

# Fitting NLFA

**FESTO**



### Characteristics

#### At a glance

- Fittings for liquid media, especially suitable for lab applications
- Five variants for different tubing or dispensing nozzles

#### Intended use:

The fittings NLFA are intended for installation in laboratory devices. The fittings are used to attach tubing or needles within the scope of the technical data. The chemical resistance of the materials of the fittings that come in contact with the media must be tested for each application. The application is to be validated.

#### Misuse:

Use of non-compatible media (compatibility must be checked in advance by the customer). Consult Festo if you are unsure about the suitability of the product for the intended use.

## Type code

001	Series	
NLFA	Fitting	
002	Design	
D	Straight	
003	Fluid connection 1	
U14	1/4-28 UNF	

004	Fluid connection 2	
B1.2	Barbed connector, 1.2 mm	
B2.1	Barbed connector, 2.1 mm	
K1.6	Clamped terminal connection 1.6 mm	
K3	Clamped terminal connection 3 mm	
K3.2	Clamped terminal connection 3.2 mm	
005	Material, in contact with media	
PP	Polypropylene	
006	Packaging quantity [pieces]	
P10	10	

## Datasheet

**General technical data – Barbed connector**

Fluid connection 2	For tubing I.D. 1.2 mm	For tubing I.D. 2.1 mm
Fluid connection	UNF1/4-28	
Design	Tubing mount via barbed connector	
Design	Straight design	
Sealing principle	Hard	
Mounting position	optional	
Nominal torque	15 Ncm	
Tolerance for nominal tightening torque	± 15%	
Product weight	1.06 g	0.5 g
Size of pack	10	

**General technical data – Clamped terminal connection**

Fluid connection 2	For tubing O.D. 3 mm	For tubing O.D. 1.6 mm (1/16")	For tubing O.D. 3.2 mm (1/8")
Fluid connection	UNF1/4-28		
Design	Tubing mount via clamped connection		
Design	Straight design		
Sealing principle	Hard		
Mounting position	optional		
Nominal torque	15 Ncm		
Tolerance for nominal tightening torque	± 15%		
Product weight	0.45 g	0.53 g	0.44 g
Size of pack	10		

**Operating and ambient conditions - Barbed connector**

Medium	Liquid media, Gaseous media
Note on the medium	Observe resistance of materials that come into contact with the media
Operating pressure complete temperature range	-0.075 ... 0.4 MPa
Operating pressure complete temperature range	-0.75 ... 4 bar
Operating pressure complete temperature range	-10.875 ... 58 psi
Media temperature	0 ... 35°C
Ambient temperature	0 ... 35°C
Storage temperature <sup>1)</sup>	-20 ... 70°C
Suitable for use with food <sup>2)</sup>	See supplementary material information

1) Only valid for uninstalled state.

2) More information: [www.festo.com/catalogue/nlfa](http://www.festo.com/catalogue/nlfa) → Support/Downloads.

**Operating and environmental conditions – Clamped terminal connection**

Medium	Liquid media, Gaseous media
Note on the medium	Observe resistance of materials that come into contact with the media
Operating pressure complete temperature range	-0.075 ... 0.6 MPa
Operating pressure complete temperature range	-0.75 ... 6 bar
Operating pressure complete temperature range	-10.875 ... 87 psi
Media temperature	0 ... 50°C
Ambient temperature	0 ... 50°C
Storage temperature <sup>1)</sup>	-20 ... 70°C
Suitable for use with food <sup>2)</sup>	See supplementary material information

1) Only valid for uninstalled state.

2) More information: [www.festo.com/catalogue/nlfa](http://www.festo.com/catalogue/nlfa) → Support/Downloads.

