



Colex International Limited

Pneumatic Product Range

Nylon Tubing (NFM, NRM, INF, INR)

Colex nylon tubing is available in flexible and semi-rigid grades. It is manufactured from prime engineering materials, which conform to RoHS & WEEE directives, and is produced to the exacting tolerances the pneumatic industry demands. (tolerances conform with BS5409 Parts 1 or 2 & dimensional tolerances conform to SAEJ844 3A (un-reinforced) & DIN 73378/DIN74324-1.)

Nylon tubing is remarkably stable, with excellent mechanical strength so ensuring good durability when used at a wide range of temperatures and pressures. It is resistant to the crushing, cracking, abrasion and work hardening associated with the vibration of machinery and has a good resistance to a wide range of chemicals. In addition to this, the material is heat and light stabilised making it ideal for a variety of outdoor uses. Nylon tubing is also lightweight and very flexible allowing a good bend radii making it the ideal choice for a wide variety of industrial and fluid power applications.

Colex can also manufacture a range of semi-rigid nylon tube which is approved for use in food contact and brewing applications (subject to MOQ). This tubing meets the requirements of government regulations, regarding materials and articles in contact with food, under UK Statutory Instrument No.3145 (1992) and FDA Regulation CFR No. 21 (Material).

The Colex nylon range is suitable for use with both the latest push-on fittings and the more conventional compression fittings.

Altylon

Altylon tubing is manufactured from Nylon 6.10, a sustainable material that is made from the seeds of the castor oil plant making it a true alternative to products manufactured from crude oil based engineering plastics.

It offers lower density, lower moisture absorption, better zinc chloride resistance and better glycol resistance than PA6 and PA66 and better thermal resistance and higher tensile strength at break than PA11 and PA12. Altylon is competitively priced yet designed for demanding applications. Available in flexible & extraflexible grades.

Fluoropolymer Tubing (FEP/PTFE/PFA)

Fluoropolymer tubing is known for its ability to operate at the widest temperature range while retaining both its flexibility and its integrity.

The material is almost inert and therefore it can be used with most industrial chemicals and solvents. It can handle virtually any of the corrosive materials in use today, and offers excellent resistance against ageing. In addition to this, the tube offers low permeability and as it is produced without any plasticisers, it will not work harden in use or contaminate items it is used to convey.

Fluoropolymer tube has an excellent friction co-efficient and its non-stick properties allow it to convey viscous, sticky materials without resultant blockages.

Pneumatic Polyurethane Tubing (PPU)

Polyurethane is widely used in pneumatic control systems where installation is aided due to its flexibility and ease of handling. The tube remains extremely flexible even at low temperatures and has a wide operating temperature range. The high degree of natural elasticity of the material ensures excellent resistance to kinks and flattening and gives a minimum kink memory.

PPU is produced without the use of plasticisers, so it will not work harden with use. It offers excellent resistance to abrasions and cuts, most gases, many solvents, petrol and other hydrocarbons.

The Colex PPU range is designed to operate with a wide range of the most popular push-fit couplings.

Recoil Airline Coils (AC)

Colex recoil airline coils are lightweight, highly flexible and easily installed to suit a variety of horizontal or vertical applications. They offer all the benefits of Colex nylon tubing in a handy re-coil format being resistant to moisture absorption and providing consistent flexing over a wide operating temperature range and humidity conditions. Spring guards are fitted to both ends of the tube to prevent kinking and a choice of 1/4" and 3/8" BSP end fittings are available from stock.

Polyethylene Tubing (PE)

Colex polyethylene tubing is durable, flexible and lightweight making it suitable for a wide variety of industrial applications. The absence of plasticiser means there can be no contamination of the tube contents and it does not impart taste or odour to whatever is being transported, ensuring its suitability for the conveyance of a wide range of substances.

PE tubing is chemically inert and forms a good barrier to gases, vapour and moisture.

CUSTOM MANUFACTURE—THE OPTIONS ARE ENDLESS

We can offer a number of customisations to make our stock products suit your needs. For example, printing to customer requirements including logos, long lengths on drums, cut lengths, non-standard colours & sizes, packing options.

There are also many other products that we can custom make just for you that may be better suited to your needs.

Please see our Custom Manufacture brochure or visit www.colexint.com/custom-manufacture for more details.

ORDERS MAY BE SUBJECT TO MINIMUM ORDER QUANTITIES



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Pneumatic Tube Technical Data

Burst Characteristics vs Working Temperatures

This graph provides a guide to the relationship between pressure capabilities of Colex flexible nylon tube, when working within a recommended working temperature range.

As the temperature falls, the tube will become less flexible, the brittle point temperature being -70°C .

Extreme caution should be taken if the temperature is exceeded. Any increase in temperature above 20°C will result in a decrease in the short term burst pressure.

