TOXFREE® ZH H05Z1Z1-F

Flexible and halogen free cable for fixed installations.

ACCORDING TO: EN-50525-3-11

100% Green Energy Cable Production

$B2_{ca}$

APPLICATION

Toxfree® ZH H05Z1Z1-F 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 malls, offices, laboratories, etc.

- Industrial use.
- Public places

CONSTRUCTION

Conductor

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

Insulation

Low smoke zero halogen (LSHF) polyolefin insulation type TI6 according to EN 50363-7.

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

2 x	Blue + Brown
3 G	Blue + Brown + Green/Yellow
3 X	Brown + Black + Grey
4 X	Brown + Black + Grey + Blue
4 G	Brown + Black + Grey + Green/yellow
5 G	Brown + Black + Grey + Blue + Green/yellow

Outer sheath

Low Smoke Halogen Free (LSHF) polyolefin type TM7 according to EN 50363-8. White colour, non-toxic and fire retardant. Other outer sheath colours available on request.

CHARACTERISTICS

Electrical performance

Low voltage: 300/500 V.

Thermal performance

Maximum service temperature: 70°C.

Maximum short-circuit temperature: 160°C (max. 5 s).

Minimum service temperature: -30°C (static with protection).

Fire performance

Flame non-propagation according to EN 60332-1 / IEC 60332-1.

Fire non-propagation according to EN 60332-3 / IEC 60332-3 and EN 50399.

Reaction to fire CPR: $B2_{ca}$-s1a,d1,a1 according to EN 50575.

LSHF (Low Smoke Halogen Free) according to EN 60754-1 / IEC 60754-1.

Low smoke emission according to EN 61034 / IEC 61034:

Light transmittance > 80%.

Low corrosive gases emission according to EN 60754-2 / IEC 60754-2.

Mechanical performance

Minimum bending radius: 8x cable diameter.

Environmental performance

Chemical & Oil resistance: Acceptable.

Water resistance: AD5 Jets.

Installation conditions

Open Air.

In conduit.

STANDARDS / COMPLIANCE

According to

EN 50525-3-11

Standards and approvals

RoHS / CE

CPR (Construction Products Regulation)

$B2_{ca}$-s1a, d1, a1

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TOXFREE® ZH
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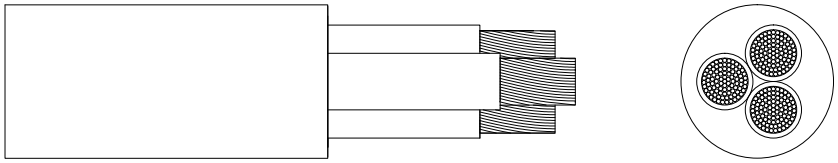
DIMENSIONS & ADMISSIBLE INTENSITIES



Cross-section (mm²)	Diameter (mm)	Weight (kg/km)	Open air (A) [1]	Voltage drop (V/A · km) [2]
2 x 1,5	7,1	85	16	31,8
2 x 2,5	8,8	130	25	19,1
3 G 1,5	8,0	105	16	31,8
3 G 2,5	9,8	165	25	19,1
4 G 1,5	8,9	135	16	27,5
4 G 2,5	10,8	200	20	16,5
5 G 1,5	10,0	165	16	27,5
5 G 2,5	12,0	245	20	16,5

[1] One cable in open air at 30°C ambient temperature according to EN 50565-1.

[2] At maximum service temperature and cos φ= 1.

For cables with 2 or 3 conductors it is supposed a single-phase circuit. For cables with 4 or 5 conductors it is supposed a three-phase circuit.