

THE WORLD OF LAPP

Products of Asia Pacific



Legend

Industries

	Automation
	e-Mobility
	Food & Beverage
	Mechanical and Plant Engineering
	Oil & Gas
	Rail
	Solar Energy
	Wind Energy

Product characteristics

	Suitable for outdoor use		Power chain
	Good chemical resistance		Clean room
	Flame-retardant		Robust
	Wide clamping range		Acid-resistant
	Halogen-free		Reliability
	Heat-resistant		Integrated SKINTOP® cable gland
	Cold-resistant		Voltage
	Corrosion-resistant		Connector with standard housing unit
	Maximum vibration protection		Interference signals
	Mechanical resistance		Temperature-resistant
	Assembly time		Torsion-resistant
	Low weight		Torsion load
	Oil-resistant		UV-resistant
	Optimum strain relief		Waterproof
	Space requirement		Variety of approval certifications

Please note:

The purpose of the icons is to provide you with a quick overview and a rough indication of the product features to which the corresponding information relates. You can find details of product characteristics in the "technical data" sections on the product pages.

Hello

Dear customers
and business partners,

I am delighted to present our all-new Asia Pacific catalogue that brings together all the product ideas that have been inspired by you - our customers in Asia. For the last 25 years LAPP has been active here with its 12 production facilities. The products were developed by our R&D teams in Asia and sometimes in collaboration with the team in Germany too. The products in this catalogue, complement the range in our main global catalogue to provide you with an unrivalled range of connectivity components and solutions.

This catalogue, created in the exact same format as our trusted global catalogue, proven by years of use by our customers everywhere, guides you through our enormous range of reliable products, covering virtually the entire world of connection technology. We hope you like the layout and design, and that you can find the relevant products and information for your requirements in an instant.



As a successful global player, we enjoy a strong position in international markets and can help our customers wherever they are. This catalogue is part of that. You can also choose to browse our high-quality branded products either in printed form or online. Click, flip through or swipe: the decision is yours.

Our company has long been characterised by continuity and progressive thinking. One example of this is our management team, which has now welcomed the third generation of the LAPP family. This is a strong signal of how we intend to remain a reliable partner in future. A partner who focuses on helping you remain successful in the long term. LAPP is there for you wherever you are in the world. No matter where you contact us and what you order from us, you will recognise us by our consistent company logo: simply LAPP. That is why, as a technology pioneer, we provide you with the solutions for a successful future – perfectly harmonised and ready for the challenges of the digital world. I hope you enjoy finding out more about our products.

Thank you very much for your trust and loyalty over the past years.

Yours sincerely,

A handwritten signature in black ink, appearing to read "A. Lapp".

Andreas Lapp



From left: Andreas Lapp, Matthias Lapp, Ursula Ida Lapp, Alexander Lapp, Siegbert Lapp.

Family

On course for success

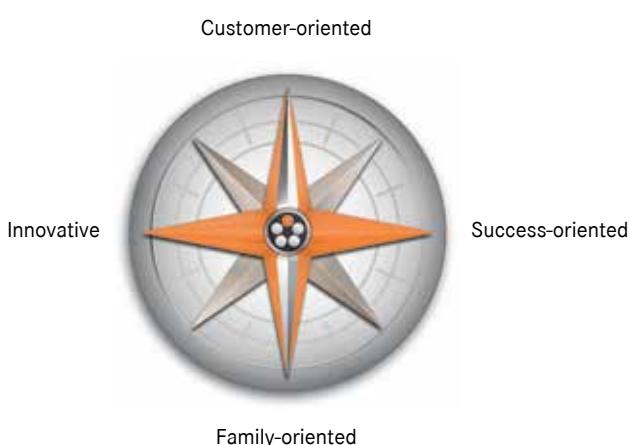


Family business and global player

LAPP is both. The history of our company has been one of success and expansion ever since it was founded in 1959 by Ursula Ida and Oskar Lapp. It remains resolutely family-owned to this day. We safeguard our success by staying close to our customers and markets, maintaining our innovative strength and brand quality, and being a reliable partner. We provide continuity, always guided in our thoughts and actions by our values.

Success built on family values

At LAPP, we maintain values that promote cooperation and enable relationships with employees, suppliers and customers based on partnership and trust. Good relations and mutual respect are key elements of our company culture and a central plank of company policy. We know that our successful business development of the last decades is down in particular to our 4,650 skilled and dedicated staff around the world, as well as the reliable partnership with our customers.



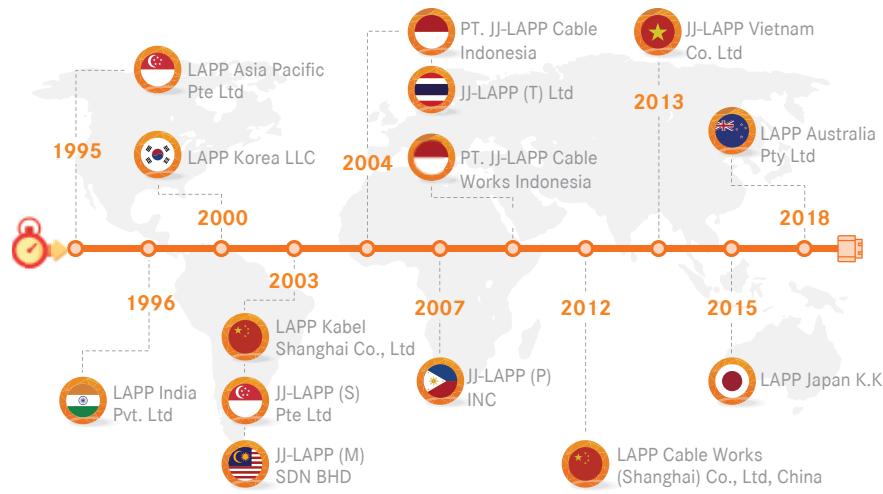
With 18 production facilities, over 44 sales companies and hundreds of dedicated consultants, we are always close to the individual needs and challenges of our customers all over the globe. We are constantly developing our products and system solutions, setting standards in safety, quality and functionality. This is why we are one of the world's leading manufacturers of integrated solutions and branded products in cable and connection technology. As our success story enters its third generation, we are aware of our duty to the future.



<http://lappapac.lappgroup.com/about-us/company>

LAPP in Asia Pacific

Bringing LAPP innovation to you



Asia Pacific

Singapore	LAPP Asia Pacific Pte Ltd (HQ)
JJJAPP (S) Pte Ltd	JJJAPP (T) Ltd
Australia	LAPP Australia Pty Ltd
China	LAPP Kabel Shanghai Co., Ltd
India	LAPP Cable Works (Shanghai) Co., Ltd, China
Indonesia	PT. JJ-LAPP Cable Indonesia
Japan	PT. JJ-LAPP Cable Works Indonesia
South Korea	LAPP Japan K.K.
Malaysia	LAPP Korea LLC
New Zealand	JJJAPP (M) SDN BHD
Philippines	ECS New Zealand Ltd
Taiwan	JJJAPP (P) INC
Thailand	DKSH Taiwan Ltd
Vietnam	JJJAPP (T) Ltd
	JJJAPP Vietnam Co. Ltd

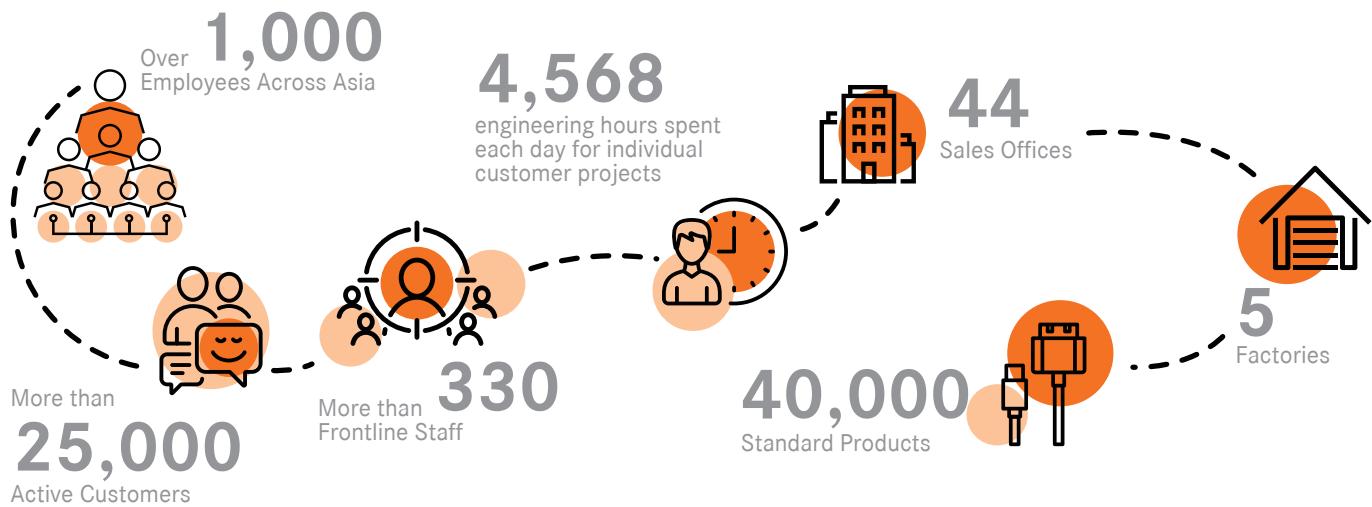
Driven by the innovative and enterprising spirit of its founder Oskar Lapp, LAPP has been active in the Asia Pacific region for over 25 years. Thanks to our customers' growing support and trust, we have extended our reach with locally-based factories, design teams and a close network of partners, to give you the same outstanding service anywhere.

Together, our R&D and production teams in Asia work seamlessly to meet specific customer requests and obtain local quality standards and approvals. As economies in the region grow closer, we are proud to compile in one book,

all the products designed and manufactured in Asia to complement our portfolio of over 20,000 global products.

Partnering with LAPP gives you access to not just quality cables and connectors, but also quick delivery times worldwide and advanced system solutions. With over 1,000 employees across Asia – of whom 330 are directly supporting and servicing our customers – we are able to bring our technical expertise even closer to you.

Tap on our capabilities for unparalleled peace-of-mind!



Our Facilities in Asia



Regional Headquarters, Singapore



Warehouse, Singapore



Hwaseong, Korea



Shanghai, China



Bengaluru, India



Bhopal, India

Industry Solutions

Connecting to the world of tomorrow

From photovoltaic (solar), wind energy, energy storage to Industry 4.0, our success is driven by pioneering innovations for a wide variety of sectors and markets. We offer specialised cable connection solutions for all industries with country-specific variations, precisely tailored to their respective requirements. Explore the areas in which our products are used and find out how we can help take your business forward with our industry-specific solutions.



Railway

High-performance connection technology is a vital part of modern railway vehicles and infrastructure. Our products meet tough national and international norms and standards like EN 45545-2, and are used in the high-speed trains such as the Korea Train eXpress (KTX). Our production facility for ÖLFLEX® TRAIN is also certified in line with IRIS (International Rail Industry Standard).



Renewable Energy

Countries across Asia Pacific are in a race to convert to sustainable renewable energy. Manifesting the innovative tradition of our company, LAPP in Asia Pacific has very early on built up specialist expertise in this area. LAPP offers a specifically tailored comprehensive range of cables, connectors and photovoltaic accessories for cabling photovoltaic plants – we are the system of choice!

Food and Beverage

In the food and beverage industry where hygiene takes top priority, operating conditions are also complex and challenging. With this in mind, cables and accessories used have to meet demanding requirements and must withstand various chemical, thermal and mechanical loads. Our extensive standard range has been proven to resist testing under these tough operating conditions.

Industrial Communication

The challenge for industrial data cables lies in reliably transferring ever higher data rates in harsh environments. The cables are often bent millions of times in cable chains or are exposed to corrosive substances and high temperatures. Here at LAPP, we offer our customers a wide array of components and system solutions for factory, building and process automation. Our data communication solutions include complete cabling and connectivity systems for integrated networking at the sensor/actuator and control level right through to the inventory management system.



ÖLFLEX® CONNECT

System solutions made by LAPP

With ÖLFLEX® CONNECT, we completed the step from component supplier to system supplier, offering complete solutions from a single source – from specialised cable assemblies and industry-standard servo connections to complex high-speed drag chain systems. We are constantly expanding our engineering, production and assembly capacities around the world.

The benefits for you:

- No capital expenditure for own production facilities
- Lean supply base leads to lower operating costs
- Low inventory levels thanks to complete assemblies
- Excellent functional reliability



<http://lappapac.lappgroup.com/oelflex-connect>



ÖLFLEX® CONNECT CABLES

Cable systems made by LAPP

Our product range stretches from single cores and multicore cables through to EMC-shielded cables, all of which can be fitted with a wide selection of crimp contacts, connectors and housings. We also offer highly flexible and durable spiral cables in premium quality, as well as glass fibre assemblies, which we can produce, test and deliver in both standard and custom lengths.

Our comprehensive range of services:

- Cable cutting as required
- Unwinding with specified bending radius
- Stripping, crimping, heat shrinking
- Markings & printings
- Testing



ÖLFLEX® CONNECT CHAIN

Power chain systems made by LAPP

When it comes to assembled drag chains, you can benefit from our extensive know-how and many years of experience.

basic chain

core chain

extended chain

basic chain

Nylon or steel drag chains with highly flexible cables, cable protection conduits, hydraulic or pneumatic hoses with no termination such as connectors or flanges

core chain

Nylon or steel drag chains with highly flexible cables, cable protection conduits, hydraulic or pneumatic hoses including termination (connectors, flanges)

extended chain

Nylon or steel drag chains with highly flexible cables, cable protection conduits, hydraulic or pneumatic hoses including termination (connectors, flanges) and functional units such as towing arms or supporting structures



ÖLFLEX® CONNECT SERVO

Servo systems made by LAPP

As a leading manufacturer of assembled servo cable systems, we offer solutions for all industry standards for customers from different areas of mechanical engineering and drive systems. These range from the cost-effective basic line for applications free of aggressive environmental influences, to the core line that is specially designed for dynamic applications, right up to the highly dynamic performance class of the extended line. LAPP therefore offers the right solution for every set of requirements.

basic line

core line

extended line



Service & Quality

Uncompromising quality – worldwide

With the same values of quality and precision around the world, you will always be on the safe side with branded products from LAPP. At our R&D laboratories in Korea, China, India and Singapore, we put our products through their paces with the same stringent tests as we do in Germany. Here we simulate all kinds of movements to determine the service life of cables and wires as well as test for flame resistance according to the relevant standards. The result: uncompromising quality from LAPP.

Customised solutions

Our teams in Asia understand the requirements in respective markets and can bring their technical expertise to provide customised solutions for challenging requirements. Whether it's a standard product or a customised special production: every product launched has undergone a demanding development process. Only once the prototypes have been thoroughly tried and tested does production begin.

Perfect projects

We turn challenging projects into success stories. That is what drives us. From fibre optic networks and control cables to power supply, you can put your trust in the infrastructure and product expertise of our outstanding project teams. Benefit from expert consulting and an all-round service that leaves nothing to be desired.

With the benefit of local market expertise, we work together closely – to understand what you need, create a precise schedule, develop the right solution for your specific requirements, clarify delivery times and product details, and coordinate logistics. Protect your resources, benefit from our expertise, and reap the rewards.

Logistics

With our Asia Pacific network of 5 major warehouse locations and additional service points across India, our ASEAN presence and stocking partners, plus a global warehouse of **70,000 m²** of storage space in Germany alone, we hold the stocks for all you need – anytime, all the time.



Reliably connecting the world

Who actually likes waiting for a product or service? We won't leave you hanging – we offer speedy delivery to anywhere in the world. After all, we have a close-knit network of logistics centres. With the finest in high-tech quality, we guarantee a smooth delivery service.

Logistics services

Find out about our range of logistics services. Simple length cutting straight from our drum packaging, scheduled order, special packaging or special import documentation, customised labels and much more. If you can't find an appropriate solution for your needs, we are happy to advise you personally.



<http://lappapac.lappgroup.com/our-services/logistics>

You Can Reach Us

We are where you are



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LAPP APAC website:
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<http://lappaustralia.com.au/en>



China
www.laponline.cn



India
<http://shopasia.lappgroup.com/in>



Japan
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8 Brands

Uncompromising quality – worldwide



ÖLFLEX®

Power and control cables



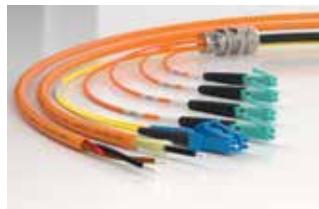
UNITRONIC®

Data communication systems



ETHERLINE®

Data communication systems for
ETHERNET technology



HITRONIC®

Optical transmission systems

ÖLFLEX® has become synonymous with power and control cables. Our flexible and oil-resistant cables satisfy the highest demands and can withstand even the very toughest conditions.

Our high-quality UNITRONIC® data network cables and field bus components provide a forward-looking solution for all applications in industrial machinery and plant engineering. From transmission of simple control signals to field bus signals in complex network structures – we offer a dependable cabling and connection solution for almost every situation.

Our ETHERLINE® branded products open up a secure, fast and reliable path to the future of Ethernet applications, e.g. PROFINET®. The systems are made up of durable and robust cables and connection components for passive and active network technology, and deliver an effective solution for almost any application, particularly in an industrial environment.

HITRONIC® fibre optic cables make transmitting large data volumes easy: fault free, bug proof and at almost light speed. Even electromagnetic radiation does not interfere with the transmission. The HITRONIC® range includes the ideal solution for indoor or outdoor use, for demanding conditions, and even for use in power chains.



EPIC®

Industrial connectors



SKINTOP®

Cable glands

EPIC® industrial connectors can be found everywhere in industrial machinery and plant engineering, for measuring, control and drives. EPIC® is a flexible system of housings, inserts and contacts: all extremely robust, absolutely safe and simplicity itself to assemble.

Simply feed in the cable and twist. That's it. Our SKINTOP® cable glands provide secure connections in no time. The universal systems are simple but effective. They secure and centre the cable, hermetically seal it and guarantee optimum strain relief.



SILVYN®

Protective cable conduit systems and
cable carrier systems

The universal range of SILVYN® protection and guidance systems protect cables effectively against dust, moisture, mechanical, thermal and chemical influences. The versatile SILVYN® CHAIN range of energy supply chains also protects and guides cables in dynamic applications.



FLEXIMARK®

Marking systems

The requirement: permanent marking. The solution: FLEXIMARK®. These sophisticated systems mean that a clear overview inside a control cabinet is no longer just a pipe dream. From simple labels for manual marking through to electronic markings, the FLEXIMARK® range is guaranteed to be permanent.

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1

ÖLFLEX® Power and control cables

ÖLFLEX® has become synonymous with power and control cables. Our flexible and oil-resistant cables satisfy the highest demands and can withstand even the very toughest conditions.

Application range

- Industrial machinery, machine tools, plant and equipment engineering
- Measurement, control, heating and air conditioning systems
- Wind power and photovoltaic systems
- Public buildings, airports and stations
- Medical technology, chemical industry, composting plants and sewage works
- Food and beverage industry
- Power drive systems
- Robot applications
- Railway applications

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ÖLFLEX® 100 I

ISI marked PVC cable



Benefits

- Space-saving installation due to small cable diameter
- High electrical performance due to 3 kV test voltage

Application range

- Plant engineering and installation, Industrial machinery
- Power circuit for Air conditioning installations
- Main power circuit to individual apartments
- Dry or damp interiors under medium mechanical load conditions

- For fixed installation as well as occasional flexing at free, non-continuously recurring movement without tensile load

Product features

- Flame retardant: According to IEC 60332-1 / IS 10810-53

Norm references / Approvals

- IS:694:2010

Product Make-up

- Conductor : Bare copper wires of fine strands
- Insulation : PVC Type D
- Outer Sheath: PVC ST 3 Grey (RAL 7001)

Info

- ISI marked cable

Technical data

 **Core identification code**
Coloured

 **Conductor stranding**
Bare copper, fine wire strand class 5 in acc. to IS 8130-1984

 **Minimum bending radius**
Occasional fixing Installation: 15 x cable OD, Fixed installation: 4 X Cable OD

 **Nominal voltage**
UM : 1100, Up to and including 1100 V in acc. to IS 694:2010

 **Temperature range**
-15°C up to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® 100 I					
38007034	2 X 0.5	6.0	grey	9.0	55
38007035	3 G 0.5	6.3	grey	14.0	64
38007036	4 G 0.5	6.8	grey	18.0	76
38007042	2 X 0.75	6.4	grey	13.0	65
38007043	3 G 0.75	6.7	grey	20.0	77
38007045	4 G 0.75	7.3	grey	26.0	92
38007053	2 X 1.0	6.7	grey	17.0	73
38007054	3 G 1.0	7.1	grey	26.0	87
38007055	4 G 1.0	7.7	grey	34.0	105
38007064	2 X 1.5	7.4	grey	25.0	90
38007065	3 G 1.5	7.8	grey	37.0	108
38007066	4 G 1.5	8.8	grey	50.0	137
38007067	5 X 1.5	9.6	grey	62.0	162
38007074	2 X 2.5	8.8	grey	42.0	133
38007075	3 G 2.5	9.3	grey	63.0	162
38007076	4 G 2.5	10.3	grey	84.0	198
38007077	5 X 2.5	11.3	grey	105.0	238
38007081	2 X 4	10.4	grey	69.0	195
38007082	3 G 4	11.1	grey	104.5	241
38007083	4 G 4	12.2	grey	138.0	297
3800997	5 X 4	13.5	grey	173.0	365
38007092	3 G 6	12.6	grey	158.0	336
38007093	4 G 6	14.0	grey	210.0	416
38001015	5 X 6	15.7	grey	263.0	512
38007094	3 G 10	15.8	grey	260.0	542
38007095	4 G 10	17.7	grey	346.0	674
38001016	5 X 10	19.7	grey	433.0	815
38007096	3 G 16	18.2	grey	407.0	754
38007097	4 G 16	20.3	grey	542.0	946
38001017	5 X 16	22.7	grey	678.0	1,164
38001018	3 G 25	22.7	grey	670.0	1,189
38009040	4 G 25	25.3	grey	893.0	1,511
38001019	5 X 25	28.2	grey	1,117.0	1,854
38001020	3 G 35	25.7	grey	855.5	1,522
38007084	4 G 35	28.7	grey	1,181.0	1,935
38001021	5 X 35	32.0	grey	1,476.0	2,366
38001022	3 G 50	30.0	grey	1,244.0	2,183
38001023	4 G 50	33.5	grey	1,659.0	2,748
38007068	3 G 1.5	7.8	black	37.0	108
38007078	3 G 2.5	9.3	black	63.0	162

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i Info

- ISI marked cable, FR-LSH For reduced Halogen and Smoke

Benefits

- Space-saving installation due to small cable diameter
- High electrical performance due to 3 kV test voltage
- Protection of human life and the environment due to reduced smoke and low toxicity

Application range

- Plant engineering and installation, Industrial machinery
- Power circuit for Air conditioning installations
- Main power circuit to individual apartments
- Dry or damp interiors under medium mechanical load conditions

- For fixed installation as well as occasional flexing at free, non-continuously recurring movement without tensile load

Product features

- Flame retardant: According to IEC 60332-1 / IS 10810-53
- Low smoke and Low Halogen : As per data sheet

Norm references / Approvals

- IS:694:2010

Product Make-up

- Conductor : Bare copper wires of fine strands
- Insulation : PVC Type D
- Outer Sheath: PVC FR-LSH ST 3 Grey (RAL 7001)

Technical data



Core identification code
Coloured



Conductor stranding
Bare copper, fine wire strand class 5 in acc. to IS 8130-1984



Minimum bending radius
Occasional fixing Installation: 15 x cable OD, Fixed installation: 4 X Cable OD



Nominal voltage
UM : 1100, Up to and including 1100 V in acc. to IS 694:2010



Temperature range
-5°C up to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX®100 I FR-LSH				
380800205	2 X 0.5	6.1	9.0	58
380800315	3 G 0.5	6.4	14.0	66
380800415	4 G 0.5	7.0	18.0	79
380810205	2 X 0.75	6.5	13.0	68
380820205	2 X 1.0	6.8	17.0	76
380820315	3 G 1.0	7.2	26.0	90
380820415	4 G 1.0	7.9	34.0	108
380830205	2 X 1.5	7.4	25.0	94
380830305	3 X 1.5	7.8	37.0	111
380830315	3 G 1.5	7.8	37.0	111
380830415	4 G 1.5	8.8	50.0	141
380840205	2 X 2.5	9.0	42.0	138
380840305	3 X 2.5	9.6	63.0	166
380840315	3 G 2.5	9.6	63.0	166
380840405	4 X 2.5	10.5	84.0	203
380840415	4 G 2.5	10.5	84.0	203
380840505	5 X 2.5	11.5	105.0	243
380840515	5 G 2.5	11.5	105.0	243
380850305	3 X 4	11.1	104.0	247
380850315	3 G 4	11.1	104.0	247
380850405	4 X 4	12.2	138.0	303
380850415	4 G 4	12.2	138.0	303
380860305	3 X 6	12.8	158.0	345
380860315	3 G 6	12.8	158.0	345
380860405	4 X 6	14.1	210.0	425
380860415	4 G 6	14.1	210.0	425
380860505	5 X 6	15.7	263.0	522
380860515	5 G 6	15.7	263.0	522
380861315	3 G 10	16.2	260.0	556
380861405	4 X 10	17.9	346.0	688
380861505	5 X 10	19.7	433.0	830
380862315	3 G 16	18.4	407.0	771
380862405	4 X 16	20.3	542.0	963
380862415	4 G 16	20.3	542.0	963
380863405	4 X 25	25.3	893.0	1,537
380863415	4 G 25	25.3	893.0	1,537
380864405	4 X 35	28.7	1,181.0	1,967
380865405	4 X 50	33.9	1,659.0	2,793
ÖLFLEX®100 I FR-LSH UVAR				
380830335	3 G 1.5	7.8	37.0	111
380840225	2 X 2.5	9.0	42.0	138

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ÖLFLEX® 100 I CY

Colour coded screened PVC power and control cable



Benefits

- EMC Compliant
- High electrical performance due to 4 kV test voltage

Application range

- Plant engineering and installation, Industrial machinery
- Power circuit for Air conditioning installations
- Main power circuit to individual apartments
- Fixed Installation

- For fixed installation as well as occasional flexing at free, non-continuously recurring movement without tensile load

Product features

- Flame retardant: According to IEC 60332-1

Product Make-up

- Conductor : Bare copper wires of fine strands
- Insulation : PVC Type A
- Inner Sheath : PVC Type ST1
- Copper braid with approx. 65% coverage
- Outer Sheath: PVC ST 1 Grey (RAL 7001)



Info

- EMC - Compliant

Technical data

Core identification code
Coloured

Conductor stranding
Bare copper, fine wire strand class 5 in acc. to IS 8130-1984

Minimum bending radius
Occasional fixing Installation: 20 x OD, Fixed installation: 6 X Cable OD

Nominal voltage
UM : 1100, Up to and including 1100 V

Temperature range
-15°C up to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® 100 I CY					
380400415	4 G 0.5	9.2	grey	49.0	141
380420205	2 X 1.0	8.9	grey	47.0	131
380420415	4 G 1.0	10.2	grey	67.0	175
380430205	2 X 1.5	9.6	grey	56.0	157
380430315	3 G 1.5	10.2	grey	70.0	177
380430305	3 X 1.5	10.2	grey	70.0	177
380430415	4 G 1.5	11.1	grey	86.0	214
380440315	3 G 2.5	12.0	grey	100.0	242
380440305	3 X 2.5	12.0	grey	100.0	242
380440415	4 G 2.5	13.1	grey	126.0	300
380440405	4 X 2.5	13.1	grey	126.0	300
380460415	4 G 6	17.2	grey	286.0	572
380461415	4 G 10	21.5	grey	469.0	916
380464415	4 G 35	33.8	grey	1,384.0	2,395
380465315	3 G 50	35.4	grey	1,465.0	2,658
380465415	4 G 50	39.4	grey	1,900.0	3,305
380410410	4 G 0.75	13.1	transparent	58.0	154
380430310	3 G 1.5	17.2	transparent	70.0	172
380440200	2 X 2.5	11.3	transparent	78.0	204
380440310	3 G 2.5	12.0	transparent	100.0	235
380440300	3 X 2.5	12.0	transparent	100.0	235
380440410	4 G 2.5	13.1	transparent	126.0	291
380440400	4 X 2.5	13.1	transparent	126.0	291
380461410	4 G 10	21.5	transparent	469.0	889
380463410	4 G 25	30.0	transparent	1,079.0	1,860
380465410	4 G 50	39.4	transparent	1,900.0	3,225
ÖLFLEX® 100 I CY UVAR					
380400225	2 X 0.5	8.1	grey	35.0	107
380400335	3 G 0.5	8.5	grey	40.0	117
380420225	2 X 1.0	8.9	grey	47.0	131
380420325	3 X 1.0	9.4	grey	57.0	152
380420435	4 G 1.0	10.2	grey	67.0	175
380440335	3 G 2.5	12.0	grey	100.0	242
380440435	4 G 2.5	13.1	grey	126.0	300
380440535	5 G 2.5	14.6	grey	168.0	374
380440325	3 X 2.5	12.0	grey	100.0	242
380440425	4 X 2.5	13.1	grey	126.0	300
380464535	5 G 35	37.6	grey	1,711.0	2,922
380465335	3 G 50	35.4	grey	1,465.0	2,658
380465435	4 G 50	39.4	grey	1,900.0	3,305
380466335	5 G 35	43.2	grey	2,219.0	3,861

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**i Info**

- ISI marked cable, FR-LSH For reduced Halogen and Smoke

Benefits

- EMC Compliant
- High electrical performance due to 3 kV test voltage
- Protection of human life and the environment due to reduced smoke and low toxicity

Application range

- Plant engineering and installation, Industrial machinery
- Power circuit for Air conditioning installations
- Main power circuit to individual apartments
- Fixed Installation

LAPP KABEL STUTTGART ÖLFLEX® 100 I FR-LSH CY 1100V



- For fixed installation as well as occasional flexing at free, non-continuously recurring movement without tensile load

Product features

- Flame retardant: According to IEC 60332-1
- Low smoke and Low Halogen : As per data sheet

Product Make-up

- Conductor : Bare copper wires of fine strands
- Insulation : PVC Type A
- Copper braid with approx. 65% coverage
- Outer Sheath: PVC FR-LSH ST 1 Grey (RAL 7001)

Technical data**Core identification code**

Coloured

**Conductor stranding**

Bare copper, fine wire strand class 5 in acc. to IS 8130-1984

**Minimum bending radius**

Occasional fixing Installation: 20 x OD, Fixed installation: 6 X Cable OD

**Nominal voltage**

UM : 1100, Up to and including 1100 V

**Temperature range**

-15°C up to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® 100 I CY FR-LSH				
380630315	3 G 1.5	10.2	70.0	180
380630305	3 X 1.5	10.2	70.0	180
380630415	4 G 1.5	11.1	86.0	218
380630405	4 X 1.5	11.1	86.0	218
380640205	2 X 2.5	11.3	78.0	214
380640315	3 G 2.5	12.0	100.0	246
380640305	3 X 2.5	12.0	100.0	246
380640415	4 G 2.5	13.1	126.0	305
380640405	4 X 2.5	13.1	126.0	305
380640515	5 G 2.5	14.6	168.0	380
380640505	5 X 2.5	14.6	168.0	380
380650315	3 G 4	14.1	168.0	382
380650305	3 X 4	14.1	168.0	382
380650415	4 G 4	15.4	211.0	452
380650405	4 X 4	15.4	211.0	452
380650515	5 G 4	16.9	249.0	533
380660305	3 X 6	15.6	230.0	489
380660415	4 G 6	17.2	286.0	579
380660405	4 X 6	17.2	286.0	579
380661415	4 G 10	21.5	469.0	928
380661405	4 X 10	21.5	469.0	928
380662415	4 G 16	24.5	689.0	1,265
380662405	4 X 16	24.5	689.0	1,265
380663415	4 G 25	30.0	1,079.0	1,937
380663405	4 X 25	30.0	1,079.0	1,937
380663515	5 G 25	33.3	1,323.0	2,343
380664415	4 G 35	33.8	1,384.0	2,422
ÖLFLEX® 100 I CY FR-LSH UVAR				
380600435	4 G 0.5	9.2	49.0	144
380610435	4 G 0.75	9.8	58.0	162
380620435	4 G 1.0	10.2	67.0	178
380640225	2 X 2.5	11.3	78.0	214
380640335	3 G 2.5	12.0	100.0	246
380640325	3 X 2.5	12.0	100.0	246
380640435	4 G 2.5	13.1	126.0	305
380640425	4 X 2.5	13.1	126.0	305
380640535	5 G 2.5	14.6	168.0	380
380640525	5 X 2.5	14.6	168.0	380
380665335	3 G 50	35.4	1,465.0	2,688
380665325	3 X 50	35.4	1,465.0	2,688
380665435	4 G 50	39.4	1,900.0	3,341

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ÖLFLEX® 100 I SY

Colour coded PVC power and control cable with steel wired braiding



Info

- Steel wire Braiding for extra mechanical protection

Benefits

- Extra mechanical protection due to braided steel wire
- High electrical performance due to 4 kV test voltage

Application range

- Plant engineering and installation, Industrial machinery
- Power circuit for Air conditioning installations
- Main power circuit to individual apartments

- Area with high mechanical stress
- Fixed installation

Product features

- Flame retardant: According to IEC 60332-1

Product Make-up

- Conductor : Bare copper wires of fine strands
- Insulation : PVC Type A
- Inner Sheath : PVC Type ST1
- Copper braid with approx. 65% coverage
- Outer Sheath: PVC ST 1 Grey (RAL 7001)

Technical data

 Core identification code
Coloured

 Conductor stranding
Bare copper, fine wire strand class 5 in acc. to IS 8130-1984

 Minimum bending radius
Occasional fixing Installation: 20 x OD, Fixed installation: 6 X Cable OD

 Nominal voltage
UM : 1100, Up to and including 1100 V

 Temperature range
-15°C up to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® 100 I SY					
380100200	2 X 0.5	8.8	transparent	9.0	111
380100310	3 G 0.5	9.2	transparent	14.0	125
380100410	4 G 0.5	9.9	transparent	18.0	141
380110310	3 G 0.75	9.7	transparent	20.0	141
380110410	4 G 0.75	10.5	transparent	26.0	159
380120200	2 X 1.0	9.6	transparent	17.0	136
380130310	3 G 1.5	10.9	transparent	37.0	181
380140300	3 X 2.5	12.7	transparent	63.0	249
380150310	3 G 4	14.5	transparent	104.0	353
380160300	3 X 6	16.1	transparent	158.0	458
380160510	5 G 6	19.4	transparent	261.0	663
380161310	3 G 10	19.7	transparent	260.0	685
380162400	4 X 16	24.7	transparent	542.0	1,172
380164310	3 G 35	30.7	transparent	886.0	1,822
380164410	4 G 35	34.1	transparent	1,181.0	2,280
380120505	5 X 1.0	10.9	grey	43.0	221
ÖLFLEX® 100 I SY UVAR					
380110225	2 X 0.75	9.3	grey	13.0	134
380110335	3 G 0.75	9.7	grey	20.0	148
380110435	4 G 0.75	10.5	grey	26.0	168
380120335	3 G 1.0	10.1	grey	26.0	160
380120435	4 G 1.0	10.9	grey	34.0	197
380130225	2 X 1.5	10.3	grey	25.0	165
380130325	3 X 1.5	10.9	grey	37.0	191
380130435	4 G 1.5	11.8	grey	50.0	226
380130535	5 G 1.5	12.8	grey	62.0	264
380140435	4 G 2.5	13.8	grey	84.0	313
380140535	5 G 2.5	15.1	grey	105.0	366
380150335	3 G 4	14.5	grey	104.0	369
380150435	4 G 4	15.9	grey	138.0	447
380150535	5 G 4	17.4	grey	173.0	530
380160435	4 G 6	17.7	grey	210.0	578
380161435	4 G 10	21.8	grey	346.0	885
380161535	5 G 10	24.0	grey	433.0	1,057
380162435	4 G 16	24.7	grey	542.0	1,210
380162535	5 G 16	27.3	grey	678.0	1,483
380163435	4 G 25	30.3	grey	893.0	1,866
380163535	5 G 25	33.6	grey	1,117.0	2,255
380164535	5 G 35	37.8	grey	1,476.0	2,851
380165435	4 G 50	39.6	grey	1,659.0	3,269
380166335	3 G 70	43.5	grey	1,968.0	3,793

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**i Info**

- Steel wire Braiding for extra mechanical protection, FR-LSH For reduced Halogen and Smoke

Benefits

- Extra mechanical protection due to braided steel wire
- High electrical performance due to 3 kV test voltage
- Protection of human life and the environment due to reduced smoke and low toxicity

Application range

- Plant engineering and installation, Industrial machinery
- Power circuit for Air conditioning installations
- Main power circuit to individual apartments

LAPP KABEL STUTTGART ÖLFLEX® 100 I FR-LSH SY 1100V

- Area with high mechanical stress
- Fixed installation

Product features

- Flame retardant: According to IEC 60332-1
- Low smoke and Low Halogen : As per data sheet

Product Make-up

- Conductor : Bare copper wires of fine strands
- Insulation : PVC Type A
- Inner Sheath : PVC Type ST1
- Copper braid with approx. 65% coverage
- Outer Sheath: PVC FR-LSH ST 1 Grey (RAL 7001)

Technical data

Core identification code
Coloured



Conductor stranding
Bare copper, fine wire strand class 5 in acc. to IS 8130-1984



Minimum bending radius
Occasional fixing Installation: 20 x OD, Fixed installation: 6 X Cable OD



Nominal voltage
UM : 1100, Up to and including 1100 V



Temperature range
-15°C up to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® 100 I SY FR-LSH				
380300315	3 G 0.5	9.2	14.0	135
380300415	4 G 0.5	9.9	18.0	152
380310415	4 G 0.75	10.5	26.0	171
380320205	2 X 1.0	9.6	17.0	147
380330205	2 X 1.5	10.3	25.0	168
380330305	3 X 1.5	10.9	37.0	195
380330315	3 G 1.5	16.1	37.0	195
380330405	4 X 1.5	11.8	50.0	230
380330415	4 G 1.5	11.8	50.0	230
380340305	3 X 2.5	12.7	63.0	265
380340315	3 G 2.5	12.7	63.0	265
380340405	4 X 2.5	13.8	84.0	318
380340415	4 G 2.5	13.8	84.0	318
380350305	3 X 4	14.5	104.0	375
380350315	3 G 4	14.5	104.0	375
380350405	4 X 4	15.9	138.0	454
380350415	4 G 4	15.9	138.0	454
380350515	5 G 4	17.4	173.0	539
380360305	3 X 6	16.1	158.0	484
380360315	3 G 6	16.1	158.0	484
380360405	4 X 6	17.7	210.0	587
380360415	4 G 6	17.7	210.0	587
380360515	5 G 6	19.4	263.0	696
380361305	3 X 10	19.7	260.0	721
380361405	4 X 10	21.8	346.0	897
380361415	4 G 10	21.8	346.0	897
380362305	3 X 16	22.3	407.0	996
380362405	4 X 16	24.7	542.0	1,226
380362415	4 G 16	24.7	542.0	1,226
380363415	4 G 25	30.3	893.0	1,888
380365305	3 X 50	35.6	1,244.0	2,631
ÖLFLEX® 100 I SY FR-LSH UVAR				
380310435	4 G 0.75	10.5	26.0	171
380310535	5 G 0.75	11.3	33.0	206
380320435	4 G 1.0	10.9	34.0	201
380363535	5 G 25	33.6	1,117.0	2,282
380364325	3 X 35	30.7	886.0	1,900
380364435	4 G 35	34.1	1,181.0	2,374
380364535	5 G 35	37.8	1,476.0	2,884
380365335	3 G 50	35.6	1,244.0	2,631
380365435	4 G 50	39.6	1,659.0	3,306

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YSLY

PVC insulated/sheathed and numbered cores



Info

- Small cable diameter
- UV-resistant

Benefits

- Space saving due to small cable diameter

Application range

- Used as a connection cable for measuring, monitoring and control connections in industrial machineries, heating and air refrigeration systems, office equipment, etc.
- Dry or damp interiors under medium mechanical load conditions
- Fixed installations as well as for occasional flexing at free, non-continuously recurring movement without tensile load

Product features

- Flame-retardant acc. to IEC 60332-1-2
- UV resistant can be used outdoor
- With or without protective conductor gn/ye

Product Make-up

- Fine strands of bare copper wires
- PVC core insulation
- Core twisted in layers
- PVC outer sheath, grey or black

Technical data



Classification

ETIM 5.0 Class-Description: Control cable
ETIM 5.0 Class-ID: EC000104

Core identification code

Black core with white numbers



Conductor stranding

Fine wire acc. to IEC 60228 Cl.5



Minimum bending radius

Occasional flexing: 20 x outer diameter
Fixed installation: 10 x outer diameter

Nominal voltage

U₀/U: 300/500 V

Protective conductor

G = with protective conductor GN/YE;
X = without protective conductor

Temperature range

Fixed installation: -20°C to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
YSLY					
3802002	2 X 0.75	5.4	grey	14.4	50
3802003	3 G 0.75	5.7	grey	21.6	59
3802004	4 G 0.75	6.2	grey	28.8	71
3802005	5 G 0.75	6.7	grey	36.0	86
3802007	7 G 0.75	7.3	grey	50.4	104
3802010	10 G 0.75	9.6	grey	72.0	156
3802012	12 G 0.75	9.9	grey	86.4	178
3802015	15 G 0.75	11.1	grey	108.0	231
3802016	16 G 0.75	11.1	grey	115.2	239
3802052	2 X 1.0	5.7	grey	19.2	58
3802053	3 G 1.0	6.0	grey	28.8	70
3802054	4 G 1.0	6.5	grey	38.4	84
3802055	5 G 1.0	7.2	grey	48.0	101
3802057	7 G 1.0	8.0	grey	67.2	132
3802062	12 G 1.0	10.5	grey	115.2	124
3802066	16 G 1.0	11.8	grey	153.6	272
3802102	2 X 1.5	6.3	grey	28.8	71
3802103	3 G 1.5	6.7	grey	43.2	87
3802104	4 G 1.5	7.2	grey	57.6	106
3802105	5 G 1.5	8.1	grey	72.0	133
3802107	7 G 1.5	8.9	grey	100.8	171
3802108	8 G 1.5	10.0	grey	115.2	218
3802109	9 G 1.5	10.7	grey	129.6	256
3802112	12 G 1.5	11.4	grey	172.8	285
3802114	14 G 1.5	12.6	grey	201.6	329
3802153	3 G 2.5	8.1	grey	72.0	135
3802154	4 G 2.5	8.9	grey	96.0	166
3802155	5 G 2.5	10.0	grey	120.0	208
3802162	12 G 2.5	14.8	grey	288.0	438
3802157	7 G 2.5	11.1	grey	168.0	269
3802168	18 G 2.5	17.8	grey	432.0	661
3802543	3 G 4	9.9	grey	115.2	201
3802544	4 G 4	10.8	grey	153.6	249
3802553	3 G 6	11.8	grey	172.8	289

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
3802554	4 G 6	13.0	grey	230.4	365
3802564	4 G 10	16.2	grey	384.0	590
3802574	4 G 16	18.9	grey	614.4	1,087
3802584	4 G 25	23.5	grey	960.0	1,582
3802002B	2 X 0.75	5.4	black	14.4	50
3802003B	3 G 0.75	5.7	black	21.6	59
3802004B	4 G 0.75	6.2	black	28.8	71
3802005B	5 G 0.75	6.7	black	36.0	86
3802007B	7 G 0.75	7.3	black	50.4	104
3802010B	10 G 0.75	9.6	black	72.0	156
3802012B	12 G 0.75	9.9	black	86.4	178
3802015B	15 G 0.75	11.1	black	108.0	231
3802016B	16 G 0.75	11.1	black	115.2	239
3802052B	2 X 1.0	5.7	black	19.2	58
3802053B	3 G 1.0	6.0	black	28.8	70
3802054B	4 G 1.0	6.5	black	38.4	84
3802055B	5 G 1.0	7.2	black	48.0	101
3802057B	7 G 1.0	8.0	black	67.2	132
3802062B	12 G 1.0	10.5	black	115.2	214
3802066B	16 G 1.0	11.8	black	153.6	272
3802102B	2 X 1.5	6.3	black	28.8	71
3802103B	3 G 1.5	6.7	black	43.2	87
3802104B	4 G 1.5	7.2	black	57.6	106
3802105B	5 G 1.5	8.1	black	72.0	133
3802107B	7 G 1.5	8.9	black	100.8	171
3802108B	8 G 1.5	10.0	black	115.2	218
3802109B	9 G 1.5	10.7	black	129.6	256
3802112B	12 G 1.5	11.4	black	172.8	285
3802114B	14 G 1.5	12.6	black	201.6	329
3802153B	3 G 2.5	8.1	black	72.0	135
3802154B	4 G 2.5	8.9	black	96.0	166
3802155B	5 G 2.5	10.0	black	120.0	208
3802162B	12 G 2.5	14.8	black	288.0	438
3802157B	7 G 2.5	11.1	black	168.0	269
3802168B	18 G 2.5	17.8	black	432.0	661

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**YSLCY**

PVC insulated/sheathed and numbered cores

**Info**

- EMC environment
- UV-resistant
- Slim and light, without inner sheath

Benefits

- Space saving due to small cable diameter

Application range

- Used as a connection cable for measuring, monitoring and control connections in industrial machineries, heating and air refrigeration systems, office equipment, etc.
- Dry or damp interiors under medium mechanical load conditions
- Fixed installations as well as for occasional flexing at free, non-continuously recurring movement without tensile load
- Suitable in EMC-critical environments

Product features

- Flame-retardant acc. to IEC 60332-1-2
- UV resistant can be used outdoor
- With or without protective conductor gn/ye

Product Make-up

- Fine strands of bare copper wires
- PVC core insulation
- Plastic foil wrapping
- Tinned copper wire screen braiding
- PVC outer sheath, grey or black

Technical data**Classification**

ETIM 5.0 Class-Description: Control cable

ETIM 5.0 Class-ID: EC000104

**Core identification code**

Black core with white numbers

**Conductor stranding**

Fine wire acc. to IEC 60228 Cl.5

**Minimum bending radius**Occasional flexing: 25 x outer diameter
Fixed installation: 12 x outer diameter**Nominal voltage**U₀/U: 300/500 V**Protective conductor**G = with protective conductor GN/YE;
X = without protective conductor**Temperature range**

Fixed installation: -20°C to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
YSLCY					
3803702	2 X 0.5	5.8	grey	18.8	45
3803703	3 G 0.5	6.1	grey	24.4	59
3803704	4 G 0.5	6.5	grey	30.3	71
3803705	5 G 0.5	7.0	grey	36.3	86
3803706	7 G 0.5	7.5	grey	47.4	105
3803740	2 X 0.75	6.0	grey	24.6	69
3803741	3 G 0.75	6.3	grey	32.7	79
3803742	4 G 0.75	6.9	grey	41.1	93
3803743	5 G 0.75	7.7	grey	49.7	116
3803744	7 G 0.75	8.3	grey	65.7	139
3803750	2 X 1.0	6.3	grey	30.5	77
3803751	3 G 1.0	6.6	grey	40.9	90
3803752	4 G 1.0	7.2	grey	51.8	105
3803753	5 G 1.0	8.0	grey	63.1	131
3803754	7 G 1.0	8.6	grey	83.8	161
3803760	2 X 1.5	7.0	grey	41.1	97
3803761	3 G 1.5	7.4	grey	56.6	118
3803762	4 G 1.5	8.0	grey	72.7	140
3803763	5 G 1.5	8.9	grey	89.0	174
3803764	7 G 1.5	9.8	grey	119.2	216
3803770	2 X 2.5	8.1	grey	63.7	130
3803771	3 G 2.5	8.7	grey	89.1	161
3803772	4 G 2.5	9.7	grey	114.9	205
3803773	5 G 2.5	10.8	grey	141.1	248
3803774	7 G 2.5	11.8	grey	191.2	319
3803780	2 X 4	9.9	grey	95.9	200
3803781	3 G 4	10.6	grey	135.7	255
3803782	4 G 4	11.6	grey	176.6	296
3803783	5 G 4	12.8	grey	217.9	362
3803784	7 G 4	14.1	grey	297.6	460
3803787	2 X 6.0	11.6	grey	138.2	274
3803788	3 G 6	12.5	grey	197.9	373
3803789	4 G 6	13.8	grey	258.0	447
3803790	5 G 6	15.2	grey	318.8	538
3803791	7 G 6	16.6	grey	443.4	220
3803794	2 X 10	13.8	grey	230.4	407

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
3803795	3 G 10	14.8	grey	318.5	566
3803796	4 G 10	16.4	grey	423.8	733
3803797	5 G 10	18.1	grey	523.9	915
3803800	2 X 16	17.0	grey	348.2	563
3803801	3 G 16	18.3	grey	505.0	783
3803802	4 G 16	20.2	grey	669.4	984
3803803	5 G 16	22.4	grey	829.5	1,198
3803806	2 X 25	20.7	grey	536.4	929
3803807	3 G 25	22.1	grey	781.5	1,260
3803808	4 G 25	24.5	grey	1,028.3	1,644
3803809	5 G 25	27.0	grey	1,276.7	1,997
3803702B	2 X 0.5	5.8	black	18.8	45
3803703B	3 G 0.5	6.1	black	24.4	59
3803704B	4 G 0.5	6.5	black	30.3	71
3803705B	5 G 0.5	7.0	black	36.3	86
3803706B	7 G 0.5	7.5	black	47.4	105
3803740B	2 X 0.75	6.0	black	24.6	69
3803741B	3 G 0.75	6.3	black	32.7	79
3803742B	4 G 0.75	6.9	black	41.1	93
3803743B	5 G 0.75	7.7	black	49.7	116
3803744B	7 G 0.75	8.3	black	43.2	139
3803750B	2 X 1.0	6.3	black	30.5	77
3803751B	3 G 1.0	6.6	black	40.9	90
3803752B	4 G 1.0	7.2	black	51.8	105
3803753B	5 G 1.0	8.0	black	63.1	131
3803754B	7 G 1.0	8.6	black	83.8	161
3803760B	2 X 1.5	7.0	black	41.1	97
3803761B	3 G 1.5	7.4	black	56.6	118
3803762B	4 G 1.5	8.0	black	72.7	140
3803763B	5 G 1.5	8.9	black	89.0	174
3803764B	7 G 1.5	9.8	black	119.2	216
3803770B	2 X 2.5	8.1	black	63.7	130
3803771B	3 G 2.5	8.7	black	89.1	161
3803772B	4 G 2.5	9.7	black	114.9	205
3803773B	5 G 2.5	10.8	black	141.1	248
3803774B	7 G 2.5	11.8	black	191.2	319

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LV (N)2XY FR



Benefits

- Maintain high insulation resistance for heat and moisture exposed environments
- Applied to copper conductor, which is conductivity rate than aluminum conductor
- Easy installation due to small cable diameter
- High flame retardancy cable

Application range

- For main power distribution and lighting circuits in residential, industrial and commercial areas
- Fixed for power and control circuits and applicable for the connection of telecom power supply
- Cable tray and wiring board in factory

Product features

- Flame retardant according to IEC 60332-1-2 and IEC 60332-3-24 (CAT.C)
- Cable material according to IEC 60502-1
- Cable test according to IEC 60811

Norm references / Approvals

- Cable design according to IEC 60502-1
- Conductor design according to IEC60228 class 2

Product Make-up

- Conductor : Stranded made of bare copper
- Core insulation: Cross-Linked Polyethylene (XLPE)
- Core insulation colour : Core Identification code according to VDE 0293-308
- Outer sheath : Polyvinyl Chloride (PVC, ST2)
- Outer sheath colour: Black

Info

- Low voltage power and control cable
- Stranded copper conductor According to IEC60228 Cl.2
- Unarmoured, XLPE Insulation, PVC Outer sheath cable

Technical data



Conductor stranding

Stranded made of bare copper wire
(Design acc.to IEC60228 Cl.2)



Minimum bending radius

Fixed installation: 8 x cable diameter



Nominal voltage

AC U₀/U: 0.6/1 KV



Temperature range

-15° C up to +90 °C max. conductor temperature

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
LV (N)2XY FR				
85627651	1 X 1.5	6.2	13.8	55
85627652	2 X 1.5	10.3	27.7	128
85627653	3 X 1.5	10.8	41.7	151
85627654	4 X 1.5	11.6	55.6	180
85627655	5 X 1.5	12.5	69.6	210
85627656	6 X 1.5	13.5	83.5	241
85627657	7 X 1.5	13.5	97.5	258
85627658	8 X 1.5	14.4	111.4	290
85627659	9 X 1.5	15.4	125.4	323
85627660	10 X 1.5	16.6	139.5	361
85627661	11 X 1.5	16.6	153.4	378
85627662	12 X 1.5	17.1	167.4	403
85627663	13 X 1.5	17.3	181.4	424
85627664	14 X 1.5	17.9	195.4	451
85627665	15 X 1.5	18.3	209.3	476
85627666	16 X 1.5	18.8	223.3	502
85627667	17 X 1.5	19.3	237.3	528
85627668	18 X 1.5	19.7	251.3	554
85627669	19 X 1.5	19.7	265.3	570
85627670	20 X 1.5	20.3	279.3	598
85627671	21 X 1.5	20.7	293.3	623
85627672	22 X 1.5	21.3	307.3	652
85627673	23 X 1.5	21.6	321.3	676
85627674	24 X 1.5	22.9	335.4	719
85627675	25 X 1.5	22.9	349.3	736
85627676	26 X 1.5	22.9	363.3	753
85627677	27 X 1.5	23.3	377.3	780
85627678	28 X 1.5	23.3	391.3	797
85627679	29 X 1.5	23.6	405.3	819
85627680	30 X 1.5	24.1	419.3	848
85627681	31 X 1.5	24.2	433.3	867
85627682	32 X 1.5	24.5	447.3	891
85627683	33 X 1.5	25.0	461.3	919
85627684	34 X 1.5	25.2	475.3	940
85627685	35 X 1.5	25.4	489.3	960
85627686	36 X 1.5	26.0	503.3	991
85627687	37 X 1.5	26.0	517.3	1,008
85627688	38 X 1.5	26.2	531.3	1,030
85627689	39 X 1.5	26.5	545.3	1,055

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LV (N)2XYRY FR

i Info

- Low voltage power and control cable
- Stranded copper conductor According to IEC60228 Cl.2
- Armoured, XLPE Insulation, PVC Inner / Outer sheath cable

Benefits

- Maintain high insulation resistance for heat and moisture exposed environments
- Applied to copper conductor, which is conductivity rate than aluminum conductor
- Easy installation due to small cable diameter
- High flame retardancy cable

Application range

- For main power distribution and lighting circuits in residential, industrial and commercial areas
- Fixed for power and control circuits and applicable for the connection of telecom power supply
- Cable tray and wiring board in factory

Product features

- Flame retardant according to IEC 60332-1-2 and IEC 60332-3-24 (CAT.C)

LAPP KABEL LV (N)2XYRY FR 1x240SQMM RoHS



- Cable material according to IEC 60502-1
- Cable test according to IEC 60811

Norm references / Approvals

- Cable design according to IEC 60502-1
- Conductor design according to IEC60228 class 2

Product Make-up

- Conductor : Stranded made of bare copper
- Core insulation: Cross-Linked Polyethylene (XLPE)
- Core insulation colour : Core Identification code according to VDE 0293-308
- Inner sheath : Polyvinyl Chloride (PVC, ST2)
- Armoured : Aluminium wire (Single core) or Galvanized wire (Multi core)
- Outer sheath : Polyvinyl Chloride (PVC, ST2)
- Outer sheath colour: Black

Technical data**Conductor stranding**

Stranded made of bare copper wire
(Design acc.to IEC60228 Cl.2)

**Minimum bending radius**

Fixed installation: 10 x cable diameter

**Nominal voltage**

AC U₀/U: 0.6/1 kV

**Temperature range**

-15° C up to +90 °C max. conductor temperature

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
LV (N)2XYRY FR				
85631251	1 X 1.5	10.6	13.9	211
85631252	2 X 1.5	14.7	27.9	363
85631253	3 X 1.5	15.2	41.8	400
85631254	4 X 1.5	16.0	55.8	443
85631255	5 X 1.5	17.6	69.7	584
85631256	6 X 1.5	18.5	83.7	641
85631257	7 X 1.5	18.5	97.6	658
85631258	8 X 1.5	19.5	111.6	715
85631259	9 X 1.5	20.4	125.5	774
85631260	10 X 1.5	21.7	139.5	848
85631261	11 X 1.5	21.7	153.4	865
85631262	12 X 1.5	22.1	167.4	903
85631263	13 X 1.5	22.4	181.3	936
85631264	14 X 1.5	23.6	195.3	1,101
85631265	15 X 1.5	24.1	209.2	1,145
85631266	16 X 1.5	24.5	223.2	1,173
85631267	17 X 1.5	25.1	237.1	1,219
85631268	18 X 1.5	25.5	251.1	1,263
85631269	19 X 1.5	25.5	265.0	1,279
85631270	20 X 1.5	26.0	279.0	1,327
85631271	21 X 1.5	26.4	292.9	1,370
85631272	22 X 1.5	27.0	306.9	1,419
85631273	23 X 1.5	27.4	320.8	1,445
85631274	24 X 1.5	28.6	334.8	1,544
85631275	25 X 1.5	28.6	348.7	1,561
85631276	26 X 1.5	28.6	362.7	1,578
85631277	27 X 1.5	29.1	376.6	1,608
85631278	28 X 1.5	29.1	390.6	1,624
85631279	29 X 1.5	29.6	404.5	1,680
85631280	30 X 1.5	30.1	418.5	1,729
85631281	31 X 1.5	30.2	432.4	1,748
85631282	32 X 1.5	30.5	446.4	1,790
85631283	33 X 1.5	31.0	460.3	1,822
85631284	34 X 1.5	31.2	474.3	1,860
85631285	35 X 1.5	31.4	488.2	1,881
85631286	36 X 1.5	32.0	502.2	1,932
85631287	37 X 1.5	32.0	516.1	1,949
85631288	38 X 1.5	32.2	530.1	1,989
85631289	39 X 1.5	32.5	544.0	2,016

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H05RR-F / 60245 IEC 53(YZ) / YZ

Rubber cable for light mechanical stress and handheld devices used in households, kitchens, offices

LAPP KABEL CCC A045548 60245 IEC 53(YZ) H05RR-F <VDE>



Info

- CCC and VDE dual certified

Application range

- Hand-held and power supply devices
- For dry and damp interiors, only temporary use outdoors; not for industrial/commercial or agricultural facilities; not suitable for supplying industrial power tools
- Light and sound applications
- Light duty rubber-sheath cable
- For light workshop devices with light stress

Product features

- Flame-retardant in acc. to IEC 60332-1-2

Norm references / Approvals

- <VDE> cable type certification in acc. to EN 50525-2-21
- CCC cable type certification in acc. to GB/T 5013.4 or JB/T 8735.2
- Complies with IEC 60245.4

Product Make-up

- Fine strands of bare copper wires
- Rubber type El4 core insulation
- Rubber type EM3 outer sheath, black

Technical data

	Core identification code acc. to VDE 0293-308
	Conductor stranding Fine wire acc. to IEC 60228 Cl. 5
	Minimum bending radius 6 x cable diameter
	Nominal voltage U ₀ /U: 300/500 V
	Test voltage 2000 V
	Protective conductor G = with GN-YE protective conductor X = without protective conductor
	Temperature range -25°C up to +60°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
H05RR-F / 60245 IEC 53(YZ), acc. to EN 50525-2-21 and GB/T 5013.4, VDE and CCC certified				
393808120	2 X 0.75	5.7 - 7.4	14.4	61
393808130	3 G 0.75	6.2 - 8.1	21.6	75
393808140	4 G 0.75	6.8 - 8.8	28.8	91
393808150	5 G 0.75	7.6 - 9.9	36.0	110
393808121	2 X 1.0	6.1 - 8.0	19.2	73
393808131	3 G 1.0	6.5 - 8.5	28.8	86
393808141	4 G 1.0	7.1 - 9.3	38.4	105
393808151	5 G 1.0	8.0 - 10.3	48.0	128
393808122	2 X 1.5	7.6 - 9.8	28.8	110
393808132	3 G 1.5	8.0 - 10.4	43.2	130
393808142	4 G 1.5	9.0 - 11.6	57.6	165
393808152	5 G 1.5	9.8 - 12.7	72.0	190
393808123	2 X 2.5	9.0 - 11.6	48.0	160
393808133	3 G 2.5	9.6 - 12.4	72.0	190
393808143	4 G 2.5	10.7 - 13.8	96.0	235
393808153	5 G 2.5	11.9 - 15.3	120.0	285
H05RR-F / YZ, acc. to EN 50525-2-21 and JB/T 8735.2, VDE and CCC certified				
393808124	2 X 4	10.6 - 13.7	76.8	227
393808134	3 G 4	11.3 - 14.5	115.2	273
YZ, acc. to JB/T 8735.2, CCC certified, w/o CE marking				
393808144	4 G 4	12.7 - 16.2	153.6	342
393808154	5 G 4	14.1 - 17.9	192.0	418
393808125	2 X 6	11.8 - 15.1	115.2	293
393808135	3 G 6	12.6 - 16.1	172.8	360
393808145	4 G 6	14.0 - 17.9	230.4	449
393808155	5 G 6	15.7 - 20.0	288.0	562

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H05RN-F / 60245 IEC 57(YZW)

Rubber cable for handheld devices and chains of decorative lights

Info

- CCC and VDE dual certified

LAPP KABEL CCC A045548 60245 IEC 57(YZW) H05RN-F <VDE>

Norm references / Approvals

- <VDE> cable type certification in acc. to EN 50525-2-21
- CCC cable type certification in acc. to GB/T 5013.4
- Complies with IEC 60245.4