## Datasheet

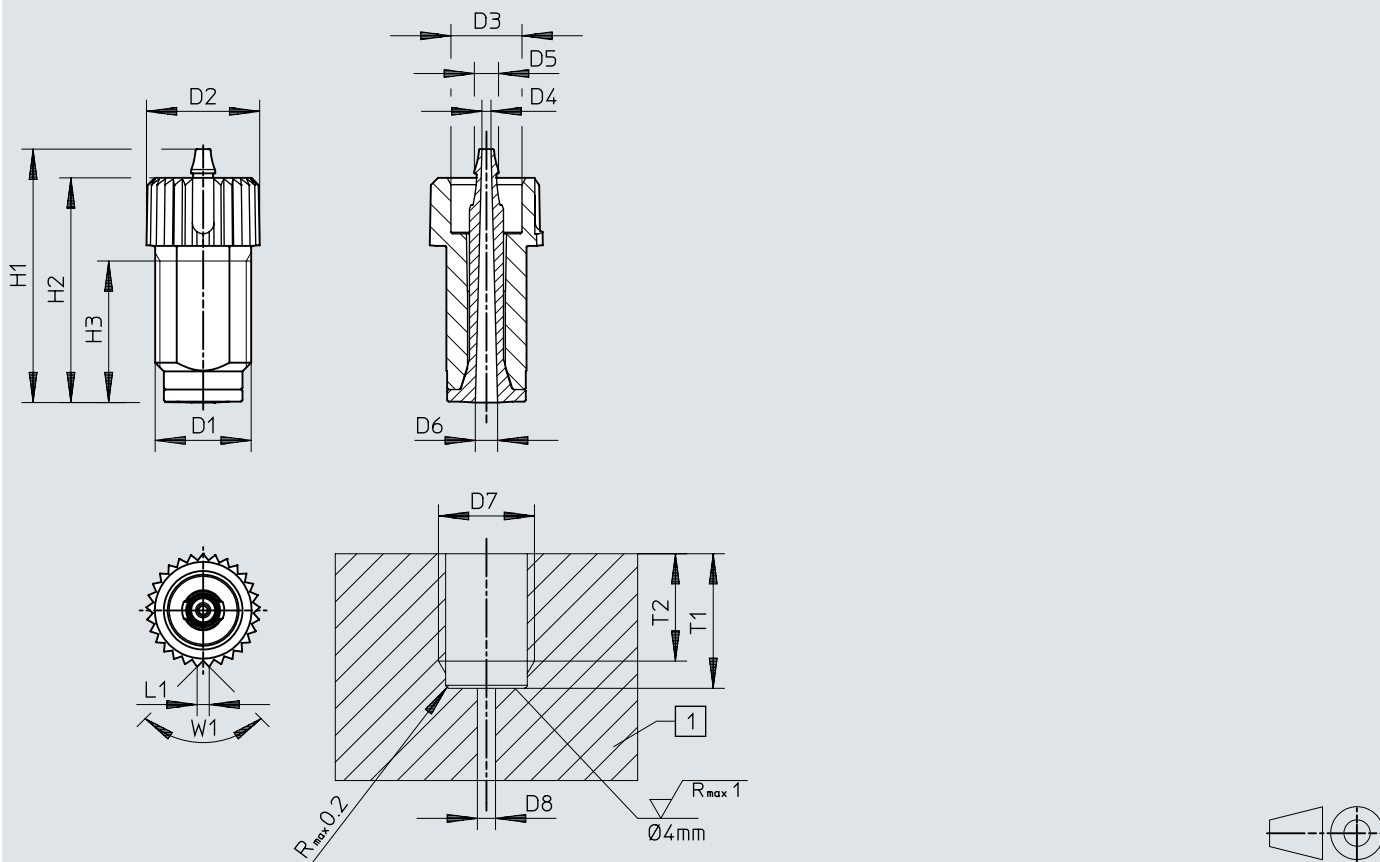
**Materials**

Material screwed plug	PA-reinforced
Material in contact with the medium	PP
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III
Instructions on use	See application note (available on the Support Portal at festo.com)

