours are available upon request, with minimum order quantity.

# **1050T..P** Fluoropolymer (PFA) Tubing

# Tubepack<sub>®</sub> 50 m

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	High purity	crystal	crystal	crystal	kg
4	2	12	1050T04P00	1050T04P12	1050T04P13	1050T04P14	0.435
6	4	34	1050T06P00	1050T06P12	1050T06P13	1050T06P14	1.185
8	6	60	1050T08P00	1050T08P12	1050T08P13	1050T08P14	2.050
10	8	95	1050T10P00	1050T10P12	1050T10P13	1050T10P14	3.615
12	9	120	1050T12P00	1050T12P12	1050T12P13	1050T12P14	5.740

Ø 10 mm and 12 mm: green, red and blue colours are available upon request, with minimum order quantity.

# 1100T...P Fluoropolymer (PFA) Tubing

# Tubepack® 100 m

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	High purity	kg
4	2	12	1100T04P00	0.870
6	4	34	1100T06P00	2.370
8	6	60	1100T08P00	4.100
10	8	95	1100T10P00	7.230
12	9	120	1100T12P00	11.480

# **1010T..A** Fluoropolymer (PFA) Antistatic Tubing

# Tubepack<sub>®</sub> 10 m

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R		kg
4	2	12	1010T04A01	0.087
6	4	34	1010T06A01	0.237
8	6	60	1010T08A01	0.410
10	8	95	1010T10A01	0.723
12	9	120	1010T12A01	1.148

# **1050T...A** Fluoropolymer (PFA) Antistatic Tubing

# Tubepack® 50 m

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R		kg
4	2	12	1050T04A01	0.435
6	4	34	1050T06A01	1.185
8	6	60	1050T08A01	2.050
10	8	95	1050T10A01	0.362
12	9	120	1050T12A01	5.740

Our range of multi-tubing combines high quality performance and **space optimisation** in complex pneumatic circuits covering a wide range of environments. Many possible configurations are available, depending on the pressure, temperature, flexibility and compatibility requirements.

# **Product Advantages**

# **Tubing**

**Sheathed PA** PVC sheath resistant to external damage:

- abrasion
- weld spatter
- aggressive fluids

Helically wound: minimum bend radius, compact installation

Simplified routing

Easy identification of circuits

Same technical performance as PA

Possible number of tubes: from 2 to 12, with numbering

Silicone-free



Tubes fully joined for improved solidity

External diameter maintained after separation

Rapid identification of circuits

Quick and easy installation

Simplified routing

3 colour combinations available

Silicone-free



Pneumatics Automation Robotics Transportation In-Plant Automotive Process Industry

# **Technical Characteristics**

Tube	PA	PU
Compatible Fluids	Compressed air, chemicals, industrial fluids	Compressed air, industrial fluids
Working Pressure	Vacuum to 24 bar	0 to 14 bar
Working Temperature	-40°C to +80°C	-20°C to +70°C
Component Materials	Polyamide	Polyurethane ester

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).

#### Regulations

#### Industrial

DI: 2002/95/EC (RoHS), 2011/65/EC

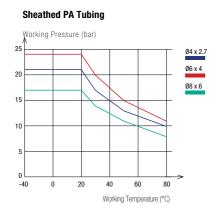
DI: 97/23/EC (PED) RG: 1907/2006 (REACH)

Performance and chemical resistance according to DIN 73378

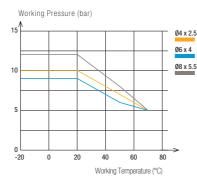
#### **Packaging**

Sheathed PA Tubing: Tubepack® 10 m, 50 m Twin PU Ester Tubing: Tubepack<sup>®</sup> 25 m

#### **Tubing Performance**



# Twin PU Ester Tubing



Material	Tube O.D.	Tube O.D. Tolerance
	4 mm	+0.05 / -0.08
PA	6 to 8 mm	+0.05 / -0.10
PU	4 to 8 mm	+0.10 / -0.10

Connected to Parker Legris push-in fittings, the calibration of Parker Legris tubing ensures perfect sealing based on NF E49-100 (for semi-rigid PA) and NF E49-101 (for twin PU ester).

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

# 1010P.. M Semi-Rigid Polyamide (PA) Multi-Tubing

Reel 10 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Number of tubes	•	kg
4	2.7	35	4	1010P04 00M04	1.440
4	2.7	45	7	1010P04 00M07	1.920
6	4	55	4	1010P06 00M04	2.300
6	4	60	7	1010P06 00M07	2.900
8	6	45	2	1010P08 00M02	2.600

# **1050P..** M Semi-Rigid Polyamide (PA) Multi-Tubing

Reel 50 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Number of tubes	E	kg
4	2.7	20	2	1050P04 00M02	4.400
4	2.7	35	4	1050P04 00M04	6.600
4	2.7	45	7	1050P04 00M07	8.200
4	2.7	55	12	1050P04 00M12	12.444
6	4	45	2	1050P06 00M02	8.400
6	4	55	4	1050P06 00M04	14.500
6	4	60	7	1050P06 00M07	12.500
8	6	45	2	1050P08 00M02	13.000

# **1420U** Twin Polyurethane (PU) Tubing

Tubepack<sub>®</sub> 25 m

O.D. tube (mm)	I.D. tube (mm)	<b>C</b> R	<u> </u>			kg
4	2.5	12	1420U04 11	1420U04 44	1420U04 41	0.620
6	4	15	1420U06 11	1420U06 44	1420U06 41	1.182
8	5.5	20	1420U08 11	1420U08 44	1420U08 41	1.942

## **Colour Selection**



Multi-Tubing Semi-Rigid PA/PVC Sheath









# **Related Products**

To complement the Multi-Tubing range, Parker Legris proposes multi-connectors, shown in our general catalogue.

#### **Push-In Fittings**

**Multi-Connector** 



# PA Recoil Tubing

Parker Legris recoil tubing has a **lasting memory after multiple uses**, offering an **alternative** to **reels** for excellent ergonomics and space saving.

The pre-assembled tubes are equipped with a protection spring, preventing damage to the ends.

# **Product Advantages**

Excellent Mechanical Properties

Low pressure drop

Good chemical compatibility

Self-retracting

Identical technical performance to PA tubing

Silicone-free

Comprehensive Range

Ready-to-use

Various colours for circuit identification

Available with pre-assembled connectors



MRO
Pneumatic Tools
Transportation
Lubrication
Industrial Cleaning
Robotics
Car Washing

# **Technical Characteristics**

Compatible Fluids	Compressed air, lubricants, Other fluids: please consult us
Working Pressure	Vacuum to 20 bar
Working Temperature	-20°C to +80°C
Component Materials	Polyamide (60 Shore D)

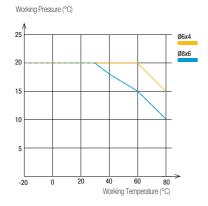
Reliable performance is dependent upon the type of fluid conveyed and fittings being used. Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

#### Regulations

DI: 97/23/EC (PED) RG: 1907/2006 (REACH)

DI: 2002/95/EC (RoHS), 2011/65/EC

#### **Performance of PA Recoil Tubing**



Tube O.D.	Passage	Tube O.D. Tolerance
6 mm	4 mm	+0.05 / -0.10
8 mm	6 mm	+0.05 / -0.10

# Packaging

Plastic bags: 2m to 6 m

Other lengths and colours on request

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

# 1470P Polyamide (PA) Recoil Tubing 2 m, Male BSPT Fitting

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	BSPT Thread			Total Closed Length (mm)	O.D. of Coil (mm)	kg
6	4	R1/4	1470P06 04 13	1470P06 07 13	520	60	0.143
8	6	N1/4	1470P08 04 13	1470P08 07 13	560	70	0.174

Length of long straight section: 300 mm Length of short straight section: 100 mm

# 1471P Polyamide (PA) Recoil Tubing 4 m, Male BSPT Fitting

<b>0.</b> E (mn		BSPT Thread			Total Closed Length (mm)	O.D. of Coil (mm)	kg
6	4	R1/4	1471P06 04 13	1471P06 07 13	640	60	0.199
- 8	6	N1/4	1471P08 04 13	1471P08 07 13	720	70	0.249

Length of long straight section: 300 mm Length of short straight section: 100 mm

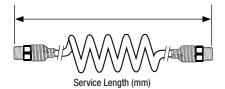
# 1472P Polyamide (PA) Recoil Tubing 6 m, Male BSPT Fitting

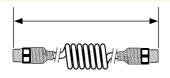
<b>0.D.</b> (mm)	I.D. (mm)	BSPT Thread	Ē		Total Closed Length (mm)	O.D. of Coil (mm)	kg
6	4	R1/4	1472P06 04 13	1472P06 07 13	760	60	0.260
8	6	N1/4	1472P08 04 13	1472P08 07 13	880	70	0.329

Length of long straight section: 300 mm Length of short straight section: 100 mm

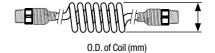
# **Dimensions for Recoil Tubing**

Service length: maximum recommended operating length in order to ensure that the coil will continue to contract after multiple uses.





