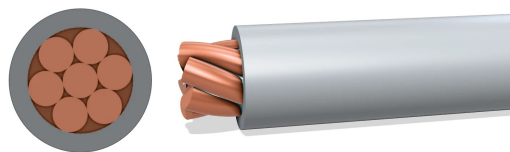


Application

H07V-R is a harmonised single-core, non-sheathed wire with a stranded plain copper conductor of class 2 and a PVC insulation, rated 450/750 V and manufactured in accordance with EN 50525-2-31. It is intended for fixed installation in conduit, trunking or closed installation ducts, on or under plaster, and for the internal wiring of switchgear, control panels and distribution boards in dry indoor locations. The stranded conductor makes the larger cross-sections easier to handle than a solid conductor; the wire is available in the cross-sections 1.5 to 400 mm² in a wide range of colours. It is not intended for direct burial, outdoor use, or for installation where it is exposed to mechanical stress or flexing in service.



CONSTRUCTION

Conductor	Stranded plain annealed copper, class 2 acc. to IEC 60228 / EN 60228.
Insulation	PVC compound type TI1 acc. to EN 50363-3; no outer sheath (non-sheathed core).
Core colours	Black, blue, brown, grey, white, red, orange, violet, green/yellow; other colours and bicoloured versions on request.

ELECTRICAL & THERMAL PROPERTIES

Rated voltage U₀/U	450/750 V.
Test voltage	2,500 V AC.
Standard	EN 50525-2-31 (HD 21.3); insulation compound acc. to EN 50363-3; conductors acc. to IEC 60228 / EN 60228.
Flame-retardant	Acc. to EN 60332-1-2 / IEC 60332-1-2.
Conductor standard	IEC 60228 / EN 60228, class 2 (stranded).
Max. conductor temperature	+70 °C (max. +160 °C for 5 s in short circuit).
Permitted outer cable temperature, fixed	-5 °C to +70 °C (min. +5 °C during installation).
Min. bending radius, fixed	6 × outer diameter.
Reaction to fire (CPR)	Eca (EN 50575).

DIMENSIONS & TECHNICAL DATA

Size (mm ²)	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
1.5	12.1	3	22
2.5	7.41	3.6	34
4	4.61	4.1	47
6	3.08	4.7	68
10	1.83	5.9	108
16	1.15	6.7	166
25	0.727	8.3	260
35	0.524	9.3	346
50	0.387	10.9	468
70	0.268	12.5	659
95	0.193	14.5	908
120	0.153	16.1	1128
150	0.124	17.7	1415
185	0.0991	19.8	1740
240	0.0754	22.6	2310
300	0.0601	27.3	2966
400	0.047	30.2	3785

Outer diameters, weights and conductor resistance are the nominal manufacturer values of the leading reference source (stranded class-2 plain copper conductor); all values are indicative and non-binding.