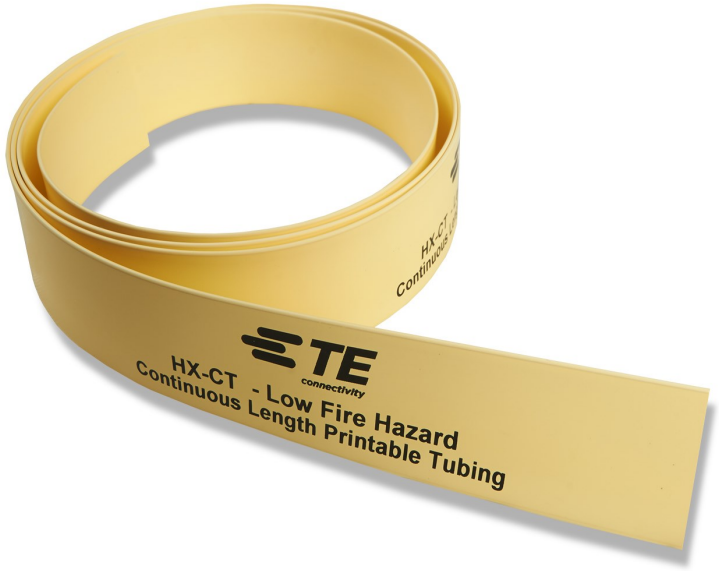


HX-CT

LFH Continuous Tube

HEAT SHRINK IDENTIFICATION SYSTEM

Technical Datasheet

TTDS-270 Revision 3 - July 2021

HX-CT Low Fire Hazard (LFH) markers sleeve for identification of wires and cables, presented as a continuous tube.

HX-CT is manufactured using a specially developed radiation cross-linked material. Formulated to give Low Fire Hazard properties, which allow this product to be used in locations where fire may pose a risk to human life and property.

HX-CT heat shrink tube, manufactured with e-beam technology gives users the ability to shrink the supplied tube with no damage to material or printed text. Shrinking the tube will ensure the printed marker has a firm hold on the wire.

HX-CT gives market leading print performance when used as a complete system, as recommended by TE Connectivity. Refer to TE document 411-121005 IDENTIFICATION PRINTER PRODUCT RIBBON MATRIX for the recommended printer/product/ribbon combinations.

Printed HX-CT meets the rail specification EN45545-2 Fire Hazard Classification 3, in accordance with requirement set R22/R23—Unlimited use for rail car design.

HX-CT Heat Shrink Identification Marker Sleeving is available as part of a complete identification system. The system comprises specific printers, thermal transfer ribbons and WINTOTAL software.

Features

- Zero Halogen, Low Toxic Fumes and Low Smoke
- Self Extinguishing, non-flame propagating
- Excellent resistance to burning—Typical LOI 39%
- Resistant to key rail and industrial fluids (defined by TE specification RW-2072)
- Sleeve diameters from 2.4mm to 38.1mm (3/32 to 1-1/2inch)
- More open profile for easier use
- Shrink ratio 2:1

Design for Environment

- HX-CT fully complies with 2011/65/EU RoHS II directive, and Regulation (EC) number 1907/2006 (REACH)
- Does not contain any declarable or prohibited substances from UNIFE Railway Industry Substance List.

Further information and a downloadable declaration covering RoHS and REACH compliance can be found at the TE Product Compliance Support Centre:

http://www.te.com/usa-en/utilities/product-compliance.html

Temperature Rating

- Operating Temperature Range –55°C to 105°C (-67°F to 221°F)

