

TUBING POLYURETHANE METRIC TUBE, ESTER BASED



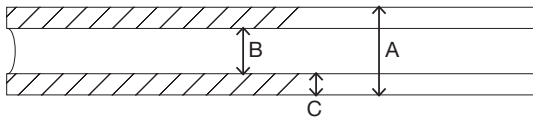
Ordering Code

P	U	03	/	020	—	B	—	100
Model	O.D.	I.D.	Colour	Length				
PU Ester Based	03 : 3mm 04 : 4mm 05 : 5mm 06 : 6mm 08 : 8mm 10 : 10mm 12 : 12mm 16 : 16mm	020 : 2mm 025 : 2.5mm 030 : 3mm 040 : 4mm 055 : 5.5mm 065 : 6.5mm 080 : 8mm 110 : 11mm	Blank : Transparent N : Black R : Red Y : Yellow B : Blue G : Green	Blank : 25 metre 30 : 30 metre 100 : 100 metre				



Attention

Ester based tube is not suitable for use with water or in high humidity environments.



A = O.D. mm
B = I.D. mm
C = Wall Thickness mm

Product Features

- 1 Extremely flexible and offers excellent bend capabilities making it ideal for pneumatic control or robotic systems.
- 2 Resistant to chemicals, fuel and oil. (Chemical Resistance Chart available on request).
- 3 Kink and abrasion resistant.
- 4 Available in a range of colours.
- 5 All 25m coils except 16mm Polyurethane Ester Tubing are supplied in convenient wall-mountable storage and supply box. Neatly stores tubing, allowing sections to be cut when required.

Technical Data

A	B	C	Working Pressure @ 23°C (psi)	Bend Radius (mm)	Weight per 100M (kg)
3	1.8	0.6	150	10	0.56
4	2.5	0.75	190	10	0.99
5	3	1	160	15	1.54
6	4	1	155	20	1.93
8	5.5	1.25	150	30	3.26
8	6	1	120	35	2.7
10	6.5	1.75	125	35	5.58
12	8	2	120	40	7.72
16	11	2.5	100	50	13
10	8	1.5	120	40	5.11

Tolerances

3mm – 8mm OD \pm 0.1mm
10mm – 12mm OD \pm 0.15mm
16mm – 18mm OD \pm 0.2mm
 \pm 0.5% on weight

Working Pressure

3 to 1 safety factor

Temperature

-20°C to +60°C

TUBING

POLYURETHANE METRIC TUBE, ESTER BASED

Dimensions

Model	OD (mm)	ID (mm)	Colour	Length Metre
PU03/020B	3	1.8	Blue	25
PU04/025	4	2.5	Transparent	25
PU04/025B	4	2.5	Blue	25
PU04/025G	4	2.5	Green	25
PU04/025N	4	2.5	Black	25
PU04/025R	4	2.5	Red	25
PU04/025Y	4	2.5	Yellow	25
PU05/030B	5	3	Blue	25
PU05/030N	5	3	Black	25
PU06/040	6	4	Transparent	25
PU06/040B	6	4	Blue	25
PU06/040G	6	4	Green	25
PU06/040N	6	4	Black	25
PU06/040R	6	4	Red	25
PU06/040Y	6	4	Yellow	25
PU08/055	8	5.5	Transparent	25
PU08/055B	8	5.5	Blue	25
PU08/055G	8	5.5	Green	25
PU08/055N	8	5.5	Black	25
PU08/055R	8	5.5	Red	25
PU08/055Y	8	5.5	Yellow	25
PU08/060	8	6	Transparent	25
PU08/060B	8	6	Blue	25
PU08/060G	8	6	Green	25
PU08/060N	8	6	Black	25
PU08/060R	8	6	Red	25
PU08/060Y	8	6	Yellow	25
PU10/065	10	6.5	Transparent	25
PU10/065B	10	6.5	Blue	25
PU10/065G	10	6.5	Green	25
PU10/065N	10	6.5	Black	25
PU10/065R	10	6.5	Red	25
PU10/065Y	10	6.5	Yellow	25
PU10/080B	10	8	Black	25
PU10/080	10	8	Blue	25
PU10/080	10	8	Transparent	25
PU12/080	12	8	Transparent	25
PU12/080B	12	8	Blue	25
PU12/080G	12	8	Green	25
PU12/080N	12	8	Black	25
PU12/080R	12	8	Red	25
PU12/080Y	12	8	Yellow	25
PU16/110	16	11	Transparent	25

