ŌMEAX

EOT Series

Compact Quarter-turn
Electric Actuator







ŌMEAX

OMEAX – France : 1 rue Dewet F-71100 Chalon-sur-Saone FRANCE Tel: +33 385 970 981

contact@omeax.com https://omeax.com/

Subject to change without notice.

Reproduction of part or all of the contents of this manual is prohibited.

Under the copyright laws, the contents of this product manual are forbidden for any other purpose without the permission of Omeax corporation.

Version: FF202306-V01

COMPANY PROFILE

Omeax is a high-tech enterprise focusing on the R&D, manufacturing, sales and service of electric actuators. providing our customers with a one stop solution to intelligent industrial networking for valve actuations.

With our own professional research and development team, we are specialized in the development for electric actuator products and have acquired for up to 100 patent and product certificates. Our business network spreads throughout the world and maintaining strategic collaboration with many of the world's Top 500 enterprises.

We always adhere to the philosophy of "Serving customers, Respect for employees, and be on site", to provide the best valve control solutions for our users.



Product Introduction Product Features

Product Introduction

EOT series compact quarter-turn electric actuator is the motor through the rotary force of multi-stage reduction gear, worm gear and other mechanisms, and finally through the output shaft, in the form of rotation 90° to switch the valve device, mainly to drive and control the valve opening, such as butterfly valve, ball valve, plug valve and other similar valve application. The output torque range is 50~6000N.m, and the control mode is mainly divided into two types: on/off type and modulating type.

The product housing use die-cast aluminum alloy, multistage reduction gear, copper alloy worm wheel and high strength alloy worm transmission structure. Actuator output clearance is small, stroke repetition deviation within ±1°, high control accuracy, for buildings and civil construction and other industries to provide quality solutions.

Limit Function

Adopt double CAM, convenient travel position setting.

Process Control

The actuator adopts QR code tracing to strictly control product quality.

Appearance design

Patented streamlined design, small size, light weight, suitable for small space applications.

Operational Safety

Class F insulation motor. The motor winding has a temperature control switch to sense the temperature of the motor to protect the overheating issues, thus ensures the operational safety of the motor.

Anti-Corrosion resistance

The housing is coated with anti-corrosion epoxy powerder coating, which has strong adhesion and corrosion resistance. All fasteners are stainless steel for outdoor applications.

Indicator

Use plane pointer and scale to show the valve opening, take up little space.

Wiring Simple

Plug - in terminal for easy connection.

Reliable Sealing

Adopt long - acting sealing ring design, effectively ensure water - proof grade.

Moisture Resistance

Installed with heater inside the actuator to prevent condensation and extend the life of the actuator.

Manual Operation

After the power is cut off, open the rubber cover and insert the matching Z-wrench to open and close the valve manually.

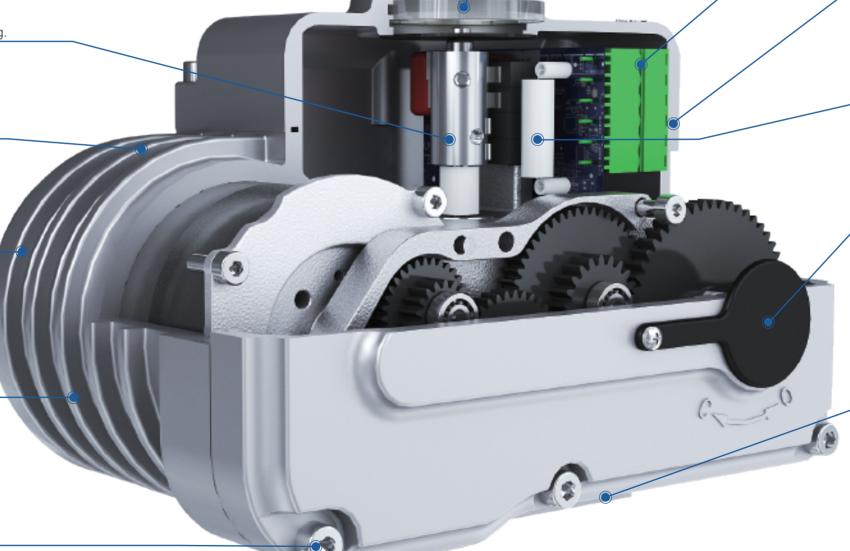
Connecting Flange

The bottom connecting hole position of the electric actuator is in accordance with ISO5211 standard, and the installation Angle can be flexibly changed to achieve the purpose of connecting the valve flange with different hole positions and angles.

Packaging

Product packaging with pearl cotton, accord with ISO2248 drop test.





