H05V2-K / H07V2-K

Structure and electrical, physical, mechanical requirements:	EN 50525-2-31
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:	2479 - L.S. FIRE TESTING INSTITUTE
CE	2017

Description

- Conductor: class 5, flexible, plain copper wire
- Insulation: special 90°C PVC, TI3 quality
- Colour:
  - H05V2-K: black, blue, brown, grey, orange, pink, red, light blue, violet, white, yellow, green, green/yellow. As two-colour: any combination
  - H07V2-K: black, blue, brown, grey, orange, pink, red, light blue, violet, white, green/yellow.

Functional characteristics

- Rated voltage:
  - H05V2-K: Uo/U 300/500 V
  - H07V2-K: Uo/U 450/750 V
- Max. operating temperature: 90°C
- Min. operating temperature: -10°C (without mechanical shocks)
- Max. short circuit temperature: 160°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/mm^2 of the cross-section of the copper

Marking

H05V2-K [company] IEMMEQU ◄HAR► [year]
H07V2-K [company] IEMMEQU ◄HAR► [year]

Use and installation method

Reference Guide EN 50565
H05V2-K: Suitable for installations inside lighting devices, in which the max. conductor temperature under normal usage conditions does not exceed 90°C. Installation permitted in aboveground or built-in pipes if used for signalling and control circuits only. Contact with water is not permitted.
H07V2-K: Suitable for installations in aboveground or built-in pipes or similar closed systems, in which the max. conductor temperature under normal usage conditions does not exceed 90°C. If installed in supply systems, the max. continuous operating temperature has to be 70°C. For fixed and protected installations in lighting and control devices, rated voltages up to 1000 V in AC or up to 750 V in DC landward are permitted. Contact with water is not permitted.

Reference Construction Products Regulation 305/2011 EU and Standard EN 50575:
The cable is suitable for the supply of electricity in buildings and other civil engineering works.

H05V2-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	2,5	39,0	9	4
1 x 0,75	1,1	0,6	2,7	26,0	11	7
1 x 1	1,3	0,6	2,8	19,5	14	12

H07V2-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	3,4	13,3	19	20
1 x 2,5	2,0	0,8	4,1	7,98	29	28
1 X 4	2,5	0,8	4,8	4,95	43	37
1 X 6	3,0	0,8	5,3	3,30	61	48
1 X 10	4,0	1,0	6,8	1,91	105	66
1 X 16	5,0	1,0	8,1	1,21	155	88
1 X 25	6,2	1,2	10,2	0,780	240	117
1 X 35	7,4	1,2	11,7	0,554	330	144

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