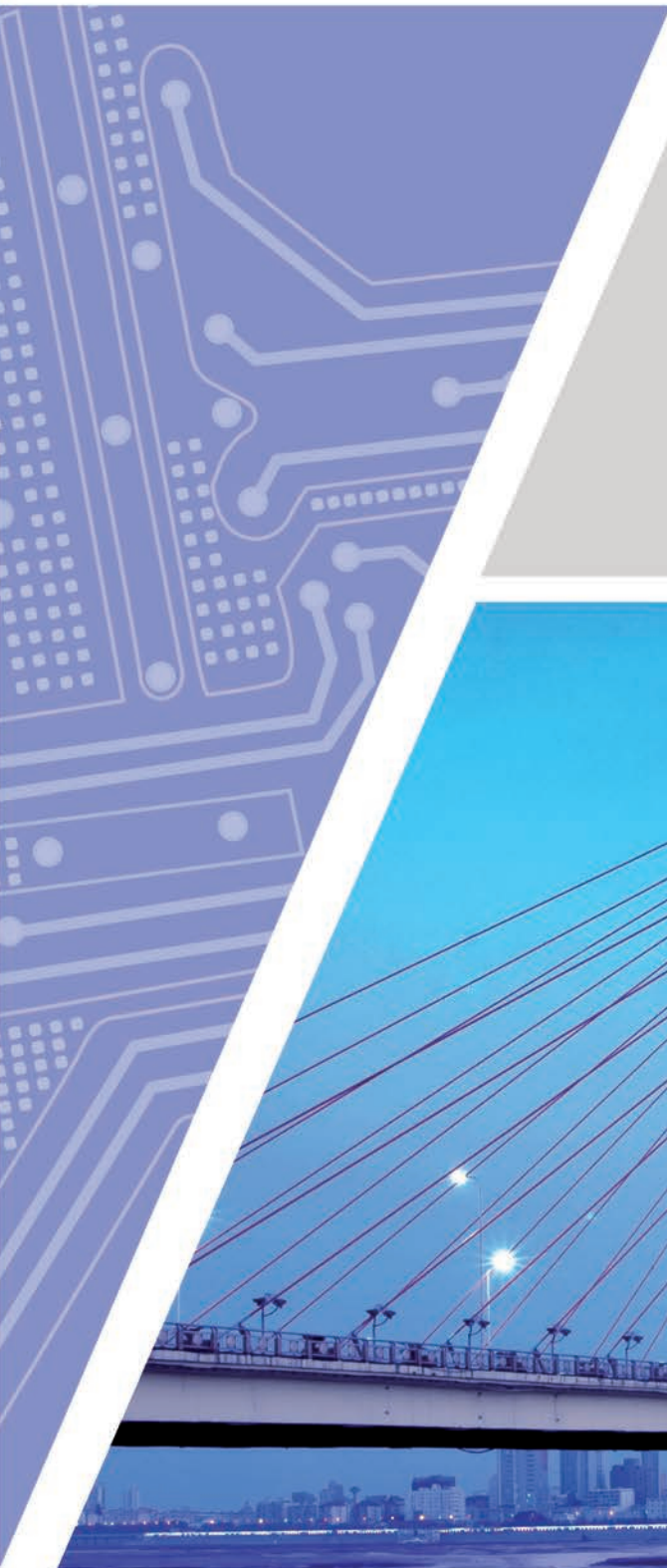


Harness Production  
Cables & Cable Processing Systems  
Industrial Connectors  
Control Products  
Cases  
Heatsinks  
Board Level Connectors



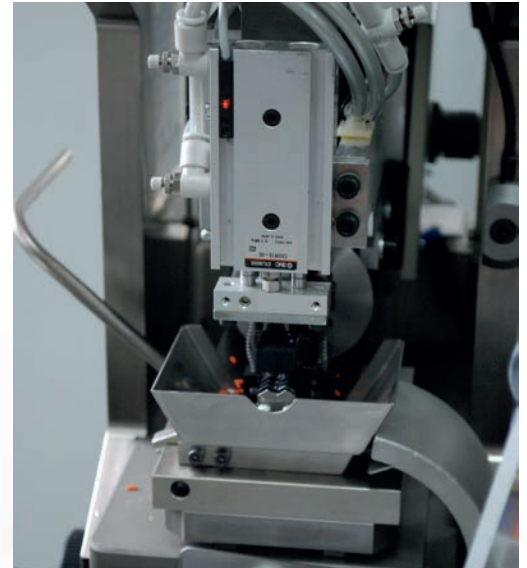
Find us on   
[www.facebook.com/Microdis.Electronics/](https://www.facebook.com/Microdis.Electronics/)



