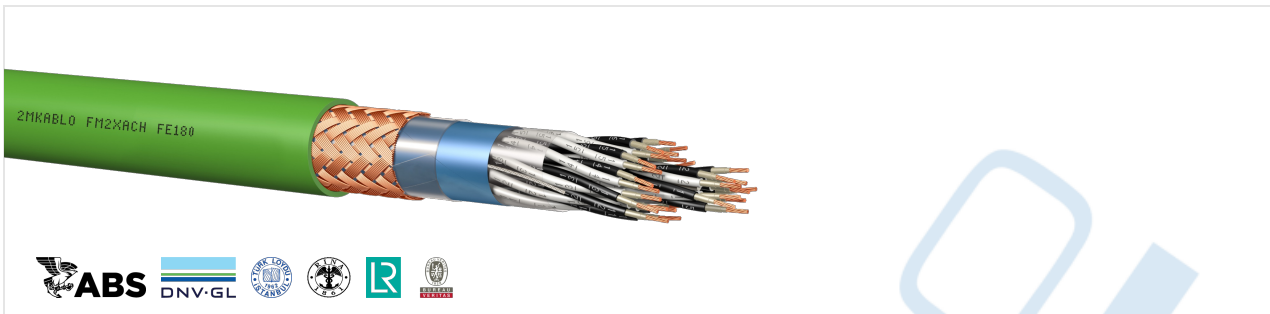


## FM2XACH FE180



### Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

### Cable Construction

<b>Conductor</b>	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
<b>Flame Barrier</b>	Mica Tape
<b>Insulation</b>	XLPE (IEC 60092-360)
<b>Core Colors</b>	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
<b>Lay-up</b>	Cores are stranded in layers
<b>Separator</b>	PET Foil
<b>1. Overall Screen</b>	Al-PET Foil (with Tinned Copper Drain Wire)
<b>Separator</b>	PET Foil (HFFR filler upon request)
<b>2. Overall Screen</b>	Annealed Copper Wire Braid (90% Coverage)
<b>Outer Sheath</b>	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
<b>Reference Standards</b>	IEC 60092-376

### Technical Properties

<b>Operating Voltage</b>	150/250 (300) V
<b>Test Voltage</b>	1.5 kV (a.c) 3.6 kV (d.c)
<b>Conductor Resistance</b>	IEC/EN 60228
<b>Insulation Resistance</b>	>5000 M.Ωxkm
<b>Temperature Range</b>	-40 °C.....+90 °C
<b>Flame Retardancy</b>	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
<b>Fire Resistance</b>	IEC 60331-21
<b>Smoke Density</b>	IEC/EN 61034-1+2
<b>Amount of Halogen Acid Gas</b>	IEC/EN 60754-1
<b>Corrosive Gases Measurement</b>	IEC/EN 60754-2
<b>Min. Bending Radius (Fixed)</b>	8 x Cable Diameter

### Cross Section

Configuration / Cross-Section (mm/mm <sup>2</sup> )	Cable Diameter (mm) (± 5%)	Copper Weight (kg / km)	~ Cable Weight (kg / km)
--	----------------------------	-------------------------	--------------------------

1x2x0.5	7.5	39	82
1x2x0.5	7,5	39	82
1x3x0.5	7.9	45	95
1x3x0.5	7,9	45	95
1x4x0.5	8.4	52	110
1x4x0.5	8,4	52	110
2x2x0.5	10.5	62	134
2x2x0.5	10,5	62	134
2x3x0.5	11.7	76	164
2x3x0.5	11,7	76	164
2x4x0.5	14.1	98	215
2x4x0.5	14,1	98	215
3x2x0.5	11.1	73	158
3x2x0.5	11,1	73	158
3x3x0.5	12.3	94	200
3x3x0.5	12,3	94	200
3x4x0.5	15.5	153	298
3x4x0.5	15,5	153	298
4x2x0.5	12.1	89	189
4x2x0.5	12,1	89	189
4x3x0.5	13.5	113	240
4x3x0.5	13,5	113	240
4x4x0.5	16.9	182	356
4x4x0.5	16,9	182	356
5x2x0.5	13.2	103	219
5x2x0.5	13,2	103	219
5x3x0.5	15.1	165	317
5x3x0.5	15,1	165	317
5x4x0.5	18.5	212	417
5x4x0.5	18,5	212	417
7x2x0.5	14.8	157	303
7x2x0.5	14,8	157	303
7x3x0.5	16.5	201	389
7x3x0.5	16,5	201	389
7x4x0.5	20.3	261	515
7x4x0.5	20,3	261	515
10x2x0.5	18.6	212	418
10x2x0.5	18,6	212	418
10x3x0.5	20.9	276	543
10x3x0.5	20,9	276	543
12x2x0.5	19.2	235	462
12x2x0.5	19,2	235	462
16x2x0.5	21.3	288	568
16x2x0.5	21,3	288	568
19x2x0.5	22.4	324	639
19x2x0.5	22,4	324	639

