

8-6

Proportional valve actuator GEA-55PD / GEA-100PD



Summary

Digital Electric Linear Actuator displays the opening position of valve by "%" on the front side and excellent actuator with smart operation to control. GEA-55PD, GEA-100PD is for Linear type to be compatible with Globe Control Valves and is easy to check opening position with accurate feedback options.

- Low maintenance with a good deal of functions and robust design, reliable operating
- Applicable with the system of heating&cooling, HVAC, local floor-heating system, ice thermal storage system
- Maximize efficiency by connecting digital Temp. controller, DDC system, PLC system

Feature

It has discretionary stroke(mm) adjustment system in open/close of valve. In case that it doesn't need to open the valve fully, user can adjust valve stroke in the range of 0~100% while "Auto-setting". Pressing "Auto-setting" button on PCB at open position that user intended recognizes as 100% open position to store automatically. After "Auto-setting", valve stem moves up to the stored position of stroke when it opens by signal.

Type Summary

With 24VAC(220VAC) and control signal 0~10V, 2~10V, 4~20mA DC, it displays the opening position of valve by "%" on-site. Auxiliary output by electric signal is also available.

Model	Stroke (mm)	Force (N)
GEA-55PD	70	5500
GEA-100PD	70	10000

Application

To operate 2-way and 3-way, GVF, GXF Series, GXF-D, GVF-S Series in the system of Heating, Ventilation, HVAC and Ice thermal storage.

Valve	Type	Pressure rating
2-way valve	Single, Double	PN10, PN20
3-way valve	Mixing, Diverting	PN10

Technical Data

Model (선택형)	GEA-55PD		GEA-100PD	
Stroke (mm)	70		70	
Actuating thrust (KN)	5.5		10.0	
Positioning speed (50/60)	1.2 / 1.3 (mm/sec)		1.2 / 1.3 (mm/sec)	
Power supply (Volt)	24VAC	220VAC	24VAC	220VAC
Standard Wire	Over HIV 2.0 SQ			
Frequency (Hz)	50 / 60			
Power consumption (VA)	58 / 55	72.8 / 71.8	58 / 55	72.8 / 71.8
Input Signal	24VAC : 0~10VDC/2~10VDC/4~20mA 220VAC : 0~10VDC/2~10VDC/4~20mA			
Output Signal	0~10VDC/2~10VDC/4~20mA			
Operating mode.	S4Min. 30%, 1250 / 1550 c/h, EN60034-1			
Motor protection	Thermal protector (Insulation class F)			
Ambient temperature	-15 ~ 70°C			
Ambient humidity	5 ~ 95% Rh(no condensation)			
Housing protection	IP 67 (IP 68 optional)			
Conduit Entries	PF ½ X 3EA			
Weight(Kg)	11		12	

- ※ mis-operation by voltage drop when using cable below criteria
- ※ power supply enough to cover power consumption of motor running
(power consumption of the table is for motor running)

Safety Radio - Interference TEST

Standard : CE(No. m8a091270564002)
EMC Criteria : EN ISO 12100-1:2003

Specifications in ordering

GEA - □ □ PD

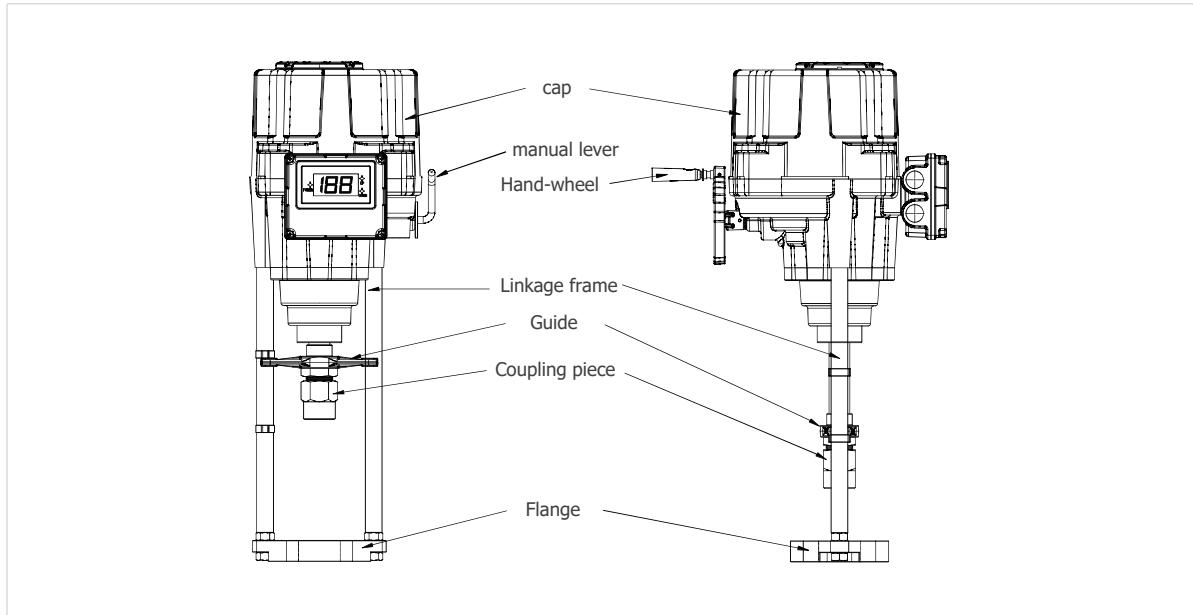
- 1) Standard power supply of GEA-55PD and GEA-100PD is 24VAC.(220VAC optional)
- 2) 60Hz(frequency) as standard, 50Hz as optional
- 3) Control output signal of GEA-PD in 24VAC is to be selected when order

