

TECHNICAL DATA SHEET

www.tycoident.com

Document number: TTDS-020
Issue: 3
Date: June 2003

HT-SCE heat-shrinkable sleeves

MATERIAL DESCRIPTION:	Thin wall, flame retarded radiation cross-linked fluoropolymer heat-shrinkable tubing, assembled as organized cut sleeves in a "ladder" configuration. 2:1 shrink ratio.
USE:	Identification of wires and cables by computer-based printing onto sleeves. Sleeves can also provide terminal insulation and strain relief. Suitable for many high temperature applications, especially military and aerospace applications. Can be used for space applications where low vacuum outgassing is required.
PRINT METHOD/RIBBON:	Thermal transfer: Tyco T312M-PRINTER, Tyco TMS-RJS-RIBBON-4HT black ribbon or Tyco TMS-RJS-RIBBON-WH white ribbon. Thermal transfer: Tyco T408M-PRINTER, Tyco TMS-RJS-RIBBON-4HT Thermal transfer: Tyco T200 Series, Tyco TMS-101-RIBBON-HT black ribbon or Tyco TMS-101-RIBBON-WH white ribbon. Thermal transfer: Tyco QLS-2001, Tyco TMS-RJS-RIBBON-4HT
SERVICE TEMPERATURE:	-55°C to +225°C (-67°F to +437°F).
MINIMUM RECOVERY TEMPERATURE:	135°C (275°F).
MAXIMUM STORAGE TEMPERATURE:	40°C (104°F).
COLORS:	White or black.
HEAT AGEING:	No cracking and print legible after 168 hours at 225°C (437°F).
HEAT SHOCK:	No cracking, dripping or flowing and print legible after 4 hours at 275°C (527°F).

Page 1 of 3

Business locations:

☎ N America: + 1 650 361 3860 (West Coast)
☎ France: +33 (0) 476 099696 (Labels)
☎ Germany: + 49 (0) 6074 89080
☎ UK: + 44 (0) 1495 244000 (Labels)
☎ Japan: + 81 (0) 44 900 5102

☎ N America: + 1 401 751 6505 (East Coast)
☎ France: + 33 (0) 134 20 21 22 (Other products)
☎ UK: + 44 (0) 1793 528171 (Other products)
☎ Singapore: + 65 (0) 4866 151

All the above information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. Tyco Electronics makes no warranties as to the accuracy or completeness of the information and disclaims any liability regarding its use. Tyco Electronics only obligations are those in the Standard Terms and Conditions of Sale for this product and in no case will Tyco Electronics be liable for any incidental, indirect or consequential damages arising from the sale, resale, use or misuse of the product. Tyco Electronics Specifications are subject to change without notice. In addition Tyco Electronics reserves the right to make changes in materials or processing, without notification to the Buyer, which do not affect compliance with any applicable specification.

TECHNICAL DATA SHEET

www.tycoident.com

Document number: TTDS-020
Issue: 3
Date: June 2003

HT-SCE heat-shrinkable sleeves

TEMPERATURE CYCLING:	No cracking, dripping or flowing and print legible after 6 cycles from -196°C (-320°F) to +200°C (+392°F).
ULTIMATE ELONGATION:	200% minimum (ASTM D2671).
TENSILE STRENGTH:	24MPa minimum (ASTM D2671).
MOLD GROWTH:	Rating 1 maximum (ASTM G21).
FLAMMABILITY:	VW-1 rated (UL 224, section 16).
VACUUM OUTGASSING:	1% maximum Total Mass Loss (TML) after 24 hours at 130°C (266°F); pressure <10 ⁻⁵ torr. (ASTM-E595) 0.1% maximum Vacuum Condensible Material (VCM) after 24 hours at 130°C (266°F); pressure <10 ⁻⁵ torr; condensing surface at 18°C (64°F).
CORROSIVE EFFECT (COPPER MIRROR):	Non corrosive (16 hours at 200°C (392°F), ASTM D2671 Procedure A).
DIELECTRIC STRENGTH:	20MV/m minimum (ASTM D2671).
VOLUME RESISTIVITY:	10 ¹² Ωcm minimum (ASTMS D2671).
PRINT PERMANENCE AFTER RECOVERY:	Print legible after 100 rubs (SAE AS81531, 4.6.2). Print legible after 100 strokes (MIL-STD-202F, method 215J). Print legible after 100 rubs (UL 224).
FLUID RESISTANCE:	

