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TKF CONNECTIVITY SOLUTIONS

CONTENTS

TECHNOLOGICAL LEADERSHIP IN CONNECTIVITY SOLUTIONS	4	2 Marine medium voltage power cables	
		MarinePower Y(Z)OZmv 3,6/6 kV	66
		MarinePower Y(Z)OZmv 6/10 kV	68
		MarinePower Y(Z)OZmv 8,7/15 kV	70
MEET THE TKH GROUP AND ITS CORE TECHNOLOGIES	5	MarinePower Y(Z)OZmv 12/20 kV	72
		MarinePower Y(Z)OZmv 18/30 kV	74
		MarinePowerFlex Y(Z)OZmv 6/10 kV	76
		MarinePowerFlex Y(Z)OZmv 8,7/15 kV	78
		MarinePowerFlex Y(Z)OZmv 18/30 kV	80
INTEGRATED MARINE SOLUTIONS OF THE TKH GROUP	6	MarinePowerFlex+ YZOZmv EMC 3,6/6 kV	82
		MarinePowerFlex+ YZOZmv EMC 6/10 kV	84
MARINE MARKET	8	MarinePower MultiFlex YQOQmv 6/10 kV	86
INTERNATIONAL STANDARDS AND APPROVALS	10		
		3 Communication cables	
		MarineCom YOZc 250 V	88
GREEN PASSPORT FOR ENVIRONMENTALLY FRIENDLY MATERIALS	12	Marine2Com YOZ2c 250 V	92
		MarineCom YZafc 250 V	96
		Marine2Com YZ2afc 250 V	99
SAFE RETURN TO PORT (SRTP)	12	MarineCom YOZc X-FR 250 V	102
		Marine2Com YOZ2c X-FR 250 V	106
CORPORATE SOCIAL RESPONSIBILITY	13	MarineCom YZafc X-FR 250 V	110
MARINE CONNECT	14		
CUTTING & LABELING SERVICE	16	4 Signal cables	
		MarineSignal YZs 250 V	112
		MarineSignal YOZs 250 V	114
		MarineSignal+ YZs 250 V	116
		MarineSignal+ YOZs 250 V	118
1 Low voltage cables			
MarineLine YZp 0,6/1 kV	18	5 CAT 5 & CAT 6 & CAT 7	
MarineLine YOZp 0,6/1 kV	21	Cat.5E S/FTP Marine Approved	120
MarineLine YZafp 0,6/1 kV	24	Cat.6A S/FTP Marine Approved	122
MarineLine+ YZp 0,6/1 kV	26	Cat.6A S/FTP Marine Approved	
MarineLine+ YOZp 0,6/1 kV	28	Fire Resistant	124
MarineFlex YZp 0,6/1 kV	30	Cat.7 S/FTP Marine Approved	126
MarineFlex YOZp 0,6/1 kV	32	Cat.7 S/FTP Marine Approved	
MarineFlex YOZp 1,8/3 kV	35	Fire Resistant	128
MarineLine YOZp EMC 0,6/1 kV	37	Cat.7A S/FTP Marine Approved	130
MarineLine+ YOZp EMC 0,6/1 kV	39		
MarineFlex YOZp EMC 0,6/1 kV	41	6 Connector	
MarineFlex YOZp EMC 1,8/3 kV	43	MarineConnect Cat 6A	132
MarineMultiFlex BOQp 0,6/1 kV	45		
MarineMultiFlex BOQp 1,8/3 kV	47	TECHNICAL PRODUCT INFORMATION	136
MarineLine YZp X-FR 0,6/1 kV	49		
MarineLine YOZp X-FR 0,6/1 kV	52	WORLDWIDE CUSTOMER SERVICE	141
MarineLine+ YZp X-FR 0,6/1 kV	55	OUR SALES TEAM	141
MarineLine+ YOZp X-FR 0,6/1 kV	57		
MarineFlex YZp X-FR 0,6/1 kV	60	CABLE DRUM SIZES AND WEIGHTS	142
MarineFlex YOZp X-FR 0,6/1 kV	62		
MarineWire Zp 0,6/1 kV	64	MORE INFORMATION	143

TECHNOLOGICAL LEADERSHIP IN CABLE AND 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.

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



MORE THAN 90 YEARS
OF EXPERIENCE



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.



member of the TKH Group

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

WWW.TKHGROUP.COM

INTEGRATED MARINESOLUTIONS OF THE TKH GROUP

TKH Group supplies a wide variety of (integrated) innovative Marine, Oil and Gas (MOG) solutions.

The areas of expertise within MOG are:

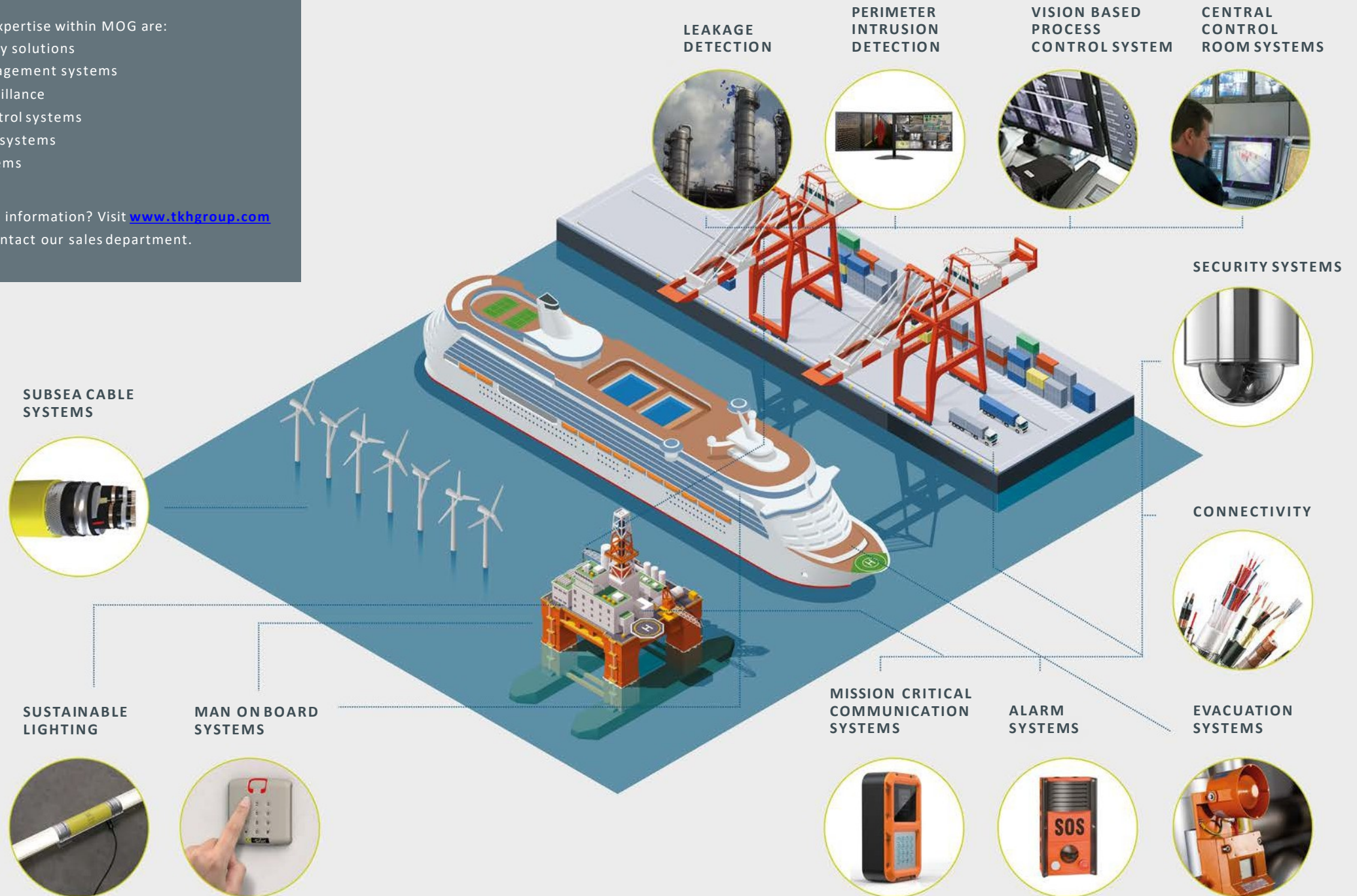
- Connectivity solutions
- Video management systems
- Video surveillance
- Access control systems
- Evacuation systems
- Alarm systems



More information? Visit www.tkhgroup.com or contact our sales department.



TKH MARINESOLUTIONS
WATCH AN IMPRESSION



MARINE MARKET

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.

HIGH END CABLE SOLUTIONS FOR ALL MARINE APPLICATIONS



Watch our video

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, 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.

CUSTOMER SERVICES

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 consists of the following cable types and connectivity:

LOW VOLTAGE CABLES

Light weighted low voltage cables for power and lighting on board of ships.

MEDIUM VOLTAGE CABLES

(Flexible) power cables for medium voltage energy transport for fixed installations.

COMMUNICATION CABLES

(Fire resistant) communication cables for instrumentation, telecommunication and data transmission on board of ships.

SIGNAL CABLES

Signal cables for signaling-, control- and alarm-systems on board of ships.



CUT & LABEL SERVICE

- 25% faster installation
- No stock, no cutting losses
- First-time-right installation



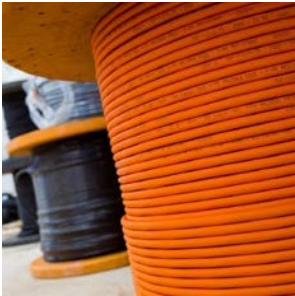
VENDOR MANAGED INVENTORY

- Improved planning
- No downtime
- Storage cost reduction



LOGISTIC EXCELLENCE

- Just-in-time delivery
- Yard space optimisation
- International local stocks



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	CRS		Instrumentation & Signal cables 250 V	ABS	BV	DNV-GL	LRS	PRS	CRS	RINA
MarineLine YZp 0,6/1 kV	X	X	X	X	X	X	X	MarineCom YOZc 250 V	X	X	X	X	X		X
MarineLine YOZp 0,6/1 kV	X	X	X	X	X	X		MarineCom YZafc 250 V	X	X	X	X			X
MarineLine YZafp 0,6/1 kV	X	X	X	X		X	X	Marine2Com YOZ2c 250 V	X	X	X	X	X		X
MarineLine+ YZp 0,6/1 kV	X	X	X	X		X		Marine2Com YZ2afc 250 V	X	X	X	X			X
MarineLine+ YOZp 0,6/1 kV	X	X	X	X		X	X	MarineCom+ YOZc 250 V		pending	X				X
MarineFlex YZp 0,6/1 kV	X	X	X	X	X	X		Marine2Com+ YOZc 250 V		pending	X				X
MarineFlex YOZp 0,6/1 kV	X	X	X	X	X	X	X	MarineCom YOZc X-FR 250 V	X	X	X	X	X		X
MarineLine YOZp 0,6/1 kV EMC	X		X	X		X		MarineCom YZafc X-FR 250 V			X	X			X
MarineLine+ YOZp 0,6/1 kV EMC	X		X	X		X	X	Marine2Com YOZ2c X-FR 250 V	X	X	X	X	X		X
MarineFlex YOZp 0,6/1 kV EMC	X		X	X		X		MarineCom+ YOZc X-FR 250V		pending	X				X
MarineLine YOZp 1,8/3 kV	X	X	X	X		X	X	Marine2Com+ YOZ2c X-FR 250V		pending	X				X
MarineFlex YOZp 1,8/3 kV	X	X	X	X		X		Marine2Com YZ2afc X-FR 250 V			X	X			X
MarineLine YOZp 1,8/3 kV EMC	X		X				X	MarineSignal YZs 250 V	X	X	X	X			X
MarineLine+ YOZp 1,8/3 kV EMC								MarineSignal YOZs 250 V	X	X	X	X			X
MarineFlex YOZp 1,8/3 kV EMC	X		X	X		X	X	MarineSignal+ YZs 250 V	X	X	X	X			X
MarineMultiFlex BOQp 0,6/1 kV								MarineSignal+ YOZs 250 V	X	X	X	X			X
MarineWire			X					MarineSignal YZs X-FR 250V			X				X
MarineLine YZp X-FR 0,6/1 kV	X	X	X	X	X		X	MarineSignal YOZs X-FR 250 V							X
MarineLine YOZp X-FR 0,6/1 kV	X	X	X	X	X		X	CAT 5 & CAT 6 & CAT 7							
MarineLine+ YOZp X-FR 0,6/1 kV	X	X	X	X				InduData Cat 5e SFTP stranded			X				X
MarineFlex YZp X-FR 0,6/1 kV	X	X	X	X	X		X	InduData Cat 7 SFTP stranded			X				X
MarineFlex YOZp X-FR 0,6/1 kV	X	X	X	X	X		X	InduData Cat 7 SFTP solid			X				X
MarineLine YOZp X-FR 0,6/1 kV EMC	X		X	X			X	InduData Cat 6a SFTP solid/stranded			X				
MarineLine+ YOZp X-FR 0,6/1 kV EMC	X		X	X			X	InduData Cat 7a SFTP solid			X				
MarineFlex YOZp X-FR 0,6/1 kV EMC	X		X	X			X	CAT 6a/7 SFTP Fire Resistant			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.

GREEN PASSPORT FOR ENVIRONMENTALLY FRIENDLY MATERIALS

As one of the first cable manufacturers, TKF (has) registered with Det Norske Veritas (DNV GL), a declaration of conformity for a “Green Passport” for ships, in June 2009. At this moment there are two main legislations with respect to ship recycling in the market, one is IMO Hong Kong Convention (HKC) SR/CONF/45 and the other one is the EU Ship Recycling Regulation (EU SRR) EC No 1257/2013. HKC has in total 6 guidelines and MEPC.269(68) is the guidelines for the development of the inventory of hazardous materials (IHM) under IMO. The IHM is a list of hazardous materials that are present on a ship. The IHM quantifies and locates hazardous materials on board ships which are known to represent a potential hazard to people and the environment. For assuring a safe and environmentally friendly handling of these materials, detailed documentation of those materials in the ship’s structure and equipment, and in stores, is essential. For newbuilding projects, the IHM Part I is prepared by the shipyard. The IHM is based on Material Declarations (MD) and the Supplier’s Declaration of Conformity (SDoC) provided for all machinery, equipment, materials and coatings installed on board a vessel. The MD and SDoC contain information on whether hazardous materials, as listed in Annexes I and II of the EU SRR and/or Appendixes 1 and 2 of the Convention, are present in the specified products. TKF marine cables are completely free of hazardous substances as listed by the EU SRR / Convention. Contact our Sales Department for more information.



SAFE RETURN TO PORT (SRTP)

Safe Return to Port (SRTP) is mandatory for passenger ships constructed after July 2010. It is applicable for ship with a length of 120mtr or more or having three or more main vertical zones. The overall intentions of SRTP regulations are to increase the vessels robustness and the 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. This is one of the reasons for the continuous research and development of highly specialised fire resistant cables, designed to withstand and remain operational in the event of fire and during firefighting efforts. TKF Marine X-FRSW series, high-end cables designed to exceed the most stringent fire resistant standards, 3 hours burning time including mechanical shock and water simulations.

CORPORATE SOCIAL RESPONSIBILITY

TKF aims to contribute to a sustainable society. This means that every business decision is made not only in the light of its effect on profitability, but also on its possible consequences for the people involved in our organization, and its impact on the environment and our reputation.

CSR-STRATEGY

As a matter of strategic priority, sustainability is firmly embedded in our day-to-day operations, and CSR initiatives are increasingly being integrated into our organization. Our CSR policy provides a framework for our short- and medium-term plans without losing sight of company interests. CSR is fully incorporated into our business operations so that, when we implement our strategy and achieve our objectives, we consider our social responsibilities in relation to all relevant stakeholders.

TKF is present in an increasing number of value chains as a purchaser, producer, supplier or business partner. In all of these roles, TKF tries to guarantee uniformity with regard to its CSR principles.

We have defined four areas with focused programs for achieving sustainability results:



PEOPLE: THE SOCIAL ASPECT OF ENTREPRENEURSHIP

- Ensuring a safe and healthy work environment;
- Providing opportunities for development, thereby retaining and engaging TKF employees;
- Being socially responsible towards the organisation as an employer.



PLANET: ATTENTION FOR ENVIRONMENT AND CLIMATE

- TKF contributes to a better climate with an energy reduction program;
- More efficient commodity chains through reduction and separation of waste;
- Focus on circularity.



PROFIT: ECONOMIC ASPECT OF ENTREPRENEURSHIP

- Ingenuity as one of the pillars at TKF for further growth;
- Sustainability in the chain.



POSITIONING: MAINTAINING GOOD REPUTATION

- A balanced and sustainable product and customer portfolio;
- TKF provides (sponsor) contributions to society;
- Maintaining a good reputation.

MARINE CONNECT

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.

FAST AND SAVE DATA WITH TKF MARINE CONNECT



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 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.



Our MarineConnect portfolio consists of the following cable types and connectivity:

CABLES:

Art. 24026 MarineConnect Cat.5E S/FTP	4x2xAWG 24/7HFFR-LS
Art. 24031 MarineConnect Cat.6A S/FTP	4x2xAWG 23/1HFFR-LS
Art. 24021 MarineConnect Cat.6AS/FTP	4x2xAWG 23/7HFFR-LS
Art. 24016 MarineConnect Cat.7 S/FTP	4x2xAWG 22/7HFFR-LS
Art. 24021 MarineConnect Cat.7 S/FTP	4x2xAWG 23HFFR-LS
Art. 24023 MarineConnect Cat.7AS/FTP	4x2xAWG 23/1HFFR-LS

CONNECTOR:

Art. 800412 MarineConnect RJ45	Cat.6A Tool less connector
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TKF MarineConnect Permanent link is certified and approved by:



DNV GL

BENEFITS & CHARACTERISTICS

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

*ask for our conditions



Watch our video about the cutting & labeling service concept

SERVICE ADVANTAGES

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

CUTTING & LABELING SERVICE

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

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 the installation. 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.

Estimation of types and amount of cables needed

Detailed engineering: cable lengths per type

Standardized file with detailed information for the installer

Cables cut & labeled mainly automated

Sorting of cable types per route

Detailed planning, just-in-time delivery

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

PRODUCTS

- 1 Low voltage cables
- 2 Marine medium voltage power cables
- 3 Communication cables
- 4 Signal cables
- 5 CAT 5 & CAT 6 & CAT 7
- 6 Connector

MarineLine YZp0,6/1 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

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Conductor coding in accordance with HD 308 S2	Yes
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV

**MarineLine YZp0,6/1 kV****78 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16560	2 x 1,0 mm ² Black	0.053	28	7	30
16000	1 x 1,5 mm ² Black	0.035	19	4,8	23
16001	2 x 1,5 mm ² Black	0.065	31	7,6	45
16002	3 x 1,5 mm ² Black	0.084	32	8	68
15969	3 G 1,5 mm ² Black	0.084	32	8	68
15970	4 G 1,5 mm ² Black	0.108	36	8,9	90
16003	4 x 1,5 mm ² Black	0.108	36	8,9	90
16004	5 x 1,5 mm ² Black	0.137	40	9,8	113
15971	5 G 1,5 mm ² Black	0.137	40	9,8	113
16005	6 x 1,5 mm ² Black	0.164	43	10,6	135
16006	7 x 1,5 mm ² Black	0.171	43	10,6	158
15972	7 G 1,5 mm ² Black	0.171	43	10,6	158
16007	8 x 1,5 mm ² Black	0.228	51	12,7	180
16008	10 x 1,5 mm ² Black	0.248	55	13,6	225
16009	12 x 1,5 mm ² Black	0.288	58	14,3	270
16010	16 x 1,5 mm ² Black	0.372	64	16	360
16011	19 x 1,5 mm ² Black	0.435	70	17,4	428
16059	20 x 1,5 mm ² Black	0.455	72	17,8	450
16012	24 x 1,5 mm ² Black	0.545	78	19,4	540
15999	27 x 1,5 mm ² Black	0.6	82	20,4	608
16013	1 x 2,5 mm ² Black	0.047	22	5,5	38
16014	2 x 2,5 mm ² Black	0.091	35	8,7	75
16015	3 x 2,5 mm ² Black	0.12	37	9,2	113
15973	3 G 2,5 mm ² Black	0.12	37	9,2	113
15974	4 G 2,5 mm ² Black	0.15	40	10	150
16016	4 x 2,5 mm ² Black	0.15	40	10	150
16017	5 x 2,5 mm ² Black	0.196	45	11,2	188
15975	5 G 2,5 mm ² Black	0.195	45	11,2	188
17401	6 x 2,5 mm ² Black	0.231	49	12,2	225
15976	7 G 2,5 mm ² Black	0.247	49	12,2	263
16018	7 x 2,5 mm ² Black	0.247	49	12,2	263
16019	1 x 4 mm ² Black	0.064	24	5,9	60
16020	2 x 4 mm ² Black	0.125	39	9,6	120
16021	3 x 4 mm ² Black	0.168	41	10,2	180
15977	3 G 4 mm ² Black	0.169	41	10,2	180
15978	4 G 4 mm ² Black	0.223	46	11,4	240
16022	4 x 4 mm ² Black	0.222	46	11,4	240
16561	5 x 4 mm ² Black	0.275	50	12,5	240
16559	5 G 4 mm ² Black	0.278	50	12,5	240
16023	1 x 6 mm ² Black	0.085	26	6,5	90
16024	2 x 6 mm ² Black	0.169	43	10,7	180
16025	3 x 6 mm ² Black	0.237	47	11,6	270
15979	3 G 6 mm ² Black	0.238	47	11,6	270
15980	4 G 6 mm ² Black	0.308	51	12,7	360

