

# Electric Linear Actuator



- GEA-20AW, PDW (S)
- GEA-35AW, PDW



## General

- Digital indicator showing the opening or closing of valve
- Stroke can be adjusted to suit the user's conditions using the auto setting button.
- Minimized maintenance due to the durable structure and reliable quality
- Applied to general industries including cooling & heating system, air conditioning, ice thermal storage system.
- Compatible with Digital temperature controller, DDC system or PLC system for the optimal performance.

## Features

- Digit indicator (FND and LED lamp)
- Durable structure suitable for severe environment conditions
- Perfect enclosure against rain, water, moisture or dust.

## Type

| Model              | Nominal stroke(mm) | Force(N)    |
|--------------------|--------------------|-------------|
| GEA-20 AW, PDW (S) | 20                 | 2000(2.0KN) |
| GEA-35 AW, PDW     | 40                 | 3500(3.5KN) |

## Application

Applicable for 2-Way or 3-Way Globe Valve installed at General Industries, Heating, Ventilation, Air conditioning or Ice thermal storage system

| Valve       | Type              | Model(GVS, GXS, GVF, GXF) |
|-------------|-------------------|---------------------------|
| 2-Way valve | Single Seat       | 10K, 16K, 20K             |
| 3-Way valve | Mixing, Diverting | 10K, 16K, 20K             |

(GVS, GXS.... belong to the product of Ginice)

# Weatherproof Type

## Specification

| Model                 | GEA-20 AW, PDW                                                                             | GEA-20 AW,PDW(S) | GEA-35 AW, PDW  |
|-----------------------|--------------------------------------------------------------------------------------------|------------------|-----------------|
| Nominal stroke(mm)    | 20                                                                                         |                  | 40              |
| Rated force(N)        | 2000                                                                                       |                  | 3500            |
| Operating time(Sec)   | 50(0.4mm/sec)                                                                              | 28(0.7mm/sec)    | 100(0.4mm/ssec) |
| Power supply(V)       | 24V or 220V AC $\pm 10\%$                                                                  |                  |                 |
| Frequency(Hz)         | 50 / 60                                                                                    |                  |                 |
| RPM                   | 500 / 600                                                                                  |                  |                 |
| Rated load(A)         | 24VAC : 0.5 / 220V AC: 0.075                                                               |                  |                 |
| Condenser( $\mu$ F)   | 24VAC: 34 / 220VAC : 0.474                                                                 |                  |                 |
| Power consumption(VA) | 24VAC : 12 / 220VAC : 16.5                                                                 |                  |                 |
| In/Output Signal      | 0~10VDC, 2~10VDC or 4~20mA DC                                                              |                  |                 |
| Motor efficiency      | S4-30%                                                                                     |                  |                 |
| Ambient temperature   | Operating : -15~60 °C                                                                      |                  |                 |
| Insulation class      | E (IEC)                                                                                    |                  |                 |
| Space Heater          | 10W                                                                                        |                  |                 |
| Ambient Humidity      | 5~95% Rh (Non Condensing)                                                                  |                  |                 |
| Housing Protection    | IP 67                                                                                      |                  |                 |
| Conduit Entries       | PF $\frac{1}{2}$ x 3EA ( PT $\frac{1}{2}$ , NPT $\frac{1}{2}$ or M20 x 1.5 at the request) |                  |                 |
| Net weight (kg)       | 5.8                                                                                        |                  | 5.9             |

※ GEA-20 AW. PDW(S) : High Speed Operating Actuator

## Option

| Option        | Description                                                                                  |
|---------------|----------------------------------------------------------------------------------------------|
| ALS           | Auxiliary Open, Close Limit Switches                                                         |
| PCU           | Proportional Contact Unit ( Modulating )<br>In/Output signal : 4~20mA DC, 2~10VDC or 0~10VDC |
| PTM           | Position Transmitter / Output : DC 4~20mA                                                    |
| Potentiometer | Potentiometer 1K Ohm / 135Ω                                                                  |

