

Plastic tubing, inch 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
- Resistant to most cleaning agents and lubricants
- Operating medium: compressed air, vacuum, water

Additional documents

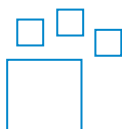
[Link](#) [pln-inch](#)



The additional document TUBING-NPT-ADD contains further information on tubing/fitting combinations, assembly instructions and measuring procedures.

Ordering data - modular system

[Link](#) [pln-inch](#)



Configurable product

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

Engineering tools

[Link](#) [engineering tools](#)



Save time with engineering tools: Smart engineering for the optimal solution. Our goal is to increase your productivity. Our engineering tools play an integral part in achieving this goal. They help you size your system correctly, tap into unimagined productivity reserves and generate additional productivity along the entire value chain. In every phase of your project, from the initial contact to the modernisation of your machine, you will come across a number of different tools that will be of use to you.

- Flow calculation: Determine the nominal flow rate by entering parameters such as input pressure, output pressure, tube length and internal diameter (www.festo.com/x/flowrate-calculation).
- Media resistance: Evaluate the resistance of various types of materials and tubing from Festo to different chemicals and media (www.festo.com/x/media-resistance).

Tubing outside diameter

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

Type code

001	Series	
PLN	Plastic tubing, polyethylene, standard O.D.	
002	Tubing outside diameter	
3/16	3/16"	
1/4	1/4"	
5/16	5/16"	
3/8	3/8"	
5/8	5/8"	

003	Colour	
BL	Blue	
NT	Natural	
SW	Black	
004	Packaging unit [ft]	
150	150 ft	
005	Packaging	
CB	Cardboard box	

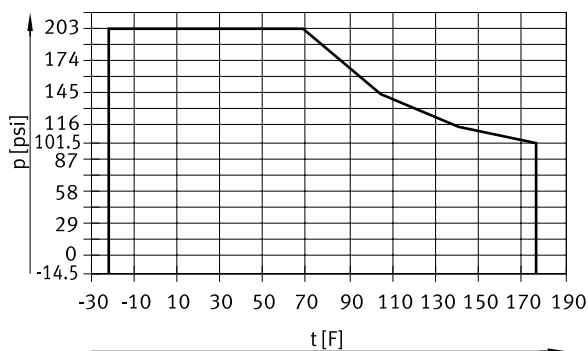
Datasheet

Operating and environmental conditions

Pneumatic connection	For push-in connector outside diameter of 3/16"	For push-in connector O.D. 1/4"	For push-in connector O.D. 8 mm For push-in connector outside diameter of 5/16"	For push-in connector O.D. 3/8"	For push-in connector outside diameter of 5/8"
Outside diameter inch	3/16	1/4	5/16	3/8	5/8
Flow-relevant bending radius	0.095 Feet	0.105 Feet	0.164 Feet	0.187 Feet	0.311 Feet
Min. bending radius	0.036 Feet	0.039 Feet	0.082 Feet	0.115 Feet	0.197 Feet
Operating pressure complete temperature range	-0.095 ... 0.7 MPa				
Operating pressure complete temperature range	-0.95 ... 7 bar				
Operating pressure complete temperature range	-13.775 ... 101.5 psi				
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				
Note on operating pressure	Water: max. 0.6 MPa at 0 - 50°C				
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-] Water (liquid, ice-free)				
Suitable for use with food ¹⁾	See supplementary material information				
Ambient temperature	-22 ... 176°F				

1) Further information www.festo.com/catalogue/pln → Support/Downloads.

Operating pressure p as a function of temperature t



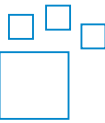
Materials

Shore hardness	D 52 +/-3
Material tubing	Packaging unit
Note on materials	RoHS compliant
LABS (PWIS) conformity	VDMA24364-B2-L
Cleanroom suitability, measured according to ISO 14644-14	Element installed statically, no meaningful evaluation possible according to ISO 14644-1

Ordering data

Ordering data						
	Pneumatic connection	Packaging unit [ft]	Product weight according to length	Colour	Part no.	Type
	For push-in connector O.D. 8 mm, For push-in connector outside diameter of 5/16"	150 ft	0.231 oz/ft	Natural	569900	PLN-5/16-NT-150-CB
	For push-in connector outside diameter of 3/16"		0.107 oz/ft	Blue	569914	PLN-3/16-BL-150-CB
			Natural	569898	PLN-3/16-NT-150-CB	
	For push-in connector O.D. 1/4"		0.18 oz/ft	Blue	569915	PLN-1/4-BL-150-CB
				Natural	569899	PLN-1/4-NT-150-CB
				Black	569907	PLN-1/4-SW-150-CB
	For push-in connector O.D 3/8"		0.403 oz/ft	Blue	569917	PLN-3/8-BL-150-CB
				Natural	569901	PLN-3/8-NT-150-CB
				Black	569909	PLN-3/8-SW-150-CB
	For push-in connector outside		0.881 oz/ft	Natural	569903	PLN-5/8-NT-150-CB
				Black	569911	PLN-5/8-SW-150-CB

Ordering data – Modular product system

	Short type code	Part no.	Type
	PLN	567449	PLN.-U