

TECALAN – tubing

Physical characteristics

| | in | polyamide 11 | polyamide 12 |
|--|---------------------|----------------------|----------------------|
| density at +20°C (+68°F) | g / cm ³ | 1,04 | 1,02 |
| moisture content at +20°C (+68°F) and 30 – 100% humidity | % | 0,5 – 1,9 | 0,4 – 1,5 |
| specific heat | J / gK | 2,44 | 2,44 |
| thermal conductivity | KJ / m • h • K | 1,05 | 1,05 |
| linear expansion coefficient | 1 / K | 15 • 10 ⁶ | 15 • 10 ⁶ |
| melting point | °C | approx. +186 | approx. +174 |

Light resistance

TECALAN black tubing, light stabilised quality „LT“, should be used in applications where tubing is exposed to sunlight and other violet radiation and for automotive use.

Atmospherical influence

TECALAN-tubing absorbs only a minimum of humidity (max. 1,9%). This guarantees a stable dimension without changes in size.

Service temperatures

| type | continuous | short time |
|-------------------|---|-----------------------------|
| semi-rigid (hart) | -60°C up to +100°C (-76°F up to +210°F) | up to +130°C (up to +265°F) |
| flexible (weich) | | |

Working pressures

The working pressures stated are valid for constant and pulsating pressures at +20°C following DIN 73378.

1 bar = 14.223 psi
+20°C = +68°F

Installation

TECALAN-tubing is less costly to install and maintain than other conventional tubing. To cut TECALAN-tubing we recommend our TECALAN-cutter, part-no. 2.89 08 63.1. This tool cuts TECALAN-tubing rectangular. A deburring is not necessary.

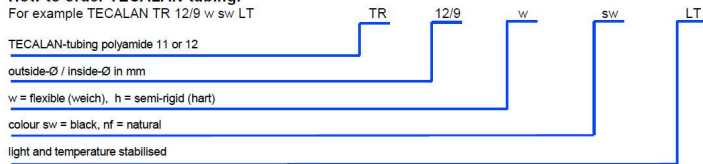


Bending

TECALAN-tubing especially the flexible type can be bent at normal temperatures. The bending radius is measured from the tube axis.

How to order TECALAN-tubing:

For example TECALAN TR 12/9 w sw LT



TECALAN-tubing polyamide 11 or 12

outside-Ø / inside-Ø in mm

w = flexible (weich), h = semi-rigid (hart)

colour sw = black, nf = natural

light and temperature stabilised

Always mention code and part-no. when ordering.

| code: TECALAN >flexible< | dimensions | WP at 20°C | bending radius | weight | pack. unit roll of | part-no. |
|-----------------------------|--------------|---------------|-------------------|----------|-----------------------|------------|
| | mm | bar / psi | mm | kg/100 m | m | |
| TR 3.15 / 2 w nf | 3.15 x 0.575 | 30 / 440 | 15 | 0.50 | 500 | 2.477210.1 |
| TR 3.15 / 2 w blau | 3.15 x 0.575 | 30 / 440 | 15 | 0.50 | 500 | 2.680300.5 |
| TR 3.15 / 2 w grün | 3.15 x 0.575 | 30 / 440 | 15 | 0.50 | 500 | 2.680300.6 |
| TR 4 / 2 w nf | 4 x 1 | 45 / 625 | 20 | 1.10 | 500 | 2.477311.1 |
| TR 4 / 2 w sw LT | 4 x 1 | 45 / 625 | 20 | 1.10 | 500 | 2.472311.8 |
| TR 4 / 2.5 w nf | 4 x 0.75 | 31 / 440 | 20 | 0.85 | 500 | 2.477321.1 |
| TR 4 / 2.7 w nf | 4 x 0.65 | 26 / 370 | 20 | 0.75 | 500 | 2.462341.1 |
| TR 5 / 3 w nf | 5 x 1 | 34 / 485 | 25 | 1.35 | 200 | 2.462411.1 |
| TR 6 / 3 w nf | 6 x 1.5 | 45 / 625 | 30 | 2.25 | 200 | 2.477511.8 |
| TR 6 / 3 w sw LT | 6 x 1.5 | 45 / 625 | 30 | 2.25 | 200 | 2.477511.8 |
| TR 6 / 4 w nf | 6 x 1 | 27 / 385 | 30 | 1.70 | 200 | 2.477531.1 |
| TR 6 / 4 w sw | 6 x 1 | 27 / 385 | 30 | 1.70 | 200 | 2.477531.8 |
| TR 6 / 4 w gelb | 6 x 1 | 27 / 385 | 30 | 1.70 | 200 | 2.472531.7 |
| TR 6 / 4 w grün | 6 x 1 | 27 / 385 | 30 | 1.70 | 200 | 2.472531.6 |
| TR 6 / 4 w blau | 6 x 1 | 27 / 385 | 30 | 1.70 | 200 | 2.477531.5 |
| TR 6 / 4 w rot | 6 x 1 | 27 / 385 | 30 | 1.70 | 200 | 2.472531.3 |
| TR 8 / 4 w nf | 8 x 2 | 45 / 625 | 40 | 4.00 | 200 | 2.477711.1 |
| TR 8 / 4 w sw LT | 8 x 2 | 45 / 625 | 40 | 4.00 | 200 | 2.472711.8 |
| TR 8 / 5 w nf | 8 x 1.5 | 31 / 440 | 40 | 3.20 | 200 | 2.477731.1 |
| TR 8 / 5 w sw LT | 8 x 1.5 | 31 / 440 | 40 | 3.20 | 200 | 2.477731.8 |
| TR 8 / 6 w nf | 8 x 1 | 19 / 270 | 40 | 2.40 | 200 | 2.477751.1 |
| TR 8 / 6 w sw LT | 8 x 1 | 19 / 270 | 40 | 2.40 | 200 | 2.477751.8 |
| TR 9 / 6 w sw LT | 9 x 1.5 | 27 / 385 | 45 | 3.80 | 200 | 2.477811.8 |
| TR 10 / 6 w nf | 10 x 2 | 34 / 485 | 50 | 5.50 | 200 | 2.477911.1 |
| TR 10 / 6 w sw LT | 10 x 2 | 34 / 485 | 50 | 5.50 | 200 | 2.477911.8 |
| TR 10 / 7.5 w sw LT | 10 x 1.25 | 19 / 270 | 60 | 3.60 | 200 | 2.477921.8 |
| TR 10 / 8 w nf | 10 x 1 | 15 / 200 | 60 | 3.00 | 200 | 2.477931.1 |
| TR 10 / 8 w sw LT | 10 x 1 | 15 / 200 | 60 | 3.00 | 200 | 2.477931.8 |
| TR 12 / 8 w nf | 12 x 2 | 27 / 385 | 60 | 6.80 | 200 | 2.478111.1 |
| TR 12 / 8 w sw LT | 12 x 2 | 27 / 385 | 60 | 6.80 | 200 | 2.478111.8 |
| TR 12 / 9 w nf | 12 x 1.5 | 19 / 270 | 60 | 5.30 | 200 | 2.478121.1 |
| TR 12 / 9 w sw LT | 12 x 1.5 | 19 / 270 | 60 | 5.30 | 200 | 2.478121.8 |
| TR 12 / 10 w nf | 12 x 1 | 12 / 170 | 85 | 3.80 | 200 | 2.478131.1 |
| TR 12.5 / 10 w nf | 12.5 x 1.25 | 15 / 200 | 75 | 4.70 | 200 | 2.463151.1 |
| TR 15 / 10 w nf | 15 x 2.5 | 26 / 370 | 75 | 11.00 | 100 | 2.478311.1 |
| TR 15 / 12 w nf | 15 x 1.5 | 15 / 200 | 90 | 7.00 | 100 | 2.478331.1 |
| TR 15 / 12 w sw LT | 15 x 1.5 | 15 / 200 | 90 | 7.00 | 100 | 2.478331.8 |
| TR 16 / 12 w sw LT | 16 x 2 | 19 / 270 | 95 | 9.30 | 100 | 2.473411.8 |
| TR 16 / 12.5 w nf | 16 x 1.75 | 16 / 225 | 95 | 8.50 | 100 | 2.463421.1 |
| TR 18 / 14 w nf | 18 x 2 | 16 / 225 | 100 | 11.00 | 100 | 2.478511.1 |
| TR 18 / 14 w sw LT | 18 x 2 | 16 / 225 | 100 | 11.00 | 100 | 2.478511.8 |
| TR 22 / 18 w nf | 22 x 2 | 13 / 185 | 150 | 13.00 | 100 | 2.463711.1 |
| TR 22 / 18 w sw LT | 22 x 2 | 13 / 185 | 150 | 13.00 | 100 | 2.473711.8 |

