

Polyurethane hoses are renowned for their extreme flexibility and correspondingly narrow bending radius across a wide temperature range.

They are more flexible even than LD-PE hoses and exhibit good abrasion resistance, very good low-temperature flexibility, only minimal permanent deformation when subjected to long-term stresses as well as good resistance to the majority of oils, greases, aliphatic hydrocarbons and oxygen.

Main applications:

- Pneumatic and hydraulic (miniature hydraulics) lines
- Mechanical engineering
- Engine construction
- Instrumentation and control
- Flexible hose connectors for conveying defined substances (remember to take account of the resistance)
- Ideal for use with unions, externally calibrated hoses
- Suitable for vacuum



Shore Hardness	98A
Material	Polyester polyurethane
Temperature range	-20 °C to 60 °C
Colour	Polyurethane hoses are available in colours natural (N), blue (B), yellow (G), red (R), black (S), green (GR) and silver (SI)

Polyurethane hose (PUR)

Type No.	Tube O.D. mm	Tube I.D. mm	Max. operating pressure at 23 °C bar	Max. bending radius mm	Colour	Reel length m
259.50 X	3	1.5	13	10	N, B, S	25
259.04 X	4	2	16	15	N, B, G, R, S, GR, SI	25
259.04 X-100	4	2	16	15	N, B, S	100
259.15 X	5	3	13	15	N, B, G, R, S, GR, SI	25
259.16 X	6	4	11	20	N, B, G, R, S, GR, SI	25
259.16 X-100	6	4	11	20	N, B, S	100
259.63 X	8	5	10	30	N, B, S	25
259.17 X	8	6	10	40	N, B, G, R, S, GR, SI	25
259.17 X-100	8	6	10	40	N, B, S	100
259.64 X	10	7	10	50	N, B, S	25
259.18 X	10	8	7	55	N, B, G, R, S, GR, SI	25
259.18 X-100	10	8	7	55	N, B, S	100
259.65 X	12	8	10	40	N, B, S	25
259.20 X	12	9	8	45	N, B, G, R, S, GR, SI	25
259.20 X-100	12	9	8	45	N, B, S	100
259.51 X	14	10	7	120	N, B, S, SI	25
259.52 X	16	12	8	125	N, S, SI	25

Tolerances (based on DIN 73378 : 1996-02)

Hose O.D.	Toleranzen
4 to 8 mm	+/- 0.10 mm
10 to 12 mm	+/- 0.15 mm
16 mm	+/- 0.20 mm

Calibrated plastic tubing made of polyurethane (PUR 98)

Polyurethane hoses are extremely flexible over a wide temperature range and suitable for small bending radii. They are considerably more flexible even than LD-PE hoses and exhibit good abrasion resistance, very good low-temperature flexibility and only minimal permanent deformation when subjected to long-term stresses.

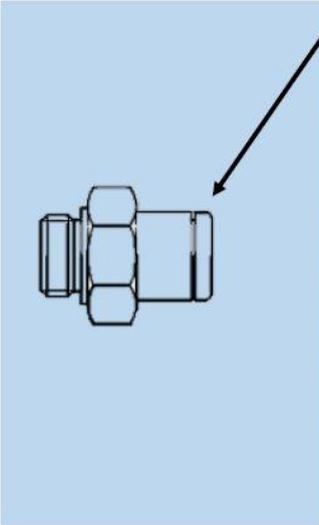
Resistance

- PUR resists oils, greases, aliphatic hydrocarbons and oxygen.
- For contact with chemical media, refer to the relevant resistance lists, consult the manufacturer or test in-house.

Assembly information

Polyurethane hoses are exceptionally flexible and resistant to buckling, and are also suitable for use in conjunction with push-fit screw fittings.

We recommend for improved strength of push-in fittings with **PU** hoses, the following push-in fitting - hose combination:



For tube O.D.	Recommended hose Ø	Recommended hose
3	3x1.5 *	259.50 X
4	4x2 *	259.04 X
5	5x3	259.15 X
6	6x4 *	259.16 X
8	8x5 *	259.63 X
10	10x7 *	259.64 X
12	12x8 *	259.65 X
14	14x10	259.51 X
16	16x12	259.52 X

* Recommended and based on ISO 14743