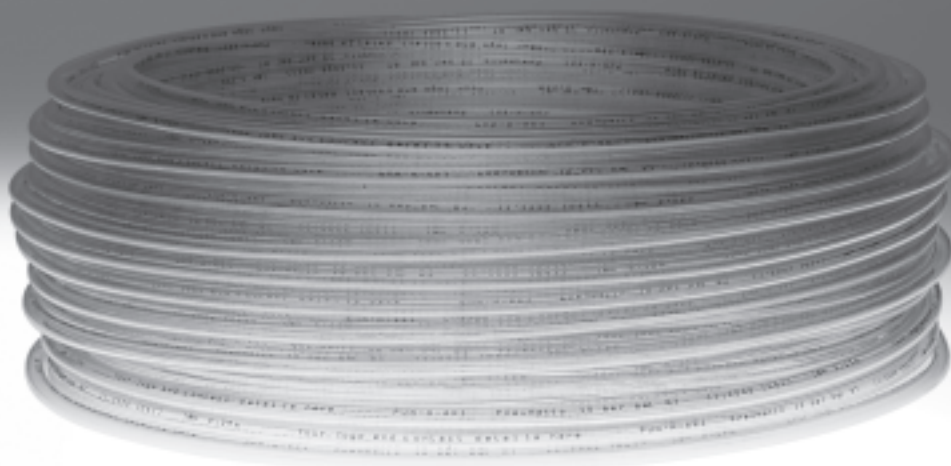


Plastic tubing, standard O.D.

FESTO



Do not use for new designs!
 Type PUN-E discontinued

Plastic tubing, standard O.D.

Product range overview

FESTO

Version	Type	Outside Ø [mm]	Colour											Operating medium				
			Silver	Blue	Black	Yellow	Green	Red	Brown	White	Natural	Blue/black	Compressed air	Vacuum	Water (not drinking water)	Drinking water	Mineral oil	
	PAN Polyamide	4, 6, 8, 10, 12, 14, 16	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PAN-R Polyamide	4, 6, 8, 10, 12, 14, 16	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PAN-VO Polyamide	4, 6, 8, 10, 12	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PEN Polyethylene	4, 6, 8, 10, 12, 14, 16	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PFAN Perfluor-alkoxyalkan	4, 6, 8, 10, 12	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PLN Polyethylene	4, 6, 8, 10, 12, 14, 16	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PUN Polyurethane	3, 4, 6, 8, 10, 12, 14, 16	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PUN-DUO Polyurethane	4, 6, 8, 10	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PUN-E Polyurethane	4, 6, 8, 10, 12	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PUN-CM Polyurethane	4, 6, 8, 10, 12, 14	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PUN-H Polyurethane	3, 4, 6, 8, 10, 12, 14, 16	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PUN-H-DUO Polyurethane	4, 6, 8, 10	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PUN-VO Polyurethane	6, 8, 10, 16	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PUN-VO-C Polyurethane	4, 6, 8, 10, 12, 14, 16	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	

Do not use for new designs!
 Type PUN-E discontinued

Plastic tubing, standard O.D.

Product range overview

FESTO

Type	Food approval as per directive 2002/72/EC	Food approval as per directive FDA	KTW-A certification for drinking water	W 270 certification for drinking water	Fire protection classification to UL 94	Antistatic	Halogen-free	Contact with electrical cables	PWIS-free to FN 942 010	Suitable for chain link trunking	Approved by German Technical Control Board	Germanischer Lloyd	Resistance				Flexibility	Shore hardness	→ Page/ Internet
													Chemicals	Microbes	UV radiation	Hydrolysis			
PAN	-	-	-	-	-	-	■	■	■	■	■	■ ¹⁾	+	++	+	++	++	D 55	6
PAN-R	-	-	-	-	-	-	■	■	■	■	■	-	+	++	+	++	+	D 62	8
PAN-V0	-	-	-	-	V0	-	-	■	■	■	-	-	+	++	++	++	++	A 72 ³⁾ D 57 ⁴⁾	9
PEN	-	-	-	-	-	-	■	■	■	■	■	-	++	++	++ ²⁾	+++	++	D 52	13
PFAN	■	■	-	-	V0	-	-	■	■	-	■	-	+++	++	++	+++	+	D 60	12
PLN	■	-	■	■	-	-	■	■	■	-	■	-	++	++	++ ²⁾	+++	+	-	17
PUN	-	-	-	-	-	-	■	■ ⁵⁾	■	■	■	-	-	-	++ ²⁾	+	+++	D 52	20
PUN-DUO	-	-	-	-	-	-	■	■ ⁵⁾	■	■	■	-	-	-	+	+	++	D 52	22
PUN-E	■	■	-	-	-	-	■	■	■	■	-	-	+	++	++ ²⁾	++	+++	D 52	23
PUN-CM	-	-	-	-	-	■	■	■	■	■	-	-	+	++	++	++	++	D 52	25
PUN-H	■	■	-	-	-	-	■	■	■	■	■	-	+	++	++ ²⁾	++	+++	D 52	26
PUN-H-DUO	■	■	-	-	-	-	■	■	■	■	■	-	+	++	+	++	++	D 52	29
PUN-V0	-	-	-	-	V0... V2	-	■	■	■	■	■	-	+	++	++ ²⁾	++	++	D 54	30
PUN-V0/-C	-	-	-	-	V0... V2	-	■	■	■	■	■	-	+	++	++ ²⁾	++	++	D 54	30

+++ Very well suited
 ++ Well suited

+ Limited suitability (upon request)
 - Unsuitable

1) Applies for silver colour
 2) Applies for black colour
 3) External conduit
 4) Internal conduit

5) Under unfavourable conditions, cables which contain phosphoric acid ester may damage PUN tubing.

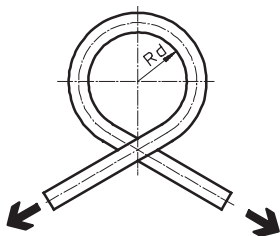
Plastic tubing

Technical data

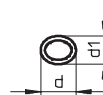
FESTO

Measuring methods

Flow-relevant bending radius R_d



The tubing is bent in the direction of its inherent flexion until a 5% flattening of the tubing O.D. occurs. The R_d is then calculated. There is no reduction in the flow rate up until the R_d is reached.

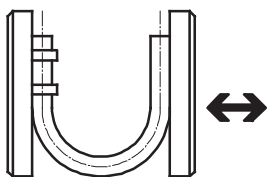


Cross section flattened as a result of bended tubing

d = non deformed tubing OD

$d1$ = deformed tubing OD

Minimum bending radius R_{min}



The tubing attached to a movable plate is bent until the deformation results in a kink. The measured value is the minimum bending radius R_{min} . This R_{min} leads to considerable reductions in flow.

Plastic tubing, standard O.D.

Type codes

FESTO

PUN		—		—	12x2	—		—	BL	—	200
-----	--	---	--	---	------	---	--	---	----	---	-----

Material	
PAN	Polyamide
PFAN	Perfluor-alkoxyalkan
PEN	Polyethylene
PLN	
PUN	Polyurethane

Certification	
E	Economy
CM	Antistatic
H	Hydrolysis resistant
V0	Flame retardant to UL 94 V0

Outside Ø x wall thickness [mm]	

Twin tubing	
DUO	Twin tubing

Colour	
SW	Black
BL	Blue
GN	Green
RT	Red
WS	White
GE	Yellow
BR	Brown
SI	Silver
NT	Natural
BS	Blue/black

Packaging unit [m]	

Plastic tubing PAN, standard O.D.

Technical data

Plastic tubing PAN

High thermal and mechanical load capacities.

