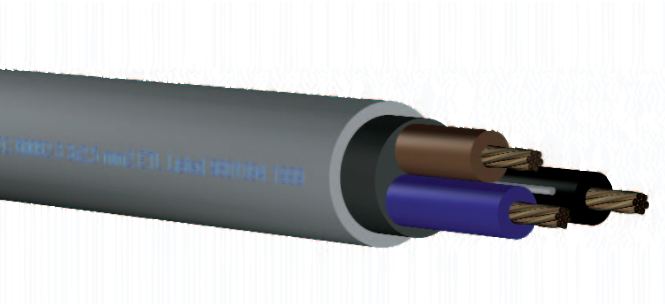
Power and control cables

HXXM EEP 0.6/1 kV IEC 60092-3

Class 2 conductors



Application:

Unarmored power and control cables 0.6/1 kV with special properties for electrical installations in ships and offshore units. Temperature Class 85 °C, Flame Retardant (IEC 60332-3 category "A", "A/F"), Low Smoke, Halogen Free, Low Toxicity. Suitable for application in cold climate areas required to pass cold bend and cold impact testing at –40 °C and –35 °C, respectively.

Construction:

Generally according to IEC 60092-3 0.6/1 kV

Conductors:	stranded bare annealed copper, IEC 60228, (Class 2) sizes 1 - 300 mm^2
Insulation:	cross linked polyethylene (XLPE/ HF XLPE) according to IEC 60092-3, IEC 60092-351 and IEEE Std 45
Assembly:	cores cabled together
Filler:	halogen free filling compound
Sheathing:	halogen free, flame retardant (SHF1, IEC 60092-359); all sheath and jacketing materials shall pass tear resistance testing to 35 lbs/in (6.4 N/mm)
Sheathing color:	gray (other colors are available on request)

Identification of the cores:

1 core	black
2 cores	black, blue
3 cores	black, blue, brown
4 cores	black, blue, brown, green/yellow
5 cores and up:	black, numbered

Special cable properties:

Fire propagation:	IEC 60332-3 category "A", "A/F"
Smoke:	IEC 61034-1/2, MIL-C-24643A (par. 4.7.27) and NES 711
Acidity:	IEC 60754-1/2 and MIL-C-24643A (par. 4.7.25)
Halogen content:	IEC 60754-1/2 and MIL-C-24643A (par. 4.7.26)
Toxicity index:	NES 713
Cold properties:	cold bend (–40 °C) and cold impact (–35 °C) according to CAN/CSA-C22.2 No. 0.3-Dec. '92

