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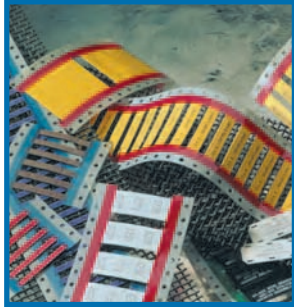
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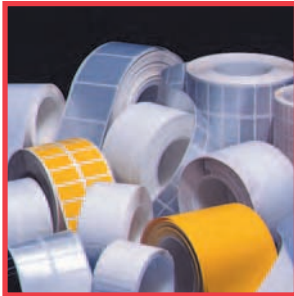




WIRE AND HARNESS ID PRODUCTS

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- Heat Shrink/Cable Markers*
- Performance Labels*
- Self-Laminating Labels*
- Pre-Printed Wire and Cable Markers*



LABEL ID PRODUCTS

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- Printers*
- Scanners and Imagers*
- Laser Marking Systems*
- Ribbons*
- Software*
- Application Systems*



SPECIALTY PRODUCTS

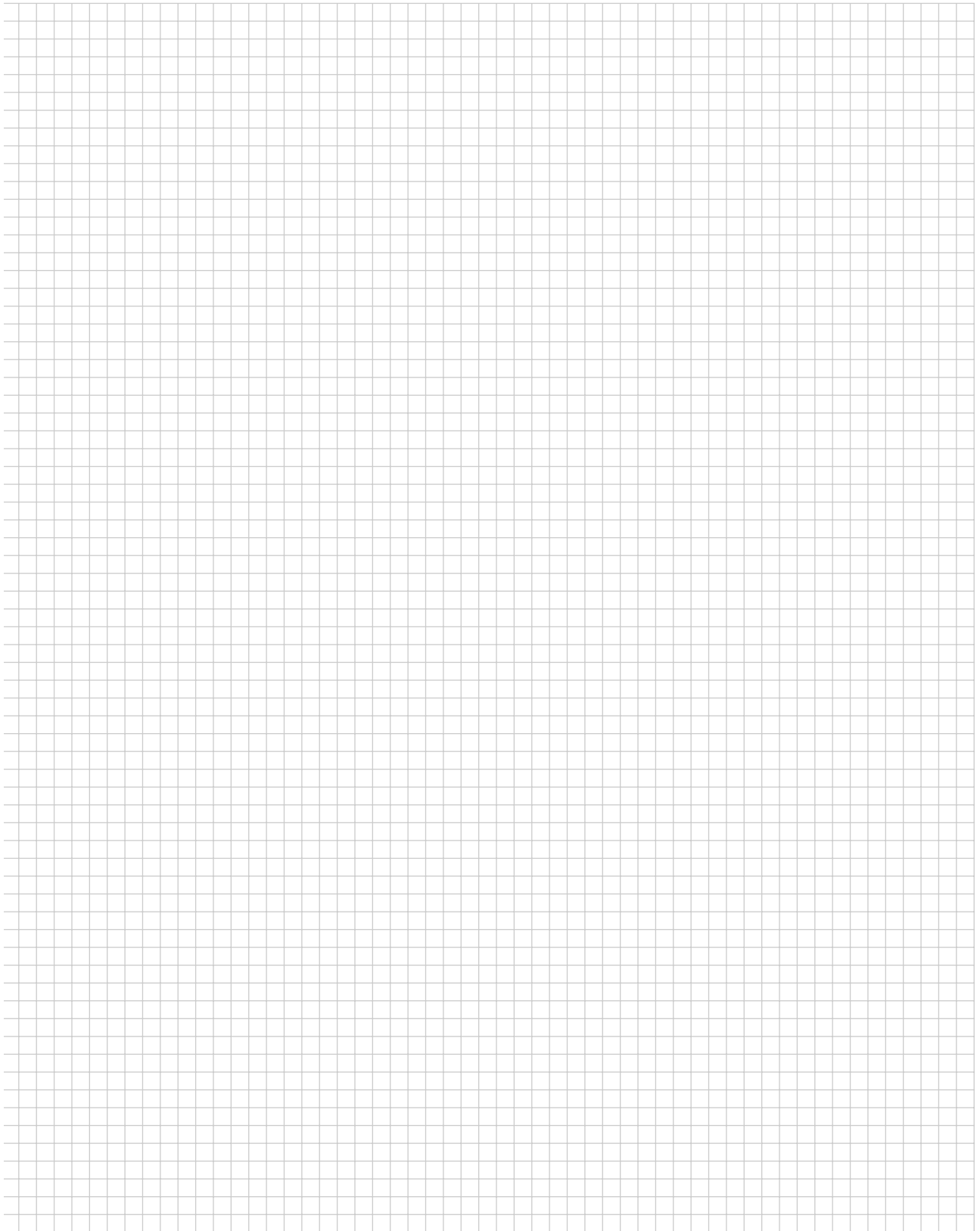
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- RFID*
- Pre-Print Services*
- Permark®*
- Rail – Signal Products*
- Tube and Pipe ID Labels*

REFERENCE

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HEAT SHRINK/CABLE MARKERS

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RPS Commercial Grade Sleeves	16	MultiMark	32
TMS-CCUV UV Resistant Oversleeves	18	iMC Snap-on Cable Clip	34
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PERFORMANCE LABELS

VF/NPVF/VF-130 Polyvinyl Fluoride	38	TTP Polyester	44
RMK-6 Epoxy Coated Polyester	40	HPK Polypropylene	46
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SELF-LAMINATING LABELS

SB Thermal Transfer Vinyl	48	CSL Polyester Laser Printable	60
SP Self Laminating Polyester	50	TKM Self-writable, Self-laminating Label Booklet	62
PVF Thermal Transfer Polyvinyl Fluoride	52	Label Dimensions	64
TW Dot Matrix Vinyl	54	TEK Vinyl Fabric Labels	66
PV Dot Matrix Polyvinyl Fluoride	56	CMD Label Dispenser	68
LSR Polyester Laser Printable	58	WCD Label Dispenser	70

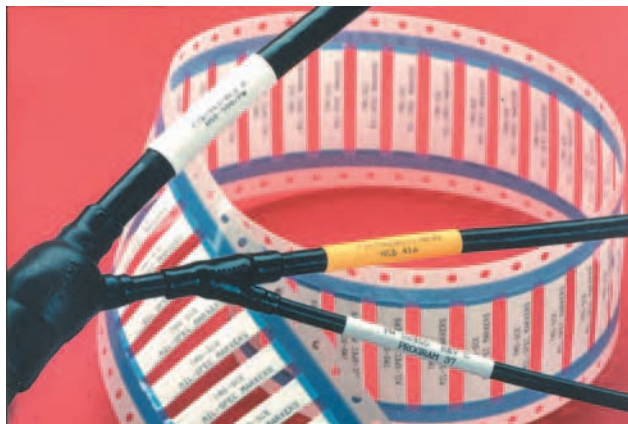


PRE-PRINTED WIRE AND CABLE MARKERS

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TMS-SCE Military grade heat shrinkable wire identification sleeves

TMS-SCE marker sleeves are designed to meet the wire and cable marking needs of manufacturers with high performance requirements. Made from durable, flame retardant, radiation-crosslinked heat-shrinkable polyolefin, TMS-SCE marker sleeves can be used in a wide variety of applications. All TMS-SCE meet the performance requirements of SAE-ASM-DTL-23053/5 class 1. TMS-SCE-2X meets all of the requirements of SAE-AMS-DTL-23053/5 classes 1 and 3. The marks are permanent immediately after printing and remain legible even when exposed to abrasion, aggressive cleaning solvents, and military fuels and oils. The sleeves meet the mark permanence requirements of SAE AS81531 4.6.2 and MIL-STD-202 both before and after shrinking.



Both 2:1 and 3:1 shrink ratios are available. The 2:1 products provide a thick, rugged sleeve wall and are particularly easy to handle. The lightweight 3:1 products provide extremely fast shrinking and cover a wider range of wire diameters, thus simplifying inventory.

The marker sleeves are designed to be printed by computer-driven dot matrix or thermal transfer printers, providing several advantages in terms of reduced errors, cycle time and cost.

Supplied in a thin, flat "ladder" format, the sleeves are held horizontally between two hole-punched polyester strips. This configuration feeds directly from the storage box into a Tyco Electronics recommended printer. Tyco Electronics recommended ribbons should always be used. The ladder format provides automatic kitting of the marker sleeves in the desired sequence. A standard heat gun with reflector is used to shrink the sleeves onto the wire or cable.

