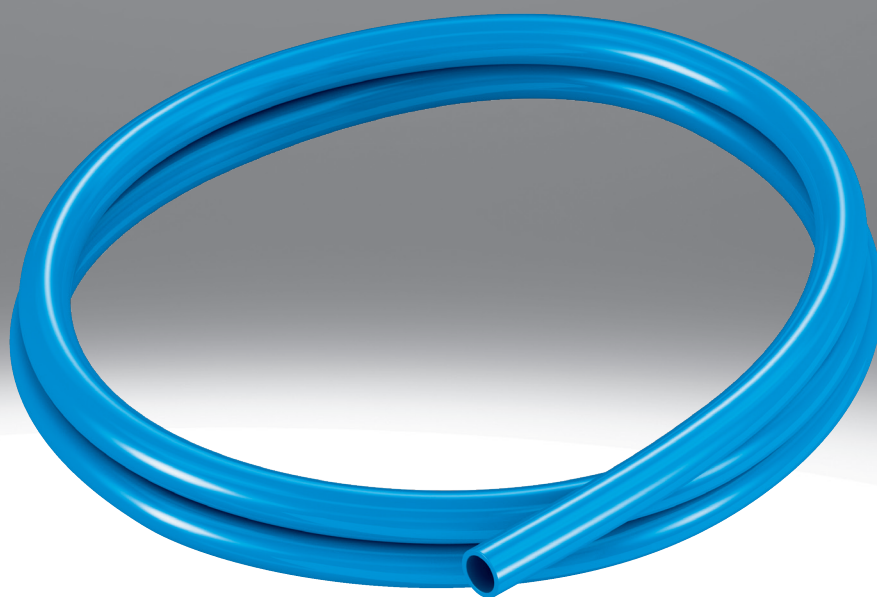


Plastic tubing PUN-H-F

FESTO



Characteristics

At a glance

Flexible and hydrolysis-resistant tubing with standard O.D. in various colours

- Polyurethane
- Highly resistant to microbes and hydrolysis
- Suitable for contact with food
- Food grade see www.festo.com/certificates/PUN_H
- Suitable for energy chains
- Operating medium: compressed air, vacuum, water
- Very easy installation thanks to “one-click” principle

Additional documents

Link [pun-h-f](#)



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 [pun-h-f](#)



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

Alternative material characteristic

[H] Hydrolysis-resistant

Hydrolysis-resistant and suitable for water applications.

Additional features

Link [pun-h-f](#)

[F] Food-safe



Suitable for contact with food

Declaration of conformity to EU Regulation EC 1935/2004.

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.

Type code

001	Series	
PUN	Plastic tubing, polyurethane	
002	Alternative material characteristic	
H	Hydrolysis-resistant	
003	Additional features	
F	Food-safe	

004	Pipe/tubing O.D. x wall thickness	
4x0,75	4x0.75 mm	
6x1	6x1 mm	
8x1,25	8x1.25 mm	
10x1,5	10x1.5 mm	
12x2	12x2 mm	
14x2	14x2 mm	
16x2,5	16x2.5 mm	

005	Colour	
BL	Blue	
GE	Yellow	
GN	Green	
NT	Natural	
RT	Red	
SW	Black	
TBL	Translucent blue	

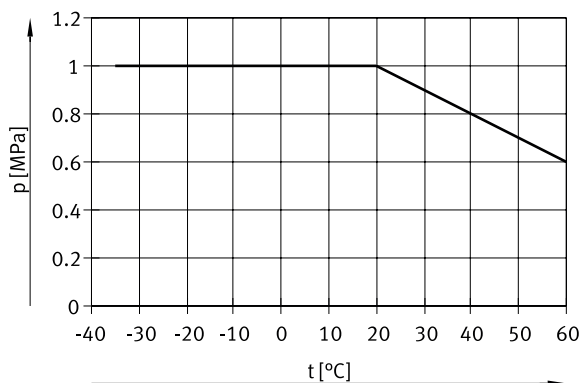
Datasheet

Operating and environmental conditions							
Outside diameter	4 mm	6 mm	8 mm	10 mm	12 mm	14 mm	16 mm
Inside diameter	2.6 mm	4 mm	5.7 mm	7 mm	8 mm	9.8 mm	11 mm
Pneumatic connection	For push-in connector O.D. 4 mm For barbed fitting I.D. 3 mm with union nut	For push-in connector O.D. 6 mm For barbed fitting I.D. 4 mm with union nut	For push-in connector O.D. 8 mm For barbed fitting inside diameter of 6 mm with union nut	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	16 mm	26 mm	37 mm	52 mm	62 mm	78 mm	88 mm
Min. bending radius	8 mm	10 mm	21 mm	28 mm	33 mm	38 ... 39 mm	38 mm
Temperature-dependent operating pressure	-0.095 ... 1 MPa						
Temperature-dependent operating pressure	-0.95 ... 10 bar						
Temperature-dependent operating pressure	-13.775 ... 145 psi						
Operating pressure complete temperature range	-0.095 ... 0.6 MPa						
Operating pressure complete temperature range	-0.95 ... 6 bar						
Operating pressure complete temperature range	-13.775 ... 87 psi						
Note on operating pressure	Water: temperature-dependent operating pressure, see diagram, max. 0.3 MPa at 0–60°C						
Operating medium ¹⁾	Compressed air to ISO 8573-1:2010 [7:-:-], Oxygen, Water (liquid, ice-free)						
Suitable for use with food ²⁾	See declaration of conformity						
Ambient temperature	-35 ... 60°C						
Fire test material	UL94 HB						
Tubing characteristics	Suitable for energy chains						

1) Oxygen: Applies only to NT variants (colour: natural). More information www.festo.com/catalogue/pun-h-f → Support/Downloads.

