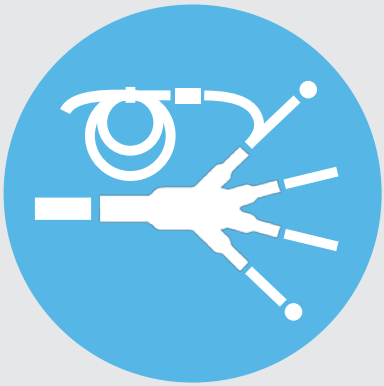

Wire and Cable
Heat-shrink Tubing
Non-shrink Tubing
Braided Sleeving
Screening Braids
Moulded Parts
Terminals and Splices
Wire and Cable Markers
Accessories
Connectors
Backshells
Bonding Leads
Metal Braids
Relays and Contactors
Switches and Grips
Adhesives and Tapes
Application Equipment
Added Value Services

Repeatable and Consistent Quality, Inspect-ability, Convenience and Speed. Lower Installed Costs

Termination devices offer an inexpensive, single step, easy to use method of producing high quality wire splicing, solder crimp and sealing in one operation, strain relieving and coaxial shield terminations.

A large range of products are available, providing solutions for commercial to harsh environment applications, through to the high performance demands of the Aerospace and Motorsport markets.

Wire to Wire Splicing
Including single piece solder splice to crimp and heat shrink sleeve.

Terminals and Disconnects
DuraSeal® devices are simple and quick to install using a crimp tool and a heat source.

Wire Terminations to Pins, Posts and Tabs
One step solutions for wire connections to pins, posts, tabs and mass wire terminations.

Braid / Shield Termination
Screen grounding terminators offer sealed, insulated and encapsulated solder connection.

Coaxial Cable terminations
Coaxial cable terminators for coaxial cable applications, including printed circuit boards.

Cable to Cable Splicing Kits
SolderShield® wire splicing and shield continuity solutions in a heat-shrinkable insulation sleeve.

Shielded Connector Contacts
SolderTact® controlled soldering contacts help speed installation and reduce installed costs.

Databus Components
MIL-STD-1553B for multiplexing needs.

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Selection Guide

Overview

Application Type	Conductor: Solder	Conductor: Crimp	Conductor: Coil	Max Temp.	Product Description	Part Series
Wire to Wire Splicing	■			125°C	SolderSleeve wire splices	CWT-9000
	■			125°C	RoHS SolderSleeve wire splices	B-155
	■			150°C	SolderSleeve wire splices	D-1744
	■		■	125°C	SolderGrip closed end connector	SGRS
		■		125°C	DuraSeal crimp splices	D-406
		■		155°C	MiniSeal crimp splices	D-436
		■		200°C	MiniSeal crimp splices	D-200
Terminal Disconnects		■		125°C	DuraSeal crimp terminals & disconnects	B-106
	■		■	150°C	SolderGrip terminals	SGRT
Pin, Post & Tab	■			125°C	SolderSleeve wire terminators	CWT
	■			125°C	RoHS SolderSleeve wire terminators	B-155
	■			150°C	SolderSleeve wire terminators	D-129, D-141
Shield Termination	■			125°C	SolderSleeve shield terminators	CWT
	■				SolderSleeve shield terminators	B-15x
	■				RoHS SolderSleeve shield terminators	B-155
	■				NAS1747 SolderSleeve shield terminators	ST18
	■			150°C	NAS1747 SolderSleeve shield terminators	ST63
	■				SAE-AS83519 SolderSleeve shield terminators	SO63
	■				M83519, SolderSleeve shield terminators	S01, S02 & SO3
	■			175°C	SolderSleeve shield terminators	S096
	■				SolderSleeve shield terminators - Bi-alloy	SO175
	■			200°C	SolderSleeve shield terminators	S200
	■			260°C	SolderSleeve shield terminators	B-023
Coax Cable Termination	■			125°C	SolderSleeve coaxial cable terminators	CWT
	■				RoHS, SolderSleeve coaxial cable terminators	B-155
	■			150°C	SolderSleeve coaxial cable terminators	B-02x & B-04x
	■				SolderSleeve coaxial cable terminators	D-181
	■				SolderSleeve coaxial PCB terminators	D-607 & B-046
Cable to Cable Splicing	■	■		150°C	SolderShield cable splices - Multi-conductor	D-150
	■	■			SolderShield cable splices - Coaxial	D-150, B-202
Connector Contacts	■			150°C	SolderTact for MIL-DTL-26482	D-602
	■				SolderTact for MIL-DTL-28748	D-602, D-610
	■				SolderTact for MIL-DTL-38999 Series I, III, IV	D-602, D-610
	■				SolderTact for MIL-DTL-38999 Series II	D-602
	■				SolderTact for Sub-miniature	D-602
Databus				200°C	Databus micro-couplers - MIL-STD-1553B	D-500

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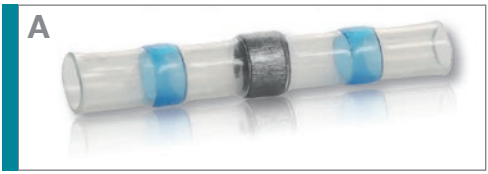
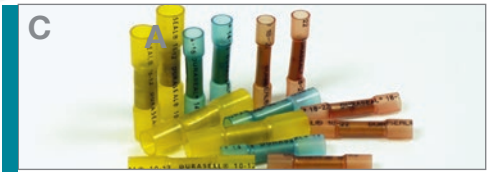


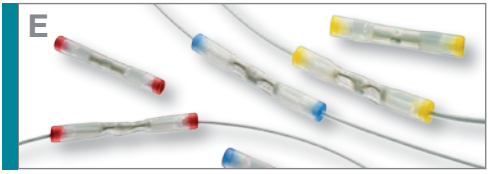
SolderSleeve Splicing Devices
CWT, B-155 and D-1744
For crimp free sealed wire to wire splicing. In a single step process they solder, insulate, encapsulate and strain-relieve wire to wire splices , in a wide range of wire sizes.

SolderGrip Closed End Connector
SGRS
Closed-end connector utilising a spiral copper coil that grips and compresses the conductors, allows pre-fluxed solder ring to flow to the centre of splicing area, resulting in a high-reliability, repeatable joint.

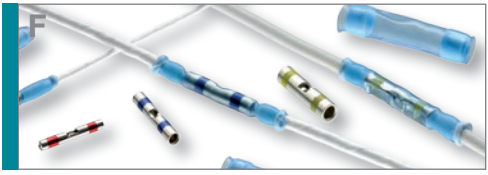


DuraSeal Heat-Shrinkable Crimp Splices
D-406
Designed for OEM harness fabricators, repair and maintenance, plus accessory installations. DuraSeal Nylon crimp splices provide watertight sealing and protection against corrosion, abrasion, and vibration.

MiniSeal Crimp Splices
D-436
Small, lightweight and low-profile MiniSeal high performance crimp splices, substantially reduce wire bundle size & weight, QPL listed to the MIL-S-81824 specification.



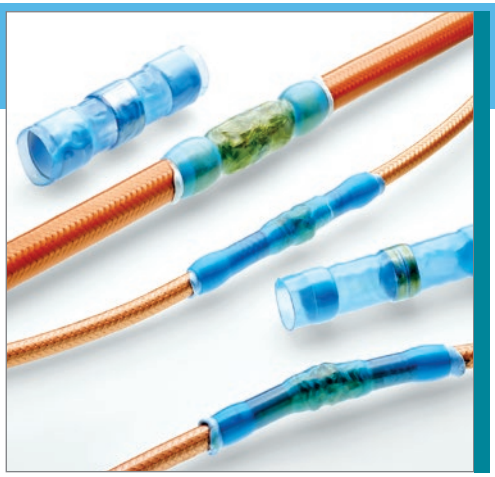
Cold Applied Splice
D-436-COLD
Simple one step immersion-resistant crimped in-line splice, that requires no heat. Ideal for Aerospace and Defence applications where performance and reliability is essential. With MIL-Spec approval.



200°C MiniSeal Crimp Splices
D-200
Small, lightweight, and low-profile MiniSeal high crimp splices, substantially reduce wire bundle size & weight, QPL listed to the MIL-S-81824 specification and are required by the MIL-W-5088 specification.

SolderSleeve®

Wire to Wire Splicing
Single Piece Solder Splice



SolderSleeve splicing devices which can be used to make sealed or unsealed splices in a single step they solder, insulate, encapsulate and strain relieve a wide range of wire sizes.

Features & Benefits

- Transparent PVDF (D-1744 Series) or Polyolefin (B-155 & CWT Series) sleeve provides encapsulation, inspectability, strain relief and insulation solution.
- Pre-fluxed solder preform provides a controlled soldering process.
- One piece design makes installation easy and lowers the installed cost.
- Thermo-chromic temperature indicator in the D1744 splices facilitates termination and inspection.

Specifications & Approvals

- CWT: UL E87681 and D-5023
- D-1744: NAS-1744 and RT-1404

Product Selection

Product Series	Minimum Wire Rating	Minimum Operating Temp'	Maximum Operating Temp'	Application Environment
CWT Series	85°C	-55°C	125°C	Splash-Proof
D-1744 Series	125°C	-55°C	150°C	Immersion Sealed
B-155	85°C	-55°C	125°C	RoHS Splash-Proof

Application 1:
If there is one size of wire per side and no more than two wires on either side:

- Determine wire gauge sizes for both sides of the splice being made.
- Determine number of wires (one or two wires) for each side of splice.
- Select part numbers from the appropriate table on the following two pages.

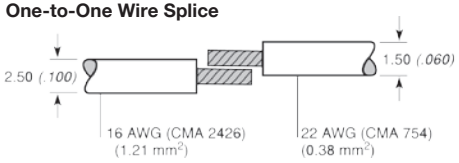
Application 2:
More than two wires on either side (or if you prefer sizes to work with CMA or mm^2 sizes):

- Turn to 'CMA/mm^2 Calculation' chart opposite to calculate the total cross section to be spliced.
- Use Splice Selection Guide to select sleeve recommended for that cross section

Notes:

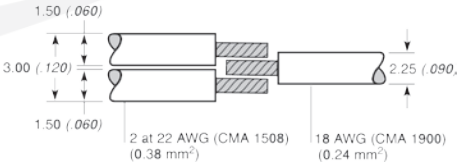
- While all combinations listed will provide satisfactory solder joints, the degree of strain relief obtained depends on the outer diameter of the wires being joined. Refer to Table D for the recommended size ranges for the sleeves.
- Wires 16 AWG (1.2mm^2) and larger, having more than 19 strands should be pre-tinned prior to splicing, to obtain the optimum solder joint quality.
- Part selection for wires 26 AWG (0.15mm^2) and smaller are also available, please contact us for further information or discuss particular needs.
- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector. See Application Equipment Section.

One-to-One Wire Splice



Total CMA = 3180
Total mm² =1.59
Correct part number selection from tables below (based on CMA/mm2 and nominal jacket wire OD) .
= CWT-9002, B-155-9002 or D-1744-02

Multiwire Splice



Total CMA = 3408
Total mm² =1.71
Correct part number selection from tables below (based on CMA/mm2 and nominal jacket wire OD) .
= CWT-9003, B-155-9003 or D-1744-03

CMA/mm² Calculation

To calculate the total circular mil or mm² area of the conductors to be terminated in a single splice, follow these steps:

1. Choose either CMA or mm² as your unit of measure for selection purposes and continue to use it for all your criteria.
2. List the CMA or mm² for each conductor that will go into the same splice (to assist you, refer to 'Size Selection Guide' table, which provides the CMA of typical conductors).
3. Add together the values thus listed, to obtain the total area.
4. From 'Splice Selection Guide' table below, select the part number recommended for the total CMA or mm² you have calculated.
5. Refer to the examples on this page for further clarification

Size Selection Guide

AWG	28	26	24	22	20	18	16	14	12
CMA	177	304	475	754	1216	900	2426	3831	5874
mm²	0.09	0.16	0.24	0.38	0.62	0.96	1.23	1.94	2.97

Splice Selection Guide

Product Series	Wire Jacket OD mm		CMA Combined Total		mm² Combined Total	
	Min.	Max.	Min.	Max.	Min.	Max.
CWT-9001 & B-155-9001	0.4	1.7	450	1500	0.3	0.8
CWT-9002 & B-155-9002	1.3	2.7	1250	3500	0.8	2.0
CWT-9003 & B-155-9003	1.8	4.5	2500	7200	2.0	4.0
CWT-9004 & B-155-9004	2.8	6.0	6100	19000	4.0	6.0
CWT-9005 & B-155-9005	3.2	7.0	12000	25000	6.0	10.0
D-1744-01	0.5	1.9	350	2000	-	-
D-1744-02	0.8	2.8	2000	4000	-	-
D-1744-03	1.3	4.6	4000	10000	-	-
D-1744-04	2.0	7.11	10000	13000	-	-

SolderSleeve®

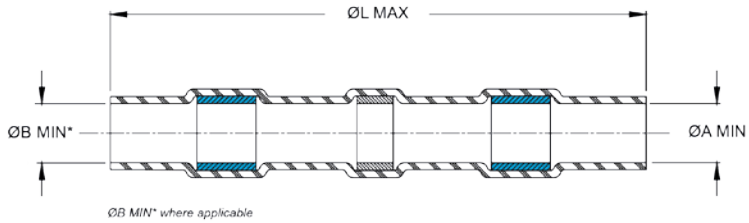
Wire to Wire Splicing
Single Piece Solder Splice

Material

Product Characteristics	Product Performance
Insulation (D-1744)	Radiation cross linked, heat shrinkable polyvinylidene fluoride
Insulation (CWT, B-155)	Radiation cross linked, heat shrinkable polyolefin
Solder and flux (D-1744)	Solder: Sn63 Pb37 Flux: ROL1 per ANSI-J-004
Solder and flux (CWT)	Solder: Sn50 Pb32 Cd18 Flux: ROM1 per ANSI-J-004
Solder and flux (B-155)	Solder: Sn42 Bi58 Flux: ROM1 per ANSI-J-004
Melt-able inserts (B-155, D-1744 & CWT)	Meltable thermoplastic

Typical Performance

Product Characteristics	Product Performance
Voltage drop	2.0 mV
Tensile strength	Exceeds strength of conductor
Dielectric strength	2.0 kV
Temperature rating (B-155, CWT)	-55°C to +125°C
Temperature rating (D-1744)	-55°C to +150°C
Insulation resistance	1000 megohms



