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CATALOGUE

MARINE & OFFSHORE

CONTENTS

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 THREE TKH CORE TECHNOLOGIES:

- Vision & Security
- Connectivity
- Smart Manufacturing

WWW.TKHGROUP.COM

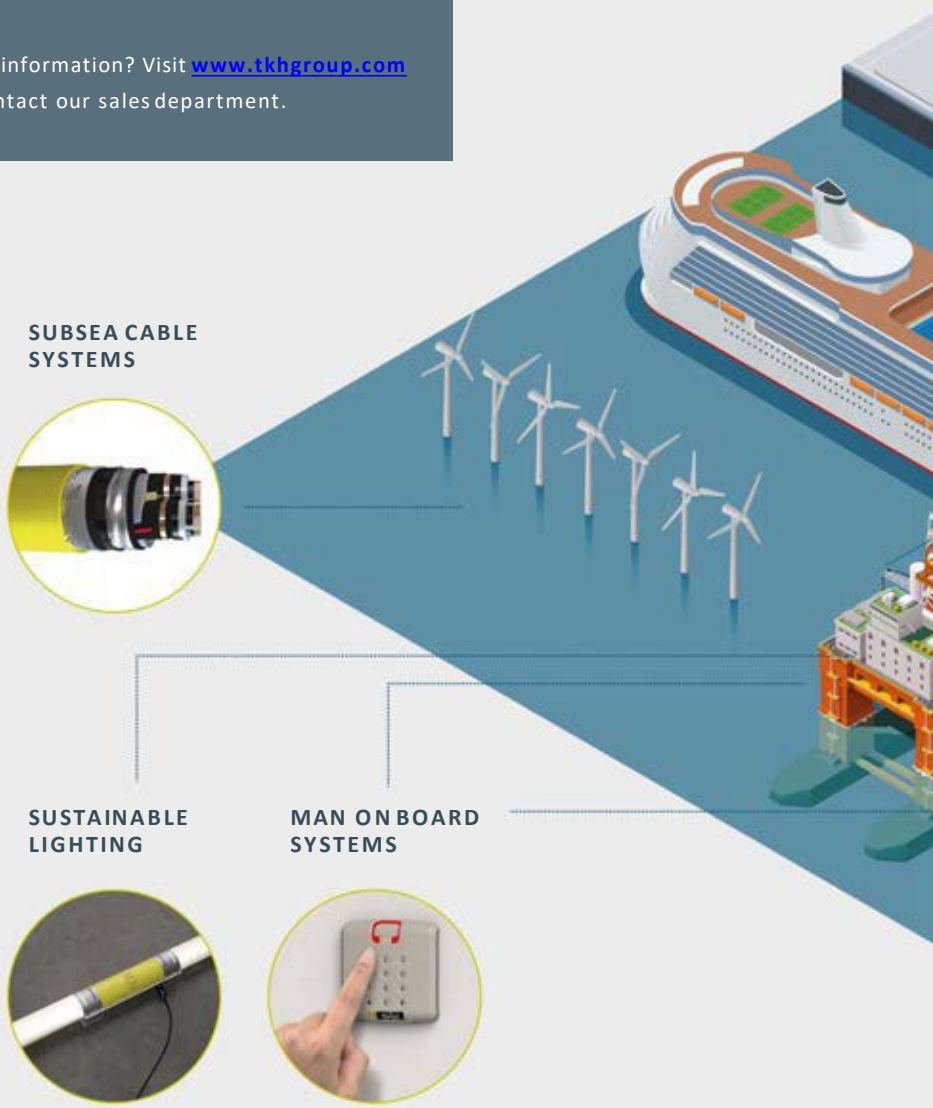
INTEGRATED MARINE SOLUTIONS OF THE TKH GROUP

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

LEAKAGE DETECTION

PERIMETER INTRUSION DETECTION

VISION BASED PROCESS CONTROL SYSTEM

CENTRAL CONTROL ROOM SYSTEMS

SECURITY SYSTEMS

CONNECTIVITY

MISSION CRITICAL COMMUNICATION SYSTEMS

ALARM SYSTEMS

EVACUATION SYSTEMS

The images of the cables are for illustrative purposes only and may vary depending on the article number.

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

The images of the cables are for illustrative purposes only and may vary depending on the article number.

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	LRS	PRS	CRS	RINA
MarineLine YZp 0,6/1 kV	X	X	X	X	X	X	X
MarineLine YOZp 0,6/1 kV	X	X	X	X	X	X	X
MarineLine YZafp 0,6/1 kV	X	X	X	X		X	X
MarineLine+ YZp 0,6/1 kV	X	X	X	X		X	X
MarineLine+ YOZp 0,6/1 kV	X	X	X	X		X	X
MarineFlex YZp 0,6/1 kV	X	X	X	X	X	X	X
MarineFlex YOZp 0,6/1 kV	X	X	X	X	X	X	X
MarineLine YOZp 0,6/1 kV EMC	X		X	X		X	X
MarineLine+ YOZp 0,6/1 kV EMC	X		X	X		X	X
MarineFlex YOZp 0,6/1 kV EMC	X		X	X		X	X
MarineLine YOZp 1,8/3 kV	X	X	X	X		X	X
MarineFlex YOZp 1,8/3 kV	X	X	X	X		X	X
MarineLine YOZp 1,8/3 kV EMC	X		X				X
MarineLine+ YOZp 1,8/3 kV EMC							X
MarineFlex YOZp 1,8/3 kV EMC	X		X	X		X	X
MarineMultiFlex BOQp 0,6/1 kV							
MarineWire			X				
MarineLine YZp X-FR 0,6/1 kV	X	X	X	X	X		X
MarineLine YOZp X-FR 0,6/1 kV	X	X	X	X	X		X
MarineLine+ YZp X-FR 0,6/1 kV	X	X	X	X			X
MarineLine+ YOZp X-FR 0,6/1 kV	X	X	X	X			X
MarineFlex YZp X-FR 0,6/1 kV	X	X	X	X	X		X
MarineFlex YOZp X-FR 0,6/1 kV	X	X	X	X	X		X
MarineLine YOZp X-FR 0,6/1 kV EMC	X		X	X			X
MarineLine+ YOZp X-FR 0,6/1 kV EMC	X		X	X			X
MarineFlex YOZp X-FR 0,6/1 kV EMC	X		X	X			X
MarineLine YZp X-FRSW 0,6/1 kV		X	X				
MarineLine YOZp X-FRSW 0,6/1 kV		X	X				
MarineFlex YZp X-FRSW 0,6/1 kV		X	X				
MarineFlex YOZp X-FRSW 0,6/1 kV		X	X				
MarineLine YOZp X-FRSW EMC 0,6/1 kV		X	X				
MarineFlex YOZp X-FRSW EMC 0,6/1 kV		X	X				

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

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

Instrumentation & Signal cables 250 V	ABS	BV	DNV	LRS	PRS	CRS	RINA
MarineCom YOZc 250 V	X	X	X	X	X		X
MarineCom YZafc 250 V	X	X	X	X			X
Marine2Com YOZ2c 250 V	X	X	X	X	X		X
Marine2Com YZ2afc 250 V	X	X	X	X			X
MarineCom+ YOZc 250 V		pending	X				X
Marine2Com+ YOZc 250 V		pending	X				X
MarineCom YOZc X-FR 250 V	X	X	X	X	X		X
MarineCom YZafc X-FR 250 V			X	X			X
Marine2Com YOZ2c X-FR 250 V	X	X	X	X	X		X
MarineCom+ YOZc X-FR 250V		pending	X				X
Marine2Com+ YOZ2c X-FR 250V		pending	X				X
Marine2Com YZ2afc X-FR 250 V			X	X			X
MarineSignal YZs 250 V	X	X	X	X			X
MarineSignal YOZs 250 V	X	X	X	X			X
MarineSignal+ YZs 250 V	X	X	X	X			X
MarineSignal+ YOZs 250 V	X	X	X	X			X
MarineSignal YZs X-FR 250 V			X				X
MarineSignal YOZs X-FR 250 V							X
MarineCom YOZc X-FRSW 250 V		X	X				
Marine2Com YOZ2c X-FRSW 250 V		X	X				
MarineCom+ YOZc X-FRSW 250 V		X	X				
Marine2Com+ YOZ2c X-FRSW 250 V		X	X				
MarineCom YZafc X-FRSW 250 V		X	X				
Marine2Com YZ2afc X-FRSW 250 V		X	X				

CAT 5 & **CAT 6 & CAT 7**	ABS	BV	DNV	LRS	PRS	CRS	RINA
InduData Cat 5e S/FTP stranded			X				X
InduData Cat 7 S/FTP stranded			X				X
InduData Cat 7 S/FTP solid			X				X
InduData Cat 6a S/FTP solid/stranded			X				
InduData Cat 7a S/FTP solid			X				
CAT 6a/7 S/FTP Fire Resistant			X				

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.

DNV

SAFE RETURN TO PORT (SRTP)

Safe Return to Port (SRtP) is mandatory for passenger ships constructed after July 2010.
It is applicable for ships 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 24/7 HFFR-LS
Art. 24031 MarineConnect Cat.6A S/FTP	4x2xAWG 23/1 HFFR-LS
Art. 24032 MarineConnect Cat.6A S/FTP	4x2xAWG 23/7 HFFR-LS
Art. 24016 MarineConnect Cat.7 S/FTP	4x2xAWG 22/7 HFFR-LS
Art. 24021 MarineConnect Cat.7 S/FTP	4x2xAWG 23/1 HFFR-LS
Art. 24023 MarineConnect Cat.7A S/FTP	4x2xAWG 23/1 HFFR-LS

CONNECTOR:

Art. 800412 MarineConnect RJ45	Cat.6A Tool less connector

TKF MarineConnect Permanent link is certified and approved by:

DELTA

DNV

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 & costs saving
- Cat.7 cable and Cat.6A connector suitable for Power Ethernet (PoE and PoE+/++)

* ask for our conditions

The images of the cables are for illustrative purposes only and may vary depending on the article number.

Watch our video about the cutting & labeling service concept

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.

SERVICE ADVANTAGES

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

Estimation of types and amount of cables needed → Detailed engineering: cable lenghts 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

The images of the cables are for illustrative purposes only and may vary depending on the article number.

Low voltage cables

MarineLine YZp 0,6/1 kV

Properties

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

Characteristics:
- Class 2 conductors
- Lightweight, reduced diameter
- Halogen free and low smoke, flame retardant
- Excellent abrasion resistance
- Different colour outer sheaths, other than black, available on request
- DC 0,9/1,5kV (if voltage to earth does not exceed 0,9kV)

Core identification:
- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Material core insulation	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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

MarineLine YZp 0,6/1 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 mm² Black	0.053	28	7	30
16000	1 x 1,5 mm² Black	0.035	19	4.8	23
16001	2 x 1,5 mm² Black	0.065	31	7.6	45
16002	3 x 1,5 mm² Black	0.084	32	8	68
15969	3 G 1,5 mm² Black	0.084	32	8	68
15970	4 G 1,5 mm² Black	0.108	36	8.9	90
16003	4 x 1,5 mm² Black	0.108	36	8.9	90
15971	5 G 1,5 mm² Black	0.137	40	9.8	113
16004	5 x 1,5 mm² Black	0.137	40	9.8	113
16005	6 x 1,5 mm² Black	0.164	43	10.6	135
15972	7 G 1,5 mm² Black	0.171	43	10.6	158
16006	7 x 1,5 mm² Black	0.171	43	10.6	158
16007	8 x 1,5 mm² Black	0.228	51	12.7	180
16008	10 x 1,5 mm² Black	0.248	55	13.6	225
16009	12 x 1,5 mm² Black	0.288	58	14.3	270
16010	16 x 1,5 mm² Black	0.372	64	16	360
16011	19 x 1,5 mm² Black	0.435	70	17.4	428
16059	20 x 1,5 mm² Black	0.455	72	17.8	450
16012	24 x 1,5 mm² Black	0.545	78	19.4	540
15999	27 x 1,5 mm² Black	0.6	82	20.4	608
16013	1 x 2,5 mm² Black	0.047	22	5.5	38
16014	2 x 2,5 mm² Black	0.091	35	8.7	75
16015	3 x 2,5 mm² Black	0.12	37	9.2	113
15973	3 G 2,5 mm² Black	0.12	37	9.2	113
15974	4 G 2,5 mm² Black	0.15	40	10	150
16016	4 x 2,5 mm² Black	0.15	40	10	150
16017	5 x 2,5 mm² Black	0.196	45	11.2	188
15975	5 G 2,5 mm² Black	0.195	45	11.2	188
17401	6 x 2,5 mm² Black	0.231	49	12.2	225
16018	7 x 2,5 mm² Black	0.247	49	12.2	263
15976	7 G 2,5 mm² Black	0.247	49	12.2	263
16019	1 x 4 mm² Black	0.064	24	5.9	60
16020	2 x 4 mm² Black	0.125	39	9.6	120
15977	3 G 4 mm² Black	0.169	41	10.2	180
16021	3 x 4 mm² Black	0.168	41	10.2	180
15978	4 G 4 mm² Black	0.223	46	11.4	240
16022	4 x 4 mm² Black	0.222	46	11.4	240
16559	5 G 4 mm² Black	0.276	50	12.5	240
16561	5 x 4 mm² Black	0.275	50	12.5	240
16023	1 x 6 mm² Black	0.085	26	6.5	90
16024	2 x 6 mm² Black	0.169	43	10.7	180
16025	3 x 6 mm² Black	0.237	47	11.6	270
15979	3 G 6 mm² Black	0.238	47	11.6	270
15980	4 G 6 mm² Black	0.308	51	12.7	360

Low voltage cables

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 mm² Black	0.307	51	12.7	360
16563	5 x 6 mm² Black	0.39	57	14.2	450
15967	5 G 6 mm² Black	0.391	57	14.2	450
17352	19 x 6 mm² Black	1.332	160	25.8	1,710
16027	1 x 10 mm² Black	0.124	29	7.1	150
16028	2 x 10 mm² Black	0.255	51	12.6	300
16029	3 x 10 mm² Black	0.356	54	13.4	450
15981	3 G 10 mm² Black	0.359	54	13.4	450
15982	4 G 10 mm² Black	0.475	60	14.9	600
16030	4 x 10 mm² Black	0.474	60	14.9	600
17426	5 G 10 mm² Black	0.589	66	16.3	750
16564	5 x 10 mm² Black	0.588	66	16.3	750
17353	19 x 10 mm² Black	2.086	122	30.3	2,850
16031	1 x 16 mm² Black	0.178	35	8.1	240
16032	2 x 16 mm² Black	0.374	60	14.8	480
16033	3 x 16 mm² Black	0.524	64	15.7	720
16034	4 x 16 mm² Black	0.695	70	17.5	960
16568	4 G 16 mm² Black	0.695	70	17.5	960
16565	5 x 16 mm² Black	0.876	80	19.4	1,200
15968	5 G 16 mm² Black	0.869	75	19.2	1,200
16035	1 x 25 mm² Black	0.276	40	10.1	375
16036	2 x 25 mm² Black	0.584	75	18.8	750
16037	3 x 25 mm² Black	0.832	80	20.2	1,125
16038	4 x 25 mm² Black	1.081	90	22	1,500
16558	5 G 25 mm² Black	1.376	99	24.7	1,875
16039	1 x 35 mm² Black	0.369	46	11.3	525
16040	2 x 35 mm² Black	0.776	85	21.2	1,050
16041	1 x 50 mm² Black	0.496	52	12.8	750
16042	1 x 70 mm² Black	0.7	59	14.7	1,050
16043	1 x 95 mm² Black	0.954	68	16.8	1,425
16044	1 x 120 mm² Black	1.198	75	18.6	1,800
16045	1 x 150 mm² Black	1.495	83	20.7	2,250
16046	1 x 185 mm² Black	1.866	93	23.1	2,775
16047	1 x 240 mm² Black	2.393	103	25.7	3,600

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
- DC 0,9/1,5kV (if voltage to earth does not exceed 0,9kV)

Core identification:
- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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 mm² Black	0.057	22	5.6	23
16111	2 x 1,5 mm² Black	0.1	35	8.6	45
16112	3 x 1,5 mm² Black	0.12	36	9	68
15984	3 G 1,5 mm² Black	0.12	36	9	68
15985	4 G 1,5 mm² Black	0.145	39	9.7	90
16113	4 x 1,5 mm² Black	0.145	39	9.7	90
16114	5 x 1,5 mm² Black	0.176	42	10.5	113
15986	5 G 1,5 mm² Black	0.176	42	10.5	113
15991	6 G 1,5 mm² Black	0.205	46	11.5	135
16115	6 x 1,5 mm² Black	0.21	46	11.5	135
16116	7 x 1,5 mm² Black	0.216	46	11.5	158
15995	7 G 1,5 mm² Black	0.216	46	11.5	158
16117	8 x 1,5 mm² Black	0.271	51	12.7	180
16595	10 G 1,5 mm² Black	0.341	60	14.9	225
16118	10 x 1,5 mm² Black	0.34	50	14.9	225
16574	12 G 1,5 mm² Black	0.378	62	15.4	270
16119	12 x 1,5 mm² Black	0.377	62	15.4	270
16597	14 G 1,5 mm² Black	0.422	66	16.3	315
16120	16 x 1,5 mm² Black	0.481	70	17.3	360
16121	19 x 1,5 mm² Black	0.543	76	18.5	428
16599	19 G 1,5 mm² Black	0.539	76	18.2	428
16430	20 x 1,5 mm² Black	0.568	76	18.9	450
16122	24 x 1,5 mm² Black	0.667	82	20.5	540
16600	24 G 1,5 mm² Black	0.662	86	20.5	540
16159	27 x 1,5 mm² Black	0.729	91	21.5	608
16185	37 x 1,5 mm² Black	0.942	96	23.9	833
16123	1 x 2,5 mm² Black	0.07	25	6.1	38
16124	2 x 2,5 mm² Black	0.128	38	9.5	75
16125	3 x 2,5 mm² Black	0.157	40	10	113
15987	3 G 2,5 mm² Black	0.157	41	10.2	113
15988	4 G 2,5 mm² Black	0.193	44	10.8	150
16126	4 x 2,5 mm² Black	0.192	44	10.8	150
16127	5 x 2,5 mm² Black	0.239	48	11.9	188
15989	5 G 2,5 mm² Black	0.239	48	11.9	188
16128	7 x 2,5 mm² Black	0.294	52	12.9	263
16572	7 G 2,5 mm² Black	0.295	52	12.9	263
16596	10 G 2,5 mm² Black	0.459	68	17	375
16567	10 x 2,5 mm² Black	0.459	68	17	375
16573	12 G 2,5 mm² Black	0.52	70	17.5	450
16437	12 x 2,5 mm² Black	0.52	59	17.5	450
16598	14 G 2,5 mm² Black	0.59	78	18.5	525
16429	19 x 2,5 mm² Black	0.758	85	21.1	713
16540	24 x 2,5 mm² Black	0.928	94	23.4	900
16129	1 x 4 mm² Black	0.085	27	6.6	60