Features and benefits

- Permanent identification sleeves
- Computer-printable
- Lightweight for aerospace applications
- Military specification material and print performance
- 2:1 and 3:1 shrink ratio
- CSA Certified
- UL Recognized, VW all flame tubing test rated
- Quick recovery for heat sensitive areas



Temperature rating

Operating temperature range	-55°C to +135°C	-67°F to +275°F
Minimum recovery temperature	+85°C	+185°F
Maximum storage temperature	+40°C	+104°F

Specifications/approvals

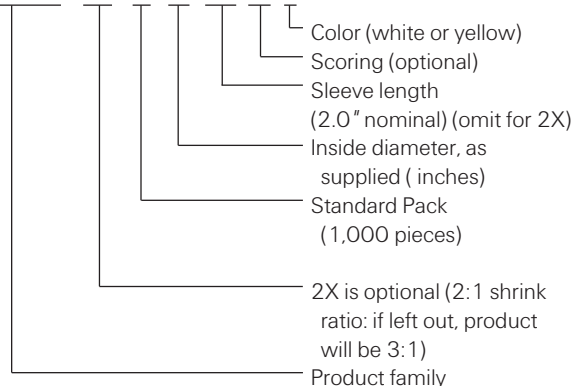
Tyco Electronics	RW 25 11 TTDS-Q23
Military	SAE-AMS-DTL-23053/5 class 1 and 3 (TMS-SCE-2X) SAE-AMS-DTL-23053/5 class 1 (TMS-SCE) SAE AS81531 4.6.2, MIL-STD-202 Method 215J
Industry	UL Recognized – Standard 224, file E35586 (TMS-SCE-2X is UL224-VW1 rated. TMS-SCE is UL224-all tube flame test rated) CSA Certified – File 31929

Printer information

Tyco Electronics printer	AM6310 (dot matrix) T200 Series (thermal transfer, low volume) T312M (thermal transfer)
Tyco Electronics ribbon	1892BK04-RIBBON (dot matrix) TMS-101-RIBBON-4RPSCE (thermal transfer for T208M) TMS-RJS-RIBBON-4RPSCE (thermal transfer for T312M))

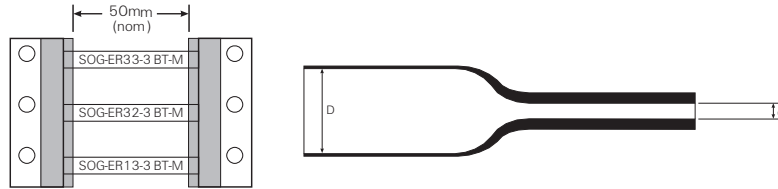
Part numbering system

TMS-SCE - 2X - 1K⁻¹/_s - 2.0-S1-9



TMS-SCE Military grade heat shrinkable wire identification sleeves

Ordering information



Available sizes and formats

Ordering description	Expanded D (minimum)		Recovered d (maximum)		Recommended use range		Recovered wall thickness		Weight (g/10 pcs.)
	mm	inches	mm	inches	mm	inches	mm	inches	
	TMS-SCE-1K- ³ / ₃₂ -2.0- <color>	2.36	0.093	0.79	0.031	0.81 - 1.90	0.032 - 0.075	0.53 ± 0.08	
TMS-SCE-2X-1K- ³ / ₃₂ - <color>	2.36	0.093	1.17	0.046	1.27 - 1.90	0.050 - 0.075	0.64 ± 0.08	0.025 ± 0.003	2.04
TMS-SCE-1K- ¹ / ₈ -2.0- <color>	3.18	0.125	1.07	0.042	1.11 - 2.66	0.044 - 0.105	0.58 ± 0.08	0.023 ± 0.003	2.03
TMS-SCE-2X-1K- ¹ / ₈ - <color>	3.18	0.125	1.58	0.062	1.75 - 2.66	0.069 - 0.105	0.64 ± 0.08	0.025 ± 0.003	2.75
TMS-SCE-1K- ³ / ₁₆ -2.0- <color>	4.75	0.187	1.57	0.062	1.75 - 4.06	0.069 - 0.160	0.58 ± 0.08	0.023 ± 0.003	2.68
TMS-SCE-2X-1K- ³ / ₁₆ - <color>	4.75	0.187	2.36	0.093	2.54 - 4.06	0.100 - 0.160	0.64 ± 0.08	0.025 ± 0.003	3.62
TMS-SCE-1K- ¹ / ₄ -2.0- <color>	6.35	0.250	2.11	0.083	2.31 - 5.46	0.091 - 0.215	0.58 ± 0.08	0.023 ± 0.003	3.51
TMS-SCE-2X-1K- ¹ / ₄ - <color>	6.35	0.250	3.18	0.125	3.81 - 5.46	0.150 - 0.215	0.64 ± 0.08	0.025 ± 0.003	5.94
TMS-SCE-1K- ³ / ₈ -2.0- <color>	9.53	0.375	3.18	0.125	3.47 - 8.12	0.137 - 0.320	0.61 ± 0.08	0.024 ± 0.003	5.04
TMS-SCE-2X-1K- ³ / ₈ - <color>	9.53	0.375	4.75	0.187	5.59 - 8.12	0.220 - 0.320	0.64 ± 0.08	0.025 ± 0.003	8.50
TMS-SCE-1K- ¹ / ₂ -2.0- <color>	12.70	0.500	4.22	0.166	4.64 - 10.79	0.183 - 0.425	0.61 ± 0.08	0.024 ± 0.003	6.81
TMS-SCE-2X-1K- ¹ / ₂ - <color>	12.70	0.500	6.35	0.250	6.99 - 10.79	0.275 - 0.425	0.64 ± 0.08	0.025 ± 0.003	11.45
TMS-SCE-1K- ³ / ₄ -2.0- <color>	19.05	0.750	6.35	0.250	6.99 - 16.25	0.275 - 0.640	0.61 ± 0.08	0.024 ± 0.003	12.03
TMS-SCE-2X-1K- ³ / ₄ - <color>	19.05	0.750	9.53	0.375	10.16 - 16.25	0.400 - 0.640	0.76 ± 0.08	0.030 ± 0.003	20.63
TMS-SCE-1K-1-2.0- <color>	25.40	1.000	8.46	0.333	9.29 - 21.59	0.366 - 0.850	0.64 ± 0.08	0.025 ± 0.003	15.35
TMS-SCE-1K-1 ¹ / ₂ -2.0- <color>	38.10	1.500	19.05	0.750	20.95 - 33.02	0.825 - 1.300	0.51 ± 0.08	0.020 ± 0.003	27.51
TMS-SCE-1K-2-2.0- <color>	50.80	2.000	25.40	1.000	27.94 - 44.95	1.100 - 1.750	0.64 ± 0.08	0.025 ± 0.003	47.27
TMS-SCE-1K-2 ¹ / ₄ -2.0- <color>	57.15	2.250	19.05	0.750	22.32 - 50.80	0.880 - 2.000	0.76 ± 0.08	0.030 ± 0.003	42.06

Total width as supplied 90.18 mm (3.550 inches) including tape and carrier width.

Options

Prescoring	Perforated score to produce multiple markers from each sleeve.								
	Number of prescores	1 prescore			2 prescores			3 prescores	
	Code	S1			S2			S3	
Package sizes	Standard	1K - 1000-piece packs							
	Nonstandard	Smaller and larger pack sizes are available. Please contact Tyco Electronics.							
Colors	Standard	Yellow	White						
	Code	4	9						
	Nonstandard	Red	Pink	Orange	Green	Blue	Violet	Gray	Black
Code	2	2L	3	5	6	7	8	0	

Note: 3:1 products yellow and white meet the color requirements of MIL-STD-104 class 1. Otherwise colors are pastel for print contrast.

Ordering information: Specify product name, pack size, sleeve size, prescore format, and color.

Ordering example: TMS-SCE-1K-¹/₈-2.0-S1-9 (scored once)

TMS-SCE-2X only available in white

HT-SCE High temperature, low outgassing heat-shrinkable wire identification sleeves

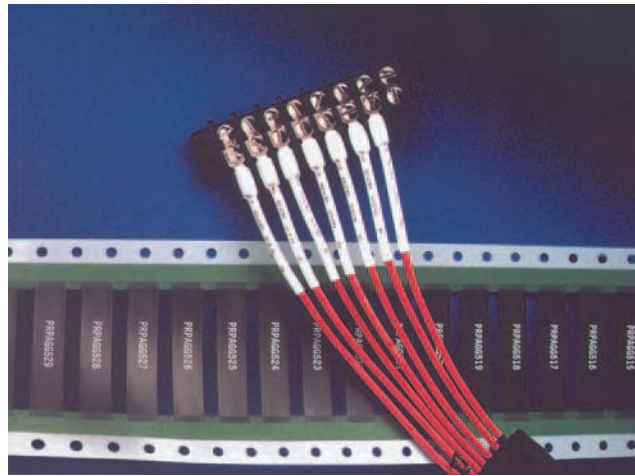
HT-SCE wire markers are designed for use in high temperature applications or where extreme resistance to fuels, lubricants and cleaning solvents is required. They are also ideal for applications in which low-vacuum outgassing is of high importance. The marker sleeves are made of highly flame retardant, heat-shrinkable fluoro-polymer tubing.

HT-SCE markers are supplied as a thin, flat "ladder" of sleeves held horizontally between two polyester strips. This configuration feeds directly from the storage box into standard Tyco Electronics recommended printers, with no modifications necessary. A strip of adhesive tape on each side of the sleeves holds them securely in place for printing and kitting, yet the sleeves pull easily from the carrier strips. A standard heat gun with reflector is used to shrink the sleeves onto the wire or cable to achieve a permanent mark.

After shrinking, HT-SCE markers meet the print performance requirements of SAE AS8153 1 4.6.2 and MIL-STD-202. HT-SCE markers are supplied in boxes of 1000 sleeves and are available in nine diameter sizes. These cover substrates from 0.8mm to 34.0mm. Because of this versatility, customers need not carry a large inventory of markers.