Product Selection

Part Number Ref	ØL (mm)	ØA (mm)	ØB (mm)	Colour Code
CWT-9001 & B-155-9001	26.00	1.70	n/a	Clear
CWT-9002 & B-155-9002	42.00	2.70	n/a	Red
CWT-9003 & B-155-9003	42.00	4.50	n/a	Blue
CWT-9004 & B-155-9004	42.00	6.00	n/a	Yellow
CWT-9005 & B-155-9005	42.00	7.00	n/a	Grey
D-1744-01	29.70	1.90	2.40	n/a
D-1744-02	30.15	2.80	3.15	n/a
D-1744-03	29.60	4.60	5.10	n/a
D-1744-04	30.00	7.11	7.62	n/a

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CWT Series Selection Guide - Two Tables

End A Size & No. of Conductors		End B: Size & Number of Conductors							
		26 AWG		24 AWG		22 AWG		20 AWG	
		1	2	1	2	1	2	1	2
26 AWG	1	CWT-9001	CWT-9001	CWT-9001	CWT-9001	CWT-9001	CWT-9002	CWT-9002	CWT-9002
	2	CWT-9001	CWT-9001	CWT-9001	CWT-9002	CWT-9001	CWT-9002	CWT-9002	CWT-9002
24 AWG	1	CWT-9001	CWT-9001	CWT-9001	CWT-9001	CWT-9001	CWT-9002	CWT-9002	CWT-9002
	2	CWT-9001	CWT-9002	CWT-9001	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002
22 AWG	1	CWT-9001	CWT-9001	CWT-9001	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002
	2	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9003
20 AWG	1	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9003
	2	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9003	CWT-9003	CWT-9003
18 AWG	1	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9003
	2	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003
16 AWG	1	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9002	CWT-9003	CWT-9003	CWT-9003
	2	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003
14 AWG	1	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003
	2	CWT-9004	CWT-9004	CWT-9004	CWT-9004	CWT-9004	CWT-9004	CWT-9004	CWT-9004
12 AWG	1	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9004
	2	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005
10 AWG	1	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005

End A Size & No. of Conductors		End B: Size & Number of Conductors								
		18 AWG		16 AWG		14 AWG		12 AWG		10 AWG
		1	2	1	2	1	2	1	2	1
26 AWG	1	CWT-9002	CWT-9003	CWT-9002	CWT-9003	CWT-9003	CWT-9004	CWT-9003	CWT-9005	CWT-9005
	2	CWT-9002	CWT-9003	CWT-9002	CWT-9003	CWT-9003	CWT-9004	CWT-9003	CWT-9005	CWT-9005
24 AWG	1	CWT-9002	CWT-9003	CWT-9002	CWT-9003	CWT-9003	CWT-9004	CWT-9003	CWT-9005	CWT-9005
	2	CWT-9002	CWT-9003	CWT-9002	CWT-9003	CWT-9003	CWT-9004	CWT-9003	CWT-9005	CWT-9005
22 AWG	1	CWT-9002	CWT-9003	CWT-9002	CWT-9003	CWT-9003	CWT-9004	CWT-9003	CWT-9005	CWT-9005
	2	CWT-9002	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9004	CWT-9003	CWT-9005	CWT-9005
20 AWG	1	CWT-9002	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9004	CWT-9003	CWT-9005	CWT-9005
	2	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9004	CWT-9004	CWT-9005	CWT-9005
18 AWG	1	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9004	CWT-9004	CWT-9005	CWT-9005
	2	CWT-9003	CWT-9003	CWT-9003	CWT-9004	CWT-9003	CWT-9004	CWT-9004	CWT-9005	CWT-9005
16 AWG	1	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9003	CWT-9004	CWT-9004	CWT-9005	CWT-9005
	2	CWT-9003	CWT-9004	CWT-9003	CWT-9004	CWT-9004	CWT-9005	CWT-9004	CWT-9005	CWT-9005
14 AWG	1	CWT-9003	CWT-9003	CWT-9003	CWT-9004	CWT-9003	CWT-9004	CWT-9004	CWT-9005	CWT-9005
	2	CWT-9004	CWT-9004	CWT-9004	CWT-9005	CWT-9004	CWT-9005	CWT-9005	CWT-9005	CWT-9005
12 AWG	1	CWT-9004	CWT-9004	CWT-9004	CWT-9004	CWT-9004	CWT-9005	CWT-9004	CWT-9005	CWT-9005
	2	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005
10 AWG	1	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005	CWT-9005

B-155 Series SolderSleeve®

RoHS Wire to Wire Splicing
Single Piece Solder Splice

B-155 Series Selection Guide

RoHS compliant

End A Size & No. of Conductors		End B: Size & Number of Conductors							
		26 AWG		24 AWG		22 AWG		20 AWG	
		1	2	1	2	1	2	1	2
26 AWG	1	B-155-9001	B-155-9001	B-155-9001	B-155-9001	B-155-9001	B-155-9002	B-155-9002	B-155-9002
	2	B-155-9001	B-155-9001	B-155-9001	B-155-9002	B-155-9001	B-155-9002	B-155-9002	B-155-9002
24 AWG	1	B-155-9001	B-155-9001	B-155-9001	B-155-9001	B-155-9001	B-155-9002	B-155-9002	B-155-9002
	2	B-155-9001	B-155-9002	B-155-9001	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002
22 AWG	1	B-155-9001	B-155-9001	B-155-9001	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002
	2	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9003
20 AWG	1	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9003
	2	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9003	B-155-9003	B-155-9003
18 AWG	1	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9003
	2	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003
16 AWG	1	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9002	B-155-9003	B-155-9003	B-155-9003
	2	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003
14 AWG	1	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003
	2	B-155-9004	B-155-9004	B-155-9004	B-155-9004	B-155-9004	B-155-9004	B-155-9004	B-155-9004
12 AWG	1	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9004
	2	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005
10 AWG	1	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005

End A Size & No. of Conductors		End B: Size & Number of Conductors								
		18 AWG		16 AWG		14 AWG		12 AWG		10 AWG
		1	2	1	2	1	2	1	2	1
26 AWG	1	B-155-9002	B-155-9003	B-155-9002	B-155-9003	B-155-9003	B-155-9004	B-155-9003	B-155-9005	B-155-9005
	2	B-155-9002	B-155-9003	B-155-9002	B-155-9003	B-155-9003	B-155-9004	B-155-9003	B-155-9005	B-155-9005
24 AWG	1	B-155-9002	B-155-9003	B-155-9002	B-155-9003	B-155-9003	B-155-9004	B-155-9003	B-155-9005	B-155-9005
	2	B-155-9002	B-155-9003	B-155-9002	B-155-9003	B-155-9003	B-155-9004	B-155-9003	B-155-9005	B-155-9005
22 AWG	1	B-155-9002	B-155-9003	B-155-9002	B-155-9003	B-155-9003	B-155-9004	B-155-9003	B-155-9005	B-155-9005
	2	B-155-9002	B-155-9003	B-155-9002	B-155-9003	B-155-9003	B-155-9004	B-155-9003	B-155-9005	B-155-9005
20 AWG	1	B-155-9002	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9004	B-155-9003	B-155-9005	B-155-9005
	2	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9004	B-155-9004	B-155-9005	B-155-9005
18 AWG	1	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9004	B-155-9004	B-155-9005	B-155-9005
	2	B-155-9003	B-155-9003	B-155-9003	B-155-9004	B-155-9003	B-155-9004	B-155-9004	B-155-9005	B-155-9005
16 AWG	1	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9003	B-155-9004	B-155-9004	B-155-9005	B-155-9005
	2	B-155-9003	B-155-9003	B-155-9003	B-155-9004	B-155-9004	B-155-9005	B-155-9004	B-155-9005	B-155-9005
14 AWG	1	B-155-9003	B-155-9003	B-155-9003	B-155-9004	B-155-9003	B-155-9005	B-155-9004	B-155-9005	B-155-9005
	2	B-155-9004	B-155-9004	B-155-9004	B-155-9005	B-155-9004	B-155-9005	B-155-9005	B-155-9005	B-155-9005
12 AWG	1	B-155-9004	B-155-9004	B-155-9004	B-155-9004	B-155-9004	B-155-9005	B-155-9004	B-155-9005	B-155-9005
	2	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005
10 AWG	1	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005	B-155-9005

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D-1744 Selection Guide

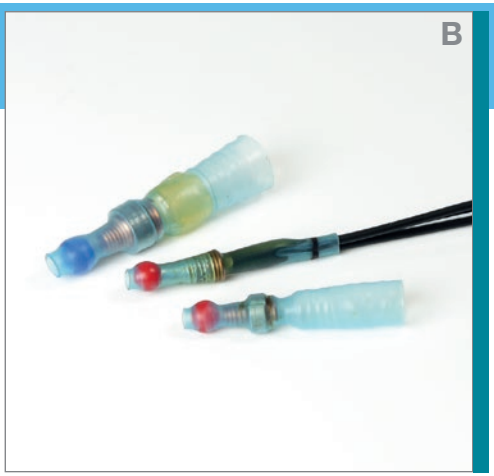
Side A Size & No. of Conductors		Side B: Size & Number of Conductors							
		26 AWG		24 AWG		22 AWG		20 AWG	
		1	2	1	2	1	2	1	2
26 AWG	1	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-02
	2	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-02	D-1744-01	D-1744-02
24 AWG	1	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-02
	2	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-02	D-1744-02	D-1744-02
22 AWG	1	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-01	D-1744-02	D-1744-01	D-1744-02
	2	D-1744-01	D-1744-02	D-1744-01	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-02
20 AWG	1	D-1744-01	D-1744-01	D-1744-01	D-1744-02	D-1744-01	D-1744-02	D-1744-02	D-1744-02
	2	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-03
18 AWG	1	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-03
	2	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03
16 AWG	1	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-02	D-1744-03
	2	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03
14 AWG	1	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03
	2	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-04
12AWG	1	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-04	D-1744-04
	2	D-1744-04	D-1744-04	D-1744-04	-	D-1744-04	-	-	-

Side A Size & No. of Conductors		Side B: Size & Number of Conductors							
		18 AWG		16 AWG		14 AWG		12 AWG	
		1	2	1	2	1	2	1	2
26 AWG	1	D-1744-02	D-1744-03	D-1744-02	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-04
	2	D-1744-02	D-1744-03	D-1744-02	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-04
24 AWG	1	D-1744-02	D-1744-03	D-1744-02	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-04
	2	D-1744-02	D-1744-03	D-1744-02	D-1744-03	D-1744-03	D-1744-03	D-1744-03	-
22 AWG	1	D-1744-02	D-1744-03	D-1744-02	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-04
	2	D-1744-02	D-1744-03	D-1744-02	D-1744-03	D-1744-03	D-1744-03	D-1744-03	-
20 AWG	1	D-1744-02	D-1744-03	D-1744-02	D-1744-03	D-1744-03	D-1744-03	D-1744-04	-
	2	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-04	D-1744-04	-
18 AWG	1	D-1744-02	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	-
	2	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-04	D-1744-03	-
16 AWG	1	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-04	D-1744-03	-
	2	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-04	D-1744-04	-
14 AWG	1	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-03	D-1744-04	D-1744-03	-
	2	D-1744-03	D-1744-04	D-1744-04	D-1744-04	D-1744-04	-	-	-
12AWG	1	D-1744-03	D-1744-03	D-1744-03	D-1744-04	D-1744-03	-	D-1744-04	-

SGRS Closed End Connector

SolderGrip®

Self Fixing Solder End



Features & Benefits

- PVDF insulation sleeve provides encapsulation, inspectability & strain relief.
- Spiral copper coil grips and compresses the conductors for the optimum solder connection.
- Pre-fluxed solder preform provides a controlled soldering process.
- The SGRS series has an adhesive insert to provide immersion sealing performance.
- One piece design.
- Accommodates a wide variety of conductor types, quantities and sizes.
- Colour coded for easy identification.

Solder & Flux Characteristics

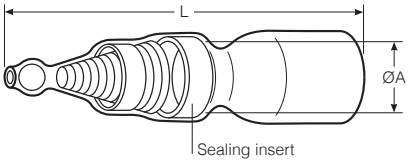
- Sn60 Pb40 with ROM 1flux per ANSI-J-STD-004

Specifications & Approvals

- UL CUL E87681
- RB-109

Part Number	Wire Range mm² (CMA)	Max. Current Rating	Length	Colour Code
SGRS-1	0.7 - 2.4 (1400 - 4800)	17 Amps	34.8mm	Green
SGRS-2	2.0 - 4.0 (4000 - 8000)	28 Amps	34.2mm	Red
SGRS-3	3.5 - 8.0 (7000 - 16000)	56 Amps	42.0mm	Blue
SGRS-4	7.5 - 12.0 (15000 - 24000)	84 Amps	41.5mm	Yellow

This product is also available as ‘Ring Terminals’, please see SGRT later in this section.



Product Characteristics	Product Performance
Voltage drop	<2.0mV
Tensile strength	Exceeds strength of individual conductors
Dielectric strength	2.0kV
Temperature rating	-55°C to +125°C
Insulation resistance after immersion	100 megaohms
Insulation performance	300 mbar (for specific combinations refer to RB-109)
Voltage rating	600V

Notes:

- To calculate mm² or CMA refer to page earlier in this section
- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

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D-406 Series

DuraSeal®

Heat Shrinkable, Crimp Splice

Automotive wiring repair and maintenance
Automotive accessory installations
Marine electronics
Fleet maintenance
Commercial wiring
OEM Harness assembly

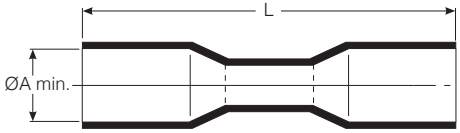
Features & Benefits

- Protects splices from water, condensation, salt and corrosion.
- Provides strain relief
- Protects against vibration in rugged environments
- Completely insulates and protects electrical connections
- Adhesive lining provides protection that is more reliable than conventional splices.

Specifications & Approvals

- UL CUL listed 9134, Fire E87681 (C)
- Lloyds listed, File 65 247 HH 02-93
- RB-107

Part Number		Conductor Size		Splice Dimension		Colour
Bulk	Boxed	AWG	mm²	AØ	L	
D-406-0001	D-406-0001CS100	22 - 18	0.50 - 1.00	3.7	31.5	Red
D-406-0002	D-406-0002CS100	16 - 14	1.50 - 2.50	4.6	31.5	Blue
D-406-0003	D-406-0003CS50	12 - 10	3.00 - 6.00	6.5	37.5	Yellow



Product Characteristics	Product Performance
Operating temperature	-55°C to +125°C
Shrink ratio	Approximately 2:1
Physical properties	Cut through resistance 31 kg
	Wire pull out Red 11.3 kg; Blue 22.7 kg; Yellow 27.2 kg
	No cracking after heat aging for 168h @ 160°C
Chemical Resistance	Solvent resistance: Isopropyl alcohol, trichloroethylene, gasoline, battery acid, diesel fuel, motor oil, antifreeze, brake fluid, 5% salt water
Electrical properties	Dielectric strength: 2500 Vac
	Insulation resistance: 1,000 MΩ at 100VDC

Notes:

- Bulk packs contain 1000 pieces for D-406-0001 & D-406-0002 and 500 pieces for D-406-0003.
- Boxes contain 100 pieces for D-406-0001 & D-406-0002, and 50 pieces for D-406-0003.
- Application tooling: Heat guns with the correct reflector added, together with crimp tools.

