



Characteristics

At a glance

Stainless steel fitting for use in areas subject to intensive cleaning.

- Maximum corrosion resistance CRC4
- Suitable plastic tubing: PAN, PFAN, PFTEN, PEN, PLN, PUN-H, PUN-H-DUO, PUN-H-F

Product version

| [C] | Easy-to-clean design |
|-----|----------------------|
|-----|----------------------|

Fulfils all clean design requirements

Pneumatic connection 1

The screwed plug is screwed onto the counterpart with the sealing ring and tightened according to the nominal tightening torque.



Screw the union nut into the screwed plug until there is resistance from the counterpart. The tubing is attached and the sealing ring is pressed between the sealing surface, the screwed plug and the union nut.

Type code

| 001 | Series | |
|------|----------------------|--|
| NPCK | Fitting | |
| 002 | Product version | |
| C | Easy-to-clean design | |
| | | |
| 003 | Design | |

| 004 | Pneumatic connection 1 | |
|-----|---------------------------|--|
| G14 | G1/4 | |
| G18 | G1/8 | |
| G38 | G3/8 | |
| M5 | M5 | |
| 005 | Pneumatic connection 2 | |
| K4 | Terminal connection 4 mm | |
| K6 | Terminal connection 6 mm | |
| К8 | Terminal connection 8 mm | |
| | Terminal connection 10 mm | |

Datasheet

General technical data Pneumatic connection, port 1 Male thread M5 Male thread G1/8 Male thread G1/4 Male thread G3/8 Pneumatic connection, port 2 For tubing outside di-For tubing outside di-For tubing outside diameter of 8 mm For tubing outside diameter of 10 mm ameter of 4 mm ameter of 6 mm Nominal size 2 mm 2.9 mm 4.9 mm 6.1 mm 6.2 mm Design Straight design Mounting position optional Type of seal on screwed plug 0-ring Sealing ring Nominal torque 1.5 Nm 6.5 Nm 20 Nm 35 Nm 12 Nm +/- 10% for NP-Note on the nominal tighten-4 Nm +/-10% for NPCK to MPA-C 7 Nm +/- 10% for NPCK on MPA-C ing torque¹⁾ CK on MPA-C Tolerance for nominal tighten-± 10% ing torque Degree of protection IP69K

1) The nominal tightening torque MPA-C applies to the connector used for mounting the fitting NPCK on the valve terminal MPA-C. The union nut for the NPCK must not exceed these values. The plastic tubing PUN-H is to be used.

Operating and environmental conditions

| Operating pressure complete temperature range | -0.095 1.2 MPa |
|---|---|
| Operating pressure complete temperature range | -0.95 12 bar |
| Operating pressure complete temperature range | -13.775 174 psi |
| Note on operating pressure | Water: max. 0.6 MPa at 0 - 85°C |
| | Water vapour: 0 – 0.15 MPa, 0 – 1.5 bar, 0 – 22 psi |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:], Water (liquid, ice-free), Water vapour |
| Note on operating and pilot | Lubricated operation possible |
| medium | |
| Note on temperature of medi- | Water vapour: max. 120°C |
| um | |
| Ambient temperature 1) | -20 120°C |
| Note on ambient temperature | The NPCK can be used from -40 to 60 °C when using suitable tubing and observing the maximum operating pressure of the tube. |
| Corrosion resistance class CRC ²⁾ | 4 - Very high corrosion stress |
| Suitable for use with food 3) | See supplementary material information |

1) Other options: The fitting can be used in the temperature range from -40 +60°C when suitable tubing is used. The maximum permissible operating pressure of the tubing must not be exceeded.

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

3) More information: www.festo.com/catalogue/npck \rightarrow Support/Downloads.

