



Key features

Application

Choosing the right fitting is effortless. With a system that includes well over.

1000 types of standard and function fittings, Festo offers a secure solution for every connection.

Summary of tubing/fitting combinations

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Applications	Fitting	Tubing	Description
Standard Higher pressures Resistant to chemicals, food- safe and hydrolysis-resistant Resistant to chemicals and hydrolysis Antistatic	QS	PEN	Suitable for a wide range of tasks and attractively priced. Flexible thanks to highly resistant materials, easy to install thanks to optimised bending radii. High level of abrasion resistance in dynamic applications.
	QS	PUN	Maximum flexibility in standard applications thanks to an extremely wide range of options for combining the different types.
tandard QS QS QS QS US VPQM esistant to chemicals, food- afe and hydrolysis-resistant NPQH NPQH NPQP Afe and hydrolysis-resistant NPQH NPQH NPQH NPQH NPQH NPQH NPQK CRQS esistant to chemicals and ydrolysis ntistatic NPQM lame-retardant NPQM	PAN	Meets all requirements, even for standard applications with increased pressure and temperature ranges.	
Higher pressures	NPQM	PAN-MF	Meets DIN standard 73378: ideal for use in mobile pneumatics. Suitable for increased temperature ranges combined with high pressure ranges.
	NPQH	PAN-R	Powerful in pressure ranges up to 20 bar, for example in applications with the pressure booster DPA.
Resistant to chemicals, food- safe and hydrolysis-resistant	NPQP	PLN	Resistant to cleaning agents, FDA-compliant and economical. Can be used instead of the combination with stainless steel fittings.
	NPKA	PUN-H	Hydrolysis-resistant and suitable for water applications. Combination suitable for use in clean rooms, FDA compliant and corrosion resistant as it is made of 100% polymer. Very easy to install thanks to the "one click principle".
	NPQH	PFAN/PTFEN	For high temperatures up to 150 °C. Food-safe, FDA-compliant and resistant to cleaning agents.
	NPCK	PFAN/PTFEN	Easy to clean thanks to the union nut's edge-free design. Extremely high resistance to corrosion (CRC4) and FDA compliant. Suitable for a wide range of media.
	CRQS	PFAN/PTFEN	Extremely high resistance to corrosion (CRC4) and to aggressive acids and alkalis.
Resistant to chemicals and hydrolysis	NPQR	PFAN/PTFEN	Optimised design, fewer edges where dirt can collect – all at an attractive price. For high temperatures up to 150 °C. Pressure range up to 16 bar. Extremely high corrosion resistance (CRC4).
Antistatic	NPQM	PUN-CM	Antistatic tubing plus solid metal fitting: maximum protection for electrical and electronic components.
Flame-retardant	NPQM	PUN-V0	Very safe in areas where there is a risk of fire thanks to flame-retardant properties. The tubing has been tested to DIN 5510-2.
Resistant to welding spatter	NPQH	PUN-VO-C	Ideal for applications involving welding spatter. Reliable thanks to a tubing wall thickness of 2 mm for all diameters.
	QS-V0	PAN-V0	Safe even in the close vicinity of welding spatter thanks to the double-walled tubing with special fitting.

Key features

Push-in fittings product range QSM, mini series



CRQS, stainless steel

Data sheets → Internet: qsm

Miniature push-in fittings for maximum component density in confined spaces. For pneumatic applications with a temperature range up to 80 °C and a pressure range up to 14 bar. Tubing O.D. of 2, 3, 4 and 6 mm with connecting threads M3, M5, M6, M7, R1/8 and G1/8.

Data sheets \rightarrow Internet: crgs

Stainless steel push-in fitting.

Extremely high corrosion resistance (CRC4) and chemical resistance with

approval for use in the food and pack-

aging industry. For pneumatic applica-

tions with a temperature range up to

120 °C and a pressure range up to

Tubing O.D. of 4, 6, 8, 10, 12 and

16 mm with connecting threads M5

10 bar.

and R1/8 ... R1/2.

QS, standard series



QS-V0, resistant to welding spatter

Data sheets → Internet: qs

Wide selection of push-in fittings for pneumatic applications with a temperature range up to 80 °C and a pressure range up to 14 bar. Tubing O.D. of 4, 6, 8, 10, 12, 16 and 22 mm with connecting threads R1/8 ... R1/2 and G1/8 ... G3/4.

