

1. Products:

DuraSeal Splice:

DS-XX-XX	D-406-XXXX
DS-MIXT-XX	

DuraSeal Terminal:

DB-X-XX	DP-X-XX	B-106-XX
DF-X-XX	DR-X-XX	DS-MIXT-XX

2. Application Equipment:

- Crimping tool: AD-1522

- Hot air gun:

Heat Gun	Reflector	Setting
HL1910E	PR-25 or PR-25D and HL1802E-ADAPT	6 on dial ⁽¹⁾
HL2010E		700°F on LCD ⁽¹⁾
CV-1981	PR-25D	7 ⁽¹⁾

3. Wire Preparation:

- Strip the stranded wire as shown.

Configuration		Product						
		Red		Blue		Yellow		
		Wire Range 22-18 AWG	Strip Length L (±0.5)	Wire Range 16-14 AWG	Strip Length L (±0.5)	Wire Range 12-10 AWG	Strip Length L (±0.5)	
Terminal		0.5 < Sc < 1.0	L _C = 7.0	1.5 < Sc < 2.5	L _C = 7.0	3.0 < Sc < 6.0	L _C = 7.0	see Fig. 1
Splice 1 to 1		0.5 < Sc < 1.0	L _C = 8.0	1.5 < Sc < 2.5	L _C = 8.0	3.0 < Sc < 6.0	L _C = 8.5	see Fig. 2
Splice 2 to 1	φA < φB	1.5 < φA+φB < 3.7 and 1.5 < φC < 3.7	L _A = 10 L _B = 8.0	2.0 < φA+φB < 4.3 and 2.0 < φC < 4.3	L _A = 10 L _B = 8.0	3.0 < φA+φB < 6.4 and 3.0 < φC < 6.4	L _A = 11 L _B = 8.5	see Fig. 3
		0.5 < S _A +S _B < 1.0 and 0.5 < S _C < 1.0		1.5 < S _A +S _B < 2.5 and 1.5 < S _C < 2.5		3.0 < S _A +S _B < 6.0 and 3.0 < S _C < 6.0		
Splice 2 to 1	φA = φB	1.5 < φA+φB < 3.7 and 1.5 < φC < 3.7	L _A = 10 L _B = 10	2.0 < φA+φB < 4.3 and 2.0 < φC < 4.3	L _A = 10 L _B = 10	3.0 < φA+φB < 6.4 and 3.0 < φC < 6.4	L _A = 11 L _B = 11	see Fig. 4
		0.5 < S _A +S _B < 1.0 and 0.5 < S _C < 1.0		1.5 < S _A +S _B < 2.5 and 1.5 < S _C < 2.5		3.0 < S _A +S _B < 6.0 and 3.0 < S _C < 6.0		

φA = diameter (mm) of the insulation of wire A.

Sc = cross section area (mm²) of wire C.

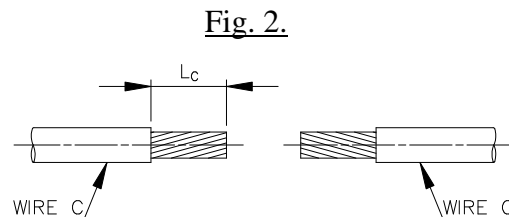
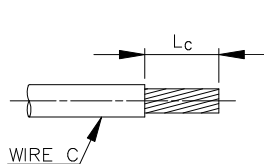


Fig. 3.

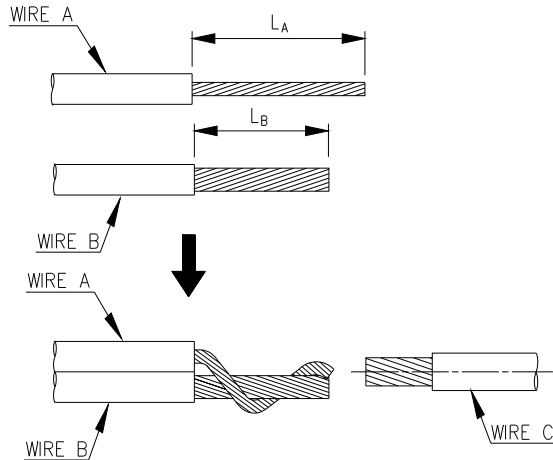
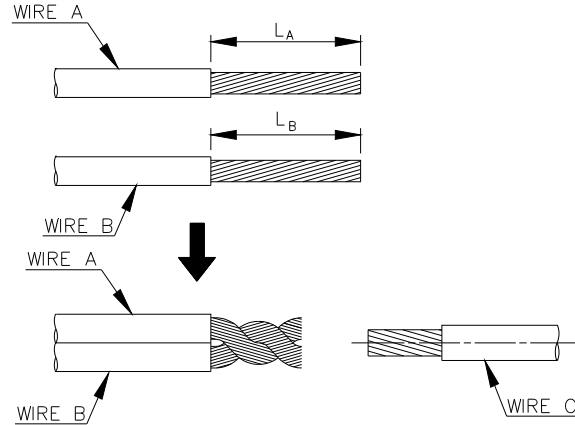


Fig. 4.



