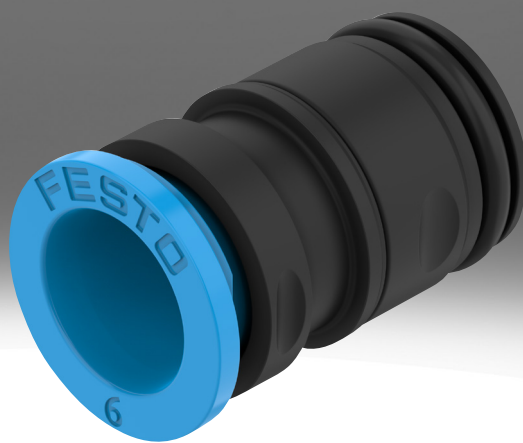


## Cartridge NPQX

**FESTO**



## Characteristics

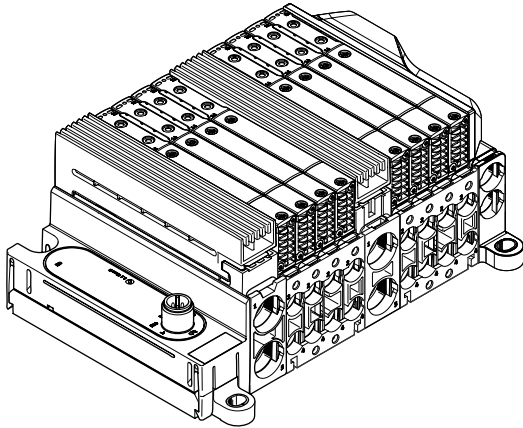
### At a glance

Push-in fittings and plug connectors for pneumatic applications with a temperature range up to 60 °C and a pressure range up to 10 bar.

Note: Since the valve terminal VTUX has a compact design, a releasing tool for tubing sizes 4, 6, 8 and 10 is available as an accessory (NPAT-QX-T-V1).

### Series

[Link](#)  [vtux](#)



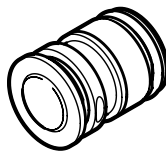
Push-in fitting, specially developed for the valve terminal VTUX.

### Design

[D] Straight



[P] Blanking plug



### Pneumatic connection 1

The fitting is based on the principle of the “PIN-type cartridge”, so that by loosening the PIN/retaining clip it can be easily replaced for different tubing diameters.

### Pneumatic connection 2

The tubing holding function works according to the “push-pull principle”.

## Type code

001	Series
NPQX	Push-in fitting
002	Design
D	Straight
P	Blanking plug
003	Pneumatic connection 1
PC10	Cartridge 10 mm
PC12	Cartridge 12 mm
PC15	Cartridge 15 mm
PC19	Cartridge 15 mm (aluminium housing)

004	Pneumatic connection 2
	None
Q4	Push-in connector 4 mm
Q6	Push-in connector 6 mm
Q8	Push-in connector 8 mm
Q10	Push-in connector 10 mm
Q12	Push-in connector 12 mm
T14	Push-in connector for 1/4"
T18	Push-in connector for 1/8"
T38	Push-in connector for 3/8"
T516	Push-in connector for 5/16"
T532	Push-in connector for 5/32"

005	Packaging quantity [pieces]
	Standard
P10	10

## Datasheet

### General technical data – Cartridges

Pneumatic connection, port 2	For tubing outside diameter of 4 mm	For tubing outside diameter of 6 mm	For tubing outside diameter of 8 mm	For tubing outside diameter of 10 mm	For tubing outer diameter of 12 mm	For tubing outside diameter of 5/32"	For tubing O.D. 1/8"	For tubing outside diameter of 1/4"	For tubing outside diameter of 5/16"	For tubing outside diameter of 3/8"	
Pneumatic connection, port 1	Cartridge 10 mm Cartridge 12 mm		Cartridge 12 mm Cartridge 15 mm	Cartridge 15 mm		Cartridge 10 mm Cartridge 12 mm	Cartridge 10 mm	Cartridge 10 mm Cartridge 12 mm	Cartridge 12 mm Cartridge 15 mm	Cartridge 15 mm	
Nominal size	2.6 mm	4 mm	6 mm	8 mm	10 mm	2.6 mm	2.5 mm	4.5 mm	6 mm	6.4 mm	
Tubing insertion depth	15 mm	14.9 mm	15.2 mm	15.5 mm	19.5 mm	15 mm	11.7 mm	11.93 mm	15.2 mm	20.1 mm	
Size	Standard										
Design	Straight design										
Mounting position	optional						Horizontal		optional	Horizontal	
Type of seal on screwed plug	O-ring						No seal		O-ring	No seal	
Design	Push-pull principle										
Type of mounting	Via retaining clamp										

