

DAMPER & VALVE MOTOR ACTUATORS

Type EGK & WGK

SAGInoMIYA

GENERAL DESCRIPTION

- Series GK motor actuator can provide On-Off, proportional or floating control of damper, valve or other controlling devices.
- Balancing relay without contact causes no burn-out.
- Type EGK is for damper.
- Type WGK is for valve.

TYPE NUMBER SELECTION (SPECIFICATIONS)

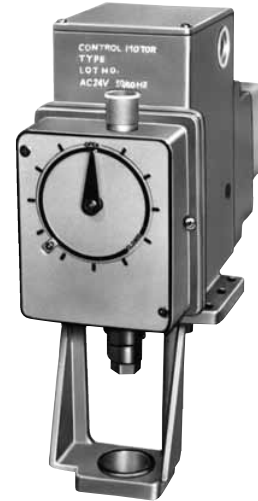
Power requirement: 24V.AC $\pm 10\%$, 50/60Hz

Max. power consumption: 21VA (without spring return action)
24VA (with spring return action)

Input signal: resistance 0 to 135 Ω
Current 4 to 20mA. DC
(Input Impedance 250 Ω)
Voltage 1 to 5V. DC
(Input Impedance 100k Ω)



Type EGK



Type WGK

Type: EGK

Torque: 12.2N·m {1.25 kg·m}
(without spring return action)
3.9N·m {0.4 kg·m}
(with spring return action)
Rotation angle: 90 to 270°
(without spring return action)
90 to 160°
(with spring return action)
Delivery Setting 90°
Timing: 80 sec/160°
Ambient temp.: - 20 to 55°C
(without spring return action)
- 10 to 55°C
(with spring return action)
Weight: 4.3kg
(without spring return action)
6.1kg
(with spring return action)

Type: WGK

Thrust: 1220N {125 kgf}
(without spring return action)
390N {40 kgf}
(with spring return action)
Stroke: 14 to 50mm
(without spring return action)
14 to 30mm
(with spring return action)
Delivery Setting 20mm
Timing: 80 sec/stroke 25mm
Ambient temp.: - 20 to 55°C
(without spring return action)
- 10 to 55°C
(with spring return action)
Weight: 5kg
(without spring return action)
6.7kg
(with spring return action)

DAMPER MOTOR SELECTION

Function	On-Off / Floating Control		Without Positioning Balance Relay		With Positioning Balance Relay		With Positioning Balance Relay		
Model	* 1	On-Off / Floating	* 2	On-Off Servo	* 3	Resistance Input	* 4	Current Input	Voltage Input
Standard		EGK-N500A		EGK-N600 A/S		EGK-N700 A/S		EGK-N701 A/S	EGK-N702 A/S
With Auxiliary Potentiometer		—		EGK-N610 A/S		EGK-N710 A/S		EGK-N711 A/S	EGK-N712 A/S
With Auxiliary Switch		EGK-N520A		EGK-N620 A/S		EGK-N720 A/S		EGK-N721 A/S	EGK-N722 A/S

VALVE MOTOR SELECTION

Function	On-Off / Floating Control		Without Positioning Balance Relay		With Positioning Balance Relay		With Positioning Balance Relay		
Model	* 1	On-Off / Floating	* 2	On-Off Servo	*3	Resistance Input	* 4	Current Input	Voltage Input
Standard		WGK-N500A		WGK-N600 A/S		WGK-N700 A/S		WGK-N701 A/S	WGK-N702 A/S
With Auxiliary Potentiometer		—		WGK-N610 A/S		WGK-N710 A/S		WGK-N711 A/S	WGK-N712 A/S
With Auxiliary Switch		WGK-N520A		WGK-N620 A/S		WGK-N720 A/S		WGK-N721 A/S	WGK-N722 A/S

* 1. The motor actuates with On-Off or floating signal from sensor.

* 2. The motor actuates with proportional signal from electronic sensor (Example: Type RBE Control Unit).

* 3. The motor actuates with the signal between 0 and 135 Ω from electric sensor (Example: Type PWS Thermostat).

* 4. Spring Return Type is so designed that actuator shaft returns to safe side on current failure.

• Auxiliary potentiometer is to provide the signal between 0 and 135 Ω in accordance with motor angular rotation for output.

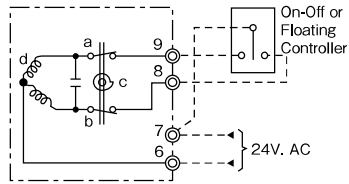
• Auxiliary switch provides the contact signal of S.P.D.T. for output.

