



Application:

High temperature, flame retardant wire designed for use in switch control, relay and instrumentation panels for power, switch gear and for purposes such as internal connectors in equipment, motor starters and controllers

Insulation Colours:

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

Standards:

UL1015 (file number E352035), BS6231 Type CK

Conductor:

Class 5 flexible plain copper conductor to BS EN 60228:2005 (previously BS6360)

Insulation:

PVC

Voltage Rating:

BS6231 : 600/1,000V

Temperature Rating:

BS6231 : 90°C/105°C for 15,000 hours

Minimum Bending Radius:

6 × OD

Dimensions:

Nominal Cross Sectional (mm ²)	AWG	Stranding	Nominal Thickness of Insulation (mm)	Nominal Overall Diameter (mm)	Nominal Weight kg/Km
0.5	22	16mm × 0.2mm	0.80	2.55	12
0.75	20	24mm × 0.2mm	0.80	2.75	15
1	18	32mm × 0.2mm	0.80	2.90	18
1.5	16	30mm × 0.25mm	0.80	3.15	23
2.5	14	50mm × 0.25mm	0.80	3.60	34
4	12	56mm × 0.3mm	0.80	4.15	48
6	10	84mm × 0.3mm	0.80	4.70	67
10	8	80mm × 0.4mm	1.14	6.40	119
16	6	126mm × 0.4mm	1.52	8.45	187
25	4	196mm × 0.4mm	1.52	9.60	291

Conductors:

Class 5 flexible Copper Conductors for Single Core and Multi-Core cable

Nominal Cross Sectional Area mm ²	Maximum Diameter of Wires in Conductor (mm)	Maximum Resistance of Conductor at 20°C Plain Wires (Ω/km)
0.5	0.21	39
0.75	0.21	26
1	0.21	19.5
1.5	0.26	13.3
2.5	0.26	7.98
4	0.31	4.95
6	0.31	3.3
10	0.41	1.91
16	0.41	1.21
25	0.41	0.78

Table in accordance with BS EN 60228:2005 (previously BS6360)

Electrical Characteristics:

Current Carrying Capacity (amperes) and Voltage Drop (per ampere per metre)

Nominal Cross Sectional Area mm ²	Current Rating Amps	Voltage Drop mV/A/m
0.5	11	46
0.75	14	31
1	17	22
1.5	21	15
2.5	30	9.1
4	41	5.7
6	53	3.8
10	75	2.2
16	100	1.4
25	136	0.89

Current ratings are based on a conductor operating temperature of 85°C and an ambient air temperature of 45°C and assumes single cable isolated in free air.

Correction Factors:

Ambient Temperature	45°C	50°C	55°C	60°C	65°C	70°C	75°C
Reduction Factor	1	0.97	0.9	0.82	0.73	0.63	0.52

Tri-Rated Equipment Wire

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Where Cables are to be grouped, the following factors should be applied :

Number of cables in group	2	3	4	5	6	7	8
Reduction Factor	0.8	0.7	0.65	0.6	0.56	0.53	0.5

Part Number Table

Description	Part Number
Equipment Wire, 100m, Black, 22AWG	PP000717
Equipment Wire, 100m, Blue, 22AWG	PP000718
Equipment Wire, 100m, Brown, 22AWG	PP000719
Equipment Wire, 100m, Violet, 22AWG	PP000720
Equipment Wire, 100m, Red, 22AWG	PP000721
Equipment Wire, 100m, Orange, 22AWG	PP000722
Equipment Wire, 100m, White, 22AWG	PP000723
Equipment Wire, 100m, Grey, 22AWG	PP000724
Equipment Wire, 100m, Yellow, 22AWG	PP000725
Equipment Wire, 100m, GRN/YEL, 22AWG	PP000726
Equipment Wire, 100m, Pink, 22AWG	PP000727
Equipment Wire, 100m, Light Blue, 22AWG	PP000728
Equipment Wire, 100m, Green, 22AWG	PP000410
Equipment Wire, 100m, Black, 20AWG	PP000729
Equipment Wire, 100m, Blue, 20AWG	PP000730
Equipment Wire, 100m, Brown, 20AWG	PP000731
Equipment Wire, 100m, Violet, 20AWG	PP000732
Equipment Wire, 100m, Red, 20AWG	PP000733
Equipment Wire, 100m, Grey, 20AWG	PP000734
Equipment Wire, 100m, White, 20AWG	PP000735
Equipment Wire, 100m, Pink, 20AWG	PP000736
Equipment Wire, 100m, GRN/YEL, 20AWG	PP000737
Equipment Wire, 100m, Yellow, 20AWG	PP000738
Equipment Wire, 100m, Orange, 20AWG	PP000739
Equipment Wire, 100m, Light Blue, 20AWG	PP000740
Equipment Wire, 100m, Green, 20AWG	PP000411
Equipment Wire, 100m, GRN/YEL, 18AWG	PP000741
Equipment Wire, 100m, Black, 18AWG	PP000742
Equipment Wire, 100m, Brown, 18AWG	PP000743
Equipment Wire, 100m, White, 18AWG	PP000744
Equipment Wire, 100m, Red, 18AWG	PP000745
Equipment Wire, 100m, Yellow, 18AWG	PP000746

