

# pneumatic push-in fittings system LF 3000<sup>®</sup>



# Principle

of system LF 3000®

Invented and launched by **Legris** in 1969, the **LF 3000® system** has become universally adopted. It has been designed using a simple and widely proven operating principle which allows instant fitting. The **connection** of tube to fitting is made by simply pushing the tube into the fitting, no other operation is required. **Disconnection** is similarly "instantaneous".



Attentive to market needs, **Legris** has taken into account the requirements of its customers, i.e. optimisation of performance, miniaturization and appearance.

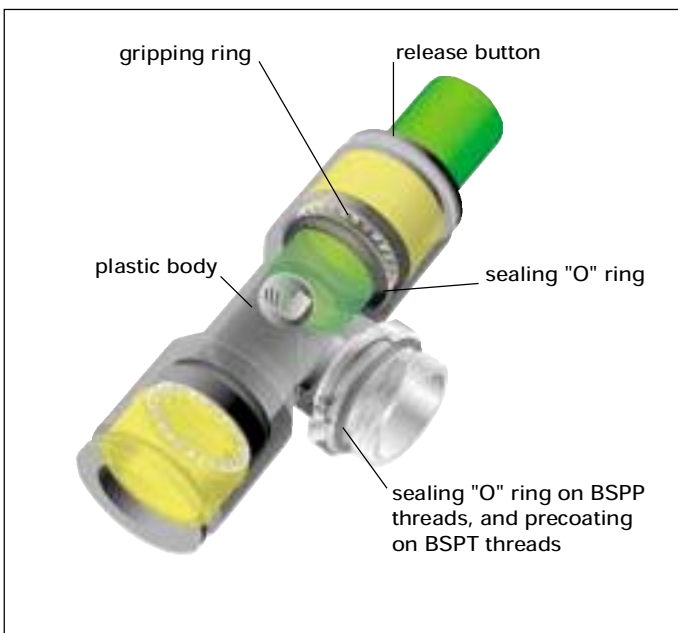
In order to be utilised to its maximum capability, the **LF 3000® system** is available in 3 ranges :

- for **metric tubing with BSP threads in taper, parallel or metric form.**
- for fractional **inch tubing with BSP threads in taper form.**
- for fractional **inch tubing with NPT threads.**

Millions of fittings are in service throughout the world. Designed for pneumatic installations, the **LF 3000® system** is therefore an essential component in a wide variety of industries.

## technical specifications

Reliable performance is dependent upon the type of tubing being used, ambient temperature and fluid conveyed together with the suitability of component materials of the fitting, according to the application.



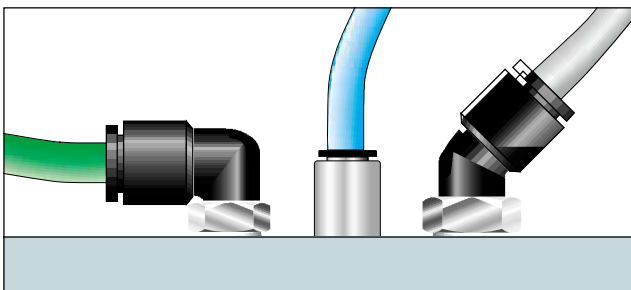
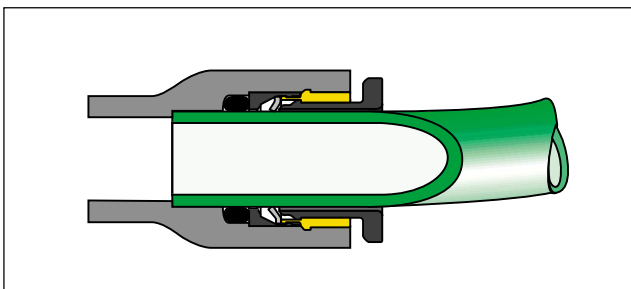
All items in the LF 3000® range are guaranteed **SILICONE FREE**

