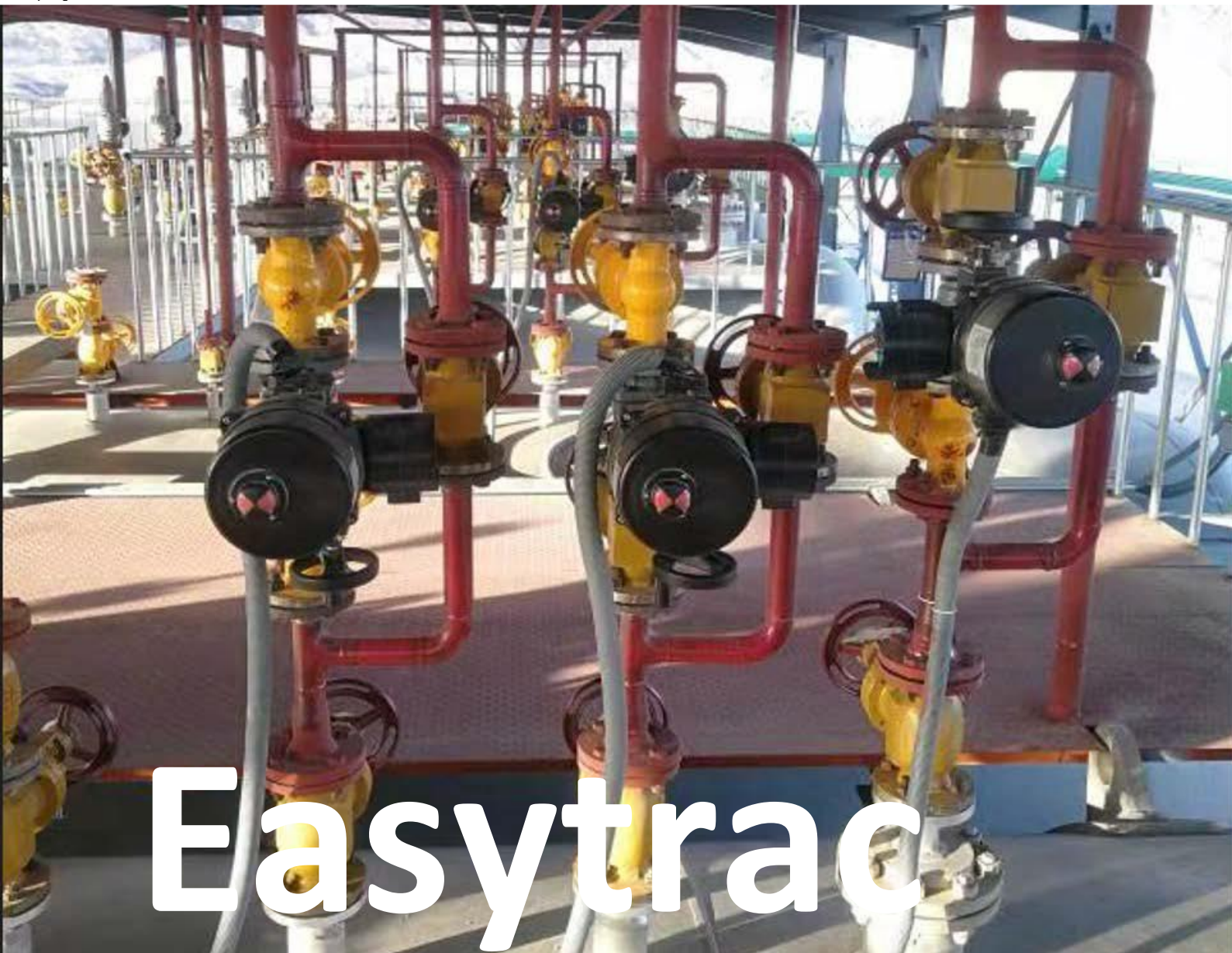




# Easytrac

**Intelligent Electric Actuator  
Valve Actuation and Process Automation Solutions**

**Easytrac Technology and Product Range**



[ontracactuators.com](http://ontracactuators.com)

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## 1.0 OUR STORY

The Ontrac company traces its roots back to Hartmann & Braun where our story started. A successful actuation company, they were acquired by Asea Brown Boveri (ABB) in 1999. The following year ABB launched both the Contrac & Ontrac product ranges.

In 2011 ABB Automation Product GmbH completed the transfer of its Ontrac advanced technology actuator product line to Ontrac, a now independent company.

Ontrac has now grown to become an international supplier of a range of high specification electric actuators. The Ontrac product range has an unrivalled feature set suitable for applications across the whole market with corporate headquarters in California and sales & service offices around the globe we are ideally placed to serve our customer.



Our Easytrac actuator has been used successfully on a global scale in many applications where accurate, robustness and data collection are important including –

- Power Generation
- Iron and Steel
- Oil & Gas
- Chemical
- Cement
- Water & Waste Treatment

- Food & Beverage

## 2.0 INTRODUCTION



Easytrac is a compact, competitive actuator with a high accuracy output. It is available in both On/Off and Modulating configurations as well as an explosion-proof version. There is also a rich option set which includes a sophisticated control head with a color LCD screen and non intrusive IR connectivity..

Like all Ontrac actuators it can be connected to both Smartrac for comprehensive data analysis and configuration and to our Ontrac Cloud for remote download of actuator parameters and technical information.

The Ontrac Easytrac electric actuator is a compact robust actuator.

The Easytrac EME (Easytrac Modulating Electric) provides (S4-25%) modulating control.

The Easytrac EOE (Easytrac On/Off Electric) provides (S2) On/Off control.

Part-Turn Torque up to 3000 Nm

Linear Thrust up to 10000N

Full-turn Torque up to 100Nm

| ONTRAC FAMILY OF ACTUATORS                                                                      |                                                                                                 |                                                                                              |                                                                                                 |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Easytrac                                                                                        |                                                                                                 |                                                                                              |                                                                                                 |
|                                                                                                 |  Part-turn |  Linear |  Full-turn |
| Thrust/Torque                                                                                   | 50 to 3000Nm                                                                                    | 0~4000/0~6000N/0-10000N                                                                      | ≤100Nm                                                                                          |
| Travel/Turns                                                                                    | 5 to 95 degrees                                                                                 | 40mm                                                                                         | 20 turns                                                                                        |
| Speed                                                                                           | 11 to 102 sec                                                                                   | 0.4mm/S                                                                                      | 7 rpm                                                                                           |
| <input checked="" type="checkbox"/> Metric Units<br><input type="checkbox"/> Click for US units |            |         |            |

### **3.0 KEY FEATURES**

#### **3.1 FOR INTELLIGENT MODEL (WITH CONTROL UNIT)**

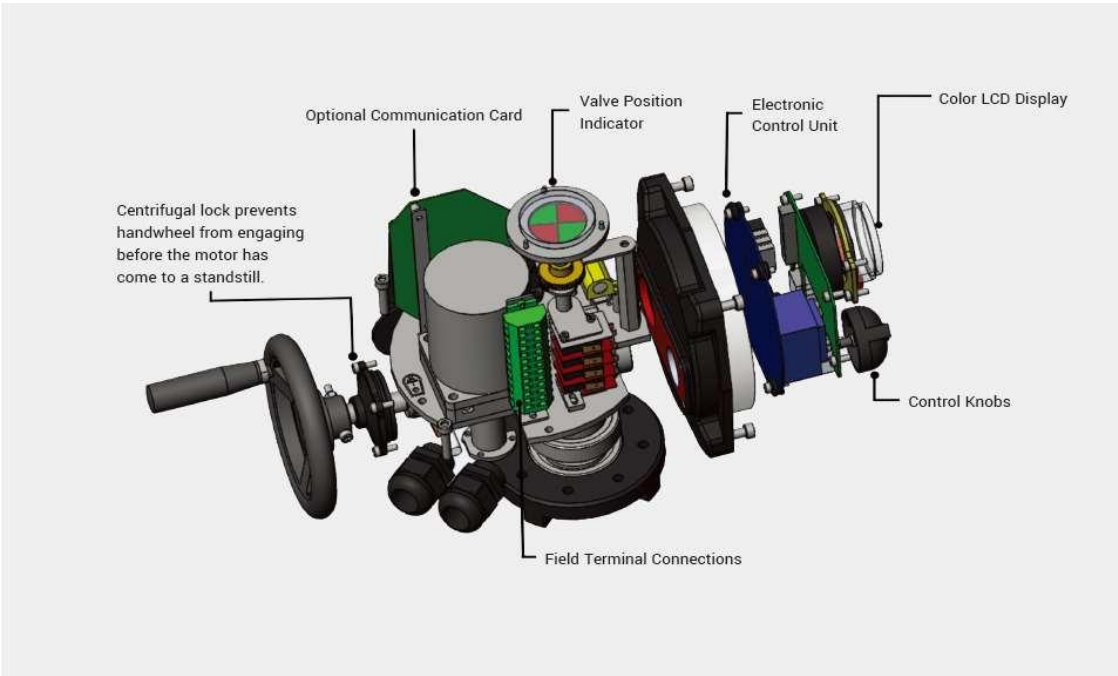
- Auto phase correction, phase lost detection
- Password protection
- ESD
- PST
- SIL
- Input/output user programable
- Reverse protection
- Jam valve/Blockage, 1.5 torque of nominal max torque
- Absolute encoder for sensing with high resolution
- Deadband, user adjustable
- PC based Smartrac
- Serial communication

#### **3.2 FOR BASIC MODEL:**

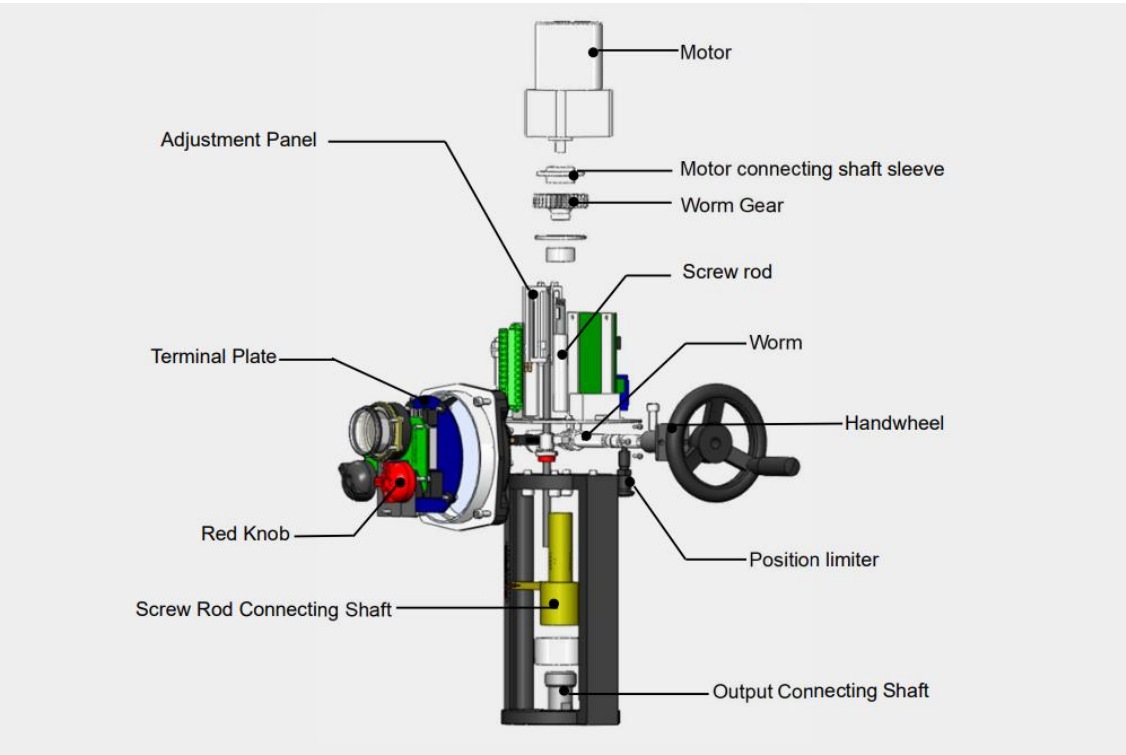
- Rugged, reliable design
- Manual switch handle
- IP67, IP68 optional
- Vibration endurance
- Mechanical position indicator

4.0 ACTUATOR CUT AWAY

Part-turn



Linear



## 5.0 CLOUDTRAC ASSET MANAGEMENT

The **Ontrac** Cloud allows you complete global access to our actuator database to provide specific as built technical details and parameters without the use of special tools or proprietary software. Every **Ontrac** actuator comes with a permanent QR code attached. Externally simply scanning the QR (Quick Response) code on your actuator from your phone connects you to **Cloudtrac** . Our database provides access to the specific information for your actuator.

You will then be able to download instruction and data sheets as well as your actuators specific wiring diagram. This simple aid to set up, commissioning and fault finding will save users considerable time and ensure the right connections are made.

| Basic Information      |                   |
|------------------------|-------------------|
| Product Type           | EME200-A          |
| Serial Number          | 761212120T2115404 |
| Power Supply           | 380V 3PHASE       |
| Manufacturing Date     | 2021-08-12        |
| Duty Mode              | modulating        |
| Speed                  | 22sec/90°         |
| Max. Switch-off Torque | 200               |

| Electrical Control |        |
|--------------------|--------|
| Input Signal       | 4-20mA |
| Output Signal      | 4-20mA |
| Bus Protocol Type  | No     |
| Voltage Input      | 30V DC |

| Option                      |                        |
|-----------------------------|------------------------|
| Enclosure Protection        | IP68 (10 meter, 72hrs) |
| Explosion Protection        | No                     |
| Split Type                  | No                     |
| Low temperature environment | No                     |
| Documents                   | Instruction Manual     |

## 6.0 SMARTRAC

**Smartrac** is our PC based system for digitally communicating directly to our actuators. It will provide you with an Engineer level access to all of the settings and data that your actuator contains.

**Smartrac** requires a standard PC (Windows 10 or above) and a dedicated RS486 standard cable to connect to the actuator.

### Features include:

- Settings – actuator settings can be saved, uploaded or downloaded to the actuator
- Ports – serial communication ports can be configured and allocated
- Operate – the actuator can be operated to set the running times, valve positions and stroke and facilitate fault finding.
- Configure – parameters can be set including; control modes, analogue settings, indications, speed and torque, limit switches and ports.
- Diagnosis – comprehensive alarm and failure logs and historic data logs are all accessible.

## 7.0 SERIAL COMMUNICATIONS

Serial communications allow for a much greater bandwidth and more information transfer capability than traditional 4 – 20 mA signaling. **Ontrac** produces a wide range of serial communication options through the use of an optional communications board. The communications cards are fitted internally to the actuator.

These include:

### 7.1 PROFIBUS:

Ontrac offers Profibus DP (Decentralised Peripherals) up to a baud rate of 1.5Mbit/s. Our actuators are supplied with active bus termination. The electrical connections are via RS486 type A. Double channel profibus to give redundancy available as option.