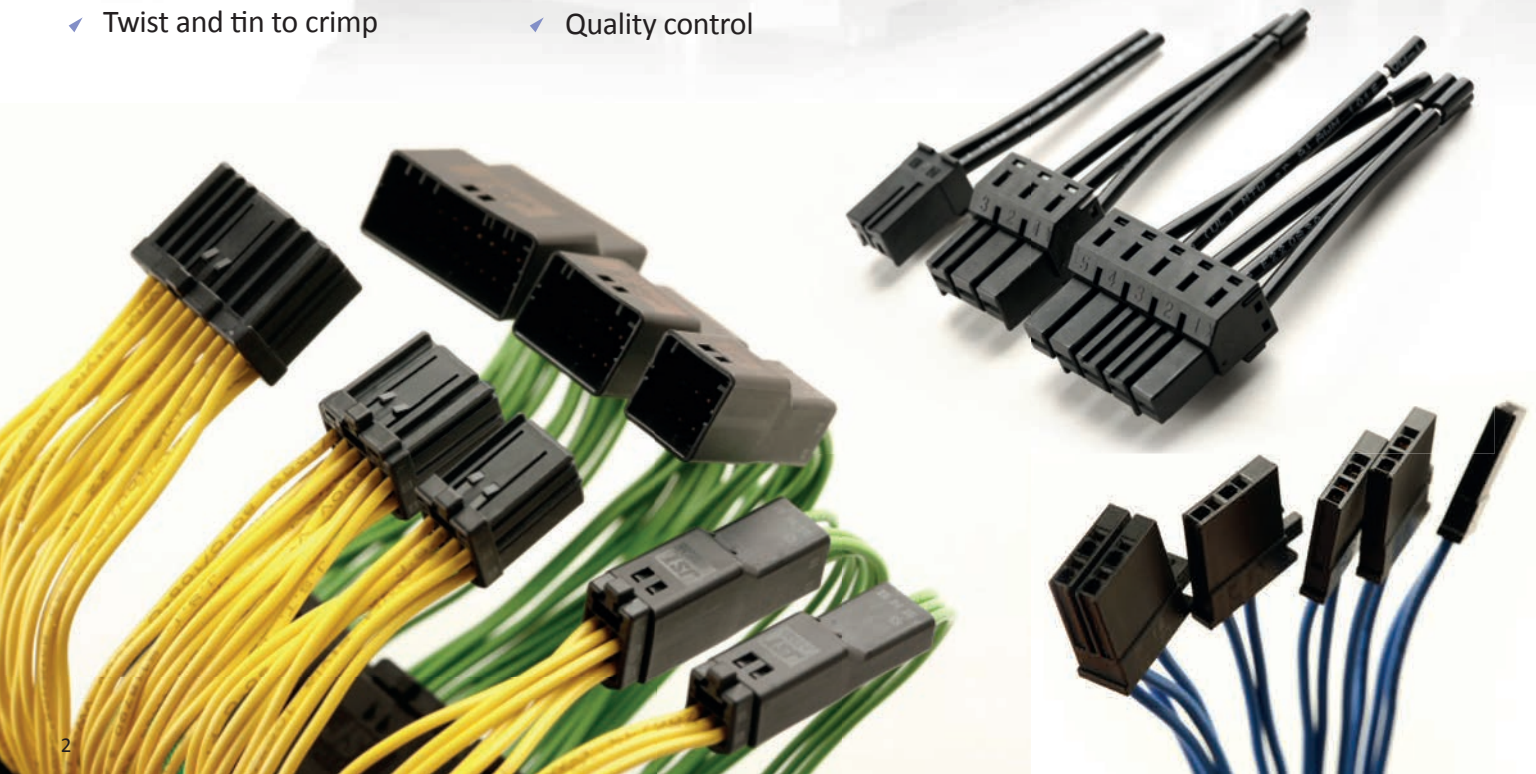


# Harness Production

- ✓ Harness with all typical connectors in half or full automatic process
- ✓ Harness with RAST connectors (Lear, Lumberg) or other IDC connectors in half automatic process
- ✓ Cutting and stripping from AWG32 (0.05mm<sup>2</sup>) up to AWG8 (8.00mm<sup>2</sup>)



- ✓ Measure and cut to length
- ✓ Full or partial strip both sides
- ✓ Crimp to crimp
- ✓ Twist and tin to crimp
- ✓ Special connectors hand soldering (D-Sub, industrial etc.)
- ✓ Lead free tin plating
- ✓ Pull-out force and crimp height measuring
- ✓ Quality control





# Cable Processing System

## Machines for:

- ✓ Benchtop crimping & stripping
- ✓ Cutting to length and stripping
- ✓ Cutting
- ✓ Full process crimping
- ✓ Marking
- ✓ MiniLabs for micrography of crimping quality
- ✓ Pulltester



