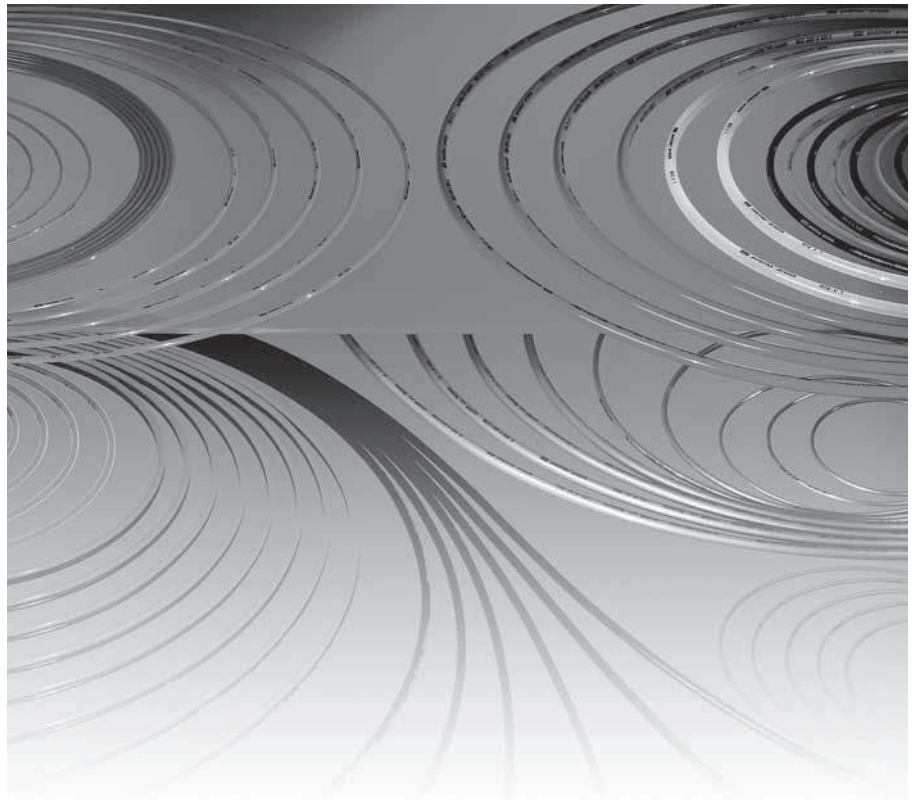




# ***Thermoplastic Tubing***

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*Catalogue 5210/UK*



**Thermoplastic Tubing**

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***presto* polyurethane tubes (52 Shore D) - Single tubes**

Working pressures shown are based on a design factor of 3:1.

Temperature range: -35 °C up to +80 °C

**Polyurethane (TPU) metric single tubes with O.D. within the limits of CETOP RP 54P**

# PU Metric	Tube size		Maximum working pressure MPa			Minimum bend radius mm 	
	 O.D. mm	 I.D. mm	 -35°C to +23°C	 -35°C to +40°C	 -35°C to +60°C		
TPU 3 x 0.5	3.0	2.0	1.2	0.9	0.8	13	5
TPU 4 x 0.75	4.0	2.5	1.4	1.1	0.9	17	9
TPU 6 x 1	6.0	4.0	1.2	0.9	0.8	27	19
TPU 8 x 1.25	8.0	5.5	1.1	0.9	0.7	37	32
TPU 10 x 1.5	10.0	7.0	1.0	0.8	0.7	54	49
TPU 12 x 2	12.0	8.0	1.2	0.9	0.8	62	77
TPU 16 x 2.5	16.0	11.0	1.1	0.9	0.7	88	129

For Prestolok push-in fittings (TÜV tested).

1 MPa = 10 bar

Polyurethane single tube tolerances in mm	
Tube O. D. 3 to 8 mm	Tube O. D. 10 to 16 mm
± 0.1	± 0.15

Colour codes												
Natural	Red	Blue	Green	Black	Brown	Yellow	Orange	Grey	Purple	Pink	White	Silver
1	2	3	4	5	6	7	8	9	10	11	12	13



**presto polyurethane Tubes - Twin-line tubes**

Two tubes are permanently joined to make a pair. For assembly, the tube pair is separated at either end to the required length. Additional multi-line tubes are available on request.

Working pressures shown are based on a design factor of 3:1.

