



## electric actuators

The brand name of **PRISMA** Actuators has become well-known all around the world and is now a point of reference in this industry because of the robustness and reliability of its products. This success relies on continuously improving the quality and enhancing the development of our products and also to tailoring our service to meet the individual requirements of every one of our customers.

Since it was founded in 1980, PRISMA has grown remarkably. In recent times our mechanical know-how as well as our extensive technical knowledge has evolved to offer complete solutions in the automation of valves to control the process of fluid conduction.

**MECÁNICA PRISMA** develops four Pneumatic Actuator ranges, according to different environments of application: Aluminium, Stainless Steel, Polyamide and for High Temperatures. All manufactured according to international norms such as: ISO, DIN, NAMUR, VDE, VDI, ATEX, CE, DNV, PCT, SIL2

MECÁNICA PRISMA is accredited by quality norm ISO 9001-2000, ISO-TS-29001, API Q1 and 65% of its production is exported to more than 45 countries worldwide.



**ISO-9001 / TS 29001 / API Q1**

**PRISMA** offers a wide range of products for valve automation including pneumatic actuators, electric actuators and elements of regulation and control: solenoid valves, limit switch boxes, positioners, travel stops, declutchable gearboxes, handwheels, etc.

All actuators can be mounted onto any kind of valve, due to the wide range of mounting kits that PRISMA develops and produces.

PRISMA pneumatic actuators are available in double acting and spring return, covering a torque range from 17Nm to 65.000Nm at 6 Bar. Industrial applications: Chemical, Nuclear, Electronics, Automotive, Food and Beverage, Pharmaceutical; and other sectors such as Iron and Steel, Power Plants, Water Treatment, Oil & Gas, Off-Shore plants, etc.

**По вопросам продаж и поддержки обращайтесь:**  
**Екатеринбург (343)384-55-89, Казань (843)206-01-48, Краснодар (861)203-40-90,**  
**Москва (495)268-04-70, Санкт-Петербург (812)309-46-40**  
**Единый адрес: [pma@nt-rt.ru](mailto:pma@nt-rt.ru)**  
**[www.prisma.nt-rt.ru](http://www.prisma.nt-rt.ru)**

## PRISMA

The company

### ER ELECTRIC ACTUATORS

|                                 |   |
|---------------------------------|---|
| ER PREMIER thechnical features  | 1 |
| ER PREMIER range                | 2 |
| ER PLUS thechnical features     | 3 |
| ER PLUS range                   | 5 |
| ER PREMIER - ER PLUS dimensions | 6 |

### V ELECTRIC ACTUATORS

|                       |    |
|-----------------------|----|
| Technical features    | 7  |
| VX electric actuators | 9  |
| V - VX range          | 11 |
| V - VX dimensions     | 12 |

### EH ELECTRIC ACTUATORS

|                    |    |
|--------------------|----|
| Technical features | 13 |
| EH range           | 15 |
| EH dimensions      | 16 |



# ER PREMIER ELECTRIC ACTUATORS

## TECHNICAL FEATURES

### Description

Compact electric actuators with On-Off rapid cycle and 0°-90° rotation angle (option 180°, 270°) to pilot ball, butterfly and plug valves. Range of models from 20-35-60-100Nm with manual override to use in case of emergency.

### Tensions

90-240V 50/60Hz, 90-350V DC,  
24V 50/60 Hz, 24V DC  
Duty rating: 30%.

### Normal working temperature

-10°C to +55°C

### Standard equipment

- Torque limiter.
- 4 adjustable limit switches.
- On-Off or 3 points wiring.
- IP65 protection.
- Manual override.
- Position indicator.

### Travel time

7s to 25s

### Options

- Anti-condensation heater.
- Two extra contacts card.
- Handle for manual override.
- 0-20mA / 4-20mA / 0-10V transmitter.
- Feedback potentiometer.
- Second 3P + T DIN 43650 connector

### Power

15W - 45W

### Electrical connection

1 or 2 DIN 43650 3P + T connectors

### Mounting kits

Broad range of couplings for any kind valve adaptation.

### Weight

ER20 = 1Kg

ER35-ER60-ER100= 2.100Kg



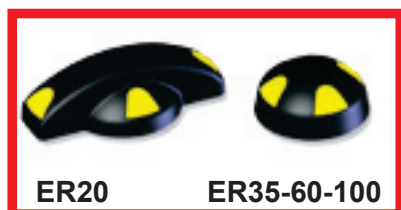
| CODE          | Star/Fixation  | Torque | Tensions                            | Power | Operating time 90° |
|---------------|----------------|--------|-------------------------------------|-------|--------------------|
| ER20.X0A.M00  | 14/F03-F04-F05 | 20 Nm  | 100V a 24V 50/60Hz (100V a 350V DC) | 15W   | 9/13s              |
| ER20.X03.M00  | 14/F03-F04-F05 | 20 Nm  | 24V 50/60Hz (24V DC)                | 15W   | 7/12s              |
| ER35.90A.M00  | 22/F05-F07     | 35 Nm  | 100V a 24V 50/60Hz (100V a 350V DC) | 45W   | 7/8s               |
| ER35.903.M00  | 22/F05-F07     | 35 Nm  | 24V 50/60Hz (24V DC)                | 45W   | 6/7s               |
| ER60.90A.M00  | 22/F05-F07     | 60 Nm  | 100V a 24V 50/60Hz (100V a 350V DC) | 45W   | 14/15s             |
| ER60.903.M00  | 22/F05-F07     | 60 Nm  | 24V 50/60Hz (24V DC)                | 45W   | 10/13s             |
| ER100.90A.M00 | 22/F05-F07     | 100 Nm | 100V a 24V 50/60Hz (100V a 350V DC) | 45W   | 22/25s             |
| ER100.903.M00 | 22/F05-F07     | 100 Nm | 24V 50/60Hz (24V DC)                | 45W   | 18/22s             |

# ER PREMIER ELECTRIC ACTUATORS

ER PREMIER

## POSITION INDICATOR

Incorporate handle with manual operation for electric actuators with smaller torques.



## LIMIT SWITCHES

4 limit switches  
(2 motor control and 2 for feedback information).



## CAP

Self-extinguishing Material  
(Polyamide 6)

## CLUCH

Cluch system for a practical manual control.



## CONNECTOR

3P+T DIN43650 connectors



## FIXATION PLATE

ISO-5211 fixations.

Removable fixation plates (F03 o F04-F05) for smaller torque models (ER20).

Models ER35-60-100 with F05-F07 plate.



# ER PLUS ELECTRIC ACTUATORS

## TECHNICAL FEATURES

### Descripción

Compact electric actuators with On-Off rapid cycle and 0°-90° rotation angle (option 180°, 270°) to pilot ball, butterfly and plug valves. Range of models from 10-20-35-60-100Nm with manual override to use in case of emergency.

### Tensions

15-30V 50/60 Hz, 12-48V DC,  
90-240V 50/60 Hz, 90-350V DC  
Duty rating: 50%.

### Normal working temperature

-10°C to +55°C

### Standard equipment

- Torque limiter.
- 4 adjustable limit switches.
- On-Off or 3 points wiring.
- IP66 protection.
- Manual override.
- Position indicator.
- Anti-condensation heater.

### Travel time

7s to 119s

### Options

- Two extra contacts card (EFC2).
- Handle for manual override (ERP).
- 0-20mA / 4-20mA / 0-10V transmitter (EPT.C).
- Feedback potentiometer (EPT.B).
- Second 3P + T DIN 43650 connector

### Power

15W - 45W

- **FAILSAFE**: Return to initial position in case power failure.

- **POSI**: 4-20mA/0-10V proporcional control.

### Mounting kits

Broad range of couplings for any kind valve adaptation.



