

# Introducing Cold Applied Splices



# **Cold Applied Splices**



#### **KEY FEATURES**

One-step termination and environmental protection

No heating required for installation — safe for use on fueled aircraft

Reliable in a wide variety of environmental conditions

Achieve environmental performance while maintaining:

- Small profile
- Electrical performance

Easy installation and application flexibility

Prevents water ingress under permanent pressure/weight

#### **DESCRIPTION**

The cold applied splice product line is designed at a single component in-line splice to provide high environmental protection to seal the termination from moisture and provide electrical isolation. If moisture is present, it can lead to insulation failure and breakdown of the electrical connection.

In this product, sealing is achieved by replacing traditional methods, such as grommets, greases and tapes with a novel Tyco Electronics gel technology. The electrical isolation is provided by a polymer outer layer.

#### **APPLICATIONS**

Ideal for aerospace and defense application where performance and reliability is essential

Designed to provide an immersion resistant in-line splice on 1:1 wires

- Wide range from 26 AWG to 12 AWG
- Nickel-plated, silver-plated, and tin-plated conductors
- Insulation rated for at least 135°C

Protects and seals on al conventional MIL spec and commercial wire insulation systems

#### STANDARDS & SPECS

Meets or exceeds the following:

- SAE-AMS-DTL-23053/8 (Insulation sleeve)
- SAE-AS81824/12

Under qualification for SAE AS81824 and AS81824/12

#### ORDERING INFORMATION

Minimum order quantity: 500 pieces for all sizes

#### **ENVIRONMENTAL**

Temperature range:	-65°C to 150°C
Dielectric strength:	2,500 V Maximum
Insulation resistance:	5,000 Mega-ohms minimum
Altitude immersion:	75,000 ft.
Fluid resistance:	MIL-L-7808, MIL-L-3699, MIL-H-5605 (Hydraulic), MIL-A-8243, MIL-C-59769, and MIL-T-5624 (JP-5)

#### **ELECTRICAL**

Current rating as defined by the size of crimp, guage of wire and specification

#### **MECHANICAL**

Cold splice tensile strenth exceeds strength of spliced wire



# PHYSICAL OR OTHER PROPERTIES



Cross-linked gel technology:

- Proven gel sealing system
- Versatile gel closure
- Non-flowing gel

# **MATERIALS**



Insulation sleeve:	Transparent polyvinylidene fluoride
Metal crimp splice:	Tin plated copper
End caps:	Thermoplastic, color coded
Gel:	Clear flame-retardant silicone based gel

### **APPLICATION TOOLING**



AD-1381 Tool

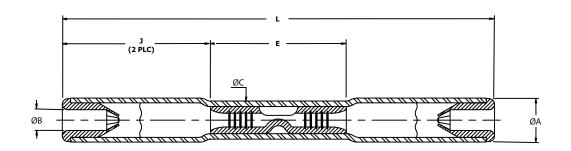
Cold Applied Crimp Tool: AD-1381 Under qualification per M22520/44-01

AD-1381 or approved M22520/44-01 crimp tool  ${\bf must\ be}$  used for proper installation of these devices

# **PART NUMBERS**

Part Number	Wire Range	L ± 1.0	øA±0.5	øB±0.25	øC±0.5	E±0.25	J±0.25	End Cap Color Code
		(±0.040) 36.8	(±0.020) 4.2	(±0.010) 2.0	(±0.020)	(±0.010) 12.1	(±0.010) 12.7	(Both Ends)
D-436-36-COLD	26-24-22-20	(1.450)	(0.165)	(0.080)	(0.145)	(0.475)	(0.500)	Red
D-436-37-COLD	18-16	38.7	5.1	2.9	4.5	14.3	12.7	Blue
	10 10	(1.525)	(0.200)	(0.115)	(0.175)	(0.565)	(0.500)	- Diac
D-436-38-COLD	14-12	38.7	5.9	3.8	5.2	14.3	12.7	Yellow
D 150 50 COLD	12	(1.525)	(0.235)	(0.150)	(0.205)	(0.565)	(0.500)	removi

Dimensions are in inches.



#### FOR MORE INFORMATION

#### **Technical Support**

Internet: www.tycoelectronics.com/ADM E-mail: product.info@tycoelectronics.com

 USA:
 +1 (800) 522-6752

 Canada:
 +1 (905) 470-4425

 Mexico:
 +52 (0) 55-1106-0814

 C. America:
 +52 (0) 55-1106-0814

 South America:
 +55 (0) 11-2103-6000

 Germany:
 +49 (0) 6251-133-1999

 Great Britain:
 +44 (0) 8706-080208

 France:
 +33 (0) 1-3420-8686

 Netherlands:
 +31 (0) 73-6246-999

 China:
 +86 (0) 400-820-6015

**Tyco Electronics Corporation** 

Menlo Park, CA

tycoelectronics.com/ADM

©2010 Tyco Electronics Corporation



