



Halogen-free 1kV power cables, functional for 180 min. in fire



Application:

Power cables with resistance to flame propagation according to STN EN 60332-3... (STN EN 50266-2-...), halogen-free, with low density of smoke according to STN EN 61034-2 and low corrosivity of combustion gases according to STN EN 50267-2-3. Cables are functional in fire for time period 180 min. according to IEC 60331-21. These are used for nominal voltage of 0,6/1 kV for fixed installation both in normal and moist environments (STN 33 2000-5-51). Cables can be used in the fire hazard conditions and can be installed on flammable material.

Cable construction:

- **Number of cores:** 2 - 24
- **Cable cores:** copper conductor cl. 1 or cl. 2
- **Nominal cross-section:** 1 mm², 1,5 mm², 2,5 mm², 4 mm², 6 mm², 10 mm²
- **Insulation:** mica-glass tape + cross-linked homo- / copolymer ethylene, HFFR
- halogen-free, flame-retarding filler is placed above the coiled cores
- **Sheath cable:** halogen-free, flame-retardant material
- **Colour of sheath:** orange or other if required

Technical data:

- **Nominal voltage U₀/U (kV):** 0,6/1
- **Test voltage [kV]:** 4
- **Max. short-circuit temperature:** 90 °C
- **Operating temperature:** -40 °C to +70 °C
- **Min. temperature for laying:** -5 °C
- **Min. bending radius:** 15 x cable diameter

Marking:

- **Core identification:** Acc. to STN EN 60446

- **Letter code:**

position	letter	meaning
1.	N	VDE standard
2.	HX	mica-glass tape + cross-linked homo- / copolymer ethylene, HFFR
3.	H	homo- / copolymer ethylene, HFFR
4.	RE	copper conductor cl. 1
	RM	copper conductor cl. 2
5.	FE180	cable is flame-retardant with maintaining its functionality at fire



Application table:

Number of cores	Nominal cross-section	Effective resistance of conductors	Total weight (appr.)	Outer diameter (appr.)
	mm ²	Ω/km	kg/km	mm
2	1	18,1	80	9
	1,5	12,1	105	9,5
	2,5	7,41	130	10,5
	4	4,61	160	12,5
3	1	18,1	110	9,5
	1,5	12,1	130	10
	2,5	7,41	180	11
	4	4,61	240	13,5
	6	3,08	360	14,5
	10	1,83	500	16,5
4	1	18,1	140	10,5
	1,5	12,1	185	11,5
	2,5	7,41	240	12,5
	4	4,61	320	14,5
	6	3,08	420	15,5
	10	1,83	600	17,5
5	1	18,1	165	11
	1,5	12,1	220	12
	2,5	7,41	290	13
	4	4,61	360	15,5
	6	3,08	460	16,5
	10	1,83	710	18,5
7	1	18,1	210	12
	1,5	12,1	260	13
	2,5	7,41	380	14
	4	4,61	550	17,5
12	1,5	12,1	450	16,5
	2,5	7,41	600	18,5
	4	4,61	750	20
19	1,5	12,1	570	21
	2,5	7,41	780	23
24	1,5	12,1	760	24
	2,5	7,41	990	26