

Your Global Automation Partner

TURCK

The Full Range for Mobile Equipment



Sensors

Inductive

- E1 type-approval of the Federal Motor Transport Authority
- High protection rating (IP69K) and highly thermostable
- Load-dump protection and improved EMC properties
- Many different designs, optionally available with vehicle-specific connectivity



Inclinometers

- Available with analog and switching output or CANopen interface
- Rugged IP69K rated design, improved thermostability
- Fulfills the requirements of the e1 specification
- Individual filter settings for suppression of vibration and shock



Capacitive and Ultrasonic

- High protection rating (IP69K) and improved EMC properties
- Fixed customized settings or adjustable sensitivity
- Adjustable foreground suppression
- Many different designs, optionally available with vehicle-specific connectivity



Encoders and Draw-wire Solutions

- Highly shock and vibration proof
- IP69K rated and immune to interferences at high speed rotation
- Optionally available with SIL or e1 type approval
- Signal types (analog, CANopen, J1939, Ethernet, Serial, Incremental)
- Robust designs available with magnetic absolute singleturn or multiturn technology



Pressure

- Peak pressure cover prevents damage caused by high pressure shocks
- High operational safety thanks to rugged mechanical and electronic design
- Broad medium temperature range
- Various electrical connection options such as Deutsch, AMP, Kostal and others
- Various analog outputs for 5 VDC, 12 VDC and 24 VDC on-board power supply



Linear Position and Angle

- Magnet-free resonator principle, non-contact and wear-free, fail-safe detection of signals
- High shock and vibration resistance
- Exceeds the requirements of the e1 specification



Connectivity

Cables and Connectors

- High protection rating (NEMA 6P, IP67, IP68, IP69K), shock and vibration proof
- Thermostable, oil and chemical-resistant materials
- Many different connector types, ready-made and injection-molded
- Molded Deutsch DT & DTM Series
- Minifast
- M12
- Mil-Spec



Passive Junctions and T-pieces

- Signal transfer and voltage distribution
- Different designs and wirings available
- Rugged construction (fully encapsulated), IP67 rated



Harness & Cable Assemblies

- Complex multi-branch harnesses
- Simple discrete wire solutions
- Custom engineered solutions
- Heavy gauge wire and battery cable
- Electro mechanical solutions



Reelfast™/Raw Cable

- Over 5.5 million meters in stock
- Industry leading variety, agency approvals and durability
- Options such as discrete wire, jacketed, and flat ribbon cable available



Fieldbus Technology

Compact I/O Modules in IP67 and IP9K

- Rugged multiprotocol Ethernet devices support Ethernet/IP, PROFINET and Modbus TCP
- SAE j1939 modules for mobile equipment applications
- Fully potted electronics; high vibration and shock resistance
- Wide range of signal types supported
- Web-based programming editor for local logic in multiprotocol IO devices
- CODESYS-based PLC devices for complex control tasks in harsh environments



RFID Systems and Services

- Flexible and easy integration into systems, thanks to a big variation of communication modules in IP67
- Many application possibilities thanks to mixed HF and UHF operation
- Application-optimized data carriers and read/write heads, also for use in Ex areas
- Identify physical objects, harvest event data and improve process flow with turn-key RFID systems
- Industry leading software stack includes gate, handheld and forklift clients with stray read removal and direction detection



TIRE & TRACK

Shock, vibration, and extreme temperatures are just the beginning of what your applications face on a daily basis. Turck rises to the challenge, offering solutions that thrive when put to the test in the most extreme environments. From rugged, reliable sensors you can depend on to connectivity solutions developed specifically for extreme temperatures, Turck works harder than anyone to keep you moving.