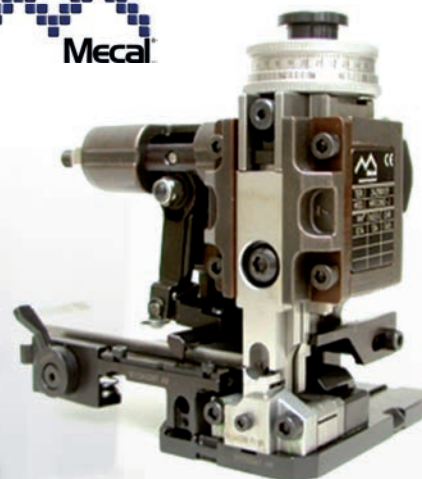
**WDT**  
WIRE PROCESSING SYSTEMS



**WEZAG**  
WERKZEUGE | TOOLS | OUTILS



**Mecal**



## Applicators and Presses

- ✓ Fully mechanical applicators (with or without pneumatic support) for all standard contacts
- ✓ Applicators for RAST connectors and other special types
- ✓ Applicators for terminals packed in tubes
- ✓ Applicators with 30 and 40mm stroke, in European (standard) or Asian (special) coupling
- ✓ Two-post dies for big cross section loose contacts
- ✓ Mechanical presses with crimping force from 1.5 to 200 tons
- ✓ Pneumatic and hydraulic presses with dedicated dies



## Interconnecting wires and flexible leads

- ✓ Insulation: PVC/PE/TPE/Silicone/PP/PA Tefzel/Teflon/PUR/Glass filament/EVA etc.
- ✓ Temperature range: -200 to 1200C halogen-free/flame resistant/lead free
- ✓ VDE/UL/CSA/MIL approvals, DIN standards
- ✓ Single, multiple, fine, ultra-fine wire / single, double, triple coloured

## Ribbon cables and twin conductors

- ✓ All grid sizes / single & multi coloured
- ✓ Solid or Flexible – screened

## Flat circular conductors

- ✓ UL/CSA approval

## Data and Communication Technology

- ✓ Optical fiber technology (patch cable / connection technology)
- ✓ Optical fiber cables
- ✓ Plug-in connectors and systems
- ✓ Splice boxes
- ✓ Trunk cables
- ✓ Copper wiring systems

## Data and Control Cables, Power cables

- ✓ Screened / unscreened
- ✓ Insulation: PVC/PE/PUR/Silicone/Teflon
- ✓ Approvals: UL/CSA/MIL/VDE
- ✓ Customer-specific manufacture from 500m

## Accessories:

- ✓ Spiral cables (from 1 cable)
- ✓ Shrink tubing
- ✓ Insulation tubing
- ✓ Cable testing systems
- ✓ Cable protection systems



# Circular Connectors



**Connect<sup>2</sup>**  
Expertise | Reliability | Innovation

More than 10'000 circular connectors known for their durability. Miniature, metal or plastic shell cylindrical connectors with push-pull locking, sealed or not. Fischer Connectors also does cable assembly and can develop a custom made solution for your device.

## Circular connectors

- ✓ Multipole Low & High Voltage connectors
- ✓ Coax Low & High Voltage connectors
- ✓ Triax connectors
- ✓ Fiber optic connectors
- ✓ Fluid / Gas connectors
- ✓ Hybrid connectors
- ✓ Tools and accessories



## Serving all markets

From Medical to Defense

From Instrumentation to Food and more



### FISCHER CORE SERIES:

ANY SIZE  
ANY CONFIGURATION  
ANY APPLICATION



### FISCHER FIBEROPTIC SERIES:

ROBUST  
OPTICAL PERFORMANCE  
EASY CLEANING



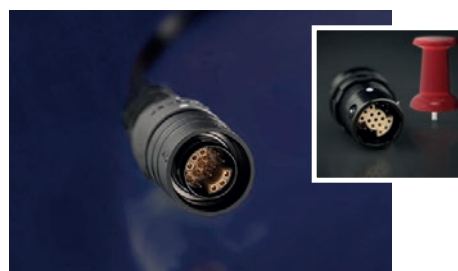
### FISCHER ULTIMATE™ SERIES:

RUGGED  
COMPACT  
LIGHTWEIGHT



### FISCHER MINIMAX™ SERIES:

HIGH DENSITY  
SIGNAL & POWER  
MINIATURIZATION



#### Cable Assembly

Rely on Fischer in-house expertise for cable assemblies, engineered to your needs.



#### Custom Solutions

From initial concept through prototyping, testing and installation, Fischer finds solution that suits your specific needs.



#### Accessories

Explore Fischer full range of accessories for improved connector performance or protection.



#### Tools

Complete your in-house toolset with spanners, crimp and assembly tools, and more.



