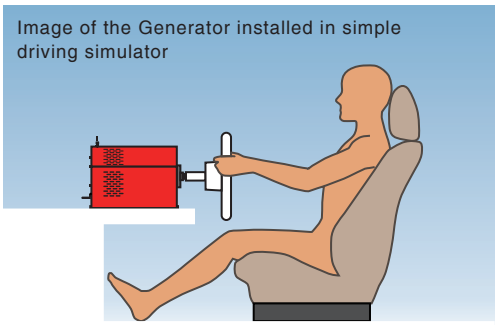
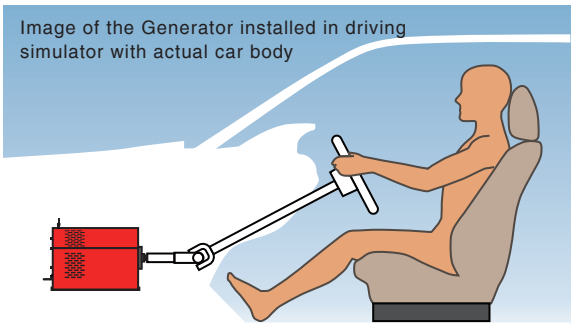
Steering Reaction Force Generator

- Designed for space saving, allowing desktop experiments
- Controlled with high accuracy and low cogging torque
- Operable with 100V AC power supply

Features

- Reaction force control and steering models can be created based on the steering reaction force data on vehicle dynamics.
- Control models can be created by the use of digital analysis software.
- The Generator can be installed in the simple driving simulator as well as the driving simulator using an actual car body.





Main Functions

Steering Reaction Force Generation

The steering reaction force is controlled with high accuracy and low cogging torque by using a coreless direct drive AC servomotor.

Constant Measurement of Steering Reaction Force Torque

The steering reaction force torque that is generated by the AC servomotor and transmitted to any output axis is constantly measured. The dynamic torque variations are accurately measured by using a high accuracy and high response torque sensor.

Transmission of Steering Reaction Force Torque

The steering reaction force torque is transmitted to an arbitrary steering column connected to the generator. The axial ends are provided with serration processing for connection.

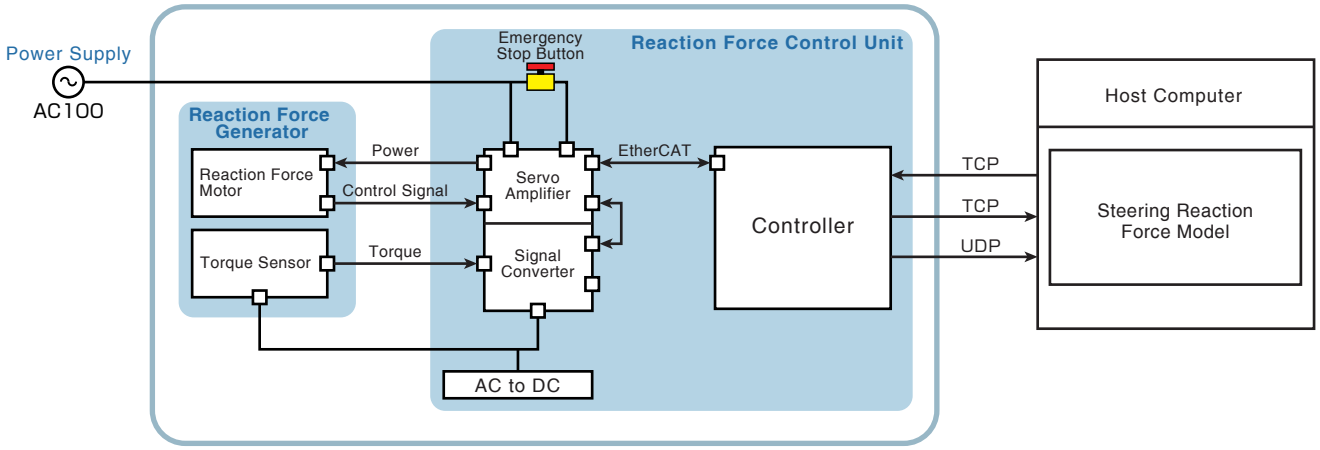
Specifications

Item	Required Specifications
Steering velocity/constant torque	Max.17.5Nm at 750deg/sec or more
Maximum momentary torque	43 Nm or more
Torque fluctuation	0.18 Nm or less
Torque resolution	0.018 Nm or less

Item	Performance
Movable range	360 deg. x 5 rotations or more
Maximum velocity	650 deg./s or more
Maximum reaction force	12 Nm or more
Resolution	16 bits or more

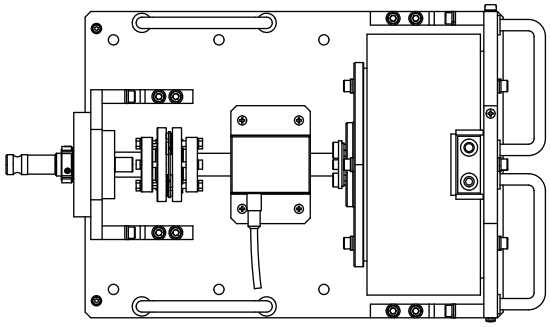
System Configuration Diagram

- The steering reaction force torque is generated by the AC servomotor in accordance with the torque command from the upper control system.
- The steering reaction force torque is transmitted to an arbitrary steering column connected to the output axis of the generator.
- The torque value generated by the generator is constantly measured and outputted by a torque sensor.

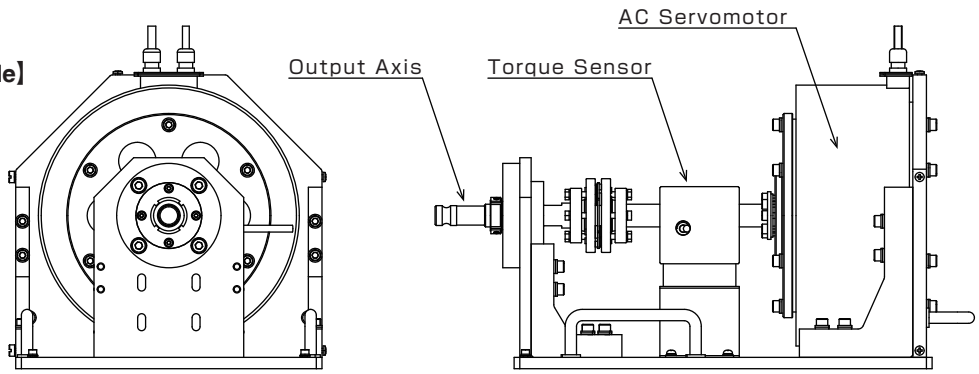


Components

Component	Quantity	Remarks
Steering Reaction Force Generator	1 set	With a motor and a torque sensor
AC Servomotor Unit	1	
Torque Sensor	1	
Output axis	1	
Reaction Force Generator Control Unit	1	
Instruction Manual	1	



【Reaction Force Generator Inside】



• Specifications may be subject to change without notice.

For further information, contact:

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