Motor specifications

Rated current (A)	1-Phase			
	24VAC		220VAC	
	50Hz	60Hz	50Hz	60Hz
GEA-55PD	2.4	2.1	0.28	0.27
GEA-100PD	3.4	3.0	0.41	0.40

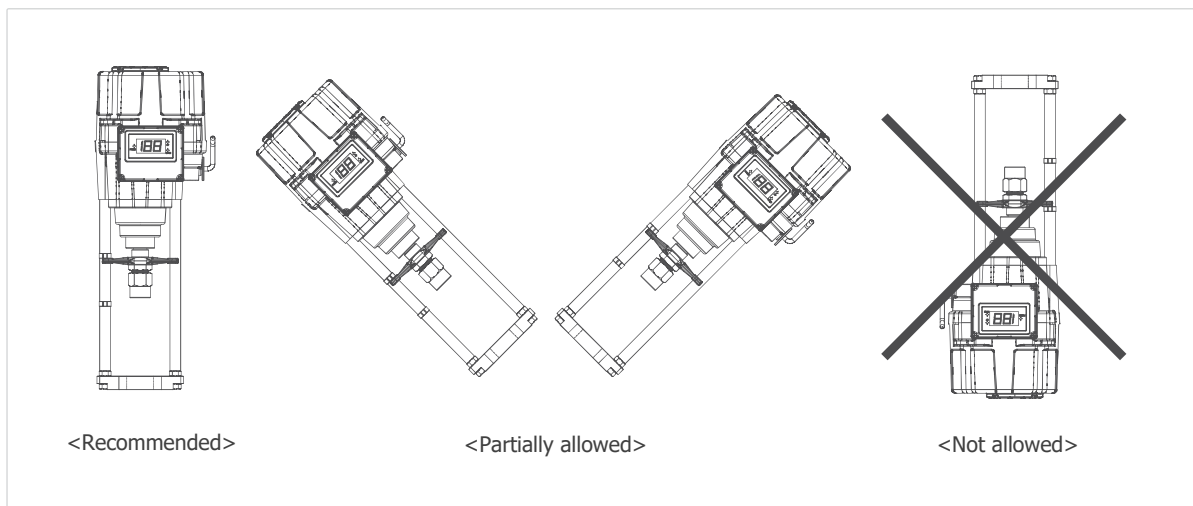
Design Character

Easy to mount actuator onto the valve without special tools
 Low maintenance with synchronous motor compatible with CW, CCW movement. Easy replacement of motor.
 Easy manual operation with De-clutching system