Model	OD (mm)	ID (mm)	Colour	Length Metre
PU04/025-30	4	2.5	Transparent	30
PU04/025B-30	4	2.5	Blue	30
PU06/040-30	6	4	Transparent	30
PU06/040B-30	6	4	Blue	30
PU08/055-30	8	5.5	Transparent	30
PU08/055B-30	8	5.5	Blue	30
PU08/060-30	8	6	Transparent	30
PU08/060B-30	8	6	Blue	30
PU10/065-30	10	6.5	Transparent	30
PU10/065B-30	10	6.5	Blue	30
PU10/080-30	10	8	Transparent	30
PU10/080B-30	10	8	Blue	30
PU12/080-30	12	8	Transparent	30
PU12/080B-30	12	8	Blue	30

Model	OD (mm)	ID (mm)	Colour	Length Metre
PU04/025-100	4	2.5	Transparent	100
PU04/025B-100	4	2.5	Blue	100
PU04/025G-100	4	2.5	Green	100
PU04/025N-100	4	2.5	Black	100
PU04/025R-100	4	2.5	Red	100
PU04/025Y-100	4	2.5	Yellow	100
PU06/040-100	6	4	Transparent	100
PU06/040B-100	6	4	Blue	100
PU06/040G-100	6	4	Green	100
PU06/040N-100	6	4	Black	100
PU06/040R-100	6	4	Red	100
PU06/040Y-100	6	4	Yellow	100
PU08/055-100	8	5.5	Transparent	100
PU08/055B-100	8	5.5	Blue	100
PU08/055G-100	8	5.5	Green	100
PU08/055N-100	8	5.5	Black	100
PU08/055R-100	8	5.5	Red	100
PU08/055Y-100	8	5.5	Yellow	100
PU08/060-100	8	6	Transparent	100
PU08/060B-100	8	6	Blue	100
PU08/060G-100	8	6	Green	100
PU08/060N-100	8	6	Black	100
PU08/060R-100	8	6	Red	100
PU08/060Y-100	8	6	Yellow	100
PU10/065-100	10	6.5	Transparent	100
PU10/065B-100	10	6.5	Blue	100
PU10/065G-100	10	6.5	Green	100
PU10/065N-100	10	6.5	Black	100
PU10/065R-100	10	6.5	Red	100
PU10/065Y-100	10	6.5	Yellow	100
PU10/080-100	10	8	Transparent	100
PU10/080B-100	10	8	Blue	100
PU10/080N-100	10	8	Black	100
PU12/080-100	12	8	Transparent	100
PU12/080B-100	12	8	Blue	100
PU12/080G-100	12	8	Green	100
PU12/080N-100	12	8	Black	100
PU12/080R-100	12	8	Red	100

