

## Push-in fittings NPQH

**FESTO**



## 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.

### Suitability for contact with food



The push-in fittings NPQR are suitable for contact with food. They have the necessary declaration of conformity in accordance with EU Regulation (EC) No. 1935/2004.

### 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.
Anti-static	NPQM	PUN-CM	Anti-static tubing plus solid metal fitting: maximum protection for electric 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 production	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 series

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 series

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 thread 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 thread 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 thread 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 thread 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 thread 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 thread 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 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 thread 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 thread 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. 4, 6, 8 and 10 mm with connecting thread M5 and G1/8 ... G3/8.

### 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.

## Technical data

General technical data	
Size	Standard
Design	Push-pull principle
Mounting position	Any
Type of seal on the screwed trunnion	Sealing ring
Nominal tightening torque [Nm]	1 ±20% for connecting thread M5
	3 ±20% for connecting thread M7
	6 ±20% for connecting thread G1/8
	7.5 ±20% for connecting thread G1/4
	9 ±20% for connecting thread G3/8
	9 ±20% for connecting thread G1/2
Tubing insertion depth [mm]	13 for tubing O.D. 4 mm
	15.8 for tubing O.D. 6 mm
	16 for tubing O.D. 8 mm
	18.3 for tubing O.D. 10 mm
	19.5 for tubing O.D. 12 mm
	22.5 for tubing O.D. 14 mm

Operating and environmental conditions	
Operating pressure for complete temperature range	[MPa] -0.095 ... +2
	[bar] -0.95 ... +20
	[psi] -13.775 ... +290
Note on operating pressure	Water: max. 0.6 MPa at max. 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 <sup>2)</sup> [°C]	0 ... +150
Corrosion resistance class CRC <sup>3)</sup>	3 - High corrosion stress
Food-safe <sup>1)</sup>	NSF/ANSI 169
	See declaration of conformity
Certificate-issuing authority	NSF C0523185

- 1) More information: [www.festo.com/catalogue/npqh\\_d/Support/Downloads](http://www.festo.com/catalogue/npqh_d/Support/Downloads).
- 2) Observe the range of application of the plastic tubing.
- 3) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

Materials	
Housing	Nickel-plated brass
Releasing ring	Chemically nickel-plated brass
Retaining ring	PEI
Support ring	PEI
Tube clamping segment	High-alloy stainless steel
Nut (NPQH-H only)	Nickel-plated brass
Threaded seal	FPM
Tubing seal	FPM
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Cleanroom class <sup>1)</sup>	Class 4 to ISO 14644-1

- 1) For blanking plug, push-in sleeves, push-in fittings with push-in sleeve and screw plugs (statically installed elements) no meaningful evaluation according to ISO 14644-1 possible.

## Technical data

### Tube mounting/dismounting

#### Mounting

The prerequisite for ensuring that the inner seal is securely held and protected against damage is that the tube is cut into straight lengths and deburred.

- 1) Insert tubing as far as the stop.  
It is important to ensure that the tubing is inserted into the inner seal. Depending on the tolerance between the tubing and the seal, the contact of the tubing with the seal may be wrongly interpreted as the stop.
- 2) Check that the tubing connection is secure by pulling gently on the tube.

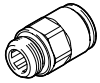

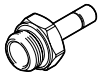

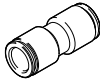
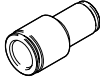
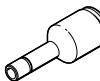
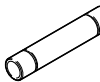
#### Dismantling

- 1) The tubing can be detached easily by pressing and holding down the releasing ring. Carefully remove the tubing from the fitting.
- 2) Before re-using the tubing, remove the damaged part by cutting it off.


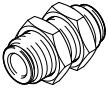
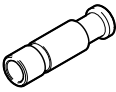

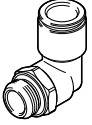
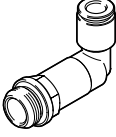
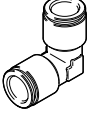
#### Note

When using a push-in sleeve as a quick coupling plug, the only way to guarantee an optimal and secure connection is by using products from the same series.  
In other words, a push-in sleeve NPQH may only be used with a push-in connector NPQH. The slot of the push-in sleeve must engage securely in the counterpart.

Product range overview

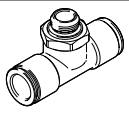
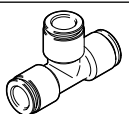
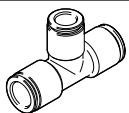
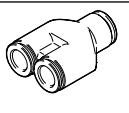
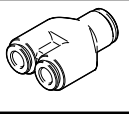
Design	Version	Type	Connection D1					Connection D2		→ Page/ Internet	
			M thread	R thread	G thread	Tubing O.D.	Push-in sleeve ø	Tubing O.D.	Push-in sleeve ø		
Straight shape	<b>Push-in fitting – Male thread with external hex</b>										
		NPQH-D	M5	-	-	-	-	-	4, 6	-	10
			M7		-				4, 6		
			-		G1/8				4, 6, 8		
			G1/4		6, 8, 10, 12						
			G3/8		8, 10, 12, 14						
			G1/2		10, 12, 14						
	<b>Push-in fitting – Female thread with external hex</b>										
		NPQH-D	-	-	G1/8	-	-	-	4, 6, 8	-	11
			G1/4		4, 6, 8						
<b>Push-in fitting with push-in sleeve</b>											
	NPQH-D	M5	-	-	-	-	-	-	4, 6	11	
		-		G1/8					4, 6, 8		
		G1/4		6, 8, 10, 12							
		G3/8		10, 12							
		G1/2		12							
<b>Push-in fitting – Male thread with internal hex</b>											
	NPQH-DK	M5	-	-	-	-	-	-	4, 6	12	
		M7		-					4, 6		
		-		G1/8					4, 6, 8		
		G1/4		8, 10							
		G3/8		12							
<b>Push-in connector</b>											
	NPQH-D	-	-	-	-	4	-	-	4	13	
		6		6							
		8		8							
		10		10							
		12		12							
	NPQH-D Reducing	-	-	-	-	6	-	-	4	13	
		8		6							
		12		8							
		14		10, 12							
<b>Push-in connector with push-in sleeve</b>											
	NPQH-D	-	-	-	-	4	-	-	6	14	
		4, 6		8							
		4, 6, 8		10							
		6, 8, 10		12							
		6, 8, 10, 12		14							
<b>Push-in sleeve</b>											
	NPQH-D	-	-	-	-	4	-	-	4	14	
		6		6							
		8		8							
		10		10							
		12		12							
		14		14							