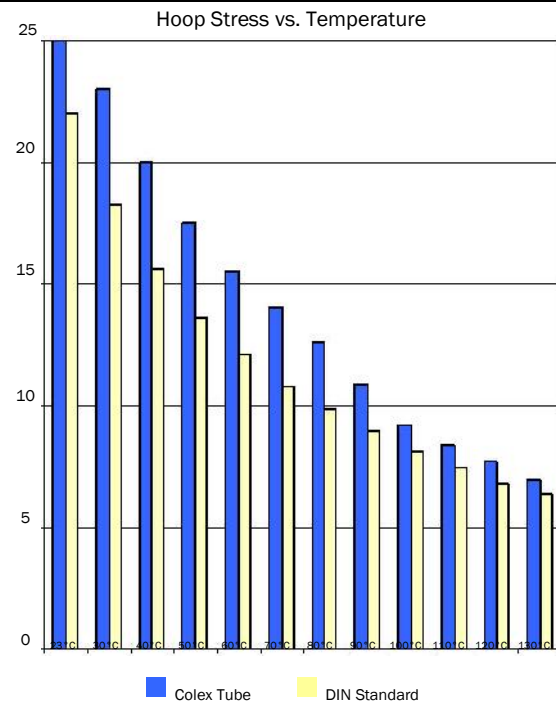
Short term burst pressure is defined as the value recorded when testing a tube to burst pressure, as described in **BS EN ISO 1402**.

Examples

Burst pressure of NFM6/4 at 23°C = 1450 psi = 100%

Burst Pressure of NFM6/4 at 40°C = 80% of 1450 psi = 1160 psi

Burst Pressure of NFM6/4 at 100°C = 37% of 1450 psi = 535 psi



Safety Factors

When selecting a hose for an application it is vital that an adequate safety factor is taken into account.

We recommend a working pressure with 4:1 safety factor on short term burst pressures given in the tables for all gasses and chemicals. For water a 3:1 safety factor may be used.

Below is an extract from ISO 7751 : 1997 which will assist an installer in providing a proven level of safety.

<u>Type of Service</u> (for guidance only)	<u>(Ratio of minimum BP to Design WP)</u>
Water hose, max WP 10 bar	3.0
Hose for all other liquids, solid materials suspended in liquids or air and water hose, WP over 10 bar	4.0
Hose for compressed air and other gases	4.0
Hose for liquid media that change into a gaseous state when subjected to a reduction in pressure, i.e. released to atmosphere	5.0
Steam hose	10.0
Jetting hose	2.5

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Colex International Limited

Flexible Nylon Tubing - Metric

Applications

Automotive air brake systems and suspension lines, low temperature diesel transfer transport of many fuels and oils, lubrication systems, compressed air lines, refrigeration and coolant lines, hydraulic lines, chemical transfer, air conditioning, the transport of CO₂ and many other gasses, pneumatic control and instrumentation systems.

Chemical Resistance

Nylon is resistant to most solvents, alkalis, oils, greases, petroleum products, fungi, mould and dilute acids (mineral and organic).

Construction

Most flexible nylon (PA) tube is manufactured from high impact heat and light stabilised material.

Temperatures *

-40°C to +70°C. Occasional use up to 130°C. Brittle point: -70°C.

Din Spec Nylon

The ✓ marked sizes can be supplied to conform with Din 73378 and can be printed: "CX DIN 73378 - size - PA 12 - HIPHL WO/NO" Subject to minimum order quantities.



Lightweight & flexible

Good chemical resistance

Part Number	OD (mm)	ID (mm)	Burst Pressure *		Kgs/30m	Bend Radius * (mm)	OD Tolerances (mm)	Lengths Available Ex Stock	Colours Available Ex Stock
			psi	bar					
NFM4/25 ✓	4	2.5	1608	111	0.240	11	+0.01/-0.09	30m 100m	Natural, yellow, green, red, blue & black Natural, yellow, green, red, blue & black
NFM4/3	4	3	994	68	0.174	16	+0.01/-0.09	30m	Natural
NFM5/3 ✓	5	3	1740	120	0.393	13	+0.03/-0.10	30m	Natural, yellow, green, red, blue & black
NFM6/4 ✓	6	4	1392	96	0.492	18	+0.02/-0.11	30m 100m 500m	Natural, yellow, green, red, blue, black, brown & orange Natural, yellow, green, red, blue & black Natural & black
NFM6/45	6	4.5	994	68	0.387	24	+0.02/-0.11	30m	Natural
NFM8/55 ✓	8	5.5	1287	88	0.828	26	+0.03/-0.10	30m 100m	Natural, yellow, green, red, blue & black Natural
NFM8/6 ✓	8	6	994	68	0.687	32	+0.03/-0.10	30m 100m	Natural, yellow, green, red, blue, black, brown & orange Natural, yellow, green, red, blue & black
NFM10/7	10	7	1228	84	1.251	33	+0.03/-0.09	30m	Natural, yellow, green, red, blue & black
NFM10/75 ✓	10	7.5	995	68	1.083	45	+0.03/-0.09	30m 100m	Natural, yellow, green, red, blue & black Natural, yellow, green, red, blue & black
NFM10/8 ✓	10	8	772	53	0.885	50	+0.03/-0.09	30m 100m	Natural, yellow, green, red, blue & black Natural & black
NFM12/9 ✓	12	9	994	68	1.545	48	+0.01/-0.11	30m 100m	Natural, yellow, green, red, blue & black Natural, yellow, green, red, blue & black
NFM12/10	12	10	633	43	1.080	72	+0.01/-0.11	30m 100m	Natural, yellow, green, red, blue & black Natural
NFM14/11	14	11	835	57	1.839	65	+0.02/-0.11	30m	Natural
NFM15/12 ✓	15	12	772	53	1.986	75	+0.02/-0.11	30m	Natural
NFM16/12 ✓	16	12	995	68	2.772	80	+0.03/-0.10	30m	Natural
NFM16/13	16	13	720	49	2.133	85	+0.03/-0.10	30m	Natural
NFM22/17	22	17	890	61	4.779	97	+0.02/-0.11	30m	Natural
NFM28/22	28	22	835	57	7.353	131	+0.03/-0.15	30m	Natural

