



BFSI/FRHF (EMC)

Power cable 0,6/1 kV halogen – free, low smoke fire resistant cable with Cu conductors

APPLICATION

Fire resistant security cables for installation everywhere where high safety requirements have a special significance e.g., in industrial complexes, power stations, public buildings, hotels, underground railway systems, hospitals etc. The copper screen can have 100% covering and complies with the EMC directive with right practicable installation. Installations in the open air, underground, indoors, in cable ducts. Not suitable for use in water. Cables may be laid directly in ground if installed properly and carefully acc. to REN leaf 9000 guide. This product is designed and tested to last minimum 90 minutes, and up to a temperature of 1000°C.

CONSTRUCTION

Conductors: Cu, class 1 or 2 according to EN 60228

Insulation: Mica tape and XLPE compound over it

Bedding: Extruded elastomere or plastomere halogen-free compound or plastic halogen-free tape
Concentric conductor: Cu foil tape (optional), Cu wires with counter helix of Cu tape

Sheath: HFFR compound, type ST8 acc. to IEC 60502-1, UV resistant

CORE IDENTIFICATION

According to HD 308 S2

Insulation Color:

2-core: ●Brown ●Blue

3-core (a): ●Green/Yellow ●Brown ●Blue

3-core (b): ●Black ●Brown ●Grey

4-core (a): ●Green/Yellow ●Brown ●Black ●Grey

4-core (b): ●Blue ●Brown ●Black ●Grey

5-core: ●Green/Yellow ●Blue ●Brown ●Black ●Grey

Outer Sheath Colour:

●Orange

Other colours available on request

TECHNICAL CHARACTERISTICS

Test voltage: 4 Kv

Rated voltage: 0,6/1 kV

Bending radius (min): single-core- 15D;
 multicore- 12D

Min. laying temperature: -20°C

Max. conductor temperature: 90°C

Max. short-circuit temperature: 250°C

Lowest temp. for fixed installation: -40°C

CERTIFICATION



STANDARDS

HD 604 S1, part 5D; IEC 60502-1	Construction
EN 60331-1-2	Fire resistant properties (90min- 830°C)
EN 60331-1, -2, -21	Fire resistant properties
EN 60332-3-24 (Cat. C)	Flame retardant
EN 60754-1	Halogen free properties: pH ≥ 4,3, Conductivity ≤ 10µS
EN 60754-1	Halogen free properties: < 0,5% Halogen
EN 61034-1, -2	Low smoke properties: minimum 60% light transmittance

NOMINAL CROSS-SECTION	CONDUCTOR CONSTRUCTION	MAX. RESISTANCE AT 20°C	CURRENT CAPACITY IN AIR	OUTER DIAM. (APPROX.)	CABLE WEIGHT (APPROX.)
mm ²		Ω/km	A	mm	kg/km
2x1,5/1,5	RE	12,1/12,1	25	14,2	196
2x2,5/2,5	RE	7,41/7,41	33	15	225
2x4/4	RE	4,61/4,61	43	16,3	285
2x6/6	RE	3,08/3,08	54	17,6	353
2x10/10	RE	1,83/1,83	75	19,3	486
2x16/16	RE	1,15/1,15	100	21,1	670
2x25/16	RM	0,727/1,15	136	25,9	943
2x35/16	RM	0,524/1,15	165	28	1155

NOMINAL CROSS-SECTION	CONDUCTOR CONSTRUCTION	MAX. RESISTANCE AT 20°C	CURRENT CAPACITY IN AIR	OUTER DIAM. (APPROX.)	CABLE WEIGHT (APPROX.)
mm ²		Ω/km	A	mm	kg/km
3x1,5/1,5	RE	12,1/12,1	25	14,8	222
3x2,5/2,5	RE	7,41/7,41	33	15,6	260
3x4/4	RE	4,61/4,61	43	17	335
3x4/4	RM	4,61/4,61	43	17,7	347
3x6/6	RE	3,08/3,08	54	18,4	422
3x6/6	RM	3,08/3,08	54	18,8	431
3x10/10	RE	1,83/1,83	75	20,2	591
3x10/10	RM	1,83/1,83	75	20,8	604
3x16/16	RE	1,15/1,15	100	22,1	828
3x16/16	RM	1,15/1,15	100	23	851
3x25/16	RM	0,727/1,15	136	27,3	1196
3x35/16	RM	0,524/1,15	165	29,6	1497
3x50/25	SM	0,387/0,727	201	29,7	1896
3x70/35	SM	0,268/0,524	255	33,6	2645
3x95/50	SM	0,193/0,387	314	36,7	3547
3x120/70	SM	0,153/0,268	364	40,5	4488
3x150/70	SM	0,124/0,268	416	44,7	5373
3x185/95	SM	0,0991/0,193	480	48,6	6705
3x240/120	SM	0,0754/0,153	565	54,6	8690

NOMINAL CROSS-SECTION	CONDUCTOR CONSTRUCTION	MAX. RESISTANCE AT 20°C	CURRENT CAPACITY IN AIR	OUTER DIAM. (APPROX.)	CABLE WEIGHT (APPROX.)
mm ²		Ω/km	A	mm	kg/km
4x1,5/1,5	RE	12,1/12,1	25	15,8	247
4x2,5/2,5	RE	7,41/7,41	33	16,7	294
4x4/4	RE	4,61/4,61	43	18,2	382
4x6/6	RE	3,08/3,08	54	19,7	486
4x6/6	RM	3,08/3,08	54	20,7	495
4x10/10	RE	1,83/1,83	75	21,7	690
4x10/10	RM	1,83/1,83	75	22,4	705
4x16/16	RE	1,15/1,15	100	23,9	977
4x16/16	RM	1,15/1,15	100	24,9	1002
4x25/16	RM	0,727/1,15	136	29,7	1429
4x35/16	RM	0,524/1,15	165	32,2	1821
4x35/16	SM	0,524/1,15	165	29,8	1810
4x50/25	SM	0,387/0,727	201	33,2	2419
4x70/35	SM	0,268/0,524	255	37,6	3375
4x95/50	SM	0,193/0,387	314	41,3	4533
4x120/70	SM	0,153/0,268	364	46,1	5742
4x150/70	SM	0,124/0,268	416	50,1	6874
4x185/95	SM	0,0991/0,193	480	54,8	8594
4x240/120	SM	0,0754/0,153	565	61,4	11135

NOMINAL CROSS-SECTION	CONDUCTOR CONSTRUCTION	MAX. RESISTANCE AT 20°C	CURRENT CAPACITY IN AIR	OUTER DIAM. (APPROX.)	CABLE WEIGHT (APPROX.)
mm ²		Ω/km	A	mm	kg/km
5x1,5/1,5	RE	12,1/12,1	25	16,8	284
5x2,5/2,5	RE	7,41/7,41	33	17,9	344
5x4/4	RE	4,61/4,61	43	19,5	449
5x6/6	RE	3,08/3,08	54	21,1	574
5x10/10	RE	1,83/1,83	75	23,4	820
5x16/16	RE	1,15/1,15	100	25,8	1167