# Electric Linear Actuator

## Ordering (On-Off)

| Model | Force | Type | Power/Frequency | In/Output | Description                       |
|-------|-------|------|-----------------|-----------|-----------------------------------|
| GEA   | N     |      | AC / Hz         |           | Ginice Electric Actuator          |
|       | 20    |      |                 |           | 2000N                             |
|       | 35    |      |                 |           | 3500N                             |
|       |       | AW   |                 |           | On-Off / IP67                     |
|       |       | AWS  |                 |           | On-Off / IP67 / High speed(28sec) |
|       |       |      | 24              |           | DC 24V (Under developing)         |
|       |       |      | 46              |           | AC 24V / 60Hz                     |
|       |       |      | 26              |           | AC 220V / 60Hz                    |
|       |       |      | 45              |           | AC 24V / 50Hz                     |
|       |       |      | 25              |           | AC 220V / 50Hz                    |
|       |       |      |                 | 00        | Standard (RELAY)                  |
|       |       |      |                 | LS        | Auxiliary Limit Switch            |
|       |       |      |                 | 135       | Output : 0~135 Ohm                |

※ High speed is applied into only GEA-20

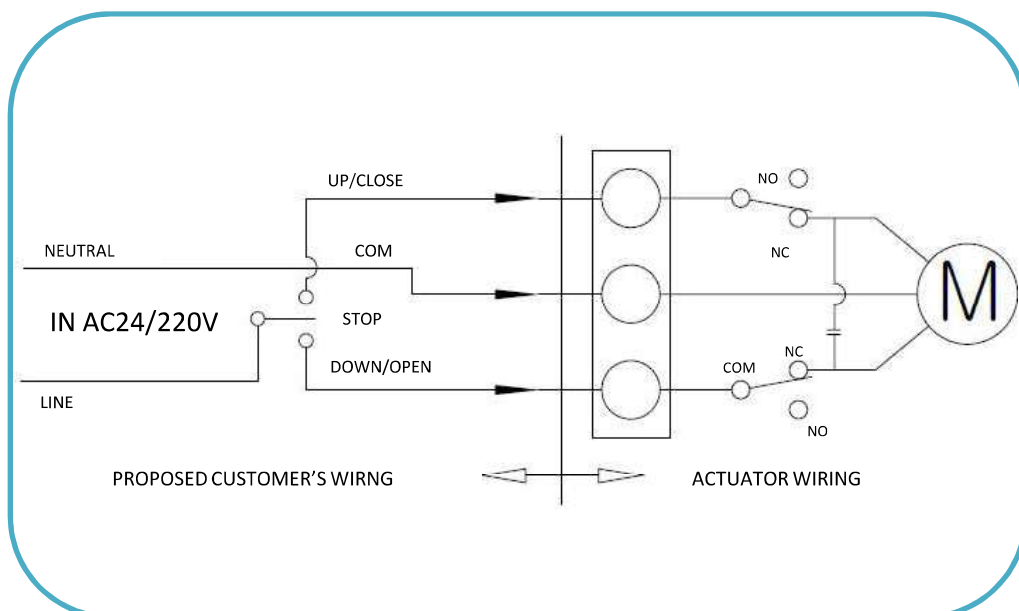
## Ordering (Proportional)

| Model | Force | Type | Power/Frequency | In/Output | Description                             |
|-------|-------|------|-----------------|-----------|-----------------------------------------|
| GEA   | N     |      | AC / Hz         |           | Ginice Electric Actuator                |
|       | 20    |      |                 |           | 2000N                                   |
|       | 35    |      |                 |           | 3500N                                   |
|       |       | PDW  |                 |           | Proportional / IP67                     |
|       |       | PDWS |                 |           | Proportional / IP67 / High speed(28sec) |
|       |       |      | 24              |           | DC 24V (Under developing)               |
|       |       |      | 46              |           | AC 24V / 60Hz                           |
|       |       |      | 26              |           | AC 220V / 60Hz                          |
|       |       |      | 45              |           | AC 24V / 50Hz                           |
|       |       |      | 25              |           | AC 220V / 50Hz                          |
|       |       |      |                 | VO        | In/Output : 0~10VDC                     |
|       |       |      |                 | A4        | In/Output : 4~20mA                      |
|       |       |      |                 | V2        | In/Output : 2~10VDC                     |