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 mm² Black	0.167	42	10.4	120
16131	3 x 4 mm² Black	0.216	45	11.2	180
16536	3 G 4 mm² Black	0.217	45	11.2	180
16132	4 x 4 mm² Black	0.27	49	12.2	240
15992	4 G 4 mm² Black	0.269	49	12.2	240
16586	5 G 4 mm² Black	0.325	55	13.2	300
16133	1 x 6 mm² Black	0.114	29	7.2	90
16134	2 x 6 mm² Black	0.218	47	11.7	180
16135	3 x 6 mm² Black	0.285	50	12.4	270
15997	3 G 6 mm² Black	0.285	50	12.4	270
15990	4 G 6 mm² Black	0.397	57	14.1	360
16136	4 x 6 mm² Black	0.396	57	14.1	360
16480	5 G 6 mm² Black	0.479	60	15.3	450
16566	5 x 6 mm² Black	0.478	63	15.3	450
16089	7 x 6 mm² Black	0.613	68	16.8	630
16109	7 G 6 mm² Black	0.613	68	16.8	630
16137	1 x 10 mm² Black	0.155	32	8	150
16138	2 x 10 mm² Black	0.308	54	13.3	300
16139	3 x 10 mm² Black	0.45	59	14.7	450
16534	3 G 10 mm² Black	0.451	59	14.7	450
16140	4 x 10 mm² Black	0.567	67	16	600
15993	4 G 10 mm² Black	0.569	64	16	600
16489	5 x 10 mm² Black	0.702	71	17.6	600
16108	5 G 10 mm² Black	0.702	70	17.6	600
16141	1 x 16 mm² Black	0.215	36	9.1	240
16142	2 x 16 mm² Black	0.466	65	15.9	480
16143	3 x 16 mm² Black	0.631	70	17	720
16535	3 G 16 mm² Black	0.634	70	17	720
16144	4 x 16 mm² Black	0.814	77	18.6	960
15994	4 G 16 mm² Black	0.806	75	18.6	960
15996	5 G 16 mm² Black	1	85	20.5	1,200
16145	1 x 25 mm² Black	0.324	65	11.2	375
16146	2 x 25 mm² Black	0.701	120	19.9	750
16147	3 x 25 mm² Black	0.948	85	21.9	1,125
16148	4 x 25 mm² Black	1.231	95	23.3	1,500
16158	1 x 35 mm² Black	0.422	50	12.3	525
16157	2 x 35 mm² Black	0.912	94	23.4	1,050
16436	5 G 35 mm² Black	2.051	118	29.3	2,625
16401	1 x 50 mm² Black	0.585	57	14.2	750
16402	1 x 70 mm² Black	0.796	62	15.3	1,050
16403	1 x 95 mm² Black	1.071	73	18.2	1,425
16404	1 x 120 mm² Black	1.328	80	20	1,800
16405	1 x 150 mm² Black	1.64	88	22	2,250
16406	1 x 185 mm² Black	2.028	98	24.5	2,775
16407	1 x 240 mm² Black	2.573	109	27.1	3,600
16433	1 x 300 mm² Black	3.23	125	31.2	4,500

Low voltage cables

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
- DC 0,9/1,5kV (if voltage to earth does not exceed 0,9kV)

Core identification:
- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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 mm² Black	0.074	65	7.9	45
16602	3 x 1,5 mm² Black	0.098	70	8.5	68
16670	3 G 1,5 mm² Black	0.098	70	8.5	68
16671	4 G 1,5 mm² Black	0.119	75	9.2	90
16603	4 x 1,5 mm² Black	0.119	75	9.2	90
16604	5 x 1,5 mm² Black	0.147	80	10	113
16672	5 G 1,5 mm² Black	0.147	80	10	113
16605	6 x 1,5 mm² Black	0.175	85	10.8	135
16676	7 G 1,5 mm² Black	0.182	85	10.8	158
16606	7 x 1,5 mm² Black	0.181	85	10.8	158
16607	8 x 1,5 mm² Black	0.241	106	13.2	180
16609	10 x 1,5 mm² Black	0.266	115	14	225
16611	12 x 1,5 mm² Black	0.3	115	14.5	270
16615	16 x 1,5 mm² Black	0.385	130	16.2	360
16618	19 x 1,5 mm² Black	0.448	140	17.6	428
16623	24 x 1,5 mm² Black	0.56	155	19.6	540
16626	27 x 1,5 mm² Black	0.615	165	20.6	608
16627	30 x 1,5 mm² Black	0.674	170	21.6	675
16628	37 x 1,5 mm² Black	0.822	190	23.8	833
16631	2 x 2,5 mm² Black	0.104	70	9	75
16673	3 G 2,5 mm² Black	0.133	75	9.5	113
16632	3 x 2,5 mm² Black	0.133	75	9.5	113
16633	4 x 2,5 mm² Black	0.165	85	10.3	150
16674	4 G 2,5 mm² Black	0.165	80	10.3	150
16634	5 x 2,5 mm² Black	0.209	90	11.4	188
16675	5 G 2,5 mm² Black	0.209	90	11.4	188
16635	6 x 2,5 mm² Black	0.249	100	12.4	225
16677	7 G 2,5 mm² Black	0.26	100	12.4	263
16636	7 x 2,5 mm² Black	0.26	100	12.4	263
16637	8 x 2,5 mm² Black	0.337	115	13.9	300
16639	10 x 2,5 mm² Black	0.367	140	15.9	375
16641	12 x 2,5 mm² Black	0.431	135	16.6	450
16645	16 x 2,5 mm² Black	0.558	150	18.7	600
16648	19 x 2,5 mm² Black	0.648	160	20.2	713
16653	24 x 2,5 mm² Black	0.806	180	22.5	900
16656	27 x 2,5 mm² Black	0.894	190	23.7	1,013
16657	30 x 2,5 mm² Black	0.993	200	25	1,125
16658	37 x 2,5 mm² Black	1.197	220	27.3	1,388

Low voltage cables

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
- DC 0,9/1,5kV (if voltage to earth does not exceed 0,9kV)

Core identification:
- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Material core insulation	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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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 mm² Black	0.115	35	8.8	45
16061	3 x 1,5 mm² Black	0.12	35	8.8	68
16420	3 G 1,5 mm² Black	0.12	35	8.8	68
16419	4 G 1,5 mm² Black	0.139	35	9.4	90
16062	4 x 1,5 mm² Black	0.139	39	9.7	90
16063	5 x 1,5 mm² Black	0.172	40	10.4	113
16418	5 G 1,5 mm² Black	0.172	42	10.4	113
16661	7 x 1,5 mm² Black	0.256	47	12.9	158
16064	2 x 2,5 mm² Black	0.135	37	9.2	75
16065	3 x 2,5 mm² Black	0.167	40	10	113
16417	3 G 2,5 mm² Black	0.167	40	10	113
16416	4 G 2,5 mm² Black	0.195	45	10.7	150
16066	4 x 2,5 mm² Black	0.195	45	10.7	150
16067	5 x 2,5 mm² Black	0.25	50	12.1	188
16415	5 G 2,5 mm² Black	0.25	50	12.1	188
16068	2 x 4 mm² Black	0.187	42	10.4	120
16069	3 x 4 mm² Black	0.236	46	11.4	180
16084	3 G 4 mm² Black	0.237	46	11.4	180
16070	4 x 4 mm² Black	0.288	50	12.4	240
16071	2 x 6 mm² Black	0.256	49	11.8	180
16072	3 x 6 mm² Black	0.308	50	12.4	270
16085	3 G 6 mm² Black	0.308	50	12.4	270
16073	4 x 6 mm² Black	0.371	54	13.3	360
16074	2 x 10 mm² Black	0.363	54	13.4	300
16075	3 x 10 mm² Black	0.462	58	14.5	450
16076	4 x 10 mm² Black	0.573	64	15.8	600
16083	4 G 10 mm² Black	0.574	64	15.8	600
16077	2 x 16 mm² Black	0.531	65	15.9	480
16078	3 x 16 mm² Black	0.659	65	16.8	720
16079	4 x 16 mm² Black	0.81	75	18.1	960
16086	5 G 16 mm² Black	0.997	80	20	1,200
16080	2 x 25 mm² Black	0.824	80	19.8	750
16081	3 x 25 mm² Black	1.02	85	20.9	1,125
16087	3 G 25 mm² Black	1.04	85	21.2	1,125
16088	4 G 25 mm² Black	1.302	95	23.2	1,500
16082	4 x 25 mm² Black	1.279	90	22.9	1,500

Low voltage cables

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
- DC 0,9/1,5kV (if voltage to earth does not exceed 0,9kV)

Core identification:
- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

MarineLine+ YOZp 0,6/1 kV

47 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 mm² Black	0.176	42	10.4	45
16161	3 x 1,5 mm² Black	0.196	45	10.8	68
16414	3 G 1,5 mm² Black	0.197	43	10.8	68
16413	4 G 1,5 mm² Black	0.227	48	11.7	90
16162	4 x 1,5 mm² Black	0.226	48	11.7	90
16163	5 x 1,5 mm² Black	0.258	50	12.4	113
16412	5 G 1,5 mm² Black	0.258	50	12.4	113
16662	7 x 1,5 mm² Black	0.34	57	14.1	158
16665	10 x 1,5 mm² Black	0.459	69	17.1	225
16663	12 x 1,5 mm² Black	0.501	71	17.6	270
16666	16 x 1,5 mm² Black	0.62	78	19.5	315
16667	19 x 1,5 mm² Black	0.717	85	21.2	270
16664	24 x 1,5 mm² Black	0.909	96	23.8	540
16668	30 x 1,5 mm² Black	1.077	105	26.1	675
16164	2 x 2,5 mm² Black	0.221	45	11.5	75
16411	3 G 2,5 mm² Black	0.251	50	12	113
16165	3 x 2,5 mm² Black	0.249	50	12	113
16410	4 G 2,5 mm² Black	0.289	50	12.8	150
16166	4 x 2,5 mm² Black	0.287	50	12.8	150
16167	5 x 2,5 mm² Black	0.371	60	14.3	188
16409	5 G 2,5 mm² Black	0.373	60	14.3	188
16168	2 x 4 mm² Black	0.27	50	12.3	120
16186	3 G 4 mm² Black	0.312	52	12.9	180
16169	3 x 4 mm² Black	0.311	52	12.9	180
16170	4 x 4 mm² Black	0.41	58	14.5	240
16454	4 G 4 mm² Black	0.414	59	14.6	240
16446	5 G 4 mm² Black	0.479	63	15.6	300
16171	2 x 6 mm² Black	0.338	54	13.4	180
16187	3 G 6 mm² Black	0.442	60	14.8	270
16172	3 x 6 mm² Black	0.441	60	14.8	270
16173	4 x 6 mm² Black	0.519	64	15.8	360
16174	2 x 10 mm² Black	0.503	63	15.7	300
16175	3 x 10 mm² Black	0.607	67	16.7	450
16428	3 G 10 mm² Black	0.608	68	16.7	450
16176	4 x 10 mm² Black	0.725	72	17.9	600
16445	4 G 10 mm² Black	0.726	72	17.9	600
16177	2 x 16 mm² Black	0.688	70	17.9	480
16178	3 x 16 mm² Black	0.821	75	18.8	720
16179	4 x 16 mm² Black	1.008	85	20.6	960
16188	5 G 16 mm² Black	1.216	90	22.5	1,200
16551	5 x 16 mm² Black	1.215	90	22.5	1,200
16180	2 x 25 mm² Black	0.993	85	21.6	750
16181	3 x 25 mm² Black	1.218	90	23	1,125
16431	3 G 25 mm² Black	1.222	90	22.9	1,125

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)
16182	4 x 25 mm² Black	1.502	100	25.1	1,500
16432	4 G 25 mm² Black	1.497	100	25.1	1,500
16435	5 G 25 mm² Black	1.825	110	27.6	1,875

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
- DC 0,9/1,5kV (if voltage to earth does not exceed 0,9kV)

Core identification:
- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 5 = flexible
Material core insulation	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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

Low voltage cables

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 mm² Black	0.184	35	8.6	375
16486	2 x 16 mm² Black	0.549	67	16.6	720
16447	3 x 16 mm² Black	0.679	71	17.6	720
16484	4 x 16 mm² Black	0.831	76	19	960
17427	5 G 16 mm² Black	1.039	86	21.3	1,200
16537	1 x 25 mm² Black	0.271	41	10.2	375
16659	2 x 25 mm² Black	0.812	80	20	1,125
16482	3 x 25 mm² Black	1.007	85	21.2	1,125
16542	4 x 25 mm² Black	1.263	94	23.3	1,500
16090	1 x 35 mm² Black	0.357	47	11.7	525
16091	2 x 35 mm² Black	1.065	91	22.7	1,050
16092	3 x 35 mm² Black	1.397	101	25.1	1,575
16438	4 x 35 mm² Black	1.812	113	28.1	2,100
16093	1 x 50 mm² Black	0.492	53	13.1	750
16094	3 x 50 mm² Black	1.909	114	28.5	2,250
16439	4 x 50 mm² Black	2.478	128	31.9	3,000
16095	1 x 70 mm² Black	0.69	63	15.1	1,050
16096	3 x 70 mm² Black	2.653	132	32.9	3,150
16440	4 x 70 mm² Black	3.409	147	36.6	4,200
16097	1 x 95 mm² Black	0.9	69	17.1	1,425
16098	3 x 95 mm² Black	3.437	150	37.4	4,275
16441	4 x 95 mm² Black	4.402	165	41.1	5,700
16099	1 x 120 mm² Black	1.13	76	18.9	1,800
16100	3 x 120 mm² Black	4.352	167	41.6	5,400
16442	4 x 120 mm² Black	5.61	186	46.2	7,200
16101	1 x 150 mm² Black	1.404	85	21.1	2,250
16102	3 x 150 mm² Black	5.383	185	46.2	6,750
16103	1 x 185 mm² Black	1.704	92	23	2,775
16104	3 x 185 mm² Black	6.519	206	51.4	8,325
16105	1 x 240 mm² Black	2.294	106	26.5	3,600
16106	3 x 240 mm² Black	8.695	234	58.3	10,800
15983	4 x 240 mm² Black	11.17	258	64.3	14,400
16107	1 x 300 mm² Black	2.815	118	29.3	4,500

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
- DC 0,9/1,5kV (if voltage to earth does not exceed 0,9kV)

Core identification:
- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 5 = flexible
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

Low voltage cables

MarineFlex YOZp 0,6/1 kV

46 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 mm² Black	0.888	83	20.6	720
16485	4 x 16 mm² Black	1.096	90	22.5	960
16487	2 x 25 mm² Black	1.045	92	23	750
16543	3 x 25 mm² Black	1.262	97	24.2	1,125
16553	4 G 25 mm² Black	1.55	107	26.6	1,500
16491	4 x 25 mm² Black	1.552	107	26.6	1,500
16190	1 x 35 mm² Black	0.405	50	12.5	525
16456	2 x 35 mm² Black	1.33	105	26	1,050
16191	3 x 35 mm² Black	1.63	110	27.5	1,575
16192	4 x 35 mm² Black	2.032	121	30.1	2,100
16523	4 G 35 mm² Black	1.982	118	29.7	2,100
16552	5 G 35 mm² Black	2.575	135	33.6	2,100
16193	1 x 50 mm² Black	0.585	58	14.5	750
17898	2 x 50 mm² Black	1.737	115	28.7	1,500
16194	3 x 50 mm² Black	2.17	123	30.9	2,250
16195	4 x 50 mm² Black	2.685	135	33.7	3,000
17790	4 G 50 mm² Black	2.693	135	33.7	3,000
16473	5 G 50 mm² Black	3.362	150	37.6	3,750
16196	1 x 70 mm² Black	0.789	66	16.3	1,050
16197	3 x 70 mm² Black	3.109	144	35.9	3,150
16198	4 x 70 mm² Black	3.878	158	39.4	4,200
16524	4 G 70 mm² Black	3.882	158	39.4	4,200
16474	5 G 70 mm² Black	4.74	175	43.4	5,250
16199	1 x 95 mm² Black	1.01	74	18.3	1,425
16522	2 x 95 mm² Black	3.161	152	37.8	2,850
16200	3 x 95 mm² Black	3.895	160	40	4,275
16201	4 x 95 mm² Black	4.928	177	44.1	5,700
16490	4 G 95 mm² Black	4.932	177	44.1	5,700
16475	5 G 95 mm² Black	6.033	195	48.5	7,125
16202	1 x 120 mm² Black	1.263	82	20.3	1,800
16203	3 x 120 mm² Black	4.842	177	44.2	5,400
16476	4 G 120 mm² Black	6.129	195	48.6	7,200
16443	4 x 120 mm² Black	6.118	195	48.6	7,200
16477	5 G 120 mm² Black	7.525	215	53.7	9,000
16204	1 x 150 mm² Black	1.553	90	22.5	2,250
16205	3 x 150 mm² Black	5.891	195	48.6	6,750
16539	4 x 150 mm² Black	7.517	217	54.1	9,000
17791	4 G 150 mm² Black	7.474	215	53.7	9,000
16206	1 x 185 mm² Black	1.854	97	24.2	2,775
16207	3 x 185 mm² Black	7.046	212	52.8	8,325
16478	4 G 185 mm² Black	8.992	234	58.4	11,100
16479	4 x 185 mm² Black	8.976	234	58.4	11,100
16208	1 x 240 mm² Black	2.466	111	27.7	3,600
16209	3 x 240 mm² Black	9.33	242	60.3	10,800

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)
15998	4 x 240 mm² Black	12.042	270	67.3	14,400
16455	1 x 300 mm² Black	3.003	122	30.4	4,500

Low voltage cables

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
- DC 0,9/1,5kV (if voltage to earth does not exceed 0,9kV)