Application range

- For supplying devices in households, kitchens or offices under light mechanical stress; handheld inspection lamps
- For dry and damp interiors, as well as for limited outdoor use
- Medium duty rubber-sheath cable
- For lightweight workshop tools subject to medium loads

Product features

- Flame-retardant in acc. to IEC 60332-1-2
- Oil-resistant according to EN 60811-404

Technical data

Core identification code
acc. to VDE 0293-308

Conductor stranding
Fine wire acc. to IEC 60228 / VDE 0295 Cl. 5

Minimum bending radius
6 x cable diameter

Nominal voltage
U₀/U: 300/500 V

Test voltage
2000 V

Protective conductor
G = with GN-YE protective conductor
X = without protective conductor

Temperature range
-25°C up to +60°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
H05RN-F / 60245 IEC 57(YZW), acc. to EN 50525-2-21 and GB/T 5013.4, VDE and CCC certified				
393808220	2 X 0.75	5.7 - 7.4	14.4	60
393808230	3 G 0.75	6.2 - 8.1	21.6	75
393808240	4 G 0.75	6.8 - 8.8	28.8	90
393808221	2 X 1.0	6.1 - 8.0	19.2	71
393808231	3 G 1.0	6.5 - 8.5	28.8	90
393808241	4 G 1.0	7.1 - 9.3	38.4	102
60245 IEC 57(YZW), acc. to GB/T 5013.4, CCC certified, w/o CE marking				
393808232	3 G 1.5	8.0 - 10.4	43.2	126
393808242	4 G 1.5	9.0 - 11.6	57.6	162
393808252	5 G 1.5	9.8 - 12.7	72.0	188
393808233	3 G 2.5	9.6 - 12.4	72.0	188
393808243	4 G 2.5	10.7 - 13.8	96.0	232
393808253	5 G 2.5	11.9 - 15.3	120.0	280

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H07RN-F / 60245 IEC 66(YCW) / YCW

Heavy standard construction



LAPP KABEL H07RN-F VDE



LAPP KABEL H07RN-F VDE

Application range

- Hand-held and power supply devices
- For dry and damp interiors, as well as for limited outdoor use
- Light and sound technology
- Heavy-duty rubber-sheath cable
- Medium mechanical stress Industrial, agricultural use

Product features

- Flame-retardant in acc. to IEC 60332-1-2
- Oil-resistant according to EN 60811-404

Norm references / Approvals

- <VDE> cable type certification in acc. to EN 50525-2-21
- CCC cable type certification in acc. to GB/T 5013.4 or JB/T 8735.2
- Complies with IEC 60245.4

Product Make-up

- Fine strands of bare copper wires
- Rubber type EI4 core insulation
- Rubber type EM2 outer sheath, black

i Info

- CCC and VDE dual certified

Technical data

**Core identification code**

Up to 5 cores: colour-coded according to VDE0293-308

From 6 cores: black with white numbers

**Conductor stranding**

Fine wire acc. to IEC 60228 / VDE 0295 Cl. 5

**Minimum bending radius**

6 x cable diameter

**Nominal voltage**U₀/U: 450/750 V**Test voltage**

2500 V

**Protective conductor**

G = with GN-YE protective conductor

X = without protective conductor

**Temperature range**

-25°C up to +60°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
H07RN-F/60245 IEC 66(YCW), acc. to EN 50525-2-21 and GB/T 5013.4, VDE and CCC certified				
393807120	2 X 1.0	7.7 - 10.0	19.2	100
393807140	3 G 1.0	8.3 - 10.7	28.8	125
393807160	4 G 1.0	9.2 - 11.9	38.4	155
393807180	5 G 1.0	10.2 - 13.1	48.0	180
393807100	1 X 1.5	5.7 - 7.1	14.4	57
393807121	2 X 1.5	8.5 - 11.0	28.8	130
393807141	3 G 1.5	9.2 - 11.9	43.2	155
393807161	4 G 1.5	10.2 - 13.1	57.6	195
393807181	5 G 1.5	11.2 - 14.4	72.0	230
393807101	1 X 2.5	6.3 - 7.9	24.0	75
393807122	2 X 2.5	10.2 - 13.1	48.0	185
393807142	3 G 2.5	10.9 - 14.0	72.0	225
393807162	4 G 2.5	12.1 - 15.5	96.0	275
393807182	5 G 2.5	13.3 - 17.0	120.0	330
393807102	1 X 4	7.2 - 9.0	38.4	104
393807123	2 X 4	11.8 - 15.1	76.8	270
393807143	3 G 4	12.7 - 16.2	115.2	310
393807163	4 G 4	14.0 - 17.9	153.6	385
393807183	5 G 4	15.6 - 19.9	192.0	473
393807103	1 X 6	7.9 - 9.8	57.6	131
393807124	2 X 6	13.1 - 16.8	115.2	350
393807144	3 G 6	14.1 - 18.0	172.8	410
393807164	4 G 6	15.7 - 20.0	230.4	515
393807184	5 G 6	17.5 - 22.2	288.0	635
393807104	1 X 10	9.5 - 11.9	96.0	202
393807125	2 X 10	17.7 - 22.6	192.0	565
393807145	3 G 10	19.1 - 24.2	288.0	710
393807165	4 G 10	20.9 - 26.5	384.0	900
393807185	5 G 10	22.9 - 29.1	480.0	1,095
393807105	1 X 16	10.8 - 13.4	153.6	280
393807126	2 X 16	20.2 - 25.7	307.2	765
393807146	3 G 16	21.8 - 27.6	460.8	975
393807166	4 G 16	23.8 - 30.1	614.4	1,255
393807186	5 G 16	26.4 - 33.3	768.0	1,545
393807106	1 X 25	12.7 - 15.8	240.0	390
393807127	2 X 25	24.3 - 30.7	480.0	1,080
393807147	3 G 25	26.1 - 33.0	720.0	1,375
393807167	4 G 25	28.9 - 36.6	960.0	1,810
393807187	5 G 25	32.0 - 40.4	1,200.0	2,220
393807107	1 X 35	14.3 - 17.9	336.0	510
393807148	3 G 35	29.3 - 37.1	1,008.0	1,780
393807168	4 G 35	32.5 - 41.1	1,344.0	2,345
393807108	1 X 50	16.5 - 20.6	480.0	705
393807149	3 G 50	34.1 - 42.9	1,440.0	2,460
393807169	4 G 50	37.7 - 47.5	1,920.0	3,220

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
H07RN-F / YCW, acc. to EN 50525-2-21 and JB/T 8735.2, VDE and CCC certified				
393807128	2 X 35	27.2 - 34.3	672.0	1,380
393807188	5 G 35	35.7 - 45.1	1,680.0	2,855
393807129	2 X 50	31.6 - 39.8	960.0	1,905
393807201	5 G 50	41.8 - 53.0	2,400.0	3,985
393807130	2 X 70	35.8 - 45.1	1,344.0	2,375
393807202	5 G 70	47.5 - 60.0	3,360.0	5,370
393807131	2 X 95	40.2 - 51.0	1,824.0	3,035
393807203	5 G 95	54.0 - 67.0	4,560.0	6,960
393807152	3 G 120	47.4 - 60.0	3,456.0	5,110
393807153	3 G 150	52.0 - 66.0	4,320.0	6,262
H07RN-F, acc. to EN 50525-2-21, VDE certified				
393807190	7 G 1.5	14.7 - 18.7	100.8	335
393807192	12 G 1.5	17.6 - 22.4	172.8	550
393807194	18 G 1.5	20.7 - 26.3	259.2	755
393807196	24 G 1.5	24.3 - 30.7	345.6	985
393807198	36 G 1.5	27.8 - 35.2	518.4	1,370
393807191	7 G 2.5	17.1 - 21.8	168.0	475
393807193	12 G 2.5	20.6 - 26.2	288.0	746
393807195	18 G 2.5	24.4 - 30.9	432.0	1,070
393807197	24 G 2.5	28.8 - 36.4	576.0	1,415
393807199	36 G 2.5	33.2 - 41.8	864.0	2,025
393807204	7 G 4	20.1 - 25.5	268.8	655
393807205	12 G 4	24.4 - 30.9	460.8	1,050
393807206	18 G 4	28.8 - 36.4	691.2	1,565
393807154	3 G 185	57.0 - 72.0	5,328.0	7,580
393807174	4 G 185	64.0 - 80.0	7,104.0	10,060
393807155	3 G 240	65.0 - 82.0	6,912.0	9,830
393807175	4 G 240	72.0 - 91.0	9,216.0	13,035
YCW, acc. to JB/T 8735.2, CCC certified, w/o CE marking				
393807207	5 G 120	59.0 - 74.0	5,760.0	8,335
393807208	5 G 150	65.0 - 81.0	7,200.0	10,240

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LAPP KABEL X01N2-D

	Info
<ul style="list-style-type: none"> Arc welding cable acc. to EN-50525-2-81 	

**Application range**

- For transmitting high currents from the electric welding device to the welding tool
- Can be used in dry or damp rooms

Product features

- Flame retardant acc. to IEC 60332-1-2

Product Make-up

- Fine strands of bare copper wires
- Stranding approximately corresponds to class 6 for up to 95 mm², and class 5 for sizes from 120 mm²
- Separator made of PET tape
- EPR compound covering, type EM5
- Covering colour in black or orange

Technical data

	Minimum bending radius 12 x cable diameter
	Nominal voltage U ₀ /U: 100/100 V
	Test voltage 1000 V
	Temperature range -25°C to +85°C

Article number	Conductor cross-section (mm ²)	Outer diameter (mm)	Outer sheath colour	Copper index (kg/km)	Weight (kg/km)
LAPP KABEL X01N2-D					
3808080	10	8.5	black	96.0	171
3808081	10	8.5	orange	96.0	171
3808082	16	9.5	black	154.0	198
3808083	16	9.5	orange	154.0	198
3808084	25	11.2	black	240.0	305
3808085	25	11.2	orange	240.0	305
3808086	35	12.5	black	336.0	415
3808087	35	12.5	orange	336.0	415
3808088	50	14.3	black	480.0	555
3808089	50	14.3	orange	480.0	555
3808090	70	16.5	black	672.0	765
3808091	70	16.5	orange	672.0	765
3808092	90	18.5	black	912.0	1,010
3808093	90	18.5	orange	912.0	1,010
3808094	120	20.0	black	1,152.0	1,262
3808095	120	20.0	orange	1,152.0	1,262
3808096	150	22.5	black	1,440.0	1,610
3808097	150	22.5	orange	1,440.0	1,610
3808098	185	25.5	black	1,776.0	1,995
3808099	185	25.5	orange	1,776.0	1,995
3808100	240	38.5	black	2,304.0	2,520
3808101	240	38.5	orange	2,304.0	2,520

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ÖLFLEX® INSTRUM RE-2X(ST)Y



Info

- Un-armoured XLPE insulation
- Overall Screen

Application range

- For communication, data and voice transmission signal in industrial process manufacturing plants
- Oil and Gas industry
- Petrochemical industry
- Generally used for indoor installation and suitable for wet and damp areas
- The Blue outer sheath is suitable for use with Group 2 Intrinsically Safe (IS) systems in hazardous areas where the voltage range is <50 VAC / <75 VDC

Product features

- Cable construction in acc. to BS EN 50288-7
- Flame retardant in acc. to IEC 60332-3-24

Product Make-up

- Stranded plain annealed copper wires
- XLPE core insulation
- Pairs are collectively screened with aluminium polyester tape
- Tinned copper drain wire
- PVC outer sheath, black or blue

Technical data



Classification

ETIM 5.0 Class-Description: Control cable
ETIM 5.0 Class-ID: EC000104



Core identification code

Pair: black and white
Multipair: black and white with numbers



Conductor stranding

acc. to BS 6360 / IEC 60228 Cl. 2



Minimum bending radius

6 x cable diameter



Nominal voltage

500 V
< 50 VAC / < 75 VDC for Intrinsically Safe (IS) circuits application



Temperature range

-30°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® INSTRUM RE-2X(ST)Y					
1270000	1x2x0.5	6.9	black	14.4	48
1270001	1x2x0.5	6.9	blue	14.4	48
1270002	2x2x0.5	9.8	black	24.0	73
1270003	2x2x0.5	9.8	blue	24.0	73
1270004	4x2x0.5	11.5	black	43.2	132
1270005	4x2x0.5	11.5	blue	43.2	132
1270006	6x2x0.5	13.7	black	62.4	185
1270007	6x2x0.5	13.7	blue	62.4	185
1270008	8x2x0.5	15.2	black	81.6	223
1270009	8x2x0.5	15.2	blue	81.6	223
1270010	10x2x0.5	17.4	black	100.8	276
1270011	10x2x0.5	17.4	blue	100.8	276
1270012	12x2x0.5	17.9	black	120.0	323
1270013	12x2x0.5	17.9	blue	120.0	323
1270030	1x2x0.75	7.3	black	19.2	57
1270031	1x2x0.75	7.3	blue	19.2	57
1270032	2x2x0.75	10.7	black	33.6	88
1270033	2x2x0.75	10.7	blue	33.6	88
1270034	4x2x0.75	12.3	black	62.4	213
1270035	4x2x0.75	12.3	blue	62.4	213
1270036	6x2x0.75	14.7	black	91.2	233
1270037	6x2x0.75	14.7	blue	91.2	233
1270038	8x2x0.75	16.7	black	120.0	285
1270039	8x2x0.75	16.7	blue	120.0	285
1270040	10x2x0.75	19.0	black	148.8	352
1270041	10x2x0.75	19.0	blue	148.8	352
1270042	12x2x0.75	19.6	black	177.6	409
1270043	12x2x0.75	19.6	blue	177.6	409
1270080	1x2x1	7.9	black	24.0	71
1270081	1x2x1	7.9	blue	24.0	71
1270082	2x2x1	11.3	black	43.2	102
1270083	2x2x1	11.3	blue	43.2	102
1270084	4x2x1	13.2	black	81.6	195
1270085	4x2x1	13.2	blue	81.6	195
1270086	6x2x1	15.9	black	120.0	291

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
1270087	6x2x1	15.9	blue	120.0	291
1270088	8x2x1	17.7	black	158.4	356
1270089	8x2x1	17.7	blue	158.4	356
1270090	10x2x1	20.1	black	196.8	439
1270091	10x2x1	20.1	blue	196.8	439
1270092	12x2x1	20.8	black	235.2	511
1270093	12x2x1	20.8	blue	235.2	511
1270120	1x2x1.5	8.5	black	33.6	86
1270121	1x2x1.5	8.5	blue	33.6	86
1270122	2x2x1.5	12.3	black	62.4	134
1270123	2x2x1.5	12.3	blue	62.4	134
1270124	4x2x1.5	14.4	black	120.0	240
1270125	4x2x1.5	14.4	blue	120.0	240
1270126	6x2x1.5	17.4	black	177.6	337
1270127	6x2x1.5	17.4	blue	177.6	337
1270128	8x2x1.5	19.6	black	235.2	428
1270129	8x2x1.5	19.6	blue	235.2	428
1270130	10x2x1.5	22.4	black	292.8	537
1270131	10x2x1.5	22.4	blue	292.8	537
1270132	12x2x1.5	23.1	black	350.4	627
1270133	12x2x1.5	23.1	blue	350.4	627
1270150	1x2x2.5	9.8	black	52.8	105
1270151	1x2x2.5	9.8	blue	52.8	105
1270152	2x2x2.5	14.6	black	100.8	188
1270153	2x2x2.5	14.6	blue	100.8	188
1270154	4x2x2.5	17.1	black	196.8	310
1270155	4x2x2.5	17.1	blue	196.8	310
1270156	6x2x2.5	20.6	black	292.8	440
1270157	6x2x2.5	20.6	blue	292.8	440
1270158	8x2x2.5	23.4	black	388.8	570
1270159	8x2x2.5	23.4	blue	388.8	570
1270160	10x2x2.5	26.9	black	484.8	717
1270161	10x2x2.5	26.9	blue	484.8	717
1270162	12x2x2.5	27.8	black	580.8	828
1270163	12x2x2.5	27.8	blue	580.8	828

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ÖLFLEX® INSTRUM RE-2X(ST)Y PiMF

Info

- Un-armoured XLPE insulation
- Overall Screen



Application range

- For communication, data and voice transmission signal in industrial process manufacturing plants
- Oil and Gas industry
- Petrochemical industry
- Generally used for indoor installation and suitable for wet and damp areas
- The Blue outer sheath is suitable for use with Group 2 Intrinsically Safe (IS) systems in hazardous areas where the voltage range is <50 VAC / <75 VDC

Product features

- Cable construction in acc. to BS EN 50288-7
- Flame retardant in acc. to IEC 60332-3-24

Product Make-up

- Stranded plain annealed copper wires
- XLPE core insulation
- Pairs are collectively screened with aluminium polyester tape
- Tinned copper drain wire
- PVC outer sheath, black or blue

Technical data



Classification

ETIM 5.0 Class-Description: Control cable

ETIM 5.0 Class-ID: EC000104



Core identification code

Pair: black and white

Multipair: black and white with numbers



Conductor stranding

acc. to BS 6360 / IEC 60228 Cl. 2



Minimum bending radius

6 x cable diameter



Nominal voltage

500 V
< 50 VAC / < 75 VDC for Intrinsically Safe (IS) circuits application



Temperature range

-30°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® INSTRUM RE-2X(ST)Y PiMF					
1270200	2x2x0.5	10.8	black	33.6	89
1270201	2x2x0.5	10.8	blue	33.6	89
1270202	4x2x0.5	12.4	black	62.4	156
1270203	4x2x0.5	12.4	blue	62.4	156
1270204	6x2x0.5	14.7	black	91.2	213
1270205	6x2x0.5	14.7	blue	91.2	213
1270206	8x2x0.5	16.7	black	120.0	259
1270207	8x2x0.5	16.7	blue	120.0	259
1270208	10x2x0.5	18.9	black	148.8	323
1270209	10x2x0.5	18.9	blue	148.8	323
1270210	12x2x0.5	19.5	black	177.6	378
1270211	12x2x0.5	19.5	blue	177.6	378
1270240	2x2x0.75	11.6	black	43.2	106
1270241	2x2x0.75	11.6	blue	43.2	106
1270242	4x2x0.75	13.5	black	81.6	195
1270243	4x2x0.75	13.5	blue	81.6	195
1270244	6x2x0.75	16.1	black	120.0	255
1270245	6x2x0.75	16.1	blue	120.0	255
1270246	8x2x0.75	18.0	black	158.4	310
1270247	8x2x0.75	18.0	blue	158.4	310
1270248	10x2x0.75	20.5	black	196.8	387
1270249	10x2x0.75	20.5	blue	196.8	387
1270250	12x2x0.75	21.3	black	235.2	451
1270251	12x2x0.75	33.9	blue	235.2	1,284
1270280	2x2x1	12.2	black	52.8	133
1270281	2x2x1	12.2	blue	52.8	133
1270282	4x2x1	14.3	black	100.8	243
1270283	4x2x1	14.3	blue	100.8	243
1270284	6x2x1	17.1	black	148.8	319
1270285	6x2x1	17.1	blue	148.8	319

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
1270286	8x2x1	19.6	black	196.8	388
1270287	8x2x1	19.6	blue	196.8	388
1270288	10x2x1	22.0	black	244.8	483
1270289	10x2x1	22.0	blue	244.8	483
1270290	12x2x1	22.7	black	292.8	563
1270291	12x2x1	22.7	blue	292.8	563
1270330	2x2x1.5	13.5	black	72.0	149
1270331	2x2x1.5	13.5	blue	72.0	149
1270332	4x2x1.5	15.8	black	139.2	284
1270333	4x2x1.5	15.8	blue	139.2	284
1270334	6x2x1.5	18.9	black	206.4	361
1270335	6x2x1.5	18.9	blue	206.4	361
1270336	8x2x1.5	21.4	black	273.6	468
1270337	8x2x1.5	21.4	blue	273.6	468
1270338	10x2x1.5	24.3	black	340.8	578
1270339	10x2x1.5	24.3	blue	340.8	578
1270340	12x2x1.5	25.1	black	408.0	680
1270341	12x2x1.5	25.1	blue	408.0	680
1270360	2x2x2.5	15.9	black	110.4	189
1270361	2x2x2.5	15.9	blue	110.4	189
1270362	4x2x2.5	18.7	black	216.0	309
1270363	4x2x2.5	18.7	blue	216.0	309
1270364	6x2x2.5	22.4	black	321.6	496
1270365	6x2x2.5	22.4	blue	321.6	496
1270366	8x2x2.5	25.4	black	427.2	667
1270367	8x2x2.5	25.4	blue	427.2	667
1270368	10x2x2.5	28.8	black	532.8	853
1270369	10x2x2.5	28.8	blue	532.8	853
1270370	12x2x2.5	30.2	black	638.4	1,055
1270371	12x2x2.5	30.2	blue	638.4	1,055

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ÖLFLEX® INSTRUM RE-2X(ST)YRY


Info

- Armoured XLPE insulation
- Overall Screen

Application range

- For communication, data and voice transmission signal in industrial process manufacturing plants
- Oil and Gas industry
- Petrochemical industry
- Generally used for indoor installation and suitable for wet and damp areas
- The Blue outer sheath is suitable for use with Group 2 Intrinsically Safe (IS) systems in hazardous areas where the voltage range is <50 VAC / <75 VDC

Product features

- Cable construction in acc. to BS EN 50288-7
- Flame retardant in acc. to IEC 60332-3-24

Product Make-up

- Stranded plain annealed copper wires
- XLPE core insulation
- Pairs are collectively screened with aluminium polyester tape
- Tinned copper drain wire
- PVC inner sheath, black
- PVC outer sheath, black or blue
- Galvanized steel wire armoured

Technical data
Classification

ETIM 5.0 Class-Description: Control cable
ETIM 5.0 Class-ID: EC000104

Core identification code

Pair: black and white
Multipair: black and white with numbers

Conductor stranding

acc. to BS 6360 / IEC 60228 Cl. 2

Minimum bending radius

10 x cable diameter

Nominal voltage

500 V
< 50 VAC / < 75 VDC for Intrinsically Safe (IS) circuits application

Temperature range

-30°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® INSTRUM RE-2X(ST)Y					
1270400	1x2x0.5	11.3	black	14.4	218
1270401	1x2x0.5	11.3	blue	14.4	218
1270402	2x2x0.5	14.4	black	24.0	335
1270403	2x2x0.5	14.4	blue	24.0	335
1270404	4x2x0.5	16.1	black	43.2	392
1270405	4x2x0.5	16.1	blue	43.2	392
1270406	6x2x0.5	19.2	black	62.4	527
1270407	6x2x0.5	19.2	blue	62.4	527
1270408	8x2x0.5	20.8	black	81.6	722
1270409	8x2x0.5	20.8	blue	81.6	722
1270410	10x2x0.5	23.8	black	100.8	822
1270411	10x2x0.5	23.8	blue	100.8	822
1270412	12x2x0.5	24.3	black	120.0	903
1270413	12x2x0.5	24.3	blue	120.0	903
1270440	1x2x0.75	11.7	black	19.2	237
1270441	1x2x0.75	11.7	blue	19.2	237
1270442	2x2x0.75	15.3	black	33.6	378
1270443	2x2x0.75	15.3	blue	33.6	378
1270444	4x2x0.75	17.6	black	62.4	526
1270445	4x2x0.75	17.6	blue	62.4	526
1270446	6x2x0.75	20.2	black	91.2	670
1270447	6x2x0.75	20.2	blue	91.2	670
1270448	8x2x0.75	22.3	black	120.0	785
1270449	8x2x0.75	22.3	blue	120.0	785
1270450	10x2x0.75	25.4	black	148.8	1,045
1270451	10x2x0.75	25.4	blue	148.8	1,045
1270452	12x2x0.75	26.2	black	177.6	1,115
1270453	12x2x0.75	26.2	blue	177.6	1,115
1270480	1x2x1	12.3	black	24.0	255
1270481	1x2x1	12.3	blue	24.0	255
1270482	2x2x1	15.9	black	43.2	385
1270483	2x2x1	15.9	blue	43.2	385
1270484	4x2x1	18.8	black	81.6	595
1270485	4x2x1	18.8	blue	81.6	595
1270486	6x2x1	21.4	black	120.0	735

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
1270487	6x2x1	21.4	blue	120.0	735
1270488	8x2x1	24.1	black	158.4	995
1270489	8x2x1	24.1	blue	158.4	995
1270490	10x2x1	26.8	black	196.8	1,153
1270491	10x2x1	26.8	blue	196.8	1,153
1270492	12x2x1	27.4	black	235.2	1,238
1270493	12x2x1	27.4	blue	235.2	1,238
1270530	1x2x1.5	12.9	black	33.6	281
1270531	1x2x1.5	12.9	blue	33.6	281
1270532	2x2x1.5	17.6	black	62.4	525
1270533	2x2x1.5	17.6	blue	62.4	525
1270534	4x2x1.5	20.0	black	120.0	676
1270535	4x2x1.5	20.0	blue	120.0	676
1270536	6x2x1.5	23.7	black	177.6	985
1270537	6x2x1.5	23.7	blue	177.6	985
1270538	8x2x1.5	26.2	black	235.2	1,162
1270539	8x2x1.5	26.2	blue	235.2	1,162
1270540	10x2x1.5	29.0	black	292.8	1,354
1270541	10x2x1.5	29.0	blue	292.8	1,354
1270542	12x2x1.5	29.9	black	350.4	1,473
1270543	12x2x1.5	29.9	blue	350.4	1,473
1270570	1x2x2.5	14.4	black	52.8	350
1270571	1x2x2.5	14.4	blue	52.8	350
1270572	2x2x2.5	20.1	black	100.8	658
1270573	2x2x2.5	20.1	blue	100.8	658
1270574	4x2x2.5	23.5	black	196.8	1,005
1270575	4x2x2.5	23.5	blue	196.8	1,005
1270576	6x2x2.5	27.2	black	292.8	1,266
1270577	6x2x2.5	27.2	blue	292.8	1,266
1270578	8x2x2.5	30.2	black	388.8	1,510
1270579	8x2x2.5	30.2	blue	388.8	1,510
1270580	10x2x2.5	33.9	black	484.8	1,818
1270581	10x2x2.5	33.9	blue	484.8	1,818
1270582	12x2x2.5	35.6	black	580.8	2,206
1270583	12x2x2.5	35.6	blue	580.8	2,206

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ÖLFLEX® INSTRUM RE-2X(ST)YRY PiMF



Info

- Armoured XLPE insulation
- Overall Screen



Application range

- For communication, data and voice transmission signal in industrial process manufacturing plants
- Oil and Gas industry
- Petrochemical industry
- Generally used for indoor installation and suitable for wet and damp areas
- The Blue outer sheath is suitable for use with Group 2 Intrinsically Safe (IS) systems in hazardous areas where the voltage range is <50 VAC / <75 VDC

Product features

- Cable construction in acc. to BS EN 50288-7
- Flame retardant in acc. to IEC 60332-3-24

Product Make-up

- Stranded plain annealed copper wires
- XLPE core insulation
- Pairs are collectively screened with aluminium polyester tape
- Tinned copper drain wire
- PVC inner sheath, black
- PVC outer sheath, black or blue
- Galvanized steel wire armoured

Technical data



Classification

ETIM 5.0 Class-Description: Control cable

ETIM 5.0 Class-ID: EC000104



Core identification code

Pair: black and white
Multipair: black and white with numbers



Conductor stranding

acc. to BS 6360 / IEC 60228 Cl. 2



Minimum bending radius

10 x cable diameter



Nominal voltage

500 V
<50 VAC / <75 VDC for Intrinsically Safe (IS) circuits application



Temperature range

-30°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® INSTRUM RE-2X(ST)Y PiMF					
1270600	2x2x0.5	15.4	black	33.6	349
1270601	2x2x0.5	15.4	blue	33.6	349
1270602	4x2x0.5	17.7	black	62.4	514
1270603	4x2x0.5	17.7	blue	62.4	514
1270604	6x2x0.5	20.2	black	91.2	629
1270605	6x2x0.5	20.2	blue	91.2	629
1270606	8x2x0.5	22.3	black	120.0	742
1270607	8x2x0.5	22.3	blue	120.0	742
1270608	10x2x0.5	25.3	black	148.8	999
1270609	10x2x0.5	25.3	blue	148.8	999
1270610	12x2x0.5	26.1	black	177.6	1,058
1270611	12x2x0.5	26.1	blue	177.6	1,058
1270640	2x2x0.75	16.1	black	43.2	383
1270641	2x2x0.75	16.1	blue	43.2	383
1270642	4x2x0.75	19.0	black	81.6	579
1270643	4x2x0.75	19.0	blue	81.6	579
1270644	6x2x0.75	21.6	black	120.0	730
1270645	6x2x0.75	21.6	blue	120.0	730
1270646	8x2x0.75	24.3	black	158.4	961
1270647	8x2x0.75	24.3	blue	158.4	961
1270648	10x2x0.75	27.0	black	196.8	1,130
1270649	10x2x0.75	27.0	blue	196.8	1,130
1270650	12x2x0.75	27.9	black	235.2	1,200
1270651	12x2x0.75	27.9	blue	235.2	1,200
1270680	2x2x1	17.5	black	52.8	497
1270681	2x2x1	17.5	blue	52.8	497
1270682	4x2x1	19.7	black	100.8	628
1270683	4x2x1	19.7	blue	100.8	628
1270684	6x2x1	23.5	black	148.8	911
1270685	6x2x1	23.5	blue	148.8	911

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
1270686	8x2x1	25.9	black	196.8	1,084
1270687	8x2x1	25.9	blue	196.8	1,084
1270688	10x2x1	28.5	black	244.8	1,255
1270689	10x2x1	28.5	blue	244.8	1,255
1270690	12x2x1	29.4	black	292.8	1,338
1270691	12x2x1	29.4	blue	292.8	1,338
1270730	2x2x1.5	19.0	black	72.0	574
1270731	2x2x1.5	19.0	blue	72.0	574
1270732	4x2x1.5	21.3	black	139.2	731
1270733	4x2x1.5	21.3	blue	139.2	731
1270734	6x2x1.5	25.3	black	206.4	1,065
1270735	6x2x1.5	25.3	blue	206.4	1,065
1270736	8x2x1.5	27.9	black	273.6	1,247
1270737	8x2x1.5	27.9	blue	273.6	1,247
1270738	10x2x1.5	31.1	black	340.8	1,473
1270739	10x2x1.5	31.1	blue	340.8	1,473
1270740	12x2x1.5	31.9	black	408.0	1,582
1270741	12x2x1.5	31.9	blue	408.0	1,582
1270760	2x2x2.5	21.4	black	110.4	710
1270761	2x2x2.5	21.4	blue	110.4	710
1270762	4x2x2.5	25.1	black	216.0	1,080
1270763	4x2x2.5	25.1	blue	216.0	1,080
1270764	6x2x2.5	29.0	black	321.6	1,370
1270765	6x2x2.5	29.0	blue	321.6	1,370
1270766	8x2x2.5	32.2	black	427.2	1,621
1270767	8x2x2.5	32.2	blue	427.2	1,621
1270768	10x2x2.5	37.0	black	532.8	2,170
1270769	10x2x2.5	37.0	blue	532.8	2,170
1270770	12x2x2.5	38.1	black	638.4	2,355
1270771	12x2x2.5	38.1	blue	638.4	2,355

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ÖLFLEX® INSTRUM RE-Y(ST)Y**i Info**

- Un-armoured PVC (V-90HT) Heat Resistant
- Overall Screen

Application range

- For communication, data and voice transmission signal in industrial process manufacturing plants
- Oil and Gas industry
- Petrochemical industry
- Generally used for indoor installation and suitable for wet and damp areas
- The Blue outer sheath is suitable for use with Group 2 Intrinsically Safe (IS) systems in hazardous areas where the voltage range is <50 VAC / <75 VDC

Product features

- Cable construction in acc. to BS EN 50288-7
- Flame retardant in acc. to IEC 60332-3-24

Product Make-up

- Stranded plain annealed copper wires
- PVC (V-90HT) core insulation
- Pairs are collectively screened with aluminium polyester tape
- Tinned copper drain wire
- PVC outer sheath, black or blue

Technical data**Classification**

ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000104

Core identification code

Pair: black and white
Multipair: black and white with numbers
Multicore: black with numbers (4C and above)

Conductor stranding

acc. to BS 6360 / IEC 60228 Cl. 2

Minimum bending radius

6 x cable diameter

Nominal voltage

500 V
<50 VAC / <75 VDC for Intrinsically Safe (IS) circuits application

Temperature range

-30°C to +105°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® INSTRUM RE-Y(ST)Y					
1270800	1x2x0.5	6.9	black	14.4	60
1270801	1x2x0.5	6.9	blue	14.4	60
1270802	2x2x0.5	9.8	black	24.0	86
1270803	2x2x0.5	9.8	blue	24.0	86
1270824	3x2x0.5	10.6	black	33.6	125
1270825	3x2x0.5	10.6	blue	33.6	125
1270804	4x2x0.5	11.5	black	43.2	160
1270805	4x2x0.5	11.5	blue	43.2	160
1270840	1x2x0.75	7.3	black	19.2	69
1270841	1x2x0.75	7.3	blue	19.2	69
1270842	2x2x0.75	10.7	black	33.6	104
1270843	2x2x0.75	10.7	blue	33.6	104
1270866	3x2x0.75	11.3	black	48.0	118
1270867	3x2x0.75	11.3	blue	48.0	118
1270844	4x2x0.75	12.3	black	62.4	187
1270845	4x2x0.75	12.3	blue	62.4	187
1270900	1x2x1.0	7.9	black	24.0	92
1270901	1x2x1.0	7.9	blue	24.0	92
1270902	2x2x1.0	11.3	black	43.2	129
1270903	2x2x1.0	11.3	blue	43.2	129
1270926	3x2x1.0	12.0	black	62.4	155
1270927	3x2x1.0	12.0	blue	62.4	155
1270904	4x2x1.0	13.2	black	81.6	234
1270905	4x2x1.0	13.2	blue	81.6	234
1270950	1x2x1.5	8.5	black	33.6	104
1270951	1x2x1.5	8.5	blue	33.6	104
1270952	2x2x1.5	12.3	black	62.4	155
1270953	2x2x1.5	12.3	blue	62.4	155
1270978	3x2x1.5	13.2	black	91.2	176
1270979	3x2x1.5	13.2	blue	91.2	176
1270954	4x2x1.5	14.4	black	120.0	290
1270955	4x2x1.5	14.4	blue	120.0	290
1271000	1x2x2.5	9.8	black	52.8	132
1271001	1x2x2.5	9.8	blue	52.8	132
1271002	2x2x2.5	14.6	black	100.8	226
1271003	2x2x2.5	14.6	blue	100.8	226
1271026	3x2x2.5	15.5	black	148.8	258
1271027	3x2x2.5	15.5	blue	148.8	258
1271004	4x2x2.5	17.1	black	196.8	372
1271005	4x2x2.5	17.1	blue	196.8	372

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
1271250	3x0.5	7.2	black	19.2	51
1271251	3x0.5	7.2	blue	19.2	51
1271252	4x0.5	8.0	black	24.0	63
1271253	4x0.5	8.0	blue	24.0	63
1271254	6x0.5	9.2	black	33.6	89
1271255	6x0.5	9.2	blue	33.6	89
1271268	8x0.5	10.4	black	43.2	110
1271269	8x0.5	10.4	blue	43.2	110
1271256	10x0.5	11.5	black	52.8	135
1271257	10x0.5	11.5	blue	52.8	135
1271280	3x0.75	7.9	black	26.4	61
1271281	3x0.75	7.9	blue	26.4	61
1271282	4x0.75	8.5	black	33.6	76
1271283	4x0.75	8.5	blue	33.6	76
1271284	6x0.75	9.8	black	48.0	110
1271285	6x0.75	9.8	blue	48.0	110
1271248	8x0.75	11.1	black	62.4	140
1271249	8x0.75	11.1	blue	62.4	140
1271286	10x0.75	12.4	black	76.8	173
1271287	10x0.75	12.4	blue	76.8	173
1271300	3x1.5	9.0	black	48.0	95
1271301	3x1.5	9.0	blue	48.0	95
1271302	4x1.5	9.7	black	62.4	120
1271303	4x1.5	9.7	blue	62.4	120
1271304	6x1.5	11.5	black	91.2	175
1271305	6x1.5	11.5	blue	91.2	175
1271318	8x1.5	12.8	black	120.0	225
1271319	8x1.5	12.8	blue	120.0	225
1271306	10x1.5	14.5	black	148.8	275
1271307	10x1.5	14.5	blue	148.8	275
1271340	3x2.5	9.9	black	76.8	145
1271341	3x2.5	9.9	blue	76.8	145
1271342	4x2.5	10.9	black	100.8	182
1271343	4x2.5	10.9	blue	100.8	182
1271344	6x2.5	12.8	black	148.8	266
1271345	6x2.5	12.8	blue	148.8	266
1271358	8x2.5	14.5	black	196.8	350
1271359	8x2.5	14.5	blue	196.8	350
1271346	10x2.5	16.4	black	244.8	434
1271347	10x2.5	16.4	blue	244.8	434

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ÖLFLEX® INSTRUM RE-Y(ST)Y PiMF

Info

- Un-armoured PVC (V-90HT) Heat Resistant
- Individual and Overall Screen

LAPP KABEL STUTTGART ÖLFLEX® INSTRUM RE-Y(ST)Y PiMF IS

LAPP KABEL STUTTGART ÖLFLEX INSTRUM RE-Y(ST)Y PiMF



Application range

- For communication, data and voice transmission signal in industrial process manufacturing plants
- Oil and Gas industry
- Petrochemical industry
- Generally used for indoor installation and suitable for wet and damp areas
- The Blue outer sheath is suitable for use with Group 2 Intrinsically Safe (IS) systems in hazardous areas where the voltage range is <50 VAC / <75 VDC

Product features

- Cable construction in acc. to BS EN 50288-7
- Flame retardant in acc. to IEC 60332-3-24

Product Make-up

- Stranded plain annealed copper wires
- PVC (V-90HT) core insulation
- Pairs are collectively screened with aluminium polyester tape
- Tinned copper drain wire
- PVC outer sheath, black or blue

Technical data



Classification

ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000104

Core identification code

Pair: black and white
Multipair: black and white with numbers

Conductor stranding

acc. to BS 6360 / IEC 60228 Cl. 2



Minimum bending radius

6 x cable diameter



Nominal voltage

500 V
<50 VAC / <75 VDC for Intrinsically Safe (IS) circuits application

Temperature range

-30°C to +105°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® INSTRUM RE-Y(ST)Y PiMF					
1271050	2x2x0.5	10.8	black	33.6	116
1271051	2x2x0.5	10.8	blue	33.6	116
1271074	3x2x0.5	11.4	black	48.0	155
1271075	3x2x0.5	11.4	blue	48.0	155
1271052	4x2x0.5	12.4	black	62.4	202
1271053	4x2x0.5	12.4	blue	62.4	202
1271076	5x2x0.5	13.6	black	76.8	238
1271077	5x2x0.5	13.6	blue	76.8	238
1271054	6x2x0.5	14.7	black	91.2	275
1271055	6x2x0.5	14.7	blue	91.2	275
1271056	8x2x0.5	16.7	black	120.0	336
1271057	8x2x0.5	16.7	blue	120.0	336
1271058	10x2x0.5	18.9	black	148.8	418
1271059	10x2x0.5	18.9	blue	148.8	418
1271060	12x2x0.5	19.5	black	177.6	490
1271061	12x2x0.5	19.5	blue	177.6	490
1271080	2x2x0.75	11.6	black	43.2	138
1271081	2x2x0.75	11.6	blue	43.2	138
1271104	3x2x0.75	12.3	black	62.4	188
1271105	3x2x0.75	12.3	blue	62.4	188
1271082	4x2x0.75	13.5	black	81.6	252
1271083	4x2x0.75	13.5	blue	81.6	252
1271106	5x2x0.75	14.6	black	100.8	277
1271107	5x2x0.75	14.6	blue	100.8	277
1271084	6x2x0.75	16.1	black	120.0	330
1271085	6x2x0.75	16.1	blue	120.0	330
1271086	8x2x0.75	18.0	black	158.4	402
1271087	8x2x0.75	18.0	blue	158.4	402
1271088	10x2x0.75	20.5	black	196.8	501
1271089	10x2x0.75	20.5	blue	196.8	501
1271090	12x2x0.75	21.3	black	235.2	583
1271091	12x2x0.75	21.3	blue	235.2	583
1271120	2x2x1.0	12.2	black	52.8	172
1271121	2x2x1.0	12.2	blue	52.8	172
1271144	3x2x1.0	13.1	black	76.8	227
1271145	3x2x1.0	13.1	blue	76.8	227
1271122	4x2x1.0	14.3	black	100.8	315
1271123	4x2x1.0	14.3	blue	100.8	315
1271146	5x2x1.0	15.7	black	124.8	365
1271147	5x2x1.0	15.7	blue	124.8	365

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
1271124	6x2x1.0	17.1	black	148.8	413
1271125	6x2x1.0	17.1	blue	148.8	413
1271126	8x2x1.0	19.6	black	196.8	502
1271127	8x2x1.0	19.6	blue	196.8	502
1271128	10x2x1.0	22.0	black	244.8	626
1271129	10x2x1.0	22.0	blue	244.8	626
1271130	12x2x1.0	22.7	black	292.8	729
1271131	12x2x1.0	22.7	blue	292.8	729
1271160	2x2x1.5	13.5	black	72.0	193
1271161	2x2x1.5	13.5	blue	72.0	193
1271182	3x2x1.5	14.3	black	105.6	273
1271183	3x2x1.5	14.3	blue	105.6	273
1271162	4x2x1.5	15.8	black	139.2	369
1271163	4x2x1.5	15.8	blue	139.2	369
1271184	5x2x1.5	17.2	black	172.8	412
1271185	5x2x1.5	17.2	blue	172.8	412
1271164	6x2x1.5	18.9	black	206.4	468
1271165	6x2x1.5	18.9	blue	206.4	468
1271166	8x2x1.5	21.4	black	273.6	605
1271167	8x2x1.5	21.4	blue	273.6	605
1271168	10x2x1.5	24.3	black	340.8	748
1271169	10x2x1.5	24.3	blue	340.8	748
1271170	12x2x1.5	25.1	black	408.0	880
1271171	12x2x1.5	25.1	blue	408.0	880
1271200	2x2x2.5	15.9	black	110.4	259
1271201	2x2x2.5	15.9	blue	110.4	259
1271222	3x2x2.5	16.9	black	163.2	291
1271223	3x2x2.5	16.9	blue	163.2	291
1271202	4x2x2.5	18.7	black	216.0	379
1271203	4x2x2.5	18.7	blue	216.0	379
1271224	5x2x2.5	20.4	black	268.8	437
1271225	5x2x2.5	20.4	blue	268.8	437
1271204	6x2x2.5	22.4	black	321.6	666
1271205	6x2x2.5	22.4	blue	321.6	666
1271206	8x2x2.5	25.4	black	427.2	847
1271207	8x2x2.5	25.4	blue	427.2	847
1271208	10x2x2.5	28.8	black	532.8	1,061
1271209	10x2x2.5	28.8	blue	532.8	1,061
1271210	12x2x2.5	30.2	black	638.4	1,249
1271211	12x2x2.5	30.2	blue	638.4	1,249

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ÖLFLEX® INSTRUM RE-Y(ST)YRY



Info

- Armoured PVC (V-90HT) Heat Resistant
- Overall Screen

Application range

- For communication, data and voice transmission signal in industrial process manufacturing plants
- Oil and Gas industry
- Petrochemical industry
- Generally used for indoor installation and suitable for wet and damp areas
- The Blue outer sheath is suitable for use with Group 2 Intrinsically Safe (IS) systems in hazardous areas where the voltage range is <50 VAC / <75 VDC

Product features

- Cable construction in acc. to BS EN 50288-7
- Flame retardant in acc. to IEC 60332-3-24

Product Make-up

- Stranded plain annealed copper wires
- PVC (V-90HT) core insulation
- Pairs are collectively screened with aluminium polyester tape
- Tinned copper drain wire
- PVC inner sheath, black
- PVC outer sheath, black or blue
- Galvanized steel wire armoured

Technical data

Classification

ETIM ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000104

Core identification code

Pair: black and white
Multipair: black and white with numbers
Multicore: black with numbers (4C and above)

Conductor stranding

acc. to BS 6360 / IEC 60228 Cl. 2

Minimum bending radius

10 x cable diameter

Nominal voltage

500 V
<50 VAC / <75 VDC for Intrinsically Safe (IS) circuits application

Temperature range

-30°C to +105°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® INSTRUM RE-Y(ST)YRY					
1271380	1x2x0.5	11.3	black	14.4	248
1271381	1x2x0.5	11.3	blue	14.4	248
1271382	2x2x0.5	14.4	black	24.0	365
1271383	2x2x0.5	14.4	blue	24.0	365
1271404	3x2x0.5	15.2	black	33.6	406
1271405	3x2x0.5	15.2	blue	33.6	406
1271384	4x2x0.5	16.1	black	43.2	455
1271385	4x2x0.5	16.1	blue	43.2	455
1271420	1x2x0.75	11.7	black	19.2	264
1271421	1x2x0.75	11.7	blue	19.2	264
1271422	2x2x0.75	15.3	black	33.6	395
1271423	2x2x0.75	15.3	blue	33.6	395
1271444	3x2x0.75	15.9	black	48.1	486
1271445	3x2x0.75	15.9	blue	48.1	486
1271424	4x2x0.75	17.6	black	62.4	603
1271425	4x2x0.75	17.6	blue	62.4	603
1271460	1x2x1.0	12.3	black	24.0	270
1271461	1x2x1.0	12.3	blue	24.0	270
1271462	2x2x1.0	15.9	black	43.2	429
1271463	2x2x1.0	15.9	blue	43.2	429
1271486	3x2x1.0	17.3	black	62.4	569
1271487	3x2x1.0	17.3	blue	62.4	569
1271464	4x2x1.0	18.8	black	81.6	753
1271465	4x2x1.0	18.8	blue	81.6	753
1271500	1x2x1.5	12.9	black	33.6	336
1271501	1x2x1.5	12.9	blue	33.6	336
1271502	2x2x1.5	17.6	black	62.4	589
1271503	2x2x1.5	17.6	blue	62.4	589
1271524	3x2x1.5	18.7	black	91.2	675
1271525	3x2x1.5	18.7	blue	91.2	675
1271504	4x2x1.5	20.0	black	120.0	849
1271505	4x2x1.5	20.0	blue	120.0	849
1271550	1x2x2.5	14.4	black	52.8	407
1271551	1x2x2.5	14.4	blue	52.8	407
1271552	2x2x2.5	20.1	black	100.8	689
1271553	2x2x2.5	20.1	blue	100.8	689
1271576	3x2x2.5	21.0	black	148.8	855
1271577	3x2x2.5	21.0	blue	148.8	855
1271554	4x2x2.5	23.5	black	196.8	1,111
1271555	4x2x2.5	23.5	blue	196.8	1,111

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
1271800	3x0.5	11.6	black	19.2	280
1271801	3x0.5	11.6	blue	19.2	280
1271802	4x0.5	12.4	black	24.0	335
1271803	4x0.5	12.4	blue	24.0	335
1271804	6x0.5	13.6	black	33.6	360
1271805	6x0.5	13.6	blue	33.6	360
1271818	8x0.5	15.0	black	43.2	445
1271819	8x0.5	15.0	blue	43.2	445
1271806	10x0.5	16.1	black	52.8	510
1271807	10x0.5	16.1	blue	52.8	510
1271830	3x0.75	12.3	black	26.4	305
1271831	3x0.75	12.3	blue	26.4	305
1271832	4x0.75	12.9	black	33.6	355
1271833	4x0.75	12.9	blue	33.6	355
1271834	6x0.75	14.5	black	48.0	400
1271835	6x0.75	14.5	blue	48.0	400
1271848	8x0.75	15.7	black	62.4	502
1271849	8x0.75	15.7	blue	62.4	502
1271836	10x0.75	17.9	black	76.8	565
1271837	10x0.75	17.9	blue	76.8	565
1271860	3x1.5	13.3	black	48.0	380
1271861	3x1.5	13.3	blue	48.0	380
1271862	4x1.5	14.1	black	62.4	420
1271863	4x1.5	14.1	blue	62.4	420
1271864	6x1.5	16.1	black	91.2	540
1271865	6x1.5	16.1	blue	91.2	540
1271879	8x1.5	18.3	black	120.0	618
1271880	8x1.5	18.3	blue	120.0	618
1271866	10x1.5	20.0	black	148.8	750
1271867	10x1.5	20.0	blue	148.8	750
1271900	3x2.5	15.1	black	76.8	500
1271901	3x2.5	15.1	blue	76.8	500
1271902	4x2.5	16.0	black	100.8	535
1271903	4x2.5	16.0	blue	100.8	535
1271904	6x2.5	19.1	black	148.8	780
1271905	6x2.5	19.1	blue	148.8	780
1271918	8x2.5	20.7	black	196.8	856
1271919	8x2.5	20.7	blue	196.8	856
1271906	10x2.5	23.6	black	244.8	940
1271907	10x2.5	23.6	blue	244.8	940

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ÖLFLEX® INSTRUM RE-Y(ST)YRY PiMF



Info

- Armoured PVC (V-90HT) Heat Resistant
- Individual and Overall Screen



Application range

- For communication, data and voice transmission signal in industrial process manufacturing plants
- Oil and Gas industry
- Petrochemical industry
- Generally used for indoor installation and suitable for wet and damp areas
- The Blue outer sheath is suitable for use with Group 2 Intrinsically Safe (IS) systems in hazardous areas where the voltage range is <50 VAC / <75 VDC

Product features

- Cable construction in acc. to BS EN 50288-7
- Flame retardant in acc. to IEC 60332-3-24

Product Make-up

- Stranded plain annealed copper wires
- PVC (V-90HT) core insulation
- Pairs are collectively screened with aluminium polyester tape
- Tinned copper drain wire
- PVC inner sheath, black
- PVC outer sheath, black or blue
- Galvanized steel wire armoured

Technical data



Classification

ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000104



Core identification code

Pair: black and white
Multipair: black and white with numbers
Multicore: black with numbers



Conductor stranding

acc. to BS 6360 / IEC 60228 Cl. 2



Minimum bending radius

10 x cable diameter



Nominal voltage

< 50 VAC / < 75 VDC for Intrinsically Safe (IS) circuits application



Temperature range

-30°C to +105°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® INSTRUM RE-Y(ST)YRY PiMF					
1271600	2x2x0.5	15.4	black	33.6	116
1271601	2x2x0.5	15.4	blue	33.6	116
1271624	3x2x0.5	16.0	black	48.0	155
1271625	3x2x0.5	16.0	blue	48.0	155
1271602	4x2x0.5	17.7	black	62.4	202
1271603	4x2x0.5	17.7	blue	62.4	202
1271626	5x2x0.5	19.1	black	76.8	238
1271627	5x2x0.5	19.1	blue	76.8	238
1271604	6x2x0.5	20.2	black	91.2	275
1271605	6x2x0.5	20.2	blue	91.2	275
1271606	8x2x0.5	22.3	black	120.0	336
1271607	8x2x0.5	22.3	blue	120.0	336
1271608	10x2x0.5	25.3	black	148.8	418
1271609	10x2x0.5	25.3	blue	148.8	418
1271610	12x2x0.5	26.1	black	177.6	490
1271611	12x2x0.5	26.1	blue	177.6	490
1271080	2x2x0.75	16.1	black	43.2	451
1271081	2x2x0.75	16.1	blue	43.2	451
1271104	3x2x0.75	17.5	black	62.4	565
1271105	3x2x0.75	17.5	blue	62.4	565
1271082	4x2x0.75	19.0	black	81.6	717
1271083	4x2x0.75	19.0	blue	81.6	717
1271106	5x2x0.75	20.1	black	100.8	838
1271107	5x2x0.75	20.1	blue	100.8	838
1271084	6x2x0.75	21.6	black	120.0	952
1271085	6x2x0.75	21.6	blue	120.0	952
1271086	8x2x0.75	24.3	black	158.4	1,084
1271087	8x2x0.75	24.3	blue	158.4	1,084
1271088	10x2x0.75	27.0	black	196.8	1,458
1271089	10x2x0.75	27.0	blue	196.8	1,458
1271090	12x2x0.75	27.9	black	235.2	1,612
1271091	12x2x0.75	27.9	blue	235.2	1,612
1271680	2x2x1.0	17.5	black	52.8	564
1271681	2x2x1.0	17.5	blue	52.8	564
1271704	3x2x1.0	18.6	black	76.8	710
1271705	3x2x1.0	18.6	blue	76.8	710
1271682	4x2x1.0	19.7	black	100.8	879
1271683	4x2x1.0	19.7	blue	100.8	879
1271706	5x2x1.0	21.0	black	124.8	998
1271707	5x2x1.0	21.0	blue	124.8	998

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
1271684	6x2x1.0	23.5	black	148.8	1,189
1271685	6x2x1.0	23.5	blue	148.8	1,189
1271686	8x2x1.0	25.9	black	196.8	1,354
1271687	8x2x1.0	25.9	blue	196.8	1,354
1271688	10x2x1.0	28.5	black	244.8	1,822
1271689	10x2x1.0	28.5	blue	244.8	1,822
1271690	12x2x1.0	29.4	black	292.8	2,014
1271691	12x2x1.0	29.4	blue	292.8	2,014
1271720	2x2x1.5	19.0	black	72.0	644
1271721	2x2x1.5	19.0	blue	72.0	644
1271746	3x2x1.5	19.8	black	105.6	788
1271747	3x2x1.5	19.8	blue	105.6	788
1271722	4x2x1.5	21.3	black	139.2	970
1271723	4x2x1.5	21.3	blue	139.2	970
1271742	5x2x1.5	23.6	black	172.8	11,28
1271743	5x2x1.5	23.6	blue	172.8	1,128
1271724	6x2x1.5	25.3	black	206.4	1,315
1271725	6x2x1.5	25.3	blue	206.4	1,315
1271726	8x2x1.5	27.9	black	273.6	1,584
1271727	8x2x1.5	27.9	blue	273.6	1,584
1271728	10x2x1.5	31.1	black	340.8	1,865
1271729	10x2x1.5	31.1	blue	340.8	1,865
1271730	12x2x1.5	31.9	black	408.0	2,085
1271731	12x2x1.5	31.9	blue	408.0	2,085
1271760	2x2x2.5	21.4	black	110.4	803
1271761	2x2x2.5	21.4	blue	110.4	803
1271784	3x2x2.5	22.6	black	163.2	956
1271785	3x2x2.5	22.6	blue	163.2	956
1271762	4x2x2.5	25.1	black	216.0	1,139
1271763	4x2x2.5	25.1	blue	216.0	1,139
1271786	5x2x2.5	27.0	black	268.8	1,386
1271787	5x2x2.5	27.0	blue	268.8	1,386
1271764	6x2x2.5	29.0	black	321.6	1,705
1271765	6x2x2.5	29.0	blue	321.6	1,705
1271766	8x2x2.5	32.2	black	427.2	1,997
1271767	8x2x2.5	32.2	blue	427.2	1,997
1271768	10x2x2.5	37.0	black	532.8	2,376
1271769	10x2x2.5	37.0	blue	532.8	2,376
1271770	12x2x2.5	38.1	black	638.4	2,717
1271771	12x2x2.5	38.1	blue	638.4	2,717

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For current information see: <http://lappapac.lappgroup.com>

ÖLFLEX® POWER TPR 90 EARTH

Earth cables



Application range

- Internal wiring of devices
- Stranded hook-up wires for grounding connection of electrical equipment and electronic components within devices

Product features

- Flame retardant acc. to AS/NZS 1660.5.6 resp. to IEC 60332-1-2

Product Make-up

- Extra fine strands of bare copper wires
- TPR core insulation, green/yellow



Info

- Flexible earth cable

Technical data



Conductor stranding

Extra fine wire acc. to AS/NZS 1125 Cl.6 / IEC 60228 Cl.6



Minimum bending radius

occasional flexing: 15 x cable diameter
fixed installation: 5 x cable diameter



Nominal voltage

U_0/U : 600/1000 V



Test voltage

3500 V



Temperature range

-30°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER TPR 90 EARTH				
3801520	1 X 6	5.6	57.6	70
3801521	1 X 10	6.8	96.0	112
3801522	1 X 16	8.1	153.6	171
3801523	1 X 25	9.7	240.0	255
3801524	1 X 35	11.2	336.0	351
3801525	1 X 50	12.7	480.0	488
3801526	1 X 70	14.9	672.0	685
3801527	1 X 95	16.9	912.0	914
3801528	1 X 120	19.6	1,152.0	1,191

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ÖLFLEX® POWER TPR 90 SDI

Flexible power cables

Info

- Highly flexible SDI
- Oil-, abrasion- and UV-resistant
- The previous product designation was TP90/TP90 Single Core

Benefits

- Ideal alternative for H07RN-F with improved characteristics

Application range

- Connection of electrical equipment, drills, boilers, etc.
- For transportable motors or machines
- Suitable for power application

Product features

- Flame retardant acc. to AS/NZS 1660.5.6 resp. to IEC 60332-1-2



- Oil resistant acc. to IEC 60811-2-1
- UV-resistant outer sheath for outdoor application
- Good abrasion and tearing properties
- Also available in gne color but in single insulation only

Product Make-up

- Extra fine strands of bare copper wires
- TPR core insulation
- TPR outer sheath, black or orange

Technical data

	Classification
ETIM	ETIM 5.0 Class-Description: Low voltage power cable ETIM 5.0 Class-ID: EC000057
	Core identification code white
	Specific insulation resistance >5 MΩ x km
	Conductor stranding Extra fine wire acc. to AS/NZS 1125 Cl.6 / IEC 60228 Cl.6
	Minimum bending radius occasional flexing: 15 x cable diameter fixed installation: 5 x cable diameter
	Nominal voltage U_0/U : 600/1000 V
	Temperature range -30°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER TPR 90 SDI					
3801449	1X 2.5	6.6	orange	24.0	59
3801797	1X 2.5	6.6	black	24.0	59
3801450	1X 4	6.9	orange	38.4	74
3801780	1X 4	6.9	black	38.4	74
3801451	1X 6	7.5	orange	57.6	97
3801781	1X 6	7.5	black	58.0	97
3801452	1X 10	8.4	orange	96.0	139
3801782	1X 10	8.4	black	96.0	139
3801453	1X 16	9.6	orange	153.6	200
3801783	1X 16	9.6	black	154.0	200
3801454	1X 25	10.9	orange	240.0	284
3801784	1X 25	10.9	black	240.0	284
3801455	1X 35	12.2	orange	336.0	378
3801785	1X 35	12.2	black	336.0	378
3801456	1X 50	13.9	orange	480.0	522
3801786	1X 50	13.9	black	480.0	522
3801457	1X 70	16.0	orange	672.0	724
3801787	1X 70	16.0	black	672.0	724
3801458	1X 95	18.2	orange	912.0	952
3801788	1X 95	18.2	black	912.0	952
3801459	1X 120	20.4	orange	1,152.0	1,230
3801789	1X 120	20.4	black	1,152.0	1,230
3801460	1X 150	22.5	orange	1,440.0	1,510
3801790	1X 150	22.5	black	1,440.0	1,510
3801461	1X 185	24.7	orange	1,776.0	1,833
3801791	1X 185	24.7	black	1,776.0	1,833
3801462	1X 240	27.6	orange	2,301.0	2,365
3801792	1X 240	27.6	black	2,301.0	2,365
3801463	1X 300	32.1	orange	2,880.0	3,047
3801793	1X 300	32.1	black	2,880.0	3,047
3801464	1X 400	37.7	orange	3,840.0	3,955
3801794	1X 400	37.7	black	3,840.0	3,955
3801465	1X 500	41.1	orange	4,800.0	4,916
3801795	1X 500	41.1	black	4,800.0	4,916
3801466	1X 630	45.9	orange	6,048.0	6,426
3801796	1X 630	45.9	black	6,048.0	6,426

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ÖLFLEX® POWER TPR 90 MC

**Info**

- Highly flexible
- Oil-, abrasion- and UV-resistant
- The previous product designation was TP90/TP90 Multicore

Benefits

- Ideal alternative for H07RN-F with improved characteristics

Application range

- Connection of electrical equipment, drills, boilers, etc.
- For transportable motors or machines
- Suitable for power application

Product features

- Flame retardant acc. to AS/NZS 1660.5.6 resp. to IEC 60332-1-2
- Oil resistant acc. to IEC 60811-2-1
- UV-resistant outer sheath for outdoor application
- Good abrasion and tearing properties

Product Make-up

- Extra fine strands of bare copper wires
- TPR core insulation
- TPR outer sheath, black

Technical data

Classification
ETIM 5.0 Class-Description: Low voltage power cable
ETIM 5.0 Class-ID: EC000057



Core identification code
acc. to VDE 0293-308



Specific insulation resistance
> 5 MΩ x km



Conductor stranding
Fine wire acc. to AS/NZS 1125 Cl.5
IEC 60228 Cl.5



Minimum bending radius
occasional flexing: 15 x cable diameter
fixed installation: 5 x cable diameter