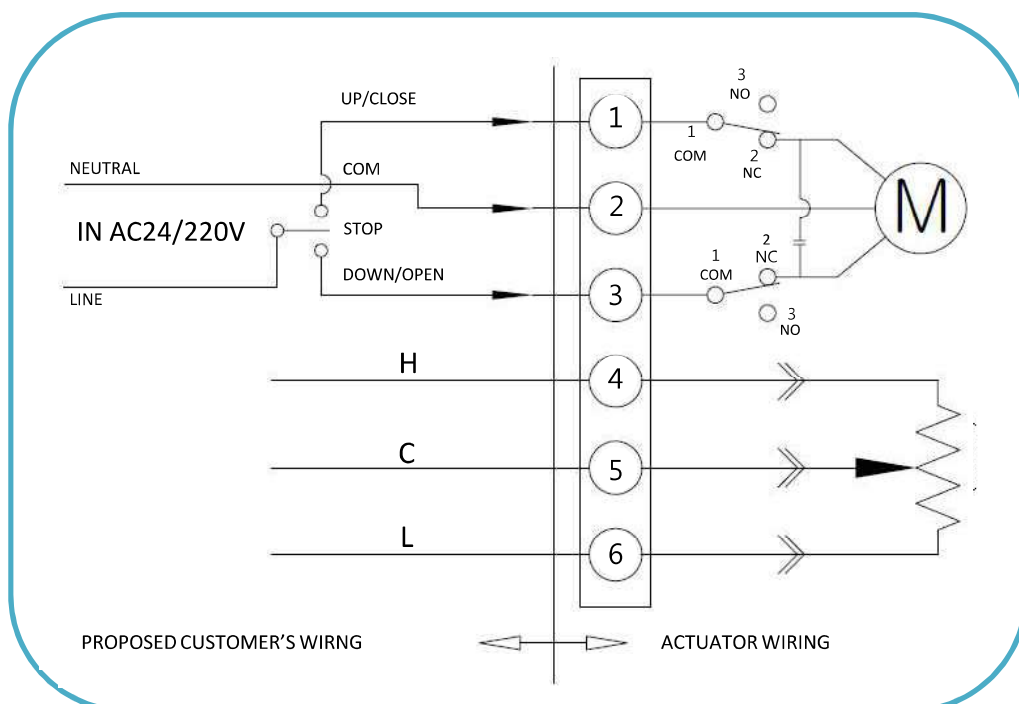
※ High speed is applied into only GEA-20