D-436 Series MiniSeal®

Wire to Wire Splicing
Heat Shrinkable, Crimp Splice

RoHS compliant

Used for wire splicing where size, weight and environmental sealing are critical. MiniSeal crimp splices consist of a plated copper crimp barrel and a separate sealing sleeve. They can be used on a combination of wires, from 1:1 to 10:10 (sealing inserts may be required).

Features & Benefits

- Immersion-resistant crimp splices
- Splices are smaller and lighter than comparable termination products.
- Transparent heat-shrinkable insulation provides protection & strain relief.
- Splice provides sealing to un-etched wire insulations, including Teflon®.
- Low total installation cost.
- Available as both 'Butt' (in-line) splice or 'Stub' (parallel) splice.

Specifications & Approvals

- SAE-AS-81824/1 for D-436-36/37/38
- MIL spec M8184/1

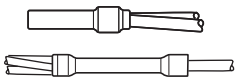
Table A: CMA of Typical Conductors

AWG	28	26	24	22	20	18	16	14	12
CMA	177	304	475	754	1216	1900	2426	3831	5874
mm2	0.09	0.16	0.24	0.38	0.62	0.96	1.23	1.94	2.97

Part Number	MIL Spec Equivalent	mm² Range	Wire Range	Colour Code
D-436-36	M81824/-1-1	0.15 - 0.75	26 - 20 AWG	Red
D-436-37	M81824/-1-2	0.39 - 1.34	20 -16 AWG	Blue
D-436-38	M81824/-1-3	0.95 - 3.37	16 - 12 AWG	Yellow

Product Selection Process

- Determine the type of splice required -
  Stub (parallel) or
  Butt (in-line).



- Which crimp barrel plating is required -
  Tin plating or
  Nickel plating
- Calculate the size of crimp barrel required. Using the table above, calculate the total cross section to be spliced by adding the circular mil area (CMA) or square millimetres (mm^2) of each wire.
- Stub Splice: Add the CMA or mm2 of all the wires together.
- Butt Splice: Calculate each side separately
- Select the colour code for the size crimp barrel required. Using the table above.
- Determine the type of sealing sleeve required, by ensuring wires fit in the holes of the sealing sleeve inserts.
- Select the part number. Turn to the MiniSeal part number selection tables over this page.
- Using the appropriate table, find the crimp barrel size range and the size and number of wires for your application. Then select the part number for the type required.
- Crimp barrels and sealing sleeves are available separately, please contact us for details.

Notes:

- Application tooling: Heat guns HL2010E and CV198X with the correct reflector added are recommended for the installation of these devices, together with crimp tool 1377. See Application Equipment Section.

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BUTT (in-line) Splice - Selection Guide

Part Number		Colour	Crimp Barrel Size Range		Internal Dimensions			
					End 1		End 2	
Tin Plated	Nickel Plated		CMA	mm²	Sealing Insert mm	Max. No. Wires	Sealing Insert mm	Max. No. Wires
D-436-36	D-436-82	Red	304-1510	0.15-0.75	2.16 Ø	2	2.16 Ø	2
D-436-37	D-436-83	Blue	1058-2680	0.39-1.34	2.79 Ø	2	2.79 Ø	2
D-436-38	D-436-84	Yellow	2375-6755	0.95-3.37	4.32 Ø	2	4.32 Ø	2
D-436-0110	D-436-85	Red	304-1510	0.15-0.75	2.36 Ø	6*	4.06 Ø	2
D-436-52	D-436-86	Blue	1058-2680	0.39-1.34	2.36 Ø	6*	4.06 Ø	2
D-436-53	D-436-87	Yellow	2375-6755	0.95-3.37	2.36 Ø	6*	4.06 Ø	2
D-436-0115	D-436-88	Red	304-1510	0.15-0.75	2.36 Ø	6*	2.36 Ø	6*
D-436-42	D-436-89	Blue	1058-2680	0.39-1.34	2.36 Ø	6*	2.36 Ø	6*
D-436-43	D-436-90	Yellow	2375-6755	0.95-3.37	2.36 Ø	6*	2.36 Ø	6*

* Denotes max 2 wires per hole of insert

STUB (parallel) Splice - Selection Guide

Part Number		Colour	Crimp Barrel Size Range		Internal Ø Dimensions			
					End 1		End 2	
Tin Plated	Nickel Plated		CMA	mm²	Sealing Insert	Max. No. Wires	Sealing Insert mm	Max. No. Wires
D-436-0128	D-436-0119	Red	304-1510	0.15-0.75	2.16	2	1.01	2
D-436-58	D-436-75	Blue	1058-2680	0.39-1.34	4.56	2	2.28	2
D-436-59	D-436-76	Yellow	2375-6755	0.95-3.37	4.56	2	2.28	2
D-436-60	D-436-77	Blue	1058-2680	0.39-1.34	2.03	10*	6.35	2
D-436-61	D-436-78	Yellow	2375-6755	0.95-3.37	2.03	10*	6.35	2

* Denotes max 2 wires per hole of insert

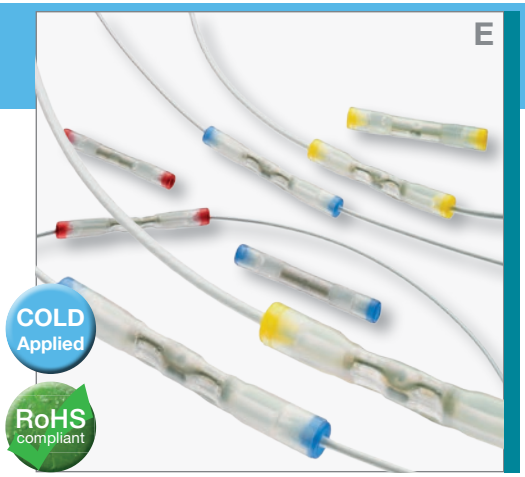
Product Characteristics	Product Performance
Insulation	Radiation crosslinked, heat-shrinkable polyvinylidene fluoride
Operating temperature	-55°C to +150°C
Dielectric strength	2500 V Max
Insulation resistance after immersion	5000 Mega-ohms
Voltage drop	6.9 mV @ 4.5A vs 8.1 mV for an equal length of wire
Physical properties	Tensile strength exceeds strength of spliced wire

Notes:

- The correct crimp tool AD-1377, must be used for proper installation of these devices.
- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

D-436-COLD Series

Cold Applied
Gel Sealed, Crimp Splice



Ideal for Aerospace and Defence applications where performance and reliability is essential. Designed to provide an immersion resistant in-line splice on 1:1 wires.

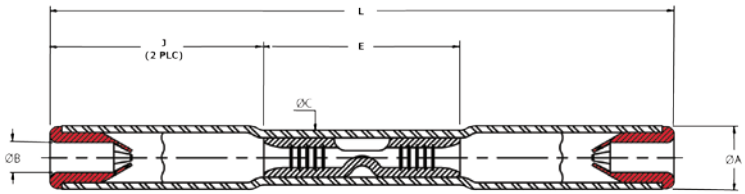
Features & Benefits

- Simple one-step termination and environmental protection.
- No heating required for installation - safe for use on fuelled aircraft.
- Reliability in a wide variety of environmental conditions.
- Prevent water ingress under permanent pressure/weight.
- Achieve environmental performance while maintaining a small profile and electrical performance.

Specifications & Approvals

- SAE-AMS-DTL-23053/8 insulation sleeve
- SAE-AS81824/12

Part Number	Conductor Size		Splice Dimensions (mm)					End Cap Colour Code
	AWG	mm²	AØ	BØ	E	J	L	
D-436-36-COLD	26 - 20	0.16 - 0.62	4.2	2.0	12.1	12.7	36.8	Red
D-436-37-COLD	18 - 16	0.96 - 1.23	5.1	2.9	14.3	11.8	37.7	Blue
D-436-38-COLD	14 - 12	1.94 - 2.97	5.9	3.8	14.3	11.8	37.7	Yellow



Product Characteristics	Product Performance
Operating temperature	-65°C to +150°C
Dielectric strength	2500 V Max
Insulation resistance after immersion	5000 Mega-ohms minimum
Altitude immersion	75,000 ft
Fluid resistance	MIL-L-7808, MIL-L-23699, MIL-PRF-5605 (Hydraulic), MIL-A-8243, MIL-C-25769 and MIL-T-5624 (JP-5)
Physical properties	Tensile strength exceeds strength of spliced wire

Notes:

- Application Tooling: Cold applied crimp tool AD-1381 or approved M22520/44-01 crimp tool, **must be** used for proper installation of these devices.

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D-200 Series

200°C MiniSeal®
Heat Shrinkable, Crimp Splice

Immersion resistant in-line nickel plated sealed crimp splices for 200°C applications. Developed for the growing needs of high temperature applications in the aerospace and defence industry. Provides a small and light, environmental-resistant splice, while meeting SAE-AS81824/1

Provides immersion resistant in-line splice on 1:1 wires for 26 AWG to 12AWG; nickel-plated conductors.

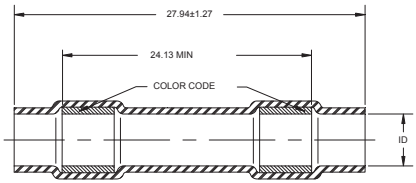
Features & Benefits

- Immersion-resistant crimp splices
- Small size and lightweight
- Provides sealing to unetched wire insulations.
- No need to stagger wire splices.

Specifications & Approvals

- SAE-AS-81824/1 (modified for 200°C applications with heat ageing and thermal shock test temperature of 200°C).

Part Number	MIL Spec Equivalent	Conductor Size		Insulation Sleeve ID Ø		Colour Code
		AWG	mm^2	Supplied	Recovered	
D-200-82	AS81824/1-1	26 - 20	0.16 - 0.62	2.16	0.64	Red
D-200-83	AS81824/1-2	20 - 16	0.62 - 1.23	2.79	0.64	Blue
D-200-84	AS81824/1-3	16 - 12	1.23 - 2.97	4.32	0.64	Yellow



Product Characteristics	Product Performance
Insulation	Radiation crosslinked, heat-shrinkable modified fluoropolymer
Operating temperature	-55°C to +200°C
Dielectric strength	2500 V Max
Insulation resistance after immersion	5000 Mega-ohms
Voltage drop	6.9 mV @ 4.5A vs 8.1 mV for an equal length of wire
Physical properties	Tensile strength exceeds strength of spliced wire

Notes:

- The correct crimp tool AD-1377, must be used for proper installation of these devices.
- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

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DuraSeal Crimps

RoHS compliant

Twist-on Soldergrip

DuraSeal Heat Shrinkable Nylon Crimps B-106 Series

DuraSeal terminals and disconnects protect against water, condensation, salt and corrosion. Their tough, heat-shrinkable nylon tubing resists abrasion and cut-through damage, provides strain relief and protects against vibration damage.

DuraSeal products are simple and quick to install using a crimp tool and a heat source. They accommodate a wide range of wire sizes and are colour coded for easy identification, yet are transparent for visual inspection of the finished splice.

SolderGrip Heat Shrinkable Twist-on SGRT

SolderGrip terminals and disconnects utilise a spiral copper coil that grips and compresses the conductors and allows a pre-fluxed solder ring to flow to the centre of the splicing area, resulting in a highly reliable, repeatable joint.

SolderGrip terminals use a durable polyvinylidene fluoride heat-shrinkable tubing that protects the electrical joint and provides insulation and strain relief.

- The SolderGrip technology is a reliable and repeatable means of terminating conductors time after time.
- Can terminate a variety of conductor types (solid and stranded) and platings.
- Multiple conductors can be successfully terminated in a single splice.

B-106 Series

DuraSeal®
Heat Shrinkable, Crimp Terminals

Crimp and Shrink

DuraSeal products insulate and protect electrical connections for numerous applications including;

- OEM wire harness fabrication
- Marine electronics
- Fleet maintenance
- Commercial wiring

RoHS compliant

Features & Benefits

- Resistance to moisture and abrasion.
- Strain relief.
- Protection from wire pull-out.
- Easy installation.
- Environmental protection.
- Colour coded for identification.
- Transparent for inspection.
- Adhesive lined.

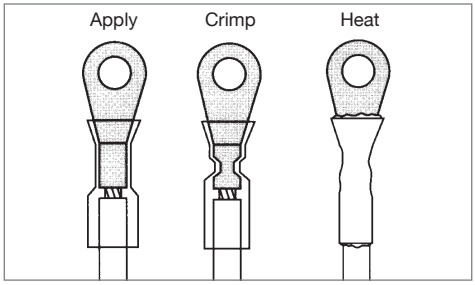
Specifications & Approvals

- UL and CUL 91J4, File E87681
- Lloyds listed, File 65 247 HH 02-93
- UL & CUL E157833 (for B106-3 & B106-4 series only)

Product Characteristics	Product Performance
Operating temperature	-55°C to +125°C
Minimum shrink temperature	180°C
Cut through resistance	31.7kg
Wire pull out after crimping and recovery	Red: 11.3 kg; Blue: 22.7 kg; Yellow: 27.2 kg
Chemical to ASTM D 3032, ESA-603D	Diesel fuel; Brake fluid; Antifreeze; 5% salt water; Motor oil
Chemical resistance	Isopropyl alcohol, trichloroethane, gasoline, battery acid
Dielectric withstand	2500V
Insulation resistance	10 Mega-ohms
Voltage rating	600 Volt max
Physical properties	Tensile strength exceeds strength of spliced wire

Product Installation Process

1 Select appropriate size crimp to suit application. For terminal and disconnect terminations, strip wire insulation to expose 6.5mm conductor.
2 Securely crimp using AD-1522 crimp tool for pre-insulated crimps.
3 Heat terminal or disconnect with appropriate heat gun and reflector until tubing recovers and adhesive flows. Avoid heating ring or fork metallic parts.



Notes:

- The correct crimp tool AD-1522, must be used for proper installation of these devices.
- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector. See Application Equipment Section.

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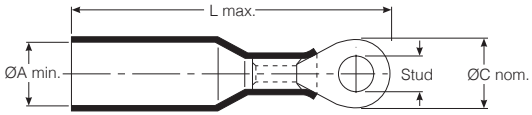
IMPORTANT Ordering Information:
The B-106 Series devices are available in both 'Boxed' and 'Bulk' packaging

- **BOXED** - Boxed packs of 100 pieces for Blue and Red devices are available by adding CS100 to the end of the part number. Whilst boxed packs of 50 pieces for the Yellow size are available by adding CS50 to the end of the part number as illustrated below.

