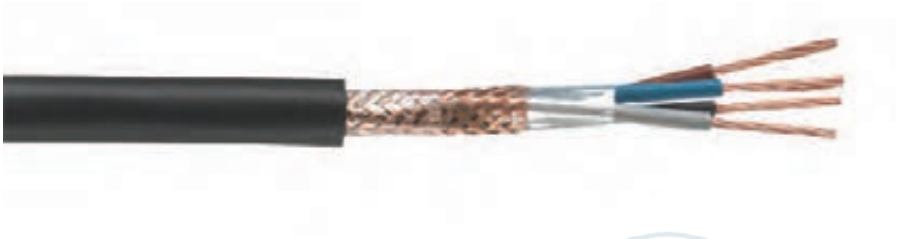
Marine Armoured Power Cables - Flame Retardant



Application

Suitable for drilling rigs and oil platforms, this cable is designed for fixed wiring in ships, and in mobile and fixed offshore units such as drilling rigs and oil platforms. This cable is particularly designed for use in areas regularly occupied by people, such as accommodation facilities, control rooms and computer suites, which assists in reducing smoke and noxious fumes and where vital, sensitive equipment may be damaged by acid forming gases.

Specifications

- In accordance with IEC60092-353
- **Conductor:** Class 2 or flexible plain copper conductor to BS EN 60228
- **Insulation:** XLPE complying with IEC60092-351
- **Core Identification:**
  2 cores are brown and blue
  3 cores are brown, black and grey
  4 cores are brown, black, grey and blue
- **Armour:** Plain copper wire braid
- **Outer Sheath:** Zero halogen type SHF1 to IEC60092-359
- **Identification:** The legend will include the manufacturers name, voltage, number of cores and cross sectional area, and IEC60332-3A reference where applicable. The standard sheath colour is black
- **Sheath Characteristics:**
  Oxygen index: $>37\%$
  Temperature index: 250°C
  HCL emission: $<0.5\%$ of weight of compound @ 800°C (typically $<0.1\%$)
- **Fire Performance:** Flame retardant to IEC60332-3-22 Category A (reduced propagation)
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** 600/1000 V

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Anixter Number		Nominal Cond Area	Approximate Overall Diameter	Approximate Weight	Flame Proof Stuffing Gland	
Stranded	Flexible	mm²	mm	kg/km	PRYSMIAN E1AT-A2EX	CMP E1AT-A2F
Single-Core						
MA-1C-0040		4	7.5	105	-20SS	-16/20C
MA-1C-0060		6	8.0	130	-20S	-16/20C
MA-1C-0100		10	9.5	190	-20S	-20SC
	MA-1C-0160F	16	10.5	240	-20S	-20SC
	MA-1C-0250F	25	13.0	360	-20	-20C
	MA-1C-0350F	35	14.0	460	-20	-25C
	MA-1C-0500F	50	17.0	650	-25	-25C
	MA-1C-0700F	70	19.0	885	-25	-25C
	MA-1C-0950F	95	21.5	1115	-32	-32C
	MA-1C-1200F	120	23.5	1405	-32	-32C
	MA-1C-1500F	150	26.5	1720	-32	-40C
	MA-1C-1850F	185	29.0	2065	-40	-40C
	MA-1C-2400F	240	32.5	2715	-40	-50SC
	MA-1C-0300F	300	35.5	3300	-50	-50SC
2 Core						
MA-2C-0015	MA-2C-0015F	1.5	9.5	130	-20S	-20SC
MA-2C-0025	MA-2C-0025F	2.5	10.5	160	-20S	-20SC
MA-2C-0040		4	12.0	210	-20	-20C
MA-2C-0060		6	13.0	315	-20	-20C
MA-2C-0100		10	15.5	480	-25	-25C
3 Core						
MA-3C-0015	MA-3C-0015F	1.5	10.0	155	-20S	-20SC
MA-3C-0025	MA-3C-0025F	2.5	11.0	195	-20S	-20SC
MA-3C-0040	MA-3C-0040F	4	12.5	200	-20	-20C
MA-3C-0060	MA-3C-0060F	6	14.0	370	-20	-25C
MA-3C-0100	MA-3C-0100F	10	16.5	570	-25	-25C
	MA-3C-0160F	16	19.0	750	-25	-25C
	MA-3C-0250F	25	24.5	1165	-32	-32C
	MA-3C-0350F	35	27.0	1505	-40	-40C
	MA-3C-0500F	50	32.0	2100	-40	-50SC
	MA-3C-0700F	70	36.5	2850	-50	-50SC
	MA-3C-0950F	95	42.0	3685	-63	-50C
	MA-3C-1200F	120	47.0	4745	-63	-63SC
	MA-3C-1500F	150	53.0	5885	-	-63C
	MA-3C-1850F	185	59.5	7265	-	-

