

ÖLFLEX® TRUCK 2006/2007

Cables, connectors and assemblies for commercial vehicles



LAPPKABEL

Lapp Kabel in Germany

Lapp Kabel is one of the foremost suppliers of cables and cable accessories worldwide. In 1957, company founder Oskar Lapp developed **ÖLFLEX®**, the first industrially manufactured control cable in the world. Today, cables are available for mechanical engineering, the automotive industry, measurement and control technology, electrical and installation engineering, EDP and many other fields of applications.

Lapp Kabel products are mainly manufactured at the Lapp Group production units. As a result, at present more than 40.000 different standard items are ready ex-works.

For customer-related solutions, special cables and conduits are designed and manufactured separately.

Short distances and proximity to our customers ensure a closely meshed distribution network, even outside Germany.

Technically competent company representatives, who have been trained at our company headquarters in Stuttgart, impart their expertise on site. Country-specific approvals and certifications permit problem free use of our products worldwide.



The Lapp Kabel headquarter in Stuttgart-Vaihingen.



The Lapp Center in Stuttgart-Vaihingen

Our headquarter

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Our business hours

Sales/Germany:
Mon - Thu 7.00 - 18.00 h
Fri 7.00 - 16.00 h

Self collection:
Mon - Fri 7.00 - 19.00 h

Export:
Mon - Thu 7.00 - 18.00 h
Fri 7.00 - 17.00 h

Call-Center:
Mon - Fri 7.00 - 20.00 h
Sat 8.00 - 12.00 h

The Lapp Test Centre

Our Test Centre with its extremely high demands on material testing and quality assurance is another surety of the crucial headstart of our products. The capability of all Lapp Group developments is tested here in hard endurance

tests. For example, we subject our highly flexible cables to millionfold bending cycles at different speeds and with extreme bending radii. Only what the "torture chamber" survives is good enough to be accepted in the program.



55 m endurance test unit for testing highly flexible power chain cables.

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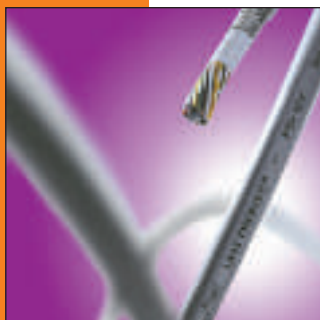
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Our international brands



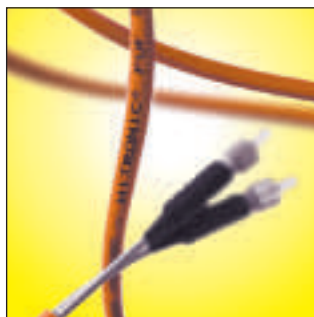
ÖLFLEX® connection and control cables

ÖLFLEX® is used in machinery, machine tools, system and appliance engineering, measuring, control, heating and air conditioning technologies. For permanent connections or in cable chains, halogen-free or internationally certified, you can choose from our comprehensive range of standard products.



UNITRONIC® Data cables

Lapp produces a full range of data cables for fast and secure transfers of large volumes of data. From machine electronics and bus systems to super-fast LAN data networks or highly-versatile applications: We have the data cables you need for virtually any situation.



HITRONIC® Fibre optic cables

HITRONIC® fibre optic cables are designed to transfer large volumes of data. Communications media via fibre optics are fast, efficient, and secure. Not even electromagnetic interference can affect HITRONIC® fibre optic cable. The HITRONIC® range of products includes cables for office communications, industrial applications, simplex, duplex, hybrid wiring, or cable chain applications.



SKINTOP® Cable glands

SKINTOP® cable glands guarantee secure connections every time. Simply thread the cable and twist. That's all! Your cables are perfectly centered, secured, hermetically sealed, and ready for action. Choose from a wide range of models in plastic or brass, for EX and EMC applications, halogen-free types or anti-kink protection, metric, PG or NPT.

SILVYN® cable protection and guiding systems

In many applications cables have to be additionally protected against mechanical and chemical stress. For this type of application, Lapp Kabel can supply the universal **SILVYN®** protective cable conduit program. Cable conduits manufactured from metal or plastic material, which can be used with matching glands to form a perfect system connection. The complete system results in all round protection for cables in indoor and outdoor installations. With **SILVYN® CHAIN**, Lapp Kabel's widely variable programme of power chains we offer both cable protection and guidance for highly dynamic applications.



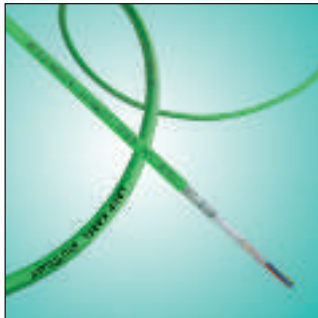
FLEXIMARK® marking systems

Labels on single cores, cables, and control cabinets need to remain legible for years to come. This is the best way to keep things well organized and avoid potential problems. From plastic to durable stainless steel, manual or electronic identification, with **FLEXIMARK®** you can be sure that your labels will last a lifetime.



ETHERLINE® Industrial Ethernet components

The Lapp Group is now in a position to offer comprehensive system solutions in the field of industrial networking. Its Factory Automation division supplies active network components that are used to supplement existing cable and plug technologies. These include services and security systems incorporating firewall solutions, in addition to distribution components such as switches, routers, cables and plug connectors. For its industrial customers, all of this means that a solution from the Lapp Group represents a considerable step forward in terms of security, safety and availability.