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 5 = flexible
Material core insulation	XLHFFR - HF90
Flame retardant	IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1/2
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assemblingwithout vibration	-40 / 90 °C
Transportation and storage temperature	-40 / 50 °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	0.044	15	4	60
160263	6 mm² Green/yellow	0.063	18	4.6	90
160264	10 mm² Green/yellow	0.103	22	5.6	150
160265	16 mm² Green/yellow	0.156	27	6.6	240
160266	25 mm² Green/yellow	0.24	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	1,050
160270	95 mm² Green/yellow	0.834	59	14.6	1,425
160271	120 mm² Green/yellow	1.062	70	17.4	1,800
160272	150 mm² Green/yellow	1.327	74	18.4	2,250
160273	185 mm² Green/yellow	1.619	81	20.2	2,775
160274	240 mm² Green/yellow	2.189	94	23.5	3,600
160275	300 mm² Green/yellow	2.692	105	26.1	4,500

Low voltage cables

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
- DC 0,9/1,5kV (if voltage to earth does not exceed 0,9kV)

Core identification:
- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

MarineLine YOZp EMC 0,6/1 kV

35 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
17997	2 x 1,5 mm² Black	0.106	35	8.6	45
17341	3 x 1,5 mm² Black	0.125	40	9	68
17344	4 G 1,5 mm² Black	0.151	40	9.7	90
16530	4 x 1,5 mm² Black	0.151	39	9.7	90
17904	5 x 1,5 mm² Black	0.184	42	10.5	113
17998	3 G 2,5 mm² Black	0.165	40	10	113
17437	3 x 2,5 mm² + 3 G 1,5 mm² Black	0.26	52	13	180
17342	3 x 2,5 mm² Black	0.163	40	10	113
17345	4 G 2,5 mm² Black	0.198	44	10.8	150
16531	4 x 2,5 mm² Black	0.198	45	10.8	150
17908	5 G 2,5 mm² Black	0.248	48	11.9	188
16541	12 G 2,5 mm² Black	0.53	70	17.5	450
16533	19 x 2,5 mm² Black	0.771	85	21.1	713
17473	1 x 4 mm² Black	0.09	27	6.6	60
16532	2 x 4 mm² Black	0.172	42	10.4	120
17902	3 x 4 mm² + 3 G 1,5 mm² Black	0.338	57	14.1	248
17177	3 x 4 mm² Black	0.222	45	11.2	180
16638	4 x 4 mm² Black	0.279	50	12.3	240
17346	4 G 4 mm² Black	0.275	49	12.2	240
17905	5 G 4 mm² Black	0.335	55	13.2	300
16550	2 x 6 mm² Black	0.226	71	11.7	180
17454	3 x 6 mm² + 3 G 1,5 mm² Black	0.402	59	14.7	338
17343	3 x 6 mm² Black	0.29	52	12.4	270
17347	4 G 6 mm² Black	0.403	57	14.1	360
17469	4 x 6 mm² Black	0.402	57	14.1	360
17378	3 x 10 mm² + 3 G 4 mm² Black	0.636	125	17.9	630
17193	3 x 10 mm² Black	0.465	60	14.8	450
17219	4 G 10 mm² Black	0.583	65	16.1	600
17451	4 x 10 mm² Black	0.582	65	16.1	600
17350	2 x 16 mm² Black	0.474	65	15.9	480
17348	3 x 16 mm² Black	0.641	70	17	720
17176	3 x 16 mm² + 3 G 6 mm² Black	0.885	82	20.4	990
17184	4 G 16 mm² Black	0.826	75	18.6	960
17439	4 x 16 mm² Black	0.825	75	18.6	960
17197	3 x 25 mm² Black	0.965	85	21.2	1,125

Low voltage cables

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
- DC 0,9/1,5kV (if voltage to earth does not exceed 0,9kV)

Core identification:
- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 2 = stranded
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	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 mm² Black	0.775	72	17.9	720
17215	3 x 25 mm² Black	1.205	91	22.7	1,125

Low voltage cables

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
- DC 0,9/1,5kV (if voltage to earth does not exceed 0,9kV)

Core identification:
- HD308 S2

Specifications

Standardization	IEC 60092-350/-360/-353
Conductor material	Copper
Shape of conductor	Round
Conductor category	Class 5 = flexible
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	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 mm² + 3 G 6 mm² Black	1.33	103	25.7	1,980
17472	1 x 35 mm² Black	0.412	51	12.6	525
17198	3 x 35 mm² Black	1.654	111	27.6	1,575
55902	3 x 35 mm² + 3 G 6 mm² Black	1.877	118	29.4	3,150
17217	4 x 35 mm² Black	2.064	122	30.3	2,100
17160	1 x 50 mm² Black	0.592	58	14.5	750
17199	3 x 50 mm² Black	2.199	125	31.1	2,250
55907	3 x 50 mm² + 3 G 16 mm² Black	3.287	155	38.6	2,700
17432	4 G 50 mm² Black	2.766	136	34	3,000
17161	1 x 70 mm² Black	0.797	66	16.3	1,050
17178	3 x 70 mm² Black	3.168	146	36.4	3,150
17379	3 x 70 mm² + 3 G 16 mm² Black	3.861	162	40.5	3,150
17183	4 G 70 mm² Black	3.948	160	39.9	4,200
17218	1 x 95 mm² Black	1.018	74	18.3	1,425
17376	2 x 95 mm² Black	3.225	156	38.3	4,275
17195	3 x 95 mm² Black	3.965	162	40.5	4,275
55908	3 x 95 mm² + 3 G 25 mm² Black	5.192	377	47.1	5,400
17214	4 x 95 mm² Black	5.005	179	44.6	5,700
17399	1 x 120 mm² Black	1.276	82	20.4	1,800
55903	3 x 120 mm² + 3 G 25 mm² Black	5.846	390	48.7	5,400
17213	3 x 120 mm² Black	4.909	179	44.7	5,400
17400	1 x 150 mm² Black	1.569	91	22.6	2,250
17216	3 x 150 mm² Black	5.997	198	49.3	6,750
55909	3 x 150 mm² + 3 G 25 mm² Black	6.806	416	52	6,750
17194	1 x 185 mm² Black	1.865	97	24.2	2,775
17209	3 x 185 mm² Black	7.137	214	53.3	8,325
17438	1 x 240 mm² Black	2.498	112	28	3,600

Low voltage cables

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
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	1.8 kV
Nominal voltage U	3 kV
Test voltage	6.5 kV

MarineFlex YOZp EMC 1,8/3 kV

14 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 mm² Black	2.214	138	34.5	1,575
55913	3 x 35 mm² + 3 G 6 mm² Black	2.857	161	40.3	1,845
55914	3 x 50 mm² + 3 G 10 mm² Black	3.763	179	44.7	2,700
17826	3 x 50 mm² Black	2.805	150	37.4	2,250
17783	3 x 70/35 mm² Black	3.591	165	41.3	3,150
16554	4 x 70 mm² Black	4.448	182	45.3	4,200
55915	3 x 95 mm² + 3 G 16 mm² Black	5.214	199	49.6	4,275
17784	3 x 95/50 mm² Black	4.49	182	45.4	4,275
17785	3 x 120/70 mm² Black	5.785	207	51.8	5,400
55901	3 x 120 mm² + 3 G 25 mm² Black	6.862	228	57.1	6,525
17897	3 x 150 mm² + 3 G 25 mm² Black	7.631	235	58.7	7,875
55900	1 x 185 mm² Black	1.937	104	26.1	2,775
17899	3 x 185 mm² + 3 G 25 mm² Black	8.335	238	59.5	8,595
55906	1 x 240 mm² Black	2.547	116	29	3,600

Low voltage cables

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
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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 mm² Black	0.505	63	15.7	525
16515	3 x 35 mm² Black	1.919	128	32.1	1,575
16508	1 x 50 mm² Black	0.658	69	17.2	750
16516	3 x 50 mm² Black	2.664	147	36.7	2,250
16509	1 x 70 mm² Black	0.865	75	18.8	1,050
16517	3 x 70 mm² Black	3.572	166	41.6	3,150
16510	1 x 95 mm² Black	1.088	83	20.8	1,425
16518	3 x 95 mm² Black	4.395	181	45.3	4,275
16511	1 x 120 mm² Black	1.341	90	22.6	1,800
16519	3 x 120 mm² Black	5.328	196	49.1	5,400
16512	1 x 150 mm² Black	1.614	97	24.2	2,250
16520	3 x 150 mm² Black	6.348	211	52.7	6,750
16513	1 x 185 mm² Black	1.918	104	26	2,775
16521	3 x 185 mm² Black	7.428	224	56	8,325
16514	1 x 240 mm² Black	2.524	116	29	3,600

Low voltage cables

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.)
- 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
Material core insulation	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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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

74 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
27000	1 x 1,5 mm² Orange	0.045	35	5.8	23
27001	2 x 1,5 mm² Orange	0.085	55	8.8	45
27002	3 x 1,5 mm² Orange	0.109	55	9.3	68
27080	3 G 1,5 mm² Orange	0.111	55	9.3	68
27081	4 G 1,5 mm² Orange	0.137	60	10.2	90
27003	4 x 1,5 mm² Orange	0.136	60	10.2	90
27004	5 x 1,5 mm² Orange	0.178	70	11.4	113
27082	5 G 1,5 mm² Orange	0.179	70	11.4	113
27005	6 x 1,5 mm² Orange	0.214	75	12.4	135
27083	7 G 1,5 mm² Orange	0.222	75	12.4	158
27006	7 x 1,5 mm² Orange	0.222	56	12.4	158
27007	8 x 1,5 mm² Orange	0.31	103	17.1	180
27008	10 x 1,5 mm² Orange	0.322	95	15.9	225
27009	12 x 1,5 mm² Orange	0.364	100	16.4	270
27010	16 x 1,5 mm² Orange	0.482	110	18.7	360
27011	19 x 1,5 mm² Orange	0.554	120	20.2	428
27012	24 x 1,5 mm² Orange	0.706	135	22.7	540
27013	27 x 1,5 mm² Orange	0.776	145	23.9	608
27014	30 x 1,5 mm² Orange	0.851	150	25	675
27015	37 x 1,5 mm² Orange	1.04	165	27.6	833
27016	1 x 2,5 mm² Orange	0.055	35	5.8	38
27017	2 x 2,5 mm² Orange	0.11	59	9.8	75
27018	3 x 2,5 mm² Orange	0.145	65	10.4	113
27084	3 G 2,5 mm² Orange	0.146	63	10.4	113
27085	4 G 2,5 mm² Orange	0.189	70	11.6	150
27019	4 x 2,5 mm² Orange	0.19	70	11.6	150
27086	5 G 2,5 mm² Orange	0.237	77	12.8	188
27020	5 x 2,5 mm² Orange	0.239	77	12.8	188
27021	6 x 2,5 mm² Orange	0.282	83	13.9	225
27022	7 x 2,5 mm² Orange	0.3	84	13.9	263
27087	7 G 2,5 mm² Orange	0.301	84	13.9	263
27096	16 x 2,5 mm² Orange	0.658	127	21.1	600
27023	1 x 4 mm² Orange	0.072	38	6.3	60
27024	2 x 4 mm² Orange	0.144	65	10.8	120
27025	3 x 4 mm² Orange	0.199	70	11.6	180
27088	3 G 4 mm² Orange	0.2	70	11.6	180
27026	4 x 4 mm² Orange	0.256	77	12.8	240
27089	4 G 4 mm² Orange	0.257	77	12.8	240
27078	5 G 4 mm² Orange	0.327	86	14.3	240
27027	1 x 6 mm² Orange	0.096	42	6.9	90
27028	2 x 6 mm² Orange	0.198	74	12.2	180
27090	3 G 6 mm² Orange	0.271	78	12.9	270
27029	3 x 6 mm² Orange	0.27	78	12.9	270
27030	4 x 6 mm² Orange	0.357	87	14.4	360

Low voltage cables

MarineLine YZp 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)
27091	4 G 6 mm² Orange	0.358	87	14.4	360
27079	5 G 6 mm² Orange	0.447	96	15.9	360
27031	1 x 10 mm² Orange	0.137	46	7.6	150
27032	2 x 10 mm² Orange	0.284	83	13.7	300
27033	3 x 10 mm² Orange	0.402	89	14.8	450
27092	3 G 10 mm² Orange	0.403	89	14.8	450
27093	4 G 10 mm² Orange	0.522	98	16.2	600
27034	4 x 10 mm² Orange	0.521	98	16.2	600
27097	5 G 10 mm² Orange	0.661	108	18	750
27035	1 x 16 mm² Orange	0.198	53	8.8	240
27037	3 x 16 mm² Orange	0.581	103	17.1	720
27094	3 G 16 mm² Orange	0.583	103	17.1	720
27095	4 G 16 mm² Orange	0.77	113	18.8	960
27038	4 x 16 mm² Orange	0.765	113	18.8	960
27098	5 G 16 mm² Orange	0.949	127	21.1	1,200
27039	1 x 25 mm² Orange	0.297	65	10.7	375
27040	2 x 25 mm² Orange	0.639	120	20.2	750
27041	3 x 25 mm² Orange	0.908	130	21.7	1,125
27042	4 x 25 mm² Orange	1.177	140	23.7	1,500
27043	1 x 35 mm² Orange	0.398	73	12.1	525
27044	2 x 35 mm² Orange	0.862	140	23.2	1,050
27047	1 x 50 mm² Orange	0.524	81	13.5	750
27048	2 x 50 mm² Orange	1.177	161	26.8	1,500
27051	1 x 70 mm² Orange	0.736	95	15.4	1,050
27055	1 x 95 mm² Orange	1.002	106	17.7	1,425
27059	1 x 120 mm² Orange	1.245	116	19.3	1,800
27063	1 x 150 mm² Orange	1.55	129	21.4	2,250
27067	1 x 185 mm² Orange	1.944	145	24.1	2,775
27071	1 x 240 mm² Orange	2.481	160	26.6	3,600
27075	1 x 300 mm² Orange	3.098	182	30.3	4,500

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
Material core insulation	Mica + XLHFFR
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

Low voltage cables

MarineLine YOZp X-FR 0,6/1 kV

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Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
27199	3 x 1,0 mm² Orange	0.126	59	9.7	45
27100	1 x 1,5 mm² Orange	0.065	37	6.1	23
27101	2 x 1,5 mm² Orange	0.121	42	9.6	45
27180	3 G 1,5 mm² Orange	0.147	60	10.1	68
27102	3 x 1,5 mm² Orange	0.146	61	10.1	68
27181	4 G 1,5 mm² Orange	0.183	65	11.2	90
27103	4 x 1,5 mm² Orange	0.183	65	11.2	90
27182	5 G 1,5 mm² Orange	0.223	75	12.1	113
27104	5 x 1,5 mm² Orange	0.22	75	12.1	113
27105	6 x 1,5 mm² Orange	0.296	80	13.5	135
27106	7 x 1,5 mm² Orange	0.27	79	13.1	158
27183	7 G 1,5 mm² Orange	0.301	81	13.5	158
27107	8 x 1,5 mm² Orange	0.385	90	15	180
27172	10 G 1,5 mm² Orange	0.432	105	17.2	225
27108	10 x 1,5 mm² Orange	0.434	105	17.2	225
27109	12 x 1,5 mm² Orange	0.476	107	17.7	270
27173	14 G 1,5 mm² Orange	0.547	115	19	315
27110	16 x 1,5 mm² Orange	0.609	120	20	360
27174	19 G 1,5 mm² Orange	0.693	130	21.5	428
27111	19 x 1,5 mm² Orange	0.692	130	21.5	428
27112	24 x 1,5 mm² Orange	0.849	145	23.8	540
27113	27 x 1,5 mm² Orange	0.94	114	25.2	608
27114	30 x 1,5 mm² Orange	1.022	160	26.3	675
27115	37 x 1,5 mm² Orange	1.226	175	28.9	833
27116	1 x 2,5 mm² Orange	0.077	40	6.6	38
27117	2 x 2,5 mm² Orange	0.151	63	10.6	75
27118	3 x 2,5 mm² Orange	0.193	69	11.4	113
27184	3 G 2,5 mm² Orange	0.194	69	11.4	113
27119	4 x 2,5 mm² Orange	0.237	75	12.4	150
27185	4 G 2,5 mm² Orange	0.238	75	12.4	150
27120	5 x 2,5 mm² Orange	0.315	84	13.9	188
27186	5 G 2,5 mm² Orange	0.316	84	13.9	188
27187	7 G 2,5 mm² Orange	0.398	92	15.2	263
17825	7 x 2,5 mm² Orange	0.397	67	15.2	263
17423	12 x 2,5 mm² Orange	0.622	119	19.8	450
27196	19 x 2,5 mm² Orange	0.929	146	24.3	713
27398	21 x 2,5 mm² Orange	1.126	110	28.5	713
27121	27 x 2,5 mm² Orange	1.248	169	28.1	1,013
27123	1 x 4 mm² Orange	0.098	42	7	60
27124	2 x 4 mm² Orange	0.193	71	11.8	120
27188	3 G 4 mm² Orange	0.246	75	12.4	180
27125	3 x 4 mm² Orange	0.246	75	12.4	180
27126	4 x 4 mm² Orange	0.347	86	14.2	240
27189	4 G 4 mm² Orange	0.346	86	14.2	240

