



# 10

## Pneumatic Tubing

**Pneumatic tubings for flexible solutions in automatisisation and mechanical engineering**



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## Polyethylene pneumatic tubing-low density



### Applications

- Pneumatic control lines
- Machine manufacturing

### Properties

- lightweight
- physiologically safe and tasteless (complies with FDA regulation 21 CFR 177.1520(c) 2.2 and EU, No 10/2011)
- low permeability for water, water vapor and gases
- resistant to various chemicals (see attached table of chemical resistance)
- sterilizable using ethylene oxide and gamma rays
- good dielectric characteristics
- low price
- easily fitted
- available in a range of colours

### Temperature Range

- -30°C to +70°C

### Standard colours

- nature
- black
- blue



Stock lengths and technical data / [www.masterflex.de/en](http://www.masterflex.de/en)

ID* mm	Wall thickness mm	OD* mm	Tolerance ID & OD mm	Weight/m g	Max. op. pressure resistance at 23°C bar	Min. bending radius mm
2	1	4	± 0,10	8,7	24	20
3	1	5	± 0,10	11,6	18	25
4	1	6	± 0,10	14,5	14	30
5	1,5	8	± 0,10	28,3	16	40
6	1	8	± 0,10	20,3	10	40
6	2	10	± 0,10	46,4	18	50
7	1,5	10	± 0,10	37,0	12	50
8	1	10	± 0,10	26,1	8	40
9	1,5	12	± 0,10	45,7	10	60
10	1	12	± 0,10	31,9	6	60
10	2	14	± 0,15	69,7	12	80
12	2	16	± 0,15	81,3	10	90
14	2	18	± 0,15	92,9	9	120

All data refers to a medium and ambient temperature of +23 °C  
 \* Refers to the inner hose lining  
 Subject to technical changes and colour deviations.

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#### Applications

- Pneumatic control lines
- Machine manufacturing

#### Standard colours

- nature
- black
- blue

#### Properties

- lightweight
- high flexibility at low temperatures
- UV-resistant
- high elasticity
- good damping behaviour
- excellent abrasion resistance
- excellent resistance against tear propagation
- kink resistant
- oil and grease resistant
- ideally suited for push-in-connectors
- easily fitted
- available in a range of colours
- small bending radius
- unplasticized, no embrittlement

#### Temperature Range

- -40°C to +85°C

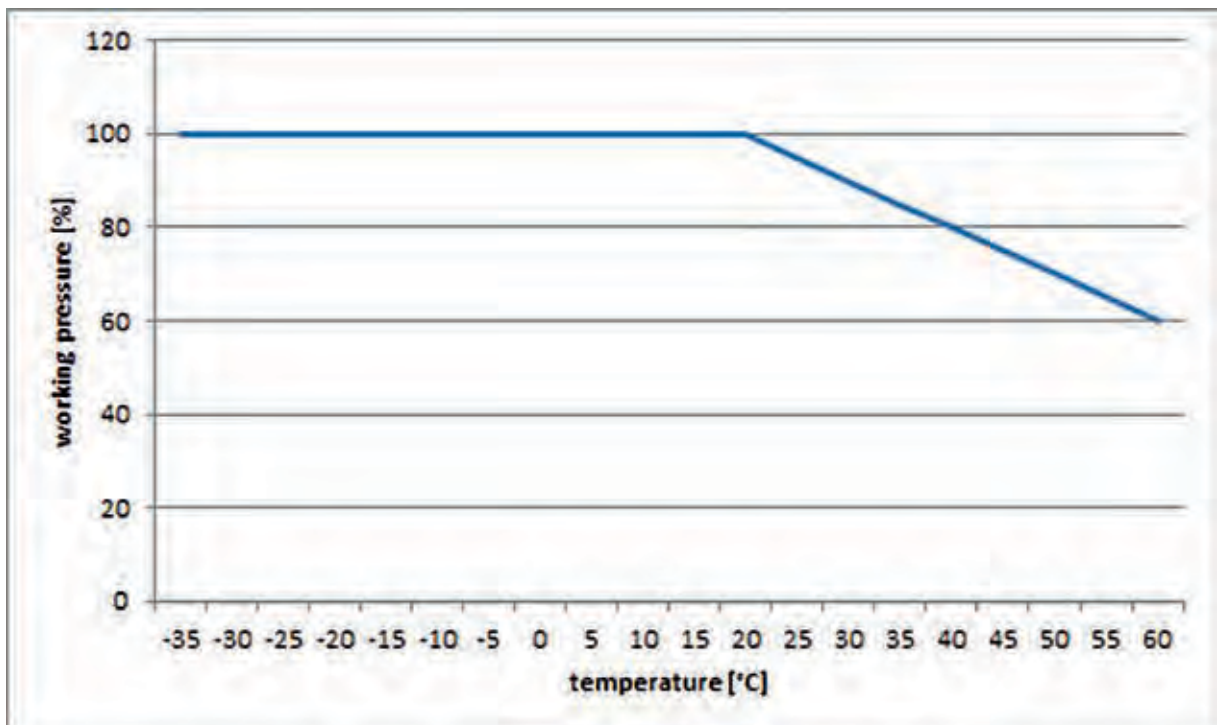


ID* mm	Wall thickness mm	OD* mm	Tolerance ID & OD mm	Weight/m g	Max. op. pressure resistance at 23°C bar	Min. bending radius mm
2	1	4	± 0,10	11	20	20
2,7	0,65	4	± 0,10	9	11	20
3	1	5	± 0,10	15	15	25
4	1	6	± 0,10	19	12	30
5	1,5	8	± 0,10	37	13	40
5,5	1,25	8	± 0,10	32	11	40
5,7	1,15	8	± 0,10	30	10	40
6	1	8	± 0,10	27	8	40
6,5	1,75	10	± 0,10	55	12	50
7	1,5	10	± 0,10	49	10	50
8	1	10	± 0,10	34	6	50
8	2	12	± 0,15	77	12	60
9	1,5	12	± 0,15	60	8	60
11	2,5	16	± 0,20	129	11	80

