

SCL



SEMIRIGID, ENCAPSULANT-LINED, POLYOLEFIN TUBING

PRODUCT BENEFITS

- 3:1 shrink ratio
- Splash-resistant, moisture-resistant covering; not intended for use where immersion in fluids is required
- Rugged protection against abrasion, vibration, and flexing
- Excellent strain relief and insulation of weak points
- RoHS compliant

SCL is encapsulant-lined, heatshrinkable tubing that provides moisture resistance, strain relief, and electrical insulation for electrical splices, terminations, breakouts, and mechanical connections. SCL is constructed as a dual-wall tubing. The outer wall is a semirigid, crosslinked polyolefin, while the inner wall is a meltable polyolefin that flows with the application of heat. Heating SCL shrinks the outer jacket and melts the inner "encapsulant" wall to flow and fill surface irregularities. While still hot, the tubing can be pinched and blocked to form a wire breakout. SCL provides a splash-resistant, moisture-resistant covering suitable for many applications. SCL also performs satisfactorily if briefly exposed to common solvents or chemicals. The installed tubing provides rugged protection against abrasion, vibration, and flexing. A wide range of applications can be accommodated with only a few sizes of SCL tubing. SCL tubing is UL-recognized at 125°C, 600 V, and meets the requirements of AMS-DTL-23053/4, Class 1.

TEMPERATURE RATING

- Continuous operating temperature from -55°C up to +110°C
- Minimum shrink temperature: +125°C
- Minimum full recovery temperature: +135°C

SPECIFICATIONS

- TE: Specification 108-120027
- UL: **E85381, 600 V, 125°C**
- Military: AMS-DTL-23053/4*, Class 1

MARKETS

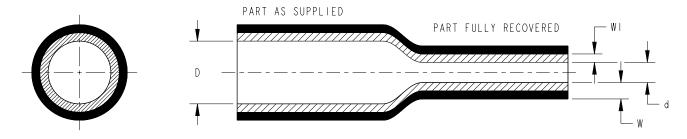
- Defense & Military
- Aerospace
- Automotive

TYPICAL APPLICATION

· Encapsulation of components, splices and terminations where splash resistance and mechanical protection are required.

*Formerly MIL-I-23053/4 and MIL-DTL-23053/4.

DIMENSIONS (MILLIMETERS/INCHES)



SCL 3:1 RATIO STANDARD SIZES

	ADDITIONAL STANDARD COLOR	AS SUPPLIED		AS RECOVERED										
PRODUCT SIZES		MINIMUM INSIDE DIAMETER (D)		MAXIMUM INSIDE DIAMETER (d)		TOTAL WALL THICKNESS (W)						INNER MELTABLE WALL THICKNESS (W1)		
						MINIMUM		MAXIMUM		NOMINAL		NOMINAL		
		mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
SCL-1/8	BROWN	3.17	0.125	0.58	0.023	0.81	0.032	1.15	0.045	0.98	0.039	0.50	0.020	
SCL-3/16	GRAY	4.74	0.187	1.52	0.060	0.93	0.037	1.24	0.049	1.09	0.043	0.64	0.025	
SCL-1/4	WHITE	6.35	0.250	2.03	0.080	1.04	0.041	1.34	0.053	1.19	0.047	0.68	0.027	
SCL-3/8	RED	9.93	0.391	3.42	0.135	1.09	0.043	1.44	0.057	1.27	0.050	0.76	0.030	
SCL-1/2	BLUE	12.70	0.500	4.95	0.195	1.21	0.048	1.57	0.062	1.39	0.055	0.88	0.035	
SCL-3/4	YELLOW	19.05	0.750	7.95	0.313	1.47	0.058	1.82	0.072	1.65	0.065	1.01	0.040	
SCL-1	N/A	25.40	1.000	10.16	0.400	1.72	0.068	2.08	0.082	1.90	0.075	1.01	0.040	

ORDERING INFORMATION								
Color	Standard: Black (-0) for all sizes, plus one additional color per size per Product Dimensions table.							
Size selection	Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request.							
Standard packaging	In 1.2-meter [4-foot] lengths.							
	Specify product family, size/range, color, and package.							
Ordering description***	SCL-X/X-X-X → Package → Color → Size/Range							
	▶ Product Family							

^{***}Europe only. For supply to MIL spec., Def Stan and BS add -MS, -DS or -BS to ordering description.

Are you looking to seal out moisture, offer enhanced strain relief, or provide rigorous mechanical protection?

Do you need a flame retardant product? Leverage TE Connectivity's (TE) comprehensive portfolio of heat shrink tubing products in a wide range of applications.

Learn more: TE.com/heatshrinktubing

© 2024 TE Connectivity. All Rights Reserved.

TE Connectivity, TE connectivity (logo), TE and Raychem are trademarks owned or licensed by the TE Connectivity Ltd. family of companies. Other logos, product and company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this brochure are for reference purposes only and are subject to change without notice. Specifications:

07/24