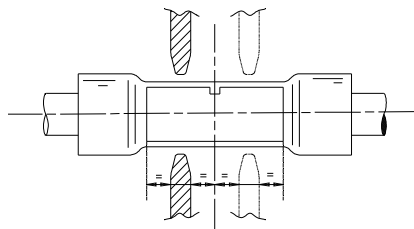
WARNING

- *IR tools are not recommended for use with black wire or cable insulations, and must not be used for Tyco Electronics/Raychem 99T uncross-linked wires.*
- *Hot Air guns shall be set to a temperature as low as 300 deg C (570 deg F) to avoid thermal damage on uncross-linked wires, such as Tyco Electronics/Raychem 99T.*
- *Tyco Electronics recommends controlling temperature of application equipment such as hot air guns regularly.*

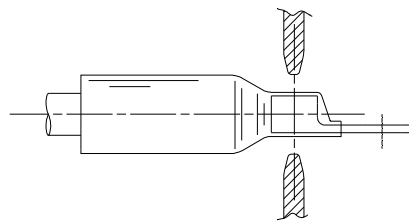
4. Installation Procedure:

- Select the correct DuraSeal crimp.
- Match its color with the color of the cavity of the crimp tool.
- Get the jaws in touch with the tubing.

DuraSeal Splice



DuraSeal Terminal



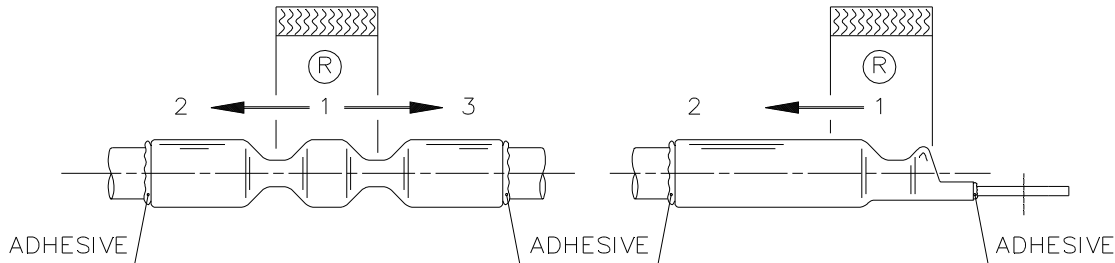
- Insert the stripped wire until it butts inside the DuraSeal crimp.
- Crimp the wire in place.
- Repeat the operation symmetrically for the DuraSeal splice.
- Allow the hot air gun to warm up.
- Position the DuraSeal crimp in the reflector (R).
- Apply heat to shrink the sleeve until the adhesive melt and flow around the extremities of sleeve.

Devices Installation Procedure

Unless otherwise specified dimensions are in millimeters. [Inches dimensions are in between brackets]

DuraSeal Splice

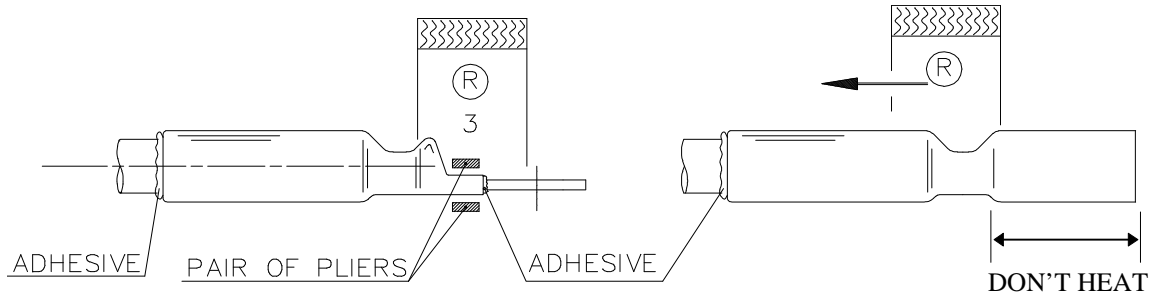
DuraSeal Terminal



Note: For DuraSeal terminals, in order to achieve maximum sealing (except for DuraSeal push-on) heat the terminal at 3 and press the flat part with a pair of pliers until the assembly cools.

Ring Terminal

Push-on Terminal



Note: Do not heat the terminal for the push-on terminal.

Do not bend the splice or the terminal assemblies until then have completely cooled.

5. **Inspection of Assembly:**

Check:

- Wire insulation is positioned inside the DuraSeal sleeve.
- Adhesive has flowed to form a fillet around the ends of the sleeve.
- Sleeve is completely shrunk on to the wire insulation.
- Sleeve is not cut, split or discolored.
- Wire insulation has no signs of mechanical damage or overheating.

Acceptable termination



¹ These values are for reference only and may change based on other variables (i.e. reflector type, sleeve's relative distance to the reflector, etc.)

DISCLAIMER

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