

SFA-E-SA

Steering Force/Angle Transducer

Move into the future with reliable measurements



PRODUCT INFORMATION

Accurately measures the torque and angle of operated steering wheel



SFA-E-50NMSA



Dedicated Indicator

High-resolution angle detection, thin-model, lightweight

◆Thin and lightweight

Weight: Approx. 2.5kg
(Including steering wheel approx.
1kg)

◆Steering Force(Torque)

Rated Capacity: $\pm 50\text{Nm}$
(± 20 , 100, 200Nm are available)

Rated Output: $\pm 2\text{V}$

Power: $\pm 5\text{VDC}$

Nonlinearity: Within $\pm 0.3\%\text{RO}$ *1

Hysteresis: Within $\pm 0.3\%\text{RO}$ *1

Signal transmitting: Slip ring

*1: Nonlinearity and hysteresis of rated capacity
200Nm are $\pm 0.5\%\text{RO}$

◆Steering Angle

Angle detection: Rotary encoder
Output pulse: 18000pulse/360°
Endless rotation

◆Optional Items

- ✓ Serration machining of steering shaft adapter
- ✓ Lock arms
- ✓ Dedicated carrying case
- ✓ Dedicated indicator

◆ Dedicated Indicator for SFA-E-SA

This Dedicated Indicator is connected with SFA-E Steering Force/Angle Transducer which provide built-in strain amplifier.

Since the Signal Conditioner Unit is separated from the Display Unit, these units are easily installed at the required place.

Input signals to the S/C Unit are voltage input and pulse input issued from SFA-E.

The S/C Unit also provides analog outputs to external data acquisition system.

Since the angle pulse from SFA-E accepts 18000 pulse/revolution, it can measure steering angle with high resolution.

- ◆ Separated Display Unit and Signal Conditioner Unit
- ◆ Display unit can be installed on conditioner unit or put on windshield using sucker.
- ◆ Input: Steering torque, steering angle(pulse)
- ◆ Output: Steering torque, steering angle, angle rate ($\pm 5\text{VDC}$)



◆ Signal Conditioner Unit(SFA-E-218)



◆ Display Unit(SFA-E-20A)



Specifications are subject to change without notice for improvement.



Safety precautions

Be sure to observe the safety precautions given in the instruction manual in order to ensure correct and safe operation.



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