## Slip-ring type Wheel Torque Measurement

Slip-ring type

## LTW-NA Wheel Torque Transducer



The Slip-ring type Wheel Torque Measuring System, which is composed of the Wheel torque transducer LTW-NA to measure drive/braking torque, and Dynamic strainmeter, Multi-Recorder, can measure torque with analog output by being connected to the included slip-ring and Dynamic Strainmeter. The slip-ring, which incorporates an encoder, allows rotation speed to be measured if connected to a F/V converter to count

output pulses. The use of the exclusive rim and hub adapter allows installation into any type of passenger car.

Protection ratings : IP 54 equivalent

## **Specifications**



- Lightweight, almost the same weight as ordinary passenger car wheel
- Watrproof construction making running in the rain possible
- Possible installation to various vehicles using exclusive rim and hub adaptor



Unit: mm



	LTW-2.5KNA
Sensing system	Slip-ring and encoder built-in
Capacity	2.5kN-m
Rated output	1mV/V (2000 x 10 <sup>-6</sup> strain) ±10%
Non-linearity	0.3%RO
Hysteresis	0.3%RO
Temperature effect on zero	0.01%R0/°C
Temperature effect on span	0.01%/°C
Compensated temperature range	-20 ~ +80 °C
Temperature range	-30 ~ +100 °C
Over load	150%
Bending moment allowable	3.5kN-m
Wheel load allowable	20kN-m
Allowable exciting voltage	20V
Input/output resistance	$700\Omega\pm5\%$
Effect of wheel load	Less than 0.5%RO at a wheel load of 5kN
Effect of side load	Less than 0.5%RO at a side load of 3kN (with a tire of 300mm in radiation)
Applicable wheel size	12-in. or larger in various type
Applicable hub size	100-4, 100-5, 114.3-4, 114.3-5 holes
Weight	15 kg. with 15x6J wheel mounted
Supplied cable	CT6-8P5/SWP-N+SNP (\delta 6mm 8-core shielded polyurethane cable 5m)