



TKF CONNECTIVITY SOLUTIONS

CATALOGUE

INNOVATIVE CABLE SOLUTIONS MEETING INTERNATIONAL STANDARDS

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TKF TECHNOLOGICAL LEADERSHIP IN CONNECTIVITY SOLUTIONS

Since its establishment in 1930 TKF developed from a cable producer to a leading supplier of connectivity solutions located in the Netherlands. A broad range of cables, systems and services enables us to provide our customers worldwide with safe and reliable power and data connections.

Due to a focused commitment, TKF is distinguished by specialized application knowledge and solutions with a high degree of reliability, quality and service. Specialized technical know-how and flexibility lead to a high return on investment for our customers.

TKF is characterized by continuous investment in customer relations, quality and supplementary services, resulting in sustainable cable solutions and long-term and successful relationships.

It goes without saying that we offer our customized solutions with respect for people and environment. Being part of the technology company TKH Group NV, TKF has access to breakthrough solutions, concepts and technologies.

More than 85 years of experience



Our market segmentation

Building Solutions

- » Building
- » Energy
- » Infrastructure
- » Renewable
- » Rail infra

Industrial Solutions

- » Industry
- » Marine & offshore
- » Oil, gas & petrochemical

Telecom Solutions

- » Telecom

Our core values

- » Innovativeness
- » Maximum reliability
- » Outstanding quality
- » High service degree
- » Corporate Social Responsibility

MEET THE TKH GROUP AND ITS CORE TECHNOLOGIES

TKH Group NV (TKH) is an internationally operating group of companies specialized in creating and supplying innovative Telecom, Building and Industrial Solutions.

All TKH technologies are interlinked into total solutions for these three business segments. Specialists in the fields of marketing, process development, design, engineering and logistics add advice and project implementation to offer a tailor-made solution. TKH aims to carve out strong market positions based mainly on its own advanced technologies and services and on its strong regional and international positioning.

The group's growth is concentrated in North-Western, Central and Eastern Europe and in Asia. TKH is known for its innovations and its commitment to renewal. The urge to lead is great. TKH places its experience and knowledge into the service of its clients, and jointly looks for optimal solutions.

The four TKH core technologies:

Vision & Security | Communications | Connectivity | Manufacturing Systems



member of the TKH Group <

www.tkhgroup.com



HIGH END CABLE SOLUTIONS FOR ALL MARINE APPLICATIONS

Efficiency, safety and cost reduction emphasize the importance of high quality shipboard cables. The right cables can reduce costs, improve safety, improve performance, and help respect the environment.

TKF designs and produces marine cables to create added value for shipbuilders, owners and shipyards. Our complete portfolio of cables and service concepts is appropriate for dredgers, private yachts, cruise ships, offshore vessels and working boats of all kinds. Designed for the marine environment, shipboard cables can increase operations and safety on board. Our portfolio is light weight, flexible, flame-retardant, halogen free, fire-resistant and suitable for harsh environments.

Our customers profit from our reliability, short delivery times, local stocks and cut and labeling services. The light weight, small diameter, flexibility, stock availability and international certification by major classification societies are important advantages.

Our Marine portfolio:

- | | |
|-----------------|---|
| Low voltage: | Light weighted low voltage cables for power and lighting on board of ships. |
| Medium voltage: | (Flexible) power cables for medium voltage energy transport for fixed installations in all ship areas. |
| Communication: | (Fire resistant) communication cables for instrumentation, telecommunication and data transmission on board of ships. |
| Signal: | Signal cables for signaling-, control- and alarm-systems on board of ships. |

INTERNATIONAL STANDARDS AND APPROVALS

All marine cables are designed and produced according to international standards and approvals. TKF marine cables fully comply with the requirements specified in the IEC 60092 series of standards.

Low Voltage Cables 0,6/1kV & 1,8/3kV	ABS	BV	DNV-GL	LRS	PRS	RMRS	RINA
MarineLine YZp 0,6/1 kV	X	X	X	X	X	X	X
MarineLine YOZp 0,6/1 kV	X	X	X	X	X	X	X
MarineLine YZafp 0,6/1 kV	X	X	X	X			X
MarineLine+ YZp 0,6/1 kV	X	X	X	X		X	X
MarineLine+ YOZp 0,6/1 kV	X	X	X	X		X	X
MarineFlex YZp 0,6/1 kV	X	X	X	X	X	X	X
MarineFlex YOZp 0,6/1 kV	X	X	X	X	X	X	X
MarineLine YOZp 0,6/1 kV EMC	X		X	X			X
MarineLine+ YOZp 0,6/1 kV EMC	X		X	X			X
MarineFlex YOZp 0,6/1 kV EMC	X		X	X			X
MarineLine YOZp 1,8/3 kV	X	X	X	X		X	X
MarineFlex YOZp 1,8/3 kV	X	X	X	X		X	X
MarineLine YOZp 1,8/3 kV EMC	X		X				X
MarineLine+ YOZp 1,8/3 kV EMC							X
MarineFlex YOZp 1,8/3 kV EMC	X		X	X			X
MarineMultiFlex BOQp 0,6/1 kV							
MarineLine YZp FR 0,6/1 kV		X		X			
MarineLine YOZp FR 0,6/1 kV		X		X			
MarineLine+ YZp FR 0,6/1 kV		X		X			
MarineLine+ YOZp FR 0,6/1 kV		X		X			
MarineFlex YZp FR 0,6/1 kV		X		X			
MarineFlex YOZp FR 0,6/1 kV		X		X			
MarineLine YZp X-FR 0,6/1 kV	X	X	X	X	X	X	X
MarineLine YOZp X-FR 0,6/1 kV	X	X	X	X	X	X	X
MarineLine+ YZp X-FR 0,6/1 kV	X	X	X	X		X	X
MarineLine+ YOZp X-FR 0,6/1 kV	X	X	X	X		X	X
MarineFlex YZp X-FR 0,6/1 kV	X	X	X	X	X	X	X
MarineFlex YOZp X-FR 0,6/1 kV	X	X	X	X	X	X	X
MarineLine YOZp X-FR 0,6/1 kV EMC	X		X	X			X
MarineLine+ YOZp X-FR 0,6/1 kV EMC	X		X	X			X
MarineFlex YOZp X-FR 0,6/1 kV EMC	X		X	X			X

X = Type approval available

In case type approval is not available, contact us for other options (batch approvals)

Subject to alternations. Please see our website for the most recent information.



Medium Voltage Cables 3,6-30kV	ABS	BV	DNV-GL	LRS	PRS	RMRS	RINA
MarinePower YOZmv 3,6/6 kV							
MarinePower YZOZmv 3,6/6 kV							
MarinePower YOZmv 6/10 kV		X					
MarinePower YZOZmv 6/10 kV		X					
MarinePowerFlex YOZmv 6/10 kV		X					
MarinePowerFlex YZOZmv 6/10 kV		X					
MarinePower MultiFlex YQOQmv 6/10 kV							
MarinePower YOZmv 8,7/15 kV							
MarinePower YZOZmv 8,7/15 kV							
MarinePower YOZmv 12/20 kV							
MarinePower YZOZmv 12/20 kV							
MarinePower YOZmv 18/30 kV							
MarinePower YZOZmv 18/30 kV							
Instrumentation & Signal cables 250 V	ABS	BV	DNV-GL	LRS	PRS	RMRS	RINA
MarineCom YOZc 250 V	X	X	X	X	X	X	X
MarineCom YZafc 250 V	X	X	X	X			X
Marine2Com YOZ2c 250 V	X	X	X	X	X	X	X
Marine2Com YZ2afc 250 V	X	X	X	X			X
MarineCom YOZc X-FR 250 V	X	X	X	X	X	X	X
MarineCom YZafc X-FR 250 V			X	X			X
Marine2Com YOZ2c X-FR 250 V	X	X	X	X	X	X	X
Marine2Com YZ2afc X-FR 250 V				X			X
MarineSignal YZs 250 V	X	X	X	X			X
MarineSignal YOZs 250 V	X	X	X	X			X
MarineSignal+ YZs 250 V	X	X	X	X			X
MarineSignal+ YOZs 250 V	X	X	X	X			X
MarineSignal YZs X-FR 250 V			X				X
MarineSignal YOZs X-FR 250 V							X
CAT 5 & CAT 7	ABS	BV	DNV-GL	LRS	PRS	RMRS	RINA
InduData Cat 5e S/FTP stranded			X				X
InduData Cat 7e S/FTP stranded			X				X
InduData Cat 7e S/FTP solid			X				X

Green Passport

As one of the first cable manufacturers, TKF has registered with Det Norske Veritas (DNV), a declaration of conformity for a "Green Passport" for ships, in June 2009. A Green Passport is an inventory of materials present in a ship's structure, systems and equipment that may be hazardous to health and / or the environment. The Green Passport was adopted by the IMO by resolution A.962 Clean Design / Green Passport. A Green Passport is granted to a ship when build. On completion of the ship, a class society such as DNV issues a certificate of compliance. This, together with the inventory of hazardous materials and declarations that the ship is free of certain materials, form the Green Passport. This passport accompanies the ship throughout its working life. The final ship owner delivers the Green Passport together with the vessel to the recycling yard, so that hazardous materials in the ship can be identified and disposed of in an environmentally clean and safe way. Yard owners and sub-suppliers must ensure that certain materials are excluded for new-build ships. Also, they must declare all materials that have been included according to various categories required by IMO. TKF marine cables are completely free of hazardous substances and may therefore be used in a ship with a Green Passport, and do not have to be listed on the inventory of hazardous materials.

SAFE-RETURN-TO-PORT

Safe Return to Port (SRtP) is mandatory since July 2010 and is applicable for passenger ships. The overall intentions of SRtP regulations are to increase the vessels robustness and ability to safely return to the port unsupported after an incident of fire or flooding and thus reduce the likelihood of evacuation. The vessels shall be able to return to port by its own power, and provide a safe area for all passengers with a certain level of habitability.

Cables form an essential part of a ship's network infrastructure and play an indispensable role in SRtP. They have to ensure the vital functioning of power, data and control systems. SOLAS requires essential systems to be still operational for at least three hours, in order to support the "orderly evacuation" and safe return of the vessel. High-end cables of TKF are therefore provided with Safe Return to Port technology.



PRODUCTS



MarineLine YZp 0,6/1 kV

Properties

Application:

Lightweight, unarmoured, reduced diameter low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- Class 2 conductors
- Lightweight, reduced diameter
- Halogen free and low smoke, flame retardant
- Excellent abrasion resistance
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineLine YZp 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Product dependent
Core insulation	XLPE (VPE)
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U ₀	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

88 products

Part number	Construction	Shape of conductor	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16560	2 x 1 mm ²	Round	0,055	30	7,4	30
16000	1 x 1,5 mm ²	Round	0,035	20	4,9	23
16001	2 x 1,5 mm ²	Round	0,067	32	7,9	45
15969	3 G 1,5 mm ²	Round	0,084	32	8,1	68
16002	3 x 1,5 mm ²	Round	0,084	32	8,1	68
15970	4 G 1,5 mm ²	Round	0,111	37	9,3	90
16003	4 x 1,5 mm ²	Round	0,111	37	9,3	90
15971	5 G 1,5 mm ²	Round	0,138	40	10,1	113
16004	5 x 1,5 mm ²	Round	0,137	40	10,1	113
16005	6 x 1,5 mm ²	Round	0,165	45	10,9	135
15972	7 G 1,5 mm ²	Round	0,171	45	11,2	158
16006	7 x 1,5 mm ²	Round	0,171	45	11,2	158
16007	8 x 1,5 mm ²	Round	0,229	52	13	180
16008	10 x 1,5 mm ²	Round	0,255	62	14,2	225
16009	12 x 1,5 mm ²	Round	0,288	59	14,8	270
16010	16 x 1,5 mm ²	Round	0,373	68	16,9	360
16011	19 x 1,5 mm ²	Round	0,436	72	18,0	428
16012	24 x 1,5 mm ²	Round	0,542	81	20	540
15999	27 x 1,5 mm ²	Round	0,600	85	21,2	608
16013	1 x 2,5 mm ²	Round	0,047	21	5,3	38
16014	2 x 2,5 mm ²	Round	0,094	36	9	75
15973	3 G 2,5 mm ²	Round	0,121	38	9,4	113
16015	3 x 2,5 mm ²	Round	0,121	38	9,5	113
15974	4 G 2,5 mm ²	Round	0,153	42	10,4	150
16016	4 x 2,5 mm ²	Round	0,153	42	10,4	150
15975	5 G 2,5 mm ²	Round	0,197	46	11,5	188
16017	5 x 2,5 mm ²	Round	0,197	46	11,5	188
17401	6 x 2,5 mm ²	Round	0,239	51	12,7	225
15976	7 G 2,5 mm ²	Round	0,249	50	12,6	263
16018	7 x 2,5 mm ²	Round	0,251	50	12,6	263
16019	1 x 4 mm ²	Round	0,062	24	5,9	60
17752	1 G 4 mm ²	Round	0,062	24	5,9	60
16020	2 x 4 mm ²	Round	0,126	40	10,1	120
15977	3 G 4 mm ²	Round	0,169	43	10,7	180
16021	3 x 4 mm ²	Round	0,169	43	10,7	180
15978	4 G 4 mm ²	Round	0,222	48	11,9	240
16022	4 x 4 mm ²	Round	0,222	48	11,9	240
16559	5 G 4 mm ²	Round	0,275	53	12,9	240
16561	5 x 4 mm ²	Round	0,275	53	13,1	240
16023	1 x 6 mm ²	Round	0,084	26	6,4	90
17753	1 G 6 mm ²	Round	0,085	26	6,4	90
16024	2 x 6 mm ²	Round	0,174	46	11,4	180
15979	3 G 6 mm ²	Round	0,240	48	12,1	270
16025	3 x 6 mm ²	Round	0,241	48	12,1	270
15980	4 G 6 mm ²	Round	0,308	53	13,2	360
16026	4 x 6 mm ²	Round	0,305	53	13	360
15967	5 G 6 mm ²	Round	0,385	59	14,7	450

Part number	Construction	Shape of conductor	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16563	5 x 6 mm ²	Round	0,384	59	14,7	450
17352	19 x 6 mm ²	Round	1,339	160	26,6	1710
16027	1 x 10 mm ²	Round	0,124	29	7,2	150
17754	1 G 10 mm ²	Round	0,124	29	7,2	150
16028	2 x 10 mm ²	Round	0,258	52	12,9	300
15981	3 G 10 mm ²	Round	0,358	55	13,8	450
16029	3 x 10 mm ²	Round	0,358	55	13,8	450
15982	4 G 10 mm ²	Round	0,473	61	15,2	600
16030	4 x 10 mm ²	Round	0,473	61	15,2	600
16564	5 x 10 mm ²	Round	0,588	68	17	750
17353	19 x 10 mm ²	Round	2,094	187	31,1	2850
16031	1 x 16 mm ²	Round	0,178	33	8,2	240
16032	2 x 16 mm ²	Round	0,374	60	15,1	480
16033	3 x 16 mm ²	Round	0,524	64	16	720
16034	4 x 16 mm ²	Round	0,693	71	17,8	960
16568	4 G 16 mm ²	Round	0,693	71	17,9	960
15968	5 G 16 mm ²	Round	0,867	79	19,8	1200
16565	5 x 16 mm ²	Round	0,867	79	19,8	1200
16035	1 x 25 mm ²	Round	0,275	40	10,1	375
16036	2 x 25 mm ²	Round	0,583	75	18,7	750
16037	3 x 25 mm ²	Round	0,830	80	20,3	1125
16038	4 x 25 mm ²	Round	1,078	89	22,3	1500
16558	5 G 25 mm ²	Round	1,370	99	25,0	1875
16039	1 x 35 mm ²	Round	0,370	47	11,8	525
16040	2 x 35 mm ²	Round	0,797	88	22,5	1050
16048	3 x 35 mm ²	Sector-shaped	1,155	83	20,4	1575
16041	1 x 50 mm ²	Round	0,499	53	13,2	750
16049	3 x 50 mm ²	Sector-shaped	1,552	94	23,4	2250
16042	1 x 70 mm ²	Round	0,707	62	15,4	1050
16050	3 x 70 mm ²	Sector-shaped	2,188	108	27,1	3150
16043	1 x 95 mm ²	Round	0,951	70	17,5	1425
16051	3 x 95 mm ²	Sector-shaped	2,988	125	31,3	4275
16044	1 x 120 mm ²	Round	1,200	78	19,5	1800
17755	1 G 120 mm ²	Round	1,208	78	19,5	1800
16052	3 x 120 mm ²	Sector-shaped	3,664	139	34,7	5400
16045	1 x 150 mm ²	Round	1,485	86	21,5	2250
16053	3 x 150 mm ²	Sector-shaped	4,546	152	37,9	6750
16046	1 x 185 mm ²	Round	1,882	96	24	2775
16054	3 x 185 mm ²	Sector-shaped	5,510	164	41	8325
16047	1 x 240 mm ²	Round	2,390	162	27	3600
16055	3 x 240 mm ²	Sector-shaped	7,469	190	47,6	10800

MarineLine YOZp 0,6/1 kV

Properties

Application:

Lightweight, armoured, reduced diameter low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- Class 2 conductors
- Lightweight, reduced diameter
- Halogen free and low smoke, flame retardant
- Tinned copper wire braid armouring
- Excellent abrasion resistance
- Different colour outer sheaths, other than black, available on request



Core identification:

- HD308 S2

Specifications

Product group	Shipboard low voltage cable
Type	MarineLine YOZp 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Product dependent
Core insulation	XLPE (VPE)
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

100 products

Part number	Construction	Shape of conductor	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16110	1 x 1,5 mm ²	Round	0,067	22	5,6	23
16111	2 x 1,5 mm ²	Round	0,101	35	8,7	45
16112	3 x 1,5 mm ²	Round	0,121	36	9,1	68
16113	4 x 1,5 mm ²	Round	0,146	40	9,9	90
16114	5 x 1,5 mm ²	Round	0,177	43	10,7	113
16115	6 x 1,5 mm ²	Round	0,212	47	11,8	135
16116	7 x 1,5 mm ²	Round	0,219	47	11,8	158
16118	10 x 1,5 mm ²	Round	0,340	63	15,4	225
16119	12 x 1,5 mm ²	Round	0,380	64	16,1	270
16120	16 x 1,5 mm ²	Round	0,495	73	17,8	360
16121	19 x 1,5 mm ²	Round	0,548	76	19	428
16430	20 x 1,5 mm ²	Round	0,579	80	20	450
16122	24 x 1,5 mm ²	Round	0,667	86	21,5	540
16159	27 x 1,5 mm ²	Round	0,744	91	22,7	608
16185	37 x 1,5 mm ²	Round	0,958	104	26,1	833
15984	3 G 1,5 mm ²	Round	0,121	36	9,1	68
15985	4 G 1,5 mm ²	Round	0,146	40	9,9	90
15986	5 G 1,5 mm ²	Round	0,178	43	10,7	113
15995	7 G 1,5 mm ²	Round	0,219	47	11,8	158
16595	10 G 1,5 mm ²	Round	0,343	63	15,2	225
16574	12 G 1,5 mm ²	Round	0,379	64	15,9	270
16597	14 G 1,5 mm ²	Round	0,433	68	16,8	315
16599	19 G 1,5 mm ²	Round	0,547	76	18,6	428
16600	24 G 1,5 mm ²	Round	0,666	86	21	540
16123	1 x 2,5 mm ²	Round	0,077	24	6,1	38
16124	2 x 2,5 mm ²	Round	0,130	39	9,7	75
16125	3 x 2,5 mm ²	Round	0,158	41	10,2	113
16126	4 x 2,5 mm ²	Round	0,198	45	11,2	150
16127	5 x 2,5 mm ²	Round	0,241	49	12,2	188
16128	7 x 2,5 mm ²	Round	0,298	53	13,2	263
16567	10 x 2,5 mm ²	Round	0,466	71	17,8	375
16437	12 x 2,5 mm ²	Round	0,527	110	18,3	450
16429	19 x 2,5 mm ²	Round	0,771	87	21,7	713
16540	24 x 2,5 mm ²	Round	0,943	96	24	900
15987	3 G 2,5 mm ²	Round	0,158	41	10,2	113
15988	4 G 2,5 mm ²	Round	0,199	45	11,2	150
15989	5 G 2,5 mm ²	Round	0,241	49	12,2	188
16572	7 G 2,5 mm ²	Round	0,338	56	14	263
16596	10 G 2,5 mm ²	Round	0,466	71	17,8	375
16573	12 G 2,5 mm ²	Round	0,537	110	18,3	450
16598	14 G 2,5 mm ²	Round	0,608	118	19,6	525
16129	1 x 4 mm ²	Round	0,093	26	6,6	60
16130	2 x 4 mm ²	Round	0,167	43	10,7	120
16131	3 x 4 mm ²	Round	0,215	46	11,5	180
16132	4 x 4 mm ²	Round	0,267	50	12,5	240
16536	3 G 4 mm ²	Round	0,215	46	11,5	180
15992	4 G 4 mm ²	Round	0,267	50	12,5	240

Low voltage cables

MarineLine YOZp 0,6/1 kV

1

Low voltage cables

Part number	Construction	Shape of conductor	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16586	5 G 4 mm ²	Round	0,354	58	14,4	300
16133	1 x 6 mm ²	Round	0,114	29	7,2	90
16134	2 x 6 mm ²	Round	0,217	48	11,9	180
16135	3 x 6 mm ²	Round	0,281	50	12,6	270
16136	4 x 6 mm ²	Round	0,390	59	14,8	360
16566	5 x 6 mm ²	Round	0,475	64	16,1	450
16089	7 x 6 mm ²	Round	0,605	70	17,1	630
15997	3 G 6 mm ²	Round	0,283	52	13	270
15990	4 G 6 mm ²	Round	0,392	56	14,3	360
16480	5 G 6 mm ²	Round	0,476	64	16,1	450
16109	7 G 6 mm ²	Round	0,606	71	17,6	630
16137	1 x 10 mm ²	Round	0,158	32	8,1	150
16138	2 x 10 mm ²	Round	0,308	54	13,5	300
16139	3 x 10 mm ²	Round	0,451	60	15,1	450
16140	4 x 10 mm ²	Round	0,570	67	16,7	600
16489	5 x 10 mm ²	Round	0,694	67	18,3	600
16534	3 G 10 mm ²	Round	0,451	60	15,2	450
15993	4 G 10 mm ²	Round	0,588	67	16,3	600
16108	5 G 10 mm ²	Round	0,701	67	17,9	600
16141	1 x 16 mm ²	Round	0,216	36	9,1	240
16142	2 x 16 mm ²	Round	0,470	66	16,5	480
16143	3 x 16 mm ²	Round	0,634	70	17,5	720
16144	4 x 16 mm ²	Round	0,811	77	19,3	960
16535	3 G 16 mm ²	Round	0,634	70	17,6	720
15994	4 G 16 mm ²	Round	0,810	77	19,4	960
15996	5 G 16 mm ²	Round	1,001	85	21,2	1200
16145	1 x 25 mm ²	Round	0,324	44	10,9	375
16146	2 x 25 mm ²	Round	0,700	80	20,1	750
16147	3 x 25 mm ²	Round	0,947	85	21,9	1125
16148	4 x 25 mm ²	Round	1,232	94	23,6	1500
16158	1 x 35 mm ²	Round	0,423	53	12,6	525
16157	2 x 35 mm ²	Round	0,914	94	23,4	1050
16149	3 x 35 mm ²	Sector-shaped	1,275	86	20,6	1575
16426	4 x 35 mm ²	Sector-shaped	1,676	95	23,6	2100
16436	5 G 35 mm ²	Round	2,031	121	30,2	2625
16401	1 x 50 mm ²	Round	0,591	59	14,7	750
16150	3 x 50 mm ²	Sector-shaped	1,680	96	23,2	2250
16427	4 x 50 mm ²	Sector-shaped	2,150	107	26,8	3000
16402	1 x 70 mm ²	Round	0,805	66	16,6	1050
16151	3 x 70 mm ²	Sector-shaped	2,350	112	27,2	3150
16403	1 x 95 mm ²	Round	1,076	75	18,7	1425
16152	3 x 95 mm ²	Sector-shaped	3,161	128	32,1	4275
16404	1 x 120 mm ²	Round	1,332	82	20,5	1800
16153	3 x 120 mm ²	Sector-shaped	3,989	142	35,5	5400
16405	1 x 150 mm ²	Round	1,633	90	22,6	2250
16154	3 x 150 mm ²	Sector-shaped	4,920	159	39,7	6750
16183	4 x 150 mm ²	Sector-shaped	6,414	181	45,3	9000
16406	1 x 185 mm ²	Round	2,047	101	25,3	2775

Low voltage cables

1

MarineLine YOZp 0,6/1 kV

Low voltage cables

Part number	Construction	Shape of conductor	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16155	3 x 185 mm ²	Sector-shaped	5,918	171	42,2	8325
16481	4 x 185 mm ²	Sector-shaped	7,848	192	48	11000
16407	1 x 240 mm ²	Round	2,573	112	27,9	3600
16156	3 x 240 mm ²	Sector-shaped	7,980	198	49,5	10800
16433	1 x 300 mm ²	Round	3,252	126	31,4	4500

MarineLine YZafp 0,6/1 kV

Properties

Application:

Alpet tape screened, lightweight, reduced diameter low voltage power cables for power and lighting applications in all ship areas where EMC protection is needed.

