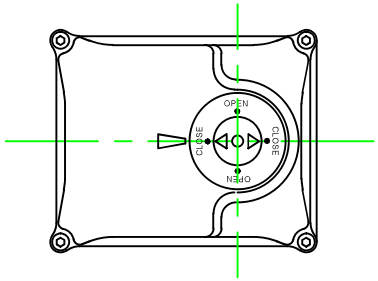
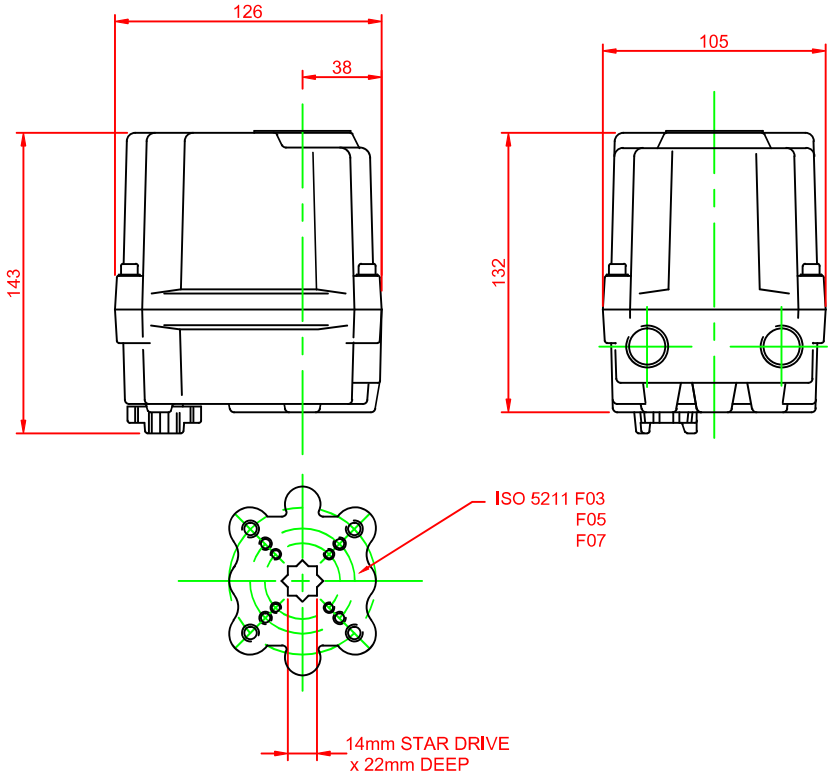
# DIMENSIONS AND TECHNICAL DETAILS — HQ-004/HQ006




## Description:

The HQ-004 & HQ-006 electric actuators are specially designed for quarter turn applications such as small ball, butterfly, plug valves and dampers.

Small, light and compact design with high ouput torques.
Various control options and a wide range of voltages are available to meet your specific requirements.

High quality electrical components and alloy gearing ensure reliability and extended life span.

The Actuator housing is Hard Anodised inside & out prior to painting to increase corrosion resistance.

## Standard Specification:

| | | |
|---|---|---|
| Enclosure | : | Weatherproof IP67 |
| Power Supply | : | 110/220v 50/60Hz, 24vAC/DC |
| Duty Cycle (On/Off Duty) | : | S2 35% |
| Motor | : | Reversible Motor |
| Limit Switches | : | 2 x SPDT, 250V AC 3A |
| Additional Limit Switches | : | 2 x SPDT, 250V AC 3A |
| Space Heater | : | 2W (110/220V AC) |
| Manual Override | : | Hexagon |
| Conduit Entries | : | 2 x M20 |
| Movement Angle | : | 320° ± 10° (0° to 320°) |
| Ambient Temperature | : | -20°C to 70°C |
| External Coating | : | Dry Powder, Polyester |
| Motor Class | : | F |

## Option Specification:

| | | |
|---|---|---|
| Enclosure | : | Waterproof IP68 |
| Conduit Entries | : | 2 x PG 13.5, 1/2" NPT |
| PIU * | : | Potentiometer Unit (1K - 10K) |
| PCU * | : | Proportional Control Unit (In/Out:0-10V,4-20mA) |
| CPT * | : | Current Position Transmitter (Output 4-20mA DC) |
| LCU-D * | : | Local Control Unit (Remote/Open/Stop/Close s/w) |
| EXA * | : | Explosion Proof Enclosure ATEX II2G EEXD IIB T4 |

