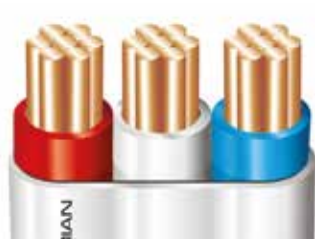


**FLAT POWER CABLES 450/750 V**
**FLAT PVC 3C**

**Cable description**

PVC insulated laid flat and PVC sheathed cable to AS/NZS 5000.2.

**Application**

For general wiring, unenclosed, enclosed in conduit, for domestic, commercial and industrial installations where not subject to mechanical damage.

**Approvals**

AS/NZS 5000.2

**Behaviour in flame and fire**

Flame retardant

**Temperature range**

Normal operating temperature: +90 °C

Minimum operating temperature: 0 °C

**Flexibility**

Semi-rigid

**Resistance to**

Chemical exposure: Occasional

Mechanical impact: Light

Water exposure: Occasional condensation

Solar radiation and

weather exposure: Occasional

**Cable design**
**Conductor:**

Plain annealed copper conductor to AS/NZS 1125

Can also be operated at temperatures up to 90 °C when not exposed to mechanical deformation (see AS/NZS 3008.1)

**Insulation:**

V-90 PVC

Colours: Red, White, Blue

**Sheath:**

3V-90 PVC

Colour: White

**Installation conditions**

In free air

In conduit

In trench

In ground with protection

In duct

External building with protection

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group; any modification or alteration afterwards of product may give different result. The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Prysmian Group. The information is believed to be correct at the time of issue. Prysmian Group reserves the right to amend this specification without prior notice. This specification is not contractually valid unless specifically authorised by Prysmian Group.



**Physical & electrical characteristics**

**3C FLAT PVC**

| Product code | Conductor                      |                                    |                     | Nominal insulation thickness mm | Cable               |     |         |     | Approx. mass kg/100 m | Min. installed bending radius (a) mm |
|--------------|--------------------------------|------------------------------------|---------------------|---------------------------------|---------------------|-----|---------|-----|-----------------------|--------------------------------------|
|              | Nominal C.S.A. mm <sup>2</sup> | Number and diameter of wires No/mm | Nominal diameter mm |                                 | Overall diameter mm |     |         |     |                       |                                      |
|              |                                |                                    |                     |                                 | Minimum             |     | Maximum |     |                       |                                      |
| Major axis   | Minor axis                     | Major axis                         | Minor axis          |                                 |                     |     |         |     |                       |                                      |
| 1.0S3CF      | 1.0*                           | 1/1.13                             | 1.13                | 0.6                             | 8.8                 | 4.1 | 9.0     | 4.3 | 8                     | 20                                   |
| 1.53CF       | 1.5                            | 7/0.50                             | 1.5                 | 0.6                             | 9.8                 | 4.5 | 10.1    | 4.6 | 10                    | 20                                   |
| 2.53CF       | 2.5                            | 7/0.67                             | 2.0                 | 0.7                             | 12.1                | 5.4 | 12.4    | 5.5 | 15                    | 20                                   |

(a) Bent in the direction of the minor axis.

| Conductor nominal area mm <sup>2</sup> | Current rating (b)  |                 |                       | Electrical characteristics           |                         |
|--|---------------------|-----------------|-----------------------|--------------------------------------|-------------------------|
|  | Unenclosed spaced A | Buried direct A | Underground in duct A | Maximum D.C. resistance at 20°C Ω/km | Reactance per core Ω/km |
| 1.0*                                   | 13                  | 14              | 14                    | 18.1                                 | 0.184                   |
| 1.5                                    | 17                  | 18              | 18                    | 13.6                                 | 0.172                   |
| 2.5                                    | 22                  | 25              | 25                    | 7.41                                 | 0.159                   |

(b) Based on 75 °C conductor temperature, 40 °C ambient air temperature and where applicable, burial depth of 0.5 m, soil temperature of 25 °C and soil thermal resistivity of 1.2 °C.m/W. Refer to AS/NZS 3008.1 for other installation conditions.

\* Single wire conductor.

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group; any modification or alteration afterwards of product may give different result. The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Prysmian Group. The information is believed to be correct at the time of issue. Prysmian Group reserves the right to amend this specification without prior notice. This specification is not contractually valid unless specifically authorised by Prysmian Group.

