

# Wire-to-Wire Splicing

# DuraSeal Heat-Shrinkable, Environmentally Sealed, Nylon-Insulated Crimp Splices



- Protects splices from water, condensation, salt, and corrosion
- Provides strain relief
- Protects against vibration in rugged environments
- Completely insulates and protects electrical connections
- Has adhesive lining for protection that is more reliable than conventional splices
- $\blacksquare$  UL, CUL, and 逊 Lloyd's listed





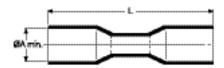
# Applications

- Automotive/truck wiring repair and maintenance.
- Automotive accessory installations.
- OEM automotive/truck/RV wire harness fabrication.
- Marine electronics.
- Fleet maintenance.
- Commercial wiring (pumps/pools/spas).

### **Specifications/Approvals**

Series	eries Agency		
D-406	ULand CULlisted 91J4, File E87681	RB-107	
_	Lloyd's listed, File 65 247 HH 02-93		

# **Product Dimensions Butt Splices**



	Bert	Butt Splice Dimensions				Wire Dimensions	
	Part No.	A Min.	L Nom.	Color	Conductor	Insulation O.D. (Max.)	Insulation O.D. (Min.)
Available in:	D-406-0001	3.68 [.145]	31.75 [1.25]	Red	22–18	3.56 [.140]	1.40 [.055]
Americas	D-406-0002	4.57 [.180]	31.75 [1.25]	Blue	16–14	4.45 [.175]	2.03 [.080]
Europe Asia Pacific	D-406-0003	6.35 [.250]	38.10 [1.50]	Yellow	12–10	6.22 [.245]	2.79 [.110]

#### 8-18

Catalog 1654025 Revised 12-03

and inches unless otherwise specified. Values in brackets www.tycoelectronics.com are U.S. equivalents.

Dimensions are in millimeters

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-5-729-0425

South America: 55-11-3611-1514 Japan: 81-44-900-5102 Singapore: 65-4866-151 UK: 44-1793-528171



# DuraSeal Heat-Shrinkable, Environmentally Sealed, Nylon-Insulated Crimp Splices (Continued)

# **Product Selection Process**

Determine wire size.
Select part number.

**Product Characteristics** 

(Typical)

Wire Size AWG	mm²	Part No.	Color	
22–18	0.38-0.95	D-406-0001	Red	
16–14	1.2–2.5	D-406-0002	Blue	
12–10	3–6	D-406-0003	Yellow	

Operating temperature	-55°C to 125°C [-67°F to 257°F]
Shrink ratio	Approximately 2:1
Physical properties	Cut-through resistance: 31 kg [70 lb] Wire pullout after crimping and recovery: red: 11.3 kg [25 lb]; blue: 22.7 kg [50 lb]; yellow: 27.2 kg [60 lb] Not flame-retardant No cracking after heat aging for 168 h at 160°C [320°F]
Chemical properties	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: 1000 megohms at 100 Vdc

## Installation Requirements

For proper installation of these devices, the correct crimp tool and a heating tool with a reflector attachment must be used. The Raychem AD-1522 crimp tool and HL1802E heating tool are recommended.

You will find ordering information for these tools in Section 10.

Refer to Raychem installation procedure RPIP 821-00 for detailed instructions.

# Installation

1. Select splice of appropriate size. Strip wire 7.5 mm (5/16 in). Insert into crimp barrel.



2. Crimp using Raychem AD-1522 crimp tool for preinsulated crimps.



 Heat crimped splice with heat gun until tubing recovers and adhesive flows.



Catalog 1654025 Revised 12-03

www.tycoelectronics.com are U.

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are U.S. equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-5-729-0425 South America: 55-11-3611-1514 Japan: 81-44-900-5102 Singapore: 65-4866-151 UK: 44-1793-528171