

## Plastic tubing PLN

**FESTO**



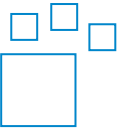
## Characteristics

### At a glance

Resistant to common cleaning agents and lubricants and FDA-compliant.

- Polyethylene
- High resistance to chemicals, microbes and hydrolysis
- For food-safe grade, see [www.festo.com/certificates/PLN](http://www.festo.com/certificates/PLN)
- Resistant to most cleaning agents and lubricants
- Operating medium: compressed air, vacuum, water

### Ordering data - modular system



Configurable product

This product and all its product options can be ordered online via the configurator.

### Diagrams

[Further information → pln](#)



The diagrams shown in this document are also available online. These can be used to display precise values.

### Pipe/tubing O.D. x wall thickness

For standard O.D. tubing, the outside diameter of the tube and the wall thickness are given as the tube size.

### Packaging unit [m]

Standard: 50 m

## Type code

| 001            | Series                                      |
|----------------|---|
| <b>PLN</b>     | Plastic tubing, polyethylene, standard O.D. |
| 002            | Pipe/tubing O.D. x wall thickness           |
| <b>4x0,75</b>  | 4x0.75 mm                                   |
| <b>6x1</b>     | 6x1 mm                                      |
| <b>8x1,25</b>  | 8x1.25 mm                                   |
| <b>10x1,5</b>  | 10x1.5 mm                                   |
| <b>12x1,75</b> | 12x1.75 mm                                  |
| <b>14x2</b>    | 14x2 mm                                     |
| <b>16x2</b>    | 16x2 mm                                     |

| 003       | Colour  |
|-----------|---------|
| <b>NT</b> | Natural |
| <b>SW</b> | Black   |
| <b>BL</b> | Blue    |
| <b>SI</b> | Silver  |
| <b>RT</b> | Red     |

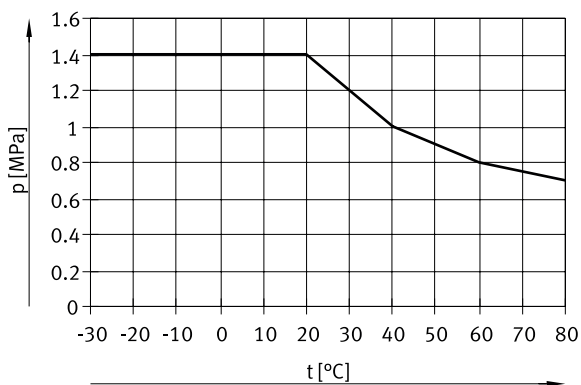
## Datasheet

### Operating and environmental conditions

|  |   |  |  |                                  |   |   |   |  |
|--|---|--|--|----------------------------------|---|---|---|--|
| Outside diameter                         | 4 mm  | 6 mm   | 8 mm   | 10 mm                            | 12 mm   | 14 mm   | 16 mm   |  |
| Inside diameter                          | 2.9 mm  | 4 mm   | 5.9 mm   | 7 mm                             | 8.4 mm  | 10 mm   | 12 mm   |  |
| Pneumatic connection                     | For push-in connector O.D. 4 mm<br>For barbed fitting I.D. 3 mm with union nut<br>For barbed fitting I.D. 3 mm  | For push-in connector O.D. 6 mm<br>For barbed fitting I.D. 4 mm with union nut<br>For barbed fitting I.D. 4 mm | For push-in connector O.D. 8 mm<br>For barbed fitting inside diameter of 6 mm with union nut<br>For barbed fitting inside diameter of 6 mm | For push-in connector O.D. 10 mm | For push-in connector outside diameter of 12 mm | For push-in connector outer diameter of 14 mm | For push-in connector O.D. 16 mm  |  |
| Flow-relevant bending radius             | 25 mm   | 32 mm  | 50 mm  | 57 mm                            | 65 mm   | 80 mm   | 95 mm   |  |
| Min. bending radius                      | 12 mm   | 11 mm  | 23 mm  | 22 mm                            | 23 mm   | 40 mm   | 55 mm   |  |
| Temperature-dependent operating pressure | -0.095 ... 1.4 MPa  |  |  |                                  |   |   |   |  |
| Temperature-dependent operating pressure | -0.95 ... 14 bar  |  |  |                                  |   |   |   |  |
| Temperature-dependent operating pressure | -13.775 ... 203 psi   |  |  |                                  |   |   |   |  |
| Operating medium                         | Compressed air to ISO 8573-1:2010 [7:-:]<br>Water as per manufacturer's declaration at <a href="http://www.festo.com">www.festo.com</a><br>Water (liquid, ice-free) | Compressed air to ISO 8573-1:2010 [7:-:]<br>Water (liquid, ice-free)   |  |                                  |   |   | Compressed air to ISO 8573-1:2010 [7:-:]<br>Water as per manufacturer's declaration at <a href="http://www.festo.com">www.festo.com</a><br>Water (liquid, ice-free) |  |
| Suitable for use with food <sup>1)</sup> | See supplementary material information  |  |  |                                  |   |   |   |  |
| Ambient temperature                      | -30 ... 80°C  |  |  |                                  |   |   |   |  |
| Approval                                 | German Technical Control Board (TÜV)  |  |  |                                  |   |   |   |  |
| Certificate issuing authority            | B 013277 0506 00  |  |  |                                  |   |   |   |  |

1) Further information [www.festo.com/catalogue/pln](http://www.festo.com/catalogue/pln) → Support/Downloads.