24x2x0.5	26.3	398	798
24x2x0.5	26,3	398	798
27x2x0.5	26.9	432	863
27x2x0.5	26,9	432	863
37x2x0.5	30.1	547	1096
37x2x0.5	30,1	547	1096
1x2x0.75	8.3	49	101
1x2x0.75	8,3	49	101
1x3x0.75	8.9	58	118
1x3x0.75	8,9	58	118
1x4x0.75	9.5	68	139
1x4x0.75	9,5	68	139
2x2x0.75	12.0	78	167
2x2x0.75	12,0	78	167
2x3x0.75	13.3	100	211
2x3x0.75	13,3	100	211
2x4x0.75	16.7	162	314
2x4x0.75	16,7	162	314
3x2x0.75	12.6	97	202
3x2x0.75	12,6	97	202
3x3x0.75	14.1	125	259
3x3x0.75	14,1	125	259
3x4x0.75	17.8	198	381
3x4x0.75	17,8	198	381
4x2x0.75	13.8	117	243
4x2x0.75	13,8	117	243
4x3x0.75	15.8	186	350
4x3x0.75	15,8	186	350
4x4x0.75	19.5	239	461
4x4x0.75	19,5	239	461
5x2x0.75	15.5	169	321
5x2x0.75	15,5	169	321
5x3x0.75	17.3	218	412
5x3x0.75	17,3	218	412
5x4x0.75	21.4	281	544
5x4x0.75	21,4	281	544
7x2x0.75	16.9	207	392
7x2x0.75	16,9	207	392
7x3x0.75	18.9	271	512
7x3x0.75	18,9	271	512
7x4x0.75	23.5	352	680
7x4x0.75	23,5	352	680
10x2x0.75	21.5	282	546
10x2x0.75	21,5	282	546
10x3x0.75	24.1	372	718
10x3x0.75	24,1	372	718

12x2x0.75	22.2	316	609
12x2x0.75	22,2	316	609
16x2x0.75	24.6	390	754
16x2x0.75	24,6	390	754
19x2x0.75	26.0	443	854
19x2x0.75	26,0	443	854
24x2x0.75	30.6	548	1073
24x2x0.75	30,6	548	1073
27x2x0.75	31.3	598	1163
27x2x0.75	31,3	598	1163
37x2x0.75	35.1	760	1486
37x2x0.75	35,1	760	1486
1x2x1	8.8	58	113
1x2x1	8,8	58	113
1x3x1	9.2	70	134
1x3x1	9,2	70	134
1x4x1	10.0	83	159
1x4x1	10,0	83	159
2x2x1	12.6	95	190
2x2x1	12,6	95	190
2x3x1	14.0	120	240
2x3x1	14,0	120	240
2x4x1	17.7	191	356
2x4x1	17,7	191	356
3x2x1	13.4	118	231
3x2x1	13,4	118	231
3x3x1	15.3	185	333
3x3x1	15,3	185	333
3x4x1	18.7	238	437
3x4x1	18,7	238	437
4x2x1	15.1	174	314
4x2x1	15,1	174	314
4x3x1	16.8	224	403
4x3x1	16,8	224	403
4x4x1	20.7	290	531
4x4x1	20,7	290	531
5x2x1	16.4	202	366
5x2x1	16,4	202	366
5x3x1	18.3	264	475
5x3x1	18,3	264	475
5x4x1	22.7	342	630
5x4x1	22,7	342	630
7x2x1	17.9	251	452
7x2x1	17,9	251	452
7x3x1	20.0	333	596
7x3x1	20,0	333	596