-Q- Ambient temperature
-30 ... +80 °C

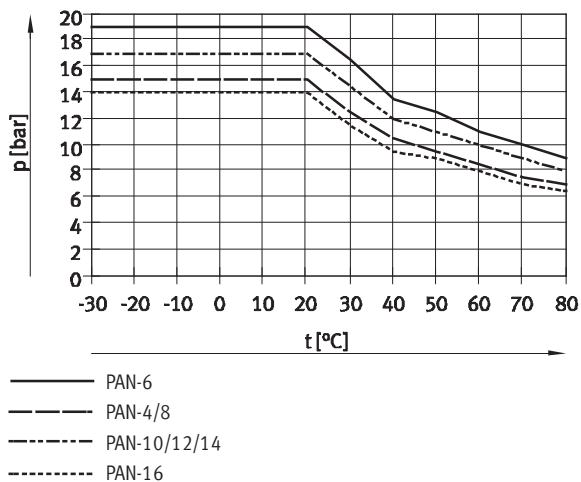
Pressure
operating pressure
-0.95 ... +19 bar

Material:
TPE-A

Note on material:
Free of copper and PTFE
RoHS-compliant



Operating pressure p as a function of temperature t



Possible fittings



Push-in fittings QS,
Quick Star¹⁾
→ Internet: qs



Barbed fittings CN
→ Internet: cn



Push-in fittings QS-F,
Quick Star, metal
→ Internet: qs-f



Quick connectors CK
→ Internet: ck

1) Recommended fitting

Dimensions and ordering data

O.D. [mm]	I.D. [mm]	Min. bending radius [mm]	Flow-relevant bending radius [mm]	Weight [kg/m]	Colour	Part No.	Type	PU ¹⁾ [m]
4	2.9	12	18	0.006	Silver	152697	PAN-4x0,75-SI	50
					Silver	553888	PAN-4x0,75-SI-500	500
					Blue	553906	PAN-4x0,75-BL	50
					Blue	553894	PAN-4x0,75-BL-500	500
					Black	553912	PAN-4x0,75-SW	50
					Black	553900	PAN-4x0,75-SW-500	500
					Natural	546284	PAN-4x0,75-NT	50
					Green	553918	PAN-4x0,75-GN	50
					Red	553924	PAN-4x0,75-RT	50
					Yellow	553930	PAN-4x0,75-GE	50

1) Packaging unit

Plastic tubing PAN, standard O.D.

Technical data

FESTO

Dimensions and ordering data								
O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
6	4	14	32	0.016	Silver	152699	PAN-6x1-SI	50
					Silver	553889	PAN-6x1-SI-500	500
					Blue	553907	PAN-6x1-BL	50
					Blue	553895	PAN-6x1-BL-500	500
					Black	553913	PAN-6x1-SW	50
					Black	553901	PAN-6x1-SW-500	500
					Natural	546285	PAN-6x1-NT	50
					Green	553919	PAN-6x1-GN	50
					Red	553925	PAN-6x1-RT	50
					Yellow	553931	PAN-6x1-GE	50
8	5.9	22	43	0.024	Silver	152700	PAN-8x1,25-SI	50
					Silver	553890	PAN-8x1,25-SI-400	400
					Blue	553908	PAN-8x1,25-BL	50
					Blue	553896	PAN-8x1,25-BL-400	400
					Black	553914	PAN-8x1,25-SW	50
					Black	553902	PAN-8x1,25-SW-400	400
					Natural	546286	PAN-8x1,25-NT	50
					Green	553920	PAN-8x1,25-GN	50
					Red	553926	PAN-8x1,25-RT	50
					Yellow	553932	PAN-8x1,25-GE	50
10	7	27	58	0.042	Silver	152701	PAN-10x1,5-SI	50
					Silver	553891	PAN-10x1,5-SI-300	300
					Blue	553909	PAN-10x1,5-BL	50
					Blue	553897	PAN-10x1,5-BL-300	300
					Black	553915	PAN-10x1,5-SW	50
					Black	553903	PAN-10x1,5-SW-300	300
					Natural	546287	PAN-10x1,5-NT	50
					Green	553921	PAN-10x1,5-GN	50
					Red	553927	PAN-10x1,5-RT	50
					Yellow	553933	PAN-10x1,5-GE	50
12	8.4	29	64	0.060	Silver	152702	PAN-12x1,75-SI	50
					Silver	553892	PAN-12x1,75-SI-200	200
					Blue	553910	PAN-12x1,75-BL	50
					Blue	553898	PAN-12x1,75-BL-200	200
					Black	553916	PAN-12x1,75-SW	50
					Black	553904	PAN-12x1,75-SW-200	200
					Natural	546288	PAN-12x1,75-NT	50
					Green	553922	PAN-12x1,75-GN	50
					Red	553928	PAN-12x1,75-RT	50
					Yellow	553934	PAN-12x1,75-GE	50
14	10	50	80	0.077	Silver	570392	PAN-14x2-SI	50
16	12	67	94	0.092	Silver	152703	PAN-16x2-SI	50
					Silver	553893	PAN-16x2-SI-100	100
					Blue	553911	PAN-16x2-BL	50
					Blue	553899	PAN-16x2-BL-100	100
					Black	553917	PAN-16x2-SW	50
					Black	553905	PAN-16x2-SW-100	100
					Natural	546289	PAN-16x2-NT	50
					Green	553923	PAN-16x2-GN	50
					Red	553929	PAN-16x2-RT	50
					Yellow	553935	PAN-16x2-GE	50

1) Packaging unit

Plastic tubing PAN-R, standard O.D.

Technical data

FESTO

Plastic tubing PAN-R

For high-pressure applications.

-Q- Ambient temperature
-30 ... +80 °C

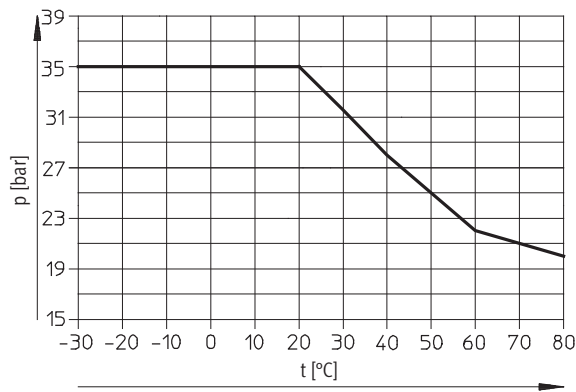
Pressure
operating pressure
-0,95 ... +35 bar

Material:
TPE-A

Note on material:
Free of copper and PTFE
RoHS-compliant



Operating pressure p as a function of temperature t



Possible fittings



Push-in fittings QS,
Quick Star¹⁾
→ Internet: qs



Push-in fittings QS-F,
Quick Star, metal
→ Internet: qs-f

Accessories



Pipe and tubing cutter ZRS
→ Internet: tool

1) Note application range of push-in fittings

Dimensions and ordering data								
O.D. [mm]	I.D. [mm]	Min. bending radius [mm]	Flow-relevant bending radius [mm]	Weight [kg/m]	Colour	Part No.	Type	PU ¹⁾ [m]
4	2.5	7	16	0.0079	Silver	541674	PAN-R-4x0,75-SI	50
6	3.8	12	21	0.0174		541675	PAN-R-6x1,1-SI	50
8	5	16	29	0.0316		541676	PAN-R-8x1,5-SI	50
10	6.2	18	44	0.0498		541677	PAN-R-10x1,9-SI	50
12	7.6	24	46	0.0698		541678	PAN-R-12x2,2-SI	50
16	10	33	73	0.1262		541679	PAN-R-16x3-SI	50

1) Packaging unit

Plastic tubing PAN-V0, standard O.D., flame retardant

Technical data

Plastic tubing PAN-V0

PVC casing, flame retardant to UL 94

VO. Casing must be cut to length X
(see table) before assembly.

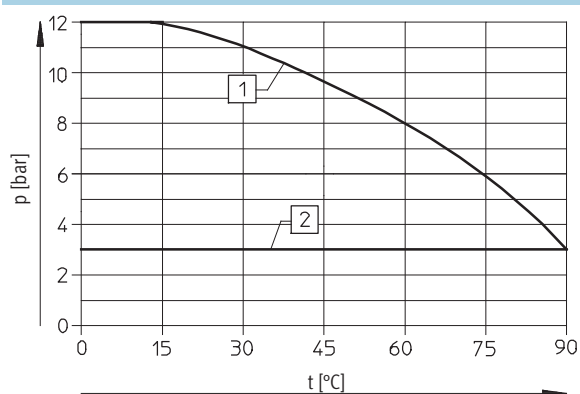
-Q- Ambient temperature
-30 ... +90 °C

Pressure
operating pressure
-0.95 ... +12 bar

Material:
Outer tubing: PVC
Inner tubing: PA

Note on material:
RoHS-compliant


Operating pressure p as a function of temperature t



- 1 Operating medium air
2 Operating medium oil/water

Possible fittings


Push-in fittings QS-V0,
Quick Star, flame-retardant
→ Internet: qs-v0

Accessories


Tubing cutter PAN-V0S-...
→ Internet: tool

Dimensions and ordering data

For push-in fitting	O.D.	Min. bending radius	Flow-relevant bending radius	Max. cut length X	Weight	Colour	Part No.	Type	PU ¹⁾
O.D.									
[mm]	[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
4	6	10	20	15	0.0335	Blue	132899	PAN-V0-4x0,75-BL-50	50
6	8	13	30	17	0.049	Black	160550	PAN-V0-6x1-SW	50
						Blue	525466	PAN-V0-6x1-BL	20
						Green	525470	PAN-V0-6x1-GN	20
						Red	525474	PAN-V0-6x1-RT	20
						White	525478	PAN-V0-6x1-WS	20
						Yellow	525482	PAN-V0-6x1-GE	20
						Brown	525486	PAN-V0-6x1-BR	20
8	10	24	45	18	0.065	Black	160551	PAN-V0-8x1-SW	50
						Blue	525467	PAN-V0-8x1-BL	20
						Green	525471	PAN-V0-8x1-GN	20
						Red	525475	PAN-V0-8x1-RT	20
						White	525479	PAN-V0-8x1-WS	20
						Yellow	525483	PAN-V0-8x1-GE	20
						Brown	525487	PAN-V0-8x1-BR	20