Characteristics:

- Class 2 conductors
- Lightweight, reduced diameter
- Halogen free and low smoke, flame retardant
- Excellent abrasion resistance
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineLine YZafp 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Construction outer shield	Alpet tape
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U ₀	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

38 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16601	2 x 1,5 mm ²	0,075	65	8,1	45
16602	3 x 1,5 mm ²	0,098	70	8,8	68
16603	4 x 1,5 mm ²	0,120	76	9,5	90
16604	5 x 1,5 mm ²	0,147	82	10,3	113
16605	6 x 1,5 mm ²	0,180	91	11,4	135
16606	7 x 1,5 mm ²	0,186	91	11,4	158
16607	8 x 1,5 mm ²	0,231	106	13,2	180
16609	10 x 1,5 mm ²	0,262	126	14,4	225
16611	12 x 1,5 mm ²	0,300	120	15	270
16615	16 x 1,5 mm ²	0,393	136	17	360
16618	19 x 1,5 mm ²	0,448	146	18,3	428
16623	24 x 1,5 mm ²	0,555	163	20,1	540
16626	27 x 1,5 mm ²	0,615	171	21,4	608
16627	30 x 1,5 mm ²	0,673	180	22,5	675
16628	37 x 1,5 mm ²	0,819	198	24,8	833
16670	3 G 1,5 mm ²	0,098	70	8,8	68
16671	4 G 1,5 mm ²	0,121	76	9,5	90
16672	5 G 1,5 mm ²	0,147	83	10,4	113
16676	7 G 1,5 mm ²	0,187	92	11,5	158
16631	2 x 2,5 mm ²	0,105	74	9,2	75
16632	3 x 2,5 mm ²	0,134	78	9,7	113
16633	4 x 2,5 mm ²	0,165	85	10,6	150
16634	5 x 2,5 mm ²	0,205	94	11,8	188
16635	6 x 2,5 mm ²	0,246	103	12,9	225
16636	7 x 2,5 mm ²	0,263	103	12,9	263
16637	8 x 2,5 mm ²	0,340	115	14,4	300
16639	10 x 2,5 mm ²	0,371	132	16,5	375
16641	12 x 2,5 mm ²	0,435	138	17,2	450
16645	16 x 2,5 mm ²	0,560	155	19,4	600
16648	19 x 2,5 mm ²	0,655	169	21,1	713
16653	24 x 2,5 mm ²	0,816	188	23,1	900
16656	27 x 2,5 mm ²	0,903	198	24,7	1013
16657	30 x 2,5 mm ²	1,003	208	26	1125
16658	37 x 2,5 mm ²	1,209	228	28,5	1388
16673	3 G 2,5 mm ²	0,134	78	9,7	113
16674	4 G 2,5 mm ²	0,165	85	10,6	150
16675	5 G 2,5 mm ²	0,210	94	11,8	188
16677	7 G 2,5 mm ²	0,263	102	12,8	263

MarineLine+ YZp 0,6/1 kV

Properties

Application:

Unarmoured, heavy duty, low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- Class 2 conductors
- Extruded inner bedding for perfectly round shaped cable
- Halogen free and low smoke, flame retardant
- Perfect abrasion resistance & suitable for heavy duty applications
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineLine+ YZp 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U ₀	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

35 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16060	2 x 1,5 mm ²	0,116	36	9	45
16061	3 x 1,5 mm ²	0,121	36	9	68
16062	4 x 1,5 mm ²	0,141	39	9,7	90
16063	5 x 1,5 mm ²	0,174	43	10,7	113
16420	3 G 1,5 mm ²	0,120	36	9	68
16419	4 G 1,5 mm ²	0,140	39	9,7	90
16418	5 G 1,5 mm ²	0,174	43	10,7	113
16064	2 x 2,5 mm ²	0,138	38	9,4	75
16065	3 x 2,5 mm ²	0,169	41	10,2	113
16066	4 x 2,5 mm ²	0,196	45	11,2	150
16067	5 x 2,5 mm ²	0,254	50	12,5	188
16417	3 G 2,5 mm ²	0,169	41	10,2	113
16416	4 G 2,5 mm ²	0,196	45	11,2	150
16415	5 G 2,5 mm ²	0,254	50	12,5	188
16068	2 x 4 mm ²	0,192	43	10,8	120
16069	3 x 4 mm ²	0,239	47	11,8	180
16070	4 x 4 mm ²	0,288	51	12,8	240
16084	3 G 4 mm ²	0,239	47	11,8	180
16071	2 x 6 mm ²	0,256	49	12,2	180
16072	3 x 6 mm ²	0,310	51	12,8	270
16073	4 x 6 mm ²	0,371	56	14	360
16085	3 G 6 mm ²	0,310	51	12,8	270
16074	2 x 10 mm ²	0,367	56	13,9	300
16075	3 x 10 mm ²	0,464	59	14,8	450
16076	4 x 10 mm ²	0,574	64	16,1	600
16083	4 G 10 mm ²	0,574	64	16,1	600
16077	2 x 16 mm ²	0,535	65	16,2	480
16078	3 x 16 mm ²	0,661	68	17,1	720
16079	4 x 16 mm ²	0,810	74	18,4	960
16086	5 G 16 mm ²	1,000	82	20,4	1200
16080	2 x 25 mm ²	0,825	80	20,1	750
16081	3 x 25 mm ²	1,020	84	21	1125
16082	4 x 25 mm ²	1,277	93	23,2	1500
16087	3 G 25 mm ²	1,039	86	21,4	1125
16088	4 G 25 mm ²	1,299	95	23,7	1500

MarineLine+ YOZp 0,6/1 kV

Properties

Application:

Armoured, heavy duty, low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- Class 2 conductors
- Extruded inner bedding for perfectly round shaped cable
- Halogen free and low smoke, flame retardant
- Tinned copper wire braid armouring
- Perfect abrasion resistance & suitable for heavy duty applications
- Different colour outer sheaths, other than black, available on request



Core identification:

- HD308 S2

Specifications

Product group	Shipboard low voltage cable
Type	MarineLine+ YOZp 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U ₀	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

39 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16160	2 x 1,5 mm ²	0,178	42	10,5	45
16161	3 x 1,5 mm ²	0,196	44	10,9	68
16162	4 x 1,5 mm ²	0,230	48	11,9	90
16163	5 x 1,5 mm ²	0,260	50	12,6	113
16414	3 G 1,5 mm ²	0,196	44	10,9	68
16413	4 G 1,5 mm ²	0,230	48	11,9	90
16412	5 G 1,5 mm ²	0,261	50	12,6	113
16164	2 x 2,5 mm ²	0,226	47	11,7	75
16165	3 x 2,5 mm ²	0,252	49	12,2	113
16166	4 x 2,5 mm ²	0,288	52	13	150
16167	5 x 2,5 mm ²	0,378	58	14,6	188
16411	3 G 2,5 mm ²	0,252	49	12,2	113
16410	4 G 2,5 mm ²	0,288	52	13	150
16409	5 G 2,5 mm ²	0,377	60	14,9	188
16168	2 x 4 mm ²	0,276	50	12,6	120
16169	3 x 4 mm ²	0,315	53	13,2	180
16170	4 x 4 mm ²	0,410	60	15,5	240
16186	3 G 4 mm ²	0,315	53	13,2	180
16454	4 G 4 mm ²	0,414	60	15,1	240
16446	5 G 4 mm ²	0,485	66	16,6	300
16171	2 x 6 mm ²	0,338	54	13,6	180
16172	3 x 6 mm ²	0,441	62	15,4	270
16173	4 x 6 mm ²	0,516	67	16,7	360
16187	3 G 6 mm ²	0,442	62	15,4	270
16174	2 x 10 mm ²	0,510	65	16,2	300
16175	3 x 10 mm ²	0,610	69	17,2	450
16176	4 x 10 mm ²	0,734	74	18,9	600
16428	3 G 10 mm ²	0,610	69	17,2	450
16445	4 G 10 mm ²	0,734	74	18,5	600
16177	2 x 16 mm ²	0,692	74	18,4	480
16178	3 x 16 mm ²	0,823	78	19,5	720
16179	4 x 16 mm ²	1,009	85	21,2	960
16188	5 G 16 mm ²	1,222	93	23,2	1200
16180	2 x 25 mm ²	0,995	88	22,1	750
16181	3 x 25 mm ²	1,220	93	23,3	1125
16182	4 x 25 mm ²	1,501	102	25,5	1500
16431	3 G 25 mm ²	1,216	94	23,4	1125
16432	4 G 25 mm ²	1,491	103	25,8	1500
16435	5 G 25 mm ²	1,819	113	28,3	1875

MarineFlex YZp 0,6/1 kV

Properties

Application:

Lightweight, unarmoured, flexible low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- Class 5 conductors
- Easy installation in tight spaces due to flexible conductors
- Halogen free and low smoke, flame retardant
- Excellent abrasion resistance
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineFlex YZp 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 5 = flexible
Core identification	HD 308 S2
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

31 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16488	1 x 16 mm ²	0,182	36	8,9	375
16486	2 x 16 mm ²	0,497	64	16,1	720
16447	3 x 16 mm ²	0,678	72	17,9	720
16484	4 x 16 mm ²	0,840	74	19,6	960
16537	1 x 25 mm ²	0,272	44	10,4	375
16482	3 x 25 mm ²	1,028	87	21,7	1125
16542	4 x 25 mm ²	1,281	96	23,8	1500
16090	1 x 35 mm ²	0,363	48	11,9	525
16091	2 x 35 mm ²	1,095	93	23,3	1050
16092	3 x 35 mm ²	1,429	103	25,6	1575
16438	4 x 35 mm ²	1,848	116	28,9	2100
16093	1 x 50 mm ²	0,495	54	13,4	750
16094	3 x 50 mm ²	1,935	118	29,1	2250
16439	4 x 50 mm ²	2,503	132	33,1	3000
16095	1 x 70 mm ²	0,691	62	15,6	1050
16096	3 x 70 mm ²	2,704	137	34,3	3150
16440	4 x 70 mm ²	3,469	152	37,9	4200
16097	1 x 95 mm ²	0,902	70	17,4	1425
16098	3 x 95 mm ²	3,491	153	38,2	4275
16441	4 x 95 mm ²	4,458	168	42,1	5700
16099	1 x 120 mm ²	1,150	78	19,2	1800
16100	3 x 120 mm ²	4,447	170	42,6	5400
16442	4 x 120 mm ²	5,691	188	46,9	7200
16101	1 x 150 mm ²	1,406	86	21,4	2250
16102	3 x 150 mm ²	5,498	190	47,4	6750
16103	1 x 185 mm ²	1,714	94	23,6	2775
16104	3 x 185 mm ²	6,600	208	52,1	8325
16105	1 x 240 mm ²	2,305	107	26,8	3600
16106	3 x 240 mm ²	8,821	236	59	10800
15983	4 x 240 mm ²	11,303	263	65,8	14400
16107	1 x 300 mm ²	2,870	123	30,8	4500

MarineFlex YOZp 0,6/1 kV

Properties

Application:

Lightweight, armoured, flexible low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- Class 5 conductors
- Easy installation in tight spaces due to flexible conductors
- Halogen free and low smoke, flame retardant
- Tinned copper wire braid armouring
- Excellent abrasion resistance
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineFlex YOZp 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 5 = flexible
Core identification	HD 308 S2
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U ₀	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

43 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16483	3 x 16 mm ²	0,891	84	20,9	720
16485	4 x 16 mm ²	1,103	92	22,9	960
16487	2 x 25 mm ²	1,065	97	23,4	750
16543	3 x 25 mm ²	1,282	103	24,7	1125
16491	4 x 25 mm ²	1,570	109	27,1	1500
16190	1 x 35 mm ²	0,408	51	12,7	525
16456	2 x 35 mm ²	1,361	106	26,6	1050
16191	3 x 35 mm ²	1,661	113	28,2	1575
16192	4 x 35 mm ²	2,079	124	30,9	2100
16523	4 G 35 mm ²	2,050	124	30,9	2100
16193	1 x 50 mm ²	0,590	60	15	750
16194	3 x 50 mm ²	2,202	127	31,5	2250
16195	4 x 50 mm ²	2,713	140	35	3000
17790	4 G 50 mm ²	2,720	139	34,7	3000
16473	5 G 50 mm ²	3,392	155	38,7	3750
16196	1 x 70 mm ²	0,802	69	17,2	1050
16197	3 x 70 mm ²	3,127	146	36,5	3150
16198	4 x 70 mm ²	3,938	162	40,4	4200
16524	4 G 70 mm ²	3,938	162	40,4	4200
16474	5 G 70 mm ²	4,820	178	44,6	5250
16199	1 x 95 mm ²	1,015	75	18,8	1425
16522	2 x 95 mm ²	3,201	154	38,4	2850
16200	3 x 95 mm ²	3,951	165	40,6	4275
16201	4 x 95 mm ²	4,993	181	45,2	5700
16490	4 G 95 mm ²	4,993	181	45,2	5700
16475	5 G 95 mm ²	6,132	199	49,8	7125
16202	1 x 120 mm ²	1,284	83	20,8	1800
16203	3 x 120 mm ²	4,960	181	45,3	5400
16443	4 x 120 mm ²	6,230	200	49,9	7200
16476	4 G 120 mm ²	6,230	200	49,9	7200
16477	5 G 120 mm ²	7,664	220	55,1	9000
16204	1 x 150 mm ²	1,558	92	23	2250
16205	3 x 150 mm ²	5,991	200	50	6750
16539	4 x 150 mm ²	7,662	220	55,1	9000
17791	4 G 150 mm ²	7,580	220	54,5	9000
16206	1 x 185 mm ²	1,880	101	25,2	2775
16207	3 x 185 mm ²	7,162	216	53,6	8325
16479	4 x 185 mm ²	9,112	240	59,9	11100
16478	4 G 185 mm ²	9,107	240	59,9	11100
16208	1 x 240 mm ²	2,479	114	28,5	3600
16209	3 x 240 mm ²	9,418	244	61,1	10800
15998	4 x 240 mm ²	12,025	274	68,4	14400
16455	1 x 300 mm ²	3,063	125	31,3	4500

MarineFlex YOZp 1,8/3 kV

Properties

Application:

Lightweight, armoured, frequency drive cables which offer good EMI- and mechanical protection.

Characteristics:

- Class 5 conductors
- Easy installation in tight spaces due to flexible conductors
- Halogen free and low smoke, flame retardant
- Tinned copper wire braid armouring
- Excellent abrasion resistance
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineFlex YOZp 1,8/3 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 5 = flexible
Core identification	HD 308 S2
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U ₀	1.8 kV
Nominal voltage U	3 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

15 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16507	1 x 35 mm ²	0,505	63	15,7	525
16515	3 x 35 mm ²	1,919	128	32,1	1575
16508	1 x 50 mm ²	0,658	69	17,2	750
16516	3 x 50 mm ²	2,662	147	36,7	2250
16509	1 x 70 mm ²	0,863	75	18,8	1050
16517	3 x 70 mm ²	3,566	166	41,6	3150
16510	1 x 95 mm ²	1,088	83	20,8	1425
16518	3 x 95 mm ²	4,395	181	45,3	4275
16511	1 x 120 mm ²	1,358	90	22,6	1800
16519	3 x 120 mm ²	5,379	196	49,1	5400
16512	1 x 150 mm ²	1,614	97	24,2	2250
16520	3 x 150 mm ²	6,348	211	52,7	6750
16513	1 x 185 mm ²	1,918	104	26	2775
16521	3 x 185 mm ²	7,428	224	56	8325
16514	1 x 240 mm ²	2,524	116	29	3600

MarineLine YOZp EMC 0,6/1 kV

Properties

Application:

Low voltage shipboard power cables with enhanced EMC properties for use in sensitive EMC areas and for Variable Frequency Drive applications. Enhanced shielding properties due to optimized tinned copper wire braid in combination with 100% foil-screen coverage.

Characteristics:

- Class 2 conductors
- Designed for situations that need Electro-Magnetic Interference to be limited to the minimum
- Halogen free and low smoke, flame retardant
- Tinned copper wire braid armouring
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineLine YOZp EMC 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Construction outer shield	EMC-screen consists of copper/PETtape and (CU) braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

21 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
17341	3 x 1,5 mm ²	0,126	38	9,1	68
16530	4 x 1,5 mm ²	0,152	40	9,9	90
17344	4 G 1,5 mm ²	0,151	40	9,9	90
17342	3 x 2,5 mm ²	0,163	42	10,4	113
16531	4 x 2,5 mm ²	0,204	45	11,2	150
16533	19 x 2,5 mm ²	0,792	90	22,4	713
17345	4 G 2,5 mm ²	0,205	45	11,2	150
16541	12 G 2,5 mm ²	0,542	110	18,3	450
16532	2 x 4 mm ²	0,172	43	10,7	120
17177	3 x 4 mm ²	0,219	46	11,6	180
16638	4 x 4 mm ²	0,278	50	12,6	240
17346	4 G 4 mm ²	0,273	50	12,5	240
17343	3 x 6 mm ²	0,286	52	13	270
17347	4 G 6 mm ²	0,366	56	13,9	360
17193	3 x 10 mm ²	0,466	61	15,2	450
17378	3 x 10 mm ² + 3 G 4 mm ²	0,632	61	18,0	450
17219	4 G 10 mm ²	0,584	67	16,3	600
17348	3 x 16 mm ²	0,652	70	17,2	720
17176	3 x 16 mm ² + 3 G 6 mm ²	0,882	84	20,8	990
17184	4 G 16 mm ²	0,828	77	19,3	960
17197	3 x 25 mm ²	0,967	86	21,5	1125

MarineLine+ YOZp EMC 0,6/1 kV

Properties

Application:

Armoured, heavy duty, low voltage power cables for power and lighting applications in all ship areas where EMC protection is needed.

Characteristics:

- Class 2 conductors
- Designed for situations that need Electro-Magnetic Interference to be limited to the minimum
- Halogen free and low smoke, flame retardant
- Tinned copper wire braid armouring
- Extruded inner bedding for perfectly round shaped cable
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineLine+ YOZp EMC 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Construction outer shield	EMC-screen consists of copper/PETtape and (CU) braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U ₀	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

MarineLine+ YOZp EMC 0,6/1 kV

2 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
17179	3 x 16 mm ²	0,846	78	19,7	720
17215	3 x 25 mm ²	1,242	93	23,3	1125

MarineFlex YOZp EMC 0,6/1 kV

Properties

Application:

Lightweight, armoured, flexible low voltage power cables for power and lighting applications in all ship areas where EMC protection is needed.

Characteristics:

- Class 5 conductors
- Easy installation in tight spaces due to flexible conductors
- Halogen free and low smoke, flame retardant
- Tinned copper wire braid armouring
- Combined screen of copper-pet tape and tinned copper wire braid for optimal screening
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineFlex YOZp EMC 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 5 = flexible
Core identification	HD 308 S2
Construction outer shield	EMC-screen consists of copper/PETtape and (CU) braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

18 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
17198	3 x 35 mm ² Klasse 5	1,688	113	28,3	1575
17217	4 x 35 mm ² Klasse 5	2,108	124	31	2100
55902	3 x 35 mm ² + 3 G 6 mm ² Klasse 5	2,281	125	31,2	3150
17160	1 x 50 mm ² Klasse 5	0,597	60	15	750
17199	3 x 50 mm ² Klasse 5	2,232	127	31,8	2250
17178	3 x 70 mm ² Klasse 5	3,211	148	37	3150
17379	3 x 70 mm ² + 3 G 16 mm ² Klasse 5	3,948	166	41,5	3150
17183	4 G 70 mm ² Klasse 5	3,995	162	41	4200
17218	1 x 95 mm ² Klasse 5	1,036	75	18,8	1425
17376	2 x 95 mm ² Klasse 5	3,283	165	38,9	4275
17195	3 x 95 mm ² Klasse 5	3,895	165	41,3	4275
17214	4 x 95 mm ² Klasse 5	5,064	181	45,3	5700
17399	1 x 120 mm ² Klasse 5	1,298	83	20,7	1800
17213	3 x 120 mm ² Klasse 5	5,010	182	45,4	5400
55903	3 x 120 mm ² + 3 G 25 mm ² Klasse 5	5,797	194	48,5	5400
17400	1 x 150 mm ² Klasse 5	1,573	92	22,9	2250
17216	3 x 150 mm ² Klasse 5	6,121	200	50,1	6750
17194	1 x 185 mm ² Klasse 5	1,898	101	25,3	2775

MarineFlex YOZp EMC 1,8/3 kV

Properties

Application:

Lightweight, EMC screened and armoured, special frequency drive cables which offer excellent EMI- and mechanical protection for use in places that need Electro-Magnetic Interference to be limited to the minimum.

Characteristics:

- Class 5 conductors
- Easy installation in tight spaces due to flexible conductors
- Halogen free and low smoke, flame retardant
- Combined screen of copper-pet tape and tinned copper wire braid for optimal screening
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineFlex YOZp EMC 1,8/3 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 5 = flexible
Core identification	HD 308 S2
Construction outer shield	EMC-screen consists of copper/PETtape and (CU) braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U0	1.8 kV
Nominal voltage U	3 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

7 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
17782	3 x 35/25 mm ² Klasse 5	2,211	138	34,5	1575
17826	3 x 50 mm ² Klasse 5	2,796	150	37,4	2250
17783	3 x 70/35 mm ² Klasse 5	3,582	165	41,3	3150
17784	3 x 95/50 mm ² Klasse 5	4,485	182	45,4	4275
17785	3 x 120/70 mm ² Klasse 5	5,829	207	51,8	5400
55901	3 x 120 mm ² + 3 G 25 mm ² Klasse 5	6,894	228	57,1	6525
55900	1 x 185 mm ² Klasse 5	1,935	104	26,1	2775

MarineMultiFlex BOQp 0,6/1 kV

Properties

Application:

Lightweight, armoured, double screened, low voltage power cables for power and lighting applications in all ship areas. Applicable where repeated bending and working in harsh environments is required, like azipod drives, powering underwater dredger motors and use in cable chains.

Characteristics:

- Class 5 conductors
- Filled cable to facilitate optimal sealing in cable transits
- Halogen free and low smoke, flame retardant
- Tinned copper wire braid armouring
- High abrasion resistance due to PUR outer sheath and a special combined EMI screening for use in frequency drive applications
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineMultiFlex BOQp 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu, tinned
Shape of conductor	Round
Core insulation	Rubber (EPR)
Conductor category	Class 5 = flexible
Core identification	HD 308 S2
Construction outer shield	EMC-screen consists of copper/PETtape and (CU) braiding
Material outer sheath	PUR (Polyurethane)
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1
Nominal voltage U ₀	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

MarineMultiFlex BOQp 0,6/1 kV

2 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
17349	3 x 50 mm ²	3,293	258	43	2250
17351	3 x 95 mm ²	5,175	317	52,9	4275

MarineMultiFlex BOQp 1,8/3 kV

Properties

Application:

Lightweight, armoured, double screened, low voltage power cables for power and lighting applications in all ship areas. Applicable where repeated bending and working in harsh environments is required, like azipod drives, powering underwater dredger motors and use in cable chains.