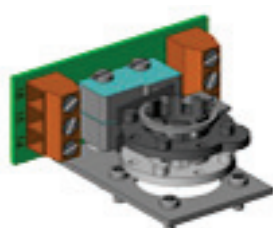
### Electrical connetion

1 or 2 DIN 43650 3P + T connectors

### Weight

ER10-ER20-ER35 = 1Kg / 1.340Kg

ER35-ER60-ER100= 2.8Kg / 3.140Kg



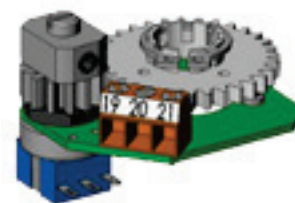
EFC2



ERP



EPT.C



EPT.B

## STANDARD

| CODE          | Star/Fixation  | Torque | Tensions                       | Power | Operating time 90° |
|---------------|----------------|--------|--------------------------------|-------|--------------------|
| ER10.X0A.G00  | 14/F03-F04-F05 | 10 Nm  | 100-240V 50/60Hz / 100-350V DC | 15W   | 9/11s              |
| ER10.X0B.G00  | 14/F03-F04-F05 | 10 Nm  | 15-30V 50/60Hz / 12-48V DC     | 15W   | 9/11s              |
| ER20.X0A.G00  | 14/F03-F04-F05 | 20 Nm  | 100-240V 50/60Hz / 100-350V DC | 15W   | 9/12s              |
| ER20.X0B.G00  | 14/F03-F04-F05 | 20 Nm  | 15-30V 50/60Hz / 12-48V DC     | 15W   | 9/12s              |
| ER35.X0A.G00  | 14/F03-F04-F05 | 35 Nm  | 100-240V 50/60Hz / 100-350V DC | 15W   | 19/26s             |
| ER35.X0B.G00  | 14/F03-F04-F05 | 35 Nm  | 15-30V 50/60Hz / 12-48V DC     | 15W   | 19/24s             |
| ER35.90A.G00  | 22/F05-F07     | 35 Nm  | 100-240V 50/60Hz / 100-350V DC | 45W   | 6/7s               |
| ER35.90B.G00  | 22/F05-F07     | 35 Nm  | 15-30V 50/60Hz / 12-48V DC     | 45W   | 6/7s               |
| ER60.90A.G00  | 22/F05-F07     | 60 Nm  | 100-240V 50/60Hz / 100-350V DC | 45W   | 10/12s             |
| ER60.90B.G00  | 22/F05-F07     | 60 Nm  | 15-30V 50/60Hz / 12-48V DC     | 45W   | 10/12s             |
| ER100.90A.G00 | 22/F05-F07     | 100 Nm | 100-240V 50/60Hz / 100-350V DC | 45W   | 20/23s             |
| ER100.90B.G00 | 22/F05-F07     | 100 Nm | 15-30V 50/60Hz / 12-48V DC     | 45W   | 19/22s             |

## STANDARD SLOW

| CODE          | Star/Fixation  | Torque | Tensions                       | Power | Operating time 90° |
|---------------|----------------|--------|--------------------------------|-------|--------------------|
| ER35.93A.G00  | 14/F03-F04-F05 | 35 Nm  | 100-240V 50/60Hz / 100-350V DC | 45W   | 34/40s             |
| ER35.93B.G00  | 14/F03-F04-F05 | 35 Nm  | 15-30V 50/60Hz / 12-48V DC     | 45W   | 34/41s             |
| ER60.93A.G00  | 22/F05-F07     | 60 Nm  | 100-240V 50/60Hz / 100-350V DC | 45W   | 67/79s             |
| ER60.93B.G00  | 22/F05-F07     | 60 Nm  | 15-30V 50/60Hz / 12-48V DC     | 45W   | 68/79s             |
| ER100.93A.G00 | 22/F05-F07     | 100 Nm | 100-240V 50/60Hz / 100-350V DC | 45W   | 110/119s           |
| ER100.93B.G00 | 22/F05-F07     | 100 Nm | 15-30V 50/60Hz / 12-48V DC     | 45W   | 110/119s           |

## FAILSAFE

| CODE          | Star/Fixation  | Torque | Tensions                       | Power | Operating time 90° |
|---------------|----------------|--------|--------------------------------|-------|--------------------|
| ER10.X0A.GS2  | 14/F03-F04-F05 | 10 Nm  | 100-240V 50/60Hz / 100-350V DC | 15W   | 9/11s              |
| ER10.X0B.GS2  | 14/F03-F04-F05 | 10 Nm  | 15-30V 50/60Hz / 12-48V DC     | 15W   | 9/11s              |
| ER20.X0A.GS2  | 14/F03-F04-F05 | 20 Nm  | 100-240V 50/60Hz / 100-350V DC | 15W   | 9/12s              |
| ER20.X0B.GS2  | 14/F03-F04-F05 | 20 Nm  | 15-30V 50/60Hz / 12-48V DC     | 15W   | 9/12s              |
| ER35.90A.GS2  | 22/F05-F07     | 35 Nm  | 100-240V 50/60Hz / 100-350V DC | 45W   | 6/7s               |
| ER35.90B.GS2  | 22/F05-F07     | 35 Nm  | 15-30V 50/60Hz / 12-48V DC     | 45W   | 6/7s               |
| ER60.90A.GS2  | 22/F05-F07     | 60 Nm  | 100-240V 50/60Hz / 100-350V DC | 45W   | 10/12s             |
| ER60.90B.GS2  | 22/F05-F07     | 60 Nm  | 15-30V 50/60Hz / 12-48V DC     | 45W   | 10/12s             |
| ER100.90A.GS2 | 22/F05-F07     | 100 Nm | 100-240V 50/60Hz / 100-350V DC | 45W   | 20/23s             |
| ER100.90B.GS2 | 22/F05-F07     | 100 Nm | 15-30V 50/60Hz / 12-48V DC     | 45W   | 19/22s             |

## FAILSAFE SLOW

| CODE          | Star/Fixation  | Torque | Tensions                       | Power | Operating time 90° |
|---------------|----------------|--------|--------------------------------|-------|--------------------|
| ER35.93A.GS2  | 14/F03-F04-F05 | 35 Nm  | 100-240V 50/60Hz / 100-350V DC | 45W   | 34/40s             |
| ER35.93B.GS2  | 14/F03-F04-F05 | 35 Nm  | 15-30V 50/60Hz / 12-48V DC     | 45W   | 34/41s             |
| ER60.93A.GS2  | 22/F05-F07     | 60 Nm  | 100-240V 50/60Hz / 100-350V DC | 45W   | 67/79s             |
| ER60.93B.GS2  | 22/F05-F07     | 60 Nm  | 15-30V 50/60Hz / 12-48V DC     | 45W   | 68/79s             |
| ER100.93A.GS2 | 22/F05-F07     | 100 Nm | 100-240V 50/60Hz / 100-350V DC | 45W   | 110/119s           |
| ER100.93B.GS2 | 22/F05-F07     | 100 Nm | 15-30V 50/60Hz / 12-48V DC     | 45W   | 110/119s           |

## POSI

| CODE          | Star/Fixation  | Torque | Tensions                       | Power | Operating time 90° |
|---------------|----------------|--------|--------------------------------|-------|--------------------|
| ER20.X3A.GP6  | 14/F03-F04-F05 | 20 Nm  | 100-240V 50/60Hz / 100-350V DC | 15W   | 16/25s             |
| ER20.X3B.GP6  | 14/F03-F04-F05 | 20 Nm  | 15-30V 50/60Hz / 12-48V DC     | 15W   | 16/25s             |
| ER35.93A.GP6  | 22/F05-F07     | 35 Nm  | 100-240V 50/60Hz / 100-350V DC | 45W   | 34/40s             |
| ER35.93B.GP6  | 22/F05-F07     | 35 Nm  | 15-30V 50/60Hz / 12-48V DC     | 45W   | 34/41s             |
| ER60.93A.GP6  | 22/F05-F07     | 60 Nm  | 100-240V 50/60Hz / 100-350V DC | 45W   | 67/79s             |
| ER60.93B.GP6  | 22/F05-F07     | 60 Nm  | 15-30V 50/60Hz / 12-48V DC     | 45W   | 68/79s             |
| ER100.93A.GP6 | 22/F05-F07     | 100 Nm | 100-240V 50/60Hz / 100-350V DC | 45W   | 110/119s           |
| ER100.93B.GP6 | 22/F05-F07     | 100 Nm | 15-30V 50/60Hz / 12-48V DC     | 45W   | 110/119s           |

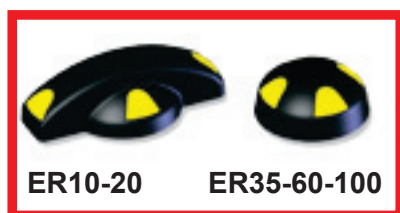
# ER PLUS ELECTRIC ACTUATORS

## ER PLUS RANGE

### POSITION INDICATOR

Visual position indicator.