  B-106-1601-CS100
  B-106-1403-CS50

- **BULK** - The part numbers on the following pages refer to devices supplied in bulk packs of 1,000 pieces for the Blue & Red sizes and 500 pieces for Yellow sizes.

Ring Terminals - Selection Guide



Part Number	Colour	Wire Dimensions			Terminal Dimensions			
		AWG	Insulation		Stud	Ø 'A' mm	'C' mm	'L' mm
B-106-1401	Red	22-18	3.81	1.40	M4	3.81	7.88	32.0
B-106-1501		22-18	3.81	1.40	M5	3.81	9.91	34.0
B-106-1601		22-18	3.81	1.40	M6	3.81	11.94	36.1
B-106-1801		22-18	3.81	1.40	M8	3.81	13.97	39.0
B-106-1991		22-18	3.81	1.40	M10	3.81	17.78	43.2
B-106-1402	Blue	16-14	4.45	2.00	M4	4.57	7.88	33.0
B-106-1502		16-14	4.45	2.00	M5	4.57	9.91	35.1
B-106-1602		16-14	4.45	2.00	M6	4.57	11.94	36.1
B-106-1802		16-14	4.45	2.00	M8	4.57	13.97	40.1
B-106-1992		16-14	4.45	2.00	M10	4.57	17.78	43.9
B-106-1403	Yellow	12-10	6.35	2.79	M4	6.35	7.88	38.1
B-106-1503		12-10	6.35	2.79	M5	6.35	9.91	40.1
B-106-1603		12-10	6.35	2.79	M6	6.35	11.94	41.2
B-106-1803		12-10	6.35	2.79	M8	6.35	13.97	45.2
B-106-1993		12-10	6.35	2.79	M10	6.35	17.78	47.0

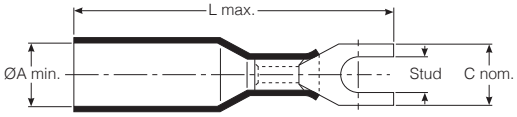
All dimensions in millimetres unless otherwise stated.

B-106 Series

DuraSeal®

Heat Shrinkable, Crimp Terminals

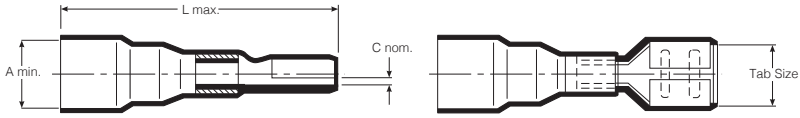
Fork Terminals - Selection Guide



Part Number	Colour	Wire Dimensions			Terminal Dimensions			
		AWG	Max Ø	Min Ø	Stud	Ø 'A' mm	'C' mm	'L' mm
B-106-2401	Red	22-18	3.81	1.40	M4	3.81	7.87	32.0
B-106-2402	Blue	16-14	4.45	2.00	M4	4.57	7.87	35.0
B-106-2403	Yellow	12-10	6.35	2.79	M4	6.35	7.87	38.1
B-106-2502	Blue	16-14	4.45	2.00	M5	4.57	9.91	35.0
B-106-2503	Yellow	12-10	6.35	2.79	M5	6.35	9.91	40.2

All dimensions in millimetres unless otherwise stated.

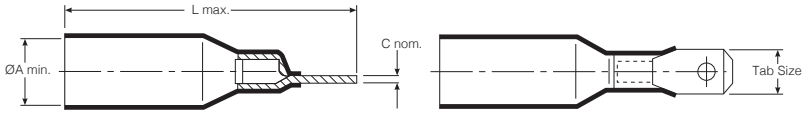
Push-on Terminals - Selection Guide



Part Number	Colour	Wire Dimensions			Terminal Dimensions			
		AWG	Max Ø	Min Ø	Tab Size	Ø 'A' mm	'C' mm	'L' mm
B-106-3631	Red	22-18	3.81	1.40	6.35	3.81	0.81	30.5
B-106-3632	Blue	16-14	4.45	2.00	6.35	4.57	0.81	32.0
B-106-3633	Yellow	12-10	6.35	2.79	6.35	6.35	0.81	33.0
B-106-3281	Red	22-18	3.81	1.40	2.79	3.81	0.51	22.9
B-106-3481	Red	22-18	3.81	1.40	4.75	3.81	0.51	30.5

All dimensions in millimetres unless otherwise stated.

Tab Terminals - Selection Guide



Part Number	Colour	Wire Dimensions			Terminal Dimensions			
		AWG	Max Ø	Min Ø	Tab Size	Ø 'A' mm	'C' mm	'L' mm
B-106-4631	Red	22-18	3.81	1.40	6.35	3.81	0.81	30.5
B-106-4632	Blue	16-14	4.45	2.00	6.35	4.57	0.81	32.0

All dimensions in millimetres unless otherwise stated.

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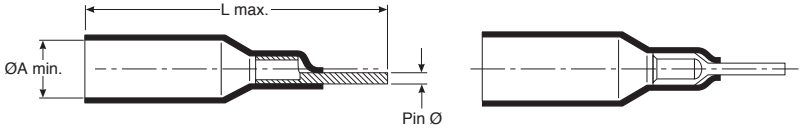
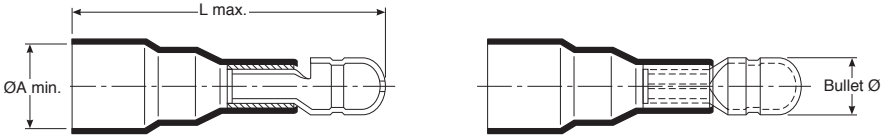
Pin Terminals - Selection Guide



Part Number	Colour	Wire Dimensions			Terminal Dimensions			
		AWG	Max Ø	Min Ø	Pin Ø	Ø 'A' mm	-	'L' mm
B-106-6201	Red	22-18	3.81	1.40	2.00	3.81	-	31.0

All dimensions in millimetres unless otherwise stated.

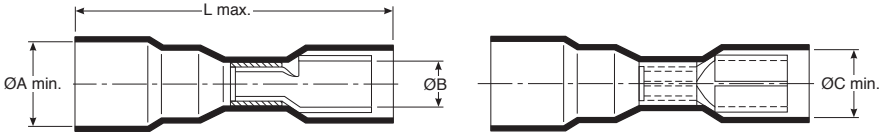
Bullet Terminals (Male) - Selection Guide



Part Number	Colour	Wire Dimensions			Terminal Dimensions			
		AWG	Max Ø	Min Ø	Bullet	Ø 'A' mm	-	'L' mm
B-106-7401	Red	22-18	3.81	1.40	3.81	3.81	-	33.5
B-106-7502	Blue	16-14	4.45	2.00	5.08	4.57	-	34.5

All dimensions in millimetres unless otherwise stated.

Bullet Terminals (Female) - Selection Guide



Part Number	Colour	Wire Dimensions			Terminal Dimensions			
		AWG	Max Ø	Min Ø	Bullet	Ø 'A' mm	'C' mm	'L' mm
B-106-8401	Red	22-18	3.81	1.40	3.81	3.81	5.59	30.5
B-106-8502	Blue	16-14	4.45	2.00	5.08	4.57	6.10	32.5

All dimensions in millimetres unless otherwise stated.

SGRT Series

SolderGrip®
Heat Shrinkable, Self-fixing Terminal

Twist and Heat Termination

For terminating multiple wires to terminals.

Features & Benefits

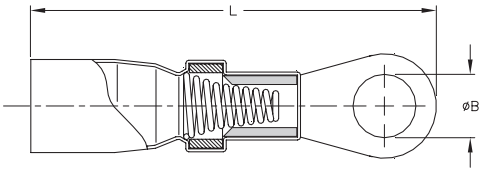
- Transparent insulation sleeve provides encapsulation, inspectability & strain relief.
- Spiral copper coil grips and compresses the conductors for optimum solder connection.
- Pre-fluxed solder preform provides a controlled soldering process.
- One piece design for easy installation.
- Accommodates a wide variety of conductor types, quantities, sizes and plating types unmatched by other termination techniques.

Specifications & Approvals

- MIL-T-7928G
- RB-120

Part Number	Stud Size	Wire Range		Max. Bundle	Max. Rating	Length
	Ø 'B' mm	CMA	mm²	Ø mm	Amps	mm
SGRT-1-02	2.4	1400 - 5000	0.7 - 2.5	4.1	12.5	38.0
SGRT-2-03	3.8	2400 - 6000	1.2 - 3.0	5.0	15.0	38.0
SGRT-2-04	4.3	2400 - 6000	1.2 - 3.0	5.0	15.0	38.0
SGRT-2-05	5.5	2400 - 6000	1.2 - 3.0	5.0	15.0	38.0
SGRT-2-06	6.5	2400 - 6000	1.2 - 3.0	5.0	15.0	38.0
SGRT-3-06	6.5	5000 - 13200	2.5 - 6.6	6.5	33.0	44.5
SGRT-3-08	8.4	5000 - 13200	2.5 - 6.6	6.5	33.0	51.0
SGRT-4-06	6.5	12000 - 22400	6.0 - 11.2	9.0	56.0	44.5
SGRT-4-08	8.5	12000 - 22400	6.0 - 11.2	9.0	56.0	51.0

Product Characteristics	Product Performance
Insulation	Radiation crosslinked, heat-shrinkable polyvinylidene fluoride
Solder and Flux	Sn60 Pb40 with RA flux
Temperature Rating	-55°C to +150°C



Notes:

- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

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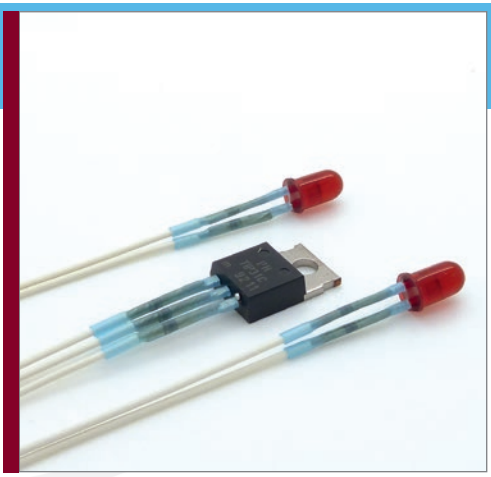
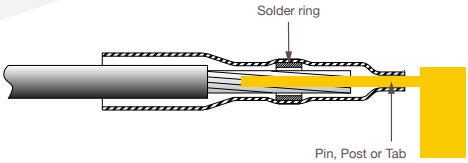




Easy One-Step SolderSleeve® Connecting Wire to Pin, Post or Tab Contacts

Each terminator consists of heat-shrinkable sleeve containing pre-fluxed solder preform. To install simply position over the wire/pin and apply heat. The sleeve will shrink and the solder will melt and flow, resulting in a perfectly soldered, insulated and strain relieved termination.

On connectors where there are several pins to be terminated it is possible to position and recover an entire row of solder sleeves in one go. Recommended for use with most connector pins/posts/tabs applications such as LED's, switches, multiple row/pin connectors

Designed for applications with temperatures up to 150°C. SolderSleeve terminators are also available on carrier tape, spaced precisely to match connector terminal spacing, enabling the termination of an entire row of wires at any one time.

SolderSleeve Terminators
CWT and B155 Series
Offers performance up to +125°C, utilising cross linked, heat-shrinkable polyolefin insulation.

SolderSleeve Terminators
D-129 and D-141 Series
Offers performance up to +150°C utilising cross linked, heat-shrinkable polyvinylidene fluoride insulation.

CWT / B155 / D1xx Series

SolderSleeve®

Wire Termination to Pin, Post & Tabs

Only B155-150X RoHS compliant

Used for discrete terminating of wires to component terminals, such as motor tabs, connector pins or switch terminals.

Features & Benefits

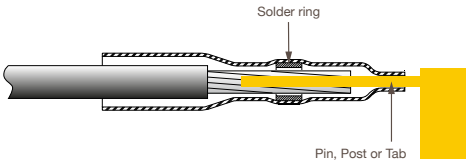
- Transparent insulation sleeve provides encapsulation, strain relief and insulation with inspectability.
- Pre-fluxed solder preform provides controlled soldering process.
- One-piece design provides easy installation and low installed cost.
- A tape carrier option provides convenience and ease of installation.
- UL and CUL recognised.

Specifications & Approvals

- UL and CUL E87681
- D-5023 and RT-1404
- B-155 series RoHS compliant

Material		
Insulation for D-129 and D-141	Radiation crosslinked, heat-shrinkable polyvinylidene fluoride	
Insulation for CWT and B155 Series	Radiation crosslinked, heat-shrinkable polyolefin	
Solder and flux for D-129 and D-141	Sn63 Pb37	Flux: ROM 1 per ANSI-J-004 [RMA flux]
Solder and flux for B155	Sn42Bi58	Flux: ROM 1 per ANSI-J-004 [RA flux]
Solder and flux for CWT-1500 Series	Sn50 Pb32 Cd18	Flux: ROM 1 per ANSI-J-004 [RA flux]

Typical Performance	
Temperature rating for CWT / B155 Series	-55°C to +125°C
Temperature rating for D-129 and D-141	-55°C to +150°C
Voltage drop	2.0 mV
Tensile strength	Exceeds strength of conductor
Dielectric strength	2.0 kV
Insulation resistance	1000 M ohms



Notes:

- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

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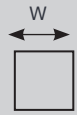
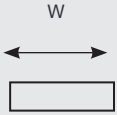
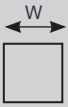
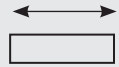
CWT / B155 / D1xx Series

SolderSleeve®

Wire Termination to Pin, Post & Tabs

Part Number		Wire Size	Terminal Characteristics		
		AWG	Dimensions mm	Shape	
CWT-1501	B155-1501	24	W = up to 0.63		Pin
CWT-1502	B155-1502	20			
CWT-1501	B155-1501	24	W = 0.63 to 0.89		
CWT-1502	B155-1502	22			
CWT-1503	B155-1503	20			
CWT-1502	B155-1502	24 - 22	W= 0.89 to 1.14		Post
CWT-1503	B155-1503	20 - 18			
CWT-1503	B155-1503	24 - 22	W = 1.14 to 1.52		
CWT-1504	B155-1504	20 - 18			
CWT-1501	B155-1501	24 - 20	W= up to 1.52		Tab
CWT-1502	B155-1502	24 - 18	W = 1.27 to 2.28		
CWT-1503	B155-1503	24 - 18	W = 1.77 to 2.79		
CWT-1504	B155-1504	24 - 18	W = 2.54 to 3.8		
CWT-1505	B155-1505	22 - 16	W = 2.28 to 4.7		

Part Number	Wire Size	Terminal Characteristics		
	AWG	Dimensions mm	Shape	
D-141-30*	30 - 26	W = up to 0.61		Pin
D-141-07*	24 - 22			
D-141-31*	20	W = 0.63 to 0.81		
D-141-56	24 - 20	W = 0.76 to 1.27		Post
D-129-05*		W = up to 1.52		
D-129-03*	24 - 20	W = 1.27 to 2.28		Tab
D-129-0043		W = 2.28 to 3.55		

* Denotes available on tape carrier version, please contact us for details.

