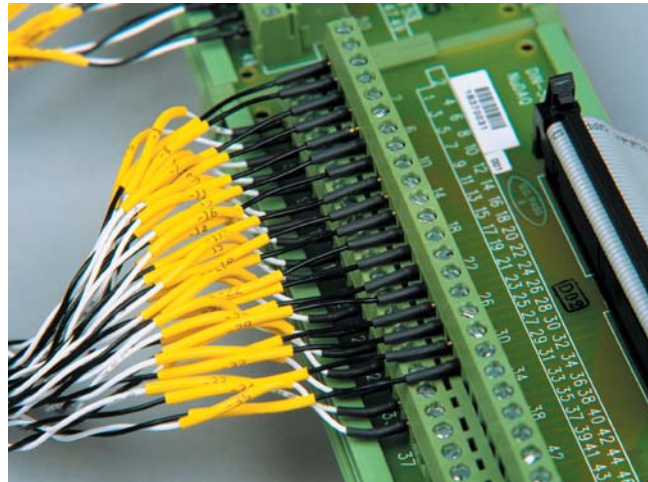
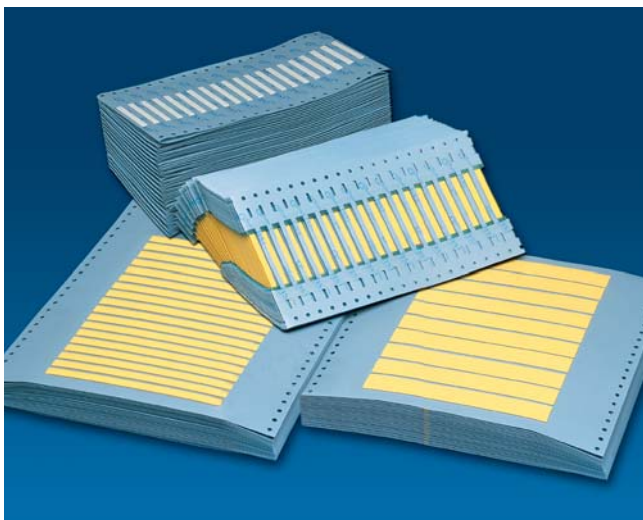


HS 2:1 Shrink ratio heat shrinkable wire identification system

HS sleeves are thin wall, flame retarded radiation cross-linked polyolefin heat-shrinkable tubing, assembled as organized cut sleeves on a paper carrier. HS products are 2:1 shrink ratio. They are used in identification of wires and cables by computer-based printing onto sleeves. These products are suited to a wide variety of applications, including those with military standard requirements. The products meet the material and performance requirements of SAE AMS-DTL-23053/5 class 1.

Features and benefits

- Shrink ratio of 2:1 recovers to half of supplied diameter. Contact Tyco Electronics for 3:1 option.
- Comes in several sleeve lengths: 38mm, 50mm and 152mm.
- Sleeve diameter from 0.093" to 1.5" (2.4mm to 38.1mm).
- Flame retarded – meets ASTM D 2671 and UL 224 (clause 14) standards.
- Single sided and double sided printing formats available.
- Standard dot matrix printable. Contact Tyco Electronics for thermal printable options.
- Heat resistance: +175°C (+347°F) for 168 hours or +250°C (+482°F) for 4 hours with no deterioration of properties.
- Concentricity: 70% minimum for low distortion of legends.
- Easy-to-use fan-fold format for improved kitting and marker selection.



