

## FEATURES

- Fine-wire strand made of annealed copper wire
- Reel of 100 m with insulation wall thickness of 0.8 mm
- Three approvals making this Switchgear versatile Cable to be used in commercial and non-commercial applications
- The BS6231 has the maximum operating temperature of +90°C (105° for 15,000 hours)

## RS PRO Single Core x 4.0sqmm (Class 5 PCW), HRPVC Insulated, 600/1000V, Tri-Rated

RS Stock No.: 811-1445



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

### Product Description

A plain copper stranded conductor covered with a PVC sheath. The advantage of using this type of cable is that it allows many different approvals to be met from a single cable type, thereby simplifying purchasing, stockholding, and production. Maximum Operating Temperature 90°C (105°C for 15,000 hours) to BS6231.

### General Specifications

|                      |  |
|----------------------|--|
| <b>Type</b>          | Tri-rated  |
| <b>Tri-rated</b>     | Yes  |
| <b>Sheath Colour</b> | Yellow/Green   |
| <b>Application</b>   | Electrical cabinets, Switch control in power switchgear, Relay and instrumentation panels of power switchgear, Internal connectors in rectifier equipment, Motor starters and controllers, Small electrical devices, Industrial electrical installations, Panel building |

### Electrical Specifications

|                             |   |
|-----------------------------|---|
| <b>Voltage Rating</b>       | 600/1000V   |
| <b>Current Rating</b>       | 41A   |
| <b>Conductor Material</b>   | 52/0.295mm Plain Annealed Copper (Class 5 to IEC 60228) |
| <b>Insulation Material</b>  | HRPVC (Type T13 to BS EN 50363)                         |
| <b>Conductor Resistance</b> | 4.95 $\Omega$ /km @ 20°C (Maximum)                      |

## Mechanical Specifications

|                                  |  |
|----------------------------------|--|
| <b>Length</b>                    | 100m                                     |
| <b>Cross Sectional Area</b>      | 4mm <sup>2</sup>                         |
| <b>Outer Diameter</b>            | 4.3mm                                    |
| <b>American Wire Gauge</b>       | 12                                       |
| <b>Core Strands</b>              | 52/0.3mm                                 |
| <b>Size of Strands</b>           | 0.3mm                                    |
| <b>Insulation Wall Thickness</b> | 0.8mm                                    |
| <b>Minimum Bend Radius</b>       | 6 x Overall Diameter                     |
| <b>Weight</b>                    | 49kg/km                                  |
| <b>Diameter Over Insulation</b>  | Lower Limit: 3.90mm; Upper Limit: 4.80mm |

## Operation Environment Specifications

|                                      |                                |
|--------------------------------------|--------------------------------|
| <b>Maximum Operating Temperature</b> | 90°C (105°C for 15,000 hours). |
| <b>Maximum Conductor Temperature</b> | 105°C in air; 60°C in oil      |
| <b>Temperature Range</b>             | -15 to +105°C                  |

## Approvals

|                                  |  |
|----------------------------------|--|
| <b>Compliance/Certifications</b> | UL & CSA                                 |
| <b>Standards Met</b>             | UL 1015 & CSA Type TEW & BS 6231 Type CK |



| AWM Size | Area mm <sup>2</sup> | Wire Type | UL Style | Nominal R/T (mm) | Nominal Diam (mm) | Current Rating (A) | Weight Kg/Km |
|----------|----------------------|-----------|----------|------------------|-------------------|--------------------|--------------|
| 22       | 0.5                  | 16/0.2    | 1015     | 0.80             | 2.6               | 11                 | 1            |
| 20       | 0.75                 | 24/0.2    | 1015     | 0.80             | 2.8               | 14                 | 14           |
| 18       | 1.0                  | 32/0.2    | 1015     | 0.80             | 3.0               | 17                 | 17           |
| 16       | 1.5                  | 30/0.25   | 1015     | 0.80             | 3.3               | 21                 | 22           |
| 14       | 2.5                  | 50/0.25   | 1015     | 0.80             | 3.7               | 30                 | 33           |
| 12       | 4.0                  | 56/0.3    | 1015     | 0.80             | 4.3               | 41                 | 49           |
| 10       | 6.0                  | 84/0.3    | 1015     | 0.80             | 5.1               | 53                 | 71           |
| 8        | 10                   | 80/0.4    | 1028     | 1.20             | 6.8               | 75                 | 124          |
| 6        | 16                   | 126/0.4   | 1283     | 1.58             | 9.2               | 100                | 199          |
| 4        | 25                   | 196/0.4   | 1283     | 1.58             | 10.6              | 136                | 290          |
| 2        | 35                   | 276/0.4   | 1283     | 1.58             | 11.6              | 167                | 387          |
| 1        | 50                   | 396/0.4   | 1284     | 2.10             | 14.4              | 190                | 570          |
| 2/0      | 70                   | 360/0.5   | 1284     | 2.10             | 16.5              | 240                | 781          |
| 3/0      | 95                   | 475/0.5   | 1284     | 2.10             | 18.7              | 300                | 1025         |
| 4/0      | 120                  | 608/0.5   | 1284     | 2.10             | 20.0              | 340                | 1280         |