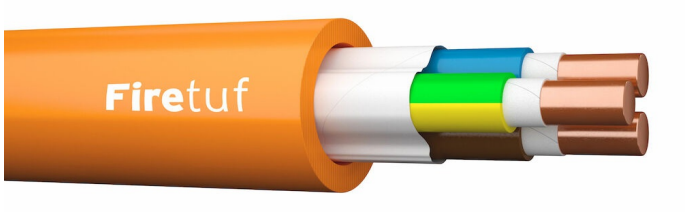
FIRETUF FRHF PH120 500V

Fire resistant and halogen-free installation cable



DESCRIPTION

500VHalogen-free and fire-resistant installation cable for emergency and panic lighting as well as warning systems in places where the electrical integrity must be maintained during a fire. Mica tape directly on the conductor provides both mechanical and electrical protection during a fire. Suitable for fixed indoor and outdoor application.

PH120 fire resistant and tested acc. to EN 50200 includes direct flame at a temperature of 842°C with mechanical shock to the back board.

FIretuf 500 V is registered in the database of building materials that can be used in Swan Label construction.

CERTIFICATION, APPROVAL & STANDARD

CE

SFS 5545	Standard for fire-resistant and HFFR cables in bundles
EN 50200	Method of test for resistance to fire of unprotected small cables for use in emergency circuits
EN 50362	Fire resistance test - cables for emergency power circuits
IEC 60332-1 & 2	Fire tests for vertical flame propagation for a single insulated wire or cable - procedure for 1-kW pre-mixed flame
REACH	Regulation concerning the Registration, Evaluation, Authorisation and Restriction of CHemicals.
ROHS	RoHS compliance - restriction of hazardous substances directive

CONSTRUCTION

Conductor material	Copper
Conductor surface	Bare
Core insulation material	Mica + XLPE
Core identification (acc. HD 308 S2)	Yes
Twisted cores	Yes
Material outer sheath	Halogenfree polymer
Cable shape	Round
Fire resistant layer (core)	Yes

ELECTRICAL PROPERTIES

Nominal voltage U0 [V]	300
Nominal voltage U [V]	500

FIRE PROPERTIES

Circuit integrity according to EN 50200	120 min
Flame retardant according to IEC 60332-1-2	Yes
Halogen free according to EN IEC 60754-1	Yes
Halogen free according to EN IEC 60754-2	Yes
Low smoke according to EN IEC 61034-2	Yes
Fire resistant layer (core)	Yes
Insulation integrity	PH 120
Insulation integrity (acc. IEC 60331)	Yes
Flame retardant	In accordance with EN/IEC 60332-1-2
Halogen free	acc. IEC/EN 60754-1/2
Low smoke	acc. IEC/EN 61034-2

THERMAL PROPERTIES

Max. conductor temperature [°C]	90
Max. conductor temperature at short circuit [°C]	250
Max. outer temperature, fixed installation [°C]	-40
Permitted cable outer temperature after assembling without vibration (max) [°C]	80
Low temperature resistant (acc. EN 60811-504+505+506)	Yes
Permitted cable outer temperature during assembling/handling (min) [°C]	-15
Permitted cable outer temperature during assembling/handling (max) [°C]	40

MECHANICAL PROPERTIES

Bending radius (rule)	10x OD

APPLICATION PROPERTIES

UV resistant	Yes
Outdoor installation	Yes
Underground installation	No
Suitable as installation cable	Yes

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DELIVERY INFORMATION

Basic construction	Cable weight [kg/km]	Standard packaging quantity	SAP code	EAN-code (GTIN)
2X1,5	100	500	20098137	6410004202128
2X2,5	130	500	20098037	6410004202135
3G1,5	120	500	20098036	6410004203231
3G2,5	160	500	20098035	6410004203224
4G1,5	150	500	20098039	6410004203613
4G2,5	190	500	20098040	
5G1,5	190	500	20098041	6410004203729
5G2.5	250	500	20098043	6410004203736

MECHANICAL AND ELECTRICAL DATA

Basic construction	Conductor category	Shape of conductor	Nominal outer diameter [mm]	Core colours	Current carrying capacity [A]
2X1,5	Class 1 = solid	Round	10	Blue, Brown	26
2X2,5	Class 1 = solid	Round	11	Blue, Brown	26
3G1,5	Class 1 = solid	Round	10	Yellow/Green, Blue, Brown	26
3G2,5	Class 1 = solid	Round	11	Yellow/Green, Blue, Brown	36
4G1,5	Class 1 = solid	Round	11	Yellow/Green, Blue, Brown, Black	23
4G2,5	Class 1 = solid	Round	12	Yellow/Green, Blue, Brown, Black	32
5G1,5	Class 1 = solid	Round	12	Yellow/Green, Blue, Brown, Black, Grey	23
5G2.5	Class 1 = solid	Round	13	Yellow/Green, Blue, Brown, Black, Grey	32

* Nominel values
* Current-carrying capacities according to IEC60364-5-52 method E or F

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