Installation and Mounting Notes

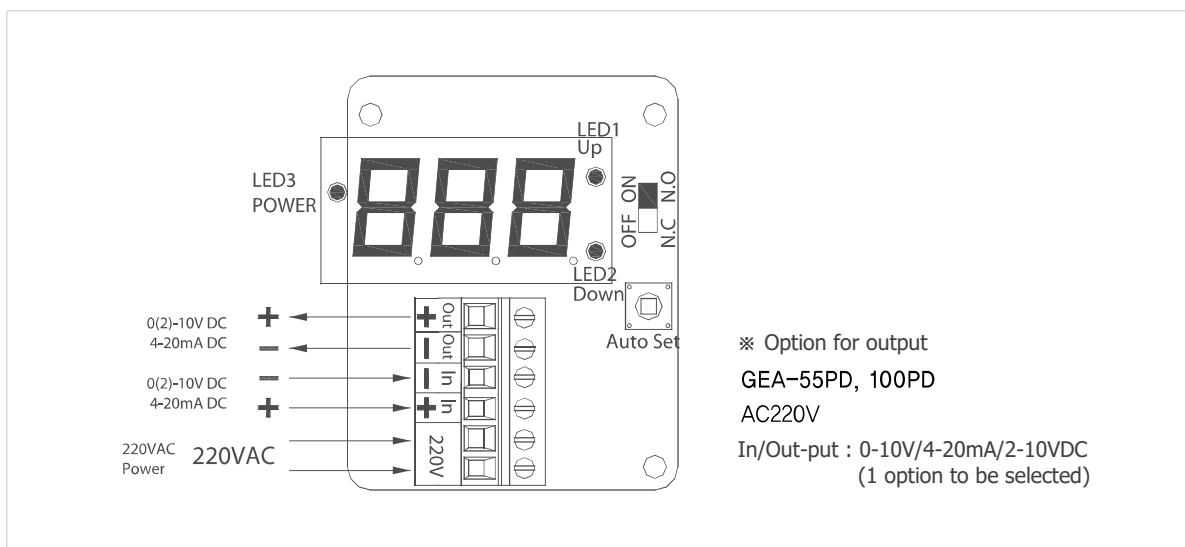
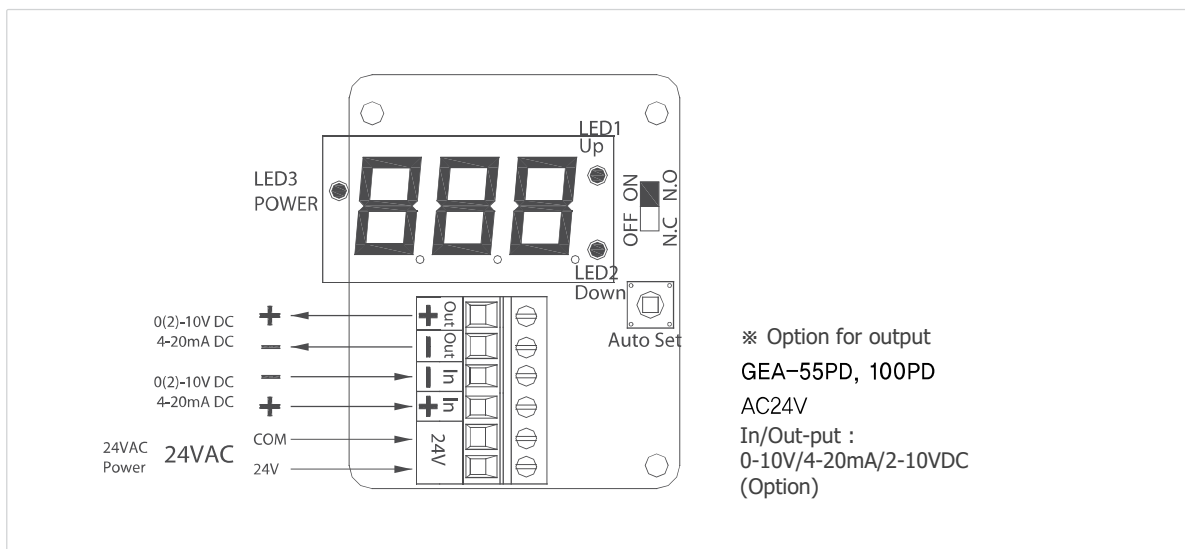
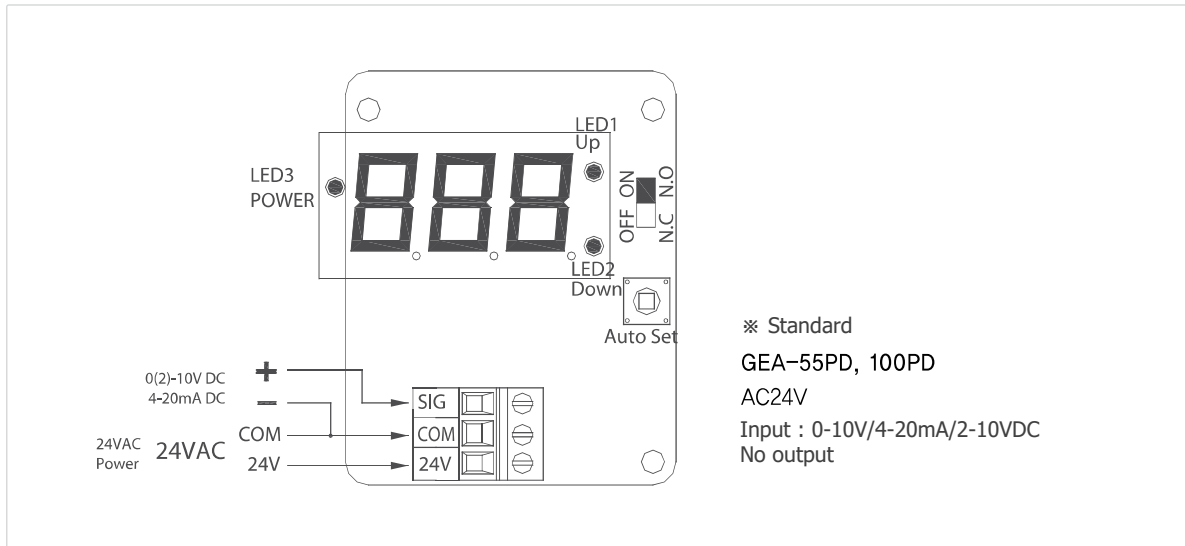
Review before valve installation