Characteristics:

- Class 5 conductors
- Filled cable to facilitate optimal sealing in cable transits
- Halogen free and low smoke, flame retardant
- Tinned copper wire braid armouring
- High abrasion resistance due to PUR outer sheath and a special combined EMI screening for use in frequency drive applications
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineMultiFlex BOQp 1,8/3 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu, tinned
Shape of conductor	Round
Core insulation	Product dependent
Conductor category	Class 5 = flexible
Core identification	HD 308 S2
Construction outer shield	EMC-screen consists of copper/PETtape and (CU) braiding
Material outer sheath	PUR (Polyurethane)
Colour outer sheath	Black
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1
Nominal voltage U ₀	1.8 kV
Nominal voltage U	3 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

MarineMultiFlex BOQp 1,8/3 kV

3 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16544	3 x 120 mm ²	5,678	316	52,6	5400
16545	3 x 150 mm ²	7,113	345	57,5	6750
16547	3 x 240 mm ²	10,084	385	64	10800

MarineLine YZp FR 0,6/1 kV

Properties

Application:

Lightweight, fire resistant, unarmoured, reduced diameter low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- Class 2 conductors
- Lightweight, reduced diameter
- Halogen free and low smoke
- Fire resistant according IEC 60331
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineLine YZp FR 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	Mica + XLPE
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Orange
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Insulation integrity in accordance with IEC 60331	Yes
Nominal voltage U ₀	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

33 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
26001	2 x 1,5 mm ²	0,077	34	8,5	45
26002	3 x 1,5 mm ²	0,096	36	8,9	68
26003	4 x 1,5 mm ²	0,123	39	9,8	90
26004	5 x 1,5 mm ²	0,149	43	10,7	113
26006	7 x 1,5 mm ²	0,192	47	11,8	158
26009	12 x 1,5 mm ²	0,314	63	15,8	270
26011	19 x 1,5 mm ²	0,485	78	19,4	428
26013	27 x 1,5 mm ²	0,667	91	22,7	608
26080	3 G 1,5 mm ²	0,096	36	8,9	68
26081	4 G 1,5 mm ²	0,121	39	9,8	90
26082	5 G 1,5 mm ²	0,149	43	10,7	113
26017	2 x 2,5 mm ²	0,102	39	9,7	75
26018	3 x 2,5 mm ²	0,131	41	10,3	113
26019	4 x 2,5 mm ²	0,172	46	11,4	150
26020	5 x 2,5 mm ²	0,213	50	12,5	188
26084	3 G 2,5 mm ²	0,131	41	10,3	113
26085	4 G 2,5 mm ²	0,172	46	11,4	150
26086	5 G 2,5 mm ²	0,213	50	12,5	188
26024	2 x 4 mm ²	0,134	42	10,5	120
26025	3 x 4 mm ²	0,185	43	10,7	180
26026	4 x 4 mm ²	0,239	48	11,9	240
26028	2 x 6 mm ²	0,187	51	12,8	180
26029	3 x 6 mm ²	0,253	54	13,6	270
26030	4 x 6 mm ²	0,334	60	15,1	360
26032	2 x 10 mm ²	0,275	56	13,9	300
26033	3 x 10 mm ²	0,379	59	14,8	450
26034	4 x 10 mm ²	0,493	65	16,2	600
26036	2 x 16 mm ²	0,397	63	15,8	480
26037	3 x 16 mm ²	0,565	68	17	720
26038	4 x 16 mm ²	0,737	75	18,7	960
26041	3 x 25 mm ²	0,894	84	21	1125
26042	4 x 25 mm ²	1,159	93	23,3	1500
26063	1 x 150 mm ²	1,507	86	21,5	2250

MarineLine YZp X-FR 0,6/1 kV

Properties

Application:

Lightweight, fire resistant, unarmoured, reduced diameter low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- Class 2 conductors
- Lightweight, reduced diameter
- Halogen free and low smoke, flame retardant
- Fire resistant according IEC 60331 1/2
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineLine YZp X-FR 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Product dependent
Core insulation	Mica + XLHFFR
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Orange
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Insulation integrity in accordance with IEC 60331	Yes
Nominal voltage U ₀	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

85 products

Part number	Construction	Shape of conductor	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
27000	1 x 1,5 mm ²	Round	0,048	23	5,8	23
27001	2 x 1,5 mm ²	Round	0,098	40	9,9	45
27002	3 x 1,5 mm ²	Round	0,125	42	10,5	68
27003	4 x 1,5 mm ²	Round	0,159	46	11,5	90
27004	5 x 1,5 mm ²	Round	0,203	51	12,8	113
27005	6 x 1,5 mm ²	Round	0,243	56	13,9	135
27006	7 x 1,5 mm ²	Round	0,254	56	13,9	158
27007	8 x 1,5 mm ²	Round	0,298	52	13	180
27008	10 x 1,5 mm ²	Round	0,362	63	15,7	225
27009	12 x 1,5 mm ²	Round	0,417	59	14,8	270
27010	16 x 1,5 mm ²	Round	0,551	68	21,1	360
27011	19 x 1,5 mm ²	Round	0,636	73	22,8	428
27012	24 x 1,5 mm ²	Round	0,830	103	25,6	540
27013	27 x 1,5 mm ²	Round	0,892	110	27,4	608
27014	30 x 1,5 mm ²	Round	0,980	113	28,3	675
27015	37 x 1,5 mm ²	Round	1,196	125	31,2	833
27080	3 G 1,5 mm ²	Round	0,125	42	10,4	68
27081	4 G 1,5 mm ²	Round	0,158	47	11,7	90
27082	5 G 1,5 mm ²	Round	0,200	51	12,8	113
27083	7 G 1,5 mm ²	Round	0,260	56	14,1	158
27016	1 x 2,5 mm ²	Round	0,061	25	6,3	38
27017	2 x 2,5 mm ²	Round	0,125	44	10,9	75
27018	3 x 2,5 mm ²	Round	0,162	46	11,4	113
27019	4 x 2,5 mm ²	Round	0,215	51	12,8	150
27020	5 x 2,5 mm ²	Round	0,267	56	14,1	188
27021	6 x 2,5 mm ²	Round	0,315	61	15,3	225
27022	7 x 2,5 mm ²	Round	0,336	61	15,3	263
27096	16 x 2,5 mm ²	Round	0,740	94	23,4	600
27084	3 G 2,5 mm ²	Round	0,167	47	11,7	113
27085	4 G 2,5 mm ²	Round	0,212	51	12,8	150
27086	5 G 2,5 mm ²	Round	0,273	46	11,6	188
27087	7 G 2,5 mm ²	Round	0,336	61	15,3	263
27023	1 x 4 mm ²	Round	0,079	27	6,8	60
27024	2 x 4 mm ²	Round	0,162	48	11,9	120
27025	3 x 4 mm ²	Round	0,223	51	12,8	180
27026	4 x 4 mm ²	Round	0,287	56	14	240
27088	3 G 4 mm ²	Round	0,224	51	12,8	180
27089	4 G 4 mm ²	Round	0,284	56	14	240
27027	1 x 6 mm ²	Round	0,102	30	7,4	90
27028	2 x 6 mm ²	Round	0,214	53	13,2	180
27029	3 x 6 mm ²	Round	0,291	56	14	270
27030	4 x 6 mm ²	Round	0,383	62	15,6	360
27090	3 G 6 mm ²	Round	0,291	57	14,2	270
27091	4 G 6 mm ²	Round	0,384	62	15,6	360
27031	1 x 10 mm ²	Round	0,143	32	8,1	150
27032	2 x 10 mm ²	Round	0,298	59	14,7	300
27033	3 x 10 mm ²	Round	0,420	63	15,8	450

Low voltage cables

MarineLine YZp X-FR 0,6/1 kV

1

Low voltage cables

Part number	Construction	Shape of conductor	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
27034	4 x 10 mm ²	Round	0,547	70	17,4	600
27092	3 G 10 mm ²	Round	0,417	63	15,8	450
27093	4 G 10 mm ²	Round	0,545	70	17,4	600
27035	1 x 16 mm ²	Round	0,210	38	9,4	240
27036	2 x 16 mm ²	Round	0,435	69	17,2	480
27037	3 x 16 mm ²	Round	0,618	74	18,4	720
27038	4 x 16 mm ²	Round	0,808	81	20,3	960
27094	3 G 16 mm ²	Round	0,617	74	18,4	720
27095	4 G 16 mm ²	Round	0,799	80	20,1	960
27039	1 x 25 mm ²	Round	0,309	45	11,2	375
27040	2 x 25 mm ²	Round	0,676	84	21,3	750
27041	3 x 25 mm ²	Round	0,954	90	23	1125
27042	4 x 25 mm ²	Round	1,238	100	24,9	1500
27043	1 x 35 mm ²	Round	0,412	49	12,3	525
27044	2 x 35 mm ²	Round	0,883	92	23,5	1050
27045	3 x 35 mm ²	Sector-shaped	1,264	87	21,7	1575
27046	4 x 35 mm ²	Sector-shaped	1,711	101	25,3	2100
27047	1 x 50 mm ²	Round	0,539	56	14,1	750
27048	2 x 50 mm ²	Round	1,216	109	28,5	1500
27049	3 x 50 mm ²	Sector-shaped	1,669	98	24,4	2250
27050	4 x 50 mm ²	Sector-shaped	2,206	113	28,2	3000
27051	1 x 70 mm ²	Round	0,754	64	16	1050
27053	3 x 70 mm ²	Sector-shaped	2,359	113	28,2	3150
27054	4 x 70 mm ²	Sector-shaped	3,098	131	32,7	4200
27055	1 x 95 mm ²	Round	1,016	73	18,3	1425
27057	3 x 95 mm ²	Sector-shaped	3,136	126	31,5	4275
27058	4 x 95 mm ²	Sector-shaped	4,158	147	36,8	5700
27059	1 x 120 mm ²	Round	1,271	80	19,9	1800
27061	3 x 120 mm ²	Sector-shaped	3,879	140	34,9	5400
27062	4 x 120 mm ²	Sector-shaped	5,193	164	40,9	7200
27063	1 x 150 mm ²	Round	1,579	88	22	2250
27065	3 x 150 mm ²	Sector-shaped	4,812	153	38,2	6750
27066	4 x 150 mm ²	Sector-shaped	6,335	182	45,4	9000
27067	1 x 185 mm ²	Round	1,977	99	24,7	2775
27069	3 x 185 mm ²	Sector-shaped	5,849	171	42,7	8325
27070	4 x 185 mm ²	Sector-shaped	7,964	196	49	11100
27071	1 x 240 mm ²	Round	2,534	109	27,3	3600
27075	1 x 300 mm ²	Round	3,130	123	30,8	4500

MarineLine YOZp FR 0,6/1 kV

Properties

Application:

Lightweight, fire resistant, armoured, reduced diameter low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- Class 2 conductors
- Lightweight, reduced diameter
- Halogen free and low smoke
- Fire resistant according IEC 60331
- Tinned copper wire braid armouring
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineLine YOZp FR 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Product dependent
Core insulation	Mica + XLPE
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Orange
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Insulation integrity in accordance with IEC 60331	Yes
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

43 products

Part number	Construction	Shape of conductor	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
26101	2 x 1,5 mm ²	Round	0,108	37	9,2	45
26102	3 x 1,5 mm ²	Round	0,133	39	9,7	68
26104	5 x 1,5 mm ²	Round	0,196	46	11,6	113
26105	6 x 1,5 mm ²	Round	0,230	50	12,5	135
26106	7 x 1,5 mm ²	Round	0,238	50	12,5	158
26109	12 x 1,5 mm ²	Round	0,420	68	17,1	270
26111	19 x 1,5 mm ²	Round	0,606	83	20,7	428
26113	27 x 1,5 mm ²	Round	0,811	96	24	608
26181	4 G 1,5 mm ²	Round	0,157	42	10,5	90
26182	5 G 1,5 mm ²	Round	0,195	46	11,6	113
26117	2 x 2,5 mm ²	Round	0,106	42	10,4	75
26118	3 x 2,5 mm ²	Round	0,179	45	11,2	113
26119	4 x 2,5 mm ²	Round	0,216	48	12,1	150
26120	5 x 2,5 mm ²	Round	0,259	53	13,2	188
26121	6 x 2,5 mm ²	Round	0,348	60	15,1	225
26122	7 x 2,5 mm ²	Round	0,361	60	15,1	263
26183	21 x 2,5 mm ²	Round	0,922	102	25,2	788
26184	3 G 2,5 mm ²	Round	0,178	45	11,2	113
26185	4 G 2,5 mm ²	Round	0,214	48	12,1	150
26186	5 G 2,5 mm ²	Round	0,259	53	13,2	188
26124	2 x 4 mm ²	Round	0,182	46	11,4	120
26125	3 x 4 mm ²	Round	0,229	46	11,6	180
26126	4 x 4 mm ²	Round	0,286	52	13,1	240
26128	2 x 6 mm ²	Round	0,235	52	12,9	180
26129	3 x 6 mm ²	Round	0,302	54	13,6	270
26130	4 x 6 mm ²	Round	0,422	66	16,6	360
26131	1 x 10 mm ²	Round	0,165	34	8,5	150
26132	2 x 10 mm ²	Round	0,362	61	15,2	300
26133	3 x 10 mm ²	Round	0,473	64	16,1	450
26134	4 x 10 mm ²	Round	0,611	71	17,7	600
26135	1 x 16 mm ²	Round	0,226	38	9,4	240
26136	2 x 16 mm ²	Round	0,502	69	17,3	480
26137	3 x 16 mm ²	Round	0,678	73	18,3	720
26138	4 x 16 mm ²	Round	0,862	81	20,2	960
26139	1 x 25 mm ²	Round	0,339	46	11,4	375
26140	2 x 25 mm ²	Round	0,743	84	21	750
26141	3 x 25 mm ²	Round	1,016	90	22,5	1125
26142	4 x 25 mm ²	Round	1,306	99	24,8	1500
26146	4 x 35 mm ²	Sector-shaped	1,728	198	24,7	2100
26150	4 x 50 mm ²	Sector-shaped	2,224	222	27,7	3000
26154	4 x 70 mm ²	Sector-shaped	3,100	252	31,5	4200
26157	3 x 95 mm ²	Sector-shaped	3,274	266	33,3	4275
26163	1 x 150 mm ²	Round	1,662	92	23,1	2250

MarineLine YOZp X-FR 0,6/1 kV

Properties

Application:

Lightweight, fire resistant, armoured, reduced diameter low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- Class 2 conductors
- Lightweight, reduced diameter
- Halogen free and low smoke
- Fire resistant according IEC 60331 1/2
- Tinned copper wire braid armouring
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineLine YOZp X-FR 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Product dependent
Core insulation	Mica + XLHFFR
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Orange
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Insulation integrity in accordance with IEC 60331	Yes
Nominal voltage U ₀	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

95 products

Part number	Construction	Shape of conductor	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
27100	1 x 1,5 mm ²	Round	0,080	26	6,5	23
27101	2 x 1,5 mm ²	Round	0,135	42	10,6	45
27102	3 x 1,5 mm ²	Round	0,168	45	11,2	68
27103	4 x 1,5 mm ²	Round	0,209	50	12,4	90
27104	5 x 1,5 mm ²	Round	0,253	54	13,5	113
27105	6 x 1,5 mm ²	Round	0,331	59	14,8	135
27106	7 x 1,5 mm ²	Round	0,342	59	14,8	158
27107	8 x 1,5 mm ²	Round	0,424	68	16,9	180
27108	10 x 1,5 mm ²	Round	0,486	78	19,4	225
27109	12 x 1,5 mm ²	Round	0,542	80	20	270
27110	16 x 1,5 mm ²	Round	0,698	90	22,6	360
27111	19 x 1,5 mm ²	Round	0,791	97	24,3	428
27112	24 x 1,5 mm ²	Round	0,962	108	26,8	540
27113	27 x 1,5 mm ²	Round	1,077	114	28,5	608
27114	30 x 1,5 mm ²	Round	1,090	118	29,4	675
27115	37 x 1,5 mm ²	Round	1,411	130	32,5	833
27180	3 G 1,5 mm ²	Round	0,166	45	11,2	68
27181	4 G 1,5 mm ²	Round	0,209	50	12,4	90
27182	5 G 1,5 mm ²	Round	0,282	54	13,9	113
27183	7 G 1,5 mm ²	Round	0,341	59	14,8	158
27172	10 G 1,5 mm ²	Round	0,485	78	19,2	225
27173	14 G 1,5 mm ²	Round	0,624	86	21,3	315
27174	19 G 1,5 mm ²	Round	0,790	97	24,1	428
27116	1 x 2,5 mm ²	Round	0,092	28	7	38
27117	2 x 2,5 mm ²	Round	0,172	47	11,8	75
27118	3 x 2,5 mm ²	Round	0,214	50	12,4	113
27119	4 x 2,5 mm ²	Round	0,294	55	13,7	150
27120	5 x 2,5 mm ²	Round	0,355	60	15	188
27196	19 x 2,5 mm ²	Round	1,043	110	27,4	713
27398	21 x 2,5 mm ²	Round	1,128	110	28,5	713
27184	3 G 2,5 mm ²	Round	0,215	50	12,4	113
27185	4 G 2,5 mm ²	Round	0,293	55	13,7	150
27186	5 G 2,5 mm ²	Round	0,354	60	15,8	188
27187	7 G 2,5 mm ²	Round	0,439	67	16,8	263
27123	1 x 4 mm ²	Round	0,110	30	7,5	60
27124	2 x 4 mm ²	Round	0,214	51	12,8	120
27125	3 x 4 mm ²	Round	0,302	55	13,7	180
27126	4 x 4 mm ²	Round	0,382	62	15,5	240
27188	3 G 4 mm ²	Round	0,302	55	13,7	180
27189	4 G 4 mm ²	Round	0,382	62	15,5	240
27178	5 G 4 mm ²	Round	0,469	68	17,1	300
27127	1 x 6 mm ²	Round	0,133	32	8,1	90
27128	2 x 6 mm ²	Round	0,298	56	14,4	180
27129	3 x 6 mm ²	Round	0,386	62	15,5	270
27130	4 x 6 mm ²	Round	0,483	68	16,9	360
27190	3 G 6 mm ²	Round	0,386	62	15,5	270
27191	4 G 6 mm ²	Round	0,480	68	16,9	360

Low voltage cables

MarineLine YOZp X-FR 0,6/1 kV

Part number	Construction	Shape of conductor	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16457	5 G 6 mm ²	Round	0,598	75	18,7	450
27131	1 x 10 mm ²	Round	0,179	36	9	150
27132	2 x 10 mm ²	Round	0,399	65	16,2	300
27133	3 x 10 mm ²	Round	0,518	68	17,1	450
27134	4 x 10 mm ²	Round	0,669	76	18,9	600
27192	3 G 10 mm ²	Round	0,516	68	16,9	450
27193	4 G 10 mm ²	Round	0,667	76	18,9	600
16458	5 G 10 mm ²	Round	0,817	82	20,6	750
27135	1 x 16 mm ²	Round	0,246	40	10	240
27136	2 x 16 mm ²	Round	0,557	75	18,5	480
27137	3 x 16 mm ²	Round	0,732	79	19,5	720
27138	4 x 16 mm ²	Round	0,948	87	21,8	960
27194	3 G 16 mm ²	Round	0,730	79	19,7	720
27195	4 G 16 mm ²	Round	0,948	87	21,8	960
16459	5 G 16 mm ²	Round	1,175	96	24,1	1200
27139	1 x 25 mm ²	Round	0,358	48	12,1	375
27140	2 x 25 mm ²	Round	0,800	90	22,4	750
27141	3 x 25 mm ²	Round	1,075	95	23,7	1125
27142	4 x 25 mm ²	Round	1,398	105	26,2	1500
16460	4 G 25 mm ²	Round	1,397	105	26,2	1500
16461	5 G 25 mm ²	Round	1,742	117	29,2	1875
27143	1 x 35 mm ²	Round	0,462	52	13,1	525
27144	2 x 35 mm ²	Round	1,012	98	24,4	1050
27145	3 x 35 mm ²	Sector-shaped	1,408	93	23,2	1575
27146	4 x 35 mm ²	Sector-shaped	1,871	106	26,4	2100
27147	1 x 50 mm ²	Round	0,718	62	15,5	750
27148	2 x 50 mm ²	Round	1,330	115	28,8	1500
27149	3 x 50 mm ²	Sector-shaped	1,841	104	25,7	2250
27150	4 x 50 mm ²	Sector-shaped	2,392	119	29,7	3000
17361	5 G 50 mm ²	Sector-shaped	3,100	154	38,6	3750
27151	1 x 70 mm ²	Round	0,871	70	17,4	1050
27153	3 x 70 mm ²	Sector-shaped	2,555	119	29,7	3150
27154	4 x 70 mm ²	Sector-shaped	3,296	136	34	4200
27155	1 x 95 mm ²	Round	1,134	79	19,7	1425
27157	3 x 95 mm ²	Sector-shaped	3,330	131	32,4	4275
27158	4 x 95 mm ²	Sector-shaped	4,528	155	38,7	5700
27179	5 G 95 mm ²	Round	2,254	128	31,9	7125
27159	1 x 120 mm ²	Round	1,411	86	21,5	1800
27161	3 x 120 mm ²	Sector-shaped	4,263	147	36,8	5400
27162	4 x 120 mm ²	Sector-shaped	5,609	171	42,8	7200
27163	1 x 150 mm ²	Round	1,733	94	23,2	2250
27165	3 x 150 mm ²	Sector-shaped	5,199	160	40,1	6750
27166	4 x 150 mm ²	Sector-shaped	6,821	188	47,1	9000
27167	1 x 185 mm ²	Round	2,138	104	26,1	2775
27169	3 x 185 mm ²	Sector-shaped	6,705	178	44,6	8325
27170	4 x 185 mm ²	Sector-shaped	8,475	204	50,9	11100
27171	1 x 240 mm ²	Round	2,711	115	28,7	3600
27175	1 x 300 mm ²	Round	3,346	130	32,4	4500

MarineLine+ YZp X-FR 0,6/1 kV

Properties

Application:

Unarmoured, heavy duty, fire resistant, low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- Class 2 conductors
- Extruded inner bedding for perfectly round shaped cable
- Halogen free and low smoke
- Fire resistant according IEC 60331 1/2
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineLine+ YZp X-FR 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	Mica + XLHFFR
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Orange
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Insulation integrity in accordance with IEC 60331	Yes
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

41 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
27200	2 x 1,5 mm ²	0,168	43	10,8	45
27201	3 x 1,5 mm ²	0,190	46	11,4	68
27202	4 x 1,5 mm ²	0,223	50	12,4	90
27203	5 x 1,5 mm ²	0,273	55	13,7	113
27280	3 G 1,5 mm ²	0,191	46	11,4	68
27281	4 G 1,5 mm ²	0,223	50	12,4	90
27282	5 G 1,5 mm ²	0,273	55	13,7	113
27204	2 x 2,5 mm ²	0,209	47	11,8	75
27205	3 x 2,5 mm ²	0,238	50	12,4	113
27206	4 x 2,5 mm ²	0,288	55	13,7	150
27207	5 x 2,5 mm ²	0,349	60	15	188
27283	3 G 2,5 mm ²	0,237	50	12,4	113
27284	4 G 2,5 mm ²	0,287	55	13,7	150
27285	5 G 2,5 mm ²	0,349	60	15	188
27208	2 x 4 mm ²	0,268	52	13	120
27209	3 x 4 mm ²	0,311	55	13,7	180
27210	4 x 4 mm ²	0,376	60	14,9	240
27286	3 G 4 mm ²	0,311	55	13,7	180
27287	4 G 4 mm ²	0,375	60	14,9	240
27288	5 G 4 mm ²	0,459	66	16,5	300
27211	2 x 6 mm ²	0,334	56	14,1	180
27212	3 x 6 mm ²	0,394	60	14,9	270
27213	4 x 6 mm ²	0,492	66	16,5	360
27289	3 G 6 mm ²	0,395	60	14,9	270
27290	4 G 6 mm ²	0,489	66	16,5	360
27291	5 G 6 mm ²	0,591	72	18,1	450
27214	2 x 10 mm ²	0,455	63	15,8	300
27215	3 x 10 mm ²	0,549	68	16,9	450
27216	4 x 10 mm ²	0,687	74	18,5	600
27292	3 G 10 mm ²	0,546	67	16,7	450
27293	4 G 10 mm ²	0,685	74	18,5	600
27294	5 G 10 mm ²	0,817	81	20,2	750
27217	2 x 16 mm ²	0,643	72	18,1	480
27218	3 x 16 mm ²	0,795	77	19,3	720
27219	4 x 16 mm ²	0,993	85	21,2	960
27295	3 G 16 mm ²	0,795	77	19,3	720
27296	4 G 16 mm ²	0,993	85	21,2	960
27297	5 G 16 mm ²	1,209	94	23,5	1200
27220	2 x 25 mm ²	0,963	88	22	750
27221	3 x 25 mm ²	1,180	93	23,3	1125
27222	4 x 25 mm ²	1,485	103	25,8	1500

MarineLine+ YOZp X-FR 0,6/1 kV

Properties

Application:

Armoured, heavy duty, fire resistant, low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- Class 2 conductors
- Extruded inner bedding for perfectly round shaped cable
- Halogen free and low smoke
- Fire resistant according IEC 60331 1/2
- Tinned copper wire braid armouring
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineLine+ YOZp X-FR 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	Mica + XLHFFR
Conductor category	Class 2 = stranded
Core identification	HD 308 S2
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Orange
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Insulation integrity in accordance with IEC 60331	Yes
Nominal voltage U ₀	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