# Cabling Solutions for Networks



Intelligent networks – perfect connections

**Cabling solutions in the copper and fiber optic techniques for building and industrial cabling applications**

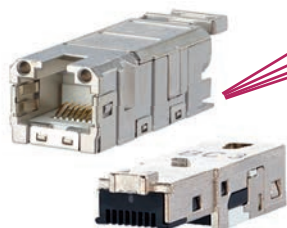
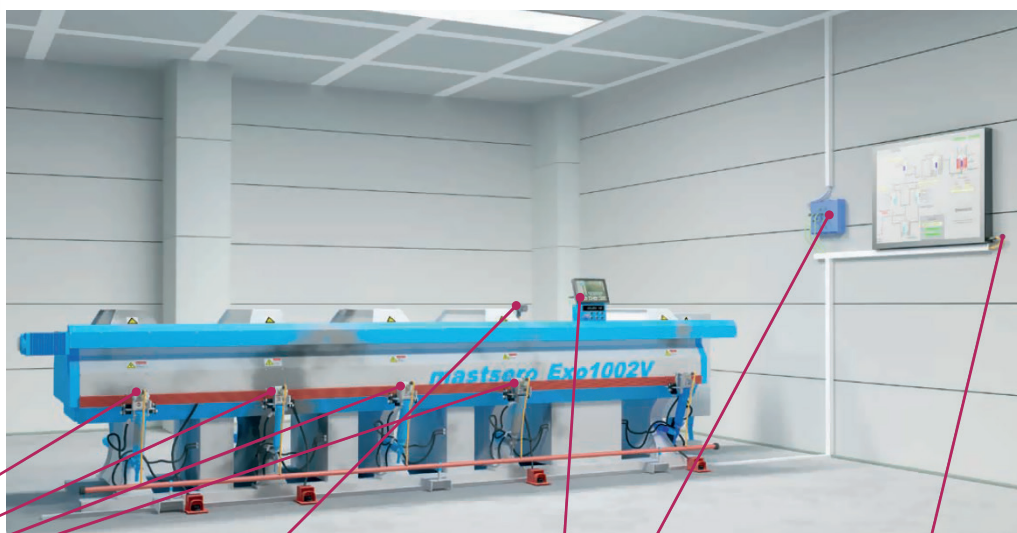
The growing demand for data transmission volumes requires an ever stronger performance and continuity of underlying data networks. Today, IT-technologies are used in a multitude of applications in buildings, data centers and industrial plants. Anticipatory and intelligent cabling systems that spaningly connect several segments must therefore match perfectly in order to guarantee a sustainable, safe and continuous form of communications.

All this is guaranteed by the Metz Connect range of P | Cabling products: highly specialized, internationally standardized and high-performance connection components in copper and fiber optic technology stand out by their quality and strong system compatibility.



## Building and industrial cabling, data communication

- ✓ Office fiber optic
- ✓ Office RJ45
- ✓ Industry fiber optic
- ✓ Industry RJ45
- ✓ Ethernet M12
- ✓ Industry unequipped housings
- ✓ Data center solutions
- ✓ Assembled cables
- ✓ Accessories



E-DAT Industry RJ45 field insert



E-DAT Industry RJ45 housing



Ethernet M12, 4-pole, D-coded receptacle & overmolded cable



C6<sub>A</sub> RJ45 field plug pro



# Terminal Block Connectors



Innovate product systems – continuous connections

## Spring clamp terminal blocks

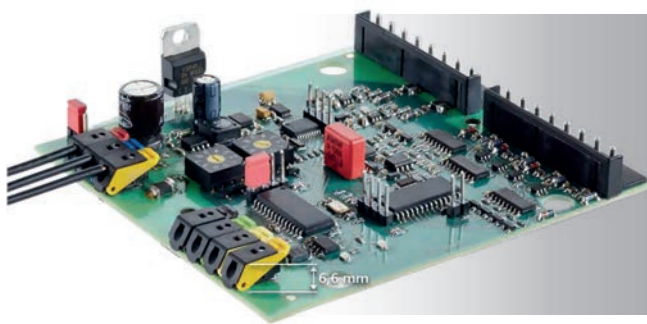
- ✓ Solderable
- ✓ Pluggable
- ✓ Compression-mount
- ✓ Suitable for solid wires and multi-stranded wires
- ✓ Nominal cross section of 0.08 - 2.5mm<sup>2</sup>
- ✓ Centerline 2.5 - 10mm

## Screw-type terminal blocks

- ✓ Solderable
- ✓ Pluggable
- ✓ Single poles
- ✓ Suitable for solid wires and multi-stranded wires
- ✓ Centerline 3.5 - 10.16mm

## IDC type terminal blocks

- ✓ Solderable
- ✓ Centerline 3.5 - 10.16mm



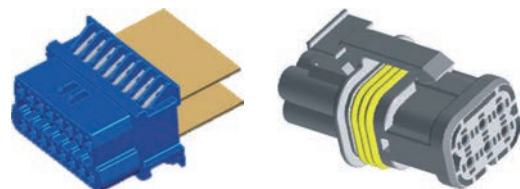
## Advantages:

