tyco Electronics

Raychem

- Controlled soldering
- Strain relief
- Insulation
- Easy installation
- Applications from 125°C to 260°C
- NAS, MIL-SPEC, and UL approvals

SolderSleeve

High-performance wire and cable terminators

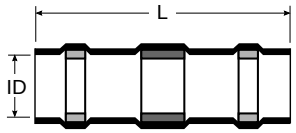
Raychem's SolderSleeve heat-shrinkable wire and cable interconnection devices are a labor-saving alternative to conventional wire and cable termination methods such as craft-sensitive, time-consuming hand soldering or crimping.

Versatility
SolderSleeve terminators insulate, strain relieve, and protect terminations from environmental damage in a wide spectrum of electrical interconnection applications.

Capability
SolderSleeve terminators create strong, soldered connections. They consist of a heat-shrinkable sleeve and a pre-measured, fluxed solder band. When heated, the tubing shrinks and the solder melts, making reliable, insulated terminations for even greater convenience. They are available with optional preinstalled ground leads or on tape carrier.

Compatibility
SolderSleeve terminators are compatible with many component dielectric materials and wire insulations–wires can be terminated in applications with maximum operating temperatures ranging from 125°C to 260°C. For other temperature requirements contact a Raychem representative.

SolderSleeve terminator sleeve styles



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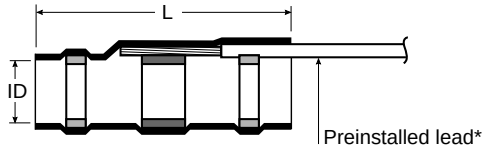

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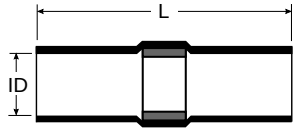

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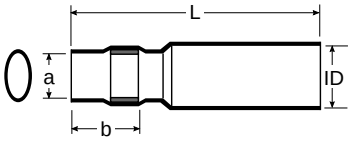

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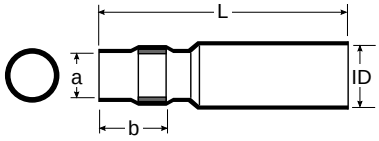

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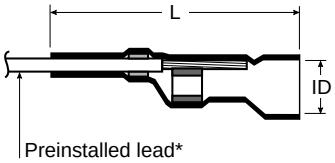

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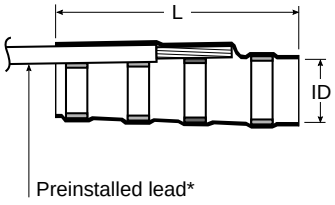

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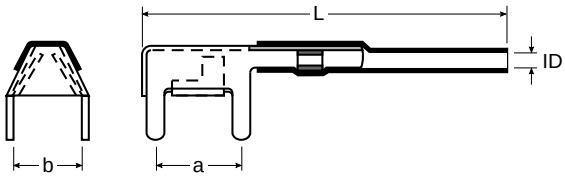

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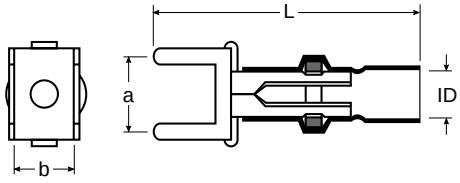

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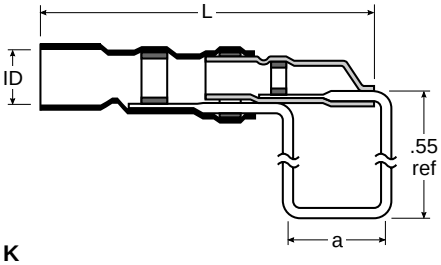

K

*Refer to SolderSleeve Selection Guide (H54683).

Product dimensions (in inches)

Application	Part number		Sleeve style	Length (max.)	ID (min.)	a (nom.)	b (nom.)
Shielded cable grounding	B-023-00		A	1.22	0.170		
	B-023-02		A	1.54	0.275		
	B-023-03		A	1.80	0.410		
	SO63-1-*/ST63-1-*		A or B	0.720	0.075		
	SO63-2-*/ST63-2-*		A or B	0.720	0.170		
	SO63-3-*/ST63-3-*		A or B	0.720	0.075		
	SO63-4-*/ST63-4-*		A or B	0.820	0.235		
	SO63-5-*/ST63-5-*		A or B	0.820	0.270		
	SO96-1-*/ST96-1-*		A or B	0.720	0.075		
	SO96-2-*/ST96-2-*		A or B	0.720	0.105		
	SO96-3-*/ST96-3-*		A or B	0.720	0.170		
	SO96-4-*/ST96-4-*		A or B	0.820	0.235		
	SO96-5-*/ST96-5-*		A or B	0.820	0.270		
	S01-01-R		A	0.720	0.075		
	S01-02-R		A	0.720	0.105		
	S01-03-R		A	0.720	0.170		
	S01-04-R		A	0.820	0.235		
	S01-05-R		A	0.820	0.270		
	S02-01-R		B	0.720	0.075		
	S02-02-R		B	0.720	0.105		
	S02-03-R		B	0.720	0.170		
	S02-04-R		B	0.820	0.235		
	S02-05-R		B	0.820	0.270		
	S02-06-R		B	0.720	0.075		
	S02-07-R		B	0.720	0.105		
	S02-08-R		B	0.720	0.170		
	S02-09-R		B	0.820	0.235		
	S02-10-R		B	0.820	0.270		
	S02-11-R		B	0.720	0.075		
	S02-12-R		B	0.720	0.105		
	S02-13-R		B	0.720	0.170		
	S02-14-R		B	0.820	0.235		
	S02-15-R		B	0.820	0.270		
	S02-16-R		B	0.720	0.075		
	S02-17-R		B	0.720	0.105		
	S02-18-R		B	0.720	0.170		
	S02-19-R		B	0.820	0.235		
	S02-20-R		B	0.820	0.270		
Coaxial cable termination	D-181-1XXX-90/9	Conductor term.	F	0.670	0.092		
		Shield term.	G	0.830	0.145		
	D-181-2XXX-90/9	Conductor term.	F	0.670	0.120		
		Shield term.	G	0.830	0.175		
	D-181-3XXX-90/9	Conductor term.	F	0.670	0.155		
		Shield term.	G	0.830	0.205		
	D-607-09		J	0.860	0.145	0.200	0.200
	D-607-10		H	0.900	0.160	0.200	0.200
	D-607-40		J	0.860	0.110	0.100	0.100
	D-148-0201		K	0.950	0.085	0.100	
	D-148-0202		K	0.950	0.085	0.200	
	D-148-0204		K	0.950	0.085	0.200	
	D-148-0206		K	1.030	0.175	0.100	
	D-148-0207		K	1.030	0.175	0.200	
	D-148-0208		K	1.030	0.175	0.250	
	D-148-0209		K	1.030	0.175	0.200	

