



# TOXFREE ZH ES05Z1-K & H07Z1-K (AS)

Flexible and halogen free power cable for electrical panel wiring.

UNE-EN 50525-3-31 / UNE 211002 / UL 1581

## DESIGN

### 1. Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228 and IEC 60228.

### 2. Insulation

Extra sliding low smoke zero halogen (LSZH) polyolefin insulation.

The standard identification of insulated conductors is the following:

Blue	RAL 5015
Brown	RAL 8003
Black	RAL 9005
Red	RAL 3000
Green/yellow	RAL 1021 / RAL 6018
Grey	RAL 7000
Dark Blue	RAL 5003
White	RAL 9010
Orange	RAL 2003
Violet	RAL 4005

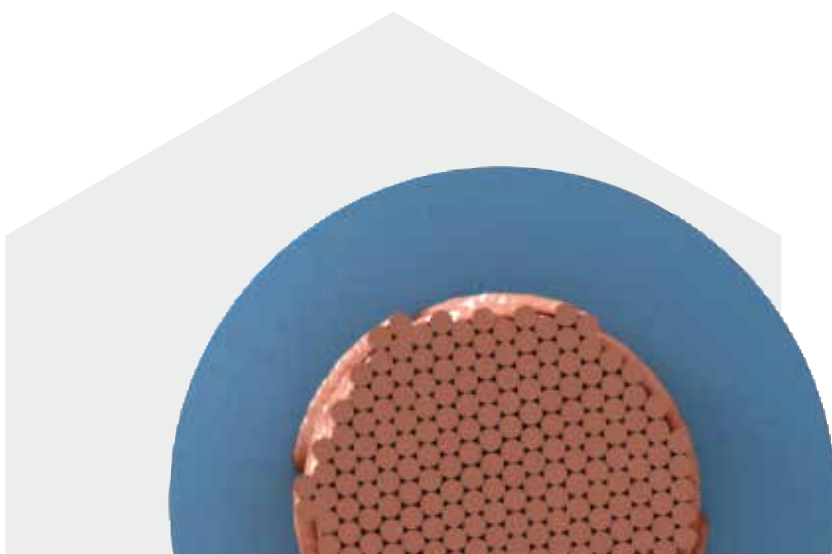
Other colours available on request

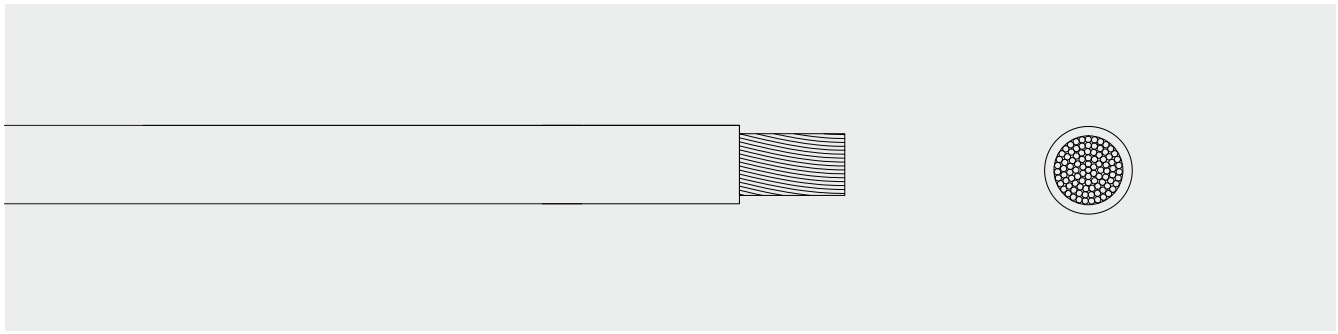


## APPLICATIONS

Toxfree ES05Z1-K & H07Z1-K is a LSZH safety cable. In the event of fire, it does not emit toxic gases, nor does it give off corrosive gases, avoiding any possible damage to people or electronic equipment. For these reasons it is highly recommended for use in public places such as: hospitals, schools, museums, airports, bus terminals, shopping malls, offices, laboratories, etc.

This cable render is an example from this product range and does not necessarily match the selected core size or number of cores.





## CHARACTERISTICS



### Electrical performance

LOW VOLTAGE 300/500 V · 450/750 V · UL 600 V



### Standard

UNE-EN 50525-3-31 / UNE 211002 / UL 1581



### Approvals

CE  
SEC  
HAR  
BUREAU VERITAS  
AENOR  
SASO  
RoHS



### Thermal performance

Maximum service temperature: 90°C (UL 1581) / 70°C (EN 50525-3-31).  
Maximum short-circuit temperature: 160°C (max. 5 s).  
Minimum service temperature: -40°C (fixed and protected installations).



### Fire performance

Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.  
Fire non-propagation based on UNE-EN 60332-3 and IEC 60332-3.  
LSZH (Low Smoke Zero Halogen) based on UNE-EN 60754-1 and IEC 60754-1.  
Low smoke emission based on UNE-EN 61034 and IEC 61034: Light transmittance > 60%  
Low corrosive gases emission based on UNE-EN 60754-2 and IEC 60754-2.



### Mechanical performance

Minimum bending radius: x5 cable diameter.



### Chemical performance

Chemical & Oil resistance: Acceptable.



### Water performance

Water resistance: AD3 Sprays.



### Other

Meter by meter marking. (from 10mm<sup>2</sup> onwards)



### Installation conditions

In conduit.



### Applications

Domestic use.  
Electrical panel wiring.  
Public places.



### Packaging

Small cross sections (from 0,75 mm<sup>2</sup> to 6 mm<sup>2</sup>) are supplied in high-resistant boxes. Medium cross sections (from 10 mm<sup>2</sup> to 35 mm<sup>2</sup>) are supplied in 100 m sealed coils. Greater cross sections (>35 mm<sup>2</sup>) are supplied in drums.