Electric actuators with smaller torques incorporate handle for manual operation.



### LIMIT SWITCHES

4 limit switches

(2 motor control and 2 for feedback information)



### CAP

Self-extinguishing material

(Polyamide 6)

### CLUCH

Cluch system for a practical manual control.

### CONNECTOR

3P+T DIN43650 1 connector

3P+T DIN43650 2 connectors (option)



### FIXATION PLATE

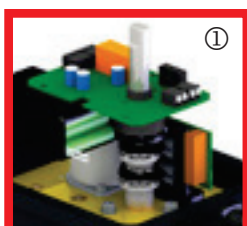
ISO-5211 Fixations.

Removable fixation plates (F03 o F04-F05) for smaller torque models (ER10-20).

Models ER35-60-100 with F05-F07 plate

### VERSIONS

1. Failsafe: return to safe position.
2. Posi: 4-20mA/0-10V positioning control.

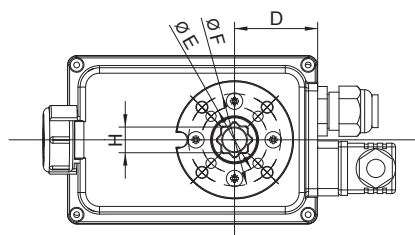




# ER ELECTRIC ACTUATORS

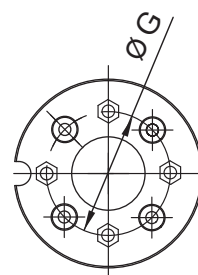
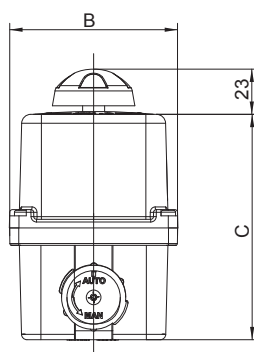
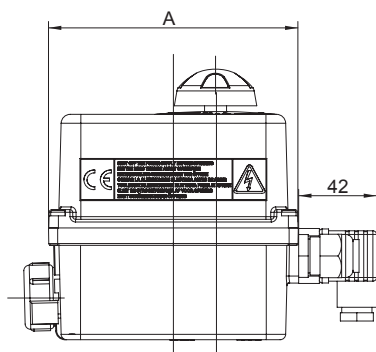
## ER PREMIER - ER PLUS DIMENSIONS

### ER10-20-35

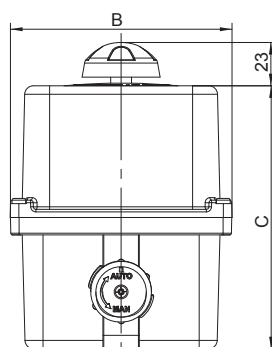
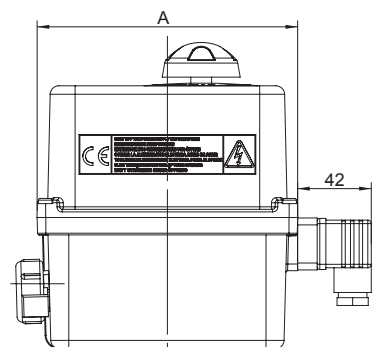
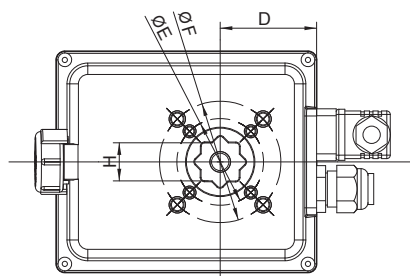


Modelos ER10-ER20-ER35 models incorporate interchangeable F04 flange.

ER35 model incorporate interchangeable F05-F07 flange.



### ER35-60-100



ER

| CODE  | DIMENSIONS (mm) |     |     |    |          |          |          |           |
|-------|-----------------|-----|-----|----|----------|----------|----------|-----------|
|       | A               | B   | C   | D  | E        | F        | G        | H<br>Star |
|       |                 |     |     |    | ISO-5211 | ISO-5211 | ISO-5211 |           |
| ER10  | 136             | 92  | 124 | 45 | Ø36 F03  | Ø50 F05  | Ø42 F04  | 14        |
| ER20  | 136             | 92  | 124 | 45 | Ø36 F03  | Ø50 F05  | Ø42 F04  | 14        |
| ER35  | 136             | 92  | 124 | 45 | Ø36 F03  | Ø50 F05  | Ø42 F04  | 14        |
|       | 151             | 128 | 152 | 55 | Ø50 F05  | Ø70 F07  | —        | 22        |
| ER60  | 151             | 128 | 152 | 55 | Ø50 F05  | Ø70 F07  | —        | 22        |
| ER100 | 151             | 128 | 152 | 55 | Ø50 F05  | Ø70 F07  | —        | 22        |

# V ELECTRIC ACTUATORS

## TECHNICAL FEATURES

### Description

Compact electric actuators with On-Off rapid cycle and 0°-90° rotation angle to pilot ball, butterfly and plug valves.

Range of models from 25-45-75-100-150-300Nm with manual override to use in case of emergency.

### Tensions

VR-VS: 100-240V AC (125-320V DC), 24V AC/DC or 400V three-phase.

VT: 400V three-phase, 230V AC.

Duty rating: 50%

### Standard equipment

- 24V AC/DC, 100-240V AC multivolt.
- Mechanical or electronic torque limiter.
- Mechanical stops (adjustable for VS ).
- 4 adjustables limit switches.
- Digital signal processing: microcontroller based.
- On-Off or 3 points wiring.
- IP67 protection.
- Manual override.
- Position indicator.
- Regulated heating resistor 10W

### Normal working temperature

-20°C to +70°C

FAILSAFE (-10°C to +40°C)

### Travel time

7s to 60s

### Options

- Feedback potentiometer: 1K-5K-10K Ohms or 4-20mA.
- M12 3P+T connectors.
- Two extra contacts card.
- 180° or 270° rotation angle (on demand).
- High duty cycle (80% on request).
- All aluminium version (on demand).
- Integrated failsafe block - 24V / 100-240V.

### Electrical connection

2 glands x ISO M20, IP68

### Weight

VR = 3,5Kg to 4,4kg

VS = 5,1Kg to 6,4kg



### Versions

**MULTIVOLT:** 24V AC/DC, 100-240V (On-Off or 3 points modulating).

**FAILSAFE:** return to initial position in case power failure.

**POSI:** Positioning solution evolved.  
Microprocessor based.  
Control poporcional 4-20mA / 0-10V.  
Reversible (ejemplo: 20-4mA).  
Multivolt: 24V AC/DC or 100-240V AC.  
Training mode.

**ATEX:** ATEX  II 2GD certificated for explosives atmospheres (see documentation VX range).

### 400V THREE-PHASE

### Mounting kits

Broad range of couplings for any kind valve adaptation.

