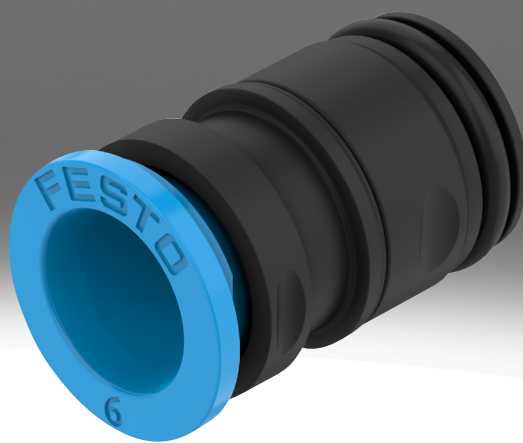


Cartridge NPQX

FESTO



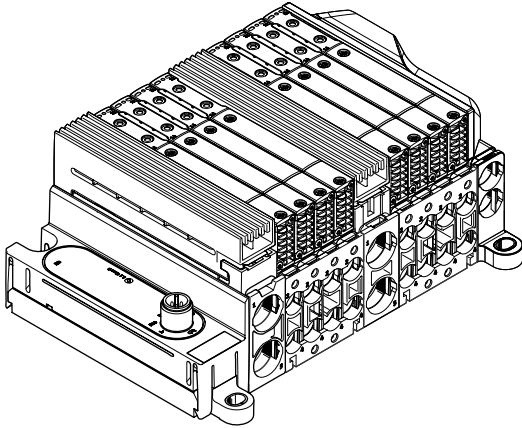
Characteristics

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.

Series

Further information → vtux

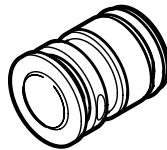


Design

[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 |
| PC14 | Cartridge 14 mm |
| PC15 | Cartridge 15 mm |
| PC19 | Cartridge 15 mm (housing aluminium) |

| 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 |
| 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 outside diameter of 5/16" |
|------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|------------------------------------|--------------------------------------|--------------------------------------|
| 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 12 mm Cartridge 15 mm |
| Nominal size | 2.6 mm | 4 mm | 6 mm | 8 mm | 10 mm | 2.6 mm | 6 mm |
| Tubing insertion depth | 15 mm | 14.9 mm | 15.2 mm | 15.5 mm | 19.5 mm | 15 mm | 15.2 mm |
| Size | Standard | | | | | | |
| Design | Straight design | | | | | | |
| Mounting position | optional | | | | | | |
| Type of seal on screwed plug | O-ring | | | | | | |
| Design | Push-pull principle | | | | | | |
| Type of mounting | Via retaining clamp | | | | | | |

Operating and environmental conditions – Cartridges

| | |
|---|--|
| 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 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 ¹⁾ | 3 - High corrosion stress |

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

Materials – Cartridges

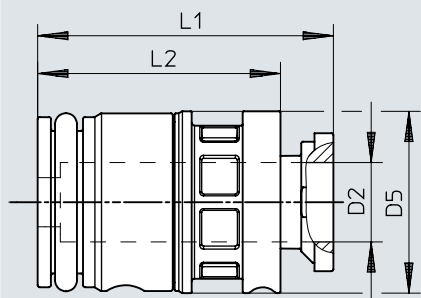
| Pneumatic connection, port 2 | For tubing outside diameter of 4 mm | For tubing outside diameter of 6 mm | For tubing outside diameter of 8 mm | For tubing outside diameter of 10 mm | For tubing outer diameter of 12 mm | For tubing outside diameter of 5/32" | For tubing outside diameter of 5/16" |
|---------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|------------------------------------|--------------------------------------|--------------------------------------|
| Material housing | PA-reinforced | | | | Anodised aluminium | PA-reinforced | |
| Material release ring | POM | | | | - | | |
| Material o-ring | HNBR | | | | | | |
| Material tubing seal | 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 | | | | | | |

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 – Dimensions – PA housing

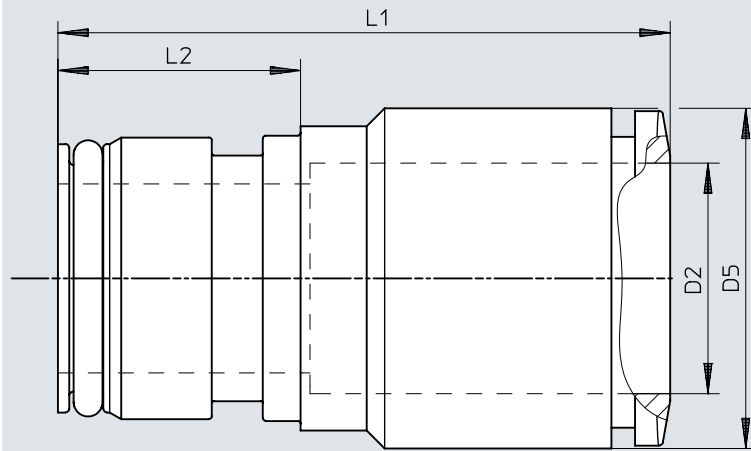
Download CAD data → www.festo.com

| | 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-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 – Aluminium housing

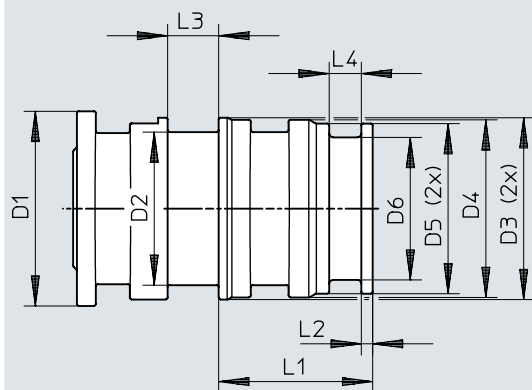
Download CAD data → www.festo.com



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


Dimensions


Dimensions – Blanking plugs

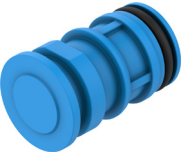
Download CAD data → www.festo.com

| | D1 ∅ ±0,09 | D2 ∅ ±0,06 | D3 ∅ ±0,06 | D4 ∅ ±0,06 | D5 ∅ ±0,06 | D6 ∅ ±0,06 | L1 | L2 | L3 | L4 |
|-------------|------------------|------------------|------------------|------------------|------------------|------------------|-----|-----|-----|-----|
| NPQX-P-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 |

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 |
| | 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 5/16" | | 0.92 g | 8184513 | NPQX-D-PC12-T516-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 | 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 5/16" | | 1.9 g | 8184515 | NPQX-D-PC15-T516-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 – Blanking plugs | | | | |
|--|-----------------|----------------|----------|-------------|
| | Short type code | Product weight | Part no. | Type |
|  | NPQX | 0.8 g | 8191750 | NPQX-P-PC12 |
| | | 1.6 g | 8191751 | NPQX-P-PC15 |