1) Packaging unit

Plastic tubing PAN-V0, standard O.D., flame retardant

FESTO

Technical data

Dimensions and ordering data									
For push-in fitting	O.D.	Min. bending radius	Flow-relevant bending radius	Max. cut length X	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
10	12	34	56	20	0.088	Black	160552	PAN-V0-10x1,25-SW	50
						Blue	525468	PAN-V0-10x1,25-BL	20
						Green	525472	PAN-V0-10x1,25-GN	20
						Red	525476	PAN-V0-10x1,25-RT	20
						White	525480	PAN-V0-10x1,25-WS	20
						Yellow	525484	PAN-V0-10x1,25-GE	20
						Brown	525488	PAN-V0-10x1,25-BR	20
12	14	43	65	23	0.133	Black	160553	PAN-V0-12x1,5-SW	50
						Blue	525469	PAN-V0-12x1,5-BL	20
						Green	525473	PAN-V0-12x1,5-GN	20
						Red	525477	PAN-V0-12x1,5-RT	20
						White	525481	PAN-V0-12x1,5-WS	20
						Yellow	525485	PAN-V0-12x1,5-GE	20
						Brown	525489	PAN-V0-12x1,5-BR	20

1) Packaging unit

Plastic tubing PAN, standard O.D.

Ordering data – Modular products

Ordering table (minimum order quantity 3,000 m, rounding-off value 25 m)										
Size	4	6	8	10	12	14	16	Condition s	Code	Enter code
[M] Module No.	553610									
Function	Polyamide tubing, standard O.D.								PAN	PAN
[O] Alternative material characteristic	Standard									
	Heavy-duty								-R	
[M] Tubing O.D. [mm]	4	–	–	–	–	–	–		-4	
	–	6	–	–	–	–	–		-6	
	–	–	8	–	–	–	–		-8	
	–	–	–	10	–	–	–		-10	
	–	–	–	–	12	–	–		-12	
	–	–	–	–	–	14	–		-14	
	–	–	–	–	–	–	16		-16	
Colour	Silver								-SI	
	Blue								-BL	
	Black								-SW	
	Yellow								-GE	
	Green								-GN	
	Red								-RT	
	Brown								-BR	
	White								-WS	
	Natural								-NT	
[O] Inscription text (on request)	Standard									
	Customer-specific tubing inscription							[1]	-TXT	
[M] Packaging unit [m]	25								-25	
	50								-50	
	100								-100	
	200								-200	
	300					–	–		-300	
	400				–	–	–		-400	
	500	–	–	–	–	–	–		-500	
Packaging	Cardboard box							[2]	-CB	
	Reel							[3]	-HA	

- [1] TXT** Only on request
[2] CB Only with packaging unit 25, 50

- [3] HA** Not with packaging unit 25, 50

Transfer order code

553610 **PAN** – – – – – –

Plastic tubing PFAN, standard O.D.

Technical data

FESTO

Plastic tubing PFAN

Pneumatic tubing with resistance to high temperatures and chemicals.

-Q- Ambient temperature
-20 ... +150 °C

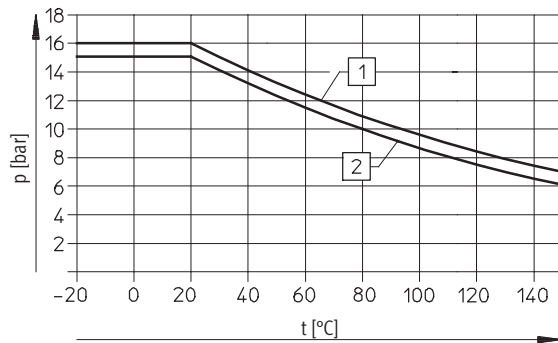
Pressure
operating pressure
-0.95 ... +16 bar

Material:
PFA

Note on material:
RoHS-compliant



Operating pressure p as a function of temperature t



- 1 PFAN-6/10/12
2 PFAN-4/8

Possible fittings



Push-in fittings QS-F,
Quick Star, metal
→ Internet: qs-f



Quick connectors CK
→ Internet: ck



Push-in fittings CRQS, Quick Star,
stainless steel¹⁾
→ Internet: crqs

1) Recommended fitting

Dimensions and ordering data								
O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
4	2.9	11	37	0.012	Natural	197061	PFAN-4x0,75-NT	50
6	4	12	50	0.034		197062	PFAN-6x1-NT	50
8	5.9	25	110	0.049		197063	PFAN-8x1,25-NT	50
10	7	22	140	0.087		197064	PFAN-10x1,5-NT	50
12	8.4	29	165	0.125		197065	PFAN-12x1,75-NT	50

1) Packaging unit

Plastic tubing PEN, standard O.D.

Technical data

Plastic tubing PEN

Polyethylene tubing is distinguished by its high resistance to chemicals and hydrolysis. It is also resistant to most cleaning agents and lubricants.

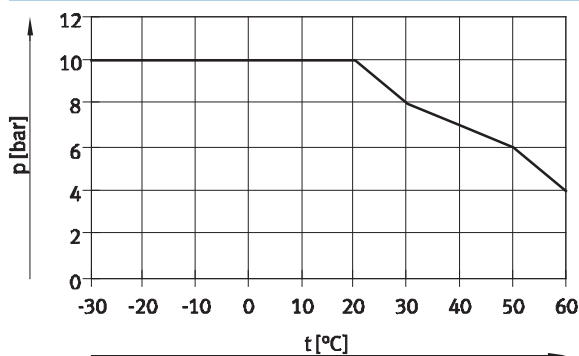
- Q- Ambient temperature
-30 ... +60 °C
-  - Temperature dependent
operating pressure
-0.95 ... +10 bar

Material:
PE

Note on material:
Free of copper and PTFE
RoHS-compliant



Operating pressure p as a function of temperature t



Possible fittings


Push-in fitting QS-B,
Quick Star¹⁾
→ Internet: qs-b


Barbed fitting CN
→ Internet: cn


Push-in fitting QS-F,
Quick Star, metal
→ Internet: qs-f


Quick connector CK
→ Internet: ck

1) Recommended fitting

Dimensions and ordering data

O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
4	2.7	10	20	0.0064	Black	543240	PEN-4x0,75-SW	50
					Black	551438	PEN-4x0,75-SW-500	500
					Blue	551456	PEN-4x0,75-BL	50
					Blue	551444	PEN-4x0,75-BL-500	500
					Silver	551462	PEN-4x0,75-SI	50
					Silver	551450	PEN-4x0,75-SI-500	500
					Natural	543246	PEN-4x0,75-NT	50
					Green	551468	PEN-4x0,75-GN	50
					Red	551474	PEN-4x0,75-RT	50
					Yellow	551480	PEN-4x0,75-GE	50

1) Packaging unit

Plastic tubing PEN, standard O.D.