### 7.2 MODBUS:

Ontrac offers Modbus RTU protocol communications at a baud rate up to 38.4kbits/s. Our factory default speed is 9.6kbits/s giving a 1.5km maximum distance between nodes. We use a master / slave query response polling cycle with CRC (Cyclic Redundancy Check).

### 7.3 HART:

Ontrac can provide HART Communication Protocol (Highway Addressable Remote Transducer) connectivity. HART allows use of conventional 4 – 20 mA wiring.

#### **7.4 FF FOUNDATION FIELDBUS:**

Ontrac can provide FF Communication Protocol connectivity. FF is developed with reference to the Open System Interconnection (OSI) protocol of the International Organization for Standardization (ISO) which adheres strictly to the IEC 61158-2 standard for H1, 31.25 kbit/s networks utilizing 2-wire communication

## 8.0 PERFORMANCE TABLES

### 8.1 TECHNICAL DATA

|                                        | EOE Basic Type                                                                                                                                        | EOE/EME Intelligent Type                                                                                                                                                                                                |                                                                                                                                                                                                                         |                                                                                                                                                                                                                         |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                        |                                                                                                                                                       | Part-turn                                                                                                                                                                                                               | Linear                                                                                                                                                                                                                  | Full-turn                                                                                                                                                                                                               |
| Output Torque/Thrust                   | 50-1000 Nm                                                                                                                                            | 50-3000 Nm                                                                                                                                                                                                              | 0~4000N/0~6000N/0~10000N                                                                                                                                                                                                | ≤100Nm                                                                                                                                                                                                                  |
| Whole Stroke Time                      | 11-62s                                                                                                                                                | 11-102s                                                                                                                                                                                                                 | 100s at 40mm (Speed: 0.4mm/s);<br>125s at 50mm (Speed: 0.4mm/s);<br>250s at 50mm (Speed: 0.2mm/s)                                                                                                                       | 20 turns/ 4 rpm, 20 turns/ 7 rpm,                                                                                                                                                                                       |
| Power Supply                           | Three-phase: 110/220/380V ±10%, 50/60Hz ±5%<br>Single-phase: 110/220V ±10%, 50/60Hz ±5%<br>Single-phase/Three-phase: 100-500V (wide voltage optional) | Three-phase: 110/220/380V ±10%, 50/60Hz ±5%<br>Single-phase: 110/220V ±10%, 50/60Hz ±5%<br>Single-phase/Three-phase: 100-500V (wide voltage optional)                                                                   | Three-phase: 110/220/380V ±10%, 50/60Hz ±5%<br>Single-phase: 110/220V ±10%, 50/60Hz ±5%<br>Single-phase/Three-phase: 100-500V (wide voltage optional)                                                                   | Three-phase: 110/220/380V ±10%, 50/60Hz ±5%<br>Single-phase: 110/220V ±10%, 50/60Hz ±5%<br>Single-phase/Three-phase: 100-500V (wide voltage optional)                                                                   |
| Failsafe Function                      | DC 24V (Optional)                                                                                                                                     | DC 24V (Optional)                                                                                                                                                                                                       | DC 24V (Optional)                                                                                                                                                                                                       | DC 24V (Optional)                                                                                                                                                                                                       |
| Internal Power Supply (Optional)       | N/A                                                                                                                                                   | Fail safe                                                                                                                                                                                                               | Fail safe                                                                                                                                                                                                               | Fail safe                                                                                                                                                                                                               |
| Duty Mode                              | On-off (EOE Type) S2-15 min                                                                                                                           | On-off and Inching (EOE Type) S2-15 min                                                                                                                                                                                 | On-off and inching (EOE Type) S2-15 min                                                                                                                                                                                 | On-off and inching (EOE Type) S2-15 min                                                                                                                                                                                 |
|                                        | Modulating N/A                                                                                                                                        | Modulating, EME Type S4-25%                                                                                                                                                                                             | Modulating, EME Type S4-25%                                                                                                                                                                                             | Modulating, EME Type S4-25%,                                                                                                                                                                                            |
| Ambient Temp.                          | -20℃ to 65℃                                                                                                                                           | -20℃ to 65℃                                                                                                                                                                                                             | -20℃ to 65℃                                                                                                                                                                                                             | -20℃ to 65℃                                                                                                                                                                                                             |
|                                        | -40℃ and -60℃ optional                                                                                                                                | -40℃ and -60℃ optional                                                                                                                                                                                                  | -40℃ and -60℃ optional                                                                                                                                                                                                  | -40℃ and -60℃ optional                                                                                                                                                                                                  |
| Humidity                               | ≤100% (25℃)                                                                                                                                           | ≤100% (25℃)                                                                                                                                                                                                             | ≤100% (25℃)                                                                                                                                                                                                             | ≤100% (25℃)                                                                                                                                                                                                             |
| Motor Control                          | Class F                                                                                                                                               | Class F                                                                                                                                                                                                                 | Class F                                                                                                                                                                                                                 | Class F                                                                                                                                                                                                                 |
| Valve Connection                       | ISO5211 direct connection, splined bore                                                                                                               | ISO5211 direct connection, splined bore                                                                                                                                                                                 | ISO5211 flange connection, thread hole                                                                                                                                                                                  | ISO5211 flange connection, thread hole                                                                                                                                                                                  |
| Manual Device                          | Handwheel with manual override level                                                                                                                  | Handwheel with manual override level                                                                                                                                                                                    | Handwheel with manual override level                                                                                                                                                                                    | Handwheel with manual override level                                                                                                                                                                                    |
| Signal Input                           | N/A                                                                                                                                                   | 24 VDC (Optional for 110/220VAC)                                                                                                                                                                                        | 24 VDC (Optional for 110/220VAC)                                                                                                                                                                                        | 24 VDC (Optional for 110/220VAC)                                                                                                                                                                                        |
| Analog Input Signal                    | N/A                                                                                                                                                   | 4-20 mA (Analogue Input)                                                                                                                                                                                                | 4-20 mA (Analogue Input)                                                                                                                                                                                                | 4-20 mA (Analogue Input)                                                                                                                                                                                                |
| Output Signal                          | 5A 110/220 VAC (Dry contact 2 SPST)                                                                                                                   | 5A 110/220 VAC (Dry contact 4 SPST) +2 SPST (Optional)<br>Contact load (resistive): 5A 250VAC/30VDC<br>Maximum switching voltage: 250VAC/30VDC<br>Maximum switching current: 5A<br>Maximum switching power: 250VAC/150W | 5A 110/220 VAC (Dry contact 4 SPST) +2 SPST (Optional)<br>Contact load (resistive): 5A 250VAC/30VDC<br>Maximum switching voltage: 250VAC/30VDC<br>Maximum switching current: 5A<br>Maximum switching power: 250VAC/150W | 5A 110/220 VAC (Dry contact 4 SPST) +2 SPST (Optional)<br>Contact load (resistive): 5A 250VAC/30VDC<br>Maximum switching voltage: 250VAC/30VDC<br>Maximum switching current: 5A<br>Maximum switching power: 250VAC/150W |
| Digital Input Signal                   | N/A                                                                                                                                                   | Open/close, State indicator, Alarm                                                                                                                                                                                      | Open/close, State indicator, Alarm                                                                                                                                                                                      | Open/close, State indicator, Alarm                                                                                                                                                                                      |
| Analog Output Signal (Optional)        | N/A                                                                                                                                                   | 4-20 mA (Analogue Output)                                                                                                                                                                                               | 4-20 mA (Analogue Output)                                                                                                                                                                                               | 4-20 mA (Analogue Output)                                                                                                                                                                                               |
| Intermediate Valve Position (Optional) | N/A                                                                                                                                                   | Intermediate Valve Position                                                                                                                                                                                             | Intermediate Valve Position                                                                                                                                                                                             | Intermediate Valve Position                                                                                                                                                                                             |
| Optional Extension board (Control B)   | N/A                                                                                                                                                   | 6 switch contacts (110/220VAC, 5A) 4-20 mA (Analogue output)                                                                                                                                                            | 6 switch contacts (110/220VAC, 5A) 4-20 mA (Analogue Output)                                                                                                                                                            | 6 switch contacts (110/220VAC, 5A) 4-20 mA (Analogue Output)                                                                                                                                                            |
| Communication (optional)               | N/A                                                                                                                                                   | Profibus-DP/Modbus/Hart/Foundation Fieldbus/Ethernet                                                                                                                                                                    | Profibus-DP/Modbus/Hart/Foundation Fieldbus/Ethernet                                                                                                                                                                    | Profibus-DP/Modbus/Hart/Foundation Fieldbus/Ethernet                                                                                                                                                                    |
| Anti-condensation                      | Standard                                                                                                                                              | Standard                                                                                                                                                                                                                | Standard                                                                                                                                                                                                                | Standard                                                                                                                                                                                                                |
| Enclosure Protection                   | IP67 (standard)<br>IP68 (2 meter, 72 hr) optional and enhanced option available (10 meter, 72 hr)                                                     | IP67 (standard)<br>IP68 (2 meter, 72 hr) optional and enhanced option available (10 meter, 72 hr)                                                                                                                       | IP67 (standard)<br>IP68 (2 meter, 72 hr) optional and enhanced option available (10 meter, 72 hr)                                                                                                                       | IP67 (standard)<br>IP68 (2 meter, 72 hr) optional and enhanced option available (10 meter, 72 hr)                                                                                                                       |
| Safety Integrated Level(Optional)      |                                                                                                                                                       | SIL2 & SIL3, Electric actuators with configurable safety functions: Stay put or Emergency shut-down (ESD) open or close on demand.                                                                                      | SIL2 & SIL3, Electric actuators with configurable safety functions: Stay put or Emergency shut-down (ESD) open or close on demand.                                                                                      | SIL2 & SIL3, Electric actuators with configurable safety functions: Stay put or Emergency shut-down (ESD) open or close on demand.                                                                                      |
| Explosive-Protection (Optional)        | Ex db eb IIC T4 Gb                                                                                                                                    | Ex db eb IIC T4 Gb                                                                                                                                                                                                      | Ex db eb IIC T4 Gb                                                                                                                                                                                                      | Ex db eb IIC T4 Gb                                                                                                                                                                                                      |
| CCC (Optional)                         | CCC                                                                                                                                                   | CCC ≤1000Nm                                                                                                                                                                                                             | CCC                                                                                                                                                                                                                     | CCC                                                                                                                                                                                                                     |
| Cable Connection                       | 2*M25 for cable Φ10-Φ16                                                                                                                               | 2*M25 for cable Φ10-Φ16                                                                                                                                                                                                 | 2*M25 for cable Φ10-Φ16                                                                                                                                                                                                 | 2*M25X1.5, for cable Φ10-Φ16                                                                                                                                                                                            |
| Coating                                | RAL9005 (Black). Anti corrosion epoxy resin power coating;<br>C5-M for corrosion environment (optional)                                               |                                                                                                                                                                                                                         |                                                                                                                                                                                                                         |                                                                                                                                                                                                                         |
|                                        |                                                                    |                                                                                                                                      |                                                                                                                                     |                                                                                                                                    |

## 8.2 PHYSICAL DIMENSIONS

### 8.2.1 BASIC TYPE OUTLINE DIMENSION DRAWINGS

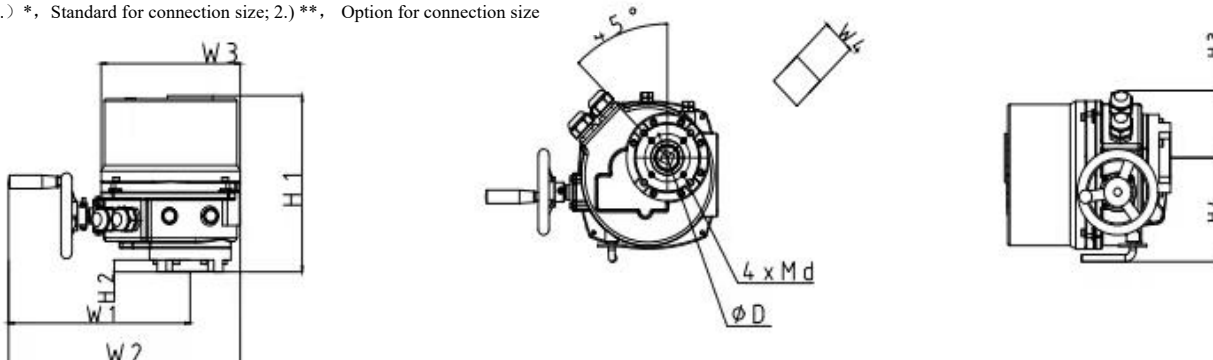
#### EOE SERIES (AC power supply)

| Model  | Torque<br>Nm | Fastest<br>open/Close<br>time S | Power<br>W | Direct Connection |        |        |       |     |    |     |     |               |                  |               |                   |                 |              |
|--------|--------------|---------------------------------|------------|-------------------|--------|--------|-------|-----|----|-----|-----|---------------|------------------|---------------|-------------------|-----------------|--------------|
|        |              |                                 |            | W<br>1            | W<br>2 | W<br>3 | W4    | H1  | H2 | H3  | H4  | Φ D           |                  | Md            |                   | Flange          | Weight<br>Kg |
|        |              |                                 |            |                   |        |        |       |     |    |     |     | ENISO<br>5211 | MSS<br>SP-101    | ENISO<br>5211 | MSS<br>SP-101     |                 |              |
|        |              |                                 |            |                   |        |        |       |     |    |     |     |               |                  |               |                   |                 |              |
| EOE50  | 50           | 22                              | 20         | 281               | 358    | 215    | 11x11 | 256 | 35 | 98  | 151 | Φ50<br>Φ102   | Φ50.8<br>Φ101.6  | M6<br>M10     | 1/4-20<br>3/8-16  | F05*<br>(F10)** | 9            |
| EOE100 | 100          | 22                              | 40         | 281               | 358    | 215    | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 10           |
| EOE200 | 200          | 22                              | 60         | 281               | 358    | 215    | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 10           |
| EOE400 | 400          | 29                              | 90         | 291               | 381    | 239    | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125  | Φ101.6<br>Φ125.7 | M10<br>M12    | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 18           |
| EOE600 | 600          | 29                              | 140        | 291               | 381    | 239    | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 20           |