*Refer to SolderSleeve Selection Guide (H54683).

Product dimensions (continued)

Application	Part number	Sleeve style	Length (max.)	ID (min.)	a (min.)	b (max.)
Discrete wire to component leads or terminals	D-129-03	D	0.503	0.110	0.088	0.225
	D-129-05	D	0.360	0.080	0.050	0.175
	D-129-0043	D	0.810	0.215	0.145	0.300
	D-141-07	E	0.360	0.056	0.030	0.210
	D-141-30	E	0.395	0.065 x 0.024	0.024	0.155
	D-141-31	E	0.525	0.080	0.030	0.175
	D-141-56	E	0.800	0.120	0.060	0.275
Wire splices	D-110-35	C	1.150	0.070		
	D-110-41	C	1.150	0.105		
	D-110-0083	C	2.230	0.345		
	D-110-0090	C	2.230	0.280		
	D-110-0100	C	2.230	0.280		
	D-110-0101	C	1.550	0.170		
	D-110-0181	C	1.550	0.170		
	D-1744-01	A	1.190	0.075		
	D-1744-01	A	1.190	0.110		
	D-1744-02	A	1.190	0.110		
	D-1744-03	A	1.190	0.180		
	D-1744-04	A	1.190	0.280		

Product characteristics

Material	
Insulation (all series except B023)	Radiation-crosslinked, transparent heat-shrinkable polyvinylidene fluoride (Kynar)
Insulation (B023 series)	Heat-shrinkable polytetrafluoroethylene (Teflon)
Solder preform with flux (all series except B023)	Sn63 or Sn96 with RMA or RAP flux per QQ-S-571
Solder preform with flux (B023 series)	Pb92, Sn5, Bi 2, Ag 1 with RAP flux per QQ-S-571
Inserts	Meltable thermoplastic polymer
Preinstalled lead (optional)	*
Bus leads (D-148 series)	Tin-plated copper alloy
D-607 series body	Copper alloy, solder-plated

Physical	Unit	Method of test	Requirement
Dimensions	inches	RT-1404	See product dimensions

Electro-mechanical	Unit	Method of test	Typical value
Dielectric voltage withstand	kilovolts	RT-1404	2.0
Voltage drop	millivolts	RT-1404	Less than 2.0 mV increase
Current cycling	degrees	RT-1404	Less than 50°C
Pullout strength	pounds		20 pounds for 22 AWG stranded wire
Insulation resistance	megohms	RT-1404	1000

Chemical (fluid resistance)		Method of test	Requirement
Copper mirror corrosion		RT-1404	Noncorrosive

Environmental	Unit	Method of test	Requirement
Pullout strength after salt spray exposure	pounds	RT-1404	20 pounds for 22 AWG stranded wire
IR after conditioning	megohms	RT-1404	1000

Operating condition		Value
Temperature rating	N/A	–55°C to +125°C/+150°C/+175°C/+260°C*
Voltage rating	volts	600

*Refer to SolderSleeve Selection Guide (H54683).

Product characteristics (continued)

Electrical performance (D-607 series only)	Typical values (not requirements)				
	Frequency	D-607-09/-40 ΔZ (ohms)	VSWR	D-607-10 ΔZ (ohms)	VSWR
	350 MHz	2.5 max.	1.04 max.	2.5 max.	1.04 max.
	700 MHz	4.0 max.	1.05 max.	4.5 max.	1.09 max.
	2.3 GHz	5.0 max.	1.09 max.	6.5 max.	1.12 max.

Approvals and reference documents

Agency approvals (refer to SolderSleeve Selection Guide for applicable part numbers)	UL, File E87681; MIL-S-83519; NAS1747; MIL-STD-2000
Reference documents	Raychem Specification RT1404
	SolderSleeve Selection Guide (H54683)
	Installation Guidelines (H54682)
	Specification Control Drawing, as applicable

Ordering information

Standard packaging	Product supplied in bulk, 50 to 1000 pieces per box, depending on style and size

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Kynar is a trademark of EIF Atochem North America, Inc.
Teflon is a trademark of E.I. du Pont de Nemours & Co.

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