Nominal voltage
 U_0/U : 600/1000 V



Temperature range
-30°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (mm)	Weight (kg/km)
ÖLFLEX®POWER TPR 90 MC				
3802900	2 X 1.5	10.8	28.8	133
3802901	2 X 2.5	12.0	48.0	172
3802902	2 X 4	13.3	76.8	227
3802903	2 X 6	15.2	115.2	313
3802904	2 X 10	20.3	192.0	559
3802905	2 X 16	23.4	307.2	774
3802906	2 X 25	27.5	480.0	1,114
3802907	2 X 35	30.7	672.0	1,446
3801900	2 X 1.0	10.8	29.0	132
3801901	2 X 1.5	11.4	43.0	156
3801902	2 X 2.5	12.8	72.0	208
3802910	2 X 4	14.2	115.2	282
3802911	2 X 6	16.2	172.8	392
3802912	2 X 10	21.6	288.0	690
3802913	2 X 16	24.8	460.8	962
3802914	2 X 25	29.5	720.0	1,406
3802915	2 X 35	32.8	1,008.0	1,840
3802916	2 X 50	38.2	1,440.0	2,523
3802917	2 X 70	42.9	2,016.0	3,350
3802918	2 X 95	47.6	2,736.0	4,252
3802919	2 X 120	52.2	3,456.0	5,277
3801911	3 X 1.0	11.8	38.0	160
3801912	3 X 1.5	12.7	58.0	194
3801913	3 X 2.5	14.1	96.0	256
3802924	3 X 4	15.9	153.6	357
3802925	3 X 6	18.0	230.4	495
3802926	3 X 10	23.7	384.0	859
3802927	3 X 16	27.3	614.4	1,202
3802928	3 X 25	32.6	960.0	1,777
3802929	3 X 35	36.3	1,344.0	2,312
3802930	3 X 50	42.2	1,920.0	3,166
3802931	3 X 70	47.6	2,688.0	4,232
3802932	3 X 95	52.9	3,648.0	5,421
3801926	4 X 1.5	12.7	72.0	218
3801927	4 X 2.5	14.1	120.0	290
3802938	4 X 4	15.9	192.0	407

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (mm)	Weight (kg/km)
3802939	4 X 6	18.0	288.0	569
3802940	4 X 10	23.7	480.0	983
3802941	4 X 16	27.3	768.0	1,386
3802942	4 X 25	32.6	1,200.0	2,058
3802943	4 X 35	36.3	1,680.0	2,694
3802944	4 X 50	42.2	2,400.0	3,699
3802945	4 X 70	47.6	3,360.0	4,963
3801940	6 X 1.5	15.3	100.8	296
3801942	11 X 1.5	20.7	172.8	511
3801947	17 X 1.5	24.6	259.2	728
3801948	26 X 1.5	29.8	388.8	1,060
3801949	35 X 1.5	33.7	518.4	1,375
3801941	6 X 2.5	17.0	168.0	397
3801943	11 X 2.5	23.0	288.0	679
3801903	2 X 4	13.9	101.0	257
3801904	2 X 6	15.3	139.0	332
3801905	2 X 10	20.5	230.0	589
3801906	2 X 16	23.1	365.0	799
3801907	2 X 25	27.4	538.0	1,137
3801908	2 X 35	30.6	768.0	1,492
3801914	3 X 4	15.4	139.0	328
3801915	3 X 6	17.2	197.0	431
3801916	3 X 10	22.3	326.0	748
3801917	3 X 16	25.4	518.0	1,027
3801918	3 X 25	29.8	778.0	1,462
3801919	3 X 35	33.5	1,104.0	1,940
3801920	3 X 50	38.9	1,594.0	2,677
3801921	3 X 70	44.0	2,256.0	3,590
3801928	4 X 4	17.3	178.0	406
3801929	4 X 6	19.2	254.0	537
3801930	4 X 10	24.9	422.0	924
3801931	4 X 16	29.0	672.0	1,291
3801932	4 X 25	34.4	1,018.0	1,856
3801933	4 X 35	38.6	1,440.0	2,452
3801934	4 X 50	45.2	2,074.0	3,399
3801935	4 X 70	50.3	2,990.0	4,573

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**i Info**

- Fire test certified and approved to BS 6387 Cat. CWZ
- Conforms to SS 299 PLS Class 1A
- Single-core power cable, 0.6/1 kV

Application range

- Specially designed to be used for wiring applications in critical life safety system in public and industrial buildings such as airports, hotels, hospitals, subways, train stations, etc.
- In building management systems, emergency lightings, standby power supplies, lifts and elevators
- Plant engineering and construction, industrial machinery, power station

Product features

- Flame retardant acc. to IEC 60332-1-2 and to IEC 60332-3-22
- Halogen free acc. to IEC 60754-1
- Acid and corrosive gases acc. to IEC 60754-2
- Smoke density test acc. to IEC 61034

Norm references / Approvals

- Fire test certified and approved to BS 6387 Cat. CWZ
- Conforms to SS 299 PLS Class 1A
- Approved to IEC 60332-3-22 Cat. A

Product Make-up

- Stranded plain annealed copper wire
- Mica based fire resistance tape
- LSHF insulation - flame retardant
- Colour: orange

Technical data

Classification
ETIM 5.0 Class-Description: Low voltage power cable
ETIM 5.0 Class-ID: EC000057

Conductor stranding
acc. to IEC 60228 Cl. 2

Minimum bending radius
10 x cable diameter

Nominal voltage
 U_0/U : 600/1000 V

Temperature range
-15°C to +85°C

Article number	Conductor cross-section (mm ²)	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
FR-6387 SC				
3806501	1	3.8	9.6	25
3806502	1.5	4.1	14.4	32
3806503	2.5	4.6	24.0	44
3806504	4	5.3	38.4	64
3806505	6	5.9	57.6	88
3806506	10	6.8	96.0	131
3806507	16	8.1	153.6	196
3806508	25	9.4	240.0	289
3806509	35	10.7	336.0	394
3806510	50	12.3	480.0	545
3806511	70	14.2	672.0	752
3806512	95	16.0	912.0	992
3806513	120	17.8	1,152.0	1,243
3806514	150	19.7	1,440.0	1,543
3806515	185	21.6	1,776.0	1,889
3806516	240	24.3	2,304.0	2,438
3806517	300	26.9	2,880.0	3,017

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FR-6387 MC

Fire resistant cables



LAPP KABEL FR-6387 MC 4025 0.6/1KV BS6387 CWZ TUV SUD PSB LISTED SS299-1 LIC 00273

Application range

- Specially designed to be used for wiring applications in critical life safety systems in public and industrial buildings such as airports, hotels, hospitals, subways, train stations, etc.
- In building management systems, emergency lightings, standby power supplies, lifts and elevators
- Plant engineering and construction, industrial machinery, power station

Product features

- Flame retardant acc. to IEC 60332-1-2 and to IEC 60332-3-22
- Halogen free acc. to IEC 60754-1
- Acid and corrosive gases acc. to IEC 60754-2
- Smoke density test acc. to IEC 61034

Norm references / Approvals

- Fire test certified and approved to BS 6387 Cat. CWZ
- Conforms to SS 299 PLS Class 1A
- Approved to IEC 60332-3-22 Cat. A

Product Make-up

- Stranded plain annealed copper wire
- Mica based fire resistance tape
- XLPE insulation
- LSHF outer sheath
- Colour: orange

Info

- Fire test certified and approved to BS 6387 Cat. CWZ
- Conforms to SS 299 PLS Class 1A
- Single-core power cable, 0.6/1 kV

Technical data

Classification
ETIM 5.0 Class-Description: Low voltage power cable
ETIM 5.0 Class-ID: EC000057

Conductor stranding
acc. to IEC 60228 Cl. 2

Minimum bending radius
10 x cable diameter

Nominal voltage
U_{0/U}: 600/1000 V

Temperature range
-30°C to 90°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
FR-6387 MC				
3806521	2 X 1.5	10.0	28.8	126
3806522	2 X 2.5	10.9	48.0	160
3806523	2 X 4	12.3	76.8	218
3806524	2 X 6	13.6	115.2	285
3806525	2 X 10	15.5	192.0	404
3806526	2 X 16	17.8	307.2	573
3806527	2 X 25	21.4	480.0	852
3806531	3 X 1.5	10.7	43.2	151
3806532	3 X 2.5	11.6	72.0	195
3806533	3 X 4	13.2	115.2	270
3806534	3 X 6	14.5	172.8	359
3806535	3 X 10	16.6	288.0	520
3806536	3 X 16	19.1	460.8	748
3806537	3 X 25	23.0	720.0	1,120
3806541	4 X 1.5	11.7	57.6	181
3806542	4 X 2.5	12.8	96.0	236
3806543	4 X 4	14.5	153.6	332
3806544	4 X 6	16.0	230.4	445
3806545	4 X 10	18.4	384.0	650
3806546	4 X 16	21.1	614.4	942
3806547	4 X 25	25.4	960.0	1,416
3806551	5 X 1.5	12.8	72.0	215
3806552	5 X 2.5	14.1	120.0	283
3806553	5 X 4	16.0	192.0	399
3806554	5 X 6	17.7	288.0	538
3806555	5 X 10	20.3	480.0	790
3806556	5 X 16	23.3	768.0	1,149
3806557	5 X 25	28.1	1,200.0	1,732

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FR-6387 MC CONTROL

Fire resistant cables

LAPP KABEL FR-6387 MC CONTROL 6x2.5 300/500V BS6387 CWZ TUV SUD PSE LISTED SS299-1 LIC 00273



Info

- Fire test certified and approved to BS 6387 Cat. CWZ
- Conforms to SS 299 PLS Class 1A
- Multicore control cable, 300/500 V

Application range

- Specially designed to be used for wiring applications in critical life safety systems in public and industrial buildings such as airports, hotels, hospitals, subways, train stations, etc.
- In building management systems, emergency lightings, standby power supplies, lifts and elevators
- Plant engineering and construction, industrial machinery, power station

Product features

- Flame retardant acc. to IEC 60332-1-2 and to IEC 60332-3-22
- Halogen free acc. to IEC 60754-1
- Acid and corrosive gases acc. to IEC 60754-2
- Smoke density test acc. to IEC 61034

Norm references / Approvals

- Fire test certified and approved to BS 6387 Cat. CWZ
- Conforms to SS 299 PLS Class 1A
- Approved to IEC 60332-3-22 Cat. A

Product Make-up

- Stranded plain annealed copper wire
- Mica based fire resistance tape
- XLPE insulation
- Mylar tape wrapping
- Binder tape
- LSHF outer sheath
- Colour: orange

Technical data



Classification

ETIM 5.0 Class-Description: Control cable
ETIM 5.0 Class-ID: EC000104



Conductor stranding

acc. to IEC 60228 Cl. 2



Minimum bending radius

10 x cable diameter



Nominal voltage

U₀/U: 300/500 V



Temperature range

-30°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
FR-6387 MC CONTROL					
3806560	2 X 1.0	7.8	BK/RD	19.2	69
3806561	2 X 1.0	7.8	BK/WH	19.2	69
3806562	2 X 1.0	7.8	BU/BN	19.2	69
3806563	3 X 1.0	8.8	BN/BK/GY	28.8	88
3806564	4 X 1.0	9.6	BU/BN/BK/GY	38.4	110
3806565	5 X 1.0	10.5	GNYE/BU/BN/BK/GY	48.0	136
3806566	7 X 1.0	11.5	WH	67.2	170
3806567	8 X 1.0	13.0	WH	76.8	199
3806568	10 X 1.0	14.8	WH	96.0	255
3806569	12 X 1.0	15.3	WH	115.2	281
3806570	14 X 1.0	16.2	WH	134.4	321
3806571	16 X 1.0	17.1	WH	153.6	367
3806572	19 X 1.0	18.1	WH	182.4	420
3806573	24 X 1.0	21.4	WH	230.4	545
3806580	2 X 1.5	8.4	BK/RD	28.8	88
3806581	2 X 1.5	8.4	BK/WH	28.8	88
3806582	2 X 1.5	8.4	BU/BN	28.8	88
3806583	3 X 1.5	9.9	BN/BK/GY	43.2	115
3806584	4 X 1.5	10.9	BU/BN/BK/GY	57.6	147
3806585	5 X 1.5	12.0	GNYE/BU/BN/BK/GY	72.0	182
3806586	7 X 1.5	13.1	WH	100.8	230
3806587	8 X 1.5	14.8	WH	115.2	268
3806588	10 X 1.5	17.0	WH	144.0	346
3806589	12 X 1.5	17.6	WH	172.8	383
3806590	14 X 1.5	18.5	WH	201.6	438
3806591	16 X 1.5	19.6	WH	230.4	502
3806592	19 X 1.5	20.8	WH	273.6	576
3806593	24 X 1.5	24.6	WH	345.6	749
3806600	2 X 2.5	10.5	BK/RD	48.0	118
3806601	2 X 2.5	10.5	BK/WH	48.0	118
3806602	2 X 2.5	10.5	BU/BN	48.0	118
3806603	3 X 2.5	11.2	BN/BK/GY	72.0	157
3806604	4 X 2.5	12.3	BU/BN/BK/GY	96.0	203
3806605	5 X 2.5	13.5	GNYE/BU/BN/BK/GY	120.0	253
3806606	7 X 2.5	14.9	WH	168.0	322
3806607	8 X 2.5	16.9	WH	192.0	376
3806608	10 X 2.5	19.3	WH	240.0	485
3806609	12 X 2.5	20.0	WH	288.0	541
3806610	14 X 2.5	21.1	WH	336.0	621
3806611	16 X 2.5	22.4	WH	384.0	713
3806612	19 X 2.5	23.7	WH	456.0	821
3806613	24 X 2.5	28.1	WH	576.0	1,066

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FR-6387 SC TWISTED

Fire resistant cables



Application range

- Specially designed to be used for wiring applications in critical life safety systems in public and industrial buildings such as airports, hotels, hospitals, subways, train stations, etc.
- In building management systems, emergency lightings, standby power supplies, lifts and elevators

Product features

- Flame retardant acc. to IEC 60332-1-2 and to IEC 60332-3-22
- Halogen free acc. to IEC 60754-1
- Acid and corrosive gases acc. to IEC 60754-2
- Smoke density test acc. to IEC 61034

Norm references / Approvals

- Fire test certified and approved to BS 6387 Cat. CWZ, and SS 299 PLS Class 1A, reference to FR-6387 SC 1x1.5mm², PN: 3806502

Product Make-up

- Stranded plain annealed copper wire
- Mica based fire resistance tape
- LSHF insulation - flame retardant
- 2 single-core wires twisted together
- Colour: Black/Red

Info

- Fire test certified and approved to BS 6387 Cat. CWZ, and SS 299 PLS Class 1A, reference to FR-6387 SC 1x1.5mm², PN: 3806502
- 2 single-core wires twisted, 0.6 / 1kV

Technical data

 **Classification**
ETIM 5.0 Class-Description: Low voltage power cable
ETIM 5.0 Class-ID: EC0000057

 **Conductor stranding**
acc. to IEC 60228 Cl. 2

 **Minimum bending radius**
10 x cable diameter

 **Nominal voltage**
U_{0/U}: 600/1000 V

 **Temperature range**
-15°C to +85°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
FR-6387 SC TWISTED				
3804079	2x (1x1.5) Twisted	8.2	28.8	64

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.
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FR-6387 OS

Fire resistant cables

Info

- Fire test certified and approved to BS 6387 Cat. CWZ
- Conforms to SS 299 PLS Class 1A
- Instrumentation cable, 300/500 V

Application range

- Specially designed to be used for wiring applications in critical life safety system in public and industrial buildings such as airports, hotels, hospitals, subways, train stations, etc.
- In building management systems, emergency lightings, standby power supplies, lifts and elevators
- Plant engineering and construction, industrial machinery, power station

Product features

- Flame retardant acc. to IEC 60332-1-2 and to IEC 60332-3-22
- Halogen free acc. to IEC 60754-1
- Acid and corrosive gases acc. to IEC 60754-2
- Smoke density test acc. to IEC 61034



Norm references / Approvals

- Fire test certified and approved to BS 6387 Cat. CWZ
- Conforms to SS 299 PLS Class 1A
- Approved to IEC 60332-3-22 Cat. A

Product Make-up

- Stranded plain annealed copper wire
- Mica based fire resistance tape
- XLPE insulation
- Mylar tape wrapping
- Aluminium/mylar tape screen in contact with drain wire
- LSHF outer sheath
- Colour: orange

Technical data

	Classification ETIM 5.0 Class-Description: Control cable ETIM 5.0 Class-ID: EC000104
	Core identification code Pair: BK/RD or BU/BN Multipair: BK/WH with numbering Multicore: 3C and above WH with numbering
	Conductor stranding acc. to IEC 60228 Cl. 2
	Minimum bending radius 10 x cable diameter
	Nominal voltage U ₀ /U: 300/500 V
	Temperature range -30°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
FR-6387 OS					
3805860	1 x 2 x 1.0	7.8	BK/RD	24.0	75
3805861	1 x 2 x 1.0	7.8	BU/BN	24.0	75
3805862	2 x 2 x 1.0	11.4	WH/BK	43.2	132
3805863	3 x 2 x 1.0	13.0	WH/BK	62.4	172
3805864	4 x 2 x 1.0	14.8	WH/BK	81.6	218
3805865	6 x 2 x 1.0	17.8	WH/BK	120.0	310
3805866	8 x 2 x 1.0	20.3	WH/BK	158.4	406
3805867	10 x 2 x 1.0	22.5	WH/BK	196.8	492
3805868	12 x 2 x 1.0	24.5	WH/BK	235.2	574
3805869	15 x 2 x 1.0	27.2	WH/BK	292.8	711
3805870	20 x 2 x 1.0	31.1	WH/BK	388.8	925
3805971	24 x 2 x 1.0	34.0	WH/BK	465.6	1,094
3805880	1 x 2 x 1.5	8.4	BK/RD	33.6	89
3805881	1 x 2 x 1.5	8.4	BU/BN	33.6	89
3805882	2 x 2 x 1.5	12.3	WH/BK	62.4	163
3805883	3 x 2 x 1.5	14.2	WH/BK	91.2	216
3805884	4 x 2 x 1.5	16.1	WH/BK	120.0	277
3805885	6 x 2 x 1.5	19.4	WH/BK	177.6	396
3805886	8 x 2 x 1.5	22.1	WH/BK	235.2	520
3805887	10 x 2 x 1.5	24.6	WH/BK	292.8	634
3805888	12 x 2 x 1.5	26.8	WH/BK	350.4	743
3805889	15 x 2 x 1.5	29.7	WH/BK	436.8	921
3805890	20 x 2 x 1.5	34.1	WH/BK	580.8	1,203
3805891	24 x 2 x 1.5	37.2	WH/BK	696.0	1,426
3805900	1 x 2 x 2.5	10.3	BK/RD	52.8	123
3805901	1 x 2 x 2.5	10.3	BU/BN	52.8	123
3805902	2 x 2 x 2.5	14.7	WH/BK	100.8	231
3805903	3 x 2 x 2.5	17.0	WH/BK	148.8	314
3805904	4 x 2 x 2.5	19.4	WH/BK	196.8	405
3805905	6 x 2 x 2.5	23.4	WH/BK	292.8	585
3805906	8 x 2 x 2.5	26.8	WH/BK	388.8	768
3805907	10 x 2 x 2.5	29.7	WH/BK	484.8	942
3805908	12 x 2 x 2.5	32.4	WH/BK	580.8	1,111
3805909	15 x 2 x 2.5	36.1	WH/BK	724.8	1,378
3805910	20 x 2 x 2.5	41.4	WH/BK	964.8	1,809
3805911	24 x 2 x 2.5	45.2	WH/BK	1,156.8	2,150

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
3805921	2 X 1.0	7.8	BK/RD	24.0	75
3805922	2 X 1.0	7.8	BU/BN	24.0	75
3805923	3 X 1.0	8.6	WH	33.6	93
3805924	4 X 1.0	9.4	WH	43.2	113
3805925	5 X 1.0	10.3	WH	52.8	140
3805926	7 X 1.0	11.3	WH	72.0	175
3805927	8 X 1.0	12.8	WH	81.6	204
3805928	10 X 1.0	14.5	WH	100.8	253
3805929	12 X 1.0	15.1	WH	120.0	285
3805930	14 X 1.0	15.9	WH	139.2	324
3805931	16 X 1.0	16.8	WH	158.4	370
3805932	19 X 1.0	17.8	WH	187.2	422
3805933	24 X 1.0	21.0	WH	235.2	540
3805941	2 X 1.5	8.4	BK/RD	33.6	89
3805942	2 X 1.5	8.4	BU/BN	33.6	89
3805943	3 X 1.5	9.3	WH	48.0	114
3805944	4 X 1.5	10.2	WH	62.4	142
3805945	5 X 1.5	11.2	WH	76.8	177
3805946	7 X 1.5	12.3	WH	105.6	223
3805947	8 X 1.5	13.9	WH	120.0	260
3805948	10 X 1.5	15.8	WH	148.8	323
3805949	12 X 1.5	16.4	WH	177.6	367
3805950	14 X 1.5	17.3	WH	206.4	419
3805951	16 X 1.5	18.3	WH	235.2	479
3805952	19 X 1.5	19.4	WH	278.4	549
3805953	24 X 1.5	23.0	WH	350.4	697
3805961	2 X 2.5	10.3	BK/RD	52.8	123
3805962	2 X 2.5	10.3	BU/BN	52.8	123
3805963	3 X 2.5	11.0	WH	76.8	162
3805964	4 X 2.5	12.1	WH	100.8	204
3805965	5 X 2.5	13.4	WH	124.8	257
3805966	7 X 2.5	14.7	WH	172.8	327
3805967	8 X 2.5	16.6	WH	196.8	381
3805968	10 X 2.5	19.0	WH	224.8	474
3805969	12 X 2.5	19.7	WH	292.8	545
3805970	14 X 2.5	20.8	WH	340.8	624
3805971	16 X 2.5	22.1	WH	388.8	715
3805972	19 X 2.5	23.4	WH	460.8	823
3805973	24 X 2.5	27.8	WH	580.0	1,051

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ÖLFLEX® SOLAR AL FLEX

LAPP KABEL STUTTGART ÖLFLEX® SOLAR AL FLEX DC 1500 V 1 X 10 SQ MM <CU 1 X 6 SQ MM>

Benefits

- Less expensive alternative compared to copper conductor
- Easy installation due to light weight aluminum conductor
- Flexible aluminum conductors (class 5 grade) for high workability.
- Insulation and sheath compounds meeting EN 50618 standard. High durability due to high insulation resistance and thermal stability.

Application range

- For cabling between solar modules and as extension cable between module strings
- Gable and flat roof photovoltaic systems
- Photovoltaic plants and solar parks

Product features

- Weathering/UV-resistance according to HD 605/A1. Ozone resistance according to EN 50396

- Flame retardant according to IEC 60332-1-2
- Halogen free according to EN 50267-2-1/-2 & EN 60684-2
- Acid and alkaline resistance according to EN 60811-2-1
- Low smoke density according to EN 61034-2

Norm references / Approvals

- Cable design according to EN 50618
- Conductor design according to ISO 6722-2-B & IEC 60228

Product Make-up

- Conductor: Fine-wire strands of aluminum
- Core insulation: Electron beam cross-linked Polyolefin (XLPO)
- Core colour: White
- Outer sheath : Electron beam cross-linked Polyolefin (XLPO)
- Outer sheath colour: Black & Black with red or blue stripe

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® SOLAR AL FLEX				
Core insulation: white / Outer sheath: black				
85120100	1 X 4	5.6	12.0	39
85120101	1 X 6	6.2	18.0	49
85120102	1 X 10	7.2	29.0	67
Core insulation: white / Outer sheath: black with red stripe				
85120103	1 X 4	5.6	12.0	39
85120104	1 X 6	6.2	18.0	49
85120105	1 X 10	7.2	29.0	67
Core insulation: white / Outer sheath: black with blue stripe				
85120106	1 X 4	5.6	12.0	39
85120107	1 X 6	6.2	18.0	49
85120108	1 X 10	7.2	29.0	67

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Info

- Fine-wired aluminum conductor according to ISO 6722, IEC 60228 Class 5.
- Lightweight and economical solar cable.

Technical data



Conductor stranding
Fine-wire strands of aluminum
Conductor design acc. to ISO 6722-2-B
Resistance acc. to IEC 60228 Cl.5



Minimum bending radius
Fixed installation: 5 x cable diameter



Nominal voltage
DC 1500 V



Temperature range
Fixed installation: -40 °C up to +120°C
max. conductor temperature



LAPP KABEL H-CV 600V

i Info

- Meets the design standard of JIS C 3605
- High operating temperature up to 90 °C

Benefits

- High operating temperature range (Up to 90 °C)
- Exact quantity control during installation by meter marking on the cable sheath
- Reduction of flame propagation

Application range

- For cabling between solar modules and as extension cable between module strings
- Gable and flat roof photovoltaic systems
- Photovoltaic plants and solar parks

Product features

- Flame retardant acc. to JIS C 3005 4.26



LAPP KABEL H-CV 600V <PS> E JET RoHS

- Oil-resistant acc. to JIS C 3605 6.8
- Environmental response acc. to RoHS Rated

Norm references / Approvals

- <PS>E certified according to JIS C 3605

Product Make-up

- Conductor: Annealed Copper Wire according to JIS C 3102
- Core insulation: Cross-Linked Polyethylene (XLPE)
- Core insulation colour: White or Black
- Outer sheath: Heat-resistant Polyvinyl Chloride (PVC), Lead-free
- Outer sheath colour: Black

Technical data**Conductor stranding**

Annealed Copper Wire according to JIS C 3102

**Minimum bending radius**

Fixed installation: 5 x outer diameter

**Nominal voltage**AC U₀: 600V**Temperature range**

Up to +90 °C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
LAPP KABEL H-CV 600V				
Core insulation: white / Outer sheath: black				
85120300	1 X 2.0	6.7	19.0	58
85120301	1 X 3.5	7.0	34.0	76
85120302	1 X 5.5	8.0	53.0	106
85120303	1 X 8	8.5	75.0	141
Core insulation: black / Outer sheath: black				
85120304	1 X 2.0	6.7	19.0	58
85120305	1 X 3.5	7.0	34.0	76
85120306	1 X 5.5	8.0	53.0	106
85120307	1 X 8	8.5	75.0	141
Core insulation: white / Outer sheath: black with white stripe				
85120308	1 X 2.0	6.7	19.0	58
85120309	1 X 3.5	7.0	34.0	76
85120310	1 X 5.5	8.0	53.0	106
85120311	1 X 8	8.5	75.0	141
Core insulation: black / Outer sheath: black with white stripe				
85120312	1 X 2.0	6.7	19.0	58
85120313	1 X 3.5	7.0	34.0	76
85120314	1 X 5.5	8.0	53.0	106
85120315	1 X 8	8.5	75.0	141

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LAPP KABEL PV-CQ 1500 V



Benefits

- High performance of heat resistance / weatherability / mechanical strength
- Standard cable from 2.0 to 60 mm²
- Exact quantity control during installation by meter marking on the cable sheath

Application range

- For use in photovoltaic-systems with rated voltage 1500 V DC
- For cabling between solar modules and as extension cable between module strings and DC/AC inverter
- Gable and flat roof photovoltaic systems

Product features

- High mechanical strength acc. to JCS 4517 6.17
- Weather/UV-resistant acc. to JIS K 7350-1 & -2; Ozone-resistant according to JIS C 3667

- Halogen-free acc. to JIS C 3666-2
- Flame retardant acc. to JIS C 3665-1-2
- Acid / Alkaline resistance according to JIS C 3660-2-1

Norm references / Approvals

- S-JET certified according to JETST-CABL-001-1
- Meets the design standard of JCS 4517

Product Make-up

- Conductor: Annealed Copper Wire according to JIS C 3102
- Core insulation: Cross-Linked Polyethylene (XLPE)
- Core insulation colour: White
- Outer sheath : Electron beam crosslinked Polyolefin (XLPO)
- Outer sheath colour: Black

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
LAPP KABEL PV-CQ 1500 V				
Core insulation: natural / Outer sheath: black				
85120000	1 X 2.0	5.6	19.0	25
85120001	1 X 3.5	6.2	34.0	41
85120002	1 X 5.5	6.8	53.0	61
85120003	1 X 8	7.4	75.0	84
85120004	1 X 14	8.8	134.0	146
85120005	1 X 22	10.4	211.2	230
85120006	1 X 38	12.4	364.8	389
85120007	1 X 60	15.2	576.0	613

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Info

- Meets the design standard of JCS 4517
- DC 1,500V SOLAR CABLE

Technical data



Conductor stranding

Annealed Copper Wire according to JIS C 3102



Minimum bending radius

Fixed installation: 5 x outer diameter



Nominal voltage

DC 1500 V



Temperature range

Ambient temperature range according to JCS 4517 : -40 °C to +90 °C



LAPP KABEL 0.6 / 1KV TFR-CV / AL

Info

- Lightweight and economical power cable with aluminum conductor to meet IEC 60502-1 specifications

LAPP KABEL 0.6/1KV TFR-CV/AL 1C X 120 SQMM

Benefits

- Less expensive alternative compared to copper conductor
- Easy installation due to light weight aluminum conductor

Application range

- Power cable with excellent flame retardance

Product features

- Flame retardant acc. to IEC 60332-3-24
- Voltage test acc. to IEC 60502-1 (3.5kV/5mins)

Norm references / Approvals

- KC certified according to IEC 60502-1

Product Make-up

- Conductor: Aluminum stranded conductor (Class 2)
- Core insulation: Cross-Linked Polyethylene (XLPE)
- Core insulation colour: Natural color
- Outer sheath : Flame retardant PVC
- Outer sheath colour: Black

Technical data



Conductor stranding

Aluminum conductor acc. to IEC 60228 Class 2



Minimum bending radius

Fixed installation: 10 x outer diameter



Nominal voltage

AC U₀/U: 0.6/1 KV



Temperature range

Fixed installation: up to +90 °C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
LAPP KABEL 0.6/1KV TFR-CV/AL				
Core insulation: natural / Outer sheath: black				
85120400	1X 16	9.2	43.3	106
85120401	1X 25	10.5	68.6	148
85120402	1X 35	11.5	95.2	184
85120403	1X 50	12.9	132.5	236
85120404	1X 70	14.8	183.7	314
85120405	1X 95	16.6	254.3	411
85120406	1X 120	18.3	320.0	504
85120407	1X 150	20.4	397.3	620
85120408	1X 185	22.3	499.5	755
85120409	1X 240	25.1	650.9	972
85120410	1X 300	27.7	816.7	1,196
85120411	1X 400	31.0	1060.8	1,506
85120412	1X 500	34.8	1341.0	1,902
85120413	1X 630	39.4	1734.3	2,465

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SOLAR AL FLEX WP

LAPP KABEL SOLAR AL FLEX WP DC 1500V 1X10 SQ MM <CU 1X6 SQ MM>



Info

- Optimised cable design for constant high volume resistance
- Fine wired Aluminum conductor According to ISO6722, IEC60228 Cl.5
- Lightweight and economical solar cable

Benefits

- Maintain high volume resistance for heat and moisture exposed environments
- Applied to aluminum conductor, which is less expensive than copper conductor
- Easy installation due to light weight aluminum conductor than copper conductor
- Flexible aluminum conductors (class 5 grade) for high workability
- Use of insulation & sheath compound meeting EN50618, the new TuV certification standard
- High durability due to high insulation resistance and thermal stability

Application range

- For installation in conduits, in which heat and moisture can accumulate
- For the cabling between the solar modules and as extension cable between the module strings
- Gable and flat roof photovoltaic systems
- Photovoltaic plants and solar parks

Product features

- Flame retardant according to IEC 60332-1-2
- Halogen free according to EN 50267-2-1/-2 & EN 60684-2

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
SOLAR AL FLEX WP				
Core insulation: white / Outer sheath: black				
85120200	1 X 4	6.0	12.0	41
85120201	1 X 6	6.6	18.0	52
85120202	1 X 10	7.6	29.0	69
Core insulation: white / Outer sheath: black with red stripe				
85120203	1 X 4	6.0	12.0	41
85120204	1 X 6	6.6	18.0	52
85120205	1 X 10	7.6	29.0	69
Core insulation: white / Outer sheath: black with blue stripe				
85120206	1 X 4	6.0	12.0	41
85120207	1 X 6	6.6	18.0	52
85120208	1 X 10	7.6	29.0	69

Technical data

	Conductor stranding Fine wire strands of Aluminum conductor (Design acc.to ISO6722-2-B, resistance acc.to IEC60228 Cl.5)
	Minimum bending radius Fixed installation: 5 x cable diameter
	Rated voltage DC1500 V
	Test voltage AC 6500 V
	Range of temperature Fixed installation: -40° C up to +120 ° C max. conductor temperature



ÖLFLEX® SOLAR XLR-E

Cross-linked solar cables - type H1Z2Z2-K certified according to EN 50618

i Info

- H1Z2Z2-K (code designation according to EN 50618)
- Substitutes previous ÖLFLEX® SOLAR XLR-R



Benefits

- Robust against mechanical impacts
- For outdoor applications
- Extruded colour stripe serves as reverse polarity protection during installation.
- Exact quantity control during installation by meter marking on the cable sheath
- Reduction of flame propagation and of toxic combustion gases in the event of fire

Application range

- For use in photovoltaic-systems with rated voltage 1500 V DC
- For the cabling between the solar modules and as extension cable between the module strings and the DC/AC inverter
- Gable and flat roof photovoltaic systems
- Photovoltaic plants and solar parks
- Not suitable for direct burial, Installation according to IEC 60364-5-52, respectively HD 60364-5-52

Product features

- Halogen-free and flame-retardant
- Weather/UV-resistant acc. to EN 50618, appendix E
- Ozone-resistant according to EN 50396
- XLR-E = X-Linked Radiated-EN Standard
Proven electron beam cross-linked quality

Norm references / Approvals

- H1Z2Z2-K (code designation according to EN 50618)
- Items with other cross-sections on request

Product Make-up

- Fine-wire, tinned-copper conductor
- Core insulation made of electron beam cross-linked copolymer
- Colour of core insulation: white
- Outer sheath made of electron beam cross-linked copolymer
- Outer sheath colour: black

Technical data

Classification
ETIM 5.0 Class-ID: EC001578
ETIM 5.0 Class-Description:
Flexible cable

Conductor stranding
Fine wire according to VDE 0295,
class 5/IEC 60228 class 5

Minimum bending radius
Fixed installation: 4 x outer diameter

Nominal voltage
AC U₀/U : 1,0/1,0 kV
DC U₀/U : 1,5/1,5 kV
Max. permissible operating voltage:
DC 1,8 kV

Test voltage
AC 6500 V

Current rating
Im compliance with EN 50618,
Table A.3

Temperature range
-40°C to +120°C max. conductor
temperature based on EN 60216-1
Ambient temperature range according
to EN 50618: -40°C to +90°C

Article number	Conductor cross-section (mm ²)	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® SOLAR XLR-E				
Core insulation: white / Outer sheath: black				
1023652	4.0	5.4	38.4	66
1023653	6.0	6.0	57.6	89
1023654	10.0	7.2	96.0	136
1023655	16.0	8.4	153.6	207
Core insulation: white / Outer sheath: black with red stripe				
1023667	4.0	5.4	38.4	66
1023668	6.0	6.0	57.6	89
1023669	10.0	7.2	96.0	136
1023670	16.0	8.4	153.6	207

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ÖLFLEX® UNIPLUS HFFR

Halogen free flame retardant single core



Benefits

- Time-saving assembly
- Highly flexible due to special insulation compound as per LAPP specifications
- Protection of human life and the environment, Thanks to the avoidance of the formation of acid and smoke in case of fire

Application range

- For wiring of lamps, devices, switch gear cabinets and distribution boxes

- For installation in tubes, as well as in closed installation ducts or protected installations
- For use in dry rooms
- In application area with a high density of people or valuable assets

Product features

- Flame retardant (FR)-IS 10810-53/IEC 60332.1

Product Make-up

- Stranded Annealed Bare copper
- Low Smoke Zero Halogen compound



Info

- Halogen free

Technical data



Core identification code
Coloured



Conductor stranding
Fine wire stranded Class 5 in acc. to IS 8130-1984/IEC 60228



Minimum bending radius
6 X OD



Nominal voltage
Up to and including 1100 V



Temperature range
Up to +70°C for fixed installations

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® UNIPLUS HFFR					
4725001U	1X 0.5	2.6	green-yellow	4.6	9
4725002U	1X 0.75	2.8	green-yellow	7.2	12
4725003U	1X 1.0	3.0	Yellow	9.6	15
4726011U	1X 1.5	3.4	black	14.4	21
4726031U	1X 1.5	3.4	brown	14.4	21
4726021U	1X 1.5	3.4	blue	14.4	21
4726141U	1X 1.5	3.4	dark blue	14.4	21
4726121U	1X 1.5	3.4	green	14.4	21
4726001U	1X 1.5	3.4	green-yellow	14.4	21
4726061U	1X 1.5	3.4	grey	14.4	21
4726091U	1X 1.5	3.4	orange	14.4	21
4726081U	1X 1.5	3.4	pink	14.4	21
4726041U	1X 1.5	3.4	red	14.4	21
4726161U	1X 1.5	3.4	ultra marine blue	14.4	21
4726071U	1X 1.5	3.4	violet	14.4	21
4726051U	1X 1.5	3.4	white	14.4	21
4726111U	1X 1.5	3.4	yellow	14.4	21
4726012U	1X 2.5	4.1	black	24.0	33
4726032U	1X 2.5	4.1	brown	24.0	33
4725002U	1X 2.5	4.1	blue	24.0	33
4726122U	1X 2.5	4.1	green	24.0	33
4726002U	1X 2.5	4.1	green-yellow	24.0	33
4726062U	1X 2.5	4.1	grey	24.0	33
4726042U	1X 2.5	4.1	red	24.0	33
4726052U	1X 2.5	4.1	white	24.0	33
4726112U	1X 2.5	4.1	green-yellow	24.0	33
4726003U	1X 4	4.8	green-yellow	38.4	50
4726004U	1X 6	5.3	green-yellow	57.6	74
4726005U	1X 10	7.0	green-yellow	96.0	122
4726006U	1X 16	8.1	green-yellow	153.6	185
4726007U	1X 25	10.2	green-yellow	240.0	288
4726008U	1X 35	11.7	green-yellow	336.0	391
4726009U	1X 50	13.9	green-yellow	480.0	557
4727001U	1X 70	16.0	green-yellow	672.0	770
4727002U	1X 95	18.2	green-yellow	912.0	1033
4727003U	1X 120	20.2	green-yellow	1152.0	1283
4727004U	1X 150	22.5	green-yellow	1440.0	1611
4727005U	1X 185	24.9	green-yellow	1776.0	1988
4727006U	1X 240	28.4	green-yellow	2304.0	2561
4722001U	1X 300	31.0	green-yellow	2615.0	2915

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**ÖLFLEX® UNIPLUS FR**

ISI Marked PVC insulated single core

**i Info**

- ISI marked

Benefits

- IS compliant ISI Marked
- Time-saving assembly

Application range

- For wiring of lamps, devices, switch gear cabinets and distribution boxes
- For installation in tubes, as well as in closed installation ducts or protected installations
- For use in dry rooms

Product features

- Flame retardant (FR)- IEC 60332.1/IS 10810-53

Norm references / Approvals

- IS 694:2010

Product Make-up

- Stranded Annealed Bare copper
- PVC compound type D in acc. to IS 5831:1984

Technical data

Core identification code
Coloured

Conductor stranding
Fine wire stranded Class 5 in acc. to IS 8130-1984/IEC 60228

Minimum bending radius
6 X OD

Nominal voltage
Up to and including 1100 V in acc. to IS 694:2010

Temperature range
Up to +70°C for fixed installations

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® UNIPLUS FR					
4510001U	1X 0.5	2.6	green-yellow	4.8	9
4510002U	1X 0.75	2.8	green-yellow	7.2	12
4510003U	1X 1.0	3.0	green-yellow	9.6	15
4520011U	1X 1.5	3.4	black	14.4	20
4520031U	1X 1.5	3.4	brown	14.4	20
4520021U	1X 1.5	3.4	blue	14.4	20
4520141U	1X 1.5	3.4	dark blue	14.4	20
4520121U	1X 1.5	3.4	green	14.4	20
4520001U	1X 1.5	3.4	green-yellow	14.4	20
4520061U	1X 1.5	3.4	grey	14.4	20
4520091U	1X 1.5	3.4	orange	14.4	20
4520081U	1X 1.5	3.4	pink	14.4	20
4520041U	1X 1.5	3.4	red	14.4	20
4520161U	1X 1.5	3.4	ultra marine blue	14.4	20
4520071U	1X 1.5	3.4	violet	14.4	20
4520051U	1X 1.5	3.4	white	14.4	20
4520111U	1X 1.5	3.4	yellow	14.4	20
4520012U	1X 2.5	4.1	black	24.0	33
4520032U	1X 2.5	4.1	brown	24.0	33
4520022U	1X 2.5	4.1	blue	24.0	33
4520122U	1X 2.5	4.1	green	24.0	33
4520002U	1X 2.5	4.1	green-yellow	24.0	33
4520062U	1X 2.5	4.1	grey	24.0	33
4520092U	1X 2.5	4.1	orange	24.0	33
4520042U	1X 2.5	4.1	red	24.0	33
4520112U	1X 2.5	4.1	yellow	24.0	33
4520003U	1X 4	4.8	green-yellow	38.4	49
4520004U	1X 6	5.3	green-yellow	57.6	72
4520005U	1X 10	7.0	green-yellow	96.0	120
4520006U	1X 16	8.1	green-yellow	153.6	182
4521001U	1X 25	10.2	green-yellow	240.0	283
4521002U	1X 35	11.7	green-yellow	336.0	386
4521003U	1X 50	13.9	green-yellow	480.0	550
4521004U	1X 70	16.0	green-yellow	672.0	761
4521005U	1X 95	18.2	green-yellow	912.0	1022
4521006U	1X 120	20.2	green-yellow	1152.0	1271
4521007U	1X 150	22.5	green-yellow	1440.0	1595
4521008U	1X 185	24.9	green-yellow	1776.0	1968
4521009U	1X 240	28.4	green-yellow	2304.0	2538
4522001U	1X 300	31.0	green-yellow	2615.0	2887

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ÖLFLEX® UNIPLUS FR-LSH

ISI Marked PVC FR-LSH insulated single core



Benefits

- IS compliant ISI Marked
- Time-saving assembly
- Safe for human life and the environment thanks to the reduced smoke and halogen in case of fire
- Internal wiring of devices

Application range

- For wiring of lamps, devices, switch gear cabinets and distribution boxes
- For installation in tubes, as well as in closed installation ducts or protected installations
- For use in dry rooms

- In application area with a high density of people or valuable assets

Product features

- Flame retardant (FR)- IEC 60332.1/IS 10810-53
- Low smoke and low halogen (LSH) : as per data sheet

Norm references / Approvals

- IS 694:2010

Product Make-up

- Stranded Annealed Bare copper
- PVC FR-LSH Type D in Acc. To IS 5831:1984

Info

- ISI marked with FRLSH properties

Technical data

Core identification code
Coloured

Conductor stranding
Fine wire stranded Class 5 in acc. to IS 8130-1984/IEC 60228

Minimum bending radius
6 X OD

Nominal voltage
Up to and including 1100 V in acc. to IS 694:2010

Temperature range
Up to +70°C for fixed installations

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® UNIPLUS FR-LSH					
4610011U	1X 0.5	2.6	black	4.8	9
4610001U	1X 0.5	2.6	green-yellow	4.8	9
4610002U	1X 0.75	2.8	green-yellow	7.2	12
4610003U	1X 1.0	3.0	green-yellow	9.6	15
4620011U	1X 1.5	3.4	black	14.4	21
4620031U	1X 1.5	3.4	brown	14.4	21
4620021U	1X 1.5	3.4	blue	14.4	21
4620141U	1X 1.5	3.4	dark blue	14.4	21
4620121U	1X 1.5	3.4	green	14.4	21
4620001U	1X 1.5	3.4	green-yellow	14.4	21
4620061U	1X 1.5	3.4	grey	14.4	21
4620091U	1X 1.5	3.4	orange	14.4	21
4620081U	1X 1.5	3.4	pink	14.4	21
4620041U	1X 1.5	3.4	red	14.4	21
4620161U	1X 1.5	3.4	ultra marine blue	14.4	21
4620071U	1X 1.5	3.4	violet	14.4	21
4620051U	1X 1.5	3.4	white	14.4	21
4620111U	1X 1.5	3.4	yellow	14.4	21
4620012U	1X 2.5	4.1	black	24.0	34
4620032U	1X 2.5	4.1	brown	24.0	34
4620022U	1X 2.5	4.1	blue	24.0	34
4620122U	1X 2.5	4.1	green	24.0	34
4620002U	1X 2.5	4.1	green-yellow	24.0	34
4620062U	1X 2.5	4.1	grey	24.0	34
4620092U	1X 2.5	4.1	orange	24.0	34
4620042U	1X 2.5	4.1	red	24.0	34
4620112U	1X 2.5	4.1	yellow	24.0	34
4620003U	1X 4	4.8	green-yellow	38.4	50
4620004U	1X 6	5.3	green-yellow	57.6	74
4620005U	1X 10	7.0	green-yellow	96.0	122
4620006U	1X 16	8.1	greyNE	153.6	185
4621001U	1X 25	10.2	green-yellow	240.0	288
4621002U	1X 35	11.7	green-yellow	336.0	391
4621003U	1X 50	13.9	green-yellow	480.0	557
4621004U	1X 70	16.0	green-yellow	672.0	770
4621005U	1X 95	18.2	green-yellow	912.0	1034
4621006U	1X 120	20.2	green-yellow	1152.0	1283
4621007U	1X 150	22.5	green-yellow	1440.0	1611
4621008U	1X 185	24.9	green-yellow	1776.0	1989
4621009U	1X 240	28.4	green-yellow	2304.0	2562

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ÖLFLEX® UNIPLUS TRI

TRI Rated Single core, British - BS 6231 type CK, USA - UL Recognised (AWM), Canada - CSA (TEW) Hookup wire

Info

- Multi-standard single core BS-6231, UL-CSA
- Conforms to BS for higher voltage range 1000V
- Higher maximum conductor temperature 1050 deg C according to UL



Benefits

- For use in the most important global markets
- Reduction in technical documentation
- Increase cost effectiveness of production process
- Time-saving assembly

Application range

- Factory wiring
- Field wiring
- Internal wiring of appliances
- Control cabinet wiring

Product features

- Flame retardant acc. to IEC 60332-1-2

- Flame retardant according to UL VW1 & CSA FT1
- Oil-resistant to 60°C

Norm references / Approvals

- CPR approved
- BS 6231 Type CK
- UL 758
- CSA 22.2 Type TEW

Product Make-up

- Annealed bare copper, Class V in acc. to IEC 60228
- Special PVC compound suitable for 105°C

Technical data



Core identification code
Coloured



Conductor stranding
Annealed bare copper, Class 5 in acc. to IEC 60228



Minimum bending radius
Occasional flexing: 8 x cable OD
Fixed installation: 6 x cable OD



Nominal voltage
BS: 1000V
UL (AWM): 600V



Temperature range
Occasional flexing: -15°C up to +105°C
max. conductor temperature
Fixed installation: -30°C up to +105°C
max. conductor temperature

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® UNIPLUS HFFR					
8201010100	1 X 0.5	2.6	black	4.8	12
8201010000	1 X 0.5	2.6	green-yellow	4.8	12
8201010001	1 X 0.75	2.8	green-yellow	7.2	15
8201010102	1 X 1.0	3.0	black	9.6	18
8201010302	1 X 1.0	3.0	brown	9.6	18
8201010202	1 X 1.0	3.0	blue	9.6	18
8201010402	1 X 1.0	3.0	red	9.6	18
8201010002	1 X 1.0	3.0	green-yellow	9.6	18
8201010103	1 X 1.5	3.2	black	14.4	22
8201010303	1 X 1.5	3.2	brown	14.4	22
8201010203	1 X 1.5	3.2	blue	14.4	22
82010111403	1 X 1.5	3.2	dark blue	14.4	22
8201011203	1 X 1.5	3.2	green	14.4	22
8201010603	1 X 1.5	3.2	grey	14.4	22
8201011503	1 X 1.5	3.2	light blue	14.4	22
8201010903	1 X 1.5	3.2	orange	14.4	22
8201010803	1 X 1.5	3.2	pink	14.4	22
8201010403	1 X 1.5	3.2	red	14.4	22
8201010703	1 X 1.5	3.2	volet	14.4	22
8201010503	1 X 1.5	3.2	white	14.4	22
82010111103	1 X 1.5	3.2	yellow	14.4	22
8201010003	1 X 1.5	3.2	green-yellow	14.4	22
8201010104	1 X 2.5	3.7	black	24.0	33
8201010304	1 X 2.5	3.7	brown	24.0	33
8201010204	1 X 2.5	3.7	blue	24.0	33
8201010404	1 X 2.5	3.7	red	24.0	33
8201010004	1 X 2.5	3.7	green-yellow	24.0	33
8201010005	1 X 4	4.2	green-yellow	38.4	47
8201010006	1 X 6	5.1	green-yellow	57.6	70
8201010007	1 X 10	6.5	green-yellow	96.0	117
8201010008	1 X 16	7.5	green-yellow	154.0	172
8201010009	1 X 25	9.1	green-yellow	240.0	261
8201010010	1 X 35	10.2	green-yellow	336.0	353
8201010011	1 X 50	12.5	green-yellow	480.0	514
8201010012	1 X 70	14.2	green-yellow	672.0	705
8201010013	1 X 95	16.1	green-yellow	912.0	923
8201010014	1 X 120	17.7	green-yellow	1152.0	1156
8201010015	1 X 150	19.6	green-yellow	1440.0	1433
8201010016	1 X 185	21.6	green-yellow	1776.0	1742
8201010017	1 X 240	24.3	green-yellow	2304.0	2273

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H05V-K <VDE>

<VDE> cable type certification

**Info**

- VDE approved

Benefits

- Cables' <VDE> marking is a testing mark/ proof of the successful testing according to VDE/ EN/ HD/ IEC standards as well as possible health and safety regulations. <VDE> is issued by the VDE testing and certification institute.

Application range

- Internal wiring of devices
- Protected installation in and on lighting equipments
- Signal systems in and on plaster in tubes

Product features

- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- <VDE> cable type certification acc. EN 50525-2-31

Product Make-up

- Fine-wired copper conductor of bare copper strands in line with conductor class 5 acc. IEC 60228
- Core insulation: Based on PVC

Technical data**Classification ETIM 5/6**ETIM 5.0/6.0 Class-ID: EC000993
ETIM 5.0/6.0 Class-Description: Single core cable**Conductor stranding**

Fine wire according to VDE 0295 Class 5/ IEC 60228 Class 5

**Minimum bending radius**

6 x cable diameter

**Nominal voltage**U₀/U: 300/500 V**Test voltage**

2000 V

**Temperature range**

Fixed installation: -30°C to +70°C

Conductor Cross-section (mm ²)	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)	green/ yellow	black	blue	brown	red
0.5	2.2	4.8	9	8110001	8110011	8110021	8110031	8110041
0.75	2.3	7.2	12	8110002	8110012	8110022	8110032	8110042
1.0	2.5	9.6	14	8110003	8110013	8110023	8110033	8110043

Conductor Cross-section (mm ²)	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)	white	grey	orange	yellow	green
0.5	2.2	4.8	9	8110051	8110061	8110091	8110111	8110121
0.75	2.3	7.2	12	8110052	8110062	8110092	8110112	8110122
1.0	2.5	9.6	14	8110053	8110063	8110093	8110113	8110123

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**H07V-K <VDE>**

<VDE> cable type certification

**Info**

- VDE approved

**Benefits**

- Cables' <VDE> marking is a testing mark/ proof of the successful testing according to VDE/ EN/ HD/ IEC standards as well as possible health and safety regulations. <VDE> is issued by the VDE testing and certification institute.

Application range

- Laying in tubes, exposed or buried in plaster, and in closed installation ducts
- For direct laying on racks, troughs and tubes only as potential equalisation conductor

Product features

- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- <VDE> cable type certification acc. EN 50525-2-31

Product Make-up

- Fine-wired copper conductor of bare copper strands in line with conductor class 5 acc. IEC 60228
- Core insulation: Based on PVC

Technical data**Classification ETIM 5/6**ETIM 5.0/6.0 Class-ID: EC000993
ETIM 5.0/6.0 Class-Description: Single core cable**Conductor stranding**

Fine wire according to VDE 0295 Class 5 / IEC 60228 Class 5

**Minimum bending radius**

6 x cable diameter

**Nominal voltage**U_{0/U}: 450/750 V**Test voltage**

2500 V

**Temperature range**

Fixed installation: -30°C to +70°C

Conductor Cross-section (mm ²)	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)	green/ yellow	black	blue	brown	red
1.5	3.2	14.4	22	8120001	8120011	8120021	8120031	8120041
2.5	3.6	24.0	32	8120002	8120012	8120022	8120032	8120042
4	4.6	38.4	52	8120003	8120013	8120023	8120033	8120043
6	5.3	57.6	76	8120004	8120014	8120024	8120034	8120044
10	6.3	96.0	119	8120005	8120015	8120025	8120035	8120045
16	7.4	153.6	175	8120006	8120016	8120026	8120036	8120046
25	9.2	240.0	270	8121001	8121011	8121021	8121031	8121041
35	10.5	336.0	373	8121002	8121012	8121022	8121032	8121042
50	12.5	480.0	519	8121003	8121013	8121023	8121033	8121043
70	14.4	672.0	726	8121004	8121014	8121024	8121034	8121044
95	16.6	912.0	960	8121005	8121015	8121025	8121035	8121045
120	18.3	1152.0	1198	8121006	8121016	8121026	8121036	8121046
150	20.6	1440.0	1491	8121007	8121017	8121027	8121037	8121047
185	22.8	1776.0	1829	8121008	8121018	8121028	8121038	8121048
240	26.0	2304.0	2383	8121009	8121019	8121029	8121039	8121049

Conductor Cross-section (mm ²)	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)	white	grey	orange	yellow	green
1.5	3.2	14.4	22	8120051	8120061	8120091	8120111	8120121
2.5	3.6	24.0	32	8120052	8120062	8120092	8120112	8120122
4	4.6	38.4	52	8120053	8120063	8120093	8120113	8120123
6	5.3	57.6	76	8120054	8120064	8120094	8120114	8120124
10	6.3	96.0	119	8120055	8120065	8120095	8120115	8120125
16	7.4	153.6	175	8120056	8120066	8120096	8120116	8120126
25	9.2	240.0	270	8121051	8121061	8121091	8121111	8121121
35	10.5	336.0	373	8121052	8121062	8121092	8121112	8121122
50	12.5	480.0	519	8121053	8121063	8121093	8121113	8121123
70	14.4	672.0	726	8121054	8121064	8121094	8121114	8121124
95	16.6	912.0	960	8121055	8121065	8121095	8121115	8121125
120	18.3	1152.0	1198	8121056	8121066	8121096	8121116	8121126
150	20.6	1440.0	1491	8121057	8121067	8121097	8121117	8121127
185	22.8	1776.0	1829	8121058	8121068	8121098	8121118	8121128
240	26.0	2304.0	2383	8121059	8121069	8121099	8121119	8121129

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60227 IEC 05(BV)

Single-core non-sheathed cable with solid conductor for internal wiring
for a conductor temperature of 70 °C



Benefits

- With CCC certification issued by China Quality Certification Center

Application range

- Internal wiring of devices and control cabinets
- Protected installation in and on lighting equipment
- Signal systems in and on plaster in tubes

Product features

- Fixed installation temperature down to -40°C
- Flame retardant according to IEC 60332-1-2

Norm references / Approvals

- CCC certificate according to GB/T 5023.3, IEC 60227-3

Product Make-up

- Solid copper conductor according IEC 60228 Class 1, GB/T 3956 Class 1
- Special PVC insulation

Info

- Rated voltage U₀/U: 300/500 V
- With CCC certification

Technical data

	Conductor stranding
	Solid copper conductor according to IEC 60228 Class 1, GB/T 3956 Class 1
	Minimum bending radius
	4 x outer diameter for fixed installation
	Nominal voltage
	U ₀ /U: 300/500 V
	Test voltage
	2000 V
	Temperature range
	Fixed installation: -30°C to +80°C
	Core identification code
	Optional
	Protective conductor
	Optional
	Classification
	Optional

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
60227 IEC 05(BV) 300/500 V					
39340001	1X0.5	2.1	green-yellow	10.0	5
39340101	1X0.5	2.1	black	10.0	5
39340201	1X0.5	2.1	blue	10.0	5
39340301	1X0.5	2.1	brown	10.0	5
39340401	1X0.5	2.1	red	10.0	5
39340501	1X0.5	2.1	white	10.0	5
39340601	1X0.5	2.1	grey	10.0	5
39340701	1X0.5	2.1	violet	10.0	5
39340801	1X0.5	2.1	pink	10.0	5
39340901	1X0.5	2.1	orange	10.0	5
39341101	1X0.5	2.1	yellow	10.0	5
39341201	1X0.5	2.1	green	10.0	5
39341401	1X0.5	2.1	dark blue	10.0	5
39340002	1X0.75	2.3	green-yellow	10.0	7
39340102	1X0.75	2.3	black	10.0	7
39340202	1X0.75	2.3	blue	10.0	7
39340302	1X0.75	2.3	brown	10.0	7
39340402	1X0.75	2.3	red	10.0	7
39340502	1X0.75	2.3	white	10.0	7
39340602	1X0.75	2.3	grey	10.0	7
39340702	1X0.75	2.3	violet	10.0	7
39340802	1X0.75	2.3	pink	10.0	7
39340902	1X0.75	2.3	orange	10.0	7
39341102	1X0.75	2.3	yellow	10.0	7
39341202	1X0.75	2.3	green	10.0	7
39341402	1X0.75	2.3	dark blue	10.0	7
39340003	1X1.0	2.5	green-yellow	20.0	10
39340103	1X1.0	2.5	black	20.0	10
39340203	1X1.0	2.5	blue	20.0	10
39340303	1X1.0	2.5	brown	20.0	10
39340403	1X1.0	2.5	red	20.0	10
39340503	1X1.0	2.5	white	20.0	10
39340603	1X1.0	2.5	grey	20.0	10
39340703	1X1.0	2.5	violet	20.0	10
39340803	1X1.0	2.5	pink	20.0	10
39340903	1X1.0	2.5	orange	20.0	10
39341103	1X1.0	2.5	yellow	20.0	10
39341203	1X1.0	2.5	green	20.0	10
39341403	1X1.0	2.5	dark blue	20.0	10

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**60227 IEC 01(BV)**

Single-core non-sheathed cable with rigid conductor for general purposes

**Info**

- Rated voltage U₀/U: 450/750 V
- With CCC certification

**Benefits**

- With CCC certification issued by China Quality Certification Center

Application range

- Internal wiring of devices and control cabinets
- Laying in tubes, exposed or buried in plaster, and in closed installation ducts
- Factory wiring and Field wiring

Product features

- Fixed installation temperature down to -30°C
- Flame retardant according to IEC 60332-1-2

Norm references / Approvals

- CCC certificate according to GB/T 5023.3, IEC 60227-3

Product Make-up

- Up to 10 mm²: Solid copper conductor according to IEC 60228 class 1, GB/T 3956 Class 1
From 16 mm²: Multi copper wires stranded according to IEC 60228 Class 2, GB/T 3956 Class 2
- Special PVC insulation

Technical data**Conductor stranding**

Up to 10 mm²: Solid copper conductor according to IEC 60228 class 1, GB/T 3956 Class 1
From 16 mm²: Multi copper wires stranded according to IEC 60228 Class 2, GB/T 3956 Class 2

**Minimum bending radius**

OD ≤ 12 mm: 6 x outer diameter
OD > 12 mm: 8 x outer diameter

**Nominal voltage**U₀/U: 450/750 V**Test voltage**

2500 V

**Temperature range**

Fixed installation: -30°C to +80°C

**Core identification code**

Optional

**Protective conductor**

Optional

**Classification**

Optional

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
60227 IEC 01(BV) 450/750 V					
39370004	1 X 1.5	2.9	green-yellow	20.0	14
39370104	1 X 1.5	2.9	black	20.0	14
39370204	1 X 1.5	2.9	blue	20.0	14
39370304	1 X 1.5	2.9	brown	20.0	14
39370604	1 X 1.5	2.9	grey	20.0	14
39370005	1 X 2.5	3.4	green-yellow	40.0	24
39370105	1 X 2.5	3.4	black	40.0	24
39370205	1 X 2.5	3.4	blue	40.0	24
39370305	1 X 2.5	3.4	brown	40.0	24
39370605	1 X 2.5	3.4	grey	40.0	24
39370006	1 X 4	4.1	green-yellow	50.0	38
39370106	1 X 4	4.1	black	50.0	38
39370206	1 X 4	4.1	blue	50.0	38
39370306	1 X 4	4.1	brown	50.0	38
39370606	1 X 4	4.1	grey	50.0	38
39370007	1 X 6	4.6	green-yellow	70.0	58
39370107	1 X 6	4.6	black	70.0	58
39370207	1 X 6	4.6	blue	70.0	58
39370307	1 X 6	4.6	brown	70.0	58
39370607	1 X 6	4.6	grey	70.0	58
39370008	1 X 10	6.2	green-yellow	120.0	96
39370108	1 X 10	6.2	black	120.0	96
39370208	1 X 10	6.2	blue	120.0	96
39370308	1 X 10	6.2	brown	120.0	96
39370608	1 X 10	6.2	grey	120.0	96
39370009	1 X 16	7.3	green-yellow	190.0	153
39370109	1 X 16	7.3	black	190.0	153
39370209	1 X 16	7.3	blue	190.0	153
39370309	1 X 16	7.3	brown	190.0	153
39370609	1 X 16	7.3	grey	190.0	153
39370010	1 X 25	9.3	green-yellow	290.0	240
39370110	1 X 25	9.3	black	290.0	240
39370210	1 X 25	9.3	blue	290.0	240
39370310	1 X 25	9.3	brown	290.0	240
39370610	1 X 25	9.3	grey	290.0	240
39370011	1 X 35	10.3	green-yellow	400.0	336
39370111	1 X 35	10.3	black	400.0	336