<b>suitable fluids</b>	compressed air <i>LF 3000® can also be used for conveying various types of liquids (water, cutting oil, etc) for industrial applications. The working pressure, from 0 to 6 / 10 bar, and temperatures, from 0 to 60°C, are dependent upon the fluid conveyed and the type of 'O' ring used. For further information, please consult us.</i>							
<b>working pressure</b>	20 bar maximum Maximum circuit pressure depends equally on the type and diameter of tubing used.							
<b>vacuum capability</b>	vacuum of 755 mm Hg (99% vacuum)							
<b>working temperature</b>	-20° to +80°C The fitting's suitability depends equally on the type and OD of the tube used. For temperature above 80°C, please consult us.							
<b>constituent materials</b>	<b>body</b> : glass reinforced nylon 6.6 <b>collar</b> : nylon <b>gripping ring</b> : stainless steel <b>"O" rings</b> : nitrile (EPDM, FPM upon request) <b>sub-base</b> : nickel-plated brass (stainless steel upon request)							
<b>maximum tightening torque for LF 3000® fittings, BSPP threads, M5 and M7</b>	Thread	M3	M5	M7	G1/8"	G1/4"	G3/8"	G1/2"
	m. da N	x 0,5	x 0,8	x 1				
		0,06	0,16	0,8	0,8	1,2	3	3,5

# Advantages of system LF 3000®

## PERFORMANCE AND RELIABILITY

- **full flow** : as gripping and sealing within the fitting is achieved using the outside of the tube without deformation, there is no flow restriction.
- **automatic sealing** : the 'O' ring within the fitting provides a positive seal on the O.D. of the tube, in both static and dynamic positions, due to the **optimized design** of the tube guide.



## ONE OF THE MOST EXTENSIVE RANGES ON THE MARKET

- **a solution for all applications** : wide variety of body designs and numerous configurations, from 3 mm to 14 mm diameters.
- **3 types of thread** : BSP parallel, BSP taper and metric.
- **special items** on request.

## COMPACT AND AESTHETIC

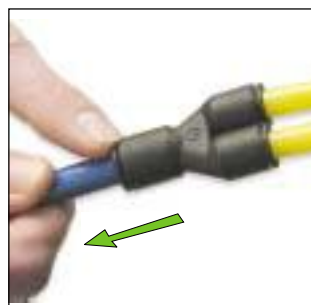
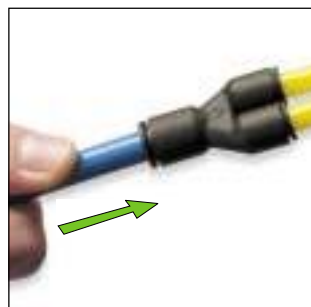
- optimized dimensions and new body designs, to satisfy the **ergonomics** and **aesthetics of pneumatic installations**.

## LIGHT WEIGHT

- a feature introduced for improved performance, mobility and productivity.

## IMMEDIATE SEAL

- for **parallel threaded fittings**, due to a patented built in captive 'O' ring seal.
- for **tapered threaded fittings** due to pre-coating.



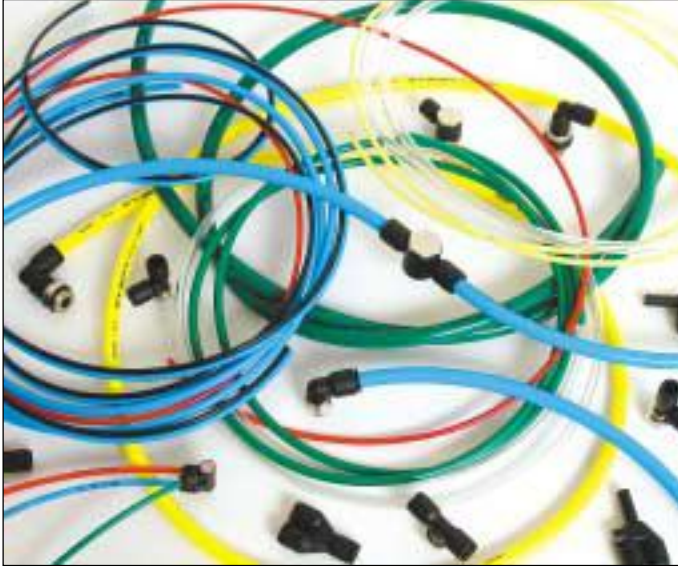
## INSTANT CONNECTION AND DISCONNECTION

- **instant** connection and disconnection without the use of spanners.
- **release buttons** : available in 5 colours, to **identify** different circuits.