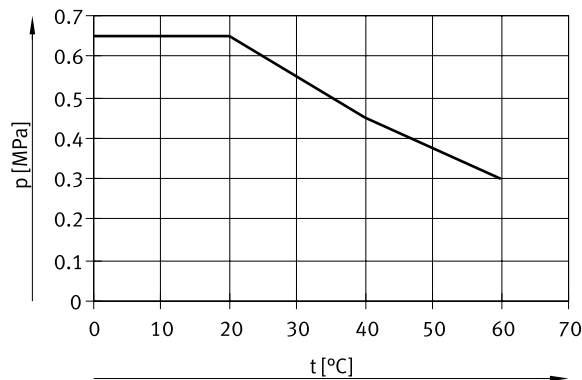
2) More information www.festo.com/catalogue/pun-h-f → Support/Downloads.

Operating pressure p as a function of temperature t



Datasheet

Operating pressure p as a function of temperature t (medium: water)



Deviating maximum operating pressures apply to the medium water, with a safety factor of $s=4$.

Materials

Shore hardness	D 52 +/- 3
Material tubing ¹⁾	TPE-U(PU)
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

1) TPE-U Ether-based, tube without printing

Ordering data

Ordering data						
	Outside diameter	Packaging unit [m] ¹⁾	Product weight according to length	Colour	Part no.	Type
	4 mm	Standard	0.008 kg/m	Blue	8153381	PUN-H-F-4X0,75-BL
				Yellow	8153384	PUN-H-F-4X0,75-GE
				Green	8153383	PUN-H-F-4X0,75-GN
				Natural	8153378	PUN-H-F-4X0,75-NT
				Red	8153379	PUN-H-F-4X0,75-RT
				Black	8153385	PUN-H-F-4X0,75-SW
				Translucent blue	8153382	PUN-H-F-4X0,75-TBL
	6 mm		0.018 kg/m	Blue	8153388	PUN-H-F-6X1-BL
				Yellow	8153391	PUN-H-F-6X1-GE
				Green	8153390	PUN-H-F-6X1-GN
				Natural	8153428	PUN-H-F-6X1-NT
				Red	8153386	PUN-H-F-6X1-RT
				Black	8153392	PUN-H-F-6X1-SW
				Translucent blue	8153389	PUN-H-F-6X1-TBL
	8 mm		0.029 kg/m	Blue	8153395	PUN-H-F-8X1,25-BL
				Yellow	8153398	PUN-H-F-8X1,25-GE
				Green	8153397	PUN-H-F-8X1,25-GN
				Natural	8153429	PUN-H-F-8X1,25-NT
				Red	8153393	PUN-H-F-8X1,25-RT
				Black	8153399	PUN-H-F-8X1,25-SW
				Translucent blue	8153396	PUN-H-F-8X1,25-TBL
	10 mm		0.046 kg/m	Blue	8153402	PUN-H-F-10X1,5-BL
				Yellow	8153405	PUN-H-F-10X1,5-GE
				Green	8153404	PUN-H-F-10X1,5-GN
				Natural	8153430	PUN-H-F-10X1,5-NT
				Red	8153400	PUN-H-F-10X1,5-RT
				Black	8153406	PUN-H-F-10X1,5-SW
				Translucent blue	8153403	PUN-H-F-10X1,5-TBL
	12 mm		0.072 kg/m	Blue	8153410	PUN-H-F-12X2-BL
				Yellow	8153413	PUN-H-F-12X2-GE
				Green	8153412	PUN-H-F-12X2-GN
				Natural	8153407	PUN-H-F-12X2-NT
				Red	8153408	PUN-H-F-12X2-RT
				Black	8153414	PUN-H-F-12X2-SW
				Translucent blue	8153411	PUN-H-F-12X2-TBL
	14 mm		0.091 kg/m	Blue	8153417	PUN-H-F-14X2-BL
				Natural	8153415	PUN-H-F-14X2-NT
				Red	8153416	PUN-H-F-14X2-RT
				Black	8153418	PUN-H-F-14X2-SW
	16 mm		0.122 kg/m	Blue	8153422	PUN-H-F-16X2,5-BL
				Yellow	8153425	PUN-H-F-16X2,5-GE
				Green	8153424	PUN-H-F-16X2,5-GN
				Natural	8153419	PUN-H-F-16X2,5-NT
				Red	8153420	PUN-H-F-16X2,5-RT
				Black	8153426	PUN-H-F-16X2,5-SW
				Translucent blue	8153423	PUN-H-F-16X2,5-TBL

1) Standard: 50 m