



MSMA SERIES

Standard Performance Fixed LSHF
CBS Shipboard / Offshore Power
Cable 0.6/1kV 90°C



APPLICATIONS:

Marine For fixed wiring installations on oil and gas rigs, shipboard and other marine applications requiring screened cable for EMC.
Rail or Rolling Stock Suitable for wiring in locomotives, rail cars, buses and coaches.

PRODUCT FEATURES:

- ▶ Low smoke halogen free
- ▶ PVC free
- ▶ Lloyds approved
- ▶ UV stabilised
- ▶ Flame retardant
- ▶ To be earthed at both ends using EMC compatible glands
- ▶ Heat, oil and chemical resistant (See *Technical Section*)




CONSTRUCTION:

Conductor Annealed plain copper stranded (Class 2).
Insulation XLPE halogen free X90.
Inner Covering (If any) Halogen free compound (IEC 60092-353).
Screening Tinned or plain copper braid.
Sheath Polyolefine compound SHF (IEC 60092-353 & 3.7.3A).

CHARACTERISTICS:

Operating Temperature Range Fixed -15°C to 90°C.
Maximum Conductor temperature 90°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).
Rated Voltage U_o/U 0.6/1kV **Max AC Operating Voltage** U_o 0.7kV.
Minimum Bending Radius Up to 25mm² 4 x cable diameter / Over 25mm² 6 x cable diameter.
Sheath Colour Orange or Black.
Standard Core Colours
Without Earth Conductor:
2 Core – Blue, Brown.
3 Core – Grey, Black, Brown.
4 Core – Blue, Black, Grey, Brown.
Multi Core – Black Numbered.
Certification Society Approvals Lloyds, Type CJPJ85 or HFX-A/CU, ABS type YOZp, BV type YOZp, DNV.GL type YOZp other approvals available on request.
Relevant Standards IEC 61034, IEC 60754, IEC 60332-3-22, IEC 60092-350/351/352/353/359, IEC 60754-1/2, IEC 61034-1/2, IEC 60332-1, **CE** Directive 2006/95/EC, **RoHS** Compliant.

SINGLE CORE




Code	No. of Cores x Size (mm ²)	Approx. Stranding No. of wires x mm	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)	Nominal Amps un-enclosed protected from sun @ 30°C fixed installation 3 phase			3 Phase Volt Drop @ 50Hz / MAX. conductor temp: 90°C (Mv/Am)
					Spaced 	Spaced from Surface 	Touching 	
MSMA1/10	1 x 10.0	7/1.35	9.2	170	88	76	94	4.050
MSMA1/16	1 x 16.0	7/1.70	10.2	235	117	100	125	2.550
MSMA1/25	1 x 25.0	7/2.13	12.0	350	156	133	155	1.620
MSMA1/35	1 x 35.0	7/2.52	12.8	440	195	166	196	1.170
MSMA1/50	1 x 50.0	19/1.83	16.0	660	245	210	248	0.872
MSMA1/70	1 x 70.0	19/2.17	18.0	890	311	265	298	0.615

Product table continued over ▶



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MSMA SERIES continued

SINGLE CORE

Code	No. of Cores x Size (mm ²)	Approx. Stranding No. of wires x mm	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)	Nominal Amps un-enclosed protected from sun @ 30°C fixed installation 3 phase			3 Phase Volt Drop @ 50Hz / MAX. conductor temp: 90°C (Mv/Am)
					Spaced 	Spaced from Surface 	Touching 	
MSMA1/95	1 x 95.0	19/2.52	20.0	1180	375	319	354	0.457
MSMA1/120	1 x 120.0	37/2.03	21.5	1440	447	381	409	0.373
MSMA1/150	1 x 150.0	37/2.27	24.0	1760	517	440	409	0.316
MSMA1/185	1 x 185.0	37/2.52	26.0	2140	594	505	470	0.269
MSMA1/240	1 x 240.0	61/2.24	29.0	2760	716	608	565	0.227

