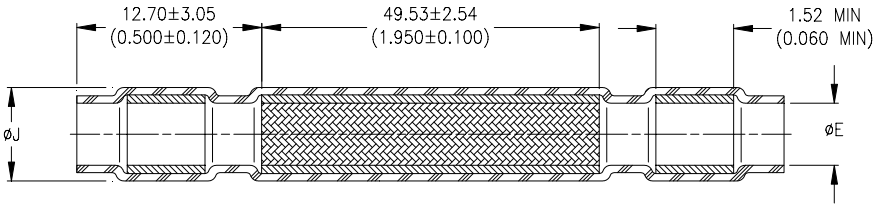
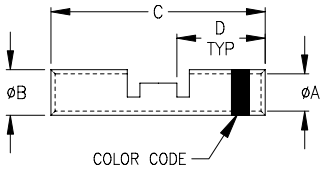
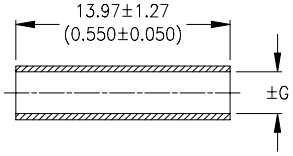
# SPECIFICATION CONTROL DRAWING



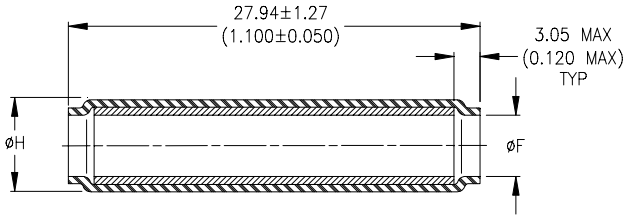

1) SHIELD SPLICE SLEEVE




2) METAL CRIMP SPLICE




3) FILLER SLEEVE




4) SEALING SLEEVE

| Product Rev | | Color | Metal Crimp Splice | | | | Shield Splice | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Part Name | | Code | øA | øB | C | D | øE | | | øJ |
| | | | | | | | (a) min | (d) min | (c) max | O.D. max |
| D-150-0094 | B | Yellow | 0.81 (0.032)<br>0.56 (0.022) | 2.03 (0.080)<br>1.91 (0.075) | 12.95 (0.510)<br>12.45 (0.490) | 6.22 (0.245)<br>5.72 (0.225) | 3.00<br>(0.118) | 1.52<br>(0.060) | 1.78<br>(0.070) | 5.84<br>(0.230) |
| D-150-0095 | B | Yellow | 0.81 (0.032)<br>0.56 (0.022) | 2.03 (0.080)<br>1.91 (0.075) | 12.95 (0.510)<br>12.45 (0.490) | 6.22 (0.245)<br>5.72 (0.225) | 4.00<br>(0.157) | 1.91<br>(0.075) | 2.03<br>(0.080) | 6.86<br>(0.270) |
| D-150-0096 | A | Red | 1.35 (0.053)<br>1.14 (0.045) | 2.03 (0.080)<br>1.91 (0.075) | 12.95 (0.510)<br>12.45 (0.490) | 6.22 (0.245)<br>5.72 (0.225) | 6.00<br>(0.236) | 3.00<br>(0.118) | 3.48<br>(0.137) | 8.90<br>(0.350) |

| | Sealing Sleeve | | | Filler Sleeve | | |
|---|---|---|---|---|---|---|
| Part | øF | | øH | øG | | |
| Name | (a) min | (b) max | O.D. max | (a) min | (e) max | (f) nom |
| D-150-0094 | 3.00 (0.118) | 0.64 (0.025) | 5.08 (0.200) | -none- | | |
| D-150-0095 | 4.00 (0.157) | 1.27 (0.050) | 6.35 (0.250) | 4.00 (0.157) | 1.78 (0.070) | 2.67 (0.105) |
| D-150-0096 | 6.00 (0.236) | 1.91 (0.075) | 7.62 (0.300) | 6.00 (0.236) | 1.78 (0.070) | 3.00 (0.118) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| tyco Electronics | Tyco Electronics Corporation<br>305 Constitutional Drive<br>Menlo Park, CA 94025 USA | RAYCHEM<br>Products | TITLE :<br>**SPLICE, COAXIAL CABLE, ENVIRONMENT RESISTANT** | | | | |
| Unless otherwise specified dimensions are in millimeters.<br>Inches dimensions are in between brackets. | | | DOCUMENT NO.: **D-150-0094/-0096** | | | | |
| TOLERANCES:<br>0.00 N/A<br>0.0 N/A<br>0 N/A | ANGLES: N/A<br><br>ROUGHNESS IN MICRON | Tyco Electronics reserves the right to amend this drawing at any time. Users should evaluate the suitability of the product for their application. | DATE:<br>May 29, 2001 | | | DOC ISSUE:<br>1 | |
| DRAWN BY:<br>M. FORONDA | REPLACES:<br>N/A | DCR NUMBER:<br>D010122 | PROD. REV.<br>SEE TABLE | SCALE:<br>None | SIZE:<br>A | SHEET:<br>1 of 2 | |