Product range overview

Design	Version	Type	Connection D1					Connection D2		→ Page		
			M thread	R thread	G thread	Tubing O.D.	Push-in sleeve ø	Tubing O.D.	Push-in sleeve ø			
Straight shape	<b>Bulkhead push-in fitting – Female thread with external hex</b>											
		NPQH-H	-	-	G1/8	-	-	4, 6, 8	-	15		
					G1/4			6, 8				
	<b>Push-in bulkhead connector</b>											
		NPQH-H	-	-	-	-	-	4	-	4	15	
								6		6		
								8		8		
								10		10		
								12		12		
	<b>Blanking plug</b>											
	NPQH-P	-	-	-	-	-	4	-	-	16		
							6					
							8					
							10					
							12					
<b>Plug screw</b>												
	NPQH-BK	M5	-	-	-	-	-	-	-	16		
											M7	
											-	G1/8
											-	G1/4
											-	G3/8
											-	G1/2
L-shape	<b>Push-in L-fitting, rotatable 360° – Male thread with external hex</b>											
		NPQH-L	M5	-	-	-	-	-	4, 6	-	17	
									M7			4, 6
									-			4, 6, 8
									-			6, 8, 10, 12
									G1/8			8, 10, 12, 14
									G1/4			10, 12, 14
	<b>Push-in L-fitting, long, rotatable 360° – Male thread with external hex</b>											
		NPQH-LL	-	-	-	-	-	-	4, 6, 8	-	18	
									G1/8			6, 8, 10
G1/4									12			
<b>Push-in L-connector</b>												
	NPQH-L	-	-	-	-	-	-	4	-	4	18	
								6		6		
								8		8		
								10		10		
								12		12		
								14		14		



Product range overview

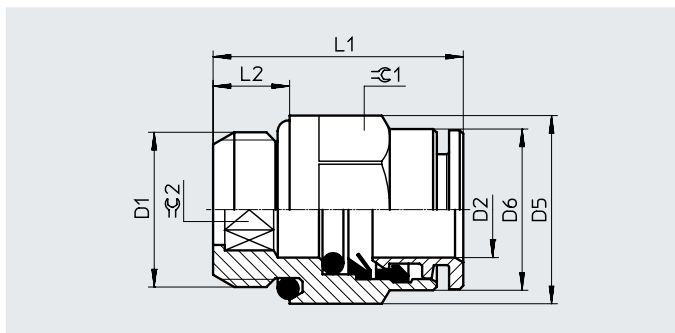
Design	Version	Type	Connection D1					Connection D2		→ Page	
			M thread	R thread	G thread	Tubing O.D.	Push-in sleeve ø	Tubing O.D.	Push-in sleeve ø		
T-shape	<b>Push-in T-fitting, rotatable 360° – Male thread with external hex</b>										
		NPQH-T	M5	-	-	-	-	-	4, 6	-	19
									4, 6, 8		
									6, 8, 10, 12		
									8, 10, 12		
									10, 12		
	<b>Push-in T-connector</b>										
		NPQH-T	-	-	-	-	-	-	4	-	20
									6		
									8		
10											
12											
	NPQH-T Reducing	-	-	-	-	-	-	6	-	20	
								8			
								10			
								12			
								12			
<b>Y-shape</b>											
<b>Push-in Y-connector</b>											
	NPQH-Y	-	-	-	-	-	-	6	-	21	
								8			
								10			
	NPQH-Y Reducing	-	-	-	-	-	-	4	-	21	
								6			
								8			

# Datasheet

## Push-in fitting NPQH-D

Male thread  
With external hex

Design:  
Straight shape



### Dimensions and ordering data

Connection	Nominal width [mm]	Tubing O.D. D2	Nominal tightening torque [Nm]	D5 $\varnothing$	D6 $\varnothing$	L1	L2	$\varnothing C1$	$\varnothing C2$	Weight/ piece [g]	Part no.	Type	PU <sup>1)</sup>
<b>M thread with sealing ring</b>													
M5	2.5	4	1 ±20%	8	9	21.5	4	9	2.5	5.8	578334	NPQH-D-M5-Q4-P10	10
	2.5	6	1 ±20%	8	12	24	4	12	2.5	11.2	578335	NPQH-D-M5-Q6-P10	10
M7	3	4	3 ±20%	9	9	20	5	9	3	5.2	578336	NPQH-D-M7-Q4-P10	10
	3	6	3 ±20%	9	12	23	5	12	3	10.2	578337	NPQH-D-M7-Q6-P10	10
<b>G thread with sealing ring</b>													
G1/8	3	4	6 ±20%	13	9	16.5	5	9	3	6.3	578338	NPQH-D-G18-Q4-P10	10
	4	6	6 ±20%	13.5	12	19.5	5	12	4	9.2	578339	NPQH-D-G18-Q6-P10	10
	6	8	6 ±20%	13	14	23.5	5	13	6	11.9	578340	NPQH-D-G18-Q8-P10	10
G1/4	4	6	7.5 ±20%	16	12	19.5	6.5	12	4	13.1	578341	NPQH-D-G14-Q6-P10	10
	6	8	7.5 ±20%	16	14	21.5	6.5	14	6	14.1	578342	NPQH-D-G14-Q8-P10	10
	8	10	7.5 ±20%	16	16	27.5	6.5	15	8	17.5	578343	NPQH-D-G14-Q10-P10	10
	8	12	7.5 ±20%	16	19	28.5	6.5	19	8	26.6	578344	NPQH-D-G14-Q12-P10	10
G3/8	6	8	9 ±20%	20	14	21	7	14	6	20.6	578345	NPQH-D-G38-Q8-P10	10
	8	10	9 ±20%	20	16	25	7	16	8	22.7	578346	NPQH-D-G38-Q10-P10	10
	10	12	9 ±20%	20	19	28.5	7	19	8	29.8	578347	NPQH-D-G38-Q12-P10	10
	10	14	9 ±20%	20	22	32	7	22	10	38.3	578348	NPQH-D-G38-Q14-P10	10
G1/2	8	10	9 ±20%	25	16	25.5	8.5	16	8	35.4	578349	NPQH-D-G12-Q10-P10	10
	10	12	9 ±20%	25	19	26.5	8.5	19	8	37.1	578350	NPQH-D-G12-Q12-P10	10
	12	14	9 ±20%	25	22	32	8.5	22	12	43.4	578351	NPQH-D-G12-Q14-P10	10