47 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
27300	2 x 1,5 mm ²	0,243	50	12,4	45
27301	3 x 1,5 mm ²	0,269	52	13	68
27302	4 x 1,5 mm ²	0,348	58	14,4	90
27303	5 x 1,5 mm ²	0,404	62	15,5	113
27326	8 x 1,5 mm ²	0,555	74	18,6	180
27380	3 G 1,5 mm ²	0,269	52	13	68
27381	4 G 1,5 mm ²	0,348	59	14,8	90
27382	5 G 1,5 mm ²	0,404	64	15,7	113
27324	7 G 1,5 mm ²	0,454	59	16,8	158
27304	2 x 2,5 mm ²	0,328	55	13,8	75
27305	3 x 2,5 mm ²	0,363	58	14,4	113
27306	4 x 2,5 mm ²	0,422	62	15,5	150
27307	5 x 2,5 mm ²	0,499	70	17,4	188
27325	6 x 2,5 mm ²	0,572	74	18,4	225
27383	3 G 2,5 mm ²	0,362	58	14,6	113
27384	4 G 2,5 mm ²	0,426	64	15,9	150
27385	5 G 2,5 mm ²	0,498	70	17,4	188
27308	2 x 4 mm ²	0,392	61	15,2	120
27309	3 x 4 mm ²	0,443	64	15,9	180
27310	4 x 4 mm ²	0,524	69	17,3	240
27386	3 G 4 mm ²	0,442	64	15,9	180
27387	4 G 4 mm ²	0,524	69	17,3	240
27388	5 G 4 mm ²	0,606	75	18,7	300
27311	2 x 6 mm ²	0,467	65	16,3	180
27312	3 x 6 mm ²	0,543	69	17,3	270
27313	4 x 6 mm ²	0,643	75	18,7	360
27389	3 G 6 mm ²	0,544	69	17,3	270
27390	4 G 6 mm ²	0,643	75	18,7	360
27391	5 G 6 mm ²	0,766	82	20,5	450
27314	2 x 10 mm ²	0,603	72	18	300
27315	3 x 10 mm ²	0,714	76	19,1	450
27316	4 x 10 mm ²	0,860	83	20,7	600
27392	3 G 10 mm ²	0,712	76	19,1	450
27393	4 G 10 mm ²	0,858	83	20,7	600
27394	5 G 10 mm ²	1,017	90	22,6	750
27317	2 x 16 mm ²	0,822	82	20,5	480
27318	3 x 16 mm ²	0,975	86	21,5	720
27319	4 x 16 mm ²	1,204	94	23,6	960
27395	3 G 16 mm ²	0,975	86	21,5	720
27396	4 G 16 mm ²	1,204	94	23,6	960
27397	5 G 16 mm ²	1,452	104	25,9	1200
27320	2 x 25 mm ²	1,167	97	24,2	750
27321	3 x 25 mm ²	1,408	103	25,7	1125
27322	4 x 25 mm ²	1,727	112	28	1500
27323	3 G 25 mm ²	1,424	103	25,7	1125
27399	5 G 25 mm ²	2,240	131	32,8	1875

Low voltage cables

MarineLine+ YOZp X-FR 0,6/1 kV

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
27177	5 G 50 mm ²	4,321	169	42,2	3750

Properties

Application:

Unarmoured, heavy duty, fire resistant, ultra flexible, low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- The only flexible fire resistant class 5 conductor cable
- Lightweight
- Halogen free and low smoke
- Fire resistant according IEC 60331 1/2
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineFlex YZp X-FR 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	Mica + XLHFFR
Conductor category	Class 5 = flexible
Core identification	HD 308 S2
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Orange
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Insulation integrity in accordance with IEC 60331	Yes
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

27 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
27223	3 x 16 mm ²	0,613	78	19,4	720
27230	1 x 35 mm ²	0,412	52	12,9	525
27231	2 x 35 mm ²	1,246	100	25	1050
27232	3 x 35 mm ²	1,551	107	26,7	1575
27233	4 x 35 mm ²	1,995	119	29,7	2100
27234	1 x 50 mm ²	0,545	57	14,3	750
27235	2 x 50 mm ²	1,637	113	28,2	1500
27236	3 x 50 mm ²	2,052	120	30	2250
27237	4 x 50 mm ²	2,636	133	33,3	3000
27238	1 x 70 mm ²	0,755	66	16,4	1050
27240	3 x 70 mm ²	2,827	138	34,5	3150
27241	4 x 70 mm ²	3,638	153	38,3	4200
27242	1 x 95 mm ²	0,962	74	18,4	1425
27244	3 x 95 mm ²	3,571	154	38,5	4275
27245	4 x 95 mm ²	4,597	171	42,8	5700
27246	1 x 120 mm ²	1,233	85	21,2	1800
27248	3 x 120 mm ²	4,666	179	44,8	5400
27249	4 x 120 mm ²	5,976	200	49,9	7200
27250	1 x 150 mm ²	1,489	90	22,5	2250
27252	3 x 150 mm ²	5,544	189	47,3	6750
27253	4 x 150 mm ²	7,150	211	52,8	9000
27254	1 x 185 mm ²	1,820	98	24,4	2775
27256	3 x 185 mm ²	6,710	206	51,6	8325
27257	4 x 185 mm ²	8,649	230	57,5	11100
27258	1 x 240 mm ²	2,410	112	27,9	3600
27260	3 x 240 mm ²	9,014	236	59,1	10800
27262	1 x 300 mm ²	2,990	123	30,7	4500

Properties

Application:

Armoured, heavy duty, fire resistant, ultra flexible, low voltage power cables for power and lighting applications in all ship areas.

Characteristics:

- The only flexible fire resistant class 5 conductor cable
- Lightweight
- Halogen free and low smoke
- Fire resistant according IEC 60331 1/2
- Tinned copper wire braid armouring
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	MarineFlex YOZp X-FR 0,6/1 kV
Standardization	IEC 60092-350/-360/-353
Conductor material	Cu
Shape of conductor	Round
Core insulation	Product dependent
Conductor category	Class 5 = flexible
Core identification	HD 308 S2
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Orange
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Insulation integrity in accordance with IEC 60331	Yes
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

40 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
27365	3 x 16 mm ²	1,018	92	22,9	720
27366	4 x 25 mm ²	1,843	118	29,5	1500
27330	1 x 35 mm ²	0,495	56	14,3	525
27331	2 x 35 mm ²	1,547	114	28,4	1050
27332	3 x 35 mm ²	1,861	120	29,9	1575
27333	4 x 35 mm ²	2,386	132	33,3	2100
16462	3 G 35 mm ²	1,943	124	31,1	1575
16463	4 G 35 mm ²	2,435	136	34,1	2100
16464	5 G 35 mm ²	3,084	149	37,7	2625
27334	1 x 50 mm ²	0,646	64	15,9	750
27335	2 x 50 mm ²	1,899	122	30,4	1500
27336	3 x 50 mm ²	2,470	136	34	2250
27337	4 x 50 mm ²	3,123	147	37,1	3000
27372	3 G 50 mm ²	2,464	135	33,8	2250
16465	4 G 50 mm ²	3,239	153	38,3	3000
16466	5 G 50 mm ²	3,861	168	41,9	3750
27338	1 x 70 mm ²	0,872	72	18	1050
27340	3 x 70 mm ²	3,417	155	38,7	3150
27341	4 x 70 mm ²	4,677	171	42,7	4200
16467	4 G 70 mm ²	4,762	172	43,1	4200
16468	5 G 70 mm ²	5,305	190	47,5	5250
27342	1 x 95 mm ²	1,081	79	19,8	1425
27344	3 x 95 mm ²	4,654	172	42,9	4275
27345	4 x 95 mm ²	5,380	189	47,2	5700
16469	4 G 95 mm ²	5,343	189	47,2	5700
16470	5 G 95 mm ²	6,634	211	52,7	7125
27346	1 x 120 mm ²	1,384	91	22,6	1800
27348	3 x 120 mm ²	5,436	197	49,2	5400
27349	4 x 120 mm ²	6,804	216	54,1	7200
16471	4 G 120 mm ²	6,810	216	54,1	7200
27350	1 x 150 mm ²	1,646	96	24	2250
27352	3 x 150 mm ²	6,351	209	52	6750
27353	4 x 150 mm ²	8,027	228	57	9000
16472	4 G 150 mm ²	8,023	228	57	9000
27354	1 x 185 mm ²	1,980	103	25,8	2775
27356	3 x 185 mm ²	7,566	223	55,8	8325
27357	4 x 185 mm ²	9,619	247	61,7	11100
27358	1 x 240 mm ²	2,593	117	29,3	3600
27360	3 x 240 mm ²	10,014	253	63,3	10800
27362	1 x 300 mm ²	3,190	128	31,9	4500

O-Line+ UX P15

Properties

Application:

Halogen Free & MUD resistant earthing & bonding wire for use on offshore topsides and onboard vessels. Cores sizes >25mm² have extra flexible Class 5/6 conductors with resistance Class 2, for improved flexibility.

Characteristics:

- Class 2 or 5 conductors, unarmoured.
- Applicable for maritime and offshore industry (onboard vessels and offshore topsides)
- Halogen free, low smoke, flame retardant and mud-resistant outer sheath (SHF 2)
- Excellent abrasion resistance
- Green/Yellow outer sheath

Core identification:

- HD308 S2



Specifications

Product group	Shipboard low voltage cable
Type	O-Line UX P15 0,6/1 kV
Standardization	NEK TS 606
Conductor material	Cu, tinned
Shape of conductor	Round
Core insulation	SHF2 MUD
Conductor category	Class 2 = stranded
Core identification	Colour
Colour outer sheath	Green/yellow
Flame retardant	In accordance with IEC 60332-1
Halogen free	IEC 60754-1/2
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

15 products

Part number	Construction	Shape of conductor	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
35902	1 x 2,5 mm ²	Round	0,050	32	5,4	38
35903	1 x 4 mm ²	Round	0,066	35	5,9	60
35904	1 x 6 mm ²	Round	0,088	39	6,5	90
35905	1 x 10 mm ²	Round	0,135	46	7,6	150
35906	1 x 16 mm ²	Round	0,188	50	8,4	240
35907	1 x 25 mm ²	Round	0,293	61	10,1	375
35908	1 x 35 mm ²	Round	0,376	71	11,8	525
35909	1 x 50 mm ²	Round	0,517	80	13,4	750
35910	1 x 70 mm ²	Round	0,733	94	15,6	1050
35911	1 x 95 mm ²	Round	1,000	106	17,7	1425
35912	1 x 120 mm ²	Round	1,227	118	19,6	1800
35913	1 x 150 mm ²	Round	1,510	130	21,7	2250
35914	1 x 185 mm ²	Round	1,916	145	24,2	2775
35915	1 x 240 mm ²	Round	2,436	162	27	3600
35916	1 x 300 mm ²	Round	3,003	179	29,8	4500

Medium voltage cables

MarinePower 3,6/6 kV

Properties

Application:

Heavy duty, midvoltage (3,6/6 kV), armoured power cables, designed for medium voltage energy transport for fixed installation in all ship areas. The cable is compliant with the specifications of VFD manufacturers.

Characteristics:

- Class 2 conductor, with special XLPE insulation
- Excellent mechanical and EMC protection due to the tinned copper braid
- Halogen free and low smoke, flame retardant
- Excellent abrasion resistance
- Different colour outer sheaths, other than red, available on request

Core identification: (for YZOZ range)

- Numbered



Specifications

Product group	Medium-voltage ship-cable
Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 2+ = stranded flexible
Conductor shield	Semiconductive Compound
Core insulation	XLPE (VPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreens construction	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Red
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Nominal voltage U0	3.6 kV
Nominal voltage U	6 kV
Nominal voltage Umax	7.2 kV
Max. conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

Medium voltage cables

MarinePower 3,6/6 kV

2

Medium voltage cables

14 products

Part number		Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
33000	MarinePower YOZmv 3,6/6 kV	1 x 35 mm ²	0,644	0.15	19	1750
33001	MarinePower YOZmv 3,6/6 kV	1 x 50 mm ²	0,786	0.16	20,3	2500
33002	MarinePower YOZmv 3,6/6 kV	1 x 70 mm ²	1,094	0.1784	22,3	3500
33003	MarinePower YOZmv 3,6/6 kV	1 x 95 mm ²	1,279	0.19	23,8	4750
33004	MarinePower YOZmv 3,6/6 kV	1 x 120 mm ²	1,563	0.21	25,7	6000
33005	MarinePower YOZmv 3,6/6 kV	1 x 150 mm ²	1,837	0.22	27,1	7500
33006	MarinePower YOZmv 3,6/6 kV	1 x 185 mm ²	2,248	0.23	28,9	9250
33007	MarinePower YOZmv 3,6/6 kV	1 x 240 mm ²	2,821	0.26	31,9	12000
33009	MarinePower YZOZmv 3,6/6 kV	3 x 50 mm ²	3,258	0.36	45	7500
33010	MarinePower YZOZmv 3,6/6 kV	3 x 70 mm ²	4,040	0.39	49	10500
33011	MarinePower YZOZmv 3,6/6 kV	3 x 95 mm ²	5,299	0.42	53,1	14250
33012	MarinePower YZOZmv 3,6/6 kV	3 x 120 mm ²	6,072	0.46	57	18000
33013	MarinePower YZOZmv 3,6/6 kV	3 x 150 mm ²	7,523	0.49	60,7	22500
33014	MarinePower YZOZmv 3,6/6 kV	3 x 185 mm ²	8,368	0.52	64,6	27750

Medium voltage cables

MarinePower 6/10 kV

Properties

Application:

Heavy duty, midvoltage (6/10 kV), armoured power cables, designed for medium voltage energy transport for fixed installation in all ship areas. The cable is compliant with the specifications of VFD manufacturers.

Characteristics:

- Class 2 conductor, with special XLPE insulation
- Excellent mechanical and EMC protection due to the tinned copper braid
- Halogen free and low smoke, flame retardant
- Excellent abrasion resistance
- Different colour outer sheaths, other than red, available on request

Core identification: (for YZOZ range)

- Numbered



Specifications

Product group	Medium-voltage ship-cable
Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 2+ = stranded flexible
Conductor shield	Semiconductive Compound
Core insulation	XLPE (VPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreens construction	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Red
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Nominal voltage U0	6 kV
Nominal voltage U	10 kV
Nominal voltage Umax	12 kV
Max. conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

16 products

Part number		Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
33099	MarinePower YOZmv 6/10 kV	1 x 25 mm ²	0,601	0.16	20,1	1250
33100	MarinePower YOZmv 6/10 kV	1 x 35 mm ²	0,715	0.17	21	1750
33101	MarinePower YOZmv 6/10 kV	1 x 50 mm ²	0,865	0.18	22,3	2500
33102	MarinePower YOZmv 6/10 kV	1 x 70 mm ²	1,096	0.19	24	3500
33103	MarinePower YOZmv 6/10 kV	1 x 95 mm ²	1,378	0.21	25,8	4750
33104	MarinePower YOZmv 6/10 kV	1 x 120 mm ²	1,654	0.22	27,7	6000
33105	MarinePower YOZmv 6/10 kV	1 x 150 mm ²	1,933	0.23	28,9	7500
33106	MarinePower YOZmv 6/10 kV	1 x 185 mm ²	2,326	0.25	30,8	9250
33107	MarinePower YOZmv 6/10 kV	1 x 240 mm ²	2,925	0.27	33,5	12000
33114	MarinePower YOZmv 6/10 kV	1 x 300 mm ²	3,469	0.28	35,5	15000
33118	MarinePower YOZmv 6/10 kV	1 x 630 mm ²	7,234	0.38	47,6	31500
33109	MarinePower YZOZmv 6/10 kV	3 x 50 mm ²	3,574	0.39	49	7500
33110	MarinePower YZOZmv 6/10 kV	3 x 70 mm ²	4,576	0.43	53,1	10500
33111	MarinePower YZOZmv 6/10 kV	3 x 95 mm ²	5,645	0.46	57,7	14250
33112	MarinePower YZOZmv 6/10 kV	3 x 120 mm ²	6,632	0.49	61,2	18000
33113	MarinePower YZOZmv 6/10 kV	3 x 150 mm ²	7,613	0.52	64,8	22500

Medium voltage cables

MarinePower 8,7/15 kV

Properties

Application:

Heavy duty, midvoltage (8,7/15 kV), armoured power cables, designed for medium voltage energy transport for fixed installation in all ship areas. The cable is compliant with the specifications of VFD manufacturers.

Characteristics:

- Class 2 conductor, with special XLPE insulation
- Excellent mechanical and EMC protection due to the tinned copper braid
- Halogen free and low smoke, flame retardant
- Excellent abrasion resistance
- Different colour outer sheaths, other than red, available on request

Core identification: (for YZOZ range)

- Numbered



Specifications

Product group	Medium-voltage ship-cable
Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 2+ = stranded flexible
Conductor shield	Semiconductive Compound
Core insulation	XLPE (VPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreens construction	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Red
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Nominal voltage U0	8.7 kV
Nominal voltage U	15 kV
Nominal voltage Umax	17.5 kV
Max. operation temperature	70 °C
Max. conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

14 products

Part number		Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
33200	MarinePower YOZmv 8,7/15 kV	1 x 35 mm ²	0,814	0.19	23,5	1750
33201	MarinePower YOZmv 8,7/15 kV	1 x 50 mm ²	0,970	0.2	24,8	2500
33202	MarinePower YOZmv 8,7/15 kV	1 x 70 mm ²	1,200	0.21	26,3	3500
33203	MarinePower YOZmv 8,7/15 kV	1 x 95 mm ²	1,203	0.23	28,2	4750
33205	MarinePower YOZmv 8,7/15 kV	1 x 150 mm ²	2,061	0.25	31,5	7500
33206	MarinePower YOZmv 8,7/15 kV	1 x 185 mm ²	2,488	0.27	33,2	9250
33207	MarinePower YOZmv 8,7/15 kV	1 x 240 mm ²	3,209	0.29	36,5	12000
33218	MarinePower YOZmv 8,7/15 kV	1 x 300 mm ²	3,756	0.31	38,7	15000
33208	MarinePower YZOZmv 8,7/15 kV	3 x 35 mm ²	3,693	0.41	51,8	5250
33209	MarinePower YZOZmv 8,7/15 kV	3 x 50 mm ²	4,218	0.43	54,3	7500
33210	MarinePower YZOZmv 8,7/15 kV	3 x 70 mm ²	5,057	0.49	60,7	10500
33211	MarinePower YZOZmv 8,7/15 kV	3 x 95 mm ²	5,341	0.5	62,4	14250
33212	MarinePower YZOZmv 8,7/15 kV	3 x 120 mm ²	7,224	0.54	66,9	18000
33213	MarinePower YZOZmv 8,7/15 kV	3 x 150 mm ²	8,517	0.57	69,9	22500

Medium voltage cables

MarinePower 12/20 kV

Properties

Application:

Heavy duty, midvoltage (12/20 kV), armoured power cables, designed for medium voltage energy transport for fixed installation in all ship areas. The cable is compliant with the specifications of VFD manufacturers.

Characteristics:

- Class 2 conductor, with special XLPE insulation
- Excellent mechanical and EMC protection due to the tinned copper braid
- Halogen free and low smoke, flame retardant
- Excellent abrasion resistance
- Different colour outer sheaths, other than red, available on request

Core identification: (for YZOZ range)

- Numbered



Specifications

Product group	Medium-voltage ship-cable
Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 2+ = stranded flexible
Conductor shield	Semiconductive Compound
Core insulation	XLPE (VPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Red
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Nominal voltage U0	12 kV
Nominal voltage U	20 kV
Nominal voltage Umax	24 kV
Max. conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

Medium voltage cables

MarinePower 12/20 kV

14 products

Part number		Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
33300	MarinePower YOZmv 12/20 kV	1 x 35 mm ²	0,897	0.2	25,4	1750
33301	MarinePower YOZmv 12/20 kV	1 x 50 mm ²	1,045	0.21	26,5	2500
33302	MarinePower YOZmv 12/20 kV	1 x 70 mm ²	1,307	0.23	28,5	3500
33303	MarinePower YOZmv 12/20 kV	1 x 95 mm ²	1,610	0.24	30,5	4750
33304	MarinePower YOZmv 12/20 kV	1 x 120 mm ²	1,893	0.2576	32	6000
33305	MarinePower YOZmv 12/20 kV	1 x 150 mm ²	2,195	0.27	33,7	7500
33306	MarinePower YOZmv 12/20 kV	1 x 185 mm ²	2,721	0.29	36,1	9250
33307	MarinePower YOZmv 12/20 kV	1 x 240 mm ²	3,362	0.31	38,7	12000
33320	MarinePower YOZmv 12/20 kV	1 x 400 mm ²	4,830	0.35	43,9	20000
33308	MarinePower YZOZmv 12/20 kV	3 x 35 mm ²	4,012	0.4536	56,7	5250
33309	MarinePower YZOZmv 12/20 kV	3 x 50 mm ²	4,577	0.476	59,5	7500
33310	MarinePower YZOZmv 12/20 kV	3 x 70 mm ²	5,682	0.508	63,5	10500
33311	MarinePower YZOZmv 12/20 kV	3 x 95 mm ²	6,719	0.5408	67,6	14250
33312	MarinePower YZOZmv 12/20 kV	3 x 120 mm ²	7,567	0.5696	71,2	18000

Medium voltage cables

MarinePower 18/30 kV

Properties

Application:

Heavy duty, midvoltage (18/30 kV), armoured power cables, designed for medium voltage energy transport for fixed installation in all ship areas. The cable is compliant with the specifications of VFD manufacturers.

Characteristics:

- Class 2 conductor, with special XLPE insulation
- Excellent mechanical and EMC protection due to the tinned copper braid
- Halogen free and low smoke, flame retardant
- Excellent abrasion resistance
- Different colour outer sheaths, other than red, available on request

Core identification: (for YZOZ range)

- Numbered



Specifications

Product group	Medium-voltage ship-cable
Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 2+ = stranded flexible
Conductor shield	Semiconductive Compound
Core insulation	XLPE (VPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Red
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Nominal voltage U0	18 kV
Nominal voltage U	30 kV
Nominal voltage Umax	36 kV
Max. operation temperature	70 °C
Max. conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

13 products

Part number		Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
33400	MarinePower YOZmv 18/30 kV	1 x 35 mm ²	1,174	0.25	31	1750
33401	MarinePower YOZmv 18/30 kV	1 x 50 mm ²	1,331	0.26	32,1	2500
33402	MarinePower YOZmv 18/30 kV	1 x 70 mm ²	1,604	0.27	33,9	3500
33403	MarinePower YOZmv 18/30 kV	1 x 95 mm ²	1,914	0.29	35,8	4750
33404	MarinePower YOZmv 18/30 kV	1 x 120 mm ²	2,342	0.31	38,2	6000
33405	MarinePower YOZmv 18/30 kV	1 x 150 mm ²	2,657	0.32	39,5	7500
33406	MarinePower YOZmv 18/30 kV	1 x 185 mm ²	3,077	0.33	41,4	9250
33407	MarinePower YOZmv 18/30 kV	1 x 240 mm ²	3,604	0.34	42,8	12000
33410	MarinePower YOZmv 18/30 kV	1 x 300 mm ²	4,294	0.37	45,9	15000
33412	MarinePower YOZmv 18/30 kV	1 x 400 mm ²	5,235	0.39	49,1	20000
33411	MarinePower YOZmv 18/30 kV	1 x 630 mm ²	8,036	0.46	57,4	31500
33408	MarinePower YZOZmv 18/30 kV	3 x 35 mm ²	5,452	0.5528	69,1	5250
33409	MarinePower YZOZmv 18/30 kV	3 x 50 mm ²	6,146	0.5752	71,9	7500

Medium voltage cables

MarinePowerFlex 6/10 kV

Properties

Application:

Highly flexible, midvoltage (6/10 kV), armoured power cables, designed for medium voltage energy transport for fixed installation in all ship areas. The cable is compliant with the specifications of VFD manufacturers.

Characteristics:

- Class 5 conductor, with special XLPE insulation
- Excellent mechanical and EMC protection due to the tinned copper braid
- Halogen free and low smoke, flame retardant
- Excellent abrasion resistance
- Easy installation in tight spaces due to flexibility
- Different colour outer sheaths, other than red, available on request

Core identification: (for YZOZ range)

- Numbered



Specifications

Product group	Medium-voltage ship-cable
Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 5+ = extra flexible
Conductor shield	Semiconductive Compound with semiconductive tape
Core insulation	XLPE (VPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreens construction	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Red
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Nominal voltage U ₀	6 kV
Nominal voltage U	10 kV
Nominal voltage U _{max}	12 kV
Max. conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

MarinePowerFlex 6/10 kV

11 products

Part number		Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
33119	MarinePowerFlex YOZmv 6/10 kV	1 x 35 mm ²	0,754	0.18	22,5	1750
33121	MarinePowerFlex YOZmv 6/10 kV	1 x 70 mm ²	1,130	0.2	25,5	3500
33122	MarinePowerFlex YOZmv 6/10 kV	1 x 95 mm ²	1,384	0.22	27,7	4750
33123	MarinePowerFlex YOZmv 6/10 kV	1 x 120 mm ²	1,683	0.23	29,3	6000
33124	MarinePowerFlex YOZmv 6/10 kV	1 x 150 mm ²	1,949	0.25	31,1	7500
33127	MarinePowerFlex YOZmv 6/10 kV	1 x 240 mm ²	2,994	0.31	38,5	12000
33128	MarinePowerFlex YZOZmv 6/10 kV	3 x 16 mm ²	2,299	0.35	43,7	2400
33129	MarinePowerFlex YZOZmv 6/10 kV	3 x 50 mm ²	3,777	0.43	53,3	7500
33131	MarinePowerFlex YZOZmv 6/10 kV	3 x 95 mm ²	5,704	0.49	61,6	14250
33132	MarinePowerFlex YZOZmv 6/10 kV	3 x 120 mm ²	6,696	0.52	65,4	18000
33133	MarinePowerFlex YZOZmv 6/10 kV	3 x 150 mm ²	7,863	0.56	69,5	22500

Medium voltage cables

MarinePowerFlex YOZmv 8,7/15 kV

Properties

Application:

Highly Flexible, midvoltage (8,7/15 kV), armoured, single core power cables, designed for medium voltage energy transport for fixed installation in all ship areas. The cable is compliant with the specifications of VFD manufacturers.