### Operating and environmental conditions – Cartridges

Operating pressure	-0.1 ... 1 MPa
Operating pressure	-1 ... 10 bar
Operating pressure	-14.5 ... 145 psi
Operating pressure complete temperature range	-0.095 ... 1 MPa
Operating pressure complete temperature range	-0.95 ... 10 bar
Operating pressure complete temperature range	-13.775 ... 145 psi
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gases
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Ambient temperature	-10 ... 60°C
Corrosion resistance class CRC <sup>1)</sup>	3 - high corrosion stress

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

### Materials – Cartridges

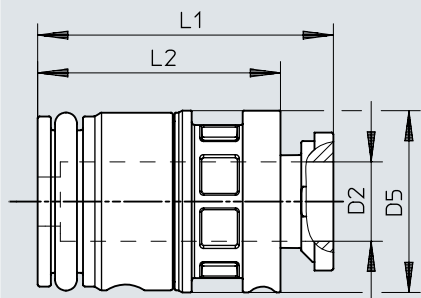
Pneumatic connection, port 2	For tubing outside diameter of 4 mm	For tubing outside diameter of 6 mm	For tubing outside diameter of 8 mm	For tubing outside diameter of 10 mm	For tubing outer diameter of 12 mm	For tubing outside diameter of 5/32"	For tubing O.D. 1/8"	For tubing outside diameter of 1/4"	For tubing outside diameter of 5/16"	For tubing outside diameter of 3/8"
Material housing	PA-reinforced				Anodised aluminium	PA-reinforced				
Material release ring	POM					-				
Material o-ring	HNBR					-		HNBR		-
Material tubing seal	HNBR			NBR	HNBR		-		HNBR	-
Material tubing clamp component	High-alloy stainless steel						-		High-alloy stainless steel	-
Colour of release ring	Blue									
Note on materials	RoHS-compliant									
LABS (PWIS) conformity	VDMA24364-B1/B2-L									

### Materials – Blanking plugs

Material blanking plug	PA-reinforced
Material o-ring	HNBR
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

## Dimensions

## Dimensions – Cartridges (PA housing)

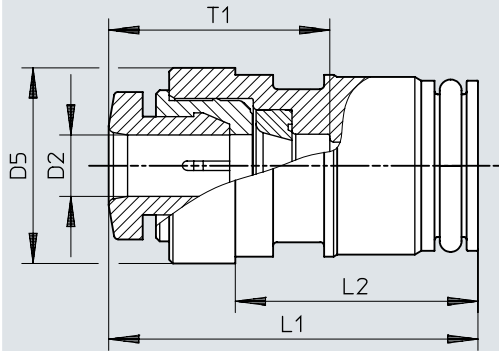
Download CAD data [www.festo.com](http://www.festo.com)

	D2 Ø	D5 Ø	L1	L2
NPQX-D-PC10-Q4-P10	4	9,6	15,7	12,9
NPQX-D-PC10-Q6-P10	6	9,6	15,7	12,9
NPQX-D-PC12-Q4-P10	4	11,8	15,7	12,9
NPQX-D-PC12-Q6-P10	6	11,8	15,7	12,9
NPQX-D-PC12-Q8-P10	8	12,2	15,7	12,9
NPQX-D-PC15-Q8-P10	8	14,9	16	13,2
NPQX-D-PC15-Q10-P10	10	15,5	16	13,2
NPQX-D-PC10-T532-P10	5/32	9,6	15,7	12,9
NPQX-D-PC12-T532-P10	5/32	11,8	15,7	12,9
NPQX-D-PC12-T516-P10	5/16	12,2	15,7	12,9
NPQX-D-PC15-T516-P10	5/16	14,9	16	13,2

