



TOXFREE MARINE PLUS XZ1-K (AS+)

The Marine fire resistant power cable.

IEC 60092-353

DESIGN

1. Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228.

2/3 Insulation

Mica Tape + LSZH XLPE 90°C.

The standard identification is the following:

1 x Black

2 x Blue + Brown

3 x Brown+ Black+ Grey

4 x Blue + Brown + Black + Grey

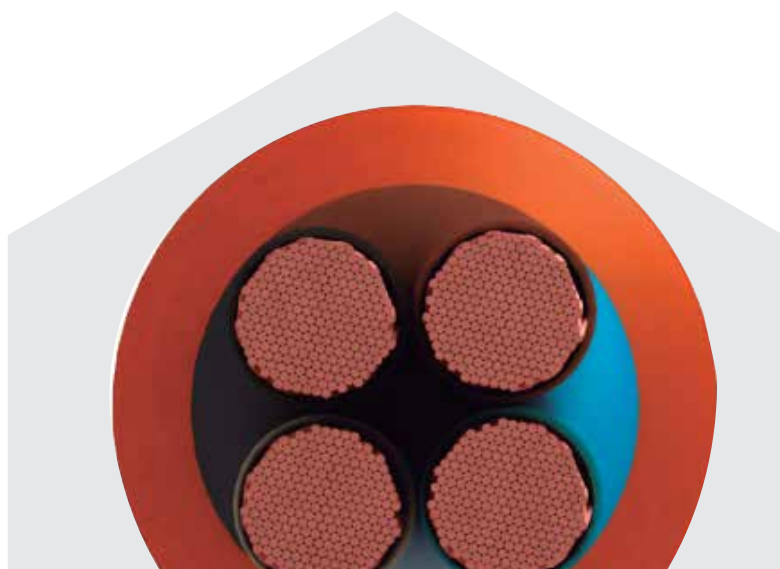
5 x or more conductors White with black numbers

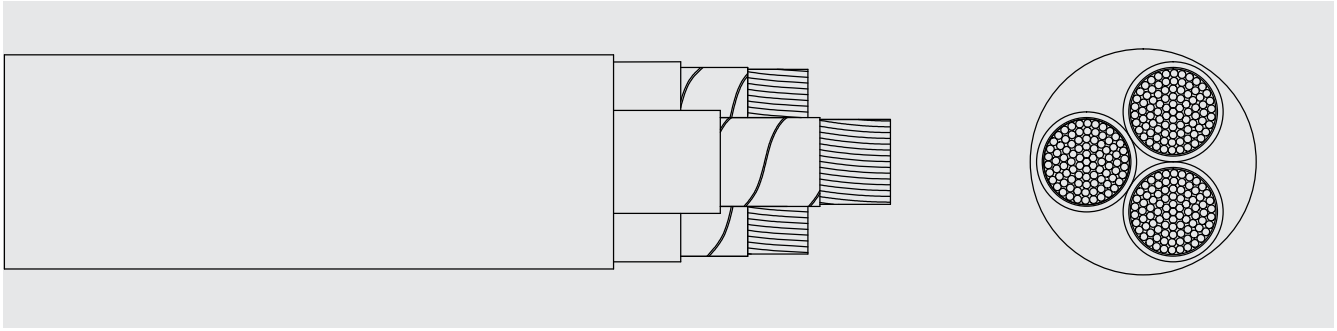
3. Outer sheath

LSZH polyolefin outer sheath SHF1 type. Orange colour, non-toxic, fire retardant and fire resistant.

APPLICATIONS

The Toxfree Marine Plus XZ1-K (AS+) is specially designed to transmit electric power in the presence of fire, assuring electric supply to emergency circuits, like signalling lights, smoke extractors, acoustic alarms, water pumps, etc. In case of fire, it does not emit toxic or corrosive gases, thereby protecting public health and avoiding any possible damage to electronic equipment. For this reason, its use is recommended in public places and marine applications.





CHARACTERISTICS



Electrical performance

LOW VOLTAGE 0.6/1 KV



Standards

IEC 60092-353



Approvals

DNV-GL
ABS
Bureau Veritas
Lloyd's Register
CE
RoHS



Thermal performance

Maximum service temperature: 90°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -40°C (fixed installations).



Fire performance

Flame non-propagation based on EN 60332-1 and IEC 60332-1.
Fire non-propagation based on EN 60332-3-22 and IEC 60332-3-22.
Fire resistant based on EN 60331-21 and IEC 60331-21.
LSZH (Low Smoke Zero Halogen) based on EN 60754-1 and IEC 60754-1.
Low smoke emission based on EN 61034 and IEC 61034.: Light transmittance > 60%
Low corrosive gases emission based on EN 60754-2 and IEC 60754-2.



Mechanical performance

Minimum bending radius: x5 cable diameter.
Impact resistance: AG3 High severity.



Chemical performance

Chemical & Oil resistance: Acceptable.



