

H07V-K

DB8 120001EN

valid from: 11th Sept. 2014

APPLICATION (HD 516)

H07V-K belongs to Europe's harmonized, normative cable types and is designed according to the CENELEC harmonized third-party standard EN 50525-2-31 – formerly: Meanwhile withdrawn harmonization document HD 21.3. H07V-K is a classic, single-layer insulated, single-core, low-voltage hook-up wire, and that for stationary/ static and protected installation inside of devices/ appliances/ machines/ control cabinets (panels)/ cable ducting systems/ closed conduits for laying on or underneath plaster as well as in similar, closed systems which cannot be opened if energized, since H07V-K doesn't dispose of error correction/ protection for lack of an outer sheath (jacket), but only of basic protection according to revised IEC 60364-4-41 / HD 60364-4-41. Beyond, H07V-K is suitable for the use in or on lighting installation or control units/ switchgear in conjunction with voltages up to 1000 V AC or 750 V DC to-ground, according to HD 516. Unprotected laying on or under plaster as well as wiring through unclosed or opening cable trunking systems is only permitted as part of security irrelevant signal and control circuits with special extra-low voltage under 25 V AC to-ground or under 60 V DC to-ground. In wet or damp rooms and locations, unprotected operation is completely forbidden. Under individual part numbers, different core insulation colours are offered for diverse application types. Flat cardboard boxes containing 100-metre coils are applied as standard package type.

ETIM 5.0 Class-ID: EC000993

ETIM 5.0 Class-Description: Single core cable

DESIGN (EN 50525-2-31)

Conductor	Copper, bare, fine-wired/ finely stranded/ conductor class 5 according to IEC 60228
Nominal conductor cross sections	1.5 mm ² to and including 6 mm ²
Core insulation	PVC compound type TI 1 according to EN 50363-3
Core insulation colours	Diverse single colours Diverse double colours, with lengthways stripes

THIRD-PARTY CABLE TYPE CERTIFICATION (EN 50525-2-31)

◀VDE▶ H07V-K

Exceptions without cable type certification:

- Transparent core insulations
- Single-coloured, yellow core insulations
- Single-coloured, green core insulations
- Double-coloured core insulations, except for green-yellow and yellow-green

ELECTRICAL PROPERTIES AT +20 °C

IEC rated voltage U ₀ /U	450/750 V AC = 675/1125 V DC
Conductor resistance	IEC 60228, conductor class 5
Test voltage	2500 V AC
Compliance with the low-voltage EC directive	2006/95/EC

MECHANICAL, THERMAL AND CHEMICAL PROPERTIES

Minimum bending radius (HD 516)	Intended use:	4 x Outer diameter
	Cautious bending:	2 x Outer diameter
Conductor temperature	Stationary/ static operation (without vibration):	-40 °C to +80 °C
	Moved operation (not normatively intended):	+5 °C to +70 °C
	Laying/ handling:	Min. +5 °C
	Short-circuit and ground leakage:	Max. +160 °C
	Ambient temperature at storage:	Max. +40 °C
Flame retardant	IEC 60332-1-2	
RoHS	Chemical compliance with the EU RoHS II directive 2011/65/EU about the Restriction of (the use of certain) Hazardous Substances	