## Dimensions

Dimensions – With barbed connector

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



[1] Mounting surface

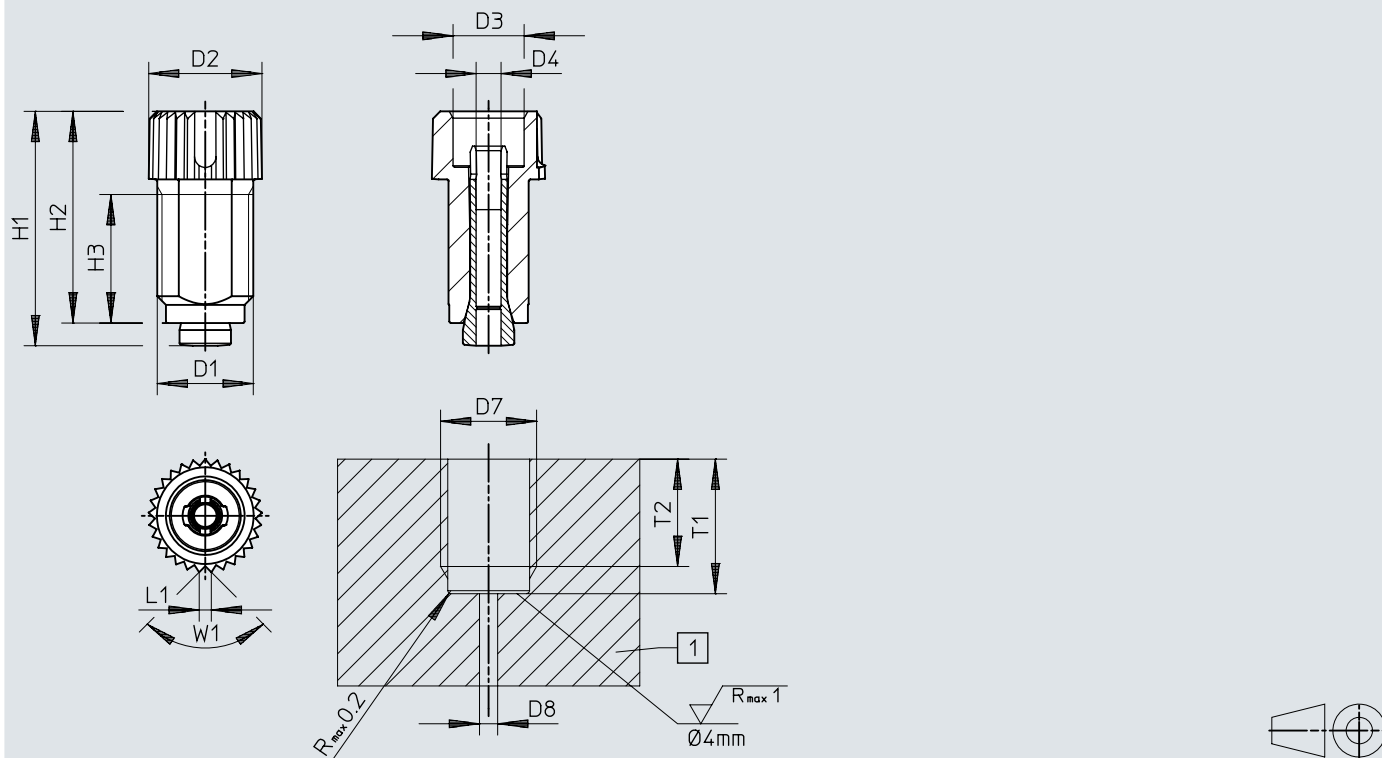
	D1	D2 Ø	D3 Ø	D4 Ø	D5 Ø	D6 Ø	D7	D8 Ø max.
NLFA-D-U14-B1.2-PP-P10	UNF1/4-28	7,5	4,7	0,6	1,6	1,5	UNF1/4-28	1,2
NLFA-D-U14-B2.1-PP-P10	UNF1/4-28	7,5	4,7	1,3	2,6	2,2	UNF1/4-28	2,4

	H1	H2	H3	L1	T1	T2	W1
NLFA-D-U14-B1.2-PP-P10	16,8	14,9	9,4	0,8	8,9	7,1	90°
NLFA-D-U14-B2.1-PP-P10	16,8	14,9	9,4	0,8	8,9	7,1	90°

