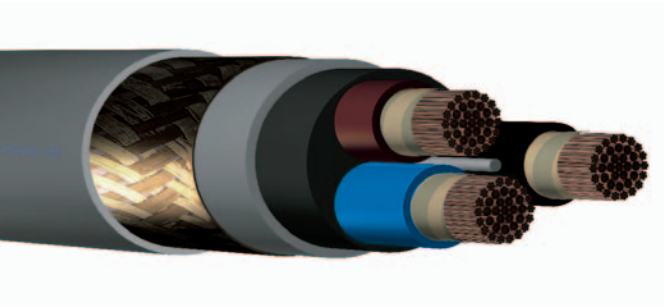


Power and control cables

HXXMB-FR EEP 0.6/1 kV IEC 60092-3

Class 5 conductors



Application:

Armored fire resistant 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 and Fire Resistant (IEC 60331 950 °C). 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:	flexible bare annealed copper, IEC 60228, (Class 5) sizes 1 - 300 mm ²
Insulation:	mica tape, and 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
Innersheath:	halogen free, flame retardant, (SHF1, IEC 60092-359)
Braiding:	bronze wires according to IEEE Std 45, CDA 220, weight coverage 90% on nominal diameter, according to IEC 60092-3, wire diameter 0.32 - 0.40 mm
8 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

Special cable properties:

Fire propagation:	IEC 60332-3 category "A", "A/F"
Fire resistance:	IEC 60331 950 °C
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 HXXMB-FR EEP 0.6/1 kV IEC 60092-3
Class 5 conductors**

number of cores and nominal cross sectional area (n x mm ²)	number of wires in conductor class 5 (n)	nominal conductor diameter (mm)	nominal core diameter (mm)	nominal diameter over inner-sheath (inches)	nominal diameter over inner-sheath (mm)	nominal diameter of braiding wire (mm)	nominal outer diameter (inches)	nominal outer diameter (mm)	minimum bending radius (mm)	approximate weight (lbs/M')	approximate weight (kg/km)	conductor resistance at 20 °C DC (Ω/M')	conductor resistance at 20 °C DC (Ω/km)
1 x 35	266	8.2	11.7	0.563	14.3	0.32	0.724	18.4	110	454	675	0.169	0.554
1 x 50	380	9.8	13.5	0.740	18.8	0.32	0.902	22.9	137	706	1,050	0.118	0.386
1 x 70	330	11.6	15.8	0.839	21.3	0.32	1.008	25.6	154	907	1,350	0.083	0.272
1 x 95	437	13.1	17.5	0.913	23.2	0.32	1.083	27.5	165	1,075	1,600	0.063	0.206
1 x 120	562	15.4	20.0	1.020	25.9	0.32	1.205	30.6	184	1,337	1,990	0.049	0.161
1 x 150	703	17.1	21.9	1.122	28.5	0.32	1.315	33.4	200	1,629	2,425	0.039	0.129
1 x 185	851	18.5	23.5	1.193	30.3	0.32	1.386	35.2	211	1,868	2,780	0.032	0.106
1 x 240	1,117	21.3	26.8	1.339	34.0	0.40	1.551	39.4	236	2,396	3,565	0.0244	0.0801
1 x 300	1,384	23.7	29.6	1.457	37.0	0.40	1.677	42.6	256	2,856	4,250	0.0195	0.0641
2 x 35	266	8.2	11.7	1.134	28.8	0.32	1.327	33.7	202	1,361	2,025	0.169	0.554
2 x 50	380	9.8	13.5	1.303	33.1	0.40	1.516	38.5	231	1,831	2,725	0.118	0.386
2 x 70	330	11.6	15.8	1.496	38.0	0.40	1.717	43.6	262	2,385	3,550	0.083	0.272
2 x 95	437	13.1	17.5	1.646	41.8	0.40	1.874	47.6	286	2,940	4,375	0.063	0.206
3 x 35	266	8.2	11.7	1.217	30.9	0.32	1.409	35.8	215	1,593	2,370	0.169	0.554
3 x 50	380	9.8	13.5	1.378	35.0	0.40	1.591	40.4	242	2,150	3,200	0.118	0.386
3 x 70	330	11.6	15.8	1.602	40.7	0.40	1.831	46.5	279	2,873	4,275	0.083	0.272
3 x 95	437	13.1	17.5	1.764	44.8	0.40	2.000	50.8	305	3,528	5,250	0.063	0.206
3 x 120	562	15.4	20.0	2.000	50.8	0.40	2.244	57.0	342	4,421	6,580	0.049	0.161
3 x 150	703	17.1	21.9	2.185	55.5	0.40	2.437	61.9	371	5,342	7,950	0.039	0.129
3 x 185	851	18.5	23.5	2.350	59.7	0.40	2.610	66.3	398	6,249	9,300	0.032	0.106
3 x 240	1,117	21.3	26.8	2.642	67.1	0.40	2.917	74.1	445	7,929	11,800	0.0244	0.0801
4 x 35	266	8.2	11.7	1.346	34.2	0.40	1.559	39.6	238	1,982	2,950	0.169	0.554
4 x 50	380	9.8	13.5	1.524	38.7	0.40	1.744	44.3	266	2,570	3,825	0.118	0.386
4 x 70	330	11.6	15.8	1.780	45.2	0.40	2.016	51.2	307	3,467	5,160	0.083	0.272
4 x 95	437	13.1	17.5	1.961	49.8	0.40	2.205	56.0	336	4,314	6,240	0.063	0.206
4 x 120	562	15.4	20.0	2.224	56.5	0.40	2.476	62.9	377	5,443	8,100	0.049	0.161
4 x 150	703	17.1	21.9	2.425	61.6	0.40	2.685	68.2	409	6,552	9,750	0.039	0.129