

## SIENOPYR FR (L)M2XCH 0,6/1 kV

Light 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. The cables are not suitable for continuous use in water.

### Global data

Brand	SIENOPYR FR
Type designation	(L)M2XCH
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)M2XCH: 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)M2XCH-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
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 60332-1-2
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 <sup>2</sup>
Min. bending radius	6 x D

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
<b>(L)M2XCH 1 core</b>								
1 x 4			5BG6 503	7.5	45	105	200	51
1 x 6			5BG6 504	8	48	130	300	52
1 x 10		20014547	5BG6 505	9.2	55	175	500	72
1 x 16		20001850	5BG6 506	10	60	233	800	96
1 x 25		20001851	5BG6 507	12.1	73	341	1250	127
1 x 35		20001852	5BG6 508	13.8	83	443	1750	157
1 x 50		20001853	5BG6 510	15.5	93	623	2500	196
1 x 70		20001854	5BG6 511	17.8	107	840	3500	242
1 x 95		20001855	5BG6 512	19.7	118	1100	4750	293
1 x 120		20001856	5BG6 513	21	126	1350	6000	339
1 x 150			5BG6 514	23.5	141	1800	7500	389
1 x 185			5BG6 515	26	156	2040	9250	444
1 x 240			5BG6 516	29	174	2630	12000	422
1 x 300			5BG6 517	33.5	201	3300	15000	601
<b>(L)M2XCH 2 cores</b>								
2 x 1.5		20001809	5BG6 112	9.7	58	117	150	20
2 x 2.5		20001810	5BG6 113	10.5	63	145	250	26
2 x 4		20001811	5BG6 114	12.1	73	192	400	34
2 x 6		20001812	5BG6 115	13.1	79	241	600	44
2 x 10		20014546	5BG6 116	15.5	93	376	1000	61
2 x 16		20001813	5BG6 117	17.8	107	530	1600	82
2 x 25		20100156	5BG6 118	21.5	129	770	2500	108
<b>(L)M2XCH 3 cores</b>								
3 x 1.5		20001814	5BG6 122	10.1	61	140	225	16
3 x 2.5		20001815	5BG6 123	11.5	69	183	375	21
3 x 4		20001816	5BG6 124	12.7	76	241	600	28
3 x 6		20001817	5BG6 125	13.9	83	310	900	36
3 x 10		20001818	5BG6 126	16.6	100	487	1500	50
3 x 16		20001819	5BG6 127	18.9	113	700	2400	67
3 x 25		20001820	5BG6 128	22.5	135	1020	3750	89
3 x 35SM		20001874	5BG6 650	22.8	137	1290	5250	110
3 x 50SM		20001875	5BG6 651	25.3	152	1690	7500	137
3 x 70SM			5BG6 652	30.1	181	2330	10500	169
3 x 95SM		20001876	5BG6 653	33.4	200	3110	14250	205
3 x 120SM			5BG6 654	37.3	224	3900	18000	237
<b>(L)M2XCH-J 3 cores with gn/ye</b>								
3 x 1.5	-J	20001821	5BG6 132	10.1	61	140	225	16
3 x 2.5	-J	20001822	5BG6 133	11.5	69	183	375	21
3 x 4	-J	20001823	5BG6 134	12.7	76	241	600	28
3 x 6	-J		5BG6 135	13.9	83	310	900	36
3 x 10	-J		5BG6 136	16.6	100	487	1500	50
3 x 16	-J		5BG6 137	18.9	113	700	2400	67
3 x 25	-J		5BG6 138	22.5	135	1020	3750	89
<b>(L)M2XCH 4 cores</b>								
4 x 1.5		20001824	5BG6 142	11.2	67	168	300	16
4 x 2.5		20001825	5BG6 143	12.4	74	222	500	21

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 4		20001826	5BG6 144	13.7	82	299	800	28
4 x 6		20001827	5BG6 145	15.6	94	428	1200	36
4 x 10		20001828	5BG6 146	18.1	109	630	2000	50
4 x 16		20001829	5BG6 147	20.7	124	890	3200	67
4 x 25		20001830	5BG6 148	25	150	1330	5000	89
(L)M2XCH-J 4 cores with gn/ye					0			
4 x 1.5	-J	20001831	5BG6 162	11.2	67	168	300	16
4 x 2.5	-J	20001832	5BG6 153	12.4	74	222	500	21
4 x 4	-J	20001833	5BG6 154	13.7	82	299	800	28
4 x 6	-J	20001834	5BG6 155	15.6	94	428	1200	36
4 x 10	-J	20159281	5BG6 156	18.1	109	630	2000	50
4 x 16	-J	20001835	5BG6 157	20.7	124	890	3200	67
4 x 25	-J	20001836	5BG6 158	25	150	1330	5000	89
(L)M2XCH 5 and multicore					0			
5 x 1.5		20001837	5BG6 162	12.2	73	205	375	14
5 x 2.5		20001838	5BG6 167	13.4	80	267	625	18
7 x 1.5		20001841	5BG6 172	13.1	79	245	525	10
7 x 2.5		20001842	5BG6 173	15	90	370	875	14
10 x 1.5		20001868	5BG6 591	16.9	101	375	750	9
12 x 1.5		20001869	5BG6 592	17.6	106	426	900	9
14 x 1.5		20001870	5BG6 593	18.4	110	471	1050	8
16 x 1.5		20001871	5BG6 594	19.3	116	530	1200	8
19 x 1.5		20001872	5BG6 595	20.3	122	600	1425	7
24 x 1.5		20001873	5BG6 596	23.4	140	750	1800	7
(L)M2XCH-J 5 and multicore with gn/ye					0			
5 x 1.5	-J	20001839	5BG6 166	12.2	73	205	375	14
5 x 2.5	-J	20001840	5BG6 167	13.4	80	267	625	18
7 x 1.5	-J	20001843	5BG6 176	13.1	79	245	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)M2XCH = armoured, without green-yellow core, (L)M2XCH-J = armoured, with green-yellow core