


Low voltage - Energy and cabling

H05Z-K / H07Z-K

Structure and electrical, physical, EN 50525-3-41
mechanical requirements:

Corrosive gases or halogens:	EN 50267-2-1
	EN 50267-2-2
	EN 60684-2 IEC 60684-2
Smoke density (transmittance):	EN 61034-2
Low Voltage Directive:	2014/35/EU
RoHS Directive:	2011/65/EU

REACTION TO FIRE

 CPR COMPLIANT REGULATION 305/2011/EU	
Standard:	EN 50575:2014+A1:2016
Class:	E _{ca}
Classification:	EN 13501-6
Flame propagation:	EN 60332-1-2
Notified Body:	0051 - IMQ
CE	2017



Description

- Conductor: class 5, flexible, plain copper wire
- Insulation: LS0H cross-linked elastomer, EI5 quality
- Colour:
 - H05Z-K: black, blue, brown, grey, orange, pink, red, light blue, violet, white, yellow, green, green/yellow.
 - As two-colour: any combination
 - H07Z-K: black, blue, brown, grey, orange, pink, red, light blue, violet, white, green/yellow.

LS0H = Low Smoke Zero Halogen

Functional Characteristics

- Rated voltage
 - H05Z-K: U_o/U 300/500 V
 - H07Z-K: U_o/U 450/750 V
- Max. operating temperature: 90°C
- Min. operating temperature: -25°C (without mechanical shocks)
- Max. short circuit temperature: 250°C

Special features

Good sliding properties in pipes, good abrasion resistance, easy stripping.

Installation conditions

- Minimum installation temperature: 5°C
- Recommended minimum bending radius: 4 times the cable diameter
- Recommended maximum tensile stress: 50 N/mm² of the cross-section of the copper

Marking

H05Z-K [company] IEMMEQU ◀HAR▶ [year]
H07Z-K [company] IEMMEQU ◀HAR▶ [year]

Use and installation method

Reference Guide EN 50565

For environments containing large number of people (schools, offices, theatres, subways, hospitals, place of worship, malls and places of entertainment) when it is necessary to protect against the emission of fumes and corrosive gases in case of fire. The presence of water in contact with cable is not acceptable.

H05Z-K: for fixed laying in above-ground or built-in pipes only if used for signalling or control circuits.

H07Z-K: for fixed laying in above-ground or built-in pipes or in similar closed systems. Cable suitable for protected installation in lighting and control appliances for voltage up to 1000V in a.c. or up to 750 V in d.c. landward.

Reference Construction Products Regulation 305/2011 EU and Standard EN 50575:

Given its properties of limiting the development of fire and heat emission, the cable is suitable for the supply of electricity in buildings and other civil engineering works.

H05Z-K

Formation	Approx. conductor Ø	Average insulation thickness	Max. external Ø	Max. electrical resistance at 20°C	Approx. cable weight	Current rating in pipe in air at 30°C
n° x mm ²	mm	mm	mm	Ω/km	kg/km	A
1 x 0,5	0,9	0,6	2,6	39,0	8	3
1 x 0,75	1,1	0,6	2,8	26,0	10	6
1 x 1	1,3	0,6	2,9	19,5	14	10

H07Z-K

Formation	Approx. conductor Ø	Average insulation thickness	Max. external Ø	Max. electrical resistance at 20°C	Approx. cable weight	Current rating in pipe in air at 30°C
n° x mm ²	mm	mm	mm	Ω/km	kg/km	A
1 x 1,5	1,5	0,7	3,5	13,3	19	20
1 x 2,5	2,0	0,8	4,3	7,98	30	28
1 x 4	2,5	0,8	4,9	4,95	43	37
1 x 6	3,0	0,8	5,5	3,30	61	48
1 x 10	4,0	1,0	7,1	1,91	110	66
1 x 16	5,0	1,0	8,4	1,21	155	88
1 x 25	6,2	1,2	10,6	0,780	240	117
1 x 35	7,4	1,2	12,1	0,554	330	144
1 x 50	8,9	1,4	14,4	0,386	480	175
1 x 70	10,5	1,4	16,6	0,272	680	222
1 x 95	12,2	1,6	18,8	0,206	860	269
1 x 120	13,8	1,6	20,9	0,161	1080	312
1 x 150	15,4	1,8	23,3	0,129	1345	355
1 x 185	16,9	2,0	25,8	0,106	1650	417
1 x 240	19,5	2,2	29,4	0,0801	2180	490

N.B. Permissible current rating values are according to three charged conductors