

X07Z-K 110°C, halogen-free single core

valid from: 2010-11-22

Application

According to HD 516, the halogen-free single-core hook-up cables X07Z-K 110°C are recommended for the installation in rigid conduits on or under plaster or in similar closed systems, especially for applications wherefore a low development of smoke and corrosive gases is demanded in fire case. Moreover, the cable is applicable for protected, fix laying in or on illumination systems or control units up to 1000 V alternating voltage or up to 750 V direct phase-to-earth voltage. Human body contact will have to be avoided if the cable is operated with high temperatures. These cables are not manufactured to provide insulation survival in the event of fire.

Allowed voltages according to HD 22.1:

450 V AC phase-to-ground

750 V AC phase-to-phase (3-phase alternating current)

Direct voltage: 1.5 times of alternating current voltage

Operated voltage: max. 10 % above V AC or V DC limits

Design:

HD 22.9

Conductor: Bare copper, fine wire strand in acc. to IEC 60 228/VDE 0295 class 5
 Core insulation: HD 22.9 H07Z-K compound EI 5 acc. to EN 50363-5,
 Electron-beam cross-linked,
 Wall thickness: H07Z-K construction norm in HD 22.9

Electrical properties at 20° C

Nominal voltage 450/750 V AC
 Test voltage 2500 V AC

Mechanical, thermal and chemical properties

Temperature range Fix installation -40 up to +110 °C maximum conductor temperature
 Vertical flame-propagation IEC 60332-1-2
 Bundle flame test – Cat. C IEC 60332-3-24/EN 60332-3-24/EN 50266-2-4/VDE 0482-332-3-24
 Minimum bending radius HD 516, table 6:
 $D^* \leq 8 \text{ mm: } 4^{**} \times D^* / 2^{***} \times D^*$
 $8 \text{ mm} < D^* \leq 12 \text{ mm: } 5^{**} \times D^* / 3^{***} \times D^*$
 $D^* > 12 \text{ mm: } 6^{**} \times D^* / 4^{***} \times D^*$
 Smoke density**** IEC 61034-2
 Halogen-free**** HD 22.9 appendix B
 Certifications Not harmonised; VDE-tested and VDE-marked
 EC low voltage directive This cable confirms to 2006/95/EC (low voltage directive).
 EC RoHS directive This cable complies with EC directive 2002/95/EC (RoHS – **R**estriction **o**f (the use of certain) **H**azardous **S**ubstances).

* D = Outer cable diameter

** At conventional use

*** At cautious bending

**** Only valid for the single-core cable on its own, not for the combination of both, installed cable and rigid conduit.