

## FM2XSH 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>Inner Sheath</b>	HFFR
<b>Overall Screen</b>	Galvanised Steel Wire Braid
<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)
2x2x0.5	11.7	19	162
2x2x0.5	11,7	19	162
2x3x0.5	12.4	28	191

2x3x0.5	12,4	28	191
2x4x0.5	13,4	38	231
2x4x0.5	13,4	38	231
3x2x0.5	12,3	28	189
3x2x0.5	12,3	28	189
3x3x0.5	13,1	43	230
3x3x0.5	13,1	43	230
3x4x0.5	14,3	57	281
3x4x0.5	14,3	57	281
4x2x0.5	13,4	38	223
4x2x0.5	13,4	38	223
4x3x0.5	14,3	57	279
4x3x0.5	14,3	57	279
4x4x0.5	15,6	76	338
4x4x0.5	15,6	76	338
5x2x0.5	14,7	47	262
5x2x0.5	14,7	47	262
5x3x0.5	15,7	71	327
5x3x0.5	15,7	71	327
5x4x0.5	17,0	95	402
5x4x0.5	17,0	95	402
7x2x0.5	16,0	66	319
7x2x0.5	16,0	66	319
7x3x0.5	17,0	99	408
7x3x0.5	17,0	99	408
7x4x0.5	18,5	133	507
7x4x0.5	18,5	133	507
10x2x0.5	20,2	95	442
10x2x0.5	20,2	95	442
10x3x0.5	21,6	142	570
10x3x0.5	21,6	142	570
12x2x0.5	20,9	114	495
12x2x0.5	20,9	114	495
16x2x0.5	23,2	152	610
16x2x0.5	23,2	152	610
19x2x0.5	24,5	180	692
19x2x0.5	24,5	180	692
24x2x0.5	28,8	227	868
24x2x0.5	28,8	227	868
27x2x0.5	29,4	256	938
27x2x0.5	29,4	256	938
37x2x0.5	33,0	351	1210
37x2x0.5	33,0	351	1210
2x2x0.75	13,1	29	195
2x2x0.75	13,1	29	195
2x3x0.75	13,9	43	240

2x3x0.75	13,9	43	240
2x4x0.75	15.1	58	286
2x4x0.75	15,1	58	286
3x2x0.75	13.8	43	233
3x2x0.75	13,8	43	233
3x3x0.75	14.8	65	293
3x3x0.75	14,8	65	293
3x4x0.75	16.1	86	359
3x4x0.75	16,1	86	359
4x2x0.75	15.1	58	281
4x2x0.75	15,1	58	281
4x3x0.75	16.2	86	353
4x3x0.75	16,2	86	353
4x4x0.75	17.7	115	436
4x4x0.75	17,7	115	436
5x2x0.75	16.5	72	328
5x2x0.75	16,5	72	328
5x3x0.75	17.7	108	420
5x3x0.75	17,7	108	420
5x4x0.75	19.4	144	521
5x4x0.75	19,4	144	521
7x2x0.75	18.0	101	408
7x2x0.75	18,0	101	408
7x3x0.75	19.4	151	528
7x3x0.75	19,4	151	528
7x4x0.75	21.2	202	665
7x4x0.75	21,2	202	665
10x2x0.75	23.0	144	572
10x2x0.75	23,0	144	572
10x3x0.75	24.8	216	745
10x3x0.75	24,8	216	745
12x2x0.75	23.9	173	644
12x2x0.75	23,9	173	644
16x2x0.75	26.5	231	755
16x2x0.75	26,5	231	755
19x2x0.75	28.0	274	866
19x2x0.75	28,0	274	866
24x2x0.75	33.0	346	1151
24x2x0.75	33,0	346	1151
27x2x0.75	33.8	389	1244
27x2x0.75	33,8	389	1244
37x2x0.75	37.9	533	1560
37x2x0.75	37,9	533	1560
2x2x1	13.7	39	216
2x2x1	13,7	39	216
2x3x1	14.6	58	267

