

## LEGEND

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

## THE WORLD OF LAPP Machine Tools



### LAPP India Private Limited.

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Customer Care No.: 080-47405000  
Buy Online: [shopasia.lappgroup.com/in](http://shopasia.lappgroup.com/in)





Reliably connecting the world

Headquartered in Stuttgart, Germany, the LAPP is a leading supplier of integrated solutions and branded products in the field of cable and connection technology. The LAPP's portfolio includes standard and highly flexible cables, industrial connectors, customized system solutions, automation technology and robotics solutions for the intelligent factory of the future, as well as technical accessories.

As a manufacturer with our expertise in the development, design and manufacture of cables, system products and cable accessories, we can guarantee that LAPP will provide you with the quality that you require and demand for.

You can always rely on quality from LAPP – wherever you are in the world.

SILVYN® RILL PA 6



- Halogen and cadmium-free
- Abrasion-resistant
- High resistance to oil, petrol, acids and other chemicals



SILVYN® SSUE



- High-tensile
- Corrosion-resistant
- Flexible
- For high mechanical stress
- Heat-resistant



SILVYN® LCC-2



- Protects against liquids
- High-tensile
- High crush-resistance
- Suitable for outdoor use and direct burial
- High mechanical resistance



FLEXIMARK® Stainless steel marking FCC



- For fastening with cable ties (LS) up to a width of 7.9 mm
- Customised stainless steel cable and component marking
- Markers are sorted prior to delivery
- No time-consuming preparation and installation
- Acid-resistant



LAPP IN INDIA



Bangalore factory



Laboratory testing facilities



EndtoEnd System facility for ÖLFLEX® Connect

Reliably connecting India

LAPP in India is a 100% subsidiary of the LAPP. Having started its operations in 1996, LAPP in India provides about 150,000 km per year of power, control, instrumentation and data cables along with connectors, accessories and EndtoEnd Systems to over 6000 customers pan India. Our customers are spread across different industry segments such as automation, textile, automotive, machine tools, oil and gas, renewable energy, process industries, as well as in the infrastructure and building sectors.

- 23 Sales offices close to customers all over India & 5 service points
- 300+ Employees committed to best serve customers
- Strong network of over 150 dealers
- 2 Manufacturing units - Bangalore and Bhopal
- 5 Warehouses
- State of the art laboratory
- Fully fledged Innovation and Engineering Centre

OUR BRANDS





SKINTOP® MS-SC-M



- Suitable for cables with and without inner sheath
- Also suitable for continuing the cable screen to another connection
- Low-resistance screen contact, optimum EMC protection
- Highly conductive, flexible EMC contact for clamping various screen diameters
- Few operation steps, easy to assemble



SKINTOP® MS-M ATEX BRUSH



SKINTOP® SDV-M ATEX

SKINTOP® SDV-M ATEX

- Faster and less complicated assembling than any other system
- Optimum, low-resistance 360° screen contact
- Simple cable adjustment
- Easy to uninstall
- Anti-static, safe, and impact-resistant at cold temperatures



SKINTOP® CLICK / SKINTOP® CLICK-R



- Fewer parts, counter nut no longer needed
- Save up to 70% of the time with the innovative CLICK system
- Simple, free assembly in any position
- Vibration protection
- No thread required



SKINTOP® CUBE



- Variable range of clamping force
- Vibration-safe module fi xation
- Strain relief
- Oil resistance
- Simplifi ed servicing due to easy assembling and disassembling



The machine tool industry is the backbone of the manufacturing industry. The main objective of this industry is to build machines which will work towards reducing operational downtime for its customers. According to IMTMA, the industry is increasingly moving towards sophisticated CNC machines driven by key segments like automobiles and consumer durables. This calls for increased focus on identifying and sourcing the right quality of cabling solutions which enhances the productivity, precision and reliability of the machine tool.

