SIENOPYR FR MMGCGCHX

Medium voltage cables for ships and offshore units

Application

For fixed installation on ships and offshore units in all locations and on open decks. The cables are not suitable for continuous use in water.

Global data

Brand	SIENOPYR FR
Type designation	MMGCGCHX
Standard	IEC 60092-354

Design features

Conductor	Copper, round stranded acc. to IEC 60228 class 2 or class 5
Insulation	Ethylen-propylene rubber (EPR) acc. to IEC 60092-360
Electrical field control	Inner and outer layer of semiconductive rubber compound
Individual screen	Copper wires wrapped in a traverse spiral and/or copper tapes. The nominal cross-section of the screening is the sum of all individual core screens.
Inner covering	Polyolefine compound, black
Screen	Plain copper wire braid
Outer sheath	Polyolefine compound, type SHF-2, according to IEC 60092-360

Electrical parameters

Rated voltage	6/10 kV
Max. permissible operating voltage AC	12 kV
AC test voltage	21 kV
Current Carrying Capacity description	The definitions in IEC 60092-201 apply.

Chemical parameters

Smoke emmission	according to IEC 61034
Acidity of fire gases	according to IEC 60754-2
Flame propagation	according to IEC 60332-3-22
Flame propagation	according to IEC 60332-1-2

Thermal parameters

Max. permissible temperature at conductor	90 °C
Max. short circuit temperature of the conductor	250 °C
Ambient temperature for fix installation min.	-35 °C
Laying temperature min.	-15 °C

Mechanical parameters

Max. tensile load on the conductor	50 N/mm²
Min. bending radius	12 x D

Number of cores x cross section	Part number	MLFB Number	Outer diameter max. mm	Bending radius fixed min. mm	Weight (ca.) kg/km	Nom. operating capaci-tance µF/km	Induc-tance nom. mH/ km	Current carrying capacity (1) A
MMGCGCHX 1 core								
1 x 35 /16		5BG3 705	26	260	1180	0.3	0.29	157
1 x 50 /16		5BG3 706	27.5	275	1320	0.33	0.28	196
1 x 70 /16		5BG3 707	29.5	295	1580	0.38	0.26	242
1 x 95 /16		5BG3 708	30.5	305	1930	0.42	0.25	293
1 x 120 /16		5BG3 710	32	320	2230	0.46	0.25	339
1 x 150 /25		5BG3 711	34	340	2570	0.5	0.24	389
1 x 185 /25		5BG3 712	36	360	3020	0.55	0.23	444
1 x 240 /25		5BG3 713	39.5	395	3750	0.61	0.22	522
1 x 300 /25		5BG3 714	41	410	4370	0.67	0.22	601
MMGCGCHX 1 core class 5								
1 x 35F /16	20143583	5BG3 725	26.5	265	1190	0.3	0.29	149
1 x 50F /16		5BG3 726	28	280	1330	0.33	0.28	186
1 x 120F /16	20098502	5BG3 730	34	340	2260	0.46	0.25	322
1 x 150F /25		5BG3 731	36	360	2600	0.5	0.24	370
1 x 185F /25		5BG3 732	37.5	375	3050	0.55	0.23	422
1 x 240F /25		5BG3 733	39.5	395	3790	0.61	0.22	496
1 x 300F /25		5BG3 734	41.5	415	4420	0.67	0.22	571

F = flexible conductor, stranded copper, class 5 acc. to IEC 60228
(1) The values are for continuous load at 45 °C ambient temperature and laying of max. 6 cables in horizontal arrangement, tightly packed, free air circulation around the cable bundle.
At ambient temperatures below -15 °C the cables should be subjected to no further mechanical movement than normal ship´s vibrations