

HF-CXO 0.6/1kV

Halogen free low smoke power cables



Type Approval Certificates

- American Bureau of Shipping
- Bureau Veritas
- China Classification Society
- Det Norske Veritas
- Germanischer Lloyd
- Korean Register
- Lloyd's Register
- Nippon Kaiji Kyokai
- Registro Italiano Navale

Application

For fixed installations in all areas and open deck



Conductors

acc. to IEC 60228 - Class 2 circular stranded copper for size 10mm² and below
- Class 5 flexible conductor for size 16mm² and above

Insulation

cross-linked polyethylene HF XLPE-90°C acc. to IEC 60092-351

Filler

polypropylene yarn

Inner Covering

polyester tape

Outer Sheath

thermoplastic polyolefine halogen-free compound type SHF1 acc. to IEC 60092-359

Color of Outer Sheath

black

Core Identification

- 1-core : not specified
- 2-core : brown, blue
- 3-core : black, brown, grey
- 4-core : black, blue, brown, grey
- 5-core : grey, black₁, blue, brown, black₂
- 6-core : white with black numbering
- and more

Maximum conductor operating temperature	: +90°C
Lowest ambient temperature for fixed installation	: -40°C
Lowest installation temperature	: -10°C
Maximum short-circuit conductor temperature	: +250°C
Minimum bending radius	: ≤25mm ² 4D (D is the overall diameter of the cable) >25mm ² 6D

Test Performances

Flame retardant	: IEC 60332-3-22 Category A
Smoke emission	: IEC 61034-2
Gases evolved during combustion	: IEC 60754-1: <0,5% acid gas IEC 60754-2: pH ≥4,3; conductivity ≤10 μSmm ⁻¹

Standards

Construction and Design	: IEC 60228, IEC 60092-350, IEC 60092-353
Materials	: IEC 60092-351, IEC 60092-359



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No. of Cores	Conductor Size	Nominal Outer Diameter	Maximum Conductor Resistance	Voltage Test (A.C)	Minimum Insulation Resistance	Approx. Cable Weight
No.s	mm ²	mm	Ω/km·20°C	kV/5min	MΩkm·20°C	kg/km
1	1	5.2	18.1	3.5	1380	35
1	1.5	5.5	12.1	3.5	850	40
1	2.5	6.0	7.41	3.5	700	52
1	4	6.6	4.61	3.5	600	70
1	6	7.2	3.08	3.5	500	90
1	10	8.2	1.83	3.5	400	135
1	16	9.4	1.21	3.5	340	205
1	25	11.4	0.780	3.5	290	310
1	35	12.6	0.554	3.5	270	430
1	50	14.6	0.386	3.5	250	560
1	70	17.0	0.272	3.5	220	800
1	95	18.7	0.206	3.5	210	1060
1	120	20.7	0.161	3.5	210	1325
1	150	22.9	0.129	3.5	210	1615
1	185	25.6	0.1060	3.5	210	2015
1	240	28.7	0.0801	3.5	210	2660
1	300	31.6	0.0641	3.5	200	3280
1	400	35.3	0.0486	3.5	200	4080
2	1	8.5	18.1	3.5	1350	70
2	1.5	9.0	12.1	3.5	850	75
2	2.5	10.0	7.41	3.5	700	110
2	4	11.2	4.61	3.5	600	145
2	6	12.5	3.08	3.5	500	195
2	10	14.5	1.83	3.5	400	315
2	16	17.0	1.21	3.5	340	470
2	25	20.8	0.780	3.5	290	710
2	35	23.4	0.554	3.5	270	935
2	50	27.2	0.386	3.5	250	1260
2	70	32.0	0.272	3.5	220	1780
2	95	35.9	0.206	3.5	210	2380
2	120	39.7	0.161	3.5	210	2990
2	150	44.1	0.129	3.5	210	3710
2	185	49.5	0.1060	3.5	210	4570
2	240	55.7	0.0801	3.5	210	5930
2	300	61.5	0.0641	3.5	200	7350
3	1	9.0	18.1	3.5	1350	85
3	1.5	9.6	12.1	3.5	850	95
3	2.5	10.7	7.41	3.5	700	140
3	4	11.9	4.61	3.5	600	190
3	6	13.3	3.08	3.5	500	265
3	10	15.5	1.83	3.5	400	400
3	16	18.1	1.21	3.5	340	635
3	25	22.4	0.780	3.5	290	960
3	35	25.2	0.554	3.5	270	1310
3	50	29.3	0.386	3.5	250	1740
3	70	34.4	0.272	3.5	220	2485
3	95	38.5	0.206	3.5	210	3295
3	120	42.6	0.161	3.5	210	4160
3	150	47.3	0.129	3.5	210	5125
3	185	53.1	0.106	3.5	210	6370
3	240	59.8	0.080	3.5	210	8210



