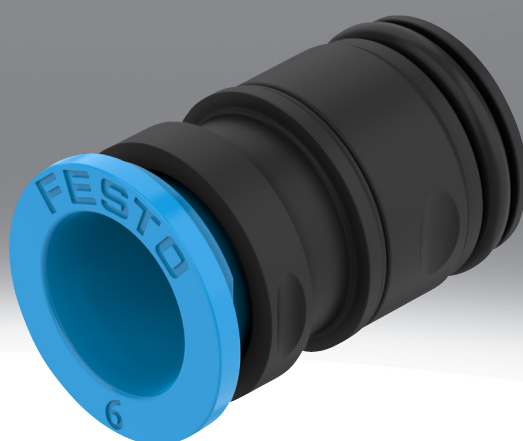


Cartridge NPQX

FESTO



Characteristics

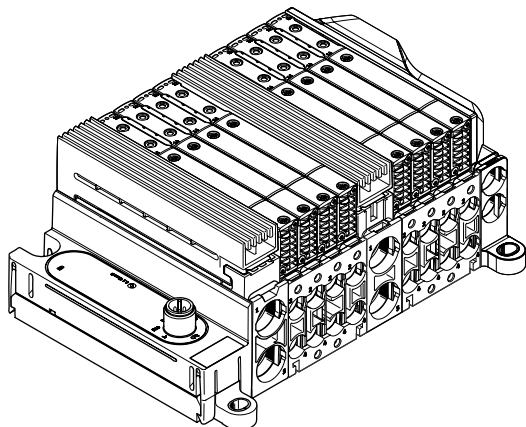
At a glance

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](#)



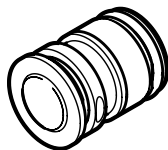
Push-in fitting, specially developed for the valve terminal VTUX.

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	

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	
Q14	Push-in connector 14 mm	
T12	Push-in connector for 1/2"	
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	
P2	2	
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 14 mm
Pneumatic connection, port 1	Cartridge 10 mm Cartridge 12 mm	Cartridge 10 mm Cartridge 12 mm Cartridge 15 mm	Cartridge 12 mm Cartridge 15 mm	Cartridge 15 mm		
Nominal size	2.6 mm	4 mm	6 mm	8 mm	10 mm	
Tubing insertion depth	15 mm	14.9 ... 15.2 mm	15.2 mm	15.5 mm	25 mm	25.4 mm
Size	Standard					
Design	Straight design					
Mounting position	Any					
Type of seal on screwed plug	O-ring					
Design	Push-pull principle					
Type of mounting	With retaining clamp					

General technical data – Cartridges

Pneumatic connection, port 2	For tubing outside di- ameter of 5/32“	For tubing O.D. 1/8“	For tubing outside di- ameter of 1/4“	For tubing outside di- ameter of 5/16“	For tubing outside di- ameter of 3/8“	For tubing outside di- ameter of 1/2“
Pneumatic connection, port 1	Cartridge 10 mm Cartridge 12 mm	Cartridge 10 mm	Cartridge 10 mm Cartridge 12 mm Cartridge 15 mm	Cartridge 12 mm Cartridge 15 mm	Cartridge 15 mm	
Nominal size	2.6 mm	2.5 mm	4.5 mm	6 mm	6.4 mm	10 mm
Tubing insertion depth	15 mm	11.7 mm	11.93 mm	15.2 mm	20.1 mm	25.4 mm
Size	Standard					
Design	Straight design					
Mounting position	Any	Horizontal		Any	Horizontal	Any
Type of seal on screwed plug	O-ring	No seal		O-ring	No seal	O-ring
Design	Push-pull principle					
Type of mounting	With retaining clamp					

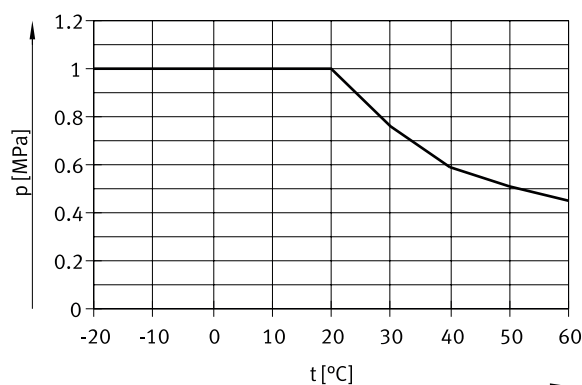
Operating and environmental conditions – Cartridges