## Dimensions

### Dimensions – With clamped terminal connection

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




[1] Mounting surface

	D1	D2 ∅	D3 ∅	D4 ∅	D7	D8 ∅ max.	H1
NLFA-D-U14-K1.6-PP-P10	UNF1/4-28	7,5	4,7	1,7	UNF1/4-28	1,2	15,5
NLFA-D-U14-K3-PP-P10	UNF1/4-28	7,5	4,7	3,1	UNF1/4-28	2,4	15,5
NLFA-D-U14-K3.2-PP-P10	UNF1/4-28	7,5	4,7	3,3	UNF1/4-28	2,4	15,5

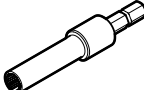
	H2	H3	L1	T1	T2	W1
NLFA-D-U14-K1.6-PP-P10	14	8,5	0,8	8,9	7,1	90°
NLFA-D-U14-K3-PP-P10	14	8,5	0,8	8,9	7,1	90°
NLFA-D-U14-K3.2-PP-P10	14	8,5	0,8	8,9	7,1	90°

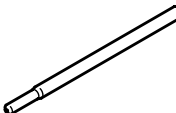
## Ordering data

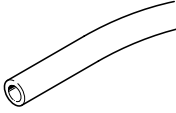
Ordering data					
	Fluid connection	Fluid connection 2	Product weight	Part no.	Type
	UNF1/4-28	For tubing O.D. 3 mm	0.45 g	<b>8104286</b>	<b>NLFA-D-U14-K3-PP-P10</b>
		For tubing I.D. 1.2 mm	1.06 g	<b>8104288</b>	<b>NLFA-D-U14-B1.2-PP-P10</b>
		For tubing I.D. 2.1 mm	0.5 g	<b>8104289</b>	<b>NLFA-D-U14-B2.1-PP-P10</b>
		For tubing O.D. 1.6 mm (1/16")	0.53 g	<b>8104285</b>	<b>NLFA-D-U14-K1.6-PP-P10</b>
		For tubing O.D. 3.2 mm (1/8")	0.44 g	<b>8104287</b>	<b>NLFA-D-U14-K3.2-PP-P10</b>



## Accessories

Assembly tool NPAT					
	Size	Material housing	Product weight	Part no.	Type
	ø 8 mm	Aluminium	10 g	8146520	NPAT-FA-A-R75

Dosing elements VAVN						
	Length of dosing needle	Nominal width of dosing needle	Size of pack	Design of dosing needle	Part no.	Type
	30 mm	0.3 mm	10	with chamfer, with tapering	8104295	VAVN-N-A1.6-03-30-F-V-V1-P10
		0.6 mm		with tapering	8104294	VAVN-N-A1.6-03-30-V-V1-P10
		1.2 mm		with tapering	8104296	VAVN-N-A1.6-06-30-V-V1-P10
		0.3 mm		with tapering	8104291	VAVN-N-A1.6-12-30-V-V1-P10
	60 mm	0.3 mm	with chamfer, with tapering	8104298	VAVN-N-A1.6-03-60-F-V-V1-P10	
			with tapering	8104297	VAVN-N-A1.6-03-60-V-V1-P10	
		0.6 mm	with tapering	8104292	VAVN-N-A1.6-06-60-V-V1-P10	
			with tapering	8104299	VAVN-N-A1.6-06-60-V-V1-P10	
		1.2 mm	with tapering	8104293	VAVN-N-A1.6-12-60-V-V1-P10	

Plastic tubing						
	Pneumatic connection	Outside diameter	Material tubing	Colour	Part no.	Type
	For push-in connector O.D. 2 mm	2 mm	TPE-U(PU)	Natural	133038	PUN-H-2X0,4-NT
	For push-in connector outside diameter of 3 mm, For barbed fitting inside diameter of 2 mm	3 mm	PFA		8061167	PFAN-3X0,5-NT
	For push-in connector outside diameter of 3 mm		TPE-U(PU)		197375	PUN-H-3X0,5-NT