

BUILDING WIRE SINGLE CORE Aluminium





## APPLICATION

For separate earth conductors, For switchboard and control

panel wiring. For fixed wiring within other enclosures or apparatus where the cable is not accessible without the use of tools.

**STANDARD** AS/NZS 5000.1

**VOLTAGE** 600/1000V

**CONDUCTOR** Aluminium 1 - 630mm2

**INSULATION** PVC, V-90

 See below for

 colour options

**MAX. OPERATING TEMP.** 90**°**C

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Item Number*** | ***Conductor*** | ***Overall Diameter*** | ***Nominal Diameter***  | ***Minimum Insulation Thickness***  | ***Approx. Mass*** | ***Minimum Installed Bending Radius*** |
|  | ***mm2*** | ***(No./mm)*** | ***Minimum (mm)*** | ***Maximum (mm)*** | ***mm*** | ***mm*** | ***Kg/Km*** | ***mm*** |
| DC18y/AL | 16 | 7/1.70 | 7.2 | 7.4 | 5.1 | 1 | 180 | 45 |
| DC19y/AL | 25 | 19/1.35 | 9.25 | 9.45 | 6.75 | 1.2 | 285 | 60 |
| DC110y/AL | 35 | 19/1.53 | 10.15 | 10.35 | 7.65 | 1.2 | 370 | 65 |
| DC111y/AL | 50 | 19/1.78 | 11.8 | 12 | 8.9 | 1.4 | 515 | 70 |
| DC112y/AL | 70 | 19/2.14 | 13.6 | 13.8 | 10.7 | 1.4 | 730 | 80 |
| DC113y/AL | 95 | 37/1.78 | 15.76 | 16 | 12.5 | 1.6 | 980 | 90 |
| DC1149y/AL | 120 | 37/2.03 | 17.51 | 17.75 | 14.21 | 1.6 | 1250 | 100 |
| DC115y/AL | 150 | 37/2.25 | 19.45 | 19.7 | 15.75 | 1.8 | 1500 | 110 |
| DC116y/AL | 185 | 37/2.52 | 21.74 | 22 | 17.64 | 2 | 1750 | 120 |
| DC117y/AL | 240 | 61/2.25 | 24.75 | 25.05 | 20.25 | 2.2 | 2200 | 130 |
| DC118y/AL | 300 | 61/2.52 | 27.58 | 27.9 | 22.68 | 2.4 | 2890 | 140 |
| DC119y/AL | 400 | 61/2.85 | 30.95 | 31.35 | 25.65 | 2.6 | 3530 | 150 |
| DC1110y/AL | 500 | 61/3.20 | 34.5 | 34.9 | 28.8 | 2.8 | 4450 | 160 |
| DC1111y/AL | 630 | 90/3.00 | 38.46 | 38.85 | 32.76 | 2.8 | 6300 | 170 |

y=1 for Black y=2 for Red y=3 for White y=4 for Blue y=5 for Green/Yellow

NB: We may not stock all sizes in all colour variations

Bigger Size available on request

DOMINION CABLES – LIGHTING FIJI AND THE PACIFIC A3

|  |  |  |
| --- | --- | --- |
| **CONDUCTOR** | **CURRENT RATING (a)** **Fixed Wiring** | **ELECTRICAL CHARACTERISTICS** |
| **Nominal Area** **mm2** | **Unenclosed In Air****2SINGLEA****A** | **Conduit** **In Air****2SINLEDA****A** | **Maximum** **DC** **Resistance @20°C****Ω/km** | **Maximum** **AC****Resistance @90°C****Ω/km** | **Equivalent Star Reactance****(trefoil)****Ω/km** | **Single Phase Voltage Drop****(trefoil)****@90°C****mV/Am** |
| 1 | 13 | 13 | 21.2 | 27.0 | 0.168 | 54.1 |
| 1.5 | 16 | 18 | 13.6 | 17.3 | 0.157 | 34.7 |
| 2.5 | 23 | 24 | 7.41 | 9.45 | 0.143 | 18.9 |
| 4 | 31 | 32 | 4.61 | 5.88 | 0.137 | 11.8 |
| 6 | 40 | 41 | 3.08 | 3.93 | 0.128 | 7.87 |
| 10 | 54 | 54 | 1.83 | 2.33 | 0.118 | 4.68 |
| 16 | 72 | 70 | 1.15 | 1.47 | 0.111 | 2.95 |
| 25 | 97 | 94 | 0.727 | 0.927 | 0.106 | 1.87 |
| 35 | 119 | 112 | 0.524 | 0.668 | 0.101 | 1.35 |
| 50 | 146 | 138 | 0.387 | 0.494 | 0.0962 | 1.01 |
| 70 | 184 | 170 | 0.268 | 0.342 | 0.0917 | 0.710 |
| 95 | 230 | 212 | 0.193 | 0.247 | 0.0904 | 0.528 |
| 120 | 267 | 242 | 0.153 | 0.197 | 0.0870 | 0.431 |
| 150 | 308 | 282 | 0.124 | 0.160 | 0.0868 | 0.365 |
| 185 | 358 | 320 | 0.0991 | 0.129 | 0.0862 | 0.311 |
| 240 | 428 | 381 | 0.0754 | 0.0991 | 0.0847 | 0.262 |
| 300 | 495 |  | 0.0601 | 0.0803 | 0.0839 | 0.233 |
| 400 | 577 |  | 0.0470 | 0.0646 | 0.0829 | 0.211 |
| 500 | 668 |  | 0.0366 | 0.0525 | 0.0820 | 0.196 |
| 630 | 770 |  | 0.0283 | 0.0432 | 0.0800 | 0.184 |

(a) Based on 40**°**C ambient air temperature.

The above information is from the following sources: AS/NZS 3008.1.1:2009 (tables 4, 30, 34, 40)

 AS 1125:2001 (table 2.3)

For installation with thermal insulation refer to AS/NZS 3008 for de-rating factors.

Do not put in direct contact with polystyrene, polyurethane or similar thermal insulation materials.

***DOMINION WIRE & CABLES LTD.***

# QUALITY CABLE MANUFACTURES, DISTRIBUTORS AND EXPORTERS

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