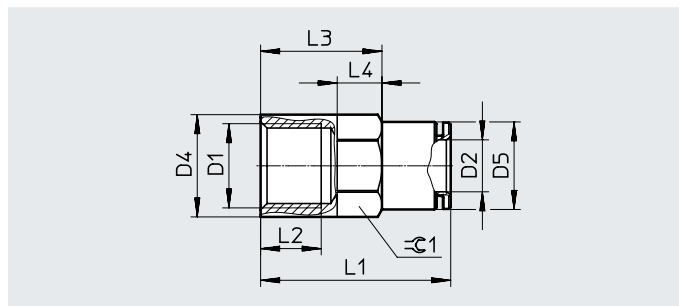
1) Packaging unit

## Datasheet

### Push-in fitting NPQH-D

Female thread  
with external hex

Design:  
Straight shape



#### Dimensions and ordering data

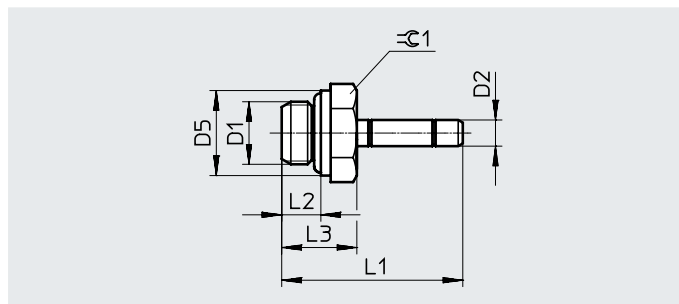
Connection	Nominal width [mm]	Tubing O.D. D2	D4 ø	D5 ø	L1	L2	L3	L4	⌀1	Weight/ piece [g]	Part no.	Type	PU <sup>1)</sup>
G1/8	3	4	13	9	23.5	7.5	15	5	9	10.2	578352	NPQH-D-G18F-Q4-P10	10
	5	6	14	12	26	7.5	13.5	6	12	15.2	578353	NPQH-D-G18F-Q6-P10	10
	7	8	16	14	26	7.5	10	10	14	17.9	578354	NPQH-D-G18F-Q8-P10	10
G1/4	3	4	16	9	27	11	18.5	5	9	14.6	578355	NPQH-D-G14F-Q4-P10	10
	5	6	16	12	30	11	18.5	6	12	18.7	578356	NPQH-D-G14F-Q6-P10	10
	7	8	16	14	30	11	19	7	14	20.3	578357	NPQH-D-G14F-Q8-P10	10

1) Packaging unit

### Push-in fitting NPQH-D

With push-in sleeve

Design:  
Straight shape



#### Dimensions and ordering data

Connection	Nominal width [mm]	Push-in sleeve ø D2	Nominal tightening torque [Nm]	D5 ø ±0.5	L1 ±0.5	L2	L3	⌀1	Weight/ piece [g]	Part no.	Type	PU <sup>1)</sup>
<b>M thread with sealing ring</b>												
M5	2.5	4	1 ±20%	8	26	4	8	9	3.3	578358	NPQH-D-M5-S4-P10	10
	2.5	6	1 ±20%	8	28	4	8	9	6	578359	NPQH-D-M5-S6-P10	10
<b>G thread with sealing ring</b>												
G1/8	2.5	4	6 ±20%	12.9	28	5	10	13	7.4	578360	NPQH-D-G18-S4-P10	10
	4	6	6 ±20%	12.9	30	5	10	13	8.6	578361	NPQH-D-G18-S6-P10	10
	6	8	6 ±20%	12.9	31	5	10	13	9.6	578362	NPQH-D-G18-S8-P10	10
G1/4	4	6	7.5 ±20%	16	32.5	6.5	12.5	16	13.9	578363	NPQH-D-G14-S6-P10	10
	6	8	7.5 ±20%	16	33.5	6.5	12.5	16	14.8	578364	NPQH-D-G14-S8-P10	10
	8	10	7.5 ±20%	16	34.5	6.5	12.5	16	15.8	578365	NPQH-D-G14-S10-P10	10
	8.5	12	7.5 ±20%	16	37.5	6.5	12.5	16	22.2	578366	NPQH-D-G14-S12-P10	10
G3/8	8	10	9 ±20%	20	35	7	13	20	22.5	578367	NPQH-D-G38-S10-P10	10
	10	12	9 ±20%	20	38	7	13	20	23.8	578368	NPQH-D-G38-S12-P10	10
G1/2	10	12	9 ±20%	25	39.5	8.5	14.5	25	34	578369	NPQH-D-G12-S12-P10	10