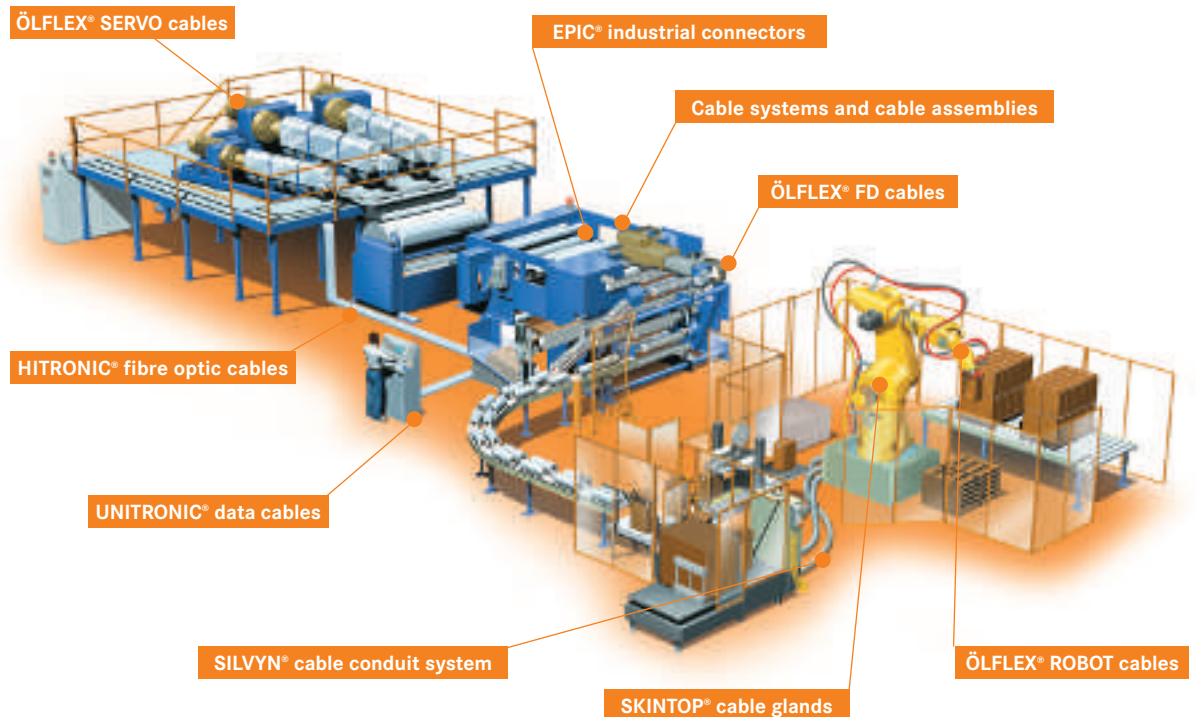


EPIC® industrial connectors

When we talk about secure connections, you can take us at our word. **EPIC®** industrial connectors produce an absolutely secure connection in combination with **ÖLFLEX®** cables. We provide the right contact for all your needs: From rectangular or circular connectors, to housings, inserts, contacts and accessories, bus or fibre optic cable applications.



Synergies combined to your advantage



Powerful brands in a powerful program

- Pioneering market leaders
- Expertise and solutions for many industries and markets
- Innovative technologies
- Highest quality
- Extensive product range for standard and tailor-made solutions
- Over more than 45 years of manufacturing experience

Perfect products, complete systems

- Tailor-made for excellent fit
- Perfectly matching cables and connectors
- System solutions for immediate deployment
- Effective with fast assembly
- Economical with simplified warehouse storage

The Lapp Group offers more than cabling

- Wires and cables
- Cable glands
- Cable accessories
- Industrial connectors
- Cable marking systems
- Cable systems
- Machines for cable and cable handling
- Communication technology
- Comprehensive range of services



Fast delivery, state-of-the-art logistics

- Constant availability, owing one of the industry's largest warehouses
- Delivery within 24 hours
- Worldwide sales network
- Innovative customer services

Everything from a single source

- Convenient and time-saving
- Full range of products and services
- Direct contacts for your solutions
- One group, one number, one call



15 production sites worldwide in America, Europe and Asia

- Global market competence
- range of products and services unique worldwide
- Highest quality standards worldwide
- Perfectly adapted to the relevant market



Head quarter in Stuttgart-Vaihingen



USA



Singapore



India



France



Austria

ÖLFLEX® TRUCK

Lapp Kabel develops and distributes a cable and connector program for the commercial vehicle industry which is known as the brand ÖLFLEX® TRUCK. These products are fulfilling all requirements and standards of the market for commercial vehicles and trailers.