*Our production process includes individual unit quality control and dating, for all LF 3000® push-in fittings, in order to guarantee their quality and traceability.*

LF 3000® pneumatic push-in fittings can be used with various Legris **technical tubing**

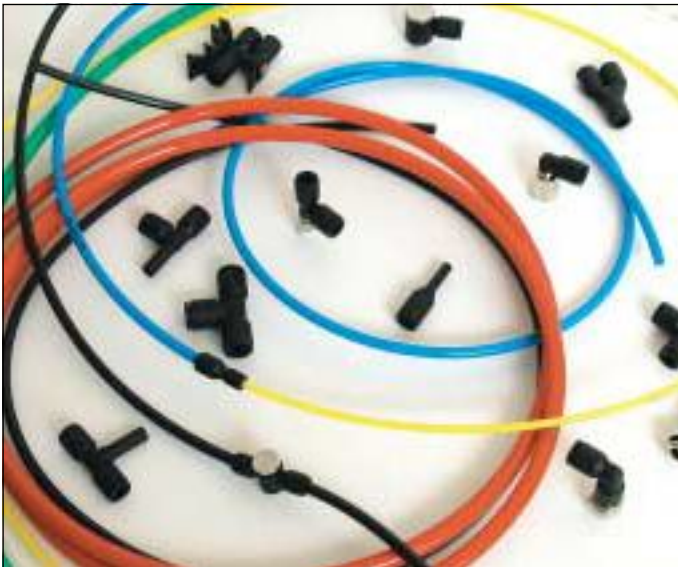
### semi-rigid close tolerance nylon tubing



Main advantages of use of Legris nylon tubing with LF 3000® push-in fittings

- large range of working temperatures and pressures
  - small pressure drop
  - constant rigidity, good ageing
  - good absorption of vibration
  - 7 colours for easy identification of circuits
- 3 mm to 16 mm O.D.  
- in 25 m rolls: part number **1025P**  
- in 100 m rolls: part number **1100P**

### close tolerance flexible polyurethane tubing



Main advantages of use of Legris polyurethane tubing with LF 3000® push-in fittings

- high flexibility and small bend radius
  - large range of working temperatures and pressures
  - small pressure drop
  - constant rigidity, good ageing
  - good absorption of vibration
  - 7 colours for easy identification of circuits
- 3 mm to 14 mm O.D.  
- 2 ranges: polyester and polyether tubing  
- in 25 m rolls:
  - polyester polyurethane, part number **1025U**
  - polyether polyurethane, part number **1025U..R**  
- in 100 m rolls:
  - polyester polyurethane, part number **1100U**
  - polyether polyurethane, part number **1100U..R**

Legris polyurethane tubing is supplied in tubepack® boxes

- easy storage
- protection of tubing against outside aggression
- easy dispensing of the tube
- immediate visual identification of tubing



You can find LF 3000® push-in fittings on legris.com

## online catalogue



- with the **online catalogue**, regularly updated, you can easily find the whole range of **LF 3000®** for metric and inch tubing.
- you can find a product quickly thanks to 3 search options
- you can get a complete product datasheet with a photo, technical drawing and specifications
- you can ask for a quotation from our distributors
- you can download CAD drawings for free



## learning space



- with the **learning space** designed to optimize performance of your installations, you will find **animated presentations** of LF 3000® fittings and their functions:
- instant connection and disconnection
- applications and solutions to match your equipment requirements



# tube to tube fittings

**3140** single "Y" piece - equal and unequal

ØD2	ØD1	ØD2		
			Part No.	Price
4	4	4	3140 04 00	
6	6	6	3140 06 00	
8	8	8	3140 08 00	
10	10	10	3140 10 00	
12	12	12	3140 12 00	
ØD1	4	6	3140 04 06	
	6	8	3140 06 08	
	8	10	3140 08 10	
	10	12	3140 10 12	

**3144** double "Y" piece - equal and unequal

ØD2	ØD1	ØD2		
			Part No.	Price
4	4	4	3144 04 04	
6	6	6	3144 06 06	
ØD1	4	6	3144 04 06	
	6	8	3144 06 08	

**3104** equal tee

ØD	Part No.	Price
3	3104 03 00	
4	3104 04 00	
6	3104 06 00	
8	3104 08 00	
10	3104 10 00	
12	3104 12 00	
14	3104 14 00	

**3106** tube/tube connector

Ø D	Part No.	Price
3	3106 03 00	
4	3106 04 00	
6	3106 06 00	
8	3106 08 00	
10	3106 10 00	
12	3106 12 00	
14	3106 14 00	