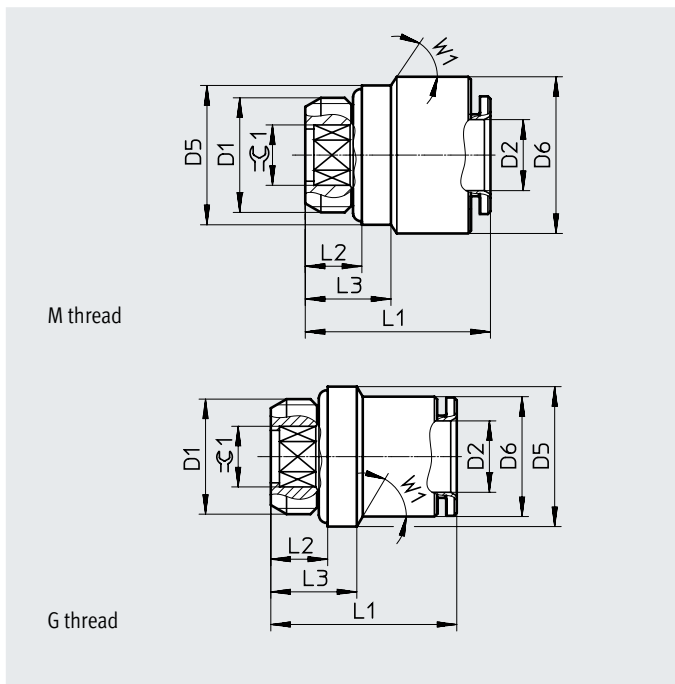
1) Packaging unit

## Datasheet

### Push-in fitting NPQH-DK

Male thread  
with internal hex

Design:  
Straight shape



#### Dimensions and ordering data

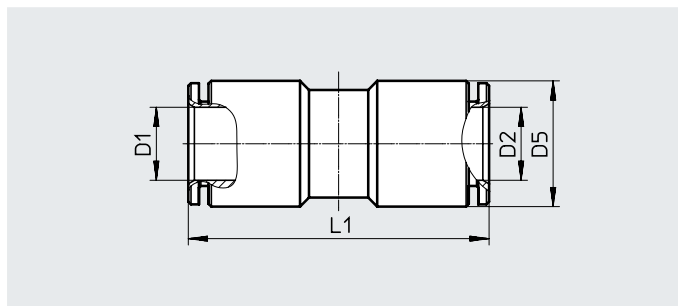
Connection	Nominal width [mm]	Tubing O.D. D2	Nominal tightening torque [Nm]	D5 ø	D6 ø	L1	L2	L3	W1	≈G1	Weight/ piece [g]	Part no.	Type	PU <sup>1)</sup>
<b>M thread with sealing ring</b>														
M5	2.5	4	1 ±20%	8	9	19	4	5	45	2.5	4.5	578370	NPQH-DK-M5-Q4-P10	10
	2.5	6	1 ±20%	8	12	22	4	5	45	2.5	8.8	578371	NPQH-DK-M5-Q6-P10	10
	2.5	6	1 ±20%	8	9.9 <sup>+0.1</sup>	22.5	4	5	–	2.5	5.58	8114987	NPQH-DK-M5-Q6-P10	10
M7	3	4	3 ±20%	9	9	20	5	–	–	3	5.1	578372	NPQH-DK-M7-Q4-P10	10
	3	6	3 ±20%	9	12	23	5	6	45	3	9.7	578373	NPQH-DK-M7-Q6-P10	10
	3	6	3 ±20%	9	9.9 <sup>+0.1</sup>	23.5	5	6	–	3	6.41	8114986	NPQH-DK-M7-Q6-P10	10
<b>G thread with sealing ring</b>														
G1/8	3	4	6 ±20%	13	9	16.5	5	7	45	3	6.2	578374	NPQH-DK-G18-Q4-P10	10
	4	6	6 ±20%	13	12	19.5	5	7.5	60	4	9.1	578375	NPQH-DK-G18-Q6-P10	10
	6	8	6 ±20%	13	14	23.5	5	6	45	6	12.8	578376	NPQH-DK-G18-Q8-P10	10
	6	10	6 ±20%	13	16	26	5	6	–	6	16.2	8114985	NPQH-DK-G18-Q10-P10	10
G1/4	6	8	7.5 ±20%	16	14	21.5	6.5	9	60	6	14.4	578377	NPQH-DK-G14-Q8-P10	10
	8.2	10	7.5 ±20%	16	16	27.5	6.5	–	–	8	18.6	578378	NPQH-DK-G14-Q10-P10	10
G3/8	10.2	12	9 ±20%	20	18	28.5	7	9.5	60	10	28.2	578379	NPQH-DK-G38-Q12-P10	10

1) Packaging unit

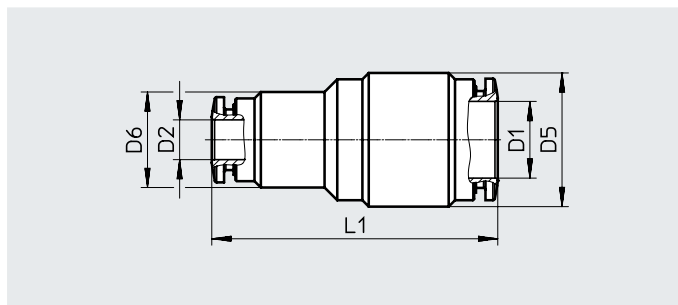
## Datasheet

### Push-in connector NPQH-D

Design:  
Straight shape



Reducing



#### Dimensions and ordering data

Tubing O.D. D1	Nominal width [mm]	Tubing O.D. D2	D5 ∅	D6 ∅	L1 ±1	Weight/piece [g]	Part no.	Type	PU <sup>1)</sup>
4	3	4	9	–	28	7	578323	NPQH-D-Q4-E-P10	10
6	5	6	12	–	33.5	15.1	578324	NPQH-D-Q6-E-P10	10
8	7	8	14	–	34	18.5	578325	NPQH-D-Q8-E-P10	10
10	9	10	16	–	38.5	22.8	578326	NPQH-D-Q10-E-P10	10
12	11	12	19	–	41	37	578327	NPQH-D-Q12-E-P10	10
14	13	14	22	–	47	49.2	578328	NPQH-D-Q14-E-P10	10
<b>Reducing</b>									
6	3	4	12	12	31	14.9	578329	NPQH-D-Q6-Q4-P10	10
8	5	6	14	14	34	21.4	578330	NPQH-D-Q8-Q6-P10	10
12	7	8	19	14	39	32.5	578331	NPQH-D-Q12-Q8-P10	10
14	9	10	22	16	44.5	43.2	578332	NPQH-D-Q14-Q10-P10	10
14	11	12	22	19	44.5	45.8	578333	NPQH-D-Q14-Q12-P10	10

1) Packaging unit

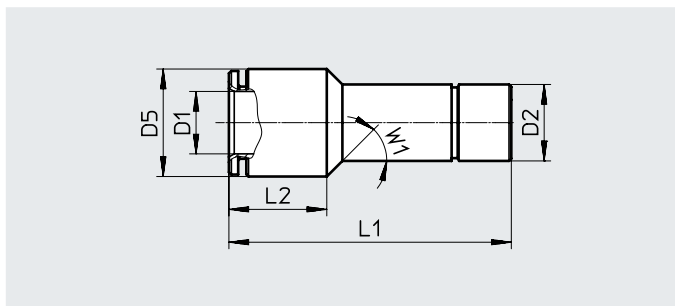
## Datasheet

### Push-in connector NPQH-D

With push-in sleeve

Design:

Straight shape

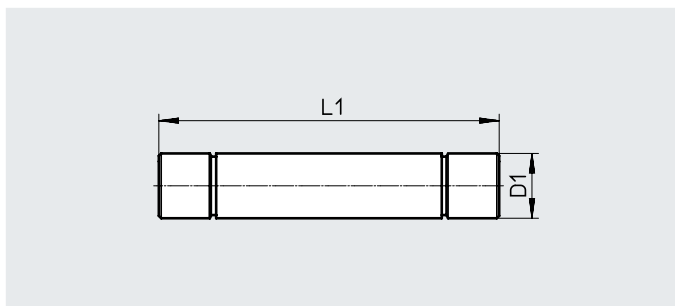


#### Dimensions and ordering data

Tubing O.D. D1	Nominal width [mm]	Push-in sleeve $\varnothing$ D2	D5 $\varnothing$	L1	L2	W1	Weight/piece [g]	Part no.	Type	PU <sup>1)</sup>
4	3	6	9	33.5	9.5	45	6.9	578304	NPQH-D-S6-Q4-P10	10
	3.5	8	9	33.5	10.5	45	10.4	578305	NPQH-D-S8-Q4-P10	10
	3.5	10	10	31.5	–	–	15.4	578307	NPQH-D-S10-Q4-P10	10
6	5	8	12	35	10.5	45	11.7	578306	NPQH-D-S8-Q6-P10	10
	5.5	10	12	36.5	11	45	16.8	578308	NPQH-D-S10-Q6-P10	10
	5.5	12	12	35.5	–	–	22.6	578310	NPQH-D-S12-Q6-P10	10
	5	14	14	37.5	–	–	35.7	578313	NPQH-D-S14-Q6-P10	10
8	7	10	14	37	10.5	45	15.1	578309	NPQH-D-S10-Q8-P10	10
	7	12	14	39	10.5	45	22.8	578311	NPQH-D-S12-Q8-P10	10
	7	14	14	38.5	–	–	31.1	578314	NPQH-D-S14-Q8-P10	10
10	9	12	16	42	12	45	20.5	578312	NPQH-D-S12-Q10-P10	10
	9	14	16	42	13	45	29.2	578315	NPQH-D-S14-Q10-P10	10
12	11	14	19	43	12.5	45	27.7	578316	NPQH-D-S14-Q12-P10	10