ÖLFLEX® TRUCK 170 FLRY Y

- for trailer and semi-trailers
- ADR/GGVS approbation
- for wiring the electrical installation
- resistant against UV, oil, low temperatures
- resistant against weathering and chemicals
- developed acc. ISO 4141 + 6722
- use for the transport of hazardous goods
- PVC/PVC, black
- temperature range: -40 °C up to +85 °C



ÖLFLEX® TRUCK 470 P FLRY Y11Y

- for trailer and semi-trailer
- ADR/GGVS approbation
- for wiring the electrical installation
- resistant against UV, oil, low temperatures
- resistant against weathering and chemicals
- resistant against wear and tear
- resistant against microbes and hydrolysis
- developed acc. ISO 4141 + 6722
- use for the transport of hazardous goods
- PVC/PUR, black
- temperature range: -40 °C up to +85 °C

ÖLFLEX® TRUCK REFLEX FLRY11Y

- reflecting
- for long material trailers
- for wiring the electrical installation
- used for side frame of a long material trailer
- resistant against weathering and chemicals
- resistant against wear and tear
- resistant against microbes and hydrolysis
- developed acc. ISO 4141 + 6722
- PVC/PUR, transparent
- acc. § 51a/7 StVZO (German law)
- temperature range: -40 °C up to +85 °C



ÖLFLEX® TRUCK 170 TWIN

- battery cable for tail lifts
- ADR/GGVS appobation
- used between the power source and end-user
- resistant against UV, oil, low temperatures
- resistant against weathering and chemicals
- developed acc. ISO 4141 + 6722
- use for the transport of hazardous goods
- polarity identification without stripping the sheath
- cores do not brush after stripping
- double sheathed, extremely rough
- PVC/PVC, black
- temperature range: -40 °C up to +85 °C



ÖLFLEX® TRUCK – the perfect connection of truck and trailer

ÖLFLEX® TRUCK SPIREX® 13- and 15-poles

- for trailer und semi-trailer
- connecting system
acc. ISO 12098
- ADR/GGVS approbation
- PP/TPE-E
- protection class IP 69k
- extension length 4m



ÖLFLEX® TRUCK SPIREX® 24N and 24S

- for trailer und semi-trailer
- connecting system
acc. ISO 1185/3731
- ADR/GGVS approbation
- PP/PUR
- protection class IP 69k
- extension length 4m

ÖLFLEX® TRUCK SPIREX® Adapter

- for trailer und semi-trailer
- connecting system
acc. ISO 12098/1128/1185
- ADR/GGVS approbation
- PP/PUR
- protection class IP 69k
- extension length 4m

ÖLFLEX® TRUCK SPIREX® EBS and ABS

- for trailer und semi-trailer
- connecting system acc.
ISO 7638
- ADR/GGVS approbation
- PP/PUR
- protection class IP 69k
- extension length 4m

With ADR/GGVS Approval !

Low voltage cable for trailers and semi-trailers



Application

ÖLFLEX® TRUCK 170 low voltage cables are suitable for commercial vehicles and for wiring the electrical installation of all trailers and semi-trailers.

Special Feature

The cable is resistant against UV, oil, low temperatures, weathering and chemicals; developed in accordance to the international standard ISO 4141 and ISO 6722. All the test requirements of the standards are fulfilled.

Note

With the special ADR approval, ÖLFLEX® TRUCK 170 is also suitable to be used in vehicles aiming to transport hazardous goods.

LAPP KABEL recommends further on polyurethan jacketed cables (like ÖLFLEX® TRUCK 470 P) for ADR/GGVS applications.

Cable Make-up

Fine strands of plain copper wires, PVC-based core insulation, cores twisted in layers, outer sheath of a special PVC-based compound, black.

Technical Data

Minimum bending radius for 12 x cable diameter

Temperature range: -40 °C up to +85 °C application range class A

Conductor stranding: fine wire in accordance to ISO 6722-4

Core ident code: ISO 4141-3

Nominal voltage 60 V

Test voltage: 5 kV min. 5 minutes

DIN/ISO: ISO 4141 and ISO 6722

Insulation resistance: 10 MOhm x km

Mutual capacitance of the data pairs: length-dependent between the cores max. 50 pF/m and between each core for the data transmission and all other cores: max. 100 pF/m

Part number	Number of cores and mm ² per conductor	Colour code	Outside diameter (mm) approx.	Copper weight kg/km	Weight kg/km approx.
7027 060	2 x 1,0	white,black	6,0	19,2	55
7027 061	2 x 1,0	white,brown	6,0	19,2	55
7027 000	2 x 1,5	white,black	6,6	28,8	68
7027 001	2 x 1,5	white,brown	6,6	28,8	68
7027 062	3 x 1,0	black,brown,blue	6,3	28,8	67
7027 012	3 x 1,0	white,brown,blue latest draft of ISO	6,3	28,8	67
7027 063	4 x 1,0	white,black,red,brown	6,8	38,4	81
7027 034	4 x 1,5	white,black,red,brown	7,5	57,6	106
7027 064	5 x 1,0	white,brown,green,red,gre	7,5	48,0	97
7027 065	5 x 1,0 + 1 x 2,5	5x1,0=green,brown,red,blue,violet 1x2,5=white	9,0	72,0	133
7027 066	5 x 1,0 + 1 x 2,5	5x1,0=yellow,black,red,blue,violet 1x2,5=white	9,0	72,0	133
7027 015	5 x 1,0 + 1 x 2,5	5x1,0=brown,green,red,gre,violet 1x2,5=white latest draft of ISO	9,0	72,0	133
7027 016	5 x 1,0 + 1 x 2,5	5x1,0=brown,yellow,red,gre,violet 1x2,5=white latest draft of ISO	9,0	72,0	133
7027 007	7 x 0,75	white,black,yellow,red,green,brown,blue	7,3	50,4	101
7027 067	7 x 1,5	white,black,yellow,red,green,brown,blue	8,9	100,8	166
7027 068	6 x 1,5 + 1 x 2,5	ISO 4141 6x1,5=black,yellow,red,green,brown,blue 1x2,5=white	10,3	110,4	187
7027 069	8 x 1,5 + 1 x 2,5	ISO 4141 + grey,violet	11,7	139,2	239
7027 070	10x1,5+3x2,5+1x(2x1,5) with data pair 24 V	white with black numbers 1,5=No. 1-3,5-8,10-12 2,5=No. 4,9,13 1,5=No. 14,15	14,4	244,8	391
7027 010	10x1,5+3x2,5+1x(2x1,5) with data pair 24 V	ISO 12098	14,4	244,8	391
7027 071	10 x 1,5 + 3 x 2,5 without data pair 24 V	white with black numbers 1,5=No. 1-3,5-8,10-12 2,5=No. 4,9,13	14,4	216,0	367
7027 035	2 x 0,75 + 2 x 1,5	0,75=white,brown 1,5=yellow,green	7,2	43,2	85
7027 017	5 x 1,5 + 2 x 2,5	1,5=black,yellow,green,brown,blue 2,5=white,red	10,3	120	217
7027 004	8 x 1,5 + 5 x 2,5	1,5=yellow,blue,green,brown,red,black,pink,white/blue 2,5=white,orange,gre,white/black,white/red	14,8	235,2	360
7027 073	9 x 1,5 + 4 x 2,5	white with black numbers 1,5=No. 2,4-8,10-12 2,5=No. 1,3,9,13	14,8	225,6	352
7027 074	4 x 6 + 1 x 1,5 / battery charging cable	1,5=grey 6,0=brown,red,black,blue	13,7	244,8	352