### MULTIVOLT

| CODE          | Star/Fixation | Torque | Tensions    | Power | Travel time |
|---------------|---------------|--------|-------------|-------|-------------|
| VR25.70A.G00  | 17/ F05-F07   | 25 Nm  | 100-240V AC | 45W   | 7s          |
| VR25.70B.G00  | 17/ F05-F07   | 25 Nm  | 24V AC/DC   | 45W   | 7s          |
| VR45.70A.G00  | 17/ F05-F07   | 45 Nm  | 100-240V AC | 45W   | 15s         |
| VR45.70B.G00  | 17/ F05-F07   | 45 Nm  | 24V AC/DC   | 45W   | 15s         |
| VR75.70A.G00  | 17/ F05-F07   | 75 Nm  | 100-240V AC | 45W   | 20s         |
| VR75.70B.G00  | 17/ F05-F07   | 75 Nm  | 24V AC/DC   | 45W   | 20s         |
| VS100.90A.G00 | 22/ F07-F10   | 100 Nm | 100-240V AC | 45W   | 15s         |
| VS100.90B.G00 | 22/ F07-F10   | 100 Nm | 24V AC/DC   | 45W   | 15s         |
| VS150.90A.G00 | 22/ F07-F10   | 150 Nm | 100-240V AC | 45W   | 30s         |
| VS150.90B.G00 | 22/ F07-F10   | 150 Nm | 24V AC/DC   | 45W   | 30s         |
| VS300.90A.G00 | 22/ F07-F10   | 300 Nm | 100-240V AC | 45W   | 60s         |
| VS300.90B.G00 | 22/ F07-F10   | 300 Nm | 24V AC/DC   | 45W   | 60s         |

### FAILSAFE

(MULTIVOLT + Integrated fail safe security block, return to initial position in case power failure)

| CODE          | Star/Fixation | Torque | Tensions    | Power | Travel time |
|---------------|---------------|--------|-------------|-------|-------------|
| VR25.70A.GS2  | 17/ F05-F07   | 25 Nm  | 100-240V AC | 45W   | 7s          |
| VR25.70B.GS2  | 17/ F05-F07   | 25 Nm  | 24V AC/DC   | 45W   | 7s          |
| VR45.70A.GS2  | 17/ F05-F07   | 45 Nm  | 100-240V AC | 45W   | 15s         |
| VR45.70B.GS2  | 17/ F05-F07   | 45 Nm  | 24V AC/DC   | 45W   | 15s         |
| VR75.70A.GS2  | 17/ F05-F07   | 75 Nm  | 100-240V AC | 45W   | 20s         |
| VR75.70B.GS2  | 17/ F05-F07   | 75 Nm  | 24V AC/DC   | 45W   | 20s         |
| VS100.90A.GS2 | 22/ F07-F10   | 100 Nm | 100-240V AC | 45W   | 15s         |
| VS100.90B.GS2 | 22/ F07-F10   | 100 Nm | 24V AC/DC   | 45W   | 15s         |
| VS150.90A.GS2 | 22/ F07-F10   | 150 Nm | 100-240V AC | 45W   | 30s         |
| VS150.90B.GS2 | 22/ F07-F10   | 150 Nm | 24V AC/DC   | 45W   | 30s         |
| VS300.90A.GS2 | 22/ F07-F10   | 300 Nm | 100-240V AC | 45W   | 60s         |
| VS300.90B.GS2 | 22/ F07-F10   | 300 Nm | 24V AC/DC   | 45W   | 60s         |

### POSI = 4-20mA / 0-10V

| CODE          | Star/Fixation | Torque | Tensions    | Power | Travel time |
|---------------|---------------|--------|-------------|-------|-------------|
| VR25.70A.GP5  | 17/ F05-F07   | 25 Nm  | 100-240V AC | 45W   | 15s         |
| VR25.70B.GP5  | 17/ F05-F07   | 25 Nm  | 24V AC/DC   | 45W   | 15s         |
| VR45.70A.GP5  | 17/ F05-F07   | 45 Nm  | 100-240V AC | 45W   | 15s         |
| VR45.70B.GP5  | 17/ F05-F07   | 45 Nm  | 24V AC/DC   | 45W   | 15s         |
| VR75.70A.GP5  | 17/ F05-F07   | 75 Nm  | 100-240V AC | 45W   | 20s         |
| VR75.70B.GP5  | 17/ F05-F07   | 75 Nm  | 24V AC/DC   | 45W   | 20s         |
| VS100.90A.GP5 | 22/ F07-F10   | 100 Nm | 100-240V AC | 45W   | 15s         |
| VS100.90B.GP5 | 22/ F07-F10   | 100 Nm | 24V AC/DC   | 45W   | 15s         |
| VS150.90A.GP5 | 22/ F07-F10   | 150 Nm | 100-240V AC | 45W   | 30s         |
| VS150.90B.GP5 | 22/ F07-F10   | 150 Nm | 24V AC/DC   | 45W   | 30s         |
| VS300.90A.GP5 | 22/ F07-F10   | 300 Nm | 100-240V AC | 45W   | 60s         |
| VS300.90B.GP5 | 22/ F07-F10   | 300 Nm | 24V AC/DC   | 45W   | 60s         |

\* 4-20mA travel time

### 400V THREE-PHASE

| CODE          | Star/Fixation | Torque | Tensions | Power | Travel time |
|---------------|---------------|--------|----------|-------|-------------|
| VR25.709.R00  | 17/ F05-F07   | 25 Nm  | 400V TRI | 52W   | 10s         |
| VR45.709.R00  | 17/ F05-F07   | 45 Nm  | 400V TRI | 52W   | 10s         |
| VR75.709.R00  | 17/ F05-F07   | 75 Nm  | 400V TRI | 52W   | 15s         |
| VS100.909.R00 | 22/ F07-F10   | 100 Nm | 400V TRI | 135W  | 10s         |
| VS150.909.R00 | 22/ F07-F10   | 150 Nm | 400V TRI | 135W  | 20s         |
| VS300.909.R00 | 22/ F07-F10   | 300 Nm | 400V TRI | 135W  | 35s         |

# VX ELECTRIC ACTUATORS

## TECHNICAL FEATURES

### Description

Compact electric actuators with On-Off rapid cycle and 0°-90° rotation angle to pilot ball, butterfly and plug valves.

Range of models from 25-45-75-100-150-300Nm with manual override to use in case of emergency.

 **ATEX - II 2 GD Ex d IIB T6 - tD A21 IP67 T80°  
LCIE 06 ATEX 6006X**

For 400V and with security block actuators :  
II 2 GD Ex d IIB T5 - tD A21 IP67 T95°

### Standard equipment

- Multivolt: 100-240V AC (125-320V DC), 24V AC/DC or 400V tri 50-60Hz.
- Torque limiter (except 400V).
- Mechanical stops (adjustable for VXS ).
- 4 adjustables limit switches.
- Digital signal processing: microcontroller based.
- On-Off or 3 points wiring.
- IP67 protection.
- Manual override.
- Position indicator.
- Regulated heating resistor 10W

### Options

- Feedback potentiometer: 1K-5K-10K Ohms or 4-20mA.
- Two extra contacts card.
- 180° or 270° rotation angle (on demand).
- Integrated failsafe block - 24V / 100-240V.

### Electrical connection

2 glands x ISO M20.

### Weight

VRX = 4Kg to 4,4kg

VSX = 6Kg to 6,4kg



VRX

VSX

### Tensions

VRX-VSX: 100-240V AC (125-320V DC),  
24V AC/DC or 400V three-phase.

Duty rating: 50%

### Normal working temperature

-20°C to +70°C  
FAILSAFE (-10°C to +40°C)

### Travel time

7s to 60s



### Versions

**MULTIVOLT:** 24V AC/DC, 100-240V (On-Off or 3 points modulating).

**FAILSAFE:** return to initial position in case power failure.

**POSI:** Positioning solution evolved.

Microprocessor based.

Control poporcional 4-20mA / 0-10V.

Reversible (ejemplo: 20-4mA).