Data sheets \rightarrow Internet: qs-v0

Flame-retardant push-in fitting for use in all areas where there is a risk of fire, for example welding systems in the automotive industry, and in the construction industry. For pneumatic applications with a temperature range up to 60 °C and a pressure range up to 10 bar.

Tubing O.D. of 4, 6, 8, 10 and 12 mm with connecting threads $R1/8 \dots R1/2$ and $G1/8 \dots G1/2$.

Data sheets → Internet: npqm

Attractively priced metal push-in fitting for pneumatic applications with a temperature range up to 70 °C and a pressure range up to 16 bar. Tubing O.D. of 3, 4, 6, 8, 10, 12 and 14 mm with connecting threads M5, M7 and G1/8 ... G1/2.

Data sheets \rightarrow Internet: npqr

Stainless steel push-in fitting. Extremely high corrosion resistance CRC4 and chemical resistance. For pneumatic applications with a temperature range up to 150 °C and a pressure range up to 16 bar. Tubing O.D. of 4, 6, 8, 10 and 12 mm with connecting threads M5, M7 and G1/8 ... G1/2.



NPQH



NPQP



Data sheets → Internet: npqh

All metal push-in fitting made of chemically nickel-plated brass. High corrosion resistance CRC3 and chemical resistance. For pneumatic applications with a temperature range up to 150 °C and a pressure range up to 20 bar. Tubing O.D. of 4, 6, 8, 10, 12 and 14 mm with connecting threads M5, M7 and G1/8 ... G1/2.

Data sheets → Internet: npqp

Polypropylene fitting for use in applications with extreme media influences. For pneumatic applications with a temperature range up to 60 °C and a pressure range up to 10 bar. Tubing O.D. of 4, 6, 8, 10 and 12 mm with connecting threads R1/8 ... R1/2.



NPQM



NPQR, stainless steel



Key features

Functional push-in fittings product range QSK,

push-in fitting, self-sealing



Quick connectors product range NPCK



Data sheets → Internet: qsk

Push-in fitting that blocks the air flow after the tubing is disconnected. For pneumatic applications with a temperature range up to 60 °C and a pressure range up to 14 bar. Tubing O.D. of 4, 6, 8, 10 and 12 mm with connecting threads M5, R1/8 ... R1/2 and G1/8 ... G1/2.

Data sheets → Internet: npck

Stainless steel fitting for use in areas

subject to intensive cleaning. Extreme-

ly high corrosion resistance CRC4. For

pneumatic applications with a temper-

Tubing O.D. of 6 mm with connecting

ature range up to 120 °C and a

pressure range up to 12 bar.

thread G1/8.



QSR,

push-in fitting, rotatable

Click fittings product range

NPKA



Data sheets \rightarrow Internet: qsr

Push-in fitting with swivel joint, rotatable by 360°. The ball bearing enables rotating movements in the application up to max. 500 rpm. For pneumatic applications with a temperature range up to 60 °C and a pressure range up to 14 bar.

Tubing O.D. of 4, 6, 8, 10 and 12 mm with connecting threads M5, R1/8 ... R1/2 and G1/8 ... G1/2.

Data sheets → Internet: npka

Plastic fitting for easy installation with one-hand operation. Hydrolysis-resistant, FDA-compliant and easy to clean. For pneumatic applications with a temperature range up to 60 °C and a pressure range up to 10 bar. Tubing O.D. of 6 mm with connecting thread G1/8.

Key features

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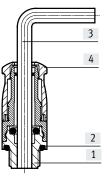
The click fitting NPKA is suitable for use in the food industry.

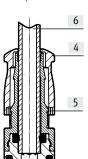
The NPKA is made entirely of plastic and is ideally suited for use in areas subject to intensive cleaning.

Quick and simple tube installation using one hand. Reliable assembly: click sound indicates that the open or closed position has been reached.

Low leaking, no scratching of the tube by retaining claws. Easy to clean, sealed shape when the tube is fitted. Suitable for tubes with corresponding slot.

Mounting and dismantling Mounting





- [1] Screwed trunnion
- [2] Sealing ring
- [3] Allen key
- [4] Sleeve
- · Screw the screwed trunnion and the sealing ring on to the counterpart and tighten in accordance with the nominal tightening torque.
- Special feature of the straight design NPKA-D: insert the long side of an Allen key completely into the click fitting through the sleeve. Use the entire contact surface of the internal hexagon.

