

APPLICATION

Toxfree® ZH RZ1-K (AS) is a LSHF 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 centers, offices, laboratories, etc.

- Industrial use.
- Public places.

CONSTRUCTION

Conductor

Electrolytic annealed copper, class 5 (flexible) according to EN 60228 and IEC 60228.

Insulation

Cross-linked polyethylene type XLPE according to IEC 60502-1 and type DIX-3 according to HD 603.

The standard identification of insulated conductors according to HD 308 is the following:

1 x	Natural
2 x	Blue + Brown
3 G	Blue + Brown + Green/Yellow
3 x	Brown + Black + Grey
3 x + 1 x	Brown + Black + Grey + Blue (reduced cross-section)
4 G	Brown + Black + Grey + Green/Yellow
4 x	Brown + Black + Grey + Blue
5 G	Brown + Black + Grey + Blue + Green/Yellow
6 or more	Black numbered + Green/Yellow




Outer sheath

Low smoke halogen free polyolefin, type ST8 according to IEC 60502-1 and type DMZ-E according to UNE 21123-4.
Green colour.

CHARACTERISTICS

- Electrical performance**
Low voltage: 0,6/1 kV
- Thermal performance**
Maximum conductor temperature: 90°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -40°C (fixed and protected installations)
Minimum installation and handling temperature: -0°C.
- Fire performance**
Flame non-propagation according to IEC 60332-1 / EN 60332-1.
Fire non-propagation according to EN 60332-3 / IEC 60332-3 and EN 50399.
Reaction to fire CPR: B2ca-s1a,d1, a1 or Cca-s1a,d1,a1 according to EN 50575 (see cross-section).
Low Smoke Halogen Free according to EN 60754-1 / IEC 60754-1.
Low corrosive gases emission according to EN 60754-2 / IEC 60754-2.
Low smoke emission according to EN 61034 / IEC 61034:
Light transmittance > 80%.
- Mechanical performance**
Minimum bending radius: 5x cable diameter.
Impact resistance: AG2 Medium severity.
- Environmental performance**
Chemical & Oil resistance: Acceptable.
UV Resistant according to EN 50618.
Water resistance: AD8 Submersion.
- Installation conditions**
Open Air.
Buried.
In conduit.

STANDARDS / COMPLIANCE

-  According to IEC 60502-1 / UNE 21123-4
-  Standards and approvals AENOR / SEC / KEMA-KEUR / RoHS / CE / UKCA
-  CPR (Construction Products Regulation) B2ca-s1a,d1,a1 (according to cross-section) or Cca-s1a,d1,a1 (according to cross-section)