Features and benefits

- Permanent identification sleeves
- High continuous operating temperature
- Extreme fluid resistance
- Low-vacuum outgassing
- Wide range of sleeve sizes for several wire and bundle diameters



Temperature rating

Operating temperature range	-55°C to +225°C	-67°F to +437°F
Minimum recovery temperature	+200°C	+392°F
Maximum storage temperature	+40°C	+104°F

Specifications/approvals

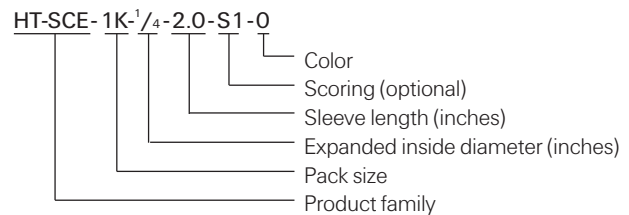
Tyco Electronics	RW 2512 TTDS-020
Military	SAE AS 8153 1 4.6.2 MIL-STD-202 Method 215J

Printer information

Tyco Electronics printer	T3 12M (thermal transfer)
Tyco Electronics ribbon	TMS-RJS-RIBBON-4HT (thermal transfer)

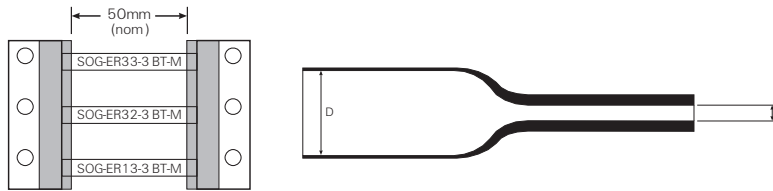


Part numbering system



HT-SCE High temperature, low outgassing heat-shrinkable wire identification sleeves

Ordering information



Available sizes and formats

Ordering description	Inside diameter				Recommended use range	
	D (min) As supplied		d (max) After recovery			
	mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>
HT-SCE-1K- $\frac{3}{32}$ -2.0- <color>	2.36	<i>0.093</i>	0.79	<i>0.031</i>	0.81 - 1.90	<i>0.032 - 0.075</i>
HT-SCE-1K- $\frac{1}{8}$ -2.0- <color>	3.18	<i>0.125</i>	1.58	<i>0.062</i>	1.75 - 2.66	<i>0.069 - 0.105</i>
HT-SCE-1K- $\frac{3}{16}$ -2.0- <color>	4.75	<i>0.187</i>	2.36	<i>0.093</i>	2.54 - 4.06	<i>0.100 - 0.160</i>
HT-SCE-1K- $\frac{1}{4}$ -2.0- <color>	6.35	<i>0.250</i>	3.18	<i>0.125</i>	3.40 - 6.00	<i>0.134 - 0.236</i>
HT-SCE-1K- $\frac{3}{8}$ -2.0- <color>	9.53	<i>0.375</i>	4.75	<i>0.187</i>	5.30 - 8.10	<i>0.209 - 0.319</i>
HT-SCE-1K- $\frac{1}{2}$ -2.0- <color>	12.70	<i>0.500</i>	6.35	<i>0.250</i>	6.60 - 11.40	<i>0.260 - 0.449</i>
HT-SCE-1K- $\frac{3}{4}$ -2.0- <color>	18.00	<i>0.709</i>	9.00	<i>0.354</i>	9.90 - 15.30	<i>0.390 - 0.602</i>
HT-SCE-1K-1-2.0- <color>	25.40	<i>1.000</i>	12.70	<i>0.500</i>	13.30 - 23.00	<i>0.524 - 0.906</i>
HT-SCE-1K-1 $\frac{1}{2}$ -2.0- <color>	38.10	<i>1.500</i>	19.05	<i>0.750</i>	20.95 - 34.00	<i>0.825 - 1.339</i>

Total width as supplied 90.18 mm (3.550 inches) including tape and carrier width.

Options

Prescoring	Perforated score to produce multiple marker sleeves from each HT-SCE sleeve			
	Number of prescores	1 prescore	2 prescores	3 prescores
	Code	S1	S2	S3
Package size	Standard	1K - 1000 piece packs		
	Nonstandard	Larger pack sizes are available. Please contact Tyco Electronics.		
Colors	Standard	White	Black	
	Code	9	0	
	Nonstandard	Pink	Blue	Yellow
Code	2L	6	4	

Ordering information: Specify product name, pack size, sleeve size, prescore, format and color.

Ordering example: HT-SCE-1K- $\frac{1}{4}$ -2.0-S1-9

HX-SCE Low fire hazard heat-shrinkable wire identification sleeves

Thin wall, zero-halogen, low smoke, low toxicity, radiation cross-linked, UV stabilised polyolefin heat-shrinkable tubing, assembled as cut sleeves organized in a ladder format.

Identification of wires and cables by computer-based printing onto sleeves. Ideal for applications where limited fire hazard characteristics are necessary. The zero halogen material coupled with low smoke and low toxic fume emissions make this product best used in enclosed spaces such as mass transit, marine and industrial installations.

This product is not recommended where strain relief properties are required.

Features and benefits

- Low fire hazard properties, low smoke, low toxicity, low flammability. Meets industry standard BS 6853 (1999) Vehicle Category 1a
- Superb print quality to give crisp clear identification marker sleeve
- Excellent print permanence when tested in demanding industry related fluids
- Choice of printer options
- Sleeve diameters from 2.4mm to 38.1mm
- Sleeve length from 12.7mm to 50.8mm
- Sleeves are printable on both sides for ease of identification or inclusion of additional information to the marker sleeve
- Shrink ratio of 2:1 - recovers to half of the original diameter



Temperature rating

Operating temperature range	-30°C to +105°C	-22°F to +221°F
Minimum recovery temperature	+120°C	+248°F
Maximum storage temperature	+40°C	+104°F

Specifications/approvals

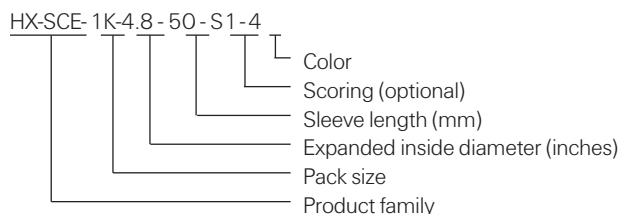
Tyco Electronics	RW 2072 TTDS-108
Military	SAE AS81531 4.6.2 MIL-STD-202 Method 215J
Industry	BS 6853 [1999] - Vehicle Category 1a LUL toxic fume (LUL E1042:A6 [2002]) -No halogen, O, N or S sources

Printer information

Tyco Electronics printers	T3 12M and T2 12M (thermal transfer)
Tyco Electronics ribbons	1966 - RIBBON (T3 12M) T200 - RIBBON-1966 (T2 12M)

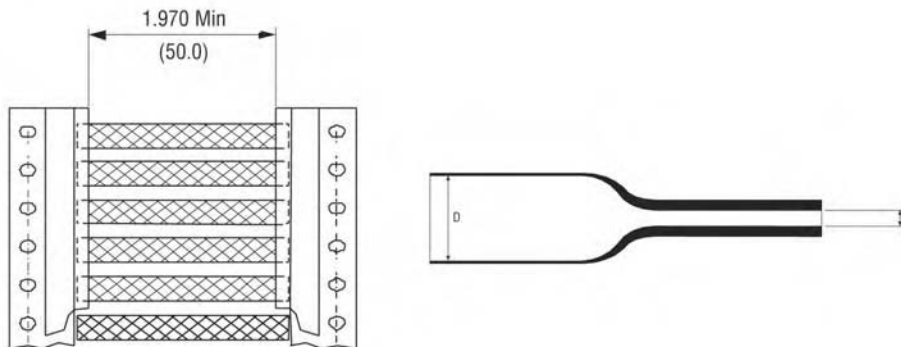


Part numbering system



HX-SCE Low fire hazard heat-shrinkable wire identification sleeves

Ordering information



Available sizes and formats

Ordering description	Inside diameter				Recommended use range	
	D (min) as supplied		d (max) after recovery			
	mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>
HX-SCE-1K-2.4 - 50- <color>	2.40	<i>0.094</i>	1.19	<i>0.047</i>	1.27 - 1.90	<i>0.050 - 0.075</i>
HX-SCE-1K-3.2 - 50- <color>	3.20	<i>0.126</i>	1.58	<i>0.060</i>	1.765 - 2.66	<i>0.069 - 0.105</i>
HX-SCE-1K-4.8 - 50- <color>>	4.80	<i>0.189</i>	2.36	<i>0.090</i>	2.54 - 4.06	<i>0.100 - 0.160</i>
HX-SCE-1K-6.4 - 50- <color>	6.40	<i>0.250</i>	3.18	<i>0.125</i>	3.81 - 5.46	<i>0.150 - 0.215</i>
HX-SCE-1K-9.5 - 50- <color>	9.50	<i>0.375</i>	4.75	<i>0.187</i>	5.59 - 8.12	<i>0.220 - 0.320</i>
HX-SCE-1K-12.7 - 50- <color>	12.70	<i>0.500</i>	6.35	<i>0.250</i>	6.99 - 10.79	<i>0.275 - 0.425</i>
HX-SCE-1K-19.0 - 50- <color>	19.00	<i>0.730</i>	9.53	<i>0.375</i>	10.16 - 16.25	<i>0.400 - 0.640</i>
HX-SCE-1K-25.4 - 50- <color>	25.40	<i>1.000</i>	12.70	<i>0.500</i>	14.29 - 21.59	<i>0.563 - 0.850</i>
HX-SCE-1K-38.1 - 50- <color>	38.10	<i>1.500</i>	19.05	<i>0.750</i>	20.95 - 33.02	<i>0.825 - 1.300</i>