Characteristics:

- Class 5 conductor, with special XLPE insulation
- Excellent mechanical and EMC protection due to the tinned copper braid
- Halogen free and low smoke, flame retardant
- Easy installation in tight spaces due to flexibility
- Different colour outer sheaths, other than red, available on request

Core identification: (for YZOZ range)

- Numbered



Specifications

Product group	Medium-voltage ship-cable
Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 5+ = extra flexible
Conductor shield	Semiconductive Compound with semiconductive tape
Core insulation	XLPE (VPE)
Insulation shield	Semiconductive Compound with semiconductive tape
Laminated sheath	Yes
Earthscreens construction	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Red
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Nominal voltage U ₀	8.7 kV
Nominal voltage U	15 kV
Nominal voltage U _{max}	17.5 kV
Max. operation temperature	70 °C
Max. conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

MarinePowerFlex YOZmv 8,7/15 kV

2 products

Part number		Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
33230	MarinePowerFlex YOZmv 8,7/15 kV	1 x 35 mm ²	0,568	0.21	26,2	2500
33235	MarinePowerFlex YOZmv 8,7/15 kV	1 x 300 mm ²	3,826	0.34	42	15000

Medium voltage cables

MarinePowerFlex 18/30 kV

Properties

Application:

Highly Flexible, midvoltage (18/30 kV), armoured power cables, designed for medium voltage energy transport for fixed installation in all ship areas. The cable is compliant with the specifications of VFD manufacturers.

Characteristics:

- Class 5 conductor, with special XLPE insulation
- Excellent mechanical and EMC protection due to the tinned copper braid
- Halogen free and low smoke, flame retardant
- Easy installation in tight spaces due to flexibility
- Different colour outer sheaths, other than red, available on request

Core identification: (for YZOZ range)

- Numbered



Specifications

Product group	Medium-voltage ship-cable
Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Product dependent
Conductor shield	Product dependent
Core insulation	XLPE (VPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreens construction	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Red
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Nominal voltage U ₀	18 kV
Nominal voltage U	30 kV
Nominal voltage U _{max}	36 kV
Max. conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

MarinePowerFlex 18/30 kV

2 products

Part number		Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load	Conductor category
33423	MarinePowerFlex YOZmv 18/30 kV	1 x 95 mm ²	2,107	0.31	38,3	4750	Class 5+ = extra flexible
33431	MarinePowerFlex YZOZmv 18/30 kV	3 x 95 mm ²	8,562	0.672	84	14250	Class 5 = flexible

Medium voltage cables

MarinePower MultiFlex YQOQmv 6/10 kV

Properties

Application:

Highly flexible, midvoltage (6/10 kV), armoured, three core power cables for applications which require continuous bending, e.g. on cable chains in dredgers or in retractable Azipod drives

Characteristics:

- Class 5 conductor, with special XLPE insulation
- Very good resistance against chemicals, UV resistant and highly abrasion resistant due to PUR outer sheath
- Halogen free and low smoke, flame retardant
- Excellent abrasion resistance
- Easy installation in tight spaces due to flexibility
- Different colour outer sheaths, other than red, available on request

Core identification:

- Numbered



Specifications

Product group	Medium-voltage ship-cable
Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 5+ = extra flexible
Conductor shield	Semiconductive Compound with semiconductive tape
Core insulation	XLPE (VPE)
Insulation shield	Semiconductive Compound with semiconductive tape
Laminated sheath	Yes
Core shield construction	Copper round wire + copper tape counter spiral
Material inner sheath	PUR (Polyurethane)
Earthscreen construction	Core screen and tinned copper braiding combination
Material outer sheath	PUR (Polyurethane)
Colour outer sheath	Red
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1
Low smoke	IEC 61034-2
Nominal voltage U ₀	6 kV
Nominal voltage U	10 kV
Nominal voltage U _{max}	12 kV
Max. operation temperature	70 °C
Max. conductor temperature	90 °C

MarinePower MultiFlex YQOQmv 6/10 kV

3 products

Part number		Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
33189	MarinePower MultiFlex YQOQmv 6/10 kV	3 x 50 mm ²	5,288	0.345	57,5	7500
33191	MarinePower MultiFlex YQOQmv 6/10 kV	3 x 95 mm ²	7,454	0.3924	65,4	14250
33192	MarinePower MultiFlex YQOQmv 6/10 kV	3 x 95 mm ²	8,009	0.42	70,0	14250

MarineCom YOZc 250 V

Properties

Application:

Lightweight, armoured, control, instrumentation, tele- and data cable.

Characteristics:

- Twisted pairs, triples or quads
- Perfect electrical properties and low capacitance for minimal signal loss
- Halogen free and low smoke, flame retardant
- Extra mechanical protection and reduced EMI due to the tinned copper braided screen
- Different colour outer sheaths, other than grey, available on request

Core identification:

- Pairs & Quads: Numbered Blue and White . Triples: Numbered Blue, White and Red



Specifications

Product group	Shipboard communication cable
Type	MarineCom YOZc 250 V
Colour outer sheath	Grey
Standardization	IEC 60092-350/-360/-376
Conductor category	Class 2 = stranded
Core insulation	XLPE (VPE)
Core identification	Numbers
Construction outer shield	tinned copper braiding
Overall stranding screen	Braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

117 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16900	1 x 2 x 0,5 mm ²	0,066	39	6,5	15
16899	2 x 2 x 0,5 mm ² (Quad)	0,087	45	7,5	30
16902	2 x 2 x 0,5 mm ²	0,098	56	9,4	30
16916	2 x 3 x 0,5 mm ²	0,118	62	10,3	45
16903	4 x 2 x 0,5 mm ²	0,143	65	10,9	60
16917	4 x 3 x 0,5 mm ²	0,177	73	12,1	90
16904	6 x 2 x 0,5 mm ²	0,201	80	12,7	90
16905	7 x 2 x 0,5 mm ²	0,199	76	12,7	105
16918	7 x 3 x 0,5 mm ²	0,301	91	15,2	158
16906	8 x 2 x 0,5 mm ²	0,256	86	14,3	120
16907	10 x 2 x 0,5 mm ²	0,304	94	15,7	150
16919	10 x 3 x 0,5 mm ²	0,412	108	18	225
16908	12 x 2 x 0,5 mm ²	0,345	100	16,6	180
16909	14 x 2 x 0,5 mm ²	0,385	106	17,6	210
16920	14 x 3 x 0,5 mm ²	0,517	119	19,9	315
16910	19 x 2 x 0,5 mm ²	0,488	121	20,1	285
16921	19 x 3 x 0,5 mm ²	0,644	137	22,9	428
16911	24 x 2 x 0,5 mm ²	0,591	136	22,7	360
16922	24 x 3 x 0,5 mm ²	0,797	154	25,6	540
16912	27 x 2 x 0,5 mm ²	0,647	143	23,8	405
16913	30 x 2 x 0,5 mm ²	0,698	149	24,8	450
16914	37 x 2 x 0,5 mm ²	0,834	163	27,2	555
16271	1 x 2 x 0,75 mm ²	0,072	41	6,9	23
16272	1 x 3 x 0,75 mm ²	0,082	44	7,3	34
16270	2 x 2 x 0,75 mm ²	0,112	61	9,9	45
16273	2 x 2 x 0,75 mm ² (Quad)	0,094	47	7,8	45
16923	2 x 3 x 0,75 mm ²	0,147	65	10,9	101
16274	4 x 2 x 0,75 mm ²	0,169	73	12,5	90
16924	4 x 3 x 0,75 mm ²	0,218	80	12,7	135
16275	6 x 2 x 0,75 mm ²	0,287	86	14,8	135
16276	7 x 2 x 0,75 mm ²	0,281	86	14,6	158
16925	7 x 3 x 0,75 mm ²	0,372	96	16	236
16288	8 x 2 x 0,75 mm ²	0,309	91	15,2	180
16277	10 x 2 x 0,75 mm ²	0,377	104	17,3	225
16926	10 x 3 x 0,75 mm ²	0,511	117	19,5	338
16289	12 x 2 x 0,75 mm ²	0,429	109	18,5	270
16955	12 x 3 x 0,75 mm ²	0,559	131	20,5	473
16278	14 x 2 x 0,75 mm ²	0,481	116	20,2	315
16927	14 x 3 x 0,75 mm ²	0,646	131	21,8	473
16279	19 x 2 x 0,75 mm ²	0,592	135	22,5	428
16928	19 x 3 x 0,75 mm ²	0,834	149	24,9	641
16285	20 x 2 x 0,75 mm ²	0,638	92	23	450
16280	24 x 2 x 0,75 mm ²	0,742	150	25	540
16929	24 x 3 x 0,75 mm ²	1,031	167	27,8	810
16283	27 x 2 x 0,75 mm ²	0,812	157	26,2	608
16281	30 x 2 x 0,75 mm ²	0,885	165	27,5	675
16282	37 x 2 x 0,75 mm ²	1,053	181	30,2	833

Communication cables

MarineCom YOZc 250 V

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16930	1 x 2 x 1,0 mm ²	0,080	45	7,3	30
16945	1 x 3 x 1,0 mm ²	0,093	46	7,7	45
16932	2 x 2 x 1,0 mm ²	0,132	64	10,7	60
16933	4 x 2 x 1,0 mm ²	0,195	74	12,4	120
16947	4 x 3 x 1,0 mm ²	0,289	86	14,4	180
16934	6 x 2 x 1,0 mm ²	0,328	91	15,1	180
16953	6 x 3 x 1,0 mm ²	0,421	105	17,5	270
16935	7 x 2 x 1,0 mm ²	0,326	93	15,5	210
16948	7 x 3 x 1,0 mm ²	0,431	103	17,1	315
16936	8 x 2 x 1,0 mm ²	0,361	96	16	240
16937	10 x 2 x 1,0 mm ²	0,446	109	18,2	300
16949	10 x 3 x 1,0 mm ²	0,594	128	21,3	450
16938	12 x 2 x 1,0 mm ²	0,506	114	19	360
16939	14 x 2 x 1,0 mm ²	0,565	122	20,4	420
16950	14 x 3 x 1,0 mm ²	0,770	141	23,5	630
16940	19 x 2 x 1,0 mm ²	0,727	142	23,7	570
16951	19 x 3 x 1,0 mm ²	0,996	161	26,9	855
16941	24 x 2 x 1,0 mm ²	0,884	158	26,3	720
16952	24 x 3 x 1,0 mm ²	1,218	179	29,8	1080
16942	27 x 2 x 1,0 mm ²	0,970	166	27,6	810
16943	30 x 2 x 1,0 mm ²	1,070	174	29	900
16944	37 x 2 x 1,0 mm ²	1,267	190	31,7	1110
16946	2 x 3 x 1,0 mm ²	0,165	70	11,6	135
16301	1 x 2 x 1,5 mm ²	0,096	50	8,3	45
16316	1 x 3 x 1,5 mm ²	0,118	53	8,9	68
16302	1 x 4 x 1,5 mm ²	0,147	59	9,9	90
16303	2 x 2 x 1,5 mm ²	0,176	76	12,6	90
16317	2 x 3 x 1,5 mm ²	0,255	83	13,9	135
16304	4 x 2 x 1,5 mm ²	0,302	89	14,9	180
16318	4 x 3 x 1,5 mm ²	0,395	101	16,9	270
16305	6 x 2 x 1,5 mm ²	0,458	107	18,3	270
16306	7 x 2 x 1,5 mm ²	0,458	109	18,5	315
16319	7 x 3 x 1,5 mm ²	0,609	123	20,5	473
16307	8 x 2 x 1,5 mm ²	0,508	115	19,2	360
16308	10 x 2 x 1,5 mm ²	0,599	124	21	450
16320	10 x 3 x 1,5 mm ²	0,843	153	25,5	675
16309	12 x 2 x 1,5 mm ²	0,700	139	23,2	540
16310	14 x 2 x 1,5 mm ²	0,788	148	24,7	630
16321	14 x 3 x 1,5 mm ²	1,084	168	28	945
16311	19 x 2 x 1,5 mm ²	1,021	171	28,5	855
16322	19 x 3 x 1,5 mm ²	1,414	193	32,1	1283
16326	20 x 2 x 1,5 mm ²	1,076	174	29,0	855
16312	24 x 2 x 1,5 mm ²	1,261	190	31,6	1080
16323	24 x 3 x 1,5 mm ²	2,183	215	35,8	1620
16313	27 x 2 x 1,5 mm ²	1,388	199	33,2	1215
16314	30 x 2 x 1,5 mm ²	1,531	209	34,9	1350
16315	37 x 2 x 1,5 mm ²	2,306	230	38,3	1665
16960	1 x 2 x 2,5 mm ²	0,124	56	9,4	75

Communication cables

MarineCom YOZc 250 V

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16975	1 x 3 x 2,5 mm ²	0,155	59	10	113
16961	1 x 4 x 2,5 mm ²	0,200	67	11,1	150
16962	2 x 2 x 2,5 mm ²	0,233	64	10,7	60
16976	2 x 3 x 2,5 mm ²	0,332	96	16	338
16963	4 x 2 x 2,5 mm ²	0,398	103	17,1	300
16977	4 x 3 x 2,5 mm ²	0,537	111	18,5	450
16964	6 x 2 x 2,5 mm ²	0,593	122	20,3	450
16965	7 x 2 x 2,5 mm ²	0,614	122	20,3	525
16978	7 x 3 x 2,5 mm ²	0,840	142	23,6	788
16966	8 x 2 x 2,5 mm ²	0,695	133	22,2	600
16967	10 x 2 x 2,5 mm ²	0,853	152	25,3	750
16979	10 x 3 x 2,5 mm ²	1,181	174	28,8	1125
16968	12 x 2 x 2,5 mm ²	0,974	158	26,4	900
16969	14 x 2 x 2,5 mm ²	1,102	169	28,1	1050
16980	14 x 3 x 2,5 mm ²	1,553	193	32,1	1575
16970	19 x 2 x 2,5 mm ²	1,450	194	32,4	1425
16981	19 x 3 x 2,5 mm ²	2,478	221	36,8	2138
16971	24 x 2 x 2,5 mm ²	2,233	217	36,2	1800
16982	24 x 3 x 2,5 mm ²	2,663	247	41,1	2700
16972	27 x 2 x 2,5 mm ²	2,445	228	38	2025
16973	30 x 2 x 2,5 mm ²	2,303	240	40	2250
16974	37 x 2 x 2,5 mm ²	2,769	263	43,8	2775

Communication cables

Marine2Com YOZ2c 250 V

Properties**Application:**

Lightweight, individual pair and overall screened, armoured, control, instrumentation, tele- and data cable.

Characteristics:

- Twisted pairs, triples or quads, individual pair and overall screening
- Perfect electrical properties and low capacitance for minimal signal loss
- Halogen free and low smoke, flame retardant
- Extra mechanical protection and reduced EMI due to the tinned copper braided screen
- Different colour outer sheaths, other than grey, available on request

Core identification:

- Pairs & Quads: Numbered Blue and White. Triples: Numbered Blue, White and Red

**Specifications**

Product group	Shipboard communication cable
Type	Marine2Com YOZ2c 250 V
Colour outer sheath	Grey
Standardization	IEC 60092-350/-360/-376
Conductor category	Class 2 = stranded
Core insulation	XLPE (VPE)
Core identification	Numbers
Construction outer shield	tinned copper braiding
Screen over stranding element	Alpet tape
Overall stranding screen	Foil + braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

105 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
17223	2 x 2 x 0,5 mm ²	0,126	80	10	30
17280	3 x 3 x 0,5 mm ²	0,151	87	10,9	68
17224	4 x 2 x 0,5 mm ²	0,183	94	11,7	60
17281	4 x 3 x 0,5 mm ²	0,218	101	12,6	90
17225	6 x 2 x 0,5 mm ²	0,292	116	14,5	90
17226	7 x 2 x 0,5 mm ²	0,268	111	13,9	105
17282	7 x 3 x 0,5 mm ²	0,369	130	16,2	158
17227	8 x 2 x 0,5 mm ²	0,329	122	15,3	120
17228	10 x 2 x 0,5 mm ²	0,400	138	17,3	150
17283	10 x 3 x 0,5 mm ²	0,505	158	19,8	225
17229	12 x 2 x 0,5 mm ²	0,458	145	18,1	180
17230	14 x 2 x 0,5 mm ²	0,507	155	19,4	210
17284	14 x 3 x 0,5 mm ²	0,642	174	21,7	315
17231	19 x 2 x 0,5 mm ²	0,644	176	22	285
17285	19 x 3 x 0,5 mm ²	0,824	198	24,7	428
17232	24 x 2 x 0,5 mm ²	0,783	195	24,4	360
17286	24 x 3 x 0,5 mm ²	0,994	219	27,4	540
17233	27 x 2 x 0,5 mm ²	0,872	206	25,8	405
17234	30 x 2 x 0,5 mm ²	0,946	215	26,9	450
17235	37 x 2 x 0,5 mm ²	1,134	236	29,5	555
16329	1 x 2 x 0,75 mm ²	0,079	30	7,0	20
16290	2 x 2 x 0,75 mm ²	0,143	87	10,9	45
16331	3 x 2 x 0,75 mm ²	0,177	94	11,7	68
17290	3 x 3 x 0,75 mm ²	0,171	94	11,7	101
16291	4 x 2 x 0,75 mm ²	0,215	102	12,7	90
17291	4 x 3 x 0,75 mm ²	0,292	115	14,4	135
16332	5 x 2 x 0,75 mm ²	0,287	116	14,4	113
16292	6 x 2 x 0,75 mm ²	0,355	126	15,8	135
16293	7 x 2 x 0,75 mm ²	0,351	126	15,8	158
17292	7 x 3 x 0,75 mm ²	0,433	140	17,5	236
17237	8 x 2 x 0,75 mm ²	0,390	130	16,3	180
16294	10 x 2 x 0,75 mm ²	0,473	152	19	225
17293	10 x 3 x 0,75 mm ²	0,595	170	21,3	338
17238	12 x 2 x 0,75 mm ²	0,525	156	19,5	270
16295	14 x 2 x 0,75 mm ²	0,611	170	21,3	315
17294	14 x 3 x 0,75 mm ²	0,768	188	23,5	473
16296	19 x 2 x 0,75 mm ²	0,770	194	24,2	428
17295	19 x 3 x 0,75 mm ²	0,987	214	26,8	641
16297	24 x 2 x 0,75 mm ²	0,944	215	26,9	540
17296	24 x 3 x 0,75 mm ²	1,206	238	29,7	810
17239	27 x 2 x 0,75 mm ²	1,028	222	27,8	608
16298	30 x 2 x 0,75 mm ²	1,138	238	29,7	675
16299	37 x 2 x 0,75 mm ²	1,364	261	32,4	833
17243	2 x 2 x 1 mm ²	0,165	93	11,6	60
17241	3 x 2 x 1 mm ²	0,199	94	12,3	68
17300	3 x 3 x 1 mm ²	0,193	99	12,4	135
17244	4 x 2 x 1 mm ²	0,239	113	14,1	120

Communication cables

Marine2Com YOZ2c 250 V

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
17301	4 x 3 x 1 mm ²	0,336	122	15,3	180
17245	6 x 2 x 1 mm ²	0,392	134	16,8	180
17246	7 x 2 x 1 mm ²	0,395	133	16,6	210
17242	7 x 3 x 1 mm ²	0,517	151	18,9	315
17247	8 x 2 x 1 mm ²	0,446	142	17,8	240
17248	10 x 2 x 1 mm ²	0,543	162	20,2	300
17303	10 x 3 x 1 mm ²	0,704	183	22,9	450
17249	12 x 2 x 1 mm ²	0,614	169	21,1	360
17250	14 x 2 x 1 mm ²	0,693	179	22,4	420
17304	14 x 3 x 1 mm ²	0,900	202	25,2	630
17251	19 x 2 x 1 mm ²	0,891	204	25,5	570
17305	19 x 3 x 1 mm ²	1,162	230	28,7	855
17252	24 x 2 x 1 mm ²	1,101	228	28,5	720
17256	24 x 3 x 1 mm ²	1,444	257	32,1	1080
17253	27 x 2 x 1 mm ²	1,212	239	29,9	810
17254	30 x 2 x 1 mm ²	1,320	250	31,3	900
17255	37 x 2 x 1 mm ²	1,587	275	34,4	1110
16333	2 x 2 x 1,5 mm ²	0,242	111	14,3	90
17310	2 x 3 x 1,5 mm ²	0,290	118	14,8	135
16335	4 x 2 x 1,5 mm ²	0,359	128	16	180
17311	4 x 3 x 1,5 mm ²	0,459	144	18	270
16334	6 x 2 x 1,5 mm ²	0,516	157	19,6	270
16336	7 x 2 x 1,5 mm ²	0,524	158	19,8	315
17312	7 x 3 x 1,5 mm ²	0,705	179	22,4	473
16337	8 x 2 x 1,5 mm ²	0,590	168	21	360
16338	10 x 2 x 1,5 mm ²	0,726	192	24	450
17317	10 x 3 x 1,5 mm ²	0,956	218	27,3	675
16339	12 x 2 x 1,5 mm ²	0,827	200	25	540
16340	14 x 2 x 1,5 mm ²	0,941	214	26,8	630
17314	14 x 3 x 1,5 mm ²	1,243	242	30,2	945
16341	19 x 2 x 1,5 mm ²	1,218	246	30,5	855
17315	19 x 3 x 1,5 mm ²	1,613	276	34,5	1283
16346	20 x 2 x 1,5 mm ²	1,267	250	31,1	900
16342	24 x 2 x 1,5 mm ²	1,511	274	34,2	1080
17316	24 x 3 x 1,5 mm ²	2,492	310	38,7	1620
16343	27 x 2 x 1,5 mm ²	2,099	288	36	1215
16344	30 x 2 x 1,5 mm ²	2,304	302	37,8	1350
16345	37 x 2 x 1,5 mm ²	2,345	336	42	1665
17263	2 x 2 x 2,5 mm ²	0,310	128	16	150
17320	3 x 3 x 2,5 mm ²	0,384	138	17,2	338
17276	4 x 2 x 2,5 mm ²	0,481	149	18,6	300
17321	4 x 3 x 2,5 mm ²	0,614	163	20,4	450
17265	6 x 2 x 2,5 mm ²	0,681	178	22,3	450
17266	7 x 2 x 2,5 mm ²	0,719	178	22,3	525
17322	7 x 3 x 2,5 mm ²	0,956	203	25,4	788
17267	8 x 2 x 2,5 mm ²	0,814	191	23,9	600
17268	10 x 2 x 2,5 mm ²	0,996	218	27,2	750
17323	10 x 3 x 2,5 mm ²	1,328	248	30,8	1125

Communication cables

Marine2Com YOZ2c 250 V

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
17269	12 x 2 x 2,5 mm ²	1,153	230	28,7	900
17270	14 x 2 x 2,5 mm ²	1,306	244	30,5	1050
17324	14 x 3 x 2,5 mm ²	1,750	275	34,4	1575
17271	19 x 2 x 2,5 mm ²	1,697	279	34,9	1425
17325	19 x 3 x 2,5 mm ²	2,435	317	39,6	2138
17272	24 x 2 x 2,5 mm ²	2,263	314	39,2	1800
17326	24 x 3 x 2,5 mm ²	3,016	354	44,2	2700
17273	27 x 2 x 2,5 mm ²	2,493	330	41,2	2025
17274	30 x 2 x 2,5 mm ²	2,716	346	43,2	2250
17275	37 x 2 x 2,5 mm ²	3,706	381	47,6	2775

Communication cables

MarineCom YZafc 250 V

Properties**Application:**

Lightweight, screened, control, instrumentation, tele-and data cable.