- Complete range for different installation requirements
- A variety of connecting technologies
- Additional product designs (operating options, mounting flanges etc.)
- Solutions for different connection cross-sections
- Color variants at customer request
- Varying number of poles
- Codeability
- Customer-specific adaptations possible

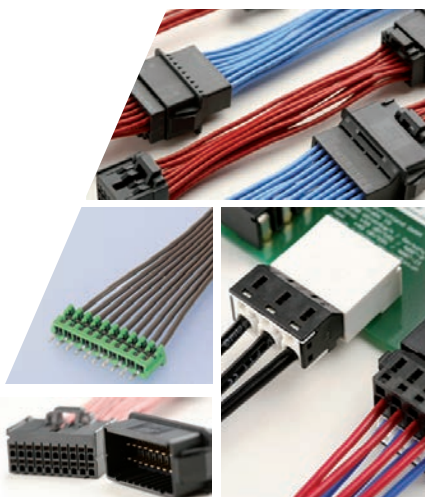
# Automotive Connectors



- ✓ Chain terminals 2.8/4.8/6.3/7.7/9.3mm
- ✓ Ring tongue and other solderless terminals and splices
- ✓ Automotive connectors
- ✓ RAST connectors



- ✓ Wire to PCB connectors
- ✓ PCB to PCB connectors
- ✓ Wire to wire connectors
- ✓ Solderless terminals and splices
- ✓ Flat ribbon cables
- ✓ Control cables
- ✓ Stranded wires





# Control Products

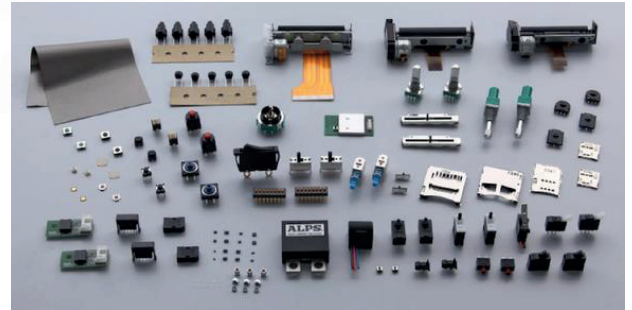
## True freedom expressed in operating feel

Alps Electric has been producing input devices ever since its founding. Company adapts to the times, developing ever smaller, thinner products and responding to needs for greater integration and multifunctionality. Maintaining elevated standards for operating feel, Alps Electric constantly pursues creation of the „right“ products.

Perfecting the Art of Electronics  
**ALPS**®

### Products:

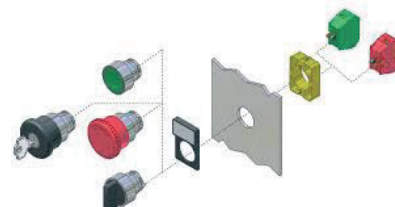
- ✓ Sensors - magnetic, geomagnetic, humidity, pressure sensors
- ✓ TACT Switches - snap-in types & surface mount types
- ✓ Switches - detector, slide, push, rotary, power, dual in line types
- ✓ Encoders – absolute & incremental types
- ✓ Potentiometers – rotary & slide types
- ✓ Connectors - SD & Micro SD card holders, SIM, MicroSim & NanoSim card holders, combined types
- ✓ Multi Control Devices – potentiometer & switch types



## Performance Engineered Control Products

- ✓ 22mm Control Switches
  - Metal and plastic bodied
  - 600V, 10A max AC
  - 10mIn operations
- ✓ Heavy Duty Footswitch
  - Single or double pole contacts
  - Snap action and slow action contact blocks
  - Normally open and normally closed blocks
  - Positive opening operation
  - Silver contacts
  - Anti Slip foot pedal
  - Non-slip rubber feet
  - Supplied with cable gland
  - IP65 sealed
- ✓ Populated Control Stations
  - Robust ABS populated control stations
  - Rated 600V, 10A max AC
  - Different size options
- ✓ Piezoelectric Switches and Keypads
  - No moving parts
  - Operating life of 50 million operations
  - Resistant to environmental factors (IP68)
  - Robust and resistant to vandalism

**CAMDENBOSS**  
ELECTRONICS & ENCLOSURES





CamdenBoss has over 440 designs, sizes and styles of enclosures to satisfy today's competitive market, where functionality, price, aesthetics and ergonomics are all driving demands. In addition to extensive range of standard injection moulded, die-cast and sheet-metal enclosures, Camdenboss has manufacturing and assembly facilities enabling offering bespoke designed Tool-Free Custom-Design enclosures from flat-sheet plastic, full customisation of standard ranges and complete turnkey enclosure and assembly solutions.

