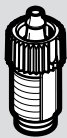


NLFA-D-U14-B.../K...-PP
Fitting



FESTO

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Assembly instructions

8149172
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[8149174]



Translation of the original instructions
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1 Applicable documents

Table with 3 columns: Document, Product, Table of contents. Row 1: Application note, -, Boundary conditions for liquid handling.

Tab. 1

2 Safety

2.1 Safety instructions

2.1.1 General safety instructions

- Only use the product in original status without unauthorised modifications.
- Only use the product if it is in perfect technical condition.
- Before carrying out any work on the product: switch off the medium supply and secure it against being switched back on.
- Take into consideration the ambient conditions at the location of use.

2.1.2 Media

- Media may escape in the event of leakage. Take suitable protective measures when using and handling the product.
- Use only media to which the materials used for the product are resistant. Materials in contact with the medium -> 7 Technical data.

2.1.3 Return to Festo

- Hazardous substances can endanger the health and safety of personnel and cause damage to the environment. To prevent hazards, the product should only be returned if explicitly requested by Festo.
- Consult your regional Festo contact.
  - Complete the declaration of contamination and attach it to the outside of the packaging.
  - Comply with all legal requirements for the handling of hazardous substances and the transport of dangerous goods.

2.2 Intended use

The fittings are specified in the technical data for installation in laboratory equipment for mounting tubing or dispensing needles.

2.3 Foreseeable misuse

Do not use the product for installation in medical devices.

2.4 Training of qualified personnel

Work on the product may only be carried out by qualified personnel who can evaluate the work and detect dangers. Personnel must have the relevant mechanical training.

3 Additional information

If you have any questions about planned areas of application of the product, contact the regional contact person for Festo -> www.festo.com.

4 Product range overview

4.1 Scope of delivery

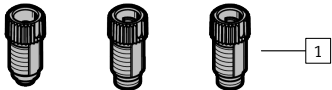


Fig. 1: NLFA-D-U14-K...-PP

- 1 Fitting (10x)
- NLFA-D-U14-K1.6-PP
  - NLFA-D-U14-K3-PP
  - NLFA-D-U14-K3.2-PP

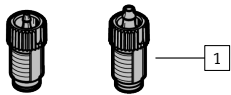


Fig. 2: NLFA-D-U14-B...-PP

4.2 Not in scope of delivery

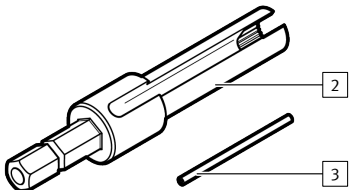


Fig. 3

- 1 Fitting (10x)
- NLFA-D-U14-B1.2-PP
  - NLFA-D-U14-B2.1-PP
- 2 Assembly tool (1x)  
NPAT-FA-A-R75
- 3 Dosing needle set (10x)  
VAVN-N-A1.6-...-V1-P10

5 Assembly

5.1 Preparing customer interface

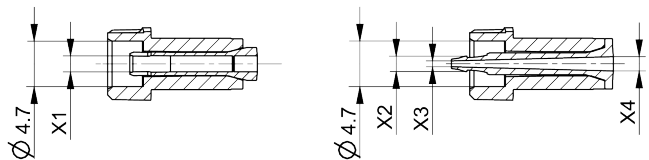


Fig. 4

- Observe the dimensions of the fittings 1.

| NLFA-D-U14-...-PP |      | K1.6 | K3   | K3.2 | B1.2 | B2.1 |
|-------------------|------|------|------|------|------|------|
| Ø X1              | [mm] | 1.65 | 3.05 | 3.25 | -    | -    |
| Ø X2              | [mm] | -    | -    | -    | 1.6  | 2.6  |
| Ø X3              | [mm] | -    | -    | -    | 0.6  | 1.3  |
| Ø X4              | [mm] | -    | -    | -    | 1.5  | 2.2  |

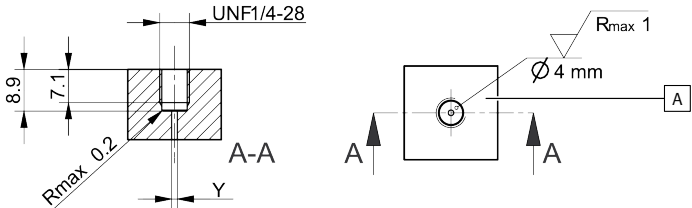


Fig. 5

- Prepare customer-provided interface (A) for the fittings 1.

| NLFA-D-U14-...-PP |      | K1.6 | K3  | K3.2 | B1.2 | B2.1 |
|-------------------|------|------|-----|------|------|------|
| max. Ø Y          | [mm] | 1.2  | 2.4 | 2.4  | 1.2  | 2.4  |

5.2 Preassembly NLFA-D-U14-K...-PP

Mounting tubing (B):

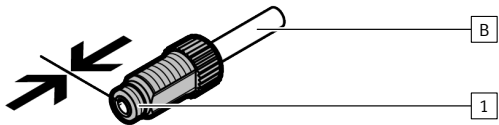


Fig. 6

1. Cut off the end of the tubing (B) straight.
2. Push tubing (B) into the fitting 1.  
↳ The tubing end is flush with the fitting 1.

