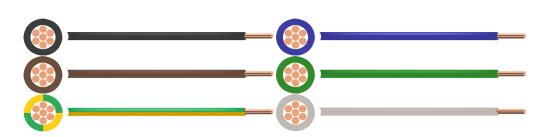
# 6491B / H07Z-R / BS EN 50525-3-41 Cable



**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 10mm <sup>2</sup> : 4 × overall diameterr
Insulation Colour	: Blue, Brown, Green/Yellow, Grey & Black
Sheath Colour	: White & Black

These product range are available on reels of 100m or per metre

## **Electrical Characteristics**

Current Carrying Capacity and Mass Supportable

Reference Me (Enclosed in Co Nominal Cross Thermally Insulation		n Conduit in (Enclosed in Conduit on a Wall		Reference Method C (Clipped Direct)		
Sectional Area mm <sup>2</sup>	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
4	35	31	42	37	46	41

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.

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#### Voltage Drop

		2 Cabl	es Single-Pha mV/A/m	ise AC	3 OR 4 Cables Three-Phase AC mV/A/m				
Nominal Cross Sectional Area	2 Cables DC mV/A/m	Reference Methods A and B	and G (clipp	lethods C, F ed direct, on h free air)	Reference Methods A and B		e Methods C, ect, on tray o		
mm <sup>2</sup>	(enclosed in conduit or trunking)	Cables Touching	Cables Spaced*	(enclosed in conduit or trunking)	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	
4	12	12	12	12	10	10	10	10	

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

		Min. I	No. of Wire	Max. Resistance of Conductor at 20°C							
Nominal Cross Sectional Area mm <sup>2</sup>	Circ	ular	Circular Compacted		Shaped		Shaped		Shaped		Annealed Copper Conductor
	Cu	AI	Cu	AI	Cu	AI	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	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 <sup>2</sup>	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
PP-6491B-1.50MMBLK				
PP-6491B-1.50MMBLU	1.5	0.7	3.4	22
PP-6491B-1.50MMBRN				

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Part Number	Nominal Cross Sectional Area mm <sup>2</sup>	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
PP-6491B-1.50MMG/Y	1.5	0.7	3.4	22
PP-6491B-1.50MMGRY	1.5	0.7	3.4	22
PP-6491B-2.50MMBLK				
PP-6491B-2.50MMBLU				
PP-6491B-2.50MMBRN	2.5	0.8	4.1	35
PP-6491B-2.50MMG/Y				
PP-6491B-2.50MMGRY				
PP-6491B-4.0MMBLK				
PP-6491B-4.0MMBLU				
PP-6491B-4.0MMBRN	4	0.8	4.7	50
PP-6491B-4.0MMG/Y				
PP-6491B-4.0MMGRY				

## Part Number Table

Description	Reel Length (m)	Part Number
6491B / H07Z-R / BS EN 50525-3-41 Cable, 1.5mm <sup>2</sup> , Black		PP-6491B-1.50MMBLK
6491B / H07Z-R / BS EN 50525-3-41 Cable, 1.5mm <sup>2</sup> , Blue	]	PP-6491B-1.50MMBLU
6491B / H07Z-R / BS EN 50525-3-41 Cable, 1.5mm <sup>2</sup> , Brown	]	PP-6491B-1.50MMBRN
6491B / H07Z-R / BS EN 50525-3-41 Cable, 1.5mm <sup>2</sup> , Green/Yellow		PP-6491B-1.50MMG/Y
6491B / H07Z-R / BS EN 50525-3-41 Cable, 1.5mm <sup>2</sup> , Grey		PP-6491B-1.50MMGRY
6491B / H07Z-R / BS EN 50525-3-41 Cable, 2.5mm <sup>2</sup> , Black	100m or per metre	PP-6491B-2.50MMBLK
6491B / H07Z-R / BS EN 50525-3-41 Cable, 2.5mm <sup>2</sup> , Blue		PP-6491B-2.50MMBLU
6491B / H07Z-R / BS EN 50525-3-41 Cable, 2.5mm <sup>2</sup> , Brown		PP-6491B-2.50MMBRN
6491B / H07Z-R / BS EN 50525-3-41 Cable, 2.5mm <sup>2</sup> , Green/Yellow		PP-6491B-2.50MMG/Y
6491B / H07Z-R / BS EN 50525-3-41 Cable, 2.5mm <sup>2</sup> , Grey	]	PP-6491B-2.50MMGRY
6491B / H07Z-R / BS EN 50525-3-41 Cable, 4mm <sup>2</sup> , Black		PP-6491B-4.0MMBLK
6491B / H07Z-R / BS EN 50525-3-41 Cable, 4mm <sup>2</sup> , Blue		PP-6491B-4.0MMBLU
6491B / H07Z-R / BS EN 50525-3-41 Cable, 4mm <sup>2</sup> , Brown	]	PP-6491B-4.0MMBRN
6491B / H07Z-R / BS EN 50525-3-41 Cable, 4mm <sup>2</sup> , Green/Yellow	]	PP-6491B-4.0MMG/Y
6491B / H07Z-R / BS EN 50525-3-41 Cable, 4mm <sup>2</sup> , Grey	]	PP-6491B-4.0MMGRY

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