01 02

EOT Compact Quarter-turn Electric Actuator -Technical Specification

| Mode | EOT Series |
|-------------------------------------|---|
| Torque Range | 50~6000N.m |
| Ingress Protection | IP67, Optional:IP68 |
| Working Time | On/off type:S2-15min Modulating type:S4-50% |
| Applicable Voltage | AC110V,AC220V±10% 1 Phase;50/60Hz±5%, Optional:AC/DC24V,AC380V(Basic type) |
| Ambient Temperature | -25°~+60°C |
| Relative Humidity | ≤90%(25°C) |
| Motor Specifications | Class F, with thermal protector |
| Output Connect | ISO5211 direct connection |
| Modulating Functional Configuration | Support loss signal mode, signal reversal selection function |
| Manual Device | Wrench operation, Optional:hand wheel |
| Position Indicator | Flat Pointer Indicator, 3D indication (optional) |
| Input Signal | On/off type:On/off signal Modulating type:Standard 4-20mA (input impedance:150Ω). Optional:0-10V, 2-10V, Optoelectronic isolation |
| Output Signal | On/off type:2-dry contact and 2-wet contact Modulating type:Standard 4-20mA (output impedance:≤750Ω). Optional:0-10V, 2-10V; Optoelectronic isolation |
| Cable Interface | On/off type:1*PG13.5;Modulating type:2*PG13.5;On/off type (380V): 2*PG13.5 |
| Space Heater | Standard |
| Over Torque Protection | Over torque switches are available expect Modulating type and EOT05 |
| Color | RAL9006 (Silver grey), Anti corrosion epoxy powerder coating |

EOT Compact Quarter-turn Electric Actuator -Technical Performance

| | | Max output | Torque (N.m) | Rur | nning time (| Sec) | | Stem | Stem | | |
|--------|--------------|------------------------------|-------------------|--------------------------|--------------|--------------|-----------------|----------------------------------|----------------|----------------|---------------------------|
| Mode | Power (W) | AC110V AC220V AC/DC24V | AC380V 3 Phase | AC110V AC220V 50Hz | AC380V | AC/DC 24V | ISO5211 | connection dimensions (mm) | height (mm) | Weight (kg) | Remark |
| EOT05 | 6 | 50 | _ | 19 | _ | 15 | F03/F05 /F07 | ☐ 9 ☐ 11 ☐ 14 Octagon | ≤20 | 2 | 8# Wrench operation |
| EOT10 | 25 | 10 | 00 | 30 | 0 | 23 | F05/F07 | ☐ 11 ☐ 14 ☐ 17 Octagon | ≤32 | 4.5 | |
| EOT20 | 40 | 20 | 00 | 30 | 0 | 23 | | □14 □17 | | | |
| EOT40 | 60 | 4(| 00 | 30 | 0 | 23 | F07/F10 | ☐ 22 Octagon | ≤44 | 10 | 6mm Allen manual |
| ЕОТ60 | 90 | 60 | 00 | 30 | 0 | 23 | | ☐27 Octagon | | | wrench operation |
| EOT100 | 120 | 10 | 00 | 30 | 0 | 23 | F10/F12 | □22 □27 | ≤30 | 26 | |
| EOT160 | 150 | 16 | 00 | 42 | 2 | 32 | 1 10/1 12 | □ 36 Octagon | _00 | 20 | |
| EOT250 | 200 | 25 | 00 | 70 | 0 | 53 | F14 F16 | □ 27 □ 36 Octagon | ≤55 | 28 | |
| EOT400 | 200 | 40 | 00 | 9: | 3 | - | F16 | ☐ 46 Octagon | ≤85 | 68 | |
| EOT600 | 200 | 60 | 00 | 15 | 53 | - | F16 | ☐ 55 Octagon | ≤85 | 80 | |

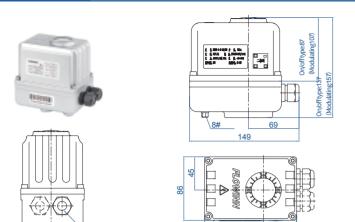
Note: 1.Standard configuration.

- 2. The switching time allows ±20%. EOT05 has no DC24V regulation
- 3. The rated torque is 0.75 times the maximum torque
- 4. The above is the 50Hz switching time, and the 60Hz switching time is 5/6 times the 50Hz switching time. Same as above for maximum torque.
- 5. If the valve stem height of the valve is greater than the above size, please contact our business personnel, can be customized according to its size.
 - 6.EOT05 If you need mechanical limit, please contact our business personnel.

03

Dimension Dimension

EOT05



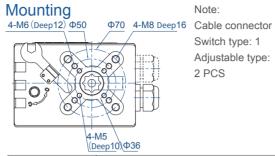
Unit:mm

Unit:mm

Unit:mm

Switch type: 1

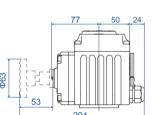
Adjustable type: 2 PCS



| Mode | EOT05 | |)5 |
|-------------|-----------------|-----|-------------|
| Stem Size | □9 | □11 | □14 Octagon |
| Flange Size | F03 / F05 / F07 | | |
| Stem Height | | ≤2 | .0 |

EOT10

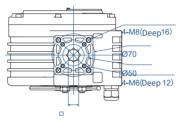




Remark: hand wheel are optional

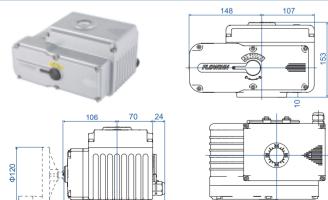
Remark: hand wheel are optional

Mounting

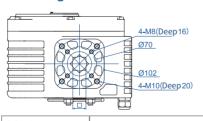


| Mode | EOT10 |
|-------------|--------------------|
| Stem Size | □11 □14 □17Octagon |
| Flange Size | F05 / F07 |
| Stem Height | €32 |

