



TOXFREE PLUS 331 ZH RZ1-K (AS+)

LSZH and fire resistant power cable, for emergency circuits.

IEC 60502-1 / UNE 211025

DESIGN

Conductor

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

Insulation

Mica tape + XLPE

The standard identification of insulated conductors is the following:

| | |
|-----|--|
| 1 x | Natural |
| 2 x | Blue + Brown |
| 3 G | Blue + Brown + Green/yellow |
| 4 G | Brown + Black + Grey + Green/yellow |
| 5 G | Brown + Black + Grey + Green/yellow + Blue |

Outer sheath

Low Smoke Zero Halogen (LSZH) polyolefin. Orange colour, non-toxic, fire retardant and fire resistant.



C_{ca}-s1a, d1, a1

APPLICATIONS

Toxfree Plus RZ1-K (AS+) is a fire resistant cable, specially designed to ensure the power supply to emergency circuits in the event of fire. During a fire you need critical circuits to work for life safety (signaling lights, fume extractors, acoustic alarms, water pumps, etc) and a secure plant shutdown. For this reason, its use is highly recommended in public places such as: hospitals, tunnels, offices, production plants, laboratories, hotels, etc.





CHARACTERISTICS



Electrical performance

LOW VOLTAGE 0,6/1kV



Standard

IEC 60502-1 / UNE 211025



Approvals

CE
RoHS



C_{ca}-s1a, d1, a1



Thermal performance

Maximum service temperature: 90°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -40°C (fixed and protected installations).



Mechanical performance

Minimum bending radius: x5 cable diameter.
Impact resistance: AG2 Medium severity.



Chemical performance

Chemical & Oil resistance: Acceptable.



Water performance

Water resistance: AD5 Jets.



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 and EN 50399.
Fire resistant:(PH120) minimum 120 minutes at 840°C:
Based on EN 50200 and IEC 60331-2 for Ø cable < 20 mm.
Based on EN 50362 and IEC 60331-1 for Ø cable > 20 mm.
180' at 950°C (cat C) category C,W & Z based on BS6387.
Fire resistant 180' at 950°C (cat C) category C,W & Z based on BS6387 (300/500V).
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.
Reaction to fire CPR: C_{ca}-s1a,d1,a1, according to EN 50575.



Other

Meter by meter marking.



Installation conditions

Open Air.
Buried.
In conduit.



Applications

Industrial use.
Emergency circuits
Public places.