# Tubing LLDPE

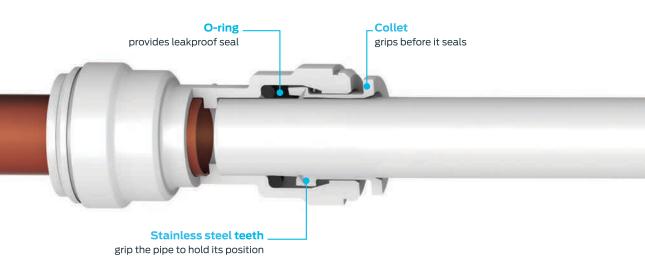
# Fluid System Products

Fittings, Valves & Tubing Catalog



### How to make a Push-Fit connection





#### To connect

Keep product clean until ready to use. Always pressure test once installed.



#### Step 1

Cut the tube square and remove any burrs or score marks. We recommend using a tube insert for soft or thin-walled plastic tubing.



#### Step 2

Push the tube into the fitting and up to the tube stop.



#### Step 3

Pull on the tube to check that it is secure. Test the system before use.

#### To disconnect



#### Step 1

Make sure that the system is depressurized, then push the collet square against the fitting. With the collet held in this position, the tube can be removed.





JJ DOWNS INDUSTRIAL PLASTICS INC.

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## Fluid Systems **Tubing**



The PE Range of plastic tubing is produced in linear low density polyethylene and is for use with cold and intermittent hot water applications. Our tubing is made from non-contaminating materials and provides the benefits of a wide range of temperature and pressure suitability and broad chemical compatibility. Common applications include water purification, water conditioners, ice makers and misting systems. LLDPE is more robust than traditional low or medium density polyethylene. Our tubing is made from FDA compliant materials and is NSF International certified.

LLDPE tubing provides excellent resistance to environmental stress cracking as measured by ASTM D-1693 (10% IGEPAL).

Our polyethylene tubing is designed for use with our standard push-fit fittings, shut-off valves and virtually all standard tubing connectors.



#### LLDPE Tubing sizes available:

Part Number	OD	ID	Coil Length	Min. Bend Radius
PE-08-BI-DF-N	1/4" (0.250")	0.170"	500'	1.00"
PE-08-BI-1000F-N	1/4" (0.250")	0.170"	1000'	1.00"
PE-10-CI-0500F-N	5/16" (0.312")	0.187"	500'	1.13"
PE-12-EI-DF-N	3/8" (0.375")	0.250"	500'	1.25"
PE-16-GI-CCLF-N	1/2" (0.500")	0.375"	250'	2.50"
PE-04025-0100M-N	4mm	2.5mm	100m	25mm
PE-0604-0100M-N	6mm	4mm	100m	25mm
PE-0604-0300M-E	6mm	4mm	300m	25mm
PE-0806-100M-N	8mm	6mm	100m	30mm
PE-1007-100M-N	10mm	7mm	100m	32mm
PE-1209-100M-N	12mm	9mm	100m	63mm
PE-15115-0100M-B	15mm	11.5mm	100m	100mm

#### Suffix indicates color.

To request other colors, please refer to adjacent table.

Popular items are generally in stock and are available for purchase in minimum quantities of 2 coils. Other items may be subject to longer lead times and are available in minimum quantities of 50 coils.

# 25' Coils

Part Number	OD	Coil Length	Bag Qty	Box Qty
PE-08-BI-025F-B	1/4"	25'	1	20
PE-08-BI-025F-N	1/4"	25'	1	20
PE-08-BI-025F-E	1/4"	25'	1	20
PE-12-EI-025F-B	3/8"	25'	1	12
PE-12-EI-025F-N	3/8"	25'	1	12

B = Blue

N = Natural E = Black

#### **Standard** colors available

N = Natural

B = Blue





E = Black

R = Red





G = Green

O = Orange





W = White

Y = Yellow





15mm - only available in blue, red and green 8mm - only available in natural, blue, black, red and white. For other colors, we suggest you use 5/16".

Black tubing - UV stabilized





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## Fluid Systems Tubing LLDPE



LLDPE working temperatures & pressures					
Tube OD		Tube ID			
1/4"	Х	0.170"			
5/16"	Х	0.187"			
3/8"	х	0.250"	230 psi @ 70°F 120 psi @ 150°F		
4mm	Х	2.5mm			
6mm	х	4mm			
10mm	Х	7mm			
1/2"	Х	0.375"			
8mm	х	6mm	150 psi @ 70°F		
12mm	Х	9mm	90 psi @ 150°F		
15mm	Х	11.5mm			

Burst pressures are approximately 3 times the maximum working pressure.

Maximum working temperature 150°F at pressures shown in chart. The chart's maximum temperatures and pressures do not take chlorine content into account. This could reduce useful service life.

Note, maximum pressure rating for a system depends on the lowest rated component, e.g., most John Guest fittings have a different rating from the tube ratings shown.

Tube tolerances	
1/4" to 1/2"	+0.001"/-0.004"
4mm	+0.05mm/-0.07mm
6mm to 12mm	+0.05mm/-0.10mm
15mm	+0.10mm/-0.10mm

#### **Pneumatics** applications

Our LLDPE tubing is suitable for pneumatic applications, providing pressure is maximum 150psi @ 70°F (10 bar @ 20°C). At elevated temperatures 120°F+ (50°C+), mineral oil will degrade LLPDE tubing, which is why LLDPE tubing used in pneumatic circuits should be periodically checked and replaced when necessary.

#### **Tube inserts**

If the tubing is used at elevated temperatures, tube inserts may be necessary.

#### **Exposure** to ultraviolet light

Black LLDPE tubing is UV stabilized and can be exposed to direct ultraviolet light (e.g. direct sunlight); other colors of LLDPE tubing are not UV stabilized and cannot be exposed to direct ultraviolet light.

#### **Chemical resistance**

For use of LLDPE tubing with chemicals or potentially aggressive liquids, please refer to our Technical Services Department.

NOTE: When using cleaning agents or other potentially aggressive liquids, check compatibility with tubing and fittings. LLDPE tubing is not recommended for mineral oils, gases and fuels or high pressure compressed air/pneumatic systems.

#### **Potable water applications**

LLDPE tubing is suitable for potable cold water applications with a maximum chlorine content of 4 parts per million (4 ppm). Heating water above  $70^{\circ}$ F ( $20^{\circ}$ C) and/or pressures above the maximum will significantly reduce useful service life. Direct exposure to sunlight will also significantly reduce its useful service. As part of good practice, tubing should be inspected regularly. If there is any evidence of damage, hardening or cracking, it should be replaced immediately.