* For use as a guide only

Lengths: 30m and 100m supplied in coils, 500m supplied on a drum.

Pressures: Values stated are based on the short term burst pressure of nylon at 20°C. Any increase in temperature above 20°C will result in a decline in burst pressures.

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Colex International Limited

Semi-Rigid Nylon Tubing - Metric

Applications

Pneumatics and hydraulic controls, lubricant and fuel tubing, CO₂ and air tubing.

Chemical Resistance

Nylon is resistant to most solvents, alkalis, oils, greases, petroleum products, fungi, moulds and dilute acids (mineral and organic).

Construction

Colex semi-rigid nylon (PA) tube is manufactured from flexible nylon.

Temperatures *

-35°C to 110°C . Occasional use up to 140°C . Brittle point: -70°C.



Lightweight

Good chemical resistance

Durable

Heat and light stabilised materials

Part Number	OD (mm)	ID (mm)	Burst Pressure*		Kgs/30 m	Bend Radius (mm)	OD Tolerances (mm)	Lengths Available Ex Stock	Colours Available Ex Stock
			psi	bar					
NRM4/25	4	2.5	2680	185	0.237	13	+0.01/-0.09	30m	Natural & black
NRM5/3	5	3	2900	200	0.390	15	+0.03/-0.10	30m	Natural & black
NRM6/4	6	4	2320	160	0.486	22	+0.02/-0.11	30m	Natural & black
NRM8/6	8	6	1659	114	0.681	38	+0.03/-0.10	30m	Natural & black
NRM10/7	10	7	2047	141	1.239	40	+0.03/-0.09	30m	Natural & black
NRM10/8	10	8	1288	89	0.876	60	+0.03/-0.09	30m	Natural & black
NRM12/10	12	10	1056	73	1.080	86	+0.01/-0.11	30m	Natural & black

FOOD GRADE SEMI-RIGID NYLON TUBING IS AVAILABLE SUBJECT TO MINIMUM ORDER QUANTITIES

* For use as a guide only

Semi-rigid nylon is supplied tyre wrapped and labelled.

Pressures: Values stated are based on the short term burst pressure of nylon at 20°C . Any increase in temperature above 20°C will result in a decline in burst pressures.

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Colex International Limited

Flexible Nylon Tubing - Imperial

Applications

Pneumatic controls, instrumentation systems, fuels and oils lubrication, compressed air, refrigeration, coolant lines, hydraulic lines, chemical transfer, air-conditioning, CO² and air tube laboratories and automotive.

Chemical Resistance

Nylon is resistant to most solvents, alkalis, oils, greases, petroleum products, fungi, moulds and dilute acids (mineral and organic).

Construction

Colex flexible nylon (PA) tube is manufactured from flexible nylon.