MarineLine YZp 0,6/1 kV

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16026	4 x 6 mm ² Black	0.307	51	12,7	360
16563	5 x 6 mm ² Black	0.39	57	14,2	450
15967	5 G 6 mm ² Black	0.391	57	14,2	450
17352	19 x 6 mm ² Black	1.332	160	25,8	1710
16027	1 x 10 mm ² Black	0.124	29	7,1	150
16028	2 x 10 mm ² Black	0.258	51	12,6	300
16029	3 x 10 mm ² Black	0.358	54	13,4	450
15981	3 G 10 mm ² Black	0.359	54	13,4	450
15982	4 G 10 mm ² Black	0.475	60	14,9	600
16030	4 x 10 mm ² Black	0.474	60	14,9	600
16564	5 x 10 mm ² Black	0.588	66	16,3	750
17426	5 G 10 mm ² Black	0.589	66	16,3	750
17353	19 x 10 mm ² Black	2.086	122	30,3	2850
16031	1 x 16 mm ² Black	0.178	35	8,1	240
16032	2 x 16 mm ² Black	0.374	60	14,8	480
16033	3 x 16 mm ² Black	0.524	64	15,7	720
16034	4 x 16 mm ² Black	0.694	70	17,5	960
16568	4 G 16 mm ² Black	0.695	70	17,5	960
16565	5 x 16 mm ² Black	0.876	80	19,4	1200
15968	5 G 16 mm ² Black	0.868	75	19,2	1200
16035	1 x 25 mm ² Black	0.276	40	10,1	375
16036	2 x 25 mm ² Black	0.584	75	18,8	750
16037	3 x 25 mm ² Black	0.832	80	20,2	1125
16038	4 x 25 mm ² Black	1.081	90	22	1500
16558	5 G 25 mm ² Black	1.375	99	24,7	1875
16039	1 x 35 mm ² Black	0.369	46	11,3	525
16040	2 x 35 mm ² Black	0.776	85	21,2	1050
16041	1 x 50 mm ² Black	0.496	52	12,8	750
16042	1 x 70 mm ² Black	0.7	59	14,7	1050
16043	1 x 95 mm ² Black	0.954	68	16,8	1425
16044	1 x 120 mm ² Black	1.198	75	18,6	1800
16045	1 x 150 mm ² Black	1.495	83	20,7	2250
16046	1 x 185 mm ² Black	1.866	93	23,1	2775
16047	1 x 240 mm ² Black	2.393	103	25,7	3600

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

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Screening	Yes
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling -20 / 70 °C	
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV



Low voltage cables

MarineLine YOZp 0,6/1 kV

90 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16110	1 x 1,5 mm ² Black	0.057	22	5,6	23
16111	2 x 1,5 mm ² Black	0.1	35	8,6	45
16112	3 x 1,5 mm ² Black	0.12	36	9	68
15984	3 G 1,5 mm ² Black	0.12	36	9	68
15985	4 G 1,5 mm ² Black	0.145	39	9,7	90
16113	4 x 1,5 mm ² Black	0.145	39	9,7	90
16114	5 x 1,5 mm ² Black	0.176	42	10,5	113
15986	5 G 1,5 mm ² Black	0.176	42	10,5	113
15991	6 G 1,5 mm ² Black	0.205	46	11,5	135
16115	6 x 1,5 mm ² Black	0.21	46	11,5	135
16116	7 x 1,5 mm ² Black	0.216	46	11,5	158
15995	7 G 1,5 mm ² Black	0.216	46	11,5	158
16117	8 x 1,5 mm ² Black	0.271	51	12,7	-
16118	10 x 1,5 mm ² Black	0.338	50	14,9	225
16595	10 G 1,5 mm ² Black	0.338	60	14,9	225
16574	12 G 1,5 mm ² Black	0.378	62	15,4	270
16119	12 x 1,5 mm ² Black	0.375	62	15,4	270
16597	14 G 1,5 mm ² Black	0.422	66	16,3	315
16120	16 x 1,5 mm ² Black	0.481	70	17,3	360
16121	19 x 1,5 mm ² Black	0.543	76	18,5	428
16599	19 G 1,5 mm ² Black	0.539	76	18,2	428
16430	20 x 1,5 mm ² Black	0.568	76	18,9	450
16122	24 x 1,5 mm ² Black	0.667	82	20,5	540
16600	24 G 1,5 mm ² Black	0.662	86	20,5	540
16159	27 x 1,5 mm ² Black	0.726	91	21,5	608
16185	37 x 1,5 mm ² Black	0.942	96	23,9	833
16123	1 x 2,5 mm ² Black	0.07	25	6,1	38
16124	2 x 2,5 mm ² Black	0.126	38	9,5	75
16125	3 x 2,5 mm ² Black	0.157	40	10	113
15987	3 G 2,5 mm ² Black	0.157	41	10,2	113
15988	4 G 2,5 mm ² Black	0.194	44	10,8	150
16126	4 x 2,5 mm ² Black	0.192	44	10,8	150
16127	5 x 2,5 mm ² Black	0.239	48	11,9	188
15989	5 G 2,5 mm ² Black	0.239	48	11,9	188
16128	7 x 2,5 mm ² Black	0.294	52	12,9	263
16572	7 G 2,5 mm ² Black	0.295	52	12,9	263
16567	10 x 2,5 mm ² Black	0.459	68	17	375
16596	10 G 2,5 mm ² Black	0.459	68	17	375
16573	12 G 2,5 mm ² Black	0.52	70	17,5	450
16437	12 x 2,5 mm ² Black	0.52	59	17,5	450
16598	14 G 2,5 mm ² Black	0.59	78	18,5	525
16429	19 x 2,5 mm ² Black	0.758	85	21,1	713
16540	24 x 2,5 mm ² Black	0.928	94	23,4	900
16129	1 x 4 mm ² Black	0.085	27	6,6	60

Low voltage cables

MarineLine YOZp 0,6/1 kV

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16130	2 x 4 mm ² Black	0.167	42	10,4	120
16131	3 x 4 mm ² Black	0.216	45	11,2	180
16536	3 G 4 mm ² Black	0.217	45	11,2	180
16132	4 x 4 mm ² Black	0.27	49	12,2	240
15992	4 G 4 mm ² Black	0.269	49	12,2	240
16586	5 G 4 mm ² Black	0.325	55	13,2	300
16133	1 x 6 mm ² Black	0.116	29	7,2	90
16134	2 x 6 mm ² Black	0.218	47	11,7	180
16135	3 x 6 mm ² Black	0.284	50	12,4	270
15997	3 G 6 mm ² Black	0.285	50	12,4	270
15990	4 G 6 mm ² Black	0.397	57	14,1	360
16136	4 x 6 mm ² Black	0.396	57	14,1	360
16566	5 x 6 mm ² Black	0.478	63	15,3	450
16480	5 G 6 mm ² Black	0.479	60	15,3	450
16089	7 x 6 mm ² Black	0.612	68	16,8	630
16109	7 G 6 mm ² Black	0.613	68	16,8	630
16137	1 x 10 mm ² Black	0.158	32	8	150
16138	2 x 10 mm ² Black	0.308	54	13,3	300
16139	3 x 10 mm ² Black	0.45	59	14,7	450
16534	3 G 10 mm ² Black	0.451	59	14,7	450
15993	4 G 10 mm ² Black	0.569	64	16	600
16140	4 x 10 mm ² Black	0.567	67	16	600
16489	5 x 10 mm ² Black	0.702	71	17,6	600
16108	5 G 10 mm ² Black	0.702	70	17,6	600
16141	1 x 16 mm ² Black	0.215	36	9,1	240
16142	2 x 16 mm ² Black	0.468	65	15,9	480
16143	3 x 16 mm ² Black	0.631	70	17	720
16535	3 G 16 mm ² Black	0.634	70	17	720
15994	4 G 16 mm ² Black	0.806	75	18,6	960
16144	4 x 16 mm ² Black	0.814	77	18,6	960
15996	5 G 16 mm ² Black	1	85	20,5	1200
16145	1 x 25 mm ² Black	0.324	65	11,2	375
16146	2 x 25 mm ² Black	0.701	120	19,9	750
16147	3 x 25 mm ² Black	0.946	85	21,9	1125
16148	4 x 25 mm ² Black	1.231	95	23,3	1500
16158	1 x 35 mm ² Black	0.422	50	12,3	525
16157	2 x 35 mm ² Black	0.912	94	23,4	1050
16436	5 G 35 mm ² Black	2.051	118	29,3	2625
16401	1 x 50 mm ² Black	0.585	57	14,2	750
16402	1 x 70 mm ² Black	0.796	62	15,3	1050
16403	1 x 95 mm ² Black	1.071	73	18,2	1425
16404	1 x 120 mm ² Black	1.328	80	20	1800
16405	1 x 150 mm ² Black	1.64	88	22	2250
16406	1 x 185 mm ² Black	2.028	98	24,5	2775
16407	1 x 240 mm ² Black	2.573	109	27,1	3600
16433	1 x 300 mm ² Black	3.23	125	31,2	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**

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Screening	Yes
Construction outer shield	Alpet tape
Drain wire	Yes
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV

MarineLine YZafp 0,6/1 kV**38 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16601	2 x 1,5 mm ² Black	0.074	65	7,9	45
16602	3 x 1,5 mm ² Black	0.098	70	8,5	68
16670	3 G 1,5 mm ² Black	0.098	70	8,5	68
16671	4 G 1,5 mm ² Black	0.119	75	9,2	90
16603	4 x 1,5 mm ² Black	0.119	75	9,2	90
16604	5 x 1,5 mm ² Black	0.147	80	10	113
16672	5 G 1,5 mm ² Black	0.147	80	10	113
16605	6 x 1,5 mm ² Black	0.175	85	10,8	135
16606	7 x 1,5 mm ² Black	0.181	85	10,8	158
16676	7 G 1,5 mm ² Black	0.182	85	10,8	158
16607	8 x 1,5 mm ² Black	0.241	106	13,2	180
16609	10 x 1,5 mm ² Black	0.266	115	14	225
16611	12 x 1,5 mm ² Black	0.3	115	14,5	270
16615	16 x 1,5 mm ² Black	0.385	130	16,2	360
16618	19 x 1,5 mm ² Black	0.448	140	17,6	428
16623	24 x 1,5 mm ² Black	0.56	155	19,6	540
16626	27 x 1,5 mm ² Black	0.615	165	20,6	608
16627	30 x 1,5 mm ² Black	0.674	170	21,6	675
16628	37 x 1,5 mm ² Black	0.822	190	23,8	833
16631	2 x 2,5 mm ² Black	0.104	70	9	75
16632	3 x 2,5 mm ² Black	0.133	75	9,5	113
16673	3 G 2,5 mm ² Black	0.133	75	9,5	113
16674	4 G 2,5 mm ² Black	0.165	80	10,3	150
16633	4 x 2,5 mm ² Black	0.165	85	10,3	150
16634	5 x 2,5 mm ² Black	0.209	90	11,4	188
16675	5 G 2,5 mm ² Black	0.209	90	11,4	188
16635	6 x 2,5 mm ² Black	0.249	100	12,4	225
16636	7 x 2,5 mm ² Black	0.26	100	12,4	263
16677	7 G 2,5 mm ² Black	0.26	100	12,4	263
16637	8 x 2,5 mm ² Black	0.337	115	13,9	300
16639	10 x 2,5 mm ² Black	0.367	140	15,9	375
16641	12 x 2,5 mm ² Black	0.431	135	16,6	450
16645	16 x 2,5 mm ² Black	0.558	150	18,7	600
16648	19 x 2,5 mm ² Black	0.648	160	20,2	713
16653	24 x 2,5 mm ² Black	0.806	180	22,5	900
16656	27 x 2,5 mm ² Black	0.894	190	23,7	1013
16657	30 x 2,5 mm ² Black	0.993	200	25	1125
16658	37 x 2,5 mm ² Black	1.197	220	27,3	1388

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**

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV

MarineLine+ YZp 0,6/1 kV**36 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16060	2 x 1,5 mm ² Black	0.115	35	8,8	45
16061	3 x 1,5 mm ² Black	0.12	35	8,8	68
16420	3 G 1,5 mm ² Black	0.12	35	8,8	68
16419	4 G 1,5 mm ² Black	0.139	35	9,4	90
16062	4 x 1,5 mm ² Black	0.146	39	9,7	90
16063	5 x 1,5 mm ² Black	0.172	40	10,4	113
16418	5 G 1,5 mm ² Black	0.172	42	10,4	113
16661	7 x 1,5 mm ² Black	0.256	47	12,9	158
16064	2 x 2,5 mm ² Black	0.135	37	9,2	75
16065	3 x 2,5 mm ² Black	0.167	40	10	113
16417	3 G 2,5 mm ² Black	0.167	40	10	113
16416	4 G 2,5 mm ² Black	0.195	45	10,7	150
16066	4 x 2,5 mm ² Black	0.195	45	10,7	150
16067	5 x 2,5 mm ² Black	0.25	50	12,1	188
16415	5 G 2,5 mm ² Black	0.25	50	12,1	188
16068	2 x 4 mm ² Black	0.187	42	10,4	120
16069	3 x 4 mm ² Black	0.236	46	11,4	180
16084	3 G 4 mm ² Black	0.237	46	11,4	180
16070	4 x 4 mm ² Black	0.288	50	12,4	240
16071	2 x 6 mm ² Black	0.256	49	11,8	180
16072	3 x 6 mm ² Black	0.308	50	12,4	270
16085	3 G 6 mm ² Black	0.309	50	12,4	270
16073	4 x 6 mm ² Black	0.371	54	13,3	360
16074	2 x 10 mm ² Black	0.363	54	13,4	300
16075	3 x 10 mm ² Black	0.462	58	14,5	450
16076	4 x 10 mm ² Black	0.573	64	15,8	600
16083	4 G 10 mm ² Black	0.574	64	15,8	600
16077	2 x 16 mm ² Black	0.531	65	15,9	480
16078	3 x 16 mm ² Black	0.659	65	16,8	720
16079	4 x 16 mm ² Black	0.81	75	18,1	960
16086	5 G 16 mm ² Black	0.997	80	20	1200
16080	2 x 25 mm ² Black	0.824	80	19,8	750
16081	3 x 25 mm ² Black	1.02	85	20,9	1125
16087	3 G 25 mm ² Black	1.04	85	21,2	1125
16088	4 G 25 mm ² Black	1.302	95	23,2	1500
16082	4 x 25 mm ² Black	1.279	90	22,9	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**

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Screening	Yes
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling -20 / 70 °C	
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U0	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV

MarineLine+ YOZp 0,6/1 kV**42 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16160	2 x 1,5 mm ² Black	0.176	42	10,4	45
16161	3 x 1,5 mm ² Black	0.195	45	10,8	68
16414	3 G 1,5 mm ² Black	0.195	43	10,8	68
16413	4 G 1,5 mm ² Black	0.226	48	11,7	90
16162	4 x 1,5 mm ² Black	0.226	48	11,7	90
16163	5 x 1,5 mm ² Black	0.257	50	12,4	113
16412	5 G 1,5 mm ² Black	0.257	50	12,4	113
16662	7 x 1,5 mm ² Black	0.34	57	14,1	158
16663	12 x 1,5 mm ² Black	0.5	71	17,6	270
16664	24 x 1,5 mm ² Black	0.908	96	23,8	540
16164	2 x 2,5 mm ² Black	0.296	45	11,5	75
16165	3 x 2,5 mm ² Black	0.249	50	12	113
16411	3 G 2,5 mm ² Black	0.249	50	12	113
16410	4 G 2,5 mm ² Black	0.286	50	12,8	150
16166	4 x 2,5 mm ² Black	0.286	50	12,8	150
16167	5 x 2,5 mm ² Black	0.371	60	14,3	188
16409	5 G 2,5 mm ² Black	0.371	60	14,3	188
16168	2 x 4 mm ² Black	0.27	50	12,3	120
16169	3 x 4 mm ² Black	0.311	52	12,9	180
16186	3 G 4 mm ² Black	0.311	52	12,9	180
16454	4 G 4 mm ² Black	0.414	59	14,6	240
16170	4 x 4 mm ² Black	0.409	58	14,5	240
16446	5 G 4 mm ² Black	0.478	63	15,6	300
16171	2 x 6 mm ² Black	0.337	54	13,4	180
16172	3 x 6 mm ² Black	0.441	60	14,8	270
16187	3 G 6 mm ² Black	0.442	60	14,8	270
16173	4 x 6 mm ² Black	0.518	64	15,8	360
16174	2 x 10 mm ² Black	0.502	63	15,7	300
16175	3 x 10 mm ² Black	0.606	67	16,7	450
16428	3 G 10 mm ² Black	0.607	68	16,7	450
16445	4 G 10 mm ² Black	0.725	72	17,9	600
16176	4 x 10 mm ² Black	0.724	72	17,9	600
16177	2 x 16 mm ² Black	0.687	70	17,9	480
16178	3 x 16 mm ² Black	0.82	75	18,8	720
16179	4 x 16 mm ² Black	1.007	85	20,6	960
16188	5 G 16 mm ² Black	1.215	90	22,5	1200
16180	2 x 25 mm ² Black	0.99	85	21,6	750
16181	3 x 25 mm ² Black	1.215	90	23	1125
16431	3 G 25 mm ² Black	1.214	90	22,9	1125
16432	4 G 25 mm ² Black	1.485	100	25,1	1500
16182	4 x 25 mm ² Black	1.498	100	25,1	1500
16435	5 G 25 mm ² Black	1.823	110	27,6	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**

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 5 = flexible
Core insulation material	Crosslinked polyethylene (XLPE)
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling -20 / 70 °C	
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U0	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV

MarineFlex YZp 0,6/1 kV**33 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16488	1 x 16 mm ² Black	0.184	35	8,6	375
16486	2 x 16 mm ² Black	0.549	67	16,6	720
16447	3 x 16 mm ² Black	0.678	71	17,6	720
16484	4 x 16 mm ² Black	0.831	76	19	960
17427	5 G 16 mm ² Black	1.039	86	21,3	1200
16537	1 x 25 mm ² Black	0.271	41	10,2	375
16659	2 x 25 mm ² Black	0.815	80	20	1125
16482	3 x 25 mm ² Black	1.011	85	21,2	1125
16542	4 x 25 mm ² Black	1.268	94	23,3	1500
16090	1 x 35 mm ² Black	0.357	47	11,7	525
16091	2 x 35 mm ² Black	1.065	91	22,7	1050
16092	3 x 35 mm ² Black	1.397	101	25,1	1575
16438	4 x 35 mm ² Black	1.812	113	28,1	2100
16093	1 x 50 mm ² Black	0.492	53	13,1	750
16094	3 x 50 mm ² Black	1.909	114	28,5	2250
16439	4 x 50 mm ² Black	2.478	128	31,9	3000
16095	1 x 70 mm ² Black	0.69	63	15,1	1050
16096	3 x 70 mm ² Black	2.653	132	32,9	3150
16440	4 x 70 mm ² Black	3.409	147	36,6	4200
16097	1 x 95 mm ² Black	0.9	69	17,1	1425
16098	3 x 95 mm ² Black	3.437	150	37,4	4275
16441	4 x 95 mm ² Black	4.402	165	41,1	5700
16099	1 x 120 mm ² Black	1.13	76	18,9	1800
16100	3 x 120 mm ² Black	4.352	167	41,6	5400
16442	4 x 120 mm ² Black	5.61	186	46,2	7200
16101	1 x 150 mm ² Black	1.404	85	21,1	2250
16102	3 x 150 mm ² Black	5.383	185	46,2	6750
16103	1 x 185 mm ² Black	1.704	92	23	2775
16104	3 x 185 mm ² Black	6.519	206	51,4	8325
16105	1 x 240 mm ² Black	2.294	106	26,5	3600
16106	3 x 240 mm ² Black	8.695	234	58,3	10800
15983	4 x 240 mm ² Black	11.17	258	64,3	14400
16107	1 x 300 mm ² Black	2.815	118	29,3	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**

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 5 = flexible
Core insulation material	Crosslinked polyethylene (XLPE)
Screening	Yes
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling -20 / 70 °C	
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV

