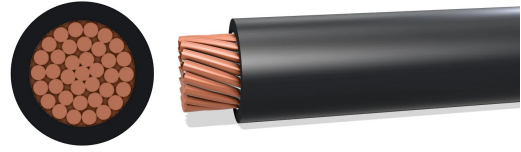


Application

H07Z-K is a harmonised single-core, non-sheathed wire with a flexible plain copper conductor of class 5 and a halogen-free, low-smoke cross-linked (thermosetting) insulation of compound type EI 5, rated 450/750 V and manufactured in accordance with EN 50525-3-41. The cross-linked insulation permits a continuous conductor temperature of 90 °C, which gives a higher current-carrying capacity than the thermoplastic types H07V-K and H07Z1-K of the same cross-section. It is intended for fixed installation in conduit, trunking or closed installation ducts and for the internal wiring of switchgear, control panels and distribution boards, in particular where people, equipment or escape routes must be protected against corrosive gases and dense smoke in the event of fire. The wire is available in the cross-sections 1.5 to 240 mm² in a range of colours; it is not intended for direct burial, unprotected outdoor use or continuous flexing in service.



CONSTRUCTION

Conductor	Flexible plain annealed copper, class 5 acc. to IEC 60228 / EN 60228.
Insulation	Halogen-free cross-linked (thermosetting) compound type EI 5 acc. to EN 50363-5, low smoke emission; no outer sheath (non-sheathed core).
Core colours	Black, blue, brown, grey, white, red, green/yellow; other colours on request.

ELECTRICAL & THERMAL PROPERTIES

Rated voltage Uo/U	450/750 V.
Test voltage	2,500 V AC.
Standard	EN 50525-3-41 (HD 22.9); insulation compound acc. to EN 50363-5; conductors acc. to IEC 60228 / EN 60228.
Flame-retardant	Acc. to EN 60332-1-2 / IEC 60332-1-2.
Halogen-free	Acc. to EN 60754-1 / IEC 60754-1 and EN 60754-2 / IEC 60754-2; low smoke density acc. to EN 61034-2 / IEC 61034-2.
Conductor standard	IEC 60228 / EN 60228, class 5 (flexible).
Max. conductor temperature	+90 °C (max. +250 °C for 5 s in short circuit).
Permitted outer cable temperature, fixed	-15 °C to +90 °C (min. +5 °C during installation).
Min. bending radius, fixed	6 × outer diameter.
Reaction to fire (CPR)	Eca (EN 50575, halogen-free).

DIMENSIONS & TECHNICAL DATA

Size (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	3.5	30
4	4.95	4.1	44
6	3.3	4.6	61
10	1.91	6	105
16	1.21	7	156
25	0.78	8.6	239
35	0.554	10	328
50	0.386	11.7	466
70	0.272	13.3	645
95	0.206	15.1	851
120	0.161	16.9	1085
150	0.129	18.6	1362
185	0.106	20.5	1660
240	0.0801	23.9	2177

Outer diameters, weights and conductor resistance are the nominal manufacturer values of the leading reference source (flexible class-5 plain copper conductor); all values are indicative and non-binding.