## Dimensions

Dimensions – Dimensions – PA housing

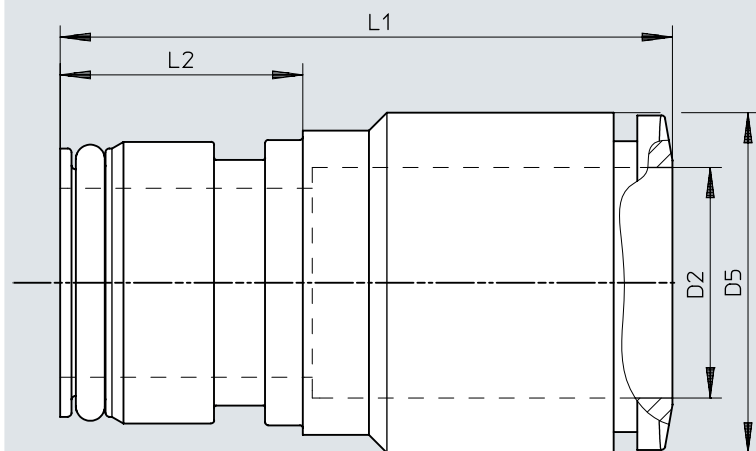
Download CAD data [www.festo.com](http://www.festo.com)



	D2	D5 ∅	L1	L2	T2
NPQX-D-PC10-T18-P10	1/8	10,4	19,5	12,9	11,7
NPQX-D-PC10-T14-P10	1/4	10,4	23,4	12,9	11,9
NPQX-D-PC12-T14-P10	1/4	12,4	21,4	12,9	11,9
NPQX-D-PC19-T38-P10	3/8	18,4	29	12,9	20,1

## Dimensions

## Dimensions – Cartridges (aluminium housing)

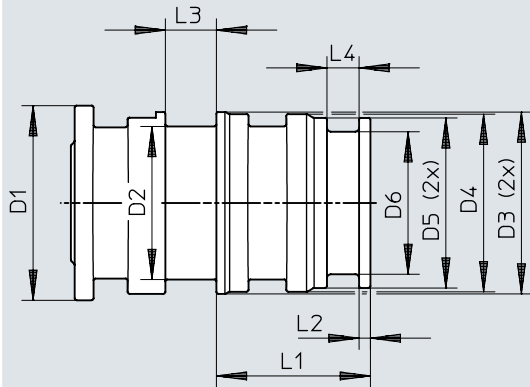
Download CAD data [www.festo.com](http://www.festo.com)