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 mm² Orange	0.418	93	15.4	300
27127	1 x 6 mm² Orange	0.124	46	7.6	90
27128	2 x 6 mm² Orange	0.249	79	13.1	180
27190	3 G 6 mm² Orange	0.362	86	14.3	270
27129	3 x 6 mm² Orange	0.36	86	14.3	270
27191	4 G 6 mm² Orange	0.452	94	15.6	360
27130	4 x 6 mm² Orange	0.453	94	15.6	360
16457	5 G 6 mm² Orange	0.555	103	17.2	450
27131	1 x 10 mm² Orange	0.172	52	8.6	150
27132	2 x 10 mm² Orange	0.377	90	15	300
27133	3 x 10 mm² Orange	0.496	96	15.9	450
27192	3 G 10 mm² Orange	0.495	96	15.9	450
27193	4 G 10 mm² Orange	0.633	105	17.5	600
27134	4 x 10 mm² Orange	0.637	105	17.5	600
16458	5 G 10 mm² Orange	0.783	116	19.3	750
27135	1 x 16 mm² Orange	0.237	59	9.8	240
27136	2 x 16 mm² Orange	0.521	104	17.2	480
27137	3 x 16 mm² Orange	0.689	110	18.2	720
27194	3 G 16 mm² Orange	0.688	110	18.2	720
27138	4 x 16 mm² Orange	0.889	121	20.1	960
27195	4 G 16 mm² Orange	0.89	87	20.1	960
16459	5 G 16 mm² Orange	1.104	134	22.2	1,200
27139	1 x 25 mm² Orange	0.344	70	11.6	375
27140	2 x 25 mm² Orange	0.754	90	21.1	750
27141	3 x 25 mm² Orange	1.021	135	22.4	1,125
16460	4 G 25 mm² Orange	1.328	150	24.8	1,500
27142	4 x 25 mm² Orange	1.326	105	24.8	1,500
16461	5 G 25 mm² Orange	1.674	165	27.6	1,875
27143	1 x 35 mm² Orange	0.452	80	13.1	525
27144	2 x 35 mm² Orange	0.992	144	23.9	1,050
27147	1 x 50 mm² Orange	0.621	90	14.9	750
27148	2 x 50 mm² Orange	1.282	162	26.9	1,500
27151	1 x 70 mm² Orange	0.836	100	16.6	1,050
27155	1 x 95 mm² Orange	1.117	114	18.9	1,425
27159	1 x 120 mm² Orange	1.385	125	20.8	1,800
27163	1 x 150 mm² Orange	1.693	136	22.6	2,250
27167	1 x 185 mm² Orange	2.103	152	25.3	2,775
27171	1 x 240 mm² Orange	2.655	167	27.8	3,600
27175	1 x 300 mm² Orange	3.311	130	31.7	4,500

Low voltage cables

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
Material core insulation	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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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

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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 mm² Orange	0.145	60	9.9	45
27201	3 x 1,5 mm² Orange	0.161	60	10.3	68
27280	3 G 1,5 mm² Orange	0.163	60	10.3	68
27281	4 G 1,5 mm² Orange	0.192	65	11.2	90
27202	4 x 1,5 mm² Orange	0.191	65	11.2	90
27203	5 x 1,5 mm² Orange	0.235	74	12.3	113
27282	5 G 1,5 mm² Orange	0.237	55	12.3	113
27204	2 x 2,5 mm² Orange	0.181	65	10.8	75
27205	3 x 2,5 mm² Orange	0.21	69	11.4	113
27283	3 G 2,5 mm² Orange	0.211	69	11.4	113
27284	4 G 2,5 mm² Orange	0.257	76	12.6	113
27206	4 x 2,5 mm² Orange	0.256	76	12.6	150
27207	5 x 2,5 mm² Orange	0.306	83	13.7	188
27285	5 G 2,5 mm² Orange	0.31	80	13.7	188
27208	2 x 4 mm² Orange	0.236	72	12	120
27209	3 x 4 mm² Orange	0.275	76	12.6	180
27286	3 G 4 mm² Orange	0.276	76	12.6	180
27287	4 G 4 mm² Orange	0.338	83	13.8	240
27210	4 x 4 mm² Orange	0.337	83	13.8	240
27288	5 G 4 mm² Orange	0.409	92	15.2	300
27211	2 x 6 mm² Orange	0.305	80	13.2	180
27212	3 x 6 mm² Orange	0.363	84	13.9	270
27289	3 G 6 mm² Orange	0.364	84	13.9	270
27290	4 G 6 mm² Orange	0.456	93	15.4	360
27213	4 x 6 mm² Orange	0.453	93	15.4	360
27291	5 G 6 mm² Orange	0.546	101	16.8	450
27214	2 x 10 mm² Orange	0.42	89	14.8	300
27215	3 x 10 mm² Orange	0.516	95	15.7	450
27216	4 x 10 mm² Orange	0.643	104	17.3	600
27292	3 G 10 mm² Orange	0.517	95	15.7	600
27293	4 G 10 mm² Orange	0.645	104	17.3	600
27294	5 G 10 mm² Orange	0.781	114	18.9	750
27217	2 x 16 mm² Orange	0.587	101	16.8	480
27295	3 G 16 mm² Orange	0.735	108	18	720
27296	4 G 16 mm² Orange	0.917	119	19.7	960
27219	4 x 16 mm² Orange	0.916	119	19.7	960
27220	2 x 25 mm² Orange	0.893	125	20.9	750
27221	3 x 25 mm² Orange	1.111	130	22.2	1,125
27222	4 x 25 mm² Orange	1.403	145	24.6	1,500

Low voltage cables

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
Material core insulation	Mica + XLHFFR
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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

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Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
27300	2 x 1,5 mm² Orange	0.21	70	11.4	45
27380	3 G 1,5 mm² Orange	0.234	72	11.9	68
27301	3 x 1,5 mm² Orange	0.233	72	11.9	68
27381	4 G 1,5 mm² Orange	0.275	98	13	91
27302	4 x 1,5 mm² Orange	0.305	80	13.4	90
27303	5 x 1,5 mm² Orange	0.353	85	14.3	113
27382	5 G 1,5 mm² Orange	0.352	86	14.3	113
27324	7 G 1,5 mm² Orange	0.394	90	15.3	158
27328	7 x 1,5 mm² Orange	0.395	92	15.3	158
27326	8 x 1,5 mm² Orange	0.49	100	16.9	180
27436	10 x 1,5 mm² Orange	0.565	117	19.4	225
27329	12 x 1,5 mm² Orange	0.607	119	19.7	270
27438	19 x 1,5 mm² Orange	0.892	145	24.1	270
27369	24 x 1,5 mm² Orange	1.128	217	27.1	540
27441	27 x 1,5 mm² Orange	1.163	165	27.6	608
27304	2 x 2,5 mm² Orange	0.262	76	12.6	75
27383	3 G 2,5 mm² Orange	0.297	83	13.2	113
27305	3 x 2,5 mm² Orange	0.296	83	13.2	113
27384	4 G 2,5 mm² Orange	0.379	88	14.6	150
27306	4 x 2,5 mm² Orange	0.378	88	14.6	150
27307	5 x 2,5 mm² Orange	0.442	96	15.9	188
27385	5 G 2,5 mm² Orange	0.443	96	15.9	188
27325	6 x 2,5 mm² Orange	0.505	84	17	225
27308	2 x 4 mm² Orange	0.349	84	14	120
27309	3 x 4 mm² Orange	0.394	87	14.6	180
27386	3 G 4 mm² Orange	0.395	87	14.6	180
27387	4 G 4 mm² Orange	0.475	96	16	240
27310	4 x 4 mm² Orange	0.474	96	16	240
27388	5 G 4 mm² Orange	0.554	75	17.2	300
27311	2 x 6 mm² Orange	0.431	92	15.2	180
27312	3 x 6 mm² Orange	0.501	97	16.1	270
27389	3 G 6 mm² Orange	0.502	69	16.1	270
27390	4 G 6 mm² Orange	0.6	105	17.4	360
27313	4 x 6 mm² Orange	0.598	105	17.4	360
27391	5 G 6 mm² Orange	0.712	82	19	450
27314	2 x 10 mm² Orange	0.559	101	16.8	300
27315	3 x 10 mm² Orange	0.672	108	17.9	450
27392	3 G 10 mm² Orange	0.673	108	17.9	450
27393	4 G 10 mm² Orange	0.809	116	19.3	600
27316	4 x 10 mm² Orange	0.806	116	19.3	600
27394	5 G 10 mm² Orange	0.973	90	21.1	750
27317	2 x 16 mm² Orange	0.755	114	19	480
27318	3 x 16 mm² Orange	0.903	120	20	720
27395	3 G 16 mm² Orange	0.904	104	20	720

Low voltage cables

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)
27396	4 G 16 mm² Orange	1.115	132	21.9	960
27319	4 x 16 mm² Orange	1.113	132	21.9	960
27397	5 G 16 mm² Orange	1.338	145	24	1,200
27323	3 G 25 mm² Orange	1.332	145	24.4	1,125
27399	5 G 25 mm² Orange	1.994	175	29.4	1,875

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
Material core insulation	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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

Low voltage cables

MarineFlex YZp X-FR 0,6/1 kV

28 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 mm² Orange	0.609	108	18	720
27230	1 x 35 mm² Orange	0.381	74	12.2	525
27231	2 x 35 mm² Orange	1.132	94	23.5	1,050
27232	3 x 35 mm² Orange	1.445	152	25.2	1,575
27233	4 x 35 mm² Orange	1.842	112	27.9	2,100
27265	4 G 35 mm² Orange	1.845	112	27.9	2,100
27234	1 x 50 mm² Orange	0.523	83	13.8	750
27235	2 x 50 mm² Orange	1.609	167	27.8	1,500
27236	3 x 50 mm² Orange	2.01	177	29.5	2,250
27237	4 x 50 mm² Orange	2.568	197	32.7	3,000
27238	1 x 70 mm² Orange	0.726	95	15.8	1,050
27240	3 x 70 mm² Orange	2.756	203	33.8	3,150
27241	4 x 70 mm² Orange	3.538	225	37.4	4,200
27242	1 x 95 mm² Orange	1.002	107	17.7	1,425
27244	3 x 95 mm² Orange	3.533	228	37.9	4,275
27245	4 x 95 mm² Orange	4.524	252	42	5,700
27246	1 x 120 mm² Orange	1.159	118	19.6	1,800
27248	3 x 120 mm² Orange	4.293	249	41.4	5,400
27249	4 x 120 mm² Orange	5.619	278	46.8	7,200
27250	1 x 150 mm² Orange	1.461	131	21.8	2,250
27252	3 x 150 mm² Orange	5.393	276	46	6,750
27253	4 x 150 mm² Orange	6.961	211	51.3	9,000
27254	1 x 185 mm² Orange	1.77	143	23.8	2,775
27256	3 x 185 mm² Orange	6.517	302	50.2	8,325
27257	4 x 185 mm² Orange	8.393	336	55.9	11,100
27258	1 x 240 mm² Orange	2.372	164	27.2	3,600
27260	3 x 240 mm² Orange	8.729	347	57.7	10,800
27262	1 x 300 mm² Orange	2.904	180	30	4,500

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
Material core insulation	Mica + XLHFFR
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

Low voltage cables

MarineFlex YOZp X-FR 0,6/1 kV

41 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
27365	3 x 16 mm² Orange	0.996	132	21.9	720
27366	4 x 25 mm² Orange	1.69	170	28.2	1,500
27330	1 x 35 mm² Orange	0.462	56	13.4	525
27331	2 x 35 mm² Orange	1.415	160	26.7	1,050
27332	3 x 35 mm² Orange	1.734	170	28.2	1,575
16462	3 G 35 mm² Orange	1.802	175	29.2	1,575
27333	4 x 35 mm² Orange	2.199	188	31.3	2,100
16463	4 G 35 mm² Orange	2.268	195	31.9	2,100
16464	5 G 35 mm² Orange	2.758	210	35	2,625
27334	1 x 50 mm² Orange	0.621	64	15.9	750
27335	2 x 50 mm² Orange	1.927	185	30.8	1,500
27372	3 G 50 mm² Orange	2.36	197	32.7	2,250
27336	3 x 50 mm² Orange	2.356	197	32.7	2,250
27337	4 x 50 mm² Orange	3.136	221	36.9	3,000
16465	4 G 50 mm² Orange	3.095	222	36.9	3,000
16466	5 G 50 mm² Orange	3.652	168	40.4	3,750
27338	1 x 70 mm² Orange	0.838	104	17.2	1,050
27340	3 x 70 mm² Orange	3.26	225	37.4	3,150
27341	4 x 70 mm² Orange	4.154	250	41.6	4,200
16467	4 G 70 mm² Orange	4.158	250	41.6	4,200
16468	5 G 70 mm² Orange	5.054	274	45.6	5,250
27342	1 x 95 mm² Orange	1.056	114	19	1,425
27344	3 x 95 mm² Orange	4.103	251	41.7	4,275
27433	3 x 95 mm² Black	4.102	251	41.7	4,275
27345	4 x 95 mm² Orange	5.167	275	45.8	5,700
16469	4 G 95 mm² Orange	5.172	275	45.8	5,700
16470	5 G 95 mm² Orange	6.425	306	51	7,125
27346	1 x 120 mm² Orange	1.296	126	21	1,800
27348	3 x 120 mm² Orange	5.004	275	45.8	5,400
27349	4 x 120 mm² Orange	6.323	303	50.4	7,200
16471	4 G 120 mm² Orange	6.329	303	50.4	7,200
27350	1 x 150 mm² Orange	1.613	140	23.2	2,250
27352	3 x 150 mm² Orange	6.187	303	50.4	6,750
27353	4 x 150 mm² Orange	7.815	333	55.5	9,000
16472	4 G 150 mm² Orange	7.823	333	55.5	9,000
27354	1 x 185 mm² Orange	1.925	150	25	2,775
27356	3 x 185 mm² Orange	7.351	327	54.4	8,325
27357	4 x 185 mm² Orange	9.322	361	60.1	11,100
27358	1 x 240 mm² Orange	2.554	171	28.4	3,600
27360	3 x 240 mm² Orange	9.686	372	61.9	10,800
27362	1 x 300 mm² Orange	3.098	188	31.2	4,500

MarineLine YZp X-FRSW 0,6/1 kV

Properties

Application:
Lightweight, unarmoured, low-voltage power cables with enhanced characteristics to withstand the effects of fire and fire-fighting efforts (sprinklers, hose spraying, etc.) in order to ensure the continuity of essential- and critical systems, i.e. to meet the concepts of Orderly Evacuation and Abandonment – OEA and Safe Return to Port – SRtP.

Characteristics:
- Class 2 conductors (class 5 on request)
- Lightweight, reduced diameter
- Halogen free and low smoke
- Cable OD ≤ 20mm: Fire resistant according IEC 60331-2 (180 min test) + EN 50200:2015 Annex E (water spray test)
- Cable OD > 20mm: Fire resistant according IEC 60331-1 (180 min test) + BS 8491: 2008 (water jet test)
- Construction with copper tape barrier (for cable OD>20mm)
- 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 category	Class 2 = stranded
Material core insulation	Mica + XLHFFR
Screen over stranding	Lapped Copper 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
Fire resistant acc. IEC60331-2(180 min test) EN50200:2015 Annex E **(diam. ≤ 20mm)**	Yes
Fire resistant acc. IEC60331-1 (180 min test) BS8491:2008 (diameter > 20mm)	Yes
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

Low voltage cables

MarineLine YZp X-FRSW 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)
115003	4 x 1,0 mm² Orange	0.137	66	10.9	60
115006	7 x 1,0 mm² Orange	0.218	80	13.3	105
115008	10 x 1,0 mm² Orange	0.328	104	17.3	150
115011	19 x 1,0 mm² Orange	0.642	135	22.4	285
115021	2 x 1,5 mm² Orange	0.1	60	10	45
115022	3 x 1,5 mm² Orange	0.13	64	10.6	68
115040	3 G 1,5 mm² Orange	0.131	64	10.6	68
115041	4 G 1,5 mm² Orange	0.171	71	11.8	90
115023	4 x 1,5 mm² Orange	0.17	71	11.8	90
115024	5 x 1,5 mm² Orange	0.213	78	13	113
115042	5 G 1,5 mm² Orange	0.214	78	13	113
115025	6 x 1,5 mm² Orange	0.263	87	14.4	135
115026	7 x 1,5 mm² Orange	0.271	87	14.4	158
115043	7 G 1,5 mm² Orange	0.272	87	14.4	158
115027	8 x 1,5 mm² Orange	0.343	96	15.9	180
115028	10 x 1,5 mm² Orange	0.395	111	18.5	225
115029	12 x 1,5 mm² Orange	0.452	116	19.3	270
115030	16 x 1,5 mm² Orange	0.686	135	22.5	360
115031	19 x 1,5 mm² Orange	0.775	144	23.9	428
115032	24 x 1,5 mm² Orange	0.964	160	26.7	540
115033	27 x 1,5 mm² Orange	1.066	170	28.3	608
115034	30 x 1,5 mm² Orange	1.164	178	29.6	675
115061	2 x 2,5 mm² Orange	0.132	68	11.2	75
115062	3 x 2,5 mm² Orange	0.173	72	11.9	113
115080	3 G 2,5 mm² Orange	0.174	72	11.9	113
115063	4 x 2,5 mm² Orange	0.219	78	13	150
115064	5 x 2,5 mm² Orange	0.282	87	14.6	188
115083	7 G 2,5 mm² Orange	0.356	95	15.8	263
115102	3 x 4 mm² Orange	0.227	78	12.9	180
115103	4 x 4 mm² Orange	0.299	87	14.4	240
115122	3 x 6 mm² Orange	0.305	87	14.4	270
115132	3 G 6 mm² Orange	0.306	87	14.4	270
115133	4 G 6 mm² Orange	0.396	96	15.9	360
115123	4 x 6 mm² Orange	0.395	96	15.9	360
115142	3 x 10 mm² Orange	0.432	96	16	450
115143	4 x 10 mm² Orange	0.572	107	17.8	600

MarineLine YOZp X-FRSW 0,6/1 kV

Properties

Application:
Lightweight, armoured, low-voltage power cables with enhanced characteristics to withstand the effects of fire and fire-fighting efforts (sprinklers, hose spraying, etc.) in order to ensure the continuity of essential- and critical systems, i.e. to meet the concepts of Orderly Evacuation and Abandonment – OEA and Safe Return to Port – SRtP.

