

## Click fittings NPKA

**FESTO**



## Key features

## Application

Choosing the right fitting is effortless. 1000 types of standard and function fittings, Festo offers the right solution for every connection.

With a system that includes well over

## Summary of tubing/fitting combinations

Applications	Fitting	Tubing	Description
Standard	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.
	QS	PAN	Meets all requirements, even for standard applications with increased pressure and temperature ranges.
High 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.
	NPQR	PUN-H-SF	Use in areas with higher pressure ranges and humidity. Tubing PUN-H-SF is resistant to kinking and hydrolysis and is suitable for water applications.
Resistant to chemicals and hydrolysis	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 cleanrooms, FDA-compliant and corrosion-resistant because it's 100% polymer. Very easy to install with the "one-click principle".
	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. Maximum corrosion resistance (CRC 4).
	NPCK	PFAN/PTFEN	Easy to clean thanks to the union nut's edge-free design. Maximum corrosion resistance (CRC 4) and FDA-compliant. Suitable for a wide range of media.
Resistant to chemicals and hydrolysis, food-safe	NPQR	PUN-H-F/PFAN	Food-safe to Regulation (EC) No. 1935/2004 and FDA-listed materials. Can be used in the food and packaging industry in combination with PUN-H-F and PFAN.
	NPQH	PFAN/PTFEN	For high temperatures up to 150 °C. Food-safe to Regulation (EC) No. 1935/2004, FDA-listed materials and resistant to cleaning agents.
Antistatic	NPQM	PUN-CM	Anti-static tubing plus solid metal fitting for 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-V0-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 immediate vicinity of welding spatter thanks to double-walled tubing with special fitting.
Battery manufacturing	NPQE-F1A <sup>1)</sup>	PUN-H	Suitable in battery production areas.

1) F1A = Free of copper, zinc and nickel

## Key features

## Push-in fittings – Product range

QSM, mini

Datasheets → Internet: qsm



Compact 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.

QS, standard

Datasheets → 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.

QS-V0, resistant to welding spatter

Datasheets → 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 ... R1/2 and G1/8 ... G1/2.

NPQH

Datasheets → 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.

NPQM

Datasheets → 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.

NPQP

Datasheets → 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.

NPQR, stainless steel

Datasheets → Internet: npqr



Stainless steel push-in fitting. Maximum corrosion resistance CRC 4 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.

## Key features

### Functional push-in fittings – Product range

QSK,  
push-in fitting, self-sealing

Datasheets → 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.

QSR,  
push-in fitting, rotatable

Datasheets → 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.

### Quick connectors – Product range

NPCK

Datasheets → Internet: npck



Stainless steel fitting for use in areas subject to intensive cleaning. Maximum corrosion resistance CRC 4. For pneumatic applications with a temperature range up to 120 °C and a pressure range up to 12 bar.  
Tubing O.D. of 6 mm with connecting thread G1/8.

### Click fittings – Product range

NPKA

Datasheets → Internet: npka



Polymer fitting for easy installation with one hand. 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

### Key features

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 easy tube installation using one hand

Reliable assembly: click sound indicates that the open or closed position has been reached

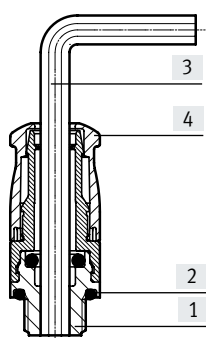
Low leakage, no scratching of the tube by retaining claws

Easy to clean, sealed shape when tubing is fitted

Suitable for tubes with corresponding slot

### Mounting and removal

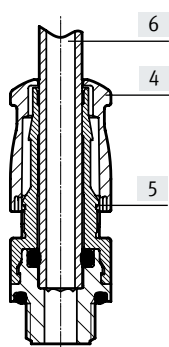
#### Mounting



- [1] Screwed trunnion
- [2] Sealing ring
- [3] Allen key
- [4] Sleeve

- Screw the screwed plug and the sealing ring on to the counterpart and tighten in accordance with the nominal tightening torque.

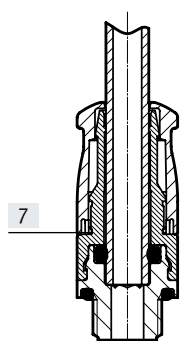
- Special feature of the straight design NPKA-D: insert the long side of an Allen key completely into the click fitting through the sleeve. Use the entire contact surface of the internal hexagon.



- [4] Sleeve
- [5] Stop contour 1
- [6] Plastic tubing

- 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.

#### Removal

In order to disassemble it, follow the steps in reverse order.

## Datasheet

**General technical data**

Size	Standard
Design	Push-pull principle
Mounting position	Any
Type of seal on the screwed plug	Sealing ring
Max. tightening torque [Nm]	2
Nominal tightening torque [Nm]	1.25
Tolerance for nominal tightening torque [%]	±20
Tubing insertion depth [mm]	25.8
Suitable plastic tubing	PAN, PAN-R, PAN-MF, PAN-VO, PFAN, PEN, PLN, PUN, PUN-DUO, PUN-CM, PUN-H, PUN-H-DUO, PUN-H-F, PUN-H-SF, PUN-VO

**Operating and environmental conditions**

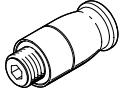
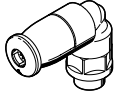

Operating pressure	[MPa]	-0.095 ... +1
	[bar]	-0.95 ... +10
	[psi]	-13.775 ... +145
Note on operating pressure	Water: max. 0.6 MPa at 0–50°C	
Operating medium	Compressed air to ISO 8573-1:2010 [7:--:-]	
	Water (liquid, ice-free) <sup>1)</sup>	
Note on the operating/pilot medium	Lubricated operation possible	
Ambient temperature [°C]	-10 ... +60	
Food-safe <sup>1)</sup>	See supplementary material information	

1) More information: [www.festo.com/catalogue/tek](http://www.festo.com/catalogue/tek) → Support/Downloads.