Temperatures *

-40°C to +70°C . Occasional use up to 130°C . Brittle point: -70°C

Choice of colours

Flexible

Lightweight

Good chemical resistance



Part Number	OD (ins)	ID (ins)	Burst Pressure*		Kgs/ 30m	Bend Radius (mm)	OD Tolerances (ins)	Lengths Available Ex Stock	Colours Available Ex Stock
			psi	bar					
Medium Wall									
INF32	1/8	0.058	2547	175	0.195	6	+0.001/-0.003	30m	Natural & black
INF48	3/16	0.117	1816	125	0.342	13	+0.001/-0.005	30m	Natural, yellow, green, red, blue & black
INF64	1/4	0.170	1325	91	0.534	20	+0.001/-0.004	30m	Natural, yellow, green, red, blue & black
INF80	5/16	0.212	1332	91	0.834	25	+0.001/-0.004	30m	Natural, yellow, green, red, blue & black
INF96	3/8	0.250	1392	96	1.236	29	+0.001/-0.004	30m	Natural, yellow, green, red, blue & black
INF128	1/2	0.375	994	68	1.731	51	+0.001/-0.004	30m	Natural, yellow, green, red, blue & black
INF160	5/8	0.500	772	53	2.226	79	+0.001/-0.004	30m	Natural
INF192	3/4	0.594	807	55	3.318	92	+0.001/-0.005	30m	Natural
INF256	1	0.813	716	49	5.361	136	+0.001/-0.006	30m	Natural
Light Wall									
INFL48	3/16	0.137	1081	74	0.261	18	+0.001/-0.005	30m	Natural
INFL64	1/4	0.190	949	65	0.420	27	+0.001/-0.004	30m	Natural
INFL80	5/16	0.242	884	61	0.621	35	+0.001/-0.004	30m	Natural
INFL96	3/8	0.295	832	57	0.849	45	+0.001/-0.004	30m	Natural

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Colex International Limited

Semi-Rigid Nylon Tubing - Imperial

Applications

Pneumatics and hydraulic controls, lubricant and fuel tubing, CO₂ and air tubing.

Chemical Resistance

Nylon is resistant to most solvents, alkalis, oils, greases, petroleum products, fungi, moulds and dilute acids (mineral and organic).

Construction

Colex semi-rigid nylon (PA) tube is manufactured from flexible nylon.

Temperatures *

-35 °C to 110 °C . Occasional use up to 140 °C . Brittle point: -70 °C .



Lightweight

Good chemical resistance

Durable

Heat and light stabilised materials

Part Number	OD (ins)	ID (ins)	Burst Pressure *		Kgs/30m	Bend Radius * (mm)	OD Tolerances (ins)	Lengths Available Ex Stock	Colours Available Ex Stock
			psi	bar					
Medium Wall									
INR48	3/16	0.117	2800	195	0.339	15	+0.001/-0.005	30m	Natural & black
INR64	1/4	0.170	2500	172	0.528	24	+0.001/-0.004	30m	Natural & black
INR80	5/16	0.212	2550	176	0.828	30	+0.001/-0.004	30m	Natural & black
INR96	3/8	0.250	2700	186	1.224	34	+0.001/-0.004	30m	Natural & black
INR128	1/2	0.406	1300	90	1.338	81	+0.001/-0.004	30m	Natural & black
Light Wall									
INRL32	1/8	0.095	1200	83	0.105	16	+0.001/-0.003	30m	Natural & black
INRL48	3/16	0.137	1600	110	0.258	21	+0.001/-0.005	30m	Natural & black
INRL64	1/4	0.190	1500	103	0.420	32	+0.001/-0.004	30m	Natural & black
INRL80	5/16	0.242	1400	97	0.615	42	+0.001/-0.004	30m	Natural & black
INRL96	3/8	0.295	1600	110	0.840	54	+0.001/-0.004	30m	Natural & black
Heavy Wall									
INRH32	1/8	0.075	3000	207	0.159	10	+0.001/-0.003	30m	Natural & black
INRH48	3/16	0.107	2950	205	0.372	13	+0.001/-0.005	30m	Natural & black
INRH64	1/4	0.150	3000	207	0.672	19	+0.001/-0.004	30m	Natural & black
INRH80	5/16	0.183	3500	241	1.005	23	+0.001/-0.004	30m	Natural & black
INRH96	3/8	0.225	3550	245	1.410	29	+0.001/-0.004	30m	Natural & black

FOOD GRADE SEMI-RIGID NYLON TUBING IS AVAILABLE SUBJECT TO MINIMUM ORDER QUANTITIES

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Semi-rigid nylon is supplied tyre wrapped and labelled.

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Colex International Limited

Altylon

At Colex International we have developed a true alternative to crude oil based engineering plastics - Altylon. Altylon is manufactured from Nylon 6.10 material, 60% of which is produced from the seeds of the castor oil plant, offering the optimum blend of performance, availability and sustainability all at a competitive price compared with PA12.

Altylon delivers lower density, lower moisture absorption, better zinc chloride resistance and better glycol resistance than PA6 and PA66 and better thermal resistance and higher tensile strength at break than PA11 and PA12 and designed for demanding applications.

Altylon answers the increasing demand for renewably sourced polymers, with high technical performance that can be used for critical polyamide applications.

Applications

Compressed air-lines, general pneumatic control and instrumentation systems, suspension lines and the transport of many fuels and oils for applications such as low temperature diesel transfer, lubrication systems, refrigeration and coolant lines, hydraulic lines, chemical transfer, air conditioning, transport of CO² and many other gases & many more.

If you have any doubts about the suitability of Altylon for your application, please don't hesitate to contact the sales team.