MarineFlex YOZp 0,6/1 kV**45 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16483	3 x 16 mm ² Black	0.888	83	20,6	720
16485	4 x 16 mm ² Black	1.096	90	22,5	960
16487	2 x 25 mm ² Black	1.047	92	23	750
16543	3 x 25 mm ² Black	1.262	97	24,2	1125
16491	4 x 25 mm ² Black	1.552	107	26,6	1500
16190	1 x 35 mm ² Black	0.405	50	12,5	525
16456	2 x 35 mm ² Black	1.33	105	26	1050
16191	3 x 35 mm ² Black	1.63	110	27,5	1575
16192	4 x 35 mm ² Black	2.032	121	30,1	2100
16523	4 G 35 mm ² Black	1.982	118	29,7	2100
16552	5 G 35 mm ² Black	2.569	135	33,6	2100
16193	1 x 50 mm ² Black	0.585	58	14,5	750
17898	2 x 50 mm ² Black	1.737	115	28,7	1500
16194	3 x 50 mm ² Black	2.17	123	30,9	2250
16195	4 x 50 mm ² Black	2.685	135	33,7	3000
17790	4 G 50 mm ² Black	2.693	135	33,7	3000
16473	5 G 50 mm ² Black	3.362	150	37,6	3750
16196	1 x 70 mm ² Black	0.789	66	16,3	1050
16197	3 x 70 mm ² Black	3.109	144	35,9	3150
16198	4 x 70 mm ² Black	3.878	158	39,4	4200
16524	4 G 70 mm ² Black	3.882	158	39,4	4200
16474	5 G 70 mm ² Black	4.74	175	43,4	5250
16199	1 x 95 mm ² Black	1.01	74	18,3	1425
16522	2 x 95 mm ² Black	3.161	152	37,8	2850
16200	3 x 95 mm ² Black	3.895	160	40	4275
16201	4 x 95 mm ² Black	4.928	177	44,1	5700
16490	4 G 95 mm ² Black	4.932	177	44,1	5700
16475	5 G 95 mm ² Black	6.033	195	48,5	7125
16202	1 x 120 mm ² Black	1.263	82	20,3	1800
16203	3 x 120 mm ² Black	4.842	177	44,2	5400
16476	4 G 120 mm ² Black	6.129	195	48,6	7200
16443	4 x 120 mm ² Black	6.118	195	48,6	7200
16477	5 G 120 mm ² Black	7.525	215	53,7	9000
16204	1 x 150 mm ² Black	1.553	90	22,5	2250
16205	3 x 150 mm ² Black	5.891	195	48,6	6750
16539	4 x 150 mm ² Black	7.517	217	54,1	9000
17791	4 G 150 mm ² Black	7.474	215	53,7	9000
16206	1 x 185 mm ² Black	1.854	97	24,2	2775
16207	3 x 185 mm ² Black	7.046	212	52,8	8325
16478	4 G 185 mm ² Black	8.992	234	58,4	11100
16479	4 x 185 mm ² Black	8.976	234	58,4	11100
16208	1 x 240 mm ² Black	2.466	111	27,7	3600
16209	3 x 240 mm ² Black	9.33	242	60,3	10800
15998	4 x 240 mm ² Black	12.042	270	67,3	14400

MarineFlex YOZp 0,6/1 kV

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16455	1 x 300 mm ² Black	3.003	122	30,4	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
- Suitable for voltage peaks up to 3kV
- Excellent abrasion resistance
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2

**Specifications**

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 5 = flexible
Core insulation material	Crosslinked polyethylene (XLPE)
Screening	Yes
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U₀	1,8 kV
Nominal voltage U	3 kV
Test voltage	6,5 kV

MarineFlex YOZp 1,8/3 kV

15 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16507	1 x 35 mm ² Black	0.505	63	15,7	525
16515	3 x 35 mm ² Black	1.919	128	32,1	1575
16508	1 x 50 mm ² Black	0.658	69	17,2	750
16516	3 x 50 mm ² Black	2.662	147	36,7	2250
16509	1 x 70 mm ² Black	0.865	75	18,8	1050
16517	3 x 70 mm ² Black	3.571	166	41,6	3150
16510	1 x 95 mm ² Black	1.088	83	20,8	1425
16518	3 x 95 mm ² Black	4.395	181	45,3	4275
16511	1 x 120 mm ² Black	1.341	90	22,6	1800
16519	3 x 120 mm ² Black	5.328	196	49,1	5400
16512	1 x 150 mm ² Black	1.614	97	24,2	2250
16520	3 x 150 mm ² Black	6.348	211	52,7	6750
16513	1 x 185 mm ² Black	1.918	104	26	2775
16521	3 x 185 mm ² Black	7.428	224	56	8325
16514	1 x 240 mm ² Black	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 suitable 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

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Screening	Yes
Construction outer shield	EMC-screen consists of copper/PETtape and (CU) braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U0	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV



MarineLine YOZp EMC 0,6/1 kV

27 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
17341	3 x 1,5 mm ² Black	0.125	40	9	68
17344	4 G 1,5 mm ² Black	0.15	40	9,7	90
16530	4 x 1,5 mm ² Black	0.15	39	9,7	90
17342	3 x 2,5 mm ² Black	0.163	40	10	113
17437	3 x 2,5 mm ² + 3 G 1,5 mm ² Black	0.25	115	13	180
17345	4 G 2,5 mm ² Black	0.196	44	10,8	150
16531	4 x 2,5 mm ² Black	0.198	45	10,8	150
16541	12 G 2,5 mm ² Black	0.528	70	17,5	450
16533	19 x 2,5 mm ² Black	0.77	85	21,1	713
16532	2 x 4 mm ² Black	0.172	42	10,4	120
17177	3 x 4 mm ² Black	0.221	45	11,2	180
17902	3 x 4 mm ² + 3 G 1,5 mm ² Black	0.335	57	14,1	248
16638	4 x 4 mm ² Black	0.278	50	12,3	240
17346	4 G 4 mm ² Black	0.274	49	12,2	240
16550	2 x 6 mm ² Black	0.225	71	11,7	180
17343	3 x 6 mm ² Black	0.289	52	12,4	270
17347	4 G 6 mm ² Black	0.402	57	14,1	360
17193	3 x 10 mm ² Black	0.464	60	14,8	450
17378	3 x 10 mm ² + 3 G 4 mm ² Black	0.635	72	17,9	450
17451	4 x 10 mm ² Black	0.582	65	16,1	600
17219	4 G 10 mm ² Black	0.583	65	16,1	600
17350	2 x 16 mm ² Black	0.474	65	15,9	480
17348	3 x 16 mm ² Black	0.64	70	17	720
17176	3 x 16 mm ² + 3 G 6 mm ² Black	0.884	82	20,4	990
17184	4 G 16 mm ² Black	0.825	75	18,6	960
17439	4 x 16 mm ² Black	0.824	75	18,6	960
17197	3 x 25 mm ² Black	0.964	85	21,2	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.

Suitable for variable frequency drive applications.

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

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Screening	Yes
Construction outer shield	EMC-screen consists of copper/PETtape and (CU) braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U ₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV



MarineLine+ YOZp EMC 0,6/1 kV

2 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
17179	3 x 16 mm ² Black	0.775	72	17,9	720
17215	3 x 25 mm ² Black	1.205	91	22,7	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
- For easy installation in tight spaces
- Halogen free and low smoke, flame retardant
- 3 +3E construction with symmetrical PE conductor are recommended for VFD applications
- 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

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 5 = flexible
Core insulation material	Crosslinked polyethylene (XLPE)
Screening	Yes
Construction outer shield	EMC-screen consists of copper/PETtape and (CU) braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U ₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV

MarineFlex YOZp EMC 0,6/1 kV

27 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
55910	3 x 16 mm ² + 3 G 6 mm ² Black	1.33	103	25,7	1980
17198	3 x 35 mm ² Black	1.654	111	27,6	1575
55902	3 x 35 mm ² + 3 G 6 mm ² Black	1.877	118	29,4	3150
17217	4 x 35 mm ² Black	2.064	122	30,3	2100
17160	1 x 50 mm ² Black	0.592	58	14,5	750
17199	3 x 50 mm ² Black	2.199	125	31,1	2250
55907	3 x 50 mm ² + 3 G 16 mm ² Black	3.287	155	38,6	2700
17432	4 G 50 mm ² Black	2.766	136	34	3000
17161	1 x 70 mm ² Black	0.797	66	16,3	1050
17178	3 x 70 mm ² Black	3.168	146	36,4	3150
17379	3 x 70 mm ² + 3 G 16 mm ² Black	3.861	162	40,5	3150
17183	4 G 70 mm ² Black	3.947	160	39,9	4200
17218	1 x 95 mm ² Black	1.018	74	18,3	1425
17376	2 x 95 mm ² Black	3.225	156	38,3	4275
17195	3 x 95 mm ² Black	3.965	162	40,5	4275
55908	3 x 95 mm ² + 3 G 25 mm ² Black	5.192	377	47,1	5400
17214	4 x 95 mm ² Black	5.005	179	44,6	5700
17399	1 x 120 mm ² Black	1.276	82	20,4	1800
55903	3 x 120 mm ² + 3 G 25 mm ² Black	5.846	390	48,7	5400
17213	3 x 120 mm ² Black	4.909	179	44,7	5400
17460	4 x 120 mm ² Black	6.23	198	49,3	7200
17400	1 x 150 mm ² Black	1.569	91	22,6	2250
17216	3 x 150 mm ² Black	5.997	198	49,3	6750
55909	3 x 150 mm ² + 3 G 25 mm ² Black	6.806	416	52	6750
17194	1 x 185 mm ² Black	1.865	97	24,2	2775
17209	3 x 185 mm ² Black	7.137	214	53,3	8325
17438	1 x 240 mm ² Black	2.498	112	28	3600

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 flexible conductors
- For easy installation in tight spaces
- Halogen free and low smoke, flame retardant
- 3 +3E construction with symmetrical PE conductor are recommended for VFD applications
- Combined screen of copper-pet tape and tinned copper wire braid for optimal screening
- Suitable for voltage peaks up to 3kV
- Different colour outer sheaths, other than black, available on request

Core identification:

- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 5 = flexible
Core insulation material	Crosslinked polyethylene (XLPE)
Screening	Yes
Construction outer shield	EMC-screen consists of copper/PETtape and (CU) braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U ₀	1,8 kV
Nominal voltage U	3 kV
Test voltage	6,5 kV



MarineFlex YOZp EMC 1,8/3 kV

12 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
17782	3 x 35/25 mm ² Black	2.211	138	34,5	1575
55913	3 x 35 mm ² + 3 G 6 mm ² Black	3.451	161	40,3	1845
55914	3 x 50 mm ² + 3 G 10 mm ² Black	3.753	179	44,7	2700
17826	3 x 50 mm ² Black	2.796	150	37,4	2250
17783	3 x 70/35 mm ² Black	3.587	165	41,3	3150
17784	3 x 95/50 mm ² Black	4.485	182	45,4	4275
17785	3 x 120/70 mm ² Black	5.779	207	51,8	5400
55901	3 x 120 mm ² + 3 G 25 mm ² Black	6.852	228	57,1	6525
17897	3 x 150 mm ² + 3 G 25 mm ² Black	7.621	235	58,7	7875
55900	1 x 185 mm ² Black	1.935	104	26,1	2775
17899	3 x 185 mm ² + 3 G 25 mm ² Black	8.324	238	59,5	8595
55906	1 x 240 mm ² Black	2.544	116	29	3600

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

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Conductor surface	Tinned
Shape of conductor	Round
Conductor category	Class 5 = flexible
Core insulation material	Rubber
Screening	Yes
Construction outer shield	EMC-screen consists of copper/PETtape and (CU) braiding
Material outer sheath	Polyurethane (PUR)
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U0	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV

MarineMultiFlex BOQp 0,6/1 kV

2 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
17349	3 x 50 mm ² Black	3.295	258	42,9	2250
17351	3 x 95 mm ² Black	5.172	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

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Conductor surface	Tinned
Shape of conductor	Round
Conductor category	Class 5 = flexible
Core insulation material	Rubber
Screening	Yes
Construction outer shield	EMC-screen consists of copper/PETtape and (CU) braiding
Material outer sheath	Polyurethane (PUR)
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U0	1,8 kV
Nominal voltage U	3 kV
Test voltage	6,5 kV

MarineMultiFlex BOQp 1,8/3 kV

3 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16544	3 x 120 mm ² Black	5.679	316	52,6	5400
16545	3 x 150 mm ² Black	7.108	345	57,5	6750
16547	3 x 240 mm ² Black	10.144	385	64	10800

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
- Fire-resistant according to IEC 60331 1/2 (≥ 120min.)
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Conductor surface	Bare
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Mica + XLHFFR
Conductor coding in accordance with HD 308 S2	Yes
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Insulation integrity according to IEC 60331	Yes
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U ₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV



MarineLine YZpX-FR0,6/1 kV

71 products

Part number	Construction	Netweight (kg/m)	Min bending radius after installatio n (mm)	Outer diameter approx (mm)	Tensil load e (N)
27000	1 x 1,5 mm ² Orange	0.045	35	5,8	23
27001	2 x 1,5 mm ² Orange	0.084	55	8,8	45
27002	3 x 1,5 mm ² Orange	0.109	55	9,3	68
27080	3 G 1,5 mm ² Orange	0.11	55	9,3	68
27081	4 G 1,5 mm ² Orange	0.137	60	10,2	90
27003	4 x 1,5 mm ² Orange	0.136	60	10,2	90
27004	5 x 1,5 mm ² Orange	0.178	70	11,4	113
27082	5 G 1,5 mm ² Orange	0.179	70	11,4	113
27005	6 x 1,5 mm ² Orange	0.214	75	12,4	135
27006	7 x 1,5 mm ² Orange	0.222	56	12,4	158
27083	7 G 1,5 mm ² Orange	0.222	75	12,4	158
27007	8 x 1,5 mm ² Orange	0.31	103	17,1	180
27008	10 x 1,5 mm ² Orange	0.322	95	15,9	225
27009	12 x 1,5 mm ² Orange	0.364	100	16,4	270
27010	16 x 1,5 mm ² Orange	0.482	110	18,7	360
27011	19 x 1,5 mm ² Orange	0.554	120	20,2	428
27012	24 x 1,5 mm ² Orange	0.706	135	22,7	540
27013	27 x 1,5 mm ² Orange	0.776	145	23,9	608
27014	30 x 1,5 mm ² Orange	0.851	150	25	675
27015	37 x 1,5 mm ² Orange	1.04	165	27,6	833
27016	1 x 2,5 mm ² Orange	0.055	35	5,8	38
27017	2 x 2,5 mm ² Orange	0.11	59	9,8	75
27018	3 x 2,5 mm ² Orange	0.145	65	10,4	113
27084	3 G 2,5 mm ² Orange	0.146	63	10,4	113
27085	4 G 2,5 mm ² Orange	0.189	70	11,6	150
27019	4 x 2,5 mm ² Orange	0.19	70	11,6	150
27020	5 x 2,5 mm ² Orange	0.239	77	12,8	188
27086	5 G 2,5 mm ² Orange	0.237	77	12,8	188
27021	6 x 2,5 mm ² Orange	0.282	83	13,9	225
27022	7 x 2,5 mm ² Orange	0.3	84	13,9	263
27087	7 G 2,5 mm ² Orange	0.301	84	13,9	263
27096	16 x 2,5 mm ² Orange	0.658	127	21,1	600
27023	1 x 4 mm ² Orange	0.072	38	6,3	60
27024	2 x 4 mm ² Orange	0.144	65	10,8	120
27025	3 x 4 mm ² Orange	0.199	70	11,6	180
27088	3 G 4 mm ² Orange	0.2	70	11,6	180
27089	4 G 4 mm ² Orange	0.257	77	12,8	240
27026	4 x 4 mm ² Orange	0.256	77	12,8	240
27027	1 x 6 mm ² Orange	0.096	42	6,9	90
27028	2 x 6 mm ² Orange	0.198	74	12,2	180
27029	3 x 6 mm ² Orange	0.27	78	12,9	270
27090	3 G 6 mm ² Orange	0.271	78	12,9	270
27091	4 G 6 mm ² Orange	0.358	87	14,4	360
27030	4 x 6 mm ² Orange	0.357	87	14,4	360

MarineLine YZpX-FR0,6/1 kV

Part number	Construction	Netweight (kg/m)	Min bending radius after installatio n (mm)	Outer diameter approx (mm)	Tensil load e (N)
27031	1 x 10 mm ² Orange	0.137	46	7,6	150
27032	2 x 10 mm ² Orange	0.284	83	13,7	300
27033	3 x 10 mm ² Orange	0.402	89	14,8	450
27092	3 G 10 mm ² Orange	0.403	89	14,8	450
27093	4 G 10 mm ² Orange	0.522	98	16,2	600
27034	4 x 10 mm ² Orange	0.521	98	16,2	600
27035	1 x 16 mm ² Orange	0.198	53	8,8	240
27036	2 x 16 mm ² Orange	0.404	96	15,9	480
27037	3 x 16 mm ² Orange	0.581	103	17,1	720
27094	3 G 16 mm ² Orange	0.576	103	17,1	720
27095	4 G 16 mm ² Orange	0.77	113	18,8	960
27038	4 x 16 mm ² Orange	0.765	113	18,8	960
27039	1 x 25 mm ² Orange	0.297	65	10,7	375
27040	2 x 25 mm ² Orange	0.639	120	20,2	750
27041	3 x 25 mm ² Orange	0.908	130	21,7	1125
27042	4 x 25 mm ² Orange	1.177	140	23,7	1500
27043	1 x 35 mm ² Orange	0.398	73	12,1	525
27044	2 x 35 mm ² Orange	0.862	140	23,2	1050
27047	1 x 50 mm ² Orange	0.524	81	13,5	750
27048	2 x 50 mm ² Orange	1.177	161	26,8	1500
27051	1 x 70 mm ² Orange	0.736	95	15,4	1050
27055	1 x 95 mm ² Orange	1.002	106	17,7	1425
27059	1 x 120 mm ² Orange	1.245	116	19,3	1800
27063	1 x 150 mm ² Orange	1.55	129	21,4	2250
27067	1 x 185 mm ² Orange	1.944	145	24,1	2775
27071	1 x 240 mm ² Orange	2.481	160	26,6	3600
27075	1 x 300 mm ² Orange	3.098	182	30,3	4500

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 (≥ 120min.)
- Tinned copper wire braid armouring
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2

**Specifications**

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Mica + XLHFFR
Screening	Yes
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Insulation integrity according to IEC 60331	Yes
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV

MarineLine YOZp X-FR 0,6/1 kV**84 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diam approx (mm)
27199	3 x 1,0 mm ² Orange	0.126	59	9,7
27100	1 x 1,5 mm ² Orange	0.066	37	6,1
27101	2 x 1,5 mm ² Orange	0.119	42	9,6
27102	3 x 1,5 mm ² Orange	0.146	61	10,1
27180	3 G 1,5 mm ² Orange	0.147	60	10,1
27181	4 G 1,5 mm ² Orange	0.183	65	11,2
27103	4 x 1,5 mm ² Orange	0.182	65	11,2
27104	5 x 1,5 mm ² Orange	0.22	75	12,1
27182	5 G 1,5 mm ² Orange	0.222	75	12,1
27105	6 x 1,5 mm ² Orange	0.296	80	13,5
27106	7 x 1,5 mm ² Orange	0.27	79	13,1
27183	7 G 1,5 mm ² Orange	0.3	81	13,5
27107	8 x 1,5 mm ² Orange	0.385	90	15
27108	10 x 1,5 mm ² Orange	0.434	105	17,2
27172	10 G 1,5 mm ² Orange	0.432	105	17,2
27109	12 x 1,5 mm ² Orange	0.476	107	17,7
27173	14 G 1,5 mm ² Orange	0.547	115	19
27110	16 x 1,5 mm ² Orange	0.609	120	20
27111	19 x 1,5 mm ² Orange	0.692	130	21,5
27174	19 G 1,5 mm ² Orange	0.693	130	21,5
27112	24 x 1,5 mm ² Orange	0.849	145	23,8
27113	27 x 1,5 mm ² Orange	0.94	114	25,2
27114	30 x 1,5 mm ² Orange	1.019	160	26,3
27115	37 x 1,5 mm ² Orange	1.223	175	28,9
27116	1 x 2,5 mm ² Orange	0.078	40	6,6
27117	2 x 2,5 mm ² Orange	0.151	63	10,6
27118	3 x 2,5 mm ² Orange	0.193	69	11,4
27184	3 G 2,5 mm ² Orange	0.194	69	11,4
27185	4 G 2,5 mm ² Orange	0.238	75	12,4
27119	4 x 2,5 mm ² Orange	0.238	75	12,4
27120	5 x 2,5 mm ² Orange	0.315	84	13,9
27186	5 G 2,5 mm ² Orange	0.316	84	13,9
27187	7 G 2,5 mm ² Orange	0.398	92	15,2
17825	7 x 2,5 mm ² Orange	0.397	67	15,2
17423	12 x 2,5 mm ² Orange	0.622	119	19,8
27196	19 x 2,5 mm ² Orange	0.929	146	24,3
27398	21 x 2,5 mm ² Orange	1.126	110	28,5
27121	27 x 2,5 mm ² Orange	1.248	169	28,1
27123	1 x 4 mm ² Orange	0.102	42	7
27124	2 x 4 mm ² Orange	0.193	71	11,8
27125	3 x 4 mm ² Orange	0.246	75	12,4
27188	3 G 4 mm ² Orange	0.246	75	12,4
27189	4 G 4 mm ² Orange	0.346	86	14,2
27126	4 x 4 mm ² Orange	0.346	86	14,2