**3102** equal elbow

ØD	Part No.	Price
4	3102 04 00	
6	3102 06 00	
8	3102 08 00	
10	3102 10 00	
12	3102 12 00	
14	3102 14 00	

**3104** unequal tee

ØD1	ØD2		
		Part No.	Price
4	6	3104 04 06	
6	4	3104 06 04	
6	8	3104 06 08	
8	6	3104 08 06	
8	10	3104 08 10	
10	8	3104 10 08	
10	12	3104 10 12	
12	10	3104 12 10	
14	8	3104 14 08	

**3106** unequal tube/tube connector

ØD1	ØD2		
		Part No.	Price
3	4	3106 03 04	
4	6	3106 04 06	
4	8	3106 04 08	
6	8	3106 06 08	
6	10	3106 06 10	
8	10	3106 08 10	
8	12	3106 08 12	
10	12	3106 10 12	
12	14	3106 12 14	

**3102** unequal elbow

ØD1	ØD2		
		Part No.	Price
4	6	3102 04 06	
6	8	3102 06 08	
8	10	3102 08 10	
10	12	3102 10 12	

# bulkhead connector fittings

**3116** bulkhead connector

ØD	Part No.	Price
4	3116 04 00	
6	3116 06 00	
8	3116 08 00	
10	3116 10 00	
12	3116 12 00	
14	3116 14 00	

**3136** female bulkhead connector, BSPP thread

ØD	C	Part No.	Price
4	G1/8	3136 04 10	
4	G1/4	3136 04 13	
6	G1/8	3136 06 10	
6	G1/4	3136 06 13	
6	G3/8	3136 06 17	
8	G1/8	3136 08 10	
8	G1/4	3136 08 13	
10	G3/8	3136 10 17	
12	G3/8	3136 12 17	
12	G1/2	3136 12 21	

**3139** equal bulkhead elbow

ØD	Part No.	Price
4	3139 04 00	
6	3139 06 00	
8	3139 08 00	
10	3139 10 00	
12	3139 12 00	
14	3139 14 00	

All plastic nuts are fitted with an "O" ring to optimise sealing to a panel

**3146** mixed bulkhead connector

ØD	Part No.	Price
4	3146 04 00	
6	3146 06 00	
8	3146 08 00	
10	3146 10 00	
12	3146 12 00	
14	3146 14 00	

# self-sealing fittings

**3391** self-sealing male stud fitting, BSPP thread

ØD	C	Part No.	Price
4	G1/8	3391 04 10	
6	G1/8	3391 06 10	
8	G1/8	3391 08 10	
8	G1/4	3391 08 13	
10	G3/8	3391 10 17	

**3091** self-sealing male stud fitting, BSPT thread

ØD	C	Part No.	Price
4	R1/8	3091 04 10	
6	R1/8	3091 06 10	
8	R1/8	3091 08 10	
8	R1/4	3091 08 13	
10	R3/8	3091 10 17	

**3160** self-sealing plug-in fitting

ØD	Part No.	Price
4	3160 04 00	
6	3160 06 00	
8	3160 08 00	



**3108** male stud branch tee, BSPT thread

ØD	C	
4	R1/8	3108 04 10
4	R1/4	3108 04 13
6	R1/8	3108 06 10
6	R1/4	3108 06 13
8	R1/8	3108 08 10
8	R1/4	3108 08 13
8	R3/8	3108 08 17
10	R1/4	3108 10 13
10	R3/8	3108 10 17
10	R1/2	3108 10 21
12	R1/4	3108 12 13
12	R3/8	3108 12 17
12	R1/2	3108 12 21
14	R3/8	3108 14 17
14	R1/2	3108 14 21

**3103** male stud run tee, BSPT thread

ØD	C	
4	R1/8	3103 04 10
4	R1/4	3103 04 13
6	R1/8	3103 06 10
6	R1/4	3103 06 13
8	R1/8	3103 08 10
8	R1/4	3103 08 13
8	R3/8	3103 08 17
10	R1/4	3103 10 13
10	R3/8	3103 10 17
10	R1/2	3103 10 21
12	R1/4	3103 12 13
12	R3/8	3103 12 17
12	R1/2	3103 12 21
14	R3/8	3103 14 17
14	R1/2	3103 14 21

