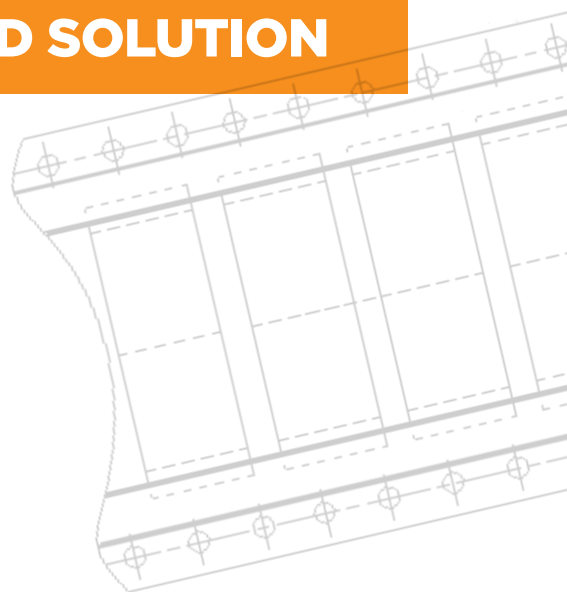




**ZHD - TWO INDUSTRY CHALLENGES.  
ONE INTELLIGENTLY COMBINED SOLUTION**







## WHAT IS ZHD?

The development of ZHD was driven by the Rail industry. A revolutionary material, created in response to a clearly identified need. It's the first and only Low Fire Hazard, Diesel Resistant heat shrink cable identification solution available in the market today - which meets the EN 45545-2 standard for fire safety in rail vehicles and NFPA130.

Using our extensive industry knowledge and research, we have developed a unique cable identification product which no other provider has been able to deliver to the industry. One that addresses two key challenges in a single solution.

### Why is it different?

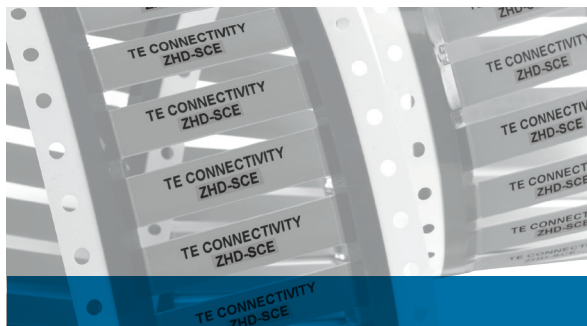
Until now, heat shrink cable identification systems were either Low Fire Hazard or Diesel Resistant - but never both. ZHD changes all that. With this combined technology, train manufacturers can standardise and simplify cable identification - but still remain compliant with exacting industry regulations.

**We call it the Next Generation of Cable Identification Solutions.**

## Benefits of ZHD

With its Low Fire Hazard and Diesel Resistant properties, ZHD provides a single option for cable identification, with clear benefits:

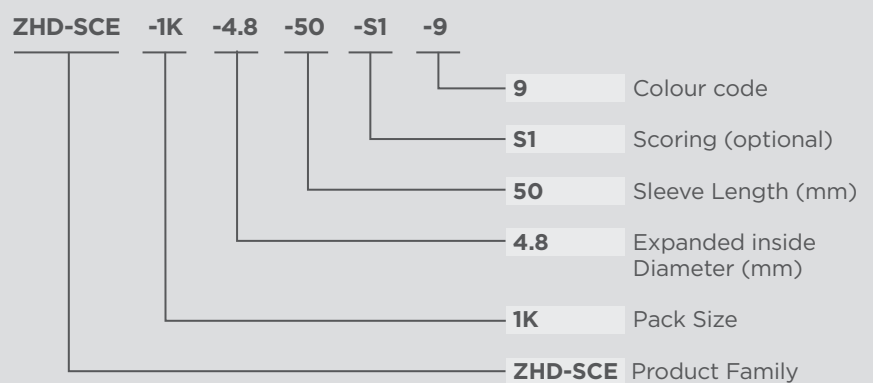
- Meets industry standards, including EN 45545-2 and NFPA130
- Meets UNIFE Railway Industry substance requirements
- Single product enables inventory reduction
- Decreases set-up and change-over frequency



## Key facts

- EN45545-2 Hazard Level 2 for fire safety in rail vehicles and NFPA130
- Zero halogen material
- Diesel Resistant and flame resistant
- Low smoke and toxicity
- Temperature range of -55 to 125°C (-67°F to 257°F)
- Sleeve diameters from 2.4mm (3/32") to 38.1mm (1 1/2")
- Shrink ratio of 2:1

## Part Description



TE CONNECTIVITY IS THE TECHNOLOGICAL SPECIALIST IN CABLE IDENTIFICATION SOLUTIONS - AND ZHD WILL BE THE NEW RAIL INDUSTRY BENCHMARK FOR HEAT SHRINK IDENTIFICATION.



## About ZHD

ZHD is part of the TE Identification Solutions portfolio. It complies with Rail Fluid Resistance regulations and Rail Fire & Smoke regulations – making it unique in the industry.

Previously, **Low Fire Hazard products** were zero halogen, low toxicity and smoke, non flame propagating and with excellent flame resistance. But while resistant to key industrial and rail fluids, they only had short term diesel resistance. Meanwhile, **Fluid Resistant products** offered excellent diesel resistance, mark permanence and physical and thermal properties – but only offered a halogenated flame retardant package, which restricted their use in some design and operational categories.

**ZHD was designed specifically to bridge this gap** - for installations where the highest performance is demanded from an identification sleeve, but without the need to compromise on safety or capability.

## Technical information

ZHD is part of a complete identification system which comprises printers, thermal transfer ribbons and software. It is suitable for pre-termination cable identification across multiple applications in the rail, mass transit, aerospace, marine and heavy industrial sectors.

ZHD is ideal for locations where there is a fire risk to people or equipment, and suitable for installations that require outstanding fluid resistance - especially from diesel. Refer to TTDS-263 for more technical information.

[www.te.com/rail](http://www.te.com/rail)

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