

**1. CONDUCTOR**

Material: Tin Plated Copper  
 Construction: See Table 1  
 Diameter: See Table 1

**2. INSULATION**

Material: Irradiated Polyvinylchloride (XLPVC)  
 Wall thickness:  
     Minimum: 0.013"  
     Minimum Average: 0.015"  
     Nominal: 0.017"  
 Diameter: See Table 1  
 Color: Munsell Color Standard  
 Marking: RU AWM 1430 105C 300V VW-1 JUDD  
     WIRE CSA REW XLPVC 105C 300V FT1  
     XX AWG ROHS

XX – Denotes Gauge Size

**3. PHYSICAL CHARACTERISTICS**

Temperature rating: 105°C  
 Voltage rating: 300V  
 Weight: See Table 1

**4. PERFORMANCE PROPERTIES PRIMARIES**

Mechanical  
 Tensile – CSA C22.2 No. 210.2-M90  
     Unaged 2000 psi, min  
     Aged (168 hrs @ 136°C) 70% retention, min  
 Elongation – CSA C22.2 No. 210.2-M90  
     Unaged 100%, min  
     Aged (168 hrs @ 136°C) 50% retention, min  
 Deformation – UL 758  
     1 hr @ 121°C  
     250 g, 50% max decrease in thickness  
 Crush Resistance – UL 758  
     600 lbs, min  
 Slow Compression – CSA C22.2 No. 210.2-M90  
     1 hr @ 23°C Pass

**PERFORMANCE PROPERTIES(cont'd)**

Thermal  
 Cold Bend – CSA C22.2 No. 210.2-M90  
     4 hrs @ -15°C No Cracks  
 Heat Shock – UL 758  
     1 hr @ 136°C No Cracks  
 Flame Test – UL 758 & CSA C22.2 No 127-99  
     VW-1 60 sec max  
     FT1 60 sec max  
 Electrical – UL 758  
 Dielectric Withstand I  
     Unaged 60 sec, 60 Hz, 2000 V  
     Aged (168 hrs @ 136°C) Greater than 50% of average unaged breakdown voltage  
 Dielectric Withstand II  
     Unaged 60 sec, 60 Hz, 2000 V  
     Aged (168 hrs @ 136°C) 60 sec, 60 Hz, 2000 V  
 Dielectric Withstand III  
     Conditioned 24 hrs in water 60 sec, 60 Hz, 2000 V  
 Dielectric Strength – CSA 22.2 No. 210.2-M90  
     Post Cold Bend (Conditioned 1 hr in Water) 60 sec, 60 Hz, 1500 V  
     Post Heat Shock (Conditioned 1 hr in Water) 60 sec, 60 Hz, 1500 V  
 Spark Test 3000 V

Environmental  
 Directive 2002/95/EC(RoHS) Complies

**5. REFERENCE SPECIFICATIONS**

UL AWM Style 1430  
 CSA – C22.2 No. 210.2-M90 AWM I A/B  
 UL Standard 758  
 UL Standard 1581  
 The European Parliament and the Council of the European Union Directive 2002/95/EC

**Table 1**

Size	Conductor Diameter	Insulated Diameter, in			Weight, lbs/kft
	Nominal	Minimum	Nominal	Maximum	Nominal
26	0.019	0.051	0.053	0.055	2.05
24	0.024"	0.053	0.056	0.059	2.56
22	0.03	0.060	0.062	0.064	3.63
20	0.038	0.070	0.072	0.074	5.40
18	0.048	0.079	0.081	0.083	7.61
16	0.0553	0.086	0.088	0.09	10.10



**JUDD WIRE INC.**  
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Date	Rev	By	Appr'd	ECN
10/28/08	---	EJK	ARJP	---
12/09/13	A	EM	GT	13-1454
Customer Approval:				

Description: <b>HOOKUP, XLPVC, UL 1430/CSA AWM, 105C, 300V</b>	
Specification Number: <b>JW1255-08</b>	Page: 1 of 2