**3121** male BSPT threaded standpipe

ØD	C	
4	R1/8	3121 04 10
4	R1/4	3121 04 13
6	R1/8	3121 06 10
6	R1/4	3121 06 13
8	R1/8	3121 08 10
8	R1/4	3121 08 13
8	R3/8	3121 08 17
10	R1/4	3121 10 13
10	R3/8	3121 10 17
10	R1/2	3121 10 21
12	R3/8	3121 12 17
12	R1/2	3121 12 21
14	R1/2	3121 14 21

**3198** male stud branch tee BSPP and M5 thread

ØD	C	
4	M5x0,8	3198 04 19
4	G1/8	3198 04 10
4	G1/4	3198 04 13
6	M5x0,8	3198 06 19
6	G1/8	3198 06 10
6	G1/4	3198 06 13
8	G1/8	3198 08 10
8	G1/4	3198 08 13
8	G3/8	3198 08 17
10	G1/4	3198 10 13
10	G3/8	3198 10 17
10	G1/2	3198 10 21
12	G1/4	3198 12 13
12	G3/8	3198 12 17
12	G1/2	3198 12 21
14	G3/8	3198 14 17
14	G1/2	3198 14 21

**3193** male stud run tee BSPP and M5 thread

ØD	C	
4	M5x0,8	3193 04 19
4	G1/8	3193 04 10
4	G1/4	3193 04 13
6	M5x0,8	3193 06 19
6	G1/8	3193 06 10
6	G1/4	3193 06 13
8	G1/8	3193 08 10
8	G1/4	3193 08 13
8	G3/8	3193 08 17
10	G1/4	3193 10 13
10	G3/8	3193 10 17
10	G1/2	3193 10 21
12	G1/4	3193 12 13
12	G3/8	3193 12 17
12	G1/2	3193 12 21
14	G3/8	3193 14 17
14	G1/2	3193 14 21

**3131** male parallel and M5 threaded standpipe

ØD	C	
4	M5x0,8	3131 04 19
4	G1/8	3131 04 10
4	G1/4	3131 04 13
6	G1/8	3131 06 10
6	G1/4	3131 06 13
8	G1/8	3131 08 10
8	G1/4	3131 08 13
8	G3/8	3131 08 17
10	G1/4	3131 10 13
10	G3/8	3131 10 17
10	G1/2	3131 10 21
12	G3/8	3131 12 17
12	G1/2	3131 12 21
14	G3/8	3131 14 17
14	G1/2	3131 14 21

**3148** "Y" piece with male BSPT thread

ØD	C	
4	R1/8	3148 04 10
4	R1/4	3148 04 13
6	R1/8	3148 06 10
6	R1/4	3148 06 13
8	R1/8	3148 08 10
8	R1/4	3148 08 13
8	R3/8	3148 08 17
10	R1/4	3148 10 13
10	R3/8	3148 10 17
10	R1/2	3148 10 21
12	R3/8	3148 12 17
12	R1/2	3148 12 21

**3158** "Y" piece with male BSPP and M5 thread

ØD	C	
4	M5x0,8	3158 04 19
4	G1/8	3158 04 10
4	G1/4	3158 04 13
6	M5x0,8	3158 06 19
6	G1/8	3158 06 10
6	G1/4	3158 06 13
8	G1/8	3158 08 10
8	G1/4	3158 08 13
8	G3/8	3158 08 17
10	G1/4	3158 10 13
10	G3/8	3158 10 17
10	G1/2	3158 10 21
12	G3/8	3158 12 17
12	G1/2	3158 12 21

**3192** female stud elbow, BSPP thread

ØD	C	
4	G1/8	3192 04 10
4	G1/4	3192 04 13
6	G1/8	3192 06 10
6	G1/4	3192 06 13
8	G1/8	3192 08 10
8	G1/4	3192 08 13
8	G3/8	3192 08 17
10	G1/4	3192 10 13
10	G3/8	3192 10 17
10	G1/2	3192 10 21
12	G1/4	3192 12 13
12	G3/8	3192 12 17
12	G1/2	3192 12 21

**3189** oscillating compact elbow, BSPP and M5 stud

ØD	C	
4	M5x0,8	3189 04 19
4	G1/8	3189 04 10
6	M5x0,8	3189 06 19
6	G1/8	3189 06 10
6	G1/4	3189 06 13
8	G1/8	3189 08 10
8	G1/4	3189 08 13
8	G3/8	3189 08 17
10	G1/4	3189 10 13
10	G3/8	3189 10 17
12	G1/4	3189 12 13
12	G3/8	3189 12 17

