

## Tri-Rated Panel Wires

CSE Cables Ltd 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.

### 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 available 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 and barrels carry UL and CSA certification labels.

### Technical Information

<b>Conductors:</b>	Plain annealed copper, class 5 to BS EN 60228
<b>Insulation:</b>	Heat resisting PVC
<b>Maximum Conductor:</b>	<b>Temperature:</b> 105°C in air, 60°C in oil
<b>Voltage Rating:</b>	600V between conductor and earth, 1000V between conductors
<b>Minimum Bending Radius:</b>	6 x Ø

AWM size	Size mm <sup>2</sup>	Wire type	UL style	Nominal R/T mm	Nominal diameter 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	32/0.2	1015	0.8	3.0	17	17
16	1.5	30/0.25	1015	0.8	3.3	21	27
14	2.5	50/0.25	1015	0.8	3.7	30	33

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AWM size	Size mm <sup>2</sup>	Wire type	UL style	Nominal R/T mm	Nominal diameter mm	Current rating A	Weight kg/km
12	4	56/0.3	1015	0.8	4.3	41	48
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 instructions 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.

For current ratings refer to IEE Regulations table 4D1 on pages 108 to 109.