Characteristics:
- Class 2 conductors (class 5 on request)
- Lightweight, reduced diameter
- Halogen free and low smoke
- Cable OD ≤ 20mm: Fire resistant according IEC 60331-2 (180 min test) + EN 50200:2015 Annex E (water spray test)
- Cable OD > 20mm: Fire resistant according IEC 60331-1 (180 min test) + BS 8491: 2008 (water jet test)
- 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
Conductor category	Class 2 = stranded
Material core insulation	Mica + XLHFFR
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
Fire resistant acc. IEC60331-2(180 min test) EN50200:2015 Annex E **(diam. ≤ 20mm)**	Yes
Fire resistant acc. IEC60331-1 (180 min test) BS8491:2008 (diameter > 20mm)	Yes
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

Low voltage cables

MarineLine YOZp X-FRSW 0,6/1 kV

47 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile Load (N)
116021	2 x 1,5 mm² Orange	0.139	65	10.8	45
116022	3 x 1,5 mm² Orange	0.178	70	11.6	68
116040	3 G 1,5 mm² Orange	0.179	70	11.6	68
116041	4 G 1,5 mm² Orange	0.22	77	12.6	90
116023	4 x 1,5 mm² Orange	0.219	77	12.6	90
116024	5 x 1,5 mm² Orange	0.301	86	14.3	113
116042	5 G 1,5 mm² Orange	0.302	86	14.3	113
116025	6 x 1,5 mm² Orange	0.345	92	15.3	135
116026	7 x 1,5 mm² Orange	0.354	92	15.3	158
116043	7 G 1,5 mm² Orange	0.355	92	15.3	158
116027	8 x 1,5 mm² Orange	0.444	102	17	180
116028	10 x 1,5 mm² Orange	0.513	118	19.6	225
116044	10 G 1,5 mm² Orange	0.513	118	19.6	225
116029	12 x 1,5 mm² Orange	0.563	122	20.2	270
116045	14 G 1,5 mm² Orange	0.649	131	21.7	315
116030	16 x 1,5 mm² Orange	0.727	120	22.9	360
116031	19 x 1,5 mm² Orange	0.845	150	24.9	428
116046	19 G 1,5 mm² Orange	0.844	150	24.9	428
116032	24 x 1,5 mm² Orange	1.014	164	27.3	540
116033	27 x 1,5 mm² Orange	1.117	173	28.9	608
116034	30 x 1,5 mm² Orange	1.223	182	30.2	675
116061	2 x 2,5 mm² Orange	0.177	72	12	75
116062	3 x 2,5 mm² Orange	0.223	77	12.7	113
116083	3 G 2,5 mm² Orange	0.224	77	12.7	113
116084	4 G 2,5 mm² Orange	0.312	87	14.3	150
116063	4 x 2,5 mm² Orange	0.312	87	14.4	150
116064	5 x 2,5 mm² Orange	0.373	95	15.7	188
116085	5 G 2,5 mm² Orange	0.374	95	15.7	188
116086	7 G 2,5 mm² Orange	0.455	102	16.9	263
116101	2 x 4 mm² Orange	0.219	78	13	120
116102	3 x 4 mm² Orange	0.317	86	14.3	180
116112	3 G 4 mm² Orange	0.318	86	14.3	180
116113	4 G 4 mm² Orange	0.394	94	15.6	240
116103	4 x 4 mm² Orange	0.393	94	15.6	240
116114	5 G 4 mm² Orange	0.484	104	17.2	300
116121	2 x 6 mm² Orange	0.307	89	14.7	180
116122	3 x 6 mm² Orange	0.398	94	15.6	270
116132	3 G 6 mm² Orange	0.399	94	15.6	270
116133	4 G 6 mm² Orange	0.502	103	17.1	360
116123	4 x 6 mm² Orange	0.5	103	17.1	360
116134	5 G 6 mm² Orange	0.617	114	18.9	450
116141	2 x 10 mm² Orange	0.408	98	16.2	300
116142	3 x 10 mm² Orange	0.536	103	17.1	450
116152	3 G 10 mm² Orange	0.537	103	17.1	450

MarineLine YOZp X-FRSW 0,6/1 kV

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile Load (N)
116153	4 G 10 mm² Orange	0.685	144	18.9	600
116143	4 x 10 mm² Orange	0.683	144	18.9	600
116154	5 G 10 mm² Orange	0.849	126	20.9	750

Low voltage cables

MarineLine YOZp X-FRSW EMC 0,6/1 kV

Properties

Application:
Low voltage fire resistant shipboard power cables with enhanced EMC properties for use in sensitive EMC areas and suitable for Variable Frequency Drive applications. Water spray /Water jet resistant to remain operational after a fire casualty and during fire-fighting efforts, i.e. to meet the concepts of Orderly Evacuation and Abandonment - OEA and Safe Return to Port - SRtP

Characteristics:
- Class 2 conductors (class 5 on request)
- Halogen free and low smoke, flame retardant
- Cable OD ≤ 20mm: Fire resistant according IEC 60331-2 (180 min test) + EN 50200:2015 Annex E (water spray test)
- Cable OD > 20mm: Fire resistant according IEC 60331-1 (180 min test) + BS 8491: 2008 (water jet test)
- 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
Conductor category	Class 2 = stranded
Material core insulation	Mica + XLHFFR
Construction outer shield	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
Fire resistant acc. IEC60331-2(180 min test) EN50200:2015 Annex **E(diam. ≤20mm)**	Yes
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

MarineLine YOZp X-FRSW 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)
117122	3 x 6 mm² Orange	0.407	94	15.6	270
117142	3 x 10 mm² Orange	0.543	103	17.1	450

Low voltage cables

MarineFlex YZp X-FRSW 0,6/1 kV

Properties

Application:
Lightweight, unarmoured, heavy duty low-voltage power cables with enhanced characteristics to withstand the effects of fire and fire-fighting efforts (sprinklers, hose spraying, etc.) in order to ensure the continuity of essential- and critical systems, i.e. to meet the concepts of Orderly Evacuation and Abandonment – OEA and Safe Return to Port – SRtP.

Characteristics:
- Flexible fire resistant class 5 conductor cable
- Lightweight
- Halogen free and low smoke
- Cable OD ≤ 20mm: Fire resistant according IEC 60331-2 (180 min test) + EN 50200:2015 Annex E (water spray test)
- Cable OD > 20mm: Fire resistant according IEC 60331-1 (180 min test) + BS 8491: 2008 (water jet test)
- Construction with copper tape barrier (for cable OD>20mm)
- 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 category	Class 5 = flexible
Material core insulation	Mica + XLHFFR
Screen over stranding	Lapped Copper 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
Fire resistant acc. IEC60331-1 (180 min test) BS8491:2008 (diameter > 20mm)	Yes
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

MarineFlex YZp X-FRSW 0,6/1 kV

22 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile Load (N)
115572	3 x 16 mm² Orange	1.019	137	22.8	720
115573	4 x 16 mm² Orange	1.249	150	25	960
115583	4 G 16 mm² Orange	1.243	150	25	960
115592	3 x 25 mm² Orange	1.429	161	26.7	1,125
115593	4 x 25 mm² Orange	1.758	176	29.3	1,500
115603	4 G 25 mm² Orange	1.761	176	29.3	1,500
115612	3 x 35 mm² Orange	1.78	176	29.3	1,575
115613	4 x 35 mm² Orange	2.204	194	32.2	2,100
115623	4 G 35 mm² Orange	2.208	194	32.2	2,100
115632	3 x 50 mm² Orange	1.093	199	33.1	2,250
115633	4 x 50 mm² Orange	1.303	220	36.6	3,000
115643	4 G 50 mm² Orange	1.307	220	36.6	3,000
115652	3 x 70 mm² Orange	3.212	227	37.8	3,150
115653	4 x 70 mm² Orange	4.084	251	41.8	4,200
115663	4 G 70 mm² Orange	4.089	251	41.8	4,200
115672	3 x 95 mm² Orange	4.056	252	42	4,275
115673	4 x 95 mm² Orange	5.173	279	46.5	5,700
115683	4 G 95 mm² Orange	5.159	279	46.5	5,700
115692	3 x 120 mm² Orange	4.951	278	46.3	5,400
115693	4 x 120 mm² Orange	6.293	306	51	7,200
115712	3 x 150 mm² Orange	6.092	304	50.6	6,750
115713	4 x 150 mm² Orange	7.749	336	56	9,000

Low voltage cables

MarineFlex YOZp X-FRSW 0,6/1 kV

Properties

Application:
Armoured, heavy duty low-voltage power cables with enhanced characteristics to withstand the effects of fire and fire-fighting efforts (sprinklers, hose spraying, etc.) in order to ensure the continuity of essential- and critical systems, i.e. to meet the concepts of Orderly Evacuation and Abandonment - OEA and Safe Return to Port - SRtP.

Characteristics:
- Flexible fire resistant class 5 conductor cable
- Lightweight
- Halogen free and low smoke
- Cable OD ≤ 20mm: Fire resistant according IEC 60331-2 (180 min test) + EN 50200:2015 Annex E (water spray test)
- Cable OD > 20mm: Fire resistant according IEC 60331-1 (180 min test) + BS 8491: 2008 (water jet test)
- 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
Conductor category	Class 5 = flexible
Material core insulation	Mica + XLHFFR
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
Fire resistant acc. IEC60331-2(180 min test) EN50200:2015 Annex E **(diam. ≤ 20mm)**	Yes
Fire resistant acc. IEC60331-1 (180 min test) BS8491:2008 (diameter > 20mm)	Yes
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

MarineFlex YOZp X-FRSW 0,6/1 kV

37 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile Load (N)
116550	1 x 10 mm² Orange	0.188	58	9.6	150
116552	3 x 10 mm² Orange	0.812	128	21.2	450
116553	4 x 10 mm² Orange	0.979	139	23.1	600
116570	1 x 16 mm² Orange	0.251	64	10.6	240
116572	3 x 16 mm² Orange	1.069	141	23.5	720
116573	4 x 16 mm² Orange	1.306	155	25.7	960
116590	1 x 25 mm² Orange	0.36	75	12.4	375
116592	3 x 25 mm² Orange	1.449	161	26.8	1,125
116593	4 x 25 mm² Orange	1.769	176	29.2	1,500
116610	1 x 35 mm² Orange	0.486	86	14.2	525
116612	3 x 35 mm² Orange	1.867	182	30.2	1,575
116622	3 G 35 mm² Orange	1.863	182	30.2	1,575
116613	4 x 35 mm² Orange	2.335	199	33.1	2,100
116624	5 G 35 mm² Orange	3.062	225	37.5	2,625
116630	1 x 50 mm² Orange	0.219	64	15.8	750
116632	3 x 50 mm² Orange	1.218	207	34.4	2,250
116642	3 G 50 mm² Orange	1.222	207	34.4	2,250
116633	4 x 50 mm² Orange	1.581	231	38.5	3,000
116644	5 G 50 mm² Orange	1.704	254	42.2	3,750
116650	1 x 70 mm² Orange	0.862	108	17.8	1,050
116652	3 x 70 mm² Orange	3.444	236	39.3	3,150
116662	3 G 70 mm² Orange	3.448	236	39.3	3,150
116653	4 x 70 mm² Orange	4.32	259	43.1	4,200
116664	5 G 70 mm² Orange	5.268	286	47.5	5,250
116670	1 x 95 mm² Orange	1.096	120	19.8	1,425
116672	3 x 95 mm² Orange	4.276	260	43.3	4,275
116682	3 G 95 mm² Orange	4.281	261	43.3	4,275
116673	4 x 95 mm² Orange	5.432	287	47.8	5,700
116684	5 G 95 mm² Orange	6.637	317	52.7	7,125
116690	1 x 120 mm² Orange	1.326	130	21.6	1,800
116692	3 x 120 mm² Orange	5.22	286	47.6	5,400
116693	4 x 120 mm² Orange	6.626	315	52.5	7,200
116710	1 x 150 mm² Orange	1.645	143	23.7	2,250
116712	3 x 150 mm² Orange	6.415	313	52.1	6,750
116713	4 x 150 mm² Orange	8.134	345	57.5	9,000
116730	1 x 185 mm² Orange	1.955	153	25.4	2,775
116750	1 x 240 mm² Orange	2.587	174	28.9	3,600

Low voltage cables

MarineFlex YOZp X-FRSW EMC 0,6/1 kV

Properties

Application:
Lightweight, fire resistant, armoured, flexible low voltage power cables for power and lighting applications in all ship areas where EMC protection is needed. Water jet resistant to remain operational after a fire casualty and during fire-fighting efforts, i.e. to meet the concepts of Orderly Evacuation and Abandonment – OEA and Safe Return to Port – SRtP.

Characteristics:
- Class 5 conductors
- For easy installation in tight spaces
- Halogen free and low smoke, flame retardant
- Cable OD > 20mm: Fire resistant according IEC 60331-1 (180 min test) + BS 8491: 2008 (water jet test)
- 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
Conductor category	Class 5 = flexible
Material core insulation	Mica + XLHFFR
Construction outer shield	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
Fire resistant acc. IEC60331-1 (180 min test) BS8491:2008 (diameter > 20mm)	Yes
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U0	0.6 kV
Nominal voltage U	1 kV
Test voltage	3.5 kV

MarineFlex YOZp X-FRSW EMC 0,6/1 kV

15 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile Load (N)
117552	3 x 10 mm² Orange	0.83	128	21.3	450
117569	3 x 10 mm² + 3 G 4 mm² Orange	1.68	169	28.1	450
117572	3 x 16 mm² Orange	1.088	142	23.6	720
117589	3 x 16 mm² + 3 G 4 mm² Orange	1.911	166	29.3	720
117592	3 x 25 mm² Orange	1.471	162	26.9	1,125
117609	3 x 25 mm² + 3 G 6 mm² Orange	1.936	189	31.4	1,125
117612	3 x 35 mm² Orange	1.891	182	30.3	1,575
117629	3 x 35 mm² + 3 G 6 mm² Orange	2.188	195	32.5	1,575
117632	3 x 50 mm² Orange	1.244	207	34.5	2,250
117649	3 x 50 mm² + 3 G 10 mm² Orange	1.808	225	37.5	2,250
117652	3 x 70 mm² Orange	3.473	237	39.4	3,150
117669	3 x 70 mm² + 3 G 16 mm² Orange	4.183	258	42.9	3,150
117672	3 x 95 mm² Orange	4.329	262	43.6	4,275
117689	3 x 95 mm² + 3 G 16 mm² Orange	4.797	270	44.9	4,275
117692	3 x 120 mm² Orange	5.283	287	47.7	5,400

Marine medium voltage power cables

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
Material core insulation	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	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 Umax	7.2 kV
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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)
33000	1 x 35 mm² Red	0.644	0,15	19	1,750
33001	1 x 50 mm² Red	0.786	0,16	20.3	2,500
33002	1 x 70 mm² Red	1.094	0,18	22.3	3,500
33003	1 x 95 mm² Red	1.279	0,19	23.8	4,750
33004	1 x 120 mm² Red	1.564	0,21	25.7	6,000
33005	1 x 150 mm² Red	1.838	0,22	27.1	7,500
33006	1 x 185 mm² Red	2.249	0,23	28.9	9,250
33007	1 x 240 mm² Red	2.867	0,26	31.9	12,000
33009	3 x 50 mm² Red	3.259	0,36	45	7,500
33010	3 x 70 mm² Red	4.142	0,39	49	10,500
33011	3 x 95 mm² Red	5.301	0,42	53.1	14,250
33012	3 x 120 mm² Red	6.051	0,46	57	18,000
33013	3 x 150 mm² Red	7.525	0,49	60.7	22,500
33014	3 x 185 mm² Red	8.418	0,52	64.6	27,750

Marine medium voltage power cables

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
Material core insulation	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	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	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 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C

MarinePower Y(Z)OZmv 6/10 kV

16 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 mm² Red	0.601	0,16	20.1	1,250
33100	1 x 35 mm² Red	0.714	0,17	21	1,750
33101	1 x 50 mm² Red	0.866	0,18	22.3	2,500
33102	1 x 70 mm² Red	1.097	0,19	24	3,500
33103	1 x 95 mm² Red	1.379	0,21	25.8	4,750
33104	1 x 120 mm² Red	1.654	0,22	27.7	6,000
33105	1 x 150 mm² Red	1.933	0,23	28.9	7,500
33106	1 x 185 mm² Red	2.343	0,25	30.8	9,250
33107	1 x 240 mm² Red	2.971	0,27	33.5	12,000
33114	1 x 300 mm² Red	3.47	0,28	35.5	15,000
33118	1 x 630 mm² Red	7.234	0,38	47.3	31,500
33109	3 x 50 mm² Red	3.563	0,39	49	7,500
33110	3 x 70 mm² Red	4.58	0,43	53.1	10,500
33111	3 x 95 mm² Red	5.571	0,46	57.7	14,250
33112	3 x 120 mm² Red	6.634	0,49	61.2	18,000
33113	3 X150 mm² Red	7.633	0,52	64.8	22,500

Marine medium voltage power cables

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
Material core insulation	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	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	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 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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 mm² Red	0.815	0,19	23.5	1,750
33201	1 x 50 mm² Red	0.97	0,2	24.8	2,500
33202	1 x 70 mm² Red	1.201	0,21	26.3	3,500
33203	1 x 95 mm² Red	1.494	0,23	28.2	4,750
33204	1 x 120 mm² Red	1.764	0,24	29.8	6,000
33205	1 x 150 mm² Red	2.063	0,25	31.5	7,500
33206	1 x 185 mm² Red	2.505	0,27	33.2	9,250
33207	1 x 240 mm² Red	3.256	0,29	36.5	12,000
33218	1 x 300 mm² Red	3.758	0,31	38.7	15,000
33208	3 x 35 mm² Red	3.696	0,41	51.8	5,250
33209	3 x 50 mm² Red	4.218	0,43	54.3	7,500
33210	3 x 70 mm² Red	5.05	0,49	60.7	10,500
33211	3 x 95 mm² Red	6.216	0,5	62.4	14,250
33212	3 x 120 mm² Red	7.224	0,54	66.9	18,000
33213	3 x 150 mm² Red	8.517	0,57	69.9	22,500

Marine medium voltage power cables

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
Material core insulation	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	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	12 kV
Nominal voltage U	20 kV
Nominal voltage Umax	24 kV
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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 mm² Red	0.898	0,2	25.4	1,750
33301	1 x 50 mm² Red	1.046	0,21	26.5	2,500
33302	1 x 70 mm² Red	1.309	0,23	28.5	3,500
33303	1 x 95 mm² Red	1.611	0,24	30.5	4,750
33304	1 x 120 mm² Red	1.894	0,26	32	6,000
33305	1 x 150 mm² Red	2.196	0,27	33.7	7,500
33306	1 x 185 mm² Red	2.729	0,29	36.1	9,250
33307	1 x 240 mm² Red	3.409	0,31	38.7	12,000
33320	1 x 400 mm² Red	4.832	0,35	43.9	20,000
33308	3 x 35 mm² Red	4.012	0,45	55.6	5,250
33309	3 x 50 mm² Red	4.577	0,48	59.5	7,500
33310	3 x 70 mm² Red	5.682	0,51	63.5	10,500
33311	3 x 95 mm² Red	6.687	0,54	67.6	14,250
33312	3 x 120 mm² Red	7.567	0,57	71	18,000

