DAMPER & VALVE MOTOR ACTUATORS

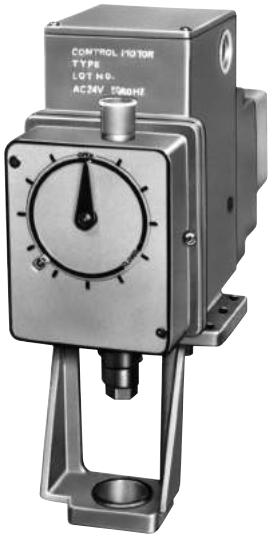
Type EGK & WGK

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 EGK



Type WGK

TYPE NUMBER SELECTION (SPECIFICATIONS)

Power requirement: 24V. AC ±10%, 50/60Hz

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

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

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 / Model	On-Off / Floating Control	Without Positioning Balance Relay	With Positioning Balance Relay	With Positioning Balance Relay	
	＊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

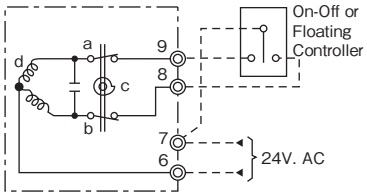
Function / Model	On-Off / Floating Control	Without Positioning Balance Relay	With Positioning Balance Relay	With Positioning Balance Relay	
	＊1 On-Off / Floating	＊2 On-Off Servo	＊3 Resistance Input	＊4 Current Input	Voltage Input
Standard	WGK–N500A	WGK–N600 A/S	WGK–N700 A/S	WGK–N701 A/S	WGK–N702 A/S
With 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 135Ω 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 135Ω in accordance with motor angular rotation for output.
・ Auxiliary switch provides the contact signal of S.P.D.T. for output.
・ Enclosure: IP62

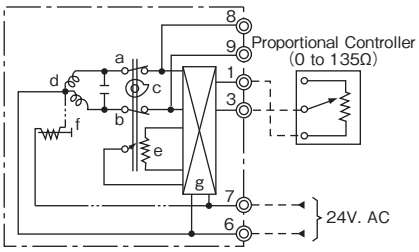
INTERNAL WIRINGS

- Check power supply to be 24V. AC ±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.

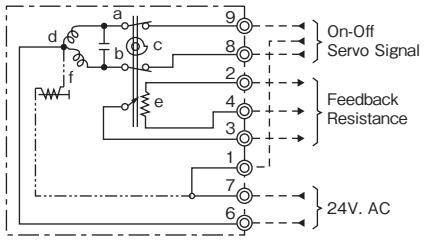
EGK–N500A, WGK–N500A



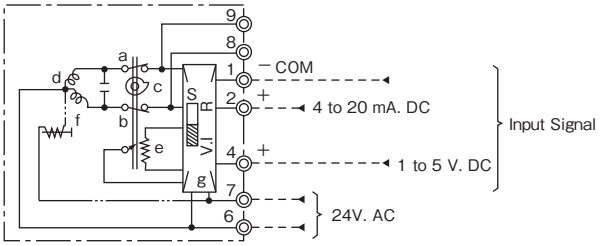
EGK–N700A/S, WGK–N700A/S



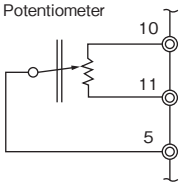
EGK–N600A/S, WGK–N600A/S



EGK–N701A/S, N702A/S, WGK–N701A/S, N702A/S

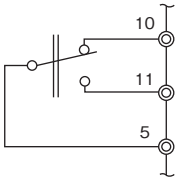


Auxiliary Potentiometer



EGK–N □ 1 □ A/S
WGK–N □ 1 □ A/S

Auxiliary Switch



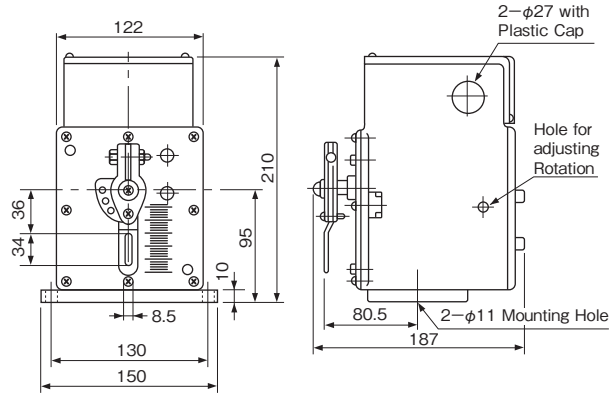
EGK–N □ 2 □ A/S
WGK–N □ 2 □ A/S

◎ Terminals
——— Motor Internal Wiring
- - - - - Motor External Wiring
—·—·— Spring Return Type Only

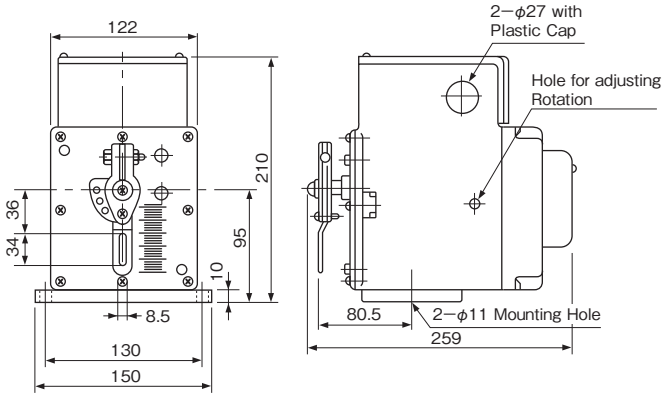
a: Upper Limit Switch
b: Lower Limit Switch
c: Cam
d: Condenser Motor
e: Feedback Potentiometer
f : Spring Return Releasing Magnet
g: Balance Relay

DIMENSIONS

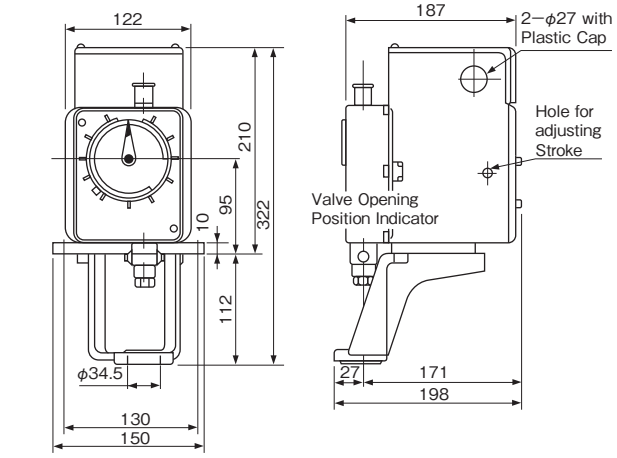
Type EGK–N···A



Type EGK–N···S



Type WGK–N···A



Type WGK–N···S