Technical data

FESTO

Dimensions and ordering data								
O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
6	4	13.5	26	0.0148	Black	543241	PEN-6x1-SW	50
					Black	551439	PEN-6x1-SW-500	500
					Blue	551457	PEN-6x1-BL	50
					Blue	551445	PEN-6x1-BL-500	500
					Silver	551463	PEN-6x1-SI	50
					Silver	551451	PEN-6x1-SI-500	500
					Natural	543247	PEN-6x1-NT	50
					Green	551469	PEN-6x1-GN	50
					Red	551475	PEN-6x1-RT	50
					Yellow	551481	PEN-6x1-GE	50
8	5.7	22.5	35	0.0233	Black	543242	PEN-8x1,25-SW	50
					Black	551440	PEN-8x1,25-SW-400	400
					Blue	551458	PEN-8x1,25-BL	50
					Blue	551446	PEN-8x1,25-BL-400	400
					Silver	551464	PEN-8x1,25-SI	50
					Silver	551452	PEN-8x1,25-SI-400	400
					Natural	543248	PEN-8x1,25-NT	50
					Green	551470	PEN-8x1,25-GN	50
					Red	551476	PEN-8x1,25-RT	50
					Yellow	551482	PEN-8x1,25-GE	50
10	7	23.5	40	0.0377	Black	543243	PEN-10x1,5-SW	50
					Black	551441	PEN-10x1,5-SW-300	300
					Blue	551459	PEN-10x1,5-BL	50
					Blue	551447	PEN-10x1,5-BL-300	300
					Silver	551465	PEN-10x1,5-SI	50
					Silver	551453	PEN-10x1,5-SI-300	300
					Natural	543249	PEN-10x1,5-NT	50
					Green	551471	PEN-10x1,5-GN	50
					Red	551477	PEN-10x1,5-RT	50
					Yellow	551483	PEN-10x1,5-GE	50
12	8.4	33	58	0.0542	Black	543244	PEN-12x1,75-SW	50
					Black	551442	PEN-12x1,75-SW-200	200
					Blue	551460	PEN-12x1,75-BL	50
					Blue	551448	PEN-12x1,75-BL-200	200
					Silver	551466	PEN-12x1,75-SI	50
					Silver	551454	PEN-12x1,75-SI-200	200
					Natural	543250	PEN-12x1,75-NT	50
					Green	551472	PEN-12x1,75-GN	50
					Red	551478	PEN-12x1,75-RT	50
					Yellow	551484	PEN-12x1,75-GE	50
14	9.5	45	80	0.0773	Black	570516	PEN-14x2-SW	 50
					Natural	570517	PEN-14x2-NT	 50

1) Packaging unit

Plastic tubing PEN, standard O.D.

Technical data

FESTO

Dimensions and ordering data								
O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
16	10.8	57.5	122	0.1029	Black	543245	PEN-16x2,5-SW	50
					Black	551443	PEN-16x2,5-SW-100	100
					Blue	551461	PEN-16x2,5-BL	50
					Blue	551449	PEN-16x2,5-BL-100	100
					Silver	551467	PEN-16x2,5-SI	50
					Silver	551455	PEN-16x2,5-SI-100	100
					Natural	543251	PEN-16x2,5-NT	50
					Green	551473	PEN-16x2,5-GN	50
					Red	551479	PEN-16x2,5-RT	50
					Yellow	551485	PEN-16x2,5-GE	50

1) Packaging unit

Plastic tubing PEN, standard O.D.

Ordering data – Modular products

FESTO

Ordering table (minimum order quantity 3,000 m, rounding-off value 25 m)										
Size	4	6	8	10	12	14	16	Condition s	Code	Enter code
[M] Module No.	553769									
Function	Polyethylene tubing, standard O.D., economical								PEN	PEN
Tubing O.D. [mm]	4	–	–	–	–	–	–		-4	
	–	6	–	–	–	–	–		-6	
	–	–	8	–	–	–	–		-8	
	–	–	–	10	–	–	–		-10	
	–	–	–	–	12	–	–		-12	
	–	–	–	–	–	14	–		-14	
	–	–	–	–	–	–	16		-16	
	–	–	–	–	–	–	–			
Colour	Silver								-SI	
	Blue								-BL	
	Black								-SW	
	Yellow								-GE	
	Green								-GN	
	Red								-RT	
	Brown								-BR	
	White								-WS	
	Natural								-NT	
[O] Inscription text (on request)	Standard									
	Customer-specific tubing inscription							[1]	-TXT	
[M] Packaging unit [m]	25								-25	
	50								-50	
	100								-100	
	200					–	–		-200	
	300					–	–		-300	
	400			–	–	–	–		-400	
	500		–	–	–	–	–		-500	
Packaging	Cardboard box							[2]	-CB	
	Reel							[3]	-HA	

- [1] TXT** Only on request
[2] CB Only with packaging unit 25, 50

- [3] HA** Not with packaging unit 25, 50

Transfer order code

553769 **PEN** – – – – –

Plastic tubing PLN, standard O.D.

Technical data

Plastic tubing PLN

Polyethylene tubing is distinguished by great resistance to chemicals and hydrolysis. It is resistant to most cleaning agents and lubricants.

The tubing is certified for use with drinking water by Germany's Water Technology Centre.

-Q- Ambient temperature
-30 ... +80 °C

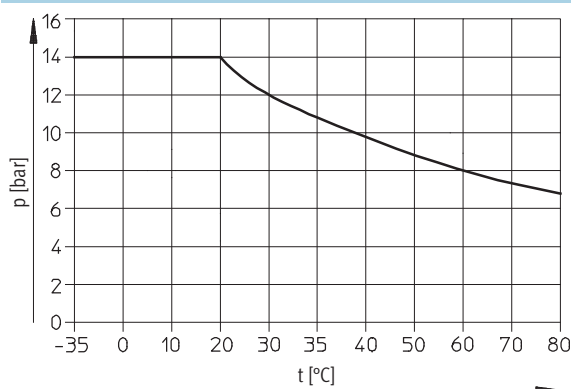
Pressure
operating pressure
-0.95 ... +14 bar

Material:
PE

Note on material:
Free of copper and PTFE
RoHS-compliant



Operating pressure p as a function of temperature t



Possible fittings



Push-in fittings QS,
Quick Star
→ Internet: qs



Barbed fittings CN
→ Internet: cn



Push-in fittings QS-F,
Quick Star, metal¹⁾
→ Internet: qs-f



Quick connectors CK
→ Internet: ck

1) Recommended fitting

Dimensions and ordering data

O.D. [mm]	I.D. [mm]	Min. bending radius [mm]	Flow-relevant bending radius [mm]	Weight [kg/m]	Colour	Part No.	Type	PU ¹⁾ [m]
4	2.9	12	25	0.0056	Natural	193403	PLN-4x0,75-NT	50
					Black	195280	PLN-4x0,75-SW	50
					Blue	558205	PLN-4x0,75-BL	50
					Silver	558211	PLN-4x0,75-SI	50
					Red	558217	PLN-4x0,75-RT	50
6	4	11	32	0.0147	Natural	193404	PLN-6x1-NT	50
					Black	195281	PLN-6x1-SW	50
					Blue	558206	PLN-6x1-BL	50
					Silver	558212	PLN-6x1-SI	50
					Red	558218	PLN-6x1-RT	50
8	5.9	23	50	0.0214	Natural	193405	PLN-8x1,25-NT	50
					Black	195282	PLN-8x1,25-SW	50
					Blue	558207	PLN-8x1,25-BL	50
					Silver	558213	PLN-8x1,25-SI	50
					Red	558219	PLN-8x1,25-RT	50

1) Packaging unit

Plastic tubing PLN, standard O.D.

Technical data

FESTO

Dimensions and ordering data								
O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
10	7	22	57	0.0375	Natural	193406	PLN-10x1,5-NT	50
					Black	195283	PLN-10x1,5-SW	50
					Blue	558208	PLN-10x1,5-BL	50
					Silver	558214	PLN-10x1,5-SI	50
					Red	558220	PLN-10x1,5-RT	50
12	8.4	23	65	0.0540	Natural	193407	PLN-12x1,75-NT	50
					Black	195284	PLN-12x1,75-SW	50
					Blue	558209	PLN-12x1,75-BL	50
					Silver	558215	PLN-12x1,75-SI	50
					Red	558221	PLN-12x1,75-RT	50
14	10	40	80	0.07	Natural	570424	PLN-14x2-NT	 50
					Black	570423	PLN-14x2-SW	 50
16	12	55	95	0.0820	Natural	539064	PLN-16x2-NT	50
					Black	539065	PLN-16x2-SW	50
					Blue	558210	PLN-16x2-BL	50
					Silver	558216	PLN-16x2-SI	50
					Red	558222	PLN-16x2-RT	50

1) Packaging unit

Plastic tubing PLN, standard O.D.

Ordering data – Modular products

Ordering table (minimum order quantity 3,000 m, rounding-off value 25 m)										
Size	4	6	8	10	12	14	16	Condition s	Code	Enter code
[M] Module No.	553850									
Function	Polyethylene tubing, standard O.D., resistant to cleaning agents (approved for use in the food industry)								PLN	PLN
Tubing O.D. [mm]	4	–	–	–	–	–	–		-4	
	–	6	–	–	–	–	–		-6	
	–	–	8	–	–	–	–		-8	
	–	–	–	10	–	–	–		-10	
	–	–	–	–	12	–	–		-12	
	–	–	–	–	–	14	–		-14	
	–	–	–	–	–	–	16		-16	
	–	–	–	–	–	–	–			
Colour	Silver								-SI	
	Blue								-BL	
	Black								-SW	
	Yellow								-GE	
	Green								-GN	
	Red								-RT	
	Brown								-BR	
	White								-WS	
	Natural								-NT	
[O] Inscription text (on request)	Standard									
	Customer-specific tubing inscription							[1]	-TXT	
[M] Packaging unit [m]	25								-25	
	50								-50	
	100								-100	
	200						–		-200	
	300				–	–	–		-300	
	400			–	–	–	–		-400	
	500		–	–	–	–	–		-500	
Packaging	Cardboard box							[2]	-CB	
	Reel							[3]	-HA	

[1] TXT Only on request
[2] CB Only with packaging unit 25, 50

[3] HA Not with packaging unit 25, 50

Transfer order code

553850 **PLN** – – – – –

Plastic tubing PUN, standard O.D.

