



TOXFREE MARINE PLUS

XTCuZ1-K (AS+) with bedding

The Marine armoured and fire resistant power cable with bedding.

IEC 60092-353

DESIGN

1. Conductor

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

2/3. Insulation

Mica Tape + LSZH XLPE 90°C.

The standard identification is the following:

1x Black

2 x Blue + Brown

3 x Brown+ Black+ Grey

4 x Blue + Brown + Black + Grey

5 or more conductors White with black numbers

4. Armour bedding

LSZH polyolefin inner sheath.

5. Armour

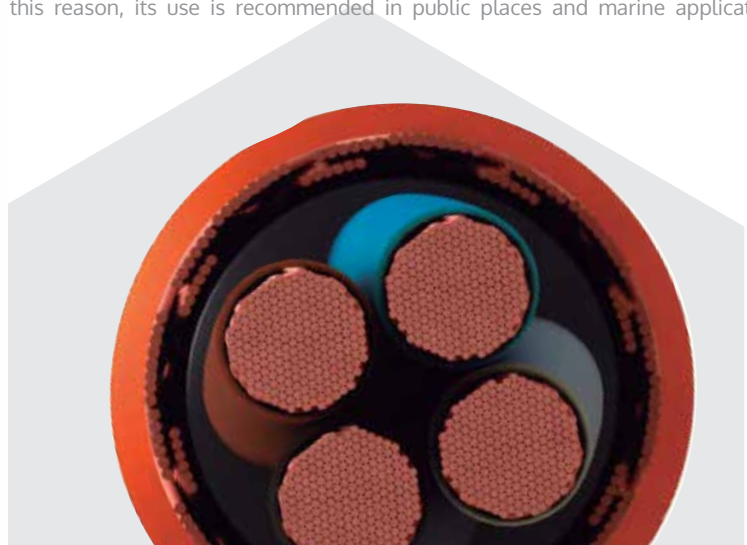
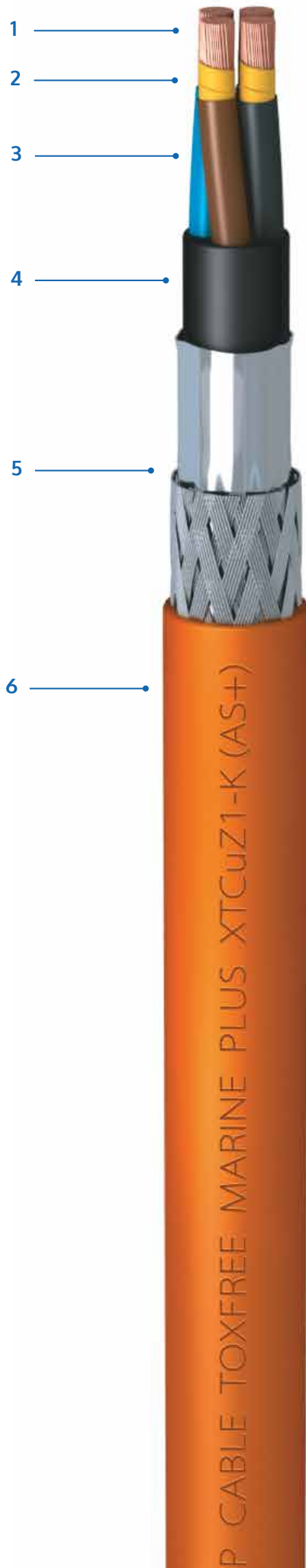
Coverage of 100% composed by an aluminium-polyester tape and a tinned copper braid.

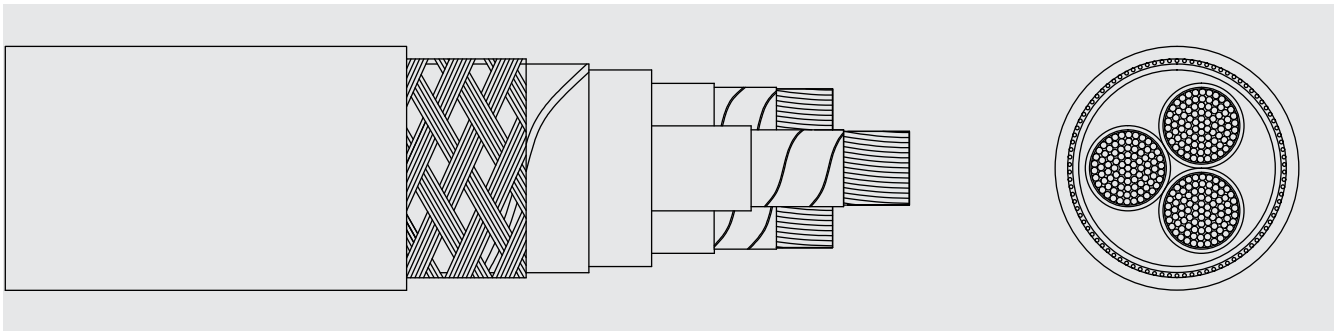
6. Outer sheath

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

APPLICATIONS

The Toxfree Marine Plus XTCuZ1-K (AS+) is specially designed to transmit electric power in the presence of fire, assuring electric supply to emergency circuits, like signaling 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 and approvals