Marine medium voltage power cables

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
Material core insulation	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	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	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 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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 mm² Red	1.176	0,25	31	1,750
33401	1 x 50 mm² Red	1.333	0,26	32.1	2,500
33402	1 x 70 mm² Red	1.606	0,27	33.9	3,500
33403	1 x 95 mm² Red	1.916	0,29	35.8	4,750
33404	1 x 120 mm² Red	2.344	0,31	38.2	6,000
33405	1 x 150 mm² Red	2.66	0,32	39.5	7,500
33406	1 x 185 mm² Red	3.095	0,33	41.4	9,250
33407	1 x 240 mm² Red	3.618	0,34	42.8	12,000
33410	1 x 300 mm² Red	4.297	0,37	45.9	15,000
33412	1 x 400 mm² Red	5.238	0,39	49.1	20,000
33411	1 x 630 mm² Red	8.133	0,46	57.4	31,500
33408	3 x 35 mm² Red	5.446	0,55	69.1	5,250
33409	3 x 50 mm² Red	6.146	0,58	72.5	7,500

Marine medium voltage power cables

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
Material core insulation	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	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	6 kV
Nominal voltage U	10 kV
Nominal voltage Umax	12 kV
Minimum installation temperature	-5 °C
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C

MarinePowerFlex Y(Z)OZmv 6/10 kV

14 products

Part number	Construction	Product - Netto gewicht	Min bending radius after installation (m)	Outer diameter approx (mm)	Tensile load (N)
33119	1 x 35 mm² Red	0.734	0,18	22.5	1,750
33121	1 x 70 mm² Red	1.122	0,2	25.5	3,500
33122	1 x 95 mm² Red	1.407	0,22	27.7	4,750
33123	1 x 120 mm² Red	1.667	0,23	29.3	6,000
33124	1 x 150 mm² Red	1.958	0,25	31.1	7,500
33127	1 x 240 mm² Red	3.027	0,31	38.5	12,000
33128	3 x 16/16 mm² Red	2.301	0,35	43.7	2,400
33135	3 x 35 mm² Red	3.209	0,4	50.1	5,250
33129	3 x 50 mm² Red	3.819	0,43	53.3	7,500
33130	3 x 70 mm² Red	4.688	0,45	56.5	10,500
33131	3 x 95 mm² Red	5.707	0,49	61.6	14,250
33132	3 x 120 mm² Red	6.813	0,52	65.4	18,000
33133	3 x 150 mm² Red	7.821	0,56	69.5	22,500
33138	3 x 240 mm² Red	11.46	0,66	82.2	36,000

Marine medium voltage power cables

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
Material core insulation	Crosslinked polyethylene (XLPE)
Insulation shield	Semiconductive Compound with semiconductive tape
Earthscreen construction	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	8.7 kV
Nominal voltage U	15 kV
Nominal voltage Umax	17.5 kV
Minimum installation temperature	-5 °C
Max. operating temperature	70 °C
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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 mm² Red	0.868	0,21	26.2	2,500
33231	1 x 120 mm² Red	1.791	0,26	32.1	6,000
33235	1 x 300 mm² Red	3.818	0,34	42	15,000

Marine medium voltage power cables

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
Material core insulation	Crosslinked polyethylene (XLPE)
Insulation shield	Product dependent
Armouring	Yes
Earthscreen construction	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	18 kV
Nominal voltage U	30 kV
Nominal voltage Umax	36 kV
Minimum installation temperature	-5 °C
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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 mm² Red	2.112	0,31	38.3	4,750
33431	3 x 95 mm² Red	8.602	0,67	84	14,250

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
Material core insulation	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 Umax	7.2 kV
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C

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 mm² + 3 G 25 mm² Red	8.115	0,52	64.7	18,000
33137	3 x 150 mm² + 3 G 25 mm² Red	9.296	0,55	68.6	22,500

Marine medium voltage power cables

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
Material core insulation	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	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 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °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 mm² + 3 G 16 mm² Red	5.594	0,46	57.3	9,900
33142	3 x 120 mm² + 3 G 25 mm² Red	8.873	0,56	69.6	18,000
33143	3 x 150 mm² + 3 G 25 mm² Red	10.154	0,6	73.9	22,500

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
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	250 V
Test voltage	1,500 V

MarineCom YOZc 250 V

105 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 mm² Grey	0.058	39	6.6	15
16902	2 x 2 x 0,5 mm² Grey	0.098	56	9.4	30
16899	2 x 2 x 0,5 mm² (Quad) Grey	0.082	45	7.5	30
16903	4 x 2 x 0,5 mm² Grey	0.144	65	10.9	60
16904	6 x 2 x 0,5 mm² Grey	0.207	80	12.7	90
16905	7 x 2 x 0,5 mm² Grey	0.2	76	12.7	105
16906	8 x 2 x 0,5 mm² Grey	0.258	86	14.3	120
16907	10 x 2 x 0,5 mm² Grey	0.306	94	15.7	150
16908	12 x 2 x 0,5 mm² Grey	0.348	100	16.6	180
16909	14 x 2 x 0,5 mm² Grey	0.388	106	17.6	210
16919	10 x 3 x 0,5 mm² Grey	0.412	108	18	225
16910	19 x 2 x 0,5 mm² Grey	0.493	121	20.1	285
16920	14 x 3 x 0,5 mm² Grey	0.517	119	19.9	315
16911	24 x 2 x 0,5 mm² Grey	0.597	136	22.7	360
16912	27 x 2 x 0,5 mm² Grey	0.653	143	23.8	405
16921	19 x 3 x 0,5 mm² Grey	0.644	137	22.9	428
16913	30 x 2 x 0,5 mm² Grey	0.705	149	24.8	450
16922	24 x 3 x 0,5 mm² Grey	0.797	154	25.6	540
16914	37 x 2 x 0,5 mm² Grey	0.843	163	27.2	555
16271	1 x 2 x 0,75 mm² Grey	0.072	41	6.9	23
16272	1 x 3 x 0,75 mm² Grey	0.078	44	7.3	34
16273	2 x 2 x 0,75 mm² (Quad) Grey	0.093	47	7.8	45
16270	2 x 2 x 0,75 mm² Grey	0.113	61	9.9	45
16287	3 x 2 x 0,75 mm² Grey	0.139	64	10.7	68
16274	4 x 2 x 0,75 mm² Grey	0.169	73	12.5	90
16275	6 x 2 x 0,75 mm² Grey	0.282	86	14.8	135
16276	7 x 2 x 0,75 mm² Grey	0.281	86	14.6	158
16288	8 x 2 x 0,75 mm² Grey	0.309	91	15.2	180
16277	10 x 2 x 0,75 mm² Grey	0.377	104	17.3	225
16289	12 x 2 x 0,75 mm² Grey	0.429	109	18.5	270
16278	14 x 2 x 0,75 mm² Grey	0.482	116	20.2	315
16926	10 x 3 x 0,75 mm² Grey	0.499	117	19.5	338
16955	12 x 3 x 0,75 mm² Grey	0.558	131	20.5	473
16279	19 x 2 x 0,75 mm² Grey	0.592	135	22.5	428
16285	20 x 2 x 0,75 mm² Grey	0.638	92	23	450
16927	14 x 3 x 0,75 mm² Grey	0.63	131	21.8	473
16280	24 x 2 x 0,75 mm² Grey	0.756	150	24.8	540
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	0.076	45	7.3	30
16945	1 x 3 x 1,0 mm² Grey	0.088	46	7.7	45

Communication cables

MarineCom YOZc 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
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
16936	8 x 2 x 1,0 mm² Grey	0.363	96	16	240
16937	10 x 2 x 1,0 mm² Grey	0.449	109	18.2	300
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	1,080
16944	37 x 2 x 1,0 mm² Grey	1.277	190	31.7	1,110
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
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
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	1,080
16313	27 x 2 x 1,5 mm² Grey	1.39	199	33.2	1,215
16322	19 x 3 x 1,5 mm² Grey	1.414	193	32.1	1,283
16314	30 x 2 x 1,5 mm² Grey	1.534	209	34.9	1,350
16323	24 x 3 x 1,5 mm² Grey	2.183	215	35.8	1,620
16315	37 x 2 x 1,5 mm² Grey	2.309	230	38.3	1,665
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
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

MarineCom YOZc 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
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	1,050
16979	10 x 3 x 2,5 mm² Grey	1.181	174	28.8	1,125
16970	19 x 2 x 2,5 mm² Grey	1.458	194	32.4	1,425
16980	14 x 3 x 2,5 mm² Grey	1.553	193	32.1	1,575
16971	24 x 2 x 2,5 mm² Grey	2.243	217	36.2	1,800
16972	27 x 2 x 2,5 mm² Grey	2.457	228	38	2,025
16981	19 x 3 x 2,5 mm² Grey	2.478	221	36.8	2,138
16973	30 x 2 x 2,5 mm² Grey	2.316	240	40	2,250
16982	24 x 3 x 2,5 mm² Grey	2.663	247	41.1	2,700
16974	37 x 2 x 2,5 mm² Grey	2.785	263	43.8	2,775

Communication cables

Marine2Com YOZ2c 250 V

Properties

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

Characteristics:
- Twisted pairs, triples or quads, individual pair and overall screening 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
Stranding element	Product dependent
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	250 V
Test voltage	1,500 V

Marine2Com YOZ2c 250 V

96 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 mm² Grey	0.126	80	10	30
17224	4 x 2 x 0,5 mm² Grey	0.185	94	11.7	60
17225	6 x 2 x 0,5 mm² Grey	0.307	116	14.5	90
17226	7 x 2 x 0,5 mm² Grey	0.272	111	13.9	105
17227	8 x 2 x 0,5 mm² Grey	0.334	122	15.3	120
17228	10 x 2 x 0,5 mm² Grey	0.406	138	17.3	150
17282	7 x 3 x 0,5 mm² Grey	0.373	130	16.2	158
17229	12 x 2 x 0,5 mm² Grey	0.466	145	18.1	180
17230	14 x 2 x 0,5 mm² Grey	0.516	155	19.4	210
17283	10 x 3 x 0,5 mm² Grey	0.51	158	19.8	225
17231	19 x 2 x 0,5 mm² Grey	0.656	176	22	285
17284	14 x 3 x 0,5 mm² Grey	0.642	174	21.7	315
17232	24 x 2 x 0,5 mm² Grey	0.798	195	24.4	360
17233	27 x 2 x 0,5 mm² Grey	0.889	206	25.8	405
17285	19 x 3 x 0,5 mm² Grey	0.824	198	24.7	428
17234	30 x 2 x 0,5 mm² Grey	0.965	215	26.9	450
17286	24 x 3 x 0,5 mm² Grey	1.008	219	27.4	540
17235	37 x 2 x 0,5 mm² Grey	1.157	236	29.5	555
16329	1 x 2 x 0,75 mm² Grey	0.074	30	7	20
16348	1 x 3 x 0,75 mm² Grey	0.085	60	7.5	34
16290	2 x 2 x 0,75 mm² Grey	0.144	87	10.9	45
16291	4 x 2 x 0,75 mm² Grey	0.217	102	12.7	90
17290	2 x 3 x 0,75 mm² Grey	0.171	94	11.7	101
17291	4 x 3 x 0,75 mm² Grey	0.293	115	14.2	135
16293	7 x 2 x 0,75 mm² Grey	0.351	126	15.8	158
17237	8 x 2 x 0,75 mm² Grey	0.392	130	16.3	180
16294	10 x 2 x 0,75 mm² Grey	0.476	152	19	225
17238	12 x 2 x 0,75 mm² Grey	0.528	156	19.5	270
16295	14 x 2 x 0,75 mm² Grey	0.611	170	21.3	315
17293	10 x 3 x 0,75 mm² Grey	0.596	170	21.3	338
16296	19 x 2 x 0,75 mm² Grey	0.775	194	24.2	428
17294	14 x 3 x 0,75 mm² Grey	0.772	188	23.3	473
16297	24 x 2 x 0,75 mm² Grey	0.951	215	26.9	540
17239	27 x 2 x 0,75 mm² Grey	1.035	222	27.8	608
17295	19 x 3 x 0,75 mm² Grey	0.991	214	26.8	641
16298	30 x 2 x 0,75 mm² Grey	1.147	238	29.7	675
17296	24 x 3 x 0,75 mm² Grey	1.21	238	29.7	810
16299	37 x 2 x 0,75 mm² Grey	1.375	261	32.4	833
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
17245	6 x 2 x 1,0 mm² Grey	0.406	134	16.8	180
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
17249	12 x 2 x 1,0 mm² Grey	0.62	169	21.1	360

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 (N)
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	1,080
17255	37 x 2 x 1,0 mm² Grey	1.604	275	34.4	1,110
16347	1 x 2 x 1,5 mm² Grey	0.107	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	1,080
16343	27 x 2 x 1,5 mm² Grey	2.102	288	36	1,215
17315	19 x 3 x 1,5 mm² Grey	1.618	276	34.5	1,283
16344	30 x 2 x 1,5 mm² Grey	2.316	302	37.8	1,350
17316	24 x 3 x 1,5 mm² Grey	2.497	310	38.7	1,620
16345	37 x 2 x 1,5 mm² Grey	2.361	336	42	1,665
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
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	1,050
17323	10 x 3 x 2,5 mm² Grey	1.335	248	30.8	1,125
17271	19 x 2 x 2,5 mm² Grey	1.712	279	34.9	1,425
17324	14 x 3 x 2,5 mm² Grey	1.76	275	34.4	1,575

Marine2Com YOZ2c 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
17272	24 x 2 x 2,5 mm² Grey	2.273	314	39.2	1,800
17273	27 x 2 x 2,5 mm² Grey	2.505	330	41.2	2,025
17325	19 x 3 x 2,5 mm² Grey	2.447	317	39.6	2,138
17274	30 x 2 x 2,5 mm² Grey	2.741	346	43.2	2,250
17326	24 x 3 x 2,5 mm² Grey	3.032	354	44.2	2,700
17275	37 x 2 x 2,5 mm² Grey	3.737	381	47.6	2,775

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
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	250 V
Test voltage	1,500 V

MarineCom YZafc 250 V

73 products

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile load (N)
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
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
16707	1 x 3 x 0,75 mm² Grey	0.06	54	6.8	34
16708	1 x 2 x 0,75 mm² Grey	0.05	51	6.4	23
16709	2 x 2 x 0,75 mm² (Quad) Grey	0.072	58	7.3	45
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
16730	1 x 2 x 1,0 mm² Grey	0.057	54	6.8	30
16731	1 x 4 x 1,0 mm² Grey	0.089	63	8	60
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
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
16743	30 x 2 x 1,0 mm² Grey	0.906	222	27.7	900

Communication cables

MarineCom YZafc 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile load (N)
16744	37 x 2 x 1,0 mm² Grey	1.103	245	30.6	1,110
16830	1 x 2 x 1,5 mm² Grey	0.074	62	7.8	45
16831	1 x 4 x 1,5 mm² Grey	0.122	75	9.4	90
16832	2 x 2 x 1,5 mm² Grey	0.14	97	12.1	90
16833	4 x 2 x 1,5 mm² Grey	0.22	112	14	180
16834	6 x 2 x 1,5 mm² Grey	0.348	136	17	270
16836	8 x 2 x 1,5 mm² Grey	0.396	146	18.3	360
16837	10 x 2 x 1,5 mm² Grey	0.492	168	21	450
16838	12 x 2 x 1,5 mm² Grey	0.566	175	21.9	540
16839	14 x 2 x 1,5 mm² Grey	0.657	189	23.6	630
16840	19 x 2 x 1,5 mm² Grey	0.867	218	27.2	855
16841	24 x 2 x 1,5 mm² Grey	1.09	244	30.5	1,080
16842	27 x 2 x 1,5 mm² Grey	1.207	257	32.1	1,215
16843	30 x 2 x 1,5 mm² Grey	1.324	269	33.6	1,350
16844	37 x 2 x 1,5 mm² Grey	1.61	296	37	1,665
16850	1 x 2 x 2,5 mm² Grey	0.099	71	8.8	75
16851	1 x 4 x 2,5 mm² Grey	0.168	83	10.4	150
16852	2 x 2 x 2,5 mm² Grey	0.189	109	13.6	150
16854	6 x 2 x 2,5 mm² Grey	0.5	155	19.4	450
16855	7 x 2 x 2,5 mm² Grey	0.502	155	19.4	525
16856	8 x 2 x 2,5 mm² Grey	0.574	167	20.9	600
16857	10 x 2 x 2,5 mm² Grey	0.712	192	24	750
16858	12 x 2 x 2,5 mm² Grey	0.838	202	25.3	900
16859	14 x 2 x 2,5 mm² Grey	0.957	216	27	1,050
16860	19 x 2 x 2,5 mm² Grey	1.268	249	31.1	1,425
16861	24 x 2 x 2,5 mm² Grey	1.595	279	34.9	1,800
16862	27 x 2 x 2,5 mm² Grey	1.771	294	36.7	2,025
16863	30 x 2 x 2,5 mm² Grey	1.966	310	38.7	2,250
16864	37 x 2 x 2,5 mm² Grey	2.396	342	42.7	2,775

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
Stranding element	Pairs
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	250 V
Test voltage	1,500 V

Communication cables

Marine2Com YZ2afc 250 V

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Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (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
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
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	1,110
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
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
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

Marine2Com YZ2afc 250 V

Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
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	1,080
16820	27 x 2 x 1,5 mm² Grey	1.456	278	34.8	1,215
16821	30 x 2 x 1,5 mm² Grey	1.598	291	36.4	1,350
16822	37 x 2 x 1,5 mm² Grey	1.947	322	40.2	1,665
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
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	1,050
16878	19 x 2 x 2,5 mm² Grey	1.508	270	33.7	1,425
16879	24 x 2 x 2,5 mm² Grey	1.897	302	37.8	1,800
16880	27 x 2 x 2,5 mm² Grey	2.108	318	39.8	2,025
16881	30 x 2 x 2,5 mm² Grey	2.34	336	42	2,250
16882	37 x 2 x 2,5 mm² Grey	2.854	370	46.3	2,775

Communication cables

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
Material core insulation	Mica + XLHFFR
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	250 V
Test voltage	1,500 V