Technical data

Plastic tubing PUN

Highly flexible plastic tubing

-Q- Ambient temperature
-35 ... +60 °C

Pressure
operating pressure
-0.95 ... +10 bar

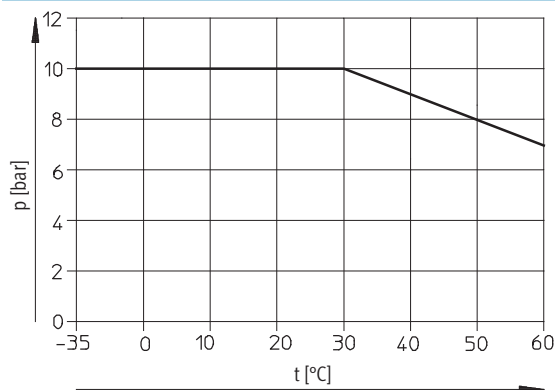
Material:
TPE-U(PU)

Note on material:
Free of copper and PTFE
RoHS-compliant

FESTO



Operating pressure p as a function of temperature t



Possible fittings



Push-in fittings QS,
Quick Star¹⁾
→ Internet: qs



Quick connectors CK
→ Internet: ck



Push-in fittings QS-F,
Quick Star, metal
→ Internet: qs-f

1) Recommended fitting

Dimensions and ordering data								
O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
3.0	2.1	9	12	0.004	Silver	152583	PUN-3x0,5-SI	50
					Silver	525738	PUN-3 x 0,5-SI-500	500
					Blue	159660	PUN-3x0,5-BL	50
					Blue	525745	PUN-3x0,5-BL-500	500
					Black	159661	PUN-3x0,5-SW	50
					Black	553936	PUN-3x0,5-SW-500	500
					Yellow	178416	PUN-3x0,5-GE	50
					Green	178423	PUN-3x0,5-GN	50
					Red	178409	PUN-3x0,5-RT	50
4.0	2.6	8	17	0.009	Silver	152584	PUN-4x0,75-SI	50
					Silver	525739	PUN-4x0,75-SI-500	500
					Blue	159662	PUN-4x0,75-BL	50
					Blue	525746	PUN-4x0,75-BL-500	500
					Black	159663	PUN-4x0,75-SW	50
					Black	553937	PUN-4x0,75-SW-500	500
					Yellow	178417	PUN-4x0,75-GE	50
					Green	178424	PUN-4x0,75-GN	50
					Red	178410	PUN-4x0,75-RT	50

1) Packaging unit

Plastic tubing PUN, standard O.D.

Technical data

FESTO

Dimensions and ordering data								
O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
6.0	4.0	14	26.5	0.019	Silver	152586	PUN-6x1-SI	50
					Silver	525740	PUN-6x1-SI-500	500
					Blue	159664	PUN-6x1-BL	50
					Blue	525747	PUN-6x1-BL-500	500
					Black	159665	PUN-6x1-SW	50
					Black	553938	PUN-6x1-SW-500	500
					Yellow	178418	PUN-6x1-GE	50
					Green	178425	PUN-6x1-GN	50
					Red	178411	PUN-6x1-RT	50
8.0	5.7	20	37	0.030	Silver	152587	PUN-8x1,25-SI	50
					Silver	525741	PUN-8x1,25-SI-400	400
					Blue	159666	PUN-8x1,25-BL	50
					Blue	525748	PUN-8x1,25-BL-400	400
					Black	159667	PUN-8x1,25-SW	50
					Black	553939	PUN-8x1,25-SW-400	400
					Yellow	178419	PUN-8x1,25-GE	50
					Green	178426	PUN-8x1,25-GN	50
					Red	178412	PUN-8x1,25-RT	50
10.0	7.0	25	54	0.049	Silver	152588	PUN-10x1,5-SI	50
					Silver	525742	PUN-10x1,5-SI-300	300
					Blue	159668	PUN-10x1,5-BL	50
					Blue	525749	PUN-10x1,5-BL-300	300
					Black	159669	PUN-10x1,5-SW	50
					Black	553940	PUN-10x1,5-SW-300	300
					Yellow	178420	PUN-10x1,5-GE	50
					Green	178427	PUN-10x1,5-GN	50
					Red	178413	PUN-10x1,5-RT	50
12.0	8.0	23	62	0.077	Silver	152589	PUN-12x2-SI	50
					Silver	525743	PUN-12x2-SI-200	200
					Blue	159670	PUN-12x2-BL	50
					Blue	252750	PUN-12x2-BL-200	200
					Black	159671	PUN-12x2-SW	50
					Black	553941	PUN-12x2-SW-200	200
					Yellow	178421	PUN-12x2-GE	50
					Green	178428	PUN-12x2-GN	50
					Red	178414	PUN-12x2-RT	50
14.0	9.8	45	84	0.0949	Silver	570389	PUN-14x2-SI 	50
					Blue	570390	PUN-14x2-BL 	50
					Black	570391	PUN-14x2-SW 	50
16.0	11.0	43	88	0.129	Silver	152590	PUN-16x2,5-SI	50
					Silver	525744	PUN-16x2,5-SI-100	100
					Blue	159672	PUN-16x2,5-BL	50
					Blue	525751	PUN-16x2,5-BL-100	100
					Black	159673	PUN-16x2,5-SW	50
					Black	553942	PUN-16x2,5-SW-100	100
					Yellow	178422	PUN-16x2,5-GE	50
					Green	178429	PUN-16x2,5-GN	50
					Red	178415	PUN-16x2,5-RT	50

1) Packaging unit

Plastic tubing PUN-DUO, standard O.D.

Technical data

FESTO

DUO tubing PUN-DUO

Highly flexible paired plastic tubing distinguished by great resistance to abrasion and kinks. Two lengths of tubing are fused together into a tubing pair. For fitting, the paired tubing is separated as required at both ends.

-Q- Ambient temperature
-35 ... +60 °C

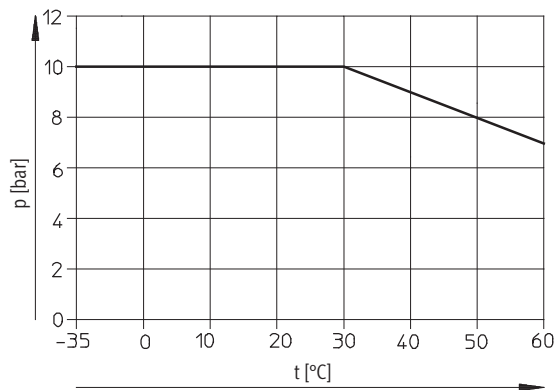
Pressure
operating pressure
-0.95 ... +10 bar

Material:
TPE-U(PU)

Note on material:
Free of copper and PTFE
RoHS-compliant



Operating pressure p as a function of temperature t



Possible fittings



Push-in fittings QS,
Quick Star¹⁾
→ Internet: qs



Quick connectors CK
→ Internet: ck



Push-in fittings QS-F,
Quick Star, metal
→ Internet: qs-f

1) Recommended fitting

Dimensions and ordering data								
O.D. [mm]	I.D. [mm]	Min. bending radius [mm]	Flow-relevant bending radius [mm]	Weight [kg/m]	Colour	Part No.	Type	PU ¹⁾ [m]
4	2.6	8	17	0.018	Silver	152822	PUN-4x0,75-DUO-SI	50
					Blue/black	159674	PUN-4x0,75-DUO-BS	50
6	4	14	26.5	0.038	Silver	152823	PUN-6x1-DUO-SI	50
					Blue/black	159675	PUN-6x1-DUO-BS	50
8	5.7	20	37	0.060	Silver	152824	PUN-8x1,25-DUO-SI	50
					Blue/black	159676	PUN-8x1,25-DUO-BS	50
10	7	25	54	0.098	Silver	152825	PUN-10x1,5-DUO-SI	50
					Blue/black	159677	PUN-10x1,5-DUO-BS	50

1) Packaging unit

Do not use for new designs!

- 7 - Type discontinued

FESTO

Plastic tubing PUN-E, standard O.D.

Technical data

Plastic tubing PUN-E

Highly flexible, hydrolysis and microbe resistant tubing

Food certification FDA for blue and black design.