* HQ-006 ONLY

## Performance

| TYPE (MODEL) | MAXIMUM OUTPUT TORQUE | OPERATING TIME 50/60Hz | RATED CURRENT (A) | | | | WEIGHT |
|---|---|---|---|---|---|---|---|
| | | | AC 1PH . 50/60Hz | | | DC | |
| | | 90° | 24V | 110V | 220V | 24V | Kg |
| HQ-004 | 40Nm | 14/12 SECS | 1.7 | 0.4/0.4 | 0.2/0.2 | 1.7 | 3 |
| HQ-006 | 60Nm | | | | | | |

DATA SHEET No. 3.01

ISSUE DATE APR 2017

ISSUE REF D

DOC: DS-01 1-9-2008

# Electric Quarter Turn Actuator
# HQ-005

## Features



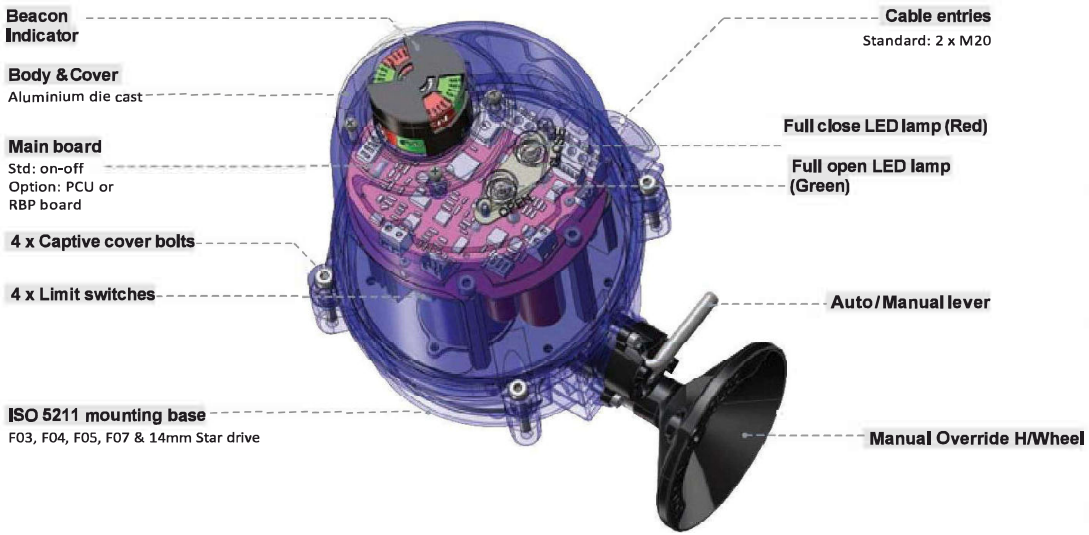
- Multi voltage design (Single phase & 24VAC/DC)
- High corrosion resistance, anodized & painted housing
- 4 off Limit switches
- Torque output: 50 Nm
- low current, long-life actuator due to unique brushless DC motor ensuring high reliability
- 2 off M20 cable entries
- IP67 weatherproof enclosure
- F03/F04/F05/F07 mounting base with 14mm Star drive
- Captive cover bolts
- Visual beacon indicator & LED lamps
- 70% Duty Rating (on/off only)
- Declutchable manual override handwheel
- Electronic torque limiter

## Description

HQ005 Electric actuator is specially designed for small quarter turn valves, such as ball, butterfly, plug valves, dampers and other similar usages. The actuator housing is made from high grade aluminum die cast which is robust and light weight. To provide high corrosion resistance, the housing is hard anodized inside & outside prior to being polyester coated. The actuator is fitted with manual override handwheel and declutch system for use when power is lost or in an emergency.

Options include 4-20mA/0-10VDC input/output modulating positioner card for all voltages and rechargeable battery backup for failsafe functionality. A set of high-quality lithium batteries are constantly trickle charged ensuring optimum performance anytime there is a power failure. The actuators can be easily set to fail closed or open and a charge status LED indicates battery health. All options are fitted within the standard housing.

