



TECHNICAL DATA SHEET

Document number: TTDS-134
Issue: 3
Date: September 2013

HLX-NEL (NARROW EDGE LEADING) LFH CABLE MARKERS

DESCRIPTION:

Low Fire Hazard, UV stabilised, cross-linked polyolefine Cable Markers, assembled in a Narrow Edge Leading (NEL) format. Consisting of a continuous strip formed into punched tie on Cable Markers. Cable Markers have perforated edges for easy removal

USE:

Designed for identification of larger cables and wire bundles where the volume or complexity of the wiring system is relatively low. Markers are printed by a computer-based system and are attached using cable ties. Ideal for applications where low fire hazard characteristics (low smoke, low toxicity and low flammability) are critical

COLORS:

White or Yellow

SERVICE TEMPERATURE:

-40°C to +105°C (-40°F to +221°F)

SPECIFICATIONS AND APPROVALS:

TE CONNECTIVITY	RW-2529 (Qualification Standard) TTDS-134 (Technical Data Sheet)
MILITARY	SAE AS5942 3.4.1. (Adherence) MIL-STD-202 Method 215 (Resistance to Solvents)
INDUSTRY	London Underground Standard 1-085 A3 Fire Safety Performance of Materials: Limited, dispersed usage EN45545-2 Requirements for fire behaviour of materials and components: Hazard rating 3 (R24) BS 6853 (1999): Vehicle category 1a NF F 16-101 Railway rolling stock, fire behaviour, choice of materials: Classification A1 SAE AS5942 3.4.1. Adherence

PRINTING SYSTEM:

Refer to TE Connectivity Document 'Printer Product Ribbon Matrix 411-121005

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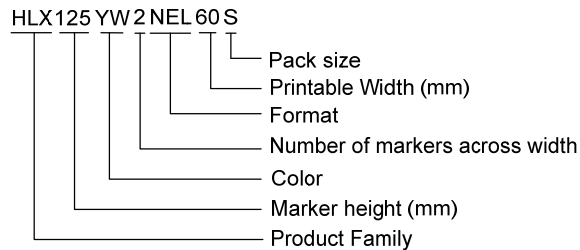


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**PART NUMBER
 DESCRIPTION:**



Refer to RW-2529 for available sizes and formats

Property	Unit	Test Method	Result
1. Physical			
TENSILE STRENGTH	MPa	ASTM D2671	7 Minimum
2. Fire Safety			
OXYGEN INDEX	%	BS EN ISO 4589-2: 1996	34 Minimum
SMOKE EMISSION, A0	---	BS6853:1999 Annex D.8.3.	0.017 Maximum
TOXIC FUME, R	---	NF X 70-100 Mass Based test Method	<1
LUL TOXIC FUME	---	1-085 A3 Fire Safety Performance of Materials	No Halogens, Phosphorus, Sulphur, or Nitrogen above trace level

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Property	Unit	Test Method	Result
3. Environmental			
MOULD GROWTH	---	BS EN 60068-2-10	Rating 2 Maximum
COLOR FASTNESS	---	BS 2782: Part 5: Method 540B using a Xenon arc discharge lamp	No colour change, legible
UV RESISTANCE			
• Tensile Strength	MPa	>90% of Original	Pass
• Ultimate Elongation	%	>40% of Original	Pass
4. Print Permanence			
PRINT ADHERENCE, DRY RUB	---	SAE AS 5942, 20 rubs, 4Kg load	Legible, Pass
HEAT AGEING	---	175°C, 168 hours followed by SAE AS 5942, 20 rubs, 4Kg load	Legible, Pass
HEAT SHOCK	---	225°C, 4 hours followed by SAE AS 5942, 20 rubs, 4Kg load	Legible, Pass
RESISTANCE TO FLUIDS			
• Aircraft Fuel (ISO 1817 Liquid B)	---	40°C, 24 hours, 25 wipes	Legible, Pass
• Hydraulic Fluid (NATO H520)	---	50°C, 24 hours, 25 wipes	Legible, Pass
• Phosphate Ester (ISO 1817 fluid 103)	---	70°C, 24 hours, 25 wipes	Legible, Pass
• Silicone Hydraulic fluid (NATO S1714)	---	50°C, 24 hours, 25 wipes	Legible, Pass
• De-Icing Fluid (Iso Propyl Alcohol)	---	40°C, 24 hours, 25 wipes	Legible, Pass

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