The industry demand for slim, light weight, highly flexible cables which not only meet the global standards but also overcome the challenges faced due to harsh environment conditions, continuous motion and high temperature. LAPP offers its array of cables, connectors, cable glands, conduits, marking systems and accessories for the machine tool industry. In addition, the OLFLEX® CONNECT cable assembly solution from LAPP ranges from cable or custom servo

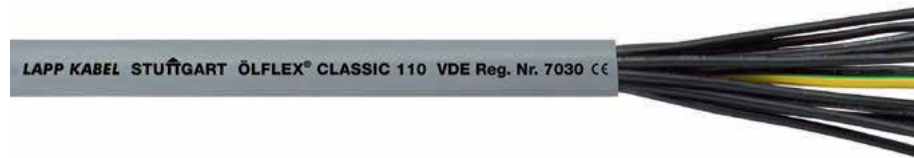
assemblies to complex drag chain applications. This plug and play solution displays superior German quality and high competence for the machine tool industry, hence being the best choice for the fast growing industry.

**Required characteristics of cables and accessories for machine tool industry:**

- a.** Cables should be oil resistant. Oil has a tendency to get absorbed into the cable resulting in swelling and softening which eventually degrades the tensile property of the cable.
- b.** Cables must also be able to sustain vibrations.
- c.** The cable glands/connectors must be ingress protected. The cables should be dust resistant and must be protected against temporary/continuous immersion in liquids.
- d.** The cables must comprise of abrasion resistant insulation.
- e.** The cables must possess the right amount of flexibility as most industrial machines have moving parts.

## ÖLFLEX® CLASSIC 110

VDE-registered oil-resistant PVC control cable for a wide range of applications



- Flame-retardant according IEC 60332-1-2
- Good chemical resistance, see catalogue appendix T1
- Oil-resistant according to DIN EN 50290-2-22 (TM54)
- Suitable for outdoor application and for direct burial



## ÖLFLEX® ROBUST 215 C

Proven all-weather control cable - screened and resistant to a wide range of chemical media



- Good chemical resistance to ester-based hydraulic fluids
- Ozone, UV and weather-resistant according to EN 50396 and HD 605 S2
- Flexible down to -40°C
- Low-capacitance design
- Number-coded cores



## ÖLFLEX® HEAT 260 C MC

Copper-screened polytetrafluoroethylene cables for most extreme loads



- Copper braiding of screened version complies with EMC requirements and protects against electromagnetic interference
- Outstanding resistance against acids, alkalis, solvents, lacquers, petrol, oils and many other chemical media
- High dielectric strength and high abrasion resistance with high elongation and tear resistance.
- Adhesion-free insulation materials - Weather and ozone resistant
- Flame retardant acc. to IEC 60332-1-2



## EPIC® HA 4, SEH WITH GLAND, PMB, METALLIC V



- Robust power supply connector
- Straight cable entry into the contacts
- Compact, robust metal housings size H-A 4

## EPIC® POWER LS1 G5 AND D6

Circular connectors for servomotors and power supply



- High power at smallest installation space, Optimal solution for electric motors
- EMC-optimised design
- Safety use in field environment by high protection class



## EPIC® POWER M17 A1

Circular connectors for servomotors and power supply




- Version with less contacts for higher current
- Compact design: small space requirements
- EMC protection
- High Power with smallest space requirements






### HITRONIC® PCF DUPLEX FD cables

For highly flexible applications




LAPP KABEL STUTTGART HITRONIC® PCF DUPLEX FD FRNC-PUR

- Flexible PCF cable compatible with all BUS systems
- For data transmission in field bus systems, such as PROFIBUS, INTERBUS etc.
- Possible transmission wavelengths: 650 nm and 850 nm
- Complies with requirements for all BUS systems
- Outer sheath flame-retardant and halogen-free

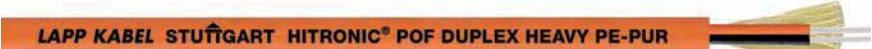


### HITRONIC® POF DUPLEX CABLE


For optical signal transmission in industrial applications



LAPP KABEL STUTTGART HITRONIC® POF DUPLEX PE-PUR




LAPP KABEL STUTTGART HITRONIC® POF DUPLEX HEAVY PE-PUR




LAPP KABEL STUTTGART HITRONIC® POF DUPLEX FD PE-PUR

- Duplex plastic fibre optic cable with strain relief and PUR outer sheath
- FD cable version: for flexible applications (power chains)
- Outer sheath flame-retardant and halogen-free
- Resistant to abrasion, oil, microbes and hydrolysis
- Adhesion-free
- FD cable version: 5.000.000 bending cycles