General data for HXXM EEP 0.6/1 kV EEP IEC 60092-3
Class 2 conductors

number of cores and nominal cross sectional area (n x mm²)	number of wires in conductor class 2 (n)	nominal conductor diameter (mm)	nominal core diameter (mm)	nominal outer diameter (inches)	nominal outer diameter (mm)	minimum bending radius (mm)	approxi-mate weight (lbs/M')	approxi-mate weight (kg/km)	conductor resistance at 20 °C DC (Ω/M')	conductor resistance at 20 °C DC (Ω/km)
1 x 1.5	7	1.6	3.4	0.220	5.6	28	29	43	3.7	12.1
1 x 2.5	7	2.0	3.9	0.236	6.0	30	37	55	2.26	7.41
1 x 4	7	2.5	4.6	0.268	6.8	34	50	75	1.41	4.61
1 x 6	7	3.1	5.2	0.287	7.3	37	63	94	0.94	3.08
1 x 10	7	4.0	6.2	0.339	8.6	43	101	150	0.56	1.83
1 x 16	7	5.0	7.5	0.386	9.8	49	141	210	0.35	1.15
1 x 25	7	6.3	9.0	0.457	11.6	58	215	320	0.222	0.727
1 x 35	19	7.0	9.7	0.484	12.3	74	276	410	0.160	0.524
1 x 50	19	8.1	11.0	0.642	16.3	98	437	650	0.118	0.387
1 x 70	19	9.7	13.0	0.728	18.5	111	591	880	0.082	0.268
1 x 95	19	11.4	15.0	0.811	20.6	124	779	1,160	0.059	0.193
1 x 120	37	13.9	17.7	0.929	23.6	142	974	1,450	0.047	0.153
1 x 150	37	15.5	19.5	1.028	26.1	157	1,189	1,770	0.038	0.124
1 x 185	37	17.3	21.5	1.106	28.1	169	1,445	2,150	0.0302	0.0991
1 x 240	61	19.9	24.5	1.248	31.7	190	1.881	2,800	0.0230	0.0754
1 x 300	61	22.2	27.3	1.366	34.7	208	2.298	3,420	0.0183	0.0601
2 x 1.5	7	1.6	3.4	0.394	10.0	50	101	150	3.7	12.1
2 x 2.5	7	2.0	3.9	0.437	11.1	56	128	190	2.26	7.41
2 x 4	7	2.5	4.6	0.500	12.7	76	175	260	1.41	4.61
2 x 6	7	3.1	5.2	0.563	14.3	86	228	340	0.94	3.08
2 x 10	7	4.0	6.2	0.661	16.8	101	329	490	0.56	1.83
2 x 16	7	5.0	7.5	0.783	19.9	119	484	720	0.35	1.15
2 x 25	7	6.3	9.0	0.909	23.1	139	706	1,050	0.222	0.727
2 x 35	19	7.0	9.7	0.969	24.6	148	874	1,300	0.160	0.524
2 x 50	19	8.1	11.0	1.079	27.4	164	1,109	1,650	0.118	0.387
2 x 70	19	9.7	13.0	1.280	32.5	195	1,546	2,300	0.082	0.268
2 x 95	19	11.4	15.0	1.445	36.7	220	2,083	3,100	0.059	0.193
3 x 1.5	7	1.6	3.4	0.417	10.6	53	114	170	3.7	12.1
3 x 2.5	7	2.0	3.9	0.461	11.7	59	141	210	2.26	7.41
3 x 4	7	2.5	4.6	0.528	13.4	80	195	290	1.41	4.61
3 x 6	7	3.1	5.2	0.594	15.1	91	262	390	0.94	3.08
3 x 10	7	4.0	6.2	0.701	17.8	107	396	590	0.56	1.83
3 x 16	7	5.0	7.5	0.815	20.7	124	564	840	0.35	1.15
3 x 25	7	6.3	9.0	0.953	24.2	145	840	1,250	0.222	0.727
3 x 35	19	7.0	9.7	1.039	26.4	158	1,075	1,600	0.160	0.524
3 x 50	19	8.1	11.0	1.165	29.6	178	1,411	2,100	0.118	0.387
3 x 70	19	9.7	13.0	1.354	34.4	206	1,915	2,850	0.082	0.268
3 x 95	19	11.4	15.0	1.547	39.3	236	2,621	3,900	0.059	0.193
3 x 120	37	13.9	17.7	1.791	45.5	273	3,326	4,950	0.047	0.153
3 x 150	37	15.5	19.5	1.976	50.2	301	4,099	6,100	0.038	0.124
3 x 185	37	17.3	21.5	2.165	55.0	330	5,006	7,450	0.0302	0.0991
3 x 240	61	19.9	24.5	2.449	62.2	373	6,518	9,700	0.0230	0.0754
4 x 1.5	7	1.6	3.4	0.461	11.7	59	134	200	3.7	12.1
4 x 2.5	7	2.0	3.9	0.504	12.8	77	168	250	2.26	7.41
4 x 4	7	2.5	4.6	0.583	14.8	89	242	360	1.41	4.61
4 x 6	7	3.1	5.2	0.634	16.1	97	302	450	0.94	3.08
4 x 10	7	4.0	6.2	0.772	19.6	118	484	720	0.56	1.83
4 x 16	7	5.0	7.5	0.902	22.9	137	706	1,050	0.35	1.15
4 x 25	7	6.3	9.0	1.051	26.7	160	1,008	1,500	0.222	0.727
4 x 35	19	7.0	9.7	1.130	28.7	172	1,310	1,950	0.160	0.524
4 x 50	19	8.1	11.0	1.287	32.7	196	1,747	2,600	0.118	0.387
4 x 70	19	9.7	13.0	1.504	38.2	229	2,385	3,550	0.082	0.268
4 x 95	19	11.4	15.0	1.717	43.6	262	3,293	4,900	0.059	0.193
4 x 120	37	13.9	17.7	1.992	50.6	304	4,166	6,200	0.047	0.153
4 x 150	37	15.5	19.5	2.189	55.6	334	5,107	7,600	0.038	0.124
5 x 1.5	7	1.6	3.4	0.504	12.8	77	148	220	3.7	12.1
5 x 2.5	7	2.0	3.9	0.555	14.1	85	202	300	2.26	7.41
5 x 4	7	2.5	4.6	0.634	16.1	97	282	420	1.41	4.61
5 x 25	7	6.3	9.0	1.185	30.1	181	1,243	1,850	0.222	0.727
24 x 1	7	1.3	3.1	0.858	21.8	131	349	520	5.5	18.1
7 x 1.5	7	1.6	3.4	0.516	13.1	79	148	220	3.7	12.1
24 x 1.5	7	1.6	3.4	0.949	24.1	145	470	700	3.7	12.1
37 x 1.5	7	1.6	3.4	1.102	28.0	168	672	1,000	3.7	12.1
7 x 2.5	7	2.0	3.9	0.575	14.6	88	202	300	2.26	7.41
10 x 2.5	7	2.0	3.9	0.732	18.6	112	289	430	2.26	7.41
20 x 2.5	7	2.0	3.9	0.953	24.2	145	531	790	2.26	7.41
24 x 2.5	7	2.0	3.9	1.059	26.9	161	632	940	2.26	7.41
30 x 2.5	7	2.0	3.9	1.130	28.7	172	773	1,150	2.26	7.41
36 x 2.5	7	2.0	3.9	1.236	31.4	188	941	1,400	2.26	7.41