CHEMICAL RESISTANCE CHART

N	PUR	PE	PVC		N	PUR	PE	PVC		N	PUR	PE	PVC		
-	-	-	-	Acetic Acid, Glacial	-	4	1	4	Ethylene Chloride	3	2	-	4	Picric Acid	
4	4	1	4	Acetic acid, 30%	-	4	1	4	Ethylene Glycol	4	4	-	-	Potassium Acetate (aq)	
4	4	2	4	Acetone	-	4	4	2	Ethylene Oxide	4	1	1	1	Potassium Chloride (aq)	
4	4	1	1	Acetylene	-	4	4	1	Ethylene Trichloride	4	1	1	1	Potassium Cyanide (aq)	
4	-	-	-	Akazene	-	4	4	-	Ferric Chloride (aq)	3	4	1	1	Potassium Hydroxide (aq)	
3	3	2	1	Aluminum Chloride (aq)	-	3	2	1	Ferric Nitrate (aq)	1	1	1	1	Producer Gas	
-	-	-	-	Aluminum Nitrate (aq)	-	3	-	-	Ferric Sulfate (aq)	1	3	3	1	Propane	
3	4	2	1	Ammonia Anhydrous	-	4	2	1	Fluorine (Liqued)	4	4	-	-	Propyl Alcohol	
4	4	-	-	Ammonia Gas (cold)	-	3	-	-	Formaldehyde (RT)	4	-	-	-	Propylene	
4	4	-	-	Ammonia Gas (hot)	-	4	-	-	Formic Acid	4	-	-	-	Propylene Oxide	
1	1	1	1	Ammonium Chloride (aq)	-	1	1	1	Freon 11	4	4	-	-	Pydraul, 10E, 29 ELT	
1	1	1	1	Ammonium Sulfate (aq)	-	1	1	1	Freon 12	4	-	-	-	Pydraul 30E, 50E, 65E	
-	-	-	-	Amyl Alcohol	-	4	2	1	Freon 22	4	4	-	-	Pydraul,115E	
4	4	-	-	Amyl Naphthalene	-	4	4	-	Fuel Oil	4	-	-	-	Pydraul 230E, 312C, 540C	
1	1	-	-	Animal Fats	-	1	-	-	Futural Glucose	2	2	-	-	Rapeseed Oil	
4	2	3	3	Aqua Regia	-	4	2	3	Glue	1	1	-	-	Red Oil (MIL-H-5606)	
4	3	2	1	Arsenic Acid	-	3	2	1	Glycerin	1	1	-	-	RJ-1 (MIL-F-2338 B)	
2	2	1	1	Asphalt	-	2	1	1	Glycols	1	1	-	-	RP-1 (MIL-F-25576 C)	
2	3	-	-	ASTM Fuel A	-	2	-	-	Green Sultate Liquor	1	2	1	1	Salt Water	
3	3	1	1	ASTM Fuel B	-	3	-	-	Hexane	4	4	-	-	Sewage	
3	3	1	1	ASTM Fuel C	-	3	1	1	Hydraulic Oil	2	1	-	-	Silicate Esters	
1	1	1	1	Barium Chloride (aq)	-	1	1	1	Hydrochloric Acid (cold) 37%	1	1	1	1	Silicone Oils	
2	2	1	1	Beer	-	1	2	1	Hydrochloric Acid (hot) 37%	1	1	1	1	Silver Nitrate	
4	4	1	1	Beet Sugar Liquors	-	4	1	1	Hydrofluoric Acid (Conc.)Cold	4	1	2	1	Skydrol 500	
1	3	3	3	Benzene	-	1	3	3	Hydrofluoric Acid (Conc.) Hot	-	4	-	-	Skydrol 700	
2	2	-	-	Benzine	-	2	-	-	Hydrogen Gas	1	3	3	1	Soap Solutions	
4	4	-	-	Blast Furnace Gas	-	4	-	-	Isobutyl Alcohol	1	1	1	1	Sodium Chloride (aq)	
4	4	-	-	Bleach Solutions	-	4	-	-	Isocetane	2	4	2	1	Sodium Hydroxide (aq)	
1	1	2	2	Borax	-	1	1	2	Isopropyl Acetate	4	4	1	2	Sodium Peroxide (aq)	
1	1	1	1	Boric Acid	-	1	1	1	Isopropyl Alcohl	1	1	-	-	Sodium Phosphate (aq)	
-	-	-	-	Brake Fluid	-	4	-	-	Isopropyl Ether	-	1	1	1	Sodium Sultate (aq)	
2	4	4	3	Brine	-	2	4	3	Kerosene	-	2	1	1	Soy Bean Oil	
4	2	-	-	Bromine Water	-	4	4	-	Lacquers	4	4	-	-	Steam Under 300°F	
4	2	-	-	Bunker Oil	-	4	2	-	Lacquer Solvents	4	4	-	-	Steam Over 300°F	
1	1	3	3	Butane	-	1	1	3	Lard	4	1	3	3	Stoddard Solvent	
1	1	-	-	Butter	-	1	-	-	Lavender Oil	3	-	-	4	Styrene	