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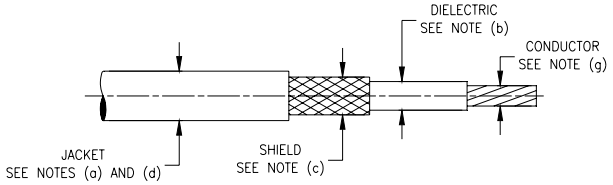
# SPECIFICATION CONTROL DRAWING

**SELECTION GUIDE:**




(a) As supplied. Cable jacket diameter must be less than this value.
(b) Recovered I.D. through meltable inserts of sealing sleeve. Cable dielectric diameter must be greater than this value.
(c) Recovered I.D. through shrinkable shield of shield splice sleeve. Cable shield diameter must be greater than this value. Cable shield may be folded back over cable jacket to increase its diameter.
(d) Recovered I.D. through meltable inserts of shield splice sleeve. Cable jacket must be greater than this value.
(e) Recovered I.D. of filler sleeve.
(f) Recovered O.D. of filler sleeve.
(g) Conductor Range: -0094 & -0095: 0.25 to 0.51 (0.010 to 0.020) 30 to 26 AWG
-0096: 0.51 to 1.02 (0.020 to 0.040) 26 to 20 AWG

**MATERIALS**

1. SHIELD SPLICE SLEEVE:
INSULATION SLEEVE: Heat-shrinkable, transparent blue, radiation cross-linked modified polyvinylidene fluoride.
SHIELD: Solder impregnated, flux coated copper wire braid.
SOLDER: TYPE Sn63 per ANSI-J-STD-006.
FLUX: TYPE ROM1 per ANSI-J-STD-004.
MELTABLE RINGS: Environment resistant thermoplastic. Color: gray.
2. CRIMP SPLICE: Tin plated copper alloy. Color code: see table.
BASE METAL: Copper Alloy 101 or 102 per ASTM B-75.
PLATING: Tin per MIL-T-10727, Type 1.
3. INSULATION SLEEVE: Heat-shrinkable, radiation cross-linked modified polyolefin, color: black.
4. SEALING SLEEVE:
INSULATION SLEEVE: Heat-shrinkable, transparent blue, radiation cross-linked modified polyvinylidene fluoride.
SEALING RING: Environment resistant thermoplastic. Color: gray.

**APPLICATION**

1. These parts are designed to make a 1 to 1 environment resistant in-line splice in coaxial cables having tin or silver-plated conductors and shields and rated for at least 125°C.

**ASSEMBLY PROCEDURE:**

1. Cable Preparation
   A. Remove 26.67 to 27.95 (1.05 to 1.10) of cable jacket.
   B. Remove 15.24 - 16.51 (0.600 - 0.650) of shield.
   C. Remove 6.35 – 7.62 (0.250 - 0.300) of dielectric.
   D. If cable shield is to be folded back over Jacket to increase its diameter (see Selection Guide), remove 15.24 - 16.51 (0.600 to 0.650) of cable jacket and fold shield back over jacket, then continue as in B and C above.
2. Place shield splice sleeve and sealing sleeve filler sleeve (if used) onto one of the cables in the order listed.
3. Crimp the conductors of the cables into the barrels of the metal crimp splice using a calibrated Raychem AD-1377 Crimp Tool.
4. Place the filler sleeve over the crimped splice and heat, using a Raychem approved hot air heater, until it recovers onto the splice.
5. Center the sealing sleeve over the splice and heat until sleeve recovers and inserts melt and flow.
6. Position the shield splice sleeve so that trailing ends of the shrinkable shield are centered between the cable jackets. Apply heat. Start at center of shield and heat until the impregnated solder has melted and the sleeve and shield have recovered down onto the cable braid, heat toward one end slowly. Heat the overlap area for an additional 5-10 seconds to ensure adequate wetting of the cable shield and then slowly move heat across splice to overlap section on second cable. Recover this end and apply additional heat to ensure wetting. Finally, heat the two sealing, rings until they melt and flow. Cool undisturbed until solder resolidifies. The use of a Raychem AD-1319 holding fixture is recommended in order to hold cables in correct alignment during the heating and subsequent cooling steps.

| | | | | | | |
|---|---|---|---|---|---|---|
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| Unless otherwise specified dimensions are in millimeters.<br>Inches dimensions are in between brackets. | | | DOCUMENT NO.: **D-150-0094/-0096** | | | |
| TOLERANCES:<br>0.00 N/A<br>0.0 N/A<br>0 N/A | ANGLES: N/A<br><br>ROUGHNESS IN MICRON | Tyco Electronics reserves the right to amend this drawing at any time. Users should evaluate the suitability of the product for their application. | DATE:<br>May 29, 2001 | | DOC ISSUE:<br>1 | |
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