

**1. CONDUCTOR**

Material: Silicone Blocked Tin Plated Copper  
Construction: 18 AWG 19/30  
Diameter: 1.25 mm, nom

Table 1

Color	Specification
Black	8C-7584
Orange	8C-7583
White	8C-7582

**2. INNER INSULATION**

Material: Crosslinked Polyethylene  
Wall thickness: 0.93 mm, nom  
Diameter: 3.10 mm ± 0.05 mm  
Color: See Table 1  
Marking: None

**3. PHYSICAL CHARACTERISTICS**

Temperature rating: -50°C to 125°C  
Voltage rating: 600 V  
Weight: 17.8 kg per km, nom

**4. PERFORMANCE PROPERTIES**

Mechanical

Tensile Strength

Unaged 12.4 MPa, min  
Aged (96 hrs @ 135°C) 25% change, max

Elongation

Unaged 100%, min  
Aged (96 hrs @ 135°C) 25% change, max

Anticapillary

Pressure Test

Prepare a 150mm sample of wire. Place one end in a water bath. Apply 250 KPa gauge for 60 sec to the other end.

Requirement: No air bubble present.

Thermal

Cold Bend (4 hrs @ -55°C)  
No Cracks, Pass Dielectric

Electrical

Dielectric Withstand 60 sec, 60 Hz, 6.0 kV  
Spark Test 8.0 kV

Environmental

Directive 2002/95/EL(RoHS) Complies

**5. REFERENCE SPECIFICATION**

MIL 16878  
Caterpillar Inc. 8C-7582  
Caterpillar Inc. 8C-7583  
Caterpillar Inc. 8C-7584



**JUDD WIRE INC.**  
124 Turnpike Road  
Turners Falls, MA 01376  
(413) 863-4357

Date	Rev	By	Appr'd	ECN
03/05/98	A	LRW	ECJ	---
01/05/06	B	EJK	GBM	06-127
07/07/06	C	EJK	GBM	06-165
Customer Approval:				

Description: <b>HOOKUP, 18 AWG, SILICONE BLOCKED, XLPE, 125C, 600V</b>	
Specification Number: <b>JW568-98</b>	Page: 1 of 1