

Datasheet

Stock No: 803-4281

RS Pro Pink Tri-rated Cable, PVC



Application

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

Standards

BS6231 Type CK, UL Subj. 758
CSA c.22.2 No. 127

Conductor

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

Voltage Rating

BS6231 : 600/1000V
UL,CSA : 600V

Temperature Rating

BS6231 : 90°C/105°C for 15,000 hours
UL1015 CSA : 105°C

Insulation Colour

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

Insulation

PVC

Minimum Bending Radius

6 x OD

Dimensions

No of Cores x Nominal Cross Sectional (mm ²)	AWG	Nominal Thickness of Insulation (mm)	Nominal Overall Diameter (mm)	Nominal Weight (kg/Km)
1 x 0.50	22	0.80	2.55	12
1 x 0.75	20	0.80	2.75	15
1 x 1.0	18	0.80	2.90	18
1 x 1.5	16	0.80	3.15	23
1 x 2.5	14	0.80	3.60	34
1 x 4.0	12	0.80	4.15	48
1 x 6.0	10	0.80	4.70	67
1 x 10.00	8	1.14	6.40	119
1 x 16.00	6	1.52	8.45	187
1 x 25.00	4	1.52	9.60	291
1 x 35.00	2	1.52	10.85	406
1 x 50.00	1	2.02	13.30	580
1 x 70.00	2/0	2.02	15.30	780
1 x 95.00	3/0	2.02	17.10	1055
1 x 120.00	4/0	2.02	18.45	1175
1 x 150.00	250 MCM	2.41	21.00	1425

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 (ohms/km)
0.50	0.21	39.0
0.75	0.21	26.0
1.00	0.21	19.5
1.50	0.26	13.3
2.50	0.26	7.98
4.00	0.31	4.95
6.00	0.31	3.30
10.00	0.41	1.91
16.00	0.41	1.21
25.00	0.41	0.780
35.00	0.41	0.554
50.00	0.41	0.386
70.00	0.51	0.272
95.00	0.51	0.206
120.00	0.51	0.161
150.00	0.51	0.129
185.00	0.51	0.106
240.00	0.51	0.0801

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)
0.50	11	46.00
0.75	14	31.00
1.00	17	22.00
1.50	21	15.00
2.50	30	9.10
4.00	41	5.70
6.00	53	3.80
10.00	75	2.20
16.00	100	1.40
25.00	136	0.89
35.00	167	0.64
50.00	204	0.45
70.00	259	0.32
95.00	321	0.24
120.00	374	0.19
150.00	418	0.16
185.00	480	0.13
240.00	593	0.10

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	0.97	0.90	0.82	0.73	0.63	0.52

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	0.80	0.70	0.65	0.60	0.56	0.53	0.50