Multivolt: 24V AC/DC or 100-240V AC.

Training mode.

### Mounting kits

Broad range of couplings for any kind valve adaptation.



### MULTIVOLT

| CODE            | Star/Fixation | Torque | Tensions    | Power | Travel time |
|-----------------|---------------|--------|-------------|-------|-------------|
| VRX25.70A.G00   | 17/ F05-F07   | 25 Nm  | 100-240V AC | 45W   | 7s          |
| VRX25.70B.G00   | 17/ F05-F07   | 25 Nm  | 24V AC/DC   | 45W   | 7s          |
| VRX45.70A.G00   | 17/ F05-F07   | 45 Nm  | 100-240V AC | 45W   | 15s         |
| VRX45.70B.G00   | 17/ F05-F07   | 45 Nm  | 24V AC/DC   | 45W   | 15s         |
| VRX75.70A.G00   | 17/ F05-F07   | 75 Nm  | 100-240V AC | 45W   | 20s         |
| VRX75.70B.G00   | 17/ F05-F07   | 75 Nm  | 24V AC/DC   | 45W   | 20s         |
| V SX100.90A.G00 | 22/ F07-F10   | 100 Nm | 100-240V AC | 45W   | 15s         |
| V SX100.90B.G00 | 22/ F07-F10   | 100 Nm | 24V AC/DC   | 45W   | 15s         |
| V SX150.90A.G00 | 22/ F07-F10   | 150 Nm | 100-240V AC | 45W   | 30s         |
| V SX150.90B.G00 | 22/ F07-F10   | 150 Nm | 24V AC/DC   | 45W   | 30s         |
| V SX300.90A.G00 | 22/ F07-F10   | 300 Nm | 100-240V AC | 45W   | 60s         |
| V SX300.90B.G00 | 22/ F07-F10   | 300 Nm | 24V AC/DC   | 45W   | 60s         |

### FAILSAFE

(MULTIVOLT + Integrated fail safe security block, return to initial position in case power failure)

| CODE            | Star/Fixation | Torque | Tensions    | Power | Travel time |
|-----------------|---------------|--------|-------------|-------|-------------|
| VRX25.70A.GS2   | 17/ F05-F07   | 25 Nm  | 100-240V AC | 45W   | 7s          |
| VRX25.70B.GS2   | 17/ F05-F07   | 25 Nm  | 24V AC/DC   | 45W   | 7s          |
| VRX45.70A.GS2   | 17/ F05-F07   | 45 Nm  | 100-240V AC | 45W   | 15s         |
| VRX45.70B.GS2   | 17/ F05-F07   | 45 Nm  | 24V AC/DC   | 45W   | 15s         |
| VRX75.70A.GS2   | 17/ F05-F07   | 75 Nm  | 100-240V AC | 45W   | 20s         |
| VRX75.70B.GS2   | 17/ F05-F07   | 75 Nm  | 24V AC/DC   | 45W   | 20s         |
| V SX100.90A.GS2 | 22/ F07-F10   | 100 Nm | 100-240V AC | 45W   | 15s         |
| V SX100.90B.GS2 | 22/ F07-F10   | 100 Nm | 24V AC/DC   | 45W   | 15s         |
| V SX150.90A.GS2 | 22/ F07-F10   | 150 Nm | 100-240V AC | 45W   | 30s         |
| V SX150.90B.GS2 | 22/ F07-F10   | 150 Nm | 24V AC/DC   | 45W   | 30s         |
| V SX300.90A.GS2 | 22/ F07-F10   | 300 Nm | 100-240V AC | 45W   | 60s         |
| V SX300.90B.GS2 | 22/ F07-F10   | 300 Nm | 24V AC/DC   | 45W   | 60s         |

For 400V and security block actuators : II 2 GD Ex d IIB T5 - tD A21 IP67 T95°

### POSI = 4-20mA / 0-10V

| CODE            | Star/Fixation | Torque | Tensions    | Power | Travel time |
|-----------------|---------------|--------|-------------|-------|-------------|
| VRX25.70A.GP5   | 17/ F05-F07   | 25 Nm  | 100-240V AC | 45W   | 7s (15s*)   |
| VRX25.70B.GP5   | 17/ F05-F07   | 25 Nm  | 24V AC/DC   | 45W   | 7s (15s*)   |
| VRX45.70A.GP5   | 17/ F05-F07   | 45 Nm  | 100-240V AC | 45W   | 15s         |
| VRX45.70B.GP5   | 17/ F05-F07   | 45 Nm  | 24V AC/DC   | 45W   | 15s         |
| VRX75.70A.GP5   | 17/ F05-F07   | 75 Nm  | 100-240V AC | 45W   | 20s         |
| VRX75.70B.GP5   | 17/ F05-F07   | 75 Nm  | 24V AC/DC   | 45W   | 20s         |
| V SX100.90A.GP5 | 22/ F07-F10   | 100 Nm | 100-240V AC | 45W   | 15s         |
| V SX100.90B.GP5 | 22/ F07-F10   | 100 Nm | 24V AC/DC   | 45W   | 15s         |
| V SX150.90A.GP5 | 22/ F07-F10   | 150 Nm | 100-240V AC | 45W   | 30s         |
| V SX150.90B.GP5 | 22/ F07-F10   | 150 Nm | 24V AC/DC   | 45W   | 30s         |
| V SX300.90A.GP5 | 22/ F07-F10   | 300 Nm | 100-240V AC | 45W   | 60s         |
| V SX300.90B.GP5 | 22/ F07-F10   | 300 Nm | 24V AC/DC   | 45W   | 60s         |

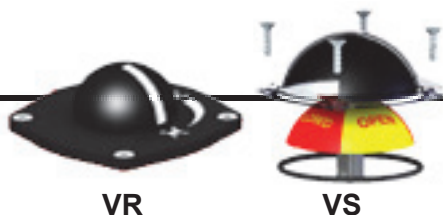
\* 4-20mA travel time

# V ELECTRIC ACTUATORS

## V - VX RANGE

### POSITION INDICATOR

Visual position indicator.



### LIMIT SWITCHES

4 limit switches  
(2 motor control and 2  
for feedback information)



### TAPA

Interchangeable aluminium or plastic  
cap with IP67 enclosure.



### ELECTRICAL/ ELECTRONIC INTERFACE

- Digital signal processing.
- Torque limiter  
(electronic or mechanical).
- Temperature regulation.
- Intuitive control mode:  
On-Off (possibility of serial wiring)  
3 points wiring.



### GLAND

ISO M20 gland

### MECHANICAL STOPS

Mechanical stops  
(adjustable for VR-VRX  $\pm 5^\circ$ )



### FIXATION PLATE

ISO-5211 fixations (F05-F07 o F07-F10)

### HANDWHEEL (VS-VSX MODELS)

Hand wheel without disengaging the clutch.  
The steering wheel does not rotate when the  
actuator operates

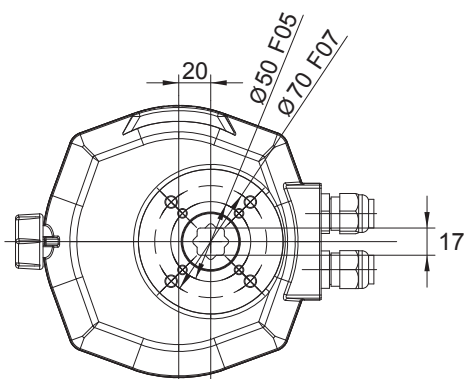
### CLUCH (MODELS VR-VRX)

Sistema de desembrague  
para un mando manual práctico.