MarineLine YOZp X-FR 0,6/1 kV

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
27178	5 G 4 mm ² Orange	0.418	93	15,4	300
27127	1 x 6 mm ² Orange	0.126	46	7,6	90
27128	2 x 6 mm ² Orange	0.249	79	13,1	180
27129	3 x 6 mm ² Orange	0.36	86	14,3	270
27190	3 G 6 mm ² Orange	0.362	86	14,3	270
27191	4 G 6 mm ² Orange	0.452	94	15,6	360
27130	4 x 6 mm ² Orange	0.451	94	15,6	360
16457	5 G 6 mm ² Orange	0.555	103	17,2	450
27131	1 x 10 mm ² Orange	0.172	52	8,6	150
27132	2 x 10 mm ² Orange	0.377	90	15	300
27133	3 x 10 mm ² Orange	0.493	96	15,9	450
27192	3 G 10 mm ² Orange	0.495	96	15,9	450
27193	4 G 10 mm ² Orange	0.633	105	17,5	600
27134	4 x 10 mm ² Orange	0.632	105	17,5	600
16458	5 G 10 mm ² Orange	0.783	116	19,3	750
27135	1 x 16 mm ² Orange	0.235	58	9,6	240
27136	2 x 16 mm ² Orange	0.516	104	17,2	480
27137	3 x 16 mm ² Orange	0.688	110	18,2	720
27194	3 G 16 mm ² Orange	0.681	110	18,2	720
27195	4 G 16 mm ² Orange	0.888	87	20,1	960
27138	4 x 16 mm ² Orange	0.887	121	20,1	960
16459	5 G 16 mm ² Orange	1.102	134	22,2	1200
27139	1 x 25 mm ² Orange	0.344	70	11,6	375
27140	2 x 25 mm ² Orange	0.752	90	21,1	750
27141	3 x 25 mm ² Orange	1.021	135	22,4	1125
27142	4 x 25 mm ² Orange	1.325	105	24,8	1500
16460	4 G 25 mm ² Orange	1.326	150	24,8	1500
16461	5 G 25 mm ² Orange	1.673	165	27,6	1875
27143	1 x 35 mm ² Orange	0.452	80	13,1	525
27144	2 x 35 mm ² Orange	0.992	144	23,9	1050
27147	1 x 50 mm ² Orange	0.621	90	14,9	750
27148	2 x 50 mm ² Orange	1.282	162	26,9	1500
27151	1 x 70 mm ² Orange	0.836	100	16,6	1050
27155	1 x 95 mm ² Orange	1.117	114	18,9	1425
27179	5 G 35 mm ² Orange	2.204	189	31,4	7125
27159	1 x 120 mm ² Orange	1.385	125	20,8	1800
27163	1 x 150 mm ² Orange	1.693	136	22,6	2250
27167	1 x 185 mm ² Orange	2.103	152	25,3	2775
27171	1 x 240 mm ² Orange	2.655	167	27,8	3600
27175	1 x 300 mm ² Orange	3.311	130	31,7	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 (≥ 120min.)
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Mica + XLHFFR
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Insulation integrity according to IEC 60331	Yes
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV



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

40 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
27200	2 x 1,5 mm ² Orange	0.142	60	9,8	45
27201	3 x 1,5 mm ² Orange	0.161	60	10,3	68
27280	3 G 1,5 mm ² Orange	0.163	60	10,3	68
27281	4 G 1,5 mm ² Orange	0.192	65	11,2	90
27202	4 x 1,5 mm ² Orange	0.191	65	11,2	90
27203	5 x 1,5 mm ² Orange	0.232	74	12,3	113
27282	5 G 1,5 mm ² Orange	0.233	55	12,3	113
27204	2 x 2,5 mm ² Orange	0.181	65	10,8	75
27205	3 x 2,5 mm ² Orange	0.21	69	11,4	113
27283	3 G 2,5 mm ² Orange	0.211	69	11,4	113
27284	4 G 2,5 mm ² Orange	0.257	76	12,6	113
27206	4 x 2,5 mm ² Orange	0.256	76	12,6	150
27207	5 x 2,5 mm ² Orange	0.306	83	13,7	188
27285	5 G 2,5 mm ² Orange	0.31	80	13,7	188
27208	2 x 4 mm ² Orange	0.236	72	12	120
27209	3 x 4 mm ² Orange	0.275	76	12,6	180
27286	3 G 4 mm ² Orange	0.276	76	12,6	180
27287	4 G 4 mm ² Orange	0.338	83	13,8	240
27210	4 x 4 mm ² Orange	0.337	83	13,8	240
27288	5 G 4 mm ² Orange	0.409	92	15,2	300
27211	2 x 6 mm ² Orange	0.305	80	13,2	180
27212	3 x 6 mm ² Orange	0.363	84	13,9	270
27289	3 G 6 mm ² Orange	0.364	84	13,9	270
27290	4 G 6 mm ² Orange	0.456	93	15,4	360
27213	4 x 6 mm ² Orange	0.453	93	15,4	360
27291	5 G 6 mm ² Orange	0.546	101	16,8	450
27214	2 x 10 mm ² Orange	0.42	89	14,8	300
27215	3 x 10 mm ² Orange	0.516	95	15,7	450
27216	4 x 10 mm ² Orange	0.643	104	17,3	600
27292	3 G 10 mm ² Orange	0.517	95	15,7	600
27293	4 G 10 mm ² Orange	0.645	104	17,3	600
27294	5 G 10 mm ² Orange	0.781	114	18,9	750
27217	2 x 16 mm ² Orange	0.575	101	16,8	480
27218	3 x 16 mm ² Orange	0.734	108	18	720
27295	3 G 16 mm ² Orange	0.724	108	18	720
27296	4 G 16 mm ² Orange	0.917	119	19,7	960
27219	4 x 16 mm ² Orange	0.916	119	19,7	960
27220	2 x 25 mm ² Orange	0.893	125	20,9	750
27221	3 x 25 mm ² Orange	1.111	130	22,2	1125
27222	4 x 25 mm ² Orange	1.403	145	24,6	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 (≥ 120min.)
- Tinned copper wire braid armouring
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Mica + XLHFFR
Screening	Yes
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Insulation integrity according to IEC 60331	Yes
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U ₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV



Low voltage cables

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

45 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installatio n (mm)	Outer diameter approx (mm)	Tensil load e (N)
27300	2 x 1,5 mm ² Orange	0.21	70	11,4	45
27301	3 x 1,5 mm ² Orange	0.233	72	11,9	68
27380	3 G 1,5 mm ² Orange	0.234	72	11,9	68
27381	4 G 1,5 mm ² Orange	0.275	98	13	91
27302	4 x 1,5 mm ² Orange	0.305	80	13,4	90
27303	5 x 1,5 mm ² Orange	0.347	85	14,3	113
27382	5 G 1,5 mm ² Orange	0.348	86	14,3	113
27324	7 G 1,5 mm ² Orange	0.393	90	15,3	158
27328	7 x 1,5 mm ² Orange	0.395	92	15,3	158
27326	8 x 1,5 mm ² Orange	0.489	100	16,9	180
27304	2 x 2,5 mm ² Orange	0.262	76	12,6	75
27305	3 x 2,5 mm ² Orange	0.296	83	13,2	113
27383	3 G 2,5 mm ² Orange	0.297	83	13,2	113
27384	4 G 2,5 mm ² Orange	0.379	88	14,6	150
27306	4 x 2,5 mm ² Orange	0.378	88	14,6	150
27307	5 x 2,5 mm ² Orange	0.442	96	15,9	188
27385	5 G 2,5 mm ² Orange	0.443	96	15,9	188
27325	6 x 2,5 mm ² Orange	0.505	84	17	225
27308	2 x 4 mm ² Orange	0.349	84	14	120
27309	3 x 4 mm ² Orange	0.394	87	14,6	180
27386	3 G 4 mm ² Orange	0.395	87	14,6	180
27387	4 G 4 mm ² Orange	0.475	96	16	240
27310	4 x 4 mm ² Orange	0.474	96	16	240
27388	5 G 4 mm ² Orange	0.554	75	17,2	300
27311	2 x 6 mm ² Orange	0.431	92	15,2	180
27312	3 x 6 mm ² Orange	0.501	97	16,1	270
27389	3 G 6 mm ² Orange	0.502	69	16,1	270
27390	4 G 6 mm ² Orange	0.601	105	17,4	360
27313	4 x 6 mm ² Orange	0.598	105	17,4	360
27391	5 G 6 mm ² Orange	0.712	82	19	450
27314	2 x 10 mm ² Orange	0.559	101	16,8	300
27315	3 x 10 mm ² Orange	0.672	108	17,9	450
27392	3 G 10 mm ² Orange	0.673	108	17,9	450
27393	4 G 10 mm ² Orange	0.809	116	19,3	600
27316	4 x 10 mm ² Orange	0.806	116	19,3	600
27394	5 G 10 mm ² Orange	0.973	90	21,1	750
27317	2 x 16 mm ² Orange	0.742	114	19	480
27318	3 x 16 mm ² Orange	0.902	120	20	720
27395	3 G 16 mm ² Orange	0.891	104	20	720
27396	4 G 16 mm ² Orange	1.115	132	21,9	960
27319	4 x 16 mm ² Orange	1.113	132	21,9	960
27397	5 G 16 mm ² Orange	1.337	145	24	1200
27323	3 G 25 mm ² Orange	1.332	145	24,4	1125
27322	4 x 25 mm ² Orange	1.629	160	26,6	1500

Low voltage cables

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

Part number	Construction	Net weight (kg/m)	Min bending radius after installatio n (mm)	Outer diameter approx (mm)	Tensil load e (N)
27399	5 G 25 mm ² Orange	1.992	175	29,4	1875

MarineFlex YZp X-FR 0,6/1 kV**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 (≥ 120min.)
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2

**Specifications**

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 5 = flexible
Core insulation material	Mica + XLHFFR
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant Halogen free	IEC 60332-1 / IEC 60332-3-22 Cat. A IEC 60754-1/2
Low smoke	IEC 61034-2
Insulation integrity according to IEC 60331	Yes
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV

MarineFlex YZp X-FR 0,6/1 kV**29 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
27223	3 x 16 mm ² Orange	0.609	108	18	720
27230	1 x 35 mm ² Orange	0.381	74	12,2	525
27231	2 x 35 mm ² Orange	1.132	94	23,5	1050
27232	3 x 35 mm ² Orange	1.445	152	25,2	1575
27233	4 x 35 mm ² Orange	1.842	112	27,9	2100
27265	4 G 35 mm ² Orange	1.845	112	27,9	2100
27234	1 x 50 mm ² Orange	0.523	83	13,8	750
27235	2 x 50 mm ² Orange	1.609	167	27,8	1500
27236	3 x 50 mm ² Orange	2.01	177	29,5	2250
27237	4 x 50 mm ² Orange	2.568	197	32,7	3000
27238	1 x 70 mm ² Orange	0.726	95	15,8	1050
27240	3 x 70 mm ² Orange	2.756	203	33,8	3150
27241	4 x 70 mm ² Orange	3.538	225	37,4	4200
27242	1 x 95 mm ² Orange	1.002	107	17,7	1425
27244	3 x 95 mm ² Orange	3.533	228	37,9	4275
27245	4 x 95 mm ² Orange	4.524	252	42	5700
27266	4 G 95 mm ² Orange	4.529	252	42	5700
27246	1 x 120 mm ² Orange	1.159	118	19,6	1800
27248	3 x 120 mm ² Orange	4.293	249	41,4	5400
27249	4 x 120 mm ² Orange	5.619	278	46,8	7200
27250	1 x 150 mm ² Orange	1.461	131	21,8	2250
27252	3 x 150 mm ² Orange	5.393	276	46	6750
27253	4 x 150 mm ² Orange	6.961	211	51,3	9000
27254	1 x 185 mm ² Orange	1.77	143	23,8	2775
27256	3 x 185 mm ² Orange	6.517	302	50,2	8325
27257	4 x 185 mm ² Orange	8.393	336	55,9	11100
27258	1 x 240 mm ² Orange	2.372	164	27,2	3600
27260	3 x 240 mm ² Orange	8.729	347	57,7	10800
27262	1 x 300 mm ² Orange	2.904	180	30	4500

MarineFlex YOZp X-FR 0,6/1 kV**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 (≥ 120min.)
- Tinned copper wire braid armouring
- Different colour outer sheaths, other than orange, available on request

Core identification:

- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 5 = flexible
Core insulation material	Mica + XLHFFR
Screening	Yes
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Insulation integrity according to IEC 60331	Yes
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U₀	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV

**MarineFlex YOZp X-FR 0,6/1 kV****39 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
27366	4 x 25 mm ² Orange	1.69	170	28,2	1500
27330	1 x 35 mm ² Orange	0.462	56	13,4	525
27331	2 x 35 mm ² Orange	1.415	160	26,7	1050
27332	3 x 35 mm ² Orange	1.734	170	28,2	1575
16462	3 G 35 mm ² Orange	1.802	175	29,2	1575
16463	4 G 35 mm ² Orange	2.268	195	31,9	2100
27333	4 x 35 mm ² Orange	2.199	188	31,3	2100
16464	5 G 35 mm ² Orange	2.758	210	35	2625
27334	1 x 50 mm ² Orange	0.621	64	15,9	750
27335	2 x 50 mm ² Orange	1.927	185	30,8	1500
27336	3 x 50 mm ² Orange	2.356	197	32,7	2250
27372	3 G 50 mm ² Orange	2.36	197	32,7	2250
16465	4 G 50 mm ² Orange	3.095	222	36,9	3000
27337	4 x 50 mm ² Orange	3.136	221	36,9	3000
16466	5 G 50 mm ² Orange	3.652	168	40,4	3750
27338	1 x 70 mm ² Orange	0.838	104	17,2	1050
27340	3 x 70 mm ² Orange	3.26	225	37,4	3150
27341	4 x 70 mm ² Orange	4.154	250	41,6	4200
16467	4 G 70 mm ² Orange	4.158	250	41,6	4200
16468	5 G 70 mm ² Orange	5.054	274	45,6	5250
27342	1 x 95 mm ² Orange	1.056	114	19	1425
27344	3 x 95 mm ² Orange	4.103	251	41,7	4275
27345	4 x 95 mm ² Orange	5.167	275	45,8	5700
16469	4 G 95 mm ² Orange	5.172	275	45,8	5700
16470	5 G 95 mm ² Orange	6.425	306	51	7125
27346	1 x 120 mm ² Orange	1.296	126	21	1800
27348	3 x 120 mm ² Orange	5.004	275	45,8	5400
27349	4 x 120 mm ² Orange	6.323	303	50,4	7200
16471	4 G 120 mm ² Orange	6.329	303	50,4	7200
27350	1 x 150 mm ² Orange	1.613	140	23,2	2250
27352	3 x 150 mm ² Orange	6.187	303	50,4	6750
27353	4 x 150 mm ² Orange	7.815	333	55,5	9000
16472	4 G 150 mm ² Orange	7.823	333	55,5	9000
27354	1 x 185 mm ² Orange	1.925	150	25	2775
27356	3 x 185 mm ² Orange	7.351	327	54,4	8325
27357	4 x 185 mm ² Orange	9.322	361	60,1	11100
27358	1 x 240 mm ² Orange	2.546	171	28,4	3600
27360	3 x 240 mm ² Orange	9.686	372	61,9	10800
27362	1 x 300 mm ² Orange	3.098	188	31,2	4500

MarineWire Zp 0,6/1 kV**Properties****Application:**

0,6/1kV halogen free earthing & power wires are used for wiring switchboards, control panels and cabinets in all ship areas. Extra flexible Class 5/6 conductors for improved flexibility.

Characteristics:

- Class 5/6 conductors, unarmoured
- Easy installation in tight spaces due to flexible conductors
- Halogen free, low smoke, flame retardant insulation
- Green/Yellow sheath. Different colours on request

**Specifications**

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 5 = flexible
Core insulation material	XLHFFR - HF90
Flame retardant	IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U0	0,6 kV
Nominal voltage U	1 kV
Test voltage	3,5 kV

MarineWire Zp 0,6/1 kV**16 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
160260	1,5 mm² Green/yellow	0.021	12	3	23
160261	2,5 mm² Green/yellow	0.031	15	3,4	38
160262	4 mm² Green/yellow	0.045	15	4	60
160263	6 mm² Green/yellow	0.063	18	4,6	90
160264	10 mm² Green/yellow	0.102	22	5,6	150
160265	16 mm² Green/yellow	0.156	27	6,6	240
160266	25 mm² Green/yellow	0.241	34	8,3	375
160267	35 mm² Green/yellow	0.318	38	9,5	525
160268	50 mm² Green/yellow	0.452	44	11	750
160269	70 mm² Green/yellow	0.64	52	12,8	1050
160270	95 mm² Green/yellow	0.834	59	14,6	1425
160271	120 mm² Green/yellow	1.062	70	17,4	1800
160272	150 mm² Green/yellow	1.327	74	18,4	2250
160273	185 mm² Green/yellow	1.619	81	20,2	2775
160274	240 mm² Green/yellow	2.189	94	23,5	3600
160275	300 mm² Green/yellow	2.692	105	26,1	4500

MarinePower Y(Z)OZmv 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

**Specifications**

Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 2+ = stranded flexible
Conductor shield	Semiconductive Compound
Core insulation material	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	tinned copperbraiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
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 during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C

MarinePower Y(Z)OZmv 3,6/6 kV**14 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (m)	Outer diameter approx (mm)	Tensile load (N)
33001	1 x 50 mm ² Red	0.786	0,16	20,3	2500
33002	1 x 70 mm ² Red	1.094	0,18	22,3	3500
33003	1 x 95 mm ² Red	1.279	0,19	23,8	4750
33004	1 x 120 mm ² Red	1.564	0,21	25,7	6000
33005	1 x 150 mm ² Red	1.838	0,22	27,1	7500
33006	1 x 185 mm ² Red	2.249	0,23	28,9	9250
33007	1 x 240 mm ² Red	2.867	0,26	31,9	12000
33000	1 x 35 mm ² Red	0.644	0,15	19	1750
33009	3 x 50 mm ² Red	3.259	0,36	45	7500
33010	3 x 70 mm ² Red	4.142	0,39	49	10500
33011	3 x 95 mm ² Red	5.301	0,42	53,1	14250
33012	3 x 120 mm ² Red	6.051	0,46	57	18000
33013	3 x 150 mm ² Red	7.525	0,49	60,7	22500
33014	3 x 185 mm ² Red	8.418	0,52	64,6	27750

MarinePower Y(Z)OZmv 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

**Specifications**

Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 2+ = stranded flexible
Conductor shield	Semiconductive Compound
Core insulation material	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	tinned copperbraiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
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 during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C

MarinePower Y(Z)OZmv 6/10 kV**17 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (m)	Outer diameter approx (mm)	Tensile load (N)
33099	1 x 25 mm ² Red	0.601	0,16	20,1	1250
33100	1 x 35 mm ² Red	0.714	0,17	21	1750
33101	1 x 50 mm ² Red	0.866	0,18	22,3	2500
33102	1 x 70 mm ² Red	1.097	0,19	24	3500
33103	1 x 95 mm ² Red	1.379	0,21	25,8	4750
33104	1 x 120 mm ² Red	1.654	0,22	27,7	6000
33105	1 x 150 mm ² Red	1.933	0,23	28,9	7500
33106	1 x 185 mm ² Red	2.343	0,25	30,8	9250
33107	1 x 240 mm ² Red	2.971	0,27	33,5	12000
33114	1 x 300 mm ² Red	3.47	0,28	35,5	15000
33118	1 x 630 mm ² Red	7.234	0,38	47,3	31500
33108	3 x 35 mm ² Red	3.117	0,38	46,9	5250
33109	3 x 50 mm ² Red	3.563	0,39	49	7500
33110	3 x 70 mm ² Red	4.58	0,43	53,1	10500
33111	3 x 95 mm ² Red	5.571	0,46	57,7	14250
33112	3 x 120 mm ² Red	6.634	0,49	61,2	18000
33113	3 X 150 mm ² Red	7.633	0,52	64,8	22500

MarinePower Y(Z)OZmv 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

**Specifications**

Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 2+ = stranded flexible
Conductor shield	Semiconductive Compound
Core insulation material	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	tinned copperbraiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
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. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C

MarinePower Y(Z)OZmv 8,7/15 kV**15 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (m)	Outer diameter approx (mm)	Tensile load (N)
33200	1 x 35 mm ² Red	0.815	0,19	23,5	1750
33201	1 x 50 mm ² Red	0.97	0,2	24,8	2500
33202	1 x 70 mm ² Red	1.201	0,21	26,3	3500
33203	1 x 95 mm ² Red	1.494	0,23	28,2	4750
33204	1 x 120 mm ² Red	1.764	0,24	29,8	6000
33205	1 x 150 mm ² Red	2.063	0,25	31,5	7500
33206	1 x 185 mm ² Red	2.505	0,27	33,2	9250
33207	1 x 240 mm ² Red	3.256	0,29	36,5	12000
33218	1 x 300 mm ² Red	3.757	0,31	38,7	15000
33208	3 x 35 mm ² Red	3.696	0,41	51,8	5250
33209	3 x 50 mm ² Red	4.218	0,43	54,3	7500
33210	3 x 70 mm ² Red	5.05	0,49	60,7	10500
33211	3 x 95 mm ² Red	6.216	0,5	62,4	14250
33212	3 x 120 mm ² Red	7.224	0,54	66,9	18000
33213	3 x 150 mm ² Red	8.517	0,57	69,9	22500

MarinePower Y(Z)OZmv 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

**Specifications**

Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 2+ = stranded flexible
Conductor shield	Semiconductive Compound
Core insulation material	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	tinned copperbraiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
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 U_{max}	24 kV
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C

MarinePower Y(Z)OZmv 12/20 kV**14 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (m)	Outer diameter approx (mm)	Tensile load (N)
33300	1 x 35 mm ² Red	0.898	0,2	25,4	1750
33301	1 x 50 mm ² Red	1.046	0,21	26,5	2500
33302	1 x 70 mm ² Red	1.309	0,23	28,5	3500
33303	1 x 95 mm ² Red	1.611	0,24	30,5	4750
33304	1 x 120 mm ² Red	1.894	0,26	32	6000
33305	1 x 150 mm ² Red	2.196	0,27	33,7	7500
33306	1 x 185 mm ² Red	2.729	0,29	36,1	9250
33307	1 x 240 mm ² Red	3.409	0,31	38,7	12000
33320	1 x 400 mm ² Red	4.832	0,35	43,9	20000
33308	3 x 35 mm ² Red	4.012	0,45	55,6	5250
33309	3 x 50 mm ² Red	4.577	0,48	59,5	7500
33310	3 x 70 mm ² Red	5.682	0,51	63,5	10500
33311	3 x 95 mm ² Red	6.687	0,54	67,6	14250
33312	3 x 120 mm ² Red	7.567	0,57	71	18000

MarinePower Y(Z)OZmv 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

**Specifications**

Standardization	IEC 60092-354
Conductor material	Cu
Shape of conductor	Round
Conductor category	Class 2+ = stranded flexible
Conductor shield	Semiconductive Compound
Core insulation material	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	tinned copperbraiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
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. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C