Water performance

Water resistance: AD6 waves.



Other

Metre by metre marking.



Installation conditions

Open Air.
In conduit.
Wall attached.
On tray.



Applications

Marine use.
Public places.





DIMENSIONS

Cross section (mm ²)	Diameter (mm)	Aprox Weight (Kg/km)	Open Air 30°C (A)	Voltage Drop (V/A · km)	Conductor resistance (Ohm/Km)
1 x 2,5	5,90	51	25	17,70	7,98
1 x 4	6,40	68	35	11,00	4,95
1 x 6	7,00	89	46	7,32	3,30
1 x 10	7,90	133	64	4,23	1,91
1 x 16	9,10	195	88	2,68	1,21
1 x 25	10,90	290	117	1,73	0,78
1 x 35	12,20	393	147	1,23	0,55
1 x 50	13,90	540	180	0,86	0,39
1 x 70	15,80	741	233	0,60	0,27
1 x 95	17,90	969	285	0,46	0,21
1 x 120	19,50	1.212	333	0,36	0,16
1 x 150	21,80	1.504	386	0,29	0,13
1 x 185	24,40	1.828	444	0,24	0,11
1 x 240	27,40	2.379	528	0,18	0,08
1 x 300	30,10	2.981	612	0,14	0,06
2 x 1,5	9,20	121	23	34,00	13,30
2 x 2,5	10,10	154	31	20,40	7,98
2 x 4	11,40	209	43	12,70	4,95
2 x 6	12,40	266	55	8,45	3,30
2 x 10	14,50	395	75	4,89	1,91
2 x 16	16,10	542	100	3,10	1,21
3 x 1,5	10,00	140	23	34,00	13,30
3 x 2,5	11,00	186	31	20,40	7,98
3 x 4	12,20	247	43	12,70	4,95
3 x 6	13,30	321	55	8,45	3,30
3 x 10	15,70	489	75	4,89	1,91
3 x 16	17,90	701	87	2,68	1,21
3 x 25	22,30	1.097	110	1,73	0,78
3 x 35	25,30	1.470	137	1,23	0,55
3 x 50	28,90	2.013	167	0,86	0,39
3 x 70	31,60	2.677	214	0,60	0,27
3 x 95	37,70	3.575	259	0,46	0,21
3 x 120	41,50	4.480	301	0,36	0,16
3 x 150	46,40	5.566	347	0,29	0,13
3 x 185	52,00	6.806	397	0,24	0,11

Cross section (mm ²)	Diameter (mm)	Aprox Weight (Kg/km)	Open Air 30°C (A)	Voltage Drop (V/A · km)	Conductor resistance (Ohm/Km)
3 x 240	58,40	8.813	468	0,18	0,08
4 x 1,5	11,10	170	20	29,50	13,30
4 x 2,5	12,00	221	28	17,70	7,98
4 x 4	13,30	298	37	11,00	4,95
4 x 6	14,90	400	47	7,32	3,30
4 x 10	17,40	609	65	4,23	1,91
4 x 16	20,10	883	87	2,68	1,21
4 x 25	25,10	1.379	110	1,73	0,78
4 x 35	27,30	1.820	137	1,23	0,55
4 x 50	32,70	2.558	167	0,86	0,39
4 x 70	37,00	3.467	214	0,60	0,27
4 x 95	42,00	4.524	259	0,46	0,21
4 x 120	46,20	5.675	301	0,36	0,16
4 x 150	51,60	7.083	347	0,29	0,13
4 x 185	57,90	8.654	397	0,24	0,11
4 x 240	65,10	11.243	468	0,18	0,08
5 x 1,5	12,00	199	20	29,50	13,30
5 x 2,5	13,20	264	28	17,70	7,98
5 x 4	14,90	364	37	11,00	4,95
5 x 6	16,60	490	47	7,32	3,30
5 x 10	19,30	747	65	4,23	1,91
5 x 16	22,40	1.088	87	2,68	1,21
7 x 1,5	12,90	240	11	29,50	13,30
7 x 2,5	14,70	334	15	17,70	7,98
10 x 1,5	15,60	337	10	29,50	13,30
12 x 1,5	16,60	395	9	29,50	13,30
12 x 2,5	19,50	561	12	17,70	7,98
14 x 1,5	17,80	394	9	29,50	13,30
16 x 1,5	19,20	454	8	29,50	13,30
19 x 1,5	20,00	514	8	29,50	13,30
19 x 2,5	23,00	730	11	17,70	7,98
24 x 1,5	22,70	640	7	29,50	13,30
27 x 1,5	24,00	709	7	29,50	13,30
27 x 2,5	27,80	1.023	9	17,70	7,98

Maximum admissible intensities according to IEC 60364-5-52.

For other installation conditions, please refer to correction factors in the appendix to this catalogue.

See more technical data on the particular cable specification.

Top Cable reserves the right to carry out any modification to the data sheets whatsoever without giving previous notice

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