

ELECTRIC LINEAR ACTUATOR



YGC(D)-61

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. YGC-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 and cover consist of Die casting aluminum 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 distance is 45mm.

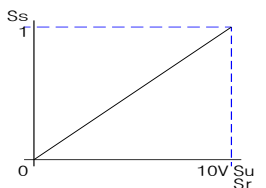
It is applied to the proportional & On-Off control system in the HVAC areas(heating, ventilation, air handling unit, heat exchanger). Models are divided into YGC(D)-61.

Technical Data

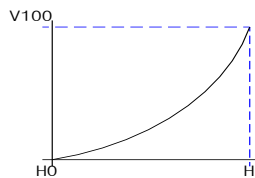
Item		YGC(D)-61	
Stroke		45mm	
Nominal force		5.5KN	
Operating time		80sec	
POWER	Operating power	24V AC ±10%	220V AC ±10%
	Frequency	60Hz	
	Condenser	70µF	0.474µF
	Power consumption	32W	26W
Control input		0~10V DC, 4~20mA DC	
Control output		0~10V DC, 4~20mA DC	
Motor efficiency		S4~48% ED-800c/h	
Available 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 44 (DIN 4005, IEC144)	
Motor rotation velocity		600rpm	
Cable incoming gland		PF1/2	
Auxiliary switch(D)		-	
Weight		9.5kg	

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>



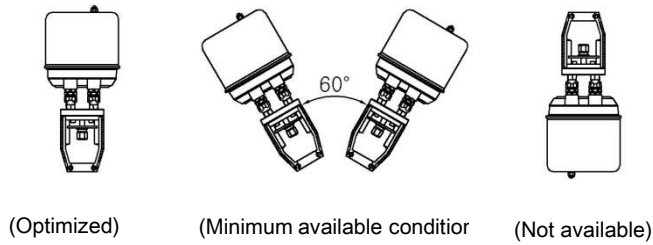
<Relationship between Valve strokes & fluid flow>

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

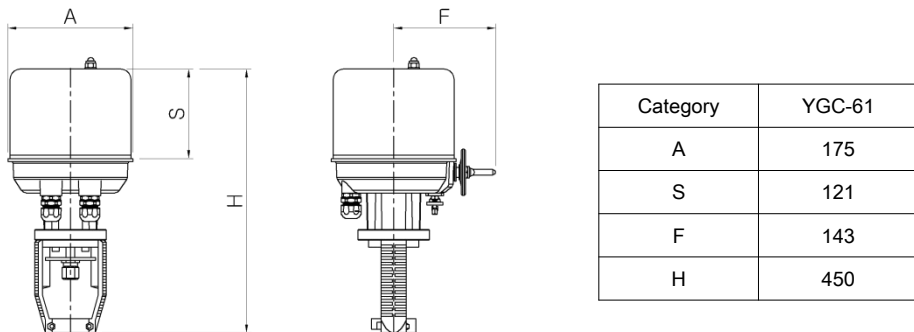
- Hysteresis is minimized through the Auto Setting.

Installation

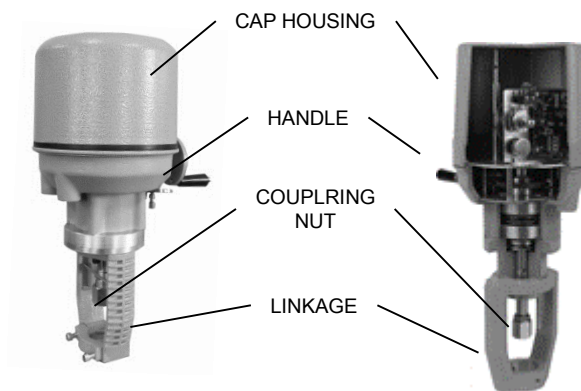
- Following contents must be understood before installing valves



Shape Dimension

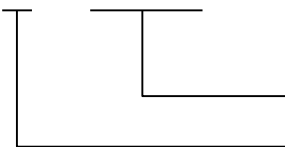


Design



Order specifications

Y G -



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

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

(Provides Proportional)