Notes:

- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

Shield Termination

SolderSleeve®

Heat Shrinkable, Shield termination

RoHS compliant

Only B-155, SO96, SO175 and S200X RoHS compliant

SolderSleeve® shield grounding terminators provide an environmentally sealed, insulated & encapsulated solder connection for a variety of applications. Reliable, versatile and easy to install, resulting in lower installed costs.

SolderSleeve terminators are designed for a wide variety of temperature applications ranging from -65°C to +200°C.

Features & Benefits

- Transparent insulation sleeve provides encapsulation, inspectability & strain relief.
- Pre-fluxed solder preform provides a controlled soldering process.
- One piece design.
- Optional pre-installed ground leads provide convenience & ease installation.
- Quality control temperature indicators.

Specifications & Approvals

- UL and CUL E87681
- NAS 1747
- SAE-AS83519/1 & /2

No Temperature Indicator Versions

CWT Series, entry level version

B-150 and B-151 Series, high performance version of CWT, low fire hazard applications.

B-155 Series, RoHS compliant, lead free low fire hazard and UL compliant.

ST18 and ST63***** offers a high degree of environmental protection and meets NAS-1747

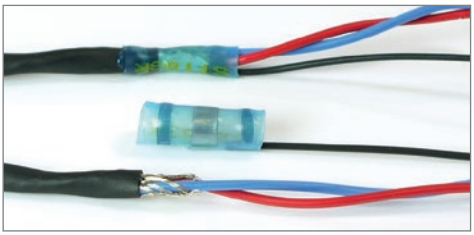
B-023 Series, high temperature terminator.

Thermo-chromic Versions

Contain a temperature indicator that exhibits a colour change when temperature is achieved.

SO1**, SO2** and SO3 Series, terminators with thermal indicator, designed for systems operating up to 150ºC.

SO96*** Series, With grounding lead or braid strap option.



Bi-alloy Versions

Contain a temperature indicator ring, encircling the solder preform that melts to indicate when the wetting temperature is released.

SO63* and SO175*****# Series, With grounding lead or braid strap option.

S200**** Series, with grounding lead or braid strap option, operating up to 200ºC and RoHS compliant.

Notes:

*	Meets performance requirements of SAE-AS83519 and NAS 1747 supplied with Bi Alloy temperature indicator.
**	Qualified to SAE-AS83519, supplied with thermo-chromic temperature indicator.
***	Meets performance requirements of SAE-AS83519 and NAS 1747, supplied with thermo-chromic temperature indicator.
****	Meets performance requirements of SAE-AS83519 and NAS 1747, supplied with Bi-Alloy temperature indicator.
*****	Qualified to NAS 1747.
#	514.1920/99 Aerospatiale Matra.

Product Series Selection Guide

Product Series	System Operating Temp.		Cable Rating	Pre-installed Lead	Temperature Indicator	Application Environment
	Min	Max.	Min.	Optional	Type	
CWT	-55°C	125°C	85°C	Yes	None	Commercial grade splash proof
B-150	-55°C	125°C	85°C	No	None	Marine/RMT grade, low fire hazard
B-151	-55°C	125°C	85°C	Yes	None	Marine/RMT grade, low fire hazard
B-155	-55°C	125°C	85°C	Yes	None	RoHS compliant version of CWT
ST18	-55°C	125°C	105°C	No	None	Defence grade NAS approved
ST63	-55°C	150°C	125°C	Yes	None	Defence grade NAS approved
SO63	-55°C	150°C	125°C	Yes & Braid	Bi-Alloy	Defence grade, immersion sealing
SO1	-55°C	150°C	125°C	No	Thermo-chromic	Mil-Spec, immersion sealing
SO2	-55°C	150°C	125°C	Yes	Thermo-chromic	Mil-Spec, immersion sealing
SO3	-55°C	150°C	125°C	Braid	Thermo-chromic	Immersion sealing
SO96	-55°C	175°C	150°C	Yes & Braid	Thermo-chromic	Defence grade, immersion sealing
SO175	-55°C	175°C	175°C	Yes & Braid	Bi-Alloy	Defence grade, immersion sealing
S200	-55°C	200°C	150°C	Yes & Braid	Bi-Alloy	Defence grade, immersion sealing
B-023	-65°C	260°C	175°C	No	None	Defence grade

Product Characteristics Selection Guide

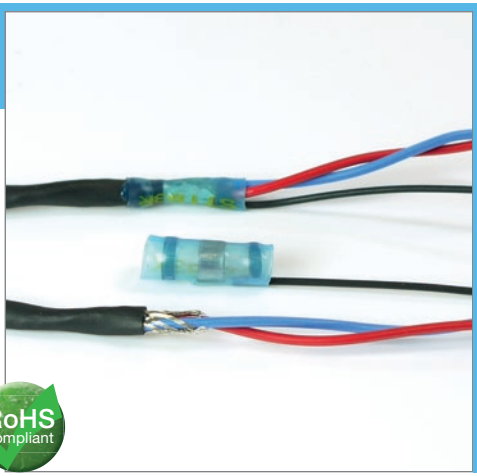
	Product Range	Characteristic
Insulation	S200	Heat-shrinkable, modified fluoropolymer
	SO & ST Series	Heat-shrinkable, polyvinylidene fluoride
	B-150, B-151, CWT	Heat-shrinkable, polyolefin
	BO23	Heat-shrinkable TFE
Solder and Flux	SO63, ST63, SO1/2/3	Solder: Sn63 Pb37 Flux: ROL 1
	S200, SO96, SO175	Solder: Sn96 Ag4 Flux: ROM 1
	B-155	Solder: Sn42 Bi58 Flux: ROM 1
	CWT, B-15X, ST18	Solder: Sn50 Pb32 Cd18 Flux: ROM 1
	BO23	Solder: Pb93 Sn5 Ag2 Flux: ROM 1
Ground Lead	B-155, CWT	XL polyethylene
	B-150, B-151	Zerohal (100G)
	S200 Series	MIL-C-22759/91 or /87
	SO, SO175 Series	MIL-W-22759/32 or /41

Typical Performance	
Voltage drop	2.5 mV
Tensile strength	Exceeds strength of ground lead
Dielectric strength	1.0 kV immersed
Insulation resistance	1000 Mega-ohms

Shield Termination

SolderSleeve®

Heat Shrinkable, Shield termination



RoHS compliant

Only B-155, SO96, SO175 and S200X RoHS compliant

Product Selection Process

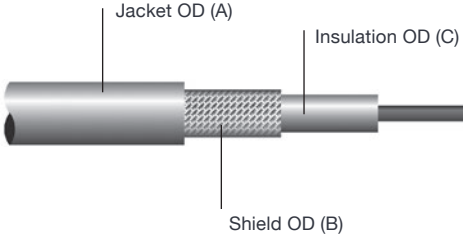
1. Select product series from the Product Series Selection Guide on previous page.
2. Determine cable dimensions for Jacket OD and Shield OD.
3. Optional: Select pre-installed wire lead type from the table below.
4. Select part number from the product selection tables on the following pages.

Pre-installed Lead Description

Product Series	Approval	Type	Plating	AWG	Length Min.	Colour
S200	SAE-AS83519	M22759/91	Silver	22	150mm	White
ST18, ST63	NAS 1747	55A0111	Tin	20-26	150mm	White/Black
SO63	SAE-AS83519	55A0111	Tin	20-26		
S02	M83519	55A0111	Tin	20-26		
SO96, SO175	SAE-AS83519	55A0813	Nickel	22		
B-151	LFH	100G0111	Tin	18	150mm	White
B-155	RoHS	XL polyethylene	Tin	22	150mm	White & Green
CWT	Commercial	XL polyethylene	Tin	22		
SO63, SO96, SO175	SAE-AS83519	Braid Strap	Nickel	22	150mm	Un-insulated
SO3	Commercial	Braid Strap	Tin/Nickel	22		
S200	SAE-AS83519	Braid Strap	Nickel	22		

Product Selection Tables:

Please see the following tables for part number cross reference for given size of cable jacket Ø (A); Shield Ø (B) and Insulation Ø (C). Please contact us for more information or advice on correct product if required.



Note:

- Heat guns are recommended for the installation of all these devices on the following pages: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

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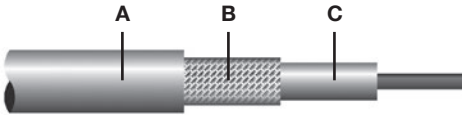


CWT Series Selection Guide - 125°C Rated Commercial Applications

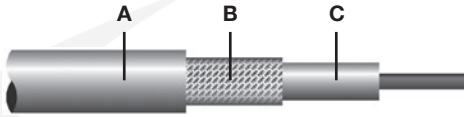
Cable Diameters			Ordering Description		
A	B	C	No Lead	Pre-installed Lead	
mm	mm	mm		22 AWG White	22 AWG Green
1.70	0.9	0.4	CWT-3801	-	-
1.95	1.1	0.6	CWT-3802	-	-
2.70	1.8	1.3	CWT-3803	CWT-3803-W1	CWT-3803-W2
4.50	2.3	1.8	CWT-3805	CWT-3805-W1	CWT-3805-W2
6.00	3.3	2.8	CWT-3806	CWT-3806-W1	CWT-3806-W2
7.00	3.7	3.2	CWT-3807	CWT-3807-W1	CWT-3807-W2
8.70	4.2	3.7	CWT-3809	CWT-3809-W1	CWT-3809-W2
9.70	6.8	6.0	CWT-3810	-	-
10.70	7.1	6.6	CWT-3811	-	-
13.00	8.9	8.4	CWT-3813	-	-

S03 Series Selection Guide - 150°C Rated, Thermo-chromic Indicator, Commercial Applications

Cable Diameters			Ordering Description	
A	B	C	Pre-installed Braid Strap	
mm	mm	mm	Tin Plated	Nickel Plated
1.95	0.90	0.50	S03-01-R	S03-06-R
2.70	1.40	0.75	S03-02-R	S03-07-R
4.30	2.15	1.25	S03-03-R	S03-08-R
6.00	3.30	1.80	S03-04-R	S03-09-R
7.00	4.30	2.50	S03-05-R	S03-10-R

B-155 and B-15X

Shield Termination SolderSleeve®
Heat Shrinkable, Shield termination



B-155 Series - 125°C Rated

RoHS compliant

LFH Low Fire Hazard

Cable Diameters			Ordering Description		
A	B	C	No Lead	Pre-installed Lead	
mm	mm	mm		22 AWG Green	22 AWG White
1.70	0.9	0.4	B-155-3801	-	-
1.95	1.1	0.6	B-155-3802	-	-
2.50	1.50	1.0	B-155-03	B-155-03-35-22-5	B-155-03-35-22-9
4.30	2.00	1.5	B-155-05	B-155-05-35-22-5	B-155-05-35-22-9
6.00	3.30	2.8	B-155-06	B-155-06-35-22-5	B-155-06-35-22-9
6.40	3.30	2.8	B-155-07	B-155-07-35-22-5	B-155-07-35-22-9
8.70	4.50	4.0	B-155-09	B-155-09-35-22-5	B-155-09-35-22-9
10.00	7.50	4.0	B-155-11	B-155-11-35-22-5	B-155-11-35-22-9
13.00	7.00	6.5	B-155-13	B-155-13-35-22-5	B-155-13-35-22-9

B-15X Series - 125°C Rated Low Fire Hazard

LFH Low Fire Hazard

Cable Diameters			Ordering Description	
A	B	C	No Lead	Pre-installed Lead
mm	mm	mm		18 AWG White
3.0	1.5	1.0	B-150-03	-
4.8	2.0	1.5	B-150-05	B-151-05
7.3	3.3	2.8	B-150-07	B-151-07
11.5	4.5	4.0	B-150-11	B-151-11
15.1	7.0	6.5	B-150-13	B-151-13
18.0	9.0	8.0	B-150-17	B-151-17
23.5	12.0	11.0	B-150-23	-
34.0	19.0	17.0	B-150-33	-

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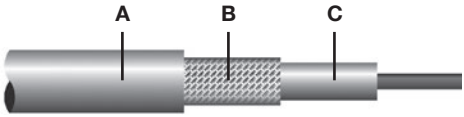


ST18 Series - 125°C Rated, NAS 1747 Approved

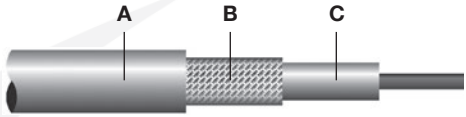
Cable Diameters			Ordering Description				
A	B	C	No Lead	Pre-installed Lead (White/Black)			
mm	mm	mm		20 AWG	22 AWG	24 AWG	26 AWG
2.65	0.90	0.5	ST18-1-00	ST18-1-55-20-90	ST18-1-55-22-90	ST18-1-55-24-90	ST18-1-55-26-90
3.65	1.40	0.75	ST18-2-00	ST18-2-55-20-90	ST18-2-55-22-90	ST18-2-55-24-90	ST18-2-55-26-90
5.08	2.15	1.25	ST18-3-00	ST18-3-55-20-90	ST18-3-55-22-90	ST18-3-55-24-90	ST18-3-55-26-90
6.45	3.30	1.80	ST18-4-00	ST18-4-55-20-90	ST18-4-55-22-90	ST18-4-55-24-90	ST18-4-55-26-90
7.60	4.30	2.50	ST18-5-00	ST18-5-55-20-90	ST18-5-55-22-90	ST18-5-55-24-90	ST18-5-55-26-90

ST63 Series - 150°C Rated NAS 1747 Approved

Cable Diameters			Ordering Description				
A	B	C	No Lead	Pre-installed Lead (White/Black)			
mm	mm	mm		20 AWG	22 AWG	24 AWG	26 AWG
2.65	0.90	0.5	ST63-1-00	ST63-1-55-20-90	ST63-1-55-22-90	ST63-1-55-24-90	ST63-1-55-26-90
3.65	1.40	0.75	ST63-2-00	ST63-2-55-20-90	ST63-2-55-22-90	ST63-2-55-24-90	ST63-2-55-26-90
5.08	2.15	1.25	ST63-3-00	ST63-3-55-20-90	ST63-3-55-22-90	ST63-3-55-24-90	ST63-3-55-26-90
6.45	3.30	1.80	ST63-4-00	ST63-4-55-20-90	ST63-4-55-22-90	ST63-4-55-24-90	ST63-4-55-26-90
7.60	4.30	2.50	ST63-5-00	ST63-5-55-20-90	ST63-5-55-22-90	ST63-5-55-24-90	ST63-5-55-26-90