MarinePower Y(Z)OZmv 18/30 kV**13 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (m)	Outer diameter approx (mm)	Tensile load (N)
33400	1 x 35 mm ² Red	1.176	0,25	31	1750
33401	1 x 50 mm ² Red	1.333	0,26	32,1	2500
33402	1 x 70 mm ² Red	1.606	0,27	33,9	3500
33403	1 x 95 mm ² Red	1.916	0,29	35,8	4750
33404	1 x 120 mm ² Red	2.344	0,31	38,2	6000
33405	1 x 150 mm ² Red	2.66	0,32	39,5	7500
33406	1 x 185 mm ² Red	3.095	0,33	41,4	9250
33407	1 x 240 mm ² Red	3.618	0,34	42,8	12000
33410	1 x 300 mm ² Red	4.297	0,37	45,9	15000
33411	1 x 630 mm ² Red	8.133	0,46	57,4	31500
33412	1 x 400 mm ² Red	5.238	0,39	49,1	20000
33408	3 x 35 mm ² Red	5.446	0,55	69,1	5250
33409	3 x 50 mm ² Red	6.146	0,58	72,5	7500

MarinePowerFlex Y(Z)OZmv 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
- Easy installation in tight spaces due to flexibility
- Different colour outer sheaths, other than red, available on request

Core identification:

- Numbered

**Specifications**

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 material	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Laminated sheath	Yes
Armouring	Yes
Earthscreen construction	tinned copperbraiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
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 during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C

MarinePowerFlex Y(Z)OZmv 6/10 kV**13 products**

Part number	Construction	Product - Netto gewicht	Min bending radius after installation (m)	Outer diam approx (mm)
33119	1 x 35 mm ² Red	0.734	0,18	22,5
33121	1 x 70 mm ² Red	1.122	0,2	25,5
33122	1 x 95 mm ² Red	1.405	0,22	27,7
33123	1 x 120 mm ² Red	1.667	0,23	29,3
33124	1 x 150 mm ² Red	1.958	0,25	31,1
33127	1 x 240 mm ² Red	3.027	0,31	38,5
33128	3 x 16/16 mm ² Red	2.301	0,35	43,7
33129	3 x 50 mm ² Red	3.819	0,43	53,3
33130	3 x 70 mm ² Red	4.688	0,45	56,5
33131	3 x 95 mm ² Red	5.707	0,49	61,6
33132	3 x 120 mm ² Red	6.813	0,52	65,4
33133	3 x 150 mm ² Red	7.821	0,56	69,5
33135	3 x 35 mm ² Red	3.209	0,4	50,1

MarinePowerFlex Y(Z)OZmv 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:

- Numbered

Specifications

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 material	Crosslinked polyethylene (XLPE)
Insulation shield	Semiconductive Compound with semiconductive tape
Laminated sheath	Yes
Earthscreen construction	tinned copperbraiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
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 U_{max}	17,5 kV
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C

**MarinePowerFlex Y(Z)OZmv 8,7/15 kV****3 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (m)	Outer diameter approx (mm)	Tensile load (N)
33230	1 x 35 mm ² Red	0.868	0,21	26,2	2500
33231	1 x 120 mm ² Red	1.791	0,26	32,1	6000
33235	1 x 300 mm ² Red	3.818	0,34	42	15000

MarinePowerFlex Y(Z)OZmv 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:

- Numbered

**Specifications**

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 material	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Laminated sheath	Yes
Armouring	Yes
Earthscreen construction	tinned copperbraiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
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 U_{max}	36 kV
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C

MarinePowerFlex Y(Z)OZmv 18/30 kV**2 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (m)	Outer diameter approx (mm)	Tensile load (N)
33423	1 x 95 mm ² Red	2.112	0,31	38,3	4750
33431	3 x 95 mm ² Red	8.602	0,67	84	14250

Marine medium voltage power cables

MarinePowerFlex+ YZOZmv EMC 3,6/6 kV**Properties****Application:**

Highly Flexible, 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 5 conductor, with special XLPE insulation
- Excellent mechanical and EMC protection due to the tinned copper braid
- Halogen free and low smoke, flame retardant
- Different colour outer sheaths, other than red, available on request
- Symmetrical insulated ground conductors reduce induced voltage imbalances and carry common mode noise back to the drive.

Core identification:

- Numbered

**Specifications**

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 material	Crosslinked polyethylene (XLPE)
Insulation shield	Semicon-XLPE, semicon-swellable tape and copper tape
Armouring	Yes
Earthscreen construction	EMC-screen consists of Cu/PET-tape and tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
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 U_{max}	7,2 kV
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C

Marine medium voltage power cables

MarinePowerFlex+ YZOZmv EMC 3,6/6 kV**2 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (m)	Outer diameter approx (mm)	Tensile load (N)
33136	3 x 120 mm ² + 3 G 25 mm ² Red	8.115	0,52	64,7	18000
33137	3 x 150 mm ² + 3 G 25 mm ² Red	9.296	0,55	68,6	22500

MarinePowerFlex+ YZOZmv EMC 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
- Different colour outer sheaths, other than red, available on request
- Symmetrical insulated ground conductors reduce induced voltage imbalances and carry common mode noise back to the drive.

Core identification:

- Numbered

**Specifications**

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 material	Crosslinked polyethylene (XLPE)
Insulation shield	Semicon-XLPE, semicon-swellable tape and copper tape
Armouring	Yes
Earthscreen construction	EMC-screen consists of Cu/PET-tape and tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
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 during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C

MarinePowerFlex+ YZOZmv EMC 6/10 kV**3 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (m)	Outer diameter approx (mm)	Tensile load (N)
33141	3 x 50 mm ² + 3 G 16 mm ² Red	5.594	0,46	57,3	9900
33142	3 x 120 mm ² + 3 G 25 mm ² Red	8.873	0,56	69,6	18000
33143	3 x 150 mm ² + 3 G 25 mm ² Red	10.154	0,6	73,9	22500

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**

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 material	Crosslinked polyethylene (XLPE)
Insulation shield	Semiconductive Compound with semiconductive tape
Laminated sheath	Yes
Core shield construction	Copper round wire + copper tape counter spiral
Earthscreen construction	Core screen and tinned copper braiding combination
Material outer sheath	Polyurethane (PUR)
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1
Low smoke	IEC 61034-2
Nominal voltage U₀	6 kV
Nominal voltage U	10 kV
Nominal voltage U_{max}	12 kV
Minimum installation temperature	-5 °C
Max. operating temperature	70 °C
Max. conductor temperature	90 °C

MarinePower MultiFlex YQOQmv 6/10 kV**2 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (m)	Outer diameter approx (mm)	Tensile load (N)
33189	3 x 50 mm ² Red	5.294	0,34	57,5	7500
33191	3 x 95 mm ² Red	7.465	0,39	65,4	14250

Communication cables

MarineCom YOZc 250 V

Properties

Application:
Lightweight, armored, 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 color outer sheaths, other than grey, available on request

Core identification:
• Pairs & Quads: Numbered Blue and White. Triples: Numbered Blue, White, and Red

Specifications

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Conductor category	Class 2 = stranded
Stranding element	Product dependent
Core insulation material	Crosslinked polyethylene (XLPE)
Binder/filler	Polyester tape
Screen over stranding	Braiding
Construction outer shield	tinned copperbraiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Ripcord	Yes
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U	250 V
Test voltage	1.500 V



Communication cables

MarineCom YOZc 250 V

120 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16900	1 x 2 x 0,5 mm ² Grey	0.058	39	6,6	15
16915	1 x 3 x 0,5 mm ² Grey	0.067	41	6,9	23
16902	2 x 2 x 0,5 mm ² Grey	0.098	56	9,4	30
16899	2 x 2 x 0,5 mm ² (Quad) Grey	0.086	45	7,5	30
16916	2 x 3 x 0,5 mm ² Grey	0.118	62	10,3	45
16903	4 x 2 x 0,5 mm ² Grey	0.144	65	10,9	60
16917	4 x 3 x 0,5 mm ² Grey	0.177	71	11,8	90
16904	6 x 2 x 0,5 mm ² Grey	0.207	80	12,7	90
16905	7 x 2 x 0,5 mm ² Grey	0.2	76	12,7	105
16906	8 x 2 x 0,5 mm ² Grey	0.258	86	14,3	120
16907	10 x 2 x 0,5 mm ² Grey	0.306	94	15,7	150
16918	7 x 3 x 0,5 mm ² Grey	0.301	91	15,2	158
16908	12 x 2 x 0,5 mm ² Grey	0.348	100	16,6	180
16909	14 x 2 x 0,5 mm ² Grey	0.388	106	17,6	210
16919	10 x 3 x 0,5 mm ² Grey	0.412	108	18	225
16910	19 x 2 x 0,5 mm ² Grey	0.493	121	20,1	285
16920	14 x 3 x 0,5 mm ² Grey	0.517	119	19,9	315
16911	24 x 2 x 0,5 mm ² Grey	0.597	136	22,7	360
16912	27 x 2 x 0,5 mm ² Grey	0.653	143	23,8	405
16921	19 x 3 x 0,5 mm ² Grey	0.644	137	22,9	428
16913	30 x 2 x 0,5 mm ² Grey	0.705	149	24,8	450
16922	24 x 3 x 0,5 mm ² Grey	0.797	154	25,6	540
16914	37 x 2 x 0,5 mm ² Grey	0.843	163	27,2	555
16271	1 x 2 x 0,75 mm ² Grey	0.072	41	6,9	23
16272	1 x 3 x 0,75 mm ² Grey	0.082	44	7,3	34
16273	2 x 2 x 0,75 mm ² (Quad) Grey	0.094	47	7,8	45
16270	2 x 2 x 0,75 mm ² Grey	0.113	61	9,9	45
16923	2 x 3 x 0,75 mm ² Grey	0.145	65	10,9	101
16287	3 x 2 x 0,75 mm ² Grey	0.139	64	10,7	68
16274	4 x 2 x 0,75 mm ² Grey	0.169	73	12,5	90
16924	4 x 3 x 0,75 mm ² Grey	0.213	80	12,7	135
16275	6 x 2 x 0,75 mm ² Grey	0.282	86	14,8	135
16276	7 x 2 x 0,75 mm ² Grey	0.281	86	14,6	158
16288	8 x 2 x 0,75 mm ² Grey	0.309	91	15,2	180
16277	10 x 2 x 0,75 mm ² Grey	0.377	104	17,3	225
16925	7 x 3 x 0,75 mm ² Grey	0.363	96	16	236
16289	12 x 2 x 0,75 mm ² Grey	0.429	109	18,5	270
16278	14 x 2 x 0,75 mm ² Grey	0.481	116	20,2	315
16926	10 x 3 x 0,75 mm ² Grey	0.499	117	19,5	338
16955	12 x 3 x 0,75 mm ² Grey	0.558	131	20,5	473
16279	19 x 2 x 0,75 mm ² Grey	0.592	135	22,5	428
16285	20 x 2 x 0,75 mm ² Grey	0.638	92	23	450
16927	14 x 3 x 0,75 mm ² Grey	0.63	131	21,8	473
16280	24 x 2 x 0,75 mm ² Grey	0.747	150	25	540

Communication cables

MarineCom YOZc 250 V

Part number	Construction	Netweight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load e (N)
16283	27 x 2 x 0,75 mm² Grey	0.812	157	26,2	608
16928	19 x 3 x 0,75 mm² Grey	0.811	149	24,9	641
16281	30 x 2 x 0,75 mm² Grey	0.883	165	27,5	675
16929	24 x 3 x 0,75 mm² Grey	1.002	167	27,8	810
16282	37 x 2 x 0,75 mm² Grey	1.053	181	30,2	833
16930	1 x 2 x 1,0 mm² Grey	0.08	45	7,3	30
16945	1 x 3 x 1,0 mm² Grey	0.093	46	7,7	45
16931	2 x 2 x 1,0 mm² (Quad) Grey	0.111	50	8,4	60
16932	2 x 2 x 1,0 mm² Grey	0.133	64	10,7	60
16933	4 x 2 x 1,0 mm² Grey	0.196	74	12,4	120
16946	2 x 3 x 1,0 mm² Grey	0.165	70	11,6	135
16947	4 x 3 x 1,0 mm² Grey	0.289	86	14,4	180
16934	6 x 2 x 1,0 mm² Grey	0.329	91	15,1	180
16935	7 x 2 x 1,0 mm² Grey	0.328	93	15,5	210
16936	8 x 2 x 1,0 mm² Grey	0.363	96	16	240
16953	6 x 3 x 1,0 mm² Grey	0.427	105	17,5	270
16937	10 x 2 x 1,0 mm² Grey	0.449	109	18,2	300
16948	7 x 3 x 1,0 mm² Grey	0.431	103	17,1	315
16938	12 x 2 x 1,0 mm² Grey	0.509	114	19	360
16939	14 x 2 x 1,0 mm² Grey	0.569	122	20,4	420
16949	10 x 3 x 1,0 mm² Grey	0.594	128	21,3	450
16940	19 x 2 x 1,0 mm² Grey	0.732	142	23,7	570
16950	14 x 3 x 1,0 mm² Grey	0.77	141	23,5	630
16941	24 x 2 x 1,0 mm² Grey	0.89	158	26,3	720
16942	27 x 2 x 1,0 mm² Grey	0.978	166	27,6	810
16951	19 x 3 x 1,0 mm² Grey	0.996	161	26,9	855
16943	30 x 2 x 1,0 mm² Grey	1.078	174	29	900
16952	24 x 3 x 1,0 mm² Grey	1.218	179	29,8	1080
16944	37 x 2 x 1,0 mm² Grey	1.277	190	31,7	1110
16301	1 x 2 x 1,5 mm² Grey	0.096	50	8,3	45
16316	1 x 3 x 1,5 mm² Grey	0.118	53	8,9	68
16302	2 x 2 x 1,5 mm² (Quad) Grey	0.147	59	9,9	90
16303	2 x 2 x 1,5 mm² Grey	0.176	76	12,6	90
16317	2 x 3 x 1,5 mm² Grey	0.255	83	13,9	135
16304	4 x 2 x 1,5 mm² Grey	0.303	89	14,9	180
16318	4 x 3 x 1,5 mm² Grey	0.395	101	16,9	270
16305	6 x 2 x 1,5 mm² Grey	0.459	107	18,3	270
16306	7 x 2 x 1,5 mm² Grey	0.459	109	18,5	315
16307	8 x 2 x 1,5 mm² Grey	0.508	115	19,2	360
16308	10 x 2 x 1,5 mm² Grey	0.6	124	21	450
16319	7 x 3 x 1,5 mm² Grey	0.609	123	20,5	473
16309	12 x 2 x 1,5 mm² Grey	0.701	139	23,2	540
16310	14 x 2 x 1,5 mm² Grey	0.79	148	24,7	630
16320	10 x 3 x 1,5 mm² Grey	0.843	153	25,5	675
16311	19 x 2 x 1,5 mm² Grey	1.023	171	28,5	855
16326	20 x 2 x 1,5 mm² Grey	1.078	174	29	855

Communication cables

MarineCom YOZc 250 V

Part number	Construction	Netweight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load e (N)
16321	14 x 3 x 1,5 mm² Grey	1.084	168	28	945
16312	24 x 2 x 1,5 mm² Grey	1.263	190	31,6	1080
16313	27 x 2 x 1,5 mm² Grey	1.39	199	33,2	1215
16322	19 x 3 x 1,5 mm² Grey	1.414	193	32,1	1283
16314	30 x 2 x 1,5 mm² Grey	1.534	209	34,9	1350
16323	24 x 3 x 1,5 mm² Grey	2.183	215	35,8	1620
16315	37 x 2 x 1,5 mm² Grey	2.309	230	38,3	1665
16960	1 x 2 x 2,5 mm² Grey	0.125	56	9,4	75
16975	1 x 3 x 2,5 mm² Grey	0.156	59	10	113
16961	2 x 2 x 2,5 mm² (Quad) Grey	0.201	67	11,2	150
16962	2 x 2 x 2,5 mm² Grey	0.235	64	14,3	60
16963	4 x 2 x 2,5 mm² Grey	0.399	103	17,1	300
16976	2 x 3 x 2,5 mm² Grey	0.332	96	16	338
16977	4 x 3 x 2,5 mm² Grey	0.537	111	18,5	450
16964	6 x 2 x 2,5 mm² Grey	0.615	122	20,3	450
16965	7 x 2 x 2,5 mm² Grey	0.617	122	20,3	525
16966	8 x 2 x 2,5 mm² Grey	0.698	133	22,2	600
16967	10 x 2 x 2,5 mm² Grey	0.857	152	25,3	750
16978	7 x 3 x 2,5 mm² Grey	0.84	142	23,6	788
16968	12 x 2 x 2,5 mm² Grey	0.98	158	26,4	900
16969	14 x 2 x 2,5 mm² Grey	1.108	169	28,1	1050
16979	10 x 3 x 2,5 mm² Grey	1.181	174	28,8	1125
16970	19 x 2 x 2,5 mm² Grey	1.458	194	32,4	1425
16980	14 x 3 x 2,5 mm² Grey	1.553	193	32,1	1575
16971	24 x 2 x 2,5 mm² Grey	2.243	217	36,2	1800
16972	27 x 2 x 2,5 mm² Grey	2.457	228	38	2025
16981	19 x 3 x 2,5 mm² Grey	2.478	221	36,8	2138
16973	30 x 2 x 2,5 mm² Grey	2.316	240	40	2250
16982	24 x 3 x 2,5 mm² Grey	2.663	247	41,1	2700
16974	37 x 2 x 2,5 mm² Grey	2.785	263	43,8	2775

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 with both a stranded tinned copper drain wire
- 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 color outer sheaths, other than grey, available on request

Core identification:

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

**Specifications**

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Binder/filler	Polyester tape
Screen over stranding element	Alpet tape
Screen over stranding	Foil + braiding
Construction outer shield	tinned copperbraiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U	250 V
Test voltage	1.500 V

Marine2Com YOZ2c 250 V**107 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
17223	2 x 2 x 0,5 mm ² Grey	0.126	80	10	30
17224	4 x 2 x 0,5 mm ² Grey	0.185	94	11,7	60
17280	2 x 3 x 0,5 mm ² Grey	0.152	87	10,9	68
17281	4 x 3 x 0,5 mm ² Grey	0.22	101	12,6	90
17225	6 x 2 x 0,5 mm ² Grey	0.307	116	14,5	90
17226	7 x 2 x 0,5 mm ² Grey	0.272	111	13,9	105
17227	8 x 2 x 0,5 mm ² Grey	0.334	122	15,3	120
17228	10 x 2 x 0,5 mm ² Grey	0.406	138	17,3	150
17282	7 x 3 x 0,5 mm ² Grey	0.373	130	16,2	158
17229	12 x 2 x 0,5 mm ² Grey	0.466	145	18,1	180
17230	14 x 2 x 0,5 mm ² Grey	0.516	155	19,4	210
17283	10 x 3 x 0,5 mm ² Grey	0.51	158	19,8	225
17231	19 x 2 x 0,5 mm ² Grey	0.656	176	22	285
17284	14 x 3 x 0,5 mm ² Grey	0.642	174	21,7	315
17232	24 x 2 x 0,5 mm ² Grey	0.798	195	24,4	360
17233	27 x 2 x 0,5 mm ² Grey	0.889	206	25,8	405
17285	19 x 3 x 0,5 mm ² Grey	0.824	198	24,7	428
17234	30 x 2 x 0,5 mm ² Grey	0.965	215	26,9	450
17286	24 x 3 x 0,5 mm ² Grey	1.008	219	27,4	540
17235	37 x 2 x 0,5 mm ² Grey	1.157	236	29,5	555
16329	1 x 2 x 0,75 mm ² Grey	0.074	30	7	20
16348	1 x 3 x 0,75 mm ² Grey	0.09	60	7,5	34
16290	2 x 2 x 0,75 mm ² Grey	0.144	87	10,9	45
16331	3 x 2 x 0,75 mm ² Grey	0.178	94	11,7	68
16291	4 x 2 x 0,75 mm ² Grey	0.216	102	12,7	90
17290	2 x 3 x 0,75 mm ² Grey	0.171	94	11,7	101
16332	5 x 2 x 0,75 mm ² Grey	0.288	116	14,4	113
17291	4 x 3 x 0,75 mm ² Grey	0.293	115	14,2	135
16292	6 x 2 x 0,75 mm ² Grey	0.356	126	15,8	135
16293	7 x 2 x 0,75 mm ² Grey	0.351	126	15,8	158
17237	8 x 2 x 0,75 mm ² Grey	0.392	130	16,3	180
16294	10 x 2 x 0,75 mm ² Grey	0.476	152	19	225
17292	7 x 3 x 0,75 mm ² Grey	0.434	140	17,5	236
17238	12 x 2 x 0,75 mm ² Grey	0.528	156	19,5	270
16295	14 x 2 x 0,75 mm ² Grey	0.611	170	21,3	315
17293	10 x 3 x 0,75 mm ² Grey	0.596	170	21,3	338
16296	19 x 2 x 0,75 mm ² Grey	0.775	194	24,2	428
17294	14 x 3 x 0,75 mm ² Grey	0.772	188	23,3	473
16297	24 x 2 x 0,75 mm ² Grey	0.951	215	26,9	540
17239	27 x 2 x 0,75 mm ² Grey	1.035	222	27,8	608
17295	19 x 3 x 0,75 mm ² Grey	0.991	214	26,8	641
16298	30 x 2 x 0,75 mm ² Grey	1.147	238	29,7	675
17296	24 x 3 x 0,75 mm ² Grey	1.21	238	29,7	810
16299	37 x 2 x 0,75 mm ² Grey	1.375	261	32,4	833

