

Flexible. Specific. Innovative.







We bestow every hose with its own very special character, because no matter how diverse the demands of modern technology are, we have the perfect solution – in form of a high-performance hose.

Novoplast Schlauchtechnik GmbH is the leading specialist for extruded thermoplastic hoses and profiles. Since our foundation in 1990 we have been resolutely investing in the newest production technologies, and we have also set up clean-rooms. Today we provide our customers with a comprehensive assortment of technical and medical hoses with diameters ranging from 0,5 mm to 50 mm.

Through our involvement with the Masterflex Group we combine the flexibility of a medium-sized operation with the strength of an international group, to the express advantage of our customers.

Customer orientation and customer satisfaction are not slogans for us, but rather the goals of our daily work. Our aims are achieved thanks to an innovative development department and to a technical sales department that accepts its demands and transforms them into products to fit the needs. These demands have led to the development of a series of innovations for the widest variety of applications and branches, e.g. mechanical engineering, the automobile supply industry, electronics and medical technology.

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Quality, Precision, Delivery Reliability

and competent advice is the cornerstones for the ongoing expansion of our market position.

Starting with the choice of material and cost effectiveness down to matters of design, our experts accompany you in a competent and comprehensive fashion, regardless of whether you require a series product from this catalogue or an individual custom item.

To protect our own everyday high quality requirements, we use special test and measuring equipment as well as laboratory equipment. As a result, we have the latest technology to safeguard the product quality at our disposal, right from the time of your initial inquiry until your product is shipped. Along with this, our lofty claim to quality is guaranteed through the resolute realization of quality control systems in accordance with ISO 9001 and ISO 13485.



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Pneumatic tubing



... provide flexible solutions even under high pressure



Pneumatic tubing made from PUR

- 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
- · easily fitted
- · minimal pressure loss
- available in a range of colours
- small bending radius
- unplasticized so no embrittlement
- individual printing is possible

Temperature range

-40 °C to +85 °C

Standard colours

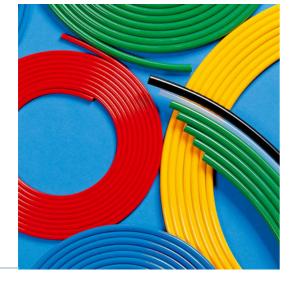
- □ natural
- black
- blue

Standard sizes

Outside-Ø: 4,0 to 16,0 mm

Custom sizes available on request

PUR



Pneumatic tubing made from PA12 w

- lightweight
- excellent temperature resistance
- highly resistant to shock and impact
- excellent compressive strength
- high chemical resistance to oil, grease, fuels, solvent and hydraulic fluids
- excellent resistance to UV-rays
- highly resistant to stress cracking
- excellent abrasion resistance characteristics
- · water insensitive
- easily fitted
- minimal pressure loss
- available in a range of colours
- calibrated

Temperature range

-40 °C to +90 °C

Standard colours

- □ natural
- black
- blue

Standard sizes

Outside-Ø: 4,0 to 22,0 mm

Custom sizes available on request

PA







Pneumatic tubing made from PA-E

- high flexible (in comparison with PA 11/12 soft)
- lightweight
- excellent temperature resistance
- highly resistant to shock and impact
- excellent resistance to UV-rays
- · water insensitive
- unplasticized so no embrittlement

- good chemical resistance characteristics
- · lasting flexibility
- calibrated
- · lasting flexibility
- calibrated
- easily fitted
- available in a range of colours
- available in a range of hardness grades

Temperature range

-40 °C to +80 °C

Standard colours

- □ natural
- black
- blue

Standard sizes

Outside-Ø:

4,0 to 10,0 mm

Custom sizes available on request

PA-E



Pneumatic tubing made from LD-PE

- lightweight
- physiologically safe and tasteless (complies with FDA regulation 21 CFR 177.120 c 2.1)
- low permeability for water, water vapor and gases
- resistant to various chemicals (see table of chemical resistance)
- sterilizable using ethylene oxide and gamma rays
- good dielectric characteristics
- · easily fitted
- available in a range of colours
- low price