• Enclosure: IP62

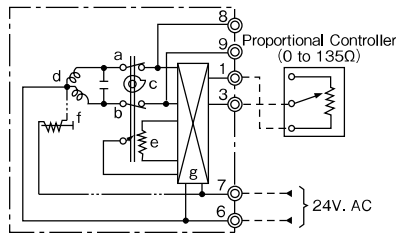
INTERNAL WIRINGS

- Check power supply to be 24V. AC $\pm 10\%$.
- Wiring is to be based on the technical standard of electrical installation. Be assured to use covered copper wire larger than 1.2 mm dia.
- Terminal wiring should be conducted with flexible wire of adequate length to prevent wire disconnection from slight move of the motor.

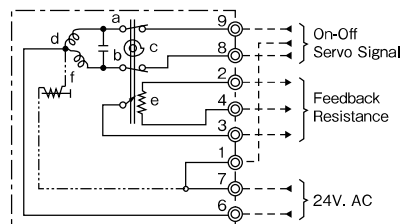
EGK-N500A, WGK-N500A



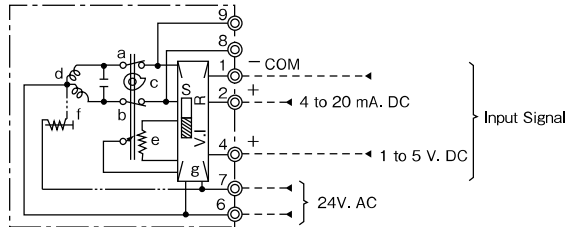
EGK-N700A/S, WGK-N700A/S



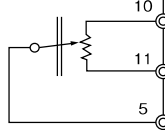
EGK-N600A/S, WGK-N600A/S



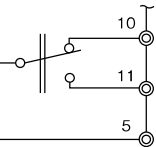
EGK-N701A/S, N702A/S, WGK-N701A/S, N702A/S



Auxiliary Potentiometer



Auxiliary Switch



EGK-N □ 1 □ A/S
WGK-N □ 1 □ A/S

EGK-N □ 2 □ A/S
WGK-N □ 2 □ A/S

⊙ Terminals

— Motor Internal Wiring

--- Motor External Wiring

----- Spring Return Type Only

a: Upper Limit Switch

b: Lower Limit Switch

c: Cam

d: Condenser Motor

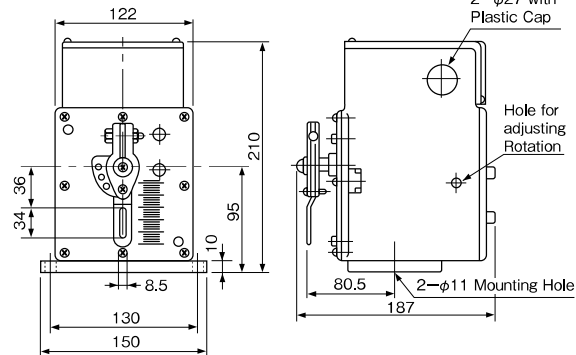
e: Feedback Potentiometer

f: Spring Return Releasing Magnet

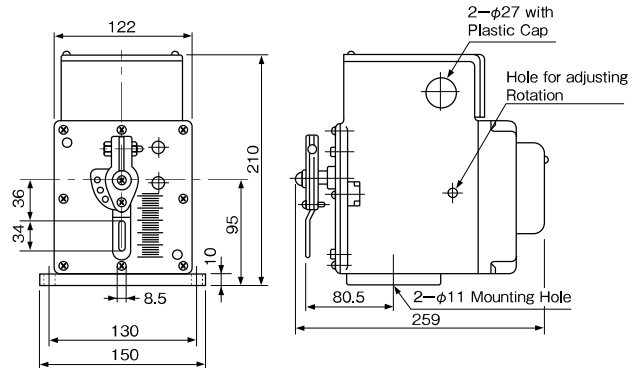
g: Balance Relay

DIMENSIONS

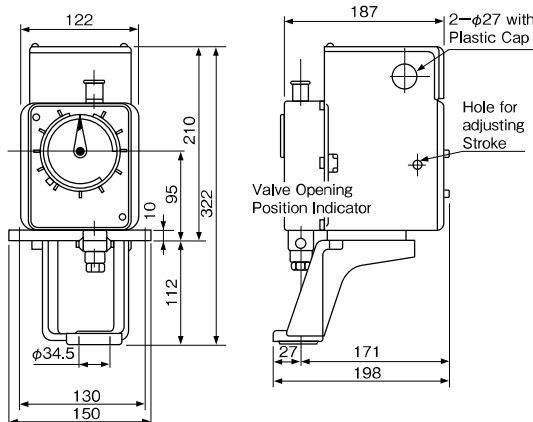
Type EGK-N...A



Type EGK-N...S



Type WGK-N...A



Type WGK-N...S

