

SIENOPYR FR (L)M2XH 0,6/1 kV

Light power cables for ships and offshore units without 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	(L)M2XH
Standard	IEC 60092-353

Design features

Conductor	Copper, stranded acc. to IEC 60228 class 2 (class 5 on request)
Insulation	Cross-linked-polyethylene (XLPE) acc. to IEC 60092-360
Core identification	Core identification according to IEC 60092-353 (L)M2XH: 1-core: brown; 2 core: blue, brown 3-core: brown, black, grey 4-core: blue, brown, black, grey 5 and multicore: white with black numbers (L)M2XH-J: 1-core: gn-ye 3-core: gn-ye, blue, brown 4-core: gn-ye, brown, black, grey 5 and multicore: white with black numbers, one core gn-ye
Core arrangement	Lapped tape over single or laid-up cores
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 60332-1-2
Flame propagation	according to IEC 60332-3-22

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	4 x D for all cables with D < 25mm (except cables with sector shaped conductors SM) 6 x D for all other cables

Number of cores x cross section	Art. Des. O/J	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
(L)M2XH 1 core								
1 x 4			5BG6 703	6.5	26	70	200	51
1 x 6			5BG6 704	7	28	95	300	52
1 x 10			5BG6 705	8	32	140	500	72
1 x 16			5BG6 706	9.2	37	195	800	96
1 x 25		20001879	5BG6 707	11.1	45	288	1250	127
1 x 35		20038697	5BG6 708	12.5	50	400	1750	157
1 x 50			5BG6 710	13.9	56	520	2500	196
1 x 70			5BG6 711	16.3	66	730	3500	242
1 x 95			5BG6 712	17.6	71	1002	4750	293
1 x 120			5BG6 713	19.6	79	1290	6000	339
1 x 150			5BG6 714	22	88	1550	7500	389
1 x 185			5BG6 715	26	104	1900	9250	444
1 x 240			5BG6 716	28.5	114	2350	12000	422
1 x 300			5BG6 717	33.5	134	2930	15000	601
(L)M2XH 2 cores								
2 x 1.5		20001775	5BG6 012	8.8	36	82	150	20
2 x 2.5		20001776	5BG6 013	9.6	39	107	250	26
2 x 4		20001777	5BG6 014	11	44	146	400	34
2 x 6			5BG6 015	12.2	49	197	600	44
2 x 10		20001779	5BG6 016	14	56	289	1000	61
2 x 16			5BG6 017	16	64	430	1600	82
(L)M2XH 3 cores								
3 x 1.5		20001780	5BG6 022	9.2	37	96	225	16
3 x 2.5		20001781	5BG6 023	10.1	41	130	375	21
3 x 4		20001782	5BG6 024	11.8	48	186	600	28
3 x 6		20001783	5BG6 025	13	52	249	900	36
3 x 10		20001784	5BG6 026	15.1	61	381	1500	50
3 x 16		20001785	5BG6 027	17.4	70	560	2400	67
3 x 25		20001786	5BG6 028	21.5	86	880	3750	89
3 x 35SM		20001903	5BG6 850	20.8	125	1150	5250	110
3 x 50SM		20001904	5BG6 851	23.6	142	1530	7500	137
3 x 70SM		20001905	5BG6 852	27.7	167	2150	10500	169
3 x 95SM		20001906	5BG6 853	31.1	187	2910	14250	205
3 x 120SM		20001907	5BG6 854	33.8	203	3620	18000	237
(L)M2XH-J 3cores with gn/ye								
3 x 1.5	-J	20001787	5BG6 032	9.2	37	96	225	16
3 x 2.5	-J	20001788	5BG6 033	10.1	41	130	375	21
3 x 4	-J	20001789	5BG6 034	11.8	48	186	600	28
3 x 6	-J		5BG6 035	13	52	249	900	36
3 x 10	-J		5BG6 036	15.1	61	381	1500	50
3 x 16	-J		5BG6 037	17.4	70	560	2400	67
3 x 25	-J		5BG6 038	21.5	86	880	3750	89
(L)M2XH 4 cores								
4 x 1.5		20001790	5BG6 042	10	40	120	300	16
4 x 2.5		20001791	5BG6 043	11.3	46	163	500	21
4 x 4		20001792	5BG6 044	12.8	52	238	800	28

Number of cores x cross section	Art. Des. O/J	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
4 x 6		20001793	5BG6 045	14.1	57	321	1200	36
4 x 10		20001794	5BG6 046	16.6	67	495	2000	50
4 x 16		20001795	5BG6 047	19.2	77	750	3200	67
4 x 25		20001796	5BG6 048	23.7	95	1140	5000	89
(L)M2XH 4-J cores with gn/ye								
4 x 1.5	-J	20001797	5BG6 052	10	40	120	300	16
4 x 2.5	-J	20001798	5BG6 053	11.3	46	163	500	21
4 x 4	-J	20001799	5BG6 054	12.8	52	238	800	28
4 x 6	-J	20001800	5BG6 055	14.1	57	321	1200	36
4 x 10	-J	20001801	5BG6 056	16.6	67	495	2000	50
4 x 16	-J	20001802	5BG6 057	19.2	77	750	3200	67
4 x 25	-J	20001803	5BG6 058	23.7	95	1140	5000	89
(L)M2XH 5 and multicores								
5 x 1.5		20001804	5BG6 062	11.1	45	148	375	14
5 x 2.5		20001805	5BG6 063	12.5	50	209	625	18
7 x 1.5		20001807	5BG6 072	12.2	49	186	525	10
10 x 1.5		20001896	5BG6 791	15.5	62	268	750	9
12 x 1.5		20001897	5BG6 792	16.2	65	310	900	9
14 x 1.5		20001898	5BG6 793	17	68	353	1050	8
16 x 1.5		20001899	5BG6 794	18	72	420	1200	8
19 x 1.5		20001900	5BG6 795	18.9	76	465	1425	7
24 x 1.5		20001901	5BG6 796	22	88	590	1800	7
(L)M2XH-J 5 and multicores with gn/ye								
5 x 1.5	-J	20001806	5BG6 066	11.1	45	148	375	14
5 x 2.5	-J	20149541	5BG6 067	12.5	50	209	625	18
7 x 1.5	-J	20001808	5BG6 076	12.2	49	186	525	10

(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

(L)M2XH = without green-yellow core, (L)M2XH-J = with green-yellow core