**3159** oscillating compact elbow, BSPT stud

ØD	C	
4	R1/8	3159 04 10
6	R1/8	3159 06 10
6	R1/4	3159 06 13
8	R1/8	3159 08 10
8	R1/4	3159 08 13
8	R3/8	3159 08 17
10	R1/4	3159 10 13
10	R3/8	3159 10 17
12	R1/4	3159 12 13
12	R3/8	3159 12 17

**3112** double "Y" piece with male BSPT thread

ØD	C	
4	R1/8	3112 04 10
4	R1/4	3112 04 13
6	R1/8	3112 06 10
6	R1/4	3112 06 13

**3132** double "Y" with male BSPP thread

ØD	C	
4	G1/8	3132 04 10
4	G1/4	3132 04 13
6	G1/8	3132 06 10
6	G1/4	3132 06 13

**carstick®**

**3100** carstick®

ØD cartridge	
4	3100 04 00
6	3100 06 00
8	3100 08 00
10	3100 10 00
12	3100 12 00

A free service accessible to everyone.

Download CAD drawings of all LF 3000® models from [www.legris.com](http://www.legris.com)





# banjo bodies for modular construction

## 3538 single banjo bodies

ØD	C	
3	M5x0,8	3538 03 19
4	M5x0,8	3538 04 19
4	G1/8	3538 04 10
6	M5x0,8	3538 06 19
6	G1/8	3538 06 10
6	G1/4	3538 06 13
8	G1/8	3538 08 10
8	G1/4	3538 08 13
8	G3/8	3538 08 17
10	G1/4	3538 10 13
10	G3/8	3538 10 17
10	G1/2	3538 10 21
12	G3/8	3538 12 17
12	G1/2	3538 12 21

## 3527 single banjo bolts, BSPP and M5 thread

C	
M5x0,8	3527 00 19
G1/8	3527 00 10
G1/4	3527 00 13
G3/8	3527 00 17
G1/2	3527 00 21

## 3539 double banjo bodies

ØD	C	
4	M5x0,8	3539 04 19
4	G1/8	3539 04 10
6	G1/8	3539 06 10
6	G1/4	3539 06 13
8	G1/4	3539 08 13
8	G3/8	3539 08 17
10	G3/8	3539 10 17

## 3528 stacking banjo for 2 body high modules BSPP and M5 thread

C	
M5x0,8	3528 00 19
G1/8	3528 00 10
G1/4	3528 00 13
G3/8	3528 00 17

## 3524 female threaded banjo bolts, BSPP and M5 thread

C1	C2	
M5x0,8	M5x0,8	3524 00 19
G1/8	G1/8	3524 00 10
G1/4	G1/4	3524 00 13
G3/8	G3/8	3524 00 17
G1/2	G1/2	3524 00 21

## 3549 twin banjo bodies

Ø D	C	
4	M5x0,8	3549 04 19
4	G1/8	3549 04 10
4	G1/4	3549 04 13
6	G1/8	3549 06 10
6	G1/4	3549 06 13
6	G3/8	3549 06 17
8	G1/4	3549 08 13
8	G3/8	3549 08 17
10	G3/8	3549 10 17