Characteristics:

- Twisted pairs, triples or quads
- Perfect electrical properties and low capacitance for minimal signal loss
- Halogen free and low smoke, flame retardant
- Extreme lightweight and small diameter for applications that don't need mechanical protection
- Different colour outer sheaths, other than grey, available on request

Core identification:

- Pairs & Quads: Numbered Blue and White. Triples: Numbered Blue, White and Red

**Specifications**

Product group	Shipboard communication cable
Type	MarineCom YZafc 250 V
Colour outer sheath	Grey
Standardization	IEC 60092-350/-360/-376
Conductor category	Class 2 = stranded
Core insulation	XLPE (VPE)
Core identification	Numbers
Overall stranding screen	Alpet tape
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

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Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16690	1 x 2 x 0,5 mm ²	0,044	49	6,1	15
16691	1 x 4 x 0,5 mm ²	0,064	57	7,1	30
16692	2 x 2 x 0,5 mm ²	0,075	71	8,9	30
16693	4 x 2 x 0,5 mm ²	0,108	82	10,2	60
16694	6 x 2 x 0,5 mm ²	0,160	98	12,3	90
16695	7 x 2 x 0,5 mm ²	0,162	98	12,3	105
16696	8 x 2 x 0,5 mm ²	0,180	105	13,1	120
16697	10 x 2 x 0,5 mm ²	0,224	120	15	150
16698	12 x 2 x 0,5 mm ²	0,253	126	15,7	180
16699	14 x 2 x 0,5 mm ²	0,293	135	16,9	210
16700	19 x 2 x 0,5 mm ²	0,374	154	19,2	285
16701	24 x 2 x 0,5 mm ²	0,462	171	21,4	360
16702	27 x 2 x 0,5 mm ²	0,519	182	22,7	405
16703	30 x 2 x 0,5 mm ²	0,566	190	23,7	450
16704	37 x 2 x 0,5 mm ²	0,686	209	26,1	555
16708	1 x 2 x 0,75 mm ²	0,050	51	6,4	23
16707	1 x 3 x 0,75 mm ²	0,060	54	6,8	34
16709	1 x 4 x 0,75 mm ²	0,072	58	7,3	45
16710	2 x 2 x 0,75 mm ²	0,086	77	9,6	45
16711	4 x 2 x 0,75 mm ²	0,137	90	11,3	90
16712	6 x 2 x 0,75 mm ²	0,200	107	13,4	135
16713	7 x 2 x 0,75 mm ²	0,202	107	13,4	158
16714	8 x 2 x 0,75 mm ²	0,230	116	14,5	180
16723	8 x 3 x 0,75 mm ²	0,323	96	16,6	236
16715	10 x 2 x 0,75 mm ²	0,285	130	16,3	225
16716	12 x 2 x 0,75 mm ²	0,326	139	17,4	270
16717	14 x 2 x 0,75 mm ²	0,368	147	18,4	315
16718	19 x 2 x 0,75 mm ²	0,478	169	21,1	428
16719	24 x 2 x 0,75 mm ²	0,598	189	23,6	540
16722	27 x 2 x 0,75 mm ²	0,659	200	25	608
16720	30 x 2 x 0,75 mm ²	0,737	209	26,1	675
16721	37 x 2 x 0,75 mm ²	0,888	230	28,8	833
16731	1 x 4 x 1 mm ²	0,088	63	7,9	60
16730	2 x 1 x 1 mm ²	0,057	54	6,8	30
16732	2 x 2 x 1 mm ²	0,102	82	10,2	60
16733	4 x 2 x 1 mm ²	0,160	95	11,9	120
16734	6 x 2 x 1 mm ²	0,243	114	14,2	180
16735	7 x 2 x 1 mm ²	0,242	114	14,2	210
16736	8 x 2 x 1 mm ²	0,277	122	15,3	240
16737	10 x 2 x 1 mm ²	0,343	140	17,5	300
16738	12 x 2 x 1 mm ²	0,393	146	18,3	360
16739	14 x 2 x 1 mm ²	0,447	156	19,5	420
16740	19 x 2 x 1 mm ²	0,589	179	22,4	570
16741	24 x 2 x 1 mm ²	0,742	202	25,2	720
16742	27 x 2 x 1 mm ²	0,821	212	26,5	810
16743	30 x 2 x 1 mm ²	0,898	222	27,7	900
16744	37 x 2 x 1 mm ²	1,093	245	30,6	1110

Communication cables

MarineCom YZafc 250 V

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16830	1 x 2 x 1,5 mm ²	0,074	62	7,8	45
16831	1 x 4 x 1,5 mm ²	0,122	75	9,4	90
16832	2 x 2 x 1,5 mm ²	0,140	97	12,1	90
16833	4 x 2 x 1,5 mm ²	0,219	112	14	180
16834	6 x 2 x 1,5 mm ²	0,348	136	17	270
16835	7 x 2 x 1,5 mm ²	0,347	138	17,2	315
16836	8 x 2 x 1,5 mm ²	0,395	146	18,3	360
16837	10 x 2 x 1,5 mm ²	0,491	168	21	450
16838	12 x 2 x 1,5 mm ²	0,565	175	21,9	540
16839	14 x 2 x 1,5 mm ²	0,655	189	23,6	630
16840	19 x 2 x 1,5 mm ²	0,865	218	27,2	855
16841	24 x 2 x 1,5 mm ²	1,088	244	30,5	1080
16842	27 x 2 x 1,5 mm ²	1,205	257	32,1	1215
16843	30 x 2 x 1,5 mm ²	1,321	269	33,6	1350
16844	37 x 2 x 1,5 mm ²	1,607	296	37	1665
16850	1 x 2 x 2,5 mm ²	0,099	70	8,7	75
16851	1 x 4 x 2,5 mm ²	0,167	83	10,4	150
16852	2 x 2 x 2,5 mm ²	0,188	109	13,6	150
16853	4 x 2 x 2,5 mm ²	0,313	128	16	300
16854	6 x 2 x 2,5 mm ²	0,478	155	19,4	450
16855	7 x 2 x 2,5 mm ²	0,499	155	19,4	525
16856	8 x 2 x 2,5 mm ²	0,570	167	20,9	600
16857	10 x 2 x 2,5 mm ²	0,708	192	24	750
16858	12 x 2 x 2,5 mm ²	0,833	202	25,3	900
16859	14 x 2 x 2,5 mm ²	0,951	216	27	1050
16860	19 x 2 x 2,5 mm ²	1,260	249	31,1	1425
16861	24 x 2 x 2,5 mm ²	1,585	279	34,9	1800
16862	27 x 2 x 2,5 mm ²	1,759	294	36,7	2025
16863	30 x 2 x 2,5 mm ²	1,953	310	38,7	2250
16864	37 x 2 x 2,5 mm ²	2,380	342	42,7	2775

Marine2Com YZ2afc 250 V

Properties

Application:

Lightweight, individual pair and overall screened, control, instrumentation, tele- and data cable.

Characteristics:

- Twisted pairs, triples or quads, individual pair and overall screening
- Perfect electrical properties and low capacitance for minimal signal loss
- Extreme lightweight and small diameter for applications that don't require mechanical protection
- Different colour outer sheaths, other than grey, available on request

Core identification:

- Pairs & Quads: Numbered Blue and White. Triples: Numbered Blue, White and Red



Specifications

Product group	Shipboard communication cable
Type	Marine2Com YZ2afc 250 V
Standardization	IEC 60092-350/-360/-376
Conductor category	Class 2 = stranded
Core insulation	XLPE (VPE)
Core identification	Numbers
Screen over stranding element	Alpet tape
Overall stranding screen	Alpet tape
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

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Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16750	2 x 2 x 0,5 mm ²	0,093	76	9,4	30
16751	4 x 2 x 0,5 mm ²	0,139	87	10,9	60
16752	6 x 2 x 0,5 mm ²	0,217	106	13,2	90
16753	7 x 2 x 0,5 mm ²	0,214	106	13,2	105
16754	8 x 2 x 0,5 mm ²	0,247	114	14,1	120
16755	10 x 2 x 0,5 mm ²	0,296	129	16,1	150
16756	12 x 2 x 0,5 mm ²	0,351	136	16,9	180
16757	14 x 2 x 0,5 mm ²	0,395	145	18,1	210
16758	19 x 2 x 0,5 mm ²	0,519	166	20,8	285
16759	24 x 2 x 0,5 mm ²	0,644	186	23,2	360
16760	27 x 2 x 0,5 mm ²	0,712	195	24,4	405
16761	30 x 2 x 0,5 mm ²	0,791	206	25,7	450
16762	37 x 2 x 0,5 mm ²	0,948	225	28,1	555
16770	2 x 2 x 0,75 mm ²	0,105	82	10,3	45
16771	4 x 2 x 0,75 mm ²	0,172	97	12,1	90
16772	6 x 2 x 0,75 mm ²	0,255	117	14,6	135
16773	7 x 2 x 0,75 mm ²	0,261	117	14,6	158
16774	8 x 2 x 0,75 mm ²	0,290	122	15,3	180
16775	10 x 2 x 0,75 mm ²	0,364	142	17,8	225
16776	12 x 2 x 0,75 mm ²	0,413	146	18,3	270
16777	14 x 2 x 0,75 mm ²	0,486	161	20,1	315
16778	19 x 2 x 0,75 mm ²	0,633	184	23	428
16779	24 x 2 x 0,75 mm ²	0,786	206	25,7	540
16782	27 x 2 x 0,75 mm ²	0,866	213	26,6	608
16780	30 x 2 x 0,75 mm ²	0,965	228	28,5	675
16781	37 x 2 x 0,75 mm ²	1,174	251	31,4	833
16790	2 x 2 x 1 mm ²	0,118	86	10,8	60
16791	4 x 2 x 1 mm ²	0,193	102	12,8	120
16792	6 x 2 x 1 mm ²	0,303	123	15,4	180
16793	7 x 2 x 1 mm ²	0,303	123	15,4	210
16794	8 x 2 x 1 mm ²	0,338	131	16,4	240
16795	10 x 2 x 1 mm ²	0,420	150	18,8	300
16796	12 x 2 x 1 mm ²	0,495	159	19,9	360
16797	14 x 2 x 1 mm ²	0,563	170	21,2	420
16798	19 x 2 x 1 mm ²	0,743	194	24,3	570
16799	24 x 2 x 1 mm ²	0,923	217	27,1	720
16800	27 x 2 x 1 mm ²	1,036	230	28,7	810
16801	30 x 2 x 1 mm ²	1,137	241	30,1	900
16802	37 x 2 x 1 mm ²	1,383	266	33,2	1110
16810	2 x 2 x 1,5 mm ²	0,159	103	12,9	90
16811	4 x 2 x 1,5 mm ²	0,262	122	15,2	180
16812	6 x 2 x 1,5 mm ²	0,408	147	18,4	270
16813	7 x 2 x 1,5 mm ²	0,412	147	18,4	315
16814	8 x 2 x 1,5 mm ²	0,471	158	19,8	360
16815	10 x 2 x 1,5 mm ²	0,588	182	22,8	450
16816	12 x 2 x 1,5 mm ²	0,678	190	23,8	540
16817	14 x 2 x 1,5 mm ²	0,774	203	25,4	630

Communication cables

Marine2Com YZ2afc 250 V

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16818	19 x 2 x 1,5 mm ²	1,038	236	29,5	855
16819	24 x 2 x 1,5 mm ²	1,294	262	32,8	1080
16820	27 x 2 x 1,5 mm ²	1,453	278	34,8	1215
16821	30 x 2 x 1,5 mm ²	1,586	291	36,4	1350
16822	37 x 2 x 1,5 mm ²	1,932	322	40,2	1665
16870	2 x 2 x 2,5 mm ²	0,221	118	14,8	150
16871	4 x 2 x 2,5 mm ²	0,361	138	17,2	300
16872	6 x 2 x 2,5 mm ²	0,560	169	21,1	450
16873	7 x 2 x 2,5 mm ²	0,591	169	21,1	525
16874	8 x 2 x 2,5 mm ²	0,664	180	22,5	600
16875	10 x 2 x 2,5 mm ²	0,837	208	26	750
16876	12 x 2 x 2,5 mm ²	0,973	218	27,3	900
16877	14 x 2 x 2,5 mm ²	1,127	234	29,3	1050
16878	19 x 2 x 2,5 mm ²	1,493	270	33,7	1425
16879	24 x 2 x 2,5 mm ²	1,886	302	37,8	1800
16880	27 x 2 x 2,5 mm ²	2,097	318	39,8	2025
16881	30 x 2 x 2,5 mm ²	2,315	336	42	2250
16882	37 x 2 x 2,5 mm ²	2,823	370	46,3	2775

MarineCom YOZc X-FR 250 V

Properties

Application:

Lightweight, fire resistant, armoured, control, instrumentation, tele- and data cable.

Characteristics:

- Twisted pairs, triples or quads
- Perfect electrical properties and low capacitance for minimal signal loss
- Fire resistant according to new IEC60331-1/2 due to (amongst other things) XLHFFR isolation
- Extra mechanical protection and reduced EMI due to the tinned copper braided screen
- Different colour outer sheaths, other than orange, available on request

Core identification:

- Pairs & Quads: Numbered Blue and White. Triples: Numbered Blue, White and Red



Specifications

Product group	Shipboard communication cable
Type	MarineCom YOZc X-FR 250 V
Colour outer sheath	Orange
Standardization	IEC 60092-350/-360/-376
Conductor category	Class 2 = stranded
Core insulation	Mica + XLHFFR
Core identification	Numbers
Construction outer shield	tinned copper braiding
Overall stranding screen	Braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Insulation integrity in accordance with IEC 60331	Yes
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

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Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
26470	1 x 2 x 0,5 mm ²	0,080	62	7,7	15
26485	1 x 3 x 0,5 mm ²	0,091	65	8,1	23
26471	1 x 4 x 0,5 mm ²	0,113	73	9,1	30
26520	2 x 2 x 0,5 mm ²	0,136	90	11,3	30
26486	2 x 3 x 0,5 mm ²	0,166	98	12,3	68
26472	4 x 2 x 0,5 mm ²	0,196	110	13,8	60
26487	4 x 3 x 0,5 mm ²	0,289	122	15,2	90
26473	6 x 2 x 0,5 mm ²	0,334	131	16,4	90
26474	7 x 2 x 0,5 mm ²	0,325	131	16,4	105
26488	7 x 3 x 0,5 mm ²	0,433	150	18,8	158
26475	8 x 2 x 0,5 mm ²	0,365	141	17,6	120
26476	10 x 2 x 0,5 mm ²	0,437	158	19,8	150
26489	10 x 3 x 0,5 mm ²	0,595	182	22,8	225
26477	12 x 2 x 0,5 mm ²	0,497	166	20,8	180
26478	14 x 2 x 0,5 mm ²	0,557	177	22,1	210
26490	14 x 3 x 0,5 mm ²	0,763	202	25,3	315
26479	19 x 2 x 0,5 mm ²	0,712	202	25,3	285
26491	19 x 3 x 0,5 mm ²	0,979	230	28,8	428
26480	24 x 2 x 0,5 mm ²	0,864	224	28	360
26492	24 x 3 x 0,5 mm ²	1,193	256	32	540
26481	27 x 2 x 0,5 mm ²	0,960	237	29,6	405
26482	30 x 2 x 0,5 mm ²	1,047	248	31	450
26483	37 x 2 x 0,5 mm ²	1,245	272	34	555
26500	1 x 2 x 0,75 mm ²	0,087	65	8,1	23
26515	1 x 3 x 0,75 mm ²	0,102	68	8,5	34
26501	1 x 4 x 0,75 mm ²	0,124	75	9,4	45
26499	2 x 2 x 0,75 mm ² (Quad)	0,124	75	9,4	45
26502	2 x 2 x 0,75 mm ²	0,154	96	12	45
26516	2 x 3 x 0,75 mm ²	0,189	108	13,5	101
26503	4 x 2 x 0,75 mm ²	0,257	116	14,3	90
26517	4 x 3 x 0,75 mm ²	0,333	128	16	135
26504	6 x 2 x 0,75 mm ²	0,387	138	17,3	135
26505	7 x 2 x 0,75 mm ²	0,384	140	17,5	158
26518	7 x 3 x 0,75 mm ²	0,517	161	20,1	236
26506	8 x 2 x 0,75 mm ²	0,430	148	18,5	180
26507	10 x 2 x 0,75 mm ²	0,516	168	21	225
26519	10 x 3 x 0,75 mm ²	0,699	194	24,2	338
26508	12 x 2 x 0,75 mm ²	0,592	178	22,2	270
26509	14 x 2 x 0,75 mm ²	0,656	187	23,4	315
26521	14 x 3 x 0,75 mm ²	0,903	214	26,8	473
26510	19 x 2 x 0,75 mm ²	0,842	214	26,7	428
26522	19 x 3 x 0,75 mm ²	1,183	246	30,8	641
26524	20 x 2 x 0,75 mm ²	0,875	218	27,3	450
26511	24 x 2 x 0,75 mm ²	1,038	238	29,8	540
26523	24 x 3 x 0,75 mm ²	1,445	274	34,2	810
26512	27 x 2 x 0,75 mm ²	1,138	250	31,3	608
26513	30 x 2 x 0,75 mm ²	1,259	264	33	675

Communication cables

MarineCom YOZc X-FR 250 V

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
26514	37 x 2 x 0,75 mm ²	1,924	288	36	833
26526	1 x 2 x 1,0 mm ²	0,098	70	8,7	30
26541	1 x 3 x 1,0 mm ²	0,116	73	9,1	45
26527	1 x 4 x 1,0 mm ²	0,145	80	10	60
26528	2 x 2 x 1,0 mm ²	0,173	102	12,8	60
26542	2 x 3 x 1,0 mm ²	0,252	117	14,6	135
26529	4 x 2 x 1,0 mm ²	0,297	123	15,4	120
26543	4 x 3 x 1,0 mm ²	0,388	138	17,2	180
26530	6 x 2 x 1,0 mm ²	0,448	147	18,4	180
26532	8 x 2 x 1,0 mm ²	0,485	158	19,8	240
26533	10 x 2 x 1,0 mm ²	0,594	180	22,5	300
26545	10 x 3 x 1,0 mm ²	0,821	208	26	450
26534	12 x 2 x 1,0 mm ²	0,683	190	23,7	360
26535	14 x 2 x 1,0 mm ²	0,767	202	25,2	420
26546	14 x 3 x 1,0 mm ²	1,062	230	28,8	630
26536	19 x 2 x 1,0 mm ²	0,989	231	28,9	570
26547	19 x 3 x 1,0 mm ²	1,392	266	33,2	855
26537	24 x 2 x 1,0 mm ²	1,220	258	32,2	720
26548	24 x 3 x 1,0 mm ²	1,831	298	37,2	1080
26538	27 x 2 x 1,0 mm ²	1,343	271	33,9	810
26539	30 x 2 x 1,0 mm ²	1,590	286	35,8	900
26540	37 x 2 x 1,0 mm ²	1,890	315	39,4	1110
26550	1 x 2 x 1,5 mm ²	0,117	76	9,5	45
26551	1 x 4 x 1,5 mm ²	0,176	87	10,9	90
26552	2 x 2 x 1,5 mm ²	0,246	119	14,9	90
26566	2 x 3 x 1,5 mm ²	0,317	130	16,3	203
26553	4 x 2 x 1,5 mm ²	0,373	139	17,4	180
26567	4 x 3 x 1,5 mm ²	0,506	157	19,6	270
26554	6 x 2 x 1,5 mm ²	0,561	168	21	270
26525	7 x 2 x 1,5 mm ²	0,559	166	20,8	315
26568	7 x 3 x 1,5 mm ²	0,784	195	24,4	473
26555	8 x 2 x 1,5 mm ²	0,631	178	22,3	360
26556	10 x 2 x 1,5 mm ²	0,787	206	25,7	450
26569	10 x 3 x 1,5 mm ²	1,089	238	29,8	675
26557	12 x 2 x 1,5 mm ²	0,892	214	26,8	540
26558	14 x 2 x 1,5 mm ²	1,009	229	28,6	630
26570	14 x 3 x 1,5 mm ²	1,435	266	33,2	945
26559	19 x 2 x 1,5 mm ²	1,322	263	32,9	855
26571	19 x 3 x 1,5 mm ²	2,016	309	38,6	1283
26560	24 x 2 x 1,5 mm ²	1,744	295	36,9	1080
26572	24 x 3 x 1,5 mm ²	2,462	342	42,8	1620
26561	27 x 2 x 1,5 mm ²	1,933	312	39	1215
26562	30 x 2 x 1,5 mm ²	2,117	326	40,8	1350
26563	37 x 2 x 1,5 mm ²	2,545	361	45,1	1665
26575	1 x 2 x 2,5 mm ²	0,147	84	10,5	75
26565	1 x 3 x 2,5 mm ²	0,190	90	11,3	113
26590	1 x 3 x 2,5 mm ²	0,190	90	11,3	113
26576	1 x 4 x 2,5 mm ²	0,231	98	12,2	150

Communication cables

MarineCom YOZc X-FR 250 V

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
26577	2 x 2 x 2,5 mm ²	0,324	135	16,9	150
26591	2 x 3 x 2,5 mm ²	0,409	146	18,2	338
26592	4 x 3 x 2,5 mm ²	0,661	174	21,7	450
26579	6 x 2 x 2,5 mm ²	0,725	188	23,5	450
26593	7 x 3 x 2,5 mm ²	1,058	220	27,5	788
26581	8 x 2 x 2,5 mm ²	0,861	203	25,4	600
26582	10 x 2 x 2,5 mm ²	1,058	232	29	750
26594	10 x 3 x 2,5 mm ²	1,486	268	33,3	1125
26583	12 x 2 x 2,5 mm ²	1,225	244	30,5	900
26584	14 x 2 x 2,5 mm ²	1,388	261	32,6	1050
26595	14 x 3 x 2,5 mm ²	2,082	301	37,6	1575
26585	19 x 2 x 2,5 mm ²	1,949	303	37,9	1425
26596	19 x 3 x 2,5 mm ²	2,727	346	43,2	2138
26586	24 x 2 x 2,5 mm ²	2,404	338	42,2	1800
26597	24 x 3 x 2,5 mm ²	3,370	385	48,1	2700
26587	27 x 2 x 2,5 mm ²	2,670	357	44,6	2025
26588	30 x 2 x 2,5 mm ²	2,941	374	46,7	2250
26589	37 x 2 x 2,5 mm ²	3,565	414	51,7	2775

Marine2Com YOZ2c X-FR 250 V

Properties

Application:

Fire resistant, lightweight, individual pair and overall screened, armoured, control, instrumentation, tele-and data cable.

