

Stephen P. Wales

Electrical Metering Specialists

TRI-RATED BS6231 FLEXIBLE PVC CABLE





APPLICATION

The British standard Tri Rated cable is sometimes referred to as panel wiring cable due to its application and purpose. It is a high temperature, flame retardant cable designed for use in instrumentation panels, motor starters or power switch gear. The cable features flexible plain annealed copper conductors and a circular high temperature PVC outer sheath. UL & CSA approved also to BS6231.

Bi-Rated cables to UL and CSA Approval

CABLE STANDARDS

Flame propagation to BS EN 50265, IEC 60332-1 BS6231 UL 1015 BS EN 50525-2-31

CONSTRUCTION

Conductor: Class 5 Flexible plain annealed

copper conductors

Sheath: Circular high temperature PVC outer

sheath in a large range of colours

CHARACTERISTICS

Voltage Rating: 600/1000 Volts

Temperature Limits: -30°C to +105°C

Minimum Bending Radius: As per cable

manufacturer datasheet

CORE IDENTIFICATION

0.5–2.5mm²: Green / Yellow Brown Black Grey Blue Orange Red

Yellow Violet Pink

4.0–16mm²: Green / Yellow Brown

Black Grey Blue Yellow Red

25.0-120mm²: Green / Yellow Brown

Black Grey Blue ellow

150mm² Green / Yellow Black

185mm² – 400m²: Black



Stephen P. Wales Ltd Electrical Metering Specialists

TRI-RATED BS6231 FLEXIBLE PVC CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM²)	STRANDING (MM)	WEIGHT (KG/KM)	APPROX OVERALL DIAMETER	GLAND SIZE
TRI0/5	0.5	16/0.20	12	2.70	-
TRI/75	0.75	24/0.20	15	2.90	-
TRI1	1	32/0.20	18	3.10	-
TRI1/5	1.5	30/0.25	23	3.30	20/16
TRI2/5	2.5	50/0.25	34	3.70	20/16
TRI4	4	56/0.30	50	4.30	20/16
TRI6	6	84/0.30	71	4.90	20/16
TRI10	10	80/0.40	123	6.30	20/16
TRI16	16	126/0.40	207	9.00	20S
TRI25	25	196/0.40	303	10.40	20S
TRI35	35	276/0.40	412	11.90	20
TRI50	50	396/0.40	607	14.70	25
TRI70	70	360/0.50	837	16.80	25
TRI95	95	475/0.50	1079	18.80	25
TRI120	120	608/0.50	1280	19.90	32
BI150	150	756/0.50	1619	22.90	32
BI185	185	925/0.50	1948	24.10	32
BI240	240	1221/0.50	2518	26.60	40
BI300	300	1525/0.50	2800	27.7	40
BI400	400	2257/0.50	3655	31.6	50

TRI-RATED BS6231 PVC - ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA	MAXIMUM DIAMETER OF WIRES	CURRENT RATING (PEAK)	VOLTAGE DROP MV/A/M	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C
MM ²	IN CONDUCTOR	AMPS		PLAIN WIRES OHMS/KM
0.5	0.21	11	46	39
0.75	0.21	14	31	26
1	0.21	17	22	19.5
1.5	0.26	21	15	13.3
2.5	0.26	30	9.1	7.98
4	0.31	41	5.7	4.95
6	0.31	53	3.8	3.3
10	0.41	75	2.2	1.91
16	0.41	100	1.4	1.21
25	0.41	136	0.89	0.78
35	0.41	167	0.64	0.554
50	0.41	204	0.45	0.386
70	0.51	259	0.32	0.272
95	0.51	321	0.24	0.206
120	0.51	374	0.19	0.161
150	0.51	429	0.16	0.129
185	0.51	496	0.13	0.106
240	0.51	595	0.1	0.0801
300	0.51	675	0.1	0.0644
400	0.51	810	0.1	0.486

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS.

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.