## Design Construction




## Performance Data

| Model | Max. output torque | | Operating time 50/60 Hz | Mounting base | Motor Stall Current | Rated current (A) | | | Duty cycle IEC34-1 | | Weight |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 phase, 50/60 Hz | | 24 VAC/DC | | | |
| | kgf.m | NM | 90° | ISO 5211 | | 110 VAC | 220 VAC | | S4 | S2 | kg |
| HQ-005 | 5 | 50 | 13 sec | F03, F04, F05, F07 | 1 A | 0.2 A | 0.1 A | 0.8 A | 70 % | 50 % | 2.6 |

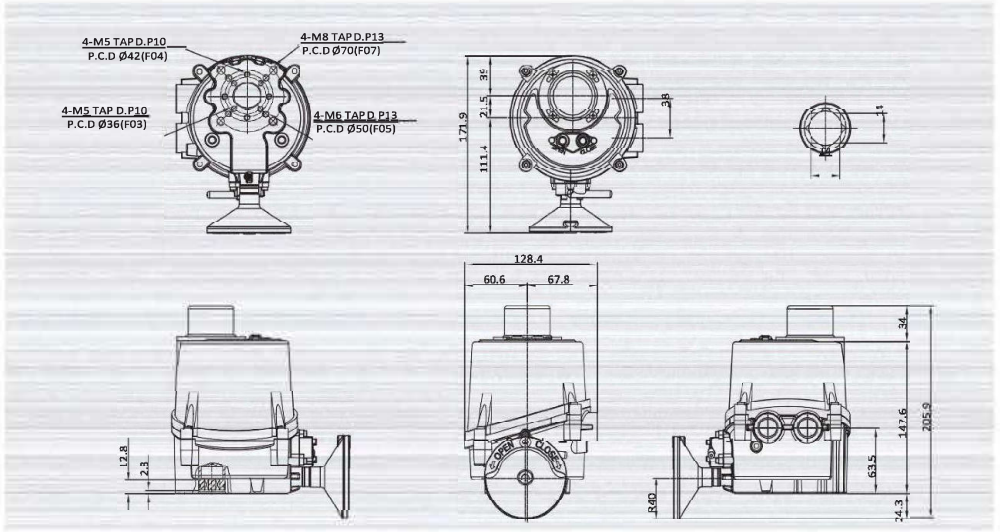
## Standard Specification

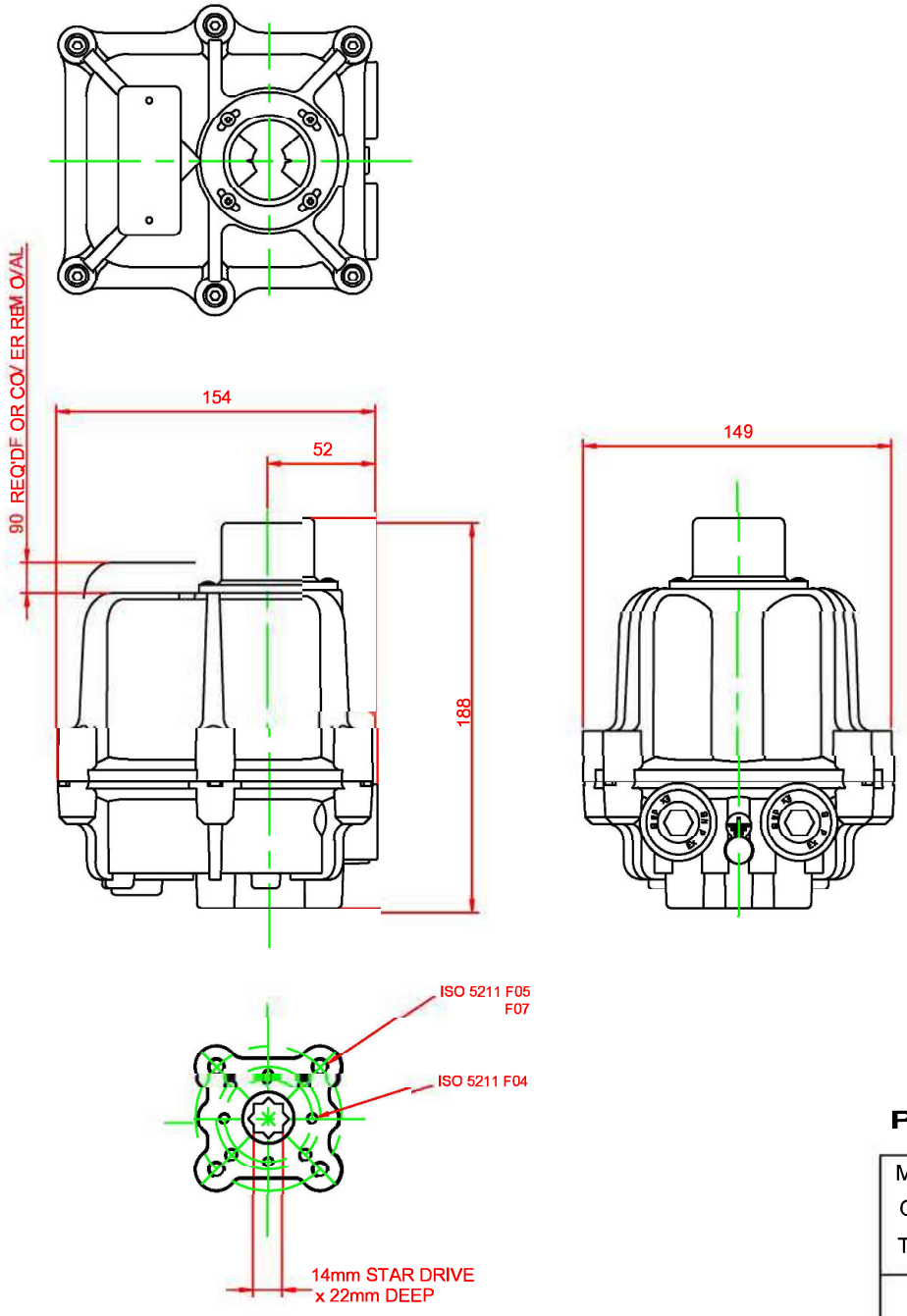
| | |
|---|---|
| Enclosure | Weatherproof enclosure IP67 |
| Power supply | 85 - 265 VAC 1 ph, 50/60 Hz \| 24 VAC/DC |
| Duty cycle | S4: 70% (average load of 80% Max. torque)<br>S2: 50% (average load of 80% Max. torque) |
| Motor | BLDC motor |
| Limit switches | 2 x open/close, SPDT, 250 V ac 10 A rating |
| Additional limit switches | 2 x open/close, SPDT, 250 V ac 10 A rating |
| Anti-condensation board | 2 W |
| Manual override | Manual Handwheel |
| Cable entries | 2 x M20 |
| Standard Rotation | 90° ± 10° |
| Ambient temperature | -20 to +70 °C |

