



DURATRAY™ CU 1000V XLPE Insulation. RHH/RHW-2/RW90 UL & CSA

Single Copper Conductors, XLPE Insulation, Sunlight Resistant, 1000V, 90°C MAX, -40°C MIN, Gasoline & Oil Resistant



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE)

APPLICATIONS AND FEATURES:

Suitable for installation in Cable Trays, Underground Duct Banks - As per CE Code limitations (see Rule 12-2202) for grounding and bonding applications. Standard colour is black. Some sizes may be available in white, red, blue, yellow, brown, orange or grey. Green Duraground™ also available.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- CSA C22.2 No. 38 Thermoset-insulated wires and cables
- CSA C22.2 No.230 Tray Cables - Rated TC-ER (1/0 AWG and Larger)
- CSA C22.2 No. 2556 & No. 0.3 Wire and Cable Test Methods
- CSA LTGG [-40°C] - as per C68.10 - for Cold Bend and Impact rating
- 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 E30117 {UL} XX AWG CU RHH-RHW-2 1000V FOR CT USE FT4 SR PR I OR PR II 90°C WET OR DRY -40°C ---
{CSA} LL90458 XX AWG (XX.X{mm2}) RW90 1000V TC FT4 SR -40°C XLPE --- RoHS {MM/DD/YYYY}





Table 1 – Weights and Measurements

Stock Number	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
TBA	8	7	60	0.141	50	0.5	132	0.653	0.786	0.052	55
TBA	6	7	60	0.177	81	0.7	209	0.411	0.495	0.051	75
TBA	4	7	60	0.225	128	0.9	333	0.258	0.310	0.048	95
TBA	2	7	60	0.282	204	1.1	530	0.162	0.195	0.045	130
694140	1/0	19	80	0.528	394	2.1	844	0.102	0.122	0.044	170
649089◇	2/0	19	80	0.572	486	2.2	1064	0.081	0.097	0.043	195
649149	3/0	19	80	0.622	601	2.4	1342	0.064	0.078	0.042	225
649098◇	4/0	19	80	0.666	743	2.6	1692	0.051	0.062	0.041	260
TBA	250	37	95	0.558	771	2.2	2000	0.043	0.053	0.041	290
649108◇	350	37	95	0.841	1216	3.3	2800	0.031	0.039	0.040	350
649047◇	500	37	95	0.966	1702	3.8	4000	0.022	0.029	0.039	430
649049◇	750	61	110	1.200	2544	6.0	6000	0.014	0.022	0.038	535
649131◇	1000	61	110	1.349	3349	6.7	8000	0.011	0.018	0.037	615

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

†Ampacities derived from the 2015 Canadian Electrical Code - Table 1 - For single conductor in free air and based on an ambient temperature of 30°C. - Table 2 - for Cable in Conduit. Not more than 3 aluminum conductors in a conduit and based on an ambient temperature of 30°C.

Table 2 – Weights and Measurements (Metric)

Stock Number	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
TBA	8	7	1.52	3.58	74	12.70	587	2.14	2.58	0.1706	55
TBA	6	7	1.52	4.50	121	17.78	930	1.35	1.62	0.1673	75
TBA	4	7	1.52	5.72	190	22.86	1482	0.85	1.02	0.1575	95
TBA	2	7	1.52	7.16	304	27.94	2359	0.53	0.64	0.1476	130
694140	1/0	19	2.03	13.41	586	53.34	3756	0.33	0.40	0.1444	170
649089◇	2/0	19	2.03	14.53	723	55.88	4735	0.27	0.32	0.1411	195
649149	3/0	19	2.03	15.80	894	60.96	5972	0.21	0.26	0.1378	225
649098◇	4/0	19	2.03	16.92	1106	66.04	7529	0.17	0.20	0.1345	260
TBA	250	37	2.41	14.17	1147	55.88	8900	0.14	0.17	0.1345	290
649108◇	350	37	2.41	21.36	1810	83.82	12460	0.10	0.13	0.1312	350
649047◇	500	37	2.41	24.54	2533	96.52	17800	0.07	0.10	0.1280	430
649049◇	750	61	2.79	30.48	3786	152.40	26700	0.05	0.07	0.1247	535
649131◇	1000	61	2.79	34.26	4984	170.18	35600	0.04	0.06	0.1214	615

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Stock Codes and Colors

Cond. Size (Strand)	Stock Number (Color)							
Size	BLACK	WHITE	RED	BLUE	YELLOW	BROWN	ORANGE	GREY
1/0	694140	649133	649135	649138	TBA	TBA	TBA	TBA
2/0	649089	649082	649084	649086	TBA	TBA	TBA	TBA
3/0	649149	649142	649144	649147	TBA	TBA	TBA	TBA
4/0	649098	649091	649093	649096	TBA	TBA	TBA	TBA
250Kcmil	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
350Kcmil	649108	649101	649104	649106	TBA	TBA	TBA	TBA
500Kcmil	649047	649112	649114	649116	TBA	TBA	TBA	TBA
750Kcmil	649049	649118	649120	649122	TBA	TBA	TBA	TBA
1000Kcmil	649131	649124	649126	649128	TBA	TBA	TBA	TBA

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