Communication cables

Marine2Com YOZ2c 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load e (N)
17243	2 x 2 x 1,0 mm² Grey	0.166	93	11,6	60
17241	3 x 2 x 1,0 mm² Grey	0.2	94	12,3	68
17244	4 x 2 x 1,0 mm² Grey	0.241	113	14,1	120
17300	2 x 3 x 1,0 mm² Grey	0.194	99	12,4	135
17301	4 x 3 x 1,0 mm² Grey	0.338	122	15,3	180
17245	6 x 2 x 1,0 mm² Grey	0.406	134	16,8	180
17246	7 x 2 x 1,0 mm² Grey	0.398	133	16,6	210
17247	8 x 2 x 1,0 mm² Grey	0.45	142	17,8	240
17248	10 x 2 x 1,0 mm² Grey	0.547	162	20,2	300
17242	7 x 3 x 1,0 mm² Grey	0.521	151	18,9	315
17249	12 x 2 x 1,0 mm² Grey	0.62	169	21,1	360
17250	14 x 2 x 1,0 mm² Grey	0.699	179	22,4	420
17303	10 x 3 x 1,0 mm² Grey	0.71	183	22,9	450
17251	19 x 2 x 1,0 mm² Grey	0.9	204	25,5	570
17304	14 x 3 x 1,0 mm² Grey	0.908	202	25,2	630
17252	24 x 2 x 1,0 mm² Grey	1.112	228	28,5	720
17253	27 x 2 x 1,0 mm² Grey	1.224	239	29,9	810
17305	19 x 3 x 1,0 mm² Grey	1.172	230	28,7	855
17254	30 x 2 x 1,0 mm² Grey	1.333	250	31,3	900
17256	24 x 3 x 1,0 mm² Grey	1.457	257	32,1	1080
17255	37 x 2 x 1,0 mm² Grey	1.604	275	34,4	1110
16347	1 x 2 x 1,5 mm² Grey	0.106	69	8,6	45
16333	2 x 2 x 1,5 mm² Grey	0.243	111	14,3	90
17310	2 x 3 x 1,5 mm² Grey	0.29	118	14,8	135
16335	4 x 2 x 1,5 mm² Grey	0.36	128	16	180
17311	4 x 3 x 1,5 mm² Grey	0.46	144	18	270
16334	6 x 2 x 1,5 mm² Grey	0.537	157	19,6	270
16336	7 x 2 x 1,5 mm² Grey	0.525	158	19,8	315
16337	8 x 2 x 1,5 mm² Grey	0.59	168	21	360
16338	10 x 2 x 1,5 mm² Grey	0.73	192	24	450
17312	7 x 3 x 1,5 mm² Grey	0.707	179	22,4	473
16339	12 x 2 x 1,5 mm² Grey	0.827	200	25	540
16340	14 x 2 x 1,5 mm² Grey	0.947	214	26,8	630
17317	10 x 3 x 1,5 mm² Grey	0.959	218	27,3	675
16341	19 x 2 x 1,5 mm² Grey	1.225	246	30,5	855
16346	20 x 2 x 1,5 mm² Grey	1.275	250	31,1	900
17314	14 x 3 x 1,5 mm² Grey	1.247	242	30,2	945
16342	24 x 2 x 1,5 mm² Grey	1.514	274	34,2	1080
16343	27 x 2 x 1,5 mm² Grey	2.102	288	36	1215
17315	19 x 3 x 1,5 mm² Grey	1.618	276	34,5	1283
16344	30 x 2 x 1,5 mm² Grey	2.316	302	37,8	1350
17316	24 x 3 x 1,5 mm² Grey	2.497	310	38,7	1620
16345	37 x 2 x 1,5 mm² Grey	2.361	336	42	1665
17263	2 x 2 x 2,5 mm² Grey	0.311	128	16	150
17276	4 x 2 x 2,5 mm² Grey	0.484	149	18,6	300
17320	2 x 3 x 2,5 mm² Grey	0.386	138	17,2	338

Communication cables

Marine2Com YOZ2c 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load e (N)
17321	4 x 3 x 2,5 mm² Grey	0.614	163	20,4	450
17265	6 x 2 x 2,5 mm² Grey	0.686	178	22,3	450
17266	7 x 2 x 2,5 mm² Grey	0.725	178	22,3	525
17267	8 x 2 x 2,5 mm² Grey	0.82	191	23,9	600
17268	10 x 2 x 2,5 mm² Grey	1.004	218	27,2	750
17322	7 x 3 x 2,5 mm² Grey	0.961	203	25,4	788
17269	12 x 2 x 2,5 mm² Grey	1.163	230	28,7	900
17270	14 x 2 x 2,5 mm² Grey	1.318	244	30,5	1050
17323	10 x 3 x 2,5 mm² Grey	1.335	248	30,8	1125
17271	19 x 2 x 2,5 mm² Grey	1.712	279	34,9	1425
17324	14 x 3 x 2,5 mm² Grey	1.76	275	34,4	1575
17272	24 x 2 x 2,5 mm² Grey	2.273	314	39,2	1800
17273	27 x 2 x 2,5 mm² Grey	2.505	330	41,2	2025
17325	19 x 3 x 2,5 mm² Grey	2.447	317	39,6	2138
17274	30 x 2 x 2,5 mm² Grey	2.741	346	43,2	2250
17326	24 x 3 x 2,5 mm² Grey	3.032	354	44,2	2700
17275	37 x 2 x 2,5 mm² Grey	3.737	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, overall screening with a stranded tinned copper drain wire
 - 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 color outer sheaths, other than grey, available on request

Core identification:
•Pairs & Quads: Numbered Blue and White. Triples: Numbered Blue, White, and Red



Specifications

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Conductor category	Class 2 = stranded
Stranding element	Product dependent
Core insulation material	Crosslinked polyethylene (XLPE)
Binder/filler	Polyester tape
Screen over stranding	Alpet tape
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U	250 V
Test voltage	1.500 V

Communication cables

MarineCom YZafc 250 V

77 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile load (N)
16692	2 x 2 x 0,5 mm² Grey	0.075	71	8,9	30
16693	4 x 2 x 0,5 mm² Grey	0.109	82	10,2	60
16694	6 x 2 x 0,5 mm² Grey	0.17	98	12,3	90
16695	7 x 2 x 0,5 mm² Grey	0.164	98	12,3	105
16696	8 x 2 x 0,5 mm² Grey	0.182	105	13,1	120
16697	10 x 2 x 0,5 mm² Grey	0.226	120	15	150
16698	12 x 2 x 0,5 mm² Grey	0.256	126	15,7	180
16699	14 x 2 x 0,5 mm² Grey	0.296	135	16,9	210
16700	19 x 2 x 0,5 mm² Grey	0.378	154	19,2	285
16701	24 x 2 x 0,5 mm² Grey	0.468	171	21,4	360
16702	27 x 2 x 0,5 mm² Grey	0.525	182	22,7	405
16703	30 x 2 x 0,5 mm² Grey	0.573	190	23,7	450
16704	37 x 2 x 0,5 mm² Grey	0.695	209	26,1	555
16690	1 x 2 x 0,5 mm² Grey	0.044	49	6,1	15
16691	1 x 4 x 0,5 mm² Grey	0.063	57	7	30
16708	1 x 2 x 0,75 mm² Grey	0.05	51	6,4	23
16710	2 x 2 x 0,75 mm² Grey	0.086	77	9,6	45
16711	4 x 2 x 0,75 mm² Grey	0.137	90	11,3	90
16712	6 x 2 x 0,75 mm² Grey	0.208	107	13,4	135
16713	7 x 2 x 0,75 mm² Grey	0.202	107	13,4	158
16714	8 x 2 x 0,75 mm² Grey	0.23	116	14,5	180
16715	10 x 2 x 0,75 mm² Grey	0.285	130	16,3	225
16716	12 x 2 x 0,75 mm² Grey	0.326	139	17,4	270
16717	14 x 2 x 0,75 mm² Grey	0.368	147	18,4	315
16718	19 x 2 x 0,75 mm² Grey	0.478	169	21,1	428
16719	24 x 2 x 0,75 mm² Grey	0.598	189	23,6	540
16720	30 x 2 x 0,75 mm² Grey	0.737	209	26,1	675
16721	37 x 2 x 0,75 mm² Grey	0.888	230	28,8	833
16722	27 x 2 x 0,75 mm² Grey	0.659	200	25	608
16723	8 x 3 x 0,75 mm² Grey	0.323	96	16,6	236
16707	1 x 3 x 0,75 mm² Grey	0.06	54	6,8	34
16709	2 x 2 x 0,75 mm² (Quad) Grey	0.072	58	7,3	45
16730	1 x 2 x 1,0 mm² Grey	0.057	54	6,8	30
16732	2 x 2 x 1,0 mm² Grey	0.102	82	10,2	60
16733	4 x 2 x 1,0 mm² Grey	0.161	95	11,9	120
16734	6 x 2 x 1,0 mm² Grey	0.245	114	14,2	180
16735	7 x 2 x 1,0 mm² Grey	0.244	114	14,2	210
16736	8 x 2 x 1,0 mm² Grey	0.279	122	15,3	240
16737	10 x 2 x 1,0 mm² Grey	0.346	140	17,5	300
16738	12 x 2 x 1,0 mm² Grey	0.397	146	18,3	360
16739	14 x 2 x 1,0 mm² Grey	0.451	156	19,5	420
16740	19 x 2 x 1,0 mm² Grey	0.594	179	22,4	570
16741	24 x 2 x 1,0 mm² Grey	0.749	202	25,2	720
16742	27 x 2 x 1,0 mm² Grey	0.828	212	26,5	810

MarineCom YZafc 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile load (N)
16743	30 x 2 x 1,0 mm ² Grey	0.906	222	27,7	900
16744	37 x 2 x 1,0 mm ² Grey	1.103	245	30,6	1110
16731	1 x 4 x 1,0 mm ² Grey	0.089	63	8	60
16830	1 x 2 x 1,5 mm ² Grey	0.074	62	7,8	45
16832	2 x 2 x 1,5 mm ² Grey	0.14	97	12,1	90
16833	4 x 2 x 1,5 mm ² Grey	0.22	112	14	180
16834	6 x 2 x 1,5 mm ² Grey	0.348	136	17	270
16835	7 x 2 x 1,5 mm ² Grey	0.348	138	17,2	315
16836	8 x 2 x 1,5 mm ² Grey	0.396	146	18,3	360
16837	10 x 2 x 1,5 mm ² Grey	0.492	168	21	450
16838	12 x 2 x 1,5 mm ² Grey	0.566	175	21,9	540
16839	14 x 2 x 1,5 mm ² Grey	0.657	189	23,6	630
16840	19 x 2 x 1,5 mm ² Grey	0.867	218	27,2	855
16841	24 x 2 x 1,5 mm ² Grey	1.09	244	30,5	1080
16842	27 x 2 x 1,5 mm ² Grey	1.207	257	32,1	1215
16843	30 x 2 x 1,5 mm ² Grey	1.324	269	33,6	1350
16844	37 x 2 x 1,5 mm ² Grey	1.61	296	37	1665
16831	1 x 4 x 1,5 mm ² Grey	0.122	75	9,4	90
16850	1 x 2 x 2,5 mm ² Grey	0.099	71	8,8	75
16852	2 x 2 x 2,5 mm ² Grey	0.189	109	13,6	150
16853	4 x 2 x 2,5 mm ² Grey	0.314	128	16	300
16854	6 x 2 x 2,5 mm ² Grey	0.5	155	19,4	450
16855	7 x 2 x 2,5 mm ² Grey	0.502	155	19,4	525
16856	8 x 2 x 2,5 mm ² Grey	0.574	167	20,9	600
16857	10 x 2 x 2,5 mm ² Grey	0.712	192	24	750
16858	12 x 2 x 2,5 mm ² Grey	0.838	202	25,3	900
16859	14 x 2 x 2,5 mm ² Grey	0.957	216	27	1050
16860	19 x 2 x 2,5 mm ² Grey	1.268	249	31,1	1425
16861	24 x 2 x 2,5 mm ² Grey	1.595	279	34,9	1800
16862	27 x 2 x 2,5 mm ² Grey	1.771	294	36,7	2025
16863	30 x 2 x 2,5 mm ² Grey	1.966	310	38,7	2250
16864	37 x 2 x 2,5 mm ² Grey	2.396	342	42,7	2775
16851	1 x 4 x 2,5 mm ² Grey	0.168	83	10,4	150

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 with both a stranded tinned copper drain wire
- Perfect electrical properties and low capacitance for minimal signal loss
- Extreme lightweight and small diameter for applications that don't require mechanical protection
- Different color outer sheaths, other than grey, available on request

Core identification:

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

Specifications

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Binder/filler	Polyester tape
Screen over stranding element	Alpet tape
Screen over stranding	Alpet tape
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U	250 V
Test voltage	1.500 V



Communication cables

Marine2Com YZ2afc 250 V

65 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load e (N)
16750	2 x 2 x 0,5 mm² Grey	0.093	76	9,4	30
16751	4 x 2 x 0,5 mm² Grey	0.142	87	10,9	60
16752	6 x 2 x 0,5 mm² Grey	0.217	106	13,2	90
16753	7 x 2 x 0,5 mm² Grey	0.218	106	13,2	105
16754	8 x 2 x 0,5 mm² Grey	0.252	114	14,1	120
16755	10 x 2 x 0,5 mm² Grey	0.302	129	16,1	150
16756	12 x 2 x 0,5 mm² Grey	0.358	136	16,9	180
16757	14 x 2 x 0,5 mm² Grey	0.403	145	18,1	210
16758	19 x 2 x 0,5 mm² Grey	0.531	166	20,8	285
16759	24 x 2 x 0,5 mm² Grey	0.659	186	23,2	360
16760	27 x 2 x 0,5 mm² Grey	0.729	195	24,4	405
16761	30 x 2 x 0,5 mm² Grey	0.81	206	25,7	450
16762	37 x 2 x 0,5 mm² Grey	0.972	225	28,1	555
16770	2 x 2 x 0,75 mm² Grey	0.106	82	10,3	45
16771	4 x 2 x 0,75 mm² Grey	0.173	97	12,1	90
16772	6 x 2 x 0,75 mm² Grey	0.268	117	14,6	135
16773	7 x 2 x 0,75 mm² Grey	0.263	117	14,6	158
16774	8 x 2 x 0,75 mm² Grey	0.292	122	15,3	180
16775	10 x 2 x 0,75 mm² Grey	0.364	142	17,8	225
16776	12 x 2 x 0,75 mm² Grey	0.416	146	18,3	270
16777	14 x 2 x 0,75 mm² Grey	0.49	161	20,1	315
16778	19 x 2 x 0,75 mm² Grey	0.639	184	23	428
16779	24 x 2 x 0,75 mm² Grey	0.793	206	25,7	540
16782	27 x 2 x 0,75 mm² Grey	0.874	213	26,6	608
16780	30 x 2 x 0,75 mm² Grey	0.974	228	28,5	675
16781	37 x 2 x 0,75 mm² Grey	1.184	251	31,4	833
16790	2 x 2 x 1,0 mm² Grey	0.119	86	10,8	60
16791	4 x 2 x 1,0 mm² Grey	0.195	102	12,8	120
16792	6 x 2 x 1,0 mm² Grey	0.306	123	15,4	180
16793	7 x 2 x 1,0 mm² Grey	0.306	123	15,4	210
16794	8 x 2 x 1,0 mm² Grey	0.342	131	16,4	240
16795	10 x 2 x 1,0 mm² Grey	0.425	150	18,8	300
16796	12 x 2 x 1,0 mm² Grey	0.5	159	19,9	360
16797	14 x 2 x 1,0 mm² Grey	0.569	170	21,2	420
16798	19 x 2 x 1,0 mm² Grey	0.751	194	24,3	570
16799	24 x 2 x 1,0 mm² Grey	0.934	217	27,1	720
16800	27 x 2 x 1,0 mm² Grey	1.049	230	28,7	810
16801	30 x 2 x 1,0 mm² Grey	1.15	241	30,1	900
16802	37 x 2 x 1,0 mm² Grey	1.4	266	33,2	1110
16810	2 x 2 x 1,5 mm² Grey	0.16	103	12,9	90
16811	4 x 2 x 1,5 mm² Grey	0.263	122	15,2	180
16812	6 x 2 x 1,5 mm² Grey	0.411	147	18,4	270
16813	7 x 2 x 1,5 mm² Grey	0.412	147	18,4	315
16814	8 x 2 x 1,5 mm² Grey	0.471	158	19,8	360

Communication cables

Marine2Com YZ2afc 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load e (N)
16815	10 x 2 x 1,5 mm² Grey	0.592	182	22,8	450
16816	12 x 2 x 1,5 mm² Grey	0.683	190	23,8	540
16817	14 x 2 x 1,5 mm² Grey	0.779	203	25,4	630
16818	19 x 2 x 1,5 mm² Grey	1.045	236	29,5	855
16819	24 x 2 x 1,5 mm² Grey	1.297	262	32,8	1080
16820	27 x 2 x 1,5 mm² Grey	1.456	278	34,8	1215
16821	30 x 2 x 1,5 mm² Grey	1.598	291	36,4	1350
16822	37 x 2 x 1,5 mm² Grey	1.947	322	40,2	1665
16870	2 x 2 x 2,5 mm² Grey	0.223	118	14,8	150
16871	4 x 2 x 2,5 mm² Grey	0.365	138	17,2	300
16872	6 x 2 x 2,5 mm² Grey	0.584	169	21,1	450
16873	7 x 2 x 2,5 mm² Grey	0.597	169	21,1	525
16874	8 x 2 x 2,5 mm² Grey	0.671	180	22,5	600
16875	10 x 2 x 2,5 mm² Grey	0.845	208	26	750
16876	12 x 2 x 2,5 mm² Grey	0.983	218	27,3	900
16877	14 x 2 x 2,5 mm² Grey	1.138	234	29,3	1050
16878	19 x 2 x 2,5 mm² Grey	1.508	270	33,7	1425
16879	24 x 2 x 2,5 mm² Grey	1.897	302	37,8	1800
16880	27 x 2 x 2,5 mm² Grey	2.108	318	39,8	2025
16881	30 x 2 x 2,5 mm² Grey	2.34	336	42	2250
16882	37 x 2 x 2,5 mm² Grey	2.854	370	46,3	2775

MarineCom YOZc X-FR 250 V**Properties****Application:**

Lightweight, fire-resistant, armored, 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 IEC60331-1/2
- Extra mechanical protection and reduced EMI due to the tinned copper braided screen
- Different color outer sheaths, other than orange, available on request

Core identification:

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

**Specifications**

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Conductor category	Class 2 = stranded
Stranding element	Product dependent
Core insulation material	Mica + XLHFFR
Binder/filler	Polyester tape
Screen over stranding	Braiding
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Insulation integrity according to IEC 60331	Yes
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U	250 V
Test voltage	1.500 V

MarineCom YOZc X-FR 250 V**116 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
26470	1 x 2 x 0,5 mm ² Orange	0.08	62	7,7	15
26485	1 x 3 x 0,5 mm ² Orange	0.091	65	8,1	23
26471	2 x 2 x 0,5 mm ² (Quad) Orange	0.113	73	9,1	30
26520	2 x 2 x 0,5 mm ² Orange	0.136	90	11,3	30
26472	4 x 2 x 0,5 mm ² Orange	0.196	110	13,8	60
26486	2 x 3 x 0,5 mm ² Orange	0.166	98	12,3	68
26487	4 x 3 x 0,5 mm ² Orange	0.289	122	15,2	90
26473	6 x 2 x 0,5 mm ² Orange	0.334	131	16,4	90
26474	7 x 2 x 0,5 mm ² Orange	0.325	131	16,4	105
26475	8 x 2 x 0,5 mm ² Orange	0.365	141	17,6	120
26476	10 x 2 x 0,5 mm ² Orange	0.437	158	19,8	150
26488	7 x 3 x 0,5 mm ² Orange	0.433	150	18,8	158
26477	12 x 2 x 0,5 mm ² Orange	0.497	166	20,8	180
26478	14 x 2 x 0,5 mm ² Orange	0.557	177	22,1	210
26489	10 x 3 x 0,5 mm ² Orange	0.595	182	22,8	225
26479	19 x 2 x 0,5 mm ² Orange	0.712	202	25,3	285
26490	14 x 3 x 0,5 mm ² Orange	0.763	202	25,3	315
26480	24 x 2 x 0,5 mm ² Orange	0.864	224	28	360
26481	27 x 2 x 0,5 mm ² Orange	0.96	237	29,6	405
26491	19 x 3 x 0,5 mm ² Orange	0.979	230	28,8	428
26482	30 x 2 x 0,5 mm ² Orange	1.047	248	31	450
26492	24 x 3 x 0,5 mm ² Orange	1.193	256	32	540
26483	37 x 2 x 0,5 mm ² Orange	1.245	272	34	555
26500	1 x 2 x 0,75 mm ² Orange	0.087	65	8,1	23
26515	1 x 3 x 0,75 mm ² Orange	0.102	68	8,5	34
26501	1 x 4 x 0,75 mm ² Orange	0.124	75	9,4	45
26502	2 x 2 x 0,75 mm ² Orange	0.154	96	12	45
26499	2 x 2 x 0,75 mm ² (Quad) Orange	0.124	75	9,4	45
26503	4 x 2 x 0,75 mm ² Orange	0.257	116	14,3	90
26516	2 x 3 x 0,75 mm ² Orange	0.189	108	13,5	101
26517	4 x 3 x 0,75 mm ² Orange	0.333	128	16	135
26504	6 x 2 x 0,75 mm ² Orange	0.398	138	17,3	135
26505	7 x 2 x 0,75 mm ² Orange	0.384	140	17,5	158
26506	8 x 2 x 0,75 mm ² Orange	0.43	148	18,5	180
26507	10 x 2 x 0,75 mm ² Orange	0.516	168	21	225
26518	7 x 3 x 0,75 mm ² Orange	0.517	161	20,1	236
26508	12 x 2 x 0,75 mm ² Orange	0.592	178	22,2	270
26509	14 x 2 x 0,75 mm ² Orange	0.656	187	23,4	315
26519	10 x 3 x 0,75 mm ² Orange	0.699	194	24,2	338
26510	19 x 2 x 0,75 mm ² Orange	0.842	214	26,7	428
26524	20 x 2 x 0,75 mm ² Orange	0.875	218	27,3	450
26521	14 x 3 x 0,75 mm ² Orange	0.903	214	26,8	473
26511	24 x 2 x 0,75 mm ² Orange	1.038	238	29,8	540
26512	27 x 2 x 0,75 mm ² Orange	1.138	250	31,3	608

