

ELECTRIC LINEAR ACTUATOR



YGC(D)-41,51

Electric Linear Actuator is an excellent actuator which properly decelerates the torque of Synchronous Motors, and generates various amounts of torque & speed by the linear motion device using the rotation. YG-Series for linear types is an operator applied to the Globe Control Valve, and characterized by a robust design, high enclosure, reliable operation, and easy maintenance with various functions. Main application areas for it are for heating, air conditioning & ice thermal storage system

Application

Valve & operator are provided separately or integrally, and the assembly for valves and actuator does not require special tools or modification.

- It is an electric operator with the static & reverse synchronous motor, and the relevant maintenance is not required.
- Blocking-protecting GearTrain is attached with the sintered lubricant bearings.
- Switch is easily available in position modification, and manually controllable.
- Lower housing part & console consist of Die casting aluminum material, and the cover consists of plastic material.
- Self Locking allows the secure operation from the fluid disturbance, and the buffer spring automatically switches in the case of abnormal torques.

Type summary

It is a gear type electric operator comprising: the operating power is AC24V or AC220V, control signal is DC 0~10V, and nominal administrative distances are 20mm & 40mm.

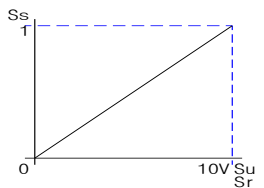
It is applied to the proportional & On-Off control system in the HVAC areas(heating, ventilation, air handling unit, heat exchanger). Models are divided into YGC-41 & 51

Technical Data

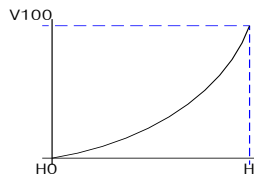
Item		YGC(YGD)-41	YGC(YGD)-51	YGD-41,51
Stroke		20mm	40mm	
Nominal force		1.5KN	3.5KN	
Operating time		35sec	80sec	
POWER	Operating power	24V AC ±10%		220V AC ±10%
	Frequency	60Hz		
	Condenser	30µF		0.47µF
	Power consumption	26W		22W
Control input		0~10V DC, 4~20mA DC		
Control output		(Option)		
Motor efficiency		S4~48% ED-800c/h		
Available temperature	Operating & Storing	-15 ... +50°C		
	Transporting	-30 ... +65°C		
	PCB	-15 ... +85°C		
	MOTOR	-15 ... +120°C		
Available humidity		Class D to DIN40040(80%)		
Housing protection level		IP 42(DIN 4005, IEC144)		
Motor rotation velocity		600rpm		
Cable incoming gland		PF1/2		
Auxiliary switch(D)		-		
Weight		2.0kg	3.5kg	

Feature

- The operator is operated by the 0~10V DC control signal received from the controller. Valves from our company and Globe valves from other companies are applicable, and the relevant linear & EQ% characteristics relationship schemes are shown below



<Relationship between control signals & variables>



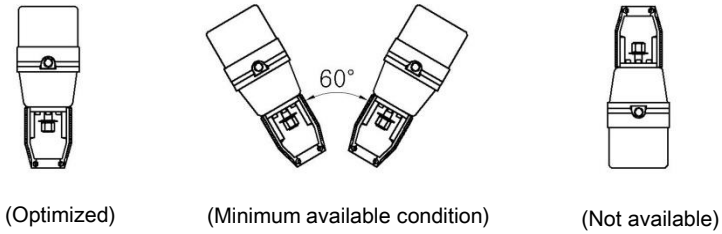
<Relationship between Valve strokes & fluid flow>

- . Ss variables
- . V100 fluid flow
- . Su 0...10V DC control signal
- . H... Valve Stroke
- . Sr 0...1000Ω position signal

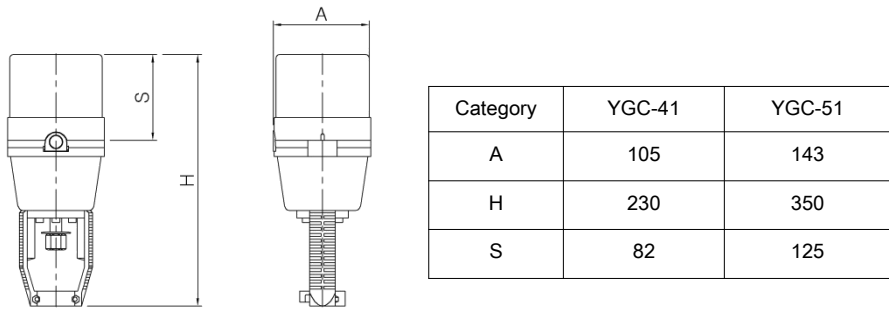
- Hysteresis is minimized through the Auto Setting.

Installation

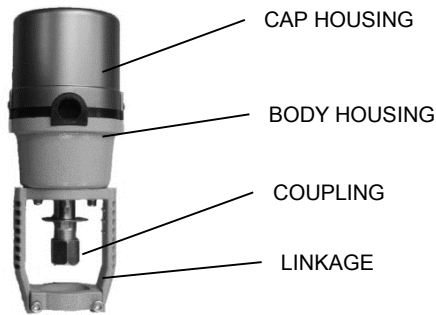
- Following contents must be understood before installing valves



Shape Dimension

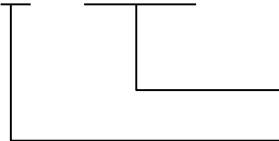


Design



Order specifications

Y G -



Model Number : 41, 51, 61, 71, 81

D:ON-OFF (Floating)/ C: Proportional control

(Provides Proportional)