Options

Prescoring	Perforated score to produce multiple marker sleeves from each HX-SCE sleeve.				
	Nonstandard	Side scored			
	Number of prescores	1 prescore	2 prescores	3 prescores	
	Code	S1	S2	S3	
Package sizes	Standard	1K - 1000 piece packages available for all HX-SCE sizes up to 25.4			
	Nonstandard	2.5K - 2500 pieces available for 4.8 and 6.4 HX-SCE sizes			
		5K - 5000 pieces available for 2.4 and 3.2 HX-SCE sizes			
		250 piece package available for all HX-SCE sizes			
Colors	Standard	Yellow	White		
	Code	4	9		
	Nonstandard	Red	Green	Blue	Orange
	Code	2	5	6	3

Ordering information: Specify product name, pack size, sleeve size, prescore, format and color.

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

HX-SCE Low fire hazard heat-shrinkable wire identification sleeves

Industry Standards

Standard	Title	Application
BS6853	Code of practice for fire precautions in the design and construction of passenger carrying trains.	Interior minor use materials of mass 100g to 500g. Vehicle category Ia.
¹ London Underground Limited Standard 2-01001-002	Fire Safety Performance of Materials	Limited, dispersed usage (abbreviation RS/EQ/I)
NF F 16-101	Railway Rolling Stock Fire behavior choice of materials	Rolling Stock Classification A1
DIN 5510-2	Preventive fire protection in railway vehicles - Part 2: Fire behavior and fire side effects of materials and parts; Classification, Requirements and Test Methods.	Dripping Classification ST2
² EN50343	Railway Applications - Rolling Stock - Rules for installation of cabling.	Tests on marking when using heat-shrinkable sleeves

¹ This replaces LUL Engineering Standard E1042

² Not including resistance to liquid fuel - not recommended for use in areas where the sleeves may be subject to extended contact from diesel fuel - Tyco Electronics D-SCE product range is designed for use in these areas.

HX-SCE Low fire hazard heat-shrinkable wire identification sleeves

Technical Information

Print Method/Ribbon:	T312M-PRINTER with 1966-RIBBON or T212M-PRINTER with T200-1966-RIBBON
Service Temperature	-30°C to +105°C (-22°F to +221°F)
Minimum Shrink Temperature	136°C (275°F)
Colors:	White or yellow. Other colors available on request.
Flammability:	Self-extinguishing - (ASTM D2671 Procedure B). Oxygen Index (BS6853: Pass 34% Min.) - (BS EN ISO 4589-2 [1999]). (AFNOR NF F 16-101 Class 12). Dripping Classification ST2 - (DIN 5510-2)
Smoke:	AO-0.017 Max. (BS 6853 [1999] Annex D [D.8.3] Small scale test Smoke Index Determination (IF) Maximum 0, Smoke Class F1 - (AFNOR NF F 16-101-1988 Smoke Index)
Toxicity:	R < 1 - (BS 6853 [1999] Annex B - AFNOR NF X 70-100 Determination of weighted summation of toxic fume, mass based method) LUL Toxid Fume: No. Halogens, No. P, S or N sources above trace level - (LUL E1042: A6 [2002]) - London Underground Standard 2-01001-002, section 5.2.3 Chemical composition/toxicity) Toxicity Index = 0.34 - (CEI 20-37-7-09-1997 Determination of toxicity index of gasses from combustion of organic material)
Dielectric Strength:	15V/mm minimum.
Water Absorption	11% maximum after 24 hours at 23C (73°F)
Copper Mirror Corrosion:	8% maximum after 16 hours of 150°C (302°F)
Longitudinal Change:	+5% to -10%.
Tensile Strength:	7MPa minimum.
Ultimate Elongation:	80% minimum.
Secant Modulus:	200MPa minimum at 2% elongation.
UL Resistance:	Tensile strength >90% & ultimate elongation >40% or original value after 1000 hours (ASTM G53: UVA [100% dry cycle]; UVB [8 hours dry/4 hours wet cycle]).
Print Permanence:	ADHERENCE - Meets the requirements of SE AS81531 4.6.2 (50 rubs). FLUID RESISTANCE - Meets the requirements of MIL-STD-202 method 215J.

D-SCE Fluid resistant heat-shrinkable wire identification sleeves

D-SCE markers are used to identify wires and cables where exposure to organic fluids, especially oils, is required. D-SCE markers are designed to operate in these conditions at elevated temperatures for extended periods of time, making them ideal in aerospace, rail and construction industries. The D-SCE markers are suitable for use in environments with temperatures of -55°C to $+135^{\circ}\text{C}$ (-67°F to $+275^{\circ}\text{F}$), and will provide strain relief, insulation and protection from mechanical abuse. The 3:1 shrink ratio markers* are assembled in a ladder format enabling sleeves to be printed on both sides for maximum data content and readability.

*See ordering description.

Features and benefits

- Resistance to organic fluids, common fuels, lubricants and solvents
- 3:1 shrink ratio
- Wide range of sizes for several wire and bundle diameters
- Formulated for use in aerospace, rail and construction equipment
- Dot matrix and thermal transfer printable — both print technologies meet all specifications and approvals listed



Temperature rating

Operating temperature range	-55°C to $+135^{\circ}\text{C}$	-67°F to $+275^{\circ}\text{F}$
Minimum recovery temperature	$+135^{\circ}\text{C}$	$+275^{\circ}\text{F}$
Maximum storage temperature	$+40^{\circ}\text{C}$	$+104^{\circ}\text{F}$

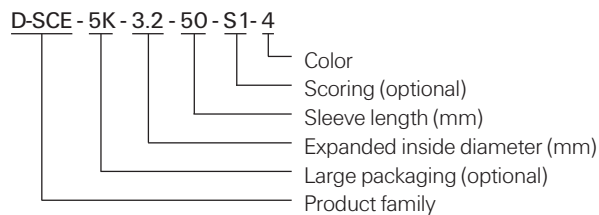
Specifications/approvals

Tyco Electronics	RW 25 19 TTDS-017
Military	SAE-AMS-DTL-23053/6, Class 1 (material and performance requirements) SAE AS8153 1 4.6.2 MIL-STD-202 Method 215J
Industry	NF F 00 608 Category A and H

Printer information

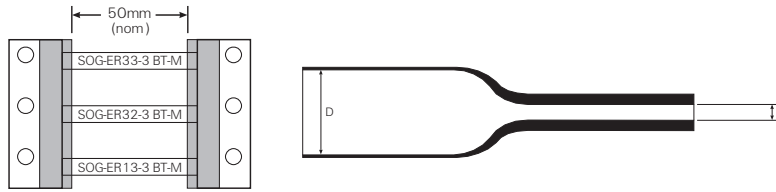
Tyco Electronics printer	AM63 10 (dot matrix) T3 12M (thermal transfer)
Tyco Electronics ribbon	1892BK04-RIBBON (dot matrix) 1966-RIBBON

Part numbering system



D-SCE Fluid resistant heat-shrinkable wire identification sleeves

Ordering information



Available sizes and formats

Ordering description	Inside diameter				Recommended use range	
	D (min) As supplied		d (max) After recovery			
	mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>
D-SCE-1K-2.4-50-<color>	2.39	<i>0.094</i>	0.79	<i>0.031</i>	0.81 - 1.90	<i>0.032 - 0.075</i>
D-SCE-1K-3.2-50-<color>	3.18	<i>0.125</i>	1.07	<i>0.043</i>	1.11 - 2.66	<i>0.044 - 0.105</i>
D-SCE-1K-4.8-50-<color>	4.75	<i>0.187</i>	1.57	<i>0.063</i>	1.75 - 4.06	<i>0.069 - 0.160</i>
D-SCE-1K-6.4-50-<color>	6.35	<i>0.250</i>	2.11	<i>0.084</i>	2.31 - 5.46	<i>0.091 - 0.215</i>
D-SCE-1K-9.5-50-<color>	9.53	<i>0.375</i>	3.18	<i>0.125</i>	3.47 - 8.12	<i>0.137 - 0.320</i>
D-SCE-1K-12-50-<color>	12.70	<i>0.500</i>	4.22	<i>0.167</i>	4.64 - 10.79	<i>0.183 - 0.425</i>
D-SCE-1K-18-50-<color>	19.05	<i>0.750</i>	6.35	<i>0.250</i>	6.99 - 16.25	<i>0.275 - 0.640</i>
D-SCE-1K-25-50-<color>	25.40	<i>1.000</i>	8.46	<i>0.333</i>	9.29 - 21.59	<i>0.366 - 0.850</i>
D-SCE-1K-38-50-<color>*	38.10	<i>1.500</i>	19.05	<i>0.750</i>	20.95 - 33.02	<i>0.825 - 1.300</i>

* 2:1 shrink ratio

Total width as supplied 90.18 mm (3.550 inches) including tape and carrier width.