SO1 and SO2

Shield Termination SolderSleeve®
Heat Shrinkable, Shield termination



S01 & S02 Series - 150ºC Rated, Thermo-chromic Indicator
M83519 Qualified Product Listing Cross Reference

Cable Diameters			Ordering Description					
A	B	C	No Lead		Pre-installed Lead (White/Black)			
mm	mm	mm			20 AWG		22 AWG	
1.95	0.90	0.50	S01-01-R	M83519/1-1	S02-01-R	M83519/2-1	S02-06-R	M83519/2-6
2.70	1.40	0.75	S01-02-R	M83519/1-2	S02-02-R	M83519/2-2	S02-07-R	M83519/2-7
4.30	2.15	1.25	S01-03-R	M83519/1-3	S02-03-R	M83519/2-3	S02-08-R	M83519/2-8
6.00	3.30	1.80	S01-04-R	M83519/1-4	S02-04-R	M83519/2-4	S02-09-R	M83519/2-9
7.00	4.30	2.50	S01-05-R	M83519/1-5	S02-05-R	M83519/2-5	S02-10-R	M83519/2-10

... Continued

Cable Diameters			Ordering Description			
A	B	C	Pre-installed Lead (White/Black)			
mm	mm	mm	24 AWG		26 AWG	
1.95	0.90	0.50	S02-11-R	M83519/2-11	S02-16-R	M83519/2-16
2.70	1.40	0.75	S02-12-R	M83519/2-12	S02-17-R	M83519/2-17
4.30	2.15	1.25	S02-13-R	M83519/2-13	S02-18-R	M83519/2-18
6.00	3.30	1.80	S02-14-R	M83519/2-14	S02-19-R	M83519/2-19
7.00	4.30	2.50	S02-15-R	M83519/2-15	S02-20-R	M83519/2-20

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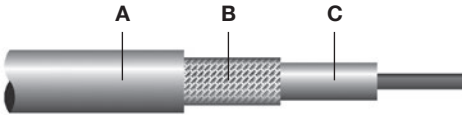


SO63 Series - 150°C Rated, Bi-alloy Indicator SAE-AS83519 Approved

Cable Diameters			Ordering Description					
A	B	C	No Lead	Pre-installed Lead (White/Black)				Braid
mm	mm	mm		20 AWG	22 AWG	24 AWG	26 AWG	Nickel
1.95	0.90	0.50	SO63-1-00	SO63-1-55-20-90	SO63-1-55-22-90	SO63-1-55-24-90	SO63-1-55-26-90	SO63-1-01
2.70	1.40	0.75	SO63-2-00	SO63-2-55-20-90	SO63-2-55-22-90	SO63-2-55-24-90	SO63-2-55-26-90	SO63-2-01
4.30	2.15	1.25	SO63-3-00	SO63-3-55-20-90	SO63-3-55-22-90	SO63-3-55-24-90	SO63-3-55-26-90	SO63-3-01
6.00	3.30	1.80	SO63-4-00	SO63-4-55-20-90	SO63-4-55-22-90	SO63-4-55-24-90	SO63-4-55-26-90	SO63-4-01
7.00	4.30	2.50	SO63-5-00	SO63-5-55-20-90	SO63-5-55-22-90	SO63-5-55-24-90	SO63-5-55-26-90	SO63-5-01

SO96 Series - 175°C Rated, Thermo-chromic Indicator SAE-AS83519 Approved

RoHS compliant

Cable Diameters			Ordering Description		
A	B	C	No Lead	Pre-installed Lead	Braid Strap
mm	mm	mm		22 AWG White/Black	Nickel Plated
1.95	0.90	0.50	SO96-1-00	SO96-1-55-22-90	SO96-1-01
2.70	1.40	0.75	SO96-2-00	SO96-2-55-22-90	SO96-2-01
4.30	2.15	1.25	SO96-3-00	SO96-3-55-22-90	SO96-3-01
6.00	3.30	1.80	SO96-4-00	SO96-4-55-22-90	SO96-4-01
7.00	4.30	2.50	SO96-5-00	SO96-5-55-22-90	SO96-5-01

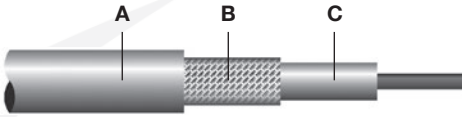
SO175 Series - 175°C Rated, Bi-alloy Indicator SAE-AS83519 Approved

RoHS compliant

Cable Diameters			Ordering Description		
A	B	C	No Lead	Pre-installed Lead	Braid Strap
mm	mm	mm		22 AWG White/Black	Nickel Plated
1.95	0.90	0.6	SO175-1-00	SO175-1-55-22-90	SO175-1-01
2.70	1.40	1.0	SO175-2-00	SO175-2-55-22-90	SO175-2-01
4.50	2.15	1.5	SO175-3-00	SO175-3-55-22-90	SO175-3-01
6.00	3.30	2.8	SO175-4-00	SO175-4-55-22-90	SO175-4-01
7.00	4.30	2.8	SO175-5-00	SO175-5-55-22-90	SO175-5-01

S200 and B-023

Shield Termination SolderSleeve®
Heat Shrinkable, Shield termination



S200 Series - 200ºC Rated, Bi-alloy Indicator, SAE-AS83519 Approved

RoHS compliant

Cable Diameters			Ordering Description		
A	B	C	No Lead	Pre-installed Lead	Braid Strap
mm	mm	mm		22 AWG White	Nickel Plated
1.90	0.90	0.50	S200-1-00	S200-1-WI-22-9	S200-1-01
2.67	1.40	0.75	S200-2-00	S200-2-WI-22-9	S200-2-01
5.00	2.15	1.25	S200-3-00	S200-3-WI-22-9	S200-3-01
6.40	3.30	1.80	S200-4-00	S200-4-WI-22-9	S200-4-01
6.90	4.30	2.50	S200-5-00	S200-5-WI-22-9	S200-5-01

* Pre-installed braid: Nickel plated copper strands in accordance,with AA59569F36N0031

B-023 Series - 260ºC Rated High Temperature Defence Grade Terminator

Cable Diameters		Ordering Description
A	B/C	No Lead
mm	mm	
4.3	3.0	B-023-00
5.5	3.6	B-023-01
7.0	4.5	B-023-02
10.5	6.8	B-023-03
2.4	2.0	B-023-04
3.1	2.4	B-023-07

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Coaxial Cable Termination
SolderSleeve®

Coaxial Terminators

One-Piece PCB Terminators

SolderSleeve coaxial cable terminators allow reliable, easy terminations in a variety of coaxial cable applications, including printed circuit boards. The insulating and strain-relieving capabilities of SolderSleeve terminators provide the ideal solution to centre-conductor breakage problems. Designed for applications with temperatures up to 150ºC.

- Transparent polyvinylidene fluoride or polyolefin insulation sleeve provides encapsulation, strain relief (eliminates centre conductor breakage) and insulation.
- Pre-fluxed solder pre-form provides a controlled soldering process.
- One-piece design provides easy installation and lower installed costs.
- Pre-installed termination leads provide convenience and ease of installation.

SolderSleeve Coaxial Terminators

B-155 and CWT Series Maximum operating temperature 125ºC, for use on cables rated (min) 85ºC. Please note that the B-155 series terminator is RoHS compliant.

B-02X/B-04X Series Maximum operating temperature 150ºC, for use on cables rated (min) 125ºC.

D-181 Series Maximum operating temperature 150ºC, for use on cables rated (min) 125ºC.

D-184 Series Maximum operating temperature 150ºC, for use on cables rated (min) 85ºC.

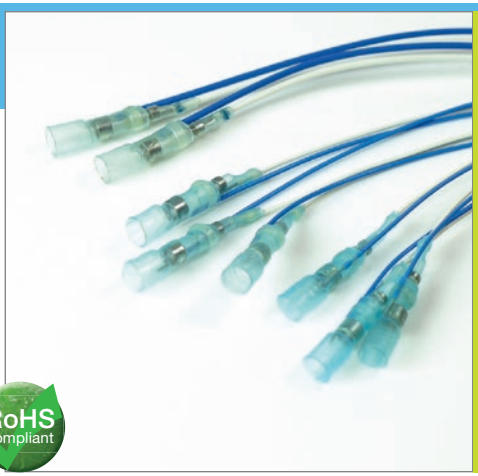
One-Piece PCB Terminators

D-607 Series Matched impedance up to 2.3 GHz, metal body.

B-046 Series Effective transmission up to 100 MHz, pin to ground.

Coaxial Cable Termination

SolderSleeve®
Heat Shrinkable, termination



RoHS compliant

Only B155-4XXX-W RoHS compliant

Used for terminating coaxial cable to component terminals, contacts and solder-less wrap terminals.

Features & Benefits

- Polyvinylidene fluoride or polyolefin insulation sleeve provides encapsulation, inspectability, strain relief and insulation.
- Pre-fluxed solder preform provides controlled soldering process.
- Pre-installed termination leads provide convenience and ease of installation.

Product Options

Product Series	Operating Temp.	Cable Rating	Cable Shield Plating	Part Selection Table	Pieces per Part
	Max.	Min.			
CWT, B-155	125°C	85°C	Tin, bare copper	**A**	2 pc
B-02X & B-04X	150°C	125°C	Tin, silver	**B**	1 pc
D-181	150°C	125°C	Tin, silver	**C**	2 pc
D-184	125°C	85°C	Tin	**D**	2 pc

Product Selection Process

1 Select product series from the product options table above.
2 Select pre-installed lead type from the table illustrated below.
3 Determine cable RG number or dimensions.
4 Select the part number required from the tables on the following pages;
- Table A - CWT & B-155 Series
- Table B - B-02X & B-04X Series
- Table C - D-181 Series
- D-184 Series please contact us

Pre-installed Lead Descriptions

Product Series	Lead Type	Plating	AWG	Length	Colour
CWT, B-155	XL polyethylene	Tin	22	150mm	White (cntr), Green (grnd)
B-021, -041, -043	M81822/13 (solder-less wrap)	Silver	24 - 30	150mm	White (cntr), Blue (grnd)
B-020. -040, -044	55A0111 (MIL-W-22759/32)	Tin	20 - 30	150mm	White (cntr), Blue (grnd)
D-181-12, -22, -32	55A0111 (MIL-W-22759/32)	Tin	20 - 30	150mm	White (cntr), white w/black stripe (grnd)
D-181-18, -28	M81822/13	Silver	26 - 30	150mm	White (cntr), blue (grnd)
D-184	55A0111 (MIL-W-22759/32)	Tin	20 - 26	150mm	White (cntr), white w/black stripe (grnd)

Two part SolderSleeve® for conductor and screen, utilising 55A0111 spec wire. Please note that these two components interlink to form a single component.

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Product Characteristics

Material		
Insulation for B-02X/B-04X, D-181, D-184	Radiation crosslinked, heat-shrinkable polyvinylidene fluoride	
Insulation for CWT, B-155 Series	Radiation crosslinked, heat-shrinkable polyolefin	
Solder and flux for B-02X, B-04X, D-181	Solder Sn63 Pb37	Flux: ROL 1 per ANSI-J-004 (RMA Flux)
Solder and flux for CWT series, D-184	Solder Sn50 Pb32 Cd18	Flux: ROM1 per ANSI-J-004 (RA Flux)
Solder and flux for B-155 series	Solder: Sn42Bi58	Flux: ROM1 per ANSI-J-004 (RA(Flux)

Typical Performance	
Voltage drop	2.0 mV
Tensile strength	Exceeds strength of conductor
Dielectric strength	2.0 kV
Temperature rating for CWT, B-155 & D-184	-55°C to +125°C
Temperature rating for B-02X/B-04X, D-181	-55°C to +150°C
Insulation resistance	1000 M ohms

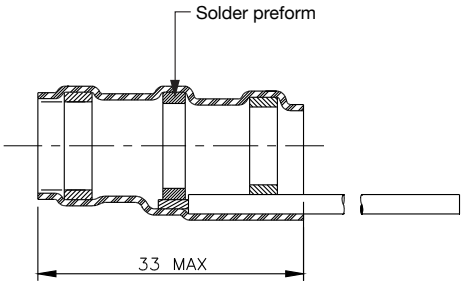
TABLE A - for CWT and B-155 Series

RoHS compliant

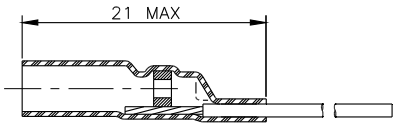
Cable RG No	Dimensions (mm)		Part Number	
	Dielectric OD	Jacket OD	CWT Series	B-155 Series (RoHS)
174	0.80 - 2.30	1.30 - 2.80	CWT-4174-W122-5/9	B-155-4174-W122-5/9
58, 122	2.00 - 2.80	2.50 - 4.40	CWT-4058-W122-5/9	B-155-4058-W122-5/9
59	2.80 - 3.30	3.20 - 6.00	CWT-4059-W122-5/9	B-155-4059-W122-5/9

Note: Only B-155 series is RoHS compliant, CWT is not.