# Weatherproof Type

## Wiring – ON/OFF



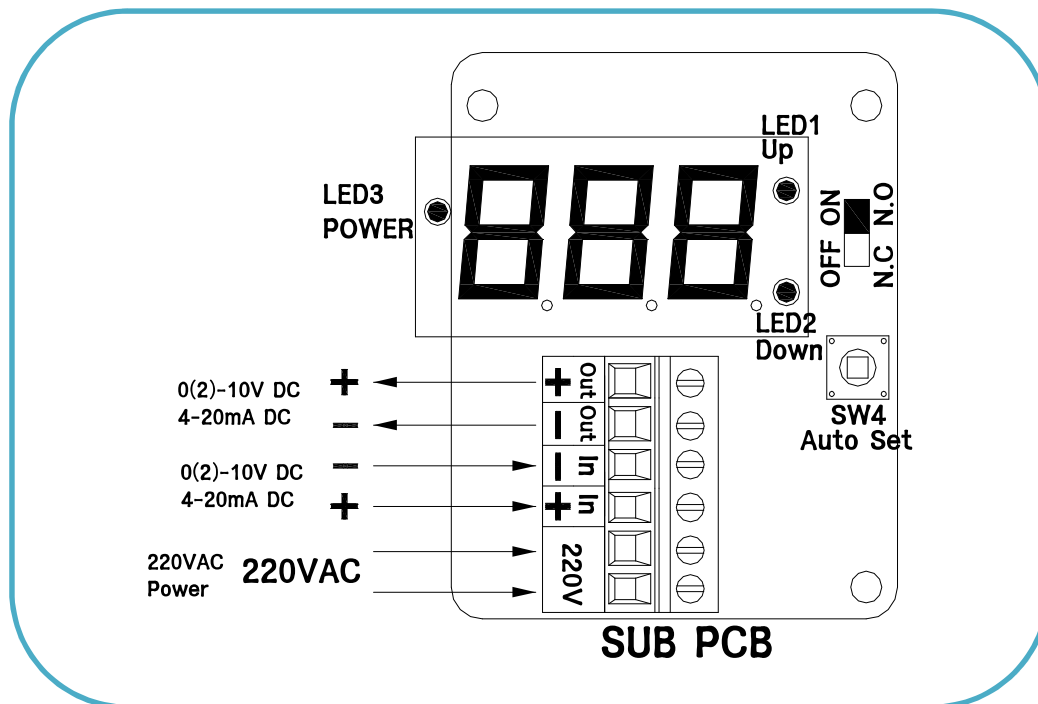
- Standard Type -



- Feedback Type –  
(0~135Ω)