Communication cables

MarineCom YOZc X-FR 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
26522	19 x 3 x 0,75 mm ² Orange	1.183	246	30,8	641
26513	30 x 2 x 0,75 mm ² Orange	1.259	264	33	675
26523	24 x 3 x 0,75 mm ² Orange	1.445	274	34,2	810
26514	37 x 2 x 0,75 mm ² Orange	1.924	288	36	833
26526	1 x 2 x 1,0 mm ² Orange	0.098	70	8,7	30
26541	1 x 3 x 1,0 mm ² Orange	0.116	73	9,1	45
26527	2 x 2 x 1,0 mm ² (Quad) Orange	0.144	80	10	60
26528	2 x 2 x 1,0 mm ² Orange	0.173	102	12,8	60
26529	4 x 2 x 1,0 mm ² Orange	0.297	123	15,4	120
26542	2 x 3 x 1,0 mm ² Orange	0.252	117	14,6	135
26543	4 x 3 x 1,0 mm ² Orange	0.388	138	17,2	180
26530	6 x 2 x 1,0 mm ² Orange	0.448	147	18,4	180
26531	7 x 2 x 1,0 mm ² Orange	0.438	147	18,4	180
26532	8 x 2 x 1,0 mm ² Orange	0.484	158	19,8	240
26533	10 x 2 x 1,0 mm ² Orange	0.593	180	22,5	300
26544	7 x 3 x 1,0 mm ² Orange	0.594	170	21,2	270
26534	12 x 2 x 1,0 mm ² Orange	0.682	190	23,7	360
26535	14 x 2 x 1,0 mm ² Orange	0.766	202	25,2	420
26545	10 x 3 x 1,0 mm ² Orange	0.821	208	26	450
26536	19 x 2 x 1,0 mm ² Orange	0.988	231	28,9	570
26546	14 x 3 x 1,0 mm ² Orange	1.062	230	28,8	630
26537	24 x 2 x 1,0 mm ² Orange	1.219	258	32,2	720
26538	27 x 2 x 1,0 mm ² Orange	1.342	271	33,9	810
26547	19 x 3 x 1,0 mm ² Orange	1.392	266	33,2	855
26539	30 x 2 x 1,0 mm ² Orange	1.591	286	35,8	900
26548	24 x 3 x 1,0 mm ² Orange	1.831	298	37,2	1080
26540	37 x 2 x 1,0 mm ² Orange	1.888	315	39,4	1110
26550	1 x 2 x 1,5 mm ² Orange	0.117	76	9,5	45
26551	2 x 2 x 1,5 mm ² (Quad) Orange	0.176	87	10,9	90
26552	2 x 2 x 1,5 mm ² Orange	0.247	119	14,9	90
26553	4 x 2 x 1,5 mm ² Orange	0.374	139	17,4	180
26566	2 x 3 x 1,5 mm ² Orange	0.317	130	16,3	203
26567	4 x 3 x 1,5 mm ² Orange	0.506	157	19,6	270
26554	6 x 2 x 1,5 mm ² Orange	0.581	168	21	270
26525	7 x 2 x 1,5 mm ² Orange	0.561	166	20,8	315
26555	8 x 2 x 1,5 mm ² Orange	0.633	178	22,3	360
26556	10 x 2 x 1,5 mm ² Orange	0.79	206	25,7	450
26568	7 x 3 x 1,5 mm ² Orange	0.784	195	24,4	473
26557	12 x 2 x 1,5 mm ² Orange	0.895	214	26,8	540
26558	14 x 2 x 1,5 mm ² Orange	1.012	229	28,6	630
26569	10 x 3 x 1,5 mm ² Orange	1.089	238	29,8	675
26559	19 x 2 x 1,5 mm ² Orange	1.326	263	32,9	855
26570	14 x 3 x 1,5 mm ² Orange	1.435	266	33,2	945
26560	24 x 2 x 1,5 mm ² Orange	1.75	295	36,9	1080
26561	27 x 2 x 1,5 mm ² Orange	1.939	312	39	1215
26571	19 x 3 x 1,5 mm ² Orange	2.016	309	38,6	1283

Communication cables

MarineCom YOZc X-FR 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
26562	30 x 2 x 1,5 mm ² Orange	2.123	326	40,8	1350
26572	24 x 3 x 1,5 mm ² Orange	2.462	342	42,8	1620
26563	37 x 2 x 1,5 mm ² Orange	2.553	361	45,1	1665
26575	1 x 2 x 2,5 mm ² Orange	0.147	84	10,5	75
26565	1 x 3 x 2,5 mm ² Orange	0.19	90	11,3	113
26576	2 x 2 x 2,5 mm ² (Quad) Orange	0.231	98	12,2	150
26577	2 x 2 x 2,5 mm ² Orange	0.324	135	16,9	150
26578	4 x 2 x 2,5 mm ² Orange	0.501	157	19,6	450
26591	2 x 3 x 2,5 mm ² Orange	0.409	146	18,2	338
26592	4 x 3 x 2,5 mm ² Orange	0.661	174	21,7	450
26579	6 x 2 x 2,5 mm ² Orange	0.725	188	23,5	450
26580	7 x 2 x 2,5 mm ² Orange	0.763	188	23,5	450
26581	8 x 2 x 2,5 mm ² Orange	0.861	203	25,4	600
26582	10 x 2 x 2,5 mm ² Orange	1.057	232	29	750
26593	7 x 3 x 2,5 mm ² Orange	1.058	220	27,5	788
26583	12 x 2 x 2,5 mm ² Orange	1.224	244	30,5	900
26584	14 x 2 x 2,5 mm ² Orange	1.386	261	32,6	1050
26594	10 x 3 x 2,5 mm ² Orange	1.486	268	33,3	1125
26585	19 x 2 x 2,5 mm ² Orange	1.948	303	37,9	1425
26595	14 x 3 x 2,5 mm ² Orange	2.082	301	37,6	1575
26586	24 x 2 x 2,5 mm ² Orange	2.402	338	42,2	1800
26587	27 x 2 x 2,5 mm ² Orange	2.668	357	44,6	2025
26596	19 x 3 x 2,5 mm ² Orange	2.727	346	43,2	2138
26588	30 x 2 x 2,5 mm ² Orange	2.939	374	46,7	2250
26597	24 x 3 x 2,5 mm ² Orange	3.37	385	48,1	2700
26589	37 x 2 x 2,5 mm ² Orange	3.563	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 screening with both a stranded tinned copper drain wire
- Perfect electrical properties and low capacitance for minimal signal loss
- Fire-resistant according to IEC60331-1/2
- Halogen-free and low smoke
- Extra mechanical protection and reduced EMI due to the tinned copper braided screen
- Different color outer sheaths, other than orange, available on request

Core identification:

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

Specifications

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Conductor category	Class 2 = stranded
Stranding element	Product dependent
Core insulation material	Mica + XLHFFR
Binder/filler	Polyester tape
Screen over stranding element	Alpet tape
Screen over stranding	Foil + braiding
Construction outer shield	tinned copper braiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Insulation integrity according to IEC 60331	Yes
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U	250 V
Test voltage	1.500 V

**Marine2Com YOZ2c X-FR 250 V****108 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
26662	2 x 2 x 0,5 mm ² Orange	0.168	98	12,3	30
26663	4 x 2 x 0,5 mm ² Orange	0.275	120	15	60
26681	2 x 3 x 0,5 mm ² Orange	0.198	105	13,1	68
26682	4 x 3 x 0,5 mm ² Orange	0.341	130	16,2	90
26664	6 x 2 x 0,5 mm ² Orange	0.402	142	17,8	90
26665	7 x 2 x 0,5 mm ² Orange	0.401	142	17,8	105
26666	8 x 2 x 0,5 mm ² Orange	0.452	151	18,9	120
26667	10 x 2 x 0,5 mm ² Orange	0.551	172	21,5	150
26683	7 x 3 x 0,5 mm ² Orange	0.51	160	20	158
26668	12 x 2 x 0,5 mm ² Orange	0.621	181	22,6	180
26669	14 x 2 x 0,5 mm ² Orange	0.697	192	24	210
26684	10 x 3 x 0,5 mm ² Orange	0.703	195	24,4	225
26670	19 x 2 x 0,5 mm ² Orange	0.895	219	27,4	285
26685	14 x 3 x 0,5 mm ² Orange	0.907	216	27	315
26671	24 x 2 x 0,5 mm ² Orange	1.106	245	30,6	360
26672	27 x 2 x 0,5 mm ² Orange	1.213	257	32,1	405
26686	19 x 3 x 0,5 mm ² Orange	1.166	246	30,8	428
26673	30 x 2 x 0,5 mm ² Orange	1.336	269	33,6	450
26687	24 x 3 x 0,5 mm ² Orange	1.442	275	34,4	540
26674	37 x 2 x 0,5 mm ² Orange	1.709	298	37,3	555
26600	1 x 2 x 0,75 mm ² Orange	0.094	66	8,2	23
26690	1 x 3 x 0,75 mm ² Orange	0.112	71	8,8	33
26601	1 x 4 x 0,75 mm ² Orange	0.132	76	9,5	45
26602	2 x 2 x 0,75 mm ² Orange	0.186	104	13	45
26691	2 x 3 x 0,75 mm ² Orange	0.258	117	14,6	68
17996	2 x 3 x 0,75 mm ² Orange	0.265	117	14,6	68
26603	4 x 2 x 0,75 mm ² Orange	0.324	123	15,4	90
26692	4 x 3 x 0,75 mm ² Orange	0.393	138	17,3	135
26604	6 x 2 x 0,75 mm ² Orange	0.461	150	18,8	135
26605	7 x 2 x 0,75 mm ² Orange	0.468	150	18,8	158
26606	8 x 2 x 0,75 mm ² Orange	0.51	161	20,1	180
26607	10 x 2 x 0,75 mm ² Orange	0.625	183	22,9	225
26693	7 x 3 x 0,75 mm ² Orange	0.597	171	21,4	236
26608	12 x 2 x 0,75 mm ² Orange	0.71	191	23,9	270
26609	14 x 2 x 0,75 mm ² Orange	0.817	206	25,7	315
26694	10 x 3 x 0,75 mm ² Orange	0.823	208	26	338
26610	19 x 2 x 0,75 mm ² Orange	1.043	234	29,3	428
26695	14 x 3 x 0,75 mm ² Orange	1.048	229	28,6	473
26611	24 x 2 x 0,75 mm ² Orange	1.286	258	32,3	540
26612	27 x 2 x 0,75 mm ² Orange	1.413	274	34,3	608
26696	19 x 3 x 0,75 mm ² Orange	1.357	262	32,7	641
26613	30 x 2 x 0,75 mm ² Orange	1.974	287	35,9	675
26697	24 x 3 x 0,75 mm ² Orange	1.808	296	37	810
26614	37 x 2 x 0,75 mm ² Orange	1.977	317	39,6	833

Communication cables

Marine2Com YOZ2c X-FR 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load e (N)
26616	1 x 4 x 1,0 mm² Orange	0.145	80	10	60
26617	2 x 2 x 1,0 mm² Orange	0.236	115	14,4	60
26701	2 x 3 x 1,0 mm² Orange	0.288	124	15,5	90
26618	4 x 2 x 1,0 mm² Orange	0.349	134	16,7	120
26702	4 x 3 x 1,0 mm² Orange	0.444	147	18,4	180
26619	6 x 2 x 1,0 mm² Orange	0.528	160	20	180
26620	7 x 2 x 1,0 mm² Orange	0.518	160	20	210
26621	8 x 2 x 1,0 mm² Orange	0.585	172	21,5	240
26622	10 x 2 x 1,0 mm² Orange	0.713	195	24,4	300
26703	7 x 3 x 1,0 mm² Orange	0.678	182	22,8	315
26628	12 x 2 x 1,0 mm² Orange	0.802	206	25,7	360
26624	14 x 2 x 1,0 mm² Orange	0.912	219	27,4	420
26704	10 x 3 x 1,0 mm² Orange	0.933	222	27,8	450
26625	19 x 2 x 1,0 mm² Orange	1.177	250	31,3	570
26705	14 x 3 x 1,0 mm² Orange	1.212	246	30,8	630
26626	24 x 2 x 1,0 mm² Orange	1.459	280	35	720
26627	27 x 2 x 1,0 mm² Orange	1.73	298	37,2	810
26706	19 x 3 x 1,0 mm² Orange	1.692	286	35,7	855
26623	30 x 2 x 1,0 mm² Orange	1.898	312	39	900
26707	24 x 3 x 1,0 mm² Orange	2.086	318	39,8	1080
26629	37 x 2 x 1,0 mm² Orange	2.271	343	42,9	1110
26630	1 x 2 x 1,5 mm² Orange	0.127	76	9,5	45
26631	1 x 4 x 1,5 mm² Orange	0.188	87	10,9	90
26632	2 x 2 x 1,5 mm² Orange	0.295	130	16,2	90
26711	2 x 3 x 1,5 mm² Orange	0.362	140	17,5	135
26633	4 x 2 x 1,5 mm² Orange	0.451	151	18,9	180
26712	4 x 3 x 1,5 mm² Orange	0.564	166	20,7	270
26634	6 x 2 x 1,5 mm² Orange	0.631	181	22,6	270
26635	7 x 2 x 1,5 mm² Orange	0.66	181	22,6	315
26636	8 x 2 x 1,5 mm² Orange	0.744	194	24,2	360
26637	10 x 2 x 1,5 mm² Orange	0.91	222	27,8	450
26713	7 x 3 x 1,5 mm² Orange	0.876	206	25,8	473
26638	12 x 2 x 1,5 mm² Orange	1.038	233	29,1	540
26639	14 x 2 x 1,5 mm² Orange	1.187	250	31,2	630
26714	10 x 3 x 1,5 mm² Orange	1.227	254	31,7	675
26640	19 x 2 x 1,5 mm² Orange	1.662	289	36,1	855
26715	14 x 3 x 1,5 mm² Orange	1.602	281	35,1	945
26641	24 x 2 x 1,5 mm² Orange	2.042	322	40,2	1080
26642	27 x 2 x 1,5 mm² Orange	2.263	338	42,3	1215
26716	19 x 3 x 1,5 mm² Orange	2.227	325	40,6	1283
26643	30 x 2 x 1,5 mm² Orange	2.468	356	44,5	1350
26717	24 x 3 x 1,5 mm² Orange	2.759	364	45,5	1620
26644	37 x 2 x 1,5 mm² Orange	2.967	398	49,8	1665
26645	1 x 2 x 2,5 mm² Orange	0.156	84	10,6	75
26647	2 x 2 x 2,5 mm² Orange	0.374	146	18,2	150
26721	2 x 3 x 2,5 mm² Orange	0.457	155	19,4	225

Communication cables

Marine2Com YOZ2c X-FR 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load e (N)
26648	4 x 2 x 2,5 mm² Orange	0.575	170	21,3	300
26722	4 x 3 x 2,5 mm² Orange	0.747	186	23,3	450
26649	6 x 2 x 2,5 mm² Orange	0.826	204	25,5	450
26650	7 x 2 x 2,5 mm² Orange	0.875	204	25,5	525
26651	8 x 2 x 2,5 mm² Orange	0.989	219	27,4	600
26652	10 x 2 x 2,5 mm² Orange	1.226	252	31,5	750
26723	7 x 3 x 2,5 mm² Orange	1.175	234	29,2	788
26653	12 x 2 x 2,5 mm² Orange	1.403	263	32,9	900
26654	14 x 2 x 2,5 mm² Orange	1.729	286	35,7	1050
26724	10 x 3 x 2,5 mm² Orange	1.794	290	36,3	1125
26655	19 x 2 x 2,5 mm² Orange	2.235	326	40,8	1425
26725	14 x 3 x 2,5 mm² Orange	2.306	322	40,2	1575
26656	24 x 2 x 2,5 mm² Orange	2.768	366	45,7	1800
26657	27 x 2 x 2,5 mm² Orange	3.061	385	48,1	2025
26726	19 x 3 x 2,5 mm² Orange	3.021	370	46,2	2138
26658	30 x 2 x 2,5 mm² Orange	3.383	405	50,6	2250
26727	24 x 3 x 2,5 mm² Orange	3.756	414	51,7	2700
26659	37 x 2 x 2,5 mm² Orange	4.061	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, overall screening with a stranded tinned copper drain wire
- Perfect electrical properties and low capacitance for minimal signal loss
- Fire-resistant according to IEC60331-1/2
- Different color outer sheaths, other than orange, available on request

Core identification:

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

**Specifications**

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Conductor category	Class 2 = stranded
Stranding element	Product dependent
Core insulation material	Mica + XLHFFR
Binder/filler	Polyester tape
Screen over stranding	Alpet tape
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Insulation integrity according to IEC 60331	Yes
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U	250 V
Test voltage	1.500 V

MarineCom YZafc X-FR 250 V**11 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
26830	2 x 2 x 0,5 mm ² Orange	0.101	43	10,7	30
26802	1 x 2 x 0,75 mm ² Orange	0.064	31	7,6	225
26816	2 x 2 x 0,75 mm ² (Quad) Orange	0.096	34	8,7	45
26801	2 x 2 x 0,75 mm ² Orange	0.121	46	11,5	45
26803	4 x 2 x 0,75 mm ² Orange	0.185	54	13,4	90
26805	7 x 2 x 0,75 mm ² Orange	0.287	65	16,2	158
26807	10 x 2 x 0,75 mm ² Orange	0.407	80	19,9	225
26809	14 x 2 x 0,75 mm ² Orange	0.54	90	22,5	315
26810	19 x 2 x 0,75 mm ² Orange	0.708	103	25,8	428
26811	24 x 2 x 0,75 mm ² Orange	0.876	115	28,7	540
26845	1 x 2 x 1,5 mm ² Orange	0.094	72	9	90

Signal cables

MarineSignal YZs250 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 color outer sheaths, other than grey, available on request

Core identification:

- Numbered

Specifications

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U	0,25 kV
Test voltage	1,5 kV



Signal cables

MarineSignal YZs250 V**19 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16210	2 x 0,75 mm ² Grey	0.042	25	6,3	23
16211	3 x 0,75 mm ² Grey	0.053	26	6,6	34
16212	4 x 0,75 mm ² Grey	0.064	28	7,1	45
16213	5 x 0,75 mm ² Grey	0.078	31	7,7	56
16214	7 x 0,75 mm ² Grey	0.099	34	8,6	79
16215	12 x 0,75 mm ² Grey	0.155	45	11,2	135
16216	19 x 0,75 mm ² Grey	0.233	54	13,5	214
16217	27 x 0,75 mm ² Grey	0.321	63	15,8	304
16218	37 x 0,75 mm ² Grey	0.428	73	18,2	416
16220	2 x 1,0 mm ² Grey	0.049	27	6,7	30
16221	3 x 1,0 mm ² Grey	0.062	28	6,9	45
16222	4 x 1,0 mm ² Grey	0.076	31	7,7	60
16223	5 x 1,0 mm ² Grey	0.094	33	8,2	75
16230	6 x 1,0 mm ² Grey	0.114	36	9,1	90
16224	7 x 1,0 mm ² Grey	0.12	36	9,1	105
16225	12 x 1,0 mm ² Grey	0.197	48	12	180
16226	19 x 1,0 mm ² Grey	0.293	59	14,8	285
16227	27 x 1,0 mm ² Grey	0.403	69	17,3	405
16228	37 x 1,0 mm ² Grey	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

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Conductor coding in accordance with HD 308 S2	Yes
Screening	Yes
Construction outer shield	tinned copperbraiding
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U	0,25 kV
Test voltage	1,5 kV



Signal cables

MarineSignal YOZs 250 V**23 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16241	2 x 0,75 mm ² Grey	0.064	28	6,9	23
16242	3 x 0,75 mm ² Grey	0.083	29	7,3	34
16243	4 x 0,75 mm ² Grey	0.094	31	7,8	45
16244	5 x 0,75 mm ² Grey	0.113	34	8,6	56
16245	7 x 0,75 mm ² Grey	0.131	37	9,2	79
16246	12 x 0,75 mm ² Grey	0.202	47	11,8	135
16247	19 x 0,75 mm ² Grey	0.322	59	14,8	214
16248	27 x 0,75 mm ² Grey	0.426	68	17,1	304
16249	37 x 0,75 mm ² Grey	0.553	78	19,4	416
16250	2 x 1,0 mm ² Grey	0.079	29	7,3	30
16251	3 x 1,0 mm ² Grey	0.092	30	7,6	45
16252	4 x 1,0 mm ² Grey	0.106	33	8,2	60
16253	5 x 1,0 mm ² Grey	0.129	36	9,1	75
16240	6 x 1,0 mm ² Grey	0.149	39	9,8	90
16254	7 x 1,0 mm ² Grey	0.155	39	9,8	105
16259	10 x 1,0 mm ² Grey	0.217	49	12,2	150
16255	12 x 1,0 mm ² Grey	0.241	50	12,6	180
16256	19 x 1,0 mm ² Grey	0.384	63	15,8	285
16257	27 x 1,0 mm ² Grey	0.517	73	18,2	405
16258	37 x 1,0 mm ² Grey	0.66	83	20,8	555
17185	2 x 1,5 mm ² Grey	0.094	33	8,2	45
17186	3 x 1,5 mm ² Grey	0.117	35	8,8	68
17187	3 G 1,5 mm ² Grey	0.112	34	8,6	68