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No.s	mm ²	mm	Ω/km·20°C	kV/5min	MΩkm·20°C	kg/km
4	1	9.8	18.1	3.5	1350	105
4	1.5	10.5	12.1	3.5	850	125
4	2.5	11.7	7.41	3.5	700	170
4	4	13.1	4.61	3.5	600	245
4	6	14.6	3.08	3.5	500	335
4	10	17.1	1.83	3.5	400	515
4	16	20.1	1.21	3.5	340	820
4	25	24.9	0.780	3.5	290	1240
4	35	28.0	0.554	3.5	270	1690
4	50	32.5	0.386	3.5	250	2330
4	70	38.5	0.272	3.5	220	3300
4	95	42.8	0.206	3.5	210	4626
4	120	47.5	0.161	3.5	210	5750
4	150	52.8	0.129	3.5	210	6980
4	185	59.2	0.106	3.5	210	8790
5	1	11.2	18.1	3.5	1350	130
5	1.5	11.5	12.1	3.5	850	150
5	2.5	11.5	7.41	3.5	700	210
5	4	14.5	4.61	3.5	600	315
5	6	16.2	3.08	3.5	500	445
5	10	18.9	1.83	3.5	400	675
5	16	22.3	1.21	3.5	340	1020
5	25	27.6	0.780	3.5	290	1710
5	35	31.0	0.554	3.5	270	2290
5	50	36.3	0.386	3.5	250	3060
5	70	42.7	0.272	3.5	220	4320
6	1	12.2	18.1	3.5	1350	150
6	1.5	12.6	12.1	3.5	850	170
6	2.5	12.6	7.41	3.5	700	260
7	1	12.2	18.1	3.5	1350	170
7	1.5	12.6	12.1	3.5	850	190
7	2.5	12.6	7.41	3.5	700	290
8	1	13.2	18.1	3.5	1350	190
8	1.5	13.7	12.1	3.5	850	250
8	2.5	13.7	7.41	3.5	700	290
9	1	14.2	18.1	3.5	1350	210
9	1.5	14.8	12.1	3.5	850	270
9	2.5	14.8	7.41	3.5	700	350
10	1	15.4	18.1	3.5	1350	230
10	1.5	16.2	12.1	3.5	850	285
10	2.5	16.2	7.41	3.5	700	410
12	1	15.9	18.1	3.5	1350	270
12	1.5	16.7	12.1	3.5	850	315
12	2.5	16.7	7.41	3.5	700	445
14	1	16.8	18.1	3.5	1350	290
14	1.5	17.6	12.1	3.5	850	375
14	2.5	17.6	7.41	3.5	700	545
16	1	17.7	18.1	3.5	1350	330
16	1.5	18.7	12.1	3.5	850	425
16	2.5	18.7	7.41	3.5	700	615



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No.s	mm ²	mm	Ω/km·20°C	kV/5min	MΩkm·20°C	kg/km
18	1	18.7	18.1	3.5	1350	350
18	1.5	19.7	12.1	3.5	850	450
18	2.5	19.7	7.41	3.5	700	640
19	1	18.7	18.1	3.5	1350	370
19	1.5	19.7	12.1	3.5	850	465
19	2.5	19.7	7.41	3.5	700	660
20	1	19.3	18.1	3.5	1350	400
20	1.5	20.4	12.10	3.5	850	530
20	2.5	20.4	7.41	3.5	700	760
23	1	20.7	18.1	3.5	1350	450
23	1.5	21.9	12.1	3.5	850	610
23	2.5	21.9	7.41	3.5	700	840
24	1	22.0	18.1	3.5	1350	475
24	1.5	23.3	12.1	3.5	850	635
24	2.5	23.3	7.41	3.5	700	925
27	1	22.5	18.1	3.5	1350	520
27	1.5	23.8	12.1	3.5	850	655
27	2.5	23.8	7.4	3.5	700	1010
28	1	22.5	18.1	3.5	1350	540
28	1.5	23.8	12.1	3.5	850	710
28	2.5	23.8	7.41	3.5	700	1030
30	1	23.3	18.1	3.5	1350	580
30	1.5	24.8	12.1	3.5	850	810
30	2.5	24.8	7.4	3.5	700	1095
32	1	23.8	18.1	3.5	1350	610
32	1.5	25.2	12.1	3.5	850	830
32	2.5	25.2	7.41	3.5	700	1140
33	1	24.3	18.1	3.5	1350	630
33	1.5	25.8	12.1	3.5	850	850
33	2.5	25.8	7.41	3.5	700	1170
34	1	24.4	18.1	3.5	1350	645
34	1.5	26.0	12.1	3.5	850	880
34	2.5	26.0	7.41	3.5	700	1210
37	1	25.2	18.1	3.5	1350	690
37	1.5	26.9	12.1	3.5	850	950
37	2.5	26.9	7.4	3.5	700	1340
44	1	28.5	18.1	3.5	1350	790
44	1.5	30.4	12.1	3.5	850	1080
44	2.5	30.4	7.41	3.5	700	1510