#### EOE SERIES (24V DC power supply)

| Model    | Torque<br>Nm | Fastest<br>open/C<br>lose<br>time<br>S | Current<br>A | Powe<br>r<br>W | Direct Connection |     |     |       |     |    |     |     |                   |                  |                   |                   |                 |                      |
|----------|--------------|----------------------------------------|--------------|----------------|-------------------|-----|-----|-------|-----|----|-----|-----|-------------------|------------------|-------------------|-------------------|-----------------|----------------------|
|          |              |                                        |              |                | W1                | W2  | W3  | W4    | H1  | H2 | H3  | H4  | Φ D               |                  | Md                |                   | Flan<br>ge      | We<br>igh<br>t<br>Kg |
|          |              |                                        |              |                |                   |     |     |       |     |    |     |     | ENIS<br>0<br>5211 | MSS<br>SP-101    | ENIS<br>0<br>5211 | MSS<br>SP-101     |                 |                      |
|          |              |                                        |              |                |                   |     |     |       |     |    |     |     |                   |                  |                   |                   |                 |                      |
| mm       |              |                                        |              |                |                   |     |     |       |     |    |     |     |                   |                  |                   |                   |                 |                      |
| EOE50-S  | 50           | 11                                     | 3.3          | 40             | 281               | 358 | 215 | 11x11 | 256 | 35 | 98  | 151 | Φ50<br>Φ102       | Φ50.8<br>Φ101.6  | M6<br>M10         | 1/4-20<br>3/8-16  | F05*<br>(F10)** | 9                    |
| EOE100-S | 100          | 11                                     | 7            | 100            | 281               | 358 | 215 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102       | Φ69.9<br>Φ101.6  | M8<br>M10         | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 10                   |
| EOE100   | 100          | 34                                     | 3.3          | 40             | 281               | 358 | 215 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102       | Φ69.9<br>Φ101.6  | M8<br>M10         | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 10                   |
| EOE200   | 200          | 34                                     | 6.5          | 100            | 281               | 358 | 215 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102       | Φ69.9<br>Φ101.6  | M8<br>M10         | 5/16-18<br>3/8-16 | F10*<br>(F07)** | 10                   |
| EOE400   | 400          | 43                                     | 10           | 150            | 291               | 381 | 239 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125      | Φ101.6<br>Φ125.7 | M10<br>M12        | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 18                   |
| EOE600   | 600          | 43                                     | 12           | 180            | 291               | 381 | 239 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102      | Φ139.6<br>Φ101.6 | M12<br>M10        | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 20                   |
| EOE800   | 800          | 62                                     | 10           | 150            | 395               | 485 | 239 | 27x27 | 343 | 55 | 107 | 164 | Φ125<br>Φ102      | Φ139.6<br>Φ101.6 | M12<br>M10        | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 23                   |
| EOE1000  | 1000         | 62                                     | 10           | 200            | 395               | 485 | 239 | 27x27 | 343 | 55 | 107 | 164 | Φ125<br>Φ102      | Φ139.6<br>Φ101.6 | M12<br>M10        | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25                   |

Note: 1.) \*, Standard for connection size; 2.) \*\*, Option for connection size



## 8.2.2 BASIC EXPLOSIVE PROTECTION TYPE OUTLINE DIMENSION DRAWINGS

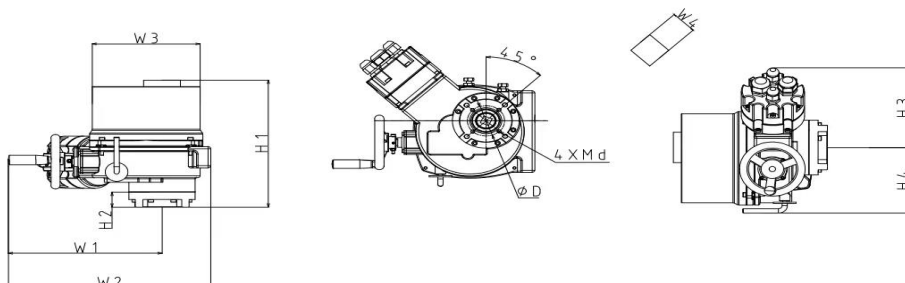
### EOE SERIES (AC power supply)

| Model    | Torque Nm | Fastest open/Close time S | Power W | Direct Connection |     |     |       |     |    |     |     |              |                  |            |                   |                 |           |
|----------|-----------|---------------------------|---------|-------------------|-----|-----|-------|-----|----|-----|-----|--------------|------------------|------------|-------------------|-----------------|-----------|
|          |           |                           |         | W1                | W2  | W3  | W4    | H1  | H2 | H3  | H4  | Φ D          |                  | Md         |                   | Flange          | Weight Kg |
|          |           |                           |         |                   |     |     |       |     |    |     |     | ENISO 5211   | MSS SP-101       | ENISO 5211 | MSS SP-101        |                 |           |
|          |           |                           |         |                   |     |     |       |     |    |     |     |              |                  |            |                   |                 |           |
| mm       |           |                           |         |                   |     |     |       |     |    |     |     |              |                  |            |                   |                 |           |
| EOE50-S  | 50        | 11                        | 40      | 281               | 358 | 215 | 11x11 | 256 | 35 | 98  | 151 | Φ50<br>Φ102  | Φ50.8<br>Φ101.6  | M6<br>M10  | 1/4-20<br>3/8-16  | F05*<br>(F10)** | 9         |
| EOE100-S | 100       | 11                        | 100     | 281               | 358 | 215 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 10        |
| EOE100   | 100       | 34                        | 40      | 281               | 358 | 215 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 10        |
| EOE200   | 200       | 34                        | 100     | 281               | 358 | 215 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 10        |
| EOE400   | 400       | 43                        | 150     | 291               | 381 | 239 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 18        |
| EOE600   | 600       | 43                        | 180     | 291               | 381 | 239 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 20        |
| EOE800   | 800       | 62                        | 150     | 395               | 485 | 239 | 27x27 | 343 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 23        |

### EOE SERIES (24V DC power supply)

| Model    | Torque Nm | Fastest open/Close time S | Current A | Power W | Direct Connection |     |     |       |     |    |     |     |              |                  |            |                   |                 |           |
|----------|-----------|---------------------------|-----------|---------|-------------------|-----|-----|-------|-----|----|-----|-----|--------------|------------------|------------|-------------------|-----------------|-----------|
|          |           |                           |           |         | W1                | W2  | W3  | W4    | H1  | H2 | H3  | H4  | Φ D          |                  | Md         |                   | Flange          | Weight Kg |
|          |           |                           |           |         |                   |     |     |       |     |    |     |     | ENISO 5211   | MSS SP-101       | ENISO 5211 | MSS SP-101        |                 |           |
|          |           |                           |           |         |                   |     |     |       |     |    |     |     |              |                  |            |                   |                 |           |
| EOE50-S  | 50        | 11                        | 3.3       | 40      | 281               | 358 | 215 | 11x11 | 256 | 35 | 98  | 151 | Φ50<br>Φ102  | Φ50.8<br>Φ101.6  | M6<br>M10  | 1/4-20<br>3/8-16  | F05*<br>(F10)** | 9         |
| EOE100-S | 100       | 11                        | 7         | 100     | 281               | 358 | 215 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 10        |
| EOE100   | 100       | 34                        | 3.3       | 40      | 281               | 358 | 215 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 10        |
| EOE200   | 200       | 34                        | 6.5       | 100     | 281               | 358 | 215 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 10        |
| EOE400   | 400       | 43                        | 10        | 150     | 291               | 381 | 239 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 18        |
| EOE600   | 600       | 43                        | 12        | 180     | 291               | 381 | 239 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 20        |
| EOE800   | 800       | 62                        | 10        | 150     | 395               | 485 | 239 | 27x27 | 343 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 23        |
| EOE1000  | 1000      | 62                        | 10        | 200     | 395               | 485 | 239 | 27x27 | 343 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25        |

Note: 1.) \*, Standard for connection size; 2.) \*\*, Option for connection size



8.2.3 EASYTRAC INTELLIGENT TYPE OUTLINE DIMENSION DRAWINGS

EME/EOE SERIES (AC power supply)

| Model   | Torque Nm | Fastest open/Close time s | Power W | Direct Connection |     |     |       |     |    |     |     |              |                  |            |                   |                 |           | Base and Level |     |     |           |
|---------|-----------|---------------------------|---------|-------------------|-----|-----|-------|-----|----|-----|-----|--------------|------------------|------------|-------------------|-----------------|-----------|----------------|-----|-----|-----------|
|         |           |                           |         | W1                | W2  | W3  | W4    | H1  | H2 | H3  | H4  | Φ D          |                  | Md         |                   | Flange          | Weight Kg | L              | W   | H   | Weight Kg |
|         |           |                           |         | Unit: mm          |     |     |       |     |    |     |     | ENISO 5211   | MSS SP-101       | ENISO 5211 | MSS SP-101        |                 |           | Unit: mm       |     |     |           |
|         |           |                           |         |                   |     |     |       |     |    |     |     |              |                  |            |                   |                 |           |                |     |     |           |
| EOE50   | 50        | 22                        | 20      | 281               | 225 | 387 | 11x11 | 256 | 35 | 98  | 151 | Φ50<br>Φ102  | Φ50.8<br>Φ101.6  | M6<br>M10  | 1/4-20<br>3/8-16  | F05*<br>(F10)** | 10        | -              | -   | -   | -         |
| EOE100  | 100       | 22                        | 40      | 281               | 225 | 387 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12        | -              | -   | -   | -         |
| EOE200  | 200       | 22                        | 66      | 281               | 225 | 387 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12        | -              | -   | -   | -         |
| EOE400  | 400       | 29                        | 90      | 291               | 238 | 387 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20        | -              | -   | -   | -         |
| EOE600  | 600       | 29                        | 140     | 291               | 238 | 387 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22        | -              | -   | -   | -         |
| EME200  | 200       | 66                        | 25      | 281               | 225 | 387 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F10*<br>(F07)** | 12        | 371            | 333 | 371 | 16        |
| EME400  | 400       | 58                        | 60      | 291               | 238 | 387 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20        | 381            | 365 | 384 | 24        |
| EME600  | 600       | 87                        | 60      | 291               | 238 | 387 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22        | 381            | 365 | 384 | 26        |
| EME800  | 800       | 58                        | 140     | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25        | 485            | 414 | 384 | 29        |
| EME1000 | 1000      | 58                        | 180     | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 27        | 485            | 414 | 384 | 31        |

EME/EOE SERIES (24V DC power supply)

| Model    | Torque Nm | Fastest open/Close time s | Current A | Power W | Direct Connection |     |     |       |     |    |     |     |              |                  |            |                   |                 |           | Base and Level |     |     |           |
|----------|-----------|---------------------------|-----------|---------|-------------------|-----|-----|-------|-----|----|-----|-----|--------------|------------------|------------|-------------------|-----------------|-----------|----------------|-----|-----|-----------|
|          |           |                           |           |         | W1                | W2  | W3  | W4    | H1  | H2 | H3  | H4  | Φ D          |                  | Md         |                   | Flange          | Weight Kg | L              | W   | H   | Weight Kg |
|          |           |                           |           |         | Unit: mm          |     |     |       |     |    |     |     | ENISO 5211   | MSS SP-101       | ENISO 5211 | MSS SP-101        |                 |           | mm             |     |     |           |
|          |           |                           |           |         |                   |     |     |       |     |    |     |     |              |                  |            |                   |                 |           |                |     |     |           |
| EOE50-S  | 50        | 11                        | 3.3       | 40      | 281               | 225 | 387 | 11x11 | 256 | 35 | 98  | 151 | Φ50<br>Φ102  | Φ50.8<br>Φ101.6  | M6<br>M10  | 1/4-20<br>3/8-16  | F05*<br>(F10)** | 10        | -              | -   | -   | -         |
| EOE100-S | 100       | 11                        | 7         | 100     | 281               | 225 | 387 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12        | -              | -   | -   | -         |
| EOE100   | 100       | 34                        | 3.3       | 40      | 281               | 225 | 387 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12        | -              | -   | -   | -         |
| EOE200   | 200       | 34                        | 6.5       | 100     | 281               | 225 | 387 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12        | -              | -   | -   | -         |
| EOE400   | 400       | 43                        | 10        | 150     | 291               | 238 | 387 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20        | -              | -   | -   | -         |
| EOE600   | 600       | 43                        | 12        | 180     | 291               | 238 | 387 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22        | -              | -   | -   | -         |
| EOE800   | 800       | 62                        | 10        | 150     | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25        | -              | -   | -   | -         |
| EOE1000  | 1000      | 62                        | 10        | 200     | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 27        | -              | -   | -   | -         |
| EOE2000  | 2000      | 102                       | 14        | 200     | 397               | 262 | 443 | 46x46 | 484 | 85 | 127 | 182 | Φ140Φ165     | Φ139.7<br>Φ165.1 | M16M20     | 5/8-11<br>3/4-10  | F14*<br>(F16)** | 48        | -              | -   | -   | -         |
| EOE3000  | 3000      | 102                       | 15        | 250     | 397               | 262 | 443 | 46x46 | 484 | 85 | 127 | 182 | Φ165<br>Φ140 | Φ165.1<br>Φ139.7 | M20<br>M16 | 3/4-10<br>5/8-11  | F16*<br>(F14)** | 48        | -              | -   | -   | -         |
| EME100   | 100       | 34                        | 3.3       | 40      | 281               | 225 | 387 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12        | 371            | 333 | 371 | 16        |
| EME200   | 200       | 34                        | 6.5       | 100     | 281               | 225 | 387 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12        | 371            | 333 | 371 | 16        |
| EME400   | 400       | 43                        | 10        | 150     | 291               | 238 | 387 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20        | 381            | 365 | 384 | 24        |
| EME600   | 600       | 43                        | 12        | 180     | 291               | 238 | 387 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22        | 381            | 365 | 384 | 26        |
| EME800   | 800       | 62                        | 10        | 150     | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25        | 485            | 414 | 384 | 29        |
| EME1000  | 1000      | 62                        | 10        | 200     | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 27        | 485            | 414 | 384 | 31        |

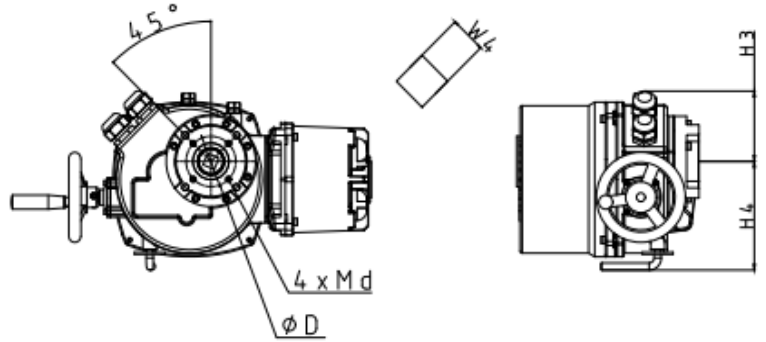
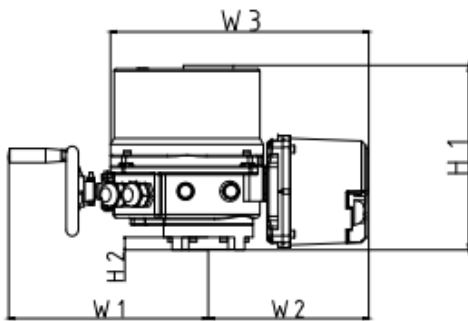
Note: 1.) “-” Means Not available 2.) \*, Standard for connection size; 3.) \*\*, Optional for connection