Mounting a dosing needle 3 with NLFA-D-U14-K1.6-PP:

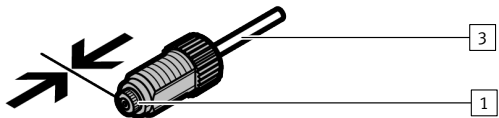


Fig. 7

- Push the dosing needle 3 into the fitting 1.  
↳ The end of the needle is flush with the fitting 1.

5.3 Mounting

5.3.1 Mounting NLFA-D-U14-K...-PP

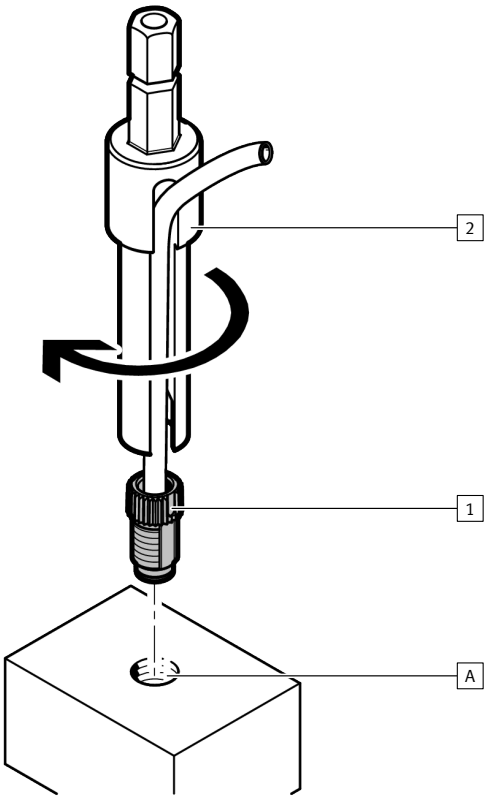


Fig.8

1. Position the assembly tool **2** on the fitting **1**.  
2. Tighten fitting **1** in the prepared mounting hole (A). Tightening torque: 0.15 Nm ± 10%

5.3.2 Mounting NLFA-D-U14-B...-PP

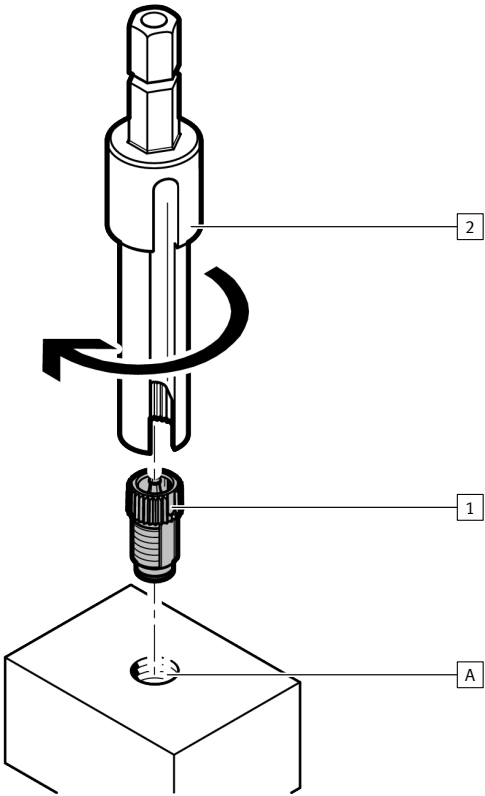


Fig.9

1. Position the assembly tool **2** on the fitting **1**.  
2. Tighten fitting **1** in the prepared mounting hole (A). Tightening torque: 0.15 Nm ± 10%

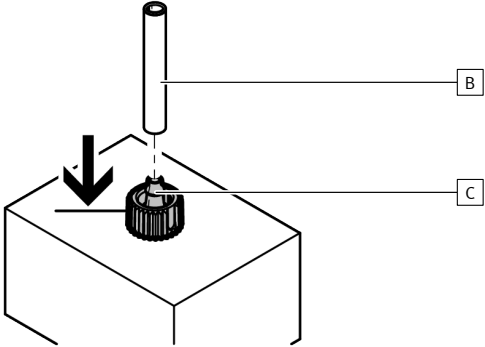


Fig.10

- Insert tubing (B) to the stop on the sleeve (C).

6 Maintenance

- Inspect outside of product regularly for leakage.

7 Technical data

| NLFA-D-U14-...-PP                                     |       | B...           | K...           |
|-------------------------------------------------------|-------|----------------|----------------|
| Technical data, general                               |       |                |                |
| Mounting position                                     |       | any            |                |
| Temperature range                                     |       |                |                |
| Medium (gas)                                          | [°C]  | 0 ... 40       | 0 ... 50       |
| Medium (liquid)                                       | [°C]  | 0 ... 35       | 0 ... 50       |
| Environment                                           | [°C]  | 0 ... 35       | 0 ... 50       |
| Storage<br>(in unassembled state)                     | [°C]  | -20 ... +70    | -20 ... +70    |
| Material of the interface provided by<br>the customer |       | PMMA           |                |
|                                                       |       | PEEK           |                |
| Technical data, fluidic                               |       |                |                |
| Medium                                                |       | liquid media   |                |
|                                                       |       | gaseous media  |                |
| Materials in contact with the medium                  |       | PP             |                |
| Operating pressure                                    | [MPa] | -0.075 ... 0.4 | -0.075 ... 0.6 |
|                                                       | [bar] | -0.75 ... 4    | -0.75 ... 6    |
|                                                       | [psi] | -10.875 ... 58 | -10.875 ... 87 |

Tab. 2: Technical data