3	4	1	2	Butyl Alcohol	-	3	4	1	Lead Acetate (aq)	-	4	-	-	Sucrose Solution	
4	4	1	1	Butylene	-	4	1	1	Linseed Oil	4	3	1	1	Sulfuric Acid (Dilute)	
1	1	2	1	Calcium Chloride (aq)	-	1	1	2	Liquified Petrolateum Gos	4	3	4	-	Sulfuric Acid (Conc.)	
1	1	2	1	Calcium Hydroxide (aq)	-	1	1	2	Lubricating Oils	4	3	2	1	Sulfuric Acid (20% Oleum)	
1	1	-	-	Calcium Nitrate (aq)	-	1	1	-	Lye	4	3	2	1	Sulfurous Acid	
1	1	-	-	Calcium Sulfide (aq)	-	1	1	-	Magnesium Chloride (aq)	1	2	1	-	Tannic Acid	
-	-	-	-	Cane Sugar Liquors	-	4	-	-	Magnesium Hydroxide (aq)	-	4	2	4	Tetrochloroethylene	
3	3	2	3	Carbolic Acid	-	3	2	3	Mercury	1	4	3	4	Toluene	
1	1	3	1	Carbon Dioxide	-	1	3	1	Methane	-	1	-	-	Transformer Oil	
1	1	2	1	Carbonic Acid	-	1	2	1	Methyl Acetate	-	1	-	-	Transmission Fluid Type A	
1	2	1	2	Carbon Monoxide	-	1	2	1	Methyl Acrylate	3	4	-	3	Trichloroethane	
3	4	2	2	Carbon Tetrachloride	-	3	4	2	Methyl Alcohol	3	4	3	4	Trichoroethylene	
-	-	-	-	Castor Oil	-	1	-	-	Methyl Butyl Ketone	-	1	3	-	Turbine Oil	
4	4	2	1	Chlorine (dry)	-	4	4	2	Methyl Chloride	-	1	4	3	2	Turpentine
4	4	1	1	Chlorine (wet)	-	4	4	-	Methylene Chloride	1	3	3	4	Varnish	
3	4	3	4	Chloroform	-	3	4	3	Methyl Ethyl Ketone	1	4	2	1	Vinegar	
4	4	3	4	Chlorox	-	4	4	-	Methyl Isobuti Ktone	1	4	-	-	Vinyl Chloride	
4	4	1	1	Chromic Acid	-	4	4	1	Milk	1	1	1	1	Water	
1	1	1	2	Citric Acid	-	1	1	1	Mineral Oil	1	2	3	1	Whiskey	
1	3	-	-	Coal Tar	-	1	3	-	Naphtha	-	1	-	-	White Oil	
2	2	-	-	Coconut Oil	-	2	-	-	Naphthalene	-	3	-	-	Wood Oil	
1	1	-	-	Cod Liver Oil	-	1	-	-	Natural Gas	-	3	-	-	Xylene	
4	4	-	-	Coke Oven Gas	-	4	-	-	Neatsfoot Oil	2	4	3	4	Zinc Acetate (aq)	
1	1	2	1	Copper Chloride (aq)	-	1	2	1	Nitric Acid (Conc.)	4	4	1	-	Zinc Chloride (aq)	
-	-	-	-	Copper Chloride (aq)	-	1	2	1	Nitric Acid (Dilute)	1	1	-	1		
1	1	3	2	Com Oil	-	1	3	2	Nitroethane	-	-	-	-		
1	1	2	2	Cotton Seed Oil	-	1	2	2	Nitrogen	-	-	-	-		
4	4	3	4	Creosot	-	4	4	3	N-Octane	-	-	-	-		
1	1	2	4	Cychlohexane	-	1	1	2	Oleic Acid	-	-	-	-		
4	4	-	-	Denatured Aicohol	-	1	4	-	Oleum Spirits	-	-	-	-		
-	-	-	-	Detergent Solution	-	4	1	1	Olive Oil	-	-	-	-		
3	3	1	1	Diesel Oil	-	3	3	1	Oxygen-Cold	-	-	-	-		
4	4	-	-	Dioxane	-	4	-	-	Oxygen (200-400°F)	-	-	-	-		
3	3	-	-	Dowtherm Oil	-	3	-	-	Paint Thnner, Duco	-	-	-	-		
4	4	-	-	Dry Cleaning Fluids	-	4	-	-	Perchloric Acid	-	-	-	-		
3	3	-	4	Ethane	-	3	-	4	Perchloroethylene	-	-	-	-		
-	-	-	-	Ethyl Acrylate	-	4	-	-	Petrolenm-Below 250°F	-	-	-	-		
4	4	-	-	Ethyl Alcohol	-	3	4	-	Petroleum-Above 250 F	-	-	-	-		
4	4	-	-	Ethyl Benzine	-	4	4	-	Phenol	-	-	-	-		
2	2	-	-	Ehtyl Cellulose	-	2	-	-	Phenyl Ethyl Ether	-	-	-	-		
2	2	-	-	Ethyl Chloronde	-	2	-	-	Phosphoric Acid-45%	-	-	-	-		
3	3	-	-	Ethyl Ether	-	3	-	-	Pickling Solution	-	-	-	-		

