

Fume-Guard Cable Range

6491B / H07Z-R Single Core Cable

(Complies with BS EN 50525-3-41)

Class 2 Stranded Copper/ Low Smoke
Zero Halogen Sheath



BRITISH CABLES COMPANY

Application

Designed for use in conduits, trunking and other fixed wiring protected installations. It is recommended for use in dry environments, for applications such as wiring lighting fixtures and appliances, and switchboards.

Manufactured to harmonised (HAR) European Standard H07Z-R, the cable has a Low Smoke Zero Halogen (LSZH) insulation, making it suitable for installations in public buildings where, in the event of fire, smoke and acid gas evolution would pose a hazard to public life and equipment.

Cable Description

Class 2 stranded copper wire, Low smoke zero halogen cross linked polyethylene (XLPE)

N.B. In the event of fire, the gases evolved from this cable are free from Halogen and the design is optimised to limit the quantity and cleanliness of the smoke evolved during this period. Although the acronym HFFR is applied to the sheath material, the terms LSOH, HFFR and HFFR are also applicable.

Insulation Colours

Red, Black, White, Green/Yellow, Blue, Brown, Violet,
Grey, Orange, Pink (other colours available upon request)

Third party Accreditation



Cables are tested and approved by
BASEC (British Approvals Service for Cables)



Physical characteristics

Nominal Cross-Sectional Area (mm ²)	Nominal Radial Thickness (mm)	Nominal Insulated Diameter (mm)	Maximum Insulated Diameter (mm)	Maximum Conductor Resistance at 20°C (ohms/km)	Nominal Weight (kg/km)
1.5	0.70	3.10	3.40	12.10	21
2.5	0.80	3.60	4.10	7.41	25
4.0	0.80	4.20	4.70	4.61	50
6.0	0.80	4.70	5.40	3.08	70
10.0	1.00	6.10	7.00	1.83	120
16.0	1.00	7.20	8.00	1.15	180
25.0	1.20	9.00	10.1	0.73	285

Mechanical characteristics

Characteristic	Unit	Value
Operating Temperature Range	°C	90
Tensile Strength Min	N/mm ²	10
% Elongation min	%	125
Hot Set Elongation at 200°C	%	100
Minimum Bend Radius	Diameter	≤10mm 3D / 10-25mm 4D
Low Temperature Bend	°C	-15

British Cables Company Limited, Delaunays Road, Blackley, Manchester, M9 8FP, United Kingdom

Tel: +44 (0) 161 741 2345 | Fax: +44 (0) 161 795 8393 | Web: www.britishcablescompany.com | Email: info@britishcables.com

Disclaimer: Great effort is made to ensure the accuracy of the information presented, but errors may occur.

Specification and availability should be confirmed with a call to our sales representatives. ©British Cables company Limited

Electrical characteristics at 20°C

Characteristic	Unit	Value
Voltage Rating	V	450/750
Voltage test at 20°C	KV	2.5
Current Rating Table	-	4E1A / 4E1B

Fire Performance

Test	Test Method	Value	Comment
Fume Emission	XR-F	No halogen, nitrogen, phosphorous or Sulphur containing com-pounds (trace elements ≤ 0.5% w/w)	Compliant
Single Cable Vertical Burn Test	BS EN 60332-1: 2004	Onset of char (from top support): > 50mm Extent of char (from top support): < 540mm	Compliant
Bunched Cable Vertical Burn Test	BS EN 50399	PHR / THR / FIGRA / SPR / TSP / d	Compliant
Acid Gas Emission	BS EN 50267-2-1: 1999	Less than 5mg/g	Compliant
Smoke Emission	BS EN 61034-2: 2005	Minimum light transmittance >60%	Compliant
CPR Euro Classification	BS EN 50575-201 4 AI-2016	Dca	DoP BCC00152-BCC0157