No cutting costs are charged for standard lengths (50, 100, 500, 1000 m). Please advise the lengths you require (e.g. 1 x 500 m drum or 5 x 100 m coil). Coils < 30 kg, drums > 30 kg. Copper base: 150,- Euro / 100 kg

ÖLFLEX® TRUCK 470 P FLRYY11Y

Low voltage cable for hazardous goods transport ADR trailers and semi-trailers

Made of lead-free
PVC
ADR/GGVS
Approval !



Application

ÖLFLEX TRUCK 470 P low voltage cables are suitable for commercial vehicles and for wiring the electrical installation of all trailers and semi-trailers, especially for the transport of hazardous goods in accordance with ADR/GGVS.

Special Feature

The cables are resistant against UV radiation, low temperatures, wear and tear (acc. to the ADR/GGVS regulations), microbes and hydrolysis as well as to a large extent resistant against oil, weathering and chemicals due to the proven ÖLFLEX® PUR sheath compound. The cables have been

developed in accordance to the international standards ISO 4141 and ISO 6722. All the test requirements of the standards are fulfilled.

Note

Further measurements or versions on request !

Cable Make-up

Fine strands of plain copper wires, PVC-based core insulation, cores twisted in layers, inner sheath of a special PVC-based compound, black, outer sheath of special polyurethane (PUR), black.

Technical Data

Minimum bending radius for 12 x cable diameter	Core ident code: ISO 4141-3	Insulation resistance: 10 MΩm x km	Approval: ADR/GGVS TÜ.EGG.003-94
Temperature range: -40 °C up to +85 °C application range class A	Nominal voltage 60 V	Mutual capacitance of the data pairs: length-dependent between the cores max. 50 pF/m and between each core for the data transmission and all other cores: max. 100 pF/m	
Conductor stranding: fine wire in accordance to ISO 6722-4	Test voltage: 5 kV min. 5 minutes		
	DIN/ISO: ISO 4141 and ISO 6722		

Part number	Number of cores and mm ² per conductor	Colour code	Outside diameter in mm approx.	Copper weight kg/km	Weight kg/km approx.
7027 080	2 x 1,0	white,black	6,0	19,2	55
7027 081	2 x 1,0	white,brown	6,0	19,2	55
7027 020	2 x 1,5	white,black	6,6	28,8	68
7027 021	2 x 1,5	white,brown	6,6	28,8	68
7027 082	3 x 1,0	black,brown,blue	6,3	28,8	67
7027 022	3 x 1,0	white,brown,blue latest draft of ISO	6,3	28,8	67
7027 083	4 x 1,0	white,black,red,brown	6,8	38,4	81
7027 038	4 x 1,5	white,black,red,brown	7,5	57,6	106
7027 084	5 x 1,0	white,brown,green,red,gre	7,5	48,0	97
7027 085	5 x 1,0 + 1 x 2,5	5x1,0=green,brown,red,blue,violet 1x2,5=white	9,0	72,0	133
7027 086	5 x 1,0 + 1 x 2,5	5x1,0=yellow,black,red,blue,violet 1x2,5=white	9,0	72,0	133
7027 025	5 x 1,0 + 1 x 2,5	5x1,0=brown,green,red,gre,violet 1x2,5=white latest draft of ISO	9,0	72,0	133
7027 087	6 x 1,5 + 1 x 2,5	ISO 4141 6x1,5=black,yellow,red,green,brown,blue 1x2,5=white	10,3	110,4	187
7027 130	7 x 0,75	white,black,yellow,red,green,brown,blue	7,3	50,4	101
7027 088	7 x 1,5	white,black,yellow,red,green,brown,blue	8,9	100,8	166
7027 089	8 x 1,5 + 1 x 2,5	ISO 4141 + grey,violet	11,7	139,2	239
7027 090	10x1,5+3x2,5+1x(2x1,5) with data pair 24 V	white with black numbers 1,5=No. 1-3,5-8,10-12 2,5=No. 4,9,13 1,5=No. 14,15	14,4	244,8	391
7027 030	10x1,5+3x2,5+1x(2x1,5) with data pair 24 V	ISO 12098	14,4	244,8	391
7027 091	10 x 1,5 + 3 x 2,5 without data pair 24 V	white with black numbers 1,5=No. 1-3,5-8,10-12 2,5=No. 4,9,13	14,4	216,0	367
7027 031	10 x 1,5 + 3 x 2,5 without data pair 24 V	10x1,5=yellow,green,blue,black,brown,red,pink,gre,white/black,white/blue 3x2,5=white,orange,white/red	14,4	216,0	367
7027 046	2 x 0,75 + 2 x 1,5	0,75=white,brown 1,5=yellow,green	7,2	43,2	85
7027 092	2 x 6 + 3 x 1,5 / ABS cable	DIN 72570 6,0=red,brown 1,5=black,yellow,white	12,1	158,4	267
7027 093	2x6+3x1,5+1x(2x1,5) with data pair / EBS cable	DIN 72570 6,0=red,brown 1,5=black,yellow,white 1,5=white/grey,white/brown	12,1	187,2	321
7027 094	2x4+3x1,5+1x(2x1,5) with data pair / EBS cable	DIN 72570 4,0=red,brown 1,5=black,yellow,white 1,5=white/grey,white/brown	12,1	148,8	226
7027 024	18 x 1,5	white with black numbers	13,7	259,2	407
7027 032	25 x 1,5	white with black numbers	16,1	360	560

