

## HX – LFH Heat Shrink Marker Sleeve



HX Low Fire Hazard (LFH) marker sleeves for the identification of wires and cables. Presented as cut sleeves organised in a ladder format.

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. Typical installations include rail, mass transit, and heavy industrial.

HX (LFH) marker sleeves are available as part of a complete printing system. The system comprises specific printers, thermal transfer ribbons and WINTOTAL software.

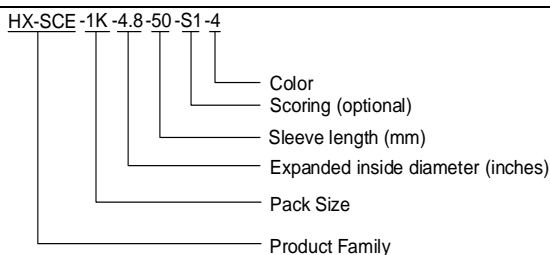
### KEY FEATURES

- Zero Halogen
- Low Toxic Fumes
- Low Smoke
- Self-extinguishing, non-flame propagating
- Low heat release rate
- Resistant to key industrial and rail fluids (defined by RW-2072)
- Excellent resistance to burning  
- typical LOI 39%
- Sleeve diameters from 2.4mm to 38.1mm
- Shrink ratio 2:1

### APPLICATIONS

- Pre-termination Cable Identification
- Particularly suitable for locations with a fire risk to human life or equipment
- Mass transit, Rail, Aerospace, Marine and Industrial

### PART DESCRIPTION



### TEMPERATURE RATING

Operating Temperature Range -55°C to 105°C (-40°F to 221°F)

### ENVIRONMENTAL

Does not contain any declarable or prohibited substances from the UNIFE Railway Industry Substances List

No Halogens, Sulphur, Nitrogen, Phosphorus and Cadmium sources above trace level. The flame retardant used in this product does not contain melamine cyanurate.

Does not promote mould growth (ASTM G21 – zero rating)

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/en/resources/product-compliance.html>

### SPECIFICATIONS / APPROVALS

#### TE Connectivity Standard

- RW-2072

#### Industrial

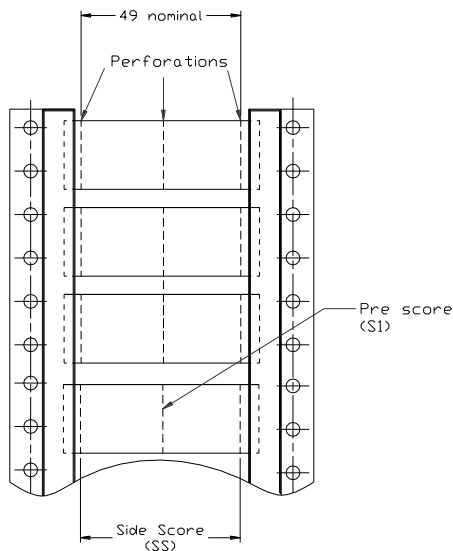
- London Underground 1-085, Fire Safety Performance of Materials 'Limited, dispersed usage'
- Registered for London Underground Product Acceptance and Registration, revision S1011 A2: <http://www.lu-apr.co.uk>
- EN45545-2 'Hazard Classification 3' Requirement Set R22/R23 – unlimited use for railcar design and operation category
- BS6853 'Vehicle Category Ia' Interior minor use materials of mass 100g to 500g
- NF F 16-101 Railway rolling stock, fire behaviour, choice of materials: Classification A1

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.

## ORDERING INFORMATION

## HX – LFH Heat Shrink Marker Sleeve

### AVAILABLE FORMAT



### OPTIONS

Prescoring				
Standard	Not scored	Code	Blank	
Non standard	Side scored	Code	SS	
	Sided scored w with one pre score	Code	SS1	
	1 Prescore	Code	S1	
	2 Prescores	Code	S2	
	3 Prescores	Code	S3	
Packaging sizes				
Standard	1K -	1000 piece packages available for all HX-SCE sizes upto to 25.4		
Non Standard	2.5k -	2500 pieces available for 4.8 and 6.4 HX-SCE sizes up to 25.4		
	5k -	5000 pieces available for 2.4 and 3.2 HX-SCE sizes		
	<no number>	250 piece package available for all HX-SCE sizes		
Colors				
Standard	Yellow	White		
Code	4	9		
Non standard	Red	Green	Blue	Orange
Code	2	5	6	3

Specify product name, pack size, sleeve size, sleeve length (always 50) pre-score (blank if not required) and colour.

Ordering example: HX-SCE-1K-4.8-50-S1-4

Ordering description	Inside diameter				Recommended wire diameter use range	
	As supplied (minimum)		After recovery (Maximum)			
	mm	inches	mm	inches	mm	inches
HX-SCE-1K-2.4-50-<score>-<color>	2.4	0.094	1.19	0.047	1.27 - 1.90	0.050 - 0.075
HX-SCE-1K-3.2-50-<score>-<color>	3.2	0.126	1.58	0.060	1.77 - 2.66	0.069 - 0.105
HX-SCE-1K-4.8-50-<score>-<color>	4.8	0.189	2.36	0.090	2.54 - 4.06	0.100 - 0.160
HX-SCE-1K-6.4-50-<score>-<color>	6.4	0.250	3.18	0.125	3.81 - 5.46	0.150 - 0.215
HX-SCE-1K-9.5-50-<score>-<color>	9.5	0.375	4.75	0.187	5.59 - 8.12	0.220 - 0.320
HX-SCE-1K-12.7-50-<score>-<color>	12.7	0.500	6.35	0.250	6.99 - 10.79	0.275 - 0.425
HX-SCE-1K-19.0-50-<score>-<color>	19.0	0.730	9.53	0.375	10.16 - 16.25	0.400 - 0.640
HX-SCE-1K-25.4-50-<score>-<color>	25.4	1.000	12.70	0.500	14.29 - 21.59	0.563 - 0.850
HX-SCE-38.1-50-<score>-<color>	38.1	1.500	19.05	0.750	20.95 - 33.02	0.825 - 1.300

Standard pack size for 38.1 is 250 pieces

### 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 at the TE document centre:

<http://www.te.com/commerce/DocumentDelivery/DDEContoller>

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### SOFTWARE

Cable Markers are fully supported by WINTOTAL and PrintEasy label printing software, available from the TE product store:

<http://www.te.com/en/general/label-printing-software.html>

Contact a TE representative for further information