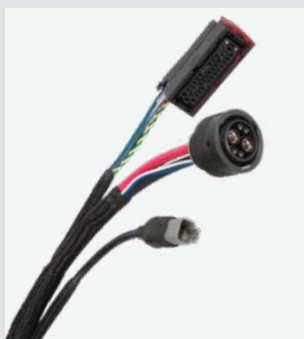
Prox w/ Deutsch
Monitor Rotation Speed



Rotary Position
Measure Header Position



SAE J1939 Splitter
Data Communication



Braided Harnesses

- Rodent resistant sleeve
- High temperature materials (for engine compartments)
- Multi branch harnessing from 2 to 50 branch with braid or sleeve
- Braided wires from 30 to 150 meter spools
- Abrasion resistance



M12 to Deutsch

- Rugged overmolded adapter for integrating sensor and I/O signals
- Wide temperature specifications
- Cut through/abrasion resistant
- Many connector options available

RAIL

Rail applications are tightly run processes that require reliable and rugged automation solutions. Turck has solutions to answer the demanding needs of rail freight, transit and service applications. Solutions that can withstand shock and vibration, provide environmental protection, and allow for reliable network and I/O communication, Turck meets the needs of rugged applications where timing is everything.



Ethernet Connection
Data Communication



Pressure Sensor
Monitor Hydraulics



Incremental Encoder
Measure Wheel Speed



TBEN Series

- Multiprotocol support for Ethernet/IP, PROFINET and Modbus TCP
- Protection classes IP65/IP67/IP69k
- -40 °C to +70 °C operating range
- I/O supported: discrete, analog, IO-Link, and RFID
- Per point diagnostics



TBCJ Series

- SAE j1939 and passive connectivity blocks
- Complemented with Turck molded Deutsch cordsets
- IP67; -40 °C to +85 °C operating range
- I/O supported: discrete, PWM, and analog
- Up to 10A per output
- Per point diagnostics

MARINE

As if the typical mobile equipment application isn't difficult enough, marine applications involve many of the same requirements, but with constant exposure to moisture, and in many cases, corrosive saltwater. Turck has developed solutions specifically to take on your toughest marine applications, including ruggedized sensing and distributed I/O, shipboard cable, and products that comply with NMEA standards.



Rugged Connectivity
CANbus Devices



Mil-Spec Connectivity
Power & Communication



Junction Box
Wiring Consolidation



Inductive Position Sensors

- Load dump protection standard
- Extended temperature ranges (-40 °C to +85 °C standard)
- High noise immunity to DIN standards
- Meets IP67, IP68, and IP69K
- Highly shock resistant to 100 g



Extremelife-60 Cable Series

- Marine shipboard
- ABS
- DNV ratings
- Analog
- Discrete
- CANbus
- Serial
- Ethernet configurations

RUGGED ENGINEERED SOLUTIONS

At Turck, we understand that not every mobile equipment application is the same. That is why we are dedicated to finding the optimal engineered solution for every application, not just the standard ones. Our specialized team of engineers works with you from design to implementation. Count on Turck's industry leading connectivity expertise to solve the most difficult connectivity applications, from offering standard cable and wire assemblies to developing custom over molded harness solutions. Whether an application must withstand extreme environmental conditions, combat continual flexing or meet specific certifications, Turck works diligently to get the job done.

- Custom harness solutions
- Standard and custom cable assemblies
- Many braiding, crimping & soldering options
- Sensors with a wide range of molded connectors
- Rugged, overmolded designs
- Custom control panels and fabrications

Developing custom solutions is part of what makes Turck fast, flexible and easy to do business with. Where others say no, Turck finds a way.



Consolidate wiring
with high-performance custom harness solutions built to withstand rugged off-road environments.



Improve reliability
with sensors customized with molded connectors to meet your exact vehicle needs.



Reduce costs
with IP67-rated overmolded junction boxes for cable consolidation in mobile vehicles.



- Custom Cable Design**
- Conductors to fit power and signal applications
 - Various insulation materials for all environments
 - Shielding to fit application needs



- Custom Control Panels (TEPS)**
- Can be created with all Turck products or with a combination of Turck and other manufacturers
 - UL508A, UL698A, UL1203 certifications
 - Wide variety of enclosure options as well as custom fabrications

TURCK



30 subsidiaries and over
60 representations worldwide!

Printed in USA