



Dca

APPLICATION

Toxfree® ZH H05Z-K & H07Z-K is a flexible cable for fixed and protected installations.

It is highly recommended for use in public places such as: hospitals, schools, museums, airports, bus terminals, shopping malls, offices, laboratories, etc.

Not suitable for wet places or immersed.

- Domestic use.
- Public places.
- Electrical panel wiring.

CONSTRUCTION

Conductor

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

Insulation







Halogen free thermosetting flexible rubber insulation, type EI5 according to EN 50363-5.

The standard identification of insulated conductors is the following:

Blue	RAL 5015
Brown	RAL 8003
Black	RAL 9005
Red	RAL 3000
Green/Yellow	RAL 6018/1021
Grey	RAL 7000
White	RAL 9010

Other colours available on request.

CHARACTERISTICS

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Electrical performance
 Low voltage: 300/500 V. 450/750 V.
 Rated Voltage: H05Z-K (up to 1 mm²): 300/500 V.
 H07Z-K (from 1,5 mm² onwards): 450/750 V.
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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).
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Fire performance
 Flame non-propagation according to EN 60332-1 / IEC 60332-1.
 Reaction to fire CPR: Dca-s1b, d1, a1 according to EN 50575 (see cross-section).
 LSHF (Low Smoke Zero Halogen) according to EN 60754-1 / IEC 60754-1.
 Low smoke emission according to EN 61034 / IEC 61034:
 Light transmittance > 60%.
 Low corrosive gases emission according to EN 60754-2 / IEC 60754-2.
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Mechanical performance
 Minimum bending radius: 5x cable diameter.
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Environmental performance
 Chemical & Oil resistance: Acceptable.
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Installation conditions
 In conduit.

STANDARDS / COMPLIANCE



According to
EN 50525-3-41



Standards and approvals
HAR / AENOR / RoHS / CE



CPR (Construction Products Regulation)
Dca-s1b, d1, a1 (according to cross-section)



DIMENSIONS & ADMISSIBLE INTENSITIES



Cross-section (mm ²)	Diameter (mm)	Weight (Kg/km)	Open Air (A) ¹ (2 cores)	Open Air (A) ¹ (3 cores)	Voltage drop (V/A · km) ²
1 x 1	2,4	13			49,72
1 x 1,5	2,9	20	23	20	33,91
1 x 2,5	3,6	30	31	28	20,35
1x4	4,1	45	42	37	12,62
1x6	4,7	60	54	48	8,41
1 x 10	6,0	105	75	66	4,87
1 x 16	7,0	160	100	88	3,08
1 x 25	8,8	245	133	117	1,99
1 x35	9,9	340	164	144	1,41
1 x 50	11,8	470	198	175	0,98
1 x 70	13,2	650	253	222	0,69
1 x 95	15,4	860	306	269	0,52
1 x 120	16,9	1.080	354	312	0,41
1 x 150	19,0	1.345	393	342	0,32

¹Reference method B1 according to IEC 60364-5-52 in open air at 30°C ambient temperature. Two or three loaded conductors installed in conduit on a wall.

² At maximum service temperature, cosφ=1 and single-phase circuit.