Options

Prescoring	Perforated score to produce multiple marker sleeves from each D-SCE sleeve.			
	Standard	Side scored		
	Number of prescores	1 prescore	2 prescores	3 prescores
	Code	S1	S2	S3
Package sizes	Standard	1K - 1000 piece packages available for all D-SCE sizes		
	Nonstandard	Larger pack sizes are available. Please contact Tyco Electronics.		
Colors	Standard	White	Yellow	
	Code	9	4	
	Nonstandard	Pink	Blue	
	Code	2L	6	

Ordering information: Specify product name, pack size, sleeve size, prescore, format and color.

Ordering example: D-SCE-1K-6.4-50-S2-4

NBC-SCE Nuclear, biological, chemical resistant heat-shrinkable wire identification sleeves

Tyco Electronics NBC-SCE is used to identify wire and cables where extreme resistance to cleaning solvents is needed. The markers are suitable for use in wire harness systems requiring high fluid resistance and resistance to the effects of nuclear, biological and chemical agent exposure and decontamination. The markers should be used with an appropriate transparent oversleeve whose ends are sealed with an appropriate epoxy adhesive.

NBC-SCE marker sleeves are suitable for use in environments with temperatures from -55°C to +225°C (-67°F to +437°F).

Features and benefits

- Permanent identification sleeves
- Computer-printable
- 2:1 shrink ratio
- NBC application with the appropriate adhesive and oversleeve



Temperature rating

Operating temperature range	-55°C to +225°C	-67°F to +437°F
Minimum recovery temperature	+200°C	+392°F
Maximum storage temperature	+40°C	+104°F

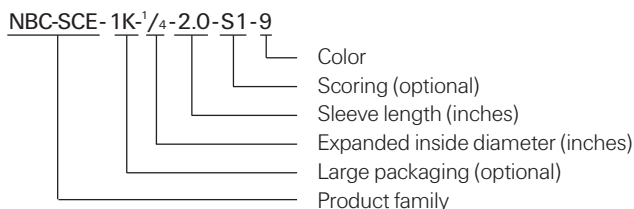
Specifications/approvals

Tyco Electronics	RW 25 14
Military	SAE AS8153 1 4.6.2 MIL-STD-202 Method 215J

Printer information

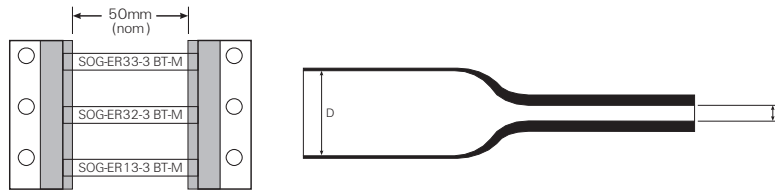
Tyco Electronics printer	T3 12M (thermal transfer)
Tyco Electronics ribbon	TMS-RJS-RIBBON-4HT (thermal transfer)

Part numbering system



NBC-SCE Nuclear, biological, chemical resistant heat-shrinkable wire identification sleeves

Ordering information



Available sizes and formats

Ordering description	Inside diameter				Recommended use range		Recovered wall thickness	
	Expanded D (minimum)		Recovered d (maximum)					
	mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>
NBC-SCE-1K-1/8-2.0<color>	3.43	<i>0.135</i>	1.59	<i>0.062</i>	1.75-2.66	<i>0.069-0.105</i>	0.38 ± 0.08	<i>0.015 ± 0.003</i>
NBC-SCE-1K-1/4-2.0<color>	6.35	<i>0.250</i>	3.18	<i>0.125</i>	3.81-5.46	<i>0.150-0.215</i>	0.38 ± 0.08	<i>0.015 ± 0.003</i>
NBC-SCE-1K-1/2-2.0<color>	12.70	<i>0.500</i>	6.35	<i>0.250</i>	6.99-10.79	<i>0.275-0.425</i>	0.38 ± 0.08	<i>0.015 ± 0.003</i>
NBC-SCE-1K-3/4-2.0<color>	19.05	<i>0.750</i>	9.53	<i>0.375</i>	10.16-16.25	<i>0.400-0.640</i>	0.38 ± 0.08	<i>0.015 ± 0.003</i>
NBC-SCE-1K-1-2.0<color>	25.40	<i>1.000</i>	12.70	<i>0.500</i>	14.70-21.50	<i>0.578-0.846</i>	0.43 ± 0.10	<i>0.017 ± 0.004</i>
NBC-SCE-1K-1-1/2-2.0<color>	38.10	<i>1.500</i>	19.05	<i>0.750</i>	20.95-33.02	<i>0.825-1.300</i>	0.43 ± 0.10	<i>0.017 ± 0.004</i>

Total width as supplied 90.18 mm (3.550 inches) including tape and carrier width.

Options

Prescoring	Perforated score to produce multiple marker sleeves from each NBC-SCE sleeve.		
	Number of prescores	1 prescore	2 prescores
	Code	S1	S2
			3 prescores
			S3
Package sizes	Standard	1000 piece packages available for all NBC-SCE sizes	
Colors	Standard	White	
	Code	9	

Ordering information: Please specify product name, pack size, sleeve size, prescore, format and color.

Ordering example: NBC-SCE-1K-1/8-2.0-9

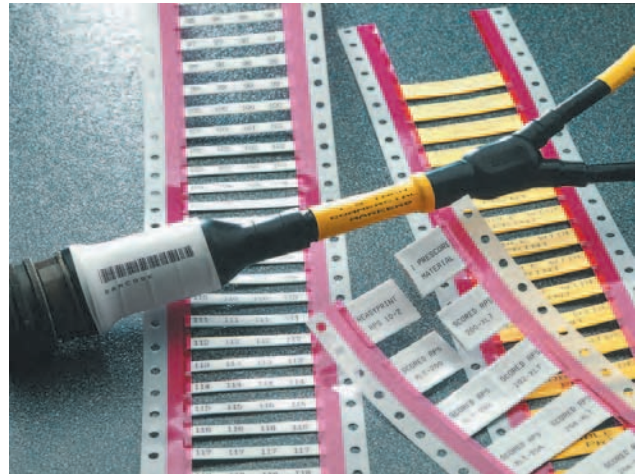
RPS Commercial grade heat-shrinkable wire identification sleeves

RPS markers are heat shrinkable marking sleeves for wire and cable identification. When RPS is printed with Tyco Electronics recommended printers and ink ribbons, the marks remain legible, without any post printing process, even when exposed to abrasion, aggressive cleaning solvents, and industrial fluids.

RPS markers are designed to meet the wire identification needs of commercial and industrial customers.

Features and benefits

- Permanent identification sleeves
- Computer printable
- Excellent print performance
- Configured for ease of kitting
- Good chemical and solvent resistance
- 3:1 shrink ratio
- CSA Certified, UL Recognized



Temperature rating

Operating temperature range	-30°C to +105°C	-22°F to +221°F
Minimum recovery temperature	+85°C	+185°F
Maximum storage temperature	+40°C	+104°F

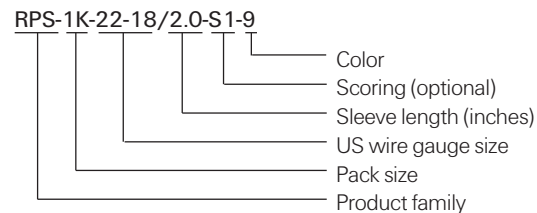
Specifications/approvals

Tyco Electronics	RW 25 10 TTDS-019
Military	SAE AS81531 4.6.2 MIL-STD-202 Method 215J
Industry	UL Recognized – standard 224, file E35586 CSA Certified – file 31929

Printer information

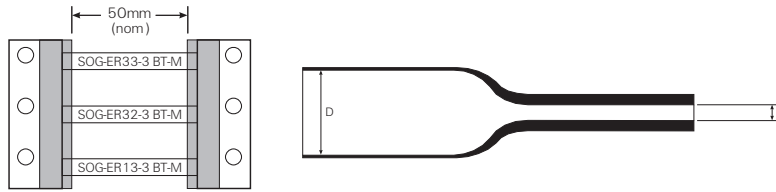
Tyco Electronics printer	AM6310 (dot matrix) T208M (thermal transfer – low volume) T312M (thermal transfer)
Tyco Electronics ribbon	1892BK04-RIBBON (dot matrix) TMS-101-RIBBON-4RPSCE (thermal transfer for T208M) TMS-RJS-RIBBON-4RPSCE (thermal transfer for T312M)

Part numbering system



RPS Commercial grade heat-shrinkable wire identification sleeves

Ordering information



Available sizes and formats

Ordering description	Inside diameter				Recommended use range	
	D (min) as supplied		d (max) after recovery			
	mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>
RPS-1K-22-18/2.0- <color>	3.18	<i>0.125</i>	1.07	<i>0.042</i>	1.17 - 2.66	<i>0.046 - 0.105</i>
RPS-1K-18-12/2.0- <color>	4.75	<i>0.187</i>	1.57	<i>0.062</i>	1.75 - 4.06	<i>0.069 - 0.160</i>
RPS-1K-16-10/2.0- <color>	6.35	<i>0.250</i>	2.11	<i>0.083</i>	2.31 - 5.46	<i>0.091 - 0.215</i>
RPS-1K-8-4/2.0- <color>	9.53	<i>0.375</i>	3.18	<i>0.125</i>	3.47 - 8.12	<i>0.137 - 0.320</i>
RPS-1K-10-2/2.0- <color>	12.70	<i>0.500</i>	4.22	<i>0.166</i>	4.64 - 10.79	<i>0.183 - 0.425</i>
RPS-1K-6-250/2.0- <color>	19.05	<i>0.750</i>	6.35	<i>0.250</i>	6.99 - 16.25	<i>0.275 - 0.640</i>
RPS-1K-1-400/2.0- <color>	25.40	<i>1.000</i>	8.46	<i>0.333</i>	9.29 - 21.59	<i>0.366 - 0.850</i>
RPS-1K-400-1000/2.0- <color>	38.10	<i>1.500</i>	19.05	<i>0.750</i>	20.95 - 33.02	<i>0.825 - 1.300</i>

Total width as supplied 90.18 mm (3.550 inches) including tape and carrier width.