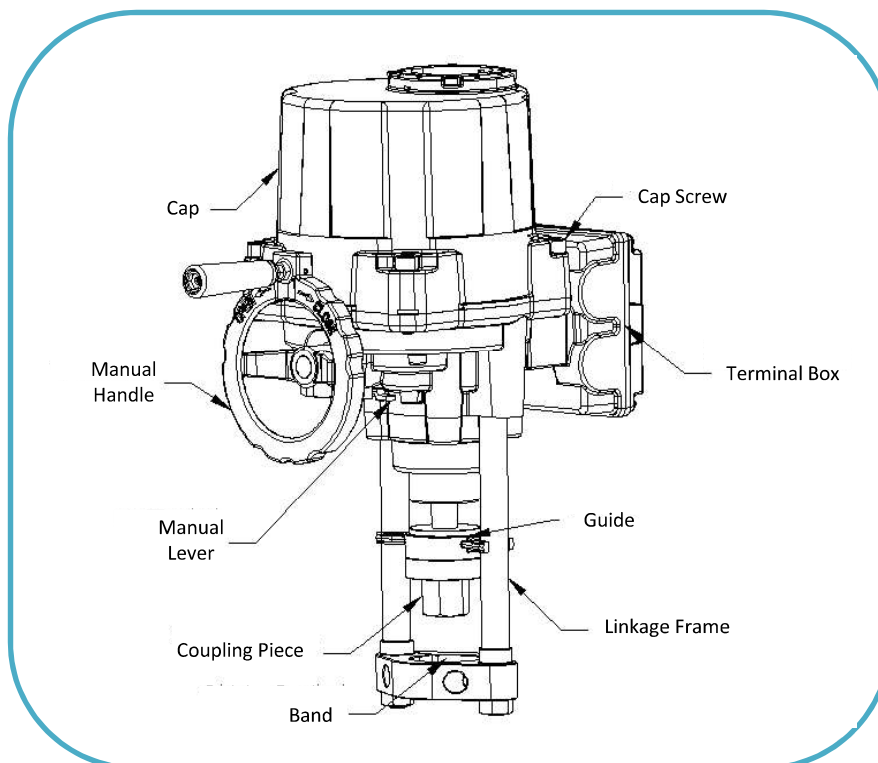
# Electric Linear Actuator

## Wiring – Proportional



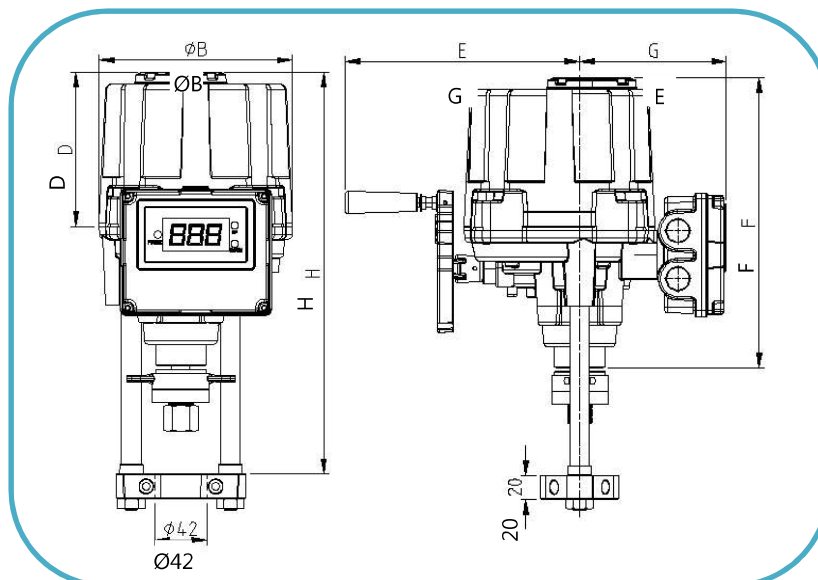
## Structure

- Easy to assemble valve and actuator without any special tools.
- Maintenance minimized and simple motor replacement
- Easy manual operation by declutching mechanism



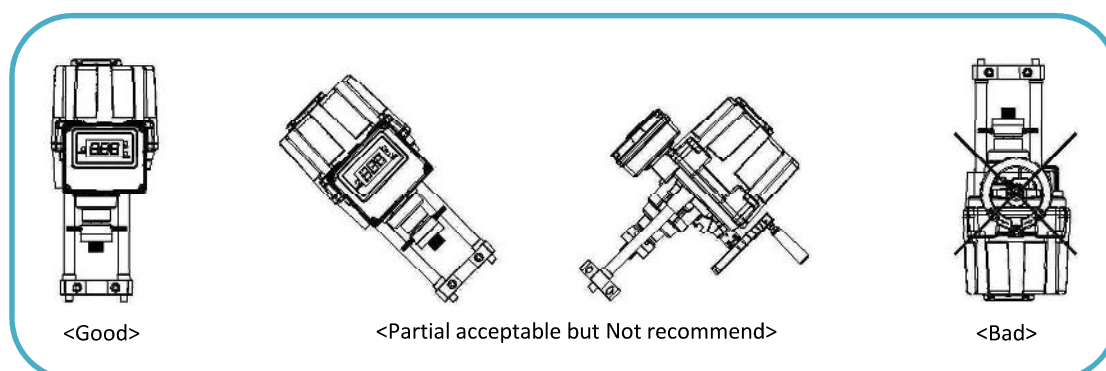
# Weatherproof Type

## Dimension



| Model    | GEA-20AW, PDW(S) | GEA-35AW, PDW |
|----------|------------------|---------------|
| $\phi B$ | 156              | 156           |
| H        | 325              | 345           |
| D        | 124.5            | 124.5         |
| F        | 237.5            | 237.5         |
| E        | 120.3            | 120.3         |
| G        | 191.9            | 191.9         |

## Installation and Mounting



## Operating (N.C Type)

Before commissioning, check wiring and specification first and then, test.

- Coupling part : Moving toward to valve / Valve - Open
- Coupling part : Moving toward to actuator / Valve - Close