### Products:

- ✓ Universal Enclosures
- ✓ Heavy Duty Enclosures
- ✓ Interface Supports
- ✓ Diecast & Metal Boxes
- ✓ Potting Boxes
- ✓ 19" Subracks
- ✓ Hand Held cases
- ✓ Din Rail Boxes
- ✓ Control Stations
- ✓ Desktop & Instrument Cases
- ✓ 19" Enclosures



## CUSTOM DESIGNED ENCLOSURES

### Custom Enclosures with Flat-Sheet Plastic Technology - No Tooling!

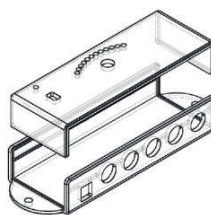
CamdenBoss develops and manufactures enclosures to your specifications using Flat Sheet Plastic Technology. Combining years of engineering expertise, precision machining & innovative assembly techniques; any concept can be manufactured to your exact size and specification. CamdenBoss unique is ideally suited for low to medium batch quantities – from the most simple to the most complex of enclosures.

#### Advantages:

- ✓ Rapid Lead Times
  - 1 - 3 weeks prototyping
  - 3 - 4 weeks volume productions
- ✓ Creative - industrial designers, technical sales & CAD/CAM engineers at your disposal
- ✓ Inexpensive - No Tooling Charge
  - Low design and set-up costs
  - Competitive unit pricing
- ✓ Any Quantities
  - From low batch runs of 5 to high volume
  - 5000+ production runs
- ✓ Flexible - make changes to the design quickly & easily after prototyping or after production

#### Basic Construction Method

**Basic Construction**  
Day 1



Week 1



Week 2-3



#### Complex Construction Method

**Complex Construction**  
Week 1



Week 2



Week 3-4





# Cases & Heatsinks

## Thermal management

- ✓ Machined extruded heatsinks
- ✓ Extruded heatsinks with solder pin
- ✓ Heatsinks and fan coolers for processors
- ✓ Lamella heatsinks
- ✓ Finger shaped and small heatsinks
- ✓ Cooling aggregates
- ✓ Thermal interface materials



## Cases

- ✓ Miniature aluminium cases
- ✓ Design cases
- ✓ Combination cases and tube cases
- ✓ Desk consoles and shell cases
- ✓ 19" System cases
- ✓ 19" Subracks
- ✓ 19" Plug-in boxes
- ✓ 19" Insert modules



## Services

### Precision Machining

Fischer Elektronik offers a wide range of processing options, especially for decorative applications. All standard cooling heatsinks and cases and also special front and cover plates can be manufactured to suit customers' requirements in terms of decorative design.

CNC machining centres and automatic machines are used to ensure optimum processing quality. Components receive mechanical surface treatment in preparation for anodizing or galvanic coating such as chromium or gold, consisting of sandblasting, grinding and polishing.



### Powder Coating

For the safe use of electronic casings under difficult ambient conditions where anodized or painted casing surfaces are no longer sufficient, first-class surface coating is required.

In addition to its standard product range, Fischer Elektronik offers robust and invulnerable powder coatings. In addition to colour and structural options for individual surface designs, powder coatings offer excellent resistance to scratches, abrasion and shocks and provide outstanding protection against corrosion and chemicals as well as good electrical insulation. Other important features include a long service life, high light fastness and a base material which is environmentally friendly, as the powder contains neither heavy metals nor solvents.



### Screen printing & Laser lettering

For optical identification of milling Fischer use screen printing or YAG-lasers.

Espacially laser inscriptions are of outstanding quality and ensure good, permanent legibility, even in the case of letter sizes below 1mm and under the influence of solvents.



# PCB Level Connectors

# GCT

Global Connector Technology

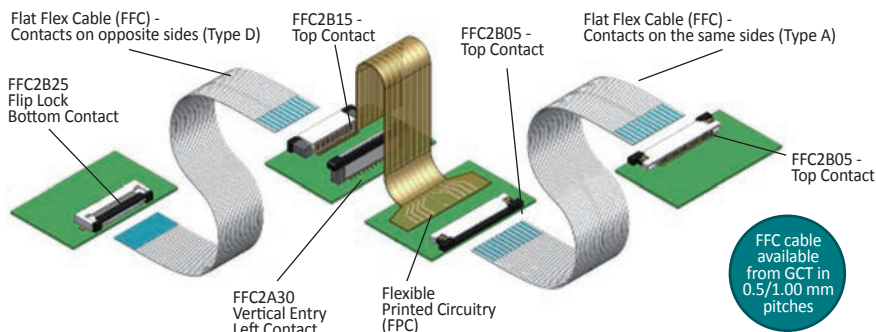
## SIM card connectors

- ✓ Hinged
- ✓ Push-push
- ✓ Retainer
- ✓ Dual SIM
- ✓ SIM + uSD combo



## FFC connectors & cables

- ✓ 0.3, 0.5, 1.0mm pitch
- ✓ Side or top entry
- ✓ Top or bottom contact
- ✓ Side or flip lock