1) Packaging unit

### Push-in sleeve NPQH-D



#### Dimensions and ordering data

Push-in sleeve $\varnothing$ D1	Nominal width [mm]	L1	Weight/piece [g]	Part no.	Type	PU <sup>1)</sup>
4	2	35	2.8	578317	NPQH-D-S4-E-P10	10
6	4	40	5.1	578318	NPQH-D-S6-E-P10	10
8	6	42	7.6	578319	NPQH-D-S8-E-P10	10
10	8	50	12	578320	NPQH-D-S10-E-P10	10
12	10	53	16.1	578321	NPQH-D-S12-E-P10	10
14	12	54	19.1	578322	NPQH-D-S14-E-P10	10

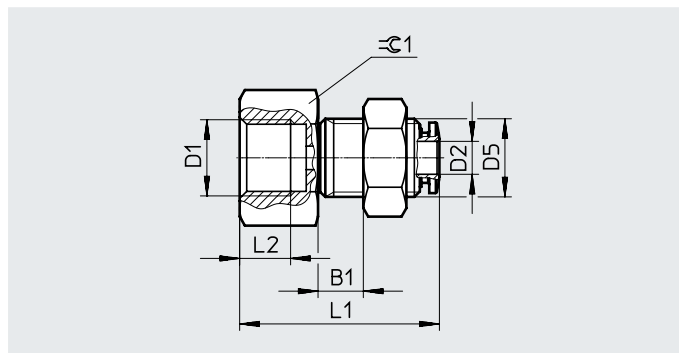
1) Packaging unit

## Datasheet

### Bulkhead push-in fitting NPQH-H

Female thread  
with external hex

Design:  
Bulkhead



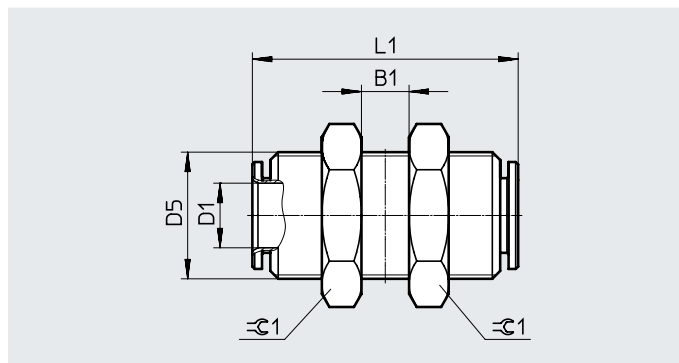
#### Dimensions and ordering data

Connection	Nominal width	Tubing O.D.	B1	D5	L1	L2	$\varnothing C1$	Weight/ piece	Part no.	Type	PU <sup>1)</sup>
D1	[mm]	D2	max.		$\pm 0.5$			[g]			
G1/8	3	4	7	M12x1	23.5	7.5	16	24.6	578294	NPQH-H-G18F-Q4-P10	10
	5	6	10	M14x1	26.5	7.5	18	34.2	578295	NPQH-H-G18F-Q6-P10	10
	7	8	10	M16x1	26.5	7.5	20	42.3	578296	NPQH-H-G18F-Q8-P10	10
G1/4	5	6	10	M14x1	30.5	11	18	36.4	578297	NPQH-H-G14F-Q6-P10	10
	7	8	10	M16x1	30.5	11	20	46.5	578298	NPQH-H-G14F-Q8-P10	10

1) Packaging unit

### Push-in bulkhead connector NPQH-H

Design:  
Bulkhead



#### Dimensions and ordering data

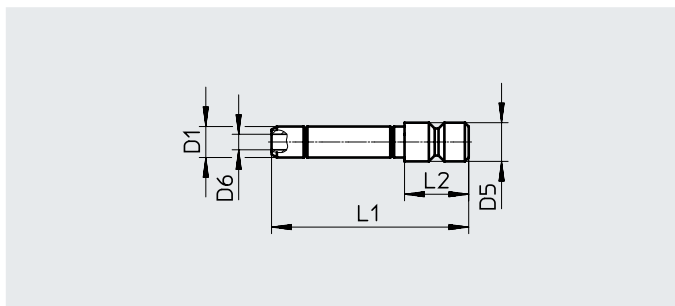
Tubing O.D.	Nominal width	B1	D5	L1	$\varnothing C1$	Weight/piece	Part no.	Type	PU <sup>1)</sup>
D1	[mm]	max.				[g]			
4	3	11	M12x1	28	16	23.5	578299	NPQH-H-Q4-E-P10	10
6	5	16	M14x1	34	18	34.6	578300	NPQH-H-Q6-E-P10	10
8	7	17	M16x1	34	20	40.6	578301	NPQH-H-Q8-E-P10	10
10	9	19	M18x1	39	22	52	578302	NPQH-H-Q10-E-P10	10
12	11	20	M20x1	41	24	60.8	578303	NPQH-H-Q12-E-P10	10

1) Packaging unit

## Datasheet

### Blanking plug NPQH-P

Design:  
Blanking plug



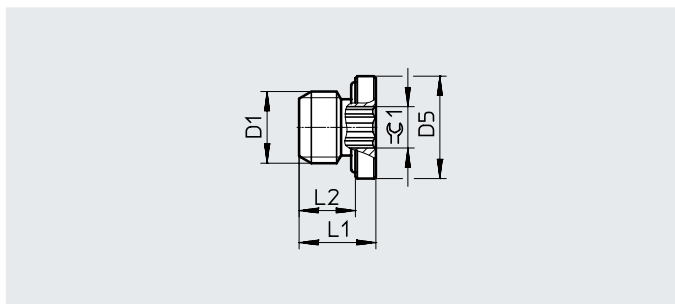
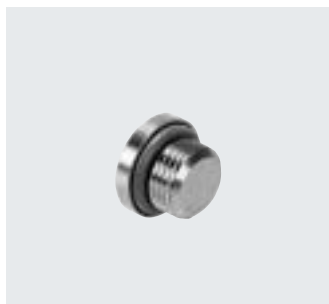
#### Dimensions and ordering data

