

Fox-Flo® UV Stable, LSZH Non-Shrink Cable Markers

General Product Information

Fox-Flo® Non-Shrink is a low-smoke, zero-halogen (LSZH) and UV-stable labelling solution, designed as an alternative to heatshrink and individual ident markers. Its figure-of-eight design provides a secure grip without adhesives or heat guns, reducing safety risks and saving time in hazardous areas. Supplied in continuous roll format, it allows variable-length labels and rapid application on even the smallest cable diameters, eliminating the inefficiencies of individual markers.

Label Material

Manufactured from Fox-Flo® LSZH, these labels offer one of the most robust and high-performing solutions on the market. The material ensures low smoke, zero halogen emissions to minimise toxic fumes in a fire, while maintaining integrity against UV, moisture, and chemicals, making it suitable for both indoor and outdoor use. (See Compliance, Certifications & Testing for details.)



Label Printing Technology

The Fox-Flo® Non-Shrink cable marker integrates seamlessly with the Fox-in-a-Box® thermal transfer printer, extending its range to 360+ label variations from a single, compact system. With plug-and-play setup and an intuitive interface, engineers can switch between label types quickly, eliminating downtime. This adaptability makes it ideal for large, complex projects where efficiency and reliability are essential.



Software Integration

Powered by Labacus Innovator® software, the Fox-in-a-Box® manages the entire printing process with features such as Excel import for bulk data, eliminating manual entry errors and speeding up turnaround. It supports advanced formats including barcodes, QR codes, and GS1 DataMatrix, ensuring full traceability and compliance. Available in Basic, Advanced, and Professional editions, the software scales with project needs, with higher levels offering data integration, batch printing, and Fluke Networks® Linkware™ Live compatibility. All editions include lifetime free updates, guaranteeing access to the latest features and standards.

Dual-Roll Printing Capability

A key feature for Fox-Flo® Non-Shrink cable markers is dual-roll printing, available in the Advanced and Professional editions of Labacus Innovator®. This allows printing from two rolls simultaneously, so both ends of a cable can be labelled in one operation. By removing duplicate printing and application steps, it delivers major labour savings on large-scale projects.



Ribbon Options	TSR3/300/25	TSR3/300/60	TSR3/300/110
LNSTLZ/4-2/T(45X2)	✓	✓	✓
LNSTLZ/6-4/T(25X2)	✓	✓	✓
LNSTLZ/8-6/T(20X2)	✓	✓	✓

Label Applications

Figure-of-Eight Design

The figure-of-eight grip, designed by Silver Fox engineers, provides a secure, tool-free hold without adhesives. It prevents slippage even on small-diameter cables and remains reliable under vibration, moisture, and temperature changes.

Flexibility Across Sizes

Designed to fit a wide range of cable diameters, Fox-Flo® reduces the need for multiple marker types. This versatility simplifies inventory and ensures consistent results across varied projects.

No Heat Gun Required

Fox-Flo® Non-Shrink requires no heat gun, removing fire hazards in restricted environments such as oil and gas sites or refineries. This makes installation faster, safer, and simpler.

Continuous Roll Format

Supplied in continuous rolls, Fox-Flo® allows cut-to-length labelling, saving time and reducing waste. This adaptability ensures a precise fit for every application.

Compliance, Certifications, and Testing

Fox-Flo® has undergone extensive testing against international safety, chemical, and environmental standards, proving its reliability in mission-critical sectors such as electrical, oil and gas, renewables, and data infrastructure.

Testing	Method	Tested	Yellow	White
Flammability - Oxygen Index	BS EN ISO 4589-2 2017	Material	38.1%	N/A
Flammability - Vertical Burning Test	UL 94 Section 8 Rating V0	Material	✓	✓
Smoke Emmision	BS 6853:1999 Annex D.8.3	Material	✓	
Toxic Fume	BS 6653:1999 Annex B.1	Material	✓	
Fire Testing of Materials and Components for Trains - Oxygen Index & Flue Gas Density	EN 45545-2 R22	Material	✓	
Smoke & Toxicity	IMO FTPC Part 2	Material	✓	✓
Surface Spread of Flames	IMO FTPC Part 5	Material	✓	✓
UV Weathering	ISO 4982 Part 3 Method A Cycle 1 - 8000 hrs	Finished Printed Label	✓	✓
Elevated Temperature**	MIL-STD-202G Method 108A - 2000 hrs @ 70°c to 100°c	Finished Printed Label	✓	✓
Low Temperature*	MIL-STD-810F Method 502.4 - 72 hrs @ -40°	Finished Printed Label	✓	✓
H2S Sour Gas	Exposure (2% H2S)	Finished Printed Label	✓	✓
Salt Mist Spray	EC60068-2-52 Test Kb Salt Mist (Cyclic)	Finished Printed Label	✓	✓
Chemical/Solvent Resistance	Refer data sheet	Finished Printed Label	✓	
UL 2043	Fire test for Heat and Visible Smoke Release	Material		✓

*Followed by a manipulation test. Manipulation of the labels were performed at -40° at completion of the low temperature test.

**Samples were subjected to 500 hours @ 70°, followed by 500 hours @ 85°, followed by 1000 hours @ 100°

Fire Safety & Smoke Performance

Fox-Flo® material meets some of the most rigorous fire safety standards worldwide. It demonstrates strong flame resistance under BS EN ISO 4589-2:2017 and achieves a UL 94 V0 rating, confirming rapid self-extinguishing with no flaming drips.

Low smoke and low toxicity are proven through BS 6853:1999 and IMO FTPC Part 2, making it safe for confined environments such as tunnels, trains, and offshore platforms.

