



Components and Systems for the Automotive Industry

PASSENGER CARS

Convenience and Reliability

The multi-function and shift paddle units are characterised by excellent tactile properties, a very high reliability and a long service life. These characteristics are achieved - among other factors - by the use of RAFI short-travel keyswitches.



Car steering wheel multi-function switches



Steering wheel multi-function units
Thumbwheel with additional push function



Steering wheel multi-function units
Metal thumbwheel with additional push function



Steering wheel multi-function unit
Buttons with push-pull function



Steering wheel multi-function units
Plastic surface



Steering wheel multi-function units
Silicone surface

Car steering wheel shift paddles



Plastic shift paddles
with RACON switch unit

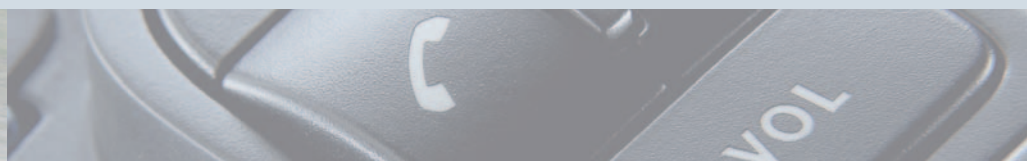


Metal shift paddles
with RACON switch unit

RAFI short-travel keyswitches



MICON 5 and RACON 8/12 short-travel keyswitches



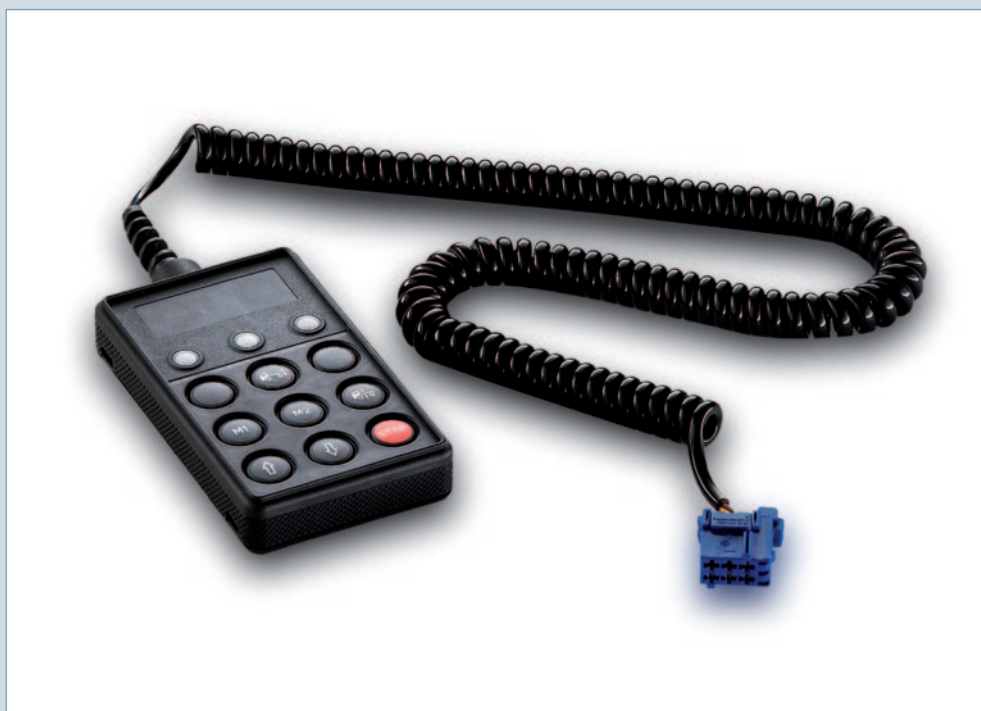
COMMERCIAL VEHICLES

Robustness and Durability

Operating units used in lorry and bus applications must be reliable under most severe conditions. Waterproof and shockproof housings and reliable electronics provide the basis for customer satisfaction.



Panels and electronic modules



Panel for lorry axle level control in waterproof housing for highest requirements



Panel for tyre pressure monitoring for lorries and buses



Panel for air conditioning in motor coaches



Gearbox interarder



Gearbox control for construction machines



OTHER VEHICLES

Individual and Innovative

Three-dimensional input landscapes or electronic modules for absolute reliability - we will solve your input issues with our comprehensive know-how, including individual test systems and sophisticated logistic solutions.

Panels and electronic modules



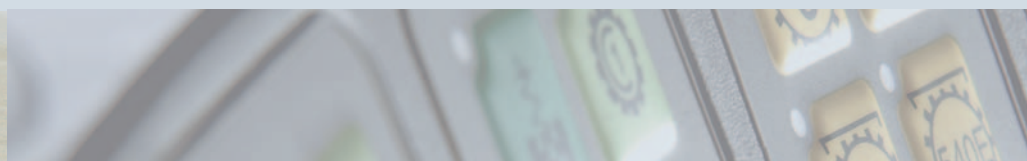
Panel for farm tractor hydraulic control



Electronic module for axle control in farm tractors



Electronic module for transmission control in military vehicles



WATERCRAFTS

Waterproof and Fully Integrated

Electronics and water? No problem. We manufacture absolutely waterproof panels and input units, including input panels with large-area control components or integrated touch screens.



Panels and electronic modules



Panel for marine engine control



Electronic module for marine gear control



Power control lever with display and CAN bus interface





Solutions with Passion

Solutions for the automotive industry have always been a special challenge for engineering, production and quality assurance. We have met this challenge with passion and produced electromechanical and electronic products for automotive applications at our production sites in Ravensburg (Germany) and Mezötúr (Hungary) since the end of the eighties. Our great success in this market segment resulted in the establishment of a separate business unit for automotive products. This enables us to work even more efficiently on the solutions for our customers.

Certification

- ▶ DIN ISO 9001:2000 (DQS)
- ▶ ISO/TS 16949:2002 (DQS)

Research

- ▶ Fundamental engineering
- ▶ Material testing

Electronic engineering

- ▶ Circuit engineering
- ▶ Component selection
- ▶ Printed circuit board design
- ▶ Software development

Design

- ▶ 3D design
- ▶ 2D design
- ▶ Design of tools and production equipment

Mechanical production

- ▶ Contact technology
- ▶ Plastic injection moulding
- ▶ Sheet metal machining
- ▶ Silk-screen printing
- ▶ Pad printing
- ▶ Manual, semi- and fully automatic assembly

Electronic production

- ▶ Manual and automatic assembly of SMD and THT components
- ▶ Soldering (reflow, wave, vapour-phase and selective soldering)
- ▶ Automatic functional testing (ICT, AOI)