

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 – **Restriction of** (the use of certain) **Hazardous Substances**).

* 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.