## Optional Specification

| | |
|---|---|
| PIU | Potentiometer unit (1-10 kΩ) |
| PCU | Proportional control unit (in/out: 0-10V or 4-20 mA ) |
| RBP | Rechargeable Battery Backup |
| WTA | Watertight enclosure actuator (IP68 10 m 72 hr) |
| EXT | Extended Rotation (0 – 270°) |
| TS | Torque overload indicator via flashing LED module |

## Dimensional Drawing






## Description:

The HQ-006 Atex electric actuators are specially designed for quarter turn applications such as small ball, butterfly, plug valves and dampers fitted within a hazardous area.

Small and compact IP67 design with 60Nm ouput torque and a wide range of voltages.

High quality electrical components and alloy gearing ensure reliability and extended life span.

As standard, the actuator is fitted with 4 off limit switches, anti-condensation heater, high visibility beacon indicator and an allen key operated manual override.

The Actuator housing is Hard Anodised inside & out prior to painting to increase corrosion resistance.

## Standard Specification:

| | | |
|---|---|---|
| Enclosure | : | Atex Ex II 2 G Ex d IIB T4 Gb (Gas only) |
| Power Supply | : | 110/220v 50/60Hz, 24vAC/DC |
| Duty Cycle (On/Off Duty) | : | S2 35% |
| Motor | : | Reversible Motor |
| Limit Switches | : | 2 x SPDT, 250V AC 3A |
| Additional Limit Switches | : | 2 x SPDT, 250V AC 3A |
| Space Heater | : | 2W (110/220V AC) |
| Manual Override | : | Allen Key Operated |
| Conduit Entries | : | 2 x M20 |
| Movement Angle | : | 320° ± 10° (0° to 320°) |
| Ambient Temperature | : | -20°C to 60°C |
| External Coating | : | Dry Powder, Polyester |
| Motor Class | : | F |

## Performance

| MAXIMUM OUTPUT TORQUE | OPERATING TIME 50/60Hz | RATED CURRENT (A) | | | | WEIGHT |
|---|---|---|---|---|---|---|
| | | AC 1PH . 50/60Hz | | | DC | |
| | 90° | 24V | 110V | 220V | 24V | Kg |
| 60Nm | 14/12 SECS | 1.7 | 0.4/0.4 | 0.2/0.2 | 1.7 | 4.5 |

