

Polyrad® XT Flexible Wire and Cable

600 V, Single-Conductor, Dual Rated – 125°C/110°C

Product Construction:

Conductor:

- 20 AWG thru 1111 kcmil soft annealed tinned copper per ASTM B33, B8 and B172

Insulation:

- Polyrad® XT flame-retardant, low-smoke irradiated Cross-linked Polyolefin (XLPO)

Print:

- GENERAL CABLE® (WC) POLYRAD® XT 125°C/110°C XXAWG 600 V YEAR/MONTH

Options:

- Available in multi-conductor constructions
- Class K stranding
- Available in colors other than dark gray

Applications:

- Ideally suited for use where environmental factors require cable characteristics to perform with a high degree of flame retardancy and excellent moisture-stable electrical values. Where reliability is the major concern and where maximum performance will be demanded
- Engineered and manufactured for both original equipment and retrofit use in power and control circuits and in motor leads
- Extensively found on all types of heavy- and light-rail cars, rapid transit cars, diesel-electric locomotives, freight cars and off-road vehicles

Features:

- Dual temperature rating at 125°C/110°C for long life, higher ampacities and protection from thermal overloads
- Excellent flexibility & free stripping
- Outstanding thermal stability at elevated temperatures
- Maximum flame retardance and low toxicity
- Excellent low-temperature performance; suitable for installation in sub-zero conditions
- Extra-tough, mechanically rugged irradiated thermoset insulation
- Resistant to most oils and chemicals
- Meets cold bend test at -55°C
- Meets cold impact test at -40°C

Compliances:

Industry:

- AAR S-501/AAR RP-585
- ICEA S-95-658
- RoHS Compliant

Flame Test:

- IEEE 1202 (70,000 BTU/hr)
- IEEE 383 (70,000 BTU/hr)
- VW-1

Other:

- BSS 7239
- SMP 800-C
- ASTM E662
- NFPA 130 STD 2010
- ASTM 1354

Packaging:

- Standard reel put-up

Color Code Chart

(Including but not limited to)

ORDERING SUFFIX	COLOR	ORDERING SUFFIX	COLOR
00	Dark Gray	05	Green
02	Red	08	Light Gray
04	Yellow	09	White



POLYRAD® XT 600 V

CATALOG NUMBER STOCK*	CONDUCTOR (AWG/kcmil) SIZE AND STRANDING		NOMINAL CONDUCTOR DIAMETER		NOMINAL INSULATION THICKNESS		NOMINAL CABLE DIAMETER		COPPER WEIGHT		NET CABLE WEIGHT		AMPACITY (FREE AIR 40°C AMBIENT)	
			INCHES	mm	MILS	mm	INCHES	mm	LBS./1000'	kg/km	LBS./1000'	kg/km	110°C	125°C
315130	20	19/32	0,038	0,97	30	0,76	0,098	2,49	4	6	8	12	15	17
280710*	18	19/30	0,048	1,21	30	0,76	0,108	2,74	6	9	11	16	17	19
280720*	16	19/29	0,054	1,37	30	0,76	0,114	2,90	8	12	13	19	23	25
280700*	14	19/27	0,067	1,70	30	0,76	0,127	3,23	12	18	17	25	39	42
296420*	12	19/25	0,086	2,18	30	0,76	0,146	3,71	19	28	26	39	51	55
303910*	10	27/24	0,117	2,97	30	0,76	0,177	4,50	34	50	42	63	67	72
296490	8	37/24	0,135	3,43	45	1,14	0,225	5,72	47	70	61	91	85	92
330230*	6	61/24	0,174	4,42	45	1,14	0,264	6,71	76	114	95	142	120	130
355320	5	91/24	0,242	6,15	45	1,14	0,332	8,43	116	173	139	211	151	163
318420	4	105/24	0,262	6,68	45	1,14	0,352	8,94	137	204	162	241	160	173
355330	3	125/24	0,285	7,24	45	1,14	0,375	9,53	167	284	191	284	199	215
355340	2	150/24	0,307	7,80	45	1,14	0,397	10,08	190	283	218	325	214	231
355350	1	225/24	0,380	9,65	55	1,40	0,490	12,45	287	427	346	515	247	267
355360	1/0	275/24	0,410	10,41	55	1,40	0,520	13,21	351	522	414	616	286	309
355370	2/0	325/24	0,470	11,94	55	1,40	0,580	14,73	407	606	471	701	329	355
355380	3/0	450/24	0,549	13,94	55	1,40	0,659	16,74	594	884	652	970	380	410
355390	4/0	550/24	0,593	15,06	55	1,40	0,703	17,86	696	1036	771	1147	446	482
355400	262	650/24	0,630	16,00	65	1,65	0,760	19,30	820	1220	913	1359	524	566
355410	313	775/24	0,685	17,40	65	1,65	0,815	20,70	987	1469	1089	1621	590	637
355420	373	925/24	0,750	19,05	65	1,65	0,880	22,35	1176	1750	1289	1918	657	710
355430	444	1100/24	0,820	20,83	65	1,65	0,950	24,13	1413	2207	1537	2287	734	793
355440	535	1325/24	0,895	22,73	80	2,03	1,055	26,80	1697	2525	1862	2771	828	894
355450	646	1600/24	0,980	24,89	80	2,03	1,140	28,96	2020	3006	2202	3277	931	1005
355460	777	1925/24	1,075	27,31	80	2,03	1,235	31,37	2435	3624	2564	3816	1047	1130
355470	929	2300/24	1,230	31,24	80	2,03	1,390	35,31	3117	4638	3401	5061	1168	1260
355480	1111	2750/24	1,328	33,73	95	2,41	1,518	38,56	3400	5060	3915	5826	1254	1354