Total Closed Length (mm)





# PU Recoil Tubing

With its small coil diameter and good impact resistance, this polyurethane recoil tubing is perfect for installations requiring **flexibility** in confined spaces. Good resistance to shock and abrasion, together with a design integrating straight ends, allow for **easy and safe operation** of pneumatic equipment.

# **Product Advantages**

Excellent Mechanical Properties

Excellent coil memory Abrasion-resistant

Perfect for rapid cycling applications

Consistent tensile strength

Optimum longevity Low pressure drop

Lightweight with plastic protection spring

Silicone-free

Comprehensive Range Available in 2 materials: PU ester and PU ether

With or without pre-assembled fittings

Pre-assembled plastic or metal protection springs to prevent

damage to equipment and tubing



Workshops Tooling Pneumatics Motion Technologies Robotics Industrial Machinery

Technical Characteristics

Compatible Fluids	Compressed air
Working Pressure	0 to 10 bar
Working	-20°C to +70°C
Temperature	(assembled tubing)
Component	Polyurethane ester: 52 Shore D
Materials	Polyurethane ether: 46 Shore D

Reliable performance is dependent upon the type of fluid conveyed and fittings being used.

#### Regulations

Industrial NF E49-101

DI: 2002/95/EC (RoHS), 2011/65/EC

**DI:** 97/23/EC (PED) **RG:** 1907/2006 (REACH)

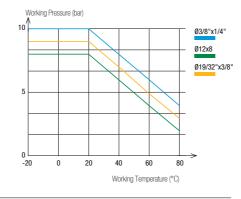
**Packaging** 

Plastic bags: from 2 m to 7.5 m

#### **Performance of PU Recoil Tubing**

# PU Ester Recoil Tubing Working Pressure (bar) 04 x 2.5 06 x 4 010 x 7 012 x 8

#### PU Ether Recoil Tubing



Tube O.D.	Tube I.D.	Tube O.D. Tolerance
4 to 8 mm	2.5 to 5.5 mm	+0.10 / -0.10
10 to 12 mm	7 to 8 mm	+0.15 / -0.15
3/8" and 19/32"	1/4" and 3/8"	+/- 0.005"

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

Working Temperature (°C)

# 1470U Polyurethane (PU) Ester Recoil Tubing 2 m, Male BSPT Fitting

<b>0.D.</b> (mm)	I.D. (mm)	BSPT Thread				Total Closed Length (mm)	O.D. of Coil (mm)	kg
4	2.5	R1/8	1470U04 03 10	1470U04 04 10	1470U04 05 10	595	24	0.060
6	4	R1/4	1470U06 03 13	1470U06 04 13	1470U06 05 13	630	32	0.060
8	5	R1/4	1470U08 03 13	1470U08 04 13	1470U08 05 13	780	42	0.120
10	7	R1/4	1470U10 03 13	1470U10 04 13	1470U10 05 13	780	62	0.160
12	8	R3/8	1470U12 03 17	1470U12 04 17	1470U12 05 17	780	65	0.190

Length of long straight section, O.D. < 8 mm: 300 mm; Length of long straight section, O.D. ≥ 8 mm: 500 mm; Length of short straight section, for all O.D.: 100 mm

## 1471U Polyurethane (PU) Ester Recoil Tubing 4 m, Male BSPT Fitting

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	BSPT Thread	[	E		Total Closed Length (mm)	O.D. of Coil (mm)	kg
4	2.5	R1/8	1471U04 03 10	1471U04 04 10	1471U04 05 10	785	24	0.100
6	4	R1/4	1471U06 03 13	1471U06 04 13	1471U06 05 13	850	32	0.160
8	5	R1/4	1471U08 03 13	1471U08 04 13	1471U08 05 13	1000	42	0.200
10	7	R1/4	1471U10 03 13	1471U10 04 13	1471U10 05 13	1000	62	0.230
12	8	R3/8	1471U12 03 17	1471U12 04 17	1471U12 05 17	1140	65	0.260

Length of long straight section, O.D. < 8 mm: 300 mm; Length of long straight section, O.D. ≥ 8 mm: 500 mm; Length of short straight section, for all O.D.: 100 mm

### 1472U Polyurethane (PU) Ester Recoil Tubing 6 m, Male BSPT Fitting

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	BSPT Thread	[	Ē		Total Closed Length (mm)	O.D. of Coil (mm)	kg
8	5	R1/4	1472U08 03 13	1472U08 04 13	1472U08 05 13	1230	42	0.280
10	7	R1/4	1472U10 03 13	1472U10 04 13	1472U10 05 13	1140	62	0.295
12	8	R3/8	1472U12 03 17	1472U12 04 17	1472U12 05 17	1190	65	0.310

Length of long straight section, O.D. < 8 mm: 300 mm; Length of long straight section, O.D. ≥ 8 mm: 500 mm; Length of short straight section, for all O.D.: 100 mm

# 1460U Polyurethane (PU) Ester Recoil Tubing 2 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)		Total Closed Length (mm)	O.D. of Coil (mm)	kg
8	5	1460U08 04	780	42	0.064
10	7	1460U10 04	780	62	0.122
12	8	1460U12 04	780	65	0.172

 $Length\ of\ long\ straight\ section,\ O.D. < 8\ mm;\ 200\ mm;\ Length\ of\ long\ straight\ section,\ O.D. \ge 8\ mm;\ 500\ mm;\ Length\ of\ short\ straight\ section,\ for\ all\ O.D.:\ 100\ mm;\ Length\ of\ short\ straight\ section,\ for\ all\ of\ short\ short\ straight\ section,\ for\ all\ of\ short\ straight\ section,\ for\ all\ of\ short\ straight\ section,\ for\ all\ of\ short\ short\ straight\ section,\ for\ all\ of\ short\ straight\ short\ short$ 

### 1461U Polyurethane (PU) Ester Recoil Tubing 4 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)		Total Closed Length (mm)	O.D. of Coil (mm)	kg
8	5	1461U08 04	1000	42	0.128
10	7	1461U10 04	1000	62	0.244
12	8	1461U12 04	1000	65	0.344

### 1462U Polyurethane (PU) Ester Recoil Tubing 6 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<u> </u>	Total Closed Length (mm)	O.D. of Coil (mm)	kg
8	5	1462U08 04	1230	42	0.192
10	7	1462U10 04	1140	62	1.246
12	8	1462U12 04	1190	65	0.280

 $Length \ of \ long \ straight \ section, \ O.D. < 8 \ mm; \ Length \ of \ long \ straight \ section, \ O.D. \ge 8 \ mm; \ Length \ of \ short \ straight \ section, \ for \ all \ O.D.: \ 100 \ mm$ 

# PU Recoil Tubing

# 1445U...R Recoil Polyurethane (PU) Ether Tubing 3 m, Male BSPP Fitting

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	BSPP Thread		Total Closed Length (mm)	O.D. of Coil (mm)	kg
8	5	G1/4	1445U08R04 13	819	40	0.170
3/8''	1/4''	G1/4	1445U60R04 13	769	60	0.230
12	8	G3/8	1445U12R04 17	789	80	0.310
14	9.5	G3/8	1445U14R04 17	759	110	0.460

