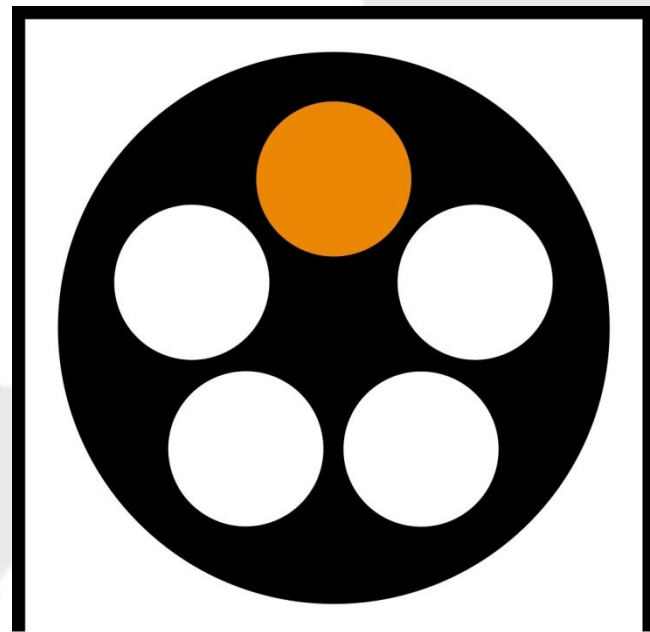


# Creating connections



**LAPP GROUP**

# Group facts – Business mission

Annual conference on pumps 20<sup>th</sup> November,09-Coimbatore

As a global player and system supplier with 39 sales companies,

17 production sites and further 100 representatives worldwide, the Lapp Group has many years of know-how and, as a brand supplier in everything related to cable technology, is one of the most innovative and successful in the world market.

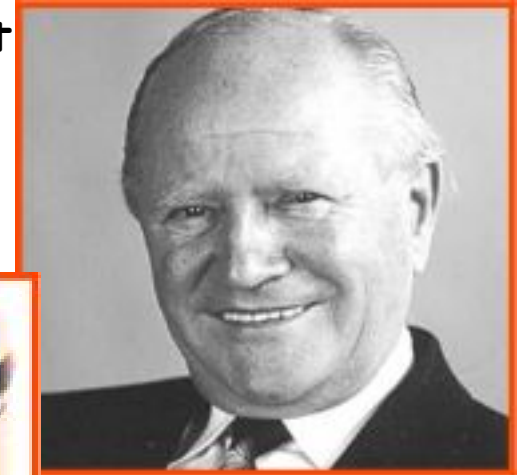


# Founding

International conference on pumps 20<sup>th</sup> November,09-Coimbatore

In 1957, Oskar Lapp invented the world's first industrially produced flexible control cable.

ÖLFLEX®



- ...since 1959, development of the company in Stuttgart
- ...since 1976, the Lapp Group has been expanding into the new world
- ...since 1980, Europe has become a strategic market
- ...since 1995, the Lapp group has been a global player, Asia calls

A LAPP Group Company



**LAPP INDIA**

# Areas of business

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## LAPP KABEL



Cables, leads and cable technology



## LAPP SYSTEMS



Spiral cables, ready-to-use  
cables



Industrial connectors



# Cables, Leads and cable technology

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One of the leading and most innovative suppliers of cables, leads and all technology relating to cables in the world for the most varied industries



The products are checked constantly in our own test centres to guarantee optimal quality.



# Spiral cables, ready-to-use cables

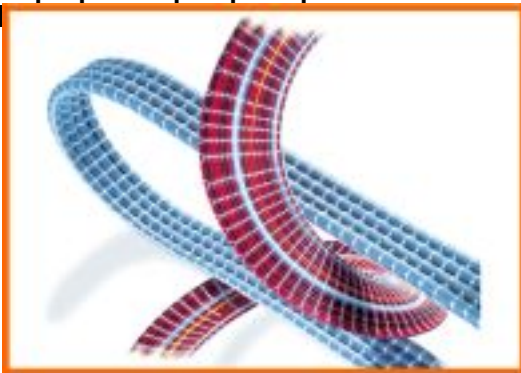
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The more complex the range of application, the more individually cables and leads must be produced. Everything is at one site, from development to logistics to production.



System solutions for:

- Machine and equipment construction
- Telecommunications
- Medical electronics
- Traffic technology
- Elevator and transport systems



# Industrial connectors

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More than 30 years of experience goes into plug connectors for electronic technology and information technology, measuring, testing and control techniques, machine construction and equipment technology.



