



RoHS
Compliant

Application:

6491X Cable H07V-R/H07V-U is suitable for power and lighting circuits and building wiring. The cable is intended for use in semi-flush exposed conduits and embedded conduits as well as in closed installation ducts, and is ideal for the internal wiring of appliances.

Cable Standards:

BS EN 50525-2-31 (previously BS 6004) BASEC approved, BS EN/IEC 60332-1-2

Construction:

Conductor : H07V-R: Class 2 stranded copper conductor to BS EN 60228 (previously BS 6360)
 H07V-U: Class 1 solid copper conductor to BS EN 60228 (previously BS 6360)
 Insulation : PVC (Polyvinyl Chloride) Type Tl1 according to BS EN 50363

Characteristics:

Voltage Rating (Uo/U) : 450/750V
 Temperature Rating : -15°C to +70°C
 Min. Bending Radius : Up to 10mm²: 3 × overall diameter
 Insulation Colour : Black, Blue, Brown, Green/Yellow & Grey

Electrical Characteristics

Current Carrying Capacity

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 flat or touching Amps	3 or 4 Cables Three-Phase AC flat and touching or trefoil Amps
1.5	14.5	13.5	17.5	15.5	20	18
2.5	20	18	24	21	27	25
4	26	24	32	28	37	33

Ambient temperature: 30°C

Conductor operating temperature: 70°C

The above table is in accordance with Table 4D1A of 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 (clipped direct, on tray or in free air)		Reference Methods A and B (enclosed in conduit or trunking)	Reference Methods C, F (clipped direct, on tray or in free air)		
			Cables Touching	Cables Spaced		Cables Touching, Trefoil	Cables Touching, Flat	Cables Spaced*, Flat
1.5	28	29	29	29	25	25	25	25
2.5	18	18	18	18	15	15	15	15
4	11	11	11	11	9.5	9.5	9.5	9.5

Conductor operating temperature: 70°C

*Spacings larger than one cable diameter will result in a larger voltage 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
4	7	-	6	-	-	-	4.61

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	25°C	30°C	35°C	40°C	45°C	50°C	55°C
De-Rating Factor	1.03	1	0.94	0.87	0.79	0.71	0.61

Dimensions

Part Number	Nominal Cross Sectional Area mm ²	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
PP-6491X-1.50MMLK	1.5	0.7	2.9	22
PP-6491X-1.50MMLU				

Part Number	Nominal Cross Sectional Area mm ²	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
PP-6491X-1.50MMBRN	1.5	0.7	2.9	22
PP-6491X-1.50MMG/Y				
PP-6491X-2.50MMBLK	2.5	0.8	3.6	32
PP-6491X-2.50MMBLU				
PP-6491X-2.50MMBRN				
PP-6491X-2.50MMG/Y				
PP-6491X-2.50MMGRY	4	0.8	4.1	50
PP-6491X-4.00MMBLK				
PP-6491X-4.00MMBLU				
PP-6491X-4.00MMBRN				
PP-6491X-4.00MMG/Y				

Part Number Table

Description	Reel Length (m)	Part Number
Wire, 6491X, Black, 1.5mm ²	100	PP-6491X-1.50MMBLK
Wire, 6491X, Blue, 1.5mm ²		PP-6491X-1.50MMBLU
Wire, 6491X, Brown, 1.5mm ²		PP-6491X-1.50MMBRN
Wire, 6491X, Green/Yellow, 1.5mm ²		PP-6491X-1.50MMG/Y
Wire, 6491X, Black, 2.5mm ²		PP-6491X-2.50MMBLK
Wire, 6491X, Blue, 2.5mm ²		PP-6491X-2.50MMBLU
Wire, 6491X, Brown, 2.5mm ²		PP-6491X-2.50MMBRN
Wire, 6491X, Green/Yellow, 2.5mm ²		PP-6491X-2.50MMG/Y
Wire, 6491X, Grey, 2.5mm ²		PP-6491X-2.50MMGRY
Wire, 6491X, Black, 4mm ²		PP-6491X-4.00MMBLK
Wire, 6491X, Blue, 4mm ²		PP-6491X-4.00MMBLU
Wire, 6491X, Brown, 4mm ²		PP-6491X-4.00MMBRN
Wire, 6491X, Green/Yellow, 4mm ²		PP-6491X-4.00MMG/Y

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