NYLON 6, 12 & POLYURETHANE ETHER BASE/PE POLYETHYLENE/PVC POLYVINYL CHLORIDE

Please Note: The above ratings are very general guidelines and designed only to be used as an initial screening tool.

Careful testing under actual conditions essential. Accuracy for these ratings is not given or implied.

Ratings: 1. Little or no impact/
2. Minor effect/ 3. Moderate effect/
4. Severe effect.

CHEMICAL COMPATIBILITY CHART

1	Recommended
2	Satisfactory
3	Not recommended

Substances	PA	PU ether	PU ester
Acetaldehyde	1	1	3
Acetone	1	3	1
Acetylene	1		
Acid, acetic		1	3
Acid, hydrochloric up to 10%	1	1	3
Acid, citric	1	1	1
Acid, chromic up to 10%	3	3	3
Acid, nitric	1	1	3
Acid, sulphuric up to 10%	1	1	1
Ammonia and gaseous	1	1	3
Ammonium chloride up to 10%	-	1	1
Benzene	1	3	3
Bromine	3	-	-
Butane	1	1	1
Butyl acetate	1	3	2
Butylic and Butyl alcohol	1	3	2
Calcium chloride	1	-	-
Carbon tetrachloride (sodium hypochlorite)	3	2	2
Chloroform	-	3	3
Copper sulphate	1	-	-
Compressed air	1	1	1
Cyclohexanone	1	-	-
Ethanol	-	2	2
Ethyl acetate	1	2	2
Ethyl alcohol	1	-	-
Ethylen oxide	1	-	-
Freon 12-22	1	2	2
Formalin (formaldehyde)	2	1	2
Glucose	1	1	2
Glycol (without H2O)	-	1	1
Glycol (methyl)	-	3	3
Hexachloride	-	2	1
Hydrogen	1	1	2
Hydrogen peroxide (perydrol)	2	2	2
Kerosene	1	1	2
Magnesium chloride (up to 30%)	-	1	2
Methane	1	1	1
Methanol	-	1	1
Methyl acetate	1	2	2
Methyl alcohol (pure)	1	1	1
Methyl bromide	1	-	-

Substances	PA	PU ether	PU ester
Methyl chloride	1	-	-
Methyl ethyl ketone	1	3	3
Methyl isobutyl ketone	1	3	3
Oils (cutting)	1	1	1
Oils (ASTM class A)	1	2	1
Oils (ASTM class B)	1	2	1
Oils (ASTM class C)	1	2	1
Oils (ASTM class 1)	1	1	1
Oils (ASTM class 2)	1	1	1
Oils (ASTM class 3)	1	1	1
Oils, engine	1	2	2
Oils, paraffin	1	1	2
Oxygen	2	1	1
Ozone	3	2	2
Perchlorate ethylene	2	3	3
Phenols	3	3	3
Phosphoric acid 50%	3	3	3
Potash	1	2	3
Potassium chloride up to 40%	1	1	2
Potassium manganate 5%	-	3	2
Potassium sulphate	1	-	-
Propane	1	1	1
Soda 50%	1	1	3
Sodium carbonate	1	-	-
Sodium chloride	2	1	2
Sodium hydroxide (caustic soda)	1	1	3
Sodium hypochlorite (bleach)	2	-	-
Sulphurous	1	3	2
Petrol with up to 40% aromatic	1	3	3
Petrol with more than 40% aromatic	1	2	2
Tetrachloroethylene	1	2	2
Toluene	1	-	-
Tributylphosphate	1	3	3
Trichlorethylene	3	1	3
Water (drinking, food)	1	1	3
Water (Industrial)	1	1	3
Water (distilled)	2	1	3
Water (sea)	1	2	2
Xylem	1	1	2
Zinc chloride	1	1	1