## EME SERIES (AC frequency power supply)

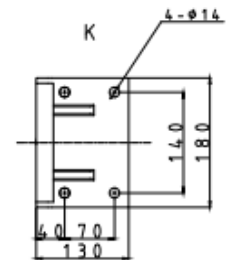
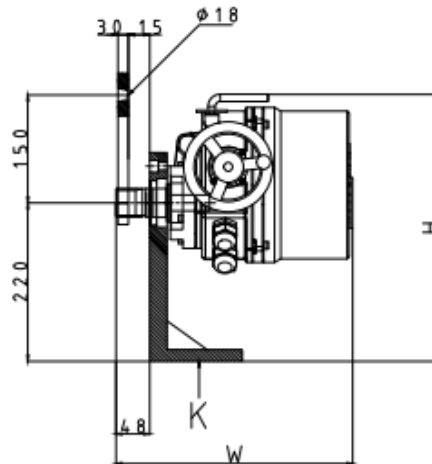
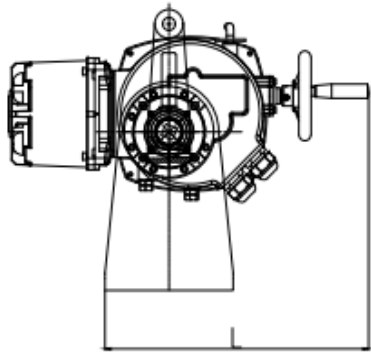
| Model   | Torque<br>Nm | Open/Close<br>time s | Power<br>W | Direct Connection |     |     |       |     |    |     |     |               |                  |               |                   |                 | Base and Level   |   |   |   |                  |
|---------|--------------|----------------------|------------|-------------------|-----|-----|-------|-----|----|-----|-----|---------------|------------------|---------------|-------------------|-----------------|------------------|---|---|---|------------------|
|         |              |                      |            | W1                | W2  | W3  | W4    | H1  | H2 | H3  | H4  | Φ D           |                  | Md            |                   | Frang<br>e      | Weig<br>ht<br>Kg | L | W | H | Weig<br>ht<br>Kg |
|         |              |                      |            |                   |     |     |       |     |    |     |     | ENISO<br>5211 | MSS<br>SP-101    | ENISO<br>5211 | MSS<br>SP-101     |                 |                  |   |   |   |                  |
|         |              |                      |            |                   |     |     |       |     |    |     |     |               |                  |               |                   |                 |                  |   |   |   |                  |
| EME100  | 50           | 22                   | 40         | 281               | 225 | 387 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12               | - | - | - | -                |
| EME200  | 100          | 22                   | 60         | 281               | 225 | 387 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F10*<br>(F07)** | 12               | - | - | - | -                |
| EME400  | 200          | 29                   | 90         | 291               | 238 | 387 | 22x22 | 343 | 55 | 107 | 164 | Φ102<br>Φ125  | Φ101.6<br>Φ125.7 | M10<br>M12    | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20               | - | - | - | -                |
| EME600  | 400          | 29                   | 140        | 291               | 238 | 387 | 27x27 | 343 | 55 | 107 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22               | - | - | - | -                |
| EME1000 | 600          | 29                   | 300        | 395               | 238 | 387 | 27x27 | 343 | 55 | 107 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22               | - | - | - | -                |

Note: 1.) "-" Means Not available 2.) \*, Standard for connection size; 3.) \*\*, Optional for connection

### Direct connection:



### Base Level:



Crank Arm Position, 360° Adjustable  
Bracket Type

## 8.2.4 INTELLIGENT EXPLOSIVE PROTECTION TYPE OUTLINE DIMENSION DRAWINGS

### EOE/EME SERIES (AC power supply)

| Model   | Torque<br>Nm | Fastest<br>open/<br>Close<br>time s | Power<br>W | Direct Connection |     |     |       |     |    |     |     |              |                  |            |                   | Base and Level  |                  |     |     |      |                  |
|---------|--------------|-------------------------------------|------------|-------------------|-----|-----|-------|-----|----|-----|-----|--------------|------------------|------------|-------------------|-----------------|------------------|-----|-----|------|------------------|
|         |              |                                     |            | W1                | W1  | W2  | W4    | H1  | H2 | H3  | H4  | W1           |                  | Md         |                   | Flange          | Weig<br>ht<br>Kg | L   | W   | H    | Wei<br>ght<br>Kg |
|         |              |                                     |            |                   |     |     |       |     |    |     |     | ENISO        | MSS              | ENISO      | MSS               |                 |                  |     |     |      |                  |
|         |              |                                     |            |                   |     |     |       |     |    |     |     | mm           |                  |            |                   |                 |                  |     |     | 5211 |                  |
| EOE50   | 50           | 22                                  | 20         | 281               | 225 | 387 | 11x11 | 256 | 35 | 183 | 151 | Φ50<br>Φ102  | Φ50.8<br>Φ101.6  | M6<br>M10  | 1/4-20<br>3/8-16  | F05*<br>(F10)** | 10               | -   | -   | -    | -                |
| EOE100  | 100          | 22                                  | 40         | 281               | 225 | 387 | 14x14 | 256 | 35 | 183 | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12               | -   | -   | -    | -                |
| EOE200  | 200          | 22                                  | 60         | 281               | 225 | 387 | 17x17 | 256 | 35 | 183 | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)8* | 12               | -   | -   | -    | -                |
| EOE400  | 400          | 29                                  | 90         | 291               | 238 | 387 | 22x22 | 287 | 55 | 180 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20               | -   | -   | -    | -                |
| EOE600  | 600          | 29                                  | 140        | 291               | 238 | 387 | 27x27 | 287 | 55 | 180 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22               | -   | -   | -    | -                |
| EME200  | 200          | 66                                  | 25         | 281               | 225 | 387 | 17x17 | 256 | 35 | 180 | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F10*<br>(F07)** | 12               | 371 | 333 | 371  | 16               |
| EME400  | 400          | 58                                  | 60         | 291               | 238 | 387 | 22x22 | 287 | 55 | 180 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20               | 381 | 365 | 384  | 24               |
| EME600  | 600          | 87                                  | 60         | 291               | 238 | 387 | 27x27 | 287 | 55 | 180 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22               | 381 | 365 | 384  | 26               |
| EME800  | 800          | 58                                  | 140        | 388               | 250 | 418 | 27x27 | 362 | 55 | 193 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25               | 485 | 414 | 384  | 29               |
| EME1000 | 1000         | 58                                  | 180        | 388               | 250 | 418 | 27x27 | 362 | 55 | 193 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 27               | 485 | 414 | 384  | 31               |

### EME/EOE SERIES (24V DC power supply)

| Model    | Torque<br>Nm | Fastest<br>open/C<br>lose<br>time s | Cur<br>rent<br>A | Po<br>wer<br>W | Direct Connection |     |     |       |     |    |     |     |              |                  |            |                   |                 |                  | Base and Level |     |     |                  |      |
|----------|--------------|-------------------------------------|------------------|----------------|-------------------|-----|-----|-------|-----|----|-----|-----|--------------|------------------|------------|-------------------|-----------------|------------------|----------------|-----|-----|------------------|------|
|          |              |                                     |                  |                | W1                | W2  | W3  | W4    | H1  | W1 | W1  | H4  | Φ D          |                  | Md         |                   | Flange          | Weig<br>ht<br>Kg | L              | W   | H   | Wei<br>ght<br>Kg |      |
|          |              |                                     |                  |                |                   |     |     |       |     |    |     |     | ENISO        | MSS              | ENISO      | MSS               |                 |                  |                |     |     |                  |      |
|          |              |                                     |                  |                |                   |     |     |       |     |    |     |     | mm           |                  |            |                   |                 |                  |                |     |     |                  | 5211 |
| EOE50-S  | 50           | 11                                  | 3.3              | 40             | 281               | 225 | 387 | 11x11 | 256 | 35 | 98  | 151 | Φ50<br>Φ102  | Φ50.8<br>Φ101.6  | M6<br>M10  | 1/4-20<br>3/8-16  | F05*<br>(F10)** | 10               | -              | -   | -   | -                |      |
| EOE100-S | 100          | 11                                  | 7                | 100            | 281               | 225 | 387 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12               | -              | -   | -   | -                |      |
| EOE100   | 100          | 34                                  | 3.3              | 40             | 281               | 225 | 387 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)8* | 12               | -              | -   | -   | -                |      |
| EOE200   | 200          | 34                                  | 6.5              | 100            | 281               | 225 | 387 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12               | -              | -   | -   | -                |      |
| EOE400   | 400          | 43                                  | 10               | 150            | 291               | 238 | 387 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20               | -              | -   | -   | -                |      |
| EOE600   | 600          | 43                                  | 12               | 180            | 291               | 238 | 387 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22               | -              | -   | -   | -                |      |
| EOE800   | 800          | 62                                  | 10               | 150            | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25               | -              | -   | -   | -                |      |
| EOE1000  | 1000         | 62                                  | 10               | 200            | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 27               | -              | -   | -   | -                |      |
| EOE2000  | 2000         | 102                                 | 14               | 200            | 397               | 262 | 443 | 46x46 | 396 | 85 | 127 | 182 | Φ140Φ16<br>5 | Φ139.7<br>Φ165.1 | M16M20     | 5/8-11<br>3/4-10  | F14*<br>(F16)** | 48               | -              | -   | -   | -                |      |
| EOE3000  | 3000         | 102                                 | 15               | 250            | 397               | 262 | 443 | 46x46 | 396 | 85 | 127 | 182 | Φ165<br>Φ140 | Φ165.1<br>Φ139.7 | M20<br>M16 | 3/4-10<br>5/8-11  | F16*<br>(F14)** | 48               | -              | -   | -   | -                |      |
| EME100   | 100          | 34                                  | 3.3              | 40             | 281               | 225 | 387 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12               | 371            | 333 | 371 | 16               |      |
| EME200   | 200          | 34                                  | 6.5              | 100            | 281               | 225 | 387 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12               | 371            | 333 | 371 | 16               |      |
| EME400   | 400          | 43                                  | 10               | 150            | 291               | 238 | 387 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20               | 381            | 365 | 384 | 24               |      |
| EME600   | 600          | 43                                  | 12               | 180            | 291               | 238 | 387 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22               | 381            | 365 | 384 | 26               |      |
| EME800   | 800          | 62                                  | 10               | 150            | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25               | 485            | 414 | 384 | 29               |      |
| EME1000  | 1000         | 62                                  | 10               | 200            | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 27               | 485            | 414 | 384 | 31               |      |

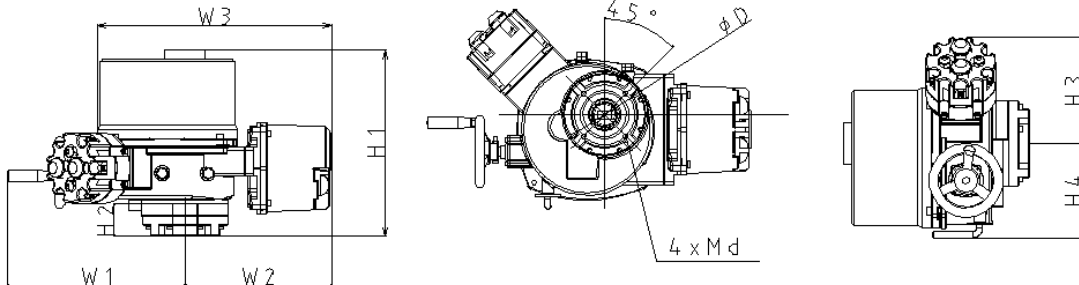
Note: 1.) “-” Means Not available 2.) \*, Standard for connection size; 3.) \*\*, Optional for connection size

# EME SERIES (AC frequency power supply)

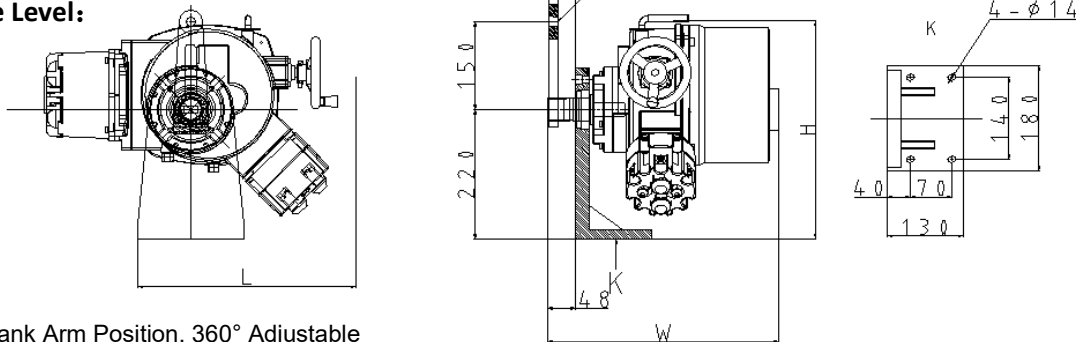
| Model   | Torque<br>Nm | Fastest<br>open/Close<br>time s | Current<br><br>A | Direct Connection |     |     |       |     |    |     |     |              |                  |            |                   | Base and Level  |                  |   |   |      |                  |
|---------|--------------|---------------------------------|------------------|-------------------|-----|-----|-------|-----|----|-----|-----|--------------|------------------|------------|-------------------|-----------------|------------------|---|---|------|------------------|
|         |              |                                 |                  | W1                | W2  | W3  | W4    | H1  | H2 | H3  | H4  | Φ D          |                  | Md         |                   | Flange          | Weight<br><br>Kg | L | W | H    | Weight<br><br>Kg |
|         |              |                                 |                  |                   |     |     |       |     |    |     |     | ENISO        | MSS              | ENISO      | MSS               |                 |                  |   |   |      |                  |
|         |              |                                 |                  |                   |     |     |       |     |    |     |     | mm           |                  |            |                   |                 |                  |   |   | 5211 |                  |
| EME100  | 50           | 22                              | 40               | 292               | 241 | 387 | 14x14 | 298 | 35 | 169 | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12               | - | - | -    | -                |
| EME200  | 100          | 22                              | 60               | 292               | 241 | 387 | 17x17 | 298 | 35 | 169 | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F10*<br>(F07)** | 12               | - | - | -    | -                |
| EME400  | 200          | 29                              | 90               | 302               | 250 | 400 | 22x22 | 362 | 55 | 180 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20               | - | - | -    | -                |
| EME600  | 400          | 29                              | 140              | 302               | 250 | 400 | 27x27 | 362 | 55 | 180 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22               | - | - | -    | -                |
| EME1000 | 600          | 29                              | 300              | 399               | 250 | 400 | 27x27 | 362 | 55 | 192 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22               | - | - | -    | -                |

Note: 1.) "-" Means Not available 2.) \*, Standard for connection size; 3.) \*\*, Optional for connection size