Chemical Resistance

Nylon is resistant to most solvents, alkalis, oils, greases, petroleum products, fungi, moulds and dilute acids (mineral and organic).

Construction

Altylon is manufactured from heat stabilised materials, 60% of which are derived from renewable resources.

Temperatures *

- 40°C to +70°C, occasional use up to 130°C, brittle point: = -70°C



Part Number	OD (mm)	ID (mm)	Burst Pressure *		Kgs/30m	Bend Radius (mm)	OD Tolerances (mm)	Lengths Available Ex Stock	Colours Available Ex Stock
			psi	bar					
ALT4/25	4	2.5	1900	131	0.252	11	+0.01/-0.09	30m	Natural
ALT6/4	6	4	1600	110	0.516	18	+0.02/-0.11	30m	Natural
ALT8/6	8	6	1200	83	0.723	32	+0.03/-0.10	30m	Natural
ALT10/75	10	7.5	1200	83	1.130	45	+0.03/-0.09	30m	Natural
ALT12/10	12	10	760	52	1.136	72	+0.01/-0.11	30m	Natural

Custom Manufacture

We can manufacture any metric or imperial size, colour or length complete with any custom packing or printing to suit your requirement, subject to minimum order quantities.

Please call the Sales Office on 01858 461100 for more information, or visit our website at www.colexint.com.

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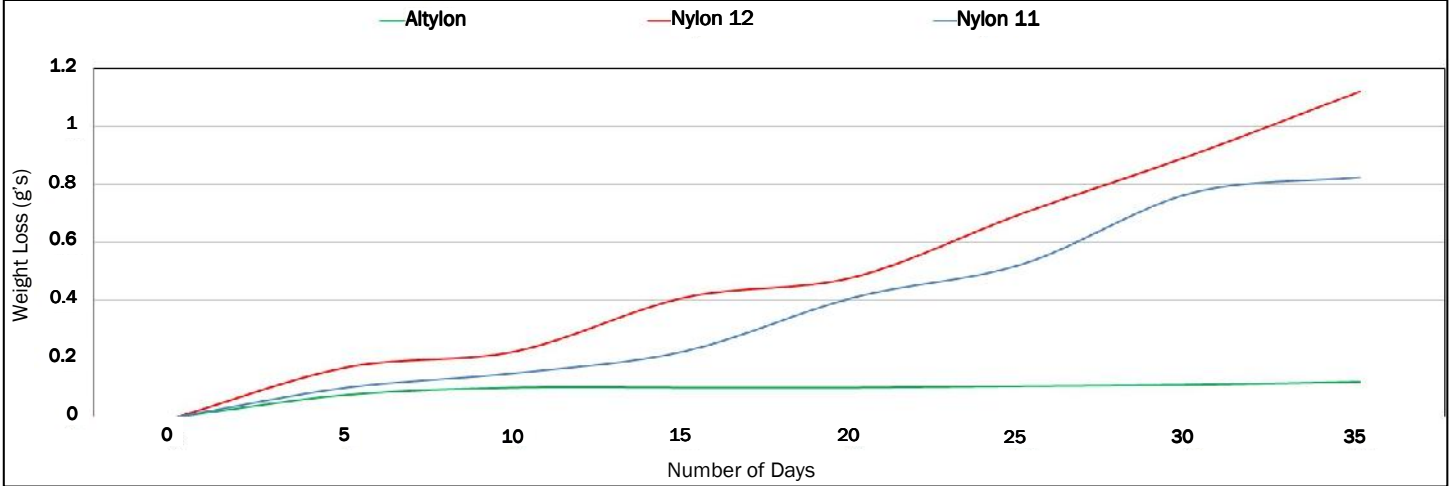