DIMENSIONS AND TECHNICAL DETAILS HQ-006 ATEX

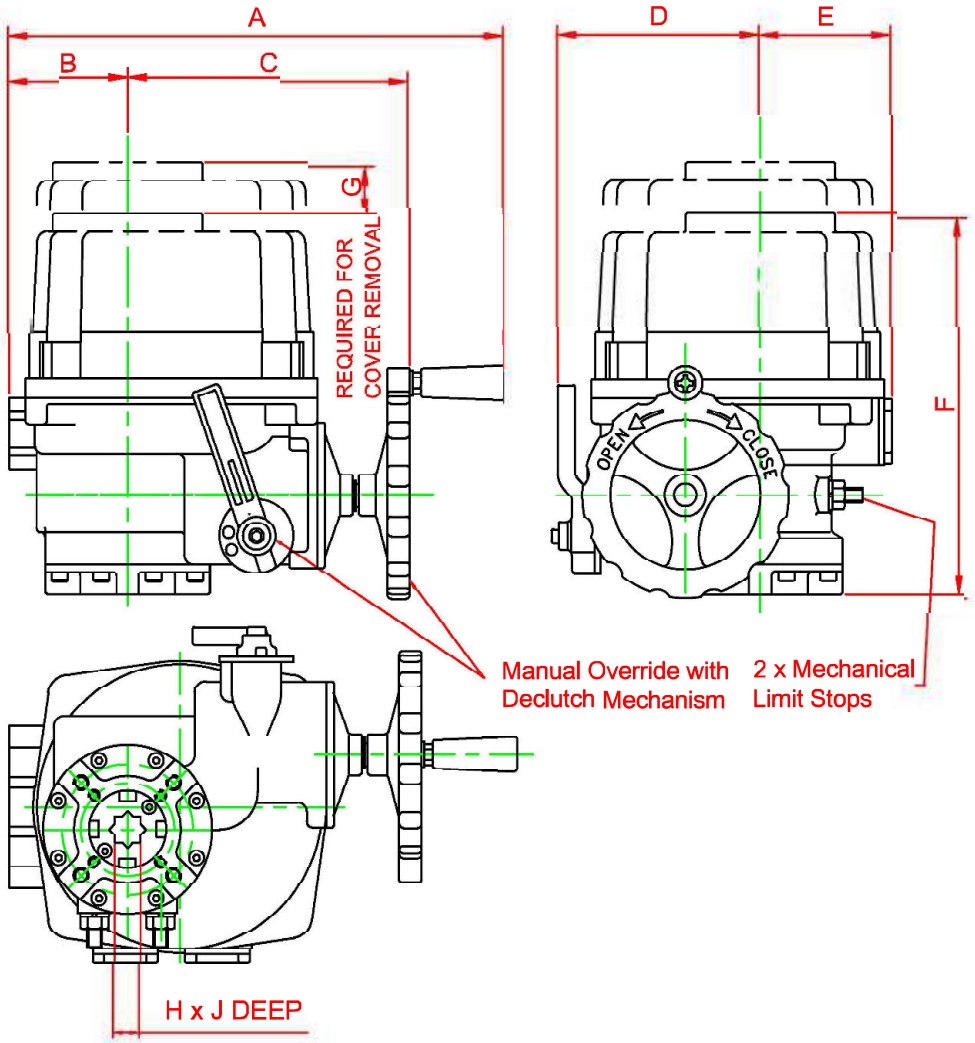
DATA SHEET No. 3.01.1

ISSUE DATE MAR 2025

ISSUE REF B

DOC: DS-01 1-9-2008

# DIMENSIONS AND TECHNICAL DETAILS HQ008 - HQ120




DRIVE BUSH CAN BE MACHINED TO SUIT MOST VALVE STEMS ( ON REQUEST)

## Dimensions:

| MODEL | BASE | A | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|---|
| HQ008 | F07 | 265 | 57 | 157 | 116 | 77 | 235 | 120 | 14 | 40 |
| HQ015 | F07/F10 | 348 | 83 | 200 | 142 | 93 | 268 | 160 | 17 | 45 |
| HQ020 | F07/F10 | 348 | 83 | 200 | 142 | 93 | 268 | 160 | 17 | 45 |
| HQ030 | F10/F12 | 378 | 92 | 221 | 160 | 105 | 290 | 180 | 22 | 52 |
| HQ050 | F10/F12 | 378 | 92 | 221 | 160 | 105 | 290 | 180 | 22 | 52 |
| HQ060 | F10/F12 | 378 | 92 | 221 | 160 | 105 | 290 | 180 | 27 | 52 |
| HQ060 24v | F12/F14 | 419 | 112 | 242 | 191 | 113 | 330 | 210 | 27 | 60 |
| HQ080 | F12/F14 | 419 | 112 | 242 | 191 | 113 | 330 | 210 | 27 | 60 |
| HQ120 | F12/F14 | 419 | 112 | 242 | 191 | 113 | 330 | 210 | 36 | 60 |

## Description:

The HQ008 to HQ120 electric actuators are specially designed for quarter turn applications such as ball, butterfly, plug valves and dampers.