MarineCom YOZc X-FR 250 V

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Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
26500	1 x 2 x 0,75 mm² Orange	0.087	66	8.2	23
26501	1 x 4 x 0,75 mm² Orange	0.126	76	9.5	45
26502	2 x 2 x 0,75 mm² Orange	0.157	99	12.3	45
26499	2 x 2 x 0,75 mm² (Quad) Orange	0.127	75	9.5	45
26503	4 x 2 x 0,75 mm² Orange	0.272	117	14.6	90
26505	7 x 2 x 0,75 mm² Orange	0.391	140	17.5	158
26507	10 x 2 x 0,75 mm² Orange	0.529	172	21.4	225
26508	12 x 2 x 0,75 mm² Orange	0.598	180	22.5	270
26509	14 x 2 x 0,75 mm² Orange	0.668	191	23.8	315
26510	19 x 2 x 0,75 mm² Orange	0.847	218	27.2	428
26511	24 x 2 x 0,75 mm² Orange	1.062	245	30.6	540
26526	1 x 2 x 1,0 mm² Orange	0.098	70	8.7	30
26541	1 x 3 x 1,0 mm² Orange	0.117	73	9.1	45
26527	2 x 2 x 1,0 mm² (Quad) Orange	0.146	81	10.1	60
26532	8 x 2 x 1,0 mm² Orange	0.484	158	19.8	240
26533	10 x 2 x 1,0 mm² Orange	0.593	180	22.5	300
26534	12 x 2 x 1,0 mm² Orange	0.682	190	23.7	360
26535	14 x 2 x 1,0 mm² Orange	0.766	202	25.2	420
26545	10 x 3 x 1,0 mm² Orange	0.821	208	26	450
26536	19 x 2 x 1,0 mm² Orange	0.988	231	28.9	570
26546	14 x 3 x 1,0 mm² Orange	1.062	230	28.8	630
26537	24 x 2 x 1,0 mm² Orange	1.219	258	32.2	720
26538	27 x 2 x 1,0 mm² Orange	1.342	271	33.9	810
26547	19 x 3 x 1,0 mm² Orange	1.392	266	33.2	855
26539	30 x 2 x 1,0 mm² Orange	1.798	288	36	900
26548	24 x 3 x 1,0 mm² Orange	1.831	298	37.2	1,080
26540	37 x 2 x 1,0 mm² Orange	1.888	315	39.4	1,110
26550	1 x 2 x 1,5 mm² Orange	0.122	78	9.7	45
26551	2 x 2 x 1,5 mm² (Quad) Orange	0.183	90	11.2	90
26552	2 x 2 x 1,5 mm² Orange	0.255	119	14.9	90
26553	4 x 2 x 1,5 mm² Orange	0.382	140	17.5	180
26566	2 x 3 x 1,5 mm² Orange	0.32	129	16.2	203
26567	4 x 3 x 1,5 mm² Orange	0.524	156	19.5	270
26554	6 x 2 x 1,5 mm² Orange	0.581	168	21	270
26525	7 x 2 x 1,5 mm² Orange	0.561	166	20.8	315
26555	8 x 2 x 1,5 mm² Orange	0.633	178	22.3	360
26556	10 x 2 x 1,5 mm² Orange	0.79	206	25.7	450
26568	7 x 3 x 1,5 mm² Orange	0.797	195	24.4	473
26557	12 x 2 x 1,5 mm² Orange	0.895	214	26.8	540
26558	14 x 2 x 1,5 mm² Orange	1.012	229	28.6	630
26569	10 x 3 x 1,5 mm² Orange	1.089	238	29.8	675
26559	19 x 2 x 1,5 mm² Orange	1.326	263	32.9	855
26570	14 x 3 x 1,5 mm² Orange	1.435	266	33.2	945
26560	24 x 2 x 1,5 mm² Orange	1.75	295	36.9	1,080

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)
26561	27 x 2 x 1,5 mm² Orange	1.939	312	39	1,215
26571	19 x 3 x 1,5 mm² Orange	2.016	309	38.6	1,283
26562	30 x 2 x 1,5 mm² Orange	2.123	326	40.8	1,350
26572	24 x 3 x 1,5 mm² Orange	2.462	342	42.8	1,620
26563	37 x 2 x 1,5 mm² Orange	2.553	361	45.1	1,665
26575	1 x 2 x 2,5 mm² Orange	0.147	84	10.5	75
26565	1 x 3 x 2,5 mm² Orange	0.191	90	11.3	113
26576	2 x 2 x 2,5 mm² (Quad) Orange	0.233	99	12.3	150
26577	2 x 2 x 2,5 mm² Orange	0.327	135	16.8	150
26578	4 x 2 x 2,5 mm² Orange	0.506	158	19.7	450
26591	2 x 3 x 2,5 mm² Orange	0.411	145	18.1	338
26592	4 x 3 x 2,5 mm² Orange	0.664	172	21.5	450
26579	6 x 2 x 2,5 mm² Orange	0.725	188	23.5	450
26580	7 x 2 x 2,5 mm² Orange	0.763	188	23.5	450
26581	8 x 2 x 2,5 mm² Orange	0.861	203	25.4	600
26582	10 x 2 x 2,5 mm² Orange	1.057	232	29	750
26593	7 x 3 x 2,5 mm² Orange	1.075	220	27.4	788
26583	12 x 2 x 2,5 mm² Orange	1.224	244	30.5	900
26584	14 x 2 x 2,5 mm² Orange	1.386	261	32.6	1,050
26594	10 x 3 x 2,5 mm² Orange	1.486	268	33.3	1,125
26585	19 x 2 x 2,5 mm² Orange	1.948	303	37.9	1,425
26595	14 x 3 x 2,5 mm² Orange	2.082	301	37.6	1,575
26586	24 x 2 x 2,5 mm² Orange	2.402	338	42.2	1,800
26587	27 x 2 x 2,5 mm² Orange	2.668	357	44.6	2,025
26596	19 x 3 x 2,5 mm² Orange	2.727	346	43.2	2,138
26588	30 x 2 x 2,5 mm² Orange	2.939	374	46.7	2,250
26597	24 x 3 x 2,5 mm² Orange	3.37	385	48.1	2,700
26589	37 x 2 x 2,5 mm² Orange	3.563	414	51.7	2,775

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
Material core insulation	Mica + XLHFFR
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	250 V
Test voltage	1,500 V

Communication cables

Marine2Com YOZ2c X-FR 250 V

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Part number	Construction	Net weight (kg/m)	Min bending radius after installation (mm)	Outer diameter approx (mm)	Tensile load (N)
26600	1 x 2 x 0,75 mm² Orange	0.098	68	8.5	23
26601	1 x 4 x 0,75 mm² Orange	0.132	77	9.6	45
26602	2 x 2 x 0,75 mm² Orange	0.19	106	13.2	45
26603	4 x 2 x 0,75 mm² Orange	0.327	128	15.9	90
26604	6 x 2 x 0,75 mm² Orange	0.466	150	18.8	135
26605	7 x 2 x 0,75 mm² Orange	0.468	150	18.8	158
26608	12 x 2 x 0,75 mm² Orange	0.723	195	24.3	270
26610	19 x 2 x 0,75 mm² Orange	1.043	234	29.3	428
26611	24 x 2 x 0,75 mm² Orange	1.286	258	32.3	540
26616	1 x 4 x 1,0 mm² Orange	0.146	81	10.1	60
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
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
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	1,080
26629	37 x 2 x 1,0 mm² Orange	2.271	343	42.9	1,110
26630	1 x 2 x 1,5 mm² Orange	0.128	79	9.8	45
26631	1 x 4 x 1,5 mm² Orange	0.191	91	11.3	90
26632	2 x 2 x 1,5 mm² Orange	0.297	130	16.2	90
26711	2 x 3 x 1,5 mm² Orange	0.369	141	17.6	135
26633	4 x 2 x 1,5 mm² Orange	0.459	151	19	180
26712	4 x 3 x 1,5 mm² Orange	0.572	167	20.8	270
26634	6 x 2 x 1,5 mm² Orange	0.64	183	22.8	270
26635	7 x 2 x 1,5 mm² Orange	0.67	183	22.8	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	0.889	209	26.1	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	1,080
26642	27 x 2 x 1,5 mm² Orange	2.263	338	42.3	1,215
26716	19 x 3 x 1,5 mm² Orange	2.227	325	40.6	1,283
26643	30 x 2 x 1,5 mm² Orange	2.468	356	44.5	1,350
26717	24 x 3 x 1,5 mm² Orange	2.759	364	45.5	1,620
26644	37 x 2 x 1,5 mm² Orange	2.967	398	49.8	1,665

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 (N)
26645	1 x 2 x 2,5 mm² Orange	0.157	84	10.6	75
26647	2 x 2 x 2,5 mm² Orange	0.375	145	18.1	150
26721	2 x 3 x 2,5 mm² Orange	0.457	155	19.4	225
26648	4 x 2 x 2,5 mm² Orange	0.578	170	21.1	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	0.833	204	25.5	450
26650	7 x 2 x 2,5 mm² Orange	0.882	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	1,050
26724	10 x 3 x 2,5 mm² Orange	1.794	290	36.3	1,125
26655	19 x 2 x 2,5 mm² Orange	2.235	326	40.8	1,425
26725	14 x 3 x 2,5 mm² Orange	2.306	322	40.2	1,575
26656	24 x 2 x 2,5 mm² Orange	2.768	366	45.7	1,800
26657	27 x 2 x 2,5 mm² Orange	3.061	385	48.1	2,025
26726	19 x 3 x 2,5 mm² Orange	3.021	370	46.2	2,138
26658	30 x 2 x 2,5 mm² Orange	3.383	405	50.6	2,250
26727	24 x 3 x 2,5 mm² Orange	3.756	414	51.7	2,700
26659	37 x 2 x 2,5 mm² Orange	4.061	445	55.6	2,775

Communication cables

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
Material core insulation	Mica + XLHFFR
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	250 V
Test voltage	1,500 V

MarineCom YZafc X-FR 250 V

12 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 mm² Orange	0.113	92	11.5	30
26802	1 x 2 x 0,75 mm² Orange	0.065	62	7.7	225
26816	2 x 2 x 0,75 mm² (Quad) Orange	0.097	71	8.8	45
26801	2 x 2 x 0,75 mm² Orange	0.123	95	11.8	45
26803	4 x 2 x 0,75 mm² Orange	0.196	112	13.9	90
26805	7 x 2 x 0,75 mm² Orange	0.297	135	16.8	158
26807	10 x 2 x 0,75 mm² Orange	0.41	167	20.5	225
26809	14 x 2 x 0,75 mm² Orange	0.551	185	23.1	315
26810	19 x 2 x 0,75 mm² Orange	0.713	212	26.5	428
26811	24 x 2 x 0,75 mm² Orange	0.881	236	29.5	540
26841	1 x 3 x 1,0 mm² Orange	0.095	70	8.6	45
26845	1 x 2 x 1,5 mm² Orange	0.095	74	9.2	90

Communication cables

MarineCom YOZc X-FRSW 250 V

Properties

Application:
Lightweight, armoured, control, instrumentation, tele- and data cables with enhanced characteristics to withstand the effects of fire and fire-fighting efforts (sprinklers, hose spraying, etc.) in order to ensure the continuity of essential- and critical systems, i.e. to meet the concepts of Orderly Evacuation and Abandonment – OEA and Safe Return to Port – SRtP.

Characteristics:
- Twisted pairs, triples or quads
- Perfect electrical properties and low capacitance for minimal signal loss
- Cable OD ≤ 20mm: Fire resistant according IEC 60331-2 (180 min test) + EN 50200:2015 Annex E (water spray test)
- Cable OD > 20mm: Fire resistant according IEC 60331-1 (180 min test) + BS 8491: 2008 (water jet test)
- Extra mechanical protection and reduced EMI due to the tinned copper braided screen
- Different colour outer sheaths, other than orange, available on request

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

Specifications

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Conductor category	Class 2 = stranded
Material core insulation	Mica + XLHFFR
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	250 V

MarineCom YOZc X-FRSW 250 V

15 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile load (N)
121050	1 x 2 x 0,75 mm² Orange	0.104	75	9.3	23
121052	2 x 2 x 0,75 mm² Orange	0.229	119	14.8	45
121054	4 x 2 x 0,75 mm² Orange	0.347	139	17.3	90
121057	7 x 2 x 0,75 mm² Orange	0.486	166	20.7	158
121060	10 x 2 x 0,75 mm² Orange	0.68	203	25.3	225
121064	14 x 2 x 0,75 mm² Orange	0.868	228	28.4	315
121069	19 x 2 x 0,75 mm² Orange	1.108	260	32.5	428
121051	2 x 2 x 0,75 mm² (Quad) Orange	0.152	87	10.8	45
121150	1 x 2 x 1,5 mm² Orange	0.148	90	11.2	45
121152	2 x 2 x 1,5 mm² Orange	0.318	141	17.6	90
121154	4 x 2 x 1,5 mm² Orange	0.494	165	20.6	180
121157	7 x 2 x 1,5 mm² Orange	0.726	200	25	315
121160	10 x 2 x 1,5 mm² Orange	1.016	245	30.6	450
121164	14 x 2 x 1,5 mm² Orange	1.311	276	34.4	630
121169	19 x 2 x 1,5 mm² Orange	1.828	322	40.2	855

Communication cables

Marine2Com YOZ2c X-FRSW 250 V

Properties

Application:
Lightweight, individual pair and overall screened, armoured, control, instrumentation, tele- and data cables with enhanced characteristics to withstand the effects of fire and fire-fighting efforts (sprinklers, hose spraying, etc.) in order to ensure the continuity of essential- and critical systems, i.e. to meet the concepts of Orderly Evacuation and Abandonment – OEA and Safe Return to Port – SRtP.

Characteristics:
•Twisted pairs, triples or quads, individual pair and overall screening with both a stranded tinned copper drain wire
•Cable OD ≤ 20mm: Fire resistant according IEC 60331-2 (180 min test) + EN 50200:2015 Annex E (water spray test)
•Cable OD > 20mm: Fire resistant according IEC 60331-1 (180 min test) + BS 8491: 2008 (water jet test)
• Halogen-free and low smoke
•Extra mechanical protection and reduced EMI due to the tinned copper braided screen
•Different colour outer sheaths, other than orange, available on request

Core identification:
• Pairs: 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
Material core insulation	Mica + XLHFFR
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	250 V

Marine2Com YOZ2c X-FRSW 250 V

8 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile load (N)
121551	1 x 2 x 0,75 mm² Orange	0.114	77	9.6	23
121552	2 x 2 x 0,75 mm² Orange	0.265	127	15.8	45
121554	4 x 2 x 0,75 mm² Orange	0.397	148	18.4	90
121557	7 x 2 x 0,75 mm² Orange	0.583	179	22.3	158
121560	10 x 2 x 0,75 mm² Orange	0.793	216	27	225
121564	14 x 2 x 0,75 mm² Orange	1.029	244	30.5	315
121652	2 x 2 x 1,5 mm² Orange	0.361	152	18.9	90
121654	4 x 2 x 1,5 mm² Orange	0.572	180	22.4	180

Communication cables

MarineCom YZafc X-FRSW 250 V

Properties

Application:
Lightweight, screened, control, instrumentation, tele- and data cables with enhanced characteristics to withstand the effects of fire and fire-fighting efforts (sprinklers, hose spraying, etc.) in order to ensure the continuity of essential- and critical systems, i.e. to meet the concepts of Orderly Evacuation and Abandonment – OEA and Safe Return to Port – SRtP.

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
•Cable OD ≤ 20mm: Fire resistant according IEC 60331-2 (180 min test) + EN 50200:2015 Annex E (water spray test)
•Cable OD > 20mm: Fire resistant according IEC 60331-1 (180 min test) + BS 8491: 2008 (water jet test)
•Different colour outer sheaths, other than orange, available on request

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

Specifications

Standardization	IEC 60092-350/-360/-376
Conductor material	Copper
Conductor category	Class 2 = stranded
Material core insulation	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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	250 V

MarineCom YZafc X-FRSW 250 V

14 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile load (N)
120050	1 x 2 x 0,75 mm² Orange	0.082	72	9	225
120051	2 x 2 x 0,75 mm² (Quad) Orange	0.117	81	10.1	45
120052	2 x 2 x 0,75 mm² Orange	0.155	112	13.9	45
120054	4 x 2 x 0,75 mm² Orange	0.247	130	16.2	90
120057	7 x 2 x 0,75 mm² Orange	0.376	159	19.8	158
120060	10 x 2 x 0,75 mm² Orange	0.534	194	24.2	225
120064	14 x 2 x 0,75 mm² Orange	0.713	220	27.5	315
120069	19 x 2 x 0,75 mm² Orange	0.918	253	31.6	428
120150	1 x 2 x 1,5 mm² Orange	0.112	84	10.5	45
120152	2 x 2 x 1,5 mm² Orange	0.226	134	16.7	90
120154	4 x 2 x 1,5 mm² Orange	0.383	158	19.7	180
120157	7 x 2 x 1,5 mm² Orange	0.581	192	23.9	315
120164	14 x 2 x 1,5 mm² Orange	1.122	268	33.5	630
120169	19 x 2 x 1,5 mm² Orange	1.478	310	38.7	855

Communication cables

Marine2Com YZ2afc X-FRSW 250 V

Properties

Application:
Lightweight, individual and overall screened, control, instrumentation, tele- and data cables with enhanced characteristics to withstand the effects of fire and fire-fighting efforts (sprinklers, hose spraying, etc.) in order to ensure the continuity of essential- and critical systems, i.e. to meet the concepts of Orderly Evacuation and Abandonment – OEA and Safe Return to Port – SRtP.

