SFA-E-SA20

- Thin & lightweight
- Rotary encoder adopted
- High-resolution angle detection

Steering Force/Angle Transducer



Specifications

Steering Torque

Rated Capacity	±20 to ±200 N·m (As specified)
Rated Output	2 V
Nonlinearity	Within ±0.3% RO (Within ±0.5% RO for ±150 N·m)
Hysteresis	Within ±0.3% RO (Within ±0.5% RO for ±150 N·m)
Safe Overloads	120%
Power Supply	±5 VDC

Steering Angle

Detector	Rotary encoder
Output Phase	A phase, B phase
Output Form	Rectangular wave
Output Pulse	18000 pulses/360°
Recommended Excitation	5 VDC

Others

Safe Temperature	0 to 60°C
Compensated Temperature	0 to 50°C
Weight	Approx. 2.5 kg
	(Including 1 kg of steering wheel)

Standard Accessories

Cable: 1 (Used to connect the dedicated indicator)
10-conductor (0.08 mm²) vinyl shielded cable, 7 mm diameter by 5 m long, terminated with connector plugs at both ends
HR25-9P-12P
Adapter and nut: 1 each
(Acceptable order for machining serration by option)

Optional Accessories

Dedicated indicator, indirect adapter, lock arms, housing case

Thin and lightweight Easy to install to steering shafts

- Rotary encoder measures steering angle with high resolution.
- Built-in amplifier ensures stable steering force output with minimal influence of external noise.
- Dedicated indicator is separately available.

SFA-E-SA20 steering transducer adopts strain gages to detect steering force (torque) and has built-in amplifier. Also, rotary encoders in a steering sensor measure steering angle with high resolution. In addition, the dedicated indicator displays steering force and angles.

Dedicated Indicator of SFA-E-SA20

- 2 channels of input for steering angle (pulse) and steering force (voltage)
- 3 voltage signals and indications: steering force (torque), steering angle, and steering angle speed.
- Allows indicator unit to be separately mounted with suction mount.

Top: Indicator Unit SFA-E-20A
Bottom: Signal Conditioner Unit SFA-E-218A



Dedicated Indicator

●Dynamic measurement

SFA-E-SA20 Recommended products for combination


Universal Recorder EDX-200A
→ 3-57


Universal Recorder EDX-100A
→ 3-65


Memory Recorder/Analyzer EDX-5000A
→ 3-69