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
39370211	1 X 35	10.3	blue	400.0	336
39370311	1 X 35	10.3	brown	400.0	336
39370611	1 X 35	10.3	grey	400.0	336
39370012	1 X 50	12.2	green-yellow	560.0	480
39370112	1 X 50	12.2	black	560.0	480
39370212	1 X 50	12.2	blue	560.0	480
39370312	1 X 50	12.2	brown	560.0	480
39370612	1 X 50	12.2	grey	560.0	480
39370013	1 X 70	13.9	green-yellow	780.0	672
39370113	1 X 70	13.9	black	780.0	672
39370213	1 X 70	13.9	blue	780.0	672
39370313	1 X 70	13.9	brown	780.0	672
39370613	1 X 70	13.9	grey	780.0	672
39370014	1 X 95	16.3	green-yellow	1,030.0	912
39370114	1 X 95	16.3	black	1,030.0	912
39370214	1 X 95	16.3	blue	1,030.0	912
39370314	1 X 95	16.3	brown	1,030.0	912
39370614	1 X 95	16.3	grey	1,030.0	912
39370015	1 X 120	17.8	green-yellow	1,290.0	1,152
39370115	1 X 120	17.8	black	1,290.0	1,152
39370215	1 X 120	17.8	blue	1,290.0	1,152
39370315	1 X 120	17.8	brown	1,290.0	1,152
39370615	1 X 120	17.8	grey	1,290.0	1,152
39370016	1 X 150	19.8	green-yellow	1,560.0	1,440
39370116	1 X 150	19.8	black	1,560.0	1,440
39370216	1 X 150	19.8	blue	1,560.0	1,440
39370316	1 X 150	19.8	brown	1,560.0	1,440
39370616	1 X 150	19.8	grey	1,560.0	1,440
39370017	1 X 185	22.0	green-yellow	1,920.0	1,776
39370117	1 X 185	22.0	black	1,920.0	1,776
39370217	1 X 185	22.0	blue	1,920.0	1,776
39370317	1 X 185	22.0	brown	1,920.0	1,776
39370617	1 X 185	22.0	grey	1,920.0	1,776
39370018	1 X 240	25.1	green-yellow	2,550.0	2,304
39370118	1 X 240	25.1	black	2,550.0	2,304
39370218	1 X 240	25.1	blue	2,550.0	2,304
39370318	1 X 240	25.1	brown	2,550.0	2,304
39370618	1 X 240	25.1	grey	2,550.0	2,304

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60227 IEC 06(RV) / H05V-K

Single-core non-sheathed cable with flexible conductor for general purposes



Benefits

- With CCC certification issued by China Quality Certification Center
- With <VDE> cable type certification issued by the VDE testing and certification institute. Cable's <VDE> marking is a testing mark /proof of the successful testing according to VDE/EN/IEC standards as well as possible health and safety regulations

Application range

- Internal wiring of devices and control cabinets
- Protected installation in and on lighting equipment
- Signal systems in and on plaster in tubes

Product features

- Fixed installation temperature down to -40°C
- Flame retardant according to IEC 60332-1-2

Norm references / Approvals

- CCC certificate according to GB/T 5023.3, IEC 60227-3
- <VDE> cable type certification according to EN 50525-2-31

Product Make-up

- Fine-wired copper conductor of bare copper strands according to class 5 of VDE 0295, IEC 60228, GB/T 3956
- PVC insulation

Info

- Rated voltage U₀/U: 300/500 V
- With CCC certification
- With <VDE> cable type certification

Technical data

	Conductor stranding
	Fine wire according to VDE 0295 Class 5, IEC 60228 Class 5, GB/T 3956 Class 5
	Minimum bending radius
	4 x outer diameter for fixed installation
	Nominal voltage
	U ₀ /U: 300/500 V
	Test voltage
	2000 V
	Temperature range
	Fixed installation: -40°C to +80°C
	Core identification code
	Optional
	Protective conductor
	Optional
	Classification
	Optional

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
60227 IEC 06(RV) / H05V-K					
3910001	1 X 0.5	2.2	green-yellow	4.8	10
3910011	1 X 0.5	2.2	black	4.8	10
39100211	1 X 0.5	2.2	blue	4.8	10
3910031	1 X 0.5	2.2	brown	4.8	10
3910041	1 X 0.5	2.2	red	4.8	10
3910051	1 X 0.5	2.2	white	4.8	10
3910061	1 X 0.5	2.2	grey	4.8	10
3910071	1 X 0.5	2.2	violet	4.8	10
3910081	1 X 0.5	2.2	pink	4.8	10
3910091	1 X 0.5	2.2	orange	4.8	10
3910111	1 X 0.5	2.2	yellow	4.8	10
3910121	1 X 0.5	2.2	green	4.8	10
39101411	1 X 0.5	2.2	dark blue	4.8	10
3910002	1 X 0.75	2.4	green-yellow	7.2	10
3910012	1 X 0.75	2.4	black	7.2	10
39100221	1 X 0.75	2.4	blue	7.2	10
3910032	1 X 0.75	2.4	brown	7.2	10
3910042	1 X 0.75	2.4	red	7.2	10
3910052	1 X 0.75	2.4	white	7.2	10
3910062	1 X 0.75	2.4	grey	7.2	10
3910072	1 X 0.75	2.4	violet	7.2	10
3910082	1 X 0.75	2.4	pink	7.2	10
3910092	1 X 0.75	2.4	orange	7.2	10
3910112	1 X 0.75	2.4	yellow	7.2	10
3910122	1 X 0.75	2.4	green	7.2	10
39101421	1 X 0.75	2.4	dark blue	7.2	10
3910003	1 X 1.0	2.6	green-yellow	9.6	20
3910013	1 X 1.0	2.6	black	9.6	20
39100231	1 X 1.0	2.6	blue	9.6	20
3910033	1 X 1.0	2.6	brown	9.6	20
3910043	1 X 1.0	2.6	red	9.6	20
3910053	1 X 1.0	2.6	white	9.6	20
3910063	1 X 1.0	2.6	grey	9.6	20
3910073	1 X 1.0	2.6	violet	9.6	20
3910083	1 X 1.0	2.6	pink	9.6	20
3910093	1 X 1.0	2.6	orange	9.6	20
3910113	1 X 1.0	2.6	yellow	9.6	20
3910123	1 X 1.0	2.6	green	9.6	20
39101431	1 X 1.0	2.6	dark blue	9.6	20

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60227 IEC 02(RV) / H07V-K

Single-core non-sheathed cable with flexible conductor for general purposes

Info

- Rated voltage U₀/U: 450/750 V
- With CCC certification
- With <VDE> cable type certification

Benefits

- With CCC certification issued by China Quality Certification Center
- With <VDE> cable type certification issued by the VDE testing and certification institute. Cable's <VDE> marking is a testing mark /proof of the successful testing according to VDE/EN/IEC standards as well as possible health and safety regulations

Application range

- Internal wiring of devices and control cabinets
- Laying in tubes, exposed or buried in plaster and in closed installation ducts
- For direct laying on racks, troughs and tubes, only as potential equalisation conductor

Product features

- Fixed installation temperature down to -40°C
- Flame retardant according to IEC 60332-1-2

Norm references / Approvals

- CCC certificate according to GB/T 5023.3, IEC 60227-3
- <VDE> cable type certification according to EN 50525-2-31

Product Make-up

- Fine-wired copper conductor of bare copper strands according to class 5 of VDE 0295, IEC 60228, GB/T 3956
- PVC insulation

Technical data

	Conductor stranding Fine wire according to VDE 0295 Class 5, IEC 60228 Class 5, GB/T 3956 Class 5
	Minimum bending radius 6 x outer diameter for fixed installation 4 x outer diameter for cautious bending
	Nominal voltage U ₀ /U: 450/750 V
	Test voltage 2500 V
	Temperature range Fixed installation: -40°C to +80°C
	Core identification code Optional
	Protective conductor Optional
	Classification Optional

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
60227 IEC 02(RV) / H07V-K					
3911001	1 X 1.5	3.1	green-yellow	14.4	20
3911011	1 X 1.5	3.1	black	14.4	20
39110211	1 X 1.5	3.1	blue	14.4	20
3911031	1 X 1.5	3.1	brown	14.4	20
3911061	1 X 1.5	3.1	grey	14.4	20
3911002	1 X 2.5	3.7	green-yellow	24.0	40
3911012	1 X 2.5	3.7	black	24.0	40
39110221	1 X 2.5	3.7	blue	24.0	40
3911032	1 X 2.5	3.7	brown	24.0	40
3911062	1 X 2.5	3.7	grey	24.0	40
3911003	1 X 4	4.3	green-yellow	38.4	50
3911013	1 X 4	4.3	black	38.4	50
39110231	1 X 4	4.3	blue	38.4	50
3911033	1 X 4	4.3	brown	38.4	50
3911063	1 X 4	4.3	grey	38.4	50
3911004	1 X 6	4.8	green-yellow	54.6	70
3911014	1 X 6	4.8	black	54.6	70
39110241	1 X 6	4.8	blue	54.6	70
3911034	1 X 6	4.8	brown	54.6	70
3911064	1 X 6	4.8	grey	54.6	70
3911005	1 X 10	6.5	green-yellow	96.0	120
3911015	1 X 10	6.5	black	96.0	120
39110251	1 X 10	6.5	blue	96.0	120
3911035	1 X 10	6.5	brown	96.0	120
3911065	1 X 10	6.5	grey	96.0	120
3911006	1 X 16	7.7	green-yellow	153.6	190
3911016	1 X 16	7.7	black	153.6	190
39110261	1 X 16	7.7	blue	153.6	190
3911036	1 X 16	7.7	brown	153.6	190
3911066	1 X 16	7.7	grey	153.6	190
3912001	1 X 25	9.7	green-yellow	240.0	290
3912011	1 X 25	9.7	black	240.0	290
3912910	1 X 25	9.7	blue	240.0	290
3912031	1 X 25	9.7	brown	240.0	290
3912061	1 X 25	9.7	grey	240.0	290
3912002	1 X 35	10.9	green-yellow	336.0	400
3912012	1 X 35	10.9	black	336.0	400

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
3912912	1 X 35	10.9	blue	336.0	400
3912032	1 X 35	10.9	brown	336.0	400
3912062	1 X 35	10.9	grey	336.0	400
3912003	1 X 50	13.1	green-yellow	480.0	560
3912013	1 X 50	13.1	black	480.0	560
3912913	1 X 50	13.1	blue	480.0	560
3912033	1 X 50	13.1	brown	480.0	560
3912063	1 X 50	13.1	grey	480.0	560
3912004	1 X 70	14.9	green-yellow	672.0	770
3912014	1 X 70	14.9	black	672.0	770
3912915	1 X 70	14.9	blue	672.0	770
3912034	1 X 70	14.9	brown	672.0	770
3912064	1 X 70	14.9	grey	672.0	770
3912005	1 X 95	17.3	green-yellow	912.0	1,030
3912015	1 X 95	17.3	black	912.0	1,030
3912917	1 X 95	17.3	blue	912.0	1,030
3912035	1 X 95	17.3	brown	912.0	1,030
3912065	1 X 95	17.3	grey	912.0	1,030
3912006	1 X 120	19.2	green-yellow	1,152.0	1,290
3912016	1 X 120	19.2	black	1,152.0	1,290
3912918	1 X 120	19.2	blue	1,152.0	1,290
3912036	1 X 120	19.2	brown	1,152.0	1,290
3912066	1 X 120	19.2	grey	1,152.0	1,290
3912007	1 X 150	21.3	green-yellow	1,440.0	1,560
3912017	1 X 150	21.3	black	1,440.0	1,560
3912929	1 X 150	21.3	blue	1,440.0	1,560
3912037	1 X 150	21.3	brown	1,440.0	1,560
3912067	1 X 150	21.3	grey	1,440.0	1,560
3912008	1 X 185	23.7	green-yellow	1,776.0	1,920
3912018	1 X 185	23.7	black	1,776.0	1,920
3912922	1 X 185	23.7	blue	1,776.0	1,920
3912038	1 X 185	23.7	brown	1,776.0	1,920
3912068	1 X 185	23.7	grey	1,776.0	1,920
3912009	1 X 240	26.8	green-yellow	2,304.0	2,550
3912019	1 X 240	26.8	black	2,304.0	2,550
3912924	1 X 240	26.8	blue	2,304.0	2,550
3912039	1 X 240	26.8	brown	2,304.0	2,550
3912069	1 X 240	26.8	grey	2,304.0	2,550

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V-90HT SC

High temperature PVC insulated cables

**Info**

- Single core, flexible hook-up wire
- UL Style 1015 and UL 10269
- Temperature up to 105°C

Benefits

- The light weight and the practical hand holes in the spool packaging makes handling easy

Application range

- Suitable for assembling cable harnesses and wiring in the switch cabinet installation
- Used for installations in plants, devices, switch gear cabinets, where high temperature occur

Product features

- Flame retardant in acc. to VW -1, and IEC 60332-1-2
- Wide temperature range up to 105°C

Product Make-up

- Fine strands of tinned annealed copper wire
- High temperature PVC based core insulation

Technical data**Classification**

ETIM 5.0 Class-Description: Single core cable
ETIM 5.0 Class-ID: EC000993

**Conductor stranding**

Fine wire acc. to VDE 0295 Cl.5 / IEC 60228 Cl.5

**Minimum bending radius**

Fixed installation: 3 x cable diameter

**Nominal voltage**

U_{0/U}: 600/1000 V

**Temperature range**

-20°C to +105°C

Conductor Cross-section (mm ²)	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)	green/yellow	black	blue	brown	red	white	grey
0.5	2.5	4.8	11	3801000	3801001	3801002	3801003	3801004	3801005	3801006
0.75	2.7	7.2	14	3801010	3801011	3801012	3801013	3801014	3801015	3801016
1.0	2.9	9.6	17	3801020	3801021	3801022	3801023	3801024	3801025	3801026
1.5	3.2	14.4	23	3801030	3801031	3801032	3801033	3801034	3801035	3801036
2.5	3.7	24.0	34	3801040	3801041	3801042	3801043	3801044	3801045	3801046
4	4.3	38.4	54	3801050	3801051	3801052	3801053	3801054	3801055	3801056
6	4.9	57.6	88	3801060	3801061	3801062	3801063	3801064	3801065	3801066
10	6.5	96.0	138	3801070	3801071	3801072	3801073	3801074	3801075	3801076
16	8.4	153.6	231	3801080	3801081	3801082	3801083	3801084	3801085	3801086
25	10.2	240.0	305	3802410	3802411	3802412	3802413	3802414	3802415	3802416
35	12.4	336.0	437	3802420	3802421	3802422	3802423	3802424	3802425	3802426
50	13.9	480.0	588	3802430	3802431	3802432	3802433	3802434	3802435	3802436
70	16.0	672.0	790	3802440	3802441	3802442	3802443	3802444	3802445	3802446
95	18.0	912.0	1051	3802450	3802451	3802452	3802453	3802454	3802455	3802456
120	20.5	1152.0	1330	3802460	3802461	3802462	3802463	3802464	3802465	3802466
150	22.2	1440.0	1628	3802470	3802471	3802472	3802473	3802474	3802475	3802476
185	24.2	1776.0	1984	3802480	3802481	3802482	3802483	3802484	3802485	3802486
240	29.5	2304.0	2514	3802490	3802491	3802492	3802493	3802494	3802495	3802496

Conductor Cross-section (mm ²)	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)	violet	pink	orange	yellow	green	dark blue
0.5	2.5	4.8	11	3801007	3801008	3801009	3801011	3801002	3801004
0.75	2.7	7.2	14	3801017	3801018	3801019	3801011	3801362	3801014
1.0	2.9	9.6	17	3801027	3801028	3801029	3801021	3801022	3801024
1.5	3.2	14.4	23	3801037	3801038	3801039	3801031	3801032	3801034
2.5	3.7	24.0	34	3801047	3801048	3801049	3801041	3801042	3801044
4	4.3	38.4	54	3801057	3801058	3801059	3801051	3801052	3801054
6	4.9	57.6	88	3801067	3801068	3801069	3801061	3801062	3801064
10	6.5	96.0	138	3801077	3801078	3801079	3801071	3801072	3801074
16	8.4	153.6	231	3801087	3801088	3801089	3801081	3801082	3801084
25	10.2	240.0	305	3802417	3802418	3802419	3802411	3802412	3802414
35	12.4	336.0	437	3802427	3802428	3802429	3802421	3802422	3802424
50	13.9	480.0	588	3802437	3802438	3802439	3802431	3802432	3802434
70	16.0	672.0	790	3802447	3802448	3802449	3802441	3802442	3802444
95	18.0	912.0	1051	3802457	3802458	3802459	3802451	3802452	3802454
120	20.5	1152.0	1330	3802467	3802468	3802469	3802461	3802462	3802464
150	22.2	1440.0	1628	3802477	3802478	3802479	3802471	3802472	3802474
185	24.2	1776.0	1984	3802487	3802488	3802489	3802481	3802482	3802484
240	29.5	2304.0	2514	3802497	3802498	3802499	3802491	3802492	3802494

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**FLEXI H SC**

Flexible halogen-free

i Info

- Single core, Flexible
- Halogen-free

**Benefits**

- Halogen free insulation material and free of releasing corrosive gases in the event of fire

Application range

- For use in wiring switchgear, control panel, lighting, and distribution boxes installation
- For installation in enclosed metallic or non-metallic conduit, ducting, and trunking protective cover
- In buildings with a high concentration of people or valuables

Product features

- Flame retardant in acc. to IEC 60332-3-22
- Halogen free in acc. to IEC 60754-1
- Smoke density in acc. to IEC 61034

Product Make-up

- Fine strands of bare copper wire
- LSHF core insulation

Technical data

Classification
ETIM 5.0 Class-Description: Single core cable
ETIM 5.0 Class-ID: EC000993

Conductor stranding
Fine wire acc. to IEC 60228 Cl. 5 / BS 6360 Cl. 5

Minimum bending radius
Fixed installation: 6 x cable diameter

Nominal voltage
 U_0/U : 600/1000 V

Temperature range
-30°C to +90°C

Conductor Cross-section (mm ²)	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)	green/yellow	black	blue	brown	red
0.5	2.5	4.8	11	3802210	3802211	3802212	3802213	3802214
0.75	2.8	7.2	14	3802220	3802221	3802222	3802223	3802224
1.0	2.9	9.6	16	3802230	3802231	3802232	3802233	3802234
1.5	3.2	14.4	22	3802240	3802241	3802242	3802243	3802244
2.5	3.6	24.0	32	3802250	3802251	3802252	3802253	3802254
4	4.6	38.4	52	3802260	3802261	3802262	3802263	3802264
6	5.3	57.6	76	3802270	3802271	3802272	3802273	3802274
10	6.3	96.0	119	3802280	3802281	3802282	3802283	3802284
16	7.4	153.6	175	3802290	3802291	3802292	3802293	3802294
25	9.2	240.0	270	3802300	3802301	3802302	3802303	3802304
35	10.5	336.0	373	3802310	3802311	3802312	3802313	3802314
50	12.5	480.0	519	3802320	3802321	3802322	3802323	3802324
70	14.4	672.0	726	3802330	3802331	3802332	3802333	3802334
95	16.6	912.0	960	3802340	3802341	3802342	3802343	3802344
120	18.3	1152.0	1198	3802350	3802351	3802352	3802353	3802354
150	20.6	1440.0	1491	3802360	3802361	3802362	3802363	3802364
185	22.8	1776.0	1829	3802370	3802371	3802372	3802373	3802374
240	26.0	2304.0	2383	3802380	3802381	3802382	3802383	3802384

Conductor Cross-section (mm ²)	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)	grey	white	orange	yellow	green
0.5	2.5	4.8	11	3802215	3802216	3802217	3802218	3802219
0.75	2.8	7.2	14	3802225	3802226	3802227	3802228	3802229
1.0	2.9	9.6	16	3802235	3802236	3802237	3802238	3802239
1.5	3.2	14.4	22	3802245	3802246	3802247	3802248	3802249
2.5	3.6	24.0	32	3802255	3802256	3802257	3802258	3802259
4	4.6	38.4	52	3802265	3802266	3802267	3802268	3802269
6	5.3	57.6	76	3802275	3802276	3802277	3802278	3802279
10	6.3	96.0	119	3802285	3802286	3802287	3802288	3802289
16	7.4	153.6	175	3802295	3802296	3802297	3802298	3802299
25	9.2	240.0	270	3802305	3802306	3802307	3802308	3802309
35	10.5	336.0	373	3802315	3802316	3802317	3802318	3802319
50	12.5	480.0	519	3802325	3802326	3802327	3802328	3802329
70	14.4	672.0	726	3802335	3802336	3802337	3802338	3802339
95	16.6	912.0	960	3802345	3802346	3802347	3802348	3802349
120	18.3	1152.0	1198	3802355	3802356	3802357	3802358	3802359
150	20.6	1440.0	1491	3802365	3802366	3802367	3802368	3802369
185	22.8	1776.0	1829	3802375	3802376	3802377	3802378	3802379
240	26.0	2304.0	2383	3802385	3802386	3802387	3802388	3802389

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.
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ÖLFLEX® FIRE SC

Fire Survival cable acc. to BS 6387 for circuit integrity of CWZ category

LAPP CABLE STUTTGART ÖLFLEX® FIRE <No. of Core> X <Cross section> SO. MM 600/1000 V SC



Benefits

- Suitable for installation in underground tunnels where fire safety is critical
- Armouring provides excellent protection against high mechanical stress
- AR (Anti Rodent) protection against rodents.

Application range

- In areas whereby there is a need to maintain circuit integrity for prolonged period of time in a fire situation, these cables provide vital additional time to accomplish the evacuation of personnel, to contain and minimize the damage to equipment, plant and buildings, and to mount an effective fire fighting operation
- Specially designed to be used for wiring applications in critical life safety system in public and industrial buildings such as airports, hotels, hospitals, subways, train stations, etc.
- Plant Engineering and Construction, Industrial Machinery and Power stations

Product features

- Fire Test : Acc to BS 6387 Cat. CWZ
- Flame Retardant: IEC 60332-1-2 & IEC 60332-3-24 (BS EN 50266-2-4)
- Halogen Free : In acc. to IEC 60754-1
- Acid and Corrosive Gases : In acc. to IEC 60754-2
- Smoke Density Test : In acc. to IEC 61034

Norm references / Approvals

- Ref. BS 7846
- Fire test based on BS 6387 Cat. CWZ

Product Make-up

- Conductor : Annealed bare copper conductor (IS 8130 / IEC 60228)
- Flame Barrier Tape :MICA
- Insulation : XLPE (BS 7655-1.3/IS 7098-1)
- Inner Sheath : Low Smoke Zero Halogen with flame retardant
- Armouring : GI Round Wire
- Outer Sheath : Low Smoke Zero Halogen with flame retardant of colour BK / RD and option available on additional properties UVAR

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® FIRE SC					
382030068	1X 4	11.9	black	35.0	265
382030069	1X 4	11.9	red	35.0	265
382030070	1X 6	12.5	black	52.7	302
382030071	1X 6	12.5	red	52.7	302
382030072	1X 10	13.6	black	88.2	374
382030073	1X 10	13.6	red	88.2	374
382030074	1X 16	15.4	black	140.7	529
382030075	1X 16	15.4	red	140.7	529
382030076	1X 25	17.3	black	222.0	700
382030077	1X 25	17.3	red	222.0	700
382030079	1X 35	19.8	red	307.9	959
382030081	1X 50	21.3	red	416.4	1,153
382030083	1X 70	27.3	red	602.4	1,463
382030085	1X 95	27.0	red	839.0	1985
382030087	1X 120	28.9	red	1,053.3	2,331
382030089	1X 150	31.0	red	1,298.7	2,720
382030091	1X 185	35.1	red	1,633.8	3,559
382030093	1X 240	38.0	red	2,140.3	4,280
382030095	1X 300	41.3	red	2,693.5	5,123
382030097	1X 400	45.2	red	3,430.3	6,194
ÖLFLEX® FIRE SC UVAR					
382030270	1X 4	11.9	black	35.0	265
382030271	1X 4	11.9	red	35.0	265
382030272	1X 6	12.5	black	52.7	302
382030273	1X 6	12.5	red	52.7	302
382030274	1X 10	13.6	black	88.2	374
382030275	1X 10	13.6	red	88.2	374
382030276	1X 16	15.4	black	140.7	529
382030277	1X 16	15.4	red	140.7	529
382030278	1X 25	17.3	black	222.0	700
382030279	1X 25	17.3	red	222.0	700
382030281	1X 35	19.8	red	307.9	959
382030283	1X 50	21.3	red	416.4	1,153
382030285	1X 70	27.3	red	602.4	1,463
382030287	1X 95	27.0	red	839.0	1,985
382030289	1X 120	28.9	red	1,053.3	2,331
382030291	1X 150	31.0	red	1,298.7	2,720
382030293	1X 185	35.1	red	1,633.8	3,559
382030295	1X 240	38.0	red	2,140.3	4,280
382030297	1X 300	41.3	red	2,693.5	5,123
382030299	1X 400	45.2	red	3,430.3	6,194

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Info

- Fire tested acc. to BS 6387 Cat. CWZ
- Twisted Pairs/Triads 500 V

Benefits

- Suitable for installation in underground tunnels where fire safety is critical
- Armouring provides excellent protection against high mechanical stress and rodents
- AR (Anti Rodent) protection against rodents.

Application range

- In areas whereby there is a need to maintain circuit integrity for prolonged period of time in a fire situation, these cables provides vital additional time to accomplish the evacuation of personnel, to contain and minimize the damage to equipment, plant and buildings, and to mount an effective fire fighting operation
- Specially used in wiring applications in critical life safety systems (e.g. Building Management Systems, emergency lightings, standby power supplies, lifts & elevators) in public such as airports, hotels, hospitals, subways, train stations, etc.
- Plant Engineering and Construction, Industrial Machinery and Power stations

Fire Survival cable acc. to BS 6387 for circuit integrity of CWZ category



Product features

- Fire Test : Acc to BS 6387 Cat. CWZ
- Flame Retardant: IEC 60332-1-2 & IEC 60332-3-24 (BS EN 50266-2-4)
- Halogen Free : In acc. to IEC 60754-1
- Acid and Corrosive Gases : In acc. to IEC 60754-2
- Smoke Density Test : In acc. to IEC 61034

Norm references / Approvals

- Ref. BS 7846
- Fire test based on BS 6387 Cat. CWZ

Product Make-up

- Conductor : Annealed bare copper conductor (IS 8130 / IEC 60228)
- Flame Barrier Tape :MICA
- Insulation : XLPE (IS 7098-1)
- Inner Sheath : Low Smoke Zero Halogen with flame retardant
- Armouring : GI Round Wire
- Laid Up :Cores / Twisted Pairs/Triads are Laid together
- Outer Sheath : Low Smoke Zero Halogen with flame retardant of colour BK / RD and option available on additional properties UVAR

Technical data

Core identification code
Pair : Blue & Brown (Repeats with Numerical Printing),
Triad : Blue, Brown & Black (Repeats with Numerical Printing)

Conductor stranding

Class 2

Minimum bending radius
18 X OD

Nominal voltage

500 V

Temperature range
-5 °C up to +90 °C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® INSTRUM OS					
382030404	1X2X1.5	15.0	black	26.8	374
382030405	1X2X1.5	15.0	red	26.8	374
382030428	1X3X1.5	15.6	black	40.1	414
382030429	1X3X1.5	15.6	red	40.1	414
382030406	1X2X2.5	16.4	black	43.4	441
382030407	1X2X2.5	16.4	red	43.4	441
382030430	1X3X2.5	17.3	black	65.2	507
382030431	1X3X2.5	17.3	red	65.2	507
382030410	2X2X2.5	23.2	black	86.9	855
382030435	2X2X2.5	25.3	red	130.3	1,003
382030414	3X2X2.5	24.4	black	130.3	968
382030439	3X2X2.5	26.7	red	195.4	1,172
382030419	4X2X2.5	26.4	red	173.7	1,124
382030443	4X2X2.5	29.2	red	260.6	1,393
382030423	5X2X2.5	28.5	red	217.2	1,286
382030447	5X2X2.5	31.5	red	325.7	1,594
382030427	6X2X2.5	30.7	red	260.6	1,450
382030451	6X2X2.5	34.9	red	390.9	2,012
ÖLFLEX® INSTRUM OS UVAR					
382030452	1X2X1.5	15.0	black	26.8	374
382030453	1X2X1.5	15.0	red	26.8	374
382030476	1X3X1.5	15.6	black	40.1	414
382030477	1X3X1.5	15.6	red	40.1	414
382030454	1X2X2.5	16.4	black	43.4	441
382030455	1X2X2.5	16.4	red	43.4	441
382030459	2X2X2.5	23.2	red	86.9	855
382030467	4X2X2.5	26.4	red	173.7	1,124
382030478	1X3X2.5	17.3	black	65.2	507
382030479	1X3X2.5	17.3	red	65.2	507
382030483	2X3X2.5	25.3	red	130.3	1,003
382030491	4X3X2.5	29.2	red	260.6	1,393
ÖLFLEX® INSTRUM ISOS					
382030500	2X2X1.5	22.7	black	53.5	805
382030501	2X2X1.5	22.7	red	53.5	805
382030508	4X2X1.5	26.1	black	107.0	1,078
382030502	2X2X2.5	25.2	black	86.9	968
382030503	2X2X2.5	25.2	red	86.9	968
ÖLFLEX® INSTRUM ISOS UVAR					
382030540	2X2X1.5	22.7	black	53.5	805
382030541	2X2X1.5	22.7	red	53.5	805
382030542	2X2X2.5	25.2	black	86.9	968
382030543	2X2X2.5	25.2	red	86.9	968
382030579	6X3X2.5	38.4	red	390.9	2,322

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For current information see: <http://lappapac.lappgroup.com>



ÖLFLEX® FIRE MC

Fire Survival cable acc. to BS 6387 for circuit integrity of CWZ category



Benefits

- Suitable for installation in underground tunnels where fire safety is critical
- Armouring provides excellent protection against high mechanical stress
- AR (Anti Rodent) protection against rodents.

Application range

- In areas whereby there is a need to maintain circuit integrity for prolonged period of time in a fire situation, these cables provide vital additional time to accomplish the evacuation of personnel, to contain and minimize the damage to equipment, plant and buildings, and to mount an effective fire fighting operation
- Specially used in wiring applications in critical life safety systems (e.g. Building Management Systems, emergency lightings, standby power supplies, lifts & elevators) in public such as airports, hotels, hospitals, subways, train stations, etc.
- Plant engineering and construction, industrial machinery, power station

Product features

- Fire Test : Acc to BS 6387 Cat. CWZ
- Flame Retardant: IEC 60332-1-2 & IEC 60332-3-24 (BS EN 50266-2-4)
- Halogen Free : In acc. to IEC 60754-1
- Acid and Corrosive Gases : In acc. to IEC 60754-2
- Smoke Density Test : In acc. to IEC 61034

Norm references / Approvals

- Ref. BS 7846
- Fire test based on BS 6387 Cat. CWZ

Product Make-up

- Conductor : Annealed bare copper conductor (IS 8130 / IEC 60228)
- Flame Barrier Tape : MICA
- Insulation : XLPE (BS 7655-1.3/IS 7098-1)
- Laid Up :Cores Laid together
- Inner Sheath : Low Smoke Zero Halogen with flame retardant
- Armouring : GI Round Wire
- Outer Sheath : Low Smoke Zero Halogen with flame retardant of colour BK / RD and option available on additional properties UVAR

Info

- Fire tested acc. to BS 6387 Cat. CWZ
- Multicore with 600/1000 V

Technical data

	Core identification code
2 Cores Red & Black,	
3 Cores Red, Yellow & Blue,	
4 Cores Red, Yellow, Blue & Black,	
5 Cores Red, Yellow, Blue, Black & Green/Yellow,	
6 cores and above Black Cores with Numerical Printing	

	Conductor stranding
Class 2	

	Minimum bending radius
18 X OD	

	Nominal voltage
600 / 1000 V	

	Temperature range
-5 °C up to +90 °C	

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® FIRE MC					
382030000	2 X 1.5	14.2	black	26.8	361
382030001	2 X 1.5	14.2	red	26.8	361
382030004	3 X 1.5	14.8	black	40.1	395
382030005	3 X 1.5	14.8	red	40.1	395
382030008	4 X 1.5	15.7	black	53.5	445
382030009	4 X 1.5	15.7	red	53.5	445
382030002	2 X 2.5	15.6	black	43.4	436
382030003	2 X 2.5	15.6	red	43.4	436
382030006	3 X 2.5	16.3	black	65.2	481
382030007	3 X 2.5	16.3	red	65.2	481
382030010	4 X 2.5	17.4	black	86.9	552
382030011	4 X 2.5	17.4	red	86.9	552
382030067	18 X 2.5	30.6	red	390.9	1,852
382030127	3 X 4	17.4	red	105.0	571
382030129	3 X 6	18.7	red	158.1	684
382030177	4 X 6	20.9	red	210.7	907
382030131	3 X 10	21.5	red	264.6	999
382030179	4 X 10	23.1	red	352.7	1,175
382030133	3 X 16	24.1	red	422.1	1,302
382030181	4 X 16	26.0	red	562.8	1,553
382030135	3 X 25	27.7	red	665.9	1,737
382030155	3 x 25 + 1 x 16	29.3	red	806.6	1,989
382030183	4 X 25	29.7	red	887.8	2,087
382030157	3 x 35 + 1 x 16	31.5	red	1,064.3	2,372
382030185	4 X 35	31.5	red	1,231.4	2,555
ÖLFLEX® FIRE MC UVAR					
382030203	2 X 1.5	14.2	red	26.8	361
382030207	3 X 1.5	14.8	red	40.1	395
382030211	4 X 1.5	15.7	red	53.5	445
382030205	2 X 2.5	15.6	red	43.4	436
382030209	3 X 2.5	16.3	red	65.2	481
382030213	4 X 2.5	17.4	red	86.9	552
382030269	18 X 2.5	30.6	red	390.9	1,852
382030376	4 X 4	18.6	black	140.0	658
382030333	3 X 10	21.5	red	264.6	999
382030335	3 X 16	24.1	red	422.1	1,302
382030337	3 X 25	27.7	red	665.9	1,737
382030397	4 X 150	52.4	red	5,194.7	8,581
382030399	4 X 180	57.3	red	6,535.1	10,405
382030401	4 X 240	63.1	red	8,561.4	13,000
382030403	4 X 300	68.5	red	10,774.1	15,720

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ÖLFLEX® POWER LV PVC FR

PVC Insulated Heavy Duty Application FR PVC Cable As per IS 1554 (Part-I) 1988

Info

- Low voltage power cable 650/1100 V
- Double sheathed FR cable for heavy duty application

Benefits

- Wide range of products variant, up to 300 articles

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts

Product features

- Flame retardant: According to IEC 60332-1
- UV-resistant outer sheath for outdoor application and AR best suitable anti rodent application



Norm references / Approvals

- IS 1554 (Part-I) 1988

Product Make-up

- Conductor : Annealed bare copper conductor of Class II as per IS 8130
- Insulation : PVC Type A as per IS 5831
- Inner Sheath : PVC
- Outer Sheath :
 - i) PVC ST I as per IS 5831;
 - ii) PVC ST I as per IS 5831 with UVAR

Technical data

Core identification code
As per IS 1554 (Part-I) 1988

Conductor stranding
Class II as per IS 8130

Minimum bending radius
10 Times the OD

Nominal voltage
1100 Volts

Temperature range
-5°C up to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV FR - RIYY1BK				
382003266	1 X 4	8.2	34.6	108
382003278	1 X 240	28.5	2,104.9	2,598
382003284	1 X 1000	53.6	9,017.6	10,433
ÖLFLEX® POWER LV FR - RIYYY1BK				
382003146	2 X 1.5	11.4	26.6	178
382003147	3 X 1.5	11.9	40.0	203
382003148	4 X 1.5	12.8	53.2	240
382003156	12 X 1.5	18.3	159.8	459
382003164	20 X 1.5	22.5	266.4	706
382003206	2 X 2.5	12.6	43.5	227
382003207	3 X 2.5	13.2	65.25	262
382003208	4 X 2.5	14.2	87.0	313
382003216	12 X 2.5	21.2	261.0	650
382003224	20 X 2.5	25.7	435.0	982
382003285	2 X 4	14.0	69.2	292
382003300	3 X 4	14.7	103.8	344
382003326	4 X 4	15.9	138.4	415
382003315	3 x 25 + 1 x 16	25.3	797.0	1,244
382003309	3 X 120	37.9	3112.0	3,950
382003335	4 X 120	43.8	4,149.3	5,224
382003339	4 X 300	67.3	10,563.03	12,960
382003314	3 X 400	63.9	10,130.4	12,308
382003325	3 x 400 + 1 x 185	70.0	11,731.9	14,270
ÖLFLEX® POWER LV FR UVAR - RIYYUVAR1BK				
382003460	1 X 4	8.2	34.6	108
382003478	1 X 1000	53.6	9,017.6	10,433
382003469	1 X 120	21.4	1,037.3	1,347
ÖLFLEX® POWER LV FR UVAR - RIYYYUVAR1BK				
382003340	2 X 1.5	11.4	26.6	178
382003341	3 X 1.5	11.9	40.0	203
382003342	4 X 1.5	12.8	53.3	240
382003408	10 X 2.5	20.6	217.5	574
382003479	2 X 4	14.0	69.2	292
382003494	3 X 4	14.7	103.8	344
382003520	4 X 4	15.9	138.4	415
382003509	3 x 25 + 1 x 16	25.3	797.0	1,244
382003488	2 X 120	33.2	2,074.6	2,729
382003514	3 x 120 + 1 x 70	41.1	3,704.2	4,701
382003529	4 X 120	43.8	4,149.3	5,224
382003506	3 X 240	51.7	6,314.7	7,812
382003533	4 X 300	67.3	10,563.0	12,960
382003508	3 X 400	63.9	10,130.4	12,308
382003519	3 x 400 + 1 x 185	70.0	11,731.9	14,270

• If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.

• Photographs are not to scale and do not represent detailed images of the respective products.



ÖLFLEX® POWER LV PVC FR-LSH

PVC Insulated Heavy Duty Application FR-LSH PVC Cable

As per IS 1554 (Part-I) 1988



Benefits

- Wide range of product variants, up to 300 articles

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- Particularly where human and animal life as well as valuable property are exposed to risk of fire hazards

Norm references / Approvals

- IS 1554 (Part-I) 1988

Product features

- Flame retardant: According to IEC 60332-1-2 / IEC 60332-3-24
- UV - resistant outer sheath for outdoor application and AR best suitable anti rodent application

Product Make-up

- Conductor : Annealed bare copper conductor of Class II as per IS 8130
- Insulation : PVC Type A as per IS 5831
- Inner Sheath :
 - i) PVC ST I as per IS 5831;
 - ii) FRLS PVC ST I
- Outer Sheath :
 - i) FRLS PVC ST I;
 - ii) FRLS PVC ST I with UVAR

Info

- Low voltage power cable 650/1100 V
- Double sheathed FR-LSH cable for heavy duty application

Technical data

	Core identification code
	As per IS 1554 (Part-I) 1988
	Conductor stranding
	Class II as per IS 8130
	Minimum bending radius
	10 Times the OD
	Nominal voltage
	1100 Volts
	Temperature range
	-5°C up to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV FRLS - RIYYC11BK				
382003654	1 X 4	8.2	34.6	113
ÖLFLEX® POWER LV FRLS - RIYYC11BK				
382003535	3 X 1.5	11.9	40.0	211
382003536	4 X 1.5	12.8	53.3	249
382003595	3 X 2.5	13.2	65.2	271
382003596	4 X 2.5	14.2	87.0	322
382003688	3 X 4	14.7	103.8	354
382003714	4 X 4	15.9	138.4	426
382003703	3 x 25 + 1 x 16	25.3	797.0	1265
382003727	4 X 300	67.3	10563.0	13054
382003713	3 x 400 + 1 x 185	70.0	11731.9	14369
ÖLFLEX® POWER LV FRLS - RIYYC1YC11BK				
382003923	3 X 1.5	11.9	40.0	215
382003924	4 X 1.5	12.8	53.3	253
382003983	3 X 2.5	13.2	65.2	276
382003984	4 X 2.5	14.2	87.0	328
382004057	3 X 4	14.7	103.8	360
382004083	4 X 4	15.9	138.4	433
382004072	3 x 25 + 1 x 16	25.3	797.0	1,270
382004096	4 X 300	67.3	10,563.0	13,072
382004071	3 X 400	63.9	10,130.4	12,409
382004082	3 x 400 + 1 x 185	70.0	11,731.9	14,387
ÖLFLEX® POWER LV FRLS UVAR - RIYYC1UVAR1BK				
382003848	1 X 4	8.2	34.6	113
382003866	1 X 1000	53.6	9,017.6	10,495
ÖLFLEX® POWER LV FRLS UVAR - RIYYC1YC1UVAR1BK				
382004098	3 X 1.5	11.9	40.0	215
382004099	4 X 1.5	12.8	53.3	253
382004232	3 X 4	14.7	103.8	360
382004258	4 X 4	15.9	138.4	433
382004247	3 x 25 + 1 x 16	25.3	797.0	1,270
382004271	4 X 300	67.3	10,563.0	13,072
382004246	3 X 400	63.9	10,130.4	12,409
382004257	3 x 400 + 1 x 185	70.0	11,731.9	14,387
ÖLFLEX® POWER LV FRLS UVAR - RIYYC1UVAR1BK				
382003729	3 X 1.5	11.9	40.0	211
382003730	4 X 1.5	12.8	53.3	249
382003789	3 X 2.5	13.2	65.2	271
382003790	4 X 2.5	14.2	87.0	322
382003882	3 X 4	14.7	103.8	354
382003908	4 X 4	15.9	138.4	426
382003997	3 x 25 + 1 x 16	25.3	797.0	1,265
382003921	4 X 300	67.3	10,563.0	13,054
382003896	3 X 400	63.9	10,130.4	12,392
382003907	3 x 400 + 1 x 185	70.0	11,731.9	14,369

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.
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ÖLFLEX® POWER LV PVC FR ARM

PVC Insulated Heavy Duty Application FR PVC Armoured Cable

As per IS 1554 (Part-I) 1988



i Info

- Low voltage power cable 650/1100 V
- Armoured and double sheathed FR cable for heavy duty / direct burial application

Benefits

- Wide range of product variants, up to 300 articles

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- Armoured cable best suitable for heavy duty installations

Norm references / Approvals

- IS 1554 (Part-I) 1988

Product features

- Flame retardant: According to IEC 60332-1
- UV - resistant outer sheath for outdoor application and AR best suitable anti rodent application

Product Make-up

- Conductor : Annealed bare copper conductor of Class II as per IS 8130
- Insulation : PVC Type A as per IS 5831
- Inner Sheath :
 - i) PVC ST I as per IS 5831;
 - ii) FRLS PVC ST I
- Outer Sheath :
 - i) PVC ST I as per IS 5831;
 - ii) PVC ST I as per IS 5831 with UVAR

Technical data

Core identification code
As per IS 1554 (Part-I) 1988

Conductor stranding
Class II as per IS 8130

Minimum bending radius
15 Times the OD

Nominal voltage
1100 Volts

Temperature range
-5°C up to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV FR ARM - RIYWAY1BK				
382005398	1 X 4	11.0	34.6	176
ÖLFLEX® POWER LV FR SSA - RIYSSAY1BK				
382004280	10 X 1.5	18.8	133.2	676
382004284	14 X 1.5	20.5	186.5	825
382004289	19 X 1.5	22.4	253.1	1,010
382004294	24 X 1.5	25.6	319.7	1,210
382004297	27 X 1.5	26.1	359.6	1,309
382004340	10 X 2.5	21.6	217.5	890
382004414	2 X 16	20.6	277.4	972
382004446	3 x 120 + 1 x 70	42.1	3,704.2	5,374
382004435	3 X 120	38.9	3,112.0	4,575
382004465	4 X 300	68.1	10,563.0	14,055
ÖLFLEX® POWER LV FR SWA - RIYSWAY1BK				
382004392	1 X 4	11.0	34.6	263
ÖLFLEX® POWER LV FR SWA - RIYSSWAY1BK				
382004272	2 X 1.5	13.6	26.6	392
382004273	3 X 1.5	14.1	40.0	440
382004274	4 X 1.5	15.0	53.3	500
382004275	5 X 1.5	15.9	66.6	563
382004277	7 X 1.5	16.8	93.2	610
382004332	2 X 2.5	14.8	43.5	608
382004333	3 X 2.5	15.4	65.2	522
382004334	4 X 2.5	16.4	87.0	608
382004411	2 X 4	16.2	69.2	575
382004453	4 X 6	20.0	207.2	924
ÖLFLEX® POWER LV FR ARM UVAR - RIYWAYUVAR1BK				
382005417	1 X 4	11.0	34.6	176
ÖLFLEX® POWER LV FR SSA UVAR - RIYSSAYUVAR1BK				
382004604	1 X 1000	55.8	9,017.6	11,501
ÖLFLEX® POWER LV FR SSA UVAR - RIYSSAYUVAR1BK				
382004476	12 X 1.5	19.7	159.8	770
382004482	18 X 1.5	22.4	239.7	988
382004489	25 X 1.5	25.6	333.0	1,233
382004536	12 X 2.5	22.2	261.0	965
382004635	3 x 25 + 1 x 16	26.3	797.0	1,656
382004659	4 X 300	68.1	10,563.0	14,055
382004634	3 X 400	64.7	10,130.4	13,357
ÖLFLEX® POWER LV FR SWA UVAR - RIYSWAYUVAR1BK				
382004586	1 X 4	11.0	34.6	263
ÖLFLEX® POWER LV FR SWA UVAR - RIYSSWAYUVAR1BK				
382004466	2 X 1.5	13.6	26.6	392
382004467	3 X 1.5	14.1	40.0	440
382004468	4 X 1.5	15.0	53.3	500
382004469	5 X 1.5	15.9	66.6	563
382004471	7 X 1.5	16.8	93.2	610
382004527	3 X 2.5	15.4	65.2	522
382004620	3 X 4	16.9	103.8	650
382004646	4 X 4	18.1	138.4	745

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ÖLFLEX® POWER LV PVC FR-LSH ARM

PVC Insulated Heavy Duty Application FR-LSH PVC Armoured Cable

As per IS 1554 (Part-I) 1988



Benefits

- Wide range of product variants, up to 300 articles
- FR-LSH for increased safety
- Extra mechanical protection due to Steel Armour

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- Armoured cable best suitable for heavy duty installations
- Particularly where human and animal life as well as valuable property are exposed to risk of fire hazards

Product features

- Flame retardant: According to IEC 60332-1-2 / IEC 60332-3-24
- UV - resistant outer sheath for outdoor application and AR best suitable anti rodent application

Article number	Number of cores and mm² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV FRLS ARM - RIYWAYC11BK				
382005437	1 X 6	11.6	51.8	217
382005449	1 X 300	35.8	2,640.8	3,702
ÖLFLEX® POWER LV FRLS SSA - RIYYC1SSAYC11BK				
382005198	3 X 25 + 1 X 16	26.3	797.0	1,679
382005222	4 X 300	68.1	10,563.0	14,158
382005197	3 X 400	64.7	10,130.4	13,450
382005208	3 X 400 + 1 X 185	70.8	11,731.9	15,544
ÖLFLEX® POWER LV FRLS SSA - RIYSSAYC11BK				
382004829	3 X 25 + 1 X 16	26.3	797.0	1,679
382004853	4 X 300	68.1	10,563.0	14,158
382004828	3 X 400	64.7	10,130.4	13,450
382004839	3 X 400 + 1 X 185	70.8	11,731.9	15,526
ÖLFLEX® POWER LV FRLS SWA - RIYSWAYC11BK				
382004780	5 G 1.0	8.0	63.1	131
ÖLFLEX® POWER LV FRLS SWA - RIYSWAYC11BK				
3803760	1 X 4	11.0	34.6	270
ÖLFLEX® POWER LV FRLS SWA - RIYYC1SWAYC11BK				
382005050	4 X 1.5	15.0	53.3	514
382005052	6 X 1.5	16.8	79.9	600
382005109	3 X 2.5	15.4	65.2	537
382005110	4 X 2.5	16.4	87.0	623
382005183	3 X 4	16.9	103.8	667
382005209	4 X 4	18.1	138.4	763
ÖLFLEX® POWER LV FRLS SWA - RIYSSWAYC11BK				
382004661	3 X 1.5	14.1	40.0	448
382004662	4 X 1.5	15.0	53.3	509
382004721	3 X 2.5	15.4	65.2	531
382004722	4 X 2.5	16.4	87.0	618
382004814	3 X 4	16.9	103.8	660
382004840	4 X 4	18.1	138.4	756

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Info

- Low voltage power cable 650/1100 V
- Armoured and double sheathed FR-LSH cable for heavy duty / direct burial application

Technical data



Core identification code

As per IS 1554 (Part-I) 1988



Conductor stranding

Class II as per IS 8130



Minimum bending radius

15 Times the OD



Nominal voltage

1100 Volts



Temperature range

-5°C up to +70°C



ÖLFLEX® POWER LV HR PVC FR

PVC Insulated Heavy Duty Application Heat Resistant (HR) FR PVC Cable

As per IS 1554 (Part-I) 1988

Info

- Low voltage power cable 650/1100 V
- Double sheathed FR cable for heavy duty application

Benefits

- Wide range of product variants, up to 300 articles
- Expanded temperature application

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- For expanded temperature application

Norm references / Approvals

- IS 1554 (Part-I) 1988

LAPP CABLE STUTTGART ÖLFLEX® POWER LV HR PVC FR 1100V, OF Conductor K <Cross Section 50, 100 CM² L <Cable Length 18, 1000 V Voltage>



Product features

- Flame retardant: According to IEC 60332-1
- UV - resistant outer sheath for outdoor application and AR best suitable anti rodent application

Product Make-up

- Conductor : Annealed bare copper conductor of Class II as per IS 8130
- Insulation : PVC Type C as per IS 5831
- Inner Sheath : PVC
- Outer Sheath :
 - i) PVC ST II as per IS 5831;
 - ii) PVC ST II as per IS 5831 with UVAR

Technical data

Core identification code
As per IS 1554 (Part-I) 1988

Conductor stranding
Class II as per IS 8130

Minimum bending radius
10 Times the OD

Nominal voltage
1100 Volts

Temperature range
-5°C up to +85°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV HR FR - RIY3Y21BK				
382005594	1X 4	8.2	34.6	108
382005603	1X 120	21.4	1,037.3	1347
382005612	1X 1000	53.6	9,017.6	10,433
ÖLFLEX® POWER LV HR FR - RIY3Y2Y21BK				
382005474	2 X 1.5	11.4	26.6	178
382005475	3 X 1.5	11.9	40.0	203
382005476	4 X 1.5	12.8	53.3	240
382005482	10 X 1.5	17.8	133.2	408
382005492	20 X 1.5	22.5	266.4	706
382005535	3 X 2.5	13.2	65.2	262
382005536	4 X 2.5	14.2	87.0	313
382005542	10 X 2.5	20.6	217.5	574
382005552	20 X 2.5	25.7	435.0	982
382005628	3 X 4	14.7	103.8	344
382005654	4 X 4	15.9	138.4	415
382005630	3 X 10	18.0	261.5	597
382005656	4 X 10	19.9	348.7	751
382005643	3 x 25 + 1 x 16	25.3	797.0	1,244
382005644	3 x 35 + 1 x 16	27.3	1,052.0	1,545
382005637	3 X 120	37.9	3,112.0	3,950
382005648	3 x 120 + 1 x 70	41.1	3,704.2	4,701
382005663	4 X 120	43.8	4,149.3	5,224
382005651	3 x 240 + 1 x 120	57.1	7,352.0	9,106
382005666	4 X 240	60.8	8,419.6	10,352
ÖLFLEX® POWER LV HR FR UVAR - RIY3Y2UVAR1BK				
382005788	1X 4	8.2	34.6	108
382005797	1X 120	21.4	1,037.3	13,47
ÖLFLEX® POWER LV HR FR UVAR - RIY3Y2Y2UVAR1BK				
382005668	2 X 1.5	11.4	26.6	178
382005669	3 X 1.5	11.9	40.0	203
382005670	4 X 1.5	12.8	53.3	240
382005729	3 X 2.5	13.2	65.2	262
382005730	4 X 2.5	14.2	87.0	313
382005736	10 X 2.5	20.6	217.5	574
382005746	20 X 2.5	25.7	435.0	982
382005822	3 X 4	14.7	103.8	344
382005848	4 X 4	15.9	138.4	415
382005837	3 x 25 + 1 x 16	25.3	797.0	1,244
382005831	3 X 120	37.9	3,112.0	3,950
382005842	3 x 120 + 1 x 70	41.1	3,704.2	4,701
382005857	4 X 120	43.8	4,149.3	5,224
382005834	3 X 240	51.7	6,314.7	7,812
382005860	4 X 240	60.8	8,419.6	10,352

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ÖLFLEX® POWER LV HR PVC FR ARM

PVC Insulated Heavy Duty Application Heat Resistant (HR) FR PVC

Armoured Cable As per IS 1554 (Part-I) 1988



Info

- Low voltage power cable 650/1100 V
- Armoured and double sheathed FR cable for heavy duty / direct burial application

Benefits

- Wide range of product variants, up to 300 articles
- Extra mechanical protection due to Steel Armour
- Expanded temperature application

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- Armoured cable best suitable for heavy duty installations
- For expanded temperature application
- Particularly where human and animal life as well as valuable property are exposed to risk of fire hazards

Product features

- Flame retardant: According to IEC 60332-1-2 / IEC 60332-3-24

- UV - resistant outer sheath for outdoor application and AR best suitable anti rodent application
- Oxygen Index(Min.) : >29% as per ASTM D 2863 (only for FRLS Outer Sheath)
- Temp. Index (Min.) : >250 Deg C as per ASTM D 2863 (only for FRLS Outer Sheath)
- HCL gas emission (Max.): 20% By weight; Smoke Density : Min. Visibility 40% (only for FRLS Outer Sheath)

Norm references / Approvals

- IS 1554 (Part-I) 1988

Product Make-up

- Conductor : Annealed bare copper conductor of Class II as per IS 8130
- Insulation : PVC Type C as per IS 5831
- Inner Sheath :
 - i) PVC ST II as per IS 5831;
 - ii) FRLS PVC ST II
- Mechanical Protection :
 - i) WA - Aluminium Wire Armour;
 - ii) SWA - GI wire Armour;
 - iii) SSA - GI strip Armour
- Outer Sheath :
 - i) FRLS PVC ST II;
 - ii) FRLS PVC ST II with UVAR

Technical data

	Core identification code
	As per IS 1554 (Part-I) 1988
	Conductor stranding
	Class II as per IS 8130
	Minimum bending radius
	15 Times the OD
	Nominal voltage
	1100 Volts
	Temperature range
	-5°C up to +85°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV HR FR ARM - RIY3WAY21BK				
382007726	1 X 4	11.0	34.6	176
382007738	1 X 240	32.1	21,04.9	2,934
ÖLFLEX® POWER LV HR FR SSA - RIY3SSAY21BK				
382006729	1 X 120	23.0	1037.3	1718
ÖLFLEX® POWER LV HR FR SSA - RIY3Y2SSAY21BK				
382006610	12 X 1.5	19.7	159.8	770
382006670	12 X 2.5	22.2	261.0	965
382006769	3 X 25 + 1 x 16	26.3	797.0	1,656
382006763	3 X 120	38.9	3,112.0	4,575
382006774	3 x 120 + 1 x 70	42.1	3,704.2	5,374
382006789	4 X 120	45.2	4,149.3	6,013
382006792	4 X 240	62.0	8,419.6	11,414
ÖLFLEX® POWER LV HR FR SWA - RIY3SWAY21BK				
382006720	1 X 4	11.0	34.6	263
ÖLFLEX® POWER LV HR FR SWA - RIY3Y2SWAY21BK				
382006600	2 X 1.5	13.6	26.6	392
382006601	3 X 1.5	14.1	40.0	440
382006602	4 X 1.5	15.0	53.3	500
382006605	7 X 1.5	16.8	93.2	610
382006661	3 X 2.5	15.4	65.2	522
382006662	4 X 2.5	16.4	87.0	608
382006665	7 X 2.5	18.6	152.2	760
382006739	2 X 4	16.2	69.2	575
382006754	3 X 4	16.9	103.8	650
382006780	4 X 4	18.1	138.4	745

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Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV HR FR ARM UVAR - RIY3WaY2UVAR1BK				
382007745	1 X 4	11.0	34.6	176
382007754	1 X 120	24.6	1,037.3	1,573
382007757	1 X 240	32.1	2,104.9	2,934
382007763	1 X 1000	59.2	9,017.6	11,423
ÖLFLEX® POWER LV HR FR SSA UVAR - RIY3Y2SSAY2UVAR1BK				
382006804	12 X 1.5	19.7	159.8	770
382006864	12 X 2.5	22.2	261.0	965
382006863	3 X 25 + 1 x 16	26.3	797.0	1,656
382006957	3 X 120	38.9	3,112.0	4,575
382006968	3 x 120 + 1 x 70	42.1	3,704.2	5,374
382006983	4 X 120	45.2	4,149.3	6,013
ÖLFLEX® POWER LV HR FR SSA UVAR - RIY3SSAY2UVAR1BK				
382006923	1 X 120	23.0	1,037.3	1,718
382006932	1 X 1000	55.8	9,017.6	11,501
ÖLFLEX® POWER LV HR FR SWA UVAR - RIY3SWAY2UVAR1BK				
382006914	1 X 4	11.0	34.6	263
ÖLFLEX® POWER LV HR FR SWA UVAR - RIY3Y2SWAY2UVAR1BK				
382006795	3 X 1.5	14.1	40.0	440
382006796	4 X 1.5	15.0	53.3	500
382006855	3 X 2.5	15.4	65.2	522
382006856	4 X 2.5	16.4	87.0	608
382006948	3 X 4	16.9	103.8	650
382006974	4 X 4	18.1	138.4	745



ÖLFLEX® POWER LV HR PVC FR-LSH

PVC Insulated Heavy Duty Application Heat Resistant (HR) FR-LSH
PVC Cable As per IS 1554 (Part-I) 1988

Info

- Low voltage power cable 650/1100 V
- Double sheathed FR-LSH cable for heavy duty application



Benefits

- Wide range of product variants, up to 300 articles
- FR-LSH for increased safety
- Expanded temperature application

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- For expanded temperature application
- Particularly where human and animal life as well as valuable property are exposed to risk of fire hazards

Norm references / Approvals

- IS 1554 (Part-I) 1988

Product features

- Flame retardant: According to IEC 60332-1-2 / IEC 60332-3-24
- UV - resistant outer sheath for outdoor application and AR best suitable anti rodent application
- Oxygen Index(Min.) : >29% as per ASTM D 2863 (only for FRLS Outer Sheath)
- Temp. Index (Min.) : >250 Deg C as per ASTM D 2863 (only for FRLS Outer Sheath)
- HCL gas emission (Max.): 20% By weight; Smoke Density : Min. Visibility 40% (only for FRLS Outer Sheath)

Product Make-up

- Conductor : Annealed bare copper conductor of Class II as per IS 8130
- Insulation : PVC Type C as per IS 5831
- Inner Sheath :
 - i) PVC ST II as per IS 5831;
 - ii) FRLS PVC ST II
- Outer Sheath :
 - i) FRLS PVC ST II;
 - ii) FRLS PVC ST II with UVAR

Technical data

	Core identification code As per IS 1554 (Part-I) 1988
	Conductor stranding Class II as per IS 8130
	Minimum bending radius 10 Times the OD
	Nominal voltage 1100 Volts
	Temperature range -5°C up to +85°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV HR FR ARM - RIY3WAY21BK				
382005982	1X4	8.2	34.6	113
382005988	1X50	15.2	410.1	606
ÖLFLEX® POWER LV HR FRLS - RIY3Y2YC21BK				
382005863	3 X 1.5	11.9	40.0	211
382005864	4 X 1.5	12.8	53.3	249
382005870	10 X 1.5	17.8	133.2	421
382005923	3 X 2.5	13.2	65.2	271
382005924	4 X 2.5	14.2	87.0	322
382006001	2 X 4	14.0	69.2	302
382006018	3 X 10	18.0	261.5	609
382006031	3 x 25 + 1 x 16	25.3	797.0	1,265
382006021	3 X 35	27.0	913.3	1,608
382006055	4 X 300	67.3	10,563.0	13,054
382006041	3 x 400 + 1 x 185	70.0	11,731.9	14,369
ÖLFLEX® POWER LV HR FRLS - RIY3YC2YC21BK				
382006251	3 X 1.5	11.9	40.0	215
382006252	4 X 1.5	12.8	53.3	253
382006311	3 X 2.5	13.2	65.2	276
382006312	4 X 2.5	14.2	87.0	328
382006385	3 X 4	14.7	103.8	360
382006413	4 X 10	19.9	348.7	778
382006400	3 x 25 + 1 x 16	25.3	797.0	1,270
382006394	3 X 120	37.9	3,112.0	3,993
382006422	4 X 185	54.0	6,406.0	8,061
382006410	3 x 400 + 1 x 185	70.0	11,731.9	14,387

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV HR FRLS UVAR - RIY3YC2UVAR1BK				
382006181	1 X 35	13.7	304.4	469
ÖLFLEX® POWER LV HR FRLS UVAR - RIY3Y2YC2UVAR1BK				
382006057	3 X 1.5	11.9	40.0	211
382006058	4 X 1.5	12.8	53.3	249
382006117	3 X 2.5	13.2	65.2	271
382006118	4 X 2.5	14.2	87.0	322
382006213	3 X 16	20.8	416.1	862
382006225	3 x 25 + 1 x 16	25.3	797.0	1,265
382006232	3 x 185 + 1 x 95	49.8	5,626.9	7,072
382006248	4 X 240	60.8	8,419.6	10,427
ÖLFLEX® POWER LV HR FRLS UVAR - RIY3YC2YC2UVAR1BK				
382006426	3 X 1.5	11.9	40.0	215
382006427	4 X 1.5	12.8	53.3	253
382006486	3 X 2.5	13.2	65.2	276
382006487	4 X 2.5	14.2	87.0	328
382006586	4 X 4	15.9	138.4	433
382006563	3 X 16	20.8	416.1	876
382006575	3 x 25 + 1 x 16	25.3	797.0	1,270
382006599	4 X 300	67.3	10,563.0	13,072

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ÖLFLEX® POWER LV HR PVC FR-LSH ARM

