

# Marine Armoured Instrumentation Cables – Flame Retardant



## Application

Anixter armoured cables are designed for use where mechanical protection is required for fixed wiring in ships, and in mobile and fixed offshore units such as drilling rigs and oil platforms. These cables are particularly designed for regularly occupied areas such as accommodation facilities, control rooms and computer suites. This is essential in reducing smoke and noxious fumes, and helps during evacuation procedures and fire fighting duties, and also helps to protect vital and sensitive equipment.

## Specifications

- In accordance with IEC60092-375 60092-350
- **Conductor:** Class 2 tinned or plain conductor to BS EN 60228
- **Insulation:** XLPE complying with IEC60092-351
- **Core Identification:**  
Pairs are light blue, black and numbered  
Triples are light blue, black, brown and numbered
- **Screening:** Aluminium mylar tape in contact with tinned copper drain wire
- **Armour:** Tinned or 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 grey
- **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:** 250 V

# Marine Armoured Instrumentation Cables – Flame Retardant

Anixter Number	Nominal Cond Area mm <sup>2</sup>	Number of Pairs/Triples	Approximate Overall Diameter mm	Approximate Weight kg/km	Flame Proof Stuffing Gland	
					PRYSMIAN EIAT-A2EX	CMP EIAT-A2F
A10FU2-01075-B-09	0.75	1P	8.5	100	-20S	-20SC
A10FU2-02075-B-09	0.75	2P	12.5	175	-20	-20C
A10FU2-04075-B0-9	0.75	4P	14.5	250	-25S	-25C
A10FU2-07075-B-09	0.75	7P	17.5	355	-25	-25C
A10FU2-10075-B-09	0.75	10P	20.5	505	-32	-32C
A10FU2-14075-B-09	0.75	14P	22.5	640	-32	-32C
A10FU2-19075-B-09	0.75	19P	25.5	810	-32	-32C
A10FU2-24075-B-09	0.75	24P	28.5	1000	-40	-40C
A10FU2-30075-B-09	0.75	30P	31.5	1195	-40	-40C
A10FU2-01015-B-09	1.5	1P	10.0	130	-20S	-20SC
A10FU2-02015-B-09	1.5	2P	14.5	245	-25S	-25C
A10FU2-04015-B-09	1.5	4P	17.0	355	-25	-25C
A10FU2-07015-B-09	1.5	7P	20.5	530	-32	-32C
A10FU2-10015-B-09	1.5	10P	23.5	725	-32	-32C
A10FU2-14015-B-09	1.5	14P	26.5	980	-40	-40C
A10FU2-19015-B-09	1.5	19P	30.0	1255	-40	-40C
A10FU2-24015-B-09	1.5	24P	33.0	1535	-50S	-50SC
A10FU2-30015-B-09	1.5	30P	37.0	1940	-50S	-50SC
<b>Individual Screen</b>						
A10FU2-02075-A-09	0.75	2	13.0	180	-20	-20C
A10FU2-04075-A-09	0.75	4	15.0	265	-25	-25C
A10FU2-02015-A-09	1.5	2	14.5	250	-25	-25C
A10FU2-04015-A-09	1.5	4	17.5	375	-25	-25C
<b>Individual and Collective Screen</b>						
A10FU2-02075-AB-09	0.75	2	13.5	195	-20	-25C
A10FU2-04075-AB-09	0.75	4	15.5	280	-20	-25C
A10FU2-02015-AB-09	1.5	2	15.0	265	-25	-25C
A10FU2-04015-AB-09	1.5	4	18.0	400	-25	-25C

For further technical information please refer to page 6.53.

# Technical Information – Cable Types

XLPE Insulated IEC60092 Type XAI(c) 250 Volts Instrumentation Cable

## Electrical Characteristics

Electrical Characteristic	Unit	Nominal Conductor Area	
		0.75mm <sup>2</sup>	1.5mm <sup>2</sup>
Maximum DC conductor resistance @ 20°C	ohms/km	25.2	12.4
Maximum DC loop conductor resistance @ 20°C	ohms/km	50.4	24.8
Maximum AC conductor resistance @ 90°C	ohms/km	32.1	15.8
Nominal LOOP inductance	mH/km	0.72	0.66
Nominal L/R ratio	μH/ohm	15	27
Maximum mutual capacitance on all cables with individually screened pairs/triples	pF/m	120	100
Maximum mutual capacitance on all cables with collective screen	pF/m	95	110

## Cables to IEC60092

Type of Cable*	Minimum Bending Radius
Instrumentation	8 x diameter
<b>Power and control up to 3.3/3.3kV</b>	
Unarmoured	4 x diameter
Armoured	4 x diameter

\* All fire survival (FS) cables - 8 x diameter.