Plastic tubing PAN-V0

FESTO



Characteristics

At a glance

Particularly suited for use in areas in close proximity to flying sparks or welding spatter

- Polyvinyl chloride (outer hose), polyamide (inner hose)
- Flame retardant according to UL 94 VO
- High resistance to microbes and UV radiation
- Double-sheath tubing
- Operating medium: compressed air, vacuum, water, mineral oil
- Resistant to welding spatter

Note: Before the plastic tubing PAN-VO can be inserted into the push-in fitting QS-VO, the PVC sheath of the tubing must be cut by length X (see dimensional drawing). The integrated stop in the tubing cutter PAN-VOS, which is available as an accessory, ensures that the sheath is always cut to the correct length X. The blade design prevents damage to the inner polyamide tubing.

Additional documents Link & pan-v0



The additional document OD-TUBING-ADD contains further information on tubing/fitting combinations, assembly instructions and measuring 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 inlet pressure, outlet pressure, hose length and inside diameter.
- Media resistance: Evaluate the resistance of various material types and hoses from Festo to different chemicals and media.

Diagrams Link ♂ pan-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

 $For standard \ O.D. \ tubing, the outside \ diameter \ of the \ tube \ and \ the \ wall \ thickness \ are \ given \ as \ the \ tube \ size.$

Packaging unit [m]

Standard: 50 m

Type code

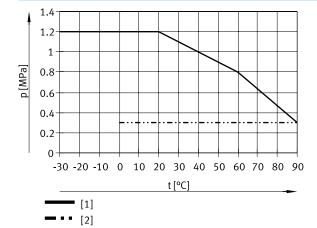
001	Series	
PAN	Standard O.D. tubing	
002	Alternative material characteristic	
V0	Flame-retardant	
003	Pipe/tubing O.D. x wall thickness	
4x0,75	4x0.75 mm	
6x1	6x1 mm	
8x1	8x1 mm	
10x1,25	10x1.25 mm	
12x1,5	12x1.5 mm	

004	Colour	
BL	Blue	
GE	Yellow	
GN	Green	
RT	Red	
SW	Black	
WS	White	
005	Packaging unit [m]	
005		
	Standard	

Datasheet

Operating and environmental conditions									
Outside diameter	6 mm	8 mm	10 mm	12 mm	14 mm				
Inside diameter	2.5 mm	4 mm	6 mm	7.5 mm	9 mm				
Pneumatic connection	For push-in connector O.D.	For push-in connector O.D.	For push-in connector O.D.	For push-in connector O.D.	For push-in connector out-				
	4 mm	6 mm	8 mm	10 mm	side diameter of 12 mm				
Flow-relevant bending radius	20 mm	30 mm	45 mm	56 mm	65 mm				
Min. bending radius	10 mm	0 mm							
Temperature-dependent operating pressure	-0.095 1.2 MPa								
Temperature-dependent operating pressure	-0.95 12 bar								
Temperature-dependent operating pressure	-13.775 174 psi								
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-] Mineral oil Water (liquid, ice-free)								
Ambient temperature	-30 90°C	-30 90°€							
Fire test material	UL94 V-0 (casing)								

Operating pressure p as a function of temperature t



[1] Air

[2] Water and mineral oil

Materials

Materials	
Shore hardness 1)	A72 +/-4
	D 57 +/-3
Material tubing 2)	PA12-P
	PVC-P
Note on materials	RoHS-compliant RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B2-L

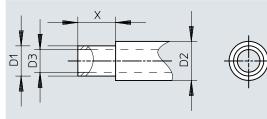
¹⁾ Outer tube: A 72 ±4, inner tube: D 57 ±3

²⁾ Outer tube: polyvinyl chloride, inner tube: polyamide

Dimensions

Dimensions – Tubing cutter PAN-VOS

Download CAD data & www.festo.com





	D1 Ø	D2 Ø	D3 Ø	x
PAN-V0S-4	4	6	2,5	14,7±1
PAN-V0S-6	6	8	4	15,7±1
PAN-V0S-8	8	10	6	16,7±1
PAN-V0S-10	10	12	7,5	19,2±1
PAN-V0S-12	12	14	9	22,7±1