## Direct connection :



## Base Level:



Crank Arm Position, 360° Adjustable  
Bracket Type

8.2.5 LINEAR OUTLINE DIMENSION DRAWINGS

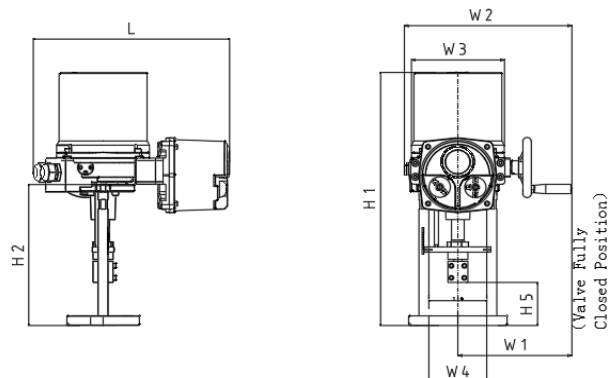
EME/EOE-L SERIES （24V DC power supply）

| Model                  | Rated<br>trust<br>N | Adjust<br>ing<br>torque<br>N | Po<br>wer<br>W | Cur<br>rent<br>A | Spe<br>ed<br>mm<br>/s | Ma<br>xim<br>um<br>trav<br>el<br>mm | Stem<br>Connection | W1  | W2  | W3  | W4  | H1  | H2  | H3 | H5<br>( Stem<br>height<br>when<br>valve<br>is fully<br>closed ) | L   | Φ D           |                   | M d                   |                   | Fla<br>nge | Wei<br>ght<br>Kg |
|------------------------|---------------------|------------------------------|----------------|------------------|-----------------------|-------------------------------------|--------------------|-----|-----|-----|-----|-----|-----|----|-----------------------------------------------------------------|-----|---------------|-------------------|-----------------------|-------------------|------------|------------------|
|                        |                     |                              |                |                  |                       |                                     |                    |     |     |     |     |     |     |    |                                                                 |     | ENISO<br>5210 | MSS<br>SP-<br>101 | ENI<br>SO<br>521<br>0 | MSS<br>SP-101     |            |                  |
|                        |                     |                              |                |                  |                       |                                     |                    |     |     |     |     |     |     |    |                                                                 |     |               |                   |                       |                   |            |                  |
| EME400-L<br>EOE400-L   | 4000                | 2000                         | 15             | 1                | 0.4                   | 40                                  | M10 M12<br>M14 M16 | 228 | 337 | 176 | 116 | 521 | 273 | -  | 85                                                              | 392 | Φ50<br>Φ70    | Φ50.8<br>Φ69.9    | M6<br>M8              | 1/4-20<br>5/16-18 | F05<br>F07 | 22               |
| EME600-L<br>EOE600-L   | 6000                | 3000                         | 30             | 1.8              | 0.4                   | 40                                  | M10 M12<br>M14 M16 | 228 | 337 | 176 | 116 | 521 | 273 | 35 | 85                                                              | 392 | Φ50<br>Φ70    | Φ50.8<br>Φ69.9    | M6<br>M8              | 1/4-20<br>5/16-18 | F05<br>F07 | 22               |
| EME1000-L<br>EOE1000-L | 10000               | 5000                         | 60             | 3.6              | 0.4                   | 50                                  | M10 M12<br>M14 M16 | 249 | 151 | 205 | 104 | 536 | 306 | 50 | 132                                                             | 506 | Φ102          | Φ101.6            | M10                   | 3/8-16            | F10        | 22               |

EME/EOE-L SERIES （AC frequency power supply）

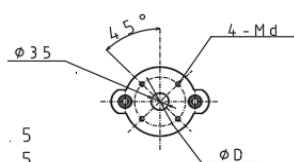
| Model                  | Rated<br>trust<br>N | Adjus<br>ting<br>torqu<br>e N | Pow<br>er<br>W | Curr<br>ent<br>A | Speed<br>mm/s | Maximum<br>travel mm | Stem<br>Connectio<br>n | W1  | W2  | W3  | W4  | H1  | H2  | H3 | H5<br>( Stem<br>height<br>when<br>valve<br>is<br>fully<br>closed ) | L   | Φ D           |               | Md                |                   | Flange | W<br>ei<br>gh<br>tk<br>g |
|------------------------|---------------------|-------------------------------|----------------|------------------|---------------|----------------------|------------------------|-----|-----|-----|-----|-----|-----|----|--------------------------------------------------------------------|-----|---------------|---------------|-------------------|-------------------|--------|--------------------------|
|                        |                     |                               |                |                  |               |                      |                        |     |     |     |     |     |     |    |                                                                    |     | ENISO<br>5210 | MSS<br>SP-101 | ENIS<br>O<br>5210 | MSS<br>SP-<br>101 |        |                          |
|                        |                     |                               |                |                  |               |                      |                        |     |     |     |     |     |     |    |                                                                    |     |               |               |                   |                   |        |                          |
| EME1000-L<br>EOE1000-L | 10000               | 5000                          | 40             | 0.2              | 0.2           | 50                   | M10 M12<br>M14 M16     | 249 | 151 | 205 | 104 | 536 | 306 | 50 | 132                                                                | 506 | Φ102          | Φ101.6        | M10               | 3/8-<br>16        | F10    | 22                       |

## EME/EOE400-L, EME/EOE600-L Dimensions Drawing:

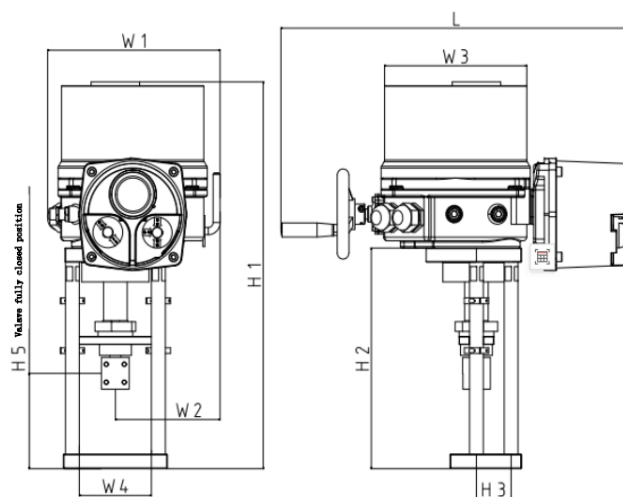


Please select the valve stem connection size M:

M10×1、M10×1.25、M10×1.5  
M12×1、M12×1.25、M12×1.5  
M14×1、M14×1.25、M14×1.5  
M16×1、M16×1.25、M16×1.5

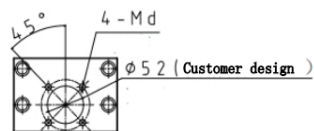


## EME/EOE1000-L Dimensions Drawing:



Please select the valve stem connection size M:

M10×1、M10×1.25、M10×1.5  
M12×1、M12×1.25、M12×1.5  
M14×1、M14×1.25、M14×1.5  
M16×1、M16×1.25、M16×1.5



8.2.6 LINEAR EXPLOSIVE PROTECTION OUTLINE DIMENSION DRAWINGS

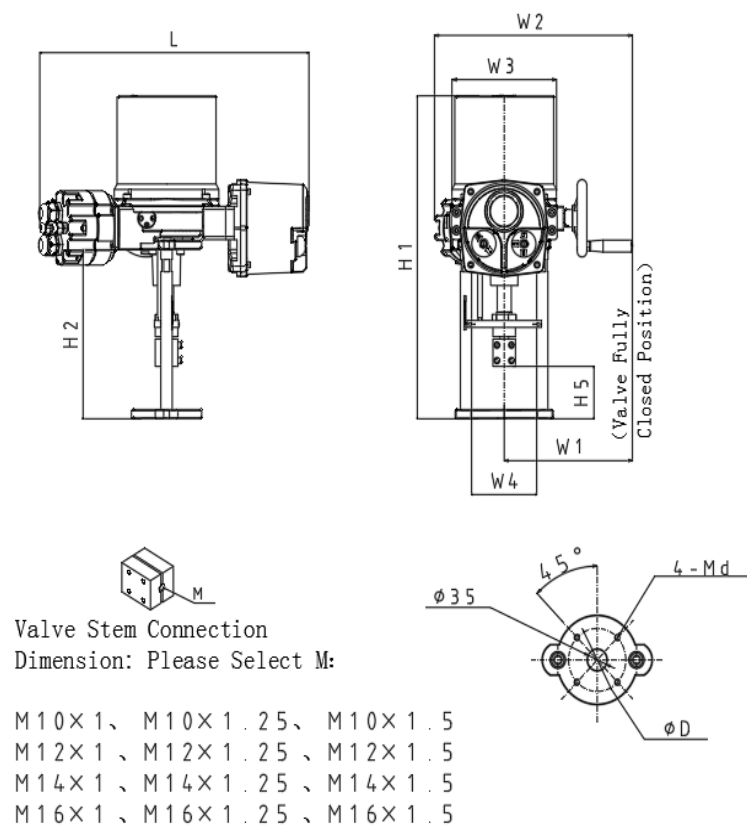
EME/EOE-L SERIES （24V DC power supply）

| Model                  | Rated<br>trust<br>N | Adjusti<br>ng<br>trust<br>N | Power<br>W | Curren<br>t<br>A | Spe<br>ed<br>mm<br>/s | Maxim<br>um<br>travel<br>mm | Stem<br>Conne<br>ction   | W1  | W2  | W3  | W4  | H1  | H2  | H3 | H5<br>( Ste<br>m<br>height<br>when<br>valve<br>is fully<br>close<br>d) | L   | Φ D           |                | M d           |                   | Fla<br>nge | We<br>igh<br>t<br>Kg |
|------------------------|---------------------|-----------------------------|------------|------------------|-----------------------|-----------------------------|--------------------------|-----|-----|-----|-----|-----|-----|----|------------------------------------------------------------------------|-----|---------------|----------------|---------------|-------------------|------------|----------------------|
|                        |                     |                             |            |                  |                       |                             |                          |     |     |     |     |     |     |    |                                                                        |     | ENISO<br>5210 | MSS<br>SP-101  | ENISO<br>5210 | MSS<br>SP-101     |            |                      |
|                        |                     |                             |            |                  |                       |                             |                          |     |     |     |     |     |     |    |                                                                        |     |               |                |               |                   |            |                      |
| mm                     |                     |                             |            |                  |                       |                             |                          |     |     |     |     |     |     |    |                                                                        |     |               |                |               |                   |            |                      |
| EME400-L<br>EOE400-L   | 4000                | 2000                        | 15         | 1                | 0.4                   | 40                          | M10<br>M12<br>M14<br>M16 | 228 | 335 | 186 | 116 | 526 | 278 | 48 | 89                                                                     | 480 | Φ50<br>Φ70    | Φ50.8<br>Φ69.9 | M6<br>M8      | 1/4-20<br>5/16-18 | F05<br>F07 | 22                   |
| EME600-L<br>EME600-L   | 6000                | 3000                        | 30         | 1.8              | 0.4                   | 40                          | M10<br>M12<br>M14<br>M16 | 228 | 335 | 186 | 116 | 526 | 278 | 48 | 89                                                                     | 480 | Φ50<br>Φ70    | Φ50.8<br>Φ69.9 | M6<br>M8      | 1/4-20<br>5/16-18 | F05<br>F07 | 22                   |
| EME1000-L<br>EOE1000-L | 10000               | 5000                        | 60         | 3.6              | 0.4                   | 50                          | M10<br>M12<br>M14<br>M16 | 323 | 151 | 205 | 104 | 569 | 306 | 50 | 132                                                                    | 532 | Φ102          | Φ101.6         | M10           | 3/8-16            | F10        | 23                   |

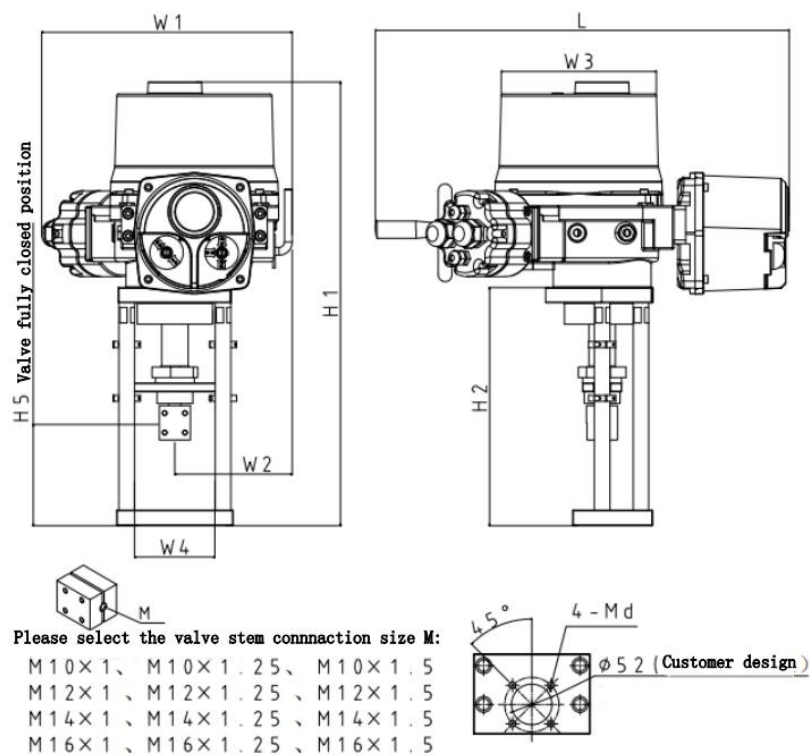
EME/EOE-L SERIES （AC frequency power supply）

| Model                  | Rated<br>trust<br>N | Adjusti<br>ng<br>trust<br>N | Power<br>W | Curren<br>t<br>A | Spe<br>ed<br>mm<br>/s | Maxim<br>um<br>travel<br>mm | Stem<br>Conne<br>ction   | W1  | W2  | W3  | W4  | H1  | H2  | H3 | H5<br>( Ste<br>m<br>height<br>when<br>valve<br>is fully<br>closed<br>) | L   | Φ D           |               | M d           |               | Fia<br>nge | We<br>igh<br>t<br>Kg |
|------------------------|---------------------|-----------------------------|------------|------------------|-----------------------|-----------------------------|--------------------------|-----|-----|-----|-----|-----|-----|----|------------------------------------------------------------------------|-----|---------------|---------------|---------------|---------------|------------|----------------------|
|                        |                     |                             |            |                  |                       |                             |                          |     |     |     |     |     |     |    |                                                                        |     | ENISO<br>5210 | MSS<br>SP-101 | ENISO<br>5210 | MSS<br>SP-101 |            |                      |
|                        |                     |                             |            |                  |                       |                             |                          | mm  |     |     |     |     |     |    |                                                                        |     |               |               |               |               |            |                      |
| EME1000-L<br>EOE1000-L | 10000               | 5000                        | 40         | 0.2              | 0.2                   | 50                          | M10<br>M12<br>M14<br>M16 | 323 | 151 | 205 | 104 | 569 | 532 | 50 | 132                                                                    | 506 | Φ102          | Φ101.6        | M10           | 3/8-16        | F10        | 23                   |

