

Plastic tubing, inch PEN

**FESTO**



## Characteristics

### At a glance

Very flexible with high abrasion resistance as well as an attractive price for a wide range of applications.

- Polyethylene
- High resistance to chemicals and very high resistance to hydrolysis
- Resistant to most cleaning agents and lubricants
- Suitable for energy chains
- Operating medium: compressed air, vacuum, water

### Additional documents

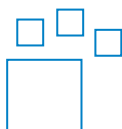
Link [pen-inch](#)



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

### Ordering data - modular system

Link [pen-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 rate calculation: Determine the nominal flow rate by entering parameters such as input pressure, output pressure, tube length and inside diameter.
- Media resistance: Evaluate the resistance of different material types and tubing from Festo to different chemicals and media.

### 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	
PEN	Plastic tubing	
002	Tubing outside diameter	
3/16	3/16"	
1/4	1/4"	
5/16	5/16"	
3/8	3/8"	
1/2	1/2"	
5/8	5/8"	

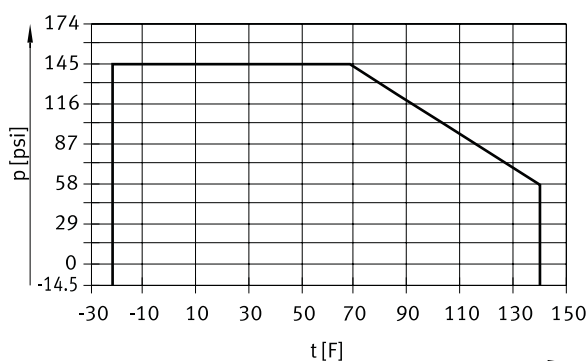
003	Colour	
BL	Blue	
SW	Black	
004	Packaging unit [ft]	
150	150 ft	
005	Packaging	
CB	Cardboard box	

## 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 O.D. 1/2"	For push-in connector outside diameter of 5/8"
Outside diameter inch	3/16	1/4	5/16	3/8	1/2	5/8
Flow-relevant bending radius	0.075 Feet	0.085 Feet	0.114 Feet	0.131 Feet	0.196 Feet	0.41 Feet
Min. bending radius	0.039 Feet	0.041 Feet	0.073 Feet	0.088 Feet	0.108 Feet	0.196 Feet
Operating pressure complete temperature range	-0.095 ... 0.4 MPa					
Operating pressure complete temperature range	-0.95 ... 4 bar					
Operating pressure complete temperature range	-13.775 ... 58 psi					
Temperature-dependent oper- ating pressure	-0.095 ... 1 MPa					
Temperature-dependent oper- ating pressure	-0.95 ... 10 bar					
Temperature-dependent oper- ating pressure	-13.775 ... 145 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)					
Ambient temperature	-22 ... 140°F					
Tubing characteristics	Suitable for energy chains					


## Operating pressure p as a function of temperature t

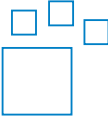


## Materials

Shore hardness	D 52 +/-3
Material tubing	PE
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B2-L
Cleanroom suitability, meas- ured 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	0.25 oz/ft	Blue	<b>569892</b>	<b>PEN-5/16-BL-150-CB</b>
				Black	<b>569884</b>	<b>PEN-5/16-SW-150-CB</b>
	For push-in connector outside diameter of 3/16"		0.1 oz/ft		<b>569882</b>	<b>PEN-3/16-SW-150-CB</b>
	For push-in connector O.D. 1/4"		0.186 oz/ft	Blue	<b>569891</b>	<b>PEN-1/4-BL-150-CB</b>
				Black	<b>569883</b>	<b>PEN-1/4-SW-150-CB</b>
	For push-in connector O.D. 3/8"		0.376 oz/ft	Blue	<b>569893</b>	<b>PEN-3/8-BL-150-CB</b>
				Black	<b>569885</b>	<b>PEN-3/8-SW-150-CB</b>
	For push-in connector O.D. 1/2"		0.848 oz/ft	Blue	<b>569894</b>	<b>PEN-1/2-BL-150-CB</b>
				Black	<b>569886</b>	<b>PEN-1/2-SW-150-CB</b>
	For push-in connector outside diameter of 5/8"		1.158 oz/ft	Blue	<b>569895</b>	<b>PEN-5/8-BL-150-CB</b>

Ordering data – Modular product system			
	Short type code	Part no.	Type
	PEN	<b>567448</b>	<b>PEN-.-U</b>