Characteristics:

- Twisted pairs, triples or quads, individual pair and overall screened
- Perfect electrical properties and low capacitance for minimal signal loss
- Fire resistant according to new IEC60331-1/2 due to (amongst other things) XLHFFR isolation
- Extra mechanical protection and reduced EMI due to the tinned copper braided screen
- Different colour outer sheaths, other than orange, available on request

Core identification:

- Pairs & Quads: Numbered Blue and White. Triples: Numbered Blue, White and Red



Specifications

Product group	Shipboard communication cable
Type	Marine2Com YOZ2c X-FR 250 V
Standardization	IEC 60092-350/-360/-376
Conductor category	Class 2 = stranded
Core insulation	Mica + XLHFFR
Core identification	Numbers
Construction outer shield	tinned copper braiding
Screen over stranding element	Alpet tape
Overall stranding screen	Foil + braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Insulation integrity in accordance with IEC 60331	Yes
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

107 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
26662	2 x 2 x 0,5 mm ²	0,167	98	12,3	30
26681	2 x 3 x 0,5 mm ²	0,197	105	13,1	68
26663	4 x 2 x 0,5 mm ²	0,274	120	15	60
26682	4 x 3 x 0,5 mm ²	0,340	130	16,2	90
26664	6 x 2 x 0,5 mm ²	0,389	142	17,8	90
26665	7 x 2 x 0,5 mm ²	0,398	142	17,8	105
26683	7 x 3 x 0,5 mm ²	0,508	160	20	158
26666	8 x 2 x 0,5 mm ²	0,448	151	18,9	120
26667	10 x 2 x 0,5 mm ²	0,546	172	21,5	150
26684	10 x 3 x 0,5 mm ²	0,700	195	24,4	225
26668	12 x 2 x 0,5 mm ²	0,616	181	22,6	180
26669	14 x 2 x 0,5 mm ²	0,691	192	24	210
26685	14 x 3 x 0,5 mm ²	0,902	216	27	315
26670	19 x 2 x 0,5 mm ²	0,887	219	27,4	285
26686	19 x 3 x 0,5 mm ²	1,159	246	30,8	428
26671	24 x 2 x 0,5 mm ²	1,096	245	30,6	360
26687	24 x 3 x 0,5 mm ²	1,434	275	34,4	540
26672	27 x 2 x 0,5 mm ²	1,201	257	32,1	405
26673	30 x 2 x 0,5 mm ²	1,323	269	33,6	450
26674	37 x 2 x 0,5 mm ²	1,692	298	37,3	555
26601	1 x 4 x 0,75 mm ²	0,131	76	9,5	45
26600	1 x 2 x 0,75 mm ²	0,094	66	8,2	23
26690	1 x 3 x 0,75 mm ²	0,112	71	8,8	33
26691	3 x 3 x 0,75 mm ²	0,226	112	14	101
26603	4 x 2 x 0,75 mm ²	0,320	123	15,4	90
26692	4 x 3 x 0,75 mm ²	0,392	138	17,3	135
26604	6 x 2 x 0,75 mm ²	0,453	150	18,8	135
26605	7 x 2 x 0,75 mm ²	0,466	150	18,8	158
26693	7 x 3 x 0,75 mm ²	0,595	171	21,4	236
26606	8 x 2 x 0,75 mm ²	0,508	161	20,1	180
26607	10 x 2 x 0,75 mm ²	0,622	183	22,9	225
26694	10 x 3 x 0,75 mm ²	0,820	208	26	338
26608	12 x 2 x 0,75 mm ²	0,708	191	23,9	270
26609	14 x 2 x 0,75 mm ²	0,809	206	25,7	315
26695	14 x 3 x 0,75 mm ²	1,045	229	28,6	473
26610	19 x 2 x 0,75 mm ²	1,036	234	29,3	428
26696	19 x 3 x 0,75 mm ²	1,353	262	32,7	641
26611	24 x 2 x 0,75 mm ²	1,286	258	32,3	540
26697	24 x 3 x 0,75 mm ²	1,802	296	37	810
26612	27 x 2 x 0,75 mm ²	1,413	274	34,3	608
26613	30 x 2 x 0,75 mm ²	1,974	287	35,9	675
26614	37 x 2 x 0,75 mm ²	1,977	317	39,6	833
26616	1 x 4 x 1 mm ²	0,145	80	10	60
26617	2 x 2 x 1 mm ²	0,236	115	14,4	60
26701	2 x 3 x 1 mm ²	0,288	124	15,5	90
26618	4 x 2 x 1 mm ²	0,348	134	16,7	120
26702	4 x 3 x 1 mm ²	0,444	147	18,4	180

Communication cables

Marine2Com YOZ2c X-FR 250 V

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
26619	6 x 2 x 1 mm ²	0,505	160	20	180
26620	7 x 2 x 1 mm ²	0,516	160	20	210
26703	7 x 3 x 1 mm ²	0,677	182	22,8	315
26621	8 x 2 x 1 mm ²	0,583	172	21,5	240
26622	10 x 2 x 1 mm ²	0,711	195	24,4	300
26704	10 x 3 x 1 mm ²	0,932	222	27,8	450
26628	12 x 2 x 1 mm ²	0,802	206	25,7	360
26624	14 x 2 x 1 mm ²	0,910	219	27,4	420
26705	14 x 3 x 1 mm ²	1,209	246	30,8	630
26625	19 x 2 x 1 mm ²	1,174	250	31,3	570
26706	19 x 3 x 1 mm ²	1,689	286	35,7	855
26626	24 x 2 x 1 mm ²	1,454	280	35	720
26707	24 x 3 x 1 mm ²	2,082	318	39,8	1080
26627	27 x 2 x 1 mm ²	1,725	298	37,2	810
26623	30 x 2 x 1 mm ²	1,893	312	39	900
26629	37 x 2 x 1 mm ²	2,264	343	42,9	1110
26631	1 x 4 x 1,5 mm ²	0,189	87	10,9	90
26630	1 x 2 x 1,5 mm ²	0,127	76	9,5	45
26632	2 x 2 x 1,5 mm ²	0,293	130	16,2	90
26711	2 x 3 x 1,5 mm ²	0,361	140	17,5	135
26633	4 x 2 x 1,5 mm ²	0,448	151	18,9	180
26712	4 x 3 x 1,5 mm ²	0,562	166	20,7	270
26634	6 x 2 x 1,5 mm ²	0,627	181	22,6	270
26635	7 x 2 x 1,5 mm ²	0,655	181	22,6	315
26713	7 x 3 x 1,5 mm ²	0,873	206	25,8	473
26636	8 x 2 x 1,5 mm ²	0,738	194	24,2	360
26637	10 x 2 x 1,5 mm ²	0,904	222	27,8	450
26714	10 x 3 x 1,5 mm ²	1,221	254	31,7	675
26638	12 x 2 x 1,5 mm ²	1,030	233	29,1	540
26639	14 x 2 x 1,5 mm ²	1,178	250	31,2	630
26715	14 x 3 x 1,5 mm ²	1,594	281	35,1	945
26640	19 x 2 x 1,5 mm ²	1,650	289	36,1	855
26716	19 x 3 x 1,5 mm ²	2,217	325	40,6	1283
26641	24 x 2 x 1,5 mm ²	2,026	322	40,2	1080
26717	24 x 3 x 1,5 mm ²	2,746	364	45,5	1620
26642	27 x 2 x 1,5 mm ²	2,245	338	42,3	1215
26643	30 x 2 x 1,5 mm ²	2,448	356	44,5	1350
26644	37 x 2 x 1,5 mm ²	2,942	398	49,8	1665
26645	1 x 2 x 2,5 mm ²	0,156	84	10,6	75
26646	1 x 4 x 2,5 mm ²	0,243	98	12,2	150
26647	2 x 2 x 2,5 mm ²	0,374	146	18,2	150
26721	2 x 3 x 2,5 mm ²	0,457	155	19,4	225
26648	4 x 2 x 2,5 mm ²	0,575	170	21,3	300
26722	4 x 3 x 2,5 mm ²	0,747	186	23,3	450
26649	6 x 2 x 2,5 mm ²	0,825	204	25,5	450
26650	7 x 2 x 2,5 mm ²	0,874	204	25,5	525
26723	7 x 3 x 2,5 mm ²	1,174	234	29,2	788
26651	8 x 2 x 2,5 mm ²	0,988	219	27,4	600

Communication cables

Marine2Com YOZ2c X-FR 250 V

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
26652	10 x 2 x 2,5 mm ²	1,225	252	31,5	750
26724	10 x 3 x 2,5 mm ²	1,794	290	36,3	1125
26653	12 x 2 x 2,5 mm ²	1,401	263	32,9	900
26654	14 x 2 x 2,5 mm ²	1,727	286	35,7	1050
26725	14 x 3 x 2,5 mm ²	2,305	322	40,2	1575
26655	19 x 2 x 2,5 mm ²	2,234	326	40,8	1425
26726	19 x 3 x 2,5 mm ²	3,020	370	46,2	2138
26656	24 x 2 x 2,5 mm ²	2,766	366	45,7	1800
26727	24 x 3 x 2,5 mm ²	3,755	414	51,7	2700
26657	27 x 2 x 2,5 mm ²	3,058	385	48,1	2025
26658	30 x 2 x 2,5 mm ²	3,380	405	50,6	2250
26659	37 x 2 x 2,5 mm ²	4,057	445	55,6	2775

MarineCom YZafc X-FR 250 V

Properties

Application:

Lightweight, fire resistant, screened, control, instrumentation, tele- and data cable.

Characteristics:

- Twisted pairs, triples or quads
- Perfect electrical properties and low capacitance for minimal signal loss
- Fire resistant according to new IEC60331-1/2 due to (amongst other things) XLHFFR isolation
- Different colour outer sheaths, other than orange, available on request

Core identification:

- Pairs & Quads: Numbered Blue and White. Triples: Numbered Blue, White and Red



Specifications

Product group	Shipboard communication cable
Type	MarineCom YZafc X-FR 250 V
Standardization	IEC 60092-350/-360/-376
Conductor category	Class 2 = stranded
Core insulation	Mica + XLHFFR
Core identification	Numbers
Overall stranding screen	Alpet tape
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Insulation integrity in accordance with IEC 60331	Yes
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

MarineCom YZafc X-FR 250 V

10 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
26830	2 x 2 x 0,5 mm ²	0,101	43	10,7	30
26802	1 x 2 x 0,75 mm ²	0,064	31	7,6	225
26816	2 x 2 x 0,75 mm ² (Quad)	0,096	34	8,6	45
26801	2 x 2 x 0,75 mm ²	0,121	46	11,5	45
26803	4 x 2 x 0,75 mm ²	0,185	54	13,4	90
26805	7 x 2 x 0,75 mm ²	0,287	65	16,2	158
26807	10 x 2 x 0,75 mm ²	0,407	80	19,9	225
26809	14 x 2 x 0,75 mm ²	0,540	90	22,5	315
26810	19 x 2 x 0,75 mm ²	0,708	103	25,8	428
26811	24 x 2 x 0,75 mm ²	0,876	115	28,7	540

Signal cables

MarineSignal YZs 250 V

Properties**Application:**

Lightweight, unarmoured, reduced diameter cable designed for signal, control & alarm purposes in all ship areas

Characteristics:

- Class 2 conductors
- Lightweight, reduced diameter
- Halogen free and low smoke, flame retardant
- Excellent abrasion resistance
- Different colour outer sheaths, other than grey, available on request

Core identification:

- Numbered

**Specifications**

Product group	Shipboard low voltage cable
Type	MarineSignal YZs 250 V
Standardization	IEC 60092-350/-360/-376
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 2 = stranded
Core identification	Numbers
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Grey
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U	0.25 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

19 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16210	2 x 0,75 mm ²	0,042	25	6,3	23
16211	3 x 0,75 mm ²	0,053	26	6,6	34
16212	4 x 0,75 mm ²	0,064	28	7,1	45
16213	5 x 0,75 mm ²	0,078	31	7,7	56
16214	7 x 0,75 mm ²	0,099	34	8,6	79
16215	12 x 0,75 mm ²	0,155	45	11,2	135
16216	19 x 0,75 mm ²	0,233	54	13,5	214
16217	27 x 0,75 mm ²	0,321	63	15,8	304
16218	37 x 0,75 mm ²	0,428	73	18,2	416
16220	2 x 1,0 mm ²	0,049	27	6,7	30
16221	3 x 1,0 mm ²	0,062	28	6,9	45
16222	4 x 1,0 mm ²	0,076	31	7,7	60
16223	5 x 1,0 mm ²	0,093	33	8,2	75
16230	6 x 1,0 mm ²	0,111	36	9,1	90
16224	7 x 1,0 mm ²	0,120	36	9,1	105
16225	12 x 1,0 mm ²	0,197	48	12,0	180
16226	19 x 1,0 mm ²	0,293	59	14,8	285
16227	27 x 1,0 mm ²	0,403	69	17,3	405
16228	37 x 1,0 mm ²	0,538	80	20	555

Signal cables

MarineSignal YOZs 250 V

Properties

Application:

Lightweight, armoured, reduced diameter cable designed for signal, control & alarm purposes in all ship areas

Characteristics:

- Class 2 conductors
- Lightweight, reduced diameter
- Halogen free and low smoke, flame retardant
- Tinned copper wire braid armouring
- Excellent abrasion resistance
- Different colour outer sheaths, other than grey, available on request

Core identification:

- Numbered



Specifications

Product group	Shipboard low voltage cable
Type	MarineSignal YOZs 250 V
Standardization	IEC 60092-350/-360/-376
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 2 = stranded
Core identification	Product dependent
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Grey
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U	250 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

18 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16241	2 x 0,75 mm ²	0,072	28	6,9	23
16242	3 x 0,75 mm ²	0,083	29	7,3	34
16243	4 x 0,75 mm ²	0,094	31	7,8	45
16244	5 x 0,75 mm ²	0,113	34	8,6	56
16245	7 x 0,75 mm ²	0,131	37	9,2	79
16246	12 x 0,75 mm ²	0,202	47	11,8	135
16247	19 x 0,75 mm ²	0,322	59	14,8	214
16248	27 x 0,75 mm ²	0,426	68	17,1	304
16249	37 x 0,75 mm ²	0,553	78	19,4	416
16250	2 x 1,0 mm ²	0,079	29	7,3	30
16252	4 x 1,0 mm ²	0,106	33	8,2	60
16253	5 x 1,0 mm ²	0,128	36	9,1	75
16240	6 x 1,0 mm ²	0,147	39	9,8	90
16254	7 x 1,0 mm ²	0,155	39	9,8	105
16255	12 x 1,0 mm ²	0,241	50	12,6	180
16256	19 x 1,0 mm ²	0,384	63	15,8	285
16257	27 x 1,0 mm ²	0,517	73	18,2	405
16258	37 x 1,0 mm ²	0,660	83	20,8	555

Signal cables

MarineSignal+ YZs 250 V

Properties

Application:

Heavy duty, unarmoured cable designed for signal, control & alarm purposes in all ship areas

Characteristics:

- Class 2 conductors
- Extruded inner bedding for perfectly round shaped cable
- Halogen free and low smoke, flame retardant
- Perfect abrasion resistance & suitable for heavy duty application
- Different colour outer sheaths, other than grey, available on request

Core identification:

- Numbered



Specifications

Product group	Shipboard low voltage cable
Type	MarineSignal+ YZs 250 V
Standardization	IEC 60092-350/-360/-376
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 2 = stranded
Core identification	Numbers
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Grey
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U	0.25 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

8 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16231	2 x 0,75 mm ²	0,062	27	6,7	23
16232	3 x 0,75 mm ²	0,072	28	7	34
16233	4 x 0,75 mm ²	0,083	30	7,5	45
16234	5 x 0,75 mm ²	0,099	33	8,2	56
16235	2 x 1,0 mm ²	0,076	29	7,3	30
16236	3 x 1,0 mm ²	0,083	30	7,4	45
16237	4 x 1,0 mm ²	0,098	33	8,2	60
16238	5 x 1,0 mm ²	0,119	36	8,9	75

Signal cables

MarineSignal+ YOZs 250 V

Properties

Application:

Heavy duty, armoured cable designed for signal, control & alarm purposes in all ship areas

Characteristics:

- Class 2 conductors
- Extruded inner bedding for perfectly round shaped cable
- Halogen free and low smoke, flame retardant
- Tinned copper wire braid armouring
- Perfect abrasion resistance & suitable for heavy duty application
- Different colour outer sheaths, other than grey, available on request

Core identification:

- Numbered



Specifications

Product group	Shipboard low voltage cable
Type	MarineSignal+ YOZs 250 V
Standardization	IEC 60092-350/-360/-376
Conductor material	Cu
Shape of conductor	Round
Core insulation	XLPE (VPE)
Conductor category	Class 2 = stranded
Core identification	Numbers
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Colour outer sheath	Grey
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Nominal voltage U	250 kV
Maximum conductor temperature	90 °C
Permitted cable outer temperature, in movement	-20 / 70 °C
Permitted cable outer temperature, fixed	-40 / 70 °C

8 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation	Outer diameter approx.	Tensile load
16261	2 x 0,75 mm ²	0,103	31	7,8	23
16262	3 x 0,75 mm ²	0,111	32	8,1	34
16263	4 x 0,75 mm ²	0,129	36	8,9	45
16264	5 x 0,75 mm ²	0,145	38	9,4	56
16265	2 x 1,0 mm ²	0,111	32	8,1	30
16266	3 x 1,0 mm ²	0,125	34	8,6	45
16267	4 x 1,0 mm ²	0,141	37	9,2	60
16268	5 x 1,0 mm ²	0,165	40	9,9	75

Cat 5E S/FTP Marine Approved

Properties

Application:

Twisted pair cable for carrying signals. This type of cable is used in structured cabling for computer networks such as Ethernet

Characteristics:

- Available in stranded (AWG 24/7 CAT 5) conductors
- Halogen free and low smoke, flame retardant
- DNV certified
- Different colour outer sheaths, other than grey , available on request

Core identification:

- White/Blue, White/Orange, White/Brown



Specifications

Product group	Signal-/telecommunications cable
Type	Cat 5E S/FTP Marine Approved
Conductor material	Copper
Conductor category	Class 2 = stranded
Screen over stranding element	Al/Polyester foil
Overall stranding screen	Braiding
Material outer sheath	LSZH
Halogen free (acc. EN 60754-1/2)	Yes
Low smoke (acc. EN 61034-2)	Yes
Oil resistant	IEC 60811-2-1 IRM 902/ASTM No.2 (70°C for 4 Hrs)
Permitted cable outer temperature, fixed	-20 / 70 °C

Cat 5E S/FTP Marine Approved

3 products

Part number	Construction	Net weight (kg/m)	Outer diameter approx.
24025	4x2xAWG 24/7 HFFR-LS Black	0,071	8,0
24026	4x2xAWG 24/7 HFFR-LS Grey	0,071	8,0
24027	4x2xAWG 24/7 HFFR-LS Lila/Purple	0,071	8,0

Cat 5 & Cat 7

Cat.7 S/FTP Marine Approved

Properties Application:

Backbone connections between servers within a data center, to provide a high-speed interconnect used for data transfer within the network

Characteristics:

- Available in stranded (AWG 22/7 CAT7) and solid (AWG 23/1 Cat 7) conductors
- Halogen free and low smoke, flame retardant
- DNV certified
- Different colour outer sheaths, other than grey , available on request

Core identification:

- White/Blue, White/Orange, White/Green, White/Brown

**Specifications**

Product group	Signal-/telecommunications cable
Type	Cat.7 S/FTP Marine Approved
Conductor material	Copper
Conductor category	Product dependent
Screen over stranding element	Al/Polyester foil
Overall stranding screen	Braiding
Material outer sheath	LSZH
Oil resistant	IEC 60811-2-1 IRM 902/ASTM No.2 (70°C for 4 Hrs)
Permitted cable outer temperature, fixed	Product dependent

6 products

Part number	Construction	Net weight (kg/m)	Outer diameter approx.
24015	4x2xAWG 22/7 HFFR-LS Black	0,080	8,3
24016	4x2xAWG 22/7 HFFR-LS Grey	0,080	8,3
24017	4x2xAWG 22/7 HFFR-LS Lila/Purple	0,080	8,3
24020	4x2x23AWG HFFR-LS Black	0,078	8,1
24021	4x2x23AWG HFFR-LS Grey	0,078	7,8
24022	4x2x23AWG HFFR-LS Lila/Purple	0,078	8,1

Connector

MarineConnect Cat 6A

Properties

Application:

The 800412 is a CAT6A Fully Shielded toolless RJ45 modular jack answering to the CAT6A performances and supporting 10 Gbps

Characteristics:

- Toolless termination through a wiring cap equipped with a separator in order to facilitate the wire management and to reduce the unsplitting length
- Component certified according to the standard ISO11801 Am d2.2
- 360° shielding: direct contact with the cable shield thanks to an adjustable flange
- Very compact connector with a depth of 28.25mm: compatible with a big part of the faceplates and wall boxes
- Optimized printed circuit to improve high frequencies crosstalk performance
- Equipped with a translucent wire cap to allow an easy visual inspection
- Keystone type
- Two wings linked to the connector's body (no loose part) offer a simple and easy locking system



Specifications

Product group	Modular connector
Type	CAT6A MODULAR JACK RJ45
Model	Bus (jack)
Screened	Yes
Category	6A (IEC)
Connection type	Insulation displacement
Suitable for round cable	Yes
Suitable for flat cable	No
Suitable for litz wire conductor	Yes
Suitable for solid core	Yes
Colour	Grey

MarineConnect Cat 6A

1 products

Part number	Construction	Model	Connection type
800412	FULLY SHIELDED	Bus (jack)	Insulation displacement



FAST & SAVE DATA WITH MARINECONNECT

APPROVED PERMANENT LINK FOR MARINE APPLICATION

With the advent of the internet of things and industry 4.0, demands are increasing rapidly if it comes to the trouble free functioning of a ship's network infrastructure. Faster data, video and telephony transmissions without downtime, performance at 24/7 basis.

To secure the reliability and maximum performance of the network, TKF has developed MarineConnect. An approved permanent link for marine application which guarantees a 24/7 functioning up to 10 Gigabit Ethernet. A Cat.7 cable and Category 6A connector, developed according to the latest requirements, certified by DELTA and approved by DNV-GL. A compact and tool less, easy to install, permanent link class Ea.

MarineConnect approved permanent link

MarineConnect permanent link class Ea consists of a Cat.6A tool less connector and a high performance Cat.7 cable. The certified link results in a reliable performance up to 10 GBps for special application in ships.

CAT.7 Solid and stranded

The Cat.7 S/FTP is a universal network cable for installation/horizontal in heavy duty applications. The cable is available in a solid version as well as a stranded version for use in tougher mechanical environments. The fully screened Cat. 6A connector offers a tool less termination through a wiring cap, equipped with a separator in order to facilitate the wire management and to reduce the unsplitting length. The optimized printed circuit improves the high frequencies crosstalk performance. Two wings linked to the connectors body (no loose parts) offer a simple and easy locking system.

BENEFITS & CHARACTERISTICS

- High performance PCB
- 20 years of warranty on the system*
- Certified link (cable and connector)
- Compact and tool less, easy to install
- Keystone format: suitable with all patch panels, boxes and plates Time & costs saving
- Cat.7 cable and Cat.6A connector suitable for Power Ethernet (PoE and PoE+)

* ask for our conditions

TKF MarineConnect Permanent link is certified and approved by:



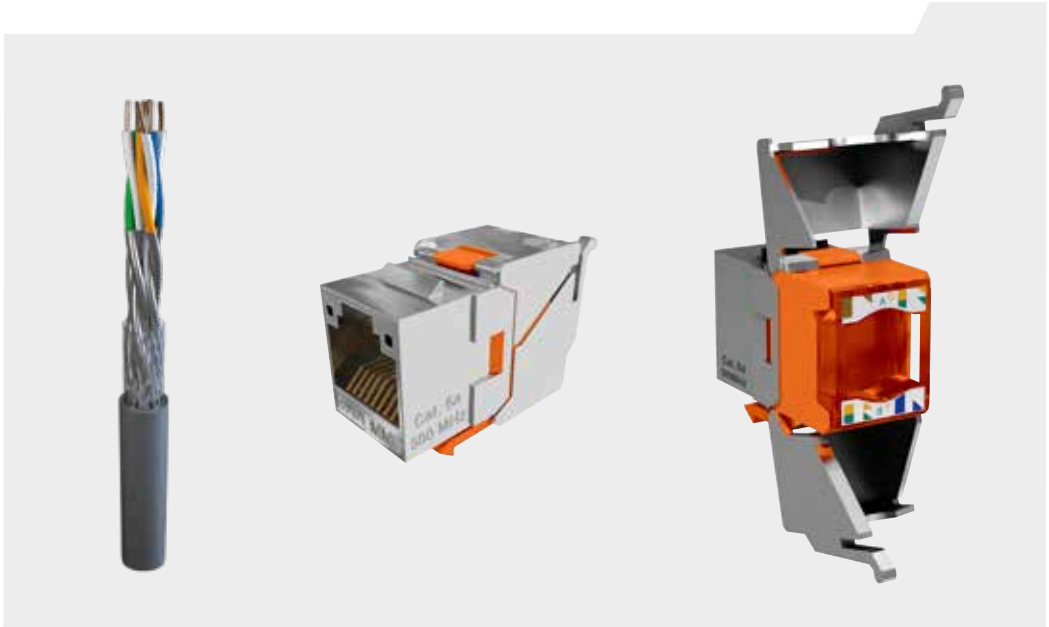
PRODUCTS:

Cables:

Art. 24016	MarineConnect Cat.7 S/FTP	4x2x0.27 mm ² stranded
Art. 24021	MarineConnect Cat.7 S/FTP	4x2x0,259 mm ² solid

Connector:

Art. 800412	MarineConnect Cat.6A	Tool less connector
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TECHNICAL PRODUCT INFORMATION

Technical product information Cat. 5 and Cat.7

Cat. 5E S/FTP 4x2 AWG 24/7

Transmission Frequency (MHZ)	1	2	10	16	20	30	31,25	62,5	100	
Attenuation dB/100 m	---	4,08	6,48	8,26	9,28	11,48	11,73	16,99	21,98	
Return Loss dB/100 m	---	32,0	35,0	25,0	25,0	23,8	23,6	21,5	20,1	
NEXT dB/100m	---	56,3	50,3	47,2	45,8	43,1	42,9	38,4	35,3	
PSNEXT dB/100m	---	53,3	47,3	44,2	42,8	40,1	39,9	35,4	32,3	
ELFEXT	---	52,0	44,0	39,9	38,0	34,5	34,1	28,1	24,0	
PSELFEXT dB/100m	---	49,0	41,0	36,9	35,0	31,5	31,1	25,1	21,0	
TCL	40	34	30	28	27	25,2	25,1	22	20	
ELTCTL	35	23	15	10,9	9,0	5,5	---	---	---	
Coupling Attenuation	---	---	---	---	---	40	40	40	40	
Delay ns/100m	---	552	545,4	543,0	542	541	540,4	538,6	537,6	
Skew ns/100m	---						≤45			