Note

Alternatively, the standard plastic O.D. tubing PEN can be used → 13.

-Q- Ambient temperature
-35 ... +50 °C

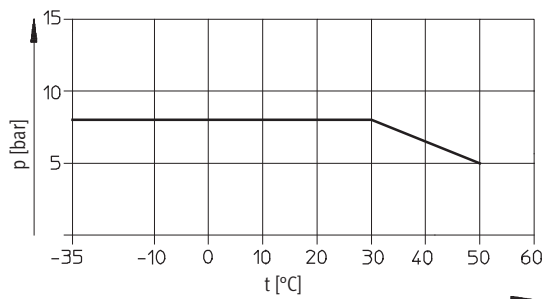
- 1 - Temperature dependent
operating pressure
-0.95 ... +8 bar

Material:
TPE-U(PU)

Note on material:
Free of copper and PTFE
RoHS-compliant



Operating pressure p as a function of temperature t



Possible fittings



Push-in fittings QS-B,
Quick Star¹⁾
→ Internet: qs-b



Push-in fittings QS-F,
Quick Star, metal
→ Internet: qs-f

1) Recommended fittings

Dimensions and ordering data									
O. D.	I. D.	M in b e n d i n g r a d i u s	F l o w- r e l e v a n t b e n d i n g r a d i u s	W e i g h t	C o l o u r	Part No.	Type	PU ¹⁾	
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]	
4	2.8	8	30	0.08	Silver	535320	PUN-E-4x0,6-SI	- 7 -	50
						534170	PUN-E-4x0,6-SI-500	- 7 -	500
						535325	PUN-E-4x0,6-BL	- 7 -	50
						534171	PUN-E-4x0,6-BL-500	- 7 -	500
						538465	PUN-E-4x0,6-SW	- 7 -	50
						538460	PUN-E-4x0,6-SW-500	- 7 -	500

6	4.4	15	45	0.08	Silver	535321	PUN-E-6x0,8-SI	- 7 -	50
						534172	PUN-E-6x0,8-SI-500	- 7 -	500
						535326	PUN-E-6x0,8-BL	- 7 -	50
						534173	PUN-E-6x0,8-BL-500	- 7 -	500
						538466	PUN-E-6x0,8-SW	- 7 -	50
						538461	PUN-E-6x0,8-SW-500	- 7 -	500
8	6.3	20	50	0.06	Silver	535322	PUN-E-8x1-SI	- 7 -	50
						534174	PUN-E-8x1-SI-400	- 7 -	400
						535327	PUN-E-8x1-BL	- 7 -	50
						534175	PUN-E-8x1-BL-400	- 7 -	400
						538467	PUN-E-8x1-SW	- 7 -	50
						538462	PUN-E-8x1-SW-400	- 7 -	400
10	7.5	26	60	0.04	Silver	535323	PUN-E-10x1,25-SI	- 7 -	50
						534176	PUN-E-10x1,25-SI-300	- 7 -	300
						535328	PUN-E-10x1,25-BL	- 7 -	50
						534177	PUN-E-10x1,25-BL-300	- 7 -	300
						538468	PUN-E-10x1,25-SW	- 7 -	50
						538463	PUN-E-10x1,25-SW-300	- 7 -	300

1) Packaging unit

Do not use for new designs!

- 2 - Type discontinued

Plastic tubing PUN-E, standard O.D.

Technical data

FESTO

Dimensions and ordering data							Part No.	Type	PU ¹⁾
O.D.	I.D.	M.D.	Flange	Weight	Color				
[mm]	[mm]	[mm]	[mm]	[kg/m]					[m]

1	8.	3	8	0.	Si	535324	PUN-E-12x1,6-SI	- 2 -	50
2	8	6	0	0	lv	534178	PUN-E-12x1,6-SI-200	- 2 -	200
				6	er				
				9	Bl	535329	PUN-E-12x1,6-BL	- 2 -	50
					u	534179	PUN-E-12x1,6-BL-200	- 2 -	200
					e				
					Bl	538469	PUN-E-12x1,6-SW	- 2 -	50
					ac	538464	PUN-E-12x1,6-SW-200	- 2 -	200
					k				

1) Packaging unit

Plastic tubing PUN-CM, standard O.D., antistatic

Technical data

FESTO

Plastic tubing PUN-CM

Highly flexible plastic tubing,
electrically conductive.
Surface resistance $10^4 \dots 10^7 \text{ Ohm}$

-Q- Ambient temperature
-35 ... +60 °C

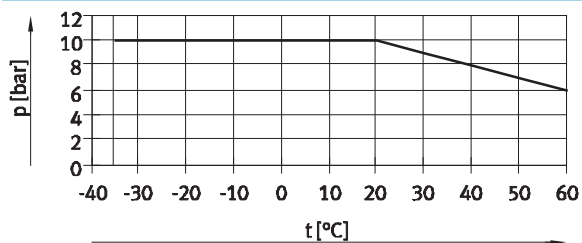
Pressure
operating pressure
-0,95 ... +10 bar

Material:
TPE-U(PU)

Note on material:
Free of copper and PTFE
RoHS-compliant



Operating pressure p as a function of temperature t



Possible fittings



Push-in fittings QS-F,
Quick Star, metal
→ Internet: qs-f

Dimensions and ordering data

O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
4	2.5	5	17	0.0089	Black	188882	PUN-CM-4-SW	50
6	4	13	26.5	0.0192		188883	PUN-CM-6-SW	50
8	5.5	14	37	0.0320		130816	PUN-CM-8-SW	50
10	7	19	54	0.0480		130817	PUN-CM-10-SW	50
12	8	22	70	0.0754		130818	PUN-CM-12-SW	50

1) Packaging unit

Plastic tubing PUN-H, standard O.D., hydrolysis resistant

Technical data

Plastic tubing PUN-H

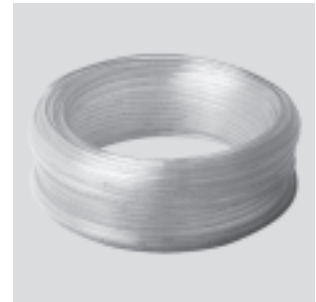
-Q- Ambient temperature
-35 ... +60 °C

Approved for use in the food industry.

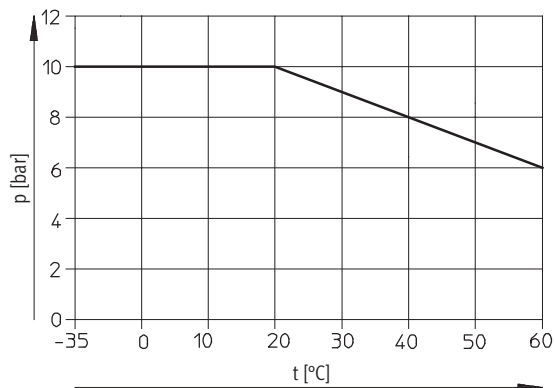
Pressure
operating pressure
-0,95 ... +10 bar

Material:
TPE-U(PU)

Note on material:
Free of copper and PTFE
RoHS-compliant



Operating pressure p as a function of temperature t



Possible fittings



Push-in fittings QS,
Quick Star
→ Internet: qs



Push-in fittings QS-F,
Quick Star, metal¹⁾
→ Internet: qs-f

1) Recommended fitting

Dimensions and ordering data

O.D. [mm]	I.D. [mm]	Min. bending radius [mm]	Flow-relevant bending radius [mm]	Weight [kg/m]	Colour	Part No.	Type	PU ¹⁾ [m]
3	2.1	6	12	0.0042	Natural	197375	PUN-H-3x0,5-NT	50
					Natural	558263	PUN-H-3x0,5-NT-500	500
					Blue	197382	PUN-H-3x0,5-BL	50
					Blue	558256	PUN-H-3x0,5 BL-500	500
					Black	197389	PUN-H-3x0,5-SW	50
					Black	558249	PUN-H-3x0,5-SW-500	500
					Silver	558277	PUN-H-3x0,5-SI	50
					Silver	558270	PUN-H-3x0,5-SI-500	500
					Red	558284	PUN-H-3x0,5-RT	50
					Green	558291	PUN-H-3x0,5-GN	50
					Yellow	558298	PUN-H-3x0,5-GE	50
4	2.6	6	16	0.0085	Natural	197376	PUN-H-4x0,75-NT	50
					Natural	558264	PUN-H-4x0,75-NT-500	500
					Blue	197383	PUN-H-4x0,75-BL	50
					Blue	558257	PUN-H-4x0,75-BL-500	50
					Black	197390	PUN-H-4x0,75-SW	500
					Black	558250	PUN-H-4x0,75-SW-500	500
					Silver	558278	PUN-H-4x0,75-SI	50
					Silver	558271	PUN-H-4x0,75-SI-500	500
					Red	558285	PUN-H-4x0,75-RT	50
					Green	558292	PUN-H-4x0,75-GN	50
					Yellow	558299	PUN-H-4x0,75-GE	50