No cutting costs are charged for standard lengths (50, 100, 500, 1000 m). Please advise the lengths you require (e.g. 1 x 500 m drum or 5 x 100 m coil). Coils < 30 kg, drums > 30 kg. Copper base: 150,- Euro / 100 kg

ÖLFLEX® TRUCK REFLEX FLRY11Y

acc.to § 51a/7
StVZO
DIN 67520

the reflecting low voltage cable for long material trailers



Application

ÖLFLEX® TRUCK REFLEX is used especially for wiring the electrical installation of long material trailers. ÖLFLEX® TRUCK REFLEX is used for the side frame of a long material trailer especially at night.

Special Feature

ÖLFLEX® TRUCK REFLEX is resistant against UV, most of mineral oils, wear and tear and additionally against microbes, low temperatures and hydrolysis. ÖLFLEX® TRUCK REFLEX low voltage cables are in accordance to the international standards ISO 4141 and ISO 6722 and fulfil the dictated reflecting values in accordance to the law § 51a/7 StVZO respect. DIN 67520, part 2.

Note

ÖLFLEX® TRUCK REFLEX is according to the law § 51a/7StVZO. The side frame marking of long vehicles is dictated in Germany by law (StVZO) since 1st of October 1998.

Cable Make-up

Fine strands of plain copper wires, PVC-based core insulation, cores twisted in layers, cores marked in accordance to ISO 4141, wrapped reflex-reflecting foil, PUR-based outer sheath, transparent.

Technical Data

Minimum bending radius for 12 x cable diameter

Temperature range: -40 °C up to +85 °C application range class A

Conductor stranding: fine wire in accordance to ISO 6722-4

Core ident code: ISO 4141-3

Nominal voltage 60 V

Test voltage: 5 kV min. 5 minutes

DIN/ISO: ISO 4141 and ISO 6722

Insulation resistance: 10 MOhm x km

Mutual capacitance of the data pairs: length-dependent between the cores max. 50 pF/m and between each core for the data transmission and all other cores: max. 100 pF/m

Part number	Number of cores and mm ² per conductor	Colour code	Outside diameter in mm approx.	copper weight kg/km	Weight kg/km
7027 039	4 x 1,0	white/black/red/brown	8,0	38,4	85
7027 040	7 x 1,5	white/black/yellow/red/green/brown/blue	9,9	100,8	163
7027 043	10x1,5+3x2,5+1x(2x1,5)	white with black numbers	15,4	220,8	360

Further measurements or versions on request !

No cutting costs are charged for standard lengths (50, 100, 500, 1000 m). Please advise the lengths you require (e.g. 1 x 500 m drum or 5 x 100 m coil). Coils < 30 kg, drums > 30 kg.

Copper base: 150,- Euro / 100 kg

ÖLFLEX® TRUCK 170 TWIN

Battery cable and battery charging cable for tail lifts

With ADR/GGVS Approval !



Application

Battery cable used in between the power source and the end-user, e.g. from battery to the motor of tail lift. In addition to the easy handling and mounting of the cable there are a lot of other advantages for different actions.

With the special ADR approval, ÖLFLEX® TRUCK 170 is also suitable to be used in vehicles aiming to transport hazardous goods.

LAPP KABEL recommends further on polyurethan jacketed cables (like ÖLFLEX® TRUCK 470 P) for ADR/GGVS applications.

Special Feature

Polarity identification is possible without stripping the sheath and an external marking (the plus pole is marked on the outer sheath). This prevents to connect the wrong cable. Additional advantages are: less abrasion of the sheath, flexible cores, cores do not brush after stripping, quick and easy to crimp.

Note

- Double sheathed version, extremely rough and therefore to lay without corrugated tubes!
- Very strong connection but nevertheless a wire separation by hand is possible.

ÖLFLEX® TRUCK 170 TWIN PLUS

LAPP-Article-No.: 7027 556
This cable combines all advantages of the ÖLFLEX® TRUCK 170 TWIN and has additionally 2 filler strands of 0,5 mm². These strands can be used as feedback to the charge station in case of constant charge control.

Further measurements or versions on request !

Cable Make-up

Fine strands of plain copper wires, PVC-based core insulation, outer sheath of a special PVC-based compound, black.