### Operating pressure p as a function of temperature t



### Materials

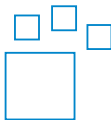
|                        |  |
|------------------------|--|
| Material tubing        | PE   |
| Note on materials      | RoHS-compliant   |
| LABS (PWIS) conformity | VDMA24364-B2-L   |
| Cleanroom class        | Element installed statically, no meaningful evaluation possible according to ISO 14644-1 |

## Ordering data

| Ordering data   |                  |                                  |                                    |            |            |               |                |
|---|------------------|----------------------------------|------------------------------------|------------|------------|---------------|----------------|
|   | Outside diameter | Packaging unit [m] <sup>1)</sup> | Product weight according to length | Colour     | Part no.   | Type          |                |
|  | 4 mm             | 50 m                             | 0.006 kg/m                         | Blue       | 558205     | PLN-4X0,75-BL |                |
|   |                  |                                  |                                    | Natural    | 193403     | PLN-4X0,75-NT |                |
|   |                  |                                  |                                    | Red        | 558217     | PLN-4X0,75-RT |                |
|   |                  |                                  |                                    | Black      | 195280     | PLN-4X0,75-SW |                |
|   |                  |                                  |                                    | Silver     | 558211     | PLN-4X0,75-SI |                |
|   | 6 mm             |                                  | Standard                           | 0.015 kg/m | Blue       | 558206        | PLN-6X1-BL     |
|   |                  |                                  |                                    |            | Natural    | 193404        | PLN-6X1-NT     |
|   |                  |                                  |                                    |            | Red        | 558218        | PLN-6X1-RT     |
|   |                  |                                  |                                    |            | Black      | 195281        | PLN-6X1-SW     |
|   |                  |                                  |                                    |            | Silver     | 558212        | PLN-6X1-SI     |
|   | 8 mm             | Standard                         |                                    | 0.021 kg/m | Blue       | 558207        | PLN-8X1,25-BL  |
|   |                  |                                  |                                    |            | Natural    | 193405        | PLN-8X1,25-NT  |
|   |                  |                                  |                                    |            | Red        | 558219        | PLN-8X1,25-RT  |
|   |                  |                                  |                                    |            | Black      | 195282        | PLN-8X1,25-SW  |
|   |                  |                                  |                                    |            | Silver     | 558213        | PLN-8X1,25-SI  |
|   | 10 mm            |                                  | Standard                           | 0.037 kg/m | Blue       | 558208        | PLN-10X1,5-BL  |
|   |                  |                                  |                                    |            | Natural    | 193406        | PLN-10X1,5-NT  |
|   |                  |                                  |                                    |            | Red        | 558220        | PLN-10X1,5-RT  |
|   |                  |                                  |                                    |            | Black      | 195283        | PLN-10X1,5-SW  |
|   |                  |                                  |                                    |            | Silver     | 558214        | PLN-10X1,5-SI  |
|   | 12 mm            | Standard                         |                                    | 0.054 kg/m | Blue       | 558209        | PLN-12X1,75-BL |
|   |                  |                                  |                                    |            | Natural    | 193407        | PLN-12X1,75-NT |
|   |                  |                                  |                                    |            | Red        | 558221        | PLN-12X1,75-RT |
|   |                  |                                  |                                    |            | Black      | 195284        | PLN-12X1,75-SW |
|   |                  |                                  |                                    |            | Silver     | 558215        | PLN-12X1,75-SI |
|   | 14 mm            |                                  | Standard                           | 0.07 kg/m  | Natural    | 570424        | PLN-14X2-NT    |
|   |                  |                                  |                                    |            | Black      | 570423        | PLN-14X2-SW    |
|   | 16 mm            |                                  |                                    | Standard   | 0.082 kg/m | Blue          | 558210         |
| Natural   |                  |                                  |                                    |            |            | 539064        | PLN-16X2-NT    |
| Red   |                  |                                  |                                    |            |            | 558222        | PLN-16X2-RT    |
| Black   |                  | 539065                           |                                    |            |            | PLN-16X2-SW   |                |
| Silver  |                  | 558216                           |                                    |            |            | PLN-16X2-SI   |                |

1) Standard: 50 m

## Ordering data – Modular product system

|   | Short type code | Part no. | Type |
|---|-----------------|----------|------|
|  | PLN             | 553850   | PLN  |