

LOW VOLTAGE CABLE

APPLICATION

Single core, fire-proof, high security cable, insulated with thermoplastic halogen-free compound. Recommended for indoor use, fixed installations, in public areas such as hospitals, hotels, shopping malls, halls, computer and communication centres and, in general, in all places with large number of people and electrical/electronic equipment.

CABLE DESIGNATION

Cu / PVC: H07Z1-K

CONSTRUCTION CHARACTERISTICS

Conductor

Copper (plain annealed): Flexible class 5.

Insulation

LSHF – Low Smoke Halogen Free thermoplastic compound, fire retardant, type T1 7.

COLOUR AND CABLE MARKING

Black • Blue • Brown • Grey • Orange • Pink • Red • Turquoise • Violet • White.
Bi-colours not used except the combination of the mono-colours green and yellow.
Oversheath marked at regular intervals with the following information:
<CERTIF> <HAR> CABELTE H07Z1-K TYPE 2

GENERAL CHARACTERISTICS

Construction and test standards	IEC 60228 HD 21.15
Rated voltage U_0/U	450/750 V
Test voltage	2 500 V a.c. 5 minutes
Conductor maximum operating temperature	70°C
Maximum short-circuit temperature	160°C (t ≤ 5s)
Minimum bending radius (mm)	9 x d
Maximum pulling force over conductor (N)	15 x S
Flame retardant	IEC 60332-1-2 • EN 60332-1-2 (cable vertically mounted, length of charred cable ≤ 540 mm)
Fire retardant	IEC 60332-3-24 • EN 60332-3-24 (bunch of cables vertically mounted on a ladder, length of charred cable ≤ 2,5 m)
Halogen free	
Low smoke	IEC 61034-2 • EN 61034-2 (cable light transmittance ≥ 60%)
Low toxicity	IEC 60754-1 • EN 50267-2-1 (halogen acid gas content ≤ 0,5%)
Low corrosivity	IEC 60754-2 • EN 50267-2-2 (pH ≥ 4,3 • conductivity ≤ 10µS/mm)

S – conductor cross-section (mm²)

d – cable outer diameter (mm)



ELECTRICAL AND DIMENSIONAL CHARACTERISTICS

Cable composition n.º cond. x cross-section (mm ²)	Approximate outer diameter (mm)	Approximate weight (kg/km)	Current carrying capacity One circuit inside embedded conduits T = 30°C (A)	
			2 charged conductors	3 charged conductors
1 x 1,5	3,0	20	16,6	14,7
1 x 2,5	4,0	35	23	20
1 x 4	4,5	46	30	27
1 x 6	5,0	65	39	34
1 x 10	6,5	115	54	48
1 x 16	7,5	170	72	65
1 x 25	9,5	260	98	86
1 x 35	10,5	350	121	107
1 x 50	12,5	495	146	130
1 x 70	15,0	680	186	166
1 x 95	16,5	890	225	201
1 x 120	18,5	1 130	261	231

Other compositions are available, contact inform@cabelte.pt for information.

Only one circuit is considered.