Technical Data

Minimum bending radius for 15 x cable diameter

Temperature range: -40 °C up to +85 °C (fixed application range class A)

Conductor resistance: max. 0,554 at 20 °C

Insulation resistance: 10 MOhm x km

Nominal voltage 75 V DC

Test voltage: 3000 V AC

Part number	Description	Colour code	Outer dimensions mm	Copper weight kg/km
7027 055	PVC/PVC 2 x 6,0	red/black	15,2 x 7,1	120
7027 056	PVC/PVC 2 x 10,0	red/black	18,8 x 8,9	200
7027 057	PVC/PVC 2 x 16,0	red/black	21,0 x 10,0	308
7027 058	PVC/PVC 2 x 25,0	red/black	25,6 x 12,3	480
7027 059	PVC/PVC 2 x 35,0	red/black	28,4 x 13,5	672
7027 054	PVC/PVC 2 x 50,0	red/black	33,0 x 16,0	960
7027 052	PVC/PVC 2 x 70,0	red/black	39,8 x 18,4	1350
7027 079	PUR/PVC 2 x 35,0	red/black	28,0 x 13,5	672
7027 556	PVC/PVC 2 x 10,0 + 2 x 0,5	10,0 mm ² : red/black 0,5 mm ² : white/brown	21,8 x 10,8	202

* further measurements on request !
No cutting costs are charged for standard lengths (50, 100, 500, 1000 m).
Please advise the lengths you require (e.g. 1 x 500 m drum or 5 x 100 m coil).
Coils < 30 kg, drums > 30 kg.
Copper base: 150,- Euro / 100 kg

ÖLFLEX® TRUCK SPIREX® 15-pole

Truck spiral cables 15-pole and 13-pole 24 V



Application

The 15-pole spirals are used to connect tractor and trailer or semi-trailer equipped with the connector system acc. to ISO 12098. With the special ADR approval this spiral cable is also suitable to be used in vehicles aiming to transport hazardous goods.

Special Feature

All spirals are in accordance to ISO 4141 and ISO 6722. The PP core insulation and TPE-E sheath material meet the high quality demands of the well-known ABS and EBS spirals of LAPP KABEL. This assures the very high number of cycles in the flexural fatigue test and high reset forces which all truck manufacturers demand. Protection class IP 69k.

Note

Now available with the max. length of 4,0 mtr.!

Cable Make-up

ÖLFLEX® TRUCK SPIREX®
15-pole
3x2,5+10x1,5+1x(2x1,5)mm²
13-pole
3x2,5+8x1,5+(4x1,5) mm² (also for use in tank vehicles)

PP core insulation
TPE-E outer sheath
working length: 2.250 mm
max. length: 4.000 mm
- ISO 4141 and ISO 6722

connector: 15-pole, 13-pole
- ISO 12098

Technical Data

Temperature range:
-40 °C up to +85 °C
application range class A

Core ident code:
colour code acc. ISO 4141-3

Test voltage:
5 kV min. 5 minutes

Insulation resistance:
10 MOhm x km

Conductor stranding:
fine wire in accordance to ISO 6722-4

Nominal voltage
50 V

DIN/ISO:
in accordance to DIN 72570, ISO 4141 and ISO 6722

Part number	Connector type	Colour	max. length	Copper weight kg/ 1000 pcs.	Weight kg/1000 pcs.
3 x 2,5 + 10 x 1,5 + 1 x (2 x 1,5) mm²					
7027 4004	15-pole ISO 12098 / Economy/small windings with connector	black	4,0 mtr.	1322	2500
7027 4005	15-pole ISO 12098 / Classic/big windings with connector	black	4,0 mtr.	1322	2500
3 x 2,5 + 8 x 1,5 + (4 x 1,5) mm²					
7027 4006	13-pole ISO 12098 / Classic/big windings with connector	black	4,0 mtr.	1322	2500

* further measurements on request !

ÖLFLEX® TRUCK SPIREX® ABS

Economy and Classic 24 V



Application

The ABS spirals are used to connect tractor and trailer or semi-trailer equipped with the 5-pole ABS connector system acc. to ISO 7638. With the special ADR approval this spiral cable is also suitable to be used in vehicles aiming to transport hazardous goods.

Special Feature

All spirals are in accordance to ISO 4141 and ISO 6722. The PP core insulation and PUR sheath material meet the high quality demands of the well-known ABS spirals of LAPP KABEL. This assures the very high number of cycles in the flexural fatigue test and high reset forces which all truck manufacturers demand. Protection class IP 69k.

Note

Now available with the max. length of 4,0 mtr.!

Cable Make-up

ÖLFLEX® TRUCK SPIREX® ABS Economy 5-pole
PP core insulation
PUR outer sheath
working length: 2.250 mm
max. length: 4.000 mm
- ISO 4141, 6722 and 7638

ÖLFLEX® TRUCK SPIREX® ABS Classic 5-pole
PP core insulation
TPE-E outer sheath
working length: 2.250 mm
max. length: 4.000 mm
- ISO 4141, 6722 and 7638

Technical Data

Temperature range:
-40 °C up to +85 °C
application range class A

Core ident code:
colour code acc. ISO 4141-3

Test voltage:
5 kV effective, min. 5 minutes

Insulation resistance:
10 MOhm x km

Conductor stranding:
fine wire in accordance to ISO
6722-4

Nominal voltage
50 V

DIN/ISO:
in accordance to ISO 4141 and
ISO 6722

Part number	Connector type	max. extension length	Copper weight kg/1000 pcs.	Weight kg/1000 pcs.
ABS with connector 24 V				
7027 4000	5-pole ISO 7638 / Economy/small windings/2x4,0+3x1,5 mm ²	4,0 mtr.	648	1800
7027 4001	5-pole ISO 7638 / Classic/big windings/2x4,0+3x1,5 mm ²	4,0 mtr.	648	1800

* further measurements on request !