# 1441U...R Recoil Polyurethane (PU) Ether Tubing 4 m, Male BSPP Fitting

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	BSPP Thread		Total Closed Length (mm)	O.D. of Coil (mm)	kg
8	5	G1/4	1441U08R04 13	889	40	0.220
3/8"	1/4''	G1/4	1441U60R04 13	819	60	0.260
12	8	G3/8	1441U12R04 17	849	80	0.400
14	9.5	G3/8	1441U14R04 17	809	110	0.554

# 1442U...R Recoil Polyurethane (PU) Ether Tubing 6 m, Male BSPP Fitting

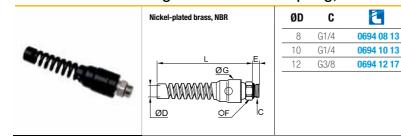
<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	BSPP Thread		Total Closed Length (mm)	O.D. of Coil (mm)	kg
8	5	G1/4	1442U08R04 13	1029	40	0.340
3/8"	1/4''	G1/4	1442U60R04 13	929	60	0.360
12	8	G3/8	1442U12R04 17	969	80	0.530
14	9.5	G3/8	1442U14R04 17	909	110	0.920

# 1447U...R Recoil Polyurethane (PU) Ether Tubing 7.5 m, Male BSPP Fitting

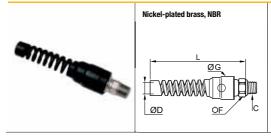
<b>O.D.</b> (mm))	<b>I.D.</b> (mm)	BSPP Thread		Total Closed Length (mm)	O.D. of Coil (mm)	kg
8	5	G1/4	1447U08R04 13	1134	40	0.420
3/8"	1/4"	G1/4	1447U60R04 13	1009	60	0.460
12	8	G3/8	1447U12R04 17	1059	80	0.600
14	9.5	G3/8	1447U14R04 17	984	110	1.150

# **Accessories**

# 0694 Push-In Fitting with Protection Spring, Male BSPP Thread



0695	Push-In Fitting with Protection Spring, Male BSPT Threa	d



	ØD	C	€	F	G	L	kg
	8	R1/4	0695 08 13	14 2	24	104.5	0.055
	10	R1/4	0695 10 13	18 2	24	106.5	0.064
	12	R3/8	0695 12 17	20 2	29.5	126	0.090
. –							

E F G L

6.5 18 24

16

20

kg

0.067

0.062

0.080

104.5

106.5

29.5 126

 $PA \ tubing \ can \ be \ connected \ to \ various \ fittings; \ you \ will \ find \ these \ fittings \ in \ our \ general \ catalogue \ or \ on \ our \ website, \ \textbf{www.parkerlegris.com}.$ 



# **Braided PU Recoil Hose**

This recoil hose offers all the advantages of polyurethane, combining the **durability** and **kink resistance** of bulkier braided hoses with great **elasticity** and maximum **flexibility**.

# **Product Advantages**

Excellent Mechanical Properties

Unsurpassed resistance to abrasion: 10 times better than rubber, polyamide and non-braided polyurethane Excellent flexibility and coil memory: minimizes work fatigue Highly kink and crush-resistant Silicone-free

Machine Tools Industrial Assembly Pneumatics In-Plant Automotive Workshops

Ready-to-Use

Pre-assembled threaded fittings
Tube ends protected with a plastic spring
Lightweight for easy handling
3 lengths available
Translucent blue: visibility of the fluid

## **Technical Characteristics**

Compatible Fluids	Compressed air Other fluids: please consult us
Working Pressure	0 to 15 bar
Working Temperature	-40°C to +75°C
Component Materials	Polyurethane (85 Shore A)

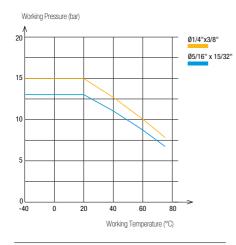
Reliable performance is dependent upon the type of fluid conveyed and fittings being used.

### Regulations

**DI:** 97/23/EC(PED) **RG:** 1907/2006 (REACH)

DI: 2002/95/EC (RoHS), 2011/65/EC

#### **Performance of Braided PU Recoil Hose**



Hose O.D.	Hose I.D.	Hose I.D. Tolerance
3/8" 15/32"	1/4" 5/16"	+/- 0.005"

Connected to Parker Legris push-in fittings, the calibration of PU tubing ensures perfect sealing.

**Packaging** 

Plastic bags: 3 m to 7.5 m

To calculate burst pressure, the values in this graph should be multiplied by  $4. \,$ 

# 1445U..E Braided Polyurethane (PU) Recoil Hose 3 m, Male BSPP Fitting

Ø ext. (mm)	<b>I.D.</b> (mm)	BSPP Thread		Total Closed Length (mm)	O.D. of Coil (mm)	kg
3/8"	1/4"	G1/4	1445U60E04 13	870	42	0.210
12	8	G3/8	1445U12E04 17	880	55	0.300

# 1442U..E Braided Polyurethane (PU) Recoil Hose 6 m, Male BSPP Fitting

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	BSPP Thread		Total Closed Length (mm)	O.D. of Coil (mm)	kg
3/8"	1/4"	G1/4	1442U60E04 13	1140	42	0.420
12	8	G3/8	1442U12E04 17	1160	55	0.600

# 1447U..E Braided Polyurethane (PU) Recoil Hose 7.5 m, Male BSPP Fitting

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	BSPP Thread		Total Closed Length (mm)	O.D. of Coil (mm)	kg
3/8"	1/4"	G1/4	1447U60E04 13	1275	42	0.525
12	8	G3/8	1447U12E04 17	1300	55	0.750

### **Related Products**

Parker Legris recoil tubing is designed for use with Parker Legris blowguns and couplers. These products can be found in our general catalogue or on our website, **www.parkerlegris.com**.

Industrial Blowguns	Couplers		
Polymer Metal	C 9000	Metal	
OF >			

# **PVC Braided Hose**

Parker Legris offers two grades of PVC which cover a wide range of industrial applications for the transportation of various fluids.

# **Product Advantages**

**PVC** 

Food-Grade Monograde tubing reinforced with a braided polyester ply

Flexible: space saving during installation

Translucent for visual identification:

- of the fluid
- of inner cleanliness
- of fluid flow

Food-grade, without phtalates

Silicone-free

**PVC** 

Industrial Tubing with a braided polyester ply between 2 grades of PVC

Resistant to abrasion, impact and crushing

Increased durability

Lightweight and easy-to-use

Silicone-free



Robotics In-Plant Automotive Pneumatics Semi-Conductors Textile Packaging Vacuum

# **Technical Characteristics**

Hose	Food-Grade PVC	Industrial PVC
Compatible Fluids	Compressed air, other fluids	Compressed air
Working Pressure	0 to 15 bar	0 to 15 bar
Working Temperature	-20°C to +70°C	-25°C to +60°C
Component Materials	Translucent food-grade PVC, phtalate-free with polyester braid	Industrial blue PVC, multi-layer, with polyester braid

Reliable performance is dependent upon the type of fluid conveyed and fittings being used.