1) Packaging unit

Plastic tubing PUN-H, standard O.D., hydrolysis resistant

Technical data

FESTO

Dimensions and ordering data								
O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
6	4	10	26	0.0183	Natural	197377	PUN-H-6x1-NT	50
					Natural	558265	PUN-H-6x1-NT-500	500
					Blue	197384	PUN-H-6x1-BL	50
					Blue	558258	PUN-H-6x1-BL-500	500
					Black	197391	PUN-H-6x1-SW	50
					Black	558251	PUN-H-6x1-SW-500	500
					Silver	558279	PUN-H-6x1-SI	50
					Silver	558272	PUN-H-6x1-SI-500	500
					Red	558286	PUN-H-6x1-RT	50
					Green	558293	PUN-H-6x1-GN	50
					Yellow	558300	PUN-H-6x1-GE	50
8	5.7	20	37	0.0287	Natural	197378	PUN-H-8x1,25-NT	50
					Natural	558266	PUN-H-8x1,25-NT-400	400
					Blue	197385	PUN-H-8x1,25-BL	50
					Blue	558259	PUN-H-8x1,25-BL-400	400
					Black	197392	PUN-H-8x1,25-SW	50
					Black	558252	PUN-H-8x1,25-SW-400	400
					Silver	558280	PUN-H-8x1,25-SI	50
					Silver	558273	PUN-H-8x1,25-SI-400	400
					Red	558287	PUN-H-8x1,25-RT	50
					Green	558294	PUN-H-8x1,25-GN	50
					Yellow	558301	PUN-H-8x1,25-GE	50
10	7	25	52	0.0465	Natural	197379	PUN-H-10x1,5-NT	50
					Natural	558267	PUN-H-10x1,5-NT-300	300
					Blue	197386	PUN-H-10x1,5-BL	50
					Blue	558260	PUN-H-10x1,5-BL-300	300
					Black	197393	PUN-H-10x1,5-SW	50
					Black	558253	PUN-H-10x1,5-SW-300	300
					Silver	558281	PUN-H-10x1,5-SI	50
					Silver	558274	PUN-H-10x1,5-SI-300	300
					Red	558288	PUN-H-10x1,5-RT	50
					Green	558295	PUN-H-10x1,5-GN	50
					Yellow	558302	PUN-H-10x1,5-GE	50
12	8	23	62	0.0729	Natural	197380	PUN-H-12x2-NT	50
					Natural	558268	PUN-H-12x2-NT-200	200
					Blue	197387	PUN-H-12x2-BL	50
					Blue	558261	PUN-H-12x2-BL-200	200
					Black	197394	PUN-H-12x2-SW	50
					Black	558254	PUN-H-12x2-SW-200	200
					Silver	558282	PUN-H-12x2-SI	50
					Silver	558275	PUN-H-12x2-SI-200	200
					Red	558289	PUN-H-12x2-RT	50
					Green	558296	PUN-H-12x2-GN	50
					Yellow	558303	PUN-H-12x2-GE	50
14	9.8	38	78	0.091	Natural	570388	PUN-H-14x2-NT	 50
					Blue	570386	PUN-H-14x2-BL	 50
					Black	570387	PUN-H-14x2-SW	 50

1) Packaging unit

Plastic tubing PUN-H, standard O.D., hydrolysis resistant

FESTO

Technical data

Dimensions and ordering data								
O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
16	11	38	88	0.1230	Natural	197381	PUN-H-16x2,5-NT	50
					Natural	558269	PUN-H-16x2,5-NT-100	100
					Blue	197388	PUN-H-16x2,5-BL	50
					Blue	558262	PUN-H-16x2,5-BL-100	100
					Black	197395	PUN-H-16x2,5-SW	50
					Black	558255	PUN-H-16x2,5-SW-100	100
					Silver	558283	PUN-H-16x2,5-SI	50
					Silver	558276	PUN-H-16x2,5-SI-100	100
					Red	558290	PUN-H-16x2,5-RT	50
					Green	558297	PUN-H-16x2,5-GN	50
					Yellow	558304	PUN-H-16x2,5-GE	50

1) Packaging unit

Plastic tubing PUN-H-DUO, standard O.D., hydrolysis resistant

FESTO

Technical data

DUO tubing PUN-H-DUO

Highly flexible paired plastic tubing distinguished by great resistance to abrasion and kinks. Two lengths of tubing are fused together into a tubing pair. For fitting, the paired tubing is separated as required at both ends.

-Q- Ambient temperature
-35 ... +60 °C

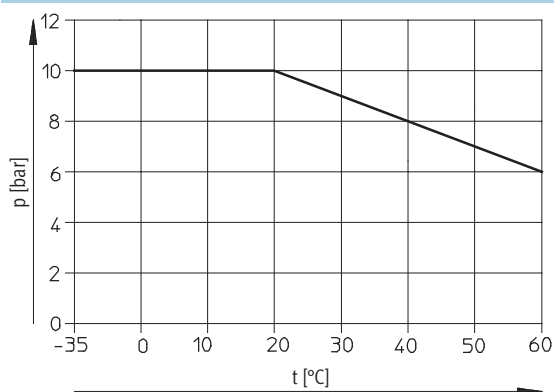
Pressure
operating pressure
-0,95 ... +10 bar

Material:
TPE-U(PU)

Note on material:
Free of copper and PTFE
RoHS-compliant



Operating pressure p as a function of temperature t



Possible fittings



Push-in fittings QS,
Quick Star
→ Internet: qs



Push-in fittings QS-F,
Quick Star, metal¹⁾
→ Internet: qs-f

1) Recommended fitting

Dimensions and ordering data

O.D. [mm]	I.D. [mm]	Min. bending radius [mm]	Flow-relevant bending radius [mm]	Weight [kg/m]	Colour	Part No.	Type	PU ¹⁾ [m]
4	2.6	6	16	0.0170	Blue/black	197396	PUN-H-4x0,75-DUO	50
6	4	10	26	0.0366	Blue/black	197397	PUN-H-6x1-DUO	50
8	5.7	20	37	0.0574	Blue/black	197398	PUN-H-8x1,25-DUO	50
10	7	25	52	0.0930	Blue/black	197399	PUN-H-10x1,5-DUO	50

1) Packaging unit

Plastic tubing PUN-V0, standard O.D., flame retardant

Technical data

Plastic tubing PUN-V0

Highly flexible plastic tubing, flame retardant to UL 94 V0 ... V2.
For use in the immediate vicinity of welding applications.

-Q- Ambient temperature
-35 ... +60 °C

Pressure
operating pressure
-0,95 ... +10 bar

Note

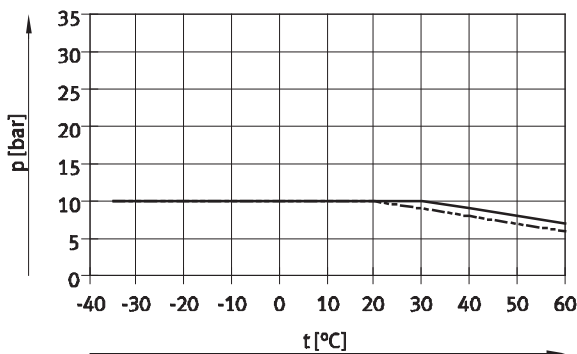
Due to the included flame retardant, the colour of the tubing deviates from the standard colour.

