

### Polyurethane hose (PUR)

Type No. 259.50 X to 259.52 X

P 7-264 e

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



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.	Tube I.D.	Wall thickness	Max. operating pressure at 23 °C	Max. bending radius	Colour	Reel length
	mm	mm	mm	bar	mm		m
259.50 X	3	1.5	0.75	13	10	N, B, S	25
259.04 X	4	2	1	16	15	N, B, G, R, S, GR, SI	25
259.15 X	5	3	1	13	15	N, B, G, R, S, GR, SI	25
259.16 X	6	4	1	11	20	N, B, G, R, S, GR, SI	25
259.63 X	8	5	1.5	10	30	N, B, S	25
259.17 X	8	6	1	10	40	N, B, G, R, S, GR, SI	25
259.17 X-V1	8	5.5	1.25	10	40	N, B, G, R, S, GR, SI	25
259.64 X	10	7	1.5	10	50	N, B, S	25
259.18 X	10	8	1	7	55	N, B, G, R, S, GR, SI	25
259.65 X	12	8	2	10	40	N, B, S	25
259.20 X	12	9	1.5	8	45	N, B, G, R, S, GR, SI	25
259.51 X	14	10	2	7	120	N, B, S, SI	25
259.52 X	16	12	2	8	125	N, S, SI	25

 $A\ hydrolysis-resistant\ polyure than e\ hose,\ ether\ based\ in\ Shore\ 98A,\ 95A,\ or\ 90A,\ is\ available\ on\ request.$ 

## Polyurethane hose (PUR)

Type No. 259.50 X to 259.52 X







Polyurethane hose (PUR), roll of 100 m, packed in a paper box							
Type No.	Tube	Tube	Wall	Max. operating	Max. bending	Colour	Reel
	O.D.	I.D.	thickness	pressure at 23 °C	radius		length
	mm	mm	mm	bar	mm		m
259.04 X-100	4	2	1	16	15	N, B, S	100
259.16 X-100	6	4	1	11	20	N, B, S	100
259.17 X-100	8	6	1	10	40	N, B, S	100
259.17 X-100-V1	8	5.5	1.25	10	40	N, B, S	100
259.18 X-100	10	8	1	7	55	N, B, S	100
259.20 X-100	12	9	1.5	8	45	N, B, S	100

A hydrolysis-resistant polyurethane hose, ether based in Shore 98A, 95A, or 90A, is available on request.

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				

Pressure utilization			
Utilization in %	Temperature		
100 %	23° C		
83 % (±5%)	30° C		
72 % (±5%)	40° C		
64 % (±5%)	50° C		
51 % (±5%)	60° C		



# Polyurethane hose (PUR) Type No. 259.50 X to 259.52 X

#### 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.

PUR resists oils, greases, aliphatic hydrocarbons and oxygen.

The applications and areas of application are responsible for the user. All further claims, in particular liability for consequential damages, are in principle excluded.

### **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  ${f PU}$  hoses, the following push-in fitting - hose combination:

j	For tube O.D.	Recommended hose Ø	Recommended hose
	3	3x0.75	259.50 X
	4	4x1	259.04 X
	5	5x1.5	259.15 X
	6	6x1*	259.16 X
	8	8x1.25*	259.17 X-V1
	8	8x1.5	259.63 X
	10	10x1.5*	259.64 X
	12	12x2*	259.65 X
	14	14x2	259.51 X
	16	16x2	259.52 X

<sup>\*</sup> Recommended and based on ISO 14743