#### Regulations

Food-Grade PVC FDA: 21 CFR 177.1550 RG: 1907/2006 (REACH) **RG:** 1935/2004

DI: 2002/95/EC (RoHS), 2011/65/EC

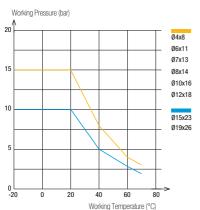
DI: 2007/10/EC (phtalates)

Industrial PVC DI: 97/23/CE (PED) **RG:** 1907/2006 (REACH)

DI: 2002/95/EC (RoHS), 2011/65/EC

### **Hose Performance**

### Food-Grade PVC



Hose Type	Hose I.D.	Hose I.D. Tolerance
Food-Grade PVC	4 to 6 mm 7 to 12 mm 15 to 19 mm	+0.5 / -0.5 +0.6 / -0.6 +0.8 / -0.8
Industrial PVC	6.3 mm 9 mm 12.7 mm	+0.3 / -0.3 +0.5 / -0.5 +0.6 / -0.6

**Packaging** Reel: 25 m, 50 m (with protective plastic bag)

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



### 1025V

### Food-Grade Braided PVC Hose

Reel 25 m

<b>O.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Clear Clear	kg
8	4	10	1025V08 00 04	1.260
11	6	12	1025V11 00 06	2.253
13	7	14	1025V13 00 07	3.182
14	8	16	1025V14 00 08	3.434
16	10	25	1025V16 00 10	3.800
18	12	30	1025V18 00 12	4.423
23	15	40	1025V23 00 15	7.300
26	19	60	1025V26 00 19	7.300

### 1050V

### Food-Grade Braided PVC Hose

Reel 50 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R	Clear Clear	kg
8	4	10	1050V08 00 04	2.690
11	6	12	1050V11 00 06	4.200
13	7	14	1050V13 00 07	5.966
14	8	16	1050V14 00 08	6.058
16	10	25	1050V16 00 10	6.400
18	12	30	1050V18 00 12	8.250
23	15	40	1050V23 00 15	14.600
26	19	60	1050V26 00 19	14.600

### 1025V..C

### Industrial-Grade Braided PVC Hose

Reel 25 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>C</b> R		kg
11	6	45	1025V11C04 06	2.175
14	9	63	1025V14C04 09	3.250
19	13	89	1025V19C04 13	4.975

### 1050V..C

### Industrial-Grade Braided PVC Hose

Reel 50 m

<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>€</b> R		kg
11	6	45	1050V11C04 06	4.350
14	9	63	1050V14C04 09	6.500
19	13	89	1050V19C04 13	9.950

### **Related Products**

PVC tubing is designed for use with Parker Legris barb connectors and couplers. These products can be found in our general catalogue or on our website, www.parkerlegris.com.

**Barb Connectors** 

0191

0123



Couplers

C 9000





Metal

Parker Legris self-fastening hose is designed according to CNOMO E07.21.115N\*. This range of hose should be used with Legris barb connectors and provides both the reliability of self-fastening technology and simplicity of installation.

# **Product Advantages**

Exceptional **Endurance** 

Unsurpassed resistance to repetitive flexing Protection against spark and flame Abrasion and crush-resistant

**UV-resistant** 

**Automotive** 

Ideal for Excellent ozone resistance In-Plant Perfect for cooling systems

> Maximum flow with no pressure drop 4 colours for immediate circuit identification

Silicone-free

Ready-To-Use

No lubrication, additive (grease, oil, ...etc), or preparation time required

To connect: push the hose fully home against the fitting shoulder To disassemble: cut the hose on the barbed side of the fitting



In-Plant Automotive Cooling Welding Robots **Pneumatics** Industrial Machinery

## **Technical Characteristics**

Compatible Fluids	Coolants, compressed air
Working Pressure	0 to 16 bar
Working Temperature	-20°C to +100°C
Component Materials	Nitrile butadiene rubber & textile braid

Reliable performance is dependent upon the type of fluid conveyed and fittings being used

### Regulations

**NFT** 46-019-1 NFT 47 252

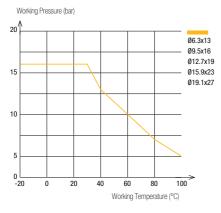
RG: 1907/2006 (REACH)

DI: 2002/95/EC (RoHS), 2011/65/EC

CNOMO: E07.21.115N

\*CAUTION: CNOMO certification is valid exclusively for red and green hose, only when connected to Legris' CNOMO-certified barb connectors 0132, 0133 and 0134.

### **Performance of Self-Fastening NBR Hose**



To calculate burst pressure, the values in this graph
To date and baret processing, and values in and grapin
should be multiplied by 3

DN mm CNOMO	DN (standard)	Hose I.D. (mm)	Hose I.D. Tolerance (mm)
6	1/4"	6.3 mm	+0.4 / -0.4
8	3/8"	9.5 mm	+0.5 / -0.5
12 16 20	1/2" 5/8" 3/4"	12.7 mm 15.9 mm 19.1 mm	+0.6 / -0.6

Use with water: maximum temperature 100°C Use with air: maximum temperature 70°C

### **Packaging**

Drum: 20 m, 40 m, 80 m, 100 m



# **1040H** Braided Self-Fastening NBR Hose

Drum 40 m

DN	<b>0.D.</b> (mm)	I.D. (mm)	<b>€</b> R				[3]	kg
1/4	13	6.3	60	1040H56 01	1040H56 02	1040H56 03	1040H56 04	7.000
3/8	16	9.5	70	1040H60 01	1040H60 02	1040H60 03	1040H60 04	8.600
1/2	19	12.7	120	1040H62 01	1040H62 02	1040H62 03	1040H62 04	9.450
5/8	23	15.9	140	1040H66 01	1040H66 02	1040H66 03	1040H66 04	13.000
3/4	27	19.1	170	1040H69 01	1040H69 02	1040Н69 03	1040Н69 04	16.500

Also available in 20 m length upon request

### **1080H** Braided Self-Fastening NBR Hose

Drum 80 m

DN	<b>0.D.</b> (mm)	<b>I.D.</b> (mm)	<b>C</b> R					kg
5/8	23	15.9	140	1080H66 01	1080H66 02	1080H66 03	1080H66 04	26.160
3/4	27	19.1	170	1080H69 01	1080H69 02	1080H69 03	1080H69 04	33.160

Also available in 20 m length upon request

### 1100H Braided Self-Fastening NBR Hose

**Drum 100 m** 

DN	<b>0.D.</b> (mm)	I.D. (mm)	<b>€</b> R	Ē				kg
1/4	13	6.3	60	1100H56 01	1100H56 02	1100H56 03	1100H56 04	14.660
3/8	16	9.5	70	1100H60 01	1100H60 02	1100H60 03	1100H60 04	20.600
1/2	19	12.7	120	1100H62 01	1100H62 02	1100H62 03	1100H62 04	23.000

Also available in 20 m length upon request

### **Related Products**

Self-fastening hose is designed for use with Parker Legris brass barb connectors (CNOMO-certified) which you can find in our general catalogue or on our website, **www.parkerlegris.com**.

#### **Barb Connectors**

0132 0133..39

9 0134







### **Installation Tool**

# Tool Part Number: 0650 00 00 05

This automatic installation tool reduces the effort required to connect self-fastening hose onto a barb connector.



### **Tube Cutting and Positioning**

Cut the tube at a right angle and position the barb connector on the mounting tool.



### **Press-Fitting the Tube**

Activate the press-fit tool; connection is complete when the tube is fully home on the barb connector.

This tool has been designed for use with 5 different diameters and is easy to operate.



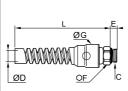
Barb connector support



# **Accessories**

### 0694 Push-In Fitting with Protection Spring, Male BSPP Thread



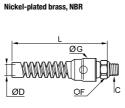


Nickel-plated brass, NBR

ØD	C	€	E	F	G	L	kg
8	G1/4	0694 08 13	6.5	16	24	104.5	0.067
10	G1/4	0694 10 13	6.5	18	24	106.5	0.062
12	G3/8	0694 12 17	7.5	20	29.5	126	0.080

# 0695 Push-In Fitting with Protection Spring, Male BSPT Thread





	ØD	C	•	F	G	L	kg
١	8	R1/4	0695 08 13	14	24	104.5	0.055
١	10	R1/4	0695 10 13	18	24	106.5	0.064
1	12	R3/8	0695 12 17	20	29.5	126	0.090

### **3000 71 00** Tube Cutter





<b>E</b>	Н	L	kg
3000 71 00	25	79	0.029

This tool is designed to give a clean cut at right angles to the tube axis for all resilient polymer tubing (polyamide, polyurethane, FEP, polyethylene, etc.) from 4 mm to 12 mm diameter inclusive.

Replacement blades: part number 3000 71 00 05
A spring maintains the cutter in the closed position.