With a wide range of output torques and control options the HQ series electric actuator can be configured to meet the demands of any site specification.

High quality electrical components,alloy gearing and a high pressure die cast aluminium housing ensure reliability and extended life span.

## Standard Specification:

| | | |
|---|---|---|
| Enclosure | : | Weatherproof IP67 (IP68 Option) |
| Power Supply | : | 110/220v 50/60Hz,24vAC/DC,380/440V 3Phase |
| Duty Cycle (On/Off Duty) | : | S4, 70% Standard, 100% for max 30 mins |
| Motor | : | Squirrel Caged Induction Motor |
| Limit Switches | : | 4 x SPDT, 250V AC 10A |
| Torque Switches | : | 2 x SPDT, 250vAC 10A (HQ015-HQ120) |
| Space Heater | : | 10W(110/220VAC) Anti Condensation |
| Conduit Entries | : | 2 x M25 (PG13.5 OR 1/2"NPT OPTION) |
| Travel Angle | : | 90° ± 5° |
| Ambient Temperature | : | -20°C to +70°C On/Off, -20° to +55° Modulating |
| External Coating | : | Hard Anodised before Dry Powder Polyester Coating |

## Option Specification:

| | | |
|---|---|---|
| PIU | : | Potentiometer Unit (1K - 10K) |
| PCU | : | Proportional Control Unit (In/Out: 0-10VDC,4-20mA) |
| CPT | : | Current Position Transmitter (Output 4-20mA) |
| LCU-B | : | Local Control Unit (Remote/Open/Stop/Close switch) |
| EXA | : | Explosion Proof: ATEX II 2GD Eexd IIB T4 |
| | | Dust Ignition Proof: Ex tb IIIC T135°C |
| FPA | : | Fire Proof Actuator. 250°C/150 min |
| RBP | : | Rechargeable Battery Back up for Fail Safe |
| MRCT | : | Speed Control Card |

## Performance:

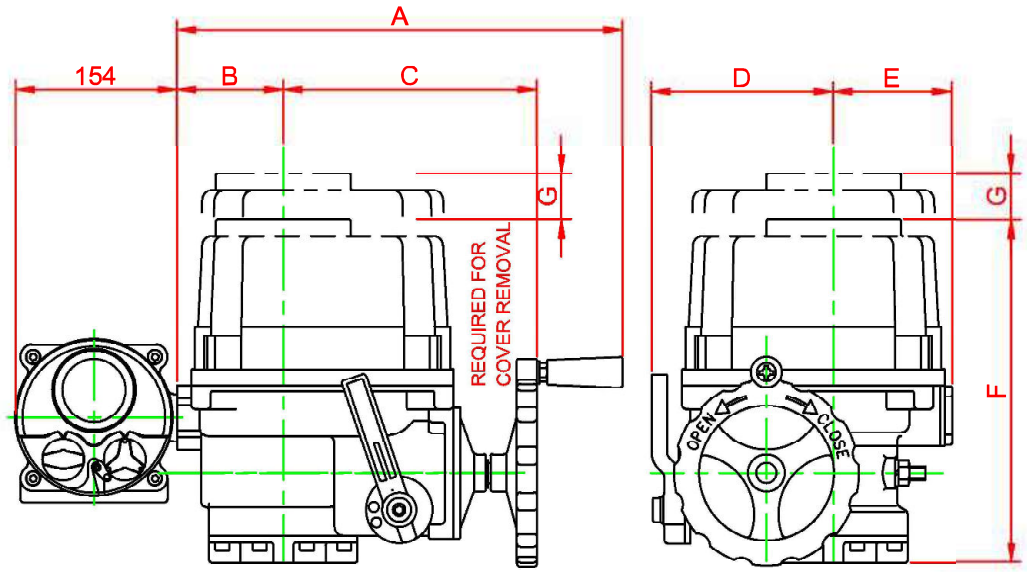
| MODEL | | HQ008 | HQ015 | HQ020 | HQ030 | HQ050 | HQ060 | HQ080 | HQ120 |
|---|---|---|---|---|---|---|---|---|---|
| TORQUE (Nm) | | 80 | 150 | 200 | 300 | 500 | 600 | 800 | 1200 |
| SPEED 90° 50/60Hz | | 16/13 | 25/21 | 25/21 | 31/26 | 31/26 | 31/26 | 34/28 | 34/28 |
| CURRENT (A) MAX | 110/1/50 | 1.2 | 2.1 | 2.2 | 2.4 | 4.2 | 4.4 | 5.7 | 6.9 |
| | 220/1/50 | 0.6 | 1 | 1.1 | 1.3 | 1.9 | 2 | 2.8 | 3 |
| | 380/3/50 | 0.2 | 0.6 | 0.7 | 0.6 | 0.9 | 1 | 1.3 | 1.5 |
| | 24V AC/DC | 3.7 | 5.3 | 6.5 | 8.6 | - | 7.0 | 8.6 | 8.6 |
| WEIGHT (Kg) | | 6 | 15 | 15 | 19 | 20 | 20 | 26 | 26 |
| MAX. SQ. DRIVE | | 17 | 19 | 19 | 30 | 30 | 40 | 40 | 40 |