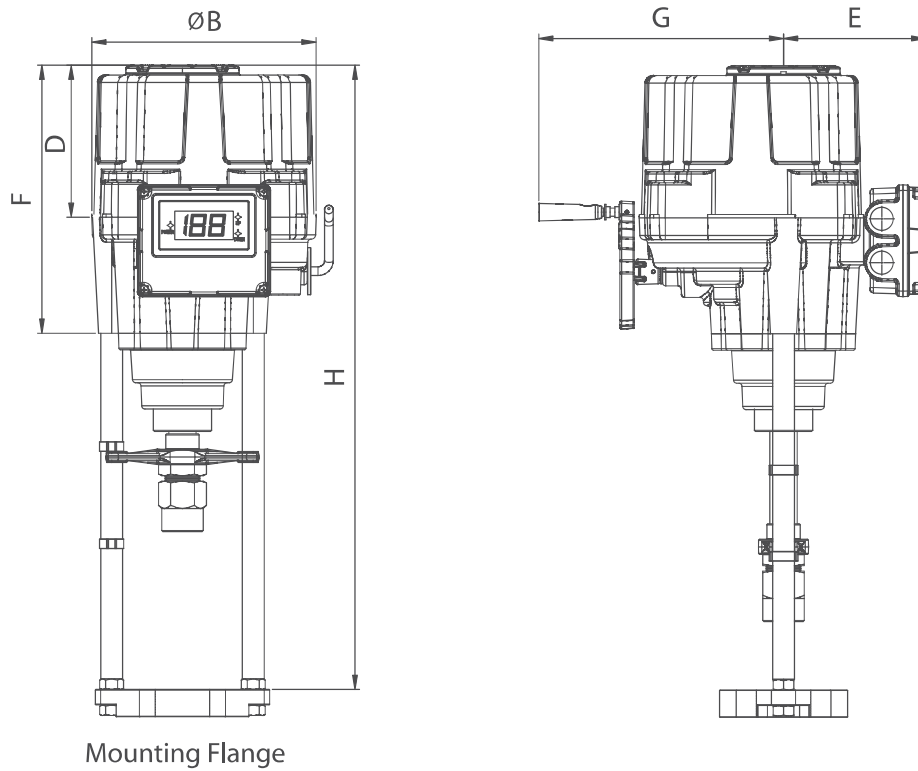
Open / Close Direction Of Valve

Check wiring and functions and test before inspection(For GINICE's valve)
 - Valve shaft or Coupling piece downward : valve open
 - Valve shaft or Coupling piece upward : valve close
 - Open/Close direction adjustable with dip switch(NC NO)

Wiring diagram



Shape dimension



Model	GEA-55PD	GEA-100PD
$\varnothing B$	206	206
H	570.5	595.5
D	139	139
F	245	245
E	130	130
G	225	225

► Mounting Flange Dimension

	Center Hole (X1)	Side Hole (X2)	Thickness (mm)
Flange Size - 1 (Standard)	$\varnothing 51$	$\varnothing 12.5$	25
Flange Size - 2	$\varnothing 71$	$\varnothing 12.5$	25
Flange Size - 3	$\varnothing 81$	$\varnothing 12.5$	24
PCD on Flange	130mm		
Pillar (Yoke) Threads	M12		