## EME/EOE400- L, EME/EOE600- L Explosive Protection Dimensions Drawing:



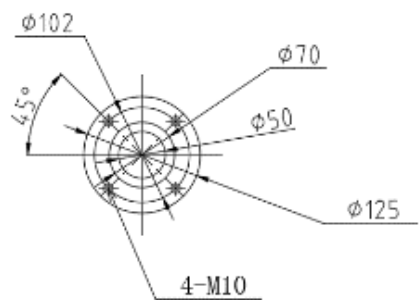
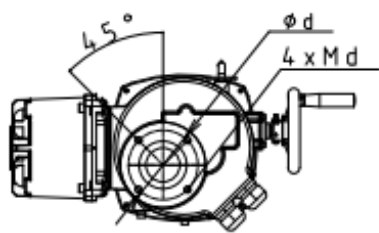
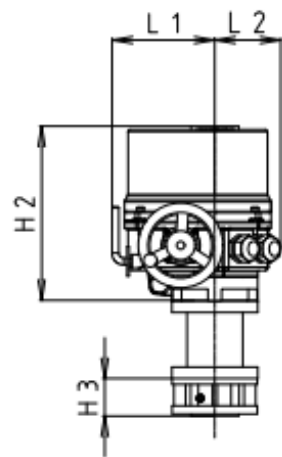
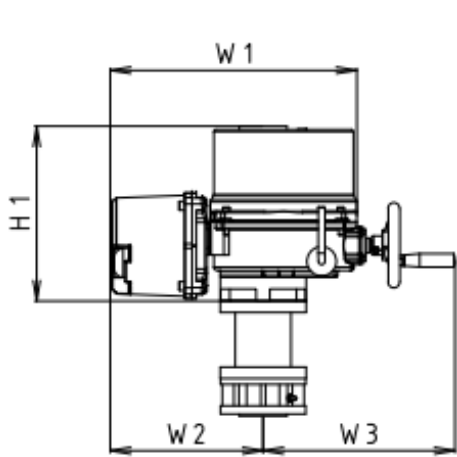
## EME/EOE1000-L Explosive Protection Dimensions Drawing:



8.2.7 FULL-TURN OUTLINE DIMENSION DRAWINGS

EME/EOE-M SERIES (24V DC power supply)

| Model                | Maximum<br>Stalling<br>Torque<br>Nm | Adjusting<br>Torque<br>Nm | Output<br>Speed<br>RPM | Maximum<br>Turns | Flange | Power W | Current<br>A | W1       | W2  | W3  | H1  | H2  | H3 | L1 | L2  | Φ D           |               | Md            |               | Weight<br>KG |
|----------------------|-------------------------------------|---------------------------|------------------------|------------------|--------|---------|--------------|----------|-----|-----|-----|-----|----|----|-----|---------------|---------------|---------------|---------------|--------------|
|                      |                                     |                           |                        |                  |        |         |              | Unit: mm |     |     |     |     |    |    |     | ENIS<br>O5210 | MSS<br>SP-101 | ENIS<br>O5210 | MSS<br>SP-101 |              |
| EME50-M<br>EOE50-M   | 50                                  | 25                        | 7                      | 20               | F10    | 120     | 7            | 362      | 225 | 282 | 426 | 257 | 72 | 98 | 151 | Φ102          | Φ101.6        | M10           | 3/8-16        | 15           |
| EME100-M<br>EOE100-M | 100                                 | 50                        | 7                      | 20               | F10    | 150     | 8            | 362      | 225 | 282 | 426 | 257 | 72 | 98 | 151 | Φ102          | Φ101.6        | M10           | 3/8-16        | 15           |



A1 drive bush output torque max is diameter 38mm for valve stem .

### 8.2.8 SPLIT TYPE OUTLINE DIMENSION DRAWINGS

### EOE/EME SERIES (AC power supply)

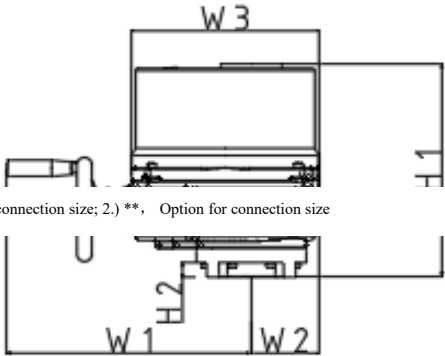
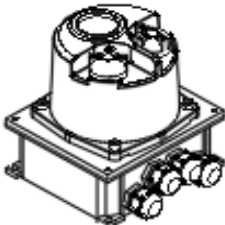
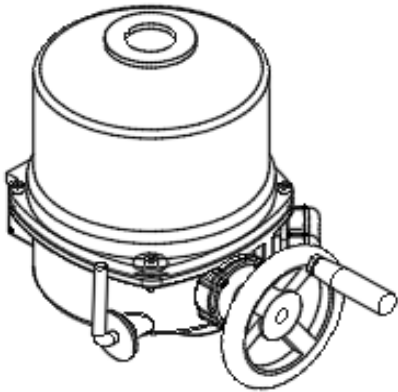
| Model   | Rated<br>torque<br>Nm | Adj<br>usti<br>ng<br>torq<br>ue | Po<br>wer<br>W | Direct Connection |     |     |       |     |    |     |     |               |                  |               |                   |                 |                  |
|---------|-----------------------|---------------------------------|----------------|-------------------|-----|-----|-------|-----|----|-----|-----|---------------|------------------|---------------|-------------------|-----------------|------------------|
|         |                       |                                 |                | W1                | W2  | W3  | W4    | H1  | H2 | H3  | H4  | Φ D           |                  | Md            |                   | Flange          | Wei<br>ght<br>Kg |
|         |                       |                                 |                |                   |     |     |       |     |    |     |     | ENISO<br>5211 | MSS<br>SP-101    | ENISO<br>5211 | MSS<br>SP-101     |                 |                  |
|         |                       |                                 |                |                   |     |     |       |     |    |     |     |               |                  |               |                   |                 |                  |
| EOE50   | 50                    | 22                              | 20             | 281               | 225 | 387 | 11x11 | 256 | 35 | 80  | 142 | Φ50<br>Φ102   | Φ50.8<br>Φ101.6  | M6<br>M10     | 1/4-20<br>3/8-16  | F05*<br>(F10)** | 10               |
| EOE100  | 100                   | 22                              | 40             | 281               | 225 | 387 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12               |
| EOE200  | 200                   | 22                              | 60             | 281               | 225 | 387 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12               |
| EOE400  | 400                   | 29                              | 90             | 291               | 238 | 387 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125  | Φ101.6<br>Φ125.7 | M10<br>M12    | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20               |
| EOE600  | 600                   | 29                              | 140            | 291               | 238 | 387 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22               |
| EME200  | 200                   | 66                              | 25             | 281               | 225 | 387 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12               |
| EME400  | 400                   | 58                              | 60             | 291               | 238 | 387 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125  | Φ101.6<br>Φ125.7 | M10<br>M12    | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20               |
| EME600  | 600                   | 87                              | 60             | 291               | 238 | 387 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22               |
| EME800  | 800                   | 58                              | 140            | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25               |
| EME1000 | 1000                  | 58                              | 180            | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 27               |

### EME/EOE SERIES (24V DC power supply)

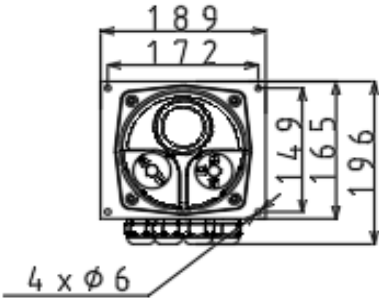
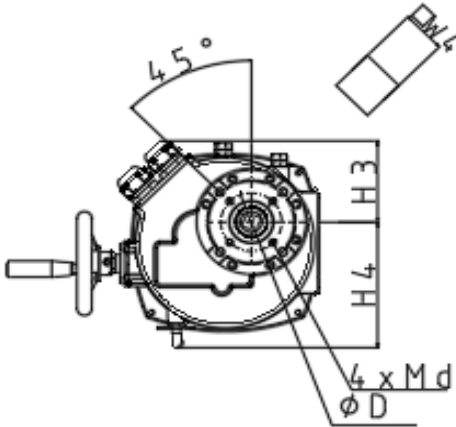
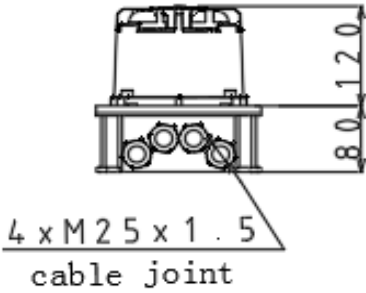
| Model    | Torqu<br>e Nm | Fastest<br>open/Cl<br>ose<br>time s | Curr<br>ent<br>A | Pow<br>er<br>W<br>W1 | Direct Connection |     |     |       |     |    |     |     |               |                  |               |                   |                 |    | Flange | Weight<br>Kg |
|----------|---------------|-------------------------------------|------------------|----------------------|-------------------|-----|-----|-------|-----|----|-----|-----|---------------|------------------|---------------|-------------------|-----------------|----|--------|--------------|
|          |               |                                     |                  |                      | W1                | W2  | W3  | W4    | H1  | H2 | H3  | H4  | Φ D           |                  | Md            |                   |                 |    |        |              |
|          |               |                                     |                  |                      |                   |     |     |       |     |    |     |     | ENISO<br>5211 | MSS<br>SP-101    | ENISO<br>5211 | MSS<br>SP-101     |                 |    |        |              |
|          |               |                                     |                  |                      |                   |     |     |       |     |    |     |     |               |                  |               |                   | mm              |    |        |              |
| EOE50-S  | 50            | 11                                  | 3.3              | 40                   | 281               | 225 | 387 | 11x11 | 256 | 35 | 98  | 151 | Φ50<br>Φ102   | Φ50.8<br>Φ101.6  | M6<br>M10     | 1/4-20<br>3/8-16  | F05*<br>(F10)** | 10 |        |              |
| EOE100-S | 100           | 11                                  | 7                | 100                  | 281               | 225 | 387 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12 |        |              |
| EOE100   | 100           | 34                                  | 3.3              | 40                   | 281               | 225 | 387 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12 |        |              |
| EOE200   | 200           | 34                                  | 6.5              | 100                  | 281               | 225 | 387 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12 |        |              |
| EOE400   | 400           | 43                                  | 10               | 150                  | 291               | 238 | 387 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125  | Φ101.6<br>Φ125.7 | M10<br>M12    | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20 |        |              |
| EOE600   | 600           | 43                                  | 12               | 180                  | 291               | 238 | 387 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22 |        |              |
| EOE800   | 800           | 62                                  | 10               | 150                  | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25 |        |              |
| EOE1000  | 1000          | 62                                  | 10               | 200                  | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 27 |        |              |
| EME100   | 100           | 34                                  | 3.3              | 40                   | 281               | 225 | 387 | 14x14 | 256 | 35 | 98  | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12 |        |              |
| EME200   | 200           | 34                                  | 6.5              | 100                  | 281               | 225 | 387 | 17x17 | 256 | 35 | 98  | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F10*<br>(F07)** | 12 |        |              |
| EME400   | 400           | 43                                  | 10               | 150                  | 291               | 238 | 387 | 22x22 | 287 | 55 | 107 | 164 | Φ102<br>Φ125  | Φ101.6<br>Φ125.7 | M10<br>M12    | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20 |        |              |
| EME600   | 600           | 43                                  | 12               | 180                  | 291               | 238 | 387 | 27x27 | 287 | 55 | 107 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22 |        |              |
| EME800   | 800           | 62                                  | 10               | 150                  | 388               | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25 |        |              |

|         |      |    |    |     |     |     |     |       |     |    |     |     |              |                  |            |                  |                 |    |
|---------|------|----|----|-----|-----|-----|-----|-------|-----|----|-----|-----|--------------|------------------|------------|------------------|-----------------|----|
| EME1000 | 1000 | 62 | 10 | 200 | 388 | 250 | 418 | 27x27 | 362 | 55 | 107 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16 | F12*<br>(F10)** | 27 |
|---------|------|----|----|-----|-----|-----|-----|-------|-----|----|-----|-----|--------------|------------------|------------|------------------|-----------------|----|

Split Type Dimensions Drawing-2



Note: 1.) \*, Standard for connection size; 2.) \*\*, Option for connection size



## 8.2.9 SPLIT TYPE EXPLOSIVE PROTECTION OUTLINE DIMENSION DRAWINGS

### EOE/EME SERIES (AC power supply)

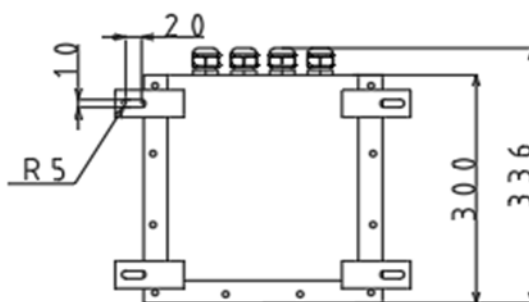
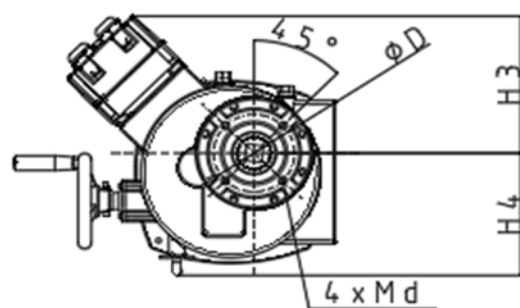
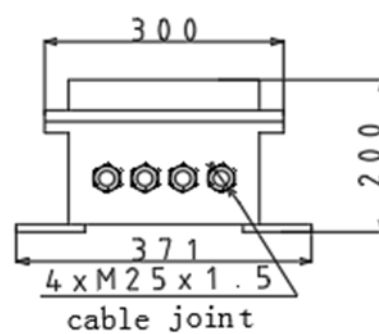
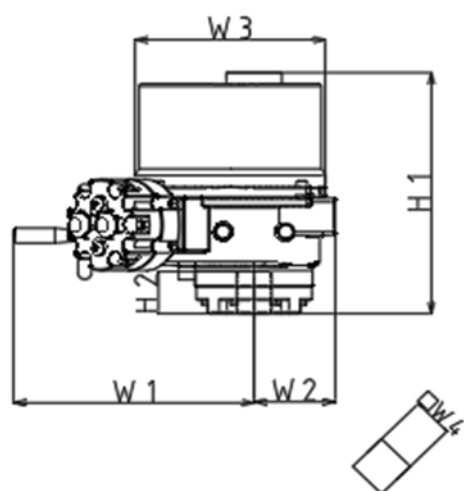
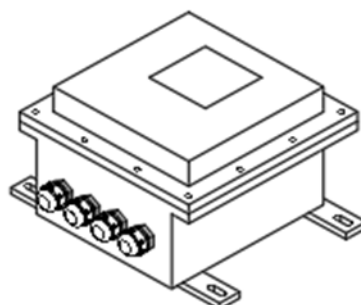
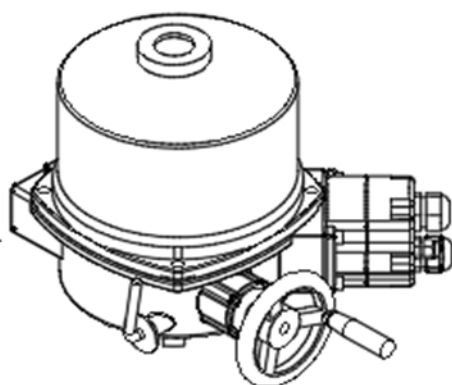
| Model   | Rated torque N | Adjusting torque | Power W | Direct Connection |     |     |       |     |    |     |     |              |                  |            |                   |                 |           |
|---------|----------------|------------------|---------|-------------------|-----|-----|-------|-----|----|-----|-----|--------------|------------------|------------|-------------------|-----------------|-----------|
|         |                |                  |         | W1                | W2  | W3  | W4    | H1  | H2 | H3  | H4  | Φ D          |                  | Md         |                   | Flange          | Weight Kg |
|         |                |                  |         |                   |     |     |       |     |    |     |     | ENISO 5211   | MSS SP-101       | ENISO 5211 | MSS SP-101        |                 |           |
|         |                |                  |         |                   |     |     |       |     |    |     |     |              |                  |            |                   |                 |           |
| EOE50   | 50             | 22               | 20      | 266               | 69  | 190 | 11x11 | 230 | 35 | 183 | 142 | Φ50<br>Φ102  | Φ50.8<br>Φ101.6  | M6<br>M10  | 1/4-20<br>3/8-16  | F05*<br>(F10)** | 10        |
| EOE100  | 100            | 22               | 40      | 281               | 77  | 216 | 14x14 | 256 | 35 | 183 | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12        |
| EOE200  | 200            | 22               | 60      | 281               | 77  | 215 | 17x17 | 256 | 35 | 183 | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F10*<br>(F07)** | 12        |
| EOE400  | 400            | 29               | 90      | 291               | 90  | 339 | 22x22 | 287 | 55 | 180 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20        |
| EOE600  | 600            | 29               | 140     | 291               | 90  | 387 | 27x27 | 287 | 55 | 180 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22        |
| EME200  | 200            | 66               | 25      | 281               | 77  | 215 | 17x17 | 256 | 35 | 183 | 151 | Φ70<br>Φ102  | Φ69.9<br>Φ101.6  | M8<br>M10  | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12        |
| EME400  | 400            | 58               | 60      | 291               | 90  | 339 | 22x22 | 287 | 55 | 180 | 164 | Φ102<br>Φ125 | Φ101.6<br>Φ125.7 | M10<br>M12 | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20        |
| EME600  | 600            | 87               | 60      | 291               | 90  | 387 | 27x27 | 287 | 55 | 180 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22        |
| EME800  | 800            | 58               | 140     | 388               | 102 | 239 | 27x27 | 362 | 55 | 193 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25        |
| EME1000 | 1000           | 58               | 180     | 388               | 102 | 239 | 27x27 | 362 | 55 | 193 | 164 | Φ125<br>Φ102 | Φ139.6<br>Φ101.6 | M12<br>M10 | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 27        |