Temperature range

-30 °C to +70 °C

Standard colours

□ natural

- black
- blue

Standard sizes

Outside-Ø: 4,0 to 18,0 mm

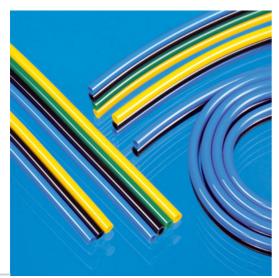
Custom sizes available on request

PE

Twin/Triple pneumatic tubing



... stay in line, you will not loose track



PUR Twin/Triple pneumatic tubing

- lightweight
- high flexibility at low temperatures
- good elasticity
- · high buffering capacity
- excellent abrasion resistance
- kink resistant
- unplasticized so no embrittlement

- easily fitting
- · no bundling necessarily
- each tube has a different colour for easy identification
- · easy separation
- air/electricity combination possible

Temperature range

-40 °C to +85 °C

Standard colour combination

- ■■ blue/black
- □ blue/black/ natural

PUR

PA Twin/Triple pneumatic tubing

- lightweight
- excellent temperature resistance
- highly resistant to shock and impact
- excellent compressive strength
- high chemical resistance to oil, grease, fuels, solvent and hydraulic fluids
- highly resistant to stress cracking
- excellent abrasion resistance characteristics
- · easily fitting
- no bundling necessarily
- each tube has a different colour for easy identification
- air/electricity combination possible

Temperature range

-40 °C to +85 °C

Standard colour combination

- ■■ blue/black
- ■■□ blue/black/ natural

Please note

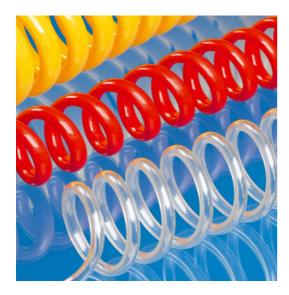
Since the separation of multiple PA hoses/tubing free of burs is no longer possible, it is advisable not to use "pushin" connectors.



Coil tubing



... this pull back force protects you from getting twisted



PUR coil tubing

- excellent springback characteristics
- · high flexibility
- excellent abrasion resistance
- · kink resistant
- · will not tear off at fittings
- no scratch painted surface by a elastomer character
- high operating lengthtube length ratio (in comparison with nylon coil tubing)
- · kink resistant
- · long service life
- small bending radius for easy handling

Temperature range

-40 °C to +85 °C

Standard colours

blue

PUR



PA coil tubing

- excellent springback characteristics
- highly resistant against oil and grease
- lightweight
- · excellent compressive strength
- space-saving
- low price as no rollers required
- · easy handling
- choice of radial (tangetial) or axial (straight) ends

Temperature range

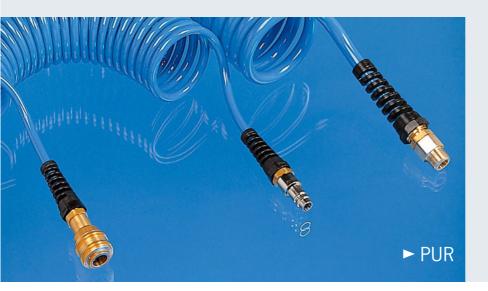
-40 °C to +90 °C

Standard colours

blue

PA

Fittings for pneumatic coil tubing



... a light connection with a secure hold



Fittings for PUR coil tubing

- clear brass or nickelplated steel
- quick-coupling DN 7.2
- Polyamide plastic spring prevents kinks and scratches
- rotating fitting with double O-ring seal
- max. pressure resistance 15 bar (test pressure 60 bar)
- · all fittings reusable
- maximum passage for optimal flow
- perfectly matched to the PUR-dimensions and degree of hardness

Temperature range

-40 °C to +85 °C

Applications

- for connecting to PUR coil tubes
- for fitting to compressed air lines and tools