### 3000 71 11 Tube Cutter



Treated steel

	kg
3000 71 11	0.227

Replacement blades: part number 3000 71 11 05

# **6000 71 00** Stripping Tool



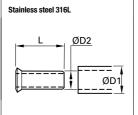
Technical polymer, stainless steel

€	kg
6000 71 00	0.098

Working principle of the stripping tool page 17

# **1827** Stainless Steel Tube Support for Fluoropolymer Tubing





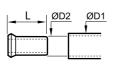
ØD1	ØD2	•	L	kg
6	4	1827 06 00	11.5	0.001
- 8	6	1827 08 00	14	0.001
10	8	1827 10 00	18	0.001
10	9	1827 12 09	18	0.001
12	10	1827 12 00	18	0.001
16	14	1827 16 00	18	0.002

This tube support is necessary when using fluoropolymer FEP tubing at all temperatures compatible with the fitting/tubing assembly.

# **0127** Brass Tube Support for Polymer Tubing







	_			
ØD1	ØD2		L	kg
4	2	0127 04 00	11	0.001
4	2.7	0127 04 27	11	0.001
5	3	0127 05 03	11	0.001
	3.3	0127 05 00	11.5	0.009
6	4	0127 06 00	11.5	0.001
8	5.5	0127 08 55	14	0.001
0	6	0127 08 00	14	0.001
	7	0127 10 07	18	0.001
10	7.5	0127 10 75	18	0.001
	8	0127 10 00	18	0.002
	8	0127 12 08	18	0.002
12	9	0127 12 09	18	0.002
	10	0127 12 00	18	0.001
14	11	0127 14 11	18	0.002
14	12	0127 14 00	18	0.002
15	12	0127 15 12	18	0.002
16	13	0127 16 13	18	0.003
18	14	0127 18 14	19.5	0.003
20	15	0127 20 15	20.5	0.003
22	16	0127 22 16	21	0.004
25	19	0127 25 19	25	0.007
This tube	support g	uarantees good g	gripping, at high temperatures and pressures, by preventing collapsing o	f the

This tube support guarantees good gripping, at high temperatures and pressures, by preventing collapsing of the tube.

# **CLIP** Clip Strip for Tubing and Fittings





Technical polymer

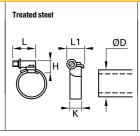


ØD		H K N	kg
4	CLIP 04 00	9 13.5 10.5	0.007
6	CLIP 06 00	10.5 13 10.5	0.004
8	CLIP 08 00	12.5 10.5 12	0.007
10	CLIP 10 00	14 12 15	0.005
12	CLIP 12 00	16.5 14 16.5	0.009
14	CLIP 14 00	18 16 20.5	0.008

Delivered in boxes of 10 strips of the same diameter (complete with self-tapping screws of 95 mm length) These clips can be used with metric or inch tubing.

# 0697 Clip for Braided Tubing





ØD	€	Н	K	L	L1	kg
6-11	0697 00 01	7	5	12	7	0.004
10-16	0697 00 02	12	9	21	13	0.011
12-22	0697 00 03	12	9	21	13	0.015
16-27	0697 00 04	12	9	24	13	0.015
20-32	0697 00 05	12	9	24	13	0.016