Ordering data

Outside diameter	Packaging unit [m] 1)	Product weight according to length	Colour	Part no.	Туре			
6 mm	Standard	0.034 kg/m	Blue	132899	PAN-V0-4X0,75-BL			
8 mm		0.049 kg/m		132905	PAN-V0-6X1-BL			
			Yellow	525482	PAN-V0-6X1-GE			
			Green	525470	PAN-V0-6X1-GN			
			Red	525474	PAN-V0-6X1-RT			
			Black	160550	PAN-V0-6X1-SW			
			White	525478	PAN-V0-6X1-WS			
10 mm		0.065 kg/m	Blue	132906	PAN-V0-8X1-BL			
			Yellow	525483	PAN-VO-8X1-GE			
					Green 5:	525471	PAN-VO-8X1-GN	
			Red	525475	PAN-VO-8X1-RT			
							Black	160551
			White	525479	PAN-V0-8X1-WS			
12 mm		0.088 kg/m	Blue	132907	PAN-V0-10X1,25-BL			
			Yellow	525484	PAN-V0-10X1,25-GE			
			Green	525472	PAN-V0-10X1,25-GN			
			Red	525476	PAN-V0-10X1,25-RT			
			Black	160552	PAN-V0-10X1,25-SW			
			White	525480	PAN-V0-10X1,25-WS			
14 mm		0.133 kg/m	Blue	525469	PAN-V0-12X1,5-BL			
			Yellow	525485	PAN-V0-12X1,5-GE			
			Green	525473	PAN-V0-12X1,5-GN			
			Red	525477	PAN-V0-12X1,5-RT			
			Black	160553	PAN-V0-12X1,5-SW			
			White	525481	PAN-V0-12X1,5-WS			

1) Standard: 50 m

Accessories

Ordering data DPA-40MA-SET							
	Inside diameter	Colour	Product weight	Part no.	Туре		
	4 mm	grey	20 g	133180	PAN-VOS-4		
Co. Oct.	6 mm			133181	PAN-VOS-6		
	8 mm		21 g	133182	PAN-VOS-8		
	10 mm			133183	PAN-VOS-10		
	12 mm			133184	PAN-VOS-12		

Push-in fitting resistant to weld	•	Dnoumatic connection	Nominal siza	Dart no	Type
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Part no.	Туре
	Male thread G1/8	For tubing outside diameter of 6 mm	5 mm	186314	QS-V0-G1/8-6
		For tubing outside di- ameter of 8 mm	6 mm	186315	QS-V0-G1/8-8
3	Male thread G1/4	For tubing outside diameter of 6 mm	5 mm	186316	QS-V0-G1/4-6
		For tubing outside di- ameter of 8 mm	7 mm	186317	QS-V0-G1/4-8
		For tubing outside di- ameter of 10 mm	8.5 mm	186318	QS-V0-G1/4-10
		For tubing outer diame- ter of 12 mm		186319	QS-V0-G1/4-12
	Male thread G3/8	For tubing outside di- ameter of 8 mm	7 mm	186320	QS-V0-G3/8-8
		For tubing outside di- ameter of 10 mm	9 mm	186321	QS-V0-G3/8-10
		For tubing outer diameter of 12 mm	11 mm	186322	QS-V0-G3/8-12
	Male thread G1/2	For tubing outside di- ameter of 10 mm	9 mm	186323	QS-V0-G1/2-10
		For tubing outer diame- ter of 12 mm	11 mm	186324	QS-V0-G1/2-12
	Male thread R1/8	For tubing outside di- ameter of 4 mm	3 mm	132888	QS-V0-1/8-4
		For tubing outside di- ameter of 6 mm	5 mm	160500	QS-V0-1/8-6
		For tubing outside di- ameter of 8 mm	6 mm	160501	QS-V0-1/8-8
	Male thread R1/4	For tubing outside di- ameter of 6 mm	5 mm	160502	QS-V0-1/4-6
		For tubing outside di- ameter of 8 mm	7 mm	160503	QS-V0-1/4-8
		For tubing outside di- ameter of 10 mm	8.5 mm	160504	QS-V0-1/4-10
		For tubing outer diame- ter of 12 mm		160505	QS-V0-1/4-12
	Male thread R3/8	For tubing outside di- ameter of 8 mm	7 mm	160506	QS-V0-3/8-8
		For tubing outside di- ameter of 10 mm	9 mm	160507	QS-V0-3/8-10
		For tubing outer diameter of 12 mm	11 mm	160508	QS-V0-3/8-12
	Male thread R1/2	For tubing outside di- ameter of 10 mm	9 mm	160509	QS-V0-1/2-10
		For tubing outer diameter of 12 mm	11 mm	160510	QS-V0-1/2-12
	For tubing outer diameter of 4 mm	For tubing outside di- ameter of 4 mm	2.8 mm	132890	QS-V0-4

Plastic tubing PAN-V0

Accessories

Push-in fitting resistant to weld spatter QS-V0							
	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Part no.	Туре		
	For tubing outside di- ameter of 6 mm	For tubing outside di- ameter of 6 mm	4.3 mm	160546	QS-V0-6		
	For tubing outer diameter of 8 mm	For tubing outside diameter of 8 mm	7 mm	160547	QS-V0-8		
	For tubing outer diame- ter of 10 mm	For tubing outside di- ameter of 10 mm	9 mm	160548	QS-V0-10		
	For tubing outer diame- ter of 12 mm	For tubing outer diame- ter of 12 mm	11 mm	160549	QS-V0-12		