Fittings for PA coil tubing

- nickel-plated brass
- · quick-coupling DN 7.2
- Anti-kink metal spring
- max. working pressure30 bar
- · all fittings reusable
- adapted for optimal flow quantities
- perfectly matched to the PUR-dimensions and degree of hardness

Temperature range

-40 °C to +90 °C

Applications

- for connecting to PA coil tubes
- for fitting to compressed air lines and tools





... lasting flexibility – even in mix ups





Paint and Lacquer hoses PUR

- for powder conveying
- unplasticized
- no hardening or embrittlement
- · kink resistant
- flexible
- high elasticity
- excellent abrasion resistance
- long lifespan
- available in a range of colours
- available in a range of hardness grades
- available in antistatic finish
- individual printing possible

Temperature range

-40 °C to +85 °C

Standard colours

□ natural

PUR



Paint and Lacquer hoses PA

- high chemical resistance to oil, grease, fuels, solvents and hydraulic fluids
- lightweight
- excellent temperature resistance
- highly resistant to shock and impact
- excellent compressive strength
- · excellent UV-resistance
- highly resistant to stress cracking
- excellent abrasion resistance characteristics
- water insensitive
- easily fitted

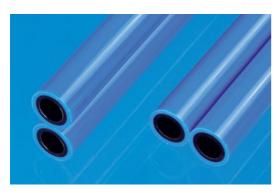
Temperature range

-40 °C to +90 °C

Standard colours

- □ natural
- black
- blue

PA



Paint and Lacquer hoses PA/PUR

- multi-layer hose structure
- suitable for use as a lowpressure paint sprayer hose
- optimum profile of properties due to material combination
- good resistance to

- solvents due to PA core
- good abrasion resistance due to PUR outer coating
- good resistance to pressure due to PA core
- optimum flexibility due to PUR outer coating and flexible special PA material in the core

Temperature range

-40 °C to +85 °C

Standard colours

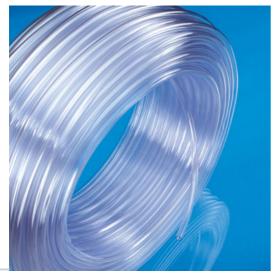
■ blue/black

PA/PUR

Hydrolysis- and microbe resistant tubing



... provides fierce resistance – even to the smallest micro-organisms



Tubing made fromPUR

- hydrolysis and microberesistant PUR special materials
- unplasticized
- no hardening or embrittlement
- kink-resistant
- excellent flexibility at low temperatures
- · good elasticity

- highly resistant to abrasion and wear
- UV resistant
- available in a range of colours
- available in different hardness grades
 individual printing
- individual printing possible

Temperature range

-40 °C to +85 °C

Standard colours

□ transparent

PUR

PA
PA-E
PVDF
PE
PP
PVC
TPE



Tubing made from diverse materials

- all materials hydrolysis and microbe-resistant
- material properties available on inquiry
- available in a range of colours
- available in different hardness grades
- · individual printing possible

Temperature range

depends on the material

Standard colours

depends on the material

Antistatic and conductive tubing



... certain tensions are easily overcome





Antistatic tubing made from PUR

- surface resistance $<10^{10}\Omega$
- highly resistant against abrasion
- high mechanical strength
- flexible

- contains no plasticizers so no embrittlement
- good shock absorbing properties
- kink resistant
- · oil and grease resistant

Temperature range

-40 °C to +85 °C

Standard colours

□ natural

■ black

PUR



Electrical conductive PA tubing

- conducts electricity, surface resistant $\stackrel{\leq}{=} 10^4 \Omega$
- lightweight
- excellent compressive strength
- good temperature resistance
- · water insensitive
- excellent resistance to UV-rays
- good chemical resistance characteristics to oil, grease, fuels, solvent and hydraulic fluids
- calibrated so suitable for use with pin and socket connectors