Part A, Ground



Part B, Conductor



B-02X and B-04X Series

150°C SolderSleeve®
Heat Shrinkable, termination

TABLE B for B-02X and B-04X Series

Part 1 - Group Selection

RG Cable Number	Dimension Range				One-Piece Coaxial Product Group
	Jacket OD max	Shield OD	Dielectric OD	Conductor OD	
178, 404	3.40	1.30 - 2.30	0.50 - 1.70	0.30 - 0.80	Group 1
179, 316	4.40	1.50 - 2.80	1.20 - 2.50	0.30 - 0.60	Group 2
180, 302, 303	6.30	2.40 - 4.60	1.40 - 4.30	0.30 - 2.80	Group 3

All dimensions in millimetres

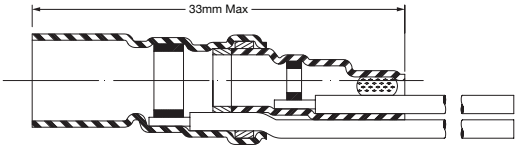
Part 2 - Part Number Selection

One-Piece Coaxial Product Group	Pre-installed Wire Size and Type						
	Type	20 AWG	22 AWG	24 AWG	26 AWG	28 AWG	30 AWG
Group 1	●	-	B-044-22-N	B-044-24-N	B-044-26-N	-	-
	♦	-	-	B-043-24-N	B-043-26-N	B-043-28-N	B-043-30-N
Group 2	●	B-040-20-N	B-040-22-N	B-040-24-N	B-040-26-N	B-040-28-N	B-040-30-N
	♦	-	-	B-041-24-N	B-041-26-N	B-041-28-N	B-041-30-N
Group 3	●	B-020-20-N	B-020-22-N	B-020-24-N	B-020-26-N		--
	♦	-	-	-	B-021-26-N	-	-

Where ● = Stranded (M22759) and ♦ = Solid (M81822) wire

The B-02X and B-04X series uses a one-piece design to terminate coaxial cables rated at 125°C minimum

One Piece Component



Notes:

- Heat guns are recommended for the installation of these devices on both these pages: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

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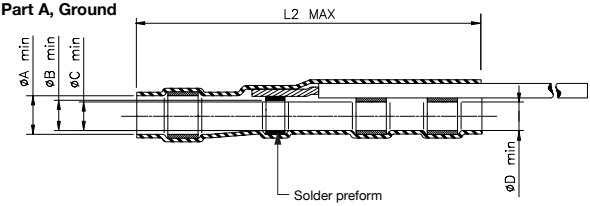
TABLE C for D-181 Series
Part Number Selection

Part Number		Min. Dimensions (mm)						Max. Dim. (mm)	
	AWG	A	B	C	D	E	F	L1	L2
D-181-1220-90/9	20	3.70	3.20	2.70	2.40	0.71	2.30	17.00	21.50
D-181-1222-90/9	22								
D-181-1224-90/9	24								
D-181-1226-90/9	26								
D-181-1226-6/9	26								
D-181-1230-6/9	30								
D-181-2220-90/9	20	4.50	4.00	3.45	2.90	1.10	3.00	17.00	22.70
D-181-2222-90/9	22								
D-181-2224-90/9	24								
D-181-2226-90/9	26								
D-181-2226-6/9	26								
D-181-2230-6/9	30								
D-181-3220-90/9	20	5.20	4.70	4.45	3.95	1.30	4.00	17.00	21.50
D-181-3222-90/9	22								
D-181-3224-90/9	24								
D-181-3226-90/9	26								
D-181-3226-6/9	26								
D-181-3230-6/9	30								

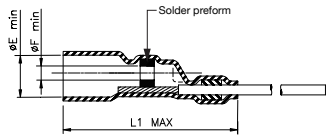
TABLE D for D-184 Series

D-184-1220-90/9	20	3.70	3.20	2.70	2.40	0.71	2.30	17.00	21.50
D-184-1222-90/9	22								
D-184-1224-90/9	24								
D-184-1226-90/9	26								
D-184-2220-90/9	20	4.50	4.00	3.45	2.90	1.10	3.00	17.00	22.70
D-184-2222-90/9	22								
D-184-2224-90/9	24								
D-184-2226-90/9	26								

Part A, Ground



Part B, Conductor



Please note that these two components interlink to form a single component.

PCB Coaxial Termination

SolderSleeve®
Heat Shrinkable, termination

Used for the termination of coaxial cable to printed circuit boards.

Features & Benefits

- Provides a completely shielded, low-resistance, matched-impedance termination with a very low Voltage Standing Wave Ratio (D-607 series).
- Polyvinylidene fluoride or polyolefin insulation sleeve provides encapsulation, inspectability, strain relief and insulation.
- Pre-fluxed solder preform provides controlled soldering process.
- One piece design provides easy installation and lower installed costs.
- Pre-installed termination body provides convenience and ease of installation.

Specifications & Approvals

- TE Connectivity RT-1404

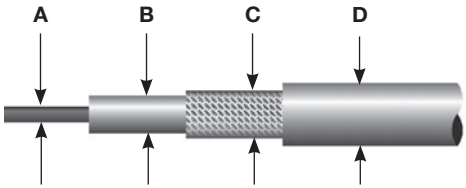
Product Options

Product Series	Typical Application Performance	Shield Method	Part Selection Table
D-607	Matched impedance up to 2.3 GHz	Metal body	A
B-046	Effective transmission up to 100 MHz	Pin to ground	B

Product Selection Process

1 Select product series from the Product Options table above.
2 Determine cable RG number or outside diameter dimensions.
3 Select the appropriate part number from Table A (D-607 series) or Table B (B-046 series).

- For D-607 (matched impedance) series, determine straight or right angle entry to PCB and grid pattern, then select the appropriate part number from Table A on the next page.
- For B-046 (PinPak, or pin to ground) series, determine hole spacing and diameter. Refer to Table B for product selection (see illustration right for cable dimensions).



Notes:

- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

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Product Characteristics

Material		
Insulation	Radiation crosslinked, heat-shrinkable polyvinylidene fluoride	
Solder and flux	Solder Sn63 Pb37	Flux: ROL 1 per ANSI-J-004 (RMA Flux)
Termination body/pin	Copper alloy, solder-plated	
Typical Performance		
Voltage drop	2.0 mV	
Tensile strength	Exceeds strength of conductor	
Dielectric strength	2.0 kV	
Temperature rating	-55°C to +150°C	
Insulation resistance	1000 M ohms	
Electrical Performance (typical) **D-607 Series Only**		
Frequency	VSWR (D-607-09, -40)	VSWR (D-607-10)
350 MHz	1.04 max	1.04 max
700 MHz	1.05 max	1.09 max
2.3 GHz	1.09 max	1.12 max

TABLE A for D-607 Series

RG Cable No.	Cable Dimensions Max. Diameter			Part No. Entry to PCB		
	Jacket	Shield	Dielectric	Straight	Right-Angle	Straight
				Grid 5.08	Grid 5.08	Grid 2.54
174, 178, 179, 316, 404	1.5 - 3.55	1.1 - 3.15	0.60 - 2.25	D-607-09	D-607-10	D-607-40*

All dimensions in millimetres

TABLE B for B-046 Series

RG Cable No.	Cable Dimensions (mm)				Pin Dia.	Part Number		
						Spacing Between Pins		
	A	B	C	D (max)	mm	2.54	5.08	6.35
178, 404	0.3 - 0.8	0.5 - 1.7	1.3 - 2.3	3.4	0.6	B-046-14-N	B-046-10-N	B-046-12-N
					0.8		B-046-11-N	B-046-13-N
179, 316	0.3 - 1.6	1.2 - 2.5	1.5 - 2.8	4.4	0.6	B-046-15-N	B-046-66-N	B-046-16-N
					0.8		B-0466-68-N	B-046-18-N

All dimensions in millimetres

Notes:

- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

Shielded and Coaxial Splices

SolderShield®

Cable to Cable Splicing

SolderShield cable splices meet the growing performance requirements for shielded cable system fabrication and maintenance while minimising electromagnetic interference (EMI). Being one piece products consisting of a flux coated, solder impregnated copper shield braid encased in a heat shrinkable insulation sleeve, with crimp wire connectors.

Conductor splices are made using MiniSeal crimp products which are recognised by MIL-S-81824 and MIL-W-5088.

SolderShield splice kits, are designed for single-conductor or multi-conductor shielded cables and are ideal for fabrication, repair, re-work while restoring the electrical integrity of the cable. SolderShield devices perform even in demanding environments. They are reliable, versatile and easy to install.

Operating Temperature

- From -55°C to +150°C

Applications

Used for splicing a wide range of cables, including coaxial and multi-conductor cables.

Features & Benefits

- Flux-coated solder-impregnated copper shield braid encased in a transparent heat shrinkable insulation sleeve provides a controlled soldering process, encapsulation, inspectability, strain relief and insulation.
- One-piece design provides easy installation and lower installed cost.
- Circumferential (360°) shielding results in EMI protection and shield continuity to or better than the original cable.
- Conductor splices are made using MiniSeal crimp products, recognised by MIL-S-81824 and MIL-W-5088.

Specifications & Approvals

- US: M81824 (conductor splice only)
- UK: RAF AP 1130-2008-1
- TE RT-1404

Product Selection Process

Multi-conductor Cable Splices

- Determine the number of conductors in the cable to be spliced
- Determine the AWG of each conductor, or the minimum jacket OD.
- Determine the conductor plating
- Select the appropriate part number from table A, over the page.

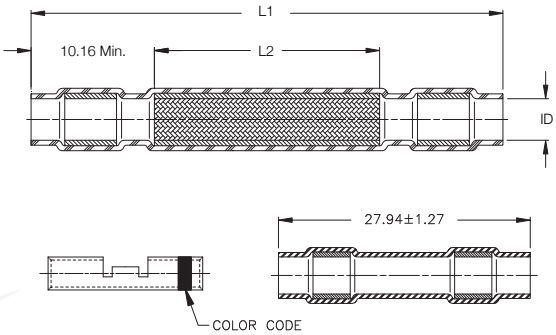
Coaxial Cable Splices

- Determine the cable RG number or cable reference.
- Select appropriate part number from table B, over the page.
- Confirm that dimensional information indicates compatibility with cable being used.

High Temperature Option

D-200 Series

Also available but not detailed here, offering improved operating temperature of -55°C to +200°C, please contact us for more details.



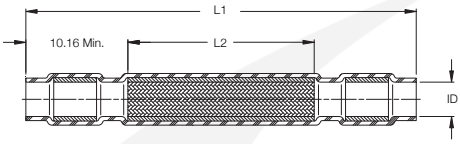
Product Characteristics

Materials		
Insulation sleeve	Radiation crosslinked polyvinylidene fluoride	
Melt-able inserts	Fluorocarbon based thermoplastic	
MiniSeal crimp splice	Base metal: Copper alloy C10200 per ASTM B75 Plating: Tin per MIL-T-10727 or nickel per QQ-N-290	
SolderShield shield splice	Base metal: Tin-plated copper wire braid per ASTM B3 Solder & flux coating: Type Sn63 Pb37. Flux: ROM1 per ANSI-J-STD-004 (RA flux)	
Electromechanical Performance		
Parameter	**Test Method**	**Requirement**
Dielectric strength (shield connection)	-	No breakdown or arcing at 1000 Vac (RMS)
Dielectric strength (conductor connection)	-	2.5 kV
Voltage drop	MIL-S-81824	Less than 2 millivolt increase
Insulation resistance (shield)	-	1000 Mega-ohms
Insulation resistance (conductor)	-	5000 Mega-ohms
Tensile strength for MiniSeal	MIL-S-81824	Exceed yield strength of wire
Tensile strength for SolderShield	MIL-S-81824	75% of strength of un-spliced cable
Temperature rating	-	-55°C to 150°C
Environmental Resistance		
Salt spray	MIL-STD-202 M101	Meets voltage drop requirement
Heat aging	750 hours at 150°C	Meets all electromechanical requirements
Temperature cycling	MIL-STD-202 M107C	Meets all electromechanical requirements
Altitude immersion	Immersion at 22,860m	Meets insulation resistance requirements
Corrosion resistance	-	No evidence of corrosion after testing in accordance with MIL-STD-202, Method 101, Test condition

D-150 Series, Multi-conductor

SolderShield®

Cable to Cable Splicing



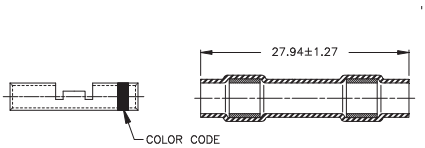
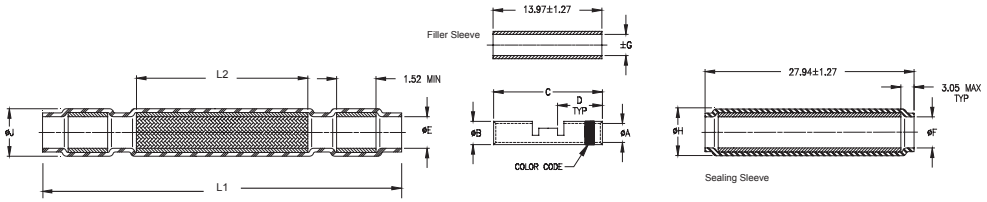


TABLE A: for D-150 Series, Multi-conductor Cable Splices

Part No.		Dimensions			Conductor Splice			
Tin Plated	Nickel Plated	L1	L2	ID	Size Range CMA	Colour Code		Qty per Kit
		Max.	Nom.	Min.	Min Max			
D-150-0168	D-150-0228	80.5	50.0	3.00	304 - 1510	Red		1
D-150-0169	D-150-0229			4.00	779 - 2680	Blue		
D-150-0170	D-150-0230			5.00	1900 - 6755	Yellow		
D-150-0174	D-150-0231	106.0	75.0	4.00	304 - 1510	Red		2
D-150-0175	D-150-0232			5.00	779 - 2680	Blue		
D-150-0176	D-150-0233			6.00	1900 - 6755	Yellow		
D-150-0177	D-150-0234			9.00	304 - 1510	Yellow		
D-150-0178	D-150-0235	106.0	75.0	4.00	304 - 1510	Red		4
D-150-0179	D-150-0236			5.00	779 - 2680	Red		
D-150-0180	D-150-0237			6.00	1900 - 6755	Blue		
D-150-0181	D-150-0238			9.00	1900 - 6755	Yellow		

All dimensions in millimetres



Drawing represent D-150-009X only

TABLE B: for D-150 and B-202 Series, Coaxial Cable Splices

Part No.	RG Cable No.	Cable Ref.	Dimensions			Conductor Splice Qty per Kit
			L1	L2	ID	
		Max	Max.	Nom.	Min.	
D-150-0214	8A, 9B, 11	5012A3311	80.50	50.00	12.00	1
	13, 26, 31	5012E1339				
	115, 144, 149	7518A1311				
	165, 213, 214	-				
	216, 235, 391	-				
	393, 397	-				
D-150-0094	178, 196	5028A1317	80.50	50.00	3.00	1
	179, 187, 188	7528A1317				
	316, 404, M17/138-00001	5030A1317				
	M16/136-00001	7530A1317				
D-150-0095	180, 195	5024A1311	80.50	50.00	4.00	1
	M17/137-00001	7526A1311				
	M17/139-00001	9527A1318				
	-	9530E1014				
D-150-0096	124, 140, 141	5020A1311	80.50	50.00	6.00	1
	159, 302, 303	5022A1311				
	-	7522A1311				
	-	7523D1331				
	-	7542A1311				
B-202-81*	29, 30, 55B	5019D3318	56.00	23.00	7.00	1
	58, 223	5021D1331				
	-	5022A1311				
B-202-82*	59, 62	7523D1331	56.00	23.00	7.00	1
	-	7524A1311				
	-	9524A1311				

All dimensions in millimetres.
* B-202-81/82 kits use solder connectors to terminate the centre conductors. All other kits use crimp connectors

Shielded Connector Contacts

SolderTacts®
Controlled Solder Contacts

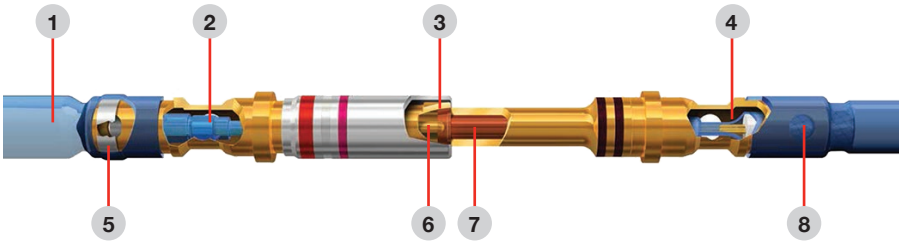
One-piece controlled soldering SolderTacts are designed to facilitate faster and more reliable terminations. SolderTacts eliminate the variables associated with crimping, accelerates production while reducing handling and installed costs.