TECHNICAL PRODUCT INFORMATION

Cat. 7 S/FTP 4x2 AWG 23/1

Transmission Frequency (MHZ)	1	4	10	16	20	30	31,25
Attenuation dB/100 m	---	3,7	5,9	7,5	8,3	10,2	10,4
Return Loss dB/100 m	---	23	25	25	25	23,8	23,6
NEXT dB/100m	---	78	78	78	78	78	78
PSNEXT dB/100m	---	75	75	75	75	75	75
ELFEXT	---	78	74	69,9	68	64,5	64,1
PSELFEXT dB/100m	---	75	71	66,9	65	61,5	61,1
TCL	40	34	30	28	27	25,2	25,1
ELTCTL	35	23	15	10,9	9	5,5	---
Coupling Attenuation	---	---	---	---	---	40	40
Delay ns/100m	---	552	545,4	543	542	541	540,4
Skew ns/100m	---				≤25		

Transmission Frequency (MHZ)	62,5	100	155	200	250	300	600
Attenuation dB/100 m	14,9	19,0	24	27,5	31	34,2	50,1
Return Loss dB/100 m	21,5	20,1	18,8	18,0	17,3	17,3	17,3
NEXT dB/100m	75,5	72,4	69,5	67,9	66,4	65,2	60,7
PSNEXT dB/100m	72,5	69,4	66,5	64,9	63,4	62,2	57,7
ELFEXT	58,1	54	50,2	48	46	44,5	38,4
PSELFEXT dB/100m	55,1	51	47,2	45	43	41,5	35,4
TCL	22	20	18,1	17	16	---	---
ELTCTL	---	---	---	---	---	---	---
Coupling Attenuation	40	40	36,2	34	32	30,5	24,4
Delay ns/100m	538,6	537,6	536,9	536,5	536,3	536,1	535,5
Skew ns/100m					≤25		

TECHNICAL PRODUCT INFORMATION

Cat. 7E S/FTP 4x2 AWG 22/7

Transmission Frequency (MHZ)	1	4	10	16	20	30	31,25
Attenuation dB/100 m	---	3,7	5,9	7,5	8,3	10,2	10,4
Return Loss dB/100 m	---	23	25	25	25	23,8	23,6
NEXT dB/100m	---	78	78	78	78	78	78
PSNEXT dB/100m	---	75	75	75	75	75	75
ELFEXT	---	78	74	69,9	68	64,5	64,1
PSELFEXT dB/100m	---	75	71	66,9	65	61,5	61,1
TCL	40	34	30	28	27	25,2	25,1
ELTCTL	35	23	15	10,9	9	5,5	---
Coupling Attenuation	---	---	---	---	---	40	40
Delay ns/100m	---	552	545,4	543	542	541	540,4
Skew ns/100m	---				≤25		

Transmission Frequency (MHZ)	62,5	100	155	200	250	300	600
Attenuation dB/100 m	14,9	19,0	24	27,5	31	34,2	50,1
Return Loss dB/100 m	21,5	20,1	18,8	18,0	17,3	17,3	17,3
NEXT dB/100m	75,5	72,4	69,5	67,9	66,4	65,2	60,7
PSNEXT dB/100m	72,5	69,4	66,5	64,9	63,4	62,2	57,7
ELFEXT	58,1	54	50,2	48	46	44,5	38,4
PSELFEXT dB/100m	55,1	51	47,2	45	43	41,5	35,4
TCL	22	20	18,1	17	16	---	---
ELTCTL	---	---	---	---	---	---	---
Coupling Attenuation	40	40	36,2	34	32	30,5	24,4
Delay ns/100m	538,6	537,6	536,9	536,5	536,3	536,1	535,5
Skew ns/100m				≤25			

TECHNICAL PRODUCT INFORMATION

Materials

TKF uses high-quality insulation materials for all its marine cables, which allows a continuous conductor temperature of 90 °C and withstands a temporary overload temperature of 130 °C and a short-circuit temperature of 250 °C. The materials show very low dielectric losses when used in power cables and excellent transmission properties for the instrumentation and communication cables. It also has extremely low moisture absorption, and a high resistance to most chemicals. The Fire-Resistant cables have conductors fully wrapped in mica-glass tape before being insulated.

Insulation

Cable type	Insulation material
MarineLine, MarineFlex, Marinecom	Cross-Linked Polyethylene (XLPE) according to IEC 60092-360, type HF-XLPE
FR-types	Mica tape + Cross-Linked Polyethylene (XLPE) according to IEC 60092-360, type HF-XLPE
X-FR types	Mica tape + Cross Linked Flame Retardant Polyolefine according IEC 60092-360, type HF90

Sheathing

Standard, TKF marine cables have a SHF1 type, halogen-free, flame retardant, low-smoke sheath. This sheath has a very good abrasion resistance, good mechanical properties, low moisture absorption and high resistance to most chemicals. The material meets the requirements as specified in IEC 60092-360 under type SHF1 for mechanical properties, as well as the IEC 60811-2-1 for oil-resistance (ASTM oil 2, 4 hours, 70 °C). The selected sheath material makes TKF marine cables very suitable for installation and usage in areas with low temperatures.

UV-resistance

Besides having good abrasion resistance and mechanical properties surpassing the requirements of the IEC 60092-series specification, all marine and offshore cables have been tested and pass the requirements for UV-resistance according to ISO 4892-2, and surpass the requirements of UL 1581:1200 & HD 605. In practice this has proven to be at least sufficient UV protected in Northern European conditions. However, TKF strongly advises to protect all cables against exposure to direct sunlight.

Especially in the marine and offshore sector, ultimate exposure of UV during the cable lifetime can vary greatly, with subject to changing geographical location and other factors, such as water spray, which can often not be completely overseen in the design fase of the structure. Therefore TKF cannot give any binding statements on the cable lifetime when exposed directly to UV-radiation.

If the cables are exposed to direct UV- radiation, protective covering or a black outer sheath is recommended. On request, special sheath materials can be applied (e.g. TPU or SHF2) for more extreme conditions.

Armouring and Screening

All TKF's braided cables (designated with the "O" in the type designation) have tinned-copper wire braiding with a coverage of at least 90%. The tinned wires give a high corrosion resistance of the braid and offer both mechanical and EMI protection. Screened cables ("af" type designation) offer only EMI protection with alu- PET tapes in combination with a tinned copper drain wire.

TECHNICAL PRODUCT INFORMATION

International standards

The marine cables in this catalogue are designed and tested in accordance with the following standards, where applicable.

International standards

Standard	Description
IEC 60092-350	General construction and test methods of power, control and instrumentation cables for shipboard and offshore applications
IEC 60092-352	Electrical installations in ships – choice and installation of cables for low-voltage power systems
IEC 60092-353	Single and multicore non-radial field power cables with extruded solid insulation for rated voltages 1 kV and 3 kV
IEC 60092-354	Single- and three-core power cables with extruded solid insulation for rated voltages 6 kV ($U_m = 7.2$ kV) up to 30 kV ($U_m = 36$ kV)
IEC 60092-360	Insulating and sheathing materials for shipboard and offshore units, power, control, instrumentation and telecommunication cables
IEC 60092-376	Cables for control and instrumentation circuits 150/250 V (300 V)
IEC 60228	Conductors of insulated cables
IEC 60331-11	Tests for electric cables under fire conditions - circuit integrity - apparatus - fire alone at a flame temperature of at least 750 °C
IEC 60331-21	Tests for electric cables under fire conditions - circuit integrity - procedures and requirements - cables of rated voltage up to and including 0.6/1.0 kV
IEC 60331-1	Tests for electric cables under fire conditions - circuit integrity - Part 1: Test method for fire with shock at a temperature of at least 830 °C for cables of rated voltage up to and including 0,6/1,0 kV and with an overall diameter exceeding 20mm
IEC 60331-2	Tests for electric cables under fire conditions - circuit integrity -Part 2: Test method for fire with shock at a temperature of at least 830 °C for cables of rated voltage up to and including 0,6/1,0 kV and with an overall diameter not exceeding 20 mm
IEC 60332-1	Tests on electric cables under fire conditions - Part 1: test on a single vertical insulated wire or cable
IEC 60332-3-22- A	Tests on electric cables under fire conditions - Part 3-22: test for vertical flame spread of vertically mounted bunched wires or cables - category A
IEC 60754-1	Test on gases evolved during combustion of electric cables - determination of the of halogen acid gas
IEC 60754-2	Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity
IEC 60811	Common test methods for insulating and sheathing materials of electric cables
IEC 61034	Measurement of smoke density of electric cables burning under defined conditions

TECHNICAL PRODUCT INFORMATION

Installation instructions

Bending radius - Bending Radii according to IEC 60092-352

Voltage Rating	Cable Construction	Outer Diameter	Bending Radius	Cable Types
Up to 1.8/ 3 kV	Unarmoured	<25 mm	R = 4 x D	YZp, YZs
	Unarmoured	>25 mm	R = 6 x D	YZp, YZs
	Armoured/Screened	any	R = 6 x D	YOZp, YOZs, YOZc
	Foil screened	any	R = 8 x D	YOZ2c, YZafp, Yzafc
≥ 3.6/6 kV	Single Core	any	R = 12 x D	YOZmv
	Triple Core	any	R = 9 x D	YZOZmv

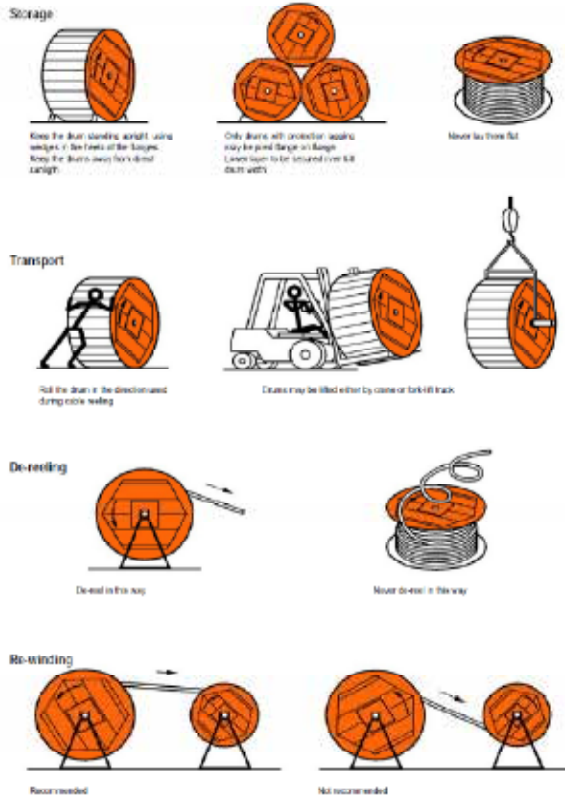
Pulling Force

The cable pulling tension during installation can be estimated by means of the following formula:

$$\text{Max. Pulling Force (N)} = 15 \times \text{total cross section}$$

Pulling instructions

It is recommended to use a sleeve on the cable head when pulling the cable into cable trays to evenly distribute the pulling stress over the whole conductor area of the cable. When using lubricants to lower the friction in cable pulling a lubricant, suitable for Halogen Free cables, should be used. When installing cables in below zero temperatures, installation of the cable is greatly eased when the cable has been stored in a location with a temperature of +15 degrees for at least 24 hours. When pulling cable in winter conditions and the reels have been stored outside, please check the reels for ice buildup and layers of cable frozen together, which could cause damage to the cable when unwinding the reels.



Installation temperature

Minimum recommended installation temperature for cables of rated voltage up to 20 kV, = -20°C.

TECHNICAL PRODUCT INFORMATION

Current Rating for general installations

The current ratings are applicable for d.c. and a.c. with a nominal frequency of 50 Hz or 60 Hz and an ambient air temperature of 45° C. For higher frequencies, the current rating shall be calculated with an appropriate method (e.g. IEC 60287). For other ambient air temperatures the correction factors have to be applied. These ratings are applicable, without correction factors, for cables bunched together on cable trays, in cable conduits, pipes or trunking, unless more than six cables operate simultaneously at their full rated capacity are laid close together without free air circulating around them. In this case a correction factor of 0.85 should be applied. The tables are for general reference purposes only, and do not describe all installation methods existing in practice. For more detailed information see IEC 60092-352(2005) Annex A & B. For specific situations not covered by these standards, exact current calculations can be made by our engineering department.

Correction factors for ambient air temperatures for maximum conductor temperature of 90° C

Air temperature	Correction factor
35° C	1.10
40° C	1.05
45° C	1.00
50° C	0.94
55° C	0.88
60° C	0.82

Air temperature	Correction factor
65° C	0.74
70° C	0.67
75° C	0.58
80° C	0.47
85° C	-
90° C	-

Current Rating (A)

Cross Section (mm2)	Number of cores loaded		
	1	2	3 & 4
1.5	23	20	16
2.5	40	26	21
4	51	34	28
6	52	44	36
10	72	61	50
16	96	82	67
25	127	108	89
35	157	133	110
50	196	167	137
70	242	206	169

Cross Section (mm2)	Number of cores loaded		
	1	2	3 & 4
95	293	249	205
120	339	288	237
150	389	331	272
185	444	377	311
240	522	444	365
300	601	511	421
	d.c. a.c.	d.c. a.c.	d.c. a.c.
400	690 670	587 570	483 469
500	780 720	663 612	546 504
630	890 780	757 663	623 548

Current carrying capacities in continuous service at maximum rated conductor temperature of 90°C in A, at 45° C ambient air temperature, based on IEC 60092-352 Annex A Table B-4

For cables with >4 conductors the current rating can be calculated with the following formula:

$$I = \frac{I_1}{\sqrt[3]{n}}$$

Where I_1 = current rating for single core, n = number of cores.

TECHNICAL PRODUCT INFORMATION

# of cores	Ampacity (A)		
	1,5mm ²	2,5mm ²	4mm ²
5	13	23	30
6	13	22	28
7	12	21	27
8	12	20	26
10	11	19	24
12	10	17	22
16	9	16	20

# of cores	Ampacity (A)		
	1,5mm ²	2,5mm ²	4mm ²
19	9	15	19
24	8	14	18
27	8	13	17
30	7	13	16
34	7	12	16
37	7	12	15

Short Circuit Current

The maximum permissible short circuit current for different cables is based on the formula:

$$I_k = 143 \cdot \frac{S}{\sqrt{t}}$$

I_k = the maximum permissible short-circuit current in Ampere

S = the cross section area of the conductor in mm²

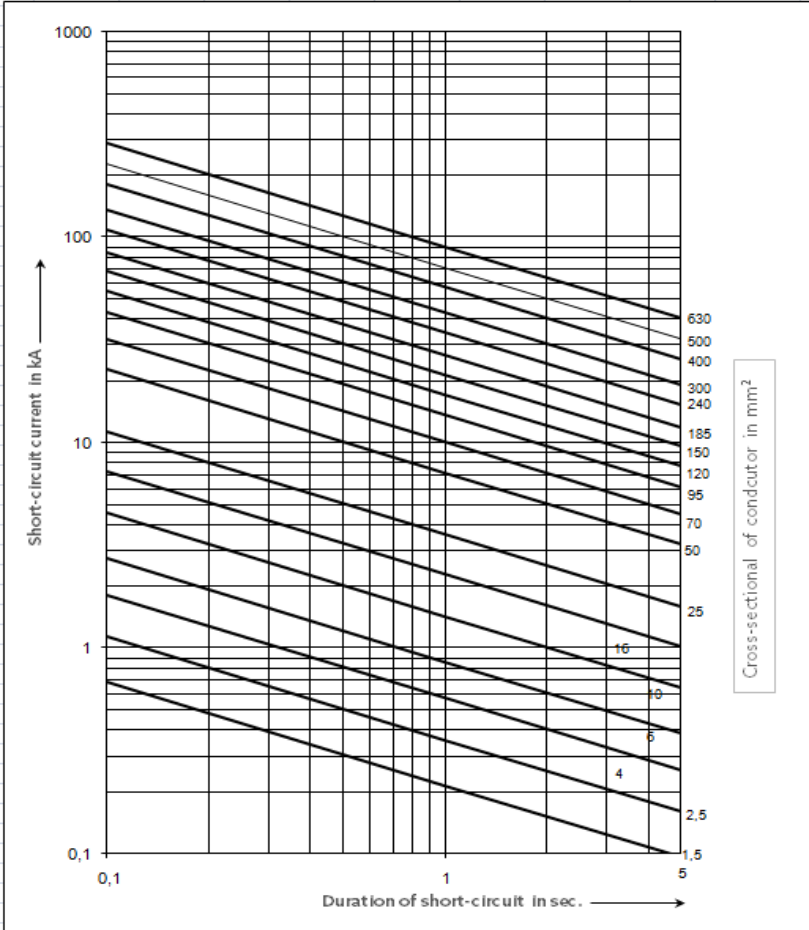
t = the duration of the short-circuit in seconds

The formula is acceptable for an increase in temperature from 90°C at the start to 250°C at the end. Further information is given in IEC 60724 and IEC 60986. In the figure the permissible short-circuit current is given in kA as a function of time (from 0.1 to 5 seconds) and as a function of the cross sectional area of the conductor

Max Short Circuit Current in kA	Duration Short Circuit	
	0,1 Second	1 Second
Cross Section (mm ²)		
1	0,452	0,143
1,5	0,679	0,215
2,5	1,131	0,358
4	1,810	0,572
6	2,715	0,859
10	4,525	1,431
16	7,240	2,289
25	11,312	3,577
35	15,836	5,008
50	22,623	7,154
70	31,673	10,016
95	42,985	13,593
120	54,296	17,170
150	67,870	21,463
185	83,707	26,470
240	108,593	34,340
300	135,741	42,925
400	180,988	57,233
500	226,235	71,542

TECHNICAL PRODUCT INFORMATION

Duration of short-circuit current



Reactance Calculations

The reactance of cables can be calculated with the following formula:

$$2 \cdot \pi \cdot f \cdot L$$

f = frequency in Hz

L = inductance in H

TECHNICAL PRODUCT INFORMATION

Sheath Colours & Core Identification

Overview types, standards, core identification and sheath colour

Application	Type	Standard	Core identification	Sheath
Low voltage	MarineLine (+) Y(O)Z(af)p 0,6/1 kV	IEC 60092-350/353 HD308 S2-2001		Black
	MarineFlex Y(O)Zp & YOQp 0,6/1 kV	IEC 60092-350/353 HD308 S2-2001		Black
	MarineFlex YOZp 1,8/3 kV	IEC 60092-350/353 HD308 S2-2001		Black
	MarineLine (+) Y(O)Zp FR 0,6/1 kV	IEC 60331-11/21 HD308 S2-2001		Orange
	MarineLine (+) Y(O)Zp X-FR 0,6/1 kV	IEC 60331-1/2 HD308 S2-2001		Orange
Medium voltage	MarinePower Y(Z)OZmv 3,6-30 kV	IEC 60092-350/354 Coloured tape + numbers		Red
	MarinePower Multiflex YQOQmv 6/10kV	IEC 60092-350/354 Coloured tape + numbers		Red
Communication	Marine(2)Com Y(O)Z(af)(2)c 250V	IEC 60092-350/376 Blue/White cores + numbers		Grey
	Marine(2)Com Y(O)Z(af)(2)c X-FR 250V	IEC 60331-1/2 Blue/White cores + numbers		Orange
Signal	MarineSignal (+) Y(O)Zs 250V	IEC 60092-350/-35 Black cores + numbers		Grey

Different sheath colours on request



Core identification




Low voltage power cables 0,6/1 kV -1,8/3kV - According to HD308 S2-2001

Cond .	Without Yellow/Green Conductor					With Yellow/Green Conductor (G)				
	N	L1/L2	L/L2	L3	L3	PE	N	L1/L2	L/L2	L3
1										
2										
3										
4										
5										
>5			Nr.						Nr.	


- Notes
- 1) PE = protective conductor - beschermingsleiding - Schutzleiter - conducteur de protection
 N = neutral conductor - nulleiding - Neutralleiter - conducteur neutre
 L, L1, L2, L3 = phase conductors - faseleidingen - Phasenleiter - conducteurs de phase
 - 2) Nr. = black numbered - zwart genummerd - schwarz nummeriert - noir numéroté

Communication Cables 250 V

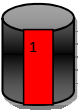
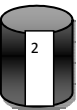
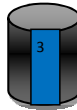
Pairs (n x 2 x y mm ²)	
	
1	2
3... etc.	4... etc.

Triples (n x 3 x y mm ²)		
		
1	2	3
4... etc.	5... etc.	6... etc.

Signal Cables 250 V

Multicores

1
2... etc.

Medium Voltage cables 3,6-30kV

Triple Cores (YZOZmv, YQOQmv)		
		
Spiral wound red tape with number	Spiral wound white tape with number	Spiral wound blue tape with number

WORLDWIDE CUSTOMER SERVICE

If you need assistance or want to request a quote, please contact our sales team:

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Orderintake		
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Information about our distributors is available on our website www.tkf.eu.

SERVICE CONCEPT: CUTTING & LABELING

The marine market is a fast moving market where pressure on efficiency and cost reduction is high. Planning is tight and delays are costly.

The amount of cables needed for a ship can reach up to hundreds of kilometers. Cable circuits route through the entire ship where spaces are narrow, both on board as well as on the installation site. The need for efficiency, ease of installation and cost reduction emphasize the importance of service concepts that allow customers to focus on what they do best. Therefore TKF developed a logistic service concept which supports clients during installation, cutting & labeling.

TKF's cutting & labeling service is a proven concept of TKF. More than 400 reel positions make it possible to cut & label cables on a large scale. This means that cables are delivered at the exact lengths needed and labeled with detailed information about the installation location. Main advantages of this concept are decrease of cost due to purchase efficiency, no stock, no waste and faster installation.

Early involvement in the design process allows TKF to plan ahead stock availability. Detailed information from engineers about cable lengths, types and diameters is gathered to compile a standardized list which is used for the final label. The customer decides what information will be added for the installer to ease installation.

SERVICE ADVANTAGES

- No stock, no waste
- Just-in-time delivery
- Reduction cost of failures
- 25% faster installation
- Efficiency
- Industrialized – traceability of cables
- Flexibility



In our specially equipped cutting & labeling hall, the cables are cut, labeled and packaged, mainly automated.

Packaging plays an important role in this concept, cables are sorted by route and labeled with the necessary details for the installer about the cable and the location. This results in 25% faster installation and less errors.

Combined with planning, the cables are delivered just-in-time. No stock is needed on location, resulting in lower costs and reduced risk.



With this service concept TKF guarantees: high quality, ease of installation and short delivery times.

CABLE DRUM SIZES AND WEIGHTS

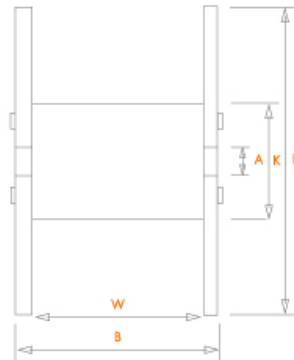
A wide range of drums with various sizes and weights is used to store and transport our cables. The most common types of drums and their sizes and weights are shown in this table.

Flange diameter (F) mm	Core diameter (K) mm	Central hole diameter (A) mm	Largest width (B) mm	Winding width (W) mm	Empty weight Kg	Volume m ³
*600	250	80	468	400	7,5	0,17
*800	400	100	480	400	14	0,31
800	500	100	500	485	43	0,31
*1000	500	100	605	485	28	0,31
1000	500	100	609	485	74	0,61
1200	600	100	724	600	108	1,04
1500	800	100	946	750	160	2,13
1600	800	100	1030	834	240	2,64
1800	900	100	1030	834	400	3,34
2100	900	100	1148	950	450	5,06
2250	1400	100	1122	830	600	5,68
2500	1450	100	1220	930	700	7,63
2500	1450	100	1458	1150	800	9,11
2650	1450	100	1488	1175	850	10,45
2800	1700	100	1520	1157	1050	11,92
3000	1600	100	1600	1235	1150	14,40

*Plastic drum

Empty drum return

To get your empty drums in the Netherlands collected quickly, please send your request to our shipping department via the website (www.tkf.eu) or by e-mail to haspels@tkf.nl. If drums have to be collected outside the Netherlands, please contact our sales staff.



- F** = Diameter flange
- K** = Diameter core
- A** = Diameter axle-hole
- B** = Largest width
- W** = Winding width

MORE INFORMATION

This catalogue contains information about product families. Information at item level can be requested via our website and from our sales staff. This catalogue has been customized. Information about products that are not included in this catalogue is available from our sales departments and can also be found on our website www.tkf.eu.

Please contact us for additional technical or commercial information. Contact information of our sales teams can be found under customer service in this catalogue and on our website.

Subject to changes

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Prices

Please contact our sales department for price information. The gross item prices of part of our portfolio have been included in our TPL price list. It can be downloaded via our website or requested from our sales staff.



 member of the TKH Group <



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