## 1. CONDUCTOR

Material: Silicone Blocked Tin Plated Copper

Construction: See Table 1 Diameter: See Table 1

## 2. INSULATION

Material: Crosslinked Polyethylene

Wall thickness: See Table 1
Diameter: See Table 1
Color: SAE Color Standard

## 3. PHYSICAL CHARACTERISTICS

Temperature rating: 125°C Voltage rating: 60 V<sub>DC</sub> Weight: See Table 1

# 4. PERFORMANCE PROPERTIES

Mechanical - SAE J1128 - GXL

Tensile Strength

Unaged 10.34 MPa, min Aged (168 hrs @ 155 ℃) 80% retention, min

Elongation

Unaged 150%, min Aged (168 hrs @ 155°C) 50% retention, min Crosslink Verification Core Not Visible Anticapillary Action

Test 1

Fill a test tube to 25mm with ATF. From the sample, cut 6 specimens to 142mm with 10mm stripped and place in the tube. Apply a vacuum of 100mm Hg through the stopper for 1 hr. After outside of specimens are dry, slice off insulation for evidence of wicking up the conductor and/or inside surface of the insulation.

Fluid shall not travel up the conductor more than 20mm.

Test 2

Condition cable 48 hours at 165 ℃ prior to performing Test 1.

#### PERFORMANCE PROPERTIES (cont'd)

Adhesion (50mm Slug @ 50 mm/min)

17.8 N – 48.9 N

Abrasion See Table 1
Pinch Resistance See Table 1

Thermal - SAE J1128 - GXL

Flame Resistance 70 sec burn, max

Cold Bend (3 hrs @ -40 °C)

No Cracks or Splits, Pass Dielectric Test

Electrical - SAE J1128 - GXL

Dielectric Test 1000V, 60 Hz, 60 Sec Spark Test 2500V

Conductor (ASTM B3)

DCR See Table 1

Chemical - SAE J1128 - GXL

Ozone Resistance No Cracks

Fluid Compatibility

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. (Dextron III) 25% Engine Coolant 50/50 15% Battery Acid (sp. Gr. ~ 1.26) 5%

#### 5. REFERENCE SPECIFICATION

**SAE J1128** 

Mercury Marine 84-858280

	JUDD WIRE INC. 124 Turnpike Road Turners Falls, MA 01376 (413) 863-4357
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Date	Rev	Ву	Appr'd	ECN
02/12/08		ARJP	EJK	
07/30/08	В	ARJP	EJK	08-416
11/11/08	С	ARJP	EJK	08-484

Customer Approval:

Description:

# HOOKUP, XLPE, THIN WALL, SILICONE BLOCKED

Specification Number:

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# Table 1

	Conductor						Abra	cion		
0	Construction	OD (mm)	DCR (mΩ/m), max	Wall Thickness (mm)		OD	Abrasion Resistance		Pinch Resistance	Weight (kg/km)
	(#/mm)			Min	Nom	(mm)	Mass (kg)	Length (mm)	(kg)	(Ng/NIII)
0.80	19/.25	1.24	24.9	0.41	0.61	2.46	0.45	410	4.1	13.9
1.00	19/.28	1.37	15.3	0.41	0.58	2.54	0.45	420	4.7	17.0



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