


Plastic tubing, standard I.D.

**FESTO**



# Plastic tubing, standard I.D.

Product range overview and type codes

Product range overview												
Version	Type	I.D. [mm]	Colour			Operating medium			Resistance		Shore hardness	→ Page/ Internet
			Blue	Black	Natural	Compressed air	Vacuum	Water (not drinking water)	Hydrolysis			
	PU	9	-	■	-	■	-	-	+	A 93 ±3	3	
	TPE-U(PU) <sup>1)</sup>	13.1	-	■	-	■	-	+				
	PCN	4	-	-	■	■	■	■		A 76 ±3	4	
	PVC											
	P	6, 9	■	-	-	■	■	■		A 68 ±5	5	
NBR												
P	13, 19	-	■	-	■	■	■		A 71 ±5	5		
EPDM, SBR												

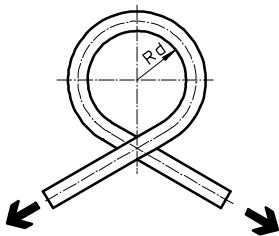
- 1) Fibre-reinforced
- + Limited suitability (on request)
- Not suitable

## Type codes

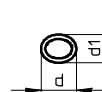
	PCN	4	NT	
<b>Material</b>				
PU	TPE-U(PU)			
PCN	PVC			
P	NBR (I.D. 6/9 mm)			
	EPDM, SBR (I.D. 13/19 mm)			
<b>I.D. [mm]</b>				
<b>Colour</b>				
SW	Black			
BL	Blue			
NT	Natural			

## Method of measurement

Flow-relevant bending radius  $R_d$



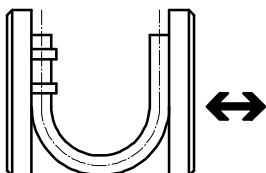
The tube is bent in the direction of its own curve until the tubing outer diameter is flattened by 5%.  $R_d$  is then calculated mathematically. The flow rate is not reduced until  $R_d$  is reached.



Cross section flattened by bending the tube.

- $d$  = non-deformed tubing O.D.
- $d_1$  = deformed tubing O.D.

## Minimum bending radius $R_{min}$



The tube fixed to the base plate is bent until the deformation results in a kink. The measured value is the minimum bending radius  $R_{min}$ . This  $R_{min}$  results in significant reductions in flow rate.

# Plastic tubing PU

Technical data

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## Plastic tubing PU

Highly flexible fibre-reinforced plastic tubing distinguished by its great resistance to abrasion and to kinks.



Operating and environmental conditions		
Type	PU-9	PU-13
Operating pressure for entire temperature range [bar]	0 ... +10	-0.95 ... +10
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-]	
Note on operating/pilot medium	Lubricated operation possible	
Ambient temperature [°C]	-35 ... +60	

## Possible fittings



Quick connector CK

→ Internet: ck

Materials	
Shore hardness	A 93 ±3
Tube	TPE-U(PU)
Note on materials	RoHS-compliant
	Free of copper and PTFE

Dimensions and ordering data							
O.D.	I.D.	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU <sup>1)</sup>
[mm]	[mm]	[mm]	[kg/m]				[m]
11.6	9	76	0.056	Black	12134	PU-9-SW	50
18	13.1	83	0.133	Black	12133	PU-13-SW	50

1) Packaging unit

# Plastic tubing PCN

Technical data

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## Plastic tubing PCN

For draining condensate in service units series D and MS



Operating and environmental conditions		
Operating pressure for entire temperature range	[bar]	-0.5 ... +0.25
Ambient temperature	[°C]	-10 ... +60

Materials	
Shore hardness	A 76 ±3
Tube	PVC
Note on materials	RoHS-compliant

Dimensions and ordering data						
O.D. [mm]	I.D. [mm]	Weight [kg/m]	Colour	Part No.	Type	PU <sup>1)</sup> [m]
6.5	4	0.025	Natural	7134	PCN-4-NT	50

1) Packaging unit

# Rubber tubing P

Technical data

## Rubber tubing P, with fibre reinforcement

Highly flexible tubing with fibre reinforcement for barbed hose fitting N-...-P and hose clip SK



Operating and environmental conditions	
Operating pressure for entire temperature range [bar]	-0.95 ... +16
Operating medium	Compressed air to ISO 8573-1:2010 [7:--:-]
Ambient temperature [°C]	-20 ... +80

Materials				
Type	P-6	P-9	P-13	P-19
Shore hardness	A 68 ±5		A 71 ±5	
Tube	NBR		EPDM, SBR	
Note on materials	RoHS-compliant			
	Free of copper and PTFE			

Dimensions and ordering data								
O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU <sup>1)</sup>
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
13	6	20	45	0.144	Blue	2231	P-6-BL	40
16	9	30	60	0.186	Blue	2232	P-9-BL	40
23	13	50	100	0.40	Black	2234	P-13-SW	40
31	19	60	200	0.649	Black	2235	P-19-SW	40

1) Packaging unit