IEC 60092-353



Standards and 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	8,90	123	25	17,70	7,98
1 x 4	9,40	145	35	11,00	4,95
1 x 6	10,00	171	46	7,32	3,30
1 x 10	11,10	231	64	4,23	1,91
1 x 16	12,10	299	88	2,68	1,21
1 x 25	14,50	450	117	1,73	0,78
1 x 35	15,60	562	147	1,23	0,55
1 x 50	17,50	739	180	0,86	0,39
1 x 70	19,40	965	233	0,60	0,27
1 x 95	21,30	1.209	285	0,46	0,21
1 x 120	23,10	1.484	333	0,36	0,16
1 x 150	25,40	1.805	386	0,29	0,13
1 x 185	28,00	2.163	444	0,24	0,11
1 x 240	31,00	2.753	528	0,18	0,08
1 x 300	34,10	3.424	612	0,14	0,06
2 x 1,5	11,70	215	23	34,00	13,30
2 x 2,5	12,60	260	31	20,40	7,98
2 x 4	14,30	353	43	12,70	4,95
2 x 6	15,30	437	55	8,45	3,30
2 x 10	17,40	582	75	4,89	1,91
2 x 16	19,20	623	100	3,10	1,21
3 x 1,5	12,50	231	23	34,00	13,30
3 x 2,5	13,90	313	31	20,40	7,98
3 x 4	15,10	386	43	12,70	4,95
3 x 6	16,20	470	55	8,45	3,30
3 x 10	18,60	661	75	4,89	1,91
3 x 16	20,80	892	87	2,68	1,21
3 x 25	24,70	1.291	110	1,73	0,78
3 x 35	27,70	1.684	137	1,23	0,55
3 x 50	31,30	2.250	167	0,86	0,39
3 x 70	34,40	2.964	214	0,60	0,27
3 x 95	41,10	4.013	259	0,46	0,21
3 x 120	45,10	4.975	301	0,36	0,16
3 x 150	50,00	6.101	347	0,29	0,13
3 x 185	56,00	7.439	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	62,60	9.525	468	0,18	0,08
4 x 1,5	14,00	299	20	29,50	13,30
4 x 2,5	14,90	358	28	17,70	7,98
4 x 4	16,20	450	37	11,00	4,95
4 x 6	17,80	567	47	7,32	3,30
4 x 10	20,30	800	65	4,23	1,91
4 x 16	23,00	1.099	87	2,68	1,21
4 x 25	27,50	1.599	110	1,73	0,78
4 x 35	29,50	2.042	137	1,23	0,55
4 x 50	35,90	2.948	167	0,86	0,39
4 x 70	40,20	3.898	214	0,60	0,27
4 x 95	45,60	5.046	259	0,46	0,21
4 x 120	49,80	6.238	301	0,36	0,16
4 x 150	55,60	7.750	347	0,29	0,13
4 x 185	61,90	9.379	397	0,24	0,11
4 x 240	69,10	12.030	468	0,18	0,08
5 x 1,5	14,90	338	20	29,50	13,30
5 x 2,5	16,10	415	28	17,70	7,98
5 x 4	17,80	532	37	11,00	4,95
5 x 6	19,50	674	47	7,32	3,30
5 x 10	22,20	958	65	4,23	1,91
5 x 16	25,30	1.328	87	2,68	1,21
7 x 1,5	15,80	390	11	29,50	13,30
7 x 2,5	17,60	501	15	17,70	7,98
10 x 1,5	18,50	514	10	29,50	13,30
12 x 1,5	19,50	541	9	29,50	13,30
12 x 2,5	22,40	718	12	17,70	7,98
14 x 1,5	20,70	602	9	29,50	13,30
16 x 1,5	22,10	676	8	29,50	13,30
19 x 1,5	22,90	746	8	29,50	13,30
19 x 2,5	25,90	995	11	17,70	7,98
24 x 1,5	25,60	902	7	29,50	13,30
27 x 1,5	26,90	986	7	29,50	13,30
27 x 2,5	30,70	1.341	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.

For more information: sales@topcable.com