# **Chemical Compatibility Chart**

Recommended	1	Not Recommended	3
Satisfactory	2	On request	-

Acetablehyloph         1           3          1           Acetone         1         3         1         3         1.5          1           Acid, chromic up to 10%          3         3         1.5         1 up to 60°C            Acid, formic up to 10%          2         3         1         1 at 25°C            Acid, formic up to 10%         1         1         3         1         1 at 25°C            Acid, subtraction up to 10%         3         2         3         1         1 at 25°C            Acid, subtract up to 10%         3         2         3         1         1 at 20°C            Acid, subtract up to 10%         3         2         3         1         1 at 20°C            Acid, subtract up to 10%         3         3         1 (50°K)         1         1           Acid, subtract up to 10%         3         3         1 (50°K)          1           Acid, subtract up to 10%         3         3         1 (50°K)          1           Acid, subtract up to 10%         3         3	Substances	PA	PU ether	PU ester	Low Density PE	Advanced PE	FEP/PFA
Acid, chromic up to 10%	Acetaldehyde	1	-	-	3	-	1
Acid, citric         3         -         1         1 up to 60°C         1           Acid, citric up to 10%         -         2         3         1         1 at 20% at 20°C         1           Acid, hydrochoric up to 10%         1         1         3         1         1 at 20°C         1           Acid, plosphoric up to 10%         3         2         3         1         2 at 20°C         1           Acid, sulphuric up to 10%         3         1         3         1 (50%)         1 (50%)         1           Acid, acetic         2 at 10%         3         3         1 (50%)         1 (50%)         1           Acid, acetic         3         3         3         1 (50%)         1         1           Acid, acetic         3         3         3         1 (50%)         1         1           Acid, acetic         3         3         3         1 (50%)         1         1           Acid, acetic         3         3         3         2         1         1           Acid, acetic         3         3         3         3         3         1           Acid, acetic         3         3         3         3	Acetone	1	3	1	3	-	1
Acid, formic up to 10%         1         2         3         1         1 at 25% at 20°C         1           Acid, hydrochloric up to 10%         1         1         1         3         1         2 at 20°C         1           Acid, hydrochloric up to 10%         3         2         3         1         2 at 20°C         1           Acid, subpluric up to 10%         3         1         3         1 (50 %)         1         1           Acid, actic         2 at 10 %         1         3         1 (50 %)         1         1           Acid, actic         3         3         3         1 (50 %)         1         1           Acid, actic         3         3         3         1 (50 %)         1         1           Acid, actic         3         3         3         1 (50 %)         1         1           Acid, actic         4         1         1         3         2         1	Acid, chromic up to 10%	-	3	3	1 (50 %)		1
Acid, hydrochloric up to 10%         1         1         3         1         1 at 20°C         1           Acid, phosphoric up to 50%         3         2         3         1         2 at 20°C         1           Acid, acetic         2 at 10%         1         3         1 (60 %)         1 (60 %)         1           Acid, alcetic         2 at 10%         1         3         1 (60 %)         1 (60 %)         1           Acid, alcetic         3         3         3         1 (60 %)         1 (60 %)         1           Ammonisum chloride up to 10%         1         1         3         2         1         1           Ammonisum chloride up to 10%         -         1 <td>Acid, citric</td> <td>3</td> <td>-</td> <td>-</td> <td colspan="2">1 1 up to 60°C</td> <td>1</td>	Acid, citric	3	-	-	1 1 up to 60°C		1
Acid, phosphoric up to 50%         3         2         3         1         2 at 20°C         1           Acid, sulphuric up to 10%         3         1         3         1         1         1         1           Acid, aceltic         2 at 10%         1         3         1 (80 %)         1 (80 %)         1           Acid, nitric         3         3         1 (80 %)         -         1           Ammonibaum dayseous         1         1         1         1         1         1           Ammonibaum chloride up to 10%         -         1         1         1         1         1         1           Benzene         1         3         3         3         3         3         3         1         1           Bromine         3         -         -         3         3         3         3         3         1	Acid, formic up to 10%	-	2	3	1	1 at 25% at 20°C	1
Acid, sulphuric up to 10%         3         1         3         1         1         1           Acid, acetic         2 at 10 %         1         3         1 (80 %); 36-40%         -         -           Acid, nitric         3         3         3         1 (80 %); 36-40%         -         -           Ammonia and gaseous         1         1         3         2         1         1           Ammonia and gaseous         1         1         1         1         1         1         1           Ammonia and gaseous         1         1         1         1         1         1         1         1           Ammonia and gaseous         1 <td>Acid, hydrochloric up to 10%</td> <td>1</td> <td>1</td> <td>3</td> <td>1</td> <td>1 at 20°C</td> <td>1</td>	Acid, hydrochloric up to 10%	1	1	3	1	1 at 20°C	1
Acid, acetic         2 at 10 %         1         3         1 (50 %)         1 (50 %)         1           Acid, nitric         3         3         3         1 (40 %); 3(-40%)          1           Ammonia and gaseous         1         1         3         2         1         1           Ammoniour chloride up to 10%          1         <	Acid, phosphoric up to 50%	3	2	3	1	2 at 20°C	1
Acid, nitric         3         3         3         1 (40 %; 36-40%)         -         1           Ammonia and gaseous         1         1         3         2         1         1           Ammonioum chloride up to 10%         -         1         1         1         1         1         1           Benzene         1         3         3         3         3         1           Bromine         3         -         -         3         3         3         1           Brothane         1         1         1         1 (20°C)         1         1         1           Buthane         1         1         1         1 (20°C)         1	Acid, sulphuric up to 10%	3	1	3	1	1	1
Ammonia and gaseous         1         1         3         2         1         1           Ammonioum chloride up to 10%         -         1<	Acid, acetic	2 at 10 %	1	3	1 (50 %)	1 (50 %)	1
Ammonioum chloride up to 10%         -         1         1         1         1         1           Benzene         1         3         3         3         3         1           Bromine         3         -         -         3         3         1           Buthane         1         1         1         1 (20°C)         1         1           Butyli acetate         1         3         2         -         -         1         1           Butyli acetate         1         3         2         -         -         1	Acid, nitric	3	3	3	1 (40 %); 3(>40%)	-	1
Benzene         1         3         3         3         1           Bromine         3         -         -         3         3         1           Butane         1         1         1         1 (20°C)         1         1           Butyl acetate         1         3         2         -         -         1           Butylic and butyl alcohol         -         1 (10% & 40%)         2 (10% & 40%)         1         1         1           Calcium choride         -         1 (10% & 40%)         2 (10% & 40%)         1         1         1           Carbon tetrachloride (sodium hypochlorite)         2         3         2         1 (30%)         3         1           Chloroform         3         3         3         3         3         -         1           Compressed air         1	Ammonia and gaseous	1	1	3	2	1	1
Bromine         3         -         -         3         3         1           Butane         1         1         1         1 (20°C)         1         1           Butyl acetate         1         3         2         -         -         1           Butylic and butyl alcohol         -         1 (10 % 8 40 %)         2 (10 % 8 40 %)         1         1         1           Carbon tetrachloride (sodium hypochlorite)         2         3         2         1 (30 %)         3         1           Chloroform         3         3         3         3         -         1           Chloroform         3         3         3         3         -         1           Compressed air         1         1         1         1         1         1         1           Cyclohexanone         1         3         3         3         -         1         1           Ethalol         1         2         2         3         2         2         1           Ethyl alcohol         1         2         2         2(20°C)         2(23°C); 3(8°C)         1           Ethyl alcohol         1         2         2	Ammonioum chloride up to 10%	-	1	1	1	1	1
Butane         1         1         1         1 (20°C)         1         1           Butyl acetate         1         3         2         -         -         1           Butylic and butyl alcohol         -         1         -         1 (10% & 40%)         2 (10% & 40%)         1         1         1           Catclum choride         -         1 (10% & 40%)         2 (10% & 40%)         1	Benzene	1	3	3	3	3	1
Butyl acetate         1         3         2         -         1           Butylic and butyl alcohol         -         -         -         1 (20°C)         1         1           Calcium choride         -         1 (10 % & 40 %)         2 (10 % & 40 %)         1         1         1           Carbon tetrachloride (sodium hypochlorite)         2         3         2         1 (30 %)         3         1           Chloroform         3         3         3         3         -         1           Compressed air         1         1         1         1         1         1           Cyclohexanone         1         3         3         3         -         1           Ethanol         1         2         2         2         3         -         1           Ethyl alcohol         1         2         2         2 (20°C)         2 (23°C); 3 (8°C)         1           Ethyl alcohol         1         -         -         3         1(23°C); 3 (8°C)         1           Ethyl alcohol         2         1         -         -         -         1           Ethyl alcohol         2         1         -         -         <	Bromine	3	-	-	3	3	1
Butylic and butyl alcohol         -         -         -         1 (20°C)         1         1           Calcium choride         -         1 (10 % & 40 %)         2 (10 % & 40 %)         1         1         1           Carbon tetrachloride (sodium hypochlorite)         2         3         2         1 (30 %)         3         1           Chloroform         3         3         3         3         3         -         1           Compressed air         1 <td< td=""><td>Butane</td><td>1</td><td>1</td><td>1</td><td>1 (20°C)</td><td>1</td><td>1</td></td<>	Butane	1	1	1	1 (20°C)	1	1
Calcium choride         -         1 (10 % & 40 %)         2 (10 % & 40 %)         1         1         1           Carbon tetrachloride (sodium hypochlorite)         2         3         2         1 (30 %)         3         1           Chloroform         3         3         3         3         3         -         1           Compressed air         1         1         1         1         1         1           Cyclohexanone         1         3         3         3         -         1           Ethanol         1         2         2         3         -         1           Ethyl acetate         1         2         2         2 (20°C)         2 (23°C); 3 (85°C)         1           Ethyl alcohol         -         -         -         3         1 (23°C); 3 (85°C)         1           Ethyl alcohol         -         -         -         3         1 (23°C); 3 (85°C)         1           Ethyl alcohol         -         -         -         3         1 (23°C); 3 (85°C)         1           Ethyl alcohol         1         -         -         -         -         1           Ethyl alcohol         2         1 <t< td=""><td>Butyl acetate</td><td>1</td><td>3</td><td>2</td><td>-</td><td>-</td><td>1</td></t<>	Butyl acetate	1	3	2	-	-	1
Carbon tetrachloride (sodium hypochlorite)         2         3         2         1 (30 %)         3         1           Chloroform         3         3         3         3         3         1           Compressed air         1         1         1         1         1         1         1         1           Cyclohexanone         1         3         3         3         3         -         1 </td <td>Butylic and butyl alcohol</td> <td>-</td> <td>-</td> <td>-</td> <td>1 (20°C)</td> <td>1</td> <td>1</td>	Butylic and butyl alcohol	-	-	-	1 (20°C)	1	1
Chloroform         3         3         3         3         3         -         1           Compressed air         1         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         1	Calcium choride	-	1 (10 % & 40 %)	2 (10 % & 40 %)	1	1	1
Compressed air         1	Carbon tetrachloride (sodium hypochlorite)	2	3	2	1 (30 %)	3	1
Cyclohexanone         1         3         3         3         3          1           Ethanol         1         2         2         3          1           Ethyl acetate         1         2         2         2 (20°C)         2 (23°C); 3 (85°C)         1           Ethyl alcohol         -         -         -         3         1 (23°C); 3 (85°C)         1           Ethylene oxide         1         -         -         -         -         -         1           Fromalin (formaldehyde)         2         -         -         1 (40 %)         -         1           Freon 12-22         1         2         2         -         -         1         1           Glucose         1         -         -         -         1         1         -         -         1         1           Glycol (without H₂O)         -         1         1         -         -         1 <td< td=""><td>Chloroform</td><td>3</td><td>3</td><td>3</td><td>3</td><td>-</td><td>1</td></td<>	Chloroform	3	3	3	3	-	1
Ethanol         1         2         2         3         -         1           Ethyl acetate         1         2         2         2 (20°C)         2 (23°C); 3 (85°C)         1           Ethyl alcohol         -         -         -         3         1 (23°C); 3 (85°C)         1           Ethylene oxide         1         -         -         1         -         -         1           Formalin (formaldehyde)         2         -         -         1 (40 %)         -         1           Freon 12-22         1         2         2         -         -         1           Glucose         1         -         -         -         1         1           Glycol (without H₂0)         -         1         1         -         -         1         1           Hydrogen         1         -         -         1         1         1         1         1           Hydrogen peroxide (perydrol)         3         2         2         1 (10 %)         1         1           Kerosene         1         1         1         -         3         1           Methane         1         1         1         <	Compressed air	1	1	1	1	1	1
Ethyl acetate         1         2         2         2 (20°C)         2 (23°C); 3 (85°C)         1           Ethyl alcohol         -         -         -         -         3         1 (23°C); 3 (85°C)         1           Ethyl alcohol         -         -         -         -         -         1           Ethyl alcohol         1         -         -         -         -         1           Ethyl alcohol         1         -         -         -         -         1           Ethyl alcohol         1         -         -         -         -         1           Ethyl alcohol         2         -         -         -         1           Fromalin (formaldehyde)         2         -         -         -         1           Fromalin (formaldehyde)         2         2         -         -         -         1           Glucose         1         -         -         -         1         1         -         -         1         1           Hydrogen         1         -         -         1         1         1         -         3         1           Kerosene         1         1	Cyclohexanone	1	3	3	3	-	1
Ethyl alcohol         -         -         -         3         1 (23°C); 3 (85°C)         1           Ethylene oxide         1         -         -         -         -         1           Formalin (formaldehyde)         2         -         -         1 (40 %)         -         1           Freon 12-22         1         2         2         -         -         1           Glucose         1         -         -         -         1         1           Glycol (without H₂0)         -         1         1         -         -         1           Hydrogen         1         -         -         1         1         1         1           Hydrogen peroxide (perydrol)         3         2         2         1 (10 %)         1         1           Kerosene         1         1         1         -         3         1           Magnesium chloride (up to 30%)         1         1         1         -         -         1           Methanol         1         2         3         -         -         1           Methyl acetate         -         2         2         -         -         -	Ethanol	1	2	2	3	-	1
Ethylene oxide 1 1 (40 %) - 1 Formalin (formaldehyde) 2 1 (40 %) - 1 Freon 12-22 1 2 2 1 Glucose 1 1 1 1 1 1 Glycol (without H <sub>2</sub> O) - 1 1 1 1 1 Hydrogen 1 1 1 1 1 1 1 Hydrogen peroxide (perydrol) 3 2 2 1 (10 %) 1 1 Kerosene 1 1 1 1 - 3 1 Magnesium chloride (up to 30%) 1 1 1 2 1 1 1 Methane 1 1 1 1 1 Methyl acetate - 2 2 2 1	Ethyl acetate	1	2	2	2 (20°C)	2 (23°C); 3 (85°C)	1
Formalin (formaldehyde)  2	Ethyl alcohol	-	-	-	3	1 (23°C); 3 (85°C)	1
Freon 12-22         1         2         2         -         -         1           Glucose         1         -         -         -         1         1           Glycol (without H₂0)         -         1         1         -         -         1           Hydrogen         1         -         -         1         1         1         1           Hydrogen peroxide (perydrol)         3         2         2         2         1 (10 %)         1         1           Kerosene         1         1         1         -         3         1           Magnesium chloride (up to 30%)         1         1         2         1         1         1           Methane         1         1         1         -         -         1           Methyl acetate         -         2         2         -         -         1	Ethylene oxide	1	-	-	-	-	1
Glucose       1       -       -       -       1       1         Glycol (without H₂0)       -       1       1       -       -       1         Hydrogen       1       -       -       1       1       1         Hydrogen peroxide (perydrol)       3       2       2       1 (10 %)       1       1         Kerosene       1       1       1       -       3       1         Magnesium chloride (up to 30%)       1       1       2       1       1       1         Methane       1       1       1       1       -       -       1         Methyl acetate       -       2       2       -       -       1	Formalin (formaldehyde)	2	-	-	1 (40 %)	-	1
Glycol (without H₂0)         -         1         1         -         -         1           Hydrogen         1         -         -         1         1         1           Hydrogen peroxide (perydrol)         3         2         2         1 (10 %)         1         1           Kerosene         1         1         1         -         3         1           Magnesium chloride (up to 30%)         1         1         2         1         1         1           Methane         1         1         1         -         -         1           Methyl acetate         -         2         2         -         -         1	Freon 12-22	1	2	2	-	-	1
Hydrogen       1       -       -       1       1       1         Hydrogen peroxide (perydrol)       3       2       2       1 (10 %)       1       1         Kerosene       1       1       1       -       3       1         Magnesium chloride (up to 30%)       1       1       2       1       1       1         Methane       1       1       1       -       -       1         Methanol       1       2       3       -       -       1         Methyl acetate       -       2       2       -       -       1	Glucose	1	-	-	-	1	1
Hydrogen peroxide (perydrol)         3         2         2         1 (10 %)         1         1           Kerosene         1         1         1         -         3         1           Magnesium chloride (up to 30%)         1         1         2         1         1         1           Methane         1         1         1         -         -         1           Methanol         1         2         3         -         -         1           Methyl acetate         -         2         2         -         -         1	Glycol (without H <sub>2</sub> O)	-	1	1	-	-	1
Kerosene         1         1         1         -         3         1           Magnesium chloride (up to 30%)         1         1         2         1         1         1           Methane         1         1         1         -         -         1           Methanol         1         2         3         -         -         1           Methyl acetate         -         2         2         -         -         1	Hydrogen	1	-	-	1	1	1
Magnesium chloride (up to 30%)         1         1         2         1         1         1           Methane         1         1         1         1         -         -         1           Methanol         1         2         3         -         -         1           Methyl acetate         -         2         2         -         -         1	Hydrogen peroxide (perydrol)	3	2	2	1 (10 %)	1	1
Methane         1         1         1         -         -         1           Methanol         1         2         3         -         -         1           Methyl acetate         -         2         2         -         -         1	Kerosene	1	1	1	-	3	1
Methanol         1         2         3         -         -         1           Methyl acetate         -         2         2         -         -         1	Magnesium chloride (up to 30%)	1	1	2	1	1	1
Methyl acetate - 2 2 1	Methane	1	1	1	-	-	1
	Methanol	1	2	3	-	-	1
Methyl alcohol (pure) 2 1	Methyl acetate	-	2	2	-	-	1
	Methyl alcohol (pure)	-	-	-	-	2	1

