

LLDPE Tubing

The John Guest PE Range of plastic tubing is produced in Linear Low Density Polyethylene for cold and intermittent hot water applications.

Our tubing provides the benefits of a wide range of temperature and pressure suitability, broad chemical compatibility and is made from non contaminating materials. Common applications are in water purification, water conditioners, ice makers and misting systems. LLDPE is more robust than traditional low or medium density polyethylene and is recommended for use with cold and intermittent hot water. Our tubing is made from FDA compliant materials and is NSF International certified. John Guest LLDPE Tubing provides excellent resistance to environmental stress cracking as measured by ASTM D-1693 (10% IGEPAL).

John Guest Polyethylene tubing is designed for use with John Guest Super Speedfit push-fit fittings, John Guest Shut-Off Valves and virtually all standard tubing connectors.

Prices subject to change without notice.

Sizes Available

PART NO.	OD	ID	COIL LENGTH	MIN. BEND RADIUS	
PE-08-BI-0500F-N PE-08-BI-1000F-N PE-08-BI-3000F-E PE-10-CI-0500F-N PE-12-EI-0500F-N PE-16-GI-0250F-N PE-04025-0100M-N PE-0604-0100M-N PE-0604-0300M-E PE-0806-0100M-N PE-1007-100M-N	1/4"(0.250") 1/4"(0.250") 5/16"(0.312") 3/8"(0.375") 1/2"(0.500") 4mm 6mm 6mm 8mm 10mm	0.170" 0.170" 0.170" 0.187" 0.250" 0.375" 2.5mm 4mm 4mm 6mm 7mm	500 FT 1000 FT 3000 FT 500 FT 250 FT 100m 100m 300m 100m 100m	1.00" 1.00" 1.13" 1.25" 2.50" 25mm 25mm 25mm 30mm 32mm	
PE-1209-100M-N PE-15115-0100M-B	12mm 15mm	9mm 11.5mm	100m 100m	63mm 100mm	

N denotes natural color. To request other colors please refer to adjacent table. Popular items are now generally in stock and are available in minimum quantities of 2 coils. Other items may be subject to longer lead times and are available in minimum quantities of 50 coils.



Smal Part No.	ler Coils	O.D.	Coil Length	Bag Qty.	Box Qty.
PE-08- PE-08- PE-12- PE-12-	BI-025F-B BI-025F-N BI-025F-E EI-025F-B EI-025F-N B = Blue N = Natural	1/4" 1/4" 1/4" 3/8" 3/8"	25' 25' 25' 25' 25'	1 1 1 1	20 20 20 12 12
	E = Black				

10 9 Col Strong

Standard Colors Available

SUFFIX N NATURAL	B BLUE
11/1	

E BLACK





W WHITE Other special colors available on request:-

Orange	(O)
Green	(G)
Violet	(V)
Yellow	(Y)

15mm size only available in Blue, Red and Green.

8mm size only available in Natural, Blue, Black, Red and White. For other colors we suggest you use 5/16".

Black tubing is UV stabilized.

Sizes ors yet flexible





NSF 51 NSF 61



Tube Tolerances

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

Working Temperatures and Pressures - LLDPE

TUBE OD		TUBE ID	
1/4" 5/16" 3/8" 4mm 6mm 10mm	x x x x x x	0.170" 0.187" 0.25" 2.5mm 4mm 7mm	230 psi @70°F 120 psi @150°F
1/2" 8mm 12mm 15mm	x x x x	0.375" 6mm 9mm 11.5mm	150 psi @70°F 90 psi @150°F

Burst pressures are approximately 3 times the maximum working pressure.

Maximum Working Temperature 150°F at pressures shown in chart above.

The above maximum temperatures and pressures do not take chlorine content into account. This could reduce service life.

Please note maximum pressure rating for a 'system' depends on the lowest rated component, eg. most John Guest fittings have a different rating from the tube ratings shown above.

Pneumatics Applications

John Guest LLDPE tube 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 tube and therefore, LLDPE tube used in pneumatic circuits should be periodically checked and replaced if necessary.

Tube Inserts

If the tube is used in a warm water system a tube insert is necessary.

Exposure to Ultraviolet Light

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

Chemical Resistance

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

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

Potable Water Applications

John Guest 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 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.