



AL 1000V LSZH RW90 SOLONONplus™

SOLONONplus™ Single Aluminum Conductor, Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Insulation Type RW90, Sunlight Resistant, 600 or 1000V, 90°C MAX, -40°C MIN, Gasoline & Oil Resistant



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compact stranded 8000 Series Aluminum ACM in accordance with ASTM B801
2. **Insulation:** SOLONONplus™ Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH)

APPLICATIONS AND FEATURES:

Southwire's 600 or 1000 Volt SOLONONplus™ Type RW 90 VW-1 cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, and aerially when supported by a messenger. These cables are ideal for use in establishments where low smoke and low acid emissions are desired for public safety and health and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions.

SPECIFICATIONS:

- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- CSA C22.2 No. 38 Thermoset-insulated wires and cables
- CSA C22.2 No.230 Tray Cables - Rated TC
- CSA C22.2 No. 2556 / UL 2556 Cable Test Methods
- CSA SUN RES - for Sunlight Resistant rating
- CSA ST1 Smoke Test - marked FT4-ST1 (1/0 and Larger)
- Oil Res I & Sun Res - AWG 8 & Larger

SAMPLE PRINT LEGEND:

SOUTHWIRE SOLONONplus (TM) LSZH XLPO 156205 {CSA} XXX AWG (XXX mm²) AL RW90 600/1000V VW-1 HAL-FREE TC
PRI PRII GRI GRII -40°C SR FT4 ST-1 {SEQUENTIAL METER MARKS} SEQ METERS [date code]





Table 1 – Weights and Measurements

Cond. Size	Strand	Insul. Thickness	Approx. OD	Approx. Weight	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C†
AWG/ Kcmil	No.	mil	inch	lb/1000ft	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp
2	7	60	0.358	85	1.4	398	0.267	0.321	0.045	100
1	19	80	0.408	109	1.6	502	0.211	0.254	0.046	115
1/0	19	80	0.446	134	1.7	633	0.168	0.201	0.044	135
2/0	19	80	0.486	163	1.9	798	0.133	0.160	0.043	150
3/0	19	80	0.532	200	2.1	1006	0.105	0.126	0.042	175
4/0	19	80	0.584	246	2.3	1269	0.084	0.100	0.041	205
250	37	90	0.650	297	2.6	1500	0.071	0.086	0.041	230
350	37	90	0.745	401	2.9	2100	0.050	0.062	0.040	280
400	37	90	0.789	453	3.1	2400	0.044	0.054	0.040	305
500	37	90	0.865	556	3.4	3000	0.035	0.044	0.039	350
750	61	90	1.068	835	5.3	4500	0.024	0.031	0.038	435
1000	61	90	1.220	1090	6.1	6000	0.018	0.025	0.037	500

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

* Strand count meets minimum number per ASTM

Table 2 – Weights and Measurements (Metric)

Cond. Size	Strand	Insul. Thickness	Approx. OD	Approx. Weight	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C
AWG/ Kcmil	No.	mm	mm	kg/km	mm	newton	Ω/km	Ω/km	Ω/km	Amp
2	7	1.52	9.09	126	35.56	1771	0.88	1.05	0.1476	100
1	19	2.03	10.36	162	40.64	2234	0.69	0.83	0.1509	115
1/0	19	2.03	11.33	199	43.18	2817	0.55	0.66	0.1444	135
2/0	19	2.03	12.34	243	48.26	3551	0.44	0.52	0.1411	150
3/0	19	2.03	13.51	298	53.34	4477	0.34	0.41	0.1378	175
4/0	19	2.03	14.83	366	58.42	5647	0.28	0.33	0.1345	205
250	37	2.29	16.51	442	66.04	6675	0.23	0.28	0.1345	230
350	37	2.29	18.92	597	73.66	9345	0.16	0.20	0.1312	280
400	37	2.29	20.04	674	78.74	10680	0.14	0.18	0.1312	305
500	37	2.29	21.97	827	86.36	13350	0.11	0.14	0.1280	350
750	61	2.29	27.13	1243	134.62	20025	0.08	0.10	0.1247	435
1000	61	2.29	30.99	1622	154.94	26700	0.06	0.08	0.1214	500

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* Strand count meets minimum number per ASTM

