Wheel Load Sensor Series RLS

Durable test bench sensor with strain gauge based multi-component technology

- Test bench measuring wheels with multi-component transducers
- Application in half-axle, axle or vehicle test benches
- Individual adjustment to the test bench conditions
- No hub electronics required for data transfer
- For biaxial wheel test benches (ZWARP) and brake disk test benches (PSP)
Wheel Load Sensor Serie RLS

Properties and features

Wheel load sensors of series RLS are designed for the specific requirements of the test bench. The number of force measuring circuits must be min. six to completely describe the induced force vector.

Depending on requirements, patented decoupled two-component transducers are used besides single component transducers to reduce the distortion influence in dynamic implementations.

The processing of the force transducer signals occurs via the multi-channel measuring amplifier electronics MCMpro. Hub electronics directly on the test bench are therefore not required.

Application areas

The wheel load sensors are implemented singly in semi-axle test benches, in pairs in axle test benches, in groups of four in chassis test benches for service life expectancy tests.

Other typical applications are strength verification for wheels and rims in biaxial wheel test benches (ZWARP) or brake disk test benches (BSP).

We recommend the measurement platforms of series MPF for property tests on wheels and tyres with increased requirements in terms of accuracy.

Versions

Depending on requirement, the wheel load sensors are manufactured from steel (higher loads, salt spray-resistant) or aluminium (light-weight construction).

Custom construction allows the adjustment of the wheel load sensors to the forces applied to the test bench, as well as the brake space and hub attachment.