

Plastic tubing PUN-V0

FESTO



Characteristics

At a glance

The flame-retardant properties as per UL94 provide a maximum of safety in areas subject to fire hazards, while also offering the proven reliability of the standard tubing PUN.

- Polyurethane
- Flame retardant to UL 94 V0 ... V2
- For use in the close vicinity of welding applications
- Highly resistant to microbes and hydrolysis
- Suitable for energy chains
- Operating medium: compressed air, vacuum, water

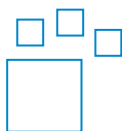
Additional documents

Link [pun-v0](#)



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

Ordering data - modular system



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).

Diagrams

Link [pun-v0](#)



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

Alternative material characteristic

[V0] Flame-retardant

With flame retardant properties for applications in areas at risk of fire.

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.

Characteristics

Version

[C]	Broader wall thickness
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For use in the close vicinity of welding applications

Type code

001	Series	
PUN	Plastic tubing, polyurethane	
002	Alternative material characteristic	
V0	Flame-retardant	
003	Pipe/tubing O.D. x wall thickness	
4x1	4x1 mm	
6x1	6x1 mm	
6x2	6x2 mm	
8x1,25	8x1.25 mm	
8x2	8x2 mm	
10x1,5	10x1.5 mm	
10x2	10x2 mm	
12x2	12x2 mm	
14x2	14x2 mm	
16x2	16x2 mm	
16x2,5	16x2.5 mm	

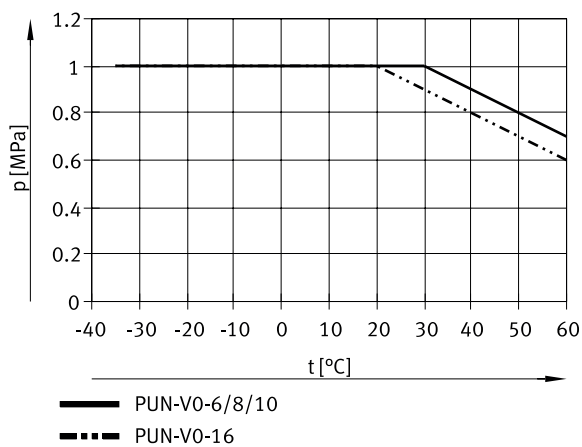
004	Colour	
BL	Blue	
BR	Brown	
GE	Yellow	
GN	Green	
RT	Red	
SW	Black	
WS	White	
005	Version	
C	Broader wall thickness	

Datasheet

Operating and environmental conditions – PUN-V0

Outside diameter	6 mm	8 mm	10 mm	16 mm
Inside diameter	4 mm	5.7 mm	7 mm	11.8 mm
Pneumatic connection	For push-in connector O.D. 6 mm 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 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 push-in connector O.D. 16 mm
Flow-relevant bending radius	26.5 mm	37 mm	54 mm	90 mm
Min. bending radius	12 mm	18 mm	20 mm	50 mm
Temperature-dependent operating pressure	-0.095 ... 1 MPa			-0.095 ... 0.9 MPa
Temperature-dependent operating pressure	-0.95 ... 10 bar			-0.95 ... 9 bar
Temperature-dependent operating pressure	-13.775 ... 145 psi			-13.775 ... 130.5 psi
Note on operating pressure	Water: max. 0.6 MPa at max. 50°C			
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-] Water (liquid, ice-free)			
Ambient temperature	-35 ... 60°C			
Note on ambient temperature	For unpressurised use up to 90°C			
Fire test material	UL94 V-0 (3mm), UL94 V-2 (0.75mm)			
Approval	German Technical Control Board (TÜV)			
Certificate issuing authority	B 013277 0527 00			
Tubing characteristics	Suitable for energy chains			

