

**1. CONDUCTOR**

Material: Copper Tin Alloy  
 Construction: 20 AWG: 266/44  
 Diameter: 1.07 mm, nom.

**2. INSULATION**

Material: Crosslinked Polyethylene  
 Wall thickness:  
 Nominal: 0.52 mm  
 Minimum: 0.30 mm  
 Minimum Average: 0.40 mm  
 Diameter: 2.11 mm ± 0.076 mm  
 Color Standard: SAE

**3. PAIRS**

Lay: L.H.L.  
 Nominal: 22.0 mm  
 Maximum: 25.4 mm  
 Diameter: 4.22 mm, nom.  
 Color: Black x White  
 Release Agent: Slipper

**4. JACKET**

Material: Crosslinked Flame Retardant Polyurethane  
 Wall thickness:  
 Nominal: 1.00 mm  
 Minimum: 0.90 mm  
 Color: Black  
 Diameter: 6.20 mm ± 0.10 mm  
 Marking: None

**5. PHYSICAL CHARACTERISTICS**

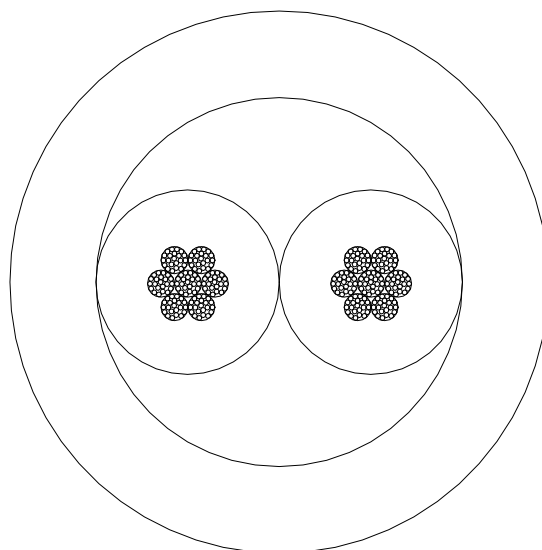
Temperature rating: 105 °C  
 Voltage Rating: 60 V  
 Weight: 42.5 kg/km, nom.

**6. PERFORMANCE PROPERTIES**

**PRIMARIES – J1128 Type GXL**

**Mechanical**

Tensile Strength  
 Unaged 10 MPa, min.  
 Aged (168 hrs @ 135°C) 80% retention, min.  
 Elongation  
 Unaged 150 %, min.  
 Aged (168 hrs @ 135°C) 50% retention, min.  
 Adhesion (50 mm slug @ 50 mm/min) 20 N, min.  
 Pinch Resistance 3.6 kg, min.  
 Sandpaper Abrasion Resistance  
 0.45 kg, 400mm, min.  
 Shrinkage None Allowed  
 Crosslink Verification (Hot Plate Method)  
 Core Not Visible, Pass Dielectric



**PERFORMANCE PROPERTIES (Cont'd)**

**Thermal**

Flame Resistance 70 s burn, max.  
 50 mm unburned, min.  
 Cold Bend (3 hrs @ -40°C)  
 No Cracks or Splits, Pass Dielectric Test

**Electrical**

Conductor Resistance 47.0 mΩ/m, max  
 Dielectric Test 1000V, 60 Hz, 60 s  
 Spark Test 2000 V

**Chemical**

Ozone Resistance No Cracks  
 Fluid Compatibility O.D. Change, max.  
 Engine Oil (IRM 902) 15%  
 Gasoline (Ref. Fuel C) 15%  
 Ethanol / Ref. Fuel C Mixture 15%  
 Diesel Fuel 15%  
 Power Steering (IRM 903) 30%  
 Auto Trans. (Dexron VI) 25%  
 Engine Coolant 50/50 15%  
 Battery Acid (Sp. Gr. ~ 1.26) 5%



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

Date	Rev	By	Appr'd	ECN
11/30/15	---	RMB	RTB	---
Customer Approval:				

Description: <b>2/C, 20 AWG 266/44 CTA, XLPE, XLPLU, 60V, 105C, 6.2 mm</b>	
Specification Number: <b>M19332</b>	Page: 1 of 2

**PERFORMANCE PROPERTIES (cont'd)**

**JACKET – J1128 Type GPT**

**Mechanical**

Tensile Strength

Unaged 20 MPa, min.

Aged (24 hrs @ 121°C) 17.5 MPa, min.

Aged (192 hrs @ 121°C)  
80% retention of aged, min.

Elongation

Unaged 400%, min.

Aged (24 hrs @ 121°C) 400%, min.

Aged (192 @ 121°C)  
50% retention of aged, min.

Adhesion

TBD

Pinch Resistance 5.0 kg, min.

Sandpaper Abrasion Resistance 2,000 mm, min.

Crosslink Verification (Hot Plate Method)  
Core Not Visible, Pass Dielectric

Flex Life (180°)

Pivot Point Length 101.0 mm ± 2 mm

Cycles 75,000 min. average

**Thermal**

Cold Bend (3 hrs @ -57°C)

No Cracks or Splits, Pass Dielectric Test

**Electrical**

Dielectric Test 1000V, 60 Hz, 60 s

**Fluid Compatibility**

Brake Fluid, SAE RM-66-06 (1 hr @ 50°C)  
No Cracks

5% Salt Solution (1 hr @ 23°C) No Cracks

**7. PROCEDURAL REFERENCE SPECIFICATION**

SAE J1128



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**2/C, 20 AWG 266/44 CTA, XLPE,  
XLPLU, 60V, 105C, 6.2 mm**

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Page:

2 of 2