Application

The EBS spirals are used to connect tractor and trailer or semi-trailer equipped with the 7-pole EBS connector system acc. to ISO 7638. With the special ADR approval this spiral cable is also suitable to be used in vehicles aiming to transport hazardous goods.

Special Feature

Data of the electrical breaking system are transmitted through the added data pair due to the regulated capacity of the standards. The 7-pole connector is in accordance to ISO 7638. All spirals are in accordance to ISO 4141 and ISO 6722. The PP core insulation and PUR sheath material meet the high quality demands of the well-known EBS spirals of LAPP KABEL. This assures the very high number of cycles in the flexural fatigue test and high reset forces which all truck manufacturers demand. Protection class IP 69k.

Note

Now available with the max. length of 4,0 mtr.!

Cable Make-up

ÖLFLEX® TRUCK SPIREX® EBS Economy 7-pole
PP core insulation
PUR outer sheath
working length: 2.250 mm
max. length: 4.000 mm
- ISO 4141, 6722 and 7638

ÖLFLEX® TRUCK SPIREX® EBS Classic 7-pole
PP core insulation
TPE-E outer sheath
working length: 2.250 mm
max. length: 4.000 mm
- ISO 4141, 6722 and 7638

Technical Data

Temperature range:
-40 °C up to +85 °C
application range class A

Conductor stranding:
fine wire in accordance to ISO 6722-4

Nominal voltage
50 V

DIN/ISO:
in accordance to ISO 4141 and ISO 6722

Core ident code:
ISO 4141-3

Test voltage:
5 kV effective, min. 5 minutes

Insulation resistance:
10 MOhm x km

Part number	Connector type	max. extension length	Copper weight kg/1000 pcs.	Weight kg/1000 pcs.
EBS with connector 24 V				
7027 4002	7-pole ISO 7638 / Economy/small windings/2x4,0+3x1,5+1x(2x1,5) mm ²	4,0 mtr.	804	2000
7027 4003	7-pole ISO 7638 / Classic/big windings/2x4,0+3x1,5+1x(2x1,5) mm ²	4,0 mtr.	804	2000

* further measurements on request !

ÖLFLEX® TRUCK SPIREX® 24N and 24S

Economy 7-pole 24 V



Application

The 7-pole spirals are used to connect tractor and trailer or semi-trailer equipped with the 7-pole connector system acc. to ISO 1185/3731 (24 V). With the special ADR approval this spiral cable is also suitable to be used in vehicles aiming to transport hazardous goods.

Special Feature

The spirals were developed in compliance with the drafts of ISO 4141 and ISO 6722. These spirals are a cost saving alternative due to the use of moulded connectors. The PP core insulation and PUR sheath material meet the high quality demands of the well-known 24 V N and 24 V S spirals of LAPP KABEL. This assures the very high number of cycles in the flexural fatigue test and high reset forces which all truck manufacturers demand. Protection class IP 69k.

Note

Now available with the max. length of 4,0 mtr.!

Cable Make-up

ÖLFLEX® TRUCK SPIREX®
Economy 7-pole 24 N
1x2,5+6x1,5 mm²
PP core insulation
PUR outer sheath
working length: 2.250 mm
max. length: 4.000 mm
- connector ISO 1185

ÖLFLEX® TRUCK SPIREX®
Economy 7-pole 24 S
1x2,5+6x1,5 mm²
PP core insulation
PUR outer sheath
working length: 2.250 mm
max. length: 4.000 mm
- connector ISO 3731

Technical Data

Temperature range:
-40 °C up to +85 °C
application range class A

Conductor stranding:
fine wire in accordance to ISO
6722-4

Nominal voltage
50 V

DIN/ISO:
in accordance to ISO 4141 and
ISO 6722

Core ident code:
ISO 4141-3

Test voltage:
5 kV effective, min. 5 minutes

Insulation resistance:
10 MOhm x km

Part number	Connector type	Colour	max. extension length	Copper weight kg/ 1000 pcs.	Weight kg/ 1000 pcs.
7027 4007	Plastic / 24 V N acc. to ISO 1185 / 1x2,5+6x1,5	black	4,0 mtr.	597	1300
7027 4008	Plastic / 24 V S acc. to ISO 3731 / 1x2,5+6x1,5	black	4,0 mtr.	597	1300

* further measurements on request !

ÖLFLEX® TRUCK SPIREX® Adapter

15-pole to 2x7-pole 24 V



ÖLFLEX® TRUCK SPIREX® Adapter 15-pole to 2 x 7-pole

Application

The adapter spirals are used to connect tractor and semi-trailer equipped with different contact systems. With the special ADR approval this spiral cable is also suitable to be used in vehicles aiming to transport hazardous goods.

Special Feature

The adapter spirals were developed in compliance with the drafts of ISO 6722 and correspond the quality level of the safety-relevant spirals. The very high retractable forces is another benefit. Protection class IP 69k.