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Stranded	Flexible	mm²	mm	kg/km	PRYSMIAN E1AT-A2EX	CMP E1AT-A2F
4 Core						
MA-4C-0015	MA-4C-0015F	1.5	11.0	180	-20S	-20SC
MA-4C-0025	MA-4C-0025F	2.5	12.5	240	-20	-20C
MA-4C-0040	MA-4C-0040F	4	13.5	320	-20	-25C
MA-4C-0060	MA-4C-0060F	6	15.5	475	-25	-25C
MA-4C-0100	MA-4C-0100F	10	18.0	695	-25	-25C
	MA-4C-0160F	16	21.0	945	-32	-32C
	MA-4C-0250F	25	27.0	1440	-40	-40C
	MA-4C-0350F	35	29.5	1900	-40	-40C
	MA-4C-0500F	50	35.5	2635	-50	-50SC
	MA-4C-0700F	70	40.0	3590	-50	-50SC
	MA-4C-0950F	95	47.0	4850	-63	-63SC
	MA-4C-1200F	120	52.0	6010	-63	-63C
	MA-4C-1500F	150	59.0	7565	-	-
5 Core						
MA-5C-0015	MA-5C-0015F	1.5	12.0	220	-20	-20C
MA-5C-0025	MA-5C-0025F	2.5	13.5	285	-20	-25C
7 Core						
MA-7C-0015	MA-7C-0015F	1.5	13.0	265	-20	-20C
MA-7C-0025	MA-7C-0025F	2.5	15.0	380	-20	-25C
10 Core						
MA-10C-0015	MA-10C-0015F	1.5	16.5	390	-25	-25C
MA-10C-0025	MA-10C-0025F	2.5	18.5	535	-25	-25C
12 Core						
MA-12C-0015	MA-12C-0015F	1.5	17.0	440	-25	-25C
MA-12C-0025	MA-12C-0025F	2.5	19.0	595	-25	-25C

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Anixter Number		Nominal Cond Area	Approximate Overall Diameter	Approximate Weight	Flame Proof Stuffing Gland	
Stranded	Flexible	mm^2	mm	kg/km	PRYSMIAN E1AT-A2EX	CMP E1AT-A2F
19 Core						
MA-19C-0015	MA-19C-0015F	1.5	19.5	610	-25	-32C
MA-19C-0025	MA-19C-0025F	2.5	22.5	855	-32	-32C
27 Core						
MA-27C-0015	MA-27C-0015F	1.5	24.0	845	-32	-32C
MA-27C-0025	MA-27C-0025F	2.5	27.0	1175	-40	-40C
37 Core						
MA-37C-0015	MA-37C-0015F	1.5	26.5	1085	-32	-40C
MA-37C-0025	MA-37C-0025F	2.5	30.0	1500	-40	-40C

For further technical information please refer to page 6:56.

Technical Information – IEC60092 Marine Cables (continued)

MultiCore Cables

Continuous current ratings for groups of circuits (up to 6 cables bunched) for twin and multicore XLPE or EPR insulated cables, run open or enclosed, and are also applicable to mica taped fire resistant types.

CURRENT RATINGS

Nominal Conductor Area	Twin Cables			Three & Four Core Cables	
	Current Rating Single Phase a.c. or d.c.	Voltage Drop Per Ampere Per Metre		Current Rating Three Phase a.c.	Voltage Drop Per Ampere Per Metre
		d.c.	Single Phase a.c.		
mm^2	A	mV	mV	A	mV
1.0	14	54	54	12	47
1.5	18	35	35	15	30
2.5	25	18	18	21	16
4.0	34	12	12	29	10
6.0	43	7.8	7.8	36	6.7
10	60	4.6	4.6	50	4.0
16	81	2.7	2.7	67	2.3
25	105	1.7	1.7	89	1.5
35	135	1.2	1.2	105	1.1
50	165	0.98	1.0	135	0.89
70	200	0.68	0.70	170	0.64
95	250	0.49	0.53	205	0.50
120	290	0.39	0.43	240	0.44
150	330	0.31	0.36	270	0.38
185	370	0.25	0.32	305	0.34
240	445	0.19	0.27	365	0.31
300	505	0.15	0.24	415	0.29

Where more than six cables are bunched, a rating factor of 0.85 should be applied to the current rating.

For ambient temperatures other than 45°C, the following rating factors should be applied:

Ambient air temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.11	1.05	1.0	0.94	0.88	0.82	0.75	0.67	0.58	0.47