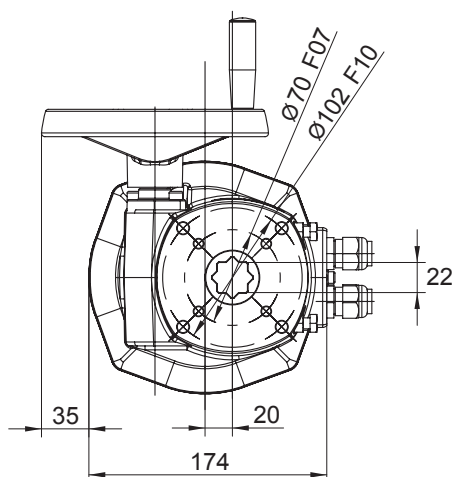
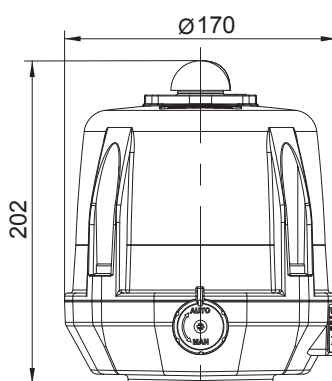
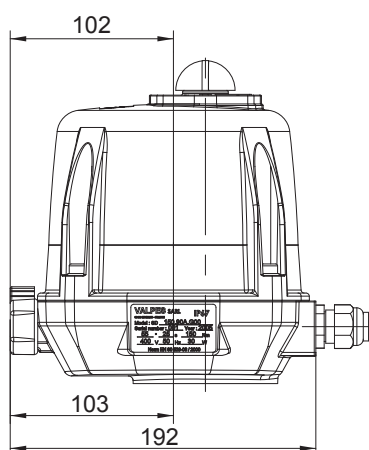


# V ELECTRIC ACTUATORS

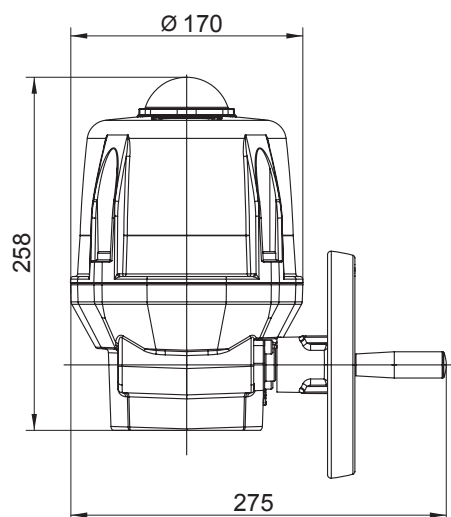
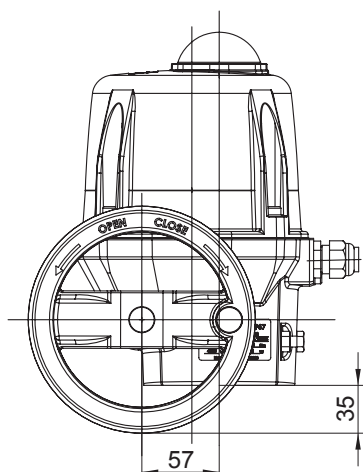
## V - VX DIMENSIONS



VR - VRX



VS - VSX



# EH ELECTRIC ACTUATORS

## TECHNICAL FEATURES

### Description

Compact electric actuators with On-Off and 0°-90° rotation angle to pilot ball, butterfly and plug valves.

Range of models from 150 to 3.000Nm with manual override to use in case of emergency.

### Tensions

150 to 300Nm models:  
24V AC/DC, 110V AC, 220V AC, 380V TRI

500 to 3.000Nm models:  
110V AC, 220V AC, 380V TRI

Duty rating: 70% - 100%

### Standard equipment

### Normal working temperature

-20°C to +70°C

- Torque limiter.
- 2 mechanical stopper (external adjustable screws).
- 4 adjustable limit switches.
- On-Off or 3 modulating points control.
- IP67 protection.
- Manual override:  
declutching mechanism  
(retorno a posición AUTO bajo tensión).
- Position indicator.
- Regulated heating resistor 10W.



### Options

- Explosionproof enclosure actuator (ATEX Eexd IIB T4) 
- IP68 protection.
- Feedback potentiometer: 1K Ohms or 4-20mA.
- SSR type proportional control unit (input,output 0-10V DC, 4-20mA DC).
- Additional torque switches.
- Semi-integral control unit (LCU + IMS + phase protect indicator).
- Intelligent digital control unit (LCU + IMS + auto phase discriminator).
- Local control unit (remote/local - open/stop/close)
- Extension 120°, 180°, 270° turn.
- Rechargeable battery backup.
- Signal lamp unit:

White: power, on  
Red: open  
Green: close  
Yellow: over-torque

### Travel time

25s to 112s

### Weight

23Kg to 75Kg



EH-200, EH-300



EH-015 to EH-120

### Electrical connection

3 x ISO M25 cable gland.

### Mounting kits

Wide range of brackets and drive adapters for any kind of valve.

## STANDARD

| CODE   | Star<br>Fixation plate | Torque   | Tensions  |         |         |          | Power | Travel time |
|--------|------------------------|----------|-----------|---------|---------|----------|-------|-------------|
|        |                        |          | 24V AC DC | 110V AC | 220V AC | 380V TRI |       |             |
| EH-015 | 17/ F07-F10            | 150 Nm   | ✓         | ✓       | ✓       | ✓        | 40W   | 25s         |
| EH-020 | 17/ F07-F10            | 200 Nm   | ✓         | ✓       | ✓       | ✓        | 40W   | 25s         |
| EH-030 | 27/ F10-F12            | 300 Nm   | ✓         | ✓       | ✓       | ✓        | 40W   | 31s         |
| EH-050 | 27/ F10-F12            | 500 Nm   | ✗         | ✓       | ✓       | ✓        | 90W   | 31s         |
| EH-060 | 27/ F10-F12            | 600 Nm   | ✗         | ✓       | ✓       | ✓        | 90W   | 31s         |
| EH-080 | 36/ F12-F14            | 800 Nm   | ✗         | ✓       | ✓       | ✓        | 180W  | 37s         |
| EH-120 | 36/ F12-F14            | 1.200 Nm | ✗         | ✓       | ✓       | ✓        | 180W  | 37s         |
| EH-200 | 36/ F14-F16            | 2.000 Nm | ✗         | ✓       | ✓       | ✓        | 180W  | 112s        |
| EH-300 | 46/ F14-F16            | 3.000 Nm | ✗         | ✓       | ✓       | ✓        | 180W  | 112s        |

✓ Available

✗ Not available

Note: Is not possible to mount several options in the same electric actuator

\* Option

## OPTIONS

|      |                                                                                                                                          |
|------|------------------------------------------------------------------------------------------------------------------------------------------|
| EXA  | Explosionproof enclosure actuator (ATEX Eexd IIB T4)  |
| WTA  | IP68 watertight enclosure                                                                                                                |
| PIU  | Potentiometer unit (0-1 Ω)                                                                                                               |
| PCU  | SSR type proportional control unit (input, output, 0-10VCD, 4-20mA)                                                                      |
| ATS  | Additional torque switches                                                                                                               |
| SICU | Semi-integral control unit (LCU + IMS + phase protect indicator)                                                                         |
| ICU  | Intelligent digital control unit (LCU + IMS + auto phase discriminator)                                                                  |
| LCU  | Local control unit (remote/local - open/stop/close)                                                                                      |
| CPT  | Current position transmitter(output 4-20mA DC)                                                                                           |
| EXT  | Extension 120°, 180°, 270° turn                                                                                                          |
| RBP  | Rechargeable battery backup                                                                                                              |
| SLU  | Signal lamp unit (white: power on / red: open / green: close / yellow: sobrepar)                                                         |