PVC Insulated Heavy Duty Application Heat Resistant (HR) FR-LSH PVC

Armoured Cable As per IS 1554 (Part-I) 1988



Info

- Low voltage power cable 650/1100 V
- Armoured and double sheathed FR-LSH cable for heavy duty / direct burial application

Benefits

- Wide range of product variants, up to 300 articles
- Extra mechanical protection due to Steel Armour
- FR-LSH for increased safety
- Expanded temperature application

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- Armoured cable best suitable for heavy duty installations
- For expanded temperature application
- Particularly where human and animal life as well as valuable property are exposed to risk of fire hazards

Product features

- Flame retardant: According to IEC 60332-1-2 / IEC 60332-3-24

- UV - resistant outer sheath for outdoor application and AR best suitable anti rodent application
- Oxygen Index(Min.) : >29% as per ASTM D 2863 (only for FRLS Outer Sheath)
- Temp. Index (Min.) : >250 Deg C as per ASTM D 2863 (only for FRLS Outer Sheath)
- HCL gas emission (Max.): 20% By weight; Smoke Density : Min. Visibility 40% (only for FRLS Outer Sheath)

Norm references / Approvals

- IS 1554 (Part-I) 1988

Technical data

	Core identification code
	As per IS 1554 (Part-I) 1988
	Conductor stranding
	Class II as per IS 8130
	Minimum bending radius
	15 Times the OD
	Nominal voltage
	1100 Volts
	Temperature range
	-5°C up to +85°C

Product Make-up

- Conductor : Annealed bare copper conductor of Class II as per IS 8130
- Insulation : PVC Type C as per IS 5831
- Inner Sheath :
 - i) PVC ST II as per IS 5831;
 - ii) FRLS PVC ST II
- Mechanical Protection :
 - i) WA - Aluminium Wire Armour;
 - ii) SWA - GI wire Armour;
 - iii) SSA - GI strip Armour
- Outer Sheath :
 - i) FRLS PVC ST II;
 - ii) FRLS PVC ST II with UVAR

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV HR FRLS ARM - RIY3WAYC21BK				
382007764	1 X 4	11.0	34.6	183
ÖLFLEX® POWER LV HR FRLS SSA - RIY3Y2SSAYC21BK				
382007157	3 x 25 + 1 x 16	26.3	797.0	1,674
382007181	4 X 300	68.1	10,563.0	14,140
382007156	3 X 400	64.7	10,130.4	13,433
ÖLFLEX® POWER LV HR FRLS SSA - RIY3SSAYC21BK				
382007126	1 X 1000	55.8	9,017.6	11,561
ÖLFLEX® POWER LV HR FRLS SWA - RIY3SWAYC21BK				
382007108	1 X 4	11.0	34.6	270
ÖLFLEX® POWER LV HR FRLS SWA - RIY3Y2SWAYC21BK				
382006989	3 X 1.5	14.1	40.0	448
382006990	4 X 1.5	15.0	53.3	509
382007049	3 X 2.5	15.4	65.2	531
382007050	4 X 2.5	16.4	87.0	618
382007142	3 X 4	16.9	103.8	660
382007168	4 X 4	18.1	138.4	756
382007526	3 x 25 + 1 x 16	26.3	797.0	1,679
382007550	4 X 300	68.1	10,563.0	14,158
382007525	3 X 400	64.7	10,130.4	13,450
ÖLFLEX® POWER LV HR FRLS SWA - RIY3YC2SWAYC21BK				
382007377	3 X 1.5	14.1	40.0	452
382007378	4 X 1.5	15.0	53.3	514
382007437	3 X 2.5	15.4	65.2	537
382007438	4 X 2.5	16.4	87.0	623
382007511	3 X 4	16.9	103.8	667
382007537	4 X 4	18.1	138.4	763

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV HR FRLS ARM UVAR - RIY3WaYC2UVAR1BK				
382007783	1 X 4	11.0	34.6	183
ÖLFLEX® POWER LV HR FRLS SSA UVAR - RIY3Y2SSAYC2UVAR1BK				
382007351	3 x 25 + 1 x 16	26.3	797.0	1,674
382007375	4 X 300	68.1	10,563.0	14,140
382007350	3 X 400	64.7	10,130.4	13,433
ÖLFLEX® POWER LV HR FRLS SSA UVAR - RIY3YC2SSAYC2UVAR1BK				
382007701	3 x 25 + 1 x 16	26.3	797.0	1,679
382007725	4 X 300	68.1	10,563.0	14,158
ÖLFLEX® POWER LV HR FRLS SWA UVAR - RIY3Y2SWAYC2UVAR1BK				
382007183	3 X 1.5	14.1	40.0	448
382007184	4 X 1.5	15.0	53.3	509
382007243	3 X 2.5	15.4	65.2	531
382007244	4 X 2.5	16.4	87.0	618
382007736	3 X 4	16.9	103.8	660
382007732	4 X 4	18.1	138.4	756
ÖLFLEX® POWER LV HR FRLS SWA UVAR - RIY3YC2SWAYC2UVAR1BK				
382007552	3 X 1.5	14.1	40.0	452
382007553	4 X 1.5	15.0	53.3	514
382007612	3 X 2.5	15.4	65.2	537
382007613	4 X 2.5	16.4	87.0	623
382007686	3 X 4	16.9	103.8	667
382007712	4 X 4	18.1	138.4	763
ÖLFLEX® POWER LV HR FRLS SWA UVAR - RIY3SWAYC2UVAR1BK				
382007308	1 X 50	18.0	410.1	959

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ÖLFLEX® POWER LV 2X FR

XLPE Insulated Heavy Duty Application FR PVC Cable As per IS 7098 (Part-I) 1988



Info

- Low voltage power cable 650/1100 V
- Double sheathed FR cable for heavy duty application



Benefits

- Wide range of product variants, up to 300 articles

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- For expanded temperature application

Norm references / Approvals

- IS 7098 (Part-I) 1988

Product features

- Flame retardant: According to IEC 60332-1
- UV - resistant outer sheath for outdoor application and AR best suitable anti rodent application

Product Make-up

- Conductor : Annealed bare copper conductor of Class II as per IS 8130
- Insulation : XLPE as per IS 7098-I
- Inner Sheath : PVC
- Outer Sheath :
 - i) PVC ST II as per IS 5831;
 - ii) PVC ST II as per IS 5831 with UVAR

Technical data

	Core identification code As per IS 7098 (Part-I) 1988
	Conductor stranding Class II as per IS 8130
	Minimum bending radius 10 Times the OD
	Nominal voltage 1100 Volts
	Temperature range -5°C up to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV 2X FR - RI2XY2Y21BK				
382000005	3 X 1.5	11.5	40.0	183
382000006	4 X 1.5	12.3	53.3	214
382000012	10 X 1.5	17.0	133.2	357
382000014	12 X 1.5	17.5	159.8	400
382000022	20 X 1.5	21.4	266.4	609
382000065	3 X 2.5	12.4	65.2	228
382000066	4 X 2.5	13.2	87.0	267
382000072	10 X 2.5	18.6	217.5	470
382000074	12 X 2.5	19.2	261.0	532
382000082	20 X 2.5	23.5	435.0	823
382000158	3 X 4	13.4	103.8	288
382000184	4 X 4	14.5	138.4	349
382000159	3 X 6	14.7	155.4	370
382000185	4 X 6	15.9	207.2	450
382000160	3 X 10	16.7	261.5	526
382000186	4 X 10	18.1	348.7	647
382000173	3 x 25 + 1 x 16	23.3	797.0	1,133
382000188	4 X 25	25.3	877.7	1,411
382000174	3 x 35 + 1 x 16	25.3	1,052.0	1,424
382000189	4 X 35	28.2	1,217.7	1,851
382000181	3 x 240 + 1 x 120	55.0	7,352.0	8,607
382000196	4 X 240	53.7	8,419.6	9,711
ÖLFLEX® POWER LV 2X FR - RI2XY21BK				
382000124	1 X 4	7.6	34.6	93
382000130	1 X 50	14.4	410.1	552
382000137	1 X 300	30.6	2,640.8	3,083
382000142	1 X 1000	52.4	9,017.6	10,078
ÖLFLEX® POWER LV 2X FR UVAR - RI2XY2Y2UVAR1BK				
382000199	3 X 1.5	11.5	40.0	183
382000200	4 X 1.5	12.3	53.3	214
382000206	10 X 1.5	17.0	133.2	357
382000216	20 X 1.5	21.4	266.4	609
382000259	3 X 2.5	12.4	65.2	228
382000260	4 X 2.5	13.2	87.0	267
382000266	10 X 2.5	18.6	217.5	470
382000276	20 X 2.5	23.5	435.0	823
382000316	60 X 2.5	34.4	1,305.0	2,098
382000383	4 X 35	28.2	1,217.7	1,851
382000372	3 x 120 + 1 x 70	39.9	3,704.2	4,422
382000387	4 X 120	39.0	4,149.3	4,872
ÖLFLEX® POWER LV 2X FR UVAR - RI2XY2UVAR1BK				
382000318	1 X 4	7.6	34.6	93
382000330	1 X 240	27.5	2,104.9	2,470

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ÖLFLEX® POWER LV 2X FR-LSH

XLPE Insulated Heavy Duty Application FR-LSH

PVC Cable As per IS 7098 (Part-I) 1988



Benefits

- Wide range of product variants, up to 300 articles
- FR-LSH for increased safety

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- For expanded temperature application
- Particularly where human and animal life as well as valuable property are exposed to risk of fire hazards

Norm references / Approvals

- IS 7098 (Part-I) 1988

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV 2X FRLS - RI2XYC21BK				
382000512	1 X 4	7.6	34.6	97
382000521	1 X 120	20.6	1,037.3	1,293
ÖLFLEX® POWER LV 2X FRLS - RI2XY2YC21BK				
382000393	3 X 1.5	11.5	40.0	191
382000394	4 X 1.5	12.3	53.3	222
382000400	10 X 1.5	17.0	133.2	369
382000402	12 X 1.5	17.5	159.8	412
382000453	3 X 2.5	12.4	65.2	237
382000454	4 X 2.5	13.2	87.0	276
382000460	10 X 2.5	18.6	217.5	483
382000462	12 X 2.5	19.2	261.0	546
382000573	4 X 6	15.9	207.2	461
382000574	4 X 10	18.1	348.7	660
382000575	4 X 16	21.2	554.8	964
382000576	4 X 25	25.3	877.7	1,432
382000566	3 x 120 + 1 x 70	39.9	3,704.2	4,459
382000555	3 X 120	37.0	3,112.0	3,784
382000584	4 X 240	53.7	8,419.6	9,773
ÖLFLEX® POWER LV 2X FRLS - RI2XYC2YC21BK				
382000781	3 X 1.5	11.5	40.0	195
382000841	3 X 2.5	12.4	65.2	241
382000915	3 X 4	13.4	103.8	303
382000916	3 X 6	14.7	155.4	387
382000947	4 X 50	28.0	1,640.4	2,112

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Photographs are not to scale and do not represent detailed images of the respective products.

Info

- Low voltage power cable 650/1100 V
- Double sheathed FR-LSH cable for heavy duty application

Technical data

	Core identification code As per IS 7098 (Part-I) 1988
	Conductor stranding Class II as per IS 8130
	Minimum bending radius 10 Times the OD
	Nominal voltage 1100 Volts
	Temperature range -5°C up to +90°C

Product Make-up

- Conductor : Annealed bare copper conductor of Class II as per IS 8130
- Insulation : XLPE as per IS 7098-I
- Inner Sheath :
 - i) PVC ST II as per IS 5831;
 - ii) FRLS PVC ST II
- Outer Sheath :
 - i) FRLS PVC ST II;
 - ii) FRLS PVC ST II with UVAR

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV 2X FRLS UVAR - RI2XYC2UVAR1BK				
382000712	1 X 50	14.4	410.1	562
382000717	1 X 185	24.8	1,601.5	1,940
382000718	1 X 240	27.5	2,104.9	2,492
382000720	1 X 400	33.9	3,376.8	3,920
ÖLFLEX® POWER LV 2X FRLS UVAR - RI2XY2YC2UVAR1BK				
382000587	3 X 1.5	11.5	40.0	191
382000589	5 X 1.5	13.1	66.6	255
382000603	19 X 1.5	20.4	253.1	594
382000608	24 X 1.5	23.4	319.7	727
382000647	3 X 2.5	12.4	65.2	237
382000648	4 X 2.5	13.2	87.0	276
382000654	10 X 2.5	18.6	217.5	483
382000656	12X 2.5	19.2	261.0	546
382000725	3 X 4	12.8	69.2	254
382000740	4 X 4	13.4	103.8	297
382000742	3 X 10	16.7	261.5	537
ÖLFLEX® POWER LV 2X FRLS UVAR - RI2XYC2YC2UVAR1BK				
382001094	3 X 25	23.1	658.3	1,159
382001105	3 x 25 + 1 x 16	23.3	797.0	1,157
382001120	4 X 25	25.3	877.7	1,451



ÖLFLEX® POWER LV 2X FR ARM

XLPE Insulated Heavy Duty Application FR PVC Armoured Cable

As per IS 7098 (Part-I) 1988

LAPP CABLES LTD. PRESENT ÖLFLEX® POWER LV 2X FR ARM (2x 16 mm² of Conductor X PVC Sheath 80, MM CM/L, HCM, No. 5) IS 1988, I 1100 V Rating.



Info

- Low voltage power cable 650/1100 V
- Armoured and double FR sheathed cable for heavy duty / direct burial application

Benefits

- Wide range of product variants, up to 300 articles
- Extra mechanical protection due to Steel Armour

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- Armoured cable best suitable for heavy duty installations
- For expanded temperature application

Norm references / Approvals

- IS 7098 (Part-I) 1988

Product features

- Flame retardant: According to IEC 60332-1
- UV - resistant outer sheath for outdoor application and AR best suitable anti rodent application

Product Make-up

- Conductor : Annealed bare copper conductor of Class II as per IS 8130
- Insulation : XLPE as per IS 7098-I
- Inner Sheath :
 - i) PVC ST II as per IS 5831;
 - ii) FRLS PVC ST II
- Mechanical Protection :
 - i) WA - Aluminium Wire Armour;
 - ii) SWA - GI wire Armour;
 - iii) SSA - GI strip Armour
- Outer Sheath :
 - i) FRLS PVC ST II;
 - ii) FRLS PVC ST II with UVAR

Technical data

	Core identification code As per IS 7098 (Part-I) 1988
	Conductor stranding Class II as per IS 8130
	Minimum bending radius 15 Times the OD
	Nominal voltage 1100 Volts
	Temperature range -5°C up to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV 2X FR SSA - RI2XY2SSAY21BK				
382001528	12 X 1.5	18.5	159.8	668
382001532	16 X 1.5	20.5	213.1	803
382001540	24 X 1.5	24.4	319.7	1072
382001588	12 X 2.5	20.6	261.0	843
382001700	4 X 10	19.5	348.7	933
382001701	4 X 16	22.2	554.8	1,262
382001702	4 X 25	26.3	877.7	1,823
382001703	4 X 35	29.2	1,217.7	2,309
382001704	4 X 50	29.0	1,640.4	2,542
ÖLFLEX® POWER LV 2X FR SWA - RI2XY2SWAY21BK				
382001518	2 X 1.5	13.2	26.6	364
382001519	3 X 1.5	13.7	40.0	409
382001520	4 X 1.5	14.5	53.3	451
382001521	5 X 1.5	15.3	66.6	506
382001522	6 X 1.5	16.2	79.9	531
382001523	7 X 1.5	16.2	93.2	550
382001525	9 X 1.5	18.6	119.9	685
382001524	8 X 1.5	17.6	106.6	620
382001526	10 X 1.5	19.6	133.2	741
382001578	2 X 2.5	14.0	43.5	422
382001579	3 X 2.5	14.6	65.2	477
382001580	4 X 2.5	15.4	87.0	527
382001672	3 X 4	15.6	103.8	560
382001698	4 X 4	16.7	138.4	644
382001673	3 X 6	16.9	155.4	677
382001699	4 X 6	18.1	207.2	780
382001674	3 X 10	19.3	261.5	897
ÖLFLEX® POWER LV 2X FR SSA UVAR - RI2XY2SSAY2UVAR1BK				
382001726	16 X 1.5	20.5	213.1	803
382001742	32 X 1.5	26.5	426.2	1,294
382001869	3 X 16	20.5	416.1	1,055
382001895	4 X 16	22.2	554.8	1,262
ÖLFLEX® POWER LV 2X FR SSA UVAR - RI2XSSAY2UVAR1BK				
382001841	1 X 120	22.2	1,037.3	1,614
ÖLFLEX® POWER LV 2X FR SWA UVAR - RI2XY2SWAY2UVAR1BK				
382001712	2 X 1.5	13.2	26.6	364
382001714	4 X 1.5	14.5	53.3	451
382001713	3 X 1.5	13.7	40.0	409
382001773	3 X 2.5	14.6	65.2	477
382001774	4 X 2.5	15.4	87.0	527
382001866	3 X 4	15.6	103.8	560
382001892	4 X 4	16.7	138.4	644
382001867	3 X 6	16.9	155.4	677

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ÖLFLEX® POWER LV 2X LSZH

XLPE Insulated Heavy Duty Application LSZH Cable

As per IS 7098 (Part-I) 1988



Benefits

- Wide range of product variants, up to 300 articles
- LSZH with increased safety installation

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- For expanded temperature application
- Particularly where human and animal life as well as valuable property are exposed to risk of fire hazards

Product features

- Flame retardant: According to IEC 60332-1-2 / IEC 60332-3-24

- UV - resistant outer sheath for outdoor application and AR best suitable anti rodent application
- Oxygen Index(Min.) : >29% as per ASTM D 2863 (only for FRLS Outer Sheath)
- Temp. Index (Min.) : >250 Deg C as per ASTM D 2863 (only for FRLS Outer Sheath)
- HCL gas emission (Max.): 20% By weight; Smoke Density : Min. Visibility 40% (only for FRLS Outer Sheath)

Norm references / Approvals

- IS 7098 (Part-I) 1988

Info

- Low voltage power cable 650/1100 V
- Double Sheathed LSZH cable for Heavy duty Application

Technical data

Core identification code
As per IS 7098 (Part-I) 1988

Conductor stranding
Class II as per IS 8130

Minimum bending radius
10 Times the OD

Nominal voltage
1100 Volts

Temperature range
-5°C up to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV 2X LSZH - RI2XHGX1BK				
382001262	1X 240	27.5	2,104.9	2,492
ÖLFLEX® POWER LV 2X LSZH - RI2XHGXH1BK				
382001131	3 X 1.5	11.5	40.0	195
382001132	4 X 1.5	12.3	53.3	226
382001138	10 X 1.5	17.0	133.2	373
382001140	12 X 1.5	17.5	159.8	416
382001191	3 X 2.5	12.4	65.2	241
382001192	4 X 2.5	13.2	87.0	281
382001208	20 X 2.5	23.5	435.0	846
382001198	10 X 2.5	18.6	217.5	487
382001284	3 X 4	13.4	103.8	303
382001310	4 X 4	14.5	138.4	365
382001287	3 X 16	19.1	416.1	770
382001312	4 X 10	18.1	348.7	670
382001299	3 x 25 + 1 x 16	23.3	797.0	1,157
382001304	3 x 120 + 1 x 70	39.9	3,704.2	4,468
382001296	3 X 240	48.9	6,314.7	7,435
382001322	4 X 240	53.7	8,419.6	9,786
ÖLFLEX® POWER LV 2X LSZH UVAR - RI2XHXUVAR1BK				
382001444	1 X 4	7.6	34.6	97
382001453	1 X 120	20.6	1,037.3	1,293
382001459	1 X 500	37.9	4,336.3	4,969
382001462	1 X 1000	52.4	9,017.6	10,139
ÖLFLEX® POWER LV 2X LSZH UVAR - RI2XHXHUXVAR1BK				
382001325	3 X 1.5	11.5	40.0	195
382001326	4 X 1.5	12.3	53.3	226
382001332	10 X 1.5	17.0	133.2	373
382001342	20 X 1.5	21.4	266.4	631
382001385	3 X 2.5	12.4	65.2	241
382001386	4 X 2.5	13.2	87.0	281
382001392	10 X 2.5	18.6	217.5	487
382001402	20 X 2.5	23.5	435.0	846
382001478	3 X 4	13.4	103.8	303
382001504	4 X 4	14.5	138.4	365
382001480	3 X 10	16.7	261.5	546
382001493	3 x 25 + 1 x 16	23.3	797.0	1,157
382001508	4 X 25	25.3	877.7	1,451
382001513	4 X 120	39.0	4,149.3	4,916
382001490	3 X 240	48.9	6,314.7	7,435
382001501	3 x 240 + 1 x 120	55.0	7,352.0	8,683
382001516	4 X 240	53.7	8,419.6	9,786
382001517	4 X 300	59.1	10,563.0	12,166
382001503	3 x 400 + 1 x 185	65.9	11,731.9	13,618

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ÖLFLEX® POWER LV 2X FR-LSH ARM

XLPE Insulated Heavy Duty Application FR-LSH PVC Armoured Cable
As per IS 7098 (Part-I) 1988

Info

- Low voltage power cable 650/1100 V
- Armoured and double sheathed FR-LSH cable for heavy duty / direct burial application



Benefits

- Wide range of product variants, up to 300 articles
- Extra mechanical protection due to Steel Armour
- FR-LSH for increased safety

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- Armoured cable best suitable for heavy duty installations
- For expanded temperature application
- Particularly where human and animal life as well as valuable property are exposed to risk of fire hazards

Norm references / Approvals

- IS 7098 (Part-I) 1988

Product features

- Flame retardant: According to IEC 60332-1-2 / IEC 60332-3-24
- UV - resistant outer sheath for outdoor application and AR best suitable anti rodent application
- Oxygen Index(Min.) : >29% as per ASTM D 2863 (only for FRLS Outer Sheath)
- Temp. Index (Min.) : >250 Deg C as per ASTM D 2863 (only for FRLS Outer Sheath)
- HCL gas emission (Max.): 20% By weight; Smoke Density : Min. Visibility 40% (only for FRLS Outer Sheath)

Technical data

	Core identification code As per IS 7098 (Part-I) 1988
	Conductor stranding Class II as per IS 8130
	Minimum bending radius 15 Times the OD
	Nominal voltage 1100 Volts
	Temperature range -5°C up to +90°C

Product Make-up

- Conductor : Annealed bare copper conductor of Class II as per IS 8130
- Insulation : XLPE as per IS 7098-I
- Inner Sheath :
 - i) PVC ST II as per IS 5831;
 - ii) FRLS PVC ST II
- Mechanical Protection :
 - i) WA - Aluminium Wire Armour;
 - ii) SWA - GI wire Armour;
 - iii) SSA - GI strip Armour
- Outer Sheath :
 - i) FRLS PVC ST II;
 - ii) FRLS PVC ST II with UVAR

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV 2X LSZH - RI2XHX1BK				
382001262	1 X 240	27.5	2,104.9	2,492
ÖLFLEX® POWER LV 2X LSZH - RI2XHXHXBK				
382001131	3 X 1.5	11.5	40.0	195
382001132	3 X 1.5	12.3	53.3	226
382001138	10 X 1.5	17.0	133.2	373
382001140	12 X 1.5	17.5	159.8	416
382001191	3 X 2.5	12.4	65.2	241
382001192	4 X 2.5	13.2	87.0	281
382001208	20 X 2.5	23.5	435.0	846
382001198	10 X 2.5	18.6	217.5	487
382001284	3 X 4	13.4	103.8	303
382001310	4 X 4	14.5	138.4	365
382001287	3 X 16	19.1	416.1	770
382001312	4 X 10	18.1	348.7	670
382001299	3 x 25 + 1 x 16	23.3	797.0	1,157
382001304	3 x 120 + 1 x 70	39.9	3,704.2	4,468
382001296	3 X 240	48.9	6,314.7	7,435
382001322	4 X 240	53.7	8,419.6	9,786
ÖLFLEX® POWER LV 2X LSZH UVAR - RI2XHXUVAR1BK				
382001444	1 X 4	7.6	34.6	97
382001453	1 X 120	20.6	1,037.3	1,293
382001459	1 X 500	37.9	4,336.3	4,969
382001462	1 X 1000	52.4	9,017.6	10,139

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV 2X LSZH UVAR - RI2XHXHXBK				
382001325	3 X 1.5	11.5	40.0	195
382001326	4 X 1.5	12.3	53.3	226
382001332	10 X 1.5	17.0	133.2	373
382001342	20 X 1.5	21.4	266.4	631
382001385	3 X 2.5	12.4	65.2	241
382001386	4 X 2.5	13.2	87.0	281
382001392	10 X 2.5	18.6	217.5	487
382001402	20 X 2.5	23.5	435.0	846
382001478	3 X 4	13.4	103.8	303
382001504	4 X 4	14.5	138.4	365
382001480	3 X 10	16.7	261.5	546
382001493	3 x 25 + 1 x 16	23.3	797.0	1,157
382001508	4 X 25	25.3	877.7	1,451
382001513	4 X 120	39.0	4,149.3	4,916
382001490	3 X 240	48.9	6,314.7	7,435
382001501	3 x 240 + 1 x 120	55.0	7,352.0	8,683
382001516	4 X 240	53.7	8,419.6	9,786
382001517	4 X 300	59.1	10,563.0	12,166
382001503	3 x 400 + 1 x 185	65.9	11,731.9	13,618

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Power and control cables

Building Applications



ÖLFLEX® POWER LV 2X LSZH ARM

XLPE Insulated Heavy Duty Application LSZH Armoured Cable

As per IS 7098 (Part-I) 1988



Benefits

- Wide range of product variants, up to 300 articles
- Extra mechanical protection due to Steel Armour
- LSZH with increased safety installation

Application range

- For main power distribution and lighting circuits in residential and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts
- Armoured cable best suitable for heavy duty installations
- For expanded temperature application
- Particularly where human and animal life as well as valuable property are exposed to risk of fire hazards

Norm references / Approvals

- IS 7098 (Part-I) 1988

Product features

- Flame retardant: According to IEC 60332-1-2 / IEC 60332-3-24
- UV - resistant outer sheath for outdoor application and AR best suitable anti rodent application
- Oxygen Index(Min.) : >29% as per ASTM D 2863 (only for FRLS Outer Sheath)
- Temp. Index (Min.) : >250 Deg C as per ASTM D 2863 (only for FRLS Outer Sheath)
- HCL gas emission (Max.): 20% By weight; Smoke Density : Min. Visibility 40% (only for FRLS Outer Sheath)

Product Make-up

- Conductor : Annealed bare copper conductor of Class II as per IS 8130
- Insulation : XLPE as per IS 7098-I
- Inner Sheath : LSZH
- Mechanical Protection :
 - i) WA - Aluminium Wire Armour;
 - ii) SWA - GI wire Armour;
 - iii) SSA - GI strip Armour
- Outer Sheath :
 - i) LSZH;
 - ii) LSZH with UVAR

Info

- Low voltage power cable 650 / 1100 V
- Armoured and double sheathed LSZH cable for heavy duty / direct burial application

Technical data

	Core identification code
	As per IS 7098 (Part-I) 1988
	Conductor stranding
	Class II as per IS 8130
	Minimum bending radius
	15 Times the OD
	Nominal voltage
	1100 Volts
	Temperature range
	-5°C up to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV 2X LSZH ARM - RI2XWaHX1BK				
382003120	1 X 240	31.5	2,104.9	3,981
ÖLFLEX® POWER LV 2X LSZH SSA - RI2XSSAHX1BK				
382002773	1 X 120	22.6	1,037.3	2,437
382002776	1 X 240	29.9	2,104.9	4,113
382002782	1 X 1000	54.6	9,017.6	13,208
ÖLFLEX® POWER LV 2X LSZH SSA - RI2XHXSSAHX1BK				
382002662	20 X 1.5	22.9	266.4	1,794
382002722	20 X 2.5	25.0	435.0	2,122
382002826	4 X 10	20.0	348.7	1,654
382002813	3 X 25 + 1 x 16	24.7	797.0	2,416
382002818	3 x 120 + 1 x 70	41.7	3,704.2	6,776
382002833	4 X 120	40.8	4,149.3	7,160
382002810	3 X 240	50.3	6,314.7	10,195
382002821	3 x 240 + 1 x 120	56.6	7,352.0	11,839
382002797	2 X 400	51.6	6,753.6	10,747
382002812	3 X 400	60.5	10,130.4	15,038
ÖLFLEX® POWER LV 2X LSZH SWA - RI2XSWAHLX1BK				
382002764	1 X 4	10.8	34.6	1,293
ÖLFLEX® POWER LV 2X LSZH SWA - RI2XHXSWAHLX1BK				
382002652	10 X 1.5	20.1	133.2	1,461
382002645	3 X 1.5	14.2	40.0	1,575
382002646	4 X 1.5	15.0	53.3	1,704
382002704	2 X 2.5	14.5	43.5	1,622
382002705	3 X 2.5	15.1	65.2	1,742
382002706	4 X 2.5	15.9	87.0	1,879
382002783	2 X 4	15.5	69.2	1,816
382002798	3 X 4	16.1	103.8	1,935
382002824	4 X 4	17.2	138.4	1,844
382002800	3 X 10	19.8	261.5	2,294

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV 2X LSZH ARM UVAR - RI2XWaHXUVAR1BK				
382003136	1 X 120	24.2	1,037.3	2,382
ÖLFLEX® POWER LV 2X LSZH UVAR - RI2XHXHXUVAR1BK				
382001517	4 X 300	59.1	10,563.0	12,166
382001503	3 x 400 + 1 x 185	65.9	11,731.9	13,618
ÖLFLEX® POWER LV 2X LSZH SSA UVAR - RI2XSSAHXUVAR1BK				
382002970	1 X 240	29.9	2,104.9	4,113
382002976	1 X 1000	54.6	9,017.6	13,208
ÖLFLEX® POWER LV 2X LSZH SSA UVAR - RI2XHXSSAHXUVAR1BK				
382002956	60 X 2.5	35.9	1,305.0	4,082
382003020	4 X 10	20.0	348.7	1,654
382002995	3 X 16	21.0	416.1	1,823
382003012	3 x 120 + 1 x 70	41.7	3,704.2	6,776
382003027	4 X 120	40.8	4,149.3	7,160
382003004	3 X 240	50.3	6,314.7	10,195
ÖLFLEX® POWER LV 2X LSZH SWA UVAR - RI2XSWAHLXUVAR1BK				
382002958	1 X 4	10.8	34.6	1,293
ÖLFLEX® POWER LV 2X LSZH SWA UVAR - RI2XHXSWAHLXUVAR1BK				
382002839	3 X 1.5	14.2	40.0	1,575
382002840	4 X 1.5	15.0	53.3	1,704
382002899	3 X 2.5	15.1	65.2	1,742
382002900	4 X 2.5	15.9	87.0	1,879
382003018	4 X 4	17.2	138.4	1,844

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ÖLFLEX® POWER LV (N)YY

Low voltage power cables

Info

- Low voltage power cable 0.6 / 1 kV
- Unarmoured, PVC/PVC



Application range

- For main power distribution and lighting circuits in residential, industrial and commercial areas
- Power and control circuit
- Telecom power supply

Product features

- Cable construction in acc. to IEC 60502-1
- Flame-retardant acc. to IEC 60332-1-2
- UV-resistant outer sheath for outdoor application

Product Make-up

- Stranded or solid plain annealed copper wire in circular or sectorial shape conductor
- PVC core insulation
- PVC sheath
- Sheath colour, gn/ye for single core and black for multicore

Technical data

	Classification ETIM 5.0 Class-Description: Low voltage power cable ETIM 5.0 Class-ID: EC000057
	Core identification code acc. to BS 7671:2004
	Conductor stranding acc. to IEC 60228 Cl. 1 and Cl. 2
	Minimum bending radius Fixed installation: 8 x cable diameter
	Nominal voltage U_0/U : 600/1000 V
	Temperature range Fixed installation: -20°C to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
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ÖLFLEX® POWER LV (N)YY - Solid Conductor (Class 1)

3800100	1 X 1.5	6.0	14.0	52
3800102	2 X 1.5	10.0	28.5	135
3800104	3 X 1.5	10.5	42.8	160
3800106	4 X 1.5	11.3	57.0	185
3804001	5 X 1.5	12.2	69.8	203
3800108	1 X 2.5	6.4	22.5	65
3800110	2 X 2.5	10.8	45.8	170
3800112	3 X 2.5	11.4	68.6	200
3800114	4 X 2.5	12.3	91.5	240
3804003	5 X 2.5	13.4	115.0	275
3800116	1 X 4	7.3	36.0	95
3800118	2 X 4	12.5	73.6	240
3800120	3 X 4	13.2	110.4	290
3800122	4 X 4	14.4	147.2	350
3804004	5 X 4	16.0	184.0	408

ÖLFLEX® POWER LV (N)YY - Stranded Conductor (Class 2)

3800101	1 X 1.5	6.2	14.0	55
3800103	2 X 1.5	10.4	28.5	145
3800105	3 X 1.5	11.5	42.5	165
3800107	4 X 1.5	12.0	57.0	200
3804002	5 X 1.5	12.4	69.8	205
3804009	6 X 1.5	13.2	97.7	260
3804010	7 X 1.5	17.0	167.4	408
3800109	12 X 1.5	6.7	22.5	70
3800111	1 X 2.5	11.5	45.8	180
3800113	2 X 2.5	12.0	68.5	210
3800115	3 X 2.5	13.0	91.5	255
3800970	4 X 2.5	13.4	115.0	275
3804018	5 X 2.5	14.5	161.0	356
3804019	7 X 2.5	18.7	276.0	571
3800117	12 X 2.5	7.6	36.0	100
3800119	1 X 4	13.5	73.6	255
3800121	2 X 4	14.0	110.4	305
3800123	3 X 4	15.5	147.2	375
3800971	4 X 4	16.0	184.0	408
3800124	5 X 4	8.2	54.0	125
3800125	1 X 6	15.0	110.4	285
3800126	2 X 6	15.5	165.6	370

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
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3800127	4 X 6	17.0	220.8	455
3804005	5 X 6	17.5	276.0	545
3800128	1 X 10	9.2	90.0	175
3800129	2 X 10	17.0	184.0	395
3800130	3 X 10	17.5	288.0	515
3800132	4 X 10	19.0	368.0	665
3804006	5 X 10	20.0	460.0	811
3800133	1 X 16	10.2	144.0	240
3800134	2 X 16	19.0	294.0	590
3800135	3 X 16	20.0	441.6	740
3800137	4 X 16	22.0	588.8	930
3804007	5 X 16	23.0	736.0	1,195
3800138	1 X 25	11.9	228.0	350
3800139	2 X 25	22.0	465.0	900
3800141	3 X 25	24.0	697.5	1,160
3800144	4 X 25	25.6	930.0	1,465
3804008	5 X 25	27.6	1,162.5	1,814
3800146	1 X 35	13.1	317.8	460
3800148	2 X 35 (S)	20.0	644.0	930
3800150	3 X 35 (S)	23.0	966.0	1,330
3800151	3 X 35 + 16	24.7	1,116.2	1,570
3800153	4 X 35 (S)	26.0	1,288.0	1,740
3800972	5 X 35	31.0	1,627.5	2,450
3800154	1 X 50	14.8	454.0	595
3800155	2 X 50 (S)	23.0	920.0	1,260
3800156	3 X 50 (S)	26.0	1,380.0	1,750
3800157	3 X 50 + 25	28.3	1,544.8	2,220
3800158	4 X 50 (S)	29.0	1,840.0	2,320
3800159	1 X 70	16.6	635.6	810
3800160	2 X 70 (S)	26.0	1,288.0	1,700
3800161	3 X 70 (S)	29.0	1,932.0	2,435
3800162	3 X 70 + 35	32.0	2,219.3	2,930
3800163	4 X 70 (S)	33.0	2,576.0	3,215
3800164	1 X 95	19.2	862.6	1,110
3800165	2 X 95 (S)	30.0	1,748.0	2,310
3800166	3 X 95 (S)	35.0	2,622.0	3,360
3800167	3 X 95 + 50	37.5	3,066.7	3,530
3800168	4 X 95 (S)	39.0	3,496.0	4,400

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ÖLFLEX® POWER LV (N)YYRY

Low voltage power cables



Application range

- For main power distribution and lighting circuits in residential, industrial and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts

Product features

- Cable construction in acc. to IEC 60502-1
- Flame-retardant acc. to IEC 60332-1-2

Product Make-up

- Stranded plain annealed copper wires in circular shape conductor
- PVC core insulation
- PVC inner sheath, black
- Galvanized steel wire armoured
- PVC outer sheath, black

Info

- Low voltage power cable 0.6 / 1 kV
- Armoured, PVC/PVC/SWA/PVC

Technical data

 ETIM	Classification ETIM 5.0 Class-Description: Low voltage power cable ETIM 5.0 Class-ID: EC000057
 acc. to BS 7671:2004	Core identification code acc. to BS 7671:2004
 acc. to IEC 60228 Cl. 2	Conductor stranding acc. to IEC 60228 Cl. 2
 10 x cable diameter	Minimum bending radius 10 x cable diameter
 U ₀ /U: 600/1000 V	Nominal voltage U ₀ /U: 600/1000 V
 Fixed installation: -20°C to +70°C	Temperature range Fixed installation: -20°C to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV (N)YYRY				
3803077	2 X 1.5	13.8	28.5	335
3800199	3 X 1.5	14.3	42.8	375
3800200	4 X 1.5	15.1	57.0	425
3800201	5 X 1.5	16.0	70.0	480
3800202	7 X 1.5	17.7	98.0	644
3800203	10 X 1.5	21.0	140.0	835
3800204	12 X 1.5	21.5	168.0	899
3803078	14 X 1.5	23.0	196.0	1,113
3803079	16 X 1.5	24.0	224.0	1,188
3800205	19 X 1.5	24.8	266.0	1,305
3802972	21 X 1.5	26.0	294.0	1,398
3800206	27 X 1.5	28.5	378.0	1,656
3800207	37 X 1.5	31.5	518.0	2,024
3800209	3 X 2.5	15.2	68.4	439
3800210	4 X 2.5	16.2	91.2	503
3800211	5 X 2.5	17.9	114.0	670
3800212	7 X 2.5	19.0	158.2	776
3800213	10 X 2.5	23.3	226.0	1,145
3800214	12 X 2.5	24.0	271.2	1,240
3800215	19 X 2.5	27.0	442.0	1,630
3802974	21 X 2.5	28.1	488.0	1,750
3800216	27 X 2.5	31.3	628.0	2,115
3800217	37 X 2.5	36.0	860.0	2,891
3800219	3 X 4	18.0	110.4	666
3800220	4 X 4	19.2	147.2	770
3800221	5 X 4	20.4	184.0	874
3800222	7 X 4	21.8	257.6	1,039
3800223	10 X 4	27.1	368.0	1,532
3800224	12 X 4	27.8	441.6	1,691
3800225	19 X 4	32.0	699.2	2,292
3800226	27 X 4	39.0	993.6	3,330
3800227	37 X 4	43.1	1,361.6	4,147
3802971	2 X 6	18.4	110.4	672
3800229	3 X 6	19.2	165.6	786
3800230	4 X 6	20.6	220.8	916
3800231	5 X 6	22.0	276.0	1,058
3800232	3 X 10	21.2	277.8	1,009
3800233	4 X 10	23.5	370.4	1,333
3800234	5 X 10	25.2	370.4	1,536
3803075	4 X 16	26.1	588.8	1,736
3803076	4 X 25	30.5	926.0	2,379

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ÖLFLEX® POWER LV (N)2XY

XLPE insulation

**Info**

- Low voltage power cable 0.6 / 1 kV
- Unarmoured, XLPE/PVC

LAPP KABEL STUTTGART ÖLFLEX® POWER LV (N)2XY

LAPP KABEL STUTTGART ÖLFLEX® POWER LV (N)2XY

Application range

- For main power distribution and lighting circuits in residential, industrial and commercial areas
- Power and control circuit
- Telecom power supply

Product features

- Cable construction in acc. to IEC 60502-1
- Flame-retardant acc. to IEC 60332-1-2
- UV-resistant outer sheath for outdoor application

Product Make-up

- Stranded plain annealed copper wires in circular shape conductor
- XLPE core insulation
- PVC sheath, black

Technical data**Classification**ETIM 5.0 Class-Description: Low voltage power cable
ETIM 5.0 Class-ID: EC000057**Core identification code**
acc. to BS 7671:2004**Conductor stranding**
acc. to IEC 60228 Cl. 2**Minimum bending radius**
Fixed installation: 8 x cable diameter**Nominal voltage**
U_{0/U}: 600/1000 V**Temperature range**
Fixed installation: -40°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV (N)2XY				
3800235	2 X 1.5	10.0	28.2	130
3800236	3 X 1.5	10.5	42.3	150
3800237	4 X 1.5	11.5	56.4	175
3804030	5 X 1.5	11.7	70.5	192
3803084	7 G 1.5	12.7	98.7	250
3804035	7 X 1.5	12.7	98.7	250
3803085	12 G 1.5	16.2	169.2	375
3804036	12 X 1.5	16.2	169.2	375
3804038	2 X 2.5	10.8	46.0	165
3804039	3 X 2.5	11.4	69.0	195
3800240	4 X 2.5	12.5	92.0	225
3803080	5 X 2.5	12.9	115.0	255
3803088	7 G 2.5	14.0	161.0	320
3804044	7 X 2.5	14.0	161.0	320
3803089	12 G 2.5	18.0	276.0	475
3804045	12 X 2.5	18.0	276.0	475
3800241	2 X 4	11.9	73.6	210
3800242	3 X 4	12.6	110.4	255
3800243	4 X 4	13.8	147.2	305
3803081	5 X 4	14.4	184.0	260
3800244	2 X 6	13.1	110.4	270
3800245	3 X 6	13.8	165.6	330
3800246	4 X 6	15.2	220.8	405
3803082	5 X 6	16.0	276.0	475
3800247	2 X 10	14.9	184.0	390
3800248	3 X 10	15.8	276.0	490
3800249	4 X 10	17.5	368.0	600
3804031	5 X 10	18.4	460.0	758
3800250	1 X 16	9.4	147.2	205
3800251	2 X 16	17.2	294.4	450
3800252	3 X 16	18.3	441.6	700
3800253	4 X 16	20.0	588.8	870
3804032	5 X 16	21.3	736.0	1135
3800254	1 X 25	11.1	230.0	309
3800255	2 X 25	20.5	460.0	820
3800257	3 X 25	21.8	690.0	1000
3800260	4 X 25	24.0	920.0	1325
3804033	5 X 25	26.0	1150.0	1742
3800262	1 X 35	12.4	322.0	412
3800264	2 X 35 (S)	18.8	651.0	880
3800266	3 X 35 (S)	22.0	976.5	1180

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
3800267	3 X 35 +16	24.8	1,113.2	1,450
3800269	4 X 35 (S)	26.5	1,288.0	1,600
3804034	5 X 35	29.2	1,610.0	2,355
3800270	1 X 50	14.0	460.0	540
3800271	2 X 50 (S)	21.0	930.0	1,140
3800272	3 X 50 (S)	24.0	1,395.0	1,600
3800273	3 X 50 +25	28.5	1,610.0	2,050
3800274	4 X 50 (S)	30.1	1,840.0	2,200
3800275	1 X 70	16.0	644.0	760
3800276	2 X 70 (S)	24.0	1,302.0	1,560
3800277	3 X 70 (S)	28.0	1,953.0	2,240
3800278	3 X 70 +35	33.2	2,254.0	2,750
3800279	4 X 70 (S)	35.4	2,576.0	3,050
3800280	1 X 95	18.0	874.0	1,020
3800281	2 X 95 (S)	26.9	1,767.0	2,130
3800282	3 X 95 (S)	31.0	2,650.5	3,050
3800283	3 X 95 +50	37.8	3,082.0	3,750
3800284	4 X 95 (S)	40.2	3,496.0	4,070
3800285	1 X 120	20.0	1,104.0	1,270
3800286	2 X 120 (S)	29.9	2,232.0	2,640
3800287	3 X 120 (S)	35.5	3,348.0	3,800
3800288	3 X 120 +70	42.6	3,956.0	4,750
3800289	4 X 120 (S)	44.9	4,416.0	5,195
3800290	1 X 150	22.0	1,380.0	1,560
3800291	2 X 150 (S)	33.4	2,790.0	3,270
3800292	3 X 150 (S)	38.5	4,185.0	4,640
3800293	3 X 150 +70	46.3	4,784.0	5,700
3800294	4 X 150 (S)	49.8	5,520.0	6,350
3800295	1 X 185	24.7	1,702.0	1,930
3800296	2 X 185 (S)	37.1	3,441.0	4,040
3800297	3 X 185 (S)	43.0	5,161.5	5,870
3800298	3 X 185 +95	52.1	5,980.0	7,705
3800299	4 X 185 (S)	55.8	6,808.0	7,890
3800300	1 X 240	27.7	2,208.0	2,510
3800301	2 X 240 (S)	45.0	4,464.0	5,250
3800302	3 X 240 (S)	48.0	6,696.0	7,670
3800303	3 X 240 +120	58.6	7,728.0	9,250
3800304	4 X 240 (S)	62.9	8,832.0	10,400
3800305	1 X 300	30.6	2,760.0	3,120
3800308	3 X 300 +150	65.0	9,660.0	11,500
3800309	4 X 300 (S)	69.7	11,040.0	12,810

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ÖLFLEX® POWER LV (N)2XYRY

Low voltage power cables

**Info**

- Low voltage power cable 0.6/1 kV
- Multicore, armoured (SWA) XLPE/PVC/SWA/PVC

Application range

- For main power distribution and lighting circuits in residential, industrial and commercial areas
- Power and control circuit
- Telecom power supply

Product Make-up

- Stranded plain annealed copper wires in circular shape conductor
- XLPE core insulation
- PVC inner sheath, black
- Galvanized steel wire armoured
- PVC outer sheath, black

Product features

- Cable construction in acc. to IEC 60502-1
- Flame-retardant acc. to IEC 60332-1-2
- UV-resistant outer sheath for outdoor application

Technical data**Classification**ETIM 5.0 Class-Description: Low voltage power cable
ETIM 5.0 Class-ID: EC000057**Core identification code**

acc. to BS 7671:2004

**Conductor stranding**

acc. to IEC 60228 Cl. 2

**Minimum bending radius**

10 x cable diameter

**Nominal voltage**U₀/U: 600/1000 V**Temperature range**

Fixed installation: -40°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV (N)2XYRY				
3800330	2 X 1.5	13.4	28.2	323
3800331	3 X 1.5	14.0	42.3	356
3800332	4 X 1.5	14.6	56.4	398
3804054	5 X 1.5	15.5	70.5	445
3804062	7 X 1.5	17.1	98.7	607
3804063	12 X 1.5	20.6	169.2	837
3804064	14 X 1.5	21.4	197.4	909
3804065	16 X 1.5	23.0	225.6	1,118
3804066	19 X 1.5	23.9	267.9	1,210
3804067	24 X 1.5	26.8	338.4	1,451
3800333	2 X 2.5	14.3	46.0	374
3800334	3 X 2.5	14.8	69.0	418
3800335	4 X 2.5	15.7	92.0	478
3804055	5 X 2.5	17.4	115.0	627
3804071	7 X 2.5	18.4	161.0	736
3804072	12 X 2.5	23.1	276.0	1,176
3804073	14 X 2.5	24.0	322.0	1,286
3804074	16 X 2.5	25.0	368.0	1,380
3804075	19 X 2.5	26.0	437.0	1,525
3804076	24 X 2.5	29.6	552.0	1,860
3800336	2 X 4	15.4	73.6	445
3800337	3 X 4	16.0	110.4	507
3800338	4 X 4	17.7	147.2	679
3804056	5 X 4	18.8	184.0	774
3800339	2 X 6	17.2	110.4	610
3800340	3 X 6	18.0	165.6	710
3800341	4 X 6	19.1	220.8	829
3804057	5 X 6	20.4	276.0	950
3800342	2 X 10	19.1	184.0	775
3800343	3 X 10	20.0	276.0	925
3800344	4 X 10	21.4	368.0	1,093
3804058	5 X 10	23.6	460.0	1,406
3800345	2 X 16	21.2	294.4	980
3800346	3 X 16	23.0	441.6	1,350
3800347	4 X 16	24.7	588.8	1,600
3804059	5 X 16	26.5	736.0	1,867
3800348	2 X 25	25.0	460.0	1,472
3800350	3 X 25	26.7	690.0	1,840

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Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
3800353	4 X 25	28.9	920.0	2,228
3804060	5 X 25	31.4	1,150.0	2,636
3800356	2 X 35 (S)	27.7	644.0	1,815
3800358	3 X 35 (S)	29.5	966.0	2,290
3800359	3 X 35 +16	30.1	1,113.2	2,521
3800361	4 X 35 (S)	31.0	1,288.0	2,817
3804061	5 X 35	35.7	1,610.0	3,626
3800362	2 X 50 (S)	30.8	920.0	2,287
3800363	3 X 50 (S)	32.7	1,380.0	2,958
3800364	3 X 50 +25	34.8	1,610.0	3,560
3800365	4 X 50 (S)	37.0	1,840.0	3,990
3800366	2 X 70 (S)	36.0	1,288.0	3,205
3800367	3 X 70 (S)	38.7	1,932.0	4,205
3800368	3 X 70 +35	40.0	2,254.0	4,688
3800369	4 X 70 (S)	42.2	2,576.0	5,222
3800370	2 X 95 (S)	40.5	1,748.0	4,040
3800371	3 X 95 (S)	43.0	2,622.0	5,306
3800372	3 X 95 +50	44.7	3,082.0	5,984
3800373	4 X 95 (S)	48.2	3,496.0	7,064
3800374	2 X 120 (S)	44.2	2,208.0	4,850
3800375	3 X 120 (S)	48.2	3,312.0	6,830
3800376	3 X 120 +70	51.0	3,956.0	7,869
3800377	4 X 120 (S)	53.1	4,416.0	8,609
3800378	2 X 150 (S)	49.8	2,760.0	6,274
3800379	3 X 150 (S)	53.0	4,140.0	8,262
3800380	3 X 150 +70	54.6	4,784.0	9,172
3800381	4 X 150 (S)	58.2	5,520.0	10,352
3800382	2 X 185 (S)	54.8	3,404.0	7,485
3800383	3 X 185 (S)	58.3	5,106.0	9,904
3800384	3 X 185 +95	60.7	5,980.0	11,204
3800385	4 X 185 (S)	64.6	6,808.0	12,530
3800386	2 X 240 (S)	61.2	4,416.0	9,260
3800387	3 X 240 (S)	65.2	6624.0	12,341
3800388	3 X 240 +120	67.3	7,728.0	13,891
3800389	4 X 240 (S)	71.7	8,832.0	15,668
3800390	2 X 300 (S)	66.8	5,580.0	11,064
3800391	3 X 300 (S)	71.2	8,280.0	14,900
3800392	3 X 300 +150	75.0	9,660.0	17,661
3800393	4 X 300 (S)	80.3	11040.0	19,982



ÖLFLEX® POWER LV (N)2XYRY SC

Low voltage power cables

Info

- Low voltage power cable 0.6 / 1 kV
- Single core, Armoured (AWA)XLPE/PVC/AWA/PVC



Application range

- For main power distribution and lighting circuits in residential, industrial and commercial areas
- Power and control circuit
- Telecom power supply
- Suitable for direct burial installations as well as in air or ducts

Product features

- Cable construction in acc. to IEC 60502-1
- Flame-retardant acc. to IEC 60332-1-2
- UV-resistant outer sheath for outdoor application

Product Make-up

- Stranded plain annealed copper wires in circular shape conductor
- XLPE core insulation
- PVC outer sheath, black
- PVC inner sheath, black
- Aluminium wire armoured

Technical data

	Classification ETIM 5.0 Class-Description: Low voltage power cable ETIM 5.0 Class-ID: EC000057
	Conductor stranding acc. to IEC 60228 Cl.2
	Minimum bending radius 10 x cable diameter
	Nominal voltage U_0/U : 600 / 1000 V
	Temperature range Fixed installation: -40°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® POWER LV (N)2XYRY SC				
3800315	1 X 25	15.8	225.0	645
3800316	1 X 35	17.5	315.0	888
3800317	1 X 50	19.0	450.0	1,107
3800318	1 X 70	21.0	630.0	1,418
3800319	1 X 95	23.6	855.0	1,913
3800320	1 X 120	25.4	1,080.0	2,275
3800321	1 X 150	27.3	1,350.0	2,718
3800322	1 X 185	29.8	1,665.0	3,245
3800323	1 X 240	32.8	2,160.0	4,021
3800324	1 X 300	36.8	2,760.0	5,141
3800325	1 X 400	40.0	3,600.0	6,474
3800326	1 X 500	44.1	4,500.0	7,872
3800327	1 X 630	50.2	5,670.0	10,177
3800328	1 X 800	55.3	7,200.0	12,494
3800329	1 X 1000	61.0	9,000.0	15,268

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ÖLFLEX® INFRA FR

ISI Marked PVC insulation single core



Info

- Standard lengths available in 90m, 180m, 270m

Benefits

- ISI Marked

Application range

- Building wire for installation on wall surface or in concealed conduits
- For lighting and power applications in Buildings-Residential and Commercial, Hotels, Hospitals & IT Parks
- For use in dry rooms

Product features

- Flame retardant- IEC 60332.1 / IS 10810-53

- Higher conductivity
- Insulation of PVC Type D, with additional LAPP special properties

Norm references / Approvals

- IS 694 : 2010

Product Make-up

- Conductor: Stranded Annealed Bare copper
- Core Insulation : Lapp special PVC

Technical data

**Conductor stranding**

Class V as per IS 8130/IEC 60228

**Minimum bending radius**Static-6 x cable diameter
Occasional flexing- 8 x cable diameter**Nominal voltage**

1100 Volts

**Temperature range**

-5°C to 70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® INFRA FR					
8010001	1 X 0.5	2.6	green-yellow	4.6	9
8010012	1 X 0.75	2.8	black	7.2	12
8010002	1 X 0.75	2.8	green-yellow	7.2	12
8010013	1 X 1.0	3.0	black	9.6	15
8010033	1 X 1.0	3.0	brown	9.6	15
8010023	1 X 1.0	3.0	blue	9.6	15
8010143	1 X 1.0	3.0	dark blue	9.6	15
8010123	1 X 1.0	3.0	green	9.6	15
8010003	1 X 1.0	3.0	green-yellow	9.6	15
8010063	1 X 1.0	3.0	grey	9.6	15
8010093	1 X 1.0	3.0	orange	9.6	15
8010083	1 X 1.0	3.0	pink	9.6	15
8010043	1 X 1.0	3.0	red	9.6	15
8010163	1 X 1.0	3.0	ultra marine blue	9.6	15
8010073	1 X 1.0	3.0	violet	9.6	15
8010053	1 X 1.0	3.0	white	9.6	15
8010113	1 X 1.0	3.0	yellow	9.6	15
8020011	1 X 1.5	3.4	black	14.4	20
8020031	1 X 1.5	3.4	brown	14.4	20
8020021	1 X 1.5	3.4	blue	14.4	20
8020141	1 X 1.5	3.4	dark blue	14.4	20
8020121	1 X 1.5	3.4	green	14.4	20
8020001	1 X 1.5	3.4	green-yellow	14.4	20
8020061	1 X 1.5	3.4	grey	14.4	20
8020091	1 X 1.5	3.4	orange	14.4	20
8020081	1 X 1.5	3.4	pink	14.4	20
8020041	1 X 1.5	3.4	red	14.4	20
8020161	1 X 1.5	3.4	ultra marine blue	14.4	20
8020071	1 X 1.5	3.4	violet	14.4	20
8020051	1 X 1.5	3.4	white	14.4	20
8020111	1 X 1.5	3.4	yellow	14.4	20
8020015	1 X 10	7.0	black	96.0	120
8020005	1 X 10	7.0	green-yellow	96.0	120
8020012	1 X 2.5	4.1	black	24.0	33
8020032	1 X 2.5	4.1	brown	24.0	33
8020022	1 X 2.5	4.1	blue	24.0	33
8020002	1 X 2.5	4.1	green-yellow	24.0	33
8020042	1 X 2.5	4.1	red	24.0	33
8020003	1 X 4	4.8	green-yellow	38.4	49
8020004	1 X 6	5.3	green-yellow	57.6	72

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**ÖLFLEX® INFRA FR-LSH**

ISI Marked PVC FR-LSH insulation single core

**Info**

- Standard lengths available in 90m, 180m, 270m

**Benefits**

- ISI Marked
- Safe for human life and the environment thanks to the reduced smoke and halogen in case of fire

Application range

- Building wire for installation on wall surface or in concealed conduits
- For lighting and power applications in Buildings -Residential and Commercial, Hotels, Hospitals & IT Parks
- For use in dry rooms
- In application area with a high density of people or valuable assets for increased safety

Norm references / Approvals

- IS 694 : 2010

Product features

- Flame retardant- IEC 60332.1 / IS 10810-53
- Higher conductivity
- Insulation of FR-LSH PVC Type D, with additional LAPP special properties

Product Make-up

- Conductor: Stranded Annealed Bare copper
- Core Insulation : Lapp special PVC

Technical data**Conductor stranding**

Class V as per IS 8130/IEC 60228

**Minimum bending radius**

Static-6 x cable diameter

Occasional flexing- 8 x cable diameter

**Nominal voltage**

UM 1100 Volts

**Temperature range**

-5°C to 70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® INFRA FR-LSH					
8210001	1X 0.5	2.6	green-yellow	4.6	9
8210012	1X 0.75	2.8	black	7.2	12
8210002	1X 0.75	2.8	green-yellow	7.2	12
8210013	1X 1.0	3.0	black	9.6	15
8210033	1X 1.0	3.0	brown	9.6	15
8210023	1X 1.0	3.0	blue	9.6	15
8210143	1X 1.0	3.0	dark blue	9.6	15
8210123	1X 1.0	3.0	green	9.6	15
8210003	1X 1.0	3.0	green-yellow	9.6	15
8210063	1X 1.0	3.0	grey	9.6	15
8210093	1X 1.0	3.0	orange	9.6	15
8210083	1X 1.0	3.0	pink	9.6	15
8210043	1X 1.0	3.0	red	9.6	15
8210163	1X 1.0	3.0	ultra marine blue	9.6	15
8210073	1X 1.0	3.0	violet	9.6	15
8210053	1X 1.0	3.0	white	9.6	15
8210113	1X 1.0	3.0	yellow	9.6	15
8220011	1X 1.5	3.4	black	14.4	21
8220031	1X 1.5	3.4	brown	14.4	21
8220021	1X 1.5	3.4	blue	14.4	21
8220141	1X 1.5	3.4	dark blue	14.4	21
8220121	1X 1.5	3.4	green	14.4	21
8220001	1X 1.5	3.4	green-yellow	14.4	21
8220061	1X 1.5	3.4	grey	14.4	21
8220091	1X 1.5	3.4	orange	14.4	21
8220081	1X 1.5	3.4	pink	14.4	21
8220041	1X 1.5	3.4	red	14.4	21
8220161	1X 1.5	3.4	ultra marine blue	14.4	21
8220071	1X 1.5	3.4	violet	14.4	21
8220051	1X 1.5	3.4	white	14.4	21
8220111	1X 1.5	3.4	yellow	14.4	21
8220015	1X 10	7.0	black	96.0	122
8220005	1X 10	7.0	green-yellow	96.0	122
8220012	1X 2.5	4.1	black	24.0	34
8220032	1X 2.5	4.1	brown	24.0	34
8220022	1X 2.5	4.1	blue	24.0	34
8220002	1X 2.5	4.1	green-yellow	24.0	34
8220042	1X 2.5	4.1	red	24.0	34
8220003	1X 4	4.8	green-yellow	38.4	50
8220004	1X 6	5.3	green-yellow	57.6	74

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ÖLFLEX® INFRA HFFR

Halogen free flame retardant single core



Info

- Standard lengths available in 90m, 180m, 270m

Benefits

- Protection of human life and the environment, Thanks to the avoidance of the formation of acid and smoke in case of fire

Application range

- Building wire for installation on wall surface or in concealed conduits
- For lighting and power applications in Buildings - Residential and Commercial, Hotels, Hospitals & IT Parks
- For use in dry rooms

- In application area with a high density of people or valuable assets for increased safety

Product features

- Flame retardant- IEC 60332.1/ IS 10810-53
- Higher conductivity
- Halogen free

Product Make-up

- Conductor: Stranded Annealed Bare copper
- Core Insulation : Zero Halogen compound

Technical data



Conductor stranding
Class V as per IS 8130/IEC 60228



Minimum bending radius
Static-6 x cable diameter
Occasional flexing- 8 x cable diameter



Nominal voltage
UM 1100 Volts



Temperature range
-5°C to 70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® INFRA HFFR					
8410001	1X 0.5	2.6	green-yellow	4.6	9
8410012	1X 0.75	2.8	black	7.2	12
8410002	1X 0.75	2.8	green-yellow	7.2	12
8410013	1X 1.0	3.0	black	9.6	15
8410033	1X 1.0	3.0	brown	9.6	15
8410023	1X 1.0	3.0	blue	9.6	15
8410143	1X 1.0	3.0	dark blue	9.6	15
8410123	1X 1.0	3.0	green	9.6	15
8410003	1X 1.0	3.0	green-yellow	9.6	15
8410063	1X 1.0	3.0	grey	9.6	15
8410093	1X 1.0	3.0	orange	9.6	15
8410083	1X 1.0	3.0	pink	9.6	15
8410043	1X 1.0	3.0	red	9.6	15
8410163	1X 1.0	3.0	ultra marine blue	9.6	15
8410073	1X 1.0	3.0	violet	9.6	15
8410053	1X 1.0	3.0	white	9.6	15
8410113	1X 1.0	3.0	yellow	9.6	15
8420011	1X 1.5	3.4	black	14.4	21
8420031	1X 1.5	3.4	brown	14.4	21
8420021	1X 1.5	3.4	blue	14.4	21
8420141	1X 1.5	3.4	dark blue	14.4	21
8420121	1X 1.5	3.4	green	14.4	21
8420001	1X 1.5	3.4	green-yellow	14.4	21
8420061	1X 1.5	3.4	grey	14.4	21
8420091	1X 1.5	3.4	orange	14.4	21
8420081	1X 1.5	3.4	pink	14.4	21
8420041	1X 1.5	3.4	red	14.4	21
8420161	1X 1.5	3.4	ultra marine blue	14.4	21
8420071	1X 1.5	3.4	violet	14.4	21
8420051	1X 1.5	3.4	white	14.4	21
8420111	1X 1.5	3.4	yellow	14.4	21
8420015	1X 10	7.0	black	96.0	122
8420005	1X 10	7.0	green-yellow	96.0	122
8420012	1X 2.5	4.1	black	24.0	33
8420032	1X 2.5	4.1	brown	24.0	33
8420022	1X 2.5	4.1	blue	24.0	33
8420002	1X 2.5	4.1	green-yellow	24.0	33
8420042	1X 2.5	4.1	red	24.0	33
8420003	1X 4	4.8	green-yellow	38.4	50
8420004	1X 6	5.3	green-yellow	57.6	74

• If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.