Push-in sleeve $\varnothing$	D5	D6	L1	L2	Weight/piece	Part no.	Type	PU <sup>1)</sup>
D1	$\varnothing$	$\pm 0.3$	$\pm 0.5$		[g]			
4	5	–	25	9	2.3	578257	NPQH-P-S4-P10	10
6	6	3.5	25	9	3.9	578258	NPQH-P-S6-P10	10
8	8	5.5	30	9	7.4	578259	NPQH-P-S8-P10	10
10	10	7.5	35	12	12	578260	NPQH-P-S10-P10	10
12	12	9.5	40	12	18.5	578261	NPQH-P-S12-P10	10
14	14	11	40	12	26.5	578262	NPQH-P-S14-P10	10

1) Packaging unit

### Plug screw NPQH-BK

Design:  
Plug screw



#### Dimensions and ordering data

Connection	Nominal tightening torque [Nm]	D5	L1	L2	$\approx \text{G1}$	Weight/piece	Part no.	Type	PU <sup>1)</sup>
D1	[Nm]	$\varnothing$	max.			[g]			
<b>M thread with sealing ring</b>									
M5	1 $\pm 20\%$	8	5.5	4	2.5	0.8	578404	NPQH-BK-M5-P10	10
M7	1 $\pm 20\%$	9	7	5	3	2.1	578405	NPQH-BK-M7-P10	10
<b>G thread with sealing ring</b>									
G1/8	6 $\pm 20\%$	13	8.5	6	5	4.4	578406	NPQH-BK-G18-P10	10
G1/4	7.5 $\pm 20\%$	16	9.5	6.5	6	8.9	578407	NPQH-BK-G14-P10	10
G3/8	9 $\pm 20\%$	20	10	7	8	18.5	578408	NPQH-BK-G38-P10	10
G1/2	9 $\pm 20\%$	25	12	8.5	10	33	578409	NPQH-BK-G12-P10	10

1) Packaging unit

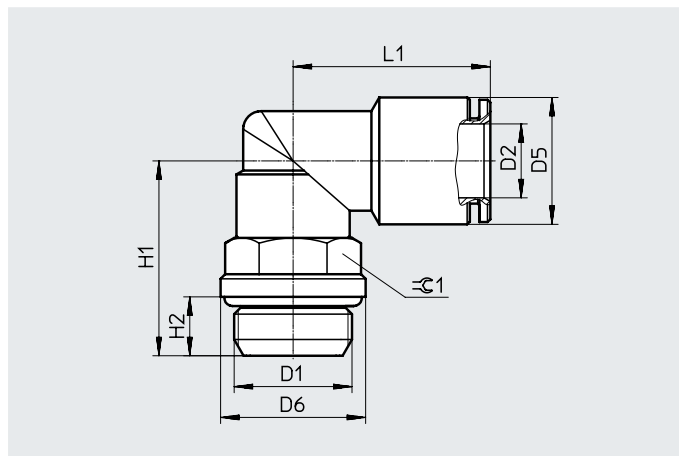


# Datasheet

## Push-in L-fitting NPQH-L

Rotatable 360°  
Male thread  
with external hex

Design:  
L-shape



Dimensions and ordering data													
Connection	Nominal width	Tubing O.D.	Nominal tightening torque	D5 ∅	D6 ∅	H1	H2	L1	⌀1	Weight/ piece	Part no.	Type	PU <sup>1)</sup>
D1	[mm]	D2	[Nm]							[g]			
<b>M thread with sealing ring</b>													
M5	2.5	4	1 ±20%	9	8	14	4	17.5	9	8.9	578276	NPQH-L-M5-Q4-P10	10
	2.5	6	1 ±20%	12	8	14	4	20.5	9	12.2	578277	NPQH-L-M5-Q6-P10	10
M7	3	4	3 ±20%	9	9	15	5	17.5	9	9.3	578278	NPQH-L-M7-Q4-P10	10
	3.25	6	3 ±20%	12	9	15	5	17.5	9	12.5	578279	NPQH-L-M7-Q6-P10	10
<b>G thread with sealing ring</b>													
G1/8	3	4	6 ±20%	9	13	18	5	19.5	13	16.3	578280	NPQH-L-G18-Q4-P10	10
	5	6	6 ±20%	12	13	18	5	22	13	19.3	578281	NPQH-L-G18-Q6-P10	10
	6	8	6 ±20%	14	13	18	5	22.5	13	22.2	578282	NPQH-L-G18-Q8-P10	10
G1/4	5	6	7,5 ±20%	12	16	21.5	6.5	22	13	22.4	578283	NPQH-L-G14-Q6-P10	10
	6	8	7,5 ±20%	14	16	21.5	6.5	22.5	13	25.8	578284	NPQH-L-G14-Q8-P10	10
	8	10	7,5 ±20%	16	16	22	6.5	26	16	33.1	578285	NPQH-L-G14-Q10-P10	10
	8.5	12	7,5 ±20%	19	16	25.5	6.5	28.5	20	59.6	578286	NPQH-L-G14-Q12-P10	10
G3/8	6	8	9 ±20%	14	20	25.5	7	23	16	36.7	578287	NPQH-L-G38-Q8-P10	10
	8	10	9 ±20%	16	20	25.5	7	26	16	38.2	578288	NPQH-L-G38-Q10-P10	10
	11	12	9 ±20%	19	20	26	7	28.5	20	58.2	578289	NPQH-L-G38-Q12-P10	10
	11	14	9 ±20%	22	20	26	7	32	20	62.4	578290	NPQH-L-G38-Q14-P10	10
G1/2	8	10	9 ±20%	16	25	27.5	8.5	26	16	42.6	578291	NPQH-L-G12-Q10-P10	10
	11	12	9 ±20%	19	25	30.5	8.5	28.5	20	66.3	578292	NPQH-L-G12-Q12-P10	10
	11	14	9 ±20%	22	25	30.5	8.5	32	20	70.7	578293	NPQH-L-G12-Q14-P10	10