Dimensions and weights are nominal; subject to industry tolerances.

Note: At the option of the purchaser, the manufacturer's standard type of stranding will be acceptable, providing that the conductor diameter does not exceed the values shown. The total number of wires shall be as specified, plus or minus one percent, except 150/24 which may vary by minus two percent, providing that the conductor diameter does not exceed the values shown.

*Standard stock items



Phone: 866.248.7060
www.generalcable.com



POLYRAD®

Polyrad® XT Flexible Wire and Cable

2000 V, Single-Conductor, Dual Rated – 125°C/110°C



POLYRAD® XT 2000 V – STANDARD INSULATION THICKNESS

CATALOG NUMBER STOCK*	CONDUCTOR (AWG/kcmil) SIZE AND STRANDING		NOMINAL CONDUCTOR DIAMETER		NOMINAL INSULATION THICKNESS		NOMINAL CABLE DIAMETER		COPPER WEIGHT		NET CABLE WEIGHT		AMPACITY (FREE AIR 40°C AMBIENT)	
			INCHES	mm	MILS	mm	INCHES	mm	LBS./1000'	kg/km	LBS./1000'	kg/km	110°C	125°C
364980	20	19/32	0.038	0.97	45	1.14	0.128	3.25	4	6	10	15	15	17
300620*	18	19/30	0.048	1.21	45	1.14	0.138	3.51	6	9	14	21	17	19
300890*	16	19/29	0.054	1.37	45	1.14	0.144	3.66	8	12	16	24	23	25
280740*	14	19/27	0.067	1.70	45	1.14	0.157	3.99	12	18	22	33	39	42
303480*	12	19/25	0.086	2.18	45	1.14	0.176	4.47	19	28	31	46	51	55
301260*	10	27/24	0.117	2.97	45	1.14	0.207	5.26	34	50	47	70	67	72
269970*	8	37/24	0.135	3.43	55	1.40	0.245	6.22	47	70	66	98	85	92
297970*	6	61/24	0.174	4.42	55	1.40	0.284	6.96	76	114	100	149	120	130
355490*	5	91/24	0.242	6.15	55	1.40	0.352	8.94	116	173	149	222	151	163
301270*	4	105/24	0.262	6.68	55	1.40	0.372	9.45	137	204	169	252	160	173
325290*	3	125/24	0.285	7.24	55	1.40	0.395	10.03	167	284	197	293	199	215
302440*	2	150/24	0.307	7.80	55	1.40	0.417	10.59	190	283	226	336	214	231
355500*	1	225/24	0.380	9.65	65	1.65	0.510	12.95	287	427	353	525	247	267
296500*	1/0	275/24	0.410	10.41	65	1.65	0.540	13.72	351	522	420	625	286	309
301280*	2/0	325/24	0.470	11.94	65	1.65	0.600	15.24	407	606	481	716	329	355
300900*	3/0	450/24	0.549	13.94	65	1.65	0.679	17.25	594	884	663	987	380	410
296510*	4/0	550/24	0.593	15.06	65	1.65	0.723	18.36	696	1036	792	1179	446	482
267040*	262	650/24	0.630	16.00	75	1.91	0.780	19.81	820	1220	931	1386	524	566
296520*	313	775/24	0.685	17.40	75	1.91	0.835	21.21	987	1469	1108	1649	590	637
304020*	373	925/24	0.750	19.05	75	1.91	0.900	22.86	1176	1750	1310	1950	657	710
300180	444	1100/24	0.820	20.83	75	1.91	0.970	24.64	1413	2207	1561	2323	734	793
263400*	535	1325/24	0.895	22.73	90	2.29	1.075	27.31	1697	2525	1888	2810	828	894
355570	646	1600/24	0.980	24.89	90	2.29	1.160	29.46	2020	3006	2231	3320	931	1005
260080	777	1925/24	1.075	27.31	90	2.29	1.255	31.88	2435	3624	2681	3990	1047	1130
355600	929	2300/24	1.230	31.24	90	2.29	1.410	35.81	3117	4638	3431	5106	1168	1260
355620	1111	2750/24	1.328	33.73	110	2.79	1.548	39.32	3400	5060	3972	5911	1254	1354