### EME/EOE SERIES (24V DC power supply)

| Model    | Torqu<br>e Nm | Fastes<br>t<br>open/<br>Close<br>time s | Cur<br>ren<br>t<br>A | Po<br>wer<br>W<br>W1 | Direct Connection |     |     |       |     |    |     |     |               |                  |               |                   |                 |    | We<br>igh<br>t<br>Kg |
|----------|---------------|-----------------------------------------|----------------------|----------------------|-------------------|-----|-----|-------|-----|----|-----|-----|---------------|------------------|---------------|-------------------|-----------------|----|----------------------|
|          |               |                                         |                      |                      | W1                | W2  | W3  | W4    | H1  | H2 | H3  | H4  | Φ D           |                  | Md            |                   | Flang<br>e      |    |                      |
|          |               |                                         |                      |                      |                   |     |     |       |     |    |     |     | ENISO<br>5211 | MSS<br>SP-101    | ENISO<br>5211 | MSS<br>SP-101     |                 |    |                      |
|          |               |                                         |                      |                      |                   |     |     |       |     |    |     |     |               |                  |               |                   |                 | mm |                      |
| EOE50-S  | 50            | 11                                      | 3.3                  | 40                   | 266               | 69  | 190 | 11x11 | 230 | 35 | 183 | 142 | Φ50<br>Φ102   | Φ50.8<br>Φ101.6  | M6<br>M10     | 1/4-20<br>3/8-16  | F05*<br>(F10)** | 10 |                      |
| EOE100-S | 100           | 11                                      | 7                    | 100                  | 281               | 77  | 216 | 14x14 | 256 | 35 | 183 | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12 |                      |
| EOE100   | 100           | 34                                      | 3.3                  | 40                   | 281               | 77  | 216 | 14x14 | 256 | 35 | 183 | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12 |                      |
| EOE200   | 200           | 34                                      | 6.5                  | 100                  | 281               | 77  | 215 | 17x17 | 256 | 35 | 183 | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12 |                      |
| EOE400   | 400           | 43                                      | 10                   | 150                  | 291               | 90  | 339 | 22x22 | 287 | 55 | 180 | 164 | Φ102<br>Φ125  | Φ101.6<br>Φ125.7 | M10<br>M12    | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20 |                      |
| EOE600   | 600           | 43                                      | 12                   | 180                  | 291               | 90  | 387 | 27x27 | 287 | 55 | 180 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22 |                      |
| EOE800   | 800           | 62                                      | 10                   | 150                  | 388               | 102 | 239 | 27x27 | 362 | 55 | 193 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25 |                      |
| EOE1000  | 1000          | 62                                      | 10                   | 200                  | 388               | 102 | 239 | 27x27 | 362 | 55 | 193 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 27 |                      |
| EME100   | 100           | 34                                      | 3.3                  | 40                   | 281               | 77  | 216 | 14x14 | 256 | 35 | 183 | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12 |                      |
| EME200   | 200           | 34                                      | 6.5                  | 100                  | 281               | 77  | 215 | 17x17 | 256 | 35 | 183 | 151 | Φ70<br>Φ102   | Φ69.9<br>Φ101.6  | M8<br>M10     | 5/16-18<br>3/8-16 | F07*<br>(F10)** | 12 |                      |
| EME400   | 400           | 43                                      | 10                   | 150                  | 291               | 90  | 339 | 22x22 | 287 | 55 | 180 | 164 | Φ102<br>Φ125  | Φ101.6<br>Φ125.7 | M10<br>M12    | 3/8-16<br>1/2-13  | F10*<br>(F12)** | 20 |                      |
| EME600   | 600           | 43                                      | 12                   | 180                  | 291               | 90  | 387 | 27x27 | 287 | 55 | 180 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 22 |                      |
| EME800   | 800           | 62                                      | 10                   | 150                  | 388               | 102 | 239 | 27x27 | 362 | 55 | 193 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 25 |                      |
| EME1000  | 1000          | 62                                      | 10                   | 200                  | 388               | 102 | 239 | 27x27 | 362 | 55 | 193 | 164 | Φ125<br>Φ102  | Φ139.6<br>Φ101.6 | M12<br>M10    | 1/2-13<br>3/8-16  | F12*<br>(F10)** | 27 |                      |

Note: 1.) \*, Standard for connection size; 2.) \*\*, Option for connection size

# Split Type Explosive Protection Dimensions Drawing-2



### 8.3 MOUNTING

The Easytrac actuator is very versatile and can be mounted in any orientation although due consideration should be given to center of gravity and forces particularly on valve stems and support metalwork.

The front controls cover can be rotated through 360 degrees to allow for the front display to be read from any mounting orientation.

### 9.0 EMC SPECIFICATION

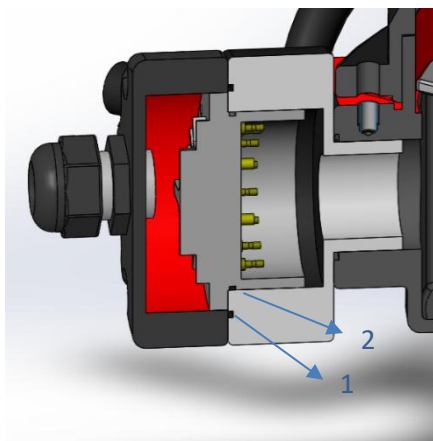
All Ontrac actuators are compliant with EN IEC 61800 part 3 under directive 2004/108/EC for immunity to and emissions of electromagnetic fields.

### 10.0 COATING (PAINTING)

All Ontrac actuators are epoxy enamel coated as standard to ISO 12944-2. Our standard color is black to RAL 9005.

We are also able to provide enhanced paint protection in accordance with ISO 12944 C5-M (Marine) for offshore environments.

### 11.0 DOUBLE SEALING



1. Seal for wiring terminal chamber
2. Seal for internal chamber

Easytrac provides an option for double sealing for even more protection against ingress. Two seals are provided which gives additional protection when the actuator terminal compartment is open.

#### Ontrac enhanced IP68 meets the following requirements:

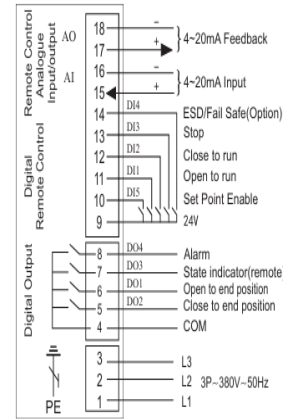
- Depth of water: maximum 10 m head of water
- Duration of continuous immersion in water: Max. 72 hours
- During continuous immersion, Up to 10 operations

12.0 ELECTRICAL CONNECTION

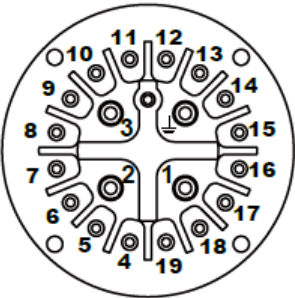
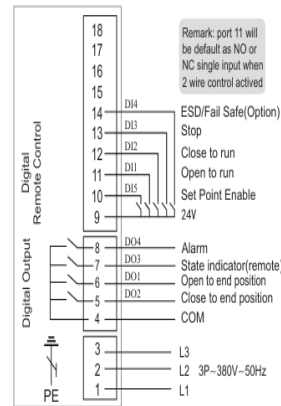
Easytrac actuators come equipped as standard with nine digital programmable I/O.

12.1 WIRING DIAGRAMS OF INTELLIGENT MODEL

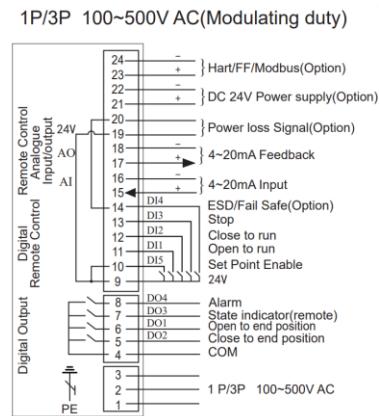
3-phase AC, 380V (Modulating)



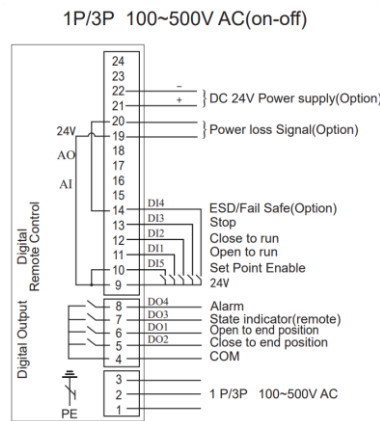
3-phase AC, 380V (On-off)



1/3-phase AC 100-500V((Modulating)

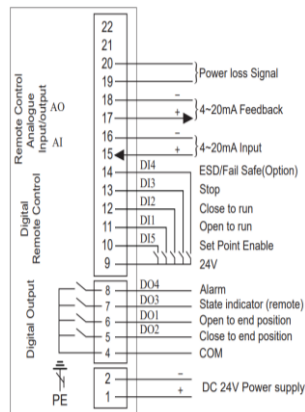


1/3-phase AC,100-500V (On-off)

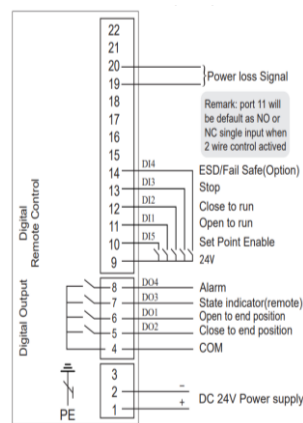


Explosive-protection  
IP68 double seal

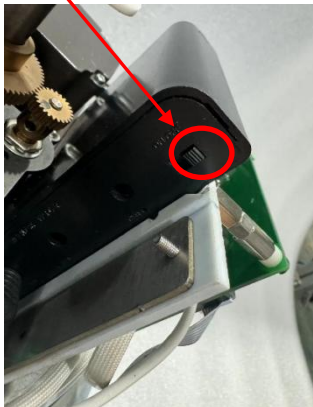
DC,24V(Modulating)



DC,24V(On-off)



When using internal power supply (24V DC / single-phase AC 100V-500V), set the battery box switch to the ON position.



1:

| DEFAULT SETTINGS |          |       |
|------------------|----------|-------|
| Function Code    | Function | Input |
|                  |          |       |

The optically isolated above, come settings as defined in

|   |                  |      |
|---|------------------|------|
| 1 | Open direction   | DI 1 |
| 2 | Close direction  | DI 2 |
| 3 | Stop direction   | DI 3 |
| 4 | ESD direction    | DI 4 |
| 5 | Set point enable | DI 5 |
| 6 | Alarm reset      |      |

inputs (DI1-DI5) shown preconfigured with default the table below.

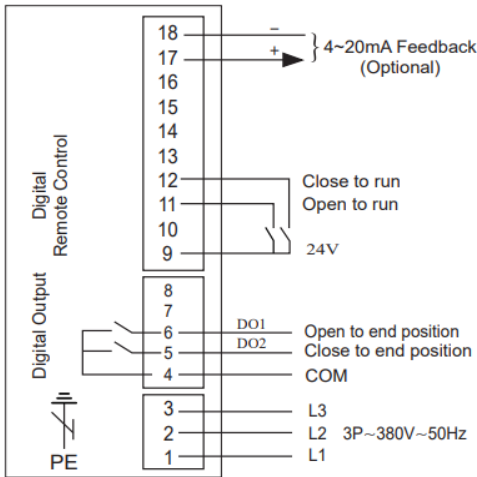
12.1.2 STANDARD OUTPUTS

The Standard outputs (DO1-DO4) shown above, come preconfigured with default settings.