## OPTIONS SELECTION CHART

| CODE   | EXA | WTA | PIU | PCU | ATS | SICU | ICU | LCU | CPT | EXT | RBP | SLU |
|--------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|
| EH-015 | ✓   | ✓   | ✓   | ✓   | ✓   | ✓    | ✓   | ✗   | ✓   | ✓   | ✓   | ✓   |
| EH-020 | ✓   | ✓   | ✓   | ✓   | ✓   | ✓    | ✓   | ✗   | ✓   | ✓   | ✓   | ✓   |
| EH-030 | ✓   | ✓   | ✓   | ✓   | ✓   | ✓    | ✓   | ✗   | ✓   | ✓   | ✓   | ✓   |
| EH-050 | ✓   | ✓   | ✓   | ✓   | ✓   | ✓    | ✓   | ✗   | ✓   | ✓   | ✗   | ✓   |
| EH-060 | ✓   | ✓   | ✓   | ✓   | ✓   | ✓    | ✓   | ✗   | ✓   | ✓   | ✗   | ✓   |
| EH-080 | ✓   | ✓   | ✓   | ✓   | ✓   | ✓    | ✓   | ✗   | ✓   | ✓   | ✗   | ✓   |
| EH-120 | ✓   | ✓   | ✓   | ✓   | ✓   | ✓    | ✓   | ✗   | ✓   | ✓   | ✗   | ✓   |
| EH-200 | ✓   | ✓   | ✓   | ✓   | ✓   | ✓    | ✓   | ✗   | ✓   | ✗   | ✗   | ✓   |
| EH-300 | ✓   | ✓   | ✓   | ✓   | ✓   | ✓    | ✓   | ✗   | ✓   | ✗   | ✗   | ✓   |

✓ Available

✗ Not available

Note: Is not possible to mount several options in the same electric actuator



# EH ELECTRIC ACTUATORS

## EH RANGE

### CAP

IP67 Protection and highly resistance to corrosion:

- internal and external anodised +
- polyester external coating

### POSITION INDICATOR

Signal lamp option:

- White: power, on
- Red: open
- Green: close
- Yellow: over-torque

### LIMIT SWITCHES

Standard:

Easy configuration design.

Double adjustment for extra limit switches.



Option:

4 independents cams.



### STROKE ADJUSTMENTS

### FIXATION PLATE

ISO-5211 fixations.

### MOTOR

Disponible:

Monofásico (24V DC - 220V AC - 110V AC)

Trifásico (400V)

Bajo consumo

Tiempo bajo tensión: 70% - 100%

### BLOQUE DE TERMINALES

### HANDWHEEL

Volante manual.

El volante no gira cuando el actuador funciona.

### CLUCH

Sistema de palanca para embragar y desembragar el volante en caso de emergencia.