Applications

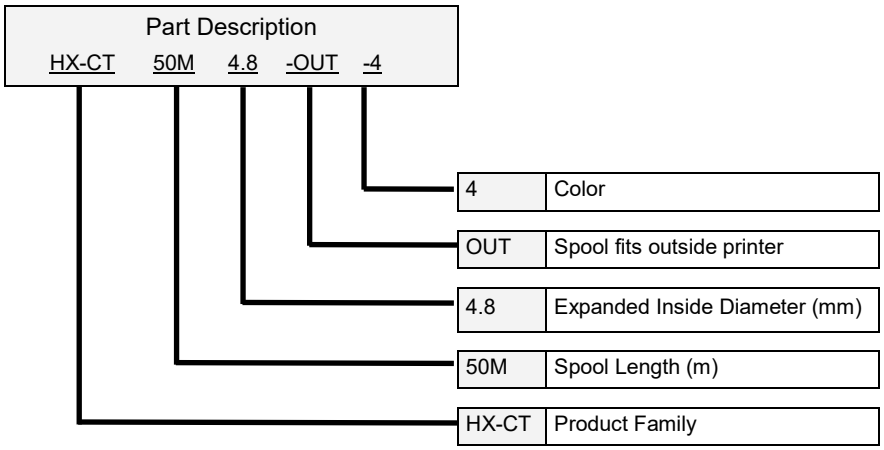
Specifications / Approvals

TE Connectivity Standard	RW-2072
Rail Standards	EN45545-2, Railway applications - Fire protection on railway vehicles, Part 2: Requirements for fire behaviour of materials and components Fire Hazard Classification 3, in accordance with requirement set R22/R23. BS 6853 “Vehicle Category 1a” Interior minor use materials of mass 100 to 500g. London Underground, 1-085, Fire Safety Performance of Materials “Limited, dispersed usage” Listed for London Underground Product Acceptance and Registration, Revision S1011 A2: http://ww.lu-apr.co.uk NF F 16-101 Railway Rolling Stock, Fire Behaviour, Choice of materials: Classification A1. Shazainennshi, Japan Railway Rolling Stock & Machinery Association 2003 Classification “Flame Retardant” Serial number 2015-165K.

Print Performance

- MIL 202 Method 215, Resistance to Solvents
- SAE AS 5942, Marking of Electrical Insulating Materials, Adherence
- EN 50343 Rolling Stock Applications - Rolling Stock Rules for Installation of Cabling, Marking for Identification

Where possible, TE have tested product as a finished item, including the print. Operational tests are followed by an assessment of mark adherence to validate fit form and function. Further details can be found in TE standard RW-2072



Available Options

Spool Size	OUT	Spool does not fit inside printers, recommend TE Connectivity PRINTER-UNIVERSAL-REEL-HOLDER, Part Number EC9926-000, reference TTDS-259
Colors	Standard	Yellow White
	Code	4 9
	Other colors available on request	
	Brown Red Orange Green Blue Violet Grey Black	
	1 2 3 5 6 7 8 0	

Ordering Example: HX-CT-50M-4.8-OUT-9

i.e. Product Family, Spool Length, Expanded Inside Diameter, OUT and Color

Ordering Information

Ordering description	Inside diameter				Recommended cable diameter use range		Spool lengths m (ft)
	As supplied (minimum)		After recovery (Maximum)				
	mm	inches	mm	inches	mm	inches	
HX-CT - <spool length> -2.4 - OUT- <Color>	2.4[1]	0.094	1.2	0.047	1.27 to 1.90	0.050 to 0.075	50 (164)
HX-CT - <spool length> -3.2 - OUT- <Color>	3.2[1]	0.125	1.6	0.063	1.77 to 2.66	0.070 to 0.105	50 (164)
HX-CT - <spool length> -4.8 - OUT- <Color>	4.8[1]	0.189	2.4	0.094	2.54 to 4.06	0.100 to 0.160	50 (164)
HX-CT - <spool length> -6.4 - OUT- <Color>	6.4[1]	0.250	3.2	0.126	3.81 to 5.46	0.150 to 0.215	50 (164)
HX-CT - <spool length> -9.5 - OUT- <Color>	9.5[1]	0.375	4.8	0.189	5.23 to 8.12	0.206 to 0.320	50 (164)
HX-CT - <spool length> -12.7 - OUT- <Color>	12.7[1]	0.500	6.4	0.250	6.99 to 10.8	0.275 to 0.425	50 (164)
HX-CT - <spool length> -19.0 - OUT- <Color>	19.1[2]	0.750	9.5	0.375	10.2 to 16.3	0.402 to 0.642	50 (164)
HX-CT - <spool length> -25.4- OUT- <Color>	25.4[2]	1.000	12.7	0.50	14.3 to 21.6	0.563 to 0.850	40 (131)
HX-CT - <spool length> -38.1 - OUT- <Color>	38.1[3]	1.500	19.1	0.75	21.0 to 33.0	0.827 to 1.299	40 (131)

