



ENGLISH

## Datasheet

Stock No: 811-1467

# RS Pro Red Tri-rated Cable, PVC



Permanoid offer a range of PVC insulated flexible panel wires which are manufactured and recognised/certified as appropriate to the following standards:

Underwriters Laboratories (UL):

Recognised to Style 1015, 1028, 1283 or 1284 (depending on wire size)

Rated - 105°C in air

- 60°C in oil

- 600V

Canadian Standards Association (CSA):

Certified to Type TEW 105°C

British Standard

Manufactured to BS6231 Type CK

Applications include the wiring of switch, control metering, relay and instrument panels of power switchgear as well as internal connections in rectifier equipment and in motor starters and controllers.

The UL and CSA certification on these wires enable their use in equipment destined for the North American market as well as the European market. This gives the benefit of simple design and manufacturing and less stockholding, compared to the alternative of using wires manufactured to the separate standards.

All wires are printed or embossed at regular intervals along their length with the following information:

UL recognition logo; AWM style no; 105°C 600V VW-1; AWG size; CSA TEW 105°C FT1; BS6231; mm<sup>2</sup> size

Wires are available in the following colours:

Black, Blue, Light Blue, Dark Blue, Brown, Green, Grey, Orange, Pink, Red, Violet, White, Yellow and Green/Yellow.

Standard reels are 50m, 100m & 500m though other lengths can be supplied on request. Sizes up to and including 6mm<sup>2</sup> can be supplied in cardboard barrels. All reels & barrels carry UL and CSA certification labels.

#### TECHNICAL INFORMATION

|                      |   |
|----------------------|---|
| Conductors:          | Plain annealed copper, Class 5 to BS EN 60288.              |
| Insulation:          | Heat Resisting PVC.   |
| Voltage Rating:      | 600V between conductor and earth, 1000V between conductors. |
| Max. Conductor Temp: | 105°C in air, 60°C in oil.                                  |
| Min. bend radius:    | 6 x overall diameter.                                       |

| AWM Size | Size (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     | 0.8             | 2.6               | 11                 | 11             |
| 20       | 0.75                    | 24/0.2    | 1015     | 0.8             | 2.8               | 14                 | 14             |
| 18       | 1.0                     | 32/0.2    | 1015     | 0.8             | 3.0               | 17                 | 17             |
| 16       | 1.5                     | 30/0.25   | 1015     | 0.8             | 3.3               | 21                 | 22             |
| 14       | 2.5                     | 50/0.25   | 1015     | 0.8             | 3.7               | 30                 | 33             |
| 12       | 4                       | 56/0.3    | 1015     | 0.8             | 4.3               | 41                 | 49             |
| 10       | 6                       | 84/0.3    | 1015     | 0.8             | 5.1               | 53                 | 71             |
| 8        | 10                      | 80/0.4    | 1028     | 1.2             | 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     | 2.1             | 14.4              | 190                | 570            |
| 2/0      | 70                      | 360/0.5   | 1284     | 2.1             | 16.5              | 240                | 781            |
| 3/0      | 95                      | 475/0.5   | 1284     | 2.1             | 18.7              | 300                | 1025           |
| 4/0      | 120                     | 608/0.5   | 1284     | 2.1             | 20.0              | 340                | 1280           |

NB. Wire constructions and diameters are nominal.

Current ratings are based on a conductor operating temperature of 85°C and an ambient air temperature of 45°C and are for a single panel wire in free air.