

Fume-Guard Cable Range

2491B / H05Z-K, H07Z-K Single Core Cable

(Complies with BS EN 50525-3-41)

Class 5 Flexible Stranded Copper/
Low Smoke Zero Halogen Sheath



Application

Designed for use within instrument control panels and switch control. Can be installed within conduits, trunking and used for fixed internal wiring within appliances.

Manufactured to harmonised (HAR) European Standard H05Z-K, H07Z-K 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 5 flexible 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 on 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)
0.50	0.60	2.30	2.60	39.00	8.70
0.75	0.60	2.40	2.80	26.00	11.30
1.00	0.60	2.60	2.90	19.50	13.90
1.50	0.70	3.10	3.50	13.30	19.30
2.50	0.80	3.60	4.30	7.96	28.00
4.00	0.80	4.20	4.90	4.95	48.00
6.00	0.80	4.70	5.50	3.30	65.00
10.0	1.00	6.10	7.10	1.91	110.0
16.0	1.00	7.20	8.40	1.21	165.0

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	4D
Low Temperature Bend	°C	-15

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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	H05Z-K 300/500 H07Z-K 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 $\leq 0.5\%$ 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	