Colex International Limited

Altylon - Technical Data

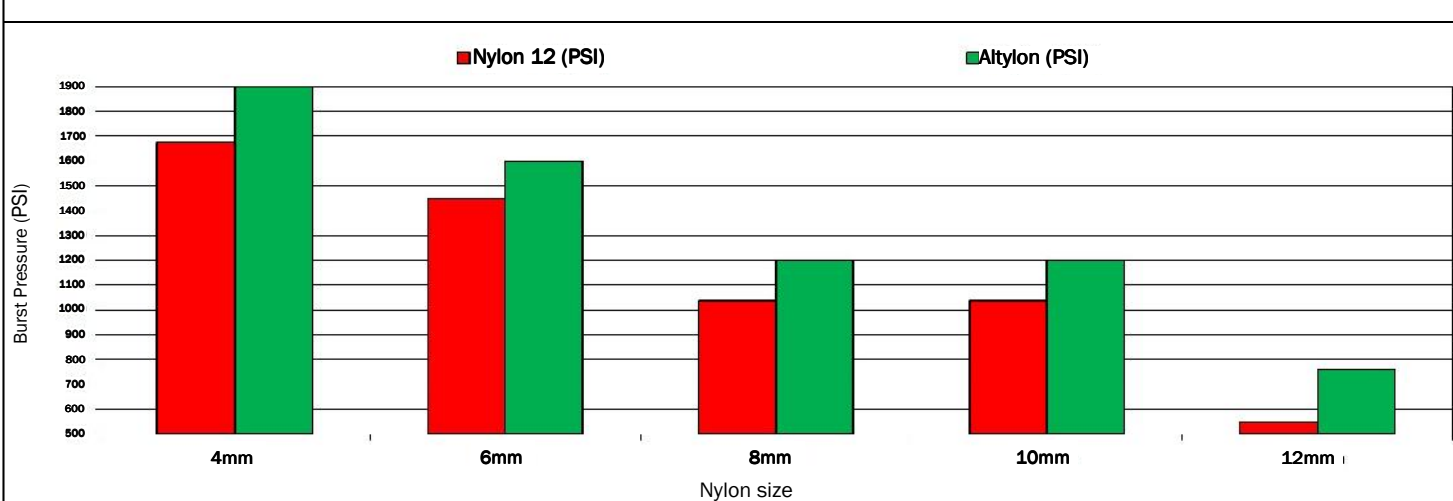
Fuel Transport, 40°C Static Permeation (Unleaded Fuel) *

As the graph below shows, Altylon has a much better performance in terms of weight loss over time compared to Nylon 11 & 12.



Burst Pressure vs. Size *

The graph below shows the burst pressure comparison between Nylon 12 and Altylon.



The table below shows the typical values of Colex International Altylon tubing. Although these values are largely based upon theoretical calculations they provide a good guide to expected performance.

Property	Standard	Units	Value 1	Value 2	Value 3
			Nylon 12	Flexible Nylon 6.10	
Density	ISO 1183	Kg/cm ³	1.04	1.096	1.096
Shore Hardness (instantaneous 1 second)	ISO 868	Shore D	72	73	—
Tensile Modulus	ISO 527	MPa	—	990	550
Flexural Modulus	ISO178	MPa	370	684	470
Stress @ Yield	ISO 527	MPa	25	38	30
Elongation @ Yield	ISO 527	%	26	26	40
Elongation @ Break	ISO 527	%	270	>100	>300
Melt Temperature	—	°C	172	215	215
Charpy Impact Strength @ +23° C	ISO 179	KJ/m ²	NB	NB	NB
Charpy Notched Impact Strength @ +23° C	ISO 179	KJ/m ²	NB	19	30
Hoop Stress @ 23° C ⁴	—	MPa-N/mm ²	25	—	29

* - For use as a guide only.
¹, ² & ³ - Values taken from supplier data sheets, ² - Dry As Moulded state, ³ - Conditioned state similar to ISO 1110, ⁴ - Typical result based on 6mm x 8mm Tubing
 Pressures: Values stated are based on the short term burst pressure of nylon at 20°C. Any increase in temperature above 20°C will result in a decline in burst pressures.

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Colex International Limited

Extraflexible Altylon

At Colex International we have developed a true alternative to crude oil based engineering plastics - Altylon Extraflexible.

Altylon is manufactured from Nylon 6.10 material, 60% of which is produced from the seeds of the castor oil plant, offering the optimum blend of performance, availability and sustainability all at a competitive price compared with PA12.

Altylon delivers lower density, lower moisture absorption, better zinc chloride resistance and better glycol resistance than PA6 and PA66 and better thermal resistance and higher tensile strength at break than PA11 and PA12 and designed for demanding applications.

Altylon answers the increasing demand for renewably sourced polymers, with high technical performance that can be used for critical polyamide applications.

Applications

Pneumatic controls, instrumentation systems, fuel and oil lines, industrial robotics, compressed air, paint spray and solvent lines. Extraflexible Altylon can be preformed and cut to size, to suit the requirements of many applications.

Chemical Resistance

Altylon is resistant to most solvents, alkalis, oils, greases, petroleum products, fungi, moulds and dilute acids (mineral and organic).

Construction

Extraflexible Altylon is manufactured from heat stabilised materials, 60% of which are derived from renewable resources.

Temperatures *

-30°C to +70°C . Occasional use up to 120°C . Brittle point: -70°C.



