



RoHS
Compliant

Application:

Suitable for use in conduit and for fixed, protected installation. For installations where fire, smoke emission and toxic fume create a potential risk to life and equipment.

Cable Standards:

BS EN 50525-3-41 (previously BS 7211), BASEC approved

Construction:

Conductor : Class 2 stranded copper conductor according to BS EN 60228 (previously BS 6360)
 Insulation : LSZH (Low Smoke Zero Halogen) Type EI5 according to BS EN 50363

Characteristics:

Voltage Rating (Uo/U) : 450/750V
 Temperature Rating : Fixed: 0°C to +90°C
 Min. Bending Radius : Up to 10mm²: 4 × overall diameter
 Insulation Colour : Blue, Brown, Green/Yellow, Grey & Black
 Sheath Colour : White & Black

Electrical Characteristics

Current Carrying Capacity and Mass Supportable

Nominal Cross Sectional Area mm ²	Reference Method A (Enclosed in Conduit in Thermally Insulating Wall etc.)		Reference Method B (Enclosed in Conduit on a Wall Or in Trunking etc.)		Reference Method C (Clipped Direct)	
	2 Cables Single-Phase AC or DC Amps	3 or 4 Cables Three-Phase AC Amps	2 Cables Single-Phase AC or DC Amps	3 or 4 Cables Three-Phase AC Amps	2 Cables Single-Phase AC or DC Amps	3 or 4 Cables Three-Phase AC Amps
1.5	19	17	23	20	25	23
2.5	26	23	31	28	34	31

Ambient temperature: 30°C

Conductor operating temperature: 90°C

The above table is in accordance with Table 4E1A from the 17th Edition of IEE Wiring Regulations.

Voltage Drop

Nominal Cross Sectional Area mm ²	2 Cables DC mV/A/m	2 Cables Single-Phase AC mV/A/m			3 OR 4 Cables Three-Phase AC mV/A/m			
		Reference Methods A and B (enclosed in conduit or trunking)	Reference Methods C, F and G (clipped direct, on tray or in free air)		Reference Methods A and B (enclosed in conduit or trunking)	Reference Methods C, F and G (clipped direct, on tray or in free air)		
			Cables Touching	Cables Spaced*		Cables Touching, Trefoil	Cables Touching, Flat	Cables Spaced*, Flat
1.5	31	31	31	31	27	27	27	27
2.5	19	19	19	19	16	16	16	16

Conductor operating temperature: 90°C

*Spacings larger than those specified in Method 12 (see table 4A of the 17th Edition of IEE Wiring Regulations) will result in larger volt drop.

The above table is in accordance with Table 4E1B from the 17th Edition of IEE Wiring Regulations.

Conductors

Class 2 Stranded Conductors for Single Core and Multi-Core Cables

Nominal Cross Sectional Area mm ²	Min. No. of Wires in Conductor						Max. Resistance of Conductor at 20°C
	Circular		Circular Compacted		Shaped		Annealed Copper Conductor
	Cu	Al	Cu	Al	Cu	Al	Plain Wires Ω/km
1.5	7	-	6	-	-	-	12.1
2.5	7	-	6	-	-	-	7.41

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

De-Rating Factors

For Ambient Air Temperatures other than 30°C

Air Temperature	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C
De-Rating Factor	1	0.96	0.91	0.87	0.82	0.76	0.71	0.65	0.58

The above table is in accordance with Table 4B1 of the 17th Edition of IEE Wiring Regulations.

Dimensions

Part Number	Nominal Cross Sectional Area mm ²	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
PP-6491B-1.50MMBLU	1.5	0.7	3.4	22
PP-6491B-1.50MMBRN				
PP-6491B-1.50MMG/Y				

Part Number	Nominal Cross Sectional Area mm ²	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
PP-6491B-1.50MMGRY	1.5	0.7	3.4	22
PP-6491B-2.50MMBLK	2.5	0.8	4.1	35
PP-6491B-2.50MMBLU				
PP-6491B-2.50MMBRN				
PP-6491B-2.50MMG/Y				
PP-6491B-2.50MMGRY				

Part Number Table

Description	Reel Length (m)	Part Number
Wire, 6491B, Blue, 1.5mm ²	100	PP-6491B-1.50MMBLU
Wire, 6491B, Brown, 1.5mm ²		PP-6491B-1.50MMBRN
Wire, 6491B, Green/Yellow, 1.5mm ²		PP-6491B-1.50MMG/Y
Wire, 6491B, Grey, 1.5mm ²		PP-6491B-1.50MMGRY
Wire, 6491B, Black, 2.5mm ²		PP-6491B-2.50MMBLK
Wire, 6491B, Blue, 2.5mm ²		PP-6491B-2.50MMBLU
Wire, 6491B, Brown, 2.5mm ²		PP-6491B-2.50MMBRN
Wire, 6491B, Green/Yellow, 2.5mm ²		PP-6491B-2.50MMG/Y
Wire, 6491B, Grey, 2.5mm ²		PP-6491B-2.50MMGRY

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