# ZHD-SCE
# LOW FIRE HAZARD
# DIESEL RESISTANT

## HEAT SHRINK IDENTIFICATION SYSTEM

### Technical Datasheet

TTDS-263 Revision 6  October 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.

# ZHD-SCE, LOW FIRE HAZARD, DIESEL RESISTANT

## HEAT SHRINK CABLE IDENTIFICATION SYSTEM

### 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

### Temperature Rating

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

### 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

### Design For Environment

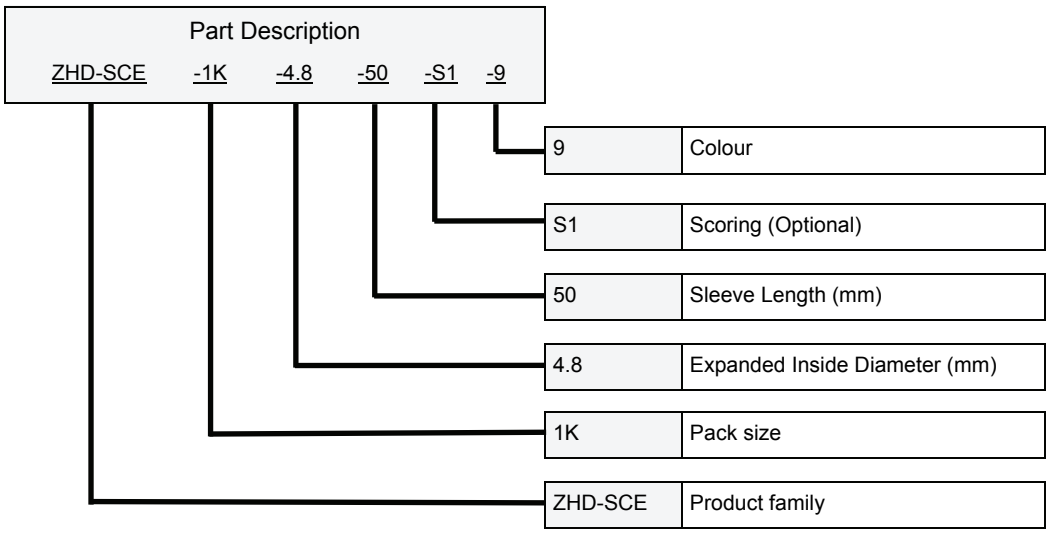
- No Halogens, Sulphur, Nitrogen, Phosphorus and Cadmium sources above trace level. The flame retardant used in this product does not contain melamine cyanurate
- Further information and a downloadable declaration covering RoHS and REACH compliance can be found at the 'TE Product Compliance Support Centre':

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

### Specifications / Approvals

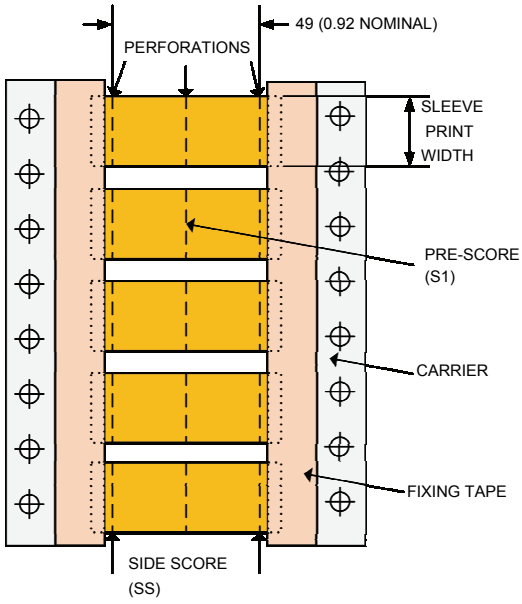
| | |
|---|---|
| **TE Connectivity Standard** | **RW-2536** |
| **Rail Standards** | **EN45545-2**, Hazard Classifications 1 and 2, In accordance with requirement set R22/R23<br><br>**BS 6853** Code of practice for fire precautions in the design and construction of passenger carrying trains.<br>Interior minor use of materials of mass 100g to 500g vehicle category II<br><br>**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.**




## 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** | | Yellow | White | |
| | Code | 4 | 9 | |
| | | Red | Green | Blue | Orange |
| | Code | 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**

Dimensions in mm (inches)

## Ordering Information

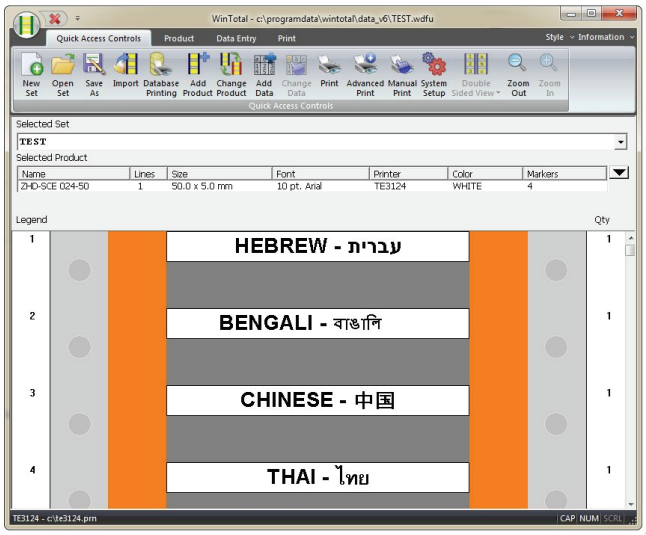
| Ordering description | Inside diameter | | | | Recommended cable diameter use range | |
|---|---|---|---|---|---|---|
| | As supplied (minimum) | | After recovery (Maximum) | | | |
| | mm | inches | mm | inches | mm | inches |
| ZHD-SCE - <pack size> - 2.4 - 50 - <score> - <colour> | 2.4 | 0.094 | 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

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

http://www.te.com/usa-en/products/identification-labeling/printers-software.html

Contact a TE representative for further information

**www.te.com/rail**

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