MULTI CORE


Code	No. of Cores x Size (mm ²)	Approx. Stranding No. of wires x mm	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)	Nominal Amps un-enclosed protected from sun @ 30°C fixed application		3 Phase Volt Drop @ 50Hz / MAX. conductor temp: 90°C (Mv/Am)
					Touching 		
MSMA2/1.5	2 x 1.5	7/0.52	10.2	120	25	30.000	
MSMA2/2.5	2 x 2.5	7/0.67	11.1	150	33	16.400	
MSMA2/4.0	2 x 4.0	7/0.85	12.3	195	44	10.200	
MSMA2/10	2 x 10.0	7/1.35	16.0	425	79	4.050	
MSMA2/16	2 x 16.0	7/1.70	18.5	590	106	2.550	
MSMA2/25	2 x 25.0	7/2.13	22.1	860	141	1.610	
MSMA3/1.5	3 x 1.5	7/0.52	10.4	145	25	30.000	
MSMA3/2.5	3 x 2.5	7/0.67	11.0	185	33	16.400	
MSMA3/4.0	3 x 4.0	7/0.85	12.4	243	44	10.200	
MSMA3/6.0	3 x 6.0	7/1.05	13.6	340	56	6.800	
MSMA3/10	3 x 10.0	7/1.35	16.0	520	79	4.050	
MSMA3/16	3 x 16.0	7/1.70	19.0	750	106	2.550	
MSMA3/25	3 x 25.0	7/2.13	22.5	1120	141	1.610	
MSMA3/35	3 x 35.0	7/2.52	26.5	1660	149	1.170	
MSMA3/50	3 x 50.0	19/1.83	29.0	2100	187	0.868	
MSMA3/70	3 x 70.0	19/2.17	34.0	2950	235	0.609	
MSMA3/95	3 x 95.0	19/2.52	39.0	4010	282	0.450	
MSMA3/120	3 x 120.0	37/2.03	42.0	4990	333	0.366	
MSMA4/1.5	4 x 1.5	7/0.52	10.8	180	21	30.000	
MSMA4/2.5	4 x 2.5	7/0.67	12.2	225	29	16.400	
MSMA4/4.0	4 x 4.0	7/0.85	13.4	305	37	10.200	
MSMA4/6.0	4 x 6.0	7/1.05	15.5	410	47	6.800	
MSMA4/10	4 x 10.0	7/1.35	18.0	635	67	4.050	
MSMA4/25	4 x 25.0	7/2.13	25.0	1360	119	1.610	

Product table continued over ►

MARINE & OFFSHORE CABLES

MSMA SERIES continued

MULTI CORE

Code	No. of Cores x Size (mm ²)	Approx. Stranding No. of wires x mm	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)	Nominal Amps un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @ 50Hz / MAX. conductor temp:
					Touching 	90°C (Mv/Am)
MSMA4/35	4 x 35.0	7/2.52	29.0	2070	149	1.170
MSMA4/50	4 x 50.0	19/1.83	32.0	2640	187	0.868
MSMA4/70	4 x 70.0	19/2.17	37.5	3700	235	0.609
MSMA4/95	4 x 95.0	19/2.52	42.5	5070	282	0.450
MSMA4/120	4 x 120.0	37/2.03	46.5	6300	333	0.366
MSMA5/1.5	5 x 1.5	7/0.52	12.0	200	21	30.000
MSMA5/2.5	5 x 2.5	7/0.67	12.6	242	29	16.400
MSMA5/4.0	5 x 4.0	7/0.85	16.2	346	37	10.200
MSMA5/6.0	5 x 6.0	7/1.05	18.1	479	47	6.800
MSMA5/10	5 x 10.0	7/1.35	20.3	737	67	4.050
MSMA5/16	5 x 16.0	7/1.70	24.5	1156	89	2.550
MSMA5/25	5 x 25.0	7/2.13	29.2	1781	119	1.610
MSMA5/35	5 x 35.0	7.252	33.4	2537	149	1.170
MSMA7/1.5	7 x 1.5	7/0.52	12.8	245	15	30.000
MSMA10/1.5	10 x 1.5	7/0.52	16.5	380	15	30.000
MSMA12/1.5	12 x 1.5	7/0.52	17.5	435	15	30.000
MSMA14/1.5	14 x 1.5	7/0.52	18.5	485	15	30.000
MSMA16/1.5	16 x 1.5	7/0.52	19.0	530	15	30.000
MSMA19/1.5	19 x 1.5	7/0.52	20.0	610	15	30.000
MSMA24/1.5	24 x 1.5	7/0.52	23.5	760	15	30.000
MSMA27/1.5	27 x 1.5	7/0.52	24.0	830	15	30.000
MSMA30/1.5	30 x 1.5	7/0.52	24.5	900	15	30.000
MSMA37/1.5	37 x 1.5	7/0.52	26.5	1060	15	30.000

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