pneumatic push-in fittings
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.

**suitable fluids**
- compressed air
- 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.

**working pressure**
- 20 bar maximum
- Maximum circuit pressure depends equally on the type and diameter of tubing used.

**vacuum capability**
- vacuum of 755 mm Hg
- (99% vacuum)

**working temperature**
- -20°C 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.

**constituent materials**
- **body**: glass reinforced nylon 6.6
- **collar**: nylon
- **gripping ring**: stainless steel
- **"O" rings**: nitrile (EPDM, FPM upon request)
- **sub-base**: nickel-plated brass (stainless steel upon request)

**maximum tightening torque for LF 3000® fittings, BSP threads, M5 and M7**
<table>
<thead>
<tr>
<th>m. da N</th>
<th>0.06</th>
<th>0.16</th>
<th>0.8</th>
<th>0.8</th>
<th>1.2</th>
<th>3</th>
<th>3.5</th>
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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

3144 double "Y" piece - equal and unequal

3106 tube/tube connector

3102 equal elbow

3104 equal tee

3106 unequal tube/tube connector

3102 unequal elbow

bulkhead connector fittings

3116 bulkhead connector

3136 female bulkhead connector, BSPP thread

3139 equal bulkhead elbow

3146 mixed bulkhead connector

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

self-sealing fittings

3391 self-sealing male stud fitting, BSPP thread

3091 self-sealing male stud fitting, BSPT thread

3160 self-sealing plug-in fitting
pneumatic push-in fittings
system LF 3000®

accessories

0178 reducer male to female, BSPP and M5

0179 increaser male to female, BSPP and M12

0222 threaded plug, BSPP and M5

3000 disconnection tool

3110 coloured release button covers

3 mm push-in fittings

3218 single banjo, M3 and M5 thread

3226 blanking plug

3229 extended male stud elbow, M3 and M5 thread

3231 male stud fitting, M3 and M5 thread

3266 4 mm to 3 mm reducer

3293 male stud run tee, M3 and M5 thread

3298 male stud branch tee, M3 and M5 thread

3299 compact male stud elbow, M3 and M5 thread

3204 equal tee

3202 equal elbow

3206 tube/tube connector

3281 male stud fitting, M3 and M5 thread

3110 ØD

4 3110 04 00
6 3110 06 00
8 3110 08 00
10 3110 10 00
12 3110 12 00
14 3110 14 00
plug-in fittings

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

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

3180 45° equal elbow with plastic tailpiece

3184 extended equal and unequal elbow with plastic tailpiece

plug-in fittings and accessories

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

3143 plug-in multiple "Y" piece

3166 reducer

3126 blanking plug

3122 barbed connector for unequal tube

3168 increaser

3120 double male stem connector - plastic
Connection solutions
for industrial fluids

Our low pressure catalogue is available upon request.