Compact and Lightweight 6-Component Wheel Force Measuring System

**SLW-25KNF** 







## Realization of a more compact and lightweight model than the conventional SLW-NC!

The main unit has been lightened from 5.2 kg to 3.3 kg, thereby mitigating the increase in unsprung weight.

And the capacity of the three-component wheel forces has been increased from 20 kN to 25 kN.

The Three Moment has been expanded from 3 kN to 4 kN, and the number of measuring vehicles has been diversified.

In addition, for the purpose of reducing the accumulation of conducted/radiated heat in the six-component wheel force transducer during braking, the six-component wheel force transducer sensing section has been opened, and the effective cool-down running and the extended operable time of the six-component wheel force transducer has been enabled.

## Feature

·High Precision

- •Compact and Light Weight (approx. 3.3 kg)
- •Can be mounted on various vehicle models using exclusive rims and hub adaptors
- •Easy installation to an actual car
- •Running in the rain possible because of the waterproof structure
- •Built-in slip ring and rotary encoder assembly incorporates vibration resistance

•Three-phase rotary encoder precisely detects the angle at all times. •Characteristic data are easily input to the measuring instrument using the included media.

## **Specifications**

Туре	SLW-25KNF
Capacity	Fx, Fy, Fz 25kN Mx, My, Mz 4kN-m
Non-linearity	1% RO
Hysteresis	1% RO
Temperature effect on zero	0.05% RO/℃
Temperature effect on span	0.05% /°C
Compensated temperature range	-10~+60°C
Temperature range	-20~+80°C
Allowable Overload <sup>*</sup>	Fx, Fy, Fz, Mx, My, Mz 130%
Critical Overload <sup>*</sup>	Fx, Fy, Fz, Mx, My, Mz 150%
Maximaum rotarion	2500 rpm
Fixing to hub	Using hub adapter Applicable hubs 100-4/100-5/114.3-4/114.3-5 hole, etc.
Fixing to tire	Using exclusive rim Applicable rim : 12-in. or larger
Input/ Output cable	φ9mm multi-core shielded polyurethane cable 5m
Weight	Approx. 3.3kg

\*Allowable overloads are not guaranteed when all listed component forces are simultaneously input.

\*This specification is for static input. Impact loads may cause load transducer failure or damage.



## **External Dimensions** Execlusive rim Hub adapter I/O connector 26 φ70 φ252 16\$\phi\$11.5 evenly spaced PCD230 4-M4 depth4 B-Ø13 Equal spacing 4 or 5 40 PCD110 Unit:mm 128 System block diagram Windows PC 6-component wheel 6-componentforce analyzer MFT-306 force transducer SI W series SLW-25KNF SLW-20KNC SLW-30KNC ○ 🔘 🔘 ∘\_\_ MFT-306 <sup>C</sup> Data recorders and other recording devices Ó 0 .....e ° 🗑 🗑 ∘\_ MFT-306 ⁰ 1000000000

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Design and manufacture of

strain gauges, strain measuring equipment and transducers

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