

## Plastic tubing PUN-H-SF

**FESTO**



## Characteristics

### At a glance

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

- Polyurethane
- Highly resistant to microbes and hydrolysis
- Food grade see [www.festo.com/certificates/PUN\\_H](http://www.festo.com/certificates/PUN_H)
- Suitable for energy chains

### Diagrams

Further information → [pun-h-sf](#)



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 characteristics

[SF] Sturdy and flexible

Kink-resistant yet still flexible thanks to increased wall thickness.

### 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 characteristics
SF	Sturdy and flexible

004	Pipe/tubing O.D. x wall thickness
4x0,85	4x0.85 mm
6x1,25	6x1.25 mm
8x1,55	8x1.55 mm
10x2	10x2 mm
12x2,3	12x2.3 mm
14x2,7	14x2.7 mm
16x3,1	16x3.1 mm
18x3,4	18x3.4 mm
22x4,3	22x4.3 mm
25x4,85	25x4.85 mm

005	Colour
SW	Black
BL	Blue

006	Packaging unit [m]
	Standard
25	25 m

## Datasheet

**Operating and environmental conditions – PUN-H-SF with outer Ø 4 ... 12 mm**

Outside diameter	4 mm	6 mm	8 mm	10 mm	12 mm
Inside diameter	2.3 mm	3.5 mm	4.9 mm	6 mm	7.4 mm
Pneumatic connection	For push-in connector O.D. 4 mm	For push-in connector O.D. 6 mm	For push-in connector O.D. 8 mm	For push-in connector O.D. 10 mm	For push-in connector out- side diameter of 12 mm
Flow-relevant bending radius	12 mm	25 mm	35 mm	42 mm	49 mm
Min. bending radius	7 mm	12 mm	15 mm	16 mm	21 mm
Temperature-dependent oper- ating pressure	-0.095 ... 1.3 MPa				
Temperature-dependent oper- ating pressure	-0.95 ... 13 bar				
Temperature-dependent oper- ating pressure	-13.775 ... 188.5 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. 0.7 MPa at 0 - 60°C				
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-] Water (liquid, ice-free)				
Suitable for use with food <sup>1)</sup>	See supplementary material information				
Ambient temperature	-35 ... 80°C				
Fire test material	UL94 HB				
Tubing characteristics	Suitable for energy chains				

1) More information [www.festo.com/catalogue/pun-h](http://www.festo.com/catalogue/pun-h) → Support/Downloads.

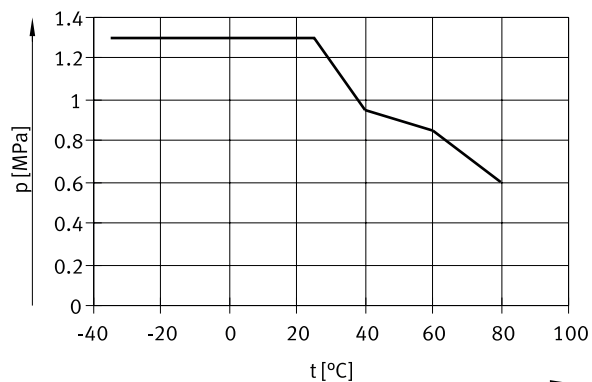
**Operating and ambient conditions – PUN-H-SF with O.D. 14 ... 25 mm**

Outside diameter	14 mm	16 mm	18 mm	22 mm	25 mm
Inside diameter	8.6 mm	9.85 mm	11.2 mm	13.4 mm	15.3 mm
Pneumatic connection	For push-in connector outer diameter of 14 mm	For push-in connector O.D. 16 mm	–	For push-in connector O.D. 22 mm	–
Flow-relevant bending radius	60 mm	73 mm	90 mm	110 mm	130 mm
Min. bending radius	26 mm	30 mm	36 mm	44 mm	55 mm
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				
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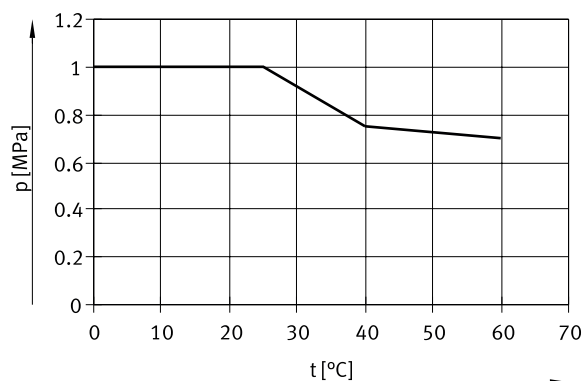
1) More information [www.festo.com/catalogue/pun-h](http://www.festo.com/catalogue/pun-h) → Support/Downloads.

## Datasheet

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



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




A restricted temperature range and deviating maximum operating pressures apply to the medium water, with a safety factor of  $s=4$ .

### Materials

Shore hardness	D 54 +/-3
Material tubing	TPE-U(PU)
Note on materials	RoHS-compliant
LABS (PWIS) conformity <sup>1)</sup>	VDMA24364-B2-L
Cleanroom class	Element installed statically, no meaningful evaluation possible according to ISO 14644-1
Instructions on use	TPE-U Ether based

<sup>1)</sup> applies to PUN-H with O.D. 3 ... 16 mm and PUN-H-DUO

## Ordering data

Ordering data						
	Outside diameter	Packaging unit [m] <sup>1)</sup>	Product weight according to length	Colour	Part no.	Type
	4 mm	Standard	0.01 kg/m	Blue	8174912	PUN-H-SF-4X0,85-BL
				Black	8174911	PUN-H-SF-4X0,85-SW
	6 mm	Standard	0.025 kg/m	Blue	8167900	PUN-H-SF-6X1,25-BL
				Black	8167899	PUN-H-SF-6X1,25-SW
	8 mm		0.04 kg/m	Blue	8167902	PUN-H-SF-8X1,55-BL
				Black	8167901	PUN-H-SF-8X1,55-SW
	10 mm	0.061 kg/m	Blue	8167904	PUN-H-SF-10X2-BL	
			Black	8167905	PUN-H-SF-10X2-SW	
	12 mm	0.085 kg/m	Blue	8167907	PUN-H-SF-12X2,3-BL	
			Black	8167906	PUN-H-SF-12X2,3-SW	
	14 mm	0.118 kg/m	Blue	8167909	PUN-H-SF-14X2,7-BL	
			Black	8167908	PUN-H-SF-14X2,7-SW	
	16 mm	0.145 kg/m	Blue	8167911	PUN-H-SF-16X3,1-BL	
			Black	8167910	PUN-H-SF-16X3,1-SW	
	18 mm	25 m	0.188 kg/m	Blue	8167912	PUN-H-SF-18X3,4-BL-25
				Black	8167913	PUN-H-SF-18X3,4-SW-25
	22 mm	0.302 kg/m	Blue	8167915	PUN-H-SF-22X4,3-BL-25	
			Black	8167914	PUN-H-SF-22X4,3-SW-25	
25 mm	0.372 kg/m	Blue	8167916	PUN-H-SF-25X4,85-BL-25		
		Black	8167917	PUN-H-SF-25X4,85-SW-25		

1) Standard: 50 m