EOT20/40/60

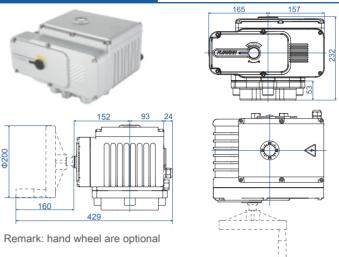


Mounting

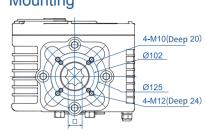


| Mode | EOT20/40 | EOT60 |
|-------------|--------------------|----------|
| Stem Size | □14 □17 □22Octagon | 270ctago |
| Flange Size | F07 / F10 | F12 |
| Stem Height | ≪44 | |

EOT100/160



Mounting

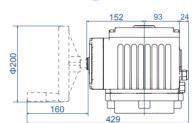


| Mode | EOT100/160 |
|-------------|---------------------|
| Stem Size | □22 □27 □36 Octagon |
| Flange Size | F10/F12/F14/F16 |
| Stem Height | ≤30 |

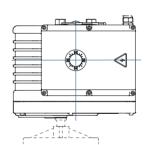
Unit:mm



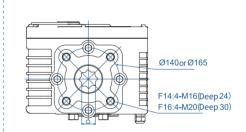
EOT250



Remark: hand wheel are optional



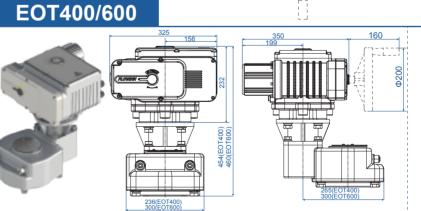
Mounting



| Mode | EOT | 250 |
|-------------|------------|------------|
| Stem Size | □27 [| 36 Octagon |
| Flange Size | F14 | F16 |
| Stem Height | € [| 55 |

Unit:mm

Unit:mm



Remark: hand wheel are optional

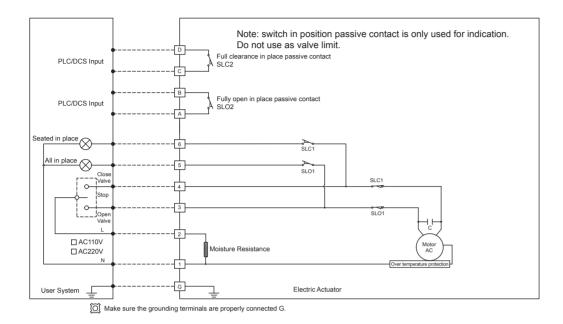
Mounting

- EOT400: F16:4-M20(Deep 32) EOT600: F25:8-M16(Deep 32)

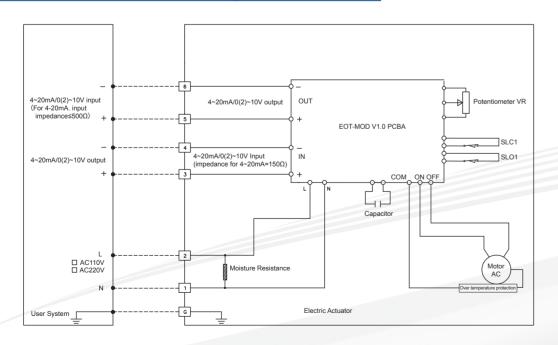
| Mode | EOT400 | EOT600 |
|-------------|-------------|-------------|
| Stem Size | ☐46 Octagon | □55 Octagon |
| Flange Size | F16 | F25 |
| Stem Height | ≤8: | 5 |

Wiring Diagram
Order Code

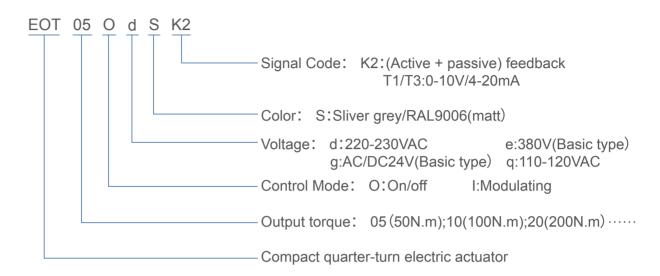
EOT Signal phase on/off type wiring diagram



EOT Signal phase modulating type wiring diagram



Order Code



SERVICES

FLOWINN's professional service team is ready to provide users with comprehensive services and professional technical supports at all time:



Under normal use, two years warranty



On-site installation and debugging



Stable delivery time



For special requirements, we provide customized solutions



Regularly follow up our products status and maintenance



We provide training for structure knowledge, operation, debugging, maintenance and more

07

[•] Subject to change without notice.

Reproduction of part or all of the contents of this manual is prohibited.

Under the copyright laws,the contents of this product manual are forbidden for any other purpose without the permission of Omeax corproation.