H05V-K / H07V-K

Structure and electrical, physical, mechanical requirements:	EN 50525-2-31 (IEC 60227-3)
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	2016



Description

- Conductor: class 5, flexible, plain copper wire
- Insulation: PVC, TI1 quality
- Colour:
  - H05V-K: black, blue, brown, grey, orange, pink, red, light blue, violet, white, yellow, green, green/yellow.
  As two-colour: any combination
  - H07V-K: black, blue, brown, grey, orange, pink, red, light blue, violet, white, green/yellow.

Functional characteristics

- Rated voltage
  H05V-K: Uo/U 300/500 V
  H07V-K: Uo/U 450/750 V
- Max. operating temperature: 70°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.

Marking

H05V-K [company] IEMMEQU ◄HAR► [year]
H07V-K [company] IEMMEQU ◄HAR► [year]

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

Use and installation method

Reference Guide EN 50565
H05V-K: for fixed laying in above-ground or built-in pipes only if used for signalling or control circuits. Contact with water is not permitted.
H07V-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 c.a. or up to 750 V in c.c. landward. 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.

H05V-K

Formation	Ø approx. conductor	Average insulation thickness	External Ø	Max. electrical resistance at 20°C	Approx. cable weight	Current rating in pipe in air at 30°C
n° x mm²	mm	mm	mm	Ω/km	kg/km	A
1 x 0,5	0,9	0,6	2,5	39,0	9	3
1 x 0,75	1,1	0,6	2,7	26,0	11	6
1 x 1	1,3	0,6	2,8	19,5	14	10

H07V-K

Formation	Ø approx. conductor	Average insulation thickness	External Ø	Max. electrical resistance at 20°C	Approx. cable weight	Current rating in pipe in air at 30°C
n° x mm²	mm	mm	mm	Ω/km	kg/km	A
1 x 1,5	1,5	0,7	3,4	13,3	20	16
1 x 2,5	2,0	0,8	4,1	7,98	31	20
1 x 4	2,5	0,8	4,8	4,95	45	25
1 x 6	3,0	0,8	5,3	3,30	64	36
1 x 10	4,0	1,0	6,8	1,91	110	50
1 x 16	5,0	1,0	8,1	1,21	160	68
1 x 25	6,2	1,2	10,2	0,780	250	89
1 x 35	7,4	1,2	11,7	0,554	340	110
1 x 50	8,9	1,4	13,9	0,386	480	134
1 x 70	10,5	1,4	16,0	0,272	670	171
1 x 95	12,2	1,6	18,2	0,206	870	207
1 x 120	13,8	1,6	20,2	0,161	1100	239
1 x 150	15,4	1,8	22,5	0,129	1370	275
1 x 185	16,9	2,0	24,9	0,106	1680	314
1 x 240	19,5	2,2	28,4	0,0801	2205	369

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