Material:
TPE-U(PU)

Note on material:
Free of copper and PTFE
RoHS-compliant



Operating pressure p as a function of temperature t



———— PUN-V0-...
----- PUN-V0-16

Possible fittings



Push-in fittings QS,
Quick Star
→ Internet: qs



Quick connectors CK
→ Internet: ck



Push-in fittings QS-F,
Quick Star, metal¹⁾
→ Internet: qs-f

1) Recommended fitting

Dimensions and ordering data								
O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
6	4	12	26.5	0.020	Black	525438	PUN-V0-6x1-SW	50
					Blue	525442	PUN-V0-6x1-BL	50
					Green	525446	PUN-V0-6x1-GN	50
					Red	525450	PUN-V0-6x1-RT	50
					White	525454	PUN-V0-6x1-WS	50
					Yellow	525458	PUN-V0-6x1-GE	50
					Brown	525462	PUN-V0-6x1-BR	50
8	5.7	18	37	0.031	Black	525439	PUN-V0-8x1,25-SW	50
					Blue	525443	PUN-V0-8x1,25-BL	50
					Green	525447	PUN-V0-8x1,25-GN	50
					Red	525451	PUN-V0-8x1,25-RT	50
					White	525455	PUN-V0-8x1,25-WS	50
					Yellow	525459	PUN-V0-8x1,25-GE	50
					Brown	525463	PUN-V0-8x1,25-BR	50

1) Packaging unit

Plastic tubing PUN-V0, standard O.D., flame retardant

Technical data

Dimensions and ordering data								
O.D.	I.D.	Min. bending radius	Flow-relevant bending radius	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
10	7	20	54	0.051	Black	525440	PUN-V0-10x1,5-SW	50
					Blue	525444	PUN-V0-10x1,5-BL	50
					Green	525448	PUN-V0-10x1,5-GN	50
					Red	525452	PUN-V0-10x1,5-RT	50
					White	525456	PUN-V0-10x1,5-WS	50
					Yellow	525460	PUN-V0-10x1,5-GE	50
					Brown	525464	PUN-V0-10x1,5-BR	50
16	11.8	50	90	0.122	Black	570767	PUN-V0-16x2-SW	 50
					Blue	570768	PUN-V0-16x2-BL	 50

1) Packaging unit

New
outside Ø 4, 14, 16

Plastic tubing PUN-V0-C, standard O.D., flame retardant

Technical data

Plastic tubing PUN-V0-C

Highly flexible single-sheath plastic tubing, flame retardant to UL 94 V0 ... V2.
For use in the immediate vicinity of welding applications.

-Q- Ambient temperature
-35 ... +60 °C

Pressure
operating pressure
-0.95 ... +10 bar

Material:
TPE-U(PU)

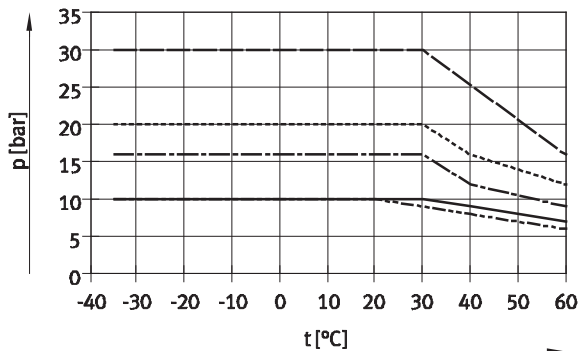
Note

Due to the included flame retardant, the colour of the tubing deviates from the standard colour.

Note on material:
Free of copper and PTFE
RoHS-compliant



Operating pressure p as a function of temperature t



———— PUN-V0-...-C
----- PUN-V0-14x2-...-C

For applications without welding spatter

— · — · — PUN-V0-6x2-...-C
····· PUN-V0-8x2-...-C
- - - - - PUN-V0-10x2-...-C

Possible fittings



Push-in fitting QS,
Quick Star
→ Internet: qs



Push-in fitting QS-F,
Quick Star, metal¹⁾
→ Internet: qs-f

1) Recommended fitting

Dimensions and ordering data

Outer Ø	Inner Ø	Min. bending radius	Bending radius relevant for flow rate	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
4	2	10	20	0.012	Black	570349	PUN-V0-4x1-SW-C	50
					Blue	570350	PUN-V0-4x1-BL-C	50
6	2	7	24	0.032	Black	561698	PUN-V0-6x2-SW-C	50
					Blue	561702	PUN-V0-6x2-BL-C	50
					Green	561706	PUN-V0-6x2-GN-C	50
					Red	561710	PUN-V0-6x2-RT-C	50
					White	561714	PUN-V0-6x2-WS-C	50
					Yellow	561718	PUN-V0-6x2-GE-C	50
					Brown	561722	PUN-V0-6x2-BR-C	50

1) Packaging unit

Plastic tubing PUN-V0-C, standard O.D., flame retardant

Technical data

FESTO

Dimensions and ordering data								
Outer Ø	Inner Ø	Min. bending radius	Bending radius relevant for flow rate	Weight	Colour	Part No.	Type	PU ¹⁾
[mm]	[mm]	[mm]	[mm]	[kg/m]				[m]
8	4	9	35	0.049	Black	561699	PUN-V0-8x2-SW-C	50
					Blue	561703	PUN-V0-8x2-BL-C	50
					Green	561707	PUN-V0-8x2-GN-C	50
					Red	561711	PUN-V0-8x2-RT-C	50
					White	561715	PUN-V0-8x2-WS-C	50
					Yellow	561719	PUN-V0-8x2-GE-C	50
					Brown	561723	PUN-V0-8x2-BR-C	50
10	6	12	42	0.064	Black	561700	PUN-V0-10x2-SW-C	50
					Blue	561704	PUN-V0-10x2-BL-C	50
					Green	561708	PUN-V0-10x2-GN-C	50
					Red	561712	PUN-V0-10x2-RT-C	50
					White	561716	PUN-V0-10x2-WS-C	50
					Yellow	561720	PUN-V0-10x2-GE-C	50
					Brown	561724	PUN-V0-10x2-BR-C	50
12	8	19	55	0.080	Black	561701	PUN-V0-12x2-SW-C	50
					Blue	561705	PUN-V0-12x2-BL-C	50
					Green	561709	PUN-V0-12x2-GN-C	50
					Red	561713	PUN-V0-12x2-RT-C	50
					White	561717	PUN-V0-12x2-WS-C	50
					Yellow	561721	PUN-V0-12x2-GE-C	50
					Brown	561725	PUN-V0-12x2-BR-C	50
14	9.8	45	70	0.096	Black	570351	PUN-V0-14x2-SW-C	 50
					Blue	570352	PUN-V0-14x2-BL-C	 50
16	11	50	90	0.147	Black	570353	PUN-V0-16x2,5-SW-C	 50
					Blue	570354	PUN-V0-16x2,5-BL-C	 50

1) Packaging unit

Plastic tubing PUN, standard O.D.

Ordering data – Modular products

FESTO

Ordering table (minimum order quantity 3,000 m, rounding-off value 25 m)											
Size	3	4	6	8	10	12	14	16	Condition s	Code	Enter code
[M] Module No.	553573										
Function	Polyurethane tubing, standard O.D.									PUN	PUN
[O] Alternative material characteristic	Standard										
	Economical									-E	
	Hydrolysis-resistant									-H	
	Antistatic									-CM	
	Flame-retardant									-VO	
	Resistant to welding spatter									-VOC	
[M] Tubing O.D. [mm]	3	4	6	8	10	12	14	16			
	3	4	6	8	10	12	14	16		-3	
	4	6	8	10	12	14	16			-4	
	6	8	10	12	14	16				-6	
	8	10	12	14	16					-8	
	10	12	14	16						-10	
	12	14	16							-12	
	14	16								-14	
	16									-16	
Colour	Silver								[1] [2]	-SI	
	Blue								[1] [3]	-BL	
	Black								[3]	-SW	
	Yellow								[1]	-GE	
	Green								[1]	-GN	
	Red								[1]	-RT	
	Brown								[1]	-BR	
	White								[1]	-WS	
	Natural								[1] [3] [4]	-NT	
[O] Inscription text (on request)	Standard										
	Customer-specific tubing inscription								[5]	-TXT	
[M] Packaging unit [m]	25	50	100	200	300	400	500				
	25	50	100	200	300	400	500			-25	
	50	100	200	300	400	500				-50	
	100	200	300	400	500					-100	
	200	300	400	500						-200	
	300	400	500							-300	
	400	500								-400	
	500									-500	
Packaging	Cardboard box								[6]	-CB	
	Reel								[7]	-HA	

[1] SI, BL, GE, GN, RT, BR, WS, NT

Not with alternative material characteristic CM

[2] SI

Not with alternative material characteristic VO, VOC

[3] BL, SW, NT

In combination with alternative material characteristic E, H:
approved for use in the food industry

[4] NT

Only with alternative material characteristic E, H

[5] TXT

Not in the online shop.

[6] CB

Festo logo, order code, TÜV, operating pressure, dimensions omitted

[7] HA

Only with packaging unit 25, 50

Not with packaging unit 25, 50

Not with alternative material characteristic VO, VOC

Transfer order code

553573 PUN - - - - -

Product Range and Company Overview

A Complete Suite of Automation Services

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



Custom Automation Components
Complete custom engineered solutions



Custom Control Cabinets
Comprehensive engineering support and on-site services



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With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



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Electromechanical actuators, motors, controllers & drives



Pneumatics
Pneumatic linear and rotary actuators, valves, and air supply



PLCs and I/O Devices
PLC's, operator interfaces, sensors and I/O devices

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Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

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Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.



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