

SIENOPYR FR M2XCH 0,6/1 kV

Power cables for ships and offshore units with screen



Application

For fixed installation on ships and offshore units in all locations and on open decks. Special measures, e.g. screening are necessary for installation of unarmoured cables in radio stations or above the upper metallic deck. The cables are not suitable for continuous use in water.

Global data

Brand	SIENOPYR FR
Type designation	M2XCH
Standard	IEC 60092-353

Design features

Conductor	Copper, round stranded acc. to IEC 60228 class 2 or class 5
Insulation	Cross-linked-polyethylene (XLPE) acc. to IEC 60092-360
Core identification	3-core: brown, black, grey 4-core: blue, brown, black, grey
Inner covering	Halogen free, flame retardant compound
Screen	Plain copper wire braid
Outer sheath	Polyolefine compound, type SHF-1, according to IEC 60092-360

Electrical parameters

Rated voltage	0.6/1 kV (600/1000V)
Max. permissible operating voltage AC	1.2 kV
Max. permissible operating voltage DC	1.8 kV
AC test voltage	3.5 kV
Current Carrying Capacity description	The definitions in IEC 60092-201 apply.

Chemical parameters

Smoke emission	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/mm ²
Min. bending radius	6 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	Permissible tensile force max. N	Current carrying capacity (1) A
M2XCH 3 cores							
3 x 35	20001858	5BG6 538	28	168	1700	5250	110
3 x 50	20001859	5BG6 540	32	192	2250	7500	137
3 x 70	20001860	5BG6 541	37.5	225	3100	10500	169
3 x 95	20001861	5BG6 542	41	246	4000	14250	205
3 x 120	20001862	5BG6 543	44.5	267	4990	18000	237
3 x 70F		5BG6 321	37.5	225	3100	10500	161
3 x 95F		5BG6 324	41	246	3970	14250	195
3 x 120F		5BG6 315	46.5	279	4990	18000	225
M2XCH 4 cores							
4 x 35	20001864	5BG6 558	30	180	2080	7000	110
4 x 50	20001865	5BG6 560	34	204	2750	10000	137
4 x 70	20001866	5BG6 561	41	246	3750	14000	169
4 x 95	20001867	5BG6 562	44.5	267	5070	19000	205
4 x 120	20161738	5BG6 563	47.5	285	6090	24000	237
4 x 70F		5BG6 303	42	252	3930	14000	161
4 x 95F		5BG6 304	45.5	273	5150	19000	195
4 x 120F		5BG6 305	48.5	291	6150	24000	225

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