## Memory SD & uSD card connectors

- ✓ Hinged
- ✓ Push-push
- ✓ Push-pull



## USB 2.0 & 3.0 connectors

- ✓ Micro USB
- ✓ Mini USB
- ✓ Full size USB
- ✓ A, B, AB types available



## Modular Jack connectors

- ✓ 4-8 positions
- ✓ 4-8 positions loaded
- ✓ Right angle or vertical
- ✓ THT or SMD style



## Board-to-board connectors

- ✓ 0.8, 1.0, 1.27, 2.0, 2.54mm pitch
- ✓ Headers, elevated headers, sockets, elevated sockets
- ✓ Horizontal, parallel, perpendicular
- ✓ THT or SMD style



## DC Power Jacks

- ✓ THT and SMD
- ✓ 0.65mm, 2.00mm, 2.35mm & 2.50mm center pin diameters

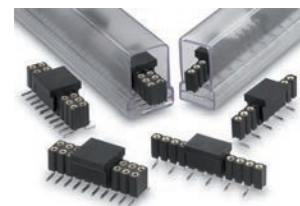
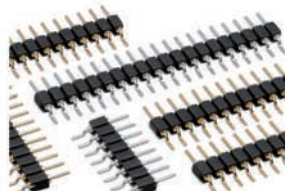
- ✓ Current ratings from 1.5A to 8.0A
- ✓ Shielded variations in both straight and right angle orientation



**fischer elektronik**

- ✓ PCB connectors - male and female headers, contact strips
- ✓ IDC connectors male & female headers, one & two rows
- ✓ D-SUB connectors

- ✓ DIL, PGA, PLCC, transistors sockets
- ✓ Flat ribbon cables



## Board to Board Connectors:

- Centerline 1.27, 2.00, 2.54mm
- SMD & THT

## RJ45 & RJ11, RJ12 Jacks

- THT & SMD versions
- Shielded & unshielded
- Single & multiport
- With integrated magnetics and/or LED indicators

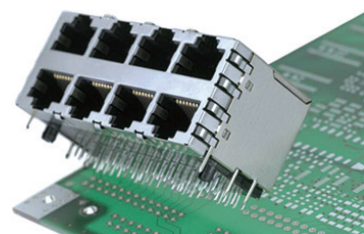
## USB Jacks

- THT & SMD versions
- Type A, B & microB






## M12 Jacks

- D coded or X coded types
- 4 or 8 pins
- THT or panel mounted
- Sealing level up to IP68

**METZ CONNECT**





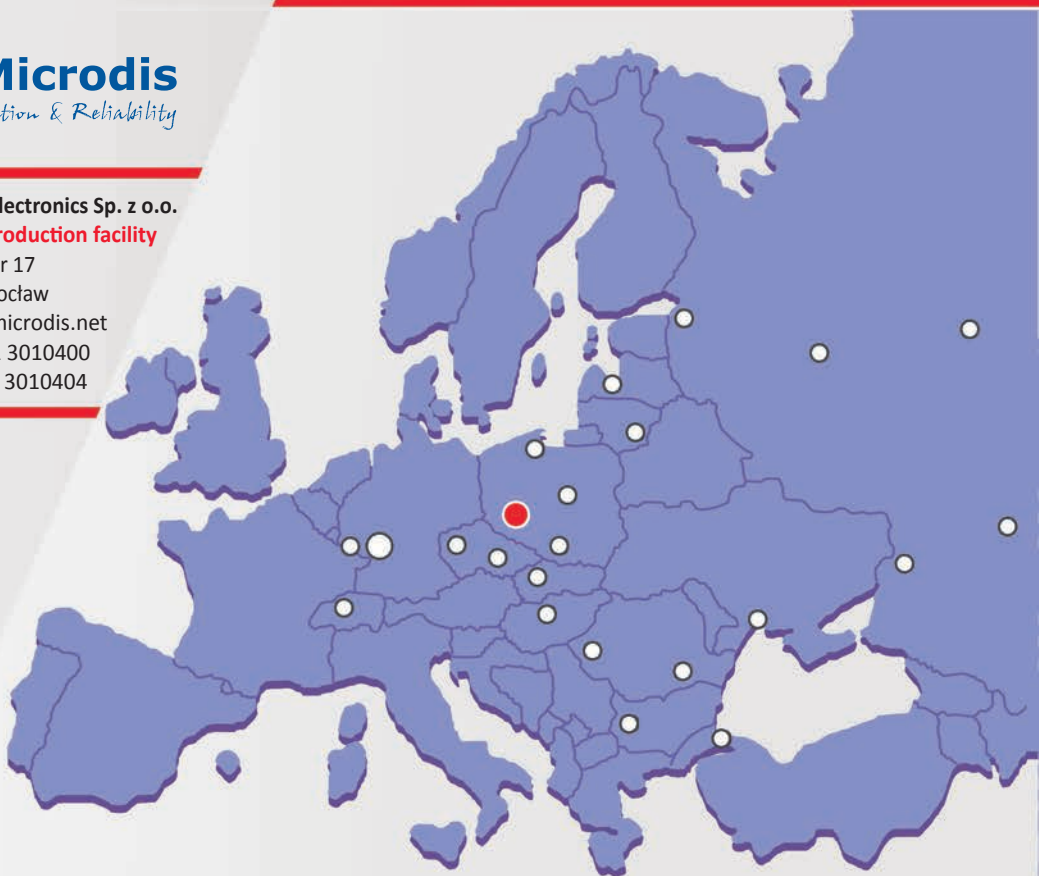
	Bulgaria@microdis.net
	Croatia@microdis.net
	Czech@microdis.net
	Estonia@microdis.net
	France@microdis.net
	Hungary@microdis.net
	Latvia@microdis.net
	Lithuania@microdis.net
	Poland@microdis.net
	Romania@microdis.net
	Russia@microdis.net
	Serbia@microdis.net
	Slovakia@microdis.net
	Slovenia@microdis.net
	Turkey@microdis.net
	Ukraine@microdis.net
	microdis.de@microdis.net



