

**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  
 Unaged 2000 psi, min  
 Aged (168 hrs @ 136°C) 70% retention, min  
 Elongation – CSA C22.2 No. 210  
 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  
 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  
 Shrinkback Test  
 Temperature 260°F, Min  
 275°F, Nom  
 300°F, Max  
 Duration 20 Sec  
 Test Piece 4"  
 Strip End Strip 1 End  
 Strip Length 0.156" ± 0.010"  
 Test Measure Amount of Movement  
 Requirement 0.010", 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  
 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  
 Judd Wire UL File No. E28327  
 CSA – C22.2 No. 210 AWM I A/B  
 Judd Wire CSA File No. 20564  
 UL Standard 758  
 UL Standard 1581  
 The European Parliament and the Council of the  
 European Union Directive 2002/95/EC



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

Date	Rev	By	Appr'd	ECN
03/17/17	F	CJS	GT	17-1787
06/20/17	G	CJS	GT	17-1822
08/05/24	H	GT	EJK	24-2206
Customer Approval:				

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

**Table 1**

Size	Stranding	Conductor Diameter, in.	Insulated Diameter, in.			Weight, lbs/kft
		Nominal	Minimum	Nominal	Maximum	Nominal
26	7/34	0.019	0.051	0.053	0.055	2.05
24	7/32	0.024	0.053	0.056	0.059	2.56
24	19/36	0.025	0.053	0.057	0.059	2.68
22	7/30	0.029	0.060	0.062	0.064	3.63
22	19/34	0.030	0.060	0.062	0.064	3.63
20	19/32	0.038	0.070	0.072	0.074	5.40
18	7/26	0.048	0.080	0.082	0.083	7.61
18	16/30	0.048	0.079	0.081	0.083	7.61
18	19/30	0.048	0.079	0.081	0.083	7.63
16	19/.0117"	0.056	0.088	0.090	0.092	10.2
16	26/30	0.055	0.086	0.088	0.090	10.1



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