Part Number	OD (mm)	ID (mm)	Burst Pressure *		Kgs/30m	Bend Radius *	OD Tolerances (mm)	Lengths Available Ex Stock	Colours Available Ex Stock
			psi	bar					
ALTX4/25	4	2.5	1300	90	0.240	10	+0.01/-0.09	30m	Natural, yellow, green, red, blue & black
ALTX5/3	5	3	1450	100	0.393	11	+0.03/-0.10	30m	Natural
ALTX6/4	6	4	1150	79	0.492	16	+0.02/-0.11	30m	Natural, yellow, green, red, blue & black
ALTX8/55	8	5.5	1150	79	0.828	23	+0.03/-0.10	30m	Natural
ALTX8/6	8	6	830	57	0.687	29	+0.03/-0.10	30m	Natural, yellow, green, red, blue & black
ALTX10/7	10	7	1025	71	1.251	30	+0.03/-0.09	30m	Natural
ALTX10/8	10	8	645	44	0.885	45	+0.03/-0.09	30m	Natural, yellow, green, red, blue & black
ALTX12/9	12	9	830	57	1.545	43	+0.01/-0.11	30m	Natural, yellow, green, red, blue & black
ALTX12/10	12	10	530	36	1.080	65	+0.01/-0.11	30m	Natural

* For use as a guide only

Pressures: Values stated are based on the short term burst pressure of nylon at 20°C . Any increase in temperature above 20°C will result in a decline in burst pressures.

IMPORTANT NOTE: Whilst every effort is made to ensure that the above information is accurate and correct, the conditions under which Colex products are used are beyond our control and therefore recommendations are made without warranty or guarantee. Colex reserve the right to change specifications without prior notice.

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Colex International Limited

Recoil Airline Coils

Applications

Airline coils are suitable for applications including hand tools, pneumatic control systems, pneumatic conveying systems and industrial robots.

Chemical Resistance

Nylon is resistant to most solvents, alkalis, oils greases, petroleum products, fungi, moulds and dilute acids (mineral and organic).

Construction

Colex recoil airline coils are manufactured from seamless nylon (PA) which is then pre-coiled. Each airline is supplied with factory fitted 360° swive male couplings, complete with spring guards.

Temperatures *

-35°C to +70°C . Occasional use up to 120°C .
Brittle point: -70°C .



Highly flexible

Easily installed

Lightweight

Spring guards

Part Number	OD Tube (mm)	ID Tube (mm)	ID Coil (mm)	Burst Pressure *		Working Length (m)	Kgs/each	End Fitting (ins)	Colours Available Ex Stock
				psi	bar				
AC86/25	8	6	60	950	65	2.5	0.194	1/4 BSP	Red & blue
AC86/50	8	6	60	950	65	5	0.281	1/4 BSP	Red & blue
AC86/100	8	6	60	950	65	10	0.453	1/4 BSP	Red & blue
AC108/25	10	8	75	800	55	2.5	0.231	1/4 BSP	Red & blue
AC108/50	10	8	75	800	55	5	0.340	1/4 BSP	Red & blue
AC108/100	10	8	75	800	55	10	0.557	1/4 BSP	Red & blue
AC1210/25	12	10	100	550	38	2.5	0.287	3/8 BSP	Red & blue
AC1210/50	12	10	100	550	38	5	0.418	3/8 BSP	Red & blue
AC1210/100	12	10	100	550	38	10	1.099	3/8 BSP	Red & blue

* For use as a guide only

Air coils are supplied individually in bags.

Pressures: Values stated are based on the short term burst pressure of nylon at 20°C . Any increase in temperature above 20°C will result in a decline in burst pressures.

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Colex International Limited

Pneumatic Polyurethane Tubing

Applications

Industrial robotics, pneumatic valves, fuel and lubrication lines, control instrumentation, pneumatic lines, chemical transfer tubing, metering pumps, conveyance of gases, some liquids, dry powders and granules.

Chemical Resistance

Pneumatic polyurethane tube is resistant to most fuels, oils and greases and many other solvents, chemicals and gases.

Construction

Colex pneumatic polyurethane tube is manufactured from 100% ester based polyurethane.

Temperatures *

-50°C to +80°C . Occasional use up to 100°C . Brittle point -70°C

Note: Ester based polyurethane is prone to hydrolysis and microbiological attack; therefore application and environment should be taken into account when recommending this tubing.

Choice of colours

Lightweight and flexible

No plasticizers



Part Number	OD (mm)	ID (mm)	Burst Pressure *		Kgs/30m	Bend Radius (mm) *	OD Tolerances (mm)	Lengths Available Ex Stock	Colours Available Ex Stock
			psi	bar					
PPU4/25	4	2.5	925	64	0.288	13	+0.10/-0.10	30m	White, yellow, green, red, blue & black
PPU5/3	5	3	1000	69	0.462	15	+0.10/-0.10	30m	White, yellow, green, red, blue & black
PPU6/4	6	4	800	55	0.555	22	+0.13/-0.13	30m	White, yellow, green, red, blue & black
PPU8/55	8	5.5	741	51	0.980	31	+0.13/-0.13	30m	White, yellow, green, red, blue & black
PPU8/6	8	6	573	39	0.810	38	+0.13/-0.13	30m	White, yellow, green, red, blue & black
PPU10/7	10	7	706	49	1.470	40	+0.13/-0.13	30m	White, yellow, green, red, blue & black
PPU10/8	10	8	444	31	1.031	60	+0.13/-0.13	30m	White, yellow, green, red, blue & black
PPU12/8	12	8	800	55	2.310	43	+0.15/-0.15	30m	White, yellow, green, red, blue & black

Colex PPU is printed with the Colex part number, size, works order number and a metre mark for convenience when cutting coils.