Characteristics:
•Twisted pairs, triples or quads, individual and overall screening with a stranded tinned copper drain wire
•Cable OD ≤ 20mm: Fire resistant according IEC 60331-2 (180 min test) + EN 50200:2015 Annex E (water spray test)
•Cable OD > 20mm: Fire resistant according IEC 60331-1 (180 min test) + BS 8491: 2008 (water jet test)
•Different colour outer sheaths, other than orange, available on request

Core identification:
• Pairs : 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	Pairs
Material core insulation	Mica + XLHFFR
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
Insulation integrity according to IEC 60331	Yes
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	250 V

Marine2Com YZ2afc X-FRSW 250 V

8 products

Part number	Construction	Net weight (kg/m)	Min. bending radius after installation (mm)	Outer diameter approx. (mm)	Tensile load (N)
120552	2 x 2 x 0,75 mm² Orange	0.176	119	14.8	45
120554	4 x 2 x 0,75 mm² Orange	0.292	140	17.4	90
120557	7 x 2 x 0,75 mm² Orange	0.439	169	21.1	158
120560	10 x 2 x 0,75 mm² Orange	0.634	208	26	225
120564	14 x 2 x 0,75 mm² Orange	0.835	235	29.3	315
120569	19 x 2 x 0,75 mm² Orange	1.101	272	33.9	428
120652	2 x 2 x 1,5 mm² Orange	0.252	144	17.9	90
120654	4 x 2 x 1,5 mm² Orange	0.428	170	21.2	180

Signal cables

MarineSignal YZs 250 V

Properties

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

Characteristics:
- Class 2 conductors
- Lightweight, reduced diameter
- Halogen-free and low smoke, flame retardant
- Excellent abrasion resistance
- Different 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
Material core insulation	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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	0.25 kV
Test voltage	1.5 kV

MarineSignal YZs 250 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 mm² Grey	0.042	25	6.3	23
16211	3 x 0,75 mm² Grey	0.053	26	6.6	34
16212	4 x 0,75 mm² Grey	0.064	28	7.1	45
16213	5 x 0,75 mm² Grey	0.078	31	7.7	56
16214	7 x 0,75 mm² Grey	0.099	34	8.6	79
16215	12 x 0,75 mm² Grey	0.155	45	11.2	135
16216	19 x 0,75 mm² Grey	0.233	54	13.5	214
16217	27 x 0,75 mm² Grey	0.321	63	15.8	304
16218	37 x 0,75 mm² Grey	0.428	73	18.2	416
16220	2 x 1,0 mm² Grey	0.049	27	6.7	30
16221	3 x 1,0 mm² Grey	0.062	28	6.9	45
16222	4 x 1,0 mm² Grey	0.076	31	7.7	60
16223	5 x 1,0 mm² Grey	0.094	33	8.2	75
16230	6 x 1,0 mm² Grey	0.114	36	9.1	90
16224	7 x 1,0 mm² Grey	0.12	36	9.1	105
16225	12 x 1,0 mm² Grey	0.197	48	12	180
16226	19 x 1,0 mm² Grey	0.293	59	14.8	285
16227	27 x 1,0 mm² Grey	0.403	69	17.3	405
16228	37 x 1,0 mm² 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
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	0.25 kV
Test voltage	1.5 kV

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 mm² Grey	0.068	28	6.9	23
16242	3 x 0,75 mm² Grey	0.078	29	7.3	34
16243	4 x 0,75 mm² Grey	0.09	31	7.8	45
16244	5 x 0,75 mm² Grey	0.113	34	8.6	56
16245	7 x 0,75 mm² Grey	0.131	37	9.2	79
16246	12 x 0,75 mm² Grey	0.202	47	11.8	135
16247	19 x 0,75 mm² Grey	0.322	59	14.8	214
16248	27 x 0,75 mm² Grey	0.426	68	17.1	304
16249	37 x 0,75 mm² Grey	0.553	78	19.4	416
16250	2 x 1,0 mm² Grey	0.075	29	7.3	30
16251	3 x 1,0 mm² Grey	0.088	30	7.6	45
16252	4 x 1,0 mm² Grey	0.106	33	8.2	60
16253	5 x 1,0 mm² Grey	0.129	36	9.1	75
16240	6 x 1,0 mm² Grey	0.149	39	9.8	90
16254	7 x 1,0 mm² Grey	0.155	39	9.8	105
16259	10 x 1,0 mm² Grey	0.217	49	12.2	150
16255	12 x 1,0 mm² Grey	0.241	50	12.6	180
16256	19 x 1,0 mm² Grey	0.384	63	15.8	285
16257	27 x 1,0 mm² Grey	0.517	73	18.2	405
16258	37 x 1,0 mm² Grey	0.66	83	20.8	555
17185	2 x 1,5 mm² Grey	0.095	33	8.2	45
17186	3 x 1,5 mm² Grey	0.117	35	8.8	68
17187	3 G 1,5 mm² Grey	0.113	34	8.6	68

Signal cables

MarineSignal+ YZs 250 V

Properties

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

Characteristics:
- Class 2 conductors
- Extruded inner bedding for perfectly round shaped cable
- Halogen-free and low smoke, flame retardant
- Perfect abrasion resistance & suitable for heavy-duty application
- Different 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
Material core insulation	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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	0.25 kV
Test voltage	1.5 kV

MarineSignal+ YZs 250 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 mm² Grey	0.063	27	6.7	23
16232	3 x 0,75 mm² Grey	0.072	28	7	34
16233	4 x 0,75 mm² Grey	0.083	30	7.5	45
16234	5 x 0,75 mm² Grey	0.099	33	8.2	56
16236	3 x 1,0 mm² Grey	0.084	30	7.4	45
16237	4 x 1,0 mm² Grey	0.099	33	8.2	60
16238	5 x 1,0 mm² 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
Material core insulation	Crosslinked polyethylene (XLPE)
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
Max. conductor temperature	90 °C
Permitted cable outer temperature during assembling/handling	-20 / 50 °C
Permitted cable outer temperature after assembling without vibration	-40 / 70 °C
Transportation and storage temperature	-40 / 50 °C
Nominal voltage U	0.25 kV
Test voltage	1.5 kV

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 mm² Grey	0.099	31	7.8	23
16262	3 x 0,75 mm² Grey	0.111	32	8.1	34
16263	4 x 0,75 mm² Grey	0.129	36	8.9	45
16264	5 x 0,75 mm² Grey	0.145	38	9.4	56
16265	2 x 1,0 mm² Grey	0.109	32	8.1	30
16266	3 x 1,0 mm² Grey	0.125	34	8.6	45
16267	4 x 1,0 mm² Grey	0.141	37	9.2	60
16268	5 x 1,0 mm² Grey	0.167	40	9.9	75

Cat 5 & Cat 6 & Cat 7

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 suchs as Ehternet

Characteristics:
- Available in stranded (AWG 24/7 CAT 5)conductors
- Halogen free and low smoke, flame retardant
- Suitable for POE+ applications
- DNV certified
- Different colour outher sheaths, other than grey , available on request

Core identification:
- White/Blue, White/Orange, White/Green, White/Brown

Specifications

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**
Material core insulation	**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 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**
Transportation and storage temperature	**-40 / 85 °C**

Cat 5E S/FTP Marine Approved

3 products

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

Cat 5 & Cat 6 & Cat 7

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 CAT 6A) 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

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
Material core insulation	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
Transportation and storage temperature	-40 / 85 °C

Cat.6A S/FTP Marine Approved

2 products

Part number	Construction	Net weight (kg/m)	Outer diameter approx. (mm)	Tensil load e (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 5 & Cat 6 & Cat 7

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 IEC 60331-23 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

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
Material core insulation	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
Halogen free	IEC 60754-1 / IEC 60754-2
Low smoke	IEC 61034-1 & IEC 61034-2
Fire resistant	IEC 60331-23
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 / 90 °C
Transportation and storage temperature	-40 / 90 °C

Cat.6A S/FTP Marine Approved Fire Resistant

1 products

Part number	Construction	Net weight (kg/m)	Outer diameter approx. (mm)	Tensil load e (N)
24033	4x2xAWG 23/1 HFFR-LS Grey	0.1	11	110

Cat 5 & Cat 6 & Cat 7

Cat.7 S/FTP Marine Approved

Properties

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

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

Core identification:
• White/Blue, White/Orange, White/Green, White/Brown

Specifications

Suitable as computerdata cable	Yes
Standardization	BS EN 50288-4, IEC 61156-5, UL Subject444
Conductor material	Copper
Conductor category	Product dependent
Stranding element	Pairs
Material core insulation	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
Transportation and storage temperature	-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)
24016	4 x 2 x AWG 22/7 HFFR-LS Grey	0.08	8.3	110
24017	4 x 2 x AWG 22/7 HFFR-LS Lila/Purple	0.08	8.3	110
24020	4 x 2 x AWG 23/1 HFFR-LS Black UV resistant	0.078	8.1	110
24021	4 x 2 x AWG 23/1 HFFR-LS Grey	0.078	7.8	100
24022	4 x 2 x AWG 23/1 HFFR-LS Lila/Purple	0.078	8.1	110

Cat 5 & Cat 6 & Cat 7

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

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
Individual screen type	Al/Polyester foil
Core insulation material	PO (Polyolefin)
Overall screen type	Tinned copper braiding
Sheath material	LSZH
Flame retardant	IEC 60332-1 / IEC 60332-3-22 Cat. A
Halogen free	IEC 60754-1 / IEC 60754-2
Low smoke	IEC 61034-1 & IEC 61034-2
Fire resistant	IEC 60331-23
Circuit integrity (acc. EN50200 or EN50362)	FE 180
UV-protection	None
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
Transportation and storage temperature	-40 / 85 °C

Cat.7 S/FTP Marine Approved Fire Resistant

1 products

Part number	Construction	Net weight (kg/m)	Outer diameter approx. (mm)	Tensil load e (N)
24034	4 x 2 x AWG 23/1 HFFR-LS Grey	0.1	11	110

Cat 5 & Cat 6 & Cat 7

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

Suitable as computer data cable	Yes
Standardization	BS EN 50288-4, IEC 61156-5, UL Subject444
Conductor material	Copper
Conductor category	Class 1 = solid
Stranding element	Pairs
Material core insulation	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
Transportation and storage temperature	-40 / 85 °C

Cat.7A S/FTP Marine Approved

1 products

Part number	Construction	Net weight (kg/m)	Outer diameter approx. (mm)	Tensil load e (N)
24023	4 x 2 x AWG 23/1 HFFR-LS Grey	0.078	8.3	110

Connector

MarineConnect Cat 6A

Properties

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

Characteristics:
•Toolless termination through a wiring cap equipped with a separator in order to facilitate the wire management and to reduce the unsplitting lenght
• Component certifed 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, bue 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

OPTIMAL DATA AND **INFORMATION PROVISION** FROM TKF

The industry is increasingly required to provide substantiation about materials used in ships and additional information, such as country of origin, production data, safety, REACH & ROHS, etc. from products. New European guidelines, the "GUIDELINES FOR THE DEVELOPMENT OF INVENTORY OF HAZARDOUS MATERIALS" adopted by the International Maritime Organization (IMO) (reference MEPC 269-68), require detailed information about products to be able to recycle ships "green". To support our customers in this, we at TKF work hard on optimal data and information sharing. In this way we help customers with:

- Automation of the engineering process
- Information management

For more information and what we can do for you in the field of data and information provision, please contact our product manager.

Marten Carol
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T: +31 53 573 2145

TKF product data has been optimized and meets the new European standards for supplying product/material data.

TECHNICAL PRODUCT INFORMATION

Materials

TKF uses high-quality insulation materials for all its marine cables, which allows a continuous conductor temperature of 90 °C and withstands a temporary overload temperature of 130 °C and a 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
X-FRSW types	Special grade Mica + 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. On request, special sheath materials can be applied (e.g. TPU or SHF2) for more extreme conditions.

UV-resistance

TKF marine and offshore cables have been tested and pass the requirements for UV-resistance according to ISO 4892-2, and surpass the requirements of UL 1581:1200 & HD 605.

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

International standards

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

International standards

[illegible]	[illegible]
[illegible]	[illegible]
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TECHNICAL PRODUCT INFORMATION

Installation instructions*

Bending radius - Bending Radii according to IEC60092-352

*6D for defined circuit integrity

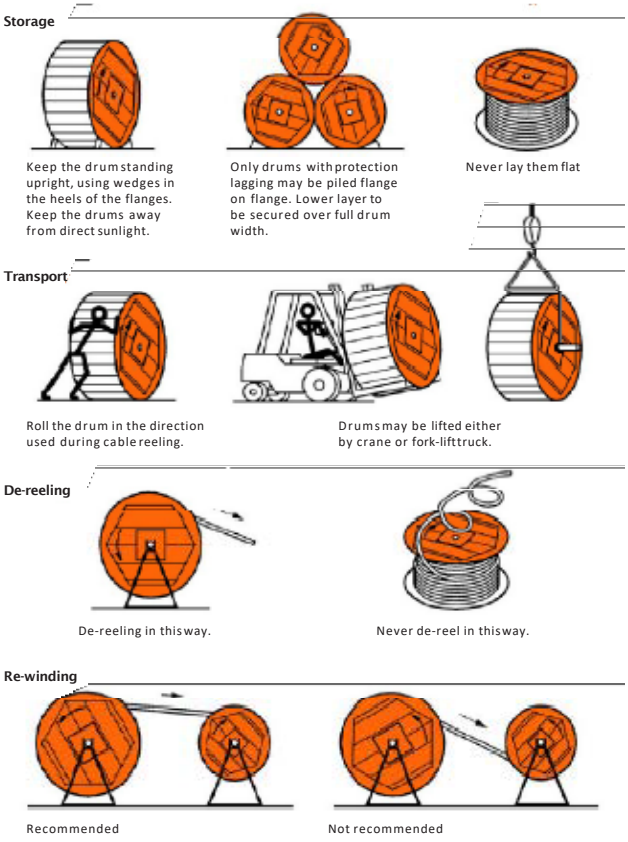
Pulling Force

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

Max. Pulling Force (N) = 15 × 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.



Storage / Installationtemperature

TKF marine cables should preferably be stored inside. When storing outside the cables should be protected against direct sunlight with suitable protective packaging such as plastic sheeting. Storage and transport temperatures of TKF marine cables may not exceed the temperature of 50 degrees Celsius or be lower than minus 40 degrees Celsius. The permitted cable outer temperature during handling and assembly/installation may not exceed 50 degrees Celsius and may not be lower than minus 20 degrees Celsius

* See also: Cable drum handling transport, storage and installation recommendations for halogen-free shipboard cables

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:

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

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

Short Circuit Current

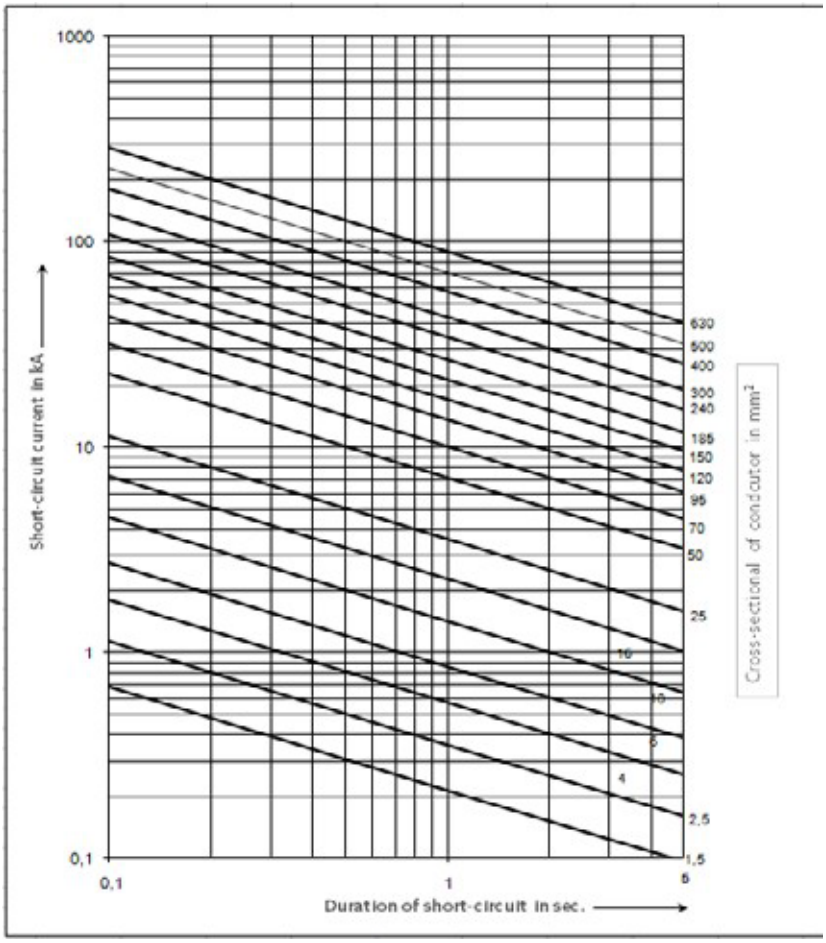
The maximum permissible short circuit current for different cables is based on the formula:

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

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

Duration of short-circuitcurrent



Reactance Calculations

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

$$2 \bullet \pi \bullet f \bullet L$$

f = frequency in Hz
L = inductance in H

TECHNICAL PRODUCT INFORMATION

Sheath Colours & Core Identification

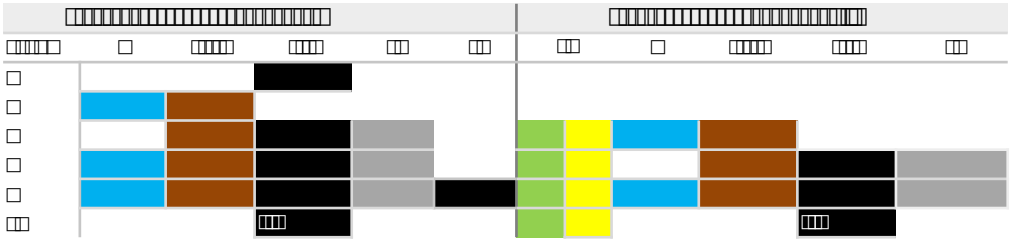
Overview types, standards, core identification and sheath colour

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 YOZp 1,8/3 kV	IEC 60092-350/353	HD308 S2-2001	Black
	MarineLine (+) Y(O)Zp X-FR(SW) 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
	MarinePowerFlex (EMC) Y(Z)OZmv 3,6-30kV	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(SW) 250V	IEC 60331-1/2	Blue/White cores + numbers	Orange
Signal	MarineSignal (+) Y(O)Zs 250V	IEC 60092-350/-351	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) Nr. =black numbered - zwart genummerd - schwarz nummeriert - noir numéroté

Communication Cables 250 V

Pairs (n x 2 x y mm2)

1	2
3...etc.	4...etc.

Triples (n x 3 x y mm^2)

1	2	3
4...etc.	5...etc.	6...etc.

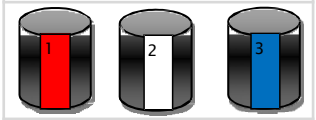
Signal Cables 250 V

Multicores

1
2...etc.

Medium Voltage cables 3,6-30kV

Triple Cores (YZOZmv, YQOQmv)



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