7x4x1	24.8	434	792
7x4x1	24,8	434	792
10x2x1	22.7	342	631
10x2x1	22,7	342	631
10x3x1	25.6	459	838
10x3x1	25,6	459	838
12x2x1	23.6	386	707
12x2x1	23,6	386	707
16x2x1	26.1	482	879
16x2x1	26,1	482	879
19x2x1	27.6	550	1001
19x2x1	27,6	550	1001
24x2x1	32.5	681	1257
24x2x1	32,5	681	1257
27x2x1	33.2	741	1361
27x2x1	33,2	741	1361
37x2x1	37.4	968	1766
37x2x1	37,4	968	1766
1x2x1.5	9.7	72	139
1x2x1.5	9,7	72	139
1x3x1.5	10.4	89	167
1x3x1.5	10,4	89	167
1x4x1.5	11.2	108	200
1x4x1.5	11,2	108	200
2x2x1.5	14.7	152	274
2x2x1.5	14,7	152	274
2x3x1.5	16.3	191	343
2x3x1.5	16,3	191	343
2x4x1.5	20.1	246	453
2x4x1.5	20,1	246	453
3x2x1.5	15.5	187	332
3x2x1.5	15,5	187	332
3x3x1.5	17.4	242	427
3x3x1.5	17,4	242	427
3x4x1.5	21.4	312	564
3x4x1.5	21,4	312	564
4x2x1.5	17.0	226	401
4x2x1.5	17,0	226	401
4x3x1.5	19.1	297	522
4x3x1.5	19,1	297	522
4x4x1.5	23.6	386	694
4x4x1.5	23,6	386	694
5x2x1.5	18.6	265	470
5x2x1.5	18,6	265	470
5x3x1.5	20.9	352	619
5x3x1.5	20,9	352	619

5x4x1.5	26.0	459	826
5x4x1.5	26,0	459	826
7x2x1.5	20.4	333	587
7x2x1.5	20,4	333	587
7x3x1.5	22.8	451	786
7x3x1.5	22,8	451	786
7x4x1.5	28.5	590	1049
7x4x1.5	28,5	590	1049
10x2x1.5	26.1	459	827
10x2x1.5	26,1	459	827
10x3x1.5	29.4	624	1112
10x3x1.5	29,4	624	1112
12x2x1.5	27.0	522	931
12x2x1.5	27,0	522	931
16x2x1.5	30.0	657	1169
16x2x1.5	30,0	657	1169
19x2x1.5	31.8	755	1336
19x2x1.5	31,8	755	1336
24x2x1.5	37.5	939	1686
24x2x1.5	37,5	939	1686
27x2x1.5	38.7	1114	1926
27x2x1.5	38,7	1114	1926
37x2x1.5	43.7	1444	2494
37x2x1.5	43,7	1444	2494
1x2x2.5	10.7	95	172
1x2x2.5	10,7	95	172
1x3x2.5	11.3	121	211
1x3x2.5	11,3	121	211
1x4x2.5	12.3	149	256
1x4x2.5	12,3	149	256
2x2x2.5	16.2	199	340
2x2x2.5	16,2	199	340
2x3x2.5	18.0	257	434
2x3x2.5	18,0	257	434
2x4x2.5	22.3	332	574
2x4x2.5	22,3	332	574
3x2x2.5	17.2	251	421
3x2x2.5	17,2	251	421
3x3x2.5	19.2	335	551
3x3x2.5	19,2	335	551
3x4x2.5	23.8	436	731
3x4x2.5	23,8	436	731
4x2x2.5	18.9	310	514
4x2x2.5	18,9	310	514
4x3x2.5	21.1	417	681
4x3x2.5	21,1	417	681

4x4x2.5	26.3	544	906
4x4x2.5	26,3	544	906
5x2x2.5	20.7	367	609
5x2x2.5	20,7	367	609
5x3x2.5	23.2	500	813
5x3x2.5	23,2	500	813
5x4x2.5	29.0	655	1087
5x4x2.5	29,0	655	1087
7x2x2.5	22.6	472	771
7x2x2.5	22,6	472	771
7x3x2.5	25.4	654	1048
7x3x2.5	25,4	654	1048
7x4x2.5	31.8	860	1405
7x4x2.5	31,8	860	1405
10x2x2.5	29.1	656	1091
10x2x2.5	29,1	656	1091
10x3x2.5	32.8	910	1488
10x3x2.5	32,8	910	1488
12x2x2.5	30.0	754	1238
12x2x2.5	30,0	754	1238
16x2x2.5	33.6	966	1572
16x2x2.5	33,6	966	1572
19x2x2.5	35.5	1110	1800
19x2x2.5	35,5	1110	1800
24x2x2.5	42.4	1485	2383
24x2x2.5	42,4	1485	2383
27x2x2.5	43.4	1628	2599
27x2x2.5	43,4	1628	2599
37x2x2.5	48.9	2138	3393
37x2x2.5	48,9	2138	3393

**17.03.2025 15:11**

**Legal Warning:** The information in this catalog is for marketing purposes. 2M Kablo can change this catalog during product development and any requirements. 2M Kablo can always change designs, technical specifications, images and other informations in this catalog without any notice. This catalog is only a guide and is valid at the time of download, not valid for an offer or contract.

If you need more information about the products in this catalog, please contact us via [info@2mkablo.com](mailto:info@2mkablo.com) or call +90 (212) 222 8250.