

Plastic tubing PTFEN

FESTO



Characteristics

At a glance

Particularly resistant to chemicals, cleaning processes, extreme temperatures and pressure. Perfect for use in the food industry, e.g. in meat processing.

- Polytetrafluoroethylene
- For food-safe grade, see www.festo.com/certificates/PTFEN
- High resistance to chemicals
- High temperature resistance
- Operating medium: compressed air, vacuum

Additional documents

Link [ptfen](#)



The additional document TUBING-ADD contains further information on application details, such as tubing/fitting combinations, installation instructions and measurement procedures.

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).

Diagrams

Link [ptfen](#)



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	
PTFEN	Plastic tubing, polytetrafluorethylene, standard O.D.	

002	Pipe/tubing O.D. x wall thickness	
4x0,5	4x0.5 mm	
6x1	6x1 mm	
8x1	8x1 mm	
10x1,5	10x1.5 mm	
12x2	12x2 mm	
14x2	14x2 mm	
16x2,5	16x2.5 mm	

003	Colour	
NT	Natural	

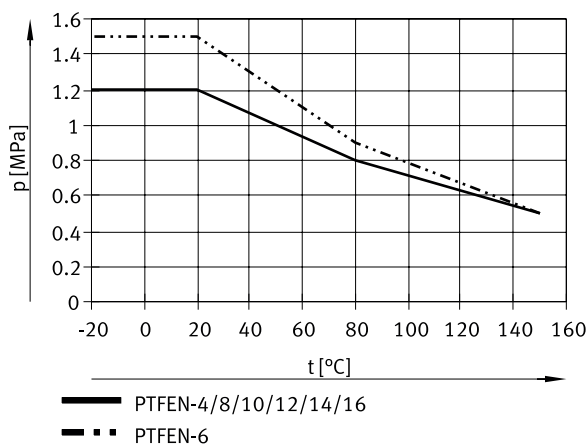
004	Packaging unit [m]	
	Standard	
25	25 m	
100	100 m	
300	300 m	
400	400 m	
500	500 m	

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	11 mm
Pneumatic connection	For push-in connector O.D. 4 mm For barbed fitting I.D. 4 mm with union nut For barbed fitting I.D. 3 mm with union nut For barbed fitting I.D. 3 mm	For push-in connector O.D. 6 mm For barbed fitting outside diameter of 6 mm with union nut For barbed fitting I.D. 4 mm with union nut For barbed fitting I.D. 4 mm	For push-in connector O.D. 8 mm For barbed fitting outside diameter of 8 mm with union nut For barbed fitting inside diameter of 6 mm with union nut For barbed fitting inside diameter of 6 mm	For push-in connector O.D. 10 mm For barbed fitting outside diameter of 10 mm with union nut	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	32 mm	40 mm	90 mm	100 mm	120 mm		160 mm
Min. bending radius	32 mm	38 mm	64 mm	70 mm	84 mm	106 mm	109 mm
Temperature-dependent operating pressure	-0.095 ... 1.2 MPa	-0.095 ... 1.5 MPa	-0.095 ... 1.2 MPa				
Temperature-dependent operating pressure	-0.95 ... 12 bar	-0.95 ... 15 bar	-0.95 ... 12 bar				
Temperature-dependent operating pressure	-13.775 ... 174 psi	-13.775 ... 217.5 psi	-13.775 ... 174 psi				
Operating pressure complete temperature range	-0.095 ... 0.5 MPa						
Operating pressure complete temperature range	-0.95 ... 5 bar						
Operating pressure complete temperature range	-13.775 ... 72.5 psi						
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-]						
Suitable for use with food ¹⁾	See supplementary material information						
Ambient temperature	-20 ... 150°C						
Fire test material	UL94 V-0						

1) More information www.festo.com/catalogue/ptfen → Support/Downloads.

Operating pressure p as a function of temperature t



Datasheet

Materials	
Shore hardness	D 55 +/-5
Material tubing	PTFE
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
Instructions on use	Tubing without printing

Ordering data

Ordering data						
	Outside diameter	Packaging unit [m] ¹⁾	Product weight according to length	Colour	Part no.	Type
	4 mm	100 m	0.013 kg/m	Natural	8061171	PTFEN-4X0,5-NT-100
	6 mm	500 m	0.034 kg/m		8061172	PTFEN-6X1-NT-100
					8061178	PTFEN-6X1-NT-500
	8 mm	Standard	0.047 kg/m		8061173	PTFEN-8X1-NT
		400 m			8061179	PTFEN-8X1-NT-400
	10 mm	Standard	0.086 kg/m		8061174	PTFEN-10X1,5-NT
		300 m			8061180	PTFEN-10X1,5-NT-300
	12 mm	Standard	0.124 kg/m		8061175	PTFEN-12X2-NT
	14 mm		0.162 kg/m		8061176	PTFEN-14X2-NT
	16 mm	25 m	0.228 kg/m		8061177	PTFEN-16X2,5-NT-25

1) Standard: 50 m