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AS ORANGE / BLACK CIRCULAR

PVC insulated / sheathed cables

i Info

- Multicore power cable
- Complies to AS/NZ Standard

**Benefits**

- Wide range of application opportunities

Application range

- For fixed installation in power and lighting circuits in commercial buildings
- Plant engineering and construction, industrial machinery, power station
- Suitable for outdoor used under direct sunlight

Product features

- Flame retardant acc. to AS/NZS 1660.5.6 resp. to IEC 60332-1-2
- UV-resistant outer sheath for outdoor application

Product Make-up

- Stranded plain annealed copper wire
- PVC (V-90) core insulation
- PVC (5V-90) outer sheath, orange
- Also available in black outer sheath

Technical data**Classification**ETIM 5.0 Class-Description: Low voltage power cable
ETIM 5.0 Class-ID: EC000057**Core identification code**

acc. to AS/NZS 5000.1

**Conductor stranding**Stranded wire acc. to AS/NZS 1125
Cl. 2**Minimum bending radius**

Fixed installation: 4 x cable diameter

**Nominal voltage**

Reduced Earth:

450/750V ($\leq 6\text{mm}^2$)600/1000V ($\geq 10\text{mm}^2$)

Full Earth: 600/1000V

**Temperature range**

Fixed installation: -20°C to +90°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
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AS ORANGE / BLACK Circular - 450/750 V

3801816	2x1.5+E	8.4	orange	43.2	105
3803840	2x1.5+E	8.4	black	43.2	105
3801831	3x1.5+E	9.3	orange	57.6	130
3803852	3x1.5+E	9.3	black	57.6	130
3801851	4x1.5+E	10.1	orange	72.0	155
3803864	4x1.5+E	10.1	black	72.0	155
3801817	2x2.5+E	10.1	orange	72.0	153
3803841	2x2.5+E	10.1	black	72.0	153
3801832	3x2.5+E	10.9	orange	96.0	192
3803853	3x2.5+E	10.9	black	96.0	192
3801852	4x2.5+E	11.9	orange	120.0	238
3803865	4x2.5+E	11.9	black	120.0	238
3801818	2x4+2.5E	11.1	orange	100.8	199
3803842	2x4+2.5E	11.1	black	100.8	199
3801833	3x4+2.5E	12.3	orange	139.2	266
3803854	3x4+2.5E	12.3	black	139.2	266
3801853	4x4+2.5E	13.7	orange	177.6	328
3803866	4x4+2.5E	13.7	black	177.6	328
3801819	2x6+2.5E	12.0	orange	139.2	258
3803843	2x6+2.5E	12.0	black	139.2	258
3801834	3x6+2.5E	13.6	orange	196.8	345
3803855	3x6+2.5E	13.6	black	196.8	345
3801854	4x6+2.5E	15.1	orange	254.4	440
3803867	4x6+2.5E	15.1	black	254.4	440

AS ORANGE / BLACK Circular - 600/1000V, Full Earth

3801960	2x1.5+E	10.5	orange	43.2	142
3803902	2x1.5+E	10.5	black	43.2	142
3801964	3x1.5+E	11.3	orange	57.6	172
3803906	3x1.5+E	11.3	black	57.6	172
3801968	4x1.5+E	12.2	orange	72.0	203
3803910	4x1.5+E	12.2	black	72.0	203
3801961	2x2.5+E	11.4	orange	72.0	187
3803903	2x2.5+E	11.4	black	72.0	187
3801965	3x2.5+E	12.4	orange	96.0	231
3803907	3x2.5+E	12.4	black	96.0	231
3801969	4x2.5+E	13.5	orange	120.0	276
3803911	4x2.5+E	13.5	black	120.0	276

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
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AS ORANGE / BLACK Circular - 600/1000V, Reduced Earth

3801962	2x4+2.5E	12.9	orange	100.8	243
3803904	2x4+2.5E	12.9	black	100.8	243
3801963	2x6+2.5E	13.7	orange	139.2	301
3803905	2x6+2.5E	13.7	black	139.2	301
3801820	2x10+4E	15.4	orange	230.4	431
3803844	2x10+4E	15.4	black	230.4	431
3801821	2x16+6E	17.4	orange	364.8	616
3803845	2x16+6E	17.4	black	364.8	616
3801822	2x25+6E	20.3	orange	537.6	868
3803846	2x25+6E	20.3	black	537.6	868
3801823	2x35+10E	22.6	orange	768.0	1,183
3803847	2x35+10E	22.6	black	768.0	1,183
3801824	2x50+16E	25.7	orange	1,113.6	1,647
3803848	2x50+16E	25.7	black	1,113.6	1,647
3801966	3x4+2.5E	14.2	orange	139.2	313
3803908	3x4+2.5E	14.2	black	139.2	313
3801967	3x6+2.5E	15.3	orange	196.8	397
3803909	3x6+2.5E	15.3	black	196.8	397
3801835	3x10+4E	17.3	orange	326.4	578
3803856	3x10+4E	17.3	black	326.4	578
3801836	3x16+6E	19.8	orange	518.4	838
3803857	3x16+6E	19.8	black	518.4	838
3801837	3x25+6E	22.7	orange	777.6	1,211
3803858	3x25+6E	22.7	black	777.6	1,211
3801838	3x35+10E	25.6	orange	1,104.0	1,648
3803859	3x35+10E	25.6	black	1,104.0	1,648
3801839	3x50+16E	29.5	orange	1,593.6	2,314
3803860	3x50+16E	29.5	black	1,593.6	2,314
3801855	4x10+4E	19.1	orange	422.4	726
3803868	4x10+4E	19.1	black	422.4	726
3801856	4x16+6E	21.7	orange	672.0	1,061
3803869	4x16+6E	21.7	black	672.0	1,061
3801857	4x25+6E	26.1	orange	1,017.6	1,581
3803870	4x25+6E	26.1	black	1,017.6	1,581
3801858	4x35+10E	28.7	orange	1,440.0	2,114
3803871	4x35+10E	28.7	black	1,440.0	2,114
3801859	4x50+16E	33.3	orange	2,073.6	2,983
3803872	4x50+16E	33.3	black	2,073.6	2,983

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ÖLFLEX® TRAIN GKW SC



Benefits

- Easy to strip and to dismantle
- Resistant to mechanical influences in harsh environmental conditions
- Expanded temperature range
- Reduced formation of toxic gases and fire spreading in the event of fire increase the protection against damage to persons and property

Application range

- For fixed and protected installations inside or outside of rail vehicles and buses
- Suitable for the connection of fixed and moving objects such as lamps, heating, electrical equipment, wiring of vehicles, terminal boxes and power supply

Product features

- Halogen-free (IEC 60754-1) & No corrosive gases (IEC 60754-2)

- No toxic gases (EN 50305, BS 6853)
- Low smoke density (IEC 61034-2)
- Flame retardant (IEC 60332-1-2)
- No fire spreading (EN 50305, BS 6853)

Norm references / Approvals

- EN 50306-2, type M
- BS 6853 (Interior use la, lb, & Exterior use la, lb,)
- EN 45545-2 HL1, HL2, HL3
- Compliant with NFPA 130

Product Make-up

- Conductor : Tinned copper strand, special round conductor
- Insulation : Electron beam cross-linked polyolefin copolymer
- Colour : Grey , Black or Green-yellow

Info

- Meets EN 50306-2 type M
- High temperature resistance : -40°C up to +125°C
- Highly oil- and fuel-resistant

Technical data

 **Conductor stranding**
Fine wired acc. to EN 50306-2
(SRC=Special Round Conductor)

 **Minimum bending radius**
Fixed installation : 4 x OD, 3 x OD for careful bending, once at connecting terminal

 **Nominal voltage**
U0/U AC 300 / 500 V, Um AC 600V, Vo DC 450V

 **Temperature range**
Fixed installation : -40°C up to +125°C max.
Occasional flexing : -35°C up to + 90°C max.

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX TRAIN GKW SC					
85161001	1 X 0.5	1.3	grey	4.8	6
85161002	1 X 0.75	1.5	grey	7.2	9
85161003	1 X 1.0	1.7	grey	9.6	11
85161004	1 X 1.5	2.1	grey	14.4	17
85161005	1 X 2.5	2.7	grey	24.4	28
85161011	1 X 0.5	1.3	black	4.8	6
85161012	1 X 0.75	1.5	black	7.2	9
85161013	1 X 1.0	1.7	black	9.6	11
85161014	1 X 1.5	2.1	black	14.4	17
85161015	1 X 2.5	2.7	black	24.4	28
85161021	1 X 0.5	1.3	green-yellow	4.8	6
85161022	1 X 0.75	1.5	green-yellow	7.2	9
85161023	1 X 1.0	1.7	green-yellow	19.2	36
85161024	1 X 1.5	2.1	green-yellow	33.6	55
85161025	1 X 2.5	2.7	green-yellow	62.4	98

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ÖLFLEX® TRAIN GKW MC



Info

- Meets EN 50306-4 class P, type MM
- High temperature resistance : -40°C up to +125°C
- Highly oil- and fuel-resistant



Benefits

- Easy to strip and to dismantle
- Resistant to mechanical influences in harsh environmental conditions
- Expanded temperature range
- Reduced formation of toxic gases and fire spreading in the event of fire increase the protection against damage to persons and property

Application range

- For fixed and protected installations inside or outside of rail vehicles and buses
- Suitable for the connection of fixed and moving objects such as lamps, heating, electrical equipment, wiring of vehicles, terminal boxes and power supply

Product features

- Halogen-free (IEC 60754-1) & No corrosive gases (IEC 60754-2)
- No toxic gases (EN 50305, BS 6853)

- Low smoke density (IEC 61034-2)
- Flame retardant (IEC 60332-1-2)
- No fire spreading (EN 50305, BS6853)

Norm references / Approvals

- EN 50306-4, type MM
- BS 6853 (Interior use Ia, Ib, & Exterior use Ia, Ib,)
- EN 45545-2 HL1, HL2, HL3
- Compliant with NFPA 130

Product Make-up

- Conductor : Tinned copper strand, special round conductor
- Insulation : Electron beam cross-linked polyolefin copolymer
- Colour of insulation : black with white numbers
- Outer sheath : Electron beam cross-linked polyolefin copolymer
- Outer sheath colour : Black

Technical data



Conductor stranding

Fine wired acc. to EN 50306-2
(SRC=Special Round Conductor)



Minimum bending radius

Fixed installation : 4 x OD, 3 x OD for careful bending, once at connecting terminal



Nominal voltage

U_0/U AC 300 / 500 V, U_m AC 600V, Vo DC 450V



Temperature range

Fixed installation : -40°C up to +125°C max.
Occasional flexing : -35°C up to + 90°C max.

Article number	Number of cores and mm^2 per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX TRAIN GKW MC				
85161201	4 X 0.5	4.5	19.2	134
85161202	7 X 0.5	5.3	33.6	243
85161203	13 X 0.5	7.3	62.4	49
85161204	19 X 0.5	8.1	91.2	76
85161205	37 X 0.5	10.7	177.6	136
85161206	4 X 0.75	5.0	28.8	188
85161207	7 X 0.75	5.9	50.4	347
85161208	13 X 0.75	8.2	93.6	443
85161209	19 X 0.75	9.1	136.8	59
85161210	37 X 0.75	12.2	266.4	92
85161211	48 X 0.75	13.9	346.6	165
85161212	4 X 1.0	5.3	38.4	229
85161213	7 X 1.0	6.3	67.2	425
85161214	13 X 1.0	8.9	124.8	90
85161215	19 X 1.0	9.8	182.4	147
85161216	37 X 1.0	13.2	355.2	257
85161217	4 X 1.5	6.4	57.6	361
85161218	7 X 1.5	7.9	108.0	675
85161219	13 X 1.5	10.9	187.2	93
85161220	19 X 1.5	12.1	273.6	119
85161221	37 X 1.5	16.3	532.8	148
85161222	2 X 2.5	7.0	49.2	100
85161223	3 X 2.5	7.4	73.8	130
85161224	4 X 2.5	8.1	98.4	130

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ÖLFLEX® TRAIN GKW IS MP

LAPP KABEL ÖLFLEX® TRAIN GKW IS MP CE



Info

- Meets EN 50306-4 class P, type MM
- High temperature resistance : -40°C up to +125°C
- Highly oil- and fuel-resistant

Benefits

- Easy to strip and to dismantle
- Resistant to mechanical influences in harsh environmental conditions
- Expanded temperature range
- Reduced formation of toxic gases and fire spreading in the event of fire increase the protection against damage to persons and property

Application range

- For fixed and protected installations inside or outside of railed vehicles and buses
- Suitable for the connection of fixed and moving objects such as lamps, heating, electrical equipment, wiring of vehicles, terminal boxes and power supply

Product features

- Halogen-free (IEC 60754-1) & No corrosive gases (IEC 60754-2)
- No toxic gases (EN 50305, BS 6853)
- Low smoke density (IEC 61034-2)

- Flame retardant (IEC 60332-1-2)
- No fire spreading (EN 50305, BS6853)

Norm references / Approvals

- EN 50306-4, type MM
- EN 45545-2 HL1, HL2, HL3
- Compliant with NFPA 130

Product Make-up

- Conductor : Tinned copper strand, special round conductor
- Insulation : Electron beam cross-linked polyolefin copolymer
- Colour of insulation : black with white numbers
- Individual shield : Tinned copper braid
- Inner sheath : Electron beam cross-linked polyolefin copolymer, Black colour
- Outer sheath : Electron beam cross-linked polyolefin copolymer, Black colour

Technical data



Conductor stranding
Fine wired acc. to EN 50306-2
(SRC=Special Round Conductor)



Minimum bending radius
Fixed installation : 6 x OD, 5 x OD for careful bending, once at connecting terminal



Nominal voltage
U₀/U AC 300 / 500 V, Um AC 600V, Vo DC 450V



Temperature range
Fixed installation : -40°C up to +125°C max.
Occasional flexing : -35°C up to + 90°C max.

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® TRAIN GKW IS MP				
85161601	2 X 2 X 0.5	9.9	38.9	128
85161602	3 X 2 X 0.5	10.3	58.3	154
85161603	4 X 2 X 0.5	11.5	77.8	201
85161604	7 X 2 X 0.5	13.6	136.4	282
85161605	2 X 2 X 0.75	10.7	51.5	151
85161606	3 X 2 X 0.75	11.3	77.3	190
85161607	4 X 2 X 0.75	12.6	103.0	245
85161608	7 X 2 X 0.75	15.1	180.7	357
85161609	2 X 2 X 1	11.5	63.0	177
85161610	3 X 2 X 1	12.2	94.5	225
85161611	4 X 2 X 1	13.7	126.0	288
85161612	7 X 2 X 1	16.3	221.0	421
85161613	2 X 2 X 1.5	13.2	90.0	233
85161614	3 X 2 X 1.5	13.9	136.0	298
85161615	4 X 2 X 1.5	15.6	181.0	385
85161616	7 X 2 X 1.5	18.7	320.0	565

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ÖLFLEX® TRAIN GKW C MC

i Info

- Meets EN 50306-4 class P, type MM
- High temperature resistance : -40°C up to +125°C
- Highly oil- and fuel-resistant

Benefits

- Easy to strip and to dismantle
- Resistant to mechanical influences in harsh environmental conditions
- Expanded temperature range
- Reduced formation of toxic gases and fire spreading in the event of fire increase the protection against damage to persons and property

Application range

- For fixed and protected installations inside or outside of rail vehicles and buses
- Suitable for the connection of fixed and moving objects such as lamps, heating, electrical equipment, wiring of vehicles, terminal boxes and power supply

Product features

- Halogen-free (IEC 60754-1) & No corrosive gases (IEC 60754-2)
- No toxic gases (EN 50305, BS 6853)



LAPP KABEL ÖLFLEX® TRAIN GKW C MC CE

- Low smoke density (IEC 61034-2)
- Flame retardant (IEC 60332-1-2)
- No fire spreading (EN 50305, BS6853)

Norm references / Approvals

- EN 50306-4, type MM
- BS 6853 (Interior use Ia, Ib, & Exterior use Ia, Ib,)
- EN 45545-2 HL1, HL2, HL3
- Compliant with NFPA 130

Product Make-up

- Conductor : Tinned copper strand, special round conductor
- Insulation : Electron beam cross-linked polyolefin copolymer
- Colour of insulation : black with white numbers
- Braiding : Tinned copper braid
- Outer sheath : Electron beam cross-linked polyolefin copolymer, Black colour

Technical data



Conductor stranding

Fine wired acc. to EN 50306-2
(SRC=Special Round Conductor)



Minimum bending radius

Fixed installation : 4 x OD, 3 x OD for careful bending, once at connecting terminal



Nominal voltage

U₀/U AC 300 / 500 V, Um AC 600V, Vo DC 450V



Temperature range

Fixed installation : -40°C up to +125°C max.
Occasional flexing : -35°C up to + 90°C max.

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX TRAIN GKW C MC				
85161401	2 X 0.5	4.5	19.4	31
85161402	3 X 0.5	4.7	24.9	38
85161403	4 X 0.5	5.1	30.9	45
85161404	6 X 0.5	5.8	43.0	61
85161405	8 X 0.5	6.8	61.3	84
85161406	2 X 0.75	5.0	25.7	39
85161407	3 X 0.75	5.2	33.8	48
85161408	4 X 0.75	5.6	42.2	58
85161409	6 X 0.75	6.6	65.4	86
85161410	8 X 0.75	7.6	84.0	110
85161411	12 X 0.75	8.6	115.6	152
85161412	2 X 1.0	5.2	31.5	44
85161413	3 X 1.0	5.5	42.0	56
85161414	4 X 1.0	5.9	52.9	68
85161415	6 X 1.0	7.1	81.8	100
85161416	8 X 1.0	8.3	105.4	133
85161417	2 X 1.2	5.9	38.2	55
85161418	3 X 1.2	6.2	52.3	82
85161419	4 X 1.2	6.8	70.3	93
85161420	2 X 1.5	6.1	44.1	62
85161421	3 X 1.5	6.6	65.6	86
85161422	4 X 1.5	7.2	82.2	106
85161423	5 X 1.5	8.0	97.9	131
85161424	6 X 1.5	8.6	117.3	151
85161425	8 X 1.5	9.9	152.0	197
85161426	4 X 2.0	8.1	107.1	133
85161427	2 X 2.5	7.7	75.5	102
85161428	3 X 2.5	8.2	102.1	132
85161429	4 X 2.5	8.9	129.8	165

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ÖLFLEX®TRAIN 3GKW SC



Benefits

- Easy to strip and to dismantle
- Resistant to mechanical influences in harsh environmental conditions
- Expanded temperature range
- Reduced formation of toxic gases and fire spreading in the event of fire increase the protection against damage to persons and property

Application range

- For fixed and protected installations inside or outside of railed vehicles and buses
- Suitable for the connection of fixed and moving objects such as lamps, heating, electrical equipment, wiring of vehicles, terminal boxes and power supply

Product features

- Halogen-free (IEC 60754-1) & No corrosive gases (IEC 60754-2)

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX TRAIN 3GKW SC					
85163001	1 X 0.5	2.1	grey	4.8	8
85163002	1 X 0.75	2.3	grey	7.2	11
85163003	1 X 1.0	2.5	grey	9.6	14
85163004	1 X 1.5	3.0	grey	14.4	20
85163005	1 X 2.5	3.4	grey	24.0	30
85163006	1 X 4	4.0	grey	38.4	44
85163007	1 X 6	4.5	grey	57.6	63
85163008	1 X 10	5.5	grey	96.0	104
85163009	1 X 16	7.2	grey	153.6	168
85163010	1 X 25	8.9	grey	240.0	260
85163011	1 X 35	10.3	grey	336.0	363
85163012	1 X 50	12.4	grey	480.0	515
85163013	1 X 70	14.5	grey	672.0	716
85163014	1 X 95	16.4	grey	912.0	952
85163015	1 X 120	18.3	grey	1,152.0	1,187
85163016	1 X 150	20.4	grey	1,440.0	1,467
85163017	1 X 185	22.8	grey	1,776.0	1,832
85163018	1 X 240	25.9	grey	2,304.0	2,376
85163019	1 X 300	28.9	grey	2,880.0	2,982
85163020	1 X 0.5	2.1	black	4.8	8
85163021	1 X 0.75	2.3	black	7.2	11
85163022	1 X 1.0	2.5	black	9.6	14
85163023	1 X 1.5	3.0	black	14.4	20
85163024	1 X 2.5	3.4	black	24.0	30
85163025	1 X 4	4.0	black	38.4	44
85163026	1 X 6	4.5	black	57.6	63
85163027	1 X 10	5.5	black	96.0	104
85163028	1 X 16	7.2	black	153.6	168

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Info

- Meets EN 50264-3-1 type M
- High temperature resistance : -40°C up to +125°C
- Highly oil- and fuel-resistant

Technical data

Conductor stranding
Fine wired acc. to IEC 60228 class 5

Minimum bending radius
Fixed installation : $\leq 12 : 4 \times OD / 3$
 $x OD^*$, $> 12 : 5 \times OD / 4 \times OD^*$, * for careful bending, once at connecting terminal

Nominal voltage
 U_0/U AC 0.6 / 1.0 kV, Um AC 1.2kV,
Vo DC 0.9kV

Temperature range
Fixed installation : -40°C up to +125°C max.
Occasional flexing : -35°C up to + 90°C max.

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
85163029	1 X 25	8.9	black	240.0	260
85163030	1 X 35	10.3	black	336.0	363
85163031	1 X 50	12.4	black	480.0	515
85163032	1 X 70	14.5	black	672.0	716
85163033	1 X 95	16.4	black	912.0	952
85163034	1 X 120	18.3	black	1,152.0	1,187
85163035	1 X 150	20.4	black	1,440.0	1,467
85163036	1 X 185	22.8	black	1,776.0	1,832
85163037	1 X 240	25.9	black	2,304.0	2,376
85163038	1 X 300	28.9	black	2,880.0	2,982
85163039	1 X 0.5	2.1	green-yellow	4.8	8
85163040	1 X 0.75	2.3	green-yellow	7.2	11
85163041	1 X 1.0	2.5	green-yellow	9.6	14
85163042	1 X 1.5	3.0	green-yellow	14.4	20
85163043	1 X 2.5	3.4	green-yellow	24.0	30
85163044	1 X 4	4.0	green-yellow	38.4	44
85163045	1 X 6	4.5	green-yellow	57.6	63
85163046	1 X 10	5.5	green-yellow	96.0	104
85163047	1 X 16	7.2	green-yellow	153.6	168
85163048	1 X 25	8.9	green-yellow	240.0	260
85163049	1 X 35	10.3	green-yellow	336.0	363
85163050	1 X 50	12.4	green-yellow	480.0	515
85163051	1 X 70	14.5	green-yellow	672.0	716
85163052	1 X 95	16.4	green-yellow	912.0	952
85163053	1 X 120	18.3	green-yellow	1,152.0	1,187
85163054	1 X 150	20.4	green-yellow	1,440.0	1,467
85163055	1 X 185	22.8	green-yellow	1,776.0	1,832
85163056	1 X 240	25.9	green-yellow	2,304.0	2,376
85163057	1 X 300	28.9	green-yellow	2,880.0	2,982



ÖLFLEX® TRAIN 3GKW MC



Info

- Meets EN 50264-3-2, type MM
- High temperature resistance : -40°C up to +125°C
- Highly oil- and fuel-resistant

Benefits

- Easy to strip and to dismantle
- Resistant to mechanical influences in harsh environmental conditions
- Expanded temperature range
- Reduced formation of toxic gases and fire spreading in the event of fire increase the protection against damage to persons and property

Application range

- For fixed and protected installations inside or outside of rail vehicles and buses
- Suitable for the connection of fixed and moving objects such as lamps, heating, electrical equipment, wiring of vehicles, terminal boxes and power supply

Product features

- Halogen-free (IEC 60754-1) & No corrosive gases (IEC 60754-2)



LAPP KABEL ÖLFLEX® TRAIN 3GKW MC CE

- No toxic gases (EN 50305, BS 6853)
- Low smoke density (IEC 61034-2)
- Flame retardant (IEC 60332-1-2)
- No fire spreading (EN 50305, BS 6853)

Norm references / Approvals

- EN 50264-3-2, type MM
- BS 6853 (Interior use Ia, Ib, & Exterior use Ia, Ib,)
- EN 45545-2 HL1, HL2, HL3
- Compliant with NFPA 130

Product Make-up

- Conductor : Tinned copper strand, fine wired
- Insulation : Electron beam cross-linked polyolefin copolymer
- Colour of insulation : black with white numbers
- Outer sheath : Electron beam cross-linked polyolefin copolymer, Black colour

Technical data



Conductor stranding

Fine wired acc. to IEC 60228 class 5



Minimum bending radius

Fixed installation : $\leq 12 : 4 \times OD / 3$
 $x OD^*, > 12 : 5 \times OD / 4 \times OD^*$, * for careful bending, once at connecting terminal

Nominal voltage

 U_0/U AC 0.6 / 1.0 kV, Um AC 1.2 kV,
Vo DC 0.9 kV

Temperature range

Fixed installation : -40°C up to +125°C max.
Occasional flexing : -35°C up to +90°C max.

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX TRAIN 3GKW MC				
85163301	2 X 1.5	7.4	28.8	84
85163302	3 X 1.5	7.9	43.2	101
85163303	4 X 1.5	8.6	57.6	124
85163304	2 X 2.5	8.3	48.0	113
85163305	3 X 2.5	8.9	72.0	139
85163306	4 X 2.5	9.7	96.0	172
85163307	2 X 4	9.3	76.8	130
85163308	3 X 4	9.9	115.2	170
85163309	4 X 4	11.2	153.6	224
85163310	2 X 6	10.7	115.2	180
85163311	3 X 6	11.4	172.8	239
85163312	4 X 6	12.9	230.4	320
85163313	2 X 10	13.1	192.0	290
85163314	3 X 10	13.9	288.0	387
85163315	4 X 10	15.3	384.0	498
85163316	2 X 16	16.4	307.2	451
85163317	3 X 16	17.5	460.8	608
85163318	4 X 16	19.7	614.4	807
85163319	2 X 25	20.3	480.0	693
85163320	3 X 25	21.6	720.0	934
85163321	4 X 25	23.9	960.0	1,211
85163322	2 X 35	23.0	672.0	932
85163323	3 X 35	24.6	1,008.0	1,267
85163324	4 X 35	27.6	1,344.7	1,677
85163325	2 X 50	27.6	960.0	1,325
85163326	3 X 50	29.5	1,440.0	1,800
85163327	4 X 50	33.1	1,924.3	2,377

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ÖLFLEX® TRAIN 4GKW



Benefits

- High flexibility and slim diameters enable small bending radii at fixed installation
- Resistant to mechanical influences in harsh environmental conditions
- Expanded temperature range
- Excellent chemical resistance and high Flammability rating as well
- Reduced formation of toxic gases and fire spreading in the event of fire increase the protection against damage to persons and property

Application range

- For fixed and protected installations inside or outside of railed vehicles and buses
- For connection of stationary and moving parts
- Suitable for cabling of switchboards, converters, panel units and rheostatic braking blocks

Product features

- Halogen-free (IEC 60754-1) & No corrosive gases (IEC 60754-2)
- No toxic gases (EN 50305, BS 6853)
- Low smoke density (IEC 61034-2)
- Flame retardant (IEC 60332-1-2)
- No fire spreading (EN 50305, BS6853)

Norm references / Approvals

- EN 50264-3-1, type OM
- BS 6853 (Interior use la, lb, & Exterior use la, lb,)
- EN 45545-2 HL1, HL2, HL3
- Compliant with NFPA 130

Product Make-up

- Conductor : Tinned copper strand, fine wired
- Inner Insulation : Electron beam cross-linked polyolefin copolymer, Natural colour
- Outer Insulation : Electron beam cross-linked polyolefin copolymer
- Outer Insulation colour : Black or green-yellow

Info

- Meets EN 50264-3-1 type OM
- High temperature resistance : -40°C up to +125°C
- Highly oil- and fuel-resistant

Technical data

	Conductor stranding Fine wired acc. to IEC 60228 class 5
	Minimum bending radius Fixed installation : $\leq 12 : 4 \times OD / 3$ $x OD^*$, $> 12 : 5 \times OD / 4 \times OD^*$, * for careful bending, once at connecting terminal
	Nominal voltage U_0/U AC 1.8 / 3.0 kV, Um AC 3.6kV, Vo DC 2.7kV
	Temperature range Fixed installation : -40°C up to +125°C max. Occasional flexing : -35°C up to + 90°C max.

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX TRAIN 4GKW					
85165001	1 X 1.5	3.6	black	14.4	25
85165002	1 X 2.5	4.0	black	24.0	35
85165003	1 X 4	4.6	black	38.4	50
85165004	1 X 6	5.3	black	57.6	71
85165005	1 X 10	6.5	black	96.0	117
85165006	1 X 16	8.5	black	153.6	193
85165007	1 X 25	10.3	black	240.0	290
85165008	1 X 35	11.9	black	336.0	401
85165009	1 X 50	14.3	black	480.0	572
85165010	1 X 70	16.2	black	672.0	771
85165011	1 X 95	18.1	black	912.0	1,011
85165012	1 X 120	20.4	black	1,152.0	1,270
85165013	1 X 150	22.2	black	1,440.0	1,536
85165014	1 X 185	24.6	black	1,776.0	1,908
85165015	1 X 240	27.5	black	2,304.0	2,443
85165016	1 X 300	30.6	black	2,880.0	3,066
85165017	1 X 400	34.3	black	3,840.0	4,018
85165020	1 X 1.5	3.6	green-yellow	14.4	25
85165021	1 X 2.5	4.0	green-yellow	24.0	35
85165022	1 X 4	4.6	green-yellow	38.4	50
85165023	1 X 6	5.3	green-yellow	57.6	71
85165024	1 X 10	6.5	green-yellow	96.0	117
85165025	1 X 16	8.5	green-yellow	153.6	193
85165026	1 X 25	10.3	green-yellow	240.0	290
85165027	1 X 35	11.9	green-yellow	336.0	401
85165028	1 X 50	14.3	green-yellow	480.0	572
85165029	1 X 70	16.2	green-yellow	672.0	771
85165030	1 X 95	18.1	green-yellow	912.0	1,011
85165031	1 X 120	20.4	green-yellow	1,152.0	1,270
85165032	1 X 150	22.2	green-yellow	1,440.0	1,536
85165033	1 X 185	24.6	green-yellow	1,776.0	1,908
85165034	1 X 240	27.5	green-yellow	2,304.0	2,443
85165035	1 X 300	30.6	green-yellow	2,880.0	3,066
85165036	1 X 400	34.3	green-yellow	3,840.0	4,018

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ÖLFLEX® TRAIN 4GKW C



Info

- Meets EN 50264-3-1 type OM
- High temperature resistance : -40°C up to +125°C
- Highly oil- and fuel-resistant

LAPP KABEL ÖLFLEX® TRAIN 4GKW C

Benefits

- High flexibility and slim diameters enable small bending radii at fixed installation
- Resistant to mechanical influences in harsh environmental conditions
- Expanded temperature range
- Excellent chemical resistance and high Flammability rating as well
- Reduced formation of toxic gases and fire spreading in the event of fire increase the protection against damage to persons and property

Application range

- For fixed and protected installations inside or outside of rail vehicles and buses
- For connection of stationary and moving parts
- Suitable for cabling of switchboards, converters, panel units and rheostatic braking blocks

Product features

- Halogen-free (IEC 60754-1) & No corrosive gases (IEC 60754-2)
- No toxic gases (EN 50305, BS 6853)
- Low smoke density (IEC 61034-2)
- Flame retardant (IEC 60332-1-2)
- No fire spreading (EN 50305, BS6853)

Norm references / Approvals

- EN 50264-3-1, type OM
- BS 6853 (Interior use Ia, Ib, & Exterior use Ia, Ib,)
- EN 45545-2 HL1, HL2, HL3
- Compliant with NFPA 130

Product Make-up

- Conductor : Tinned copper strand, fine wired
- Inner Insulation : Electron beam cross-linked polyolefin copolymer, Natural colour
- Braiding : Tinned copper braid
- Outer sheath : Electron beam cross-linked polyolefin copolymer, Black colour

Technical data



Conductor stranding

Fine wired acc. to IEC 60228 class 5



Minimum bending radius

Fixed installation : $\leq 12 : 4 \times OD / 3$
 $x OD^*$, $> 12 : 5 \times OD / 4 \times OD^*$, * for careful bending, once at connecting terminal



Nominal voltage

U_0/U AC 1.8 / 3.0 kV, Um AC 3.6kV,
 V_o DC 2.7kV



Temperature range

Fixed installation : -40°C up to +125°C max.
 Occasional flexing : -35°C up to + 90°C max.

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX TRAIN 4GKW C				
3823336	1 X 1.5	5.2	25.4	47
3823337	1 X 2.5	5.6	36.7	60
3823338	1 X 4	6.5	52.6	85
3823339	1 X 6	8.0	78.6	124
3823340	1 X 10	9.4	121.4	182
3823341	1 X 16	11.0	185.1	256
3823342	1 X 25	13.2	283.3	378
3823343	1 X 35	14.6	385.1	489
3823344	1 X 50	16.9	567.0	670
3823345	1 X 70	18.8	567.0	876
3823346	1 X 95	20.7	988.6	1,121
3823347	1 X 120	23.1	1,239.0	1,396
3823348	1 X 150	25.5	1,532.0	1,700
3823349	1 X 185	27.9	1,903.0	2,090
3823350	1 X 240	30.8	2,450.9	2,646
3823351	1 X 300	34.1	3,038.0	3,291

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ÖLFLEX® TRAIN 4GKW HF



Info

- Meets EN 50264-3-1 type OM
- High temperature resistance : -40°C up to +125°C
- Highly oil- and fuel-resistant

Benefits

- More improved high flexibility than 4GKW and slim diameters enable small bending radii at fixed installation
- Easy to strip and to dismantle & Expanded temperature range
- Resistant to mechanical influences in harsh environmental conditions
- Excellent chemical resistance and high Flammability rating as well
- Reduced formation of toxic gases and fire spreading in the event of fire increase the protection against damage to persons and property

Application range

- For fixed and protected installations inside or outside of railed vehicles and buses
- For connection of stationary and moving parts
- Suitable for cabling of switchboards, converters, panel units and rheostatic braking blocks
- For carrying energy between cars

Product features

- Halogen-free (IEC 60754-1) & No corrosive gases (IEC 60754-2)
- No toxic gases (EN 50305, BS 6853)
- Low smoke density (IEC 61034-2)
- Flame retardant (IEC 60332-1-2)
- No fire spreading (EN 50305, BS6853)

Norm references / Approvals

- EN 50264-3-1, type OM
- BS 6853 (Interior use la, lb, & Exterior use la, lb,)
- BS 6853 (Interior use la, lb, & Exterior use la, lb,)
- Compliant with NFPA 130

Product Make-up

- Conductor : Tinned copper strand, Super fine wired
- Inner Insulation : Electron beam cross-linked polyolefin copolymer, Natural colour
- Outer Insulation : Electron beam cross-linked polyolefin copolymer
- Outer Insulation colour : Black or green-yellow

Technical data



Conductor stranding

Fine wired acc. to IEC 60228 class 6



Minimum bending radius

Fixed installation : 4 x OD, 3 x OD for careful bending, once at connecting terminal



Nominal voltage

U_0/U AC 1.8 / 3.0 kV, Um AC 3.6kV, V_0 DC 2.7kV



Temperature range

Fixed installation : -40°C up to +125°C max.
Occasional flexing : -35°C up to +90°C max.

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX TRAIN 4GKW HF					
85165201	1 X 6	5.6	black	57.6	77
85165202	1 X 10	6.9	black	96.0	125
85165203	1 X 16	8.5	black	153.6	193
85165204	1 X 25	10.2	black	240.0	292
85165205	1 X 35	11.9	black	336.0	390
85165206	1 X 50	14.3	black	480.0	568
85165207	1 X 70	16.4	black	672.0	780
85165208	1 X 95	18.3	black	912.0	1,004
85165209	1 X 120	20.7	black	1,152.0	1,282
85165210	1 X 150	22.5	black	1,440.0	1,557
85165211	1 X 185	24.3	black	1,776.0	1,899
85165212	1 X 240	27.2	black	2,304.0	2,423
85165213	1 X 300	30.2	black	2,880.0	3,028
85165214	1 X 400	34.6	black	3,840.0	3,999
85165221	1 X 6	5.6	green-yellow	57.6	77
85165222	1 X 10	6.9	green-yellow	96.0	125
85165223	1 X 16	8.5	green-yellow	153.6	193
85165224	1 X 25	10.2	green-yellow	240.0	292
85165225	1 X 35	11.9	green-yellow	336.0	390
85165226	1 X 50	14.3	green-yellow	480.0	568
85165227	1 X 70	16.4	green-yellow	672.0	780
85165228	1 X 95	18.3	green-yellow	912.0	1,004
85165229	1 X 120	20.7	green-yellow	1,152.0	1,282
85165230	1 X 150	22.5	green-yellow	1,440.0	1,557
85165231	1 X 185	24.3	green-yellow	1,776.0	1,899
85165232	1 X 240	27.2	green-yellow	2,304.0	2,423
85165233	1 X 300	30.2	green-yellow	2,880.0	3,028
85165234	1 X 400	34.6	green-yellow	3,840.0	3,999

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ÖLFLEX® TRAIN 9GKW

Info

- Meets EN 50264-3-1 type OM
- High temperature resistance : -40°C up to +125°C
- Highly oil- and fuel-resistant



LAPP KABEL ÖLFLEX® TRAIN 9GKW

Benefits

- High flexibility and slim diameters enable small bending radii at fixed installation
- Resistant to mechanical influences in harsh environmental conditions
- Expanded temperature range
- Excellent chemical resistance and high Flammability rating as well
- Reduced formation of toxic gases and fire spreading in the event of fire increase the protection against damage to persons and property

Application range

- For fixed and protected installations inside or outside of rail vehicles and buses
- For connection of stationary and moving parts
- Suitable for cabling of switchboards, converters, panel units and rheostatic braking blocks

Product features

- Halogen-free (IEC 60754-1) & No corrosive gases (IEC 60754-2)
- No toxic gases (EN 50305, BS 6853)
- Low smoke density (IEC 61034-2)
- Flame retardant (IEC 60332-1-2)
- No fire spreading (EN 50305, BS6853)

Norm references / Approvals

- EN 50264-3-1, type OM
- BS 6853 (Interior use Ia, Ib, & Exterior use Ia, Ib,)
- EN 45545-2 HL1, HL2, HL3
- Compliant with NFPA 130

Product Make-up

- Conductor : Tinned copper strand, fine wired
- Inner Insulation : Electron beam cross-linked polyolefin copolymer, Natural colour
- Outer Insulation : Electron beam cross-linked polyolefin copolymer
- Outer Insulation colour : Black or green-yellow

Technical data



Conductor stranding

Fine wired acc. to IEC 60228 class 5



Minimum bending radius

Fixed installation : $\leq 12 : 4 \times OD / 3$
 $x OD^*, > 12 : 5 \times OD / 4 \times OD^*$, * for careful bending, once at connecting terminal



Nominal voltage

U_0/U AC 3.6 / 6.0 kV, Um AC 7.2kV,
 Vo DC 5.4kV



Temperature range

Fixed installation : -40°C up to +125°C max.
 Occasional flexing : -35°C up to + 90°C max.

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX TRAIN 9GKW					
85167001	1 X 2.5	5.0	black	24.0	47
85167002	1 X 4	5.8	black	38.4	64
85167003	1 X 6	6.3	black	57.6	86
85167004	1 X 10	7.7	black	96.0	138
85167005	1 X 16	9.6	black	153.6	220
85167006	1 X 25	11.1	black	240.0	314
85167007	1 X 35	12.7	black	336.0	427
85167008	1 X 50	15.3	black	480.0	605
85167009	1 X 70	17.4	black	672.0	814
85167010	1 X 95	19.3	black	912.0	1,056
85167011	1 X 120	21.4	black	1,152.0	1,308
85167012	1 X 150	23.6	black	1,440.0	1,595
85167013	1 X 185	25.6	black	1,776.0	1,942
85167014	1 X 240	28.9	black	2,304.0	2,513
85167015	1 X 300	32.0	black	2,880.0	3,137
85167021	1 X 2.5	5.0	green-yellow	24.0	47
85167022	1 X 4	5.8	green-yellow	38.4	64
85167023	1 X 6	6.3	green-yellow	57.6	86
85167024	1 X 10	7.7	green-yellow	96.0	138
85167025	1 X 16	9.6	green-yellow	153.6	220
85167026	1 X 25	11.1	green-yellow	240.0	314
85167027	1 X 35	12.7	green-yellow	336.0	427
85167028	1 X 50	15.3	green-yellow	480.0	605
85167029	1 X 70	17.4	green-yellow	672.0	814
85167030	1 X 95	19.3	green-yellow	912.0	1,056
85167031	1 X 120	21.4	green-yellow	1,152.0	1,308
85167032	1 X 150	23.6	green-yellow	1,440.0	1,595
85167033	1 X 185	25.6	green-yellow	1,776.0	1,942
85167034	1 X 240	28.9	green-yellow	2,304.0	2,513
85167035	1 X 300	32.0	green-yellow	2,880.0	3,137

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ÖLFLEX® TRAIN 9GKW C



Info

- Meets EN 50264-3-1 type OM
- High temperature resistance : -40°C up to +125°C
- Highly oil- and fuel-resistant

Benefits

- High flexibility and slim diameters enable small bending radii at fixed installation
- Resistant to mechanical influences in harsh environmental conditions
- Expanded temperature range
- Excellent chemical resistance and high Flammability rating as well
- Reduced formation of toxic gases and fire spreading in the event of fire increase the protection against damage to persons and property

Application range

- For fixed and protected installations inside or outside of railed vehicles and buses
- For connection of stationary and moving parts
- Suitable for cabling of switchboards, converters, panel units and rheostatic braking blocks

Product features

- Halogen-free (IEC 60754-1) & No corrosive gases (IEC 60754-2)
- No toxic gases (EN 50305, BS 6853)
- Low smoke density (IEC 61034-2)
- Flame retardant (IEC 60332-1-2)
- No fire spreading (EN 50305, BS6853)

Norm references / Approvals

- EN 50264-3-1, type OM
- BS 6853 (Interior use Ia, Ib, & Exterior use Ia, Ib,)
- EN 45545-2 HL1, HL2, HL3
- Compliant with NFPA 130

Product Make-up

- Conductor : Tinned copper strand, fine wired
- Inner Insulation : Electron beam cross-linked polyolefin copolymer, Natural colour
- Braiding : Tinned copper braid
- Outer sheath : Electron beam cross-linked polyolefin copolymer, Black colour

Technical data

	Conductor stranding Fine wired acc. to IEC 60228 class 5
	Minimum bending radius Fixed installation : $\leq 12 : 4 \times OD / 3$ $x OD^*$, $> 12 : 5 \times OD / 4 \times OD^*$, * for careful bending, once at connecting terminal
	Nominal voltage U_0/U AC 3.6 / 6.0 kV, Um AC 7.2kV, Vo DC 5.4kV
	Temperature range Fixed installation : -40°C up to +125°C max. Occasional flexing : -35°C up to + 90°C max.

Article number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX TRAIN 9GKW C				
85167401	1 X 2,5	7,0	39,4	83
85167402	1 X 4	8,1	59,8	114
85167403	1 X 6	9,2	82,4	150
85167404	1 X 10	10,6	126,0	212
85167405	1 X 16	12,5	195,0	312
85167406	1 X 25	14,4	289,0	433
85167407	1 X 35	15,8	390,0	549
85167408	1 X 50	18,5	543,0	745
85167409	1 X 70	20,8	744,0	978
85167410	1 X 95	22,7	993,0	1,233
85167411	1 X 120	25,3	1,264,0	1,546
85167412	1 X 150	27,3	1,560,0	1,836
85167413	1 X 185	29,7	1,911,0	2,227
85167414	1 X 240	33,0	2,455,0	2,819
85167415	1 X 300	36,5	3,047,0	3,500

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ÖLFLEX® TRAIN 9GKW HF



Info

- Meets EN 50264-3-1 type OM
- High temperature resistance : -40°C up to +125°C
- Highly oil- and fuel-resistant



Benefits

- More improved high flexibility than 4GKW and slim diameters enable small bending radii at fixed installation
- Easy to strip and to dismantle & Expanded temperature range
- Resistant to mechanical influences in harsh environmental conditions
- Excellent chemical resistance and high Flammability rating as well
- Reduced formation of toxic gases and fire spreading in the event of fire increase the protection against damage to persons and property

Application range

- For fixed and protected installations inside or outside of rail vehicles and buses
- For connection of stationary and moving parts
- Suitable for cabling of switchboards, converters, panel units and rheostatic braking blocks
- For carrying energy between cars

Product features

- Halogen-free (IEC 60754-1) & No corrosive gases (IEC 60754-2)
- No toxic gases (EN 50305, BS 6853)
- Low smoke density (IEC 61034-2)
- Flame retardant (IEC 60332-1-2)
- No fire spreading (EN 50305, BS6853)

Norm references / Approvals

- EN 50264-3-1, type OM
- BS 6853 (Interior use la, lb, & Exterior use la, lb,)
- BS 6853 (Interior use la, lb, & Exterior use la, lb,)
- Compliant with NFPA 130

Product Make-up

- Conductor : Tinned copper strand, Super fine wired
- Inner Insulation : Electron beam cross-linked polyolefin copolymer, Natural colour
- Outer Insulation : Electron beam cross-linked polyolefin copolymer
- Outer Insulation colour : Black or green-yellow

Technical data



Conductor stranding

Fine wired acc. to IEC 60228 class 6



Minimum bending radius

Fixed installation : 4 x OD, 3 x OD for careful bending, once at connecting terminal



Nominal voltage

U_0/U AC 1.8 / 3.0 kV, U_m AC 3.6kV, V_o DC 2.7kV



Temperature range

Fixed installation : -40°C up to +125°C max.
Occasional flexing : -35°C up to + 90°C max.

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Colour	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX TRAIN 9GKW HF					
85167211	1X 50	15.1	black	480.0	593
85167212	1X 70	17.2	black	672.0	804
85167213	1X 95	19.1	black	912.0	1,036
85167214	1X 120	21.3	black	1,152.0	1,305
85167215	1X 150	23.5	black	1,440.0	1,596
85167216	1X 185	25.3	black	1,776.0	1,928
85167217	1X 240	28.6	black	2,304.0	2,487
85167218	1X 300	31.6	black	2,880.0	3,098
85167231	1X 50	15.1	green-yellow	480.0	593
85167232	1X 70	17.2	green-yellow	672.0	804
85167233	1X 95	19.1	green-yellow	912.0	1,036
85167234	1X 120	21.3	green-yellow	1,152.0	1,305
85167235	1X 150	23.5	green-yellow	1,440.0	1,596
85167236	1X 185	25.3	green-yellow	1,776.0	1,928
85167237	1X 240	28.6	green-yellow	2,304.0	2,487
85167238	1X 300	31.6	green-yellow	2,880.0	3,098

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2

UNITRONIC® Data communication systems

Our high-quality UNITRONIC® data network cables and field bus components provide a forward-looking solution for all applications in industrial machinery and plant engineering. From transmission of simple control signals to field bus signals in complex network structures – we offer a dependable cabling and connection solution for almost every situation.

Application range

- Industrial machinery and plant engineering
- Sensors and actuating elements
- Appliances
- Measurement and control technology
- Automated production processes and industrial robots
- Bus systems
- Computing and communication systems

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ALARM CABLE



Application range

- Flexible cables normally used for the wiring of burglar and security alarm and other low voltage circuits
- Suitable for interconnection between control unit systems, sensors and alerting devices
- For indoor installation

Product features

- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Stranded bare annealed copper wires
- PVC core insulation
- PVC outer sheath, white

Info

- Unshielded

Technical data

Classification

ETIM 5.0 Class-Description: Signal-/telecommunication cable
ETIM 5.0 Class-ID: EC000829

Core identification code

4 core: RD/BK/WH/BU
6 core : RD/BK/WH/BU/YE/GN

Mutual capacitance

Approx. 120 nF/km, at 800Hz

Peak operating voltage

50 Vrms (not for power applications)

Minimum bending radius

10 x cable diameter

Temperature range

-30°C to +70°C

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
ALARM CABLE				
3804934	4 X 0.25	4.3	9.6	28
3804936	6 X 0.25	5.1	14.2	39

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UNITRONIC® LiY(ST)Y



Application range

- Suitable for use in data transmission for RS 232, RS 485 and control measurement
- For use in dry and damp environment

Product features

- 100% screen coverage, offers optimum protection against external interference at medium and high frequencies
- UL - approved
- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Multi-wire strands of tinned annealed copper
- Semi-Rigid PVC core insulation
- Aluminium foil screening
- Tinned copper drain wire
- PVC outer sheath
- Colour: pebble grey, RAL 7032

Info

- UL Style 2464
- UL-approved

Technical data

Classification

ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000830

Core identification code

acc. to DIN 47100

Mutual capacitance

C/C : approx. 110 pF/m

C/S : approx. 215 pF/m

Peak operating voltage

300 V (not for power applications)

Minimum bending radius

10 x cable diameter

Temperature range

-30°C to +80°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® LiY(ST)Y				
3802841	3 x 24 AWG	4.3	8.4	24
3802842	4 x 24 AWG	4.7	10.5	30
3802843	6 x 24 AWG	5.4	14.7	40
3802844	8 x 24 AWG	5.7	18.9	46
3802845	15 x 24 AWG	7.2	33.6	73
3802846	25 x 24 AWG	8.6	54.5	124
3802847	30 x 24 AWG	9.7	65.0	129

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**i Info**

- UL Style 2464
- UL-approved

Application range

- Suitable for use in data transmission for audio and control measurement
- For use in dry and damp environment

Product features

- 100% screen coverage, offers optimum protection against external interference at medium and high frequencies
- UL - approved
- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Multi-wire strands of tinned annealed copper
- Semi-Rigid PVC core insulation
- Twisted pair
- Aluminium foil screening
- Tinned copper drain wire
- PVC outer sheath
- Colour: pebble grey, RAL 7032

UNITRONIC® LiY(ST)Y-TP**Technical data**

Classification
ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000830

Core identification code
acc. to DIN 47100 (Twisted Pairs)
Pair 1 : white/brown
Pair 2 : green/yellow
Pair 3 : grey/pink
Pair 4 : blue/red
Pair 5 : black/violet

Peak operating voltage
300 V (not for power applications)

Minimum bending radius
10 x cable diameter

Temperature range
-30°C to +80°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® LiY(ST)Y-TP				
3802856	1 x 2 x 24 AWG	4.0	6.4	21
3803952	2 x 2 x 24 AWG	6.0	10.5	48
3803953	3 x 2 x 24 AWG	5.8	14.7	42
3803954	4 x 2 x 24 AWG	6.4	18.9	51
3803955	5 x 2 x 24 AWG	6.9	23.1	60
3802855	1 x 2 x 22 AWG	4.6	9.8	32
3803960	2 x 2 x 22 AWG	5.6	16.3	43
3803961	3 x 2 x 22 AWG	6.4	22.8	54
3803962	4 x 2 x 22 AWG	7.1	29.4	66
3803963	5 x 2 x 22 AWG	7.7	35.9	79
3802854	1 x 2 x 20 AWG	5.1	15.3	41
3803990	2 x 2 x 20 AWG	6.3	25.5	59
3803991	3 x 2 x 20 AWG	7.3	35.7	74
3803992	4 x 2 x 20 AWG	8.1	45.9	90
3803993	5 x 2 x 20 AWG	8.8	56.1	109
3803970	1 x 2 x 18 AWG	5.6	23.4	49
3803971	2 x 2 x 18 AWG	7.7	39.0	79
3803972	3 x 2 x 18 AWG	8.4	54.6	99
3803973	4 x 2 x 18 AWG	9.4	70.2	123
3803974	5 x 2 x 18 AWG	10.2	85.8	148
3803980	1 x 2 x 16 AWG	6.3	38.0	68
3803981	2 x 2 x 16 AWG	8.2	63.4	111
3803982	3 x 2 x 16 AWG	9.6	88.7	141
3803983	4 x 2 x 16 AWG	10.8	114.1	177
3803984	5 x 2 x 16 AWG	11.8	139.4	213

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UNITRONIC® ST 20276



Application range

- Especially designed for use as control and instrumentation cables
- For static laying in dry and damp environment

Product features

- Pair screening offers optimum protection against external interference at medium and high frequencies
- Twisted cores and individual pair shielding ensures high Near End Cross Talk attenuation
- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Multi-wire strands of tinned copper wires
- PE core insulation
- Cores twisted together
- Individual pair aluminium foil screening
- Tinned copper drain wire
- PVC sheath
- Colour: chrome grey, RAL 7005

Info

- UL Style 20276
- UL-approved

Technical data

 Classification	ETIM 5.0 Class-Description: Data cable ETIM 5.0 Class-ID: EC000830
 Core identification code	black/red, and white/green
 Mutual capacitance	C/C : approx. 115 pF/m C/S : approx. 203 pF/m
 Peak operating voltage	30 V
 Inductivity	approx. 0.55 mH/km
 Minimum bending radius	10 x cable diameter
 Characteristic impedance	45 Ohm
 Temperature range	-20°C to +60°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® ST 20276 3800952	2 x 2 x 22 AWG	4.3	20.5	28

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UNITRONIC® ST 20253



Application range

- Internal wiring for audio, transmission measurement and control signals with minimum noise
- Cost effective and ideal for environment which less susceptible to noise
- For static laying in dry and damp environment

Product features

- 100% shielding, offers optimum protection against external interference at medium and high frequencies
- Ideal solution where flexibility and a high degree of screening is required
- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Multi-wire strands of tinned copper wires
- PE core insulation
- Cores twisted together
- Individual pair of aluminium laminated plastic foil
- Tinned copper drain wire
- PVC sheath
- Colour: chrome grey, RAL 7005

Info

- Style 20253

Technical data

 Classification	ETIM 5.0 Class-Description: Data cable ETIM 5.0 Class-ID: EC000830
 Core identification code	black, natural
 Mutual capacitance	C/C : approx. 75 pF/m C/S : approx. 114 pF/m
 Peak operating voltage	600 V (not for power applications)
 Inductivity	approx. 0.65 mH/km
 Minimum bending radius	10 x cable diameter
 Characteristic impedance	65 Ohm
 Temperature range	-30°C to +80°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® ST 20253 3800717	1 x 2 x 16 AWG	8.0	33.9	80

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UNITRONIC® ST 2092



Info

- UL Style 2092
- UL-approved

Application range

- Internal wiring for audio, transmission measurement and control signals with minimum noise
- Internal wiring use in data transmission control and measurement cable with minimum noise immunity in the surrounding
- For static laying in dry and damp environment

Product features

- 100% screen coverage, offers optimum protection against external interference at medium and high frequencies
- Ideal solution where flexibility and a high degree of screening is required
- Flame retardant in acc. to IEC 60332-1-2
- Twisted pairs ensures good shielding and low noise interference

Product Make-up

- Multi-wire strands of tinned copper wires
- PE core insulation
- Cores twisted together
- Aluminium foil screening
- Tinned copper drain wire
- PVC sheath
- Colour: pebble grey, RAL 7005

LAPP KABEL STUTTGART UNITRONIC® ST 2092



Technical data



Classification

ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000830

Core identification code

black, natural



Mutual capacitance

C/C : approx. 45 pF/m (24AWG)
C/C : approx. 79 pF/m (22AWG)
C/C : approx. 97 pF/m (18AWG)
C/C : approx. 82 pF/m (16 AWG)
C/S : approx. 107 pF/m (24AWG)
C/S : approx. 154 pF/m (22AWG)
C/S : approx. 145 pF/m (18AWG)
C/S : approx. 168 pF/m (16AWG)

Peak operating voltage

300 V (not for power applications)



Inductivity

approx. 0.65 mH/km



Minimum bending radius

10 x cable diameter



Characteristic impedance

65 Ohm



Temperature range

-30°C to +60°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® ST 2092				
3804580	1 x 2 x 24 AWG	4.8	5.7	25
3800764	1 x 2 x 22 AWG	4.4	10.3	29
0033002	1 x 2 x 18 AWG	5.6	20.7	41
3804581	1 x 2 x 16 AWG	6.7	34.5	64
3804950	2 x 20 AWG	5.2	16.2	35

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UNITRONIC® ST 2095 PE



Application range

- Suitable connection for audio, control signal and instrument measurement
- For use in dry and damp environment

Product features

- 100% screen coverage, offers optimum protection against external interference at medium and high frequencies
- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Multi-wire strands of tinned copper wires
- PE core insulation
- Overall screening with aluminium foil
- Tinned annealed copper drain wire
- PVC sheath
- Colour: pebble grey, RAL 7032

Info

- UL Style 2095
- UL-approved

Technical data

 Classification	ETIM 5.0 Class-Description: Data cable ETIM 5.0 Class-ID: EC000830
 Core identification code	black, red, natural
 Mutual capacitance	C/C : approx. 90 pF/m (20 AWG) C/C : approx. 78.5 pF/m (18 AWG) C/S : approx. 160 pF/m (20 AWG) C/S : approx. 158 pF/m (18 AWG)
 Peak operating voltage	300 V (not for power applications)
 Minimum bending radius	10 x cable diameter
 Temperature range	-30°C to +80°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® ST 2095 PE				
3804951	3 x 20 AWG	5.5	21.4	46
3804931	3 x 18 AWG	6.2	28.9	50

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UNITRONIC® ST 2095 PVC



Application range

- Suitable connection for security, alarm intercom, and control measurement
- For use in dry and damp environment

Product features

- 100% screen coverage, offers optimum protection against external interference at medium and high frequencies
- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Multi-wire strands of bare copper wires
- PVC core insulation
- Twisted pair, overall screening with aluminium foil
- Tinned annealed copper drain wire
- PVC sheath
- Colour: pebble grey, RAL 7032

Info

- UL Style 2095
- Security / Alarm cable
- UL-approved

Technical data

 Classification	ETIM 5.0 Class-Description: Data cable ETIM 5.0 Class-ID: EC000830
 Core identification code	black/red and black/white
 Mutual capacitance	C/C : approx. 116 pF/m C/S : approx. 210 pF/m
 Peak operating voltage	300 V (not for power applications)
 Minimum bending radius	10 x cable diameter
 Temperature range	-20°C to +80°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® ST 2095 PVC				
3804565	2 x 2 x 18 AWG	6.7	39.3	74

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UNITRONIC® ST 2464

i Info

- UL Style 2464
- UL-approved

Application range

- Suitable for use in instrumentation, industrial automation and process control application
- For use in dry and damp environment
- UV-resistant and impervious to moisture penetration

Product features

- 100% screen coverage, offers optimum protection against external interference at medium and high frequencies
- Flame retardant in acc. to IEC 60332-1-2

LAPP KABEL STUTTGART UNITRONIC® ST 2464

Product Make-up

- Multi-wire strands of bare copper wires
- SR-PVC core insulation
- Cores twisted together
- Static screen of aluminium laminated plastic foil
- PVC sheath
- Tinned copper drain wire
- Colour: black, RAL 9005

Technical data

Classification
ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000830

Core identification code
1-Pair : black/white
2-Pair : black/white, black/red

Mutual capacitance
C/C : approx. 200 pF/m
C/S : approx. 370 pF/m

Peak operating voltage
300 V (not for power applications)

Inductivity
approx. 0.62 mH/km

Minimum bending radius
10 x cable diameter

Temperature range
-30°C to +80°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® ST 2464				
3800718	1 x 2 x 16 AWG	6.5	34.4	66
3803979	2 x 2 x 16 AWG	9.8	64.2	128

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UNITRONIC® ST 2919 PE

i Info

- UL Style 2919
- Low capacitance
- UL-approved

Application range

- Suitable for wiring of data systems with high transmission rates
- Designed for use as Data Highway (DH) RS 232, RS 422, and RS 485 interface
- Suitable for use as control and instrumentation cables
- Suitable for flexible and static laying in dry and damp locations

Product features

- 100% screen coverage, offers optimum protection against external interference at medium and high frequencies
- Low capacitance, double screened
- Excellent shielding against internal and external interference

LAPP KABEL STUTTGART UNITRONIC® ST 2919 PE

Product Make-up

- Multi-wire strands of tinned copper wires
- PE core insulation
- Twisted pair
- Aluminium / mylar
- Tinned copper drain wire
- Tinned copper braiding
- PVC outer sheath
- Colour: pebble grey, RAL 7032
Colour: chrome grey, RAL 7005

Technical data

Classification
ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000830

Core identification code
1 Pair : wh/bu stripe + bu/wh stripe
2 Pair : wh/og stripe + og/wh stripe

Mutual capacitance
C/C : approx. 42 pF/m
C/S : approx. 76 pF/m

Peak operating voltage
30V (not for power applications)

Inductivity
approx. 0.65 mH/km

Minimum bending radius
10 x cable diameter

Characteristics impedance
100-120 Ohm

Temperature range
-30°C to +80°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® ST 2919 PE				
3800765	1 x 2 x 24 AWG	5.9	21.3	46
3800953	2 x 2 x 24 AWG	8.8	32.9	86
3804582	1 x 2 x 22 AWG	6.8	28.7	62