# **Chemical Compatibility Chart**

Substances	PA	PU ether	PU ester	Low Density PE	Advanced PE	FEP/PFA
Methyl chloride	2	3	2	-	-	1
Methyl ethyl ketone	1	3	3	3 -		1
Oils (paraffin)	-	1	1	-	-	1
Oils, engine (diesel)	1	2	1	-		
Oxygen	1	-	1	1 (20 °C)	1 (20 °C) -	
Ozone	3	2 or 1	1	3	3	1
Perchlorate ethylene	1	3	3	-	-	1
Petrol, with up to 40% aromatics	1	-	2	-	-	1
Petrol, with more than 40% aromatics	1	-	3	-	-	1
Phenois	3	-	3	3	-	1
Potash	-	-	3	1	-	1
Potassium chloride up to 40%	1	1	2	1	-	1
Potassium hydroxide	1 (50 %)	1 (3n)	2	1	1	1
Potassium manganate 5%	-	3	2	-	-	1
Potassium sulphate	1	-	-	1	1	1
Propane	1	1	1	-	-	1
Sodium carbonate	1	-	-	1	1	1
Sodium chloride	1 (50 %)	1	2	1	-	1
Sodium hydroxide (caustic soda)	1 (60 %)	-	-	1	1	1
Sodium hypochlorite (bleach)	1	2	3	1 (30 %)	-	1
Tetrachloroethylene	1	2	2	-	-	1
Toluene	1	2	2	3	3	1
Tributylphosphate	1	-	-	-	-	1
Trichlorethylene	1	3	3	3	-	1
Water (distilled, deionised)	-	1	1	-	-	1
Water (drinking, food)	-	-	-	-	1	1
Water (industrial)	1	-	-	-	1	1
Water (sea)	-	-	-	-	-	1
Xylem	-	2	2	-	-	1
Zinc chloride	1 (10 %)	-	-	1	-	1

For other fluids, concentrations or special implementation, please contact us.