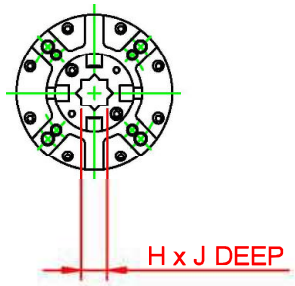
DATASHEET No. 3.02

ISSUE DATE AUG 2025

ISSUE REF J

DO C:D S01 1-92008




## Description:

The HQ008 to HQ120 electric actuators with the addition of an integral failsafe battery backup module. The actuators can be configured to fail close or fail open on loss of power. The power pack has sufficient reserve to allow up to five operations within one hour of the power loss. The integral battery module also includes controls for local operation with a padlockable Remote/Local selector, the front panel incorporates LED indicators for the battery charge status and valve close/open position.

## Standard Specification:

| | | |
|---|---|---|
| Enclosure | : | Weatherproof IP67 (IP68 Option) |
| Power Supply | : | 110/220v 50/60Hz |
| Duty Cycle (On/Off Duty) | : | S4, 70% Standard, 100% for max 30 mins |
| Motor | : | Squirrel Caged Induction Motor |
| Limit Switches | : | 4 x SPDT, 250V AC 10A |
| Torque Switches | : | 2 x SPDT, 250vAC 10A (HQ015-HQ030) |
| Space Heater | : | 10W(110/220VAC) Anti Condensation |
| Conduit Entries | : | 2 x M25 (PG13.5 OR 1/2"NPT OPTION) |
| Travel Angle | : | 90° ± 5° |
| Ambient Temperature | : | -20°C to +40°C |
| External Coating | : | Hard Anodised before Dry Powder Polyester Coating |

## Option Specification:

| | | |
|---|---|---|
| PIU | : | Potentiometer Unit (1K - 10K) (HQ015 upward) |
| PCU | : | Proportional Control Unit (In/Out: 0-10VDC,4-20mA) (HQ015 upward) |
| CPT | : | Current Position Transmitter (Output 4-20mA) (HQ015 upward) |

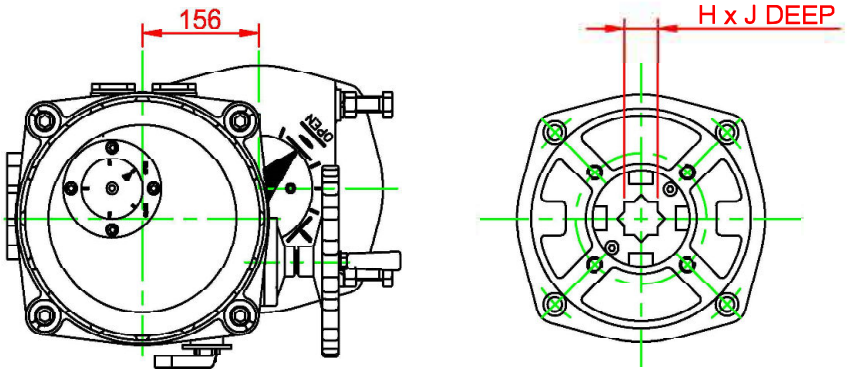
## Dimensions:

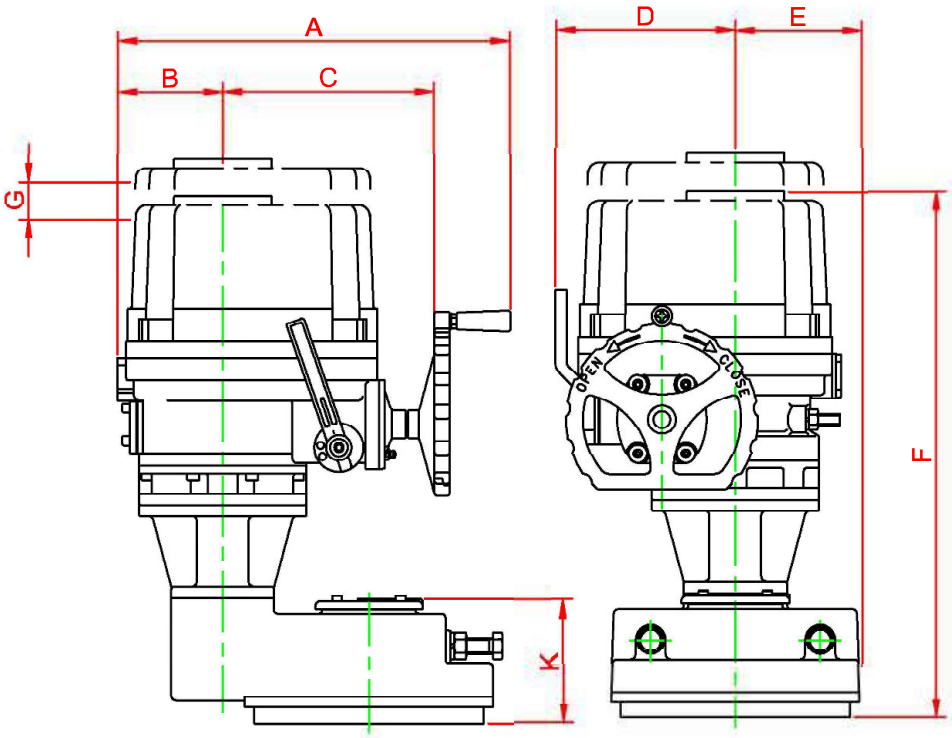
| MODEL | BASE | A | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|---|
| HQ008 | F07 | 265 | 57 | 157 | 116 | 77 | 235 | 120 | 14 | 40 |
| HQ015 | F07/F10 | 348 | 83 | 200 | 142 | 93 | 268 | 160 | 17 | 45 |
| HQ020 | F07/F10 | 348 | 83 | 200 | 142 | 93 | 268 | 160 | 17 | 45 |
| HQ030 | F10/F12 | 378 | 92 | 221 | 160 | 105 | 290 | 180 | 22 | 52 |
| HQ060 | F12/F14 | 378 | 92 | 242 | 160 | 105 | 330 | 210 | 27 | 60 |
| HQ080 | F12/F14 | 419 | 112 | 242 | 191 | 113 | 330 | 210 | 27 | 60 |
| HQ120 | F12/F14 | 419 | 112 | 242 | 191 | 113 | 330 | 210 | 36 | 60 |

DRIVE BUSHES CAN BE MACHINED TO SUIT MOST VALVE STEMS ( ON REQUEST)

## Performance:

| MODEL | HQ008 | HQ015 | HQ020 | HQ030 | HQ060 | HQ080 | HQ120 |
|---|---|---|---|---|---|---|---|
| TORQUE (Nm) | 80 | 150 | 200 | 300 | 600 | 800 | 1200 |
| SPEED 90° 50/60Hz | 16/13 | 25/21 | 25/21 | 31/26 | 31/26 | 34/28 | 34/28 |
| CURRENT 110/1/50 | 1.2 | 2.1 | 2.2 | 2.4 | 4.4 | 5.7 | 6.9 |
| (A) MAX 220/1/50 | 0.6 | 1 | 1.1 | 1.3 | 2 | 2.8 | 3 |
| WEIGHT (Kg) | 14 | 21 | 21 | 25 | 32 | 38 | 38 |
| MAX. SQ. DRIVE | 17 | 19 | 19 | 30 | 40 | 40 | 40 |




## Description:

The HQ200 and HQ300 electric actuators are specially designed for quarter turn applications such as ball, butterfly, plug valves and dampers.
With a wide range of control options the HQ series electric actuator can be configured to meet the demands of any site specification.
High quality electrical components,alloy gearing and a high pressure die cast aluminium housing ensure reliability and extended life span.

## Standard Specification:

| | | |
|---|---|---|
| Enclosure | : | Weatherproof IP67 (IP68 Option) |
| Power Supply | : | 110/220v 50/60Hz,380/440V 3Phase |
| Duty Cycle (On/Off Duty) | : | S2, 20 - 50% Max 10 - 30 Min |
| Motor | : | Squirrel Caged Induction Motor |
| Limit Switches | : | 4 x SPDT, 250V AC 10A |
| Torque Switches | : | 2 x SPDT, 250vAC 10A |
| Space Heater | : | 20W(110/220VAC) Anti Condensation |
| Conduit Entries | : | 2 x M25 