Options

Prescoring	Perforated score to produce multiple marker sleeves from each RPS sleeve.		
Number of prescores	1 prescore	2 prescores	3 prescores
Code	S1	S2	S3
Package sizes	Standard	1K -1000 piece packs	
	Nonstandard	Smaller and larger pack sizes are available. Please contact Tyco Electronics.	
Colors	Standard	White	Yellow
Code	9	4	

Ordering information: Specify product name, pack size, sleeve size, prescore, format and color.

Ordering example: RPS-1K-22-18/2.0-S2-9

TMS-CCUV Heat-shrinkable UV protection sleeves

TMS-CCUV clear heat shrinkable sleeves are designed for over protection of TMS System Six identification products, to give increased protection for permanent, long-term environmental exposure. The clear CCUV heat-shrinkable sleeves are formulated to combine a long-term barrier to the effects of ultra-violet, with tough resistance to abrasion and industrial fluids. They are available in packs which match the product sizes and pack quantities of TMS System Six heat-shrinkable identification sleeves and cable markers.



The TMS CCUV sleeves are inherently low profile and use the action of heat-shrink to lock in place over the previously installed identification sleeves; except for cable markers which use a slide fitting CCUV sleeve which is held in place by the cable ties.

The action of heat-shrink locking of the CCUV sleeves means there is no reliance on the long term performance of adhesives to hold the outer protection layer in place, and also gives the ability to accommodate cables and wire bundles which may be bent or flexed during use.

Features and benefits

- Exceptional clarity and stability
- Added UV-resistant sleeves
- Not printable
- Tough resistance to abrasion and industrial fluids
- Heat-shrink locking in place (no reliance on adhesives)
- Low profile
- Accommodates bent or flexing cable/wire bundles
- Can work as an NBC (nuclear, biological, chemical) System with NBC-SCE sleeves and appropriate adhesive

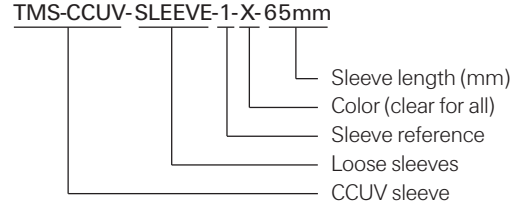
Temperature rating

Operating temperature range	-55°C to +150°C	-67°F to 302°F
Minimum recovery temperature	+150°C	+302°F
Maximum storage temperature	+40°C	+104°F

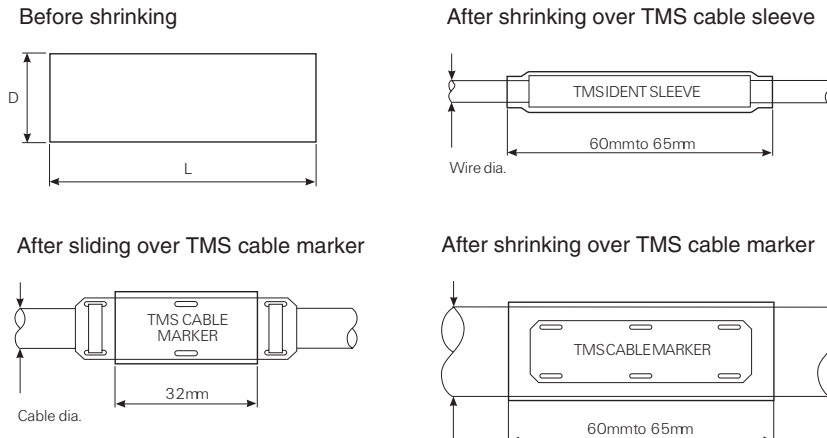
Specifications/approvals

Tyco Electronics	RW 2525
Military	UL VW-1 rated SAE-AMS-DTL-23053/18, Class 2

Part numbering system



Ordering information



TMS-CCUV Heat-shrinkable UV protection sleeves

Available sizes and formats

(For use with heat shrink sleeves)

Ordering description	Sleeve length	Inside diameter minimum		Recovered diameter maximum		Wire size diameter		Sleeve size expanded diameter		RPS	US Wire gauge
		mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>		
TMS-CCUV-SLEEVE-1-X-65mm	65	3.20	<i>0.125</i>	1.60	<i>0.063</i>	1.80-2.80	<i>0.071-0.110</i>	2.40	<i>0.094</i>		N/A
TMS-CCUV-SLEEVE-1-X-65mm	65	3.20	<i>0.125</i>	1.60	<i>0.063</i>	1.80-2.80	<i>0.071-0.110</i>	3.20	<i>0.125</i>		22-18
TMS-CCUV-SLEEVE-2-X-65mm	65	4.80	<i>0.187</i>	2.40	<i>0.094</i>	2.60-3.70	<i>0.102-0.146</i>	4.80	<i>0.188</i>		18-12
TMS-CCUV-SLEEVE-2-X-65mm	65	4.80	<i>0.187</i>	2.40	<i>0.094</i>	2.60-3.70	<i>0.102-0.146</i>	6.40	<i>0.250</i>		16-10
TMS-CCUV-SLEEVE-3-X-65mm	65	6.40	<i>0.250</i>	3.20	<i>0.126</i>	3.50-5.10	<i>0.138-0.201</i>	9.50	<i>0.375</i>		8-4
TMS-CCUV-SLEEVE-4-X-65mm	65	9.50	<i>0.375</i>	4.80	<i>0.189</i>	5.00-7.00	<i>0.197-0.275</i>	12.70	<i>0.500</i>		10-2
TMS-CCUV-SLEEVE-5-X-65mm	65	12.70	<i>0.500</i>	6.40	<i>0.252</i>	6.90-10.60	<i>0.272-0.417</i>	19.00	<i>0.750</i>		6-250
TMS-CCUV-SLEEVE-6-X-65mm	65	19.00	<i>0.750</i>	9.50	<i>0.374</i>	10.00-14.00	<i>0.394-0.551</i>	25.40	<i>1.000</i>		1-400
TMS-CCUV-SLEEVE-7-X-65mm	65	25.40	<i>1.000</i>	12.70	<i>0.500</i>	13.30-21.00	<i>0.524-0.827</i>	25.40	<i>1.000</i>		1-400
TMS-CCUV-SLEEVE-8-X-65mm	65	38.10	<i>1.500</i>	19.00	<i>0.748</i>	21.00-33.80	<i>0.827-1.331</i>	38.10	<i>1.500</i>		400-1000

Some sleeve sizes may need to be recovered partially before CUV sleeve is applied to protect them.