Temperature range: -35 °C up to +80 °C

**Polyurethane (TPU) metric twin-line tubes with O.D. within the limits of CETOP RP 54P**

# PU Metric	Tube size		Maximum working pressure MPa			Minimum bend radius mm	GR
	O.D. mm	I.D. mm	-35°C to +23°C	-35°C to +40°C	-35°C to +60°C		
TPU 4 x 0.75D	4.0	2.5	1.0	0.9	0.7	17	19
TPU 6 x 1D	6.0	4.0	1.0	0.9	0.7	27	38
TPU 8 x 1.25D	8.0	5.5	1.0	0.9	0.7	37	65
TPU 10 x 1.5D	10.0	7.0	1.0	0.9	0.7	54	98

For Prestolok push-in fittings (TÜV tested).

1 MPa = 10 bar

**Ordering keys for single and multi-line tubes**

**Metric tube**

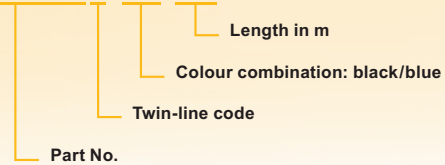
**Multi-line tube**

Examples:

**TPU6X1/5-25**



**TPU4X0.75D/5/3-100**



**Colour codes**

Natural	Red	Blue	Green	Black	Brown	Yellow	Orange	Grey	Purple	Pink	White	Silver
1	2	3	4	5	6	7	8	9	10	11	12	13




***presto* polyamide tubes - Single tubes**

Polyamide tubing is extruded in polyamide PA12. This heat & light stabilised material meets or exceeds the DIN 73378, BS5409 PT 1 and the CETOP RP54P requirements.  
 DIN 74 324 tubing available on request (for airbrake applications).



Working pressures shown are based on a design factor of 3:1.  
 Temperature range: -40 °C up to +100 °C (acc. DIN 74324)

**Polyamide (PA) metric single tubes**

#	Tube O. D.  X wall thickness	Maximum working pressure MPa			Minimum bend radius mm 	
		-40°C to +23°C	-40°C to +40°C	-40°C to +60°C		
N3X0.60	3 x 0.60 mm	3.3	2.5	1.9	15	5
N4X0.65	4 x 0.65 mm	2.6	1.9	1.5	30	7
N4X1	4 x 1 mm	4.4	3.3	2.5	20	10
N5X1	5 x 1 mm	3.3	2.5	1.9	30	13
N6X1	6 x 1 mm	2.7	2.0	1.5	30	16
N8X1	8 x 1 mm	1.9	1.4	1.1	40	23
N8X1.25	8 x 1.25 mm	2.5	1.8	1.4	35	28
N10X1	10 x 1 mm	1.5	1.1	0.8	60	29
N10X1.25	10 x 1.25 mm	1.9	1.4	1.1	60	36
N10X1.5	10 x 1.5 mm	2.4	1.7	1.3	60	42
N12X1	12 x 1 mm	1.2	0.9	0.7	85	36
N12X1.5	12 x 1.5 mm	1.9	1.4	1.1	60	52
N12X1.75	12 x 1.75 mm	2.3	1.7	1.3	60	59
N14X1.5	14 x 1.5 mm	1.6	1.2	0.9	75	61
N16X1.5	16 x 1.5 mm	1.4	1.0	0.8	105	71
N16X2	16 x 2 mm	1.9	1.4	1.1	95	92
N22X2.5	22 x 2.5 mm	1.7	1.3	1.0	125	159

1 MPa = 10 bar

Polyamide single tube tolerances in mm	
Tube O. D. 3 to 5 mm	Tube O. D. 6 to 16 mm
+ 0.05 / - 0.08	+ 0.05 / - 0.10






**presto polyethylene tubes - Single tubes**

**presto** soft polyethylene tubing is manufactured to ASTM D-1248, type 1, E5 to achieve maximum environmental stress cracking resistance.

Working pressures shown are based on a design factor of 3:1.  
 Temperature range: -30 °C up to +60 °C

**Polyethylene (PE) metric single tubes**

#	Tube O. D.  X wall thickness	Maximum working pressure MPa			Minimum bend radius mm 	
		-0°C to +23°C	-0°C to +40°C	-0°C to +60°C		
L4X1	4 x 1 mm	2.14	1.60	1.07	25	9
L6X1	6 x 1 mm	1.31	0.98	0.66	35	15
L8X1	8 x 1 mm	0.93	0.70	0.47	55	20
L10X1	10 x 1 mm	0.72	0.54	0.36	85	26
L12X2	12 x 2 mm	1.24	0.93	0.62	75	58
L16X2	16 x 2 mm	0.97	0.72	0.48	90	82

