

# Metric Cables (Pty) Ltd

REG. NO.1980/011757/07

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## PVC NITRILE WELDING & PANNELING CABLE

### CABLE DESCRIPTION

Single core flexible copper conductors to SANS 1411 Part 1, insulated with general purpose flexible grade PVC and sheathed with a flexible grade waterproof PVC/Nitrile.

Cables sizes from 70mm<sup>2</sup> to 185mm<sup>2</sup> are flame retardant, self-extinguishing.

### APPLICATIONS

A flexible power cable where flexibility is needed in equipment such as:

- LV Transformer Connections
- General Wiring Applications
- Motor Control Centres
- Distribution Boards and Panels
- Welding (Automatic and Manual)

### PROPERTIES

**Specification:** SANS 1574 Part 3

**Temperature Range:** -10°C to 70°C

**Voltage Rating:** 600/1000 volts

**Core Identification:** Welding Colour Code: Green, Blue, Grey, Red, Brown, Yellow and Black according to SANS 1576

Red, Black, Green/Yellow also available for each size up to 95mm<sup>2</sup>

**Packaging:** Coils cut to size or drummed to order

## TECHNICAL DATA

PROPERTIES						CURRENT RATING (Amps)						
Size Colour	OD mm	Core OD mm	Resistance $\Omega$	Mass kg/100m	Volt Drop mV/A/m	Automatic Class of Welding		Manual Class of Welding		Very Sporadic	Panel wiring or power supply	
						100%	85%	60%	30%	20%	1 $\infty$	3 $\infty$
<b>16</b>	10.8	5.2	1.21	23	2.8	131	134	142	172	199	99	64
<b>25</b>	13.5	7.1	0.78	31.5	1.7	177	182	197	246	289	132	88
<b>35</b>	15.3	8.5	0.554	42.5	1.3	220	229	252	322	380	160	106
<b>50</b>	18.4	10.4	0.386	57.5	0.9	280	293	327	426	507	196	126
<b>70</b>	21.2	11.6	0.272	76	0.7	346	364	411	546	654	245	159
<b>95</b>	24.1	14.1	0.206	101	0.5	422	446	508	681	819	295	198
<b>120</b>	25.6	15.6	0.161	129	0.4	493	523	599	809	976	338	226
<b>150</b>	27.7	17.32	0.132	159	0.3	576	612	703	948	1142	395	255
<b>185</b>	30.8	20	0.108	189	0.3	659	700	804	1084	1306	452	292

**Note:** Current ratings are based on cable installed in a cubicle and may vary on other applications  
 Assumed ambient air temperature is 30°C  
 Maximum conductor temperature is 70°C  
 Assumed duty cycle period 5 minutes