Cable Make-up

ÖLFLEX® TRUCK SPIREX®
Adapter 15-pole to 2 x 7-pole
1 x 2,5 + 6 x 1,5 mm², black
PP core insulation
PUR outer sheath
working length: 2.250 mm
max. length: 4.000 mm



Technical Data		Temperature range:	Conductor stranding:	Core ident code:	Nominal voltage	Test voltage:	DIN/ISO:	Insulation resistance:
ÖLFLEX® TRUCK SPIREX® Adapter		-40 °C up to +85 °C application range class A	fine wire in accordance to ISO 6722-4	ISO 4141-3	50 V	5 kV effective, min. 5 minutes	in accordance to ISO 4141 and ISO 6722	10 MOhm x km
Part number	Connector type	Spiral colour	max. extension length	Copper weight kg/1000 pcs.	Weight kg/1000 pcs.			
7027 4009	ISO 6722 1x2,5+6x1,5	black	4,0 mtr.	1166	2100			

* further measurements on request !

ADR/GGVS Certificates



ÖLFLEX® TRUCK 170



ÖLFLEX® TRUCK 470



ÖLFLEX® TRUCK SPIREX® 13-polig



ÖLFLEX® TRUCK SPIREX® 15-polig



ÖLFLEX® TRUCK SPIREX® ABS CL.



ÖLFLEX® TRUCK SPIREX® ABS ECO.



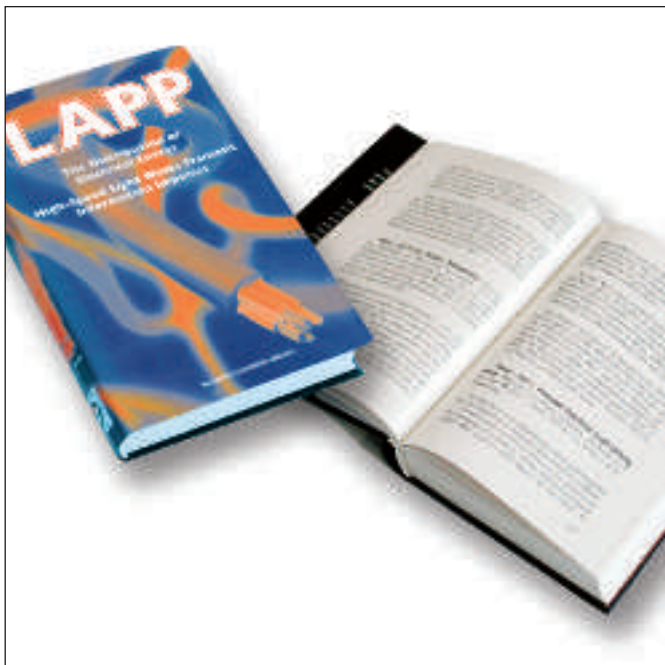
ÖLFLEX® TRUCK SPIREX® EBS CL.



ÖLFLEX® TRUCK SPIREX® EBS ECO.

Notices

The Lapp book, the Lapp Cable Guide, the main catalogue and the CD-ROM can be ordered from regional sales representatives. See catalogue pages 12-13. Visit our website: www.lappgroup.com



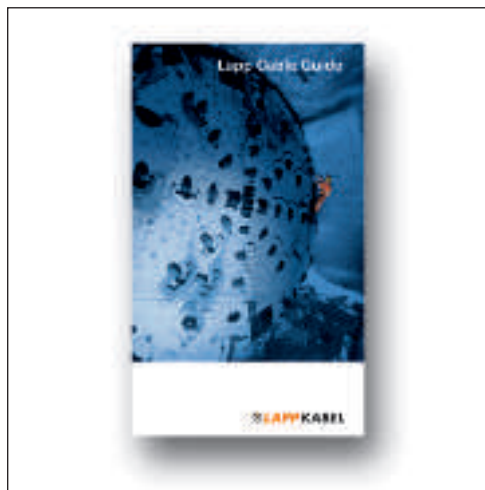
The Lapp Book

Second expanded edition with over 640 pages. Reference work and orientation tool with tips and advices for hobbyists and professionals. The book includes interesting articles, illustrations, tables and expert terminology about electricity, the development of copper cabling and modern fiber optic cabling technology.

The Lapp Cable Guide

In our "Lapp Cable Guide" you will find many of the technical terms used in the electrical industry. From A as in "absorption" to Z as in "zinc", the terms are listed

in alphabetical order and accompanied by a short but concise explanation. The "Lapp Cable Guide" also contains a large number of useful tables and charts.



The complete 2006 catalogue on CD-ROM

Safety

Without exception our products are tested for application safety in accordance with laid down standards and our own regulations, which complement the standards. Relevant legal requirements and safety regulations are also observed. Provided due care and attention is paid, the possibility of product-specific danger to the user may thus reasonably be excluded. Where products are used carelessly or incorrectly, however, considerable danger to persons and

the environment may arise. For this reason, our cables must only be processed and /or used responsibly by trained electricians or specialists. This catalogue contains general information for the application of each product. Independent of such information, the application standards DIN VDE 0298 and DIN VDE 001 for cables will apply. Excerpts from these standards, as well as complementary selection and application tables, design and installation guidelines, are contained

in the tables in the appendix to this catalogue. Our machines and installation tools are - where necessary - designed in accordance with the machine guidelines and display the CE identification mark. It must be noted, however, that our machines and installation tools must only be used by trained specialized personnel and for the purpose for which they were designed.

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Our general conditions of sale can be downloaded from our website www.lappkabel.de under the menu "Service".

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