## 3529 stacking banjo for 3 body high modules BSPP thread

C	
G1/8	3529 00 10
G1/4	3529 00 13
G3/8	3529 00 17

# multiple fittings and manifolds

## 3306 unequal multiple elbow, with fixing holes

ØD1	ØD2	
6	4	3306 06 04
8	4	3306 08 04
8	6	3306 08 06
10	6	3306 10 06
10	8	3306 10 08

## 3310 manifold with LF 3000 push-in connection

ØD	C	
4	G1/4	3310 04 13
6	G1/4	3310 06 13
8	G3/8	3310 08 17
10	G1/2	3310 10 21
12	G1/2	3310 12 21

## 3304 unequal multiple tee, with fixing holes

ØD1	ØD2	
6	4	3304 06 04
8	4	3304 08 04
8	6	3304 08 06
10	6	3304 10 06
10	8	3304 10 08

## 3107 equal cross

ØD	
4	3107 04 00
6	3107 06 00
8	3107 08 00

## 3107 unequal cross

ØD1	ØD2	
4	6	3107 04 06
6	8	3107 06 08

## 3107 unequal cross

ØD1	ØD2	
4	6	3107 06 04
6	8	3107 08 06

# modular plug-in connectors

## 3300 modular plug-in connectors

ØD	
4	3300 04 00
6	3300 06 00
8	3300 08 00

## 3381 DIN-rail connector for 3 tubes in line

ØD	
4	3381 04 00
6	3381 06 00
8	3381 08 00

## 3379 DIN-rail connector for 2 tubes

ØD	
4	3379 04 00
6	3379 06 00
8	3379 08 00

## 3320 multi-connector male screw body

o.d. tube	number of outlets	
4	2	3320 04 00 02
4	4	3320 04 00 04
4	7	3320 04 00 07
4	12	3320 04 00 12
6	2	3320 06 00 02
6	4	3320 06 00 04
6	7	3320 06 00 07
8	2	3320 08 00 02

## 3321 multi-connector female screw body

o.d. tube	number of outlets	
4	2	3321 04 00 02
4	4	3321 04 00 04
4	7	3321 04 00 07
4	12	3321 04 00 12
6	2	3321 06 00 02
6	4	3321 06 00 04
6	7	3321 06 00 07
8	2	3321 08 00 02

## 3329 multi-connector screw cap

number of outlets	
2	3329 00 01
4-7	3329 00 02
12	3329 00 03

# pneumatic push-in fittings system LF 3000®

## accessories

**0178** reducer male to female, BSPP and M5

C1	C2	
M7x1	M5x0,8	0178 55 19
G1/8	M5x0,8	0178 10 19
G1/4	G1/8	0178 13 10
G3/8	G1/8	0178 17 10
G3/8	G1/4	0178 17 13
G1/2	G1/4	0178 21 13
G1/2	G3/8	0178 21 17
G3/4	G1/2	0178 27 21

**0179** increaser male to female, BSPP and M12

C1	C2	
M12x1,5	G1/4	0179 67 13
G1/8	G1/4	0179 10 13
G1/4	G3/8	0179 13 17
G3/8	G1/2	0179 17 21

**0222** threaded plug, BSPP and M5

C	
M5x0,8	0222 19 00
M7x1	0222 55 00
G1/8	0222 10 00
G1/4	0222 13 00
G3/8	0222 17 00
G1/2	0222 21 00

**3000** disconnection tool

ØD	
4	3000 70 04
6	3000 70 06
8	3000 70 08
10	3000 70 10
12	3000 70 12
14	3000 70 14

**Clip** clip strips for tubes

ØD	
4	Clip 04 00
6	Clip 06 00
8	Clip 08 00
10	Clip 10 00
12	Clip 12 00
14	Clip 14 00

**3110** coloured release button covers

Ø D					
4	3110 04 00	3110 04 02	3110 04 03	3110 04 04	3110 04 05
6	3110 06 00	3110 06 02	3110 06 03	3110 06 04	3110 06 05
8	3110 08 00	3110 08 02	3110 08 03	3110 08 04	3110 08 05
10	3110 10 00	3110 10 02	3110 10 03	3110 10 04	3110 10 05
12	3110 12 00	3110 12 02	3110 12 03	3110 12 04	3110 12 05
14	3110 14 00	3110 14 02	3110 14 03	3110 14 04	3110 14 05