# **Product Selection Table**

Table 1			Maximum	Temperature		Performance Enviror		
Technical Tubing and Hose	Materials	Fluids	Pressure (bar)	Min.	Max.	Mechanical	Chemical	
Semi-Rigid PA	Semi-rigid bio-sourced polyamide	Compressed air, industrial fluids	50	-40°C	+100°C	Good	Good	
Rigid PA	Rigid polyamide	Compressed air, industrial fluids	58	-40°C	+80°C	Good	Good	
Fireproof HIgh Resistance PA	Polyamide with flame-retardant additive	Coolants, industrial fluids (lubricants), compressed air	50	-40°C	+100°C	Excellent	Moderate	
Anti-Spark PA and PU with or without PVC sheath	Semi-rigid polyamide with PVC sheath Polyurethane ether with PVC sheath Single-layer polyurethane ether with flame-retardant additive	Compressed air, coolants, industrial fluids	36 (PA) 14 (PU)	-20°C	+80°C +70°C	Excellent	Good	
<b>PU</b> single and multi-tube	Polyurethane ester Polyurethane ether "Crystal" food-quality polyurethane ether	Compressed air, industrial fluids (water) or food industry fluids	12	-20°C	+70°C	Excellent	Moderate Good Good	
Antistatic PU	Polyurethane filled with conductive particles	Compressed air	10	-20°C	+70°C	Excellent	Moderate	
Advanced PE	Polyethylene, 50% reticulated	All fluids	16	-40°C	+95°C	Good	Excellent	
FEP	Fluoropolymer: fluorinated ethylene- propylene	All fluids	28	-40°C	+150°C	Good	Excellent	
PFA	Fluoropolymer: high purity and coloured	All fluids	36	-196°C	+260°C	Excellent	Excellent	
Antistatic PFA	perfluoroalkoxy FDA  Fluoropolymer: perfluoroalkoxy filled with	All fluids	36	-196°C	+260°C	Excellent	Good	
Self-Fastening NBR	conducting particles  NBR with polyamide braid	Compressed air, coolants	16	-20°C	+100°C	Excellent	Good	
Braided PU	Polyurethane with polyester braid	Compressed air, industrial fluids	15	-40°C	+75°C	Excellent	Good	
Diamou i C	Tolyardalano mar polyadar braid	Compressed an industrial radio		10 0	170 0	Executoria		
Push-in Fittings								
LF 3000°	Technical polymer/brass/NBR	Compressed air	20	-20°C	+80°C	Good	Moderate	
LIQUIfit®	Bio-sourced polymer/EPDM	Liquids	16	-10°C	+95°C	Moderate	Good	
LF 3200	Nickel-plated brass/NBR	Compressed air	20	-15°C	+80°C	Excellent	Moderate	
LF 3600	Chemical nickel-plated brass FDA/FKM	All brass-compatible fluids	30	-20°C	+150°C	Excellent	Good	
LF 6100	Brass/NBR	Oil, analytical gases	60	-40°C	+120°C	Excellent	Moderate	
LF 3800 / LF 3900	316L - 303 stainless steel/FKM	All fluids	30	-20°C	+150°C	Excellent	Excellent	
Cartridges and C	ustomised Products							
LF 3000°	Technical polymer/brass or chemical	Compressed air	20	-20°C	+80°C	Good	Moderate	
LIQUIfit®	nickel-plated brass/NBR  Bio-sourced polymer/EPDM	Liquids	16	-10°C	+95°C	Moderate	Good	
LF 3600	Chemical nickel-plated brass FDA/FKM	All brass-compatible fluids	30		+150°C	Excellent	Good	
LF 3800 / LF 3900	316L - 303 stainless steel/FKM	All fluids	30		+150°C	Excellent	Excellent	
TL SOCIAL	Brass/NBR	Compressed air	16	-25°C	+80°C	Good	Moderate	
Function Fittings								
Polymer Flow Regulators		Compressed air	10	0°C	+70°C	Good	Moderate	
•		· ·						
Metal Flow Regulators Stainless Steel Flow	Treated brass/nickel-plated brass	Compressed air	10	0°C	+70°C	Excellent	Moderate	
Regulators	316L stainless steel	Compressed air	40	-15°C	+120°C	Excellent	Excellent	
Blocking Fittings	Nickel-plated brass	Compressed air	10	-20°C	+70°C	Excellent	Good	
Piloted Non-Return Valve	Technical polymer/nickel-plated brass	Compressed air	10	-5°C	+60°C	Good	Moderate	
Non-Return Fitting	Technical polymer/nickel-plated brass	Compressed air	10	0°C	+70°C	Good	Moderate	
Silencers	Polymer, sintered bronze, nickel-plated brass, 316L stainless steel	Compressed air	12	-20°C	+180°C	Good	Moderate	



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#### **Key Products**

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### Climate Control

#### Key Markets

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Construction Machinery
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Life sciences
Oil & gas
Precision cooling
Process
Refrigeration
Transportation

#### **Key Products**

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Filter driers
Hand shut-off valves
Heat exchangers
Hose & fittings
Pressure regulating valves
Refrigerant distributors
Safety relief valves
Smart pumps
Solenoid valves
Thermostatic expansion valves



### Electromechanical

### Key Markets

Aerospace
Factory automation
Life science & medical
Machine tools
Packaging machinery
Paper machinery
Plastics machinery & converting
Primary metals
Semiconductor & electronics
Textille
Wire & cable

#### **Key Products**

AC/DC drives & systems
Electric actuators, gantry robots
& slides
Electrohydrostatic actuation systems
Electromechanical actuation systems
Human machine interface
Linear motors
Slepper motors, servo motors,
drives & controls
Structural extrusions



### Filtration

#### **Key Markets**

Aerospace
Food & beverage
Industrial plant & equipment
Life sciences
Marine
Mobile equipment
Oil & gas
Power generation &
renewable energy
Process
Transportation
Water Purification

### **Key Products**

Analytical gas generators
Compressed air filters & dryers
Engine air, coolant, fuel & oil filtration systems
Fluid condition monitoring systems
Hydraulic & lubrication filters
Hydrogen, nitrogen & zero
air generators
Instrumentation filters
Membrane & fiber filters
Microfiltration
Sterile air filtration
Water desalination & purification filters &



### Fluid & Gas Handling

#### Key Markets Aerial lift

Agriculture

Bulk chemical handling Construction machinery Food & beverage Fuel & gas delivery Industrial machinery Life sciences Marine Mining Mobile Oil & gas Renewable energy Transportation

### **Key Products**

#### Check valves

Connectors for low pressure fluid conveyance Deep sea unblicals Diagnostic equipment Hose couplings Industrial hose Mooring systems & power cables PTFE hose & tubing Quick couplings Rubber & thermoplastic hose Tube fittings & adapters Tubing & plastic fittings



### Hydraulics

#### Key Markets Aerial lift

Agriculture
Alternative energy
Construction machinery
Forestry
Industrial machinery
Machine tools
Marine
Material handling
Mining
Oil & gas
Power generation
Refuse vehicles
Renewable energy
Turf equipment

### **Key Products**

Accumulators
Cartridge valves
Electrohydraulic actuators
Human machine interfaces
Hydraulic cylinders
Hydraulic cylinders
Hydraulic systems
Hydraulic valves & controls
Hydraulic steering
Integrated hydraulic circuits
Power take-offs
Power units
Rotary actuators



### Aerospace

Conveyor & material handling Factory automation Life science & medical Machine tools Packaging machinery Transportation & automotive

#### **Key Products**

Air preparation
Brass fittings & valves
Manifolds
Pneumatic accessories
Pneumatic actuators & grippers
Pneumatic aduators & grippers
Pneumatic aduators
Quick disconnects
Rotary actuators
Rubber & thermoplastic hose
& couplings
Structural extrusions
Vacuum generators, cups & sensors
Vacuum generators, cups & sensors



### Process Control

#### Key Markets

Alternative fuels Biopharmaceuticals Chemical & refining Food & beverage Marine & shipbuilding Medical & dental Microelectronics Nuclear Power Offshore oil exploration Oil & gas Pharmaceuticals Power generation Pulp & paper Steel Water/wastewater

#### **Key Products**

Analytical Instruments
Analytical sample conditioning
products & systems
Chemical injection fittings
& valves
Fluoropolymer chemical
delivery fittings, valves
& pumps
High purity gas delivery
fittings, valves, regulators
& digital flow controllers
Industrial mass flow meters/
controllers

Permanent no-weld tube fittings Precision industrial regulators & flow controllers Process control double block & bleeds Process control fittings, valves, regulators & manifold valves



### Sealing & Shielding

### Key Markets

Aerospace
Chemical processing
Consumer
Fluid power
General industrial
Information technology
Life sciences
Microelectronics
Military
Oil & gas
Power generation
Renewable energy
Telecommunications
Transportation

#### **Key Products**

Dynamic seals
Elastomeric o-rings
Electro-medical instrument
design & assembly
EMI shielding
Extruded & precision-cut,
tabricated elastomeric seals
High temperature metal seals
Homogeneous & inserted
elastomeric shapes
Medical device fabrication
& assembly
Metal & plastic retained
composite seals
Shielded optical windows
Silicone tubing & extrusions
Thermal management
Vibration dampening

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