Temperature range

-40 °C to +90 °C

Standard colours

■ black

PA

Temperature resistant tubing





... can not be bored with wide temperature variances



Tubing and hoses made from PVDF

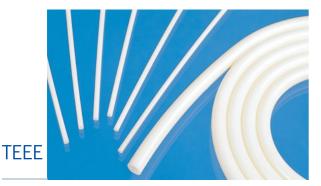
- excellent temperature resistance
- excellent pressure strength
- suitable for use with foodstuffs (FDA CFR 177.2510)
- suitable for medical applications (USP Class VI Standard)
- sterilizable
- non-flammable (UL 94 V-0)
- excellent resistance to UV-rays
- low gas permeability
- excellent mechanical properties

Temperature range

-40 °C to +150 °C

Standard colours

□ natural



Tubing made from Hytrel®

- · high mechanical strength
- excellent abrasion resistance
- · very good aging stability
- · high flexibility
- · kink resistant
- good chemical resistance characteristics (like polyurethane - see table
- of chemical resistance)
- better temperature resistance than standard pneumatic tubing
- easily fitted
- excellent compressive strength combined with high flexibility

Temperature range

-40 °C to +120 °C

Standard colours

□ natural

Please note: This hose can be damaged by water and steam (>60 °C), as well as by microbes.



Tubing and hoses made from Santoprene®

- · highly flexible
- available in a range of hardness grades
- similar to types of rubber
- good chemical resistance characteristics
- available in special grades suitable for use with foodstuff
- excellent dynamic fatigue resistance
- highly flexible at low temperatures
- excellent resistance to aging from hot air exposure
- minimal diffusion of liquid and gaseous media

Temperature range

-40 °C to +125 °C

Standard colours

□ natural

TPE

Chemical resistant tubing



... will not be irritated by aggressive media



Tubing and hoses made from PVDF

- excellent resistant to a variety of chemicals (see list of chemical resistance)
- · low gas permeability
- excellent temperature resistance
- excellent pressure strength
- suitable for use with foodstuffs (FDA CFR 177.2510)
- suitable for medical applications (USP Class VI Standard)
- sterilizable
- non-flammable (UL 94 V-0)
- excellent resistance to UV-rays
- excellent mechanical properties

Temperature range

-40 °C to +150 °C

Standard colours

□ natural

PVDF



Tubing and hoses made from PP

- excellent chemical resistance (see list of chemical resistance)
- · highly resistant to heat
- · good surface hardness
- safe to use with foodstuffs
- · good dielectric strength
- · low hygroscopicity

Temperature range

-25 °C to +90 °C

Standard colours

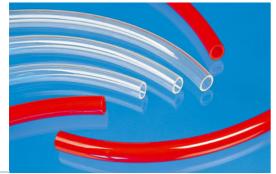
□ natural

PP

Food quality tubing



... guarantee that Yummies stay delicious



Food quality tubing made from PUR

- complies with the consumer article regulation, contained guideline
 90/128EWG(D)
- complies with FDAregulations 21CFR 177.1680, 21CFR 175.105 and 21CFR 177.2600
- hydrolysis and microbe resistant
- unplasticized
- no hardening or embrittlement
- · kink resistant
- excellent flexibility at low temperatures
- · good elasticity

Temperature range

-40 °C to +85 °C

Standard colours

□ natural

PUR



Food quality tubing made from PA

- complies with EUregulations 90/128, 92/93, 93/9, 95/3 96/11, 01/62 and 02/72
- complies with the FDAregulations 21CFR 177.1500(9)
- good chemical resistance

- lightweight
- good temperature resistance
- good UV-resistance
- highly resistant to abrasion
- · quick fitting
- available in a range of colours

Temperature range

-40 °C to +90 °C

Standard colours

□ natural

PA



Food quality tubing made from PE

- Physiologically safe and tasteless (complies with recommendation III of the BGA and complies with regulation 21 CFR 177.120 c 2.1)
- lightweight
- low permeation values for water, water vapor
- and gases
- resistant to numerous chemicals (refer to chemical resistance table)
- can be sterilized (ethylene oxide and gamma rays)

Temperature range

-30 °C to +70 °C

Standard colours

□ natural

PE