	D2 Ø	D5 Ø	L1	L2
NPQX-D-PC19-Q12-P10	12	18	29,2	12,9

## Dimensions

### Dimensions – Blanking plug

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

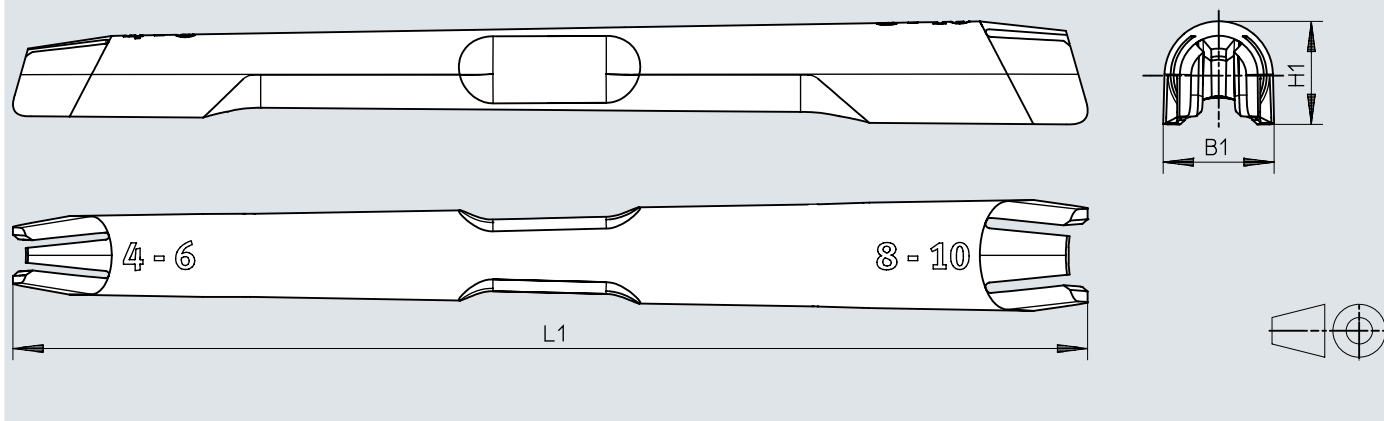


	D1 ∅ ±0,09	D2 ∅ ±0,06	D3 ∅ ±0,06	D4 ∅ ±0,06	D5 ∅ ±0,06	D6 ∅ ±0,06	L1	L2	L3	L4
NPQX-P-PC10	10,3	8,1	9,6	9,4	9	7,6	8,2	0,6	2,7	1,7
NPQX-P-PC12	12,2	10	11,8	11,6	11,2	9,6	8,2	0,6	2,7	1,7
NPQX-P-PC15	15,5	13	15,1	14,9	14,2	12	8,5	0,6	2,7	1,8




## Dimensions


Dimensions – Releasing tool NPAT

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


	B1	H1	L1
NPAT-QX-T-V1	~14,7	~13,6	142,2

Ordering data


Ordering data – Cartridges (housing PA)						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Size of pack	Product weight	Part no.	Type
	Cartridge 10 mm	For tubing outside diameter of 4 mm	10	0.9 g	8174164	NPQX-D-PC10-Q4-P10
		For tubing outside diameter of 6 mm		0.72 g	8174165	NPQX-D-PC10-Q6-P10
		For tubing outside diameter of 5/32"		0.9 g	8184509	NPQX-D-PC10-T532-P10
		For tubing O.D. 1/8"		2 g	8184511	NPQX-D-PC10-T18-P10
		For tubing outside diameter of 1/4"		2.15 g	8184510	NPQX-D-PC10-T14-P10
	Cartridge 12 mm	For tubing outside diameter of 4 mm	10	1.24 g	8174166	NPQX-D-PC12-Q4-P10
		For tubing outside diameter of 6 mm		1.2 g	8174167	NPQX-D-PC12-Q6-P10
		For tubing outside diameter of 8 mm		0.92 g	8174168	NPQX-D-PC12-Q8-P10
		For tubing outside diameter of 5/32"		1.24 g	8184512	NPQX-D-PC12-T532-P10
		For tubing outside diameter of 1/4"		2.6 g	8184514	NPQX-D-PC12-T14-P10
		For tubing outside diameter of 5/16"		0.92 g	8184513	NPQX-D-PC12-T516-P10
		Cartridge 15 mm		For tubing outside diameter of 8 mm	10	1.9 g
	For tubing outside diameter of 10 mm		1.64 g	8174170		NPQX-D-PC15-Q10-P10
	For tubing outside diameter of 5/16"		1.9 g	8184515		NPQX-D-PC15-T516-P10
	For tubing outside diameter of 3/8"		10 g	8189810		NPQX-D-PC19-T38-P10

Ordering data – Cartridges (housing aluminium)						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Size of pack	Product weight	Part no.	Type
	Cartridge 15 mm	For tubing outer diameter of 12 mm	10	7.6 g	8174171	NPQX-D-PC19-Q12-P10

## Ordering data

Ordering data – Blanking plugs				
	Size of pack	Product weight	Part no.	Type
	10	0.8 g	8191750	NPQX-P-PC12
		1 g	8191749	NPQX-P-PC10
		1.6 g	8191751	NPQX-P-PC15

Accessories

Releasing tool NPAT					
	Size	Material releasing tool	Size of pack	Part no.	Type
	For tubing O.D. 4 mm For tubing O.D. 6 mm For tubing O.D. 8 mm For tubing O.D. 10 mm	POM	1	<b>8214270</b>	<b>NPAT-QX-T-V1</b>