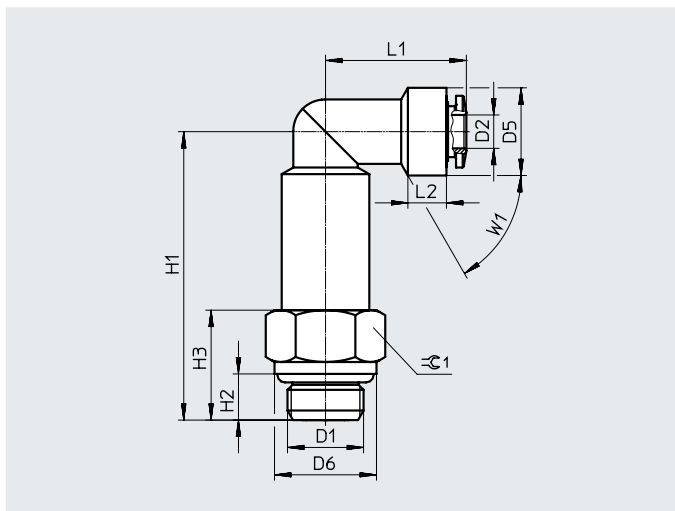
1) Packaging unit

## Datasheet

### Push-in L-fitting, long NPQH-LL

Rotatable 360°  
Male thread  
with external hex

Design:  
L-shape, long



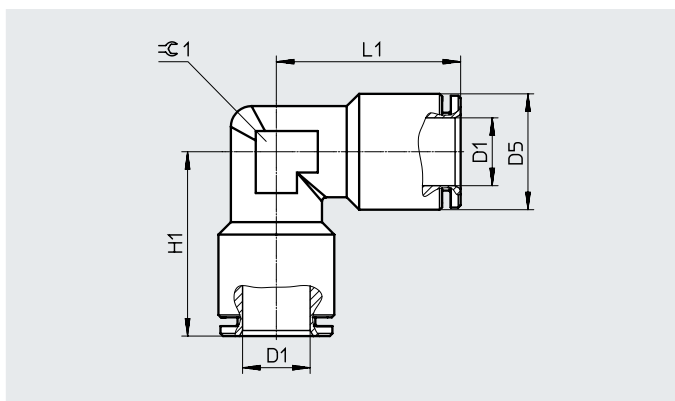
#### Dimensions and ordering data

Connection	Nominal width	Tubing O.D.	Nominal tightening torque	D5 ∅	D6 ∅	H1	H2	H3	L1	L2	W1	⊖	Weight/piece	Part no.	Type	PU <sup>1)</sup>
D1	[mm]	D2	[Nm]	±0.5	±0.5	±1			±1				[g]			
<b>G thread with sealing ring</b>																
G1/8	3	4	6 ±20%	9	13	29	5	9.5	19.5	–	–	13	25.7	578263	NPQH-LL-G18-Q4-P10	10
	5	6	6 ±20%	12	13	32	5	9.5	22	10	45	13	31.1	578264	NPQH-LL-G18-Q6-P10	10
	6	8	6 ±20%	14	13	34	5	9.5	22.5	11	30	13	36.1	578265	NPQH-LL-G18-Q8-P10	10
G1/4	5	6	7,5 ±20%	12	16	35.5	6.5	13	22	10	45	13	30.9	578266	NPQH-LL-G14-Q6-P10	10
	6	8	7,5 ±20%	14	16	37.5	6.5	13	22.5	11	30	13	36.2	578267	NPQH-LL-G14-Q8-P10	10
	8.5	10	7,5 ±20%	16	16	39	6.5	11.5	26	12	45	16	54.3	578268	NPQH-LL-G14-Q10-P10	10
G3/8	8.5	10	9 ±20%	16	20	42.5	7	15	26	12	45	16	50.8	578269	NPQH-LL-G38-Q10-P10	10

1) Packaging unit

### Push-in L-connector NPQH-L

Design:  
L-shape



#### Dimensions and ordering data

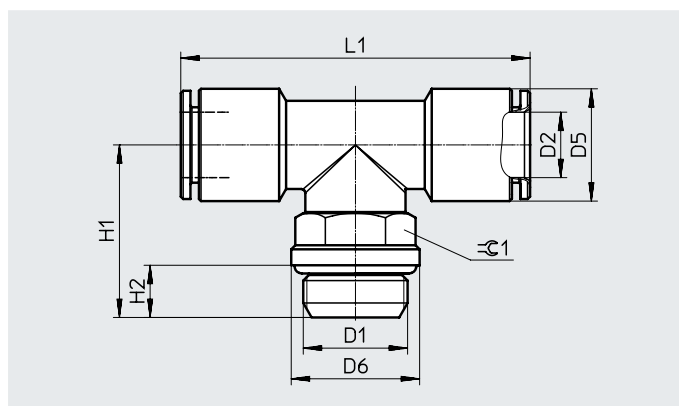
Tubing O.D.	Nominal width	D5 ∅	H1	L1	⊖	Weight/piece	Part no.	Type	PU <sup>1)</sup>
D1	[mm]					[g]			
4	3	9	17.5	17.5	8	8.9	578270	NPQH-L-Q4-E-P10	10
6	5	12	20.5	20.5	10	17.2	578271	NPQH-L-Q6-E-P10	10
8	7	14	22.5	22.5	12	22.7	578272	NPQH-L-Q8-E-P10	10
10	9	16	25	25	14	29.2	578273	NPQH-L-Q10-E-P10	10
12	11	19	26.5	26.5	18	48.6	578274	NPQH-L-Q12-E-P10	10
14	12	22	31.5	31.5	18	61.3	578275	NPQH-L-Q14-E-P10	10