Compliance with EN 45545-2 R22 ensures suitability for European rail projects, while IMO FTPC Part 5 confirms low flame spread for marine and offshore use. In addition, UL 2043 certifies it for plenum spaces in commercial buildings and data centres, ensuring safe performance in HVAC environments.

Environmental Durability

Fox-Flo® is proven to perform in extreme environments. It remains intact and legible at -40°C under MIL-STD-810F and withstands continuous heat up to 100°C for 2,000 hours under MIL-STD-202G, ensuring long-term durability in both freezing and high-temperature conditions.

UV Stability

Its resilience is further demonstrated by 8,000 hours of accelerated UV testing (ISO 4982) and salt-mist exposure (IEC 60068-2-52), confirming suitability for outdoor, coastal, and offshore projects.

Hydrogen Sulphide Testing

Additionally, resistance to H₂S gas exposure makes it highly reliable in oil, gas, and petrochemical facilities.

Chemical and Solvent Resistance

Fox-Flo® material has been rigorously tested with the DTP-1 printer and TSR3/300 ribbons for chemical resistance.

Labels showed no effect, even after rubbing, when exposed to isopropyl alcohol, de-ionised water, SAE 30 oil, detergents, acids, salts, spirits, and ethylene glycol.

Limited legibility loss occurred with MEK, petrol, WD-40, and turpentine substitute, while only highly aggressive agents such as toluene, jet fuel, and DOT 4 brake fluid caused complete removal.

These results confirm exceptional durability in the presence of most industrial chemicals.



Silver Fox Legend LSZH Non-Shrink

Industrial Applications

Fox-Flo® Non-Shrink is engineered to meet the safety, durability, and efficiency demands of multiple industries.

Electrical and Instrumentation

In electrical engineering, Fox-Flo® Non-Shrink is ideal for control panels, junction boxes, and field wiring. Its figure-of-eight design ensures reliable ID on small cables, while the continuous roll format allows variable lengths for complex layouts.

Energy and Renewables

In renewables, Fox-Flo® Non-Shrink excels in areas such as solar string labelling where cables are small and densely packed. Its resistance to UV and extreme temperatures ensures long-lasting durability outdoors, also making it ideal for offshore wind and hydroelectric projects.

Oil, Gas, and Petrochemicals

In oil and gas, Fox-Flo® material is ideal for hazardous sites where heat guns are prohibited. Its flame-retardant LSZH composition and resistance to H₂S, salt mist, chemicals, and extreme conditions ensure compliance and durability in both offshore and onshore facilities.

Power and Utilities

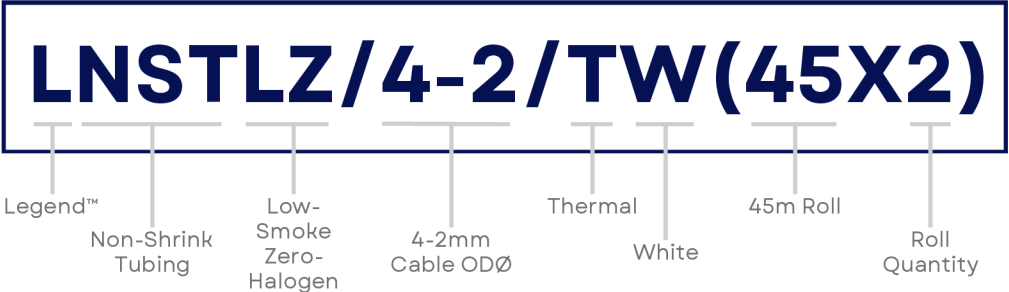
Stable in extreme temperatures, it suits power plants, substations, and grids, with continuous roll format for rapid application and compliance with international fire and smoke standards for safety.

Commercial and Infrastructure Projects

Fox-Flo® Non-Shrink delivers durable, professional labelling for construction, building services, data centres, and transport hubs.

Sizes, Colours, and Part Numbers

Fox-Flo® Non-Shrink is available in yellow and white, the industry’s most widely recognised colours for cable identification. Each colour will be supplied with a range of part numbers, supporting quick ordering and stock management.



Product Code	Cable OD rec. (mm)	Printable Area	Roll Length (m)	Pack Qty	Total Pack Length (m)
LNSTLZ/4-2/T(45X2)	2-4	L x 7mm	45	2	90
LNSTLZ/6-4/T(25X2)	4-6	L x 10mm	25	2	50
LNSTLZ/8-6/T(20X2)	6-8	L x 12mm	20	2	40



Packaging and Logistics

Supplied in protective dispenser boxes for smooth application, Fox-Flo® Non-Shrink is backed by same-day UK despatch to support urgent projects. Rapid worldwide shipping also available.

Storage Instructions

- Temperature: Between 50°F (10°C) and 77°F (25°C).
- Light Exposure: Keep in dark conditions to prevent premature material degradation.
- Humidity: Store in an environment with 35% to 65% relative humidity (RH).

Warranty and Support

Every Fox-in-a-Box® purchase includes a full support package at no extra cost, ensuring maximum value from day one. Silver Fox provides free training on setup, software features and application; free technical support via phone, email, or video; and free lifetime software updates to maintain compatibility and compliance. This complete package enhances productivity, ensures confidence in operation, and maximises long-term return on investment.

FAQs

Q: How does the label grip the cable?

A: The figure-of-eight design allows the label to hold firmly around the cable without adhesives. The tension in the material creates a secure grip that prevents slippage under normal operating conditions.

Q: Does it slide off easily?

A: No. The dual-loop grip design ensures the label remains in place even under vibration and environmental stress.

Q: What is the print quality like?

A: When printed using the Fox-in-a-Box® system, Fox-Flo® Non-Shrink produces high-resolution, durable text and symbols, tested for resistance against UV, abrasion, and common industrial chemicals.

Contacts and Resources

For further information, technical data sheets, or ordering, please contact:

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