Signal cables

MarineSignal+ YZs250 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 color outer sheaths, other than grey, available on request

Core identification:

- Numbered

Specifications

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Material outer sheath	Flame Retardant Halogen Free Polyolefin Compound
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70°C
Permitted cable outer temperature after assembling without vibration	-40 / 70°C
Max. conductor temperature	90 °C
Nominal voltage U	0,25 kV
Test voltage	1,5 kV



Signal cables

MarineSignal+ YZs250 V**7 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16231	2 x 0,75 mm ² Grey	0.063	27	6,7	23
16232	3 x 0,75 mm ² Grey	0.072	28	7	34
16233	4 x 0,75 mm ² Grey	0.083	30	7,5	45
16234	5 x 0,75 mm ² Grey	0.099	33	8,2	56
16236	3 x 1,0 mm ² Grey	0.084	30	7,4	45
16237	4 x 1,0 mm ² Grey	0.098	33	8,2	60
16238	5 x 1,0 mm ² Grey	0.121	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

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Core insulation material	Crosslinked polyethylene (XLPE)
Screening	Yes
Construction outer shield	tinned copper braiding
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Low smoke	IEC 61034-2
Permitted cable outer temperature during assembling/handling	-20 / 70 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Max. conductor temperature	90 °C
Nominal voltage U	0,25 kV
Test voltage	1,5 kV



Signal cables

MarineSignal+ YOZs 250 V**8 products**

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
16261	2 x 0,75 mm ² Grey	0.103	31	7,8	23
16262	3 x 0,75 mm ² Grey	0.111	32	8,1	34
16263	4 x 0,75 mm ² Grey	0.129	36	8,9	45
16264	5 x 0,75 mm ² Grey	0.145	38	9,4	56
16265	2 x 1,0 mm ² Grey	0.111	32	8,1	30
16266	3 x 1,0 mm ² Grey	0.125	34	8,6	45
16267	4 x 1,0 mm ² Grey	0.141	37	9,2	60
16268	5 x 1,0 mm ² Grey	0.167	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 22/7 CAT5) conductors
- Halogen free and low smoke, flame retardant
- Suitable for POE+ applications
- DNV certified
- Different colour outer sheaths, other than grey , available on request

Core identification:

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



Specifications

Certified for shipboard application	Yes
Suitable as computer data cable	Yes
Standardization	BS EN 50288-2-1, ISO/IEC 11801, IEC 61156-5, UL Subject 444
Conductor material	Copper
Conductor category	Class 2 = stranded
Stranding element	Pairs
Core insulation material	Polyethylene, foamed (foam PE)
Screen over stranding element	Al/Polyester foil
Screen over stranding	Braiding
Material outer sheath	LSZH
Flame retardant	IEC 60332-3-24 Cat. C
Halogen free	IEC 60754-1 / IEC 60754-2
Low smoke	IEC 61034-1 & IEC 61034-2
Oil resistant	IEC 60811-2-1 IIR 902/ASTM No.2 (70°C for 4 Hrs)
Permitted cable outer temperature during assembling/handling	-15 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 85 °C

Cat 5E S/FTP Marine Approved

3 products

Part number	Construction	Net weight	Outer diameter approx. (mm)	Tensile load (kg/m) (N)
24025	4x2xAWG 24/7 HFFRLS Black	0.071	8	110
24026	4x2xAWG 24/7 HFFRLS Grey	0.071	8	110
24027	4x2xAWG 24/7 HFFRLS Lila/Purple	0.071	8	110

Cat.6A S/FTP Marine Approved

Properties

Application:

Category 6A DNV- GL marine approved LAN cables are used extensively for media distribution and entertainment system integration.

Characteristics:

- Available in stranded (AWG 23/7 CAT6A) and solid (AWG 23/1 CAT6A) conductors
- Halogen free and low smoke, flame retardant
- DNV certified
- Suitable for use with CAT6A RJ45 Modular jack (800412)
- Different colour outer sheaths, other than grey, available on request

Core identification:

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



Specifications

Certified for shipboard application	Yes
Suitable as computer data cable	Yes
Standardization	BS EN 50288-2-1, ISO/IEC 11801, IEC 61156-5, UL Subject 444
Conductor material	Copper
Conductor category	Product dependent
Stranding element	Pairs
Core insulation material	Polyethylene, foamed (foam PE)
Screen over stranding element	Al/Polyester foil
Screen over stranding	tinned copper braiding
Material outer sheath	LSZH
Flame retardant	IEC 60332-3-24 Cat. C
Halogen free	IEC 60754-1 / IEC 60754-2
Low smoke	IEC 61034-1 & IEC 61034-2
Oil resistant	IEC 60811-2-1 IRM 902/ASTM No.2 (70°C for 4 Hrs)
Permitted cable outer temperature during assembling/handling	-15 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 85 °C

Cat.6A S/FTP Marine Approved

2 products

Part number	Construction	Net weight (kg/m)	Outer diameter approx. (mm)	Tensile load (N)
24031	4 x 2 x AWG 23/1 HFFR-LS Grey	0.075	8	110
24032	4 x 2 x AWG 23/7 HFFR-LS Grey	0.077	8,4	110

Cat.6A S/FTP Marine Approved Fire Resistant

Properties

Application:

Fire resistant Category 6A DNV- GL marine approved LAN cables. The cable design and structure comply with the circuit integrity performance during a fire of the relevant requirements of IEC60331-23 and allows data transmission during the fire.

Characteristics:

- Solid (AWG 23/1 CAT 6A) conductors
- Each insulation cord is wrapped with Fire resistant mica
- Fire resistant according to IEC 60331-23 (180min) & EN 50289-4-16 (180min)
- Halogen free and low smoke, flame retardant according IEC 60332-3-22
- DNV certified
- Suitable for use with CAT6A RJ45 Modular jack(800412)

Core identification:

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



Specifications

Certified for shipboard application	Yes
Suitable as computer data cable	Yes
Standardization	BS EN 50288-4, IEC 61156-5, UL Subject 444
Conductor material	Copper
Conductor category	Class 1 = solid
Stranding element	Pairs
Core insulation material	Polyolefin insulation wrapped with Fire resistant Mica tape
Screen over stranding element	Al/Polyester foil
Screen over stranding	tinned copper braiding
Material outer sheath	LSZH
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Fire resistant	IEC 60331-23
Halogen free	IEC 60754-1 / IEC 60754-2
Low smoke	IEC 61034-1 & IEC 61034-2
Circuit integrity (acc. EN50200 or EN50362)	FE 180
Oil resistant	IEC 60811-2-1 IIR 902/ASTM No.2 (70°C for 4 Hrs)
Permitted cable outer temperature during assembling/handling	-15 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 90 °C

Cat.6A S/FTP Marine Approved Fire Resistant

1 products

Part number	Construction	Net weight (kg/m)	Outer diameter approx. (mm)	Tensile load (N)
24033	4x2xAWG 23/1 HFFRLS Grey	0.1	11	110

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

Certified for shipboard application	Yes
Suitable as computer data cable	Yes
Standardization	BS EN 50288-4, IEC 61156-5, UL Subject 444
Conductor material	Copper
Conductor category	Product dependent
Stranding element	Pairs
Core insulation material	Polyethylene, foamed (foam PE)
Screen over stranding element	Al/Polyester foil
Screen over stranding	Product dependent
Material outer sheath	LSZH
Flame retardant	IEC 60332-3-24 Cat. C
Halogen free	IEC 60754-1 / IEC 60754-2
Low smoke	IEC 61034-1 & IEC 61034-2
Oil resistant	IEC 60811-2-1 IRM 902/ASTM No.2 (70°C for 4 Hrs)
Permitted cable outer temperature during assembling/handling	-15 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 85 °C

Cat.7 S/FTP Marine Approved

6 products

Part number	Construction	Net weight (kg/m)	Outer diameter approx. (mm)	Tensile load (N)
24015	4x2xAWG 22/7 HFFR-LS Black	0.08	8,3	110
24016	4x2xAWG 22/7 HFFR-LS Grey	0.08	8,3	110
24017	4x2xAWG 22/7 HFFR-LS Lila/Purple	0.08	8,3	110
24020	4x2xAWG 23/1 HFFR-LS Black UV resistant	0.078	8,1	110
24021	4x2xAWG 23 HFFR-LS Grey	0.078	7,8	100
24022	4x2xAWG 23 HFFR-LS Lila/Purple	0.078	8,1	110

Cat.7 S/FTP Marine Approved Fire Resistant

Properties

Application:

Backbone connections between servers within a data center, to provide a high-speed interconnect used for data transfer within the network. The cable design and structure comply with the circuit integrity performance during a fire of the relevant requirements of IEC 60331-23 and allows data transmission during the fire.

Characteristics:

- Solid (AWG 23/1 CAT 7) conductors
- Each insulation cord is wrapped with Fire resistant mica
- Fire resistant according to IEC 60331-23 (180min) & EN 50289-4-16 (180min)
- Halogen free and low smoke, flame retardant according IEC 60332-3-22
- DNV certified

Core identification:

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



Specifications

Certified for shipboard application	Yes
Suitable as computer data cable	Yes
Standardization	BS EN 50288-2-1, ISO/IEC 11801, IEC 61156-5, UL Subject 444
Conductor material	Copper
Conductor category	Class 1 = solid
Stranding element	Pairs
Core insulation material	PO (Polyolefin)
Screen over stranding element	Al/Polyester foil
Screen over stranding	tinned copper braiding
Material outer sheath	LSZH
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Fire resistant	IEC 60331-23
Halogen free	IEC 60754-1 / IEC 60754-2
Low smoke	IEC 61034-1 & IEC 61034-2
Circuit integrity (acc. EN50200 or EN50362)	FE 180
Oil resistant	IEC 60811-2-1 IRM 902/ASTM No.2 (70°C for 4 Hrs)
Permitted cable outer temperature during assembling/handling	-15 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 85 °C

Cat.7 S/FTP Marine Approved Fire Resistant

1 products

Part number	Construction	Net weight (kg/m)	Outer diameter approx. (mm)	Tensile load (N)
24034	4x2xAWG 23/1 HFFRLS Grey	0.1	8	110

Cat.7A S/FTP Marine Approved

Properties

Application:

Generic cabling systems. Including 10/100/1000 Base -T, 10G, ATM & Token Ring

This marine approved cable is designed to support Cat 7A Link and Channel performance. Complies with Category 7A performance up to 1000MHz

Characteristics:

- Halogen free and low smoke, flame retardant
- DNV certified
- When used with screened CAT6A RJ45 Modular jack (800412), optimal headroom to 500MHz Class EA performance is ensured
- Different colour outer sheaths, other than grey, available on request

Core identification:

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

Specifications

Certified for shipboard application	Yes
Suitable as computer data cable	Yes
Standardization	BS EN 50288-4, IEC 61156-5, UL Subject 444
Conductor material	Copper
Conductor category	Class 1 = solid
Stranding element	Pairs
Core insulation material	Polyethylene, foamed (foam PE)
Screen over stranding element	Al/Polyester foil
Screen over stranding	tinned copper braiding
Material outer sheath	LSZH
Flame retardant	IEC 60332-3-24 Cat.C
Halogen free	IEC 60754-1 / IEC 60754-2
Low smoke	IEC 61034-1 & IEC 61034-2
Oil resistant	IEC 60811-2-1 IIR 902/ASTM No.2 (70°C for 4 Hrs)
Permitted cable outer temperature during assembling/handling	-15 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 85 °C



Cat.7A S/FTP Marine Approved

1 products

Part number	Construction	Net weight (kg/m)	Outer diameter approx. (mm)	Tensile load (N)
24023	4 x 2 x AWG 23/1 HFFR-LS Grey	0.078	8,3	110

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
- Dust shutter (optional) available in different color (green, red, yellow, blue and white)



Specifications

Model	Bus (jack)
Screened	Yes
Category	6A (IEC)
Connection type	Insulation displacement
Colour	Grey
Suitable for round cable	Yes
Suitable for flat cable	No
Suitable for litz wire conductor	Yes
Suitable for solid core	Yes

MarineConnect Cat 6A

1 products

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

TECHNICAL PRODUCT INFORMATION

Materials

TKFuses 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 sort-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
X-FR types	Mica tape + Cross Linked Flame Retardent 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.

If the cables are exposed to direct sunlight, 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

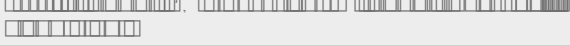
All TKF'sbraided cables (designated with the “O” in the type designation) have tinned-copper wire braiding with a coverage of at least 90%. The tinned wires give a high corrosion resistance of the braid and offer both mechanical and EMI protection. Screened cables (“aP” type designation) offer only EMI 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.

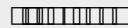
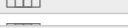
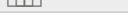
International standards

TECHNICAL PRODUCT INFORMATION

Installation instructions

Bending radius - Bending Radii according to IEC60092-352

Pulling Force

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

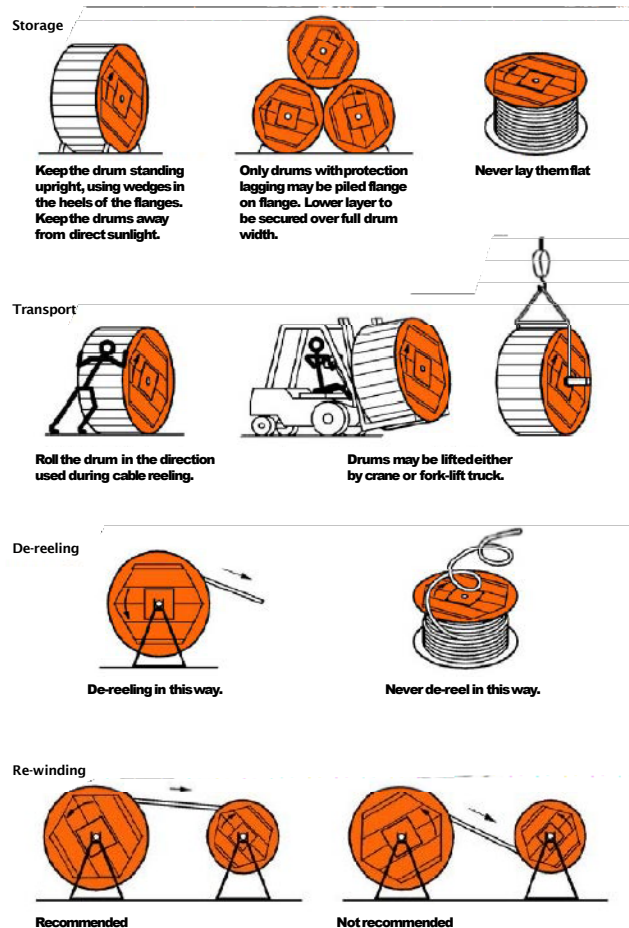
$$\text{Max. Pulling Force (N)} = 15 \times \text{total cross section}$$

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 20kV, = -20°C.

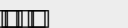
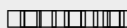
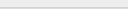
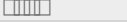
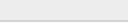
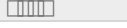
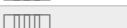
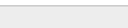
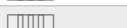


TECHNICAL PRODUCT INFORMATION

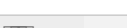
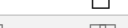
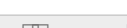
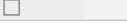
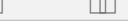
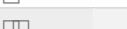
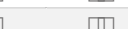
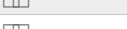
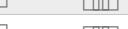
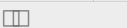
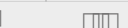
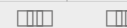
Current Rating for general installations

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

Current Rating (A)

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:

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

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

TECHNICAL PRODUCT INFORMATION

Cable cross-sections (mm²)			
10	16	25	35
50	70	95	120
150	185	240	300
300	350	400	500
630	700	800	1000

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

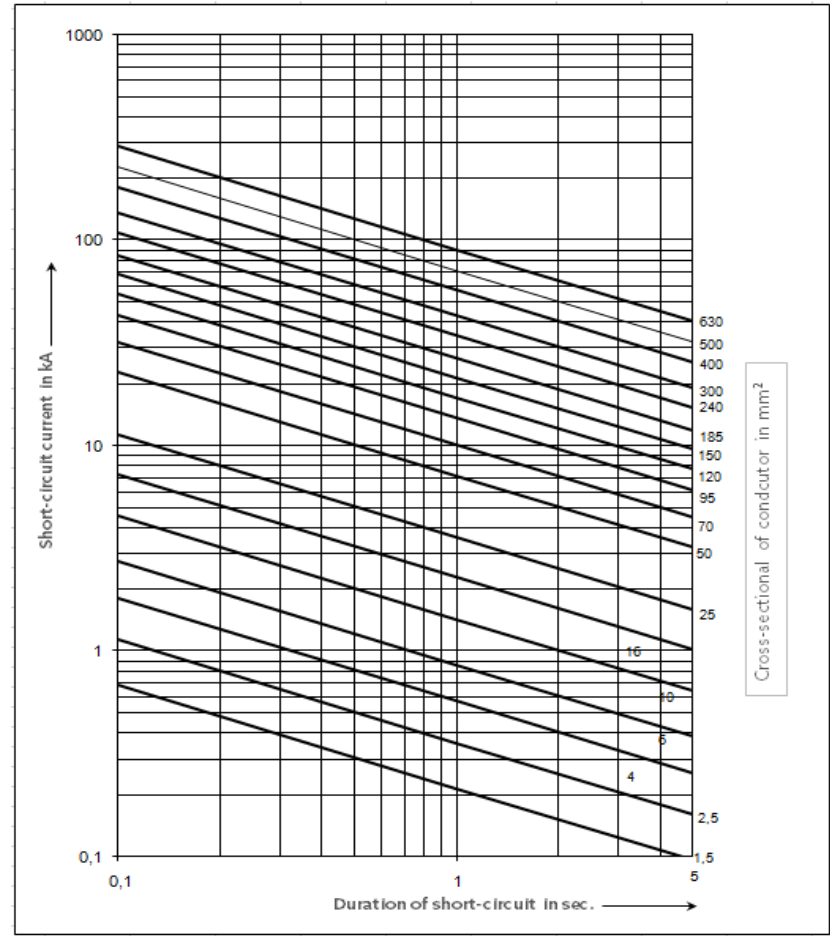
t = the duration of the short-circuit in seconds

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

Cable cross-sections (mm²)			
10	16	25	35
50	70	95	120
150	185	240	300
300	350	400	500
630	700	800	1000

TECHNICAL PRODUCT INFORMATION

Duration of short-circuitcurrent



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

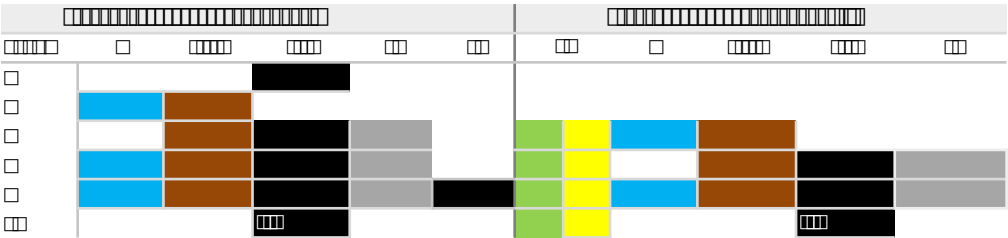
Overview types, standards, core identification and sheath colour

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 & YQQp 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 YQQQmv 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

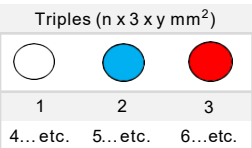
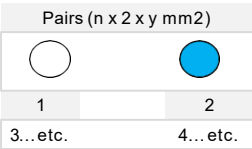
Core identification

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

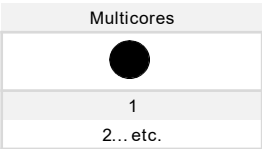


- Notes
- 1) PE= protective conductor - beschermingsleiding - Schutzleiter - conducteur de protection
N = neutral conductor - nulleiding - Neutralleiter - conducteur neutre
L, L1, L2, L3 = phase conductors - faseleidingen - Phasenleiter - conducteurs de phase
 - 2) =black numbered - zwart genummerd -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

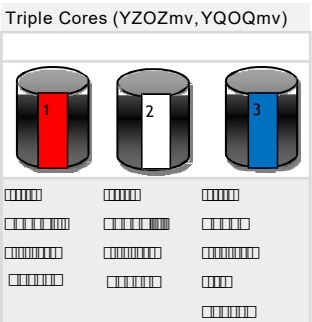
Communication Cables 250 V



Signal Cables 250 V



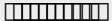
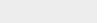
Medium Voltage cables 3,6-30kV





CABLE DRUM SIZESAND WEIGHTS

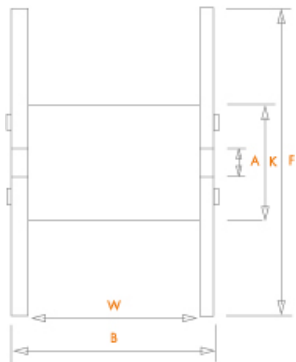
A wide range of drums with various sizes and weights is used to store and transport our cables. The most common types of drums and their sizes and weights are shown in this table.

Flange						
						
						
						
						
						
						
						
						
						
						
						
						
						
						
						

*Plasticdrum

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 = Windingwidth

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.

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