Features & Benefits

- One-piece contact design with integrated soldering technology
- Controlled re-flow soldering process yields reliable consistent terminations
- 360° shielding reduces crosstalk and improves signal transmission.
- Contact fits multiple cable sizes.
- Compatible with a variety of commercial and military connectors.
- 150°C temperature rating.

Specifications & Approvals

- TE D-6002



1. Outer SolderSleeve
Heat shrinkable insulating sleeve. Cable inserts easily, with no spacers or other parts required.

2. Inner SolderSleeve
Termination is a heat shrinkable sleeve with a precisely pre-fluxed solder preform conforming to QQ-S-571

3. Connector
The precision outer body meets electrical engagement and contact retention requirements of individual connector systems.

4. Inner Heat shrink
In the terminated signal lead, the inner heat shrink tubing forms tightly around the termination to insulate and strain relieve the connection.

5. Outer Solder Pre-form
Contains precise amounts of solder and flux conforming to QQ-S-571.

6. Inner Pin and Socket
Contacts are permanently fixed within the assembly to provide proper setback and concentrically.

7. Dielectric
The dielectric between inner and outer contacts provides concentricity, electrical integrity, precise mating dimensions and closed entry at the inner socket.

8. Inspection
The shield termination can be inspected through the viewing port.

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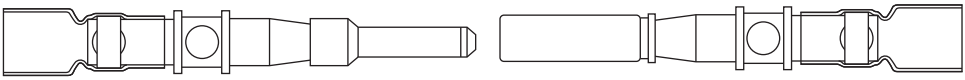

MIL-DTL-26482 Series Contacts

Part Number	Size	Wire (AWG)	Polarity	Cable Type	Military Specification
D-602-16*	12	24-32	Socket	Coaxial	MIS-20067/5-001
D-602-17*	12	24-32	Pin	Coaxial	MIS-20067/5-001
D-602-46	16	24-30	Pin	Coaxial	-
D-602-47	16	26-32	Socket	Coaxial	-
D-602-56	16	24-30	Pin	Twin Pair	-
D-602-57	16	24-30	Socket	Twin Pair	-

* These SolderTacts contacts are on qualified parts list for indicated specification.

Tooling Selection Guide for MIL-DTL-26482 Contacts

Part Numbers	Eng Standard	Adaptor	Insertion Tool	Removal Tool
D-602-46/47	ES61137	AT-1319-17	AD-1525	AD-1526
D-602-56/57	ES61138	-	(M81969/17-04)	(M81969/19-08)
D-602-16/17	ES61161	-	-	-

Notes:

- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

Shielded Connector Contacts

MIL-C-28748 Series SolderTacts®
Controlled Solder Contacts

MIL-C-28748 Series Contacts

Part Number	Size	Wire (AWG)	Polarity	Cable Type	Military Specification
D-602-44	16	26-32	Socket	Coaxial	MIS-20067/2-002[a]
D-602-45	16	26-32	Pin	Coaxial	MIS-20067/1-001[a]
D-602-54	16	24-30	Pin	Twin Pair	MIS-20067/4-001[a]
D-602-55	16	24-30	Socket	Twin Pair	MIS-20067/3-001[a]
D-602-72	16	26-32	Pin	Coaxial	M39029/79[b]
D-602-73	16	26-32	Socket	Coaxial	M39029/80[b]
D-602-76	16	26-32	Socket	Coaxial	M39029/40[b]
D-602-77	16	26-32	Socket	Coaxial	M39029/41[b]
D-602-0126	16	24-30	Socket	Twin Pair[c]	-
D-602-0127	16	24-30	Socket	Twin Pair[c]	-
D-602-0172	16	28-32	Socket	Coaxial	-
D-602-0173	16	28-32	Socket	Coaxial	MIS-20067/2-001, 003[a]
D-610-09	16	16-20	Socket	Power	MIS-20067/8-001[a]
D-610-10	16	16-20	Socket	Power	MIS-20067/7-001[a]

a. These SolderTacts contacts are on the qualified parts list for indicated specification.
b. These SolderTacts contacts are inter-mateable and inter-mountable with contacts qualified to the indicated specification; they replace crimp-style termination.
c. These SolderTacts contacts are designed for twisted pair cable per MIL-STD-1553B

Tooling Selection Guide for MIL-C-28748 Contacts

Part Numbers	Eng Standard	Adaptor	Repair Wand	Removal Tool
D-602-44/45	ES61133	AT-1319-14	AT-1480	AD-1447
D-602-0172/0173	ES61240	-	-	
D-602-54/55	ES61132	-	-	
D-602-0126/0127	ES61199	-	-	
D-619-09/10	ES61187	AT-1319-15	AT-1571	
D-602-72/73	ES61135	AT-1319-18	AT-1486	
D-602-76/77	ES61164	AT-1319-20	AT-1554	

Contact insertion tool not applicable

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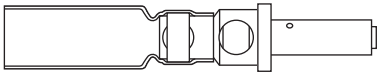


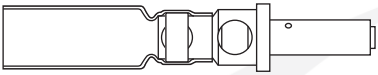
MIL-DTL-38999 Series I, III, IV Contacts

Part Number	Size	Wire (AWG)	Polarity	Cable Type	Military Specification
D-602-0122	8	22-24	Pin	Coaxial	M39029/60[a]
D-602-0123	8	22-24	Socket	Coaxial	M39029/59[a]
D-602-0140	16	26-30	Pin	Coaxial	M39029/76[a]
D-602-0141	16	26-30	Socket	Coaxial	M39029/77[a]
D-602-0142	16	26-30	Pin	Twin Pair	M39029/76[a]
D-602-0143	16	26-30	Socket	Twin Pair	M39029/77[a]
D-602-0144	12	34-32	Pin	Coaxial	M39029/28[a]
D-602-0145	12	24-32	Socket	Coaxial	M39029/75[a]
D-602-0146	12	22-26	Pin	Twin Pair	M39029/28[a]
D-602-0147	12	22-26	Socket	Twin Pair	M39029/75[a]
D-602-0150	12	22-28	Pin	Coaxial	M39029/28[a]
D-602-0151	12	22-28	Socket	Coaxial	M39029/75[a]
D-610-1108	8	24-26	Socket	Twin Pair[b]	-
D-610-1109	8	24-26	Pin	Twin Pair[b]	-
D-602-1110	8	22-26	Socket	Triaxial	-
D-602-1111	8	22-26	Pin	Triaxial	-
D-602-1112	8	24-26	Socket	Twin Pair[b]	-
D-602-1113	8	24-26	Pin	Twin Pair[b]	-
D-602-0156-N-1	8	24-26	Pin	Twinaxial[c]	M39029/90[a]
D-602-0156-N-2	8	24-26	Pin	Twinaxial[c]	M39029/90[a]
D-602-0156-N-3	8	24-26	Pin	Twinaxial[c]	M39029/90[a]
D-602-0157-N-1	8	24-26	Socket	Twinaxial[c]	M39029/91[a]
D-602-0157-N-2	8	24-26	Socket	Twinaxial[c]	M39029/91[a]
D-602-0157-N-3	8	24-26	Socket	Twinaxial[c]	M39029/91[a]
D-602-0169-1	8	20	Pin	Twinaxial[c]	M39029/90[a]
D-602-0170-1	8	20	Socket	Twinaxial[c]	M39029/91[a]

a. These SolderTacts contacts are inter-mateable and inter-mountable with contacts qualified to the indicated specification; they replace crimp-style termination.
b. These SolderTacts contacts are designed for shielded twisted pair cable per MIL-STD-1553B .
c. These SolderTacts contacts are designed for databus contacts per MIL-STD-1553B

Shielded Connector Contacts

MIL-C-38999 Series II SolderTacts®
Controlled Solder Contacts



MIL-C-38999 Series II Contacts

Part Number	Size	Wire (AWG)	Polarity	Cable Type	Military Specification
D-602-0140	16	26-30	Pin	Coaxial	M39029/76[a]
D-602-0171	16	26-30	Socket	Coaxial	M39029/77[a]
D-602-0142	16	26-30	Pin	Twin Pair	M39029/76[a]
D-602-0174	16	26-30	Socket	Twin Pair	M39029/77[a]

a. These SolderTacts contacts are inter-mateable and inter-mountable with contacts qualified to the indicated specification; they replace crimp-style termination.

Tooling Selection Guide for MIL-C-39999 Series I, II, III, IV. Contacts

Size	Part Numbers (D-602-)	Eng Standard	Adaptor	Repair Wand	Insertion Tool	Removal Tool
16	0140/0141	ES61226	AT-1319-78	AD-1565	M81969/8-07 or M81969/14-03	M81969/8-08 or M81969/14-03
	0142/0143	ES61224	-	-		
	0171	ES61226	AT-1319-27	AD-1572		
	0174	ES61224	-	-		
12	0144/0145	ES61206	AT-1319-24	AD-1566	M81969/8-09 or M81969/14-04	M81969/8-10 or M81969/14-04
	0146/0147	ES61218	-	-		
	0150/0151	ES61223	-	-		
8	0122/0123	ES61179	AT-1319-22	AD-1568	-	M81969/14-06 or ATBX-2277
	1108/1109	ES61172	AT-1319-22 and AT-1319-14	AD-1568 and AD-1480		
	1110/1111	ES61172				
	1112/1113	ES61184				
	0156/0157-X	ES61231				
	0169/0170-X	ES61235				

Notes:

- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

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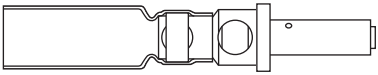


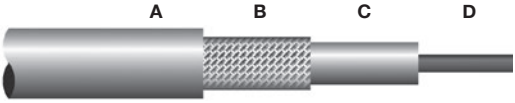
Sub-miniature / Commercial Series Contacts

Part Number	Size	Wire (AWG)	Polarity	Cable Type	A Ø	B Ø	C Ø	D Ø
D-602-0278	16	24-32	Pin	Coaxial	1.52 - 2.92	1.85 - 2.18	0.64 - 1.91	0.23 - 0.74
D-602-0279	16	24-32	Socket	Coaxial	1.52 - 2.92	1.85 - 2.18	0.64 - 1.91	0.23 - 0.74
D-602-0288	16	24-32	Pin	Twin Pair	-	-	0.74 - 1.40	0.23 - 0.74
D-602-0289	16	24-32	Socket	Twin Pair	-	-	0.74 - 1.40	0.23 - 0.74

These SolderTacts contacts belong to the TE “Sub-miniature” series of contacts, which are designed for use in commercial connectors.

Product Selection

Determine which SolderTact is required from the cable dimensions and chart above.



Tooling Selection Guide for Sub-miniature Series Contacts

Part Numbers	Eng Standard	Adapter	Repair Wand	Removal Tool
D-602-0278/0279	ES61170	AT-1319-12	AD-1481	AD-1447
D-602-0288/0289	ES61414	-	-	-

Contact insertion tool not applicable

Notes:

- Heat guns are recommended for the installation of these devices: HL2010E and CV198X with the correct reflector added. See Application Equipment Section.

D500 Databus Components

MIL-STD-1553B

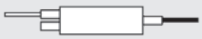
In-line micro-couplers: one & two stub.

The low profile configuration enables avionics system designers to plan for optimum coupler locations. Supplied with Spec 55 databus cables, including EMP hardened versions. Also available assembled with other components into a databus harness.

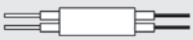
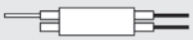
Features & Benefits

- Environmental sealing
- Lightweight -
- 360° continuous low-impedance
- Potted circuit elements for maximum durability.

Product Selection Guide - Single Stub

Part Numbers	
D-500-0455-1-YYY-ZZZ	
D-500-0465-1-YYY-ZZZ	
D-500-0456-1-YYY-ZZZ	
D-500-0466-1-YYY-ZZZ	
D-500-0457-1-YYY-ZZZ	
D-500-0467-1-YYY-ZZZ	
D-500-0458-1-YYY-ZZZ	
D-500-0468-1-YYY-ZZZ	

Product Selection Guide - Double Stub

Part Numbers	
D-500-0455-2-YYY-ZZZ	
D-500-0465-2-YYY-ZZZ	
D-500-0456-2-YYY-ZZZ	
D-500-0466-2-YYY-ZZZ	
D-500-0457-2-YYY-ZZZ	
D-500-0467-2-YYY-ZZZ	
D-500-0458-2-YYY-ZZZ	
D-500-0468-2-YYY-ZZZ	

Notes

YYY Cable Type

612 = 10612 (24 AWG single optimised shield).
613 = 10613 (24 AWG double optimised shield).
614 = 10614 (24 AWG EMP hardened).

- Bus cable
- Stub cable

ZZZ Cable Length

012 = 305mm
078 = 1980mm
079 = 2000mm
120 = 3050mm
236 = 6000mm
240 = 6100mm

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Databus Components

MIL-STD-1553B Cables

Spec 55 databus cables meet or exceed the performance requirements of MIL-STD-1553B. Insulation is a high temperature, radiation cross-linked, modified ETFE that can be used in wire constructions rated up to 200°C.

Features & Benefits

- Lightweight
- Highly flexible
- Flame resistant
- Chemical resistant to all aircraft fluids
- Solder iron resistant
- Defined shielding performance.

Product Cable Selection Guide

Cable Type		Part Numbers
24 AWG Single Optimised Shield		10612
24 AWG Double Optimised Shield		10613
24 AWG EMP Hardened		10614

Accessories

We can also supply the accessory components that may be necessary to complete a databus system.
These include:

- Bus and stub terminators (spliced-in and connectorised D-621 series).
- Cable splice kits.
- EMI/environment-resistant connector caps.
- Braid terminators and strain relief tubing.
- Cable marking materials.

Specifications / Approvals

- MIL-AS27500/32 & /35
- MIL-AS27500/41 & /46