Worldwide solutions for customer-specific applications and forward-looking innovations set new standards in the market for passive components.



# LAPP INDIA

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**LAPP INDIA**-A wholly owned subsidiary of LAPP GROUP,Germany is a pioneer in the field of cables, connectors and cable accessories.

The manufacturing facility in Bangalore is the third largest manufacturing facility of the LAPP GROUP. Each year about 100,000 km of ÖLFLEX® connecting and control cables and insulated single cores are produced.



LAPP INDIA now operates through a trained regional marketing organisation in Delhi,Kolkatta, Mumbai, Bangalore, Chennai with 23 sales offices and a strong network of dealers throughout the country.



# Corporate strengths

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Brands



Logistics



Range

Innovation

## Connecting and processing cables – Combined solutions for every application!

Comprehensive range of flexible connecting and processing cables:

- ✓ Universal use
- ✓ Robust
- ✓ Largely resistant to oil and chemicals
- ✓ For the most varied uses in machine construction, machine tool building, installation and equipment construction and in measuring, control, heating and climate control technology



## Cable glands – Make connections immediately; technology associated with cables

Attach cables quickly with one turn: feed in, turn till right – finished!

- ✓ Centred, fixed, strain relief
- ✓ Hermetically sealed
- ✓ Vibration protection
- ✓ Ergonomic gripping grooves
- ✓ Plastic or brass design
- ✓ For use in the Ex-area or with EMV
- ✓ Halogen-free design
- ✓ Protection from bending
- ✓ Connecting thread in metric, PG or NPT



## Industrial connectors from CONTACT

Components (connector housings, inserts, caps) in the most varied designs:

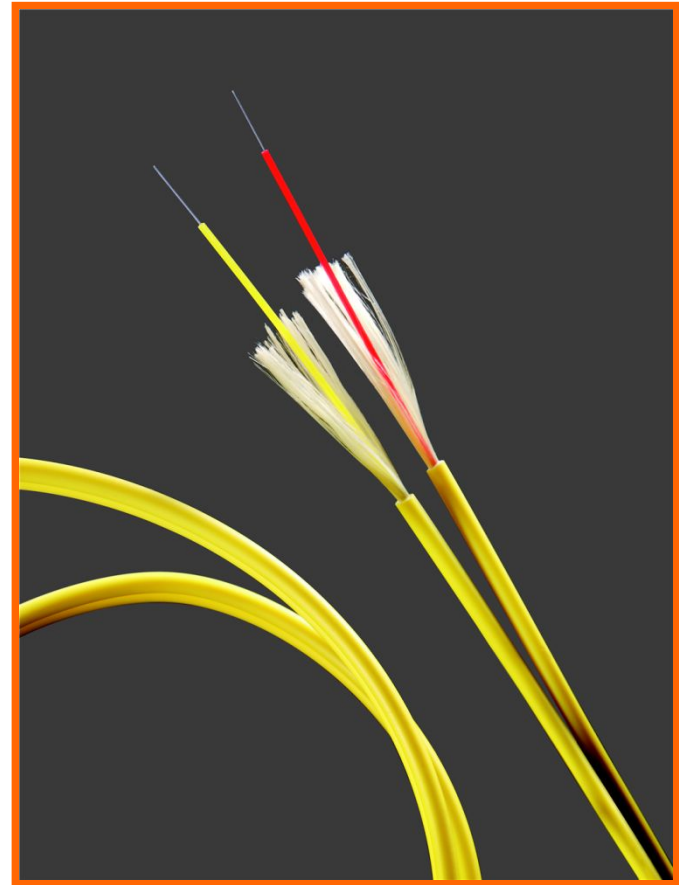
- ✓ Rectangular connectors
- ✓ Circular connectors
- ✓ For the most varied uses in machine building, communications engineering, electrical engineering, measuring, control, heating technology and many others



## Optical transfer systems based on fibre-optic cables

With glass or plastic fibres, for  
internal or external use:

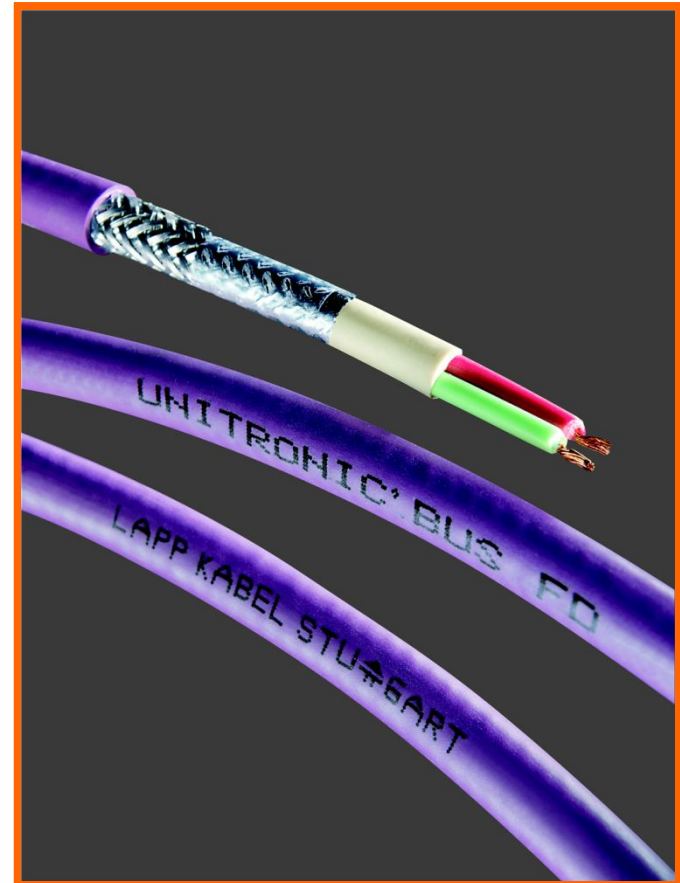
- ✓ Optical fibre cables
- ✓ Optical fibre cables with plastic fibres
- ✓ Optical fibre cables with glass fibres
- ✓ Connectors
- ✓ Tools



## Data cables – success is often a question of the right technology

Always the optimal solution, whether as standard or with the desired data transmission speed:

- ✓ Miniature data cables
- ✓ Cables with double shields
- ✓ Highly-flexible solutions for drag chains
- ✓ BUS cables conforming with systems
- ✓ Super-fast LAN cables



## Active und passive network components for the Industrial Ethernet

Networking of industrial computers  
and data terminals for machinery and  
facilities in industrial environments:

- ✓ Switches
- ✓ Router
- ✓ Firewall
- ✓ Data cables



## Protective Cable Conduit- and Carrier- Systems

The universal protective cable conduit programme:

- ✓ All round protection for cables in indoor and outdoor installations
- ✓ Plastic or metal design
- ✓ Various designs for different applications (heat-resistant, oil-resistant, halogen-free, etc.)
- ✓ With international approvals



## Marking Systems

- ✓ For cable identification, single core marking, control cupboard labeling, operation marking or office marking
- ✓ Plastic or durable stainless steel for long-lasting legibility
- ✓ Manual or electronic identification



# Single core for electrical wiring

International conference on pumps 20<sup>th</sup> November,09-Coimbatore

**LAPP KABEL UNI PLUS® as per IS 694**



## Application

- ✓ To be used as internal wiring intended to be installed in pipes and closed installation channels and panels.
- ✓ Intended for use in fixed installations.

## Features

99.99% purity copper, class 5 stranding in acc. to IEC 60228

Oxygen free ( <10 ppm) and higher silver content

Better amperage rating as per VDE 0298 part 4

Insulation PVC type A with additional LAPP special properties.

Flame retardant as per IS 10810-53

Voltage grade upto and including 1100 V

in acc. to IS 694

# Multi core cables - color coded

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## ÖLFLEX® CLASSIC 100 CY



## Application

- ✓ To be used as internal wiring for control and lighting purposes.
- ✓ For control and distribution panel wiring.
- ✓ 100 CY is with additional copper braiding for EMI protection

## Features

- ✓ Design as per VDE standards.
- ✓ Space saving installation due to small cable diameters
- ✓ High electrical performance due to 4 kV test voltage.
- ✓ Increased flexibility due to short twisted conductor layers
- ✓ Flame retardant acc. to IEC 332-1-2

## Application

ÖLFLEX® 100 I cables are connecting and control cables for fixed and flexible installation for medium mechanical use. They are for use in dry, damp and wet rooms. They may only be installed outdoors with UV-protection and in observation of temperature range. At room temperature they are generally resistant against acids, caustics solution and certain oils. ÖLFLEX® 100 I cables are used as supply and flexible connecting cable in machine tool manufacture, plant engineering, in power stations, in heating and air conditioning installations etc. Suitable for freely moved without forced guidance and tensile stress.