Temperature rating

Operating temperature range	-55°C to +135°C	-67°F to +275°F
Minimum recovery temperature	+120°C	+248°F
Maximum storage temperature	+40°C	+104°F

Specifications/approvals

Tyco Electronics	TTDS-033
Military	SAE AMS-DTL-23053/5 Class 1 (material and performance) SAE AS81531 4.6.2 MIL-STD-202F Method 215J
Industry	ASTM D 2671 UL 224 (clause 14)

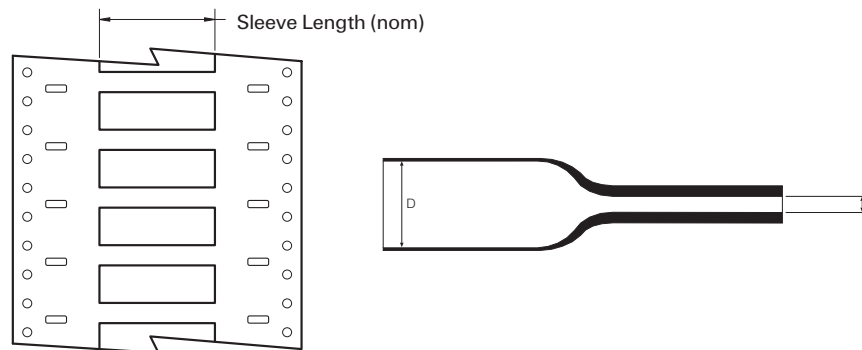
Printer information

Tyco Electronics printer	AM6310 (dot matrix)
Tyco Electronics ribbon	1892BK03 (dot matrix – high performance) 1892BK04 (dot matrix)

Part numbering system

HS-048-YW-1-NF-050-B	
HS	Product family
048	Inside diameter as supplied (mm)
YW	Color
1	Scoring
NF	Format
050	Sleeve length (mm)
B	Pack size

Ordering information



Available sizes and formats

Ordering description	Inside diameter						Pack size (uncut sleeves) NF(B) DS(B) WF(B)		
	D (min) As supplied		d (max) After recovery		Recommended use range				
	mm	<i>inches</i>	mm	<i>inches</i>	mm	<i>inches</i>	38 and 50mm lengths	152 mm lengths	
HS024- <color-prescore-format-length-pack size>2.40	0.093		1.17	0.050	1.27-1.90	0.050-0.075	1650	1100	N/A
HS032-<color-prescore-format-length-pack size> 3.20	0.126		1.58	0.060	1.75-2.66	0.069-0.105	1100	1100	550
HS048-<color-prescore-format-length-pack size> 4.80	0.189		2.36	0.090	2.54-4.06	0.100-0.160	1100	1100	500
HS064-<color-prescore-format-length-pack size> 6.35	0.250		3.18	0.125	3.81-5.46	0.150-0.215	550	550	500
HS095-<color-prescore-format-length-pack size> 9.53	0.374		4.75	0.187	5.59-8.12	0.220-0.320	550	550	275
HS127-<color-prescore-format-length-pack size>12.70	0.500		6.35	0.250	6.99-10.79	0.275-0.425	550	300	250
HS190-<color-prescore-format-length-pack size>19.05	0.750		9.53	0.375	10.16-16.25	0.400-0.640	300	300	175
HS254-<color-prescore-format-length-pack size>25.40	1.000		12.70	0.500	9.29-21.59	0.366-0.850	300	300	125
HS381-<color-prescore-format-length-pack size>38.10	1.500		19.05	0.750	20.95-22.02	0.825-1.300	100	100	75

Options

Prescoring	Perforated score to produce multiple marker sleeves from each HS.					
	Number of prescores	0 prescores	1 prescore	2 prescores	3 prescores	5* prescores
	Markers per sleeve	1	2	3	4	6*
	Code	1	2	3	4	6*

*Wide format only

Package sizes	B	Standard for narrow format: NF (single sided) and DS (double sided)			
	X	Bulk for narrow format (contains double the number of markers in a narrow format B pack): NF (single sided)			
	B	Standard for wide format: WF (single sided)			
Colors	Standard	White	Yellow		
	Code	WE	YW		
Format	NF	Single-sided printing – narrow format			
	DS	Double-sided printing – narrow format			
	WF	Single-sided printing – wide format			
Uncut sleeve length	038	38 mm (1.5") – narrow format		Ordering example: HS032WE2NF038B	
	050	50 mm (2") – narrow format		Ordering example: HS064YW3NF050X	
	152	152 mm (6") – wide format		Ordering example: HS095WE6WF152B	

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

Ordering example: HS032WE2NF038B