



# Experts in Railway Applications

Sensors, pole wheels and encoders for rolling stock

High-speed Train  
EMU/DMU  
Tramway  
Subway  
Trolleybus





SIGNALING

Hall Effect Speed Sensor

- Stainless steel flange version for harsh environments
- Reliable 1- to 4-channel sensors
- High degree of EMI immunity
- Long term stability
- Static or dynamic behavior

Optional: galvanic separation, interpolation, integrated temperature measurement



Eddy Current Speed Sensor

- Works with aluminum and steel targets
- Reduced weight by using aluminum
- EMC according to EN 50155
- Shock and vibration proof ENV61373, cat. 3
- Unaffected by run-out, vibration and electric motor magnetic fields



ENGINE DIAGNOSTICS

ALPHABOX – Predictive Diagnostic System for Engines

ALPHABOX only requires the input signal from a crankshaft speed sensor to analyze torsional vibrations as an early indication of possible mechanical failure in your engine.

Designed for

- Cylinder-by-cylinder diagnostics
- Early detection of engine problems
- Extension of engine lifespan
- Clear and concise report
- Entire fleet installation
- Quick return on your investment
- A cost efficient solution
- Easy to install and commission
- Maintenance-free use
- Remote and local access to data
- Ideally suited for retrofit engines
- Continuous monitoring and reporting





**BRAKE**



**PROPULSION**

## Modular Design matched to your demands

We develop, produce and distribute speed sensors and axle encoders for advanced equipment in the railway industry. More than 140,000 railway sensors in operation.



### Targets – Pole Wheels

- Teeth designed for optimum signal output
- No contact to the sensor
- In steel, aluminum or other magnetic materials
- Module 1 to 6, on request
- Customized solutions

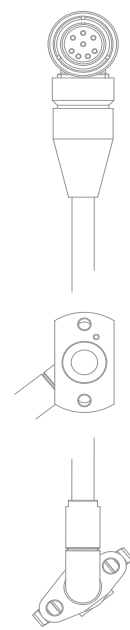
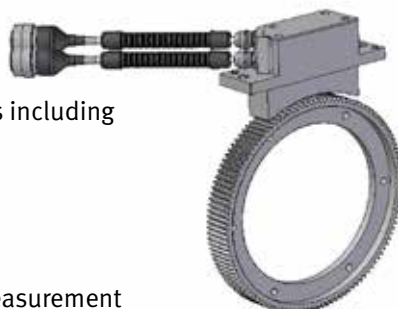
### Axle-End Encoder

- Robust, light and waterproof IP 66 aluminum housing
- Shock and vibration proof EN61373, cat. 3
- High EMC interference immunity according to EN50121-3-2
- 1 to 4 channels

### Integrated Solutions

We offer complete customized solutions including signal processing.

- Reduced space and weight
- Easy maintenance easy replacement
- Combined temperature and speed measurement



## Swiss know-how and quality matched to your demands

JAUQUET manufactures speed sensors in quantities from 1 to millions per project and year. These mostly customer specific solutions add value through being matched to individual applications. **Since 1889, a spirit of excellence complementing tradition and innovation.**



### Automotive turbochargers

Turbocharger for trucks, passenger cars, construction equipment

- Speed of VG/VN turbochargers
- Gearbox shaft and retarder speed



### Railway systems

- Optimum traction control
- WSP (wheel slide protection) systems
- Speed information for automatic train control



### Power generation

Gas, hydro, steam and wind turbines

- Overspeed protection
- Speed measurement and control



### Hydraulics

Agricultural machinery, construction and mining equipment, cranes, ROV – remote operated vehicles

- Motors and pumps, flow-rate measurement
- Position measurement, traction synchronization



### Diesel and gas engines

Large diesel and gas engines in marine, rail, off-road applications and power production.

- Cam and crank shaft for dynamic position
- Turbocharger speed, engine diagnostics

#### Quality systems

ISO TS 16949  
ISO 9001  
AS 9100  
IRIS

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