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For current information see: <http://lappapac.lappgroup.com>



UNITRONIC® ST 2919 PP



Application range

- Suitable connection for audio, control and instrumentation measurements in environments immune to noise
- For use in dry and damp environment

Product features

- 100% screen coverage, offers optimum protection against external interference at medium and high frequencies
- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Multi-wire strands of tinned annealed copper
- PP core insulation
- Twisted pair, individual pair screening of aluminium laminated foil
- Tinned copper drain wire
- PVC sheath
- Colour: pebble grey, RAL 7032



Info

- UL Style 2919
- Audio, control and instrumentation
- UL-approved

Technical data

	Classification ETIM 5.0 Class-Description: Data cable ETIM 5.0 Class-ID: EC000830
	Core identification code black/red, black/white, and black/green
	Mutual capacitance C/C : approx. 98 pF/m C/S : approx. 181 pF/m
	Peak operating voltage 30 V (not for power applications)
	Inductivity approx. 0.65 mH/km
	Minimum bending radius 10 x cable diameter
	Characteristics impedance 50 Ohm
	Temperature range -30°C to +80°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® ST 2919 PP 3801708	3 x 2 x 22 AWG	7.0	25.7	62

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UNITRONIC® ST 2919 FPE



Application range

- Designed for use as Data Highway (DH) RS 232, RS 422, and RS 485 interface
- Suitable for static laying in dry and damp condition

Product features

- Low capacitance
- 100% screen coverage, offers optimum protection against external interference at medium and high frequencies
- Flexible for use in environment where space is a constraint
- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Multi-wire strands of tinned copper wires
- Foam PE core insulationCores twisted together

- Overall screening of aluminium laminated plastic foil

- Tinned copper drain wire
- PVC sheath
- Colour: chrome grey, RAL 7005

Core insulation colour:

- Pair 1: wh/bu stripe + bu/wh stripe
 - Pair 2: wh/og stripe + og/wh stripe
 - Pair 3: wh/gn stripe + gn/wh stripe
 - Pair 4: wh/bu stripe + bu/wh stripe
 - Pair 5: wh/gy stripe + gy/wh stripe
 - Pair 6: rd/bu stripe + bu/wh stripe
 - Pair 7: rd/og stripe + og/rd stripe
 - Pair 8: rd/gn stripe + gn/rd stripe
 - Pair 9: rd/bu stripe + bu/rd stripe
 - Pair 10: rd/gy stripe + gy/rd stripe
 - Pair 11: bk/bu stripe + bu/bk stripe
 - Pair 12: bk/og stripe + og/bk stripe
- Single conductor: grey



Info

- UL Style 2919
- Low capacitance
- UL-approved

Technical data

	Classification ETIM 5.0 Class-Description: Data cable ETIM 5.0 Class-ID: EC000830
	Mutual capacitance C/C : approx. 42 pF/m C/S : approx. 72 pF/m
	Peak operating voltage 30 V (not for power applications)
	Inductivity approx. 0.7 mH/km
	Minimum bending radius 10 x cable diameter
	Characteristics impedance 100-120 Ohm
	Temperature range -30°C to +80°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® ST 2919 PE 3800950	2 x 2 x 24 AWG	6.3	10.5	46
3804943	3 x 2 x 24 AWG	6.7	14.7	42
3800951	4 x 2 x 24 AWG	7.1	19.0	55
3804946	6 x 2 x 24 AWG	8.1	27.3	75
3804947	12 x 2 x 24 AWG + 1 x 24 AWG	10.6	54.6	122

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ST 21088 Li2Y(ST)CH LSHF



Info

- Low smoke halogen free

Application range

- Internal wiring for audio, control signal and instrument measurement and RS-485
- For static laying in dry and damp environment
- Where in any case of fire, minimum formation of toxic gas is formed as protection of human life is vital

Product features

- 100% screen coverage, offers optimum protection against external interference at medium and high frequencies
- Low smoke halogen free outer sheath
- Flame retardant in acc. to IEC 60332-1-2

Norm references / Approvals

- Based on UL AWM Style 21088

Product Make-up

- Strands tinned copper wires
- HDPE core insulation
- Cores twisted together
- Aluminium foil screening
- Tinned copper drain wire
- Tinned copper braiding
- LSHF outer sheath
- Colour: pebble grey, RAL 7032

Technical data



Classification

ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000830



Pair 1 : wh/bu x bu/wh
Pair 2 : wh/og x og/wh



C/C : nom. 42 pF/m (1kHz)
C/S : nom. 76 pF/m (1kHz)



30 V max.



nom. 0.65 mH/km



10 x cable diameter



Nom. 120 Ohm



-30°C to +80°C



Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
ST 21088 Li2Y(ST)CH LSHF				
3802000	1 x 2 x 24 AWG	5.9	21.3	51
3802001	2 x 2 x 24 AWG	8.8	32.9	85

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ST 21305 Li2Y(ST)H LSHF



Info

- Low smoke halogen free

Norm references / Approvals

- Based on UL AWM Style 21305

Product Make-up

- Stranded tinned copper wires
- PE core insulation
- Cores twisted together
- Aluminium foil screening
- Tinned copper drain wire
- LSHF outer sheath
- Colour: pebble grey, RAL 7032

Technical data



Classification

ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000830



black / natural



C/C : nom. 79 pF/m (1kHz)
C/S : nom. 154 pF/m (1kHz)



300V (not for power applications)



nom. 0.65 mH/km



10 x cable diameter



100 Ohm



-30°C to +60°C



Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
ST 21305 Li2Y(ST)H LSHF				
3803115	1 x 2 x 22 AWG	4.5	10.3	29
3803116	1 x 2 x 20 AWG	5.2	16.2	39
3803117	1 x 2 x 18 AWG	5.7	20.7	46
3803118	1 x 2 x 16 AWG	6.7	34.5	68

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
ST 21305 Li2Y(ST)H LSHF				
3803115	1 x 2 x 22 AWG	4.5	10.3	29
3803116	1 x 2 x 20 AWG	5.2	16.2	39
3803117	1 x 2 x 18 AWG	5.7	20.7	46
3803118	1 x 2 x 16 AWG	6.7	34.5	68

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Li9Y(ST)Y

LAPP KABEL Li9Y(ST)Y



Application range

- Suitable connection for audio, control and instrumentation measurements in environments immune to noise
- For use in dry and damp environment

Product features

- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Stranded tinned annealed copper wires
- PP core insulation
- Overall screen of Al/My tape + stranded tinned copper drain wires
- PVC outer sheath, pebble grey

Info

- Shielding
- 100 Ohm

Technical data

Classification

ETIM 5.0 Class-Description: Data cable

ETIM 5.0 Class-ID: EC000830

Core identification code

Pair #1: wh/bu	Pair #2: wh/og
Pair #3: wh/gn	Pair #4: wh/bn
Pair #5: wh/gy	Pair #6: rd/bu
Pair #7: rd/og	Pair #8: rd/gn
Pair #9: rd/bn	Pair #10: rd/gy
Pair #11: bk/bu	Pair #12: bk/og
Pair #13: bk/gn	Pair #14: bk/bn
Pair #15: bk/gy	Pair #16: ye/bu
Pair #17: ye/og	Pair #18: ye/gn
Pair #19: ye/bn	Pair #20: ye/gy
Pair #21: vt/bu	Pair #22: vt/og
Pair #23: vt/gn	Pair #24: vt/bn
Pair #25: vt/gy	

Mutual capacitance

nom. 130 pF/m, at 1 kHz

Characteristics impedance

100 Ohm

Temperature range

-10°C to +80°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
Li9Y(ST)Y				
3802781	1 x 2 x 24 AWG/7	4.2	6.3	21
3802782	2 x 2 x 24 AWG/7	5.4	10.6	33
3802783	3 x 2 x 24 AWG/7	6.0	14.8	40
3802784	4 x 2 x 24 AWG/7	6.6	19.0	47
3802785	6 x 2 x 24 AWG/7	7.6	27.5	62
3802786	8 x 2 x 24 AWG/7	8.5	35.9	79
3802787	10 x 2 x 24 AWG/7	9.2	44.4	94
3802788	12 x 2 x 24 AWG/7	9.9	52.8	108
3802789	16 x 2 x 24 AWG/7	11.1	69.8	139
3802790	25 x 2 x 24 AWG/7	13.4	107.8	199

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J-2Y(ST)H-TP

LAPP KABEL J-2Y(ST)H-TP LEVEL 4 SHIELDED



Application range

- Data cable for digital communication in a LONWORKS® networks and building automation systems
- Also suitable for use in distributed control network in factory and process automation systems
- For indoor installation
- LONWORKS® is a trademark of ECHELON

Product features

- Offers optimum protection against external interferences
- Low smoke halogen free in acc. to IEC 61034 and IEC 60754-2
- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Solid bare annealed copper wires
- PE core insulation
- Cores twisted together
- Aluminium laminated polyester foil screen + solid tinned annealed copper drain wire
- LSHF outer sheath, white

Info

- LONWORKS®
- 100 Ohm

Technical data

Classification

ETIM 5.0 Class-Description: Data cable

ETIM 5.0 Class-ID: EC000830

Core identification code

Pair 1 : bu + wh/bu
Pair 2 : og + wh/og

Mutual capacitance

max. 17 pF/ft (core-core)

Peak operating voltage

300 V (not for power applications)

Minimum bending radius

5 x cable diameter (static)

Characteristics impedance

100 ± 15 Ohm (1MHz)

Temperature range

-20°C to +75°C

Article number	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
J-2Y(ST)H-TP				
3802596	1 x 2 x 22 AWG/1	4.6	8.5	25
3802597	2 x 2 x 22 AWG/1	6.5	15.0	39

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COAXIAL RG SERIES RG 59/U, RG 6/90, RU 11/U



Info

- Low attenuation loss
- 75 Ohm
- TÜV SÜD PSB type approved for 3801313



Benefits

- Broadband for low loss attenuation of high frequency signal

Application range

- CATV video transmission and data network
- Optimizing frequency up to 1000 MHz
- Suitable for use in dry and damp areas

Product features

- Double screen, offer good screening against external interference
- UV-resistant
- Flame retardant in acc. to IEC 60332-1-2

Norm references / Approvals

- TÜV SÜD PSB type approved for 3801313

Product Make-up

- Bare copper plated steel solid conductor
- Foam PE core insulation
- Aluminium foil bonded, 100% coverage
- Aluminium wire braiding
- PVC outer sheath, black

Technical data



Classification

ETIM 5.0 Class-Description: Coaxial cable

ETIM 5.0 Class-ID: EC000019



Mutual capacitance

51 pF/m



Minimum bending radius

Fixed installation: 10 x cable diameter

Characteristics impedance

$75 \pm 3 \text{ Ohm}$ (3800768 & 3800720)

$75 \pm 2 \text{ Ohm}$ (3801313)



Temperature range

Fixed installation: -30°C to $+80^\circ\text{C}$

Article number	Article designation	Conductor cross-section	Outer diameter (mm)	Working voltage in V	Min. braiding coverage	Copper index (kg/km)	Weight (kg/km)
COAXIAL RG SERIES RG 59/U, RG 6/90, RU 11/U							
3800768	RG 59/U	1 x 20 AWG	6.0	350	68%	0.3	33
3801313	RG 6/U	1 x 18 AWG	6.8	350	90%	0.5	43
3800720	RG 11/U	1 x 14 AWG	10.2	600	60%	1.2	100

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COAXIAL RG 59/U



Info

- CCTV / CATV
- 75 Ohm, solid copper



Application range

- CCTV and CATV video transmission and data networking
- RF/Data communication, 75 Ohm
- Indoor and outdoor (non burial) application

Product features

- Offers good screening against external interference
- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Solid bare copper conductor
- PE core insulation
- Bare copper wire braiding, 95% coverage
- PVC outer sheath, black

Technical data



Classification

ETIM 5.0 Class-Description: Coaxial cable

ETIM 5.0 Class-ID: EC000019



Mutual capacitance

$67.2 \text{ pF/m}, \text{C-S}$



Peak operating voltage

300Vrms max.



Conductor resistance

max. 66.9 Ohm/km

Attenuation loss

11.0 dB/100m at 100 MHz ,

40.0 dB/100m at 1000 MHz



Minimum bending radius

$10 \times$ cable diameter

Characteristics impedance

$75 \pm 3 \text{ Ohm}$



Temperature range

-30°C to $+70^\circ\text{C}$

Article number	Conductor cross-section	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
COAXIAL RG 59/U				
3803951	1 x 23 AWG	6.1	23.8	49

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COAXIAL RG 6/U

LAPP KABEL COAXIAL RG6/U SOLID



Application range

- CCTV and CATV video transmission and data networking
- RF/Data communication, 75 Ohm
- Indoor and outdoor (non burial) application

Product features

- Offers good screening against external interference
- Flame retardant in acc. to IEC 60332-1-2

Product Make-up

- Solid bare copper conductor
- Foam PE core insulation
- Bare copper wire braiding, approx. 95% coverage
- PVC outer sheath, black



Info

- CCTV / CATV
- 75 Ohm, solid copper

Technical data



Classification

 ETIM 5.0 Class-Description: Coaxial cable
ETIM 5.0 Class-ID: EC000019


Mutual capacitance

 nom. 54.2 pF/m, C-S
300Vrms max.


Peak operating voltage

300Vrms max.



Conductor resistance

 max. 22 Ohm/km
Attenuation loss
12.0 dB/100m at 300 MHz,
21.0 dB/100m at 1000 MHz


Minimum bending radius

10 x cable diameter

Characteristics impedance
75 ± 3 Ohm


Temperature range

-30°C to +70°C

Article number	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
COAXIAL RG 6/U 3804606	6.9	26.7	56

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Data Cables • Bus systems

UNITRONIC® BUS DeviceNet™ THICK + THIN

LAPP KABEL STUTTGART UNITRONIC® BUS DeviceNet THIN

LAPP KABEL STUTTGART UNITRONIC® BUS DeviceNet THICK

Application range

- Stationary application
- DeviceNet™ connects industrial devices e.g. limit switches, photoelectric switches, valve islands, motor starters, drivers, PLCs, etc
- DeviceNet™ Bus system (Rockwell Automation)

Product Make-up

- Stranded tinned copper conductor
- PE core insulation
- PVC sheath
- Colour: chrome grey, RAL 7005

Product features

- Based on proven CAN (Controller Area Network) technology
- Permissible cable lengths vary with the data rate and the cable thickness
- THICK cable total trunk length 125 kbit/s = 100 m
- THIN cable total trunk length 125 kbit/s = 6 m 250kbit/s = 6 m 500kbit/s = 6 m



Info

- DeviceNet™

Technical data



Classification

 ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000830


Core identification code

 Data pair: light blue + white
Power supply: red + black


Mutual capacitance

(800 Hz) max. 40 nF/km



Peak operating voltage

300 V (not for power applications)



Conductor resistance

 Thick (loop): max. 45 ohm/km
Thin (loop): max. 180 ohm/km


Minimum bending radius

 Fixed installation: 10 x outer diameter
Characteristics impedance at 1 MHz: 120 ± 10 Ohm


Temperature range

Fixed installation: -20°C to +70°C

Article number	Article designation	Number of pairs and AWG per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® BUS DeviceNet™ THICK + THIN					
3801234	DeviceNet THICK	1x2x18AWG + 1x2x15AWG	12.0	80.9	159
3801235	DeviceNet THIN	1x2x24AWG + 1x2x22AWG	7.2	30.5	67

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UNITRONIC® BUS L2/FIP FC

i Info

- Fast Connect (FC) cable design
- PROFIBUS

Application range

- For stationary installation for Bus Systems
- 150 Ohm impedance
- Dry and damp indoors

Product features

- This bus cable can be used for PROFIBUSDP as well as for PROFIBUS-FMS and FIP
- Based on the bit rates listed, in accordance with PNO specifications the following maximum cable lengths for a bus segment apply (cable type A, PROFIBUS-DP): 93.75 kbit/s = 1200 m 1875 kbit/s = 1000 m 500 kbit/s = 400 m 1.5 Mbit/s = 200 m 12.0Mbit/s = 100 m
- Flame retardant in acc. to IEC 60332-1-2

Norm references / Approvals

- In accordance with DIN 19245 and EN 50170, e.g. for SIEMENS SIMATIC NET, also suitable for FIP (Factory Instrumentation Protocol)

Product Make-up

- Single wire of bare copper
- Foam PE core insulation
- Cores twisted together
- Plastic foil wrapping
- Aluminium-mylar tape screen + tinned copper wire braiding
- PVC outer sheath, violet RAL 4001

Technical data



Classification

ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000830



Core identification code

red, green



Mutual capacitance

(800 Hz): max. 30 nF/km



Peak operating voltage

250V (not for power applications)



Conductor resistance

(loop): max. 115 Ohm/km



Minimum bending radius

Fixed installation: 10 x cable diameter

Characteristics impedance

150 ± 15 Ohm



Temperature range

-40°C up to +80°C

LAPP KABEL STUTTGART UNITRONIC® BUS L2/FIP FC

Article number	No. of pairs and AWG size	No. of cores and mm ² per conductor	Dimension and cross section in mm ²	Outer diameter (mm)	Colour	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® BUS L2/FIP FC							
2170320	1 x 2 x 0.64	1 x 2 x 0.64	1 x 2 x 0.64	8.0	violet	26.0	84

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UNITRONIC® BUS PA SWA

i Info

- Process Automation (PA)
- PROFIBUS

Benefit

- PROFIBUS-PA with Steel Wire Armouring

Application range

- Designed for the system-defined transmission rates of 1.5 Mbs, and 31.25 KHz
- Suitable for direct burial and permanent installation in harsh and rugged environments
- Suitable for oil and gas, petrochemical, pharmaceutical industry
- For indoor and outdoor use

Product features

- Transmission technology for PROFIBUS-PA in acc. to IEC 61158-2 Standard
- Blue outer sheath colour for intrinsically safe system in harardous area
- Flame retardant in acc. to IEC 60332-1-2
- UV-resistant (for black outer sheath)

LAPP KABEL STUTTGART UNITRONIC® BUS PA SWA

LAPP KABEL STUTTGART UNITRONIC® BUS PA SWA

Product Make-up

- Stranded bare copper conductor
- Foam PE core insulation
- Aluminium mylar tape screen
- Tinned copper wire braiding
- Galvanized steel wire armoured
- PVC inner sheath, black or blue
- PVC outer sheath
- Colour: black, RAL 9005 or blue, RAL 5015

Technical data



Core identification code

red, green



Mutual capacitance

(800 Hz): approx. 52 nF/km



Peak operating voltage

max. 100V (not for power applications)



Conductor resistance

(loop): max. 44 Ohm/km



Minimum bending radius

10 x cable diameter

Characteristics impedance

at 31.25 kHz: 100 \pm 20 Ohm



Test voltage

1500 V



Temperature range

-30°C to +70°C

Article number	Number of pairs and cable diameter per conductor in mm ²	Outer sheath colour	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® BUS PA SWA					
3803158	1 x 2 x 1.0	black	12.8	45.0	152
3803159	1 x 2 x 1.0	blue	12.8	45.0	152

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UNITRONIC® BUS FOUNDATION™ Fieldbus



Info

- FOUNDATION™ Fieldbus cable is suitable for data communication network for industrial process control instruments

Application range

- Stationary application
- Indoor / outdoor applications
- Direct burial (Armoured version)

Product Make-up

- For RE-2X(ST)Y :
 - Stranded bare annealed copper wires
 - Cross-link polyethylene insulation
 - Cores twisted into pair
 - Al-My pair shielding + tinned annealed copper drain wire

Note: 2 - 4 pairs with additional overall shielding of Al-My + tinned copper drain wire.

 - PVC outer sheath - Flame retardant, orange
- For RE-2X(ST)YRY (SWA) :
 - Stranded bare annealed copper wires
 - Cross-link polyethylene insulation
 - Cores twisted into pair
 - Al-My pair shielding + tinned annealed copper drain wire

Note: 2 - 4 pairs with additional overall shielding of Al-My + tinned copper drain wire.

 - Tinned copper wire braiding
 - PVC outer sheath - Flame retardant, orange
- For RE-2X(ST)CYRY (SWA) :
 - Cross-link polyethylene insulation
 - Cores twisted into pair
 - Al-My pair shielding + tinned annealed copper drain wire

Note: 2 - 4 pairs with additional overall shielding of Al-My + tinned copper drain wire.

 - Tinned copper wire braiding
 - PVC bedding - Flame retardant, orange
 - Steel wire armoured (SWA)
 - PVC outer sheath - Flame retardant, orange or black

For RE-2X(ST)CY :

- Stranded bare annealed copper wires
- Cross-link polyethylene insulation
- Cores twisted into pair
- Al-My pair shielding + tinned annealed copper drain wire

Note: 2 - 4 pairs with additional overall shielding of Al-My + tinned copper drain wire.

- Tinned copper wire braiding
- PVC outer sheath - Flame retardant, orange

For RE-2X(ST)CYRY (SWA) :

- Cross-link polyethylene insulation
- Cores twisted into pair
- Al-My pair shielding + tinned annealed copper drain wire

Note: 2 - 4 pairs with additional overall shielding of Al-My + tinned copper drain wire.

- Tinned copper wire braiding
- PVC bedding - Flame retardant, orange
- Steel wire armoured (SWA)

Note: 2 - 4 pairs with additional overall shielding of Al-My + tinned copper drain wire.

Norm references / Approvals

- Unarmoured version: UL AWM Style 2464 and CMX rated

Technical data

Classification

ETIM 5.0 Class-Description: Data cable

ETIM 5.0 Class-ID: EC000830

Core identification code

see table below

(Note: for multipair cable, blue colour core has number marking)

Mutual capacitance

C/C : approx. 65 pF/m

C/S : approx. 125 pF/m

Peak operating voltage

300 V (not for power applications)

Minimum bending radius

10 x cable diameter (unarmoured)

12 x cable diameter (armoured)

Characteristics impedance

100 ± 20 Ohm at 31.25 kHz

Temperature range

-30°C to +80°C

Article number	Number of pairs and AWG per conductor	Outer diameter (mm)	Core insulation colour	Copper index (kg/km)	Weight (kg/km)
RE-2X(ST)Y					
3804881	1 x 2 x 18 AWG	7.8	BU/OG	20.5	67
3804881A	1 x 2 x 18 AWG	7.8	BU/BN	20.5	67
3804882	2 x 2 x 18 AWG	11.8	BU/OG	45.9	110
3804882A	2 x 2 x 18 AWG	11.8	BU/BN	45.9	110
3804886	1 x 2 x 16 AWG	7.8	BU/OG	32.4	99
3804886A	1 x 2 x 16 AWG	7.8	BU/BN	32.4	99
3804887	2 x 2 x 16 AWG	11.8	BU/OG	69.9	155
3804887A	2 x 2 x 16 AWG	11.8	BU/BN	69.9	155
RE-2X(ST)CY					
3804901	1 x 2 x 18 AWG	7.8	BU/OG	40.0	83
3804901A	1 x 2 x 18 AWG	7.9	BU/BN	40.0	83
3804902	2 x 2 x 18 AWG	10.8	BU/OG	70.5	125
3804902A	2 x 2 x 18 AWG	10.8	BU/BN	70.5	125
3804906	1 x 2 x 16 AWG	9.9	BU/OG	66.7	125
3804906A	1 x 2 x 16 AWG	9.9	BU/BN	66.7	125
3804907	2 x 2 x 16 AWG	13.8	BU/OG	105.2	191
3804907A	2 x 2 x 16 AWG	13.8	BU/BN	105.2	191

Article number	Number of pairs and AWG per conductor	Outer diameter(mm)	Outer sheath colour	Core insulation colour	Copper index (kg/km)	Weight (kg/km)
RE-2X(ST)YRY						
3804891	1 x 2 x 18 AWG	12.5	OG	BU/OG	20.5	291
3804891A	1 x 2 x 18 AWG	12.5	BK	BU/OG	20.5	291
3804891B	1 x 2 x 18 AWG	12.5	OG	BU/BN	20.5	291
3804891C	1 x 2 x 18 AWG	12.5	BK	BU/BN	20.5	291
3804892	2 x 2 x 18 AWG	16.3	OG	BU/OG	45.9	570
3804892A	2 x 2 x 18 AWG	16.3	BK	BU/OG	45.9	570
3804892B	2 x 2 x 18 AWG	16.3	OG	BU/BN	45.9	570
3804892C	2 x 2 x 18 AWG	16.3	BK	BU/BN	45.9	570
RE-2X(ST)CYRY						
3804911	1 x 2 x 18 AWG	12.5	OG	BU/OG	40.0	307
3804911A	1 x 2 x 18 AWG	12.5	BK	BU/OG	40.0	307
3804911B	1 x 2 x 18 AWG	12.5	OG	BU/BN	40.0	307
3804911C	1 x 2 x 18 AWG	12.5	BK	BU/BN	40.0	307
3804912	2 x 2 x 18 AWG	16.3	OG	BU/OG	70.5	585
3804912A	2 x 2 x 18 AWG	16.3	BK	BU/OG	70.5	585
3804912B	2 x 2 x 18 AWG	16.3	OG	BU/BN	70.5	585
3804912C	2 x 2 x 18 AWG	16.3	BK	BU/BN	70.5	585

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UNITRONIC® BUS FF-844 H1 C LSZH

FF-844 H1 installation cable with EMC and LSZH solution

**Info**

- Certified with FOUNDATION FIELDBUS "FF-844 H1"
- For TYPE A installation

LAPP XINGE, ERLANGEN UNITRONIC BUS FF (FUNK CABLES - INDUSTRIAL AND COMMERCIAL) FF-844 H1 TYPE A SWUVAROR

**Benefits**

- Cables meet the requirements of ISA/SP50 and the FOUNDATION™ field bus for the cable type A

Application range

- FF cables for operating temperature up to +90°C
- Fixed Installation
- Indoor / Outdoor
- Direct burial (Armoured version)
- Tray application (Steel Wire Braid versions)

Product features

- Flammability : According to IEC 60332-1
- LSZH Property
- Oxygen Index(Min.) : >29% as per ASTM D 2863
- Temp. Index (Min.) : >250 Deg C as per ASTM D 2863
- HCL gas emission (Max.): AS PER IEC 754-2; Smoke Density : Min. Visibility 80% as per ASTM D 2843

Norm references / Approvals

- IEC 61158-2
- FF 844
- BS EN 50288-7

Product Make-up

- Conductor : ATC of Class II
- Core Insulation : XLPE
- Individual and Overall Screening : AL-MYLAR tape
- Inner Sheath : LSZH, colour orange
- Mechanical Protection : SSA-Steel strip armour / SWA-Steel wire armour / SY-Steel Braid
- Outer Sheath : LSZH / LSZH with UV and AR, orange

Technical data**Core identification code**

Blue and orange cores with numerical printing for pair identification

**Peak operating voltage**

300 V

**Conductor resistance**

23.5 Ohm/Km

**Minimum bending radius**

Unarmoured = 12 X OD

Armoured = 20 X OD

**Temperature range**

-30°C to +90°C

Article number	Number of pairs and AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® BUS FF LSZH - CHXOR				
382200013	1 X 2 X 18	9.0	15.4	123
382200037	2 X 2 X 18	15.0	30.7	266
382200061	3 X 2 X 18	15.9	46.1	326
382200085	4 X 2 X 18	17.6	61.4	401
382200229	10 X 2 X 18	27.9	153.5	940
382200277	12 X 2 X 18	28.8	184.2	1,054
UNITRONIC® BUS FF LSZH - CHXSHXOR				
38220021	1 X 2 X 18	13.0	15.4	259
38220045	2 X 2 X 18	19.4	30.7	503
38220069	3 X 2 X 18	20.5	46.1	584
38220093	4 X 2 X 18	22.0	61.4	675
382200237	10 X 2 X 18	32.9	153.5	1,406
382200285	12 X 2 X 18	34.0	184.2	1,559
UNITRONIC® BUS FF LSZH SSA - CHXSSAHXOR				
38220062	3 X 2 X 18	20.9	46.1	822
38220086	4 X 2 X 18	22.4	61.4	932
382200230	10 X 2 X 18	33.3	153.5	1,820
382200278	12 X 2 X 18	34.6	184.2	2,001
UNITRONIC® BUS FF LSZH SWA - CHXSWAHXOR				
38220014	1 X 2 X 18	13.6	15.4	374
38220038	2 X 2 X 18	20.0	30.7	689
UNITRONIC® BUS FF LSZH UVAR - CHXUVAROR				
38220015	1 X 2 X 18	9.0	15.4	123
38220039	2 X 2 X 18	15.0	30.7	266
38220087	4 X 2 X 18	17.6	46.1	401
382200231	10 X 2 X 18	27.9	153.5	940
382200279	12 X 2 X 18	28.8	184.2	1,054

Article number	Number of pairs and AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® BUS FF LSZH UVAR - CHXSHXUVAROR				
382200022	1 X 2 X 18	13.0	15.4	259
382200046	2 X 2 X 18	19.4	30.7	503
382200070	3 X 2 X 18	20.5	46.1	584
382200238	10 X 2 X 18	32.9	153.5	1,406
382200286	12 X 2 X 18	34.0	184.2	1,559
UNITRONIC® BUS FF LSZH SSA UVAR - CHXSSAHXUVAROR				
382200064	3 X 2 X 18	20.9	46.1	822
382200088	4 X 2 X 18	22.4	61.4	932
382200112	5 X 2 X 18	24.6	76.8	1,111
382200136	6 X 2 X 18	26.6	92.1	1,259
382200160	7 X 2 X 18	26.6	107.5	1,305
382200184	8 X 2 X 18	29.7	122.8	1,541
382200208	9 X 2 X 18	32.2	138.2	1,719
382200232	10 X 2 X 18	33.3	153.5	1,820
382200256	11 X 2 X 18	33.3	168.9	1,865
382200280	12 X 2 X 18	34.6	184.2	2,001
UNITRONIC® BUS FF LSZH SWA UVAR - CHXSWAHXUVAROR				
38220016	1 X 2 X 18	13.6	15.4	374
38220040	2 X 2 X 18	20.0	30.7	689

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UNITRONIC® BUS FF-844 H1 C PVC

FF-844 H1 installation cable with EMC and FR-LSH solution

**Benefits**

- Cables meet the requirements of ISA/SP50 and the FOUNDATION™ field bus for the cable type A

Application range

- FF cables for operating temperature up to +90°C
- Fixed Installation
- Indoor / Outdoor
- Direct burial (Armoured version)
- Tray application (Steel Wire Braid versions)

Product features

- Flammability : According to IEC 60332-1
- FRLS Property (only For FRLS Outer Sheath)
- Oxygen Index(Min.) : >29% as per ASTM D 2863
- Temp. Index (Min.) : >250 Deg C as per ASTM D 2863
- HCL gas emission (Max.): 20% By weight; Smoke Density : Min. Visibility 40% as per ASTM D 2843

Norm references / Approvals

- IEC 61158-2
- FF 844
- BS EN 50288-7

Product Make-up

- Conductor : ATC of Class II
- Core Insulation : XLPE
- Individual and Overall Screening : AL-MYLAR tape
- Inner Sheath : Special PVC, flameretardant low smoke low halogen, orange
- Mechanical Protection : SSA -Steel strip armour / SWA-Steel wire armour / SY-Steel Braid
- Outer Sheath : Special PVC, flameretardant low smoke low halogen with UV and AR, orange

Info

- Certified with FOUNDATION FIELDBUS "FF- 844 H1"
- For TYPE A installation

Technical data

	Core identification code Blue and orange cores with numerical printing for pair identification
	Peak operating voltage 300 V
	Conductor resistance 23.5 Ohm/Km
	Minimum bending radius Unarmoured = 10 X OD Armoured = 18 X OD
	Temperature range -30°C to +90°C

Article number	Number of pairs and AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® BUS FF PVC - CYC3OR				
382200001	1 X 2 X 18	9.0	15.4	123
382200025	2 X 2 X 18	15.0	30.7	266
382200217	10 X 2 X 18	27.9	153.5	940
382200265	12 X 2 X 18	28.8	184.2	1,054
UNITRONIC® BUS FF PVC S - CYC3SYC3OR				
382200009	1 X 2 X 18	13.0	15.4	259
382200033	2 X 2 X 18	19.4	30.7	503
382200225	10 X 2 X 18	32.9	153.5	1,406
382200273	12 X 2 X 18	34.0	184.2	1,559
UNITRONIC® BUS FF PVC SSA - CYC3SSAYC3OR				
382200218	10 X 2 X 18	33.3	153.5	1,820
382200266	12 X 2 X 18	34.6	184.2	2,001
UNITRONIC® BUS FF PVC SWA - CYC3SWAYC3OR				
382200002	1 X 2 X 18	13.6	15.4	374
382200026	2 X 2 X 18	20.0	30.7	689
UNITRONIC® BUS FF PVC UVAR - CYC3UVAROR				
382200003	1 X 2 X 18	9.0	15.4	123
382200027	2 X 2 X 18	15.0	30.7	266
382200267	10 X 2 X 18	27.9	153.5	940
382200038	12 X 2 X 18	28.8	184.2	1,054

Article number	Number of pairs and AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® BUS FF PVC S UVAR - CYC3SYC3UVAROR				
382200010	1 X 2 X 18	13.0	15.4	259
382200034	2 X 2 X 18	19.4	30.7	503
382200058	3 X 2 X 18	20.5	46.1	584
382200082	4 X 2 X 18	22.0	61.4	675
382200106	5 X 2 X 18	24.2	76.8	821
382200130	6 X 2 X 18	26.2	92.1	937
382200154	7 X 2 X 18	26.2	107.5	982
382200178	8 X 2 X 18	29.3	122.8	1186
382200202	9 X 2 X 18	31.8	138.2	1318
382200226	10 X 2 X 18	32.9	153.5	1406
382200250	11 X 2 X 18	32.9	168.9	1451
382200274	12 X 2 X 18	34.0	184.2	1559
UNITRONIC® BUS FF PVC SSA UVAR - CYC3SSAYC3UVAROR				
382200052	3 X 2 X 18	20.9	46.1	822
382200076	4 X 2 X 18	22.4	61.4	932
382200100	5 X 2 X 18	24.6	76.8	1111
382200124	6 X 2 X 18	26.6	92.1	1259
382200148	7 X 2 X 18	26.6	107.5	1305
382200172	8 X 2 X 18	29.7	122.8	1541
382200196	9 X 2 X 18	32.2	138.2	1719
382200220	10 X 2 X 18	33.3	153.5	1820
382200244	11 X 2 X 18	33.3	168.9	1865
382200268	12 X 2 X 18	34.6	184.2	2001
UNITRONIC® BUS FF PVC SWA UVAR - CYC3SWAYC3UVAROR				
382200004	1 X 2 X 18	13.6	15.4	374
382200028	2 X 2 X 18	20.0	30.7	689

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UNITRONIC® BUS FF-844 H1 LSZH

FF-844 H1 installation cable with LSZH solution



Info

- Certified with FOUNDATION FIELDBUS "FF-844 H1"
- For TYPE A installation

Benefits

- Cables meet the requirements of ISA/SP50 and the FOUNDATION™ field bus for the cable type A

Application range

- FF cables for operating temperature up to +90°C
- Fixed Installation
- Indoor / Outdoor
- Direct burial (Armoured version)
- Tray application (Steel Wire Braid versions)

Product features

- Flammability : According to IEC 60332-1
- LSZH Property
- Oxygen Index(Min.) : >29% as per ASTM D 2863
- Temp. Index (Min.) : >250 Deg C as per ASTM D 2863
- HCL gas emission (Max.): AS PER IEC 754-2; Smoke Density : Min. Visibility 80% as per ASTM D 2843

Norm references / Approvals

- IEC 61158-2
- FF 844
- BS EN 50288-7

Product Make-up

- Conductor : ATC of Class II
- Core Insulation : XLPE
- Individual and Overall Screening : AL-MYLAR tape
- Inner Sheath : LSZH, colour orange
- Mechanical Protection : SSA -Steel strip armour / SWA-Steel wire armour / SY-Steel Braid
- Outer Sheath : LSZH / LSZH with UV and AR, orange

Technical data



Core identification code

Blue and orange cores with numerical printing for pair identification



Peak operating voltage

300 V



Conductor resistance

23.5 Ohm/Km



Minimum bending radius

Unarmoured = 12 X OD

Armoured = 20 X OD



Characteristic impedance

100 ± 20 Ω At 31.25 kHz



Temperature range

-30°C to +90°C

Article number	Number of pairs and AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® BUS FF LSZH - HXOR				
382200017	1 X 2 X 18	8.6	15.4	90
382200041	2 X 2 X 18	14.7	30.7	220
382200233	10 X 2 X 18	27.4	153.5	785
382200281	12 X 2 X 18	28.3	184.2	893
382200349	20 X 2 X 18	35.8	307.1	1,418
382200381	24 X 2 X 18	39.9	368.5	1,685
382200389	25 X 2 X 18	39.9	383.8	1,733
UNITRONIC® BUS FF LSZH S - HXSHXOR				
382200023	1 X 2 X 18	12.6	15.4	222
382200047	2 X 2 X 18	18.9	30.7	443
382200239	10 X 2 X 18	32.4	153.5	1,250
382200287	12 X 2 X 18	33.3	184.2	1,371
UNITRONIC® BUS FF LSZH SSA - HXSWAHXOR				
382200234	10 X 2 X 18	32.8	153.5	1,648
382200282	12 X 2 X 18	33.7	184.2	1,783
382200350	20 X 2 X 18	41.6	307.1	2,579
382200382	24 X 2 X 18	46.3	368.5	3,050
382200390	25 X 2 X 18	46.3	383.8	3,099
UNITRONIC® BUS FF LSZH SWA - HXSWAHXOR				
382200018	1 X 2 X 18	13.2	15.4	330
382200042	2 X 2 X 18	19.7	30.7	635
UNITRONIC® BUS FF LSZH UVAR - HXUVAROR				
382200019	1 X 2 X 18	8.6	15.4	90
382200043	2 X 2 X 18	14.7	30.7	220
382200235	10 X 2 X 18	27.4	153.5	785
382200283	12 X 2 X 18	28.3	184.2	893
382200351	20 X 2 X 18	35.8	307.1	1,418
382200383	24 X 2 X 18	39.9	368.5	1,685
382200391	25 X 2 X 18	39.9	383.8	1,733

Article number	Number of pairs and AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® BUS FF LSZH S UVAR- HXSHXUVAROR				
382200024	1 X 2 X 18	12.6	15.4	222
382200048	2 X 2 X 18	18.9	30.7	443
382200240	10 X 2 X 18	32.4	153.5	1,250
382200288	12 X 2 X 18	33.3	184.2	1,371
UNITRONIC® BUS FF LSZH SSA UVAR - HXSSAHXUVAROR				
382200068	3 X 2 X 18	20.7	46.1	768
382200092	4 X 2 X 18	22.2	61.4	874
382200116	5 X 2 X 18	24.2	76.8	1,012
382200140	6 X 2 X 18	26.2	92.1	1,148
382200236	10 X 2 X 18	32.8	153.5	1,648
382200284	12 X 2 X 18	33.7	184.2	1,783
382200352	20 X 2 X 18	41.6	307.1	2,579
382200384	24 X 2 X 18	46.3	368.5	3,050
382200392	25 X 2 X 18	46.3	383.8	3,099
UNITRONIC® BUS FF LSZH SWA UVAR - HXSWAHXUVAROR				
382200020	1 X 2 X 18	13.2	15.4	330
382200044	2 X 2 X 18	19.7	30.7	635

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UNITRONIC® BUS FF-844 H1 PVC

FF-844 H1 installation cable with FR-LSH solution

**Info**

- Certified with FOUNDATION FIELDBUS "FF- 844 H1"
- For TYPE A installation

Benefits

- Cables meet the requirements of ISA/SP50 and the FOUNDATION™ field bus for the cable type A

Application range

- FF cables for operating temperature up to +90°C
- Fixed Installation
- Indoor / Outdoor
- Direct burial (Armoured version)
- Tray application (Steel Wire Braid versions)

Product features

- Flammability : According to IEC 60332-1
- FRLS Property (only For FRLS Outer Sheath)
- Oxygen Index(Min.) : >29% as per ASTM D 2863
- Temp. Index (Min.) : >250 Deg C as per ASTM D 2863
- HCL gas emission (Max.): 20% By weight; Smoke Density : Min. Visibility 40% as per ASTM D 2843

Norm references / Approvals

- IEC 61158-2
- FF 844
- BS EN 50288-7

Product Make-up

- Conductor : ATC of Class II
- Core Insulation : XLPE
- Individual and Overall Screening : AL-MYLAR tape
- Inner Sheath : Special PVC, flameretardant low smoke low halogen, orange
- Mechanical Protection : SSA-Steel strip armour / SWA-Steel wire armour / SY-Steel Braid
- Outer Sheath : Special PVC, flame retardant low smoke low halogen with UV and AR, orange

Technical data**Core identification code**

Blue and orange cores with numerical printing for pair identification

**Peak operating voltage**

300 V

**Conductor resistance**

23.5 Ohm/Km

**Minimum bending radius**Unarmoured = 10 X OD
Armoured = 18 X OD**Characteristic impedance**

100 ± 20 Ω At 31.25 kHz

**Temperature range**

-30°C to +90°C

Article number	Number of pairs and AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® BUS FF PVC - YC3OR				
382200005	1 X 2 X 18	8.6	15.4	90
382200029	2 X 2 X 18	14.7	30.7	220
382200221	10 X 2 X 18	27.4	153.5	785
382200345	20 X 2 X 18	35.8	307.1	1,418
382200377	24 X 2 X 18	39.9	368.5	1,685
UNITRONIC® BUS FF PVC S - YC3SYC3OR				
382200111	1 X 2 X 18	12.6	15.4	222
382200035	2 X 2 X 18	18.9	30.7	443
382200227	10 X 2 X 18	32.4	153.5	1,250
UNITRONIC® BUS FF PVC SSA - YC3SSAYC3OR				
382200222	10 X 2 X 18	32.8	153.5	1,648
382200346	20 X 2 X 18	41.6	307.1	2,579
382200378	24 X 2 X 18	46.3	368.5	3,050
UNITRONIC® BUS FF PVC SWA - YC3SWAYC3OR				
382200006	1 X 2 X 18	13.2	15.4	330
382200030	2 X 2 X 18	19.7	30.7	635
UNITRONIC® BUS FF PVC UVAR - YC3UVAROR				
382200007	1 X 2 X 18	8.6	15.4	90
382200031	2 X 2 X 18	14.7	30.7	220
382200223	10 X 2 X 18	27.4	153.5	785
382200347	20 X 2 X 18	35.8	307.1	1,418
382200379	24 X 2 X 18	39.9	368.5	1,685
UNITRONIC® BUS FF PVC S UVAR - YC3SYC3UVAROR				
382200012	1 X 2 X 18	12.6	15.4	222
382200036	2 X 2 X 18	18.9	30.7	443
382200228	10 X 2 X 18	32.4	153.5	1,250

Article number	Number of pairs and AWG size	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® BUS FF PVC SSA UVAR - YC3SSAYC3UVAROR				
382200056	3 X 2 X 18	20.7	46.1	768
382200080	4 X 2 X 18	22.2	61.4	874
382200104	5 X 2 X 18	24.2	76.8	1,012
382200128	6 X 2 X 18	26.2	92.1	1,148
382200152	7 X 2 X 18	26.2	107.5	1,197
382200176	8 X 2 X 18	29.2	122.9	1,381
382200200	9 X 2 X 18	31.6	138.2	1,549
382200224	10 X 2 X 18	32.8	153.5	1,648
382200248	11 X 2 X 18	32.8	168.9	1,697
382200272	12 X 2 X 18	33.7	184.3	1,783
382200316	16 X 2 X 18	37.5	245.7	2,177
382200348	20 X 2 X 18	41.6	307.1	2,579
382200356	21 X 2 X 18	41.6	322.4	2,627
382200364	22 X 2 X 18	44.0	337.8	2,814
382200372	23 X 2 X 18	44.0	353.1	2,863
382200380	24 X 2 X 18	46.3	368.5	3,050
382200388	25 X 2 X 18	46.3	383.8	3,099
UNITRONIC® BUS FF PVC SWA UVAR - YC3SWAYC3UVAROR				
382200008	1 X 2 X 18	13.2	15.4	330
382200032	2 X 2 X 18	19.7	30.7	635

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M12 Open-Ended Cordsets



Info

- Other types are available on request



Benefits

- Cost-saving due to quick and easy installation
- Space-saving due to compact dimensions
- Fast and easy error tracking

Application range

- For medium mechanical stress in dry conditions

Norm references / Approvals

- In acc. to EC 61076-2-101
- UL-listed cable, E-File Number: E63634
- Flame-retardant acc. to UL 1581 FT-1

Product Make-up

- Wire cross-section :22AWG
Colour-code:
- 3-pin: bn (1), bu (3), bk (4)
- 4-pin: bn (1), wh (2), bu (3), bk (4)
- 5-pin: bn (1), wh (2), bu (3), bk (4), gn/ye (5)
- Outer sheath: PVC, black

Technical data



Classification

ETIM 5.0 Class-ID: EC001855

ETIM 5.0 Class-Description:

Sensor actuator patch cord



Material

Contacts: Phosphor bronze, gold-plated

Contact carriers: TPU+GF

Coupling nut/screw: Nickel plated brass

Seal: FKM



Minimum bending radius

Fixed installation: 6 x outer diameter



Protection rating

IP 65/IP 67



Ambient temperature (operation)

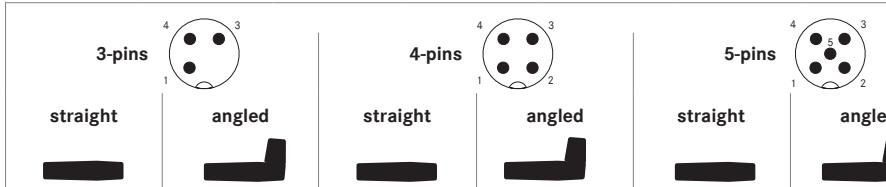
-25°C to +90°C

Coding

A-standard

Rated current (A)

4A



Product	Length	Article number					
		Plug, unshielded	8100012	8100274	8100052	8100322	8100122
Socket, unshielded	1.0m	8100002	8100262	8100042	8100310	8100112	8100418
	2.0m	8100003	8100263	8100043	8100311	8100113	8100419
	5.0m	8100005	8100265	8100045	8100313	8100115	8100421
	10.0m	8100171	8100266	8100179	8100314	8100193	8100422
Plug, shielded	1.0m	8100032	8100298	8100072	8100346	8100142	8100454
	2.0m	8100033	8100299	8100073	8100347	8100143	8100455
	5.0m	8100035	8100301	8100075	8100349	8100145	8100457
	10.0m	8100177	8100302	8100185	8100350	8100199	8100458
Socket, shielded	1.0m	8100022	8100286	8100062	8100334	8100132	8100442
	2.0m	8100023	8100287	8100063	8100335	8100133	8100443
	5.0m	8100025	8100289	8100065	8100337	8100135	8100445
	10.0m	8100175	8100290	8100183	8100338	8100197	8100446

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UNITRONIC® LiYY & UNITRONIC® LiY(ST)CY

Flexible cable for sensor/actuator cabling

**Benefits**

- Easy Installation (through cable trays, tubes and cabinets)
- Easy Stripping and Processing
- Space-saving due to compact dimensions

Application range

- Automation technology
- Sensor/actuator cabling

Norm references / Approvals

- UL AWM Style 2464

Product features

- Flame Retardant according to VW-1 and FT1

Product Make-up

- Fine wire strands of bare copper accordance to UL758
- Core insulation : SR-PVC
- Colour-code :
 - 3 core : Brown, Blue , Black,
 - 4 core : Brown, White, Blue , Black
 - 5 core : Brown, White, Blue , Black, Green/Yellow
- Shielding : Aluminium Mylar Foil Tape & Tinned Copper Braid Shielded (Only UNITRONIC® LiY(ST)CY)
- Outer Sheath : PVC
- Sheath Colour : Black (RAL 9005)

**Info**

- UL Recognized

Technical data

Peak operating voltage
300 V (not for power applications)



Conductor stranding
Fine wire strands of bare copper accordance to UL758



Temperature range
Fixed installation : -40°C to 80°C

Article number	Article designation	Dimensions (AWG)	Outer diameter (mm)	Core/Outer Sheath Material
UNITRONIC® LiYY				
85173223	LAPP KABEL LiYY TW 3x22AWG	3 x 22AWG	4.7	SR-PVC/PVC
85173224	LAPP KABEL LiYY TW 4x22AWG	4 x 22AWG	5.15	SR-PVC/PVC
85173225	LAPP KABEL LiYY TW 5x22AWG	5 x 22AWG	5.55	SR-PVC/PVC
UNITRONIC® LiYY				
85173524	LAPP KABEL LiY(ST)CY TW 4x22AWG	4 x 22AWG	5.55	SR-PVC/PVC
85173525	LAPP KABEL LiY(ST)CY TW 5x22AWG	5 x 22AWG	5.59	SR-PVC/PVC

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.

- Photographs are not to scale and do not represent detailed images of the respective products.



3

ETHERLINE® Data communication systems for ETHERNET technology

Our ETHERLINE® branded products open up a secure, fast and reliable path to the future of Ethernet applications, e. g. PROFINET®. The systems are made up of durable and robust cables and connection components for passive and active network technology, and deliver an effective solution for almost any application, particularly in an industrial environment.

Application range

- Industry and building networks
- Industrial machinery and plant engineering
- Automation technology
- Control engineering

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UNITRONIC® LAN 200 UTP CAT.5e



Info

- PVC or Halogen-free outer sheath
- Solid conductor
- 200 MHz

Technical data



Classification

ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000830



Core identification code

Pair 1 : blue + white/blue
Pair 2 : orange + white/orange
Pair 3 : green + white/green
Pair 4 : brown + white/brown



Mutual capacitance

max. 56.0 pF/m (core-core)



Minimum bending radius

Fixed installation: 4 x cable diameter



Characteristic impedance

100 ± 15 Ohm at 100 MHz



Temperature range

-20°C to +70°C

Application range

- Data transfer for horizontal network backbone for wiring office administration and development buildings
- Cable run should not exceed 100 m in acc. to ISO/IEC 11801 and EN 50173

Product features

- Transmission rate up to 200 MHz
- Flame retardant acc. to IEC 60332-1-2
- Halogen free acc. to IEC 60754-1 (for Halogen free outer sheath only)

Product Make-up

- Solid bare conductor
- PE core insulation
- PVC or Halogen-free outer sheath
- Colour: pebble grey, RAL 7032
- Packaging: 305 m/box

Article number	Article designation	Number of pairs and AWG per conductor	Outer diameter (mm)	Outer sheath type	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® LAN 200 UTP CAT.5e						
2170125K	LAN 200 UTP CAT.5e	4 x 2 x 24 AWG	5.1	PVC	14.9	29
3803999K	LAN 200 UTP-H CAT.5e	4 x 2 x 24 AWG	5.1	Halogen-free	14.9	29

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UNITRONIC® LAN 250 UTP CAT.6

Info

- PVC or Halogen-free outer sheath
- Solid conductor
- 250 MHz



Application range

- Data transfer for horizontal network backbone for wiring office administration and development buildings
- Cable run should not exceed 100 m in acc. to ISO/IEC 11801 and EN 50173

Product features

- Transmission rate up to 250 MHz
- Flame retardant acc. to IEC 60332-1-2
- Halogen free acc. to IEC 60754-1 (for Halogenfree outer sheath only)

Product Make-up

- Solid bare conductor
- PE core insulation
- PVC or Halogen-free outer sheath
- Colour: pebble grey, RAL 7032
- Packaging: 305 m/box

Technical data



Classification

ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000830



Core identification code

Pair 1 : blue + white/blue
Pair 2 : orange + white/orange
Pair 3 : green + white/green
Pair 4 : brown + white/brown



Mutual capacitance

max. 56.0 pF/m (core-core)



Minimum bending radius

Fixed installation: 4 x cable diameter



Characteristic impedance

100 ± 15 Ohm at 100 MHz



Temperature range

-20°C to +70°C

Article number	Article designation	Number of pairs and AWG per conductor	Outer diameter (mm)	Outer sheath type	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® LAN 250 UTP CAT.6						
3801501K	LAN 250 UTP CAT.6	4 x 2 x 23 AWG	6.4	PVC	17.9	40
3804000K	LAN 250 UTP-H CAT.6	4 x 2 x 23 AWG	6.4	Halogen-free	17.9	40

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LAPP KABEL LAN 500 U/FTP CAT.6A

UNITRONIC® LAN 500 U/FTP CAT.6A



Info

- PVC or Halogen-free outer sheath
- Solid conductor
- 500 MHz

Application range

- Data transfer for horizontal network backbone for wiring office administration and development buildings
- Cable run should not exceed 100 m in acc. to ANSI/TIA-568-C.2, ISO/IEC 11801 and EN 50173

Product features

- Transmission rate up to 500 MHz
- Flame retardant acc. to IEC 60332-1-2
- Halogen free acc. to IEC 60754-1 (for LSHF outer sheath only)

Product Make-up

- Solid bare conductor
- Foam PE core insulation
- Individual pair screen of Al foil
- Solid tinned copper drain wire
- PVC or LSHF outer sheath
- Colour: pebble grey, RAL 7032
- Packaging: 305 m/box

Technical data



Classification
ETIM 5.0 Class-Description: Data cable
ETIM 5.0 Class-ID: EC000830



Core identification code
Pair 1 : blue + white/blue
Pair 2 : orange + white/orange
Pair 3 : green + white/green
Pair 4 : brown + white/brown



Mutual capacitance
max. 56.0 nF/100 m



Minimum bending radius
Fixed installation: 4 x cable diameter



Characteristic impedance
150 ± 15 Ohm at 100 MHz



Temperature range
-20°C to +70°C

Article number	Article designation	Number of pairs and AWG per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® LAN 500 U/FTP CAT.6A					
3804900	LAN 500 U/FTP CAT.6A PVC	4 x 2 x 23 AWG/1	7.2	21.0	52
3804910	LAN 500 U/FTP CAT.6A LSHF	4 x 2 x 23 AWG/1	7.2	21.0	52

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.
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CAT 6 PATCH CORDS

Cord sets with RJ45 connectors for fixed installations

**Benefits**

- Economical patch cords that fits into general commercial or industrial applications

Application range

- Office Equipment connections
- Control cabinet wiring
- Servers or routers

Norms references / Approvals

- In accordance to ANSI/TIA-568-C.2,
ISO/IEC 11801

Product Features

- Available in U/UTP PVC and F/UTP LSZH versions
- Available in different lengths
- Popular colours in range, such as blue, yellow, orange, grey and black

Product Make-up

- Conductor type: Stranded bare copper wires
- Core Insulation: HD Polyethylene
- Moulded RJ45 connectors

Technical data**Core identification code**

- Pair 1 Blue + White/Blue
- Pair 2 Orange + White/Orange
- Pair 3 Green + White/Green
- Pair 4 Brown + White/Brown

**Rated voltage**

150 V

**Test voltage**

1000 V Dielectric test

**Temperature range**

Fixed installation: -20°C to +65°C

Length (m)	black	grey	blue	yellow	orange
PATCHCORD CAT 6 U/UTP PVC					
0.5	3805594	3805614	3805634	3805654	3805800
1	3805595	3805615	3805635	3805655	3805801
1.5	3805596	3805616	3805636	3805656	3805802
2	3805597	3805617	3805637	3805657	3805803
3	3805598	3805618	3805638	3805658	3805804
5	3805599	3805619	3805639	3805659	3805805
7.5	3805600	3805820	3805640	3805660	3805806
10	3805601	3805821	3805641	3805661	3805807
15	3805602	3805822	3805642	3805662	3805808
20	3805603	3805823	3805643	3805663	3805809

Length (m)	black	grey	blue	yellow	orange
PATCHCORD CAT 6 F/UTP LSZH					
0.5	3805604	3805824	3805644	3805664	3805810
1	3805605	3805825	3805645	3805665	3805811
1.5	3805606	3805826	3805646	3805666	3805812
2	3805607	3805827	3805647	3805667	3805813
3	3805608	3805828	3805648	3805668	3805814
5	3805609	3805829	3805649	3805669	3805815
7.5	3805610	3805830	3805650	3805670	3805816
10	3805611	3805831	3805651	3805671	3805817
15	3805612	3805632	3805652	3805672	3805818
20	3805613	3805633	3805653	3805673	3805819

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**TOSIBOX® KEY****Benefits**

- Intelligent crypto-processing device that enables a secure connection between your computer and one or more TOSIBOX® Locks, Central Lock and/or Virtual Central Lock

Product features

- 2048 bit RSA key in the cryptographic module
- 4 GB or larger flash memory storage for TOSIBOX® Key software and settings
- USB 2.0 interface, type A, with standard CSP/PKCS#11

Product Make-up

- Durable light metal alloy casing
- Including one Mobile Client for Android or iOS
- 83 mm x 22 mm x 10 mm / 3.27" x 0.87 x 0.39" (L x W x H)

Technical data

Operating temperature 0 °C to +70 °C
Storage temperature -20 °C to +80 °C

Article number	Article description
3806220	TOSIBOX KEY

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.
- Photographs are not to scale and do not represent detailed images of the respective products.



TOSIBOX® 150

**Benefits**

- SIMPLE - Build and manage secure IoT infrastructure in minutes
- SECURE - Tested & audited security
- MODULAR - Unlimited expandability and flexibility
- COMPATIBLE - Integrate seamlessly with legacy and future systems
- UNIQUE - Globally patented point-to-point connection

Application range

- Remote access and networking device for secure access of HMI, PLCs, PCs and other devices or systems over the Internet.

Product features

- Patented TOSIBOX® Plug & Go™ connection method takes you out of the box and into use in less than 5 minutes, without the need for software installations, network configurations or special IT skills

- NAT and firewall friendly

- VPN throughput up to 10 MB/s, end-to-end encryption between TOSIBOX® devices
- Up to 10 concurrent VPN connections
- Reliability with Tosionline™ – automatic re-connection of dropped connections

Technical data

Operating temperature -20 °C to +50 °C
Storage temperature -40 °C to +70 °C

Product Make-up

- Cast aluminium casing
- 132 mm x 99 mm x 35.5 mm / 5.2" x 3.9" x 1.4" (L x W x H)
- Weight 593 g / 1.31 lbs (net weight article)
- Accessories in package include: RJ-45 Cat6 Ethernet cable, USB extension cable, 2 x WLAN antennas, 2 dBi, AC Adapter: Input 100–240V AC, DC input plug, DIN rail mounting bracket

Article number	Article description
3806221	TOSIBOX LOCK 150

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.
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TOSIBOX® LOCK 500

The next generation Plug & GO™ connectivity device



Benefits

- SIMPLE - Build and manage secure IoT infrastructure in minutes
- SECURE - Tested & audited security
- MODULAR - Unlimited expandability and flexibility
- COMPATIBLE - Integrate seamlessly with legacy and future systems
- UNIQUE - Globally patented point-to-point connection

Application range

- Remote access and networking device for secure access of HMI, PLCs, PCs and other devices or systems over the Internet.

Product features

- Massive VPN throughput for data consuming applications, end-to-end encryption between TOSIBOX® devices
- NAT and firewall friendly

- Integrated WiFi as connectivity method or access point for wireless devices on site.
- Built-in LTE modem (optional), with two modem variants covering most of the globe no external modem needed
- Up to 50 concurrent VPN connections

Technical data



IP20

Operating temperature -20°C to +60°C
Storage temperature -40°C to +70°C

Product Make-up

- 110 mm x 58 mm x 127 mm / 4.33" x 2.28" x 5.0" (L x W x H)
- TBL5*: Weight 495 g / 1.09 lbs (net weight article)
- TBL5i*: Weight 505 g / 1.11 lbs (net weight article)
- Accessories in package include: RJ-45 Cat5e Ethernet cable, 2 x WiFi antennas, 2 dBi, I/O connector plug, Power connector plug. Additional accessories for TBL5*PS version: AC adapter - Input 100 – 240 V AC, frequency 47 – 63 Hz, Output 12.0 V, 1.6 A, max 19.2 W. EU, UK, AU and US power socket and DC feed cable

Article number	Article description
3806227	TOSIBOX LOCK 500 WITHOUT POWER SUPPLY
3806230	TOSIBOX LOCK 500i APAC VER WITHOUT POWER SUPPLY

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.
- Photographs are not to scale and do not represent detailed images of the respective products.





TOSIBOX® CENTRAL LOCK

**Benefits**

- SIMPLE - Build and manage secure IoT infrastructure in minutes
- SECURE - Tested & audited security
- MODULAR - Unlimited expandability and flexibility
- COMPATIBLE - Integrate seamlessly with legacy and future systems
- UNIQUE - Globally patented point-to-point connection

Application range

- Remote access and networking device for secure access of HMI, PLCs, PCs and other devices or systems over the Internet.