Material housing	Reinforced PA	High-alloy steel	
Material release ring	POM	PA66	Reinforced PA
Operating pressure	-0.095 ... 1 MPa		
Operating pressure	-0.95 ... 10 bar		
Operating pressure	-13.775 ... 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 gas		
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)		
Ambient temperature	-10 ... 60°C	-5 ... 60°C	
Corrosion resistance class CRC ¹⁾	3 - high corrosion stress	1 - Low corrosion stress	2 - Moderate corrosion stress

1) More information: www.festo.com/x/topic/crc

Datasheet

Operating pressure p as a function of temperature t



Cartridge pack size

Material housing	Reinforced PA	High-alloy steel
Size of pack	10	2

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 14 mm
Material housing	Reinforced PA				High-alloy steel	
Material release ring	POM				PA66	Reinforced PA
Material o-ring	HNBR					
Material tubing seal	NBR				HNBR	
Material tubing clamp component	High-alloy stainless steel					
Colour of release ring	Blue					
Note on materials	RoHS compliant					
LABS (PWIS) conformity	VDMA24364-B1/B2-L					VDMA24364-C1-L

Materials – Cartridges

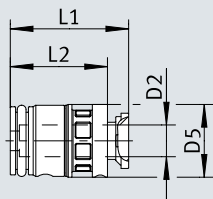
Pneumatic connection, port 2	For tubing outside diameter of 5/32"	For tubing O.D. 1/8"	For tubing outside diameter of 1/4"	For tubing outside diameter of 5/16"	For tubing outside diameter of 3/8"	For tubing outside diameter of 1/2"
Material housing	Reinforced PA					High-alloy steel
Material release ring	–					Reinforced PA
Material o-ring	HNBR	–	–	HNBR	–	HNBR
Material tubing seal	NBR	–	–	NBR	–	HNBR
Material tubing clamp component	High-alloy stainless steel	–	–	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					VDMA24364-C1-L

Materials – Blanking plugs

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

Dimensions

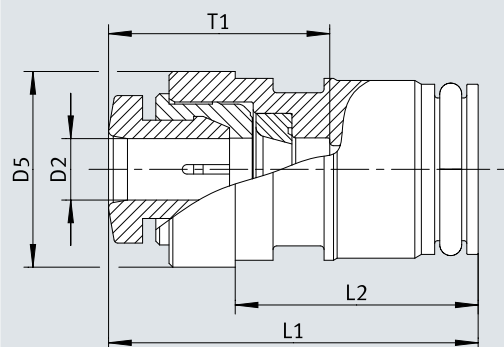
Dimensions – Cartridges (PA housing)

Download CAD data www.festo.com

	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-PC10-T532-P10	5/32"	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-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-Q6-P10	6	14,9	15,9	13,2
NPQX-D-PC15-Q8-P10	8	14,9	16	13,2
NPQX-D-PC15-T38-P10	3/8"	15,5	16	13,2
NPQX-D-PC15-Q10-P10	10	15,5	16	13,2
NPQX-D-PC15-Q14-P2	14	14,2	39,2	13
NPQX-D-PC15-T12-P2	1/2"	12,9	37,2	13
NPQX-D-PC15-T516-P10	5/16"	14,9	16	13,2

Dimensions

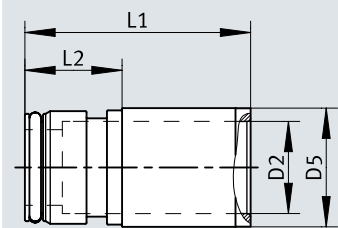
Dimensions – Cartridges (PA housing)

Download CAD data www.festo.com

	D2	D5 Ø	L1	L2	T2
NPQX-D-PC10-Q3-P10	3	10,4	19,5	12,9	11,7
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
NPQX-D-PC15-T14-P10	1/4"	15,1	16,5	10,9	11,9

Dimensions

Dimensions – Cartridges (high-alloy steel housing) [Download CAD data](#) www.festo.com

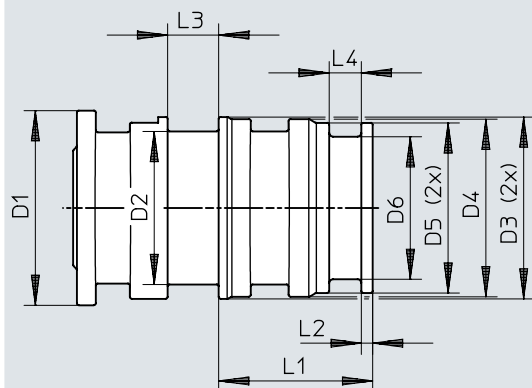


	D2 Ø	D5 Ø	L1	L2
NPQX-D-PC15-Q12-P2	12	15,7	29,9	12,9
NPQX-D-PC15-T12-P2	1/2"	17,5	37,2	13
NPQX-D-PC15-Q14-P2	14	18,7	39,2	13

