1. CONDUCTOR

Material: Silicone Blocked Tin Plated Copper
Construction: 1.00 mm^2 19/0.28 mm
Diameter: 1.37 mm nom

2. INSULATION

Material: Crosslinked Polyethylene
Wall thickness
Minimum: 0.41 mm
Nominal: 0.58 mm
Diameter: 2.54 mm
Color: SAE Color Standard

3. PHYSICAL CHARACTERISTICS

Temperature rating: 125ºC
Voltage rating: 60 V_{DC}
Weight: 17.0 kg/km

4. PERFORMANCE PROPERTIES

Mechanical - SAE J1128 – GXL

Tensile Strength	
Unaged	10.34 MPa, min
Aged (168 hrs @ 155°C)	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°C prior to performing Test 1.

PERFORMANCE PROPERTIES (cont'd)

Adhesion (50mm Slug @ 50 mm/min)	17.8 N – 48.9 N
Abrasion	0.45 kg, 420 mm, min
Pinch Resistance	4.7 kg, min

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	15.3 Ω/km, max

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

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

Date	Rev	By	Appr'd	ECN
02/12/08	---	ARJP	EJK	---
02/14/08	A	ARJP	EJK	08-334
07/30/08	B	ARJP	EJK	08-416

Customer Approval:

Description:
HOOKUP, XLPE, THIN WALL, SILICONE BLOCKED

Specification Number:
JW1197-08