1) Packaging unit

## Datasheet

**Push-in T-fitting NPQH-T**

 Rotatable 360°  
 Male thread  
 with external hex

 Design:  
 T-shape

**Dimensions and ordering data**

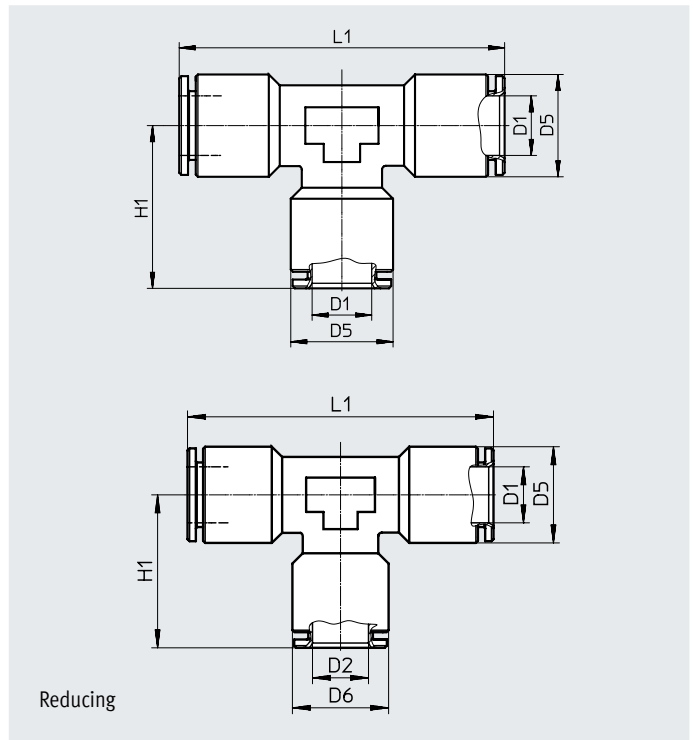
Connection	Nominal width [mm]	Tubing O.D. D2	Nominal tightening torque [Nm]	D5 $\varnothing$	D6 $\varnothing$	H1	H2	L1	$\approx\text{E}1$	Weight/piece [g]	Part no.	Type	PU <sup>1)</sup>
<b>M thread with sealing ring</b>													
M5	2.5	4	1 ±20%	9	8	14.5	4	35	9	13.9	578390	NPQH-T-M5-Q4-P10	10
	2.5	6	1 ±20%	12	8	14.5	4	41	9	20.7	578391	NPQH-T-M5-Q6-P10	10
<b>G thread with sealing ring</b>													
G1/8	3	4	6 ±20%	9	13	18	5	39	13	20.7	578392	NPQH-T-G18-Q4-P10	10
	5	6	6 ±20%	12	13	18	5	44	13	25.2	578393	NPQH-T-G18-Q6-P10	10
	6	8	6 ±20%	14	13	18	5	45	13	30.7	578394	NPQH-T-G18-Q8-P10	10
G1/4	5	6	7,5 ±20%	12	16	21.5	6.5	44	13	29.9	578395	NPQH-T-G14-Q6-P10	10
	6	8	7,5 ±20%	14	16	21.5	6.5	45	13	34.1	578396	NPQH-T-G14-Q8-P10	10
	8	10	7,5 ±20%	16	16	22	6.5	52	16	44.4	578397	NPQH-T-G14-Q10-P10	10
	8.5	12	7,5 ±20%	19	16	25.5	6.5	57	20	77.4	578398	NPQH-T-G14-Q12-P10	10
G3/8	6	8	9 ±20%	14	20	25.5	7	46	16	46.7	578399	NPQH-T-G38-Q8-P10	10
	8	10	9 ±20%	16	20	25.5	7	52	16	50.1	578400	NPQH-T-G38-Q10-P10	10
	11	12	9 ±20%	19	20	26	7	57	20	75.9	578401	NPQH-T-G38-Q12-P10	10
G1/2	8	10	9 ±20%	16	25	27.5	8.5	52	16	55.1	578402	NPQH-T-G12-Q10-P10	10
	11	12	9 ±20%	19	25	30.5	8.5	57	20	84.2	578403	NPQH-T-G12-Q12-P10	10

1) Packaging unit

## Datasheet

### Push-in T-connector NPQH-T

Design:  
T-shape



#### Dimensions and ordering data

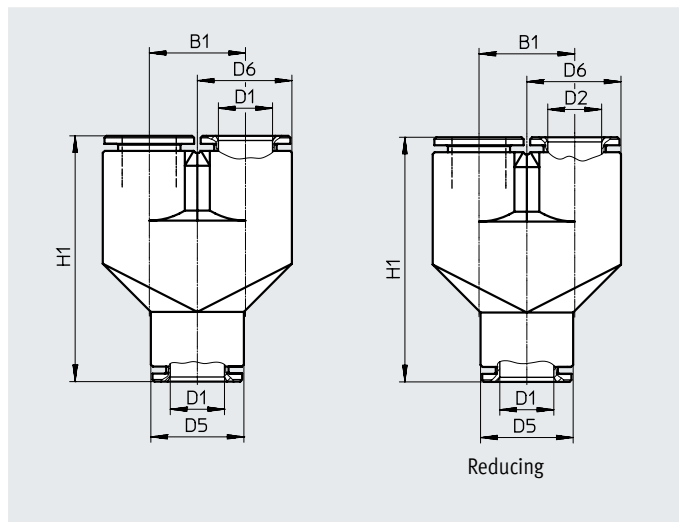
Tubing O.D. D1	Nominal width [mm]	Tubing O.D. D2	D5 ∅	D6 ∅	H1	L1	Weight/ piece [g]	Part no.	Type	PU <sup>1)</sup>
4	3	–	9	–	17.5	35	12.5	578380	NPQH-T-Q4-E-P10	10
6	5	–	12	–	20	40	23.2	578381	NPQH-T-Q6-E-P10	10
8	7	–	14	–	21	42	28.6	578382	NPQH-T-Q8-E-P10	10
10	9	–	16	–	24.5	49	39.8	578383	NPQH-T-Q10-E-P10	10
12	11	–	19	–	26	52	63.2	578384	NPQH-T-Q12-E-P10	10
14	12	–	22	–	30.5	61	79.9	578385	NPQH-T-Q14-E-P10	10
<b>Reducing</b>										
6	3	4	12	9	18	40	20.9	578386	NPQH-T-Q6-Q4-P10	10
8	5	6	14	12	20.5	42	27.9	578387	NPQH-T-Q8-Q6-P10	10
10	7	8	16	14	23	49	39.6	578388	NPQH-T-Q10-Q8-P10	10
12	9	10	19	16	26	52	61.9	578389	NPQH-T-Q12-Q10-P10	10

1) Packaging unit

# Datasheet

## Push-in Y-connector NPQH-Y

Design:  
Y-shape



### Dimensions and ordering data

Tubing O.D. D1	Nominal width [mm]	Tubing O.D. D2	B1	D5 ∅	D6 ∅	H1	Weight/ piece [g]	Part no.	Type	PU <sup>1)</sup>
6	5.5	–	12.5	12	12.3	36	32	578410	NPQH-Y-Q6-E-P10	10
8	7.5	–	14.5	14	14.3	37.5	44.9	578411	NPQH-Y-Q8-E-P10	10
10	9.5	–	16.5	16	16.3	44.5	65.9	578412	NPQH-Y-Q10-E-P10	10
<b>Reducing</b>										
6	3.5	4	12.5	12	12.3	34	35.9	578413	NPQH-Y-Q6-Q4-P10	10
8	5.5	6	14.5	14	14.3	37.5	52.6	578414	NPQH-Y-Q8-Q6-P10	10
10	7.5	8	16.5	16	16.3	44	78.1	578415	NPQH-Y-Q10-Q8-P10	10

1) Packaging unit