2x3x1	14,6	58	267
2x4x1	15,9	78	322
2x4x1	15,9	78	322
3x2x1	14,6	58	265
3x2x1	14,6	58	265
3x3x1	15,5	88	331
3x3x1	15,5	88	331
3x4x1	16,9	117	409
3x4x1	16,9	117	409
4x2x1	16,0	78	318
4x2x1	16,0	78	318
4x3x1	17,0	117	406
4x3x1	17,0	117	406
4x4x1	18,5	156	505
4x4x1	18,5	156	505
5x2x1	17,5	97	373
5x2x1	17,5	97	373
5x3x1	18,6	146	481
5x3x1	18,6	146	481
5x4x1	20,4	195	599
5x4x1	20,4	195	599
7x2x1	19,1	136	467
7x2x1	19,1	136	467
7x3x1	20,4	204	613
7x3x1	20,4	204	613
7x4x1	22,3	273	770
7x4x1	22,3	273	770
10x2x1	24,4	195	659
10x2x1	24,4	195	659
10x3x1	26,2	292	820
10x3x1	26,2	292	820
12x2x1	25,2	234	742
12x2x1	25,2	234	742
16x2x1	28,1	311	880
16x2x1	28,1	311	880
19x2x1	29,7	370	1068
19x2x1	29,7	370	1068
24x2x1	35,0	467	1337
24x2x1	35,0	467	1337
27x2x1	35,9	526	1459
27x2x1	35,9	526	1459
37x2x1	40,4	720	1847
37x2x1	40,4	720	1847
2x2x1.5	15,4	57	271
2x2x1.5	15,4	57	271
2x3x1.5	16,4	85	336

2x3x1.5	16,4	85	336
2x4x1.5	18,0	114	413
2x4x1.5	18,0	114	413
3x2x1.5	16,3	85	332
3x2x1.5	16,3	85	332
3x3x1.5	17,5	128	425
3x3x1.5	17,5	128	425
3x4x1.5	19,2	171	529
3x4x1.5	19,2	171	529
4x2x1.5	17,9	114	405
4x2x1.5	17,9	114	405
4x3x1.5	19,2	171	525
4x3x1.5	19,2	171	525
4x4x1.5	21,1	228	657
4x4x1.5	21,1	228	657
5x2x1.5	19,6	142	479
5x2x1.5	19,6	142	479
5x3x1.5	21,0	214	624
5x3x1.5	21,0	214	624
5x4x1.5	23,2	285	786
5x4x1.5	23,2	285	786
7x2x1.5	21,5	199	605
7x2x1.5	21,5	199	605
7x3x1.5	23,1	299	802
7x3x1.5	23,1	299	802
7x4x1.5	25,4	399	965
7x4x1.5	25,4	399	965
10x2x1.5	27,7	285	807
10x2x1.5	27,7	285	807
10x3x1.5	29,7	427	1145
10x3x1.5	29,7	427	1145
12x2x1.5	28,6	342	970
12x2x1.5	28,6	342	970
16x2x1.5	31,9	455	1224
16x2x1.5	31,9	455	1224
19x2x1.5	33,7	541	1403
19x2x1.5	33,7	541	1403
24x2x1.5	39,9	683	1723
24x2x1.5	39,9	683	1723
27x2x1.5	41,2	769	2029
27x2x1.5	41,2	769	2029
37x2x1.5	46,5	1053	2644
37x2x1.5	46,5	1053	2644
2x2x2.5	16,8	92	335
2x2x2.5	16,8	92	335
2x3x2.5	18,1	138	424

2x3x2.5	18,1	138	424
2x4x2.5	19,8	183	526
2x4x2.5	19,8	183	526
3x2x2.5	17,8	138	421
3x2x2.5	17,8	138	421
3x3x2.5	19,2	206	548
3x3x2.5	19,2	206	548
3x4x2.5	21,1	275	683
3x4x2.5	21,1	275	683
4x2x2.5	19,7	183	517
4x2x2.5	19,7	183	517
4x3x2.5	21,2	275	681
4x3x2.5	21,2	275	681
4x4x2.5	23,3	367	859
4x4x2.5	23,3	367	859
5x2x2.5	21,6	229	618
5x2x2.5	21,6	229	618
5x3x2.5	23,2	344	819
5x3x2.5	23,2	344	819
5x4x2.5	25,6	459	987
5x4x2.5	25,6	459	987
7x2x2.5	23,6	321	790
7x2x2.5	23,6	321	790
7x3x2.5	25,4	482	1016
7x3x2.5	25,4	482	1016
7x4x2.5	28,1	642	1306
7x4x2.5	28,1	642	1306
10x2x2.5	30,5	459	1126
10x2x2.5	30,5	459	1126
10x3x2.5	32,9	688	1523
10x3x2.5	32,9	688	1523
12x2x2.5	31,5	550	1283
12x2x2.5	31,5	550	1283
16x2x2.5	35,3	734	1629
16x2x2.5	35,3	734	1629
19x2x2.5	37,3	871	1826
19x2x2.5	37,3	871	1826
24x2x2.5	44,6	1101	2482
24x2x2.5	44,6	1101	2482
27x2x2.5	45,7	1238	2712
27x2x2.5	45,7	1238	2712
37x2x2.5	51,4	1697	3558
37x2x2.5	51,4	1697	3558

17.03.2025 13:41

**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.