| code: TECALAN >semi-rigid< | dimensions | WP at 20°C | bending radius | weight | pack. unit roll of | part-no. |
|-------------------------------|------------|---------------|-------------------|----------|-----------------------|------------|
| | mm | bar / psi | mm | kg/100 m | m | |
| TR 4 / 1.5 h nf | 4 x 1.25 | 90 / 1280 | 20 | 1.15 | 500 | 2.565410.1 |
| TR 4 / 2 h nf | 4 x 1 | 75 / 1065 | 20 | 1.10 | 500 | 2.460211.1 |
| TR 4 / 2.5 h nf | 4 x 0.75 | 52 / 740 | 20 | 0.85 | 500 | 2.460221.1 |
| TR 6 / 2 h nf | 6 x 2 | 113 / 1600 | 30 | 2.70 | 200 | 2.460411.1 |
| TR 6 / 3 h nf | 6 x 1.5 | 75 / 1065 | 30 | 2.25 | 200 | 2.460421.1 |
| TR 6 / 4 h nf | 6 x 1 | 45 / 625 | 30 | 1.70 | 200 | 2.460431.1 |
| TR 6 / 4 h sw LT | 6 x 1 | 45 / 625 | 30 | 1.70 | 200 | 2.470431.8 |
| TR 8 / 5 h nf | 8 x 1.5 | 52 / 740 | 40 | 3.20 | 200 | 2.460521.1 |
| TR 8 / 6 h nf | 8 x 1 | 32 / 440 | 40 | 2.40 | 200 | 2.460531.1 |
| TR 10 / 6 h nf | 10 x 2 | 57 / 810 | 50 | 5.50 | 200 | 2.460621.1 |
| TR 10 / 8 h nf | 10 x 1 | 25 / 355 | 60 | 3.00 | 200 | 2.460631.1 |
| TR 12 / 8 h nf | 12 x 2 | 45 / 625 | 60 | 6.80 | 200 | 2.460711.1 |
| TR 12 / 10 h nf | 12 x 1 | 20 / 285 | 85 | 3.80 | 200 | 2.460731.1 |
| TR 15 / 12 h nf | 15 x 1.5 | 25 / 355 | 90 | 7.00 | 100 | 2.470911.1 |
| TR 15 / 12 h sw LT | 15 x 1.5 | 25 / 355 | 90 | 7.00 | 100 | 2.470911.8 |
| TR 22 / 18 h sw LT | 22 x 2 | 22 / 315 | 200 | 13.00 | 96 in 6 m Stangen | 2.476311.8 |