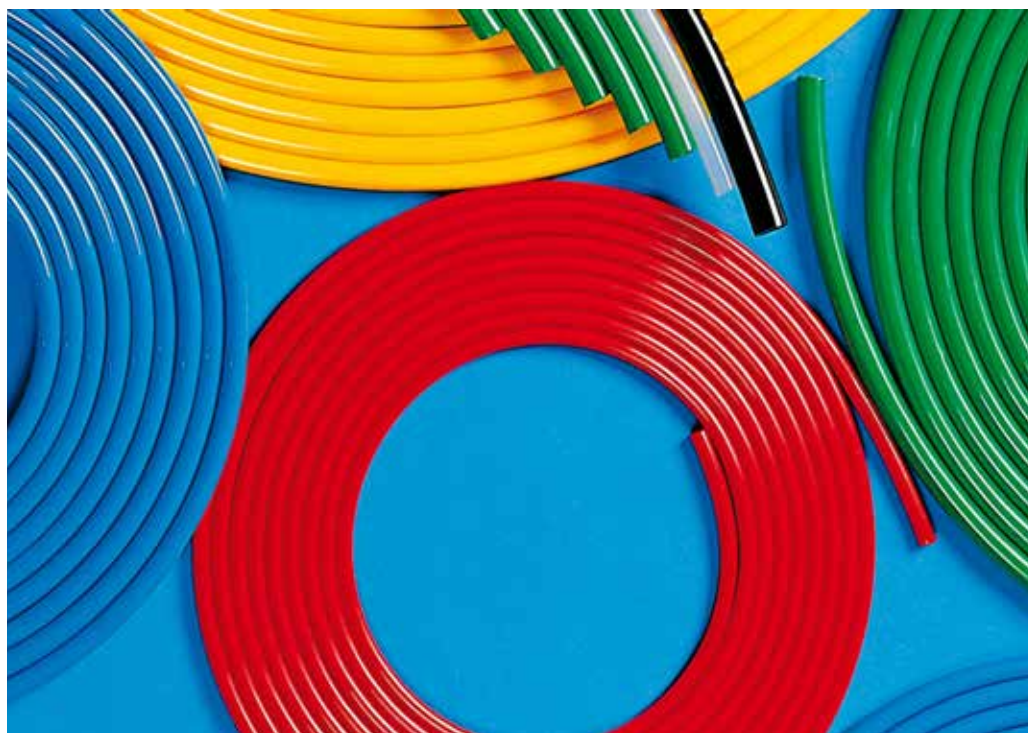
All data refers to a medium and ambient temperature of +23 °C  
 \* Refers to the inner hose lining  
 Subject to technical changes and colour deviations.

#### Diagramm of pressure for PUR 98 Shore A

Degree of utilisation of the permissible pressure resistance (%) in dependence on temperature (°C)



## Nylon 11/12 soft pneumatic tubing



### Applications

- Pneumatic control lines
- Automotive
- Machine manufacturing

### Standard colours

- nature
- black
- blue

### Properties

- lightweight
- material fully complies with DIN 73378 and DIN 74324
- good temperature resistance
- highly resistant to shock and impact
- excellent compressive strength
- resistance to oil, grease, fuels, solvent and hydraulic fuels
- excellent resistance to UV-rays
- highly resistant to stress cracking
- excellent abrasion resistance
- ideally suited for push-in-connectors
- water insentive
- easily fitted
- available in a range of colours
- calibrated

### Temperaure Range

- - 40 °C to + 90 °C



ID* mm	Wall thickness mm	OD* mm	Tolerance ID & OD mm	Weight/m g	Max. op. pressure re- sistance at 23°C bar	Min. bending radius mm
2	1	4	± 0,05	9,7	44	20
2,9	0,55	4	± 0,05	6,1	21	20
3	1	5	± 0,05	12,9	33	25
4	1	6	± 0,10	16,1	26	30
5	1,5	8	± 0,10	31,4	30	40
5,5	1,25	8	± 0,10	27,1	24	40
6	1	8	± 0,10	22,5	19	40
6	2	10	± 0,10	51,5	33	50
7	1,5	10	± 0,10	41,0	23	50
7,5	1,25	10	± 0,10	35,2	19	50
8	1	10	± 0,10	29,0	14	50
8	2	12	± 0,10	64,3	26	60
9	1,5	12	± 0,10	50,7	19	60
10	1	12	± 0,10	35,4	12	60
10	2	14	± 0,10	77,2	22	70
11	1,5	14	± 0,10	60,3	196	70
12	1,5	15	± 0,10	65,1	14	90
12	2	16	± 0,15	90,1	19	90
14	2	18	± 0,15	102,9	16	120
16	2	20	± 0,15	115,8	14	120
18	2	22	± 0,25	128,7	13	150

All data refers to a medium and ambient temperature of +23 °C  
 \* Refers to the inner hose lining  
 Subject to technical changes and colour deviations.

### Diagramm of pressure for PA 11/12W

Degree of utilisation of the permissible pressure resistance (%) in dependence on temperature (°C)

