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, 90ºC MAX, -40ºC MIN, Gasoline & Oil Resistant

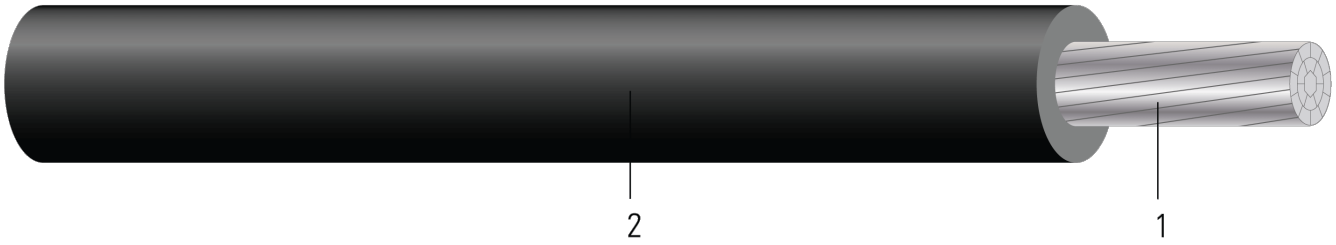


Image not to scale. See Table 1 for dimensions.

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

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]

Copyright © 2026 Southwire Company, LLC. All Rights Reserved

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	45	0.358	88	1.4	398	0.266	0.331	0.045	100
1	19	55	0.409	114	1.6	502	0.211	0.263	0.046	115
1/0	19	55	0.446	137	1.8	633	0.167	0.208	0.044	135
2/0	19	55	0.486	167	1.9	798	0.133	0.166	0.043	150
3/0	19	55	0.533	205	2.1	1006	0.105	0.131	0.042	175
4/0	19	55	0.585	251	2.3	1269	0.084	0.105	0.041	205
250	37	65	0.65	302	2.6	1500	0.07	0.087	0.041	230
350	37	65	0.746	407	3	2100	0.051	0.064	0.04	280
400	37	65	0.789	459	3.2	2400	0.044	0.055	0.04	305
500	37	65	0.866	563	3.5	3000	0.036	0.045	0.039	350
750	61	80	1.068	846	5.3	4500	0.023	0.03	0.038	435
1000	61	80	1.277	1111	6.4	6000	0.017	0.023	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
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

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	1.14	9.09	131	35.56	1771	0.87	1.09	0.1476	100
1	19	1.40	10.39	170	40.64	2234	0.69	0.86	0.1509	115
1/0	19	1.40	11.33	204	45.72	2817	0.55	0.68	0.1444	135
2/0	19	1.40	12.34	249	48.26	3551	0.44	0.54	0.1411	150
3/0	19	1.40	13.54	305	53.34	4477	0.34	0.43	0.1378	175
4/0	19	1.40	14.86	374	58.42	5647	0.28	0.34	0.1345	205
250	37	1.65	16.51	449	66.04	6675	0.23	0.29	0.1345	230
350	37	1.65	18.95	606	76.20	9345	0.17	0.21	0.1312	280
400	37	1.65	20.04	683	81.28	10680	0.14	0.18	0.1312	305
500	37	1.65	22.00	838	88.90	13350	0.12	0.15	0.1280	350
750	61	2.03	27.13	1259	134.62	20025	0.08	0.10	0.1247	435
1000	61	2.03	32.44	1653	162.56	26700	0.06	0.08	0.1214	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
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

Copyright © 2026 Southwire Company, LLC. All Rights Reserved