Colex can provide a printing service to suit your own requirements, subject to minimum order quantities.

SPECIAL MANUFACTURE

We can also offer a pneumatic polyurethane tube with a **flame retardant cover**, PPU in a range of **imperial sizes** and a variety of other made to order PPU products, subject to minimum order quantities

* For use as a guide only

All 30m coils of PPU are supplied boxed.

Pressures: Values stated are based on the short term burst pressure of pneumatic polyurethane tube at 20°C . Any increase in temperature above 20°C will result in a decline in burst pressures. Values stated are the pressure at which the tube shows signs of permanent distortion rather than bursting.

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Colex International Limited

Fluoropolymer Tubing

Applications

Transport of harsh chemicals, transport of nutrients, painting and printing equipment, abrasion protection, welding electrode guide tubing, electrical insulation, analytical instruments, environmental monitoring equipment, heat exchangers, component covering.

Chemical Resistance

Fluoropolymer tubing is almost universally inert to industrial chemicals and solvents and can handle virtually any corrosive material in use today. There is also low permeability of the tub contents.

Temperatures *

PTFE -200°C to +260°C / FEP -200°C to +200°C



Suitable for food use

Non-hardening

Non-stick

Durable

Part Number	OD (mm)	ID (mm)	Burst Pressure*		Kgs/25m	Bend Radius* (mm)	ID Tolerances (mm)	Lengths Available Ex Stock	Colours Available Ex Stock
			psi	bar					
PTFE Tubing									
PTFE4/25	4	2.5	1015	70	0.425	25	+0.15/-0.15	25m	Natural
PTFE6/4	6	4	870	60	0.848	40	+0.15/-0.15	25m	Natural
PTFE8/6	8	6	580	40	1.188	65	+0.20/-0.20	25m	Natural
PTFE10/8	10	8	435	30	1.527	100	+0.20/-0.20	25m	Natural
PTFE12/10	12	10	290	20	1.866	145	+0.30/-0.30	25m	Natural
FEP Tubing									
FEP4/25	4	2.5	1015	70	0.425	25	+0.10/-0.10	25m & 5m	Clear
FEP6/4	6	4	870	60	0.85	40	+0.10/-0.10	5m	Clear
FEP8/6	8	6	580	40	1.188	65	+0.15/-0.15	25m	Clear
FEP10/8	10	8	435	30	1.527	100	+0.15/-0.15	25m & 5m	Clear
FEP12/10	12	10	290	20	1.866	145	+0.20/-0.20	5m	Clear

* For use as a guide only

Pressures: Values stated are based on the short term burst pressure of PTFE OR FEP at 20°C. Any increase in temperature above 20°C will result in a decline in burst pressures.

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Colex International Limited

Polyethylene Tubing

Applications

Chemical lines, food and beverage lines, paint spray and solvent lines, low pressure pneumatic lines, instrumentation and laboratory uses.

Chemical Resistance

Colex PE tubing has an excellent resistance to a range of chemicals ensuring its suitability for the conveyance of many substances. It is resistant to most solvents, alkalis, oils, greases, petroleum products, fungi, moulds and dilute acids (mineral and organic).

Construction

Colex PE tube is manufactured from 100% polyethylene material.

Temperatures *

-35°C to +55°C . Brittle point: -70°C



Suitable for food use

Flexible

Lightweight

Chemically inert

Part Number	OD (mm)	ID (mm)	Burst Pressure*		Kgs/30m	Bend Radius (mm)	OD Tolerances (mm)	Lengths Available Ex Stock	Colours Available Ex Stock
			psi	bar					
PE4/2.5	4	2.5	1300	90	0.221	27	+0.10/-0.10	30m	Natural, red, blue & black
PE5/3	5	3	1700	117	0.360	30	+0.11/-0.10	30m	Natural, blue & black
PE6/4	6	4	900	62	0.450	41	+0.11/-0.10	30m	Natural, red, blue & black
PE8/6	8	6	600	41	0.630	59	+0.10/-0.10	30m	Natural, red, blue & black
PE10/8	10	8	500	34	0.795	75	+0.10/-0.10	30m	Natural, blue & black
PE12/10	12	10	450	31	0.980	130	+0.10/-0.10	30m	Natural, blue & black

The raw materials used in the manufacture of natural PE tube have the following regulatory approval for use in food contact applications; 90/128/EEC US/FDA 21CFR, Section177.1520,PAR.(C) 2.2

Colex polyethylene tube is printed with the relevant part number, size and the Colex works order number. A metre mark is also printed for convenience when cutting coils.

* For use as a guide only

Pressures: Values stated are based on the short term burst pressure of polyethylene at 20°C . Any increase in temperature above 20°C will result in a decline in burst pressures.

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