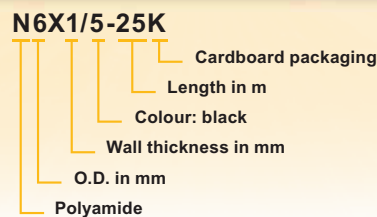
1 MPa = 10 bar

Correction factors for working pressures at lower temperatures	
-30°C to -20°C	-20°C to 0°C
0.7	0.8

Polyethylene single tube tolerances in mm	
Tube O. D. 3 to 5 mm	Tube O. D. 6 to 16 mm
+ 0.05 / - 0.08	+ 0.05 / - 0.10

**Ordering keys**

Example:



Colour codes												
Natural	Red	Blue	Green	Black	Brown	Yellow	Orange	Grey	Purple	Pink	White	Silver
1	2	3	4	5	6	7	8	9	10	11	12	13



**Thermoplastic Tubing**

**Single line tubing PVC sheathed**

For applications where the tubing requires additional protection from abrasion or the environment.

The standard product has a natural coloured core tube with a black PVC sheath. Other colour combinations are available on request.



**Tube bundles for maximum safety and minimum installation work**

**Parker** tube bundles are a high-quality thermoplastic product designed specifically for process control and monitoring applications.

**Parker** tube bundles are excellent for use in hydraulic and pneumatic systems.

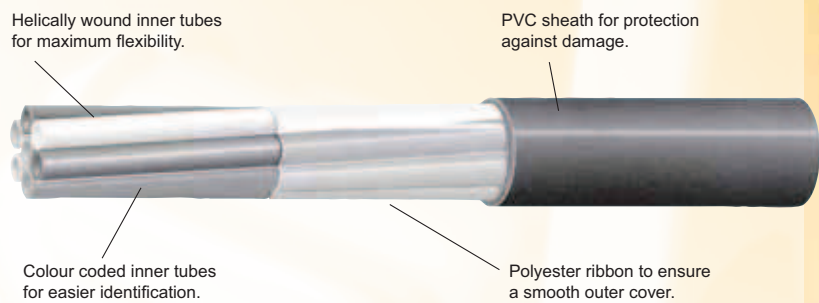
The PVC coat protects the product against mechanical and chemical damage.

The combination of different tube materials in a **Parker** tube bundle allows their application in almost all industrial areas.

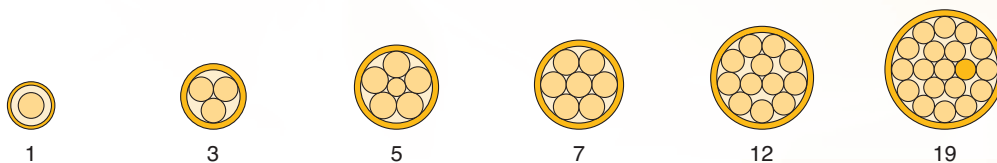
Each tube can be easily and quickly identified by its colour and position within the helically wound bundle.

The single tubes are marked in intervals of max. 500 mm as standard.

In addition to the standard range (STS), extra thick sheath (ETS), and steel wire armour (SWA) constructions are also available.






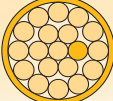


Standard configurations are available in lengths of max. 1000 m.



**Thermoplastic Tubing**

**Technical details and packaging information**

Configuration	#	Thickness of Sheath mm	Nominal O. D. mm	Min. Bend radius mm	kg / 100 m	100 m Coil Dimensions Dia x Width mm	Standard Length m
	P01N4X0.65STS	1.0	6.0	20	3.1	400 x 80	100
	P01N6X1STS	1.0	8.0	30	4.9	500 x 80	100
	P01N8X1STS	1.0	10.0	40	6.6	700 x 80	100
	P01N8X1.25STS	1.0	10.0	35	7.1	700 x 80	100
	P01N10X1STS	1.0	12.0	60	8.0	700 x 80	100
	P01N10X1.25STS	1.0	12.0	60	8.9	700 x 80	100
	P01N12X1STS	1.0	14.0	85	9.8	700 x 150	100
	P01N12X1.5STS	1.0	14.0	60	11.3	700 x 150	100
	P01N14X1.5STS	1.0	16.0	75	13.3	700 x 150	100
	P03N4X0.65STS	2.0	13.0	65	13.0	700 x 150	100
	P03N6X1STS	2.0	17.0	90	19.0	700 x 150	100
	P03N8X1STS	2.0	22.0	105	25.0	850 x 280	100
	P05N4X0.65STS	2.0	15.0	75	16.0	700 x 150	100
	P05N6X1STS	2.0	20.0	105	26.0	800 x 280	100
	P05N8X1STS	2.5	27.0	135	41.0	950 x 300	100
	P07N4X0.65STS	2.0	16.0	80	19.0	700 x 150	100
	P07N6X1STS	2.0	22.0	115	32.0	850 x 280	100
	P07N8X1STS	2.5	29.0	150	48.0	950 x 320	100
	P12N4X0.65STS	2.0	21.0	105	27.0	850 x 280	100
	P12N6X1STS	2.0	29.0	150	48.0	1000 x 300	100
	P12N8X1STS	2.5	38.0	185	70.0	1100 x 320	100
	P19N6X1STS	2.5	35.0	180	72.0	1100 x 320	100