Dimensions

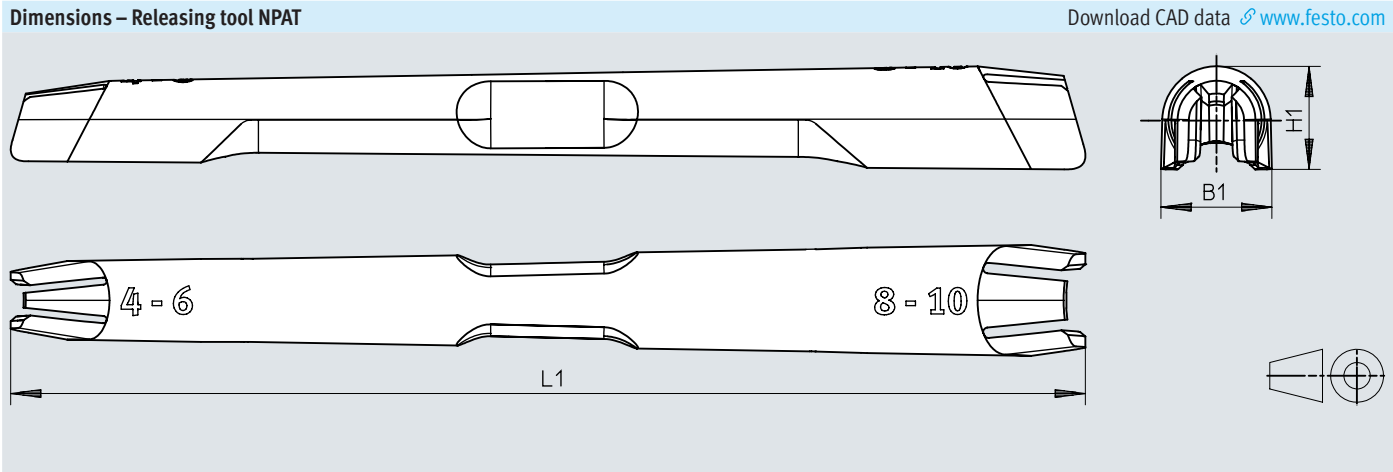
Dimensions – Blanking plug

Download CAD data www.festo.com



	D1 ø ±0,09	D2 ø ±0,06	D3 ø ±0,06	D4 ø ±0,06	D5 ø ±0,06	D6 ø ±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



	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	Product weight	Part no.	Type	
	Cartridge 10 mm	For tubing outside diameter of 4 mm	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	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 6 mm	2.057 g	8246825	NPQX-D-PC15-Q6-P10	
		For tubing outside diameter of 8 mm	1.9 g	8174169	NPQX-D-PC15-Q8-P10	
		For tubing outside diameter of 10 mm	1.64 g	8174170	NPQX-D-PC15-Q10-P10	
		For tubing outside diameter of 1/4"	2.15 g	8230012	NPQX-D-PC15-T14-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 (high-alloy steel housing)						
	Pneumatic connection, port 1	Pneumatic connection, port 2	Material release ring	Product weight	Part no.	Type
	Cartridge 15 mm	For tubing outer diameter of 12 mm	PA66	11.5 g	8225231	NPQX-D-PC15-Q12-P2
		For tubing outside diameter of 14 mm	Reinforced PA	25.8 g	8225233	NPQX-D-PC15-Q14-P2
		For tubing outside diameter of 1/2"		20.8 g	8225234	NPQX-D-PC15-T12-P2

Ordering data – Blanking plugs						
	Pneumatic connection 1	Corrosion resistance class CRC ¹⁾	Size of pack	Product weight	Part no.	Type
	Cartridge 10 mm	3 - high corrosion stress	10	1 g	8191749	NPQX-P-PC10
	Cartridge 12 mm			0.8 g	8191750	NPQX-P-PC12
	Cartridge 15 mm			1.6 g	8191751	NPQX-P-PC15

1) More information www.festo.com/x/topic/crc

Accessories

Releasing tool NPAT					
	Size	Releasing tool material	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	8214270	NPAT-QX-T-V1