**Microdis Electronics Sp. z o.o.**

**Harness production facility**

Suchy Dwór 17  
52-271 Wrocław  
inquiry@microdis.net  
tel. +48 71 3010400  
fax +48 71 3010404



AAEON  
AEGID  
ALPS ELECTRIC  
AMBER WIRELESS  
ASROCK  
BRIGHTKE  
CAMDENBOSS  
EPSON  
FISCHER CONNECTORS  
FISCHER ELEKTRONIK  
GLOBAL CONNECTOR TECHNOLOGY  
IIYAMA  
ISOCOM  
JST  
LEAR  
MAXTENA  
MECAL  
MEDER  
MEDIKABEL  
METZ CONNECT  
NEXCOM  
SEOUL SEMICONDUCTOR  
TAIWAN SEMICONDUCTOR  
U-BLOX  
WEZAG

Industrial computers and panels  
RFID systems and transponders  
Switches, encoders, potentiometers and printers  
RF ISM, Bluetooth, ZigBee modules and transceivers  
Mini-ITX industrial boards  
Power, THT and chip LEDs and LED modules  
Interconnect components, electronic housings, 19" cabinets  
Crystals, oscillators, filters and sensors  
Military, medical and industrial connectors  
Heatsinks, connectors, 19" and case technology  
SIM-Holders, memory card connectors, USB connectors  
Large Format Displays  
Optocouplers, optoswitches  
Signal connectors  
Automotive and white goods connectors  
GPS, Galileo, Glonass, Iridium antennas  
Machines and systems for wire crimping  
Reed switches, sensors and relays  
UL/CSA/DIN certified, customized industrial cables  
Terminal block connectors - screw, spring and pins  
Industrial computers and panels  
LEDs - power, full color, 230AC  
Semiconductor devices  
GNSS, GSM, UMTS/HSPA/CDMA/LTE/NB IoT modules, WiFi,  
Bluetooth, NFC, V2V/V2X, antennas  
Hand tools for crimping, pneumatic presses

www.aaeon.com  
www.aegid.de  
www.alps.com  
www.amber-wireless.de  
www.asrock.com  
www.brightkeurope.com  
www.camdenboss.com  
www.epsontoyocom.co.jp  
www.fischerconnectors.com  
www.fischerelektronik.de  
www.globalconnectortechnology.com  
www.iiyama.com  
www.isocom.com  
www.jst.de  
www.lear.com  
www.maxtena.com  
www.mecal.com  
www.meder.com  
www.medikabel.de  
www.metz-connect.com  
www.nexcom.com  
www.seoulsemi.com  
www.taiwansemi.com  
www.u-blox.com  
www.wezag.de

Currently the Microdis Group employs over 100 people, with a large number of electronic engineers, mostly involved in sales and marketing.

As a company with an extensive experience in the distribution of electronic components, and a purchasing center in Germany for many years, we are able to offer almost any product from a wide variety of electronic components. We offer also the production of cable harnesses and programming of crystal oscillators for a customised frequency. Cooperation with a catalogue distributor provides fast deliveries (2 days) of a wide range of catalogue products.

We have certificates of quality management DIN EN ISO 9001:2008 for the distribution of electronic components.

EN v.4.4

**GSM/3G/LTE   GPS/GNSS   LED   Embedded   Passive   Semicon   Electromech**