1 MPa = 10 bar

**Pneumatic multiconnectors**

The new pneumatic TL multiconnector from Parker allows the simultaneous connection of 2 to 7 tubes of different diameters (4, 6, or 8 mm) by using a combination of Prestolok TL fittings.

The pneumatic multiconnectors are available in different configurations for various applications.

Detailed information available on page B 34.





**Thermoplastic Tubing**





**FEP, PFA and TFE tubing**

**Safety factor:** 3:1

**Standard length:** 100 m

**FEP tubing**





**Temperature range:** -200°C up to +205°C

#	Tube O. D. X wall thickness  in mm	Maximum working pressure in MPa  psi at +23°C	Minimum bend radius  mm	g/m 
FEP 4 x 1	4 x 1	2.7 390	20	20.0
FEP 6 x 1	6 x 1	1.6 230	30	33.3
FEP 8 x 1	8 x 1	1.1 160	40	46.6
FEP 10 x 1	10 x 1	0.9 130	60	59.9
FEP 12 x 1	12 x 1	0.7 100	85	73.3

1 MPa = 10 bar





**PFA tubing**

**Temperature range:** -200°C up to +260°C

#	Tube O. D. X wall thickness  in mm	Maximum working pressure in MPa  psi at +23°C	Minimum bend radius  mm	g/m 
PFA 4 x 1	4 x 1	2.7 390	20	20.0
PFA 6 x 1	6 x 1	1.6 230	30	33.3
PFA 8 x 1	8 x 1	1.1 160	40	46.6
PFA 10 x 1	10 x 1	0.9 130	60	59.9
PFA 12 x 1	12 x 1	0.7 100	85	73.3

**TFE tubing**

**Temperature range:** -200°C up to +260°C

#	Tube O. D. X wall thickness  in mm	Maximum working pressure in MPa  psi at +23°C	Minimum bend radius  mm	g/m 
TFE 4 x 1	4 x 1	2.7 390	20	20.5
TFE 6 x 1	6 x 1	1.6 230	30	34.2
TFE 8 x 1	8 x 1	1.1 160	40	47.8
TFE 10 x 1	10 x 1	0.9 130	60	61.5
TFE 12 x 1	12 x 1	0.7 100	85	75.2

**Correction factors for working pressures at higher temperatures**

	Correction factor		Correction factor
50	0.87	150	0.53
75	0.77	200	0.39
100	0.68	250	0.28



**Prestoweld 2 - Polyurethane tubes - weld spark resistant**

Prestoweld 2 tubing is made of weld spark resistant Polyurethane and therefore the ideal solution for water and air supply of welding robots.

Prestoweld 2 guarantees a simple, fast and reliable assembly without additional tools.

#	Tube size		Maximum working pressure		Minimum Burst Pressure		Minimum radius	GR
	O.D. mm	I.D. mm	MPa	psi	MPa	psi	mm	
PWPU 4x1/5-W-100	4.0	2.0	2.8	406	8.4	1.218	8	12.0
PWPU 6x1/5-W-100	6.0	4.0	1.6	232	5.0	725	15	20.0
PWPU 8x1,5/5-W-100	8.0	5.0	1.9	276	5.8	841	16	38.9
PWPU 8x2/5-W-100	8.0	4.0	2.8	406	8.4	1.218	16	47.9
PWPU 10x2/5-W-50	10.0	6.0	2.1	305	6.3	914	21	63.9
PWPU 12x2/5-W-50	12.0	8.0	1.6	232	5.0	725	30	79.9
PWPU 14x2/5-W-50	14.0	10.0	1.6	232	4.2	609	47	95.8

Packaging: In cardboard boxes. 100 m or 50 m, depending on size (see Part number).

**Correction factors for burst and working pressures at higher temperatures**

Temperature	Correction factor	Temperature	Correction factor
- 30 to + 23 °C	1.00	+ 80 °C	0.46
+ 40 °C	0.77	+ 90 °C	0.42
+ 60 °C	0.56		

For spark resistant fittings, detailed information available in section C.