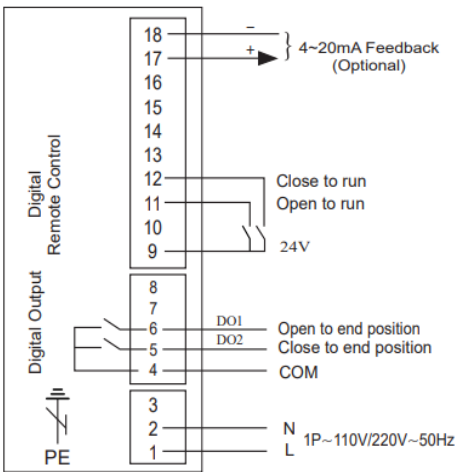
| DEFAULT SETTINGS |                       |        |
|------------------|-----------------------|--------|
| Function Code    | Function              | Output |
| 1                | Full open indication  | DO 1   |
| 2                | Full close indication | DO 2   |
| 3                | Remote indication     | DO 3   |
| 4                | Failure & alarm       | DO 4   |

12.2 WIRING DIAGRAMS OF BASE MODEL

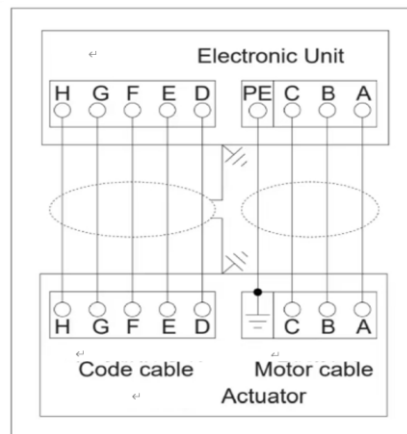
3-phase AC, 380V (Basic Type)



1-phase AC, 110V/220V (Basic Type)



## 12.3 WIRING DIAGRAMS OF SPLIT-TYPE



1. The sensor signal cable shall be 5-core cable with shield; The sectional area of the line shall be minimum 0.5mm<sup>2</sup>, and the length of the line shall be within 5m, not exceeding 10m, otherwise please contact factory;
2. The motor cable shall be 4-core cable with shield; The sectional area of the line shall be minimum 2.5mm<sup>2</sup>, and the length of the line shall be within 5m, not exceeding 10m, otherwise please contact factory
3. For cable selection, we recommend you to choose the size that fit glands provided as your power and signal cables. Using gland adopter to fit different size of each side where applies. Please make sure the glands are fully tightened after wiring to ensure IP68 sealing.
4. Cable conforming to the national standard IEC 60227 and IEC 60245 shall be preferred.
5. If used in high temperature environment, please choose right temperature rating cable, cable protection shell, etc. that meet the requirements;

## 12.4 OPTIONAL FUNCTION DI and DO

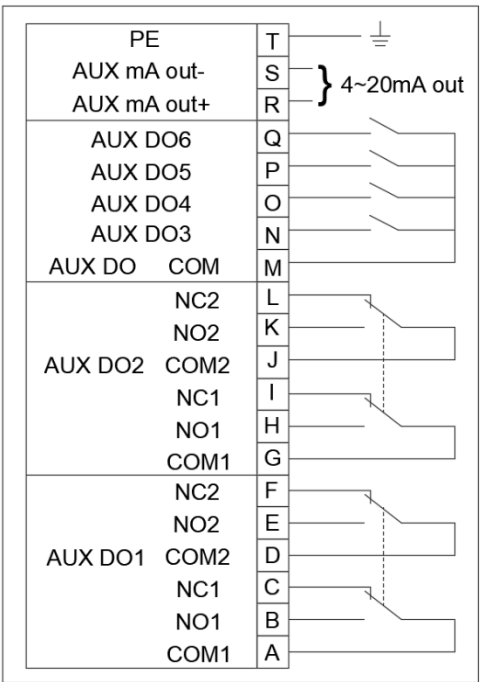
### DI Input channel functions as optional

| Value          | Clarification                |
|----------------|------------------------------|
| SetPointEnable | Adjustment Enable            |
| OpenDirection  | Open Direction Command       |
| CloseDirection | Turn-off command (computing) |
| StopDirection  | Shutdown command             |
| AlarmReset     | Alarm reset                  |
| ESD/Failsafe   | ESD/Failsafe Directive       |
| PSTDirection   | PST instruction              |
| LimSwitchStop  | Limit switch                 |
| TwoWireCtrl    | Two Wire Ctrl                |

### DO Output channel functions as optional

| Value           | Clarification        |
|-----------------|----------------------|
| FullopenIndi    | Fully open indicator |
| FullCloseIndi   | All-off instructions |
| RemoteIndicat   | Remote indication    |
| Failure&Alarm   | malfunction alarm    |
| AI_Loss         | AI_Loss              |
| OpenoverTorq    | Open over Torque     |
| CloseOverTorq   | Close over Torque    |
| Valve1ToEnd     | Valve1To End         |
| Valve2ToEnd     | Valve2 To End        |
| LocalControl    | Local Control        |
| RunHoldSignal   | Run Hold Signal      |
| RunPulseSignal  | Run Pulse Signal     |
| OpnPulseEndHold | Open Pulse End Hold  |
| CloPulseEndHold | Close Pulse End Hold |
| OpenRunHold     | Open Run Hold        |
| CloseRunHold    | Close Run Hold       |
| ESDRunHold      | ESD Run Hold         |
| PSTRunHold      | PST Run Hold         |
| BluetoothC.     | Blue tooth C.        |
| HandleSignal    | Handle Signal        |

## Wiring Diagrams of Additional Channel



|        | Default      | Min          | Max          |
|--------|--------------|--------------|--------------|
| AUXDO1 | Valve1ToEnd  | FullOpenIndi | HandleSignal |
| AUXDO2 | Valve2ToEnd  | FullOpenIndi | HandleSignal |
| AUXDO3 | LocalControl | FullOpenIndi | HandleSignal |
| AUXDO4 | ESDRunHold   | FullOpenIndi | HandleSignal |
| AUXDO5 | PSTRunHold   | FullOpenIndi | HandleSignal |
| AUXDO6 | BluetoothC   | FullOpenIndi | HandleSignal |

| Optional |                   |    |                      |
|----------|-------------------|----|----------------------|
| 1        | OPEN_END          | 11 | RUN_HOLD_SIGNAL      |
| 2        | CLOSE_END         | 12 | RUN_PULSE_SIGNAL     |
| 3        | REMOTE_CONTROL    | 13 | OPEN_PULSE_END_HOLD  |
| 4        | FAULT_MESSAGE     | 14 | CLOSE_PULSE_END_HOLD |
| 5        | ANALOG_IN_LOSS    | 15 | OPEN_RUN_HOLD        |
| 6        | OPEN_OVER_TORQUE  | 16 | CLOSE_RUN_HOLD       |
| 7        | CLOSE_OVER_TORQUE | 17 | ESD_RUN_HOLD         |
| 8        | VALUE1_TO_END     | 18 | PST_RUN_HOLD         |
| 9        | VALUE2_TO_END     | 19 | BLUETOOTH_CONNECTED  |
| 10       | LOCAL_CONTROL     | 20 | HANDLE_OPERATION_OUT |

### 13.0 ACTUATOR CONTROL

Intelligent Easytrac actuators (with the code A behind the model code) have integral control switches as well as a local/remote selector switch. In local (manual) control the three switches have open, close and stop functionality.

The settings and parameter can also be set and read through the use of these same control switches. In this case the three switches are used to scroll through, view and change settings.



## 14.0 IR CONTROLLER

The Infra-Red Controller allows the actuator to be accessed without utilizing the manual functions located on the actuator. It can be used with all Ontrac actuators.



## 15.0 HANDWHEEL

A manual override level (hand crank) is provided for manual operation. Exceeding the permissible manual override level(hand crank) force, required for the max. switch-off torque, can damage the actuator and / or the valve.

The following manual override level (hand crank) forces are required to provide the max. switch-off torque:

Reduction ratio for part-turn:

- For EOE/EME100: 39:1,  $100/39=2.56\text{Nm}$

That is the force received at a distance of 1m is 2.56N. Because the diameter of the manual override level(hand crank) is 0.12M, the force received on the manual override level(hand crank) is 42.7N

- For EOE/EME 200: 39:1,  $200/39=5\text{Nm}$

That is the force received at a distance of 1m is 5.12N. Because the diameter of the manual override level(hand crank) is 0.12M, the force received on the manual override level(hand crank) is 83.3N

- For EOE/EME 400: 50:1,  $400/50=8\text{Nm}$

That is the force received at a distance of 1m is 8N. Because the diameter of the manual override level(hand crank) is 0.16M, the force received on the manual override level(hand crank) is 100N

- For EOE/EME 600: 50:1,  $600/50=12\text{Nm}$

That is the force received at a distance of 1m is 12N. Because the diameter of the manual override level(hand crank) is 0.16M, the force received on the manual override level(hand crank) is 150N

**Note:** The planetary gear reducer (6:1) is optional. With the reducer, the force received on the manual override level(hand crank) is converted to  $150/6=25\text{N}$ .

- For EOE/EME 800: 50:1,  $800/50=16\text{Nm}$

That is the force received at a distance of 1m is 16N. Because the diameter of the

manual override level(hand crank) is 0.16M, the force received on the manual override level(hand crank) is 200N

**Note:** The planetary reducer (6:1) is optional. With the reducer, the force received on the manual override level(hand crank) is converted to  $200/6=33\text{N}$ .

- For EOE/EME 1000: 50:1,  $1000/50=20\text{Nm}$

That is the force received at a distance of 1m is 20N. Because the diameter of the manual override level(hand crank) is 0.16M, the force received on the manual override level(hand crank) is 250N

**Note:** The planetary gear reducer (6:1) is optional. With the reducer, the force received on the manual override level (manual override level(hand crank)) is converted to  $250/6 = 42\text{N}$ .

- For EOE 2000: 35:1,  $2000/35=57\text{Nm}$

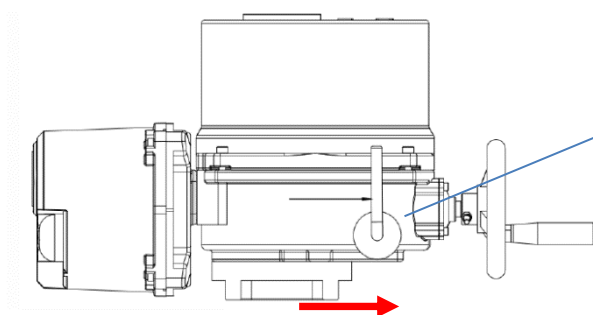
That is the force received at a distance of 1m is 57N. Because the diameter of the manual override level(hand crank) is 0.2M, the force received on the manual override level(hand crank) is 570N

**Note:** The planetary gear reducer (32:1) is optional. With the reducer, the force received on the manual override level (manual override level(hand crank)) is converted to  $570/32 = 18\text{N}$

- For EOE 3000: 35:1,  $3000/35=86\text{Nm}$

That is the force received at a distance of 1m is 86N. Because the diameter of the manual override level(hand crank) is 0.2M, the force received on the manual override level(hand crank) is 860N

**Note:** The planetary gear reducer (32:1) is optional. With the reducer, the force received on the manual override level (manual override level(hand crank)) is converted to  $860/32=27\text{N}$



**Operation:**

When an actuator is in full stop, press manual override level( hand crank) in the direction as showing in the figure, clockwise will manually operate the actuator.

When the automatic operation of the actuator ends, the manual override level(hand crank) will reset counterclockwise.



**Please do not try to use manual override level(hand crank) when actuator is in power on and in running mode**

Reduction ratio for linear:

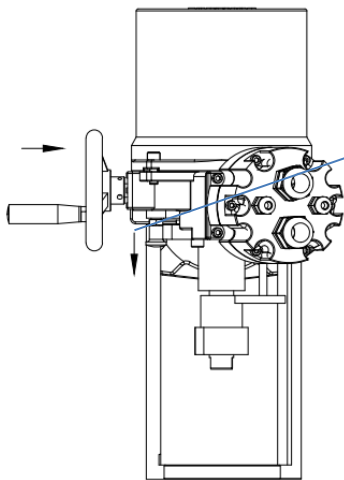
- For EOE/EME 400L,  $4000/4/35 \approx 28.6\text{Nm}$

That is the force received at a distance of 1m is 28.6N. Because the diameter of the manual override level(hand crank) is 0.12M, the force received on the manual override level(hand crank) is 20.2N

- For EOE/EME 600L,  $6000/4/35 \approx 42.9\text{Nm}$

That is the force received at a distance of 1m is 42.9N. Because the diameter of the

manual override level(hand crank) is 0.12M, the force received on the manual override level(hand crank) is 30N



**Operation:**

When the actuator stops completely, pull the limiter down according to the direction shown, so that the limiter is stuck in the second keyway of the hand wheel rod, then the actuator can be operated manually.

When the manual operation stops completely, pull down the limiter, push the handwheel rod into the first keyway in the direction shown, then the actuator can be operated automatically.



*Please do not try to use manual override level (hand crank) when actuator is in power on and in running mode*

**16.0 MOTOR**

All Easytrac actuators utilize AC &DC power supply fitted with integral stator control.

**17.0 CABLE ENTRIES**

For standard Easytrac, we offer 2 entries, 1xM25 for power supply, 1x M25 for signals in/out and serial communication.



| 22.1 WIRE CROSS SECTION (PLUG)           |                     |
|------------------------------------------|---------------------|
| Power cable<br>(inflexible or flexible)  | 2.5 mm <sup>2</sup> |
| Single Cable<br>(inflexible or flexible) | 0.5 mm <sup>2</sup> |

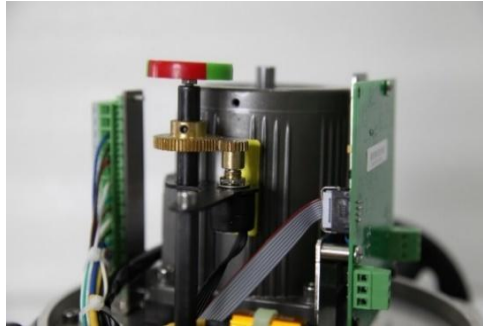
| 22.3 THREAD SIZE FOR CABLE GLANDS |               |
|-----------------------------------|---------------|
|                                   | METRIC        |
| Terminals<br>(Standard)           | 2 x M25 X 1.5 |

## **18.0 ESD /Fail safe (optional)**

An additional ESD input can be configured. This input can be configured to “open”, “close” or any preset position. This input will override any command that the actuator is currently receiving.

## **19.0 POSITION SENSING**

With Absolute encoder, resolution: 90 degrees with sensor/encoder output 0-2000, for full cycle, the resolution is 0.11 degree.



## **20.0 SELF DIAGNOSIS DESCRIPTION**

When power on, there is a self diagnosis, checking mainly external power source matching with Easytrac model selection, and performing a health check of electronics. When finished, if there is any problem, there will be an alarm or failed testing display, or the program will move on to its normal operation.

## **21.0 Partial Stroke Test( PST)**

"Partial stroke test, PST, a very useful method for avoiding the complete failure of on/off valves is the partial stroke test (PST). many valves are used very rarely in practice, such as safety valves which only have to open or close in an emergency. Their friction may increase in the course of time, especially the initial break-off force or torque of linear and rotary actuators respectively as a result of corrosion or increasing encrustation of the plug stem. Especially the initial break-off force or torque of linear and rotary actuators respectively as a result of corrosion or increasing encrustation of the plug stem. Normally a short, small movement of the valve in the closing direction is not disturbing the system process. The PST can be triggered by the control system (remote).

## **22.0 Product Ordering Coding**

Ontrac actuators use a standardized ordering code system. This brochure only lists core model. Full option codes are contained in the controlled Ordering Code Manual OCM6.12. Please contact factory to request this document.

Example for Easytrac part-turn actuator: EME100-F10-x-x-...

All final order codes comply with the Ordering Code Manual OCM6.12



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