Description	Part Number
Equipment Wire, 100m, Blue, 18AWG	PP000747
Equipment Wire, 100m, Grey, 18AWG	PP000748
Equipment Wire, 100m, Orange, 18AWG	PP000749
Equipment Wire, 100m, Violet, 18AWG	PP000750
Equipment Wire, 100m, Pink, 18AWG	PP000751
Equipment Wire, 100m, Light Blue, 18AWG	PP000752
Equipment Wire, 100m, Green, 18AWG	PP000412
Equipment Wire, 100m, Blue, 16AWG	PP000753
Equipment Wire, 100m, Pink, 16AWG	PP000754
Equipment Wire, 100m, Black, 16AWG	PP000755
Equipment Wire, 100m, Brown, 16AWG	PP000756
Equipment Wire, 100m, Red, 16AWG	PP000757
Equipment Wire, 100m, White, 16AWG	PP000758
Equipment Wire, 100m, Yellow, 16AWG	PP000759
Equipment Wire, 100m, Orange, 16AWG	PP000760
Equipment Wire, 100m, Grey, 16AWG	PP000761
Equipment Wire, 100m, GRN/YEL, 16AWG	PP000762
Equipment Wire, 100m, Light Blue, 16AWG	PP000763
Equipment Wire, 100m, Violet, 16AWG	PP000413
Equipment Wire, 100m, Green, 16AWG	PP000414
Equipment Wire, 100m, White, 14AWG	PP000764
Equipment Wire, 100m, Orange, 14AWG	PP000765
Equipment Wire, 100m, Blue, 14AWG	PP000766
Equipment Wire, 100m, Black, 14AWG	PP000767
Equipment Wire, 100m, Brown, 14AWG	PP000768
Equipment Wire, 100m, Red, 14AWG	PP000769
Equipment Wire, 100m, Yellow, 14AWG	PP000770
Equipment Wire, 100m, Grey, 14AWG	PP000771
Equipment Wire, 100m, GRN/YEL, 14AWG	PP000772
Equipment Wire, 100m, Violet, 14AWG	PP000773
Equipment Wire, 100m, Pink, 14AWG	PP000774
Equipment Wire, 100m, Light Blue, 14AWG	PP000775

Tri-Rated Equipment Wire

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Description	Part Number
Equipment Wire, 100m, Green, 14AWG	PP000415
Equipment Wire, 100m, Blue, 12AWG	PP000776
Equipment Wire, 100m, GRN/YEL, 12AWG	PP000777
Equipment Wire, 100m, Red, 12AWG	PP000778
Equipment Wire, 100m, Black, 12AWG	PP000779
Equipment Wire, 100m, Brown, 12AWG	PP000780
Equipment Wire, 100m, Yellow, 12AWG	PP000781
Equipment Wire, 100m, Grey, 12AWG	PP000782
Equipment Wire, 100m, Red, 10AWG	PP000783
Equipment Wire, 100m, Yellow, 10AWG	PP000784
Equipment Wire, 100m, Grey, 10AWG	PP000785
Equipment Wire, 100m, GRN/YEL, 10AWG	PP000786
Equipment Wire, 100m, Blue, 10AWG	PP000787
Equipment Wire, 100m, Black, 10AWG	PP000788
Equipment Wire, 100m, Brown, 10AWG	PP000789
Equipment Wire, 100m, Black, 8AWG	PP000790
Equipment Wire, 100m, Blue, 8AWG	PP000791

Description	Part Number
Equipment Wire, 100m, Brown, 8AWG	PP000792
Equipment Wire, 100m, Red, 8AWG	PP000793
Equipment Wire, 100m, Yellow, 8AWG	PP000794
Equipment Wire, 100m, Grey, 8AWG	PP000795
Equipment Wire, 100m, GRN/YEL, 8AWG	PP000796
Equipment Wire, 100m, Black, 6AWG	PP000797
Equipment Wire, 100m, Blue, 6AWG	PP000798
Equipment Wire, 100m, Brown, 6AWG	PP000799
Equipment Wire, 100m, Red, 6AWG	PP000800
Equipment Wire, 100m, Yellow, 6AWG	PP000801
Equipment Wire, 100m, Grey, 6AWG	PP000802
Equipment Wire, 100m, GRN/YEL, 6AWG	PP000803
Equipment Wire, 100m, Brown, 4AWG	PP000804
Equipment Wire, 100m, Red, 4AWG	PP000805
Equipment Wire, 100m, Grey, 4AWG	PP000806
Equipment Wire, 100m, GRN/YEL, 4AWG	PP000807

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