Operating pressure p as a function of temperature t

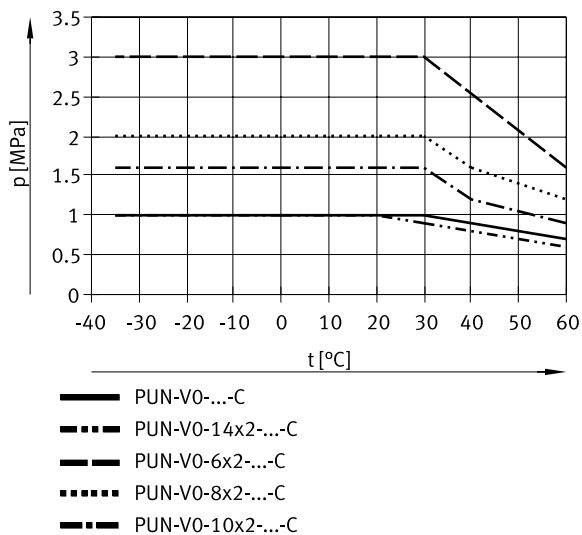


Datasheet

Operating and environmental conditions – PUN-V0-C

Outside diameter	4 mm	6 mm	8 mm	10 mm	12 mm	14 mm	16 mm
Inside diameter	2 mm		4 mm	6 mm	8 mm	9.8 mm	11 mm
Pneumatic connection	For push-in connector O.D. 4 mm	For push-in connector O.D. 6 mm For barbed fitting inside diameter of 2 mm	For push-in connector O.D. 8 mm For barbed fitting I.D. 4 mm	For push-in connector O.D. 10 mm For barbed fitting inside diameter of 6 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	20 mm	24 mm	35 mm	42 mm	55 mm	70 mm	90 mm
Min. bending radius	10 mm	7 mm	9 mm	12 mm	19 mm	45 mm	50 mm
Temperature-dependent operating pressure	-0.095 ... 1 MPa	-0.095 ... 3 MPa	-0.095 ... 2 MPa	-0.095 ... 1.6 MPa	-0.095 ... 1 MPa	-0.095 ... 0.9 MPa	-0.095 ... 1 MPa
Temperature-dependent operating pressure	-0.95 ... 10 bar	-0.95 ... 30 bar	-0.95 ... 20 bar	-0.95 ... 16 bar	-0.95 ... 10 bar	-0.95 ... 9 bar	-0.95 ... 10 bar
Temperature-dependent operating pressure	-13.775 ... 145 psi	-13.775 ... 435 psi	-13.775 ... 290 psi	-13.775 ... 232 psi	-13.775 ... 145 psi	-13.775 ... 130.5 psi	-13.775 ... 145 psi
Note on operating pressure	Water: max. 0.6 MPa at max. 50°C	For applications with welding spatter: max. 1 MPa at 20°C, max. 0.9 MPa at 40°C, max. 0.7 MPa at 60°C Water: max. 0.6 MPa at max. 50°C			Water: max. 0.6 MPa at max. 50°C		
Operating medium	Compressed air to ISO 8573-1:2010 [7:::] Water (liquid, ice-free)						
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Operating pressure p as a function of temperature t



Materials

Shore hardness	D 54 +/-3
Material tubing	TPE-U(PU)
Note on materials	RoHS compliant
LABS (PWS) conformity	VDMA24364-B2-L