- [4] Sleeve
- [5] Stop contour 1
- Plastic tubing [6]
- Pull the sleeve as far as the stop contour 1 of the clamping collet, until you hear and feel the sleeve click in.
- Insert the plastic tubing through the open sleeve, clamping collet and tubing seal as far as the tube bearing shoulder.

- [7] Stop contour 2
- Push the sleeve as far as the stop contour 2 of the clamping collet, until you hear and feel the sleeve click in.
- The closed sleeve pushes the clamping segment of the clamping collet against the plastic tubing, holding it in place.

Disassembly

Dismantling is done in the reverse sequence to assembly.

Tolerance for nominal tightening

Tubing insertion depth

Data sheet

General technical data Size Standard Design Push-pull principle Mounting position Any Type of seal on screwed trunnion Sealing ring Max. tightening torque [Nm] 2 Nominal tightening torque [Nm] 1.25

±20

25.8

[%]

[mm]

Suitable plastic tubing	PAN, PAN-R, PAN-MF, PAN-VO, PFAN, PEN, PLN, PUN, PUN-DUO, PUN-CM, PUN-H, PUN-H-DUO, PUN-VO
Operating and environmental conditions	

Operating pressure	[bar]	-0.95 +10
Operating medium		Compressed air to ISO 8573-1:2010 [7:-:-]
		Water as per manufacturer's declaration ¹⁾
Note on the operating/pilot medium		Lubricated operation possible
Ambient temperature	[°C]	-10+60
Food-safe ¹⁾		See supplementary material information

1) Additional information www.festo.com/sp \rightarrow Certificates.

Materials

torque

РОМ										
PA66-GF30										
NBR										
NBR										
RoHS-compliant										

Product range overview

Design	Version	Туре	Pneumatic connection 1 G thread	Tubing O.D.	Pneumatic connection 2 Tubing O.D.	→ Page/ Internet
Straight shape	Click fitting – M	lale thread with i	nternal hexagon			
		NPKA-D	G1/8	-	6	8
L-shape	Elbow click fitti	ng – Male thread	with external hexagon, rotatable			
		NPKA-L	G1/8	-	6	8
T-shape	Click T-connecto	Dr	·			
	a Jool	NPKA-T	-	6	6	9

Data sheet

Click fitting NPKA-D Male thread with internal hexagon



L1

Dimensions and ordering data

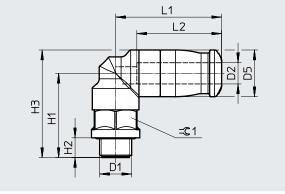
Dimensions and or	Dimensions and ordering data Download CAD data → www.festo.com												
Pneumatic connecti	on	Nominal	D5	L1	L2	=©	Weight/	Part no.	Туре	PU ¹⁾			
Male thread	For tubing O.D.	width	ø				piece						
D1	D2 [mm]	[mm]					[g]						
G1/8	6	4	14.2	33.6	6	4	4.2	1243489	NPKA-D-G18-Q6-P10	10			

1) Packaging unit

Elbow click fitting NPKA-L

Male thread with external hex, rotatable





Di	Dimensions and ordering data Download CAD data → www.festo.													to.com
Pn	neumatic connection	Nominal	D5	H1	H2	H3	L1	L2	= ©1	Weight/	Part no.	Туре	PU ¹⁾	
Ma	ale thread	For tubing O.D.	width	ø							piece			
D1	1	D2 [mm]	[mm]								[g]			
G1	1/8	6	4	14.2	25.6	6	32.7	32.3	25.8	13	7.5	1655429	NPKA-L-G18-Q6-P10	10

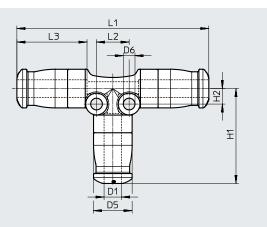
1) Packaging unit

i.

Data sheet

Click T-connector NPKA-T





Dimensions and ordering data → www.fer											to.com	
Pneumatic connection	Nominal	D5	D6	H1	H2	L1	L2	L3	Weight/	Part no.	Туре	PU ¹⁾
For tubing O.D.	width	ø	ø						piece			
D1 [mm]	[mm]								[g]			
6	4	14.2	4.3	35	5.7	70.6	12	25.8	12.5	1590710	NPKA-T-Q6-E-P10	10

1) Packaging unit