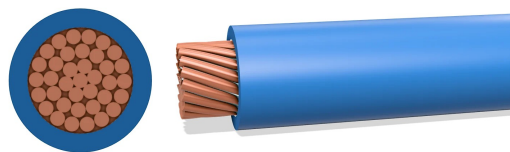


Application

H07V-K is the flexible single-core installation wire (building wire) to EN 50525-2-31 (HD 21.3 / IEC 60227-3) for 450/750 V fixed wiring. It consists of a single fine-stranded class 5 copper conductor insulated with PVC; there is no outer sheath, so H07V-K is drawn into conduits, trunking and cable ducts, or wired in enclosures, control panels and distribution boards. The flexible class 5 conductor makes it easier to route and terminate in tight panels than the solid (H07V-U) or stranded (H07V-R) versions. The PVC insulation is colour-coded to HD 308 S2, including green/yellow for protective conductors. Where a halogen-free wire is required, the low-smoke zero-halogen H07Z1-K is used instead; it is a separate product.



CONSTRUCTION

Conductor	Flexible fine-wire strand of plain annealed copper, class 5 acc. to IEC 60228.
Insulation	Polyvinyl chloride (PVC), type T11.
Core identification	Single colour per HD 308 S2: green/yellow, blue, brown, black, grey, red, white, and further colours on request.
Sheath	None (single-core insulated wire).

ELECTRICAL & THERMAL PROPERTIES

Rated voltage U₀/U	450/750 V.
Test voltage	2.5 kV AC.
Standard	EN 50525-2-31 (HD 21.3 S3 / IEC 60227-3); conductor acc. to IEC 60228, class 5.
Reaction to fire (CPR)	Class Eca acc. to EN 50575.
Flame-retardant	Acc. to IEC 60332-1-2.
Max. conductor temperature	+70 °C (short circuit +160 °C, max. 5 s).
Permitted ambient temperature, fixed	-15 °C to +70 °C.
Min. bending radius, fixed	4 × overall diameter up to 8 mm, 5 × from 8 to 12 mm and 6 × above 12 mm.

DIMENSIONS & TECHNICAL DATA

Nominal c.s.a. (mm ²)	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
1.5	13.3	2.9	19
2.5	7.98	3.6	30
4	4.95	4.1	44
6	3.3	4.6	61
10	1.91	5.9	105
16	1.21	7	160
25	0.78	8.7	245
35	0.554	9.9	335
50	0.386	11.8	480
70	0.272	13.5	655
95	0.206	15.6	865
120	0.161	17.3	1095
150	0.129	19.3	1380
185	0.106	21.5	1675
240	0.0801	24.5	2210

Outer diameters and weights are nominal values of the leading reference source; conductor resistances are the IEC 60228 class 5 maxima at 20 °C. All values are indicative and non-binding.