POLYRAD® XT 2000 V – HEAVY WALL INSULATION THICKNESS

355510	4/0	550/24	0.593	15.06	105	2.67	0.803	20.40	696	1036	837	1246	446	482
355520	262	650/24	0.630	16.00	105	2.67	0.840	21.34	820	1220	969	1442	524	566
355530	313	775/24	0.685	17.40	105	2.67	0.895	22.73	987	1469	1149	1710	590	637
355540	373	925/24	0.750	19.05	105	2.67	0.960	24.38	1176	1750	1353	2013	657	710
355550	444	1100/24	0.820	20.83	105	2.67	1.030	26.16	1413	2207	1607	2392	734	793
355560	535	1325/24	0.895	22.73	120	3.05	1.135	28.83	1697	2525	1946	2896	828	894
355580	646	1600/24	0.980	24.89	120	3.05	1.220	30.99	2020	3006	2285	3400	931	1005
355590	777	1925/24	1.075	27.31	120	3.05	1.315	33.40	2435	3624	2727	4058	1047	1130
355610	929	2300/24	1.230	31.24	120	3.05	1.470	37.34	3117	4638	3539	5267	1168	1260
355630	1111	2750/24	1.328	33.73	120	3.05	1.568	39.83	3400	5060	4011	5969	1254	1354

Dimensions and weights are nominal; subject to industry tolerances.

Note #1: Where additional insulation thickness is desired for added mechanical protection, these values are noted in the second chart.

Note #2: At the option of the purchaser, the manufacturer's standard type of stranding will be acceptable providing that the conductor diameter does not exceed the values shown. The total number of wires shall be as specified, plus or minus one percent, except 150/24 which may vary by minus two percent, providing that the conductor diameter does not exceed the values shown.

*Standard stock items

Product Construction:

Conductor:

- 20 AWG thru 1111 kcmil soft annealed tinned copper per ASTM B33, B8 and B172

Insulation:

- Polyrad® XT flame-retardant, low-smoke irradiated Cross-linked Polyolefin (XLPO)

Print:

- GENERAL CABLE® (WC) POLYRAD® XT 125°C/110°C XXAWG 2000 V YEAR/MONTH

Options:

- Class K stranding
- Available in colors other than dark gray

Applications:

- Ideally suited for use where environmental factors require cable characteristics to perform with a high degree of flame retardancy and excellent moisture-stable electrical values. Where reliability is the major concern and where maximum performance will be demanded
- Engineered and manufactured for both original equipment and retrofit use in power and control circuits and in motor leads
- Extensively found on all types of heavy- and light-rail cars, rapid transit cars, diesel-electric locomotives, freight cars and off-road vehicles

Features:

- Dual temperature rating at 125°C/110°C for long life, higher ampacities and protection from thermal overloads
- Excellent flexibility and free stripping
- Outstanding thermal stability at elevated temperatures
- Maximum flame retardance and low toxicity
- Excellent low-temperature performance; suitable for installation in sub-zero conditions
- Extra-tough, mechanically rugged irradiated thermoset insulation
- Resistant to most oils and chemicals
- Meets cold bend test at -55°C
- Meets cold impact test at -40°C

Compliances:

Industry:

- AAR S-501/AAR RP-585
- ICEA S-95-658
- RoHS Compliant

Flame Test:

- IEEE 1202 (70,000 BTU/hr)
- IEEE 383 (70,000 BTU/hr)
- VW-1

Other:

- BSS 7239
- SMP 800-C
- ASTM E662
- NFPA 130 STD 2010
- ASTM 1354

Packaging:

- Standard reel put-up

Color Code Chart

(Including but not limited to)

ORDERING SUFFIX	COLOR	ORDERING SUFFIX	COLOR
00	Dark Gray	05	Green
02	Red	08	Light Gray
04	Yellow	09	White



Polyrad® XT Multi-Conductor Cable

600 V or 2000 V, 125°C, Shielded or Non-Shielded

General Cable manufactures an extensive array of cables to support the many and diverse applications of transit infrastructures. To meet the needs of the evolving transit and locomotive industry, General Cable consistently brings new innovative cabling concepts to market with better technology, superior safety, easier and faster installation and extended performance. Polyrad® XT multi-conductor shielded and non-shielded rapid transit and locomotive car cables are rated at 125°C and supplied in both 600 and 2000 Volt constructions.