## 3 mm push-in fittings

**3281** male stud fitting, M3 and M5 thread

ØD	C	
3	M3x0,5	3281 03 09
3	M5x0,8	3281 03 19

**3206** tube/tube connector

ØD	
3	3206 03 00

**3202** equal elbow

ØD	
3	3202 03 00

**3299** compact male stud elbow, M3 and M5 thread

ØD	C	
3	M3x0,5	3299 03 09
3	M5x0,8	3299 03 19

**3298** male stud branch tee, M3 and M5 thread

ØD	C	
3	M3x0,5	3298 03 09
3	M5x0,8	3298 03 19

**3204** equal tee

ØD	
3	3204 03 00

**3229** extended male stud elbow, M3 and M5 thread

ØD	C	
3	M3x0,5	3229 03 09
3	M5x0,8	3229 03 19

**3293** male stud run tee, M3 and M5 thread

ØD	C	
3	M3x0,5	3293 03 09
3	M5x0,8	3293 03 19

**3266** 4 mm to 3 mm reducer

ØD1	ØD2	
3	4	3266 03 04

**3218** single banjo, M3 and M5 thread

ØD	C	
3	M3x0,5	3218 03 09
3	M5x0,8	3218 03 19

**3226** blanking plug

ØD	
3	3226 03 00

# plug-in fittings

**3188** plug-in equal and unequal compact tee with plastic tailpiece

ØD1	ØD2		
		Image	Price
	4	4	3188 04 00
	6	6	3188 06 00
	8	8	3188 08 00
	10	10	3188 10 00
	12	12	3188 12 00
	4	6	3188 04 06
	6	8	3188 06 08
	8	10	3188 08 10
	10	12	3188 10 12

**3183** plug-in equal and unequal run tee with plastic tailpiece

ØD1	ØD2		
		Image	Price
	4	4	3183 04 00
	6	6	3183 06 00
	8	8	3183 08 00
	10	10	3183 10 00
	12	12	3183 12 00
	4	6	3183 04 06
	6	8	3183 06 08
	8	10	3183 08 10
	10	12	3183 10 12

**3180** 45° equal elbow with plastic tailpiece

ØD1	ØD2		
		Image	Price
	4	4	3180 04 00
	6	6	3180 06 00
	8	8	3180 08 00
	10	10	3180 10 00
	12	12	3180 12 00

**3184** extended equal and unequal elbow with plastic tailpiece

ØD1	ØD2		
		Image	Price
	4	4	3184 04 00
	6	6	3184 06 00
	8	8	3184 08 00
	10	10	3184 10 00
	12	12	3184 12 00
	4	6	3184 04 06
	6	8	3184 06 08
	8	10	3184 08 10
	10	12	3184 10 12

**3182** plug-in equal and unequal compact elbow with plastic tailpiece

ØD1	ØD2		
		Image	Price
	4	4	3182 04 00
	6	6	3182 06 00
	8	8	3182 08 00
	10	10	3182 10 00
	12	12	3182 12 00
	4	6	3182 04 06
	6	8	3182 06 08
	8	10	3182 08 10
	10	12	3182 10 12

# plug-in fittings and accessories

**3142** plug-in equal and unequal single "Y" piece

ØD1	ØD2		
		Image	Price
	4	4	3142 04 00
	6	6	3142 06 00
	8	8	3142 08 00
	10	10	3142 10 00
	12	12	3142 12 00
	4	6	3142 04 06
	6	8	3142 06 08
	8	10	3142 08 10
	10	12	3142 10 12

**3143** plug-in multiple "Y" piece

ØD1	ØD2		
		Image	Price
	4	6	3143 04 06
	4	8	3143 04 08
	6	8	3143 06 08

**3168** increaser

ØD1	ØD2		
		Image	Price
	6	4	3168 06 04
	8	6	3168 08 06
	10	8	3168 10 08
	12	10	3168 12 10

**3166** reducer

ØD1	ØD2		
		Image	Price
	3	4	3166 03 04
	4	6	3166 04 06
	4	8	3166 04 08
	4	10	3166 04 10
	6	8	3166 06 08
	6	10	3166 06 10
	6	12	3166 06 12
	6	14	3166 06 14
	8	10	3166 08 10
	8	12	3166 08 12
	8	14	3166 08 14
	10	12	3166 10 12
10	14	3166 10 14	
12	14	3166 12 14	

**3120** double male stem connector - plastic

ØD		
	Image	Price
4		3120 04 00
6		3120 06 00
8		3120 08 00
10		3120 10 00
12		3120 12 00
14		3120 14 00

**3126** blanking plug

ØD		
	Image	Price
3		3126 03 00
4		3126 04 00
6		3126 06 00
8		3126 08 00
10		3126 10 00
12		3126 12 00
14		3126 14 00

**3122** barbed connector for unequal tube

ØD1	ØD2		
		Image	Price
	4	5	3122 04 05
	4	3,2	3122 04 53
	6	5	3122 06 05
	8	6,3	3122 08 56
	8	8	3122 08 08
	10	6,3	3122 10 56
	10	8	3122 10 08
	12	8	3122 12 08
	12	10	3122 12 10
	12	12,5	3122 12 62
	14	12,5	3122 14 62
	14	14	3122 14 14