**Materials**

Sleeve	POM
Housing	PA66-GF30
Thread seal	NBR
Tubing seal	NBR
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B2-L

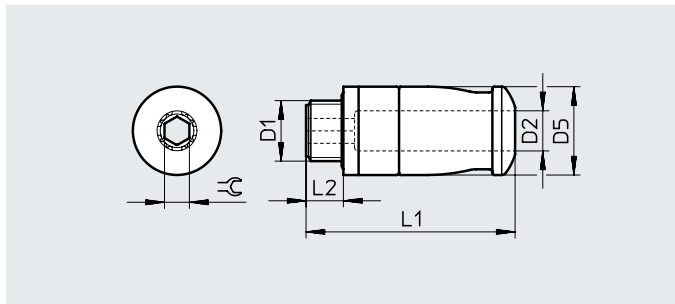
## Product range overview

Design	Version	Type	Pneumatic connection 1		Pneumatic connection 2		→ Page/ Internet
			G thread	Tubing O.D.	Tubing O.D.		
Straight shape	Click fitting – Male thread with internal hex						
		NPKA-D	G1/8	–	6	8	
L-shape	Elbow click fitting – Male thread with external hex, rotatable						
		NPKA-L	G1/8	–	6	8	
T-shape	Click T-connector						
		NPKA-T	–	6	6	9	

## Datasheet

### Click fitting NPKA-D

Male thread with internal hexagon



#### Dimensions and ordering data

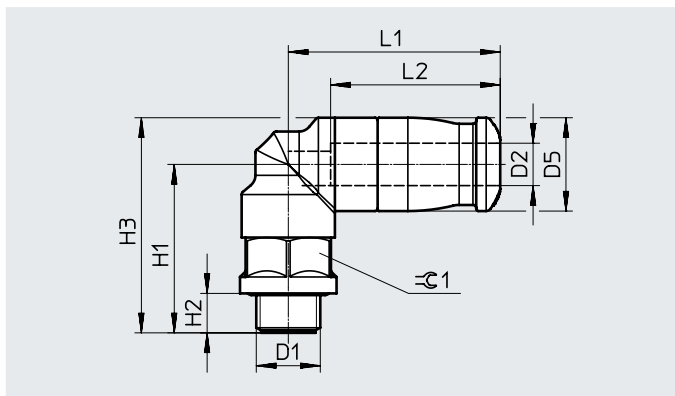
Download CAD data → [www.festo.com](http://www.festo.com)

Pneumatic connection		Nominal size	D5	L1	L2	⌀	Weight/ piece	Part no.	Type	PU <sup>1)</sup>
Male thread	For tubing O.D.	[mm]	∅				[g]			
D1	D2 [mm]									
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, ,



#### Dimensions and ordering data

Download CAD data → [www.festo.com](http://www.festo.com)

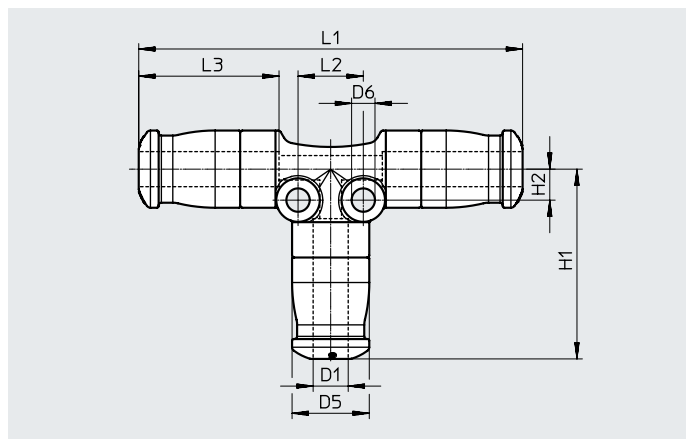
Pneumatic connection		Nominal size	D5	H1	H2	H3	L1	L2	⌀	Weight/ piece	Part no.	Type	PU <sup>1)</sup>
Male thread	For tubing O.D.	[mm]	∅							[g]			
D1	D2 [mm]												
G1/8	6	4	14.2	25.6	6	32.7	32.3	25.8	13	7.5	1655429	NPKA-L-G18-Q6-P10	10

1) Packaging unit



## Datasheet

## Click T-connector NPKA-T



## Dimensions and ordering data

Download CAD data → [www.festo.com](http://www.festo.com)

Pneumatic connection For tubing O.D. D1 [mm]	Nominal size [mm]	D5 ∅	D6 ∅	H1	H2	L1	L2	L3	Weight/ piece [g]	Part no.	Type	PU <sup>1)</sup>
6	4	14.2	4.3	35	5.7	70.6	12	25.8	12.5	<b>1590710</b>	<b>NPKA-T-Q6-E-P10</b>	<b>10</b>

1) Packaging unit