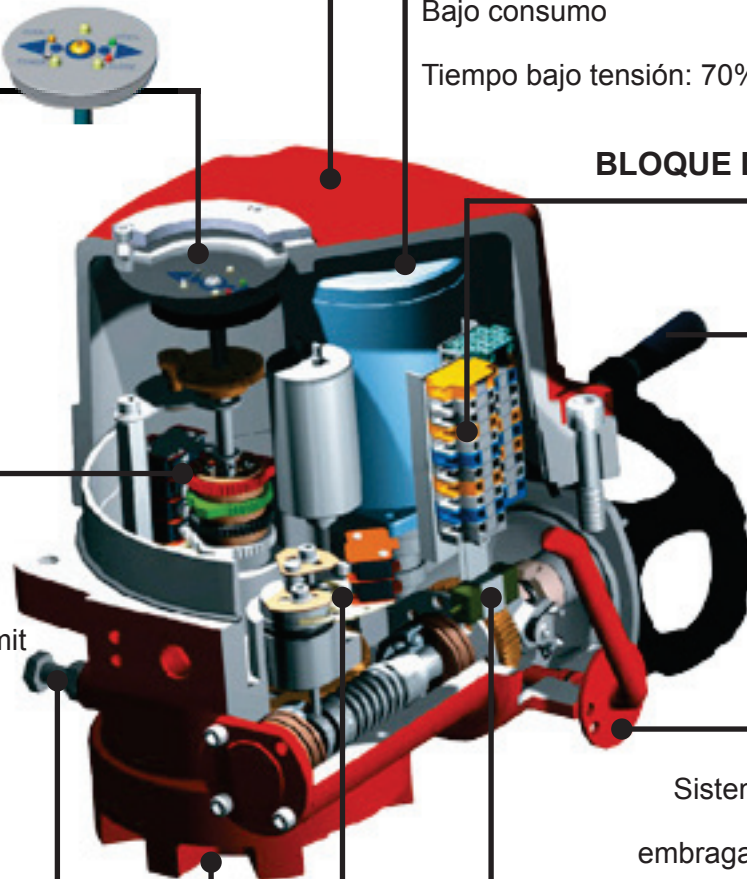


### RESISTÊNCIA CALEFACCIÓN

Estándar 10W



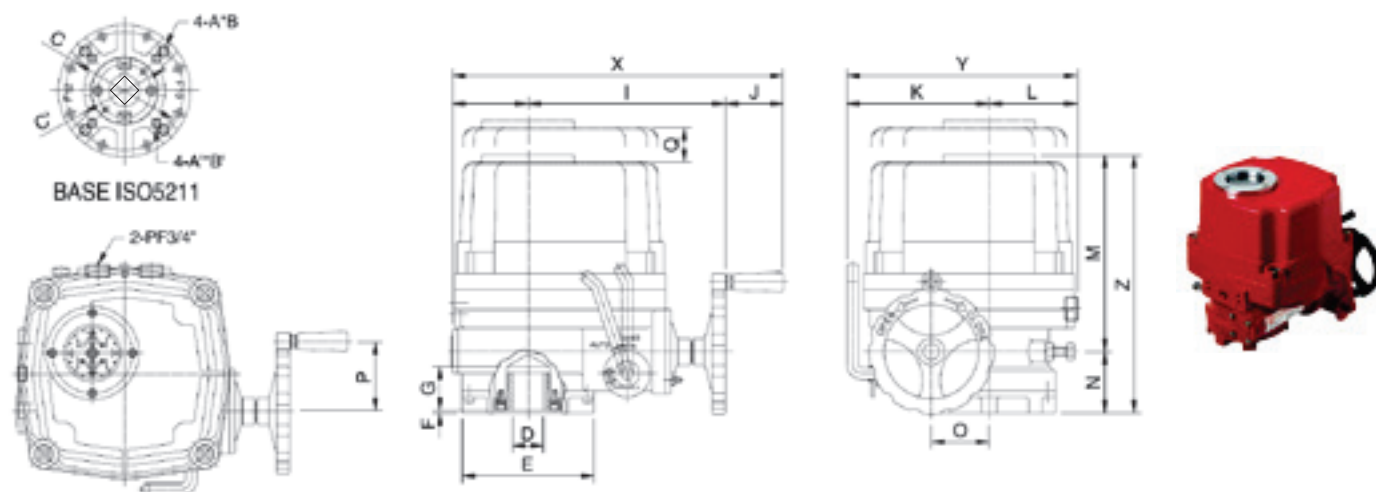
### LIMITADOR DE PAR



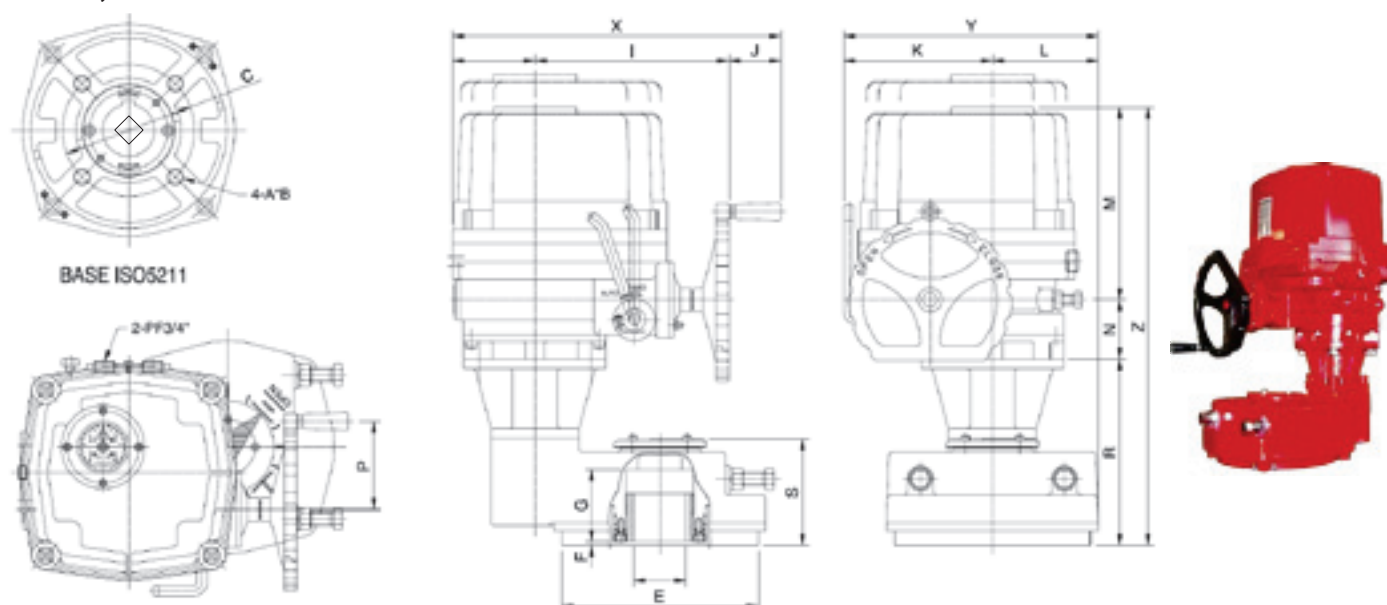
# EH ELECTRIC ACTUATORS

## EH DIMENSIONS

### EH-015 to EH-120



### EH-200, EH-300



| CODE   | DIMENSIONES (mm)       |                      |            |     |   |    |     |     |    |     |     |     |    |     |     |     |     |     |     |     |
|--------|------------------------|----------------------|------------|-----|---|----|-----|-----|----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|
|        | □<br>C (Base ISO-5211) | A<br>B               | D<br>(max) | E   | F | G  | H   | I   | J  | K   | M   | N   | O  | P   | Q   | R   | S   | X   | Y   | Z   |
| EH-015 | □17 / F07-F10          | M8 - M10<br>12 - 15  | 22         | 125 | 3 | 42 | 73  | 200 | 65 | 142 | 87  | 200 | 68 | 78  | 160 | -   | -   | 338 | 229 | 268 |
| EH-020 | □17 / F07-F10          | M8 - M10<br>12 - 15  | 22         | 125 | 3 | 42 | 73  | 200 | 65 | 142 | 87  | 200 | 68 | 78  | 160 | -   | -   | 338 | 229 | 268 |
| EH-030 | □27 / F10-F12          | M10 - M12<br>15 - 18 | 35         | 148 | 3 | 49 | 82  | 221 | 65 | 160 | 99  | 235 | 69 | 78  | 180 | -   | -   | 368 | 259 | 304 |
| EH-050 | □27 / F10-F12          | M10 - M12<br>15 - 18 | 35         | 148 | 3 | 49 | 82  | 221 | 65 | 160 | 99  | 235 | 69 | 78  | 180 | -   | -   | 368 | 259 | 304 |
| EH-060 | □27 / F10-F12          | M10 - M12<br>15 - 18 | 35         | 148 | 3 | 49 | 82  | 221 | 65 | 160 | 99  | 235 | 69 | 78  | 180 | -   | -   | 368 | 259 | 304 |
| EH-080 | □36 / F12-F14          | M12 - M16<br>18 - 24 | 45         | 178 | 3 | 57 | 103 | 242 | 65 | 186 | 111 | 256 | 74 | 110 | 210 | -   | -   | 410 | 297 | 330 |
| EH-120 | □36 / F12-F14          | M12 - M16<br>18 - 24 | 45         | 178 | 3 | 57 | 103 | 242 | 65 | 186 | 111 | 256 | 74 | 110 | 210 | -   | -   | 410 | 297 | 330 |
| EH-200 | □36 / F14-F16          | M16 - M20<br>24 - 30 | 65         | 245 | 5 | 90 | 103 | 242 | 65 | 186 | 133 | 256 | 74 | 110 | 210 | 233 | 133 | 410 | 319 | 563 |
| EH-300 | □46 / F14-F16          | M16 - M20<br>24 - 30 | 65         | 245 | 5 | 90 | 103 | 242 | 65 | 186 | 133 | 256 | 74 | 110 | 210 | 233 | 133 | 410 | 319 | 563 |

\* Option

# PNEUMATIC ACTUATORS

Pneumatic actuators with

torques up to 65.000Nm.

Broad range with pneumatic actuators:

Aluminium actuators,

Polyamide actuators,

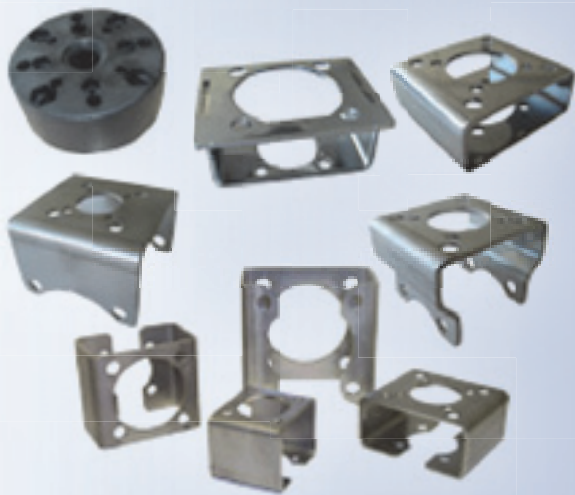
Stainless steel actuators

and Heavy Duty actuators

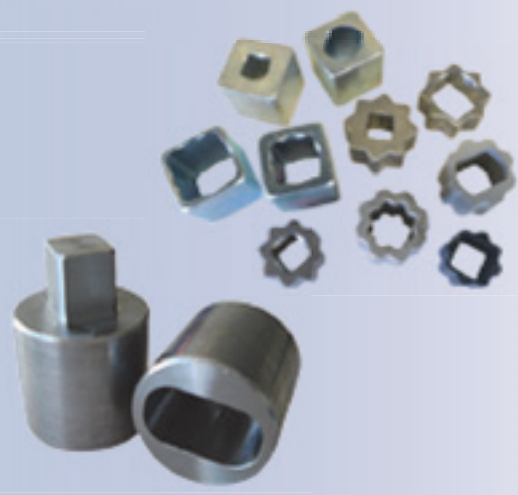


## MOUNTING KITS

- Wide range of brackets and drive adapters for any kind of valve.



BRACKETS



DRIVE ADAPTERS

## ELEMENTS OF REGULATION AND CONTROL

**PRISMA** offers a wide range of products for valve automation including pneumatic actuators, electric actuators and elements of regulation and control: solenoid valves, limit switch boxes, positioners, travel stops, seclutchable gearboxes, handwheels,...







**Prisma**



**GMCH**



**Prisma**

**MECÁNICA PRISMA, S.L.**  
C/Telègraf 1-7  
Pol. ind. Sota el Molí  
08160 - Montmeló  
(Barcelona) SPAIN

Tel.: (+34) 93 462 11 54  
Fax.: (+34) 93 462 12 74

[prisma@prisma.es](mailto:prisma@prisma.es)  
[www.prisma.es](http://www.prisma.es)



**По вопросам продаж и поддержки обращайтесь:**  
Екатеринбург (343)384-55-89, Казань (843)206-01-48, Краснодар (861)203-40-90,  
Москва (495)268-04-70, Санкт-Петербург (812)309-46-40  
Единый адрес: [pma@nt-rt.ru](mailto:pma@nt-rt.ru)  
[www.prisma.nt-rt.ru](http://www.prisma.nt-rt.ru)