Materials

| Materials | | | | | | | |
|--|--|--|---|---------------------------|----------------------------|---------------------|--|
| Pneumatic connection, port 1 | Male thread M5 | Male thread G1/8 | | Male thread G1/4 | | Male thread G3/8 | |
| Pneumatic connection, port 2 | For tubing outside di- ameter of 4 mm | For tubing outside di- ameter of 6 mm | For tubing outside diame | ter of 8 mm | For tubing outside diame | eter of 10 mm | |
| Material screwed plug | High-alloy stainless stee | | | | | | |
| Material union nut | High-alloy stainless stee | High-alloy stainless steel | | | | | |
| Material sealing ring | EPDM | EPDM PEEK | | | | | |
| Note on materials | RoHS-compliant | | | | | | |
| LABS (PWIS) conformity | VDMA24364-B2-L | VDMA24364-B2-L VDMA24364 zone III | | | | | |
| Suitability for the production of Li-ion batteries | | · · · · · | or nickel by mass are excl plug connectors and coils | uded from use. Exceptions | are nickel in steel, chemi | cally nickel-plated | |

Dimensions

Dimensions – Fittings NPCK, external thread M5

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| | D1 Ø | D2 | D3 Ø | L1 | L2 | =©1 | - ©2 | = ©3 |
|----------------|---------|----|---------|------|----|-----|-------------|-------------|
| NPCK-C-D-M5-K4 | 7,6 | M5 | 2 | 20,3 | 4 | 7 | 5,5 | 2 |

Dimensions

Dimensions – Fittings NPCK, male G thread

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| | D1 Ø | D2 | D3 Ø | L1 | L2 | = ©1 | =©2 | = ©3 |
|------------------|---------|--------|---------|------|------------|-------------|-----|-------------|
| NPCK-C-D-G18-K6 | 12.0 | C1 / 0 | 2,9 | 247 | | 11 | 10 | 4 |
| NPCK-C-D-G18-K8 | 12,8 | G1/8 | 4,9 | 24,7 | 5,5 | 11 | 10 | 5 |
| NPCK-C-D-G14-K8 | 17.0 | C1/4 | 4,9 | 28,1 | <i>C b</i> | 1.5 | 1.6 | (|
| NPCK-C-D-G14-K10 | 17,9 | G1/4 | 6,1 | 30,4 | 6,4 | 15 | 14 | 6 |
| NPCK-C-D-G38-K10 | 21,8 | G3/8 | 6,2 | 33,7 | 7,4 | 19 | 18 | 6 |

Dimensions



| | B1 | D1 | D2 |
|------------------------|-----|------|------|
| | | Ø | Ø |
| NPAS-C1-R-G18-P-FD-P10 | 0,5 | 9,9 | 11,7 |
| NPAS-C1-R-G14-P-FD-P10 | 0,5 | 13,3 | 16,6 |
| NPAS-C1-R-G38-P-FD-P10 | 1 | 16,8 | 20,7 |

Ordering data

| Ordering data | | | | | | |
|---------------|-----------------------------------|---|--------------|----------------|----------|------------------|
| | Pneumatic con- nection, port 1 | Pneumatic con- nection, port 2 | Nominal size | Product weight | Part no. | Туре |
| | Male thread M5 | For tubing out- side diameter of 4 mm | 2 mm | 4.2 g | 1857681 | NPCK-C-D-M5-K4 |
| | Male thread G1/8 | For tubing out- side diameter of 6 mm | 2.9 mm | 14.1 g | 1366257 | NPCK-C-D-G18-K6 |
| | | For tubing out- | 4.9 mm | 13.4 g | 1490383 | NPCK-C-D-G18-K8 |
| | Male thread G1/4 | side diameter of 8 mm | | 28.85 g | 1691701 | NPCK-C-D-G14-K8 |
| | | For tubing out- | 6.1 mm | 32.9 g | 1489336 | NPCK-C-D-G14-K10 |
| | Male thread G3/8 | side diameter of 10 mm | 6.2 mm | 51.15 g | 1489614 | NPCK-C-D-G38-K10 |

Accessories

| Sealing ring NPAS | Pneumatic connection | Nominal torque | Tolerance for nominal tightening torque | Size of pack | Product weight | Part no. | Туре |
|-------------------|-------------------------|-------------------|--|--------------|-------------------|----------|------------------------|
| | G1/8 | 6.5 Nm | ± 10% | 10 | 0.02 g | 2652516 | NPAS-C1-R-G18-P-FD-P10 |
| | G1/4 | 20 Nm | | | 0.05 g | 2652517 | NPAS-C1-R-G14-P-FD-P10 |
| | G3/8 | 35 Nm | | | 0.15 g | 2652519 | NPAS-C1-R-G38-P-FD-P10 |