

TOXFREE® MARINE PLUS XTCuZ1-K (AS+)

Marine armoured fire resistant power cable.

ACCORDING TO: IEC 60092-353



APPLICATION

The Toxfree® Marine Plus XTCuZ1-K (AS+) is specially designed to transmit electric power in the presence of fire, assuring electric supply to emergency circuits, like signalling lights, smoke extractors, acoustic alarms, water pumps, etc. In case of fire, it does not emit toxic or corrosive gases, thereby protecting public health and avoiding any possible damage to electronic equipment. For this reason, its use is recommended in public places and marine applications.

CONSTRUCTION

Conductor

Electrolytic annealed copper, class 5 (flexible) according to IEC 60228.

Insulation

Mica Tape + Cross linked polyethylene type HF XLPE 90°C according to IEC 60092-360.

The standard identification is the following:

1 x	Natural
2 x	Blue + Brown
3 x	Brown + Black + Grey
4 x	Brown + Black + Grey + Blue
5 or more conductors	Black numbered

Other colours available on request.

Bedding

Thermoplastic polyolefin, natural colour, with low smoke and halogen free under fire conditions (single-cores and multi-cores from 25 mm²).

Screen

Aluminium polyester tape screen with overlapping tinned copper braid armour, ensuring 100% screening coverage.

Outer sheath

Low smoke halogen free thermoplastic polyolefin, type SHFI according to IEC 60092-360.

Orange colour.

Non-toxic, fire retardant and fire resistant.

CHARACTERISTICS

 **Electrical performance**
Low voltage: 0,6/1 kV.

 **Thermal performance**
Maximum conductor temperature: 90°C.
Maximum short-circuit temperature: 250°C (max 5 s).
Minimum service temperature: -40°C (fixed installations).
Lowest installation temperature: -15°C

 **Fire performance**
Flame non-propagation according to IEC 60332-1.
Fire non-propagation according to IEC 60332-3-22.
Fire resistant minimum 90 minutes at 840 °C:
According to IEC 60331-2 for cable diameter ≤ 20 mm.
According to IEC 60331-1 for cable diameter > 20 mm.
Low smoke halogen free according to IEC 60754-1.
Low corrosive gases emission according to IEC 60754-2.
Low smoke emission according to IEC 61034:
light transmittance > 60%.

 **Mechanical performance**
Minimum bending radius during installation: 6x cable diameter.
Impact resistance: AG3 High severity.

 **Environmental performance**
Chemical & Oil resistance: Acceptable.
UV Resistant according to EN 50618.
Water resistance: AD6 waves.

 **Installation conditions**
Open Air.
In conduit on a bulkhead.
On a bulkhead.

STANDARDS / COMPLIANCE

 **According to**
IEC 60092-353

 **Standards and approvals**
ABS / DNV-GL / BUREAU VERITAS / LLOYD'S
REGISTER / CE / RoHS

