

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 |

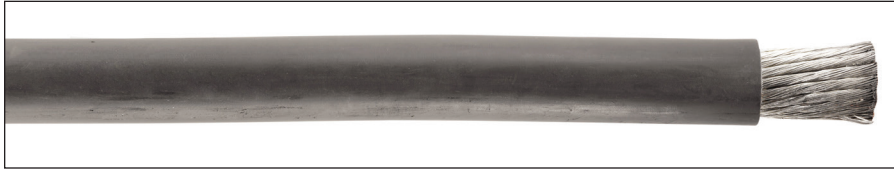
Dimensions and weights are nominal; subject to industry tolerances.

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

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 |

