

6491B H07Z-R

LSZH Insulated Conduit Wire

multicomp PRO

RoHS
Compliant



Application:

6491B H07Z-R wire is suitable for use in conduit and for fixed, protected installation. Ideal 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 annealed 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 : 4 × 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 Wires Single-Phase AC or DC Amps	3 or 4 Wires Three-Phase AC Amps	2 Wires Single-Phase AC or DC Amps	3 or 4 Wires Three-Phase AC Amps	2 Wires Single-Phase AC or DC Amps	3 or 4 Wires 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.

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Voltage Drop

Nominal Cross Sectional Area mm ²	2 Wires DC mV/A/m	2 Wires Single-Phase AC mV/A/m			3 OR 4 Wires 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)		
			Wires Touching	Wires Spaced*		Wires Touching, Trefoil	Wires Touching, Flat	Wires 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 Wire

Nominal Cross Sectional Area mm ²	Min. No. of Wires in Conductor	Max. Resistance of Conductor at 20°C
	Circular	Annealed Copper Conductor
	Cu	Plain Wires Ω/km
1.5	7	12.1
2.5	7	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	No. of Strands × Strand size	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
PP-6491B-1.50MMBLU	1.5	7 × 0.53mm	0.7	3.4	22
PP-6491B-1.50MMBRN					
PP-6491B-1.50MMG/Y					

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Part Number	Nominal Cross Sectional Area mm ²	No. of Strands × Strand size	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
PP-6491B-1.50MMGRY	1.5	7 × 0.53mm	0.7	3.4	22
PP-6491B-2.50MMBLK	2.5	7 × 0.67mm	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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