(For use with cable markers to secure / protect without cable ties)

Ordering description	Sleeve length	Inside diameter minimum		Recovered diameter maximum		Wire size diameter		Marker height	
		mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>
TMS-CCUV-SLEEVE-4-X-65mm	65	9.50	<i>0.375</i>	4.80	<i>0.189</i>	5.00-8.00	<i>0.197-0.315</i>	6.40	<i>0.250</i>
TMS-CCUV-SLEEVE-5-X-65mm	65	12.70	<i>0.500</i>	6.40	<i>0.252</i>	7.00-11.00	<i>0.275-0.433</i>	6.40	<i>0.250</i>
TMS-CCUV-SLEEVE-6-X-65mm	65	19.00	<i>0.750</i>	9.50	<i>0.374</i>	12.00-17.00	<i>0.472-0.669</i>	12.70	<i>0.500</i>
TMS-CCUV-SLEEVE-7-X-65mm	65	25.40	<i>1.000</i>	12.70	<i>0.500</i>	15.00-23.00	<i>0.590-0.905</i>	12.70	<i>0.500</i>

(For use with cable markers to protect with cable ties)

Ordering description	Sleeve length	Inside diameter minimum		Recovered diameter maximum		Wire size diameter		Marker height	
		mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>
TMS-CCUV-SLEEVE-9-X-32mm	32	6.40	<i>0.250</i>	3.20	<i>0.126</i>	N/A		6.40	<i>0.250</i>
TMS-CCUV-SLEEVE-10-X-32mm	32	12.70	<i>0.500</i>	6.40	<i>0.252</i>	N/A		12.70	<i>0.500</i>

(For use with NBC-SCE sleeves and adhesives sealing*)

Ordering description	Sleeve length	Inside diameter minimum		Recovered diameter maximum		Wire size diameter NBC-SCE		Sleeve size expanded diameter NBC-SCE	
		mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>
TMS-CCUV-SLEEVE-15	76	3.20	<i>0.125</i>	1.60	<i>0.063</i>	1.80-2.80	<i>0.071-0.110</i>	3.20	<i>0.125</i>
TMS-CCUV-SLEEVE-16	76	4.80	<i>0.187</i>	2.40	<i>0.094</i>	2.60-3.70	<i>0.102-0.146</i>	4.80	<i>0.188</i>
TMS-CCUV-SLEEVE-17	76	6.40	<i>0.250</i>	3.20	<i>0.126</i>	3.50-5.10	<i>0.138-0.201</i>	6.40	<i>0.250</i>
TMS-CCUV-SLEEVE-18	76	9.50	<i>0.375</i>	4.80	<i>0.189</i>	5.00-7.00	<i>0.197-0.275</i>	9.50	<i>0.375</i>
TMS-CCUV-SLEEVE-19	76	12.70	<i>0.500</i>	6.40	<i>0.252</i>	6.90-10.60	<i>0.272-0.417</i>	12.70	<i>0.500</i>
TMS-CCUV-SLEEVE-20	76	19.00	<i>0.750</i>	9.50	<i>0.374</i>	10.00-14.00	<i>0.394-0.551</i>	19.00	<i>0.750</i>
TMS-CCUV-SLEEVE-21	76	25.40	<i>1.000</i>	12.70	<i>0.500</i>	13.30-21.00	<i>0.524-0.827</i>	25.40	<i>1.000</i>
TMS-CCUV-SLEEVE-22	76	38.10	<i>1.500</i>	19.00	<i>0.748</i>	21.00-33.80	<i>0.827-1.331</i>	38.10	<i>1.500</i>

*For use with adhesives such as S-1255-04 and S-1264 please refer to RT1012 and RT1014 for specifications and adhesive details.

Options

Prescoring	Not available – supplied as cut pieces.	
Package Sizes	Standard	250 piece bags only
Colors	Standard	Clear only
Ordering information:	Specify product name, loose sleeve, sleeve reference, color and sleeve length.	
Ordering example:	For all Heat Shrink sleeves except NBC-SCE TMS-CCUV-SLEEVE-1-X- 65mm	
	For NBC-SCE TMS-CCUV-SLEEVE-22	

CM-SCE Military grade tie-on cable marker tags

CM-SCE markers are flat, rigid, non-adhesive labels that can be used to identify large cables and wire bundles in environments such as military and aerospace. Marker tags are applied to cables or wire bundles with cable ties.

Print performance meets or exceeds the requirements of SAE AS81531 4.6.2 and MIL-STD-202.

Features and benefits

- Side entry provides access to big size and wire bundles as well as retrofit and repair capability
- Highly flame-retardant
- Highly resistant to abrasion, mechanical abuses, fluids, lubricants and solvents
- Ease of use: markers can be easily removed from the carrier
- Easy installation: only standard cable tie-wraps are needed to install markers. No extra steps required
- Excellent print permanence when printing on the rough side of the marker



Temperature rating

Operating temperature range -55°C to +135°C -67°F to +275°F

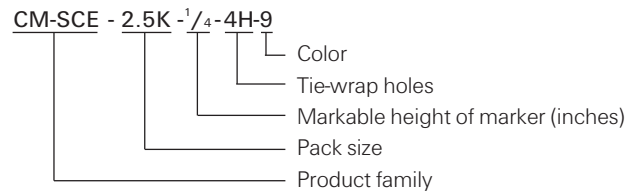
Specifications/approvals

Tyco Electronics	RW 2513 TTDS-021
Military	Mark permanence: SAE AS81531 4.6.2 Solvent resistance: MIL-STD-202 Method 215J
Industry	UL MH26328 Group PG1S2

Printer information

Tyco Electronics printer	AM6310 (dot matrix) T312M (thermal transfer)
Tyco Electronics ribbon	1892BK04-RIBBON (dot matrix) (dot matrix) 1966-RIBBON (thermal transfer)

Part numbering system



CM-SCE Military grade tie-on cable marker tags

Ordering information

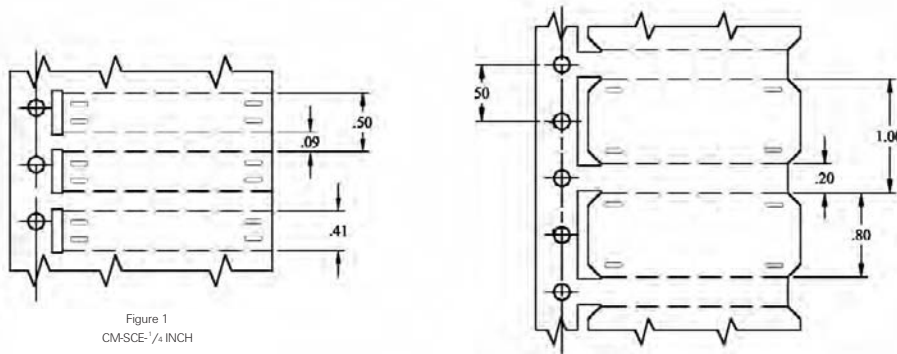


Figure 1
CM-SCE-1/4 INCH

Available sizes and formats

Ordering description	Size	Markable height		Markable length		Recommended use range	
		mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>
CM-SCE-1/4-6H- <color>	1/4	6.40	<i>0.250</i>	50.80	<i>2.000</i>	5.08 – 12.50	<i>0.200 – 0.492</i>
CM-SCE-1/4-4H- <color>	1/4	6.40	<i>0.250</i>	50.80	<i>2.000</i>	5.08 – 12.50	<i>0.200 – 0.492</i>
CM-SCE-TP-1/4-4H- <color>*	1/4	6.40	<i>0.250</i>	50.80	<i>2.000</i>	5.08 – 12.50	<i>0.200 – 0.492</i>
CM-SCE-1/2-4H- <color>	1/2	12.70	<i>0.500</i>	50.80	<i>2.000</i>	12.50 and up	<i>0.492 and up</i>
CM-SCE-TP-1/2-4H- <color>*	1/2	12.70	<i>0.500</i>	50.80	<i>2.000</i>	12.50 and up	<i>0.492 and up</i>
CM-SCE-1/2-6H- <color>	1/2	12.70	<i>0.500</i>	50.80	<i>2.000</i>	12.50 and up	<i>0.492 and up</i>
CM-SCE-TP-1/2-6H- <color>*	1/2	12.70	<i>0.500</i>	50.80	<i>2.000</i>	12.50 and up	<i>0.492 and up</i>

* for thermal transfer printing

Options

Tie-wrap holes	1/4-inch tags	Four holes standard
	1/2-inch tags	Four holes Six holes
	Code	4H 6H
Fanfold	Code	Fx (substitute package size code for "x")
Package sizes	Standard	250 pieces
Colors	Standard	White
	Code	9
	Nonstandard	Yellow
	Code	4

Ordering information: Specify product name, markable height of marker, pack size, number of tie wraps and color.

Ordering example: CM-SCE-2.5K-1/4-4H-9

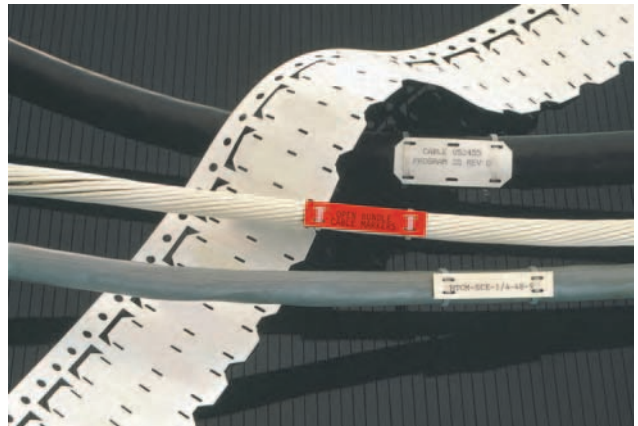
HTCM-SCE High temperature, low outgassing tie-on-cable marker tags

HTCM-SCE markers are flat, rigid, non-adhesive labels that can be used to identify large cables and wire bundles in high temperature environments and outer space applications where low vacuum outgassing is required. Marker tags are applied to cables or wire bundles using cable ties.

Print performance meets or exceeds the requirements of SAE AS81531 4.6.2 and MIL-STD-202.