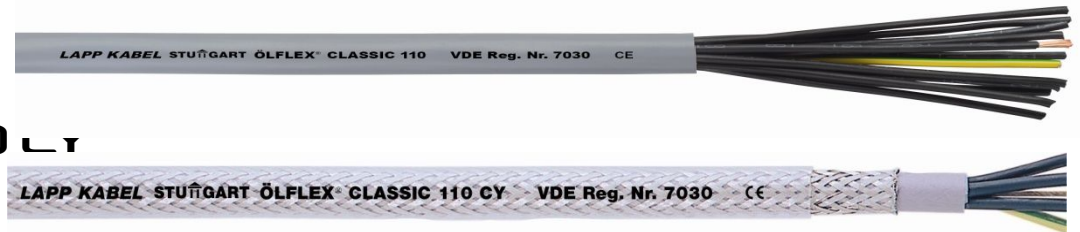
## Technical data

Conductor	bare copper, fine wire strand class 5 in acc. to IS 8130-1984/IEC 60228
Design	in acc. to IS 694
Core insulation	PVC type A compound as per IS 5831-1984 with additional LAPP special properties
Identification	color coded in acc. to IS 694
Outer sheath	PVC type ST1 as per IS 5831-1984 with additional LAPP special properties
Outer sheath color	GREY ( RAL 7001)
Nominal voltage	upto 1100 V in acc. to IS 694
Test voltage	3000 V AC in acc. to IS 694
Temp. range	-30°C up to +70°C
Min. bending radius	flexible installation: 15 x cable diameter
Flame retardant	in acc. to IS 5831 and IS 10810-53/IEC 332.1
Tests	in acc. to IS 694

# Multi core cables -number coded

International conference on pumps 20<sup>th</sup> November,09-Coimbatore

## ÖLFLEX® CLASSIC 110 CY



## Application

- ✓ To be used as internal wiring for control and lighting purposes.
- ✓ For control and distribution panel wiring.
- ✓ 100 CY is with additional copper braiding for EMI protection

## Features

- ✓ Design as per VDE standards.
- ✓ Space saving installation due to small cable diameters
- ✓ High electrical performance due to 4 kV test voltage.
- ✓ Increased flexibility due to short twisted conductor layers
- ✓ Flame retardant acc. to IEC 332-1-2

# Multi core cables with flexible armour of steel wire braid

11:00 AM on 20th November, 09-Coimbatore



## ÖLFLEX® CLASSIC 100 SY 4G2.5



## Application

- ✓ To be used as internal wiring for control and lighting purposes.
- ✓ For air conditioning control and distribution panel wiring.
- ✓ Application areas where additional mechanical protection is needed over the cable

## Features

- ✓ Design as per VDE standards.
- ✓ Overall oxidation protected steel wire braid for additional mechanical protection
- ✓ High electrical performance due to 4 kV test voltage.
- ✓ Increased flexibility due to short twisted conductor layers
- ✓ Flame retardant acc. to IEC 332-1-2

# H07RN8-F aqua grade round cable for submersible pumps

on pumps 20<sup>th</sup> November,09-Coimbatore



## Application

- ✓ For connecting electrical equipment in industrial water e.g: floater switches
- ✓ Flexible applications indoor/outdoor
- ✓ Suitable for use with submersible pumps

## Features

- ✓ Design as per <HAR> standards.
- ✓ Tested for permanent use in water
- ✓ Usable down to 10 mtr immersion depths
- ✓ Good oil resistance acc. to EN 60811-2-1
- ✓ Flame retardant acc. to IEC 332-1-2

# Drinking water usage certified multicore cable

International conference on pumps 20<sup>th</sup> November,09-Coimbatore



## ÖLFLEX® AQUA BAM

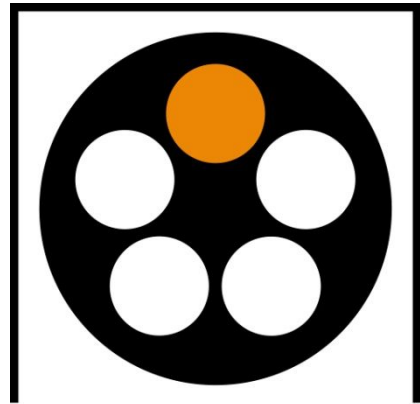
### Application

- ✓ For connecting electrical equipment (eg. submersible pumps and floating switches) in drinking water
- ✓ For use in dry, damp and wet interiors

### Features

- ✓ KTW-conformity certified for usage in drinking water
- ✓ Suitable for use with drinking water
- ✓ Suitable down to a immersion depth of 250 mtr

**THANK YOU FOR YOUR  
ATTENTION**



**LAPP GROUP**