Ordering data

Ordering data PUN-V0						
	Outside diameter	Packaging unit [m] ¹⁾	Product weight according to length	Colour	Part no.	Type
	6 mm	Standard	0.02 kg/m	Blue	525442	PUN-V0-6X1-BL
				Brown	525462	PUN-V0-6X1-BR
				Yellow	525458	PUN-V0-6X1-GE
				Green	525446	PUN-V0-6X1-GN
				Red	525450	PUN-V0-6X1-RT
				Black	525438	PUN-V0-6X1-SW
				White	525454	PUN-V0-6X1-WS
	8 mm		0.031 kg/m	Blue	525443	PUN-V0-8X1,25-BL
				Brown	525463	PUN-V0-8X1,25-BR
				Yellow	525459	PUN-V0-8X1,25-GE
				Green	525447	PUN-V0-8X1,25-GN
				Red	525451	PUN-V0-8X1,25-RT
				Black	525439	PUN-V0-8X1,25-SW
				White	525455	PUN-V0-8X1,25-WS
	10 mm		0.051 kg/m	Blue	525444	PUN-V0-10X1,5-BL
				Brown	525464	PUN-V0-10X1,5-BR
				Yellow	525460	PUN-V0-10X1,5-GE
				Green	525448	PUN-V0-10X1,5-GN
				Red	525452	PUN-V0-10X1,5-RT
				Black	525440	PUN-V0-10X1,5-SW
	16 mm		0.122 kg/m	Blue	570768	PUN-V0-16X2-BL
				Black	570767	PUN-V0-16X2-SW

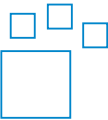
1) Standard: 50 m

Ordering data PUN-V0-C						
	Outside diameter	Packaging unit [m] ¹⁾	Product weight according to length	Colour	Part no.	Type
	4 mm	Standard	0.012 kg/m	Blue	570350	PUN-V0-4X1-BL-C
				Black	570349	PUN-V0-4X1-SW-C
	6 mm		0.032 kg/m	Blue	561702	PUN-V0-6X2-BL-C
				Brown	561722	PUN-V0-6X2-BR-C
				Yellow	561718	PUN-V0-6X2-GE-C
				Green	561706	PUN-V0-6X2-GN-C
				Red	561710	PUN-V0-6X2-RT-C
				Black	561698	PUN-V0-6X2-SW-C
				White	561714	PUN-V0-6X2-WS-C
	8 mm		0.049 kg/m	Blue	561703	PUN-V0-8X2-BL-C
				Brown	561723	PUN-V0-8X2-BR-C
				Yellow	561719	PUN-V0-8X2-GE-C
				Green	561707	PUN-V0-8X2-GN-C
				Red	561711	PUN-V0-8X2-RT-C
				Black	561699	PUN-V0-8X2-SW-C
				White	561715	PUN-V0-8X2-WS-C
	10 mm		0.064 kg/m	Blue	561704	PUN-V0-10X2-BL-C
				Brown	561724	PUN-V0-10X2-BR-C
				Yellow	561720	PUN-V0-10X2-GE-C
				Green	561708	PUN-V0-10X2-GN-C
				Red	561712	PUN-V0-10X2-RT-C
				Black	561700	PUN-V0-10X2-SW-C

Ordering data

Ordering data PUN-V0-C						
	Outside diameter	Packaging unit [m] ¹⁾	Product weight according to length	Colour	Part no.	Type
	10 mm	Standard	0.064 kg/m	White	561716	PUN-V0-10X2-WS-C
	12 mm		0.08 kg/m	Blue	561705	PUN-V0-12X2-BL-C
				Brown	561725	PUN-V0-12X2-BR-C
				Yellow	561721	PUN-V0-12X2-GE-C
				Green	561709	PUN-V0-12X2-GN-C
				Red	561713	PUN-V0-12X2-RT-C
				Black	561701	PUN-V0-12X2-SW-C
				White	561717	PUN-V0-12X2-WS-C
	14 mm	0.096 kg/m	Blue	570352	PUN-V0-14X2-BL-C	
	Black		570351	PUN-V0-14X2-SW-C		
	16 mm	0.147 kg/m	Blue	570354	PUN-V0-16X2,5-BL-C	
			Black	570353	PUN-V0-16X2,5-SW-C	

1) Standard: 50 m

Ordering data – Modular product system			
	Short type code	Part no.	Type
	PUN, PUN-CM, PUN-H, PUN-V0, PUN-V0-C	553573	PUN