Features and benefits

- Side entry provides access to big size cables and wire bundles as well as retrofit and repair capability
- High temperature use
- Highly flame-retardant
- Highly resistant to abrasion, mechanical abuses, fluids, lubricants and solvents
- Low vacuum outgassing for outer space applications
- Ease of use: markers can be easily removed from the carrier
- Easy installation: only standard cable tie-wraps are needed to install markers. No extra steps required
- Excellent print permanence when printing on the rough side of the marker



Temperature rating

Operating temperature range -55°C to +225°C -67°F to +437°F

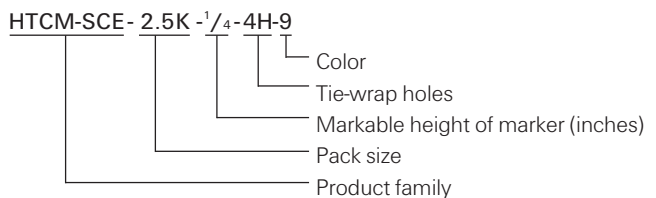
Specifications/approvals

Tyco Electronics	RW 2524 TTDS-022
Military	Mark permanence: SAE AS81531 4.6.2 Solvent resistance: MIL-STD-202 Method 215J

Printer information

Tyco Electronics printer	T3 12M (thermal transfer)
Tyco Electronics ribbon	TMS-RJS-RIBBON-4HT (thermal transfer)

Part numbering system



HTCM-SCE High temperature, low outgassing tie-on-cable marker tags

Ordering information

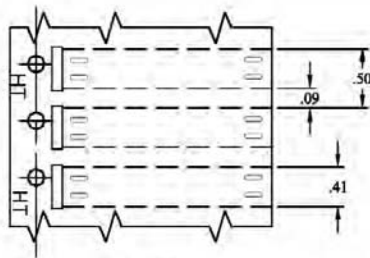


Figure 1
HTCM-SCE-1/4 INCH

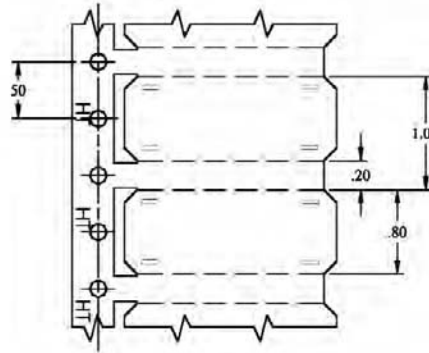


Figure 2

Available sizes and formats

Ordering description	Size	Markable height		Markable length		Recommended use range	
		mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>
HTCM-SCE-TP-1/4-4H- <color>	1/4	6.40	<i>0.250</i>	50.80	<i>2.000</i>	5.08 – 12.50	<i>0.200 – 0.492</i>
HTCM-SCE-TP-1/2-4H- <color>	1/2	12.70	<i>0.500</i>	50.80	<i>2.000</i>	12.50 and up	<i>0.492 and up</i>
HTCM-SCE-TP-1/2-6H- <color>	1/2	12.70	<i>0.500</i>	50.80	<i>2.000</i>	12.50 and up	<i>0.492 and up</i>

Options

Tie-wrap holes	1/4-inch tags	Four holes standard
	1/2-inch tags	Four holes Six holes
	Code	4H 6H
Fanfold	Code	Fx (substitute package size code for "x")
Package sizes	Standard	250 pieces
Colors	Standard	White
	Code	9
	Nonstandard	Yellow
	Code	4

Ordering information: Specify product name, markable height of marker, pack size, number of tie wraps and color.

Ordering example: HTCM-SCE - 2.5K-1/4-4H-9

HLX Low fire hazard tie-on cable marker tags

HLX cable markers are made from zero halogen, low smoke, low toxicity, radiation cross-linked, UV stabilized polyolefin sheet, formed into punched organized cable markers on a paper carrier.

They are used for identification of cables and wire bundles by computer-based printing onto markers. Markers are attached using cable ties. HLX markers are ideal for applications where limited fire hazard characteristics are necessary.

Features and benefits

- Recommended for use where combustion of products may endanger personnel or place delicate electronics at risk
- Several printable heights and widths available



Temperature rating

Operating temperature range -40°C to +105°C -40°F to +221°F

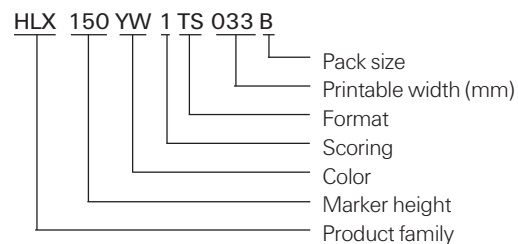
Specifications/approvals

Tyco Electronics	RW 2523
	TTDS-013
Military	SAE AS81531 4.6.2
	MIL-STD-202 Method 215J
Industry	BS 4G 198 Part 3
	ASTM D 2671

Printer information

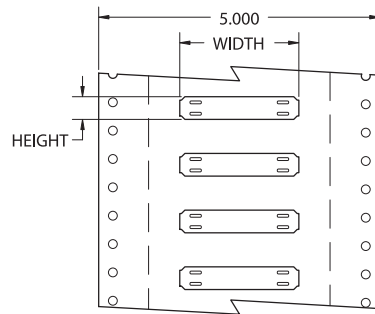
Tyco Electronics printer	T3 12M (thermal transfer)
Tyco Electronics ribbon	1966-RIBBON

Part numbering system



HLX Low fire hazard tie-on cable marker tags

Ordering information



Available sizes and formats

Ordering description	Marker dimensions (W x H)		Printable area (W x H)		Pack size TS
	mm	inches	mm	inches	
HLX104<color>1<format>025B	45.00 x 10.40	<i>1.800 x 0.400</i>	25.00 x 10.40	<i>1.000 x 0.400</i>	1000
HLX104<color>1<format>033B	52.00 x 10.40	<i>2.100 x 0.400</i>	33.00 x 10.40	<i>1.300 x 0.400</i>	1000
HLX104<color>1<format>038B	58.00 x 10.40	<i>2.300 x 0.400</i>	38.00 x 10.40	<i>1.500 x 0.400</i>	1000
HLX104<color>1<format>050B	70.00 x 10.40	<i>2.750 x 0.400</i>	50.00 x 10.40	<i>2.000 x 0.400</i>	1000
HLX104<color>1<format>070B	90.00 x 10.40	<i>3.500 x 0.400</i>	70.00 x 10.40	<i>2.750 x 0.400</i>	1000
HLX150<color>1<format>025B	45.00 x 15.00	<i>1.800 x 0.600</i>	25.00 x 15.00	<i>1.000 x 0.600</i>	500
HLX150<color>1<format>033B	52.00 x 15.00	<i>2.100 x 0.600</i>	33.00 x 15.00	<i>1.300 x 0.600</i>	500
HLX150<color>1<format>038B	58.00 x 15.00	<i>2.300 x 0.600</i>	38.00 x 15.00	<i>1.500 x 0.600</i>	500
HLX150<color>1<format>050B	70.00 x 15.00	<i>2.750 x 0.600</i>	50.00 x 15.00	<i>2.000 x 0.600</i>	500
HLX150<color>1<format>070B	90.00 x 15.00	<i>3.500 x 0.600</i>	70.00 x 15.00	<i>2.750 x 0.600</i>	500
HLX203<color>1<format>025B	45.00 x 20.30	<i>1.800 x 0.800</i>	25.00 x 20.30	<i>1.000 x 0.800</i>	500
HLX203<color>1<format>033B	52.00 x 20.30	<i>2.100 x 0.800</i>	33.00 x 20.30	<i>1.300 x 0.800</i>	500
HLX203<color>1<format>038B	58.00 x 20.30	<i>2.300 x 0.800</i>	38.00 x 20.30	<i>1.500 x 0.800</i>	500
HLX203<color>1<format>050B	70.00 x 20.30	<i>2.750 x 0.800</i>	50.00 x 20.30	<i>2.000 x 0.800</i>	500
HLX203<color>1<format>070B	90.00 x 20.30	<i>3.500 x 0.800</i>	70.00 x 20.30	<i>2.750 x 0.800</i>	500
HLX253<color>1<format>025B	45.00 x 25.30	<i>1.800 x 1.000</i>	25.00 x 25.30	<i>1.000 x 1.000</i>	250
HLX253<color>1<format>033B	52.00 x 25.30	<i>2.100 x 1.000</i>	33.00 x 25.30	<i>1.300 x 1.000</i>	250
HLX253<color>1<format>038B	58.00 x 25.30	<i>2.300 x 1.000</i>	38.00 x 25.30	<i>1.500 x 1.000</i>	250
HLX253<color>1<format>050B	70.00 x 25.30	<i>2.750 x 1.000</i>	50.00 x 25.30	<i>2.000 x 1.000</i>	250
HLX253<color>1<format>070B	90.00 x 25.30	<i>3.500 x 1.000</i>	70.00 x 25.30	<i>2.750 x 1.000</i>	250

Options

Prescoring	Not available on these products – this should always be 1.		
Package sizes	Standard	B	
Colors	Standard	White	Yellow
	Code	WE	YW
	Nonstandard	Red	Blue
	Code	RD	BE
Format	TS – Thermal transfer (reel/single sided)		
Printable width on marker	025	25mm (1")	
	033	33mm (1.3")	
	038	38mm (1.5")	
	050	50mm (2")	
	070	70mm (2.75")	

Ordering information: Specify product name, marker height, color, scoring option (always 1), format, printable width, and pack size.

Ordering example: HLX150YW1TS033B