[1] Recommended ribbon width 40mm— RIBBON-1966-NAR, Part No. 1-2186559-1

[2] Recommended ribbon width 60mm— LBF-2000P-RIBBON-1966-MED, Part No. 6-1768383-4

[3] Recommended ribbon width 100mm— 1966-RIBBON, Part No. F55931-000

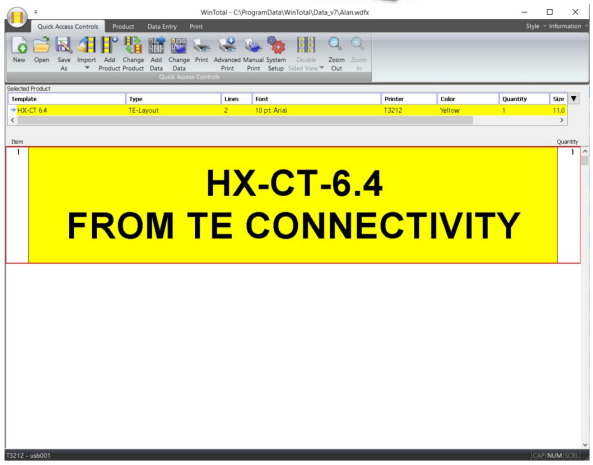
Check TE Document 411-121005 for full and current details

Printer Information

Print quality and print performance can only be guaranteed when specific TE printer and ribbons are used.

The current list of printers and ribbons can be found in TE document 411-121005 'Identification Printer Product Ribbon Matrix'. This document can be found in 'Access Our Tools':

http://www.te.com/usa-en/utilities/access-product-tools-and-resources.html

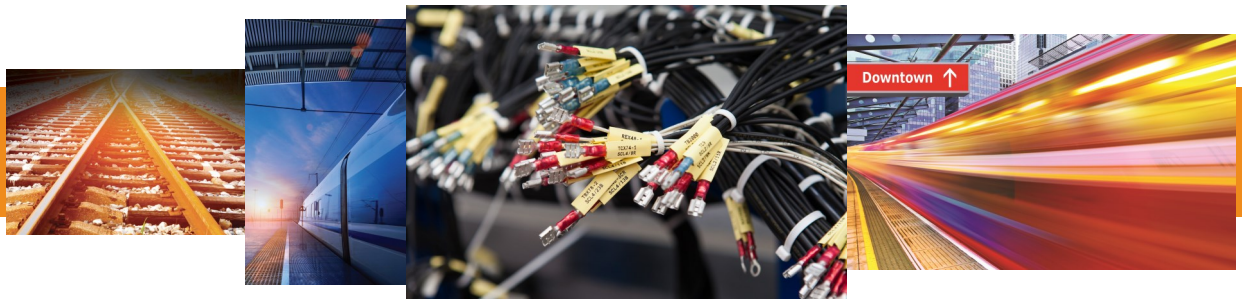


Software

WINTOTAL software, available to download for a 14 day evaluation period from the Identification Printer Software page:

www.te.com/wintotal

Contact a TE representative for further information



www.te.com/rail

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