### HITRONIC® HRH Breakout Cable

For indoor use




LAPP KABEL STUTTGART HITRONIC® HRH1700 12G 50/125 OM2




LAPP KABEL STUTTGART HITRONIC® HRH400 2G 50/125 OM3

- Breakout cable for direct connector assembly
- Tertiary cabling
- Installation cable with up to 12 Simplex cables
- Outer sheath flame-retardant and halogen-free
- Mechanically robust




### ÖLFLEX® SERVO 7DSL

Low capacitive hybrid servo cable with PVC outer sheath for static use - certified for North America




LAPP KABEL STUTTGART ÖLFLEX® SERVO 7DSL CE

- Maximum DSL transmission length: 100m
- Flammability: UL/CSA:VW-1, FT1 IEC/EN: 60332-1-2
- Multi stranded certification reduces part varieties and saves costs.
- Low-capacitance design, Oil-resistant & EMC-optimised design




### ÖLFLEX® SERVO FD 798 CP

Screened encoder cable with PUR outer sheath for highly dynamic power chain application - certified




LAPP KABEL STUTTGART ÖLFLEX® SERVO FD 798 CP

- Extended line for heavy duty in power chain application
- Flammability: UL/CSA: VW-1, FT1 IEC/EN: 60332-1-2
- Halogen-free materials
- Low-capacitance design, oil, abrasion and notch-resistant
- Increased durability under harsh conditions, thanks to robust PUR outer sheath




### ÖLFLEX® ROBOT F1 ( C )

Screened TPE-PUR robot cable for bending and torsion loads, certified




LAPP KABEL STUTTGART ÖLFLEX® ROBOT F1 (C) CE

- Flame Retardant and resistant to cold temperatures
- Oil, abrasion and notch-resistant
- Wide temperature range for applications in harsh climatic environments





### UNITRONIC® LIYCY

Screened data transmission cable with colour code acc. to DIN 47100




- Flame-retardant according IEC 60332-1-2
- Based on VDE 0812
- Screened cables with small dimensions are suitable for use in computer systems, instrumentation technology, office equipment etc.
- Multifunctional application possibilities







### UNITRONIC® FD CP (TP) plus


Screened highly flexible data transmission cable with PUR outer sheath and twisted pairs - UL/CSA-listed











- Halogen-free, has low capacitance and is flexible down to -40°C
- PUR outer sheath, tear and notch-resistant, resistant to mineral oils and abrasion when used in power chains
- Low-adhesive surface, resistant to hydrolysis and microbes, oil resistant
- Flame retardance ratings: IEC 60332-1-2, VW-1 acc. UL 1581, T2 (Horizontal Flame Test)
- Designed for 10 million alternating bending cycles and horizontal travel distances up to 100 meter



### UNITRONIC® BUS LD FD P



- UL versions with certification: UL/CSA type CMX acc. to UL 444 and CSA C22.2 no. 214-02
- Suitable for multiple Bus systems based on RS485 / RS422



### UNITRONIC® BUS PB TORSION


Highly flexible application








- TORSION: for torsional stress, e.g. robot application; ± 180° per 1 m
- Flame-retardant according IEC 60332-1-2



### UNITRONIC® BUS PB HEAT 180





- No need of additional cable protection against high temperatures
- High oil-resistance










### ETHERLINE® ROBUST

Flexible use



- Halogen-free materials
- Good chemical resistance to ester-based hydraulic fluids
- Ozone, UV and weather-resistant according to EN 50396
- Low smoke density according to IEC 61034-2



### ETHERLINE® TORSION Cat.6<sub>A</sub>




Highly flexible application



- PUR version is halogen-free according to IEC 60754
- Oil-resistant acc. IEC 60811-2-1
- Cable suitable for high torsion stress. Tested with more than 1 million bending cycles and a right/left movement of 180° per metre.
- Meets the requirements according to CAT.6 A , ISO/IEC 11801 and EN 50173



### ETHERLINE® HEAT 6722



- Halogen-free according to VDE 0472-815
- Good chemical resistance
- Flame retardant acc. to ISO 6722-1
- Temperature class B on the basis of ISO 6722-1