Page 2 of 3

Business locations:

☎ N America: + 1 650 361 3860 (West Coast)
☎ France: +33 (0) 476 099696 (Labels)
☎ Germany: + 49 (0) 6074 89080
☎ UK: + 44 (0) 1495 244000 (Labels)
☎ Japan: + 81 (0) 44 900 5102

☎ N America: + 1 401 751 6505 (East Coast)
☎ France: + 33 (0) 134 20 21 22 (Other products)
☎ UK: + 44 (0) 1793 528171 (Other products)
☎ Singapore: + 65 (0) 4866 151

All the above information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. Tyco Electronics makes no warranties as to the accuracy or completeness of the information and disclaims any liability regarding its use. Tyco Electronics only obligations are those in the Standard Terms and Conditions of Sale for this product and in no case will Tyco Electronics be liable for any incidental, indirect or consequential damages arising from the sale, resale, use or misuse of the product. Tyco Electronics Specifications are subject to change without notice. In addition Tyco Electronics reserves the right to make changes in materials or processing, without notification to the Buyer, which do not affect compliance with any applicable specification.

TECHNICAL DATA SHEET

www.tycoident.com

Document number: TTDS-020
 Issue: 3
 Date: June 2003

HT-SCE heat-shrinkable sleeves

THREAT	TEST	EFFECT
MIL-T-83133 aircraft fuel (JP-8)	24 hours at 23°C (73°F); SAE AS81531 4.6.2 (20 rubs)	Print legible
MIL-H-5606 hydraulic fluid	24 hours at 23°C (73°F); SAE AS81531 4.6.2 (20 rubs)	Print legible
Skydrol™ 500 hydraulic fluid	24 hours at 23°C (73°F); SAE AS81531 4.6.2 (20 rubs)	Print legible
MIL-A-8243 anti-icing fluid	24 hours at 23°C (73°F); SAE AS81531 4.6.2 (20 rubs)	Print legible
Aviation gasoline (100/130)	24 hours at 23°C (73°F); SAE AS81531 4.6.2 (20 rubs)	Print legible
5% salt water	24 hours at 23°C (73°F); SAE AS81531 4.6.2 (20 rubs)	Print legible

Note: see Tyco specification RT 1806 for full HT-SCE performance & dimensional details.

Page 3 of 3

Business locations:

☎ N America: + 1 650 361 3860 (West Coast)
 ☎ France: +33 (0) 476 099696 (Labels)
 ☎ Germany: + 49 (0) 6074 89080
 ☎ UK: + 44 (0) 1495 244000 (Labels)
 ☎ Japan: + 81 (0) 44 900 5102

☎ N America: + 1 401 751 6505 (East Coast)
 ☎ France: + 33 (0) 134 20 21 22 (Other products)
 ☎ UK: + 44 (0) 1793 528171 (Other products)
 ☎ Singapore: + 65 (0) 4866 151

All the above information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. Tyco Electronics makes no warranties as to the accuracy or completeness of the information and disclaims any liability regarding its use. Tyco Electronics only obligations are those in the Standard Terms and Conditions of Sale for this product and in no case will Tyco Electronics be liable for any incidental, indirect or consequential damages arising from the sale, resale, use or misuse of the product. Tyco Electronics Specifications are subject to change without notice. In addition Tyco Electronics reserves the right to make changes in materials or processing, without notification to the Buyer, which do not affect compliance with any applicable specification.