Product features

- Over 700 Mbit/s encryption throughput

- 1000 concurrent remote connections per LAN network
- Encryption and authentication PKI, 3072 bit RSA
- Data encryption TLS, AES-256-CBC / Blowfish-128-CBC
- Mirrored hard disks (RAID 1)

Technical data

Operating temperature 10°C to 30 °C
/ 50 °F to 86 °F

Product Make-up

- One 1 Gbit/s WAN port and Four 1 Gbit/s LAN ports
- 570 mm x 430 mm x 43 mm / 22.44" x 16.93" x 1.69" (L x W x H)
- Accessories include Ethernet cable 1m x 2, power cord (EU power plug) and extension power cord
- Net weight, article + accessories: 12.0 kg / 26.46 lbs

Article number	Article description
3806231	TOSIBOX CENTRAL LOCK

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.
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**TOSIBOX® ACCESSORIES**

Various accessories available to support the main Tosibox lock units

Article number	Article description
3806232	TOSIBOX CONFIGURATION SW FILE
3806233	TOSIBOX 4G MODEM EU VER
3806234	4G USB MODEM W 2 ANTENNA CONN
3806235	ADAPTOR CABLE FROM MODEM TO ANTENNA
3806236	ANTENNA EXTERNAL W 8M CABLE
3806237	ANTENNA EXTERNAL MAGNET MOUNT W 3M CABLE
3806238	ANTENNA EXTENSION CABLE 5M
3806239	ANTENNA EXTENSION CABLE 10M
3806240	1-PORT RS232 SERIAL DEVICE SERVER
3806241	ACCESSORY PACK FOR LOCK 500

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.
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TOSIBOX® LOCK 210

Industrial router with built-in firewall for LAN Networks



Benefits

- SIMPLE - Build and manage secure IoT infrastructure in minutes
- SECURE - Tested & audited security
- MODULAR - Unlimited expandability and flexibility
- COMPATIBLE - Integrate seamlessly with legacy and future systems
- UNIQUE - Globally patented point-to-point connection

Application range

- Device serves as endpoints for secure remote connections in operational (OT) networks

Product features

- 30 Mbps VPN throughout and end-to-end encryption from Key to Lock, Lock to Lock or Lock to (Virtual) Central Lock
- Up to 20 concurrent VPN connections
- TosiOnline™ feature for automatically reconnecting dropped connections

Product Make-up

- Industrial design: robust and fanless enclosure, integrated DIN rail bracket and industrial screw-on DC power connector
- 1 x RJ-45 WAN & 3 x RJ-45 LAN connections, 10/100 Mb/s, auto-negotiation (MDI/MDI-X)
110 mm x 58 mm x 127 mm /
4.33" x 2.28" x 5.0" (L x W x H)
- Weight 495 g / 1.09 lbs
- Accessories include: RJ-45 Cat5e Ethernet cable, I/O connector and power connector plug

Technical data



IP20

Operating temperature -20°C to +60°C
Storage temperature -40°C to +70°C

Article number	Article description
8100590	TOSIBOX LOCK 210 WITHOUT POWER SUPPLY
8100594	START KIT WITH KEY SOFTKEY MOBILE CLIENT & LOCK 210

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.
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TOSIBOX® LOCK 250

Robust industrial router with built-in firewall and integrated WiFi



Benefits

- SIMPLE - Build and manage secure IoT infrastructure in minutes
- SECURE - Tested & audited security
- MODULAR - Unlimited expandability and flexibility
- COMPATIBLE - Integrate seamlessly with legacy and future systems
- UNIQUE - Globally patented point-to-point connection

Application range

- Device serves as endpoints for secure remote connections in operational (OT) networks

Product features

- 30 Mbps VPN throughout and end-to-end encryption from Key to Lock, Lock to Lock or Lock to (Virtual) Central Lock
- Up to 20 concurrent VPN connections
- Integrated WiFi serves as connectivity method or access point for wireless devices on sites
- TosiOnline™ feature for automatically reconnecting dropped connections

Product Make-up

- Industrial design: robust and fanless enclosure, integrated DIN rail bracket and industrial screw-on DC power connector
- 1 x RJ-45 WAN & 3 x RJ-45 LAN connections, 10/100 Mb/s, auto-negotiation (MDI/MDI-X)
110 mm x 58 mm x 127 mm /
4.33" x 2.28" x 5.0" (L x W x H)
- Weight 495 g / 1.09 lbs
- Accessories include: RJ-45 Cat5e Ethernet cable, I/O connector and power connector plug and 2 x WiFi antennas - 2 dBi

Technical data



IP20

Operating temperature -20°C to +60°C
Storage temperature -40°C to +70°C

Article number	Article description
8100592	TOSIBOX LOCK 250 WITHOUT POWER SUPPLY

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.
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TOSIBOX® SoftKey

The virtual key for your TOSIBOX® ecosystem

**TOSIBOX® SoftKey****Info**

- The SoftKey is computer- and user-specific. It cannot be copied over or moved to another device
- The access rights are granted and controlled from the physical TOSIBOX® Key, after which the SoftKey remains bound to it
- To activate SoftKey on a PC or Mac, you will need SoftKey license for the Master Key

Benefits

- TOSIBOX® SoftKey is a computer software that enables a secure connection between the computer and one or more TOSIBOX® Locks, giving the user full visibility and control over the network devices connected to the Lock
- TOSIBOX® SoftKey can be installed into cloud services and virtual environments
- TOSIBOX® SoftKey can be created and access right can be granted immediately even from other side of the world
- Two-factor authentication is fulfilled also with SoftKey: device-specific (something in your possession) and password-protected (something only you know)

Application range

- TOSIBOX® SoftKey can be used in computers that do not have an USB port or where the use of USB devices is tricky

Product features

- Cryptographic key size and type : 4096 bit RSA
- Data encryption: TLS, Blowfish-128-CBC, AES-128-CBC, AES-256-CBC
- Comes with two-factor authentication
- VPN connection type: Layer 2 / Layer 3 (OpenVPN)

Article number	Article description
8100540	TOSIBOX SOFTKEY TBSKL1
8100541	TOSIBOX SOFTKEY TBSKL5
8100542	TOSIBOX SOFTKEY TBSKL10

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4

EPIC® Industrial connectors

EPIC® industrial connectors can be found everywhere in industrial machinery and plant engineering, for measuring, control and drives. EPIC® is a flexible system of housings, inserts and contacts: all extremely robust, absolutely safe and simplicity itself to assemble.

Application range

- Electronics and telecommunications
- Measurement, testing and control technology
- Industrial machinery and appliances
- Drive technology and industrial automation
- Photovoltaic plants

Solar Connectors

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ÖLFLEX®

UNITRONIC®

ETHERLINE®

HITRONIC®

EPIC®

SKINTOP®

SILVYN®

FLEXIMARK®

ACCESSORIES

APPENDIX

**SOLAR CONNECTORS 1.5KV**

Connectors suitable for the PV industry

**Info**

- Field-mountable and panel-mountable connectors

**Benefits**

- Low contact resistance for efficient power transmission (<=0.3m ohms)
- Crimp connection for field and panel mounting
- Suitable for various OLFLEX SOLAR cables

Application range

- Photovoltaic plants and solar parks

Product features

- 4mm connector system with double hook
- Inclusive of contacts

Norm references / Approvals

- UL
- TUV

Technical data

	Pollution degree 2
	Nominal voltage IEC/UL 1000V/1500V
	Protection rating IP68
	Temperature range -40°C to + 90°C

Article number	
3805580	FIELD MOUNT M 4 SQ MM
3805581	FIELD MOUNT M 6 SQ MM
3805582	FIELD MOUNT M 10 SQ.MM
3805583	FIELD MOUNT F 4 SQ MM
3805584	FIELD MOUNT F 6 SQ MM
3805585	FIELD MOUNT F 10 SQ.MM
3805586	PANEL MOUNT M 4 SQ MM
3805587	PANEL MOUNT M 6 SQ.MM
3805588	PANEL MOUNT M 10 SQ.MM
3805589	PANEL MOUNT F 4 SQ MM
3805590	PANEL MOUNT F 6 SQ.MM
3805591	PANEL MOUNT F 10 SQ.MM
3805592	BRANCH CONNECTOR 1M2F
3805593	BRANCH CONNECTOR 1F2M
3805576	TIGHTENING TOOL
3805577	DISCONNECT OR UNLOCKING TOOL
3805578	TEST JIG TOOL
3805579	CRIMP TOOL FOR 10 SQ.MM SOLAR CONNECTOR

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SOLAR CONNECTORS 1.5kV

Connectors suitable for the PV industry



Benefits

- Quick and easy snap-in & outward lock types
- Combines 4 & 6 sq mm types into 1 part number, ensuring ease of selection
- Suitable for various ÖLFLEX® solar cables

Application range

- Connection between solar panels
- Connection of solar panels to combiner box or main control panel

Product features

- 4mm connector system with double hooks
- Connectors are inclusive of crimp contacts
- Field mount & panel mount versions available

Norm references / Approvals

- UL
- TUV

Technical data

	Pollution degree 2, 3
	Nominal voltage 1500V
	Protection rating IP68
	Temperature range -40°C to + 90°C

Article number	Description
8100571	PANEL MOUNT CONN F 4-6 SQ MM CABLE OD 8.5MM MAX
8100572	PANEL MOUNT CONN M 4-6 SQ MM CABLE OD 8.5MM MAX
8100573	PANEL MOUNT CONN F 10 SQ MM CABLE OD 8.5MM MAX
8100574	PANEL MOUNT CONN M 10 SQ MM CABLE OD 8.5MM MAX
8100575	FIELD MOUNT CONN F 4-6 SQ MM CABLE OD 4.5-7.2MM
8100576	FIELD MOUNT CONN M 4-6 SQ MM CABLE OD 4.5-7.2MM
8100577	FIELD MOUNT CONN F 10 SQ MM CABLE OD 4.5-7.2MM
8100578	FIELD MOUNT CONN M 10 SQ MM CABLE OD 4.5-7.2MM
8100579	CRIMP TOOL FOR 10 MM2 R-TYPE CONN
8100580	WRENCH TOOL FOR R-TYPE CONN
8100581	MULTI-FUNCTION TOOL FOR R-TYPE CONN
8100582	CRIMP TOOL FOR 2.5, 4 & 6 MM2 CONN

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.
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5

SKINTOP® Cable glands

Simply feed in the cable and twist. That's it. Our SKINTOP® cable glands provide secure connections in no time. The universal systems are simple but effective. They secure and centre the cable, hermetically seal it and guarantee optimum strain relief.

Application range

- Industrial machinery and plant engineering
- Drive systems
- Measurement and control technology
- Renewable energies
- Wherever cables need to be fastened securely and quickly

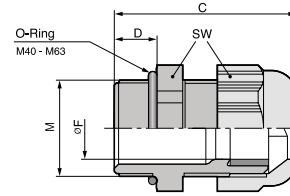
Single Entry Glands

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SKINTOP® ST-M Gland & Nut Combi Pack

SKINTOP® ST-M, increased oil-resistant plastic cable gland with variable clamping ranges, permanent vibration protection, for offshore platforms.



Benefits

- High oil-resistance for maximum reliability
- Permanent vibration protection
- Wide, variable clamping ranges
- Optimum strain relief
- Various accessories (e.g. multiple sealing inserts)

Application range

- Used in areas where a lot of cables and wires need to be inserted into housings with minimum space requirements
- Machine and equipment manufacturing
- Photovoltaic
- Automation technology
- Offshore platforms, equipment and shipyards

Norm references / Approvals

- UL File Nr. E79903
- GGVS: TÜ.EGG.020-95

Product Make-up

- Metric connection thread acc. to DIN EN 60423
- Basis for technical information DIN IEC 62444

Info

- Refer to SKINTOP® metric accessories for suitable accessories
- Now with IP69 approval! Proven to withstand the most demanding cleaning procedures for industrial machinery with high-pressure cleaners and hot water!

Technical data

Classification ETIM 5
ETIM 5.0 Class-ID: EC000441
ETIM 5.0 Class-Description: Cable screw gland

Classification ETIM 6
ETIM 6.0 Class-ID: EC000441
ETIM 6.0 Class-Description: Cable screw gland

Colour delivered
Silver grey (RAL 7001)
Light grey (RAL 7035)
Black (RAL 9005)

Material
Body: Polyamide
Seal: CR

Temperature range
Fixed: -40°C to +100°C
Dynamic: -20°C to +100°C

Protection rating
IP 66
IP 68 – 5 bar
IP 69
NEMA Type 1, 12

Caution
Refer to Appendix T21 for the installation dimensions and torques
Size M 40 x 1,5 up to M 63 x 1,5 with O-ring

Article number	Description	Colour	Clamping range ØF (mm)	SW wrench size (mm)	Overall length, C (mm)	Thread length, D (mm)	Pieces/PACK
SKINTOP® ST-M COMBI PACK							
53110068	SKINTOP ST-M 12 X 1,5 + LOCKNUT SGY	silver grey	3.5 - 7	15	30.0	8	10
53110069	SKINTOP ST-M 16 X 1,5 + LOCKNUT SGY	silver grey	4.5 - 10	19	34.0	8	10
53110070	SKINTOP ST-M 20 X 1,5 + LOCKNUT SGY	silver grey	7 - 13	25	37.0	9	10
53110071	SKINTOP ST-M 25 X 1,5 + LOCKNUT SGY	silver grey	10 - 17	30	40.0	10	10
53110072	SKINTOP ST-M 32 X 1,5 + LOCKNUT SGY	silver grey	11 - 21	36	47.0	10	5
53110073	SKINTOP ST-M 40 X 1,5 + LOCKNUT SGY	silver grey	19 - 28	46	52.0	10	5
3806006	SKINTOP ST-M 50 X 1,5 + LOCKNUT SGY	silver grey	27 - 35	55	62.0	12	1
3806007	SKINTOP ST-M 63 X 1,5 + LOCKNUT SGY	silver grey	34 - 45	66	71.0	12	1
3806008	SKINTOP ST-M 12 X 1,5 + LOCKNUT BK	black	3.5 - 7	15	30.0	8	10
3806009	SKINTOP ST-M 16 X 1,5 + LOCKNUT BK	black	4.5 - 10	19	34.0	8	10
3806010	SKINTOP ST-M 20 X 1,5 + LOCKNUT BK	black	7 - 13	25	37.0	9	10
3806011	SKINTOP ST-M 25 X 1,5 + LOCKNUT BK	black	10 - 17	30	40.0	10	10
3806012	SKINTOP ST-M 32 X 1,5 + LOCKNUT BK	black	11 - 21	36	47.0	10	5
3806013	SKINTOP ST-M 40 X 1,5 + LOCKNUT BK	black	19 - 28	46	52.0	10	5
3806014	SKINTOP ST-M 50 X 1,5 + LOCKNUT BK	black	27 - 35	55	62.0	12	1
3806015	SKINTOP ST-M 63 X 1,5 + LOCKNUT BK	black	34 - 45	66	71.0	12	1
3806016	SKINTOP ST-M 12 X 1,5 + LOCKNUT LGY	light grey	3.5 - 7	15	30.0	8	10
3806017	SKINTOP ST-M 16 X 1,5 + LOCKNUT LGY	light grey	4.5 - 10	19	34.0	8	10
3806018	SKINTOP ST-M 20 X 1,5 + LOCKNUT LGY	light grey	7 - 13	25	37.0	9	10
3806019	SKINTOP ST-M 25 X 1,5 + LOCKNUT LGY	light grey	10 - 17	30	40.0	10	10
3806020	SKINTOP ST-M 32 X 1,5 + LOCKNUT LGY	light grey	11 - 21	36	47.0	10	5
3806021	SKINTOP ST-M 40 X 1,5 + LOCKNUT LGY	light grey	19 - 28	46	52.0	10	5
3806022	SKINTOP ST-M 50 X 1,5 + LOCKNUT LGY	light grey	27 - 35	55	62.0	12	1
3806023	SKINTOP ST-M 63 X 1,5 + LOCKNUT LGY	light grey	34 - 45	66	71.0	12	1

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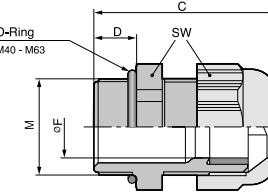


SKINTOP® ST Gland & Nut Combi Pack

SKINTOP® ST, increased oil-resistant polyamide cable gland with variable clamping ranges, permanent vibration protection and strain relief



- Refer to SKINTOP® metric accessories for suitable accessories
- Counter nut to be used: SKINTOP® GMP-GL



Benefits

- High oil-resistance for maximum reliability
- Permanent vibration protection
- Wide, variable clamping ranges
- Optimum strain relief
- Various accessories (e.g. multiple sealing inserts)

Application range

- Used in areas where a lot of cables and wires need to be inserted into housings with minimum space requirements
- Machine and equipment manufacturing
- Photovoltaic
- Automation technology

Norm references / Approvals

- UL File Nr. E79903

Product Make-up

- PG connection thread acc. to DIN 40430

Technical data



Classification ETIM 5

ETIM 5.0 Class-ID: EC000441
ETIM 5.0 Class-Description: Cable screw gland



Classification ETIM 6

ETIM 6.0 Class-ID: EC000441
ETIM 6.0 Class-Description: Cable screw gland



Colour delivered

Silver grey (RAL 7001)
Light grey (RAL 7035)
Black (RAL 9005)



Material

Body: Polyamide
Seal: CR



Temperature range

Fixed: -40°C to +100°C
Dynamic: -20°C to +80°C



Protection rating

IP 68 - 5 bar



Caution

Refer to Appendix T2.1 for the installation dimensions and torques

Article number	Description	Colour	Clamping range ØF (mm)	SW wrench size (mm)	Overall length, C (mm)	Thread length, D (mm)	Pieces/PACK
SKINTOP® ST PG COMBI PACK							
53110080	SKINTOP ST PG 7 + LOCKNUT SGY	silver grey	2.5 - 6.5	15	32	8	10
53110081	SKINTOP ST PG 9 + LOCKNUT SGY	silver grey	3.5 - 8	19	36	8	10
53110082	SKINTOP ST PG 11 + LOCKNUT SGY	silver grey	4 - 10	22	38	8	10
53110083	SKINTOP ST PG 13,5 + LOCKNUT SGY	silver grey	6 - 12	24	41	9	10
53110084	SKINTOP ST PG 16 + LOCKNUT SGY	silver grey	9 - 14	27	44	10	10
53110085	SKINTOP ST PG 21 + LOCKNUT SGY	silver grey	13 - 18	33	49	11	5
53110086	SKINTOP ST PG 29 + LOCKNUT SGY	silver grey	14 - 25	42	56	11	5
53110087	SKINTOP ST PG 36 + LOCKNUT SGY	silver grey	24 - 32	53	66	13	5
3806071	SKINTOP ST PG 42 + LOCKNUT SGY	silver grey	35 - 38	60	68	13	1
3806072	SKINTOP ST PG 48 + LOCKNUT SGY	silver grey	39 - 44	65	69	14	1
3806073	SKINTOP ST PG 7 + LOCKNUT BK	black	2.5 - 6.5	15	32	8	10
3806074	SKINTOP ST PG 9 + LOCKNUT BK	black	3.5 - 8	19	36	8	10
3806075	SKINTOP ST PG 11 + LOCKNUT BK	black	4 - 10	22	38	8	10
3806076	SKINTOP ST PG 13,5 + LOCKNUT BK	black	6 - 12	24	41	9	10
3806077	SKINTOP ST PG 16 + LOCKNUT BK	black	9 - 14	27	44	10	10
3806078	SKINTOP ST PG 21 + LOCKNUT BK	black	13 - 18	33	49	11	5
3806079	SKINTOP ST PG 29 + LOCKNUT BK	black	14 - 25	42	56	11	5
3806080	SKINTOP ST PG 36 + LOCKNUT BK	black	24 - 32	53	66	13	5
3806081	SKINTOP ST PG 42 + LOCKNUT BK	black	35 - 38	60	68	13	1
3806082	SKINTOP ST PG 48 + LOCKNUT BK	black	39 - 44	65	69	14	1
3806083	SKINTOP ST PG 7 + LOCKNUT LGY	light grey	2.5 - 6.5	15	32	8	10
3806084	SKINTOP ST PG 9 + LOCKNUT LGY	light grey	3.5 - 8	19	36	8	10
3806085	SKINTOP ST PG 11 + LOCKNUT LGY	light grey	4 - 10	22	38	8	10
3806086	SKINTOP ST PG 13,5 + LOCKNUT LGY	light grey	6 - 12	24	41	9	10
3806087	SKINTOP ST PG 16 + LOCKNUT LGY	light grey	9 - 14	27	44	10	10
3806088	SKINTOP ST PG 21 + LOCKNUT LGY	light grey	13 - 18	33	49	11	5
3806089	SKINTOP ST PG 29 + LOCKNUT LGY	light grey	14 - 25	42	56	11	5
3806090	SKINTOP ST PG 36 + LOCKNUT LGY	light grey	24 - 32	53	66	13	5
3806091	SKINTOP ST PG 42 + LOCKNUT LGY	light grey	35 - 38	60	68	13	1
3806092	SKINTOP ST PG 48 + LOCKNUT LGY	light grey	39 - 44	65	69	14	1

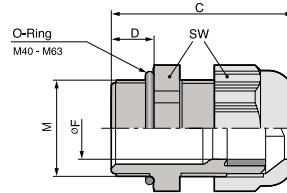
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SKINTOP® STR-M Gland & Nut Combi Pack

SKINTOP® STR-M, increased oil-resistant plastic cable gland with permanent vibration protection and reducing seal insert



Benefits

- High oil-resistance for maximum reliability
- Permanent vibration protection
- Wide, variable clamping ranges
- Optimum strain relief
- Various accessories (e.g. multiple sealing inserts)

Application range

- With reducing seal insert, to seal cables with smaller outer diameters

Norm references / Approvals

- UL File Nr. E79903
- GGVS: TÜ.EGG.020-95

Product Make-up

- Metric connection thread acc. to DIN EN 60423
- Basis for technical information DIN IEC 62444

Info

- Now with IP69 approval! Proven to withstand the most demanding cleaning procedures for industrial machinery with high-pressure cleaners and hot water!

Technical data

Classification ETIM 5
ETIM 5.0 Class-ID: EC000441
ETIM 5.0 Class-Description: Cable screw gland

Classification ETIM 6
ETIM 6.0 Class-ID: EC000441
ETIM 6.0 Class-Description: Cable screw gland

Colour delivered
Silver grey (RAL 7001)
Light grey (RAL 7035)
Black (RAL 9005)

Material
Body: Polyamide
Seal: CR

Temperature range
Fixed: -40°C to +100°C
Dynamic: -20°C to +100°C

Protection rating
IP 66
IP 68 - 5 bar
IP 69
NEMA Type 1, 12

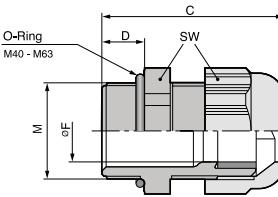
Caution
Refer to Appendix T21 for the installation dimensions and torques
Size M 40 x 1,5 up to M 63 x 1,5 with O-ring

Article number	Description	Colour	Clamping range ØF (mm)	SW wrench size (mm)	Overall length, C (mm)	Thread length, D (mm)	Pieces/PACK
SKINTOP® STR-M COMBI PACK							
3806024	SKINTOP STR-M 12 X 1,5 + LOCKNUT SGY	silver grey	2 - 5	15	30.0	8	10
3806025	SKINTOP STR-M 16 X 1,5 + LOCKNUT SGY	silver grey	3.5 - 7	19	34.0	8	10
3806026	SKINTOP STR-M 20 X 1,5 + LOCKNUT SGY	silver grey	4 - 10	25	37.0	9	10
3806027	SKINTOP STR-M 25 X 1,5 + LOCKNUT SGY	silver grey	5 - 13	30	40.0	10	10
3806028	SKINTOP STR-M 32 X 1,5 + LOCKNUT SGY	silver grey	6 - 15	36	47.0	10	5
3806029	SKINTOP STR-M 40 X 1,5 + LOCKNUT SGY	silver grey	9 - 23	46	52.0	10	5
3806030	SKINTOP STR-M 50 X 1,5 + LOCKNUT SGY	silver grey	24 - 29	55	62.0	12	1
3806031	SKINTOP STR-M 63 X 1,5 + LOCKNUT SGY	silver grey	28 - 39	66	71.0	12	1
3806032	SKINTOP STR-M 12 X 1,5 + LOCKNUT BK	black	2 - 5	15	30.0	8	10
3806033	SKINTOP STR-M 16 X 1,5 + LOCKNUT BK	black	3.5 - 7	19	34.0	8	10
3806034	SKINTOP STR-M 20 X 1,5 + LOCKNUT BK	black	4 - 10	25	37.0	9	10
3806035	SKINTOP STR-M 25 X 1,5 + LOCKNUT BK	black	5 - 13	30	40.0	10	10
3806036	SKINTOP STR-M 32 X 1,5 + LOCKNUT BK	black	6 - 15	36	47.0	10	5
3806037	SKINTOP STR-M 40 X 1,5 + LOCKNUT BK	black	9 - 23	46	52.0	10	5
3806038	SKINTOP STR-M 50 X 1,5 + LOCKNUT BK	black	24 - 29	55	62.0	12	1
3806039	SKINTOP STR-M 63 X 1,5 + LOCKNUT BK	black	28 - 39	66	71.0	12	1
3806040	SKINTOP STR-M 12 X 1,5 + LOCKNUT LGY	light grey	2 - 5	15	30.0	8	10
3806041	SKINTOP STR-M 16 X 1,5 + LOCKNUT LGY	light grey	3.5 - 7	19	34.0	8	10
3806042	SKINTOP STR-M 20 X 1,5 + LOCKNUT LGY	light grey	4 - 10	25	37.0	9	10
3806043	SKINTOP STR-M 25 X 1,5 + LOCKNUT LGY	light grey	5 - 13	30	40.0	10	10
3806044	SKINTOP STR-M 32 X 1,5 + LOCKNUT LGY	light grey	6 - 15	36	47.0	10	5
3806045	SKINTOP STR-M 40 X 1,5 + LOCKNUT LGY	light grey	9 - 23	46	52.0	10	5
3806046	SKINTOP STR-M 50 X 1,5 + LOCKNUT LGY	light grey	24 - 29	55	62.0	12	1
3806047	SKINTOP STR-M 63 X 1,5 + LOCKNUT LGY	light grey	28 - 39	66	71.0	12	1

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SKINTOP® STR Gland & Nut Combi Pack

SKINTOP® STR, increased oil-resistant polyamide cable gland with wide, variable clamping ranges and reducing seal insert



Benefits

- High oil-resistance for maximum reliability
- Permanent vibration protection
- Wide, variable clamping ranges
- Optimum strain relief
- Various accessories (e.g. multiple sealing inserts)

Application range

- With reducing seal insert, to seal cables with smaller outer diameters

Norm references / Approvals

- UL File Nr. E79903

Product Make-up

- PG connection thread acc. to DIN 40430

Technical data

Classification ETIM 5
ETIM 5.0 Class-ID: EC000441
ETIM 5.0 Class-Description: Cable screw gland

Classification ETIM 6
ETIM 6.0 Class-ID: EC000441
ETIM 6.0 Class-Description: Cable screw gland

Colour delivered
Silver grey (RAL 7001)
Light grey (RAL 7035)
Black (RAL 9005)

Material
Body: Polyamide
Seal: CR

Temperature range
Fixed: -40°C to +100°C
Dynamic: -20°C to +80°C

Protection rating
IP 68 - 5 bar
NEMA Type 1, 12

Caution
Refer to Appendix T21 for the installation dimensions and torques

Article number	Description	Colour	Clamping range ØF (mm)	SW wrench size (mm)	Overall length, C (mm)	Thread length, D (mm)	Pieces/PACK
SKINTOP® STR PG COMBI PACK							
3806093	SKINTOP STR PG 7 + LOCKNUT SGY	silver grey	1.5 - 5	15	32	7.8	10
3806094	SKINTOP STR PG 9 + LOCKNUT SGY	silver grey	2 - 6	19	36	8	10
3806095	SKINTOP STR PG 11 + LOCKNUT SGY	silver grey	2 - 7	22	38	8	10
3806096	SKINTOP STR PG 13,5 + LOCKNUT SGY	silver grey	4 - 9	24	41	9	10
3806097	SKINTOP STR PG 16 + LOCKNUT SGY	silver grey	6 - 12	27	44	10	10
3806098	SKINTOP STR PG 21 + LOCKNUT SGY	silver grey	9 - 16	33	49	11	5
3806099	SKINTOP STR PG 29 + LOCKNUT SGY	silver grey	11 - 20	42	56	10.7	5
3806100	SKINTOP STR PG 36 + LOCKNUT SGY	silver grey	17 - 26	53	66	13.3	5
3806101	SKINTOP STR PG 42 + LOCKNUT SGY	silver grey	22 - 31	60	68	13.4	1
3806102	SKINTOP STR PG 48 + LOCKNUT SGY	silver grey	26 - 35	65	69	14.3	1
3806103	SKINTOP STR PG 7 + LOCKNUT BK	black	1.5 - 5	15	32	7.8	10
3806104	SKINTOP STR PG 9 + LOCKNUT BK	black	2 - 6	19	36	8	10
3806105	SKINTOP STR PG 11 + LOCKNUT BK	black	2 - 7	22	38	8	10
3806106	SKINTOP STR PG 13,5 + LOCKNUT BK	black	4 - 9	24	41	9	10
3806107	SKINTOP STR PG 16 + LOCKNUT BK	black	6 - 12	27	44	10	10
3806108	SKINTOP STR PG 21 + LOCKNUT BK	black	9 - 16	33	49	11	5
3806109	SKINTOP STR PG 29 + LOCKNUT BK	black	11 - 20	42	56	10.7	5
3806110	SKINTOP STR PG 36 + LOCKNUT BK	black	17 - 26	53	66	13.3	5
3806111	SKINTOP STR PG 42 + LOCKNUT BK	black	22 - 31	60	68	13.4	1
3806112	SKINTOP STR PG 48 + LOCKNUT BK	black	26 - 35	65	69	14.3	1
3806113	SKINTOP STR PG 7 + LOCKNUT LGY	light grey	1.5 - 5	15	32	7.8	10
3806114	SKINTOP STR PG 9 + LOCKNUT LGY	light grey	2 - 6	19	36	8	10
3806115	SKINTOP STR PG 11 + LOCKNUT LGY	light grey	2 - 7	22	38	8	10
3806116	SKINTOP STR PG 13,5 + LOCKNUT LGY	light grey	4 - 9	24	41	9	10
3806117	SKINTOP STR PG 16 + LOCKNUT LGY	light grey	6 - 12	27	44	10	10
3806118	SKINTOP STR PG 21 + LOCKNUT LGY	light grey	9 - 16	33	49	11	5
3806119	SKINTOP STR PG 29 + LOCKNUT LGY	light grey	11 - 20	42	56	10.7	5
3806120	SKINTOP STR PG 36 + LOCKNUT LGY	light grey	17 - 26	53	66	13.3	5
3806121	SKINTOP STR PG 42 + LOCKNUT LGY	light grey	22 - 31	60	68	13.4	1
3806122	SKINTOP STR PG 48 + LOCKNUT LGY	light grey	26 - 35	65	69	14.3	1

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• Photographs are not to scale and do not represent detailed images of the respective products.



SKINTOP® BS-M Gland & Nut Combi Pack

SKINTOP® BS-M, plastic cable gland with bending and anti-kink protection, to protect flexible cables, for moving machine parts



Benefits

- Reliable bending and anti-kink protection
- Cable conservation
- Functional reliability
- To protect flexible cables

Application range

- Cables for electrical appliances and machinery that are moved under normal use must be protected against excessive bending as required in accordance with VDE 0700-1
- Handheld device
- Robotics Industry
- Light and sound applications
- Moving machine parts

Norm references / Approvals

- UL File Nr. E79903

Product Make-up

- Metric connection thread acc. to DIN EN 60423
- Basis for technical information DIN IEC 62444

Technical data

Classification ETIM 5
ETIM 5.0 Class-ID: EC000441
ETIM 5.0 Class-Description: Cable screw gland

Classification ETIM 6
ETIM 6.0 Class-ID: EC000441
ETIM 6.0 Class-Description: Cable screw gland

Colour delivered
Silver grey (RAL 7001)
Light grey (RAL 7035)
Black (RAL 9005)

Material
Body: Polyamide
Seal: CR

Temperature range
Between -20°C to +80°C

Protection rating
IP 68 - 5 bar

Caution
Refer to Appendix T21 for the installation dimensions and torques

Article number	Description	Colour	Clamping range ØF (mm)	SW wrench size (mm)	Overall length, C (mm)	Thread length, D (mm)	Pieces/PACK
SKINTOP® BS-M COMBI PACK							
3806048	SKINTOP BS-M 12X1,5 + LOCKNUT SGY	silver grey	3.5 - 7	15	64	8	10
3806049	SKINTOP BS-M 16X1,5 + LOCKNUT SGY	silver grey	4.5 - 10	19	86	8	10
3806050	SKINTOP BS-M 20X1,5 + LOCKNUT SGY	silver grey	7 - 13	25	101	9	10
3806051	SKINTOP BS-M 25X1,5 + LOCKNUT SGY	silver grey	9 - 17	30	125	10	5
3806052	SKINTOP BS-M 32X1,5 + LOCKNUT SGY	silver grey	11 - 21	36	149	10	5
3806053	SKINTOP BS-M 12X1,5 + LOCKNUT BK	black	3.5 - 7	15	64	8	10
3806054	SKINTOP BS-M 16X1,5 + LOCKNUT BK	black	4.5 - 10	19	86	8	10
3806055	SKINTOP BS-M 20X1,5 + LOCKNUT BK	black	7 - 13	25	101	9	10
3806056	SKINTOP BS-M 25X1,5 + LOCKNUT BK	black	9 - 17	30	125	10	5
3806057	SKINTOP BS-M 32X1,5 + LOCKNUT BK	black	11 - 21	36	149	10	5
3806058	SKINTOP BS-M 12X1,5 + LOCKNUT LGY	light grey	3.5 - 7	15	64	8	10
3806059	SKINTOP BS-M 16X1,5 + LOCKNUT LGY	light grey	4.5 - 10	19	86	8	10
3806060	SKINTOP BS-M 20X1,5 + LOCKNUT LGY	light grey	7 - 13	25	101	9	10
3806061	SKINTOP BS-M 25X1,5 + LOCKNUT LGY	light grey	9 - 17	30	125	10	5
3806062	SKINTOP BS-M 32X1,5 + LOCKNUT LGY	light grey	11 - 21	36	149	10	5

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.

- Photographs are not to scale and do not represent detailed images of the respective products.



SKINTOP® BS Gland & Nut Combi Pack

SKINTOP® BS, polyamide cable gland with bending and anti-kink protection, to protect flexible cables, for moving machine parts



Benefits

- Reliable bending and anti-kink protection
- Cable conservation
- Functional reliability
- To protect flexible cables

Application range

- Cables for electrical appliances and machinery that are moved under normal use must be protected against excessive bending as required in accordance with VDE 0700-1
- Handheld device
- Robotics Industry
- Light and sound applications
- Moving machine parts

Norm references / Approvals

- UL File Nr. E79903

Product Make-up

- PG connection thread acc. to DIN 40430

Technical data

	Classification ETIM 5 ETIM 5.0 Class-ID: EC000441 ETIM 5.0 Class-Description: Cable screw gland
	Classification ETIM 6 ETIM 6.0 Class-ID: EC000441 ETIM 6.0 Class-Description: Cable screw gland

	Colour delivered Silver grey (RAL 7001) Black (RAL 9005)
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	Material Body: Polyamide Seal: CR
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	Temperature range Between -20°C to +100°C
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	Protection rating IP 68 - 5 bar
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	Caution Refer to Appendix T21 for the installation dimensions and torques
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Article number	Description	Colour	Clamping range ØF (mm)	SW wrench size (mm)	Overall length, C (mm)	Thread length, D (mm)	Pieces/PACK
SKINTOP® BS PG COMBI PACK							
3806123	SKINTOP BS PG 7 + LOCKNUT SGY	silver grey	2.5 - 6.5	15	62	7.8	10
3806124	SKINTOP BS PG 9 + LOCKNUT SGY	silver grey	3.5 - 8	19	75	8	10
3806125	SKINTOP BS PG 11 + LOCKNUT SGY	silver grey	4 - 10	22	87	8	10
3806126	SKINTOP BS PG 13,5 + LOCKNUT SGY	silver grey	6 - 12	24	100	9	5
3806127	SKINTOP BS PG 16 + LOCKNUT SGY	silver grey	9 - 14	27	113	10	5
3806128	SKINTOP BS PG 21 + LOCKNUT SGY	silver grey	13 - 18	33	129	11	5
3806129	SKINTOP BS PG 7 + LOCKNUT BK	black	2.5 - 6.5	15	62	7.8	10
3806130	SKINTOP BS PG 9 + LOCKNUT BK	black	3.5 - 8	19	75	8	10
3806131	SKINTOP BS PG 11 + LOCKNUT BK	black	4 - 10	22	87	8	10
3806132	SKINTOP BS PG 13,5 + LOCKNUT BK	black	6 - 12	24	100	9	5
3806133	SKINTOP BS PG 16 + LOCKNUT BK	black	9 - 14	27	113	10	5
3806134	SKINTOP BS PG 21 + LOCKNUT BK	black	13 - 18	33	129	11	5

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E1FW CABLE GLAND

Suitable for Steel Wire Armoured (SWA) cables



Info

- Flameproof
- Zone 1, Zone 2, Zone 21 and Zone 22 Hazardous Areas
- Restricted Breathing

Application range

- The CMP E1FW Tri-Star Cable Gland is suitable for use with all forms of equipment protection permitted in Zone 1, Zone 2, Zone 21, and Zone 22, provided always that the prevailing code of practice for selection and installation is observed, e.g. IEC 60079-14

Product features

- CMP Type E1FW Tri-Star Triple Certified Flameproof (Type d), Increased Safety (Type e), and Restricted Breathing (Type nR) cable gland for use in Zone 1, Zone 2, Zone 21, and Zone 22 Hazardous Areas with Steel Wire Armour(SWA) cable
- Provides a Flameproof seal on the cable inner bedding
- Gas tight seal has been tested to prove compatibility with Restricted Breathing equipment
- Allows mechanical cable retention and earth continuity via the cable armour termination

Norm references / Approvals

- ATEX Certification: SIRA06ATEX 1097XCode of Protection Category:ATEX II 2GD/3GD Ex d IIC, Ex e II, Ex nR II,Ex tD A21 IP66, - Equipment Zone 1, Z one 21, and Z one 22, - Gas Groups IIA, IIBII C, ATEX IM2 Ex d I / Ex e ICompliance Standards:EN 60079-0:2004, EN 60079-1:2004,EN 60079-7:2003, EN 60079-15:2003,EN 61241-0:2004, EN 61241-1:2004

- IECEx Approval Number: IECEx SIR 06.0043XCode of Protection Category:Ex d IIC, Ex e II, Ex nR II,Ex tD A21 IP66,Ex d I, Ex e ICompliance Standards:IEC 60079-0:2004, IEC 60079-1:2003,IEC 60079-7:2001, IEC 60079-15:2005,IEC 61241-0:2004, IEC 61241-1:2004
- GOST R Certificate Number:POCC GB. 05.B01912Code of Protection Category:Ex d IIC U / Ex e II UGOST Compliance Standards:OCT P 52350.0-2005,OCT P 52350.1-2005,OCT P 52350.7-2005.
- GGTN Permit Number: PPC 00-18262GOST K Certificate Number:K Z 7500052.05.01.00063RoK Permit for Use Number: 08-067693
- INMETRO / UC Approval: MC, AEX -7618-XCode of Protection Category:BR-Ex d IIC / BR-Ex e II / IP66WCompliance Standards:IEC 60079-0/00, IEC 60079-1/01,IEC 60079-7/01, and NBR IEC 60529/05

Product Make-up

- E1FW Tri-Star Type
- BS 6121: Part 1: 1989, EN 50262: 1999

Technical data

Classification

ETIM 5.0 Class-Description: Cable screw gland
ETIM 5.0 Class-ID: EC000441

Note

Cable Type: Steel Wire Armour (SWA)
Armour Clamping: Detachable armour cone and anyway universal clamping ring
Sealing Technique: CMP inner displacement and unique CMP LRS™ outer seal - Load Retention Seal
Sealing Areas: Cable inner bedding and cable outer sheath
Optional Accessories: Locknut, Shroud, Entry thread sealing washer, Serrated washer, Earth tag, Adaptor/Reducer

Material

Body: Brass/Seal: CMP SOLO LSF Thermoplastic Elastomer

Protection rating

IP66 as standard, IP67 / IP68 available on request. Deluge Proof when fitted with optional CMP O-ring in the cable gland body joint

Temperature range

-60°C up to +130°C

Article number	Article designation / size	Metric	Cable bedding diameter (mm)	Armour range (mm)	Overall cable diameter (mm)	Approx. weight (kg)
E1FW CABLE GLAND						
3804460	20S/16	M20	3.1 - 8.7	0.9 - 1.0	6.1 - 11.5	0.2
3804461	20S	M20	6.1 - 11.7	0.9 - 1.3	9.5 - 15.9	0.2
3804462	20	M20	6.5 - 14.0	0.9 - 1.3	12.5 - 20.9	0.2
3804463	25S	M25	11.1 - 20.0	1.3 - 1.6	14.0 - 22.0	0.3
3804464	25	M25	11.1 - 20.0	1.3 - 1.6	18.2 - 26.2	0.3
3804465	32	M32	17.0 - 26.3	1.6 - 2.0	23.7 - 33.9	0.5
3804466	40	M40	22.0 - 32.2	1.6 - 2.0	27.9 - 40.4	0.7
3804467	50S	M50	29.5 - 38.2	2.0 - 2.5	35.2 - 46.7	0.7
3804468	50	M50	35.6 - 44.1	2.0 - 2.5	40.4 - 53.1	0.7
3804469	63S	M63	40.1 - 50.0	2.0 - 2.5	45.6 - 59.4	1
3804470	63	M63	47.2 - 56.0	2.0 - 2.5	54.6 - 65.9	1
3804471	75S	M75	52.8 - 62.0	2.0 - 2.5	59.0 - 72.1	2
3804472	75	M75	59.1 - 68.0	2.0 - 2.5	66.7 - 78.5	3
3804473	90	M90	66.6 - 80.0	3.2	76.2 - 90.4	4

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E1FX CABLE GLAND

Suitable for Steel Wire Armoured (SWA) cables

**Info**

- Flameproof
- Zone 1, Zone 2, Zone 21 and Zone 22 Hazardous Areas
- Restricted Breathing

**Application range**

- The CMP E1FX Tri-Star Cable Gland is suitable for use with all forms of equipment protection permitted in Zone 1, Zone 2, Zone 21, and Zone 22, provided always that the prevailing code of practice for selection and installation is observed, e.g. IEC 60079-14

Product features

- CMP Type E1FX Tri-Star Triple Certified Flameproof (Type d), Increased Safety (Type e), and Restricted Breathing (Type nR) cable gland for use in Zone 1, Zone 2, Zone 21, and Zone 22 Hazardous Areas with Steel Wire Armour (SWA) cable
- Provides a Flameproof seal on the cable inner bedding
- Gas tight seal has been tested to prove compatibility with Restricted Breathing equipment
- Allows mechanical cable retention and earth continuity via the cable armour termination

Norm references / Approvals

- ATEX Certification: SIRA06ATEX 1097X Code of Protection Category: ATEX II 2GD/3GD Ex d IIC, Ex e II, Ex nR II, Ex tD A21 IP66, - Equipment Zone 1, Zone 2, Zone 21, and Zone 22, - Gas Groups IIA, IIB, IIC, ATEX IM2 Ex d I / Ex e I Compliance Standards: EN 60079-0:2004, EN 60079-1:2004, EN 60079-7:2003, EN 60079-15:2003, EN 61241-0:2004, EN 61241-1:2004

- IECEx Approval Number: IECEx SIR 06.0043X Code of Protection Category: Ex d IIC, Ex e II, Ex nR II, Ex tD A21 IP66, Ex d I, Ex e I Compliance Standards: IEC 60079-0:2004, IEC 60079-1:2003, IEC 60079-7:2001, IEC 60079-15:2005, IEC 61241-0:2004, IEC 61241-1:2004
- GOST R Certificate Number: POCC GB. 05.B01912 Code of Protection Category: Ex d IIC U / Ex e II UGOST Compliance Standards: OCT P 52350.0-2005, OCT P 52350.1-2005, OCT P 52350.7-2005.
- GGTN Permit Number: PPC 00-18262 GOST K Certificate Number: KZ 7500052.05.01.000063 RoK Permit for Use Number: 08-067693
- INMETRO / UC Approval: MC, AEX -7618-X Code of Protection Category: BR-Ex d IIC / BR-Ex e II / IP66W Compliance Standards: IEC 60079-0/00, IEC 60079-1/01, IEC 60079-7/01, and NBR IEC 60529/05

Product Make-up

- E1FX Tri-Star Type
- BS 6121: Part 1: 1989, EN 50262: 1999

Technical data**Classification**

ETIM 5.0 Class-Description: Cable screw gland
ETIM 5.0 Class-ID: EC000441

Note

Cable Type: Wire Braid Armour, Screened Flexible Wire Braid (e.g. CY/SY), Pliable Wire Armour (PWA), Steel Tape Armour (STA), Aluminium Strip Armour (ASA), Armoured and jacketed Armour Clamping: Detachable armour cone and anyway universal clamping ring Sealing Technique: CMP inner displacement and unique CMP LRS™ outer seal - Load Retention Seal Sealing Areas: Cable inner bedding and cable outer sheath Optional Accessories: Locknut, Shroud, Entry thread sealing washer, Serrated washer, Earth tag, Adaptor/Reducer

**Material**

Body: Brass Seal: CMP SOLO LSF Thermoplastic Elastomer

**Protection rating**

IP66 as standard, IP67 / IP68 available on request. Deluge Proof when fitted with optional CMP O-ring in the cable gland body joint

**Temperature range**

-60°C up to +130°C

Article number	Article designation / size	Metric	Cable bedding diameter (mm)	Armour range (mm)	Overall cable diameter (mm)	Approx. weight (kg)
E1FX CABLE GLAND						
3804480	20S/16	M20	3.1 - 8.7	0.9 - 1.0	6.1 - 11.5	0.2
3804481	20S	M20	6.1 - 11.7	0.9 - 1.3	9.5 - 15.9	0.2
3804482	20	M20	6.5 - 14.0	0.9 - 1.3	12.5 - 20.9	0.2
3804483	25S	M25	11.1 - 20.0	1.3 - 1.6	14.0 - 22.0	0.3
3804484	25	M25	11.1 - 20.0	1.3 - 1.6	18.2 - 26.2	0.3
3804485	32	M32	17.0 - 26.3	1.6 - 2.0	23.7 - 33.9	0.5
3804486	40	M40	22.0 - 32.2	1.6 - 2.0	27.9 - 40.4	0.7
3804487	50S	M50	29.5 - 38.2	2.0 - 2.5	35.2 - 46.7	0.8
3804488	50	M50	35.6 - 44.1	2.0 - 2.5	40.4 - 53.1	0.8
3804489	63S	M63	40.1 - 50.0	2.0 - 2.5	45.6 - 59.4	1
3804490	63	M63	47.2 - 56.0	2.0 - 2.5	54.6 - 65.9	2
3804491	75S	M75	52.8 - 62.0	2.0 - 2.5	59.0 - 72.1	2
3804492	75	M75	59.1 - 68.0	2.0 - 2.5	66.7 - 78.5	3
3804493	90	M90	66.6 - 80.0	3.2	76.2 - 90.4	4

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E1FU CABLE GLAND

Suitable for Steel Wire Armoured (SWA) cables



Application range

- The CMP E1FU Tri-Star Cable Gland is suitable for use with all forms of equipment protection permitted in Zone 1, Zone 2, Zone 21, and Zone 22, provided always that the prevailing code of practice for selection and installation is observed, e.g. IEC 60079-14

Product features

- CMP Type E1FU Tri-Star Triple Certified Flameproof (Type d), Increased Safety (Type e), and Restricted Breathing (Type nR) cable gland for use in Zone 1, Zone 2, Zone 21, and Zone 22 Hazardous Areas with Steel Wire Armour(SWA) cable
- Provides a Flameproof seal on the cable inner bedding
- Gas tight seal has been tested to prove compatibility with Restricted Breathing equipment
- Allows mechanical cable retention and earth continuity via the cable armour termination

Norm references / Approvals

- ATEX Certification: SIRA06ATEX 1097XCode of Protection Category: ATEX II 2GD/3GD Ex d IIC, Ex e II, Ex nR II, Ex tD A21 IP66, - Equipment Zone 1, Z one 21, and Z one 22, - Gas Groups IIA, IIBII C, ATEX IM2 Ex d I / Ex e ICompliance Standards:EN 60079-0:2004, EN 60079-1:2004, EN 60079-7:2003, EN 60079-15:2003, EN 61241-0:2004, EN 61241-1:2004

Article number	Article designation / size	Metric	Cable bedding diameter (mm)	Armour range (mm)	Overall cable diameter (mm)	Approx. weight (kg)
E1FU CABLE GLAND						
3804440	20S/16	M20	3.1 - 8.7	0.9 - 1.0	6.1 - 11.5	0.2
3804441	20S	M20	6.1 - 11.7	0.9 - 1.3	9.5 - 15.9	0.2
3804442	20	M20	6.5 - 14.0	0.9 - 1.3	12.5 - 20.9	0.2
3804443	25S	M25	11.1 - 20.0	1.3 - 1.6	14.0 - 22.0	0.3
3804444	25	M25	11.1 - 20.0	1.3 - 1.6	18.2 - 26.2	0.3
3804445	32	M32	17.0 - 26.3	1.6 - 2.0	23.7 - 33.9	0.5
3804446	40	M40	22.0 - 32.2	1.6 - 2.0	27.9 - 40.4	0.7
3804447	50S	M50	29.5 - 38.2	2.0 - 2.5	35.2 - 46.7	0.8
3804448	50	M50	35.6 - 44.1	2.0 - 2.5	40.4 - 53.1	0.8
3804449	63S	M63	40.1 - 50.0	2.0 - 2.5	45.6 - 59.4	1
3804450	63	M63	47.2 - 56.0	2.0 - 2.5	54.6 - 65.9	2
3804451	75S	M75	52.8 - 62.0	2.0 - 2.5	59.0 - 72.1	2
3804452	75	M75	59.1 - 68.0	2.0 - 2.5	66.7 - 78.5	3
3804453	90	M90	66.6 - 80.0	3.2	76.2 - 90.4	4

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Info

- Flameproof
- Zone 1, Zone 2, Zone 21 and Zone 22 Hazardous Areas
- Restricted Breathing

Technical data



Classification

ETIM 5.0 Class-Description: Cable screw gland
ETIM 5.0 Class-ID: EC000441



Note

Cable Type: Steel Wire Armour (SWA), Aluminium Wire Armour (AWA), Steel Tape Armour (STA), Wire Braid Armour, Aluminium Strip Armour (ASA), Pliable Wire Armour (PWA), Screened Flexible Wire Braid (e.g. CY/SY), Armoured jacketed Armour Clamping: Reversible armour cone and anyway universal clamping ring Sealing Technique: CMP inner displacement and unique CMP LRS™ outer seal - Load Retention Seal Sealing Areas: Cable inner bedding and cable outer sheath Optional Accessories: Locknut, Shroud, Entrythread sealing washer, Serrated washer, Earth tag, Adaptor/Reducer



Material

Body: Brass/Seal: CMP SOLO LSF Thermoplastic Elastomer



Protection rating

IP66 as standard, IP67 / IP68 available on request. Deluge Proof when fitted with optional CMP O-ring in the cable gland body joint



Temperature range

-60°C up to +130°C

A2F CABLE GLAND

Suitable for unarmoured and braided cables

**Info**

- Type 'd', Type 'e', Type 'nR'
- Zone 1, Zone 2, Zone 21 and Zone 22 Hazardous Areas

**Application range**

- The CMP A2F Tri-Star Cable Gland is suitable for use with all forms of equipment protection permitted in Zone 1, Zone 2, Zone 21, and Zone 22, provided always that the prevailing code of practice for selection and installation is observed, e.g. IEC 60079-14

Product features

- CMP Type A2F Tri-Star Triple Certified Flameproof (Type d), Increased Safety (Type e), and Restricted Breathing (Type nR) cable gland for use in Zone 1, Zone 2, Zone 21, and Zone 22 Hazardous Areas
- Provides a Flameproof seal on the cable
- Gas tight seal has been tested to prove compatibility with Restricted Breathing equipment
- Allows mechanical cable retention and earth continuity via the cable armour termination

Norm references / Approvals

- ATEX Certification: SIRA13ATEX1068XCode of Protection Category: ATEX II 2/3 G, II 1D, Ex d IIC Gb, Ex e IIC Gb, Ex nR IIC Gc, Ex ta IIIC DaATEX IM2 Ex d I Mb, Ex e I MbCompliance Standards: EN 60079-0, 1, 7, 15, 31

- IECEx Certificate: IECEx SIR 13.0023XCode of Protection Category: Ex d IIC Gb, Ex e IIC Gb, Ex nR IIC Gc, Ex ta IIIC Da, Ex d I Mb, Ex e I MbCompliance Standards: IEC 60079-0, 1, 7, 15, 31
- EAC Certificate Number: TC RU C-GB-05.B00138Code of Protection Category: 1Ex d IIC Gb X, 1Ex e IIC Gb X, 2Ex nR IIC Gc X Ex ta IIIC Da XEAC Compliance Standards: OCT P 52350.7 OCT P MK 60079-0, 15, 31 O CT IEC 60079-1, 7 OCT 31610.7
- NEPSI Certificate: GYJ13.1140X/ GYJ13.1282X Code of Protection Category: Ex d IIC Gb, Ex e IIC Gb DIP A21 TA, Ex nR IIC Gc, Compliance Standards: GB3836.1,2,3,8 GB12476.1
- INMETRO Approval: TUV 12.0619XCode of Protection Category: EEx d I Mb / Ex e I Mb, Ex d IIC Gb, Ex e IIC Gb, Ex nR IIC Gc, Ex tb IIIC Db, IP66WCompliance Standards: ABNT NBR IEC 60079-0, 1, 7, 15, 31 ABNT NBR IEC 60529

Technical data**Classification**

ETIM 5.0 Class-Description: Cable screw gland
ETIM 5.0 Class-ID: EC000441

**Note**

Cable Type: Unarmoured / Braided Sealing Technique: CMP Unique Displacement Seal Concept Sealing Areas: Cable outer sheath Accessories: Locknut, Shroud, Entry thread sealing washer, Serrated washer, Earth tag, Adaptor/Reducer

**Material**

Body: Brass, Electroless Nickel Plated Brass, Stainless Steel, Aluminium Seal: CMP SOLO LSF Thermoset Rubber

**Protection rating**

IP66, IP67 and IP68

**Temperature range**

-60°C up to +130°C

Product Make-up

- A2F Tri-Star Type
- BS 6121: Part 1: 1989, EN 62444, IEC 62444

Article number	Article designation / size	Metric	Overall cable diameter (mm)	Approx. weight (kg)
A2F CABLE GLAND				
3804281	20S/16	M20	3.2 - 8.7	0.1
3804282	20S	M20	6.1 - 11.7	0.1
3804283	20	M20	6.5 - 14.0	0.7
3804284	25	M25	11.1 - 20.0	0.1
3804285	32	M32	17.0 - 26.3	0.2
3804286	40	M40	23.5 - 32.2	0.2
3804287	50S	M50	31.0 - 38.2	0.3
3804288	50	M50	35.6 - 44.1	0.3
3804289	63S	M63	41.5 - 50.0	0.4
3804290	63	M63	47.2 - 56.0	0.4
3804291	75S	M75	54.0 - 62.0	0.5
3804292	75	M75	61.1 - 68.0	0.5
3804293	90	M90	66.6 - 80.0	2
3804294	100	M100	76.0 - 91.0	2
3804295	115	M115	86.0 - 98.0	3
3804296	130	M130	97.0 - 115.0	4

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CW CABLE GLAND

Suitable for armoured cables, SWA and AWA



Application range

- CMP CW type brass indoor and outdoor cable gland for use with all types of Single WireArmour (SWA), Aluminium Wire Armour (AWA) cable, providing an environmental seal on the cable outer sheath.

Product features

- The CMP CW range of industrial cable glands are designed and tested to BS 6121-1:1989 meets or surpasses the requirements of EN 62444 and IEC 62444
- Produced from the Brass grade CuZn39Pb3(CW614N) to EN 12168

Norm references / Approvals

- GOST R Certificate: POCC GB. 05.H00187
- GOST K Certificate: KZ 75000361.01.01.25266
- RoK Permit For Use: 19-02-UL-1957
- Marine Approvals: LRS: 01/00171, ABS: 01-LD234401/2-PDA

Product Make-up

- CW Type
- BS 6121: Part 1: 1989, EN 62444, IEC 62444



Info

- Suitable for SWA and AWA cable

Technical data



Classification

ETIM 5.0 Class-Description: Cable screw gland
ETIM 5.0 Class-ID: EC000441



Note

Cable Type: SWA, AWA Sealing Technique: Unique CMP 'LRS' TM Outer Seal (Load Retention Seal)
Sealing Areas: Cable outer sheath
Accessories: Locknut, Shroud, Entry thread sealing washer, Serrated washer, Earth tag, Adaptor/Reducer



Material

Body: Brass, Electroless Nickel Plated Brass, Stainless Steel, Aluminium
Seal: CMP Thermoset Rubber



Protection rating

IP66



Temperature range

-60°C up to +130°C

Article number	Article designation / size	Metric	Cable bedding diameter (mm)	Armour range (mm)	Overall cable diameter (mm)	Approx. weight (kg)
CW CABLE GLAND						
3804300	20S/16	M20	8.7	0.8 - 1.3	6.1 - 11.5	0.1
3804301	20S	M20	11.7	0.8 - 1.3	9.5 - 15.9	0.1
3804302	20	M20	14.0	0.8 - 1.3	12.5 - 20.9	0.2
3804303	25S	M25	20.0	1.3 - 1.6	14.0 - 22.0	0.2
3804304	25	M25	20.0	1.3 - 1.6	18.2 - 26.2	0.2
3804305	32	M32	26.3	1.6 - 2.0	23.7 - 33.9	0.3
3804306	40	M40	32.2	1.6 - 2.0	27.9 - 40.4	0.5
3804307	50S	M50	38.2	2.0 - 2.5	35.2 - 46.7	1
3804308	50	M50	44.1	2.0 - 2.5	40.4 - 53.1	1
3804309	63S	M63	50.0	2.0 - 2.5	45.6 - 59.4	1
3804310	63	M63	56.0	2.0 - 2.5	54.6 - 65.9	1
3804311	75S	M75	62.0	2.5 - 3.0	59.0 - 72.1	2
3804312	75	M75	68.0	2.5 - 3.0	66.7 - 78.5	2
3804313	90	M90	80.0	3.2 - 4.0	76.2 - 90.4	3
3804314	100	M100	91.0	3.2 - 4.0	86.1 - 101.5	3
3804315	115	M115	98.0	3.2 - 4.0	101.5 - 110.3	5
3804316	130	M130	1158.0	3.2 - 4.0	110.2 - 123.3	6

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PX2K-REX CABLE GLAND

Suitable for armoured and braided cables, SWA and SWB



Info

- Type 'd', Type 'e', Type 'nR'
- Zone 1, Zone 2, Zone 21 and Zone 22 Hazardous Areas



Ex eb **Ex db** **Ex ta** **ExnR**

Application range

- The CMP PX2K-REX Tri-Star Cable Gland is suitable for use with all forms of equipment protection permitted in Zone 1, Zone 2, Zone 21, and Zone 22, provided always that the prevailing code of practice for selection and installation is observed, e.g. IEC 60079-14

Product features

- CMP Type PX2K-REX Tri-Star Triple Certified Flameproof (Type d), Increased Safety (Type e), and Restricted Breathing (Type nR) cable gland for use in Zone 1, Zone 2, Zone 21, and Zone 22 Hazardous Areas
- Provides a Flameproof seal on the cable
- Gas tight seal has been tested to prove compatibility with Restricted Breathing equipment
- Allows mechanical cable retention and earth continuity via the cable armour termination

Norm references / Approvals

- ATEX Certification: SIRA13ATEX1072X, SIRA 13ATEX4078X
Code of Protection Category:
ATEX II 2G, II 1D, Ex d IIC Gb, Ex e IIC Gb,
Ex ta IIIC Da, II 3G Ex nR IIC Gc,
ATEX IM2 Ex d I Mb, Ex e L Mb
Compliance Standards:
EN 60079-0, 1, 7, 15, 31
- INMETRO Approval: TUV 12.2073X
Code of Protection Category:
Ex d I Mb / Ex e I Mb, Ex d IIC Gb,
Ex e IIC Gb, Ex nR IIC Gc, Ex tb IIIC Db, IP66W
Compliance Standards:
ABNT NBR IEC 60079-0, 1,
ABNT NBR IEC 60529

Product Make-up

- PX2K-REX Type
- BS 6121: Part 1: 1989, EN 62444, IEC 62444

Article number	Article designation / size	Metric	Cable bedding diameter max. (mm)	SWB wire Ø max. (mm)	SWA wire Ø max. (mm)	Overall cable diameter (mm)	Approx. weight (kg)
PX2K-REX CABLE GLAND							
3804320	20S/16	M20	11.5	0.2 - 0.5	0.8 - 1.3	33.6	0.2
3804321	20S	M20	13.0	0.2 - 0.5	0.8 - 1.3	33.6	0.2
3804322	20	M20	13.0	0.2 - 0.6	0.8 - 1.3	33.6	0.2
3804323	25S	M25	18.0	0.2 - 0.6	1.3 - 1.6	41.3	0.3
3804324	25	M25	18.0	0.2 - 0.6	1.3 - 1.6	41.3	0.3
3804325	32	M32	24.0	0.2 - 0.6	1.6 - 2.0	50.6	0.5
3804326	40	M40	30.4	0.2 - 0.8	1.6 - 2.0	60.5	1
3804327	50S	M50	37.0	0.2 - 0.8	2.0 - 2.5	66.0	1
3804328	50	M50	41.4	0.3 - 0.8	2.0 - 2.5	77.0	1
3804329	63S	M63	48.5	0.3 - 0.8	2.0 - 2.5	82.5	1
3804330	63	M63	54.2	0.3 - 0.8	2.0 - 2.5	88.0	2
3804331	75S	M75	60.3	0.3 - 0.8	2.0 - 2.5	99.0	2
3804332	75	M75	64.7	0.3 - 0.8	2.5 - 3.0	110.0	3
3804333	90	M90	75.7	0.4 - 0.8	3.2 - 4.0	126.5	5
3804334	100	M100	86.0	0.4 - 0.8	3.2 - 4.0	139.7	6

- If not otherwise specified, all values relating to the product are nominal values. Other value information, such as tolerances, for example, can be obtained on request where available and released for publishing.

- Photographs are not to scale and do not represent detailed images of the respective products.

Notes



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