



## **ZHD-SCE** **Zero Halogen,** **Diesel Resistant**

### **Heat Shrink Identification Marker Sleeves**

## **TECHNICAL DATASHEET**

TTDS-263 Revision 5, June 2015

**ZHD-SCE Zero Halogen, Diesel Resistant, Heat Shrink Identification Marker Sleeves for the identification of wires and cables.**

ZHD-SCE is presented as cut sleeves organised in ladder format.

Manufactured using a specially developed radiation cross-linked, zero halogen material. ZHD-SCE is designed specifically to bridge the gap for installations where the highest performance is demanded from an identification sleeve, without compromising on safety or capability.

ZHD-SCE Heat Shrink Identification Marker Sleeves are 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
- Non-flame propagating
- Resistant to key rail and industrial fluids including diesel (defined by RW-2536)
- Sleeve diameters from 2.4mm to 38.1mm
- Shrink ratio 2:1

## Applications

- Pre-termination Cable Identification
- Suitable for locations where there is a fire risk to people or equipment
- Suitable for installations that require outstanding fluid resistance, especially from diesel, from a zero halogen identification sleeve
- Rail, Mass transit, Aerospace, Marine and Heavy Industrial

## Temperature Rating

- Operating Temperature Range -55°C to 125°C (-67°F to 257°F)

## Design For Environment

- 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
- 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-2536**

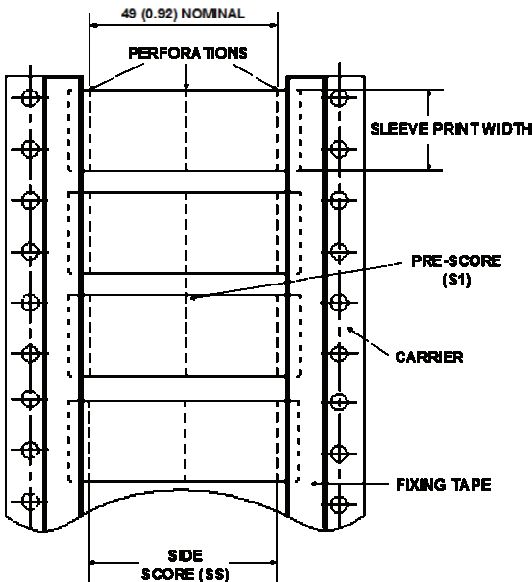
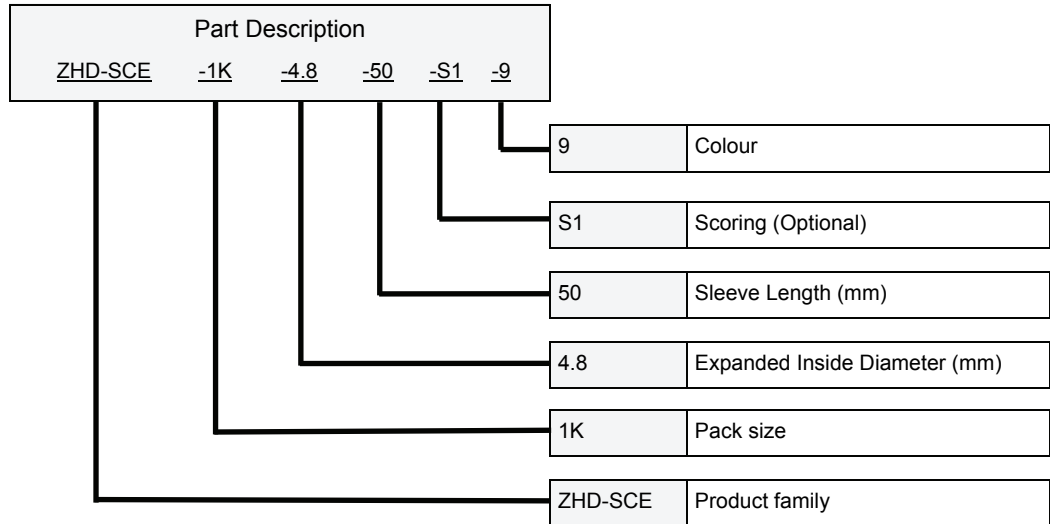
### Rail Standards

**EN45545-2**, Hazard Classifications 1 and 2, In accordance with requirement set R22/R23

**BS 6853** Code of practice for fire precautions in the design and construction of passenger carrying trains.  
Interior minor use of materials of mass 100g to 500g vehicle category II

**EN 50343** Rolling stock applications - Rolling stock - Rules for installation of cabling  
- Appendix H

Where possible, TE has 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-2536.



Dimensions in mm (inches)

Options

Pre-scoring	Perforated score to produce multiple marker sleeves from each ZHD-SCE sleeve.				
	Not scored	Code	Blank		
	Side scored	Code	SS		
	Sided scored with one pre-score	Code	SS1		
	1 Pre-score	Code	S1		
2 Pre-scores	Code	S2			
Packaging sizes	<blank>	250 piece packs available for all sizes			
	1K	1000 piece reels available for all sizes up to 25.4			
	2.5K	2500 piece reels available for sizes 4.8 up to 25.4			
	5K	5000 piece reels available for sizes 2.4 and 3.2			
Colours	Code	Yellow	White		
		4	9		
	Code	Red	Green	Blue	Orange
		2	5	6	3

Specify product name, pack size (leave blank for 250), sleeve size (in mm), sleeve length (always 50), pre-score (leave blank if not required) and colour

Ordering Information

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

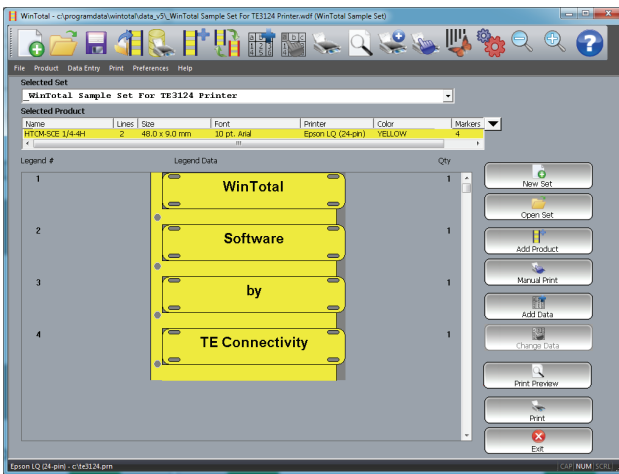


### Printer Information

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

Heat Shrink Identification Sleeves are fully supported by WINTOTAL and PrintEasy label printing software, available from the Identification Printer Software page:

<http://www.te.com/usa-en/products/identification-labeling/printers-software/printing-software.html?tab=pgp-story>

Contact a TE representative for further information

### te.com

TE Connectivity, TE Connectivity (logo) and Every Connection Counts are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2014 TE Connectivity Ltd. family of companies All Rights Reserved.