Product Construction:

Conductor:

- 20 AWG thru 4/0 AWG soft annealed tinned copper per ASTM B33, B8 and B172

Insulation:

- Polyrad® XT flame-retardant, low-smoke irradiated Cross-linked Polyolefin (XLPO)

Shield Options:

- Tinned copper braid
- Foil with drain wire
- Non-shielded

Jacket:

- Polyrad® XT flame-retardant, low-smoke irradiated Cross-linked Polyolefin (XLPO)

Print (Including but not limited to):

- GENERAL CABLE® (WC) POLYRAD® XT XX/COND XXAWG SHIELDED 125°C 600 V YEAR/MONTH

Options:

- Available in E1, E2 or Method 4 color codes

Applications:

- Ideally suited for use where environmental factors require cable characteristics to perform with a high degree of flame retardancy and excellent moisture-stable electrical values. Where reliability is the major concern and where maximum performance will be demanded



Applications (cont'd.):

- Engineered and manufactured for both original equipment and retrofit use in electronic equipment
- Extensively found on all types of heavy- and light-rail cars, rapid transit cars, diesel-electric locomotives, freight cars and off-road vehicles

Features:

- Temperature rating at 125°C for long life, higher ampacities and protection from thermal overloads
- Excellent flexibility and free stripping
- Outstanding thermal stability at elevated temperatures
- Maximum flame retardance
- Excellent low-temperature performance; suitable for installation in sub-zero conditions
- Extra-tough, mechanically rugged irradiated thermoset insulation and jacket
- Resistant to most oils and chemicals

Compliances:

Industry:

- ICEA S-95-658
- RoHS Compliant

Flame Test:

- IEEE 1202 (70,000 BTU/hr)
- IEEE 383 (70,000 BTU/hr)
- VW-1

Other:

- BSS 7239
- SMP 800-C
- ASTM E662
- NFPA 130 STD 2010

Packaging

- Standard reel put-up

The multi-conductor cables shown in the following tables are merely a sampling of General Cable's wide range of products. Other conductor sizes, designs and/or specific installation requirements are available to meet virtually all the cabling needs of the transit and locomotive industry. For more information, contact General Cable's Transit inside sales at info@generalcable.com.

TWO CONDUCTOR POLYRAD® XT 600 V SHIELDED - 36 AWG TINNED COPPER BRAID - 85% MINIMUM COVERAGE

CATALOG NUMBER	AWG		INSULATED DIAMETER		JACKET THICKNESS		CABLE DIAMETER		NET CABLE WEIGHT	
	SIZE	STRANDING	INCHES	mm	MILS	mm	INCHES	mm	LBS./1000'	kg/km
324680	20	19/32	0.098	2.49	45	1.14	0.315	8.0	59	88
376760	18	19/30	0.108	2.74	45	1.14	0.330	8.4	63	94
373770	16	19/29	0.114	2.90	45	1.14	0.345	8.8	73	109
412170	14	19/27	0.127	3.23	45	1.14	0.370	9.4	86	130
373750	12	19/25	0.146	3.71	45	1.14	0.410	10.4	109	162

THREE CONDUCTOR POLYRAD® XT 600 V SHIELDED - 36 AWG TINNED COPPER BRAID - 85% MINIMUM COVERAGE

374360	20	19/32	0.098	2.49	45	1.14	0.325	8.3	68	88
387460	18	19/30	0.108	2.74	45	1.14	0.345	8.8	72	94
373780	16	19/29	0.114	2.90	45	1.14	0.360	9.2	87	130
412180	14	19/27	0.127	3.23	45	1.14	0.390	9.7	108	161
373760	12	19/25	0.146	3.71	45	1.14	0.430	10.9	139	162

FOUR CONDUCTOR POLYRAD® XT 600 V SHIELDED - 36 AWG TINNED COPPER BRAID - 85% MINIMUM COVERAGE

412190	20	19/32	0.098	2.49	45	1.14	0.350	8.9	81	121
387570	18	19/30	0.108	2.74	45	1.14	0.380	9.7	85	127
387070	16	19/29	0.114	2.90	45	1.14	0.390	9.9	106	158
412200	14	19/27	0.127	3.23	45	1.14	0.420	10.7	131	195
412210	12	19/25	0.146	3.71	45	1.14	0.465	11.8	176	262