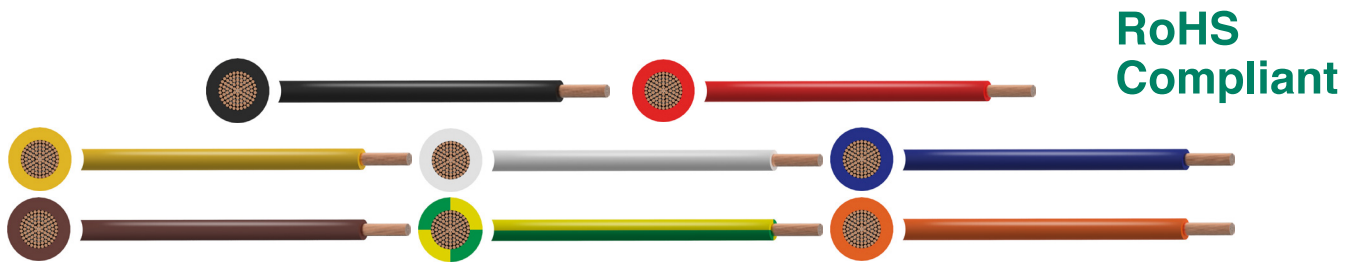


Tri-Rated Flexible PVC Equipment Wire

Reel Length 500m

pro-POWER



Application:

High temperature, flame retardant cable designed for use in the switch control, relay and instrumentation panels of power switch gear and for purposes such as internal connectors in rectifier equipment, motor starters and controllers. Tri-rated cable is sometimes referred to as BS 6231 cable, H07V2-K or panel wire.

Cable Standards:

Made in accordance with the following:

BS EN 50525-2-31* BS 6231 Type CK, UL Subj.758, CSA C22.2 No. 210 (HD 21.7 S2) #LL246095,
BS EN/IEC 60332

Construction:

UL Style Number : 1015
Conductor : Class 5 flexible copper conductor according to BS EN 60228 (previously BS 6360)
Insulation : PVC (Polyvinyl Chloride) Type TI3 according to BS EN 50363

Characteristics:

Voltage Rating (Uo/U) : UL, CSA: 450/750V
BS 6231: 600/1000V
BS EN 50525-2-31: 300/500V, 450/750V
Temperature Rating : UL, CSA: +105°C
BS 6231: +90°C
Min. Bending Radius : 6 × overall diameter
Sheath Colour : Black, Red, Yellow, White, Blue, Brown, Green/Yellow & Orange.

Note

*BS EN 50525-2-31 covers harmonised conductor sizes up to 35mm², cables above this size are generally to the specification. Where it is intended to connect cables contained within this data sheet to equipment or accessories confirmation should be obtained to ensure that they are capable of withstanding the operating temperature of the cable.

Dimensions:

Part Number	No. of Cores	Colour	Nominal Cross Sectional Area mm ²	Approximate AWG	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
PP001304	1	Black	0.5	21	0.8	2.7	11
PP001305		Red					
PP001306		Yellow					
PP001307		White					

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Part Number	No. of Cores	Colour	Nominal Cross Sectional Area mm ²	Approximate AWG	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
PP001308	1	Blue	0.5	21	0.8	2.7	11
PP001309		Brown					
PP001310		Orange					
PP001311		Black	0.75	19		2.85	15
PP001312		Red					
PP001313		Blue					
PP001314		Green/Yellow	1	18		3	18
PP001315		Brown					
PP001316		Black					
PP001317		Red	1.5	16		3.3	23
PP001318		Green/Yellow					
PP001319		Brown					
PP001320		Blue	2.5	14		3.75	35
PP001321		Black					
PP001322		Red					
PP001323		Green/Yellow	2.5	14		3.75	35
PP001324		White					
PP001325		Blue					
PP001326		Brown	2.5	14		3.75	35
PP001327		Black					
PP001328	Red						
PP001329	Green/Yellow	2.5	14	3.75	35		
PP001330	Blue						

Conductors

Class 5 Flexible Copper Conductors for Single Core Wire

Nominal Cross Sectional Area mm ²	No. of Strands x Strand Size (mm)	Max. Resistance of Conductor at 20°C
		Plain Wires Ω/km
0.5	16 × 0.2	39
0.75	24 × 0.2	26
1	30 × 0.2	19.5
1.5	30 × 0.25	13.3
2.5	50 × 0.25	7.98

The above table is in accordance with BS EN 60228 (previously BS 6360)

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Electrical Characteristics:

Current Carrying Capacity and Voltage Drop

Nominal Cross Sectional Area mm ²	Current Rating (Peak) 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

Current ratings are based on a conductor operating temperature of 90°C and an ambient air temperature of 45°C and assumes single wire isolated in free air.

De-Rating Factors:

Ambient Temperature	+45°C	+50°C	+55°C	+60°C	+65°C	+70°C	+75°C
De-Rating Factor	1	0.97	0.9	0.82	0.73	0.63	0.52

Where wires are to be grouped, the following factors should be applied

No. of Wires in Group	2	3	4	5	6	7	8
De-Rating Factor	0.8	0.7	0.65	0.6	0.56	0.53	0.5

Part Number Table

Description	Nominal Cross Sectional Area mm ²	Colour	Reel Length	Part Number
Tri-Rated Flexible PVC Equipment Wire	0.5	Black	500m	PP001304
		Red		PP001305
		Yellow		PP001306
		White		PP001307
		Blue		PP001308
		Brown		PP001309
		Orange		PP001310
	0.75	Black		PP001311
		Red		PP001312
		Blue		PP001313
		Green/Yellow		PP001314
		Brown		PP001315

Tri-Rated Flexible PVC Equipment Wire

Reel Length 500m



Description	Nominal Cross Sectional Area mm ²	Colour	Reel Length	Part Number
Tri-Rated Flexible PVC Equipment Wire	1	Black	500m	PP001316
		Red		PP001317
		Green/Yellow		PP001318
		Brown		PP001319
		Blue		PP001320
	1.5	Black		PP001321
		Red		PP001322
		Green/Yellow		PP001323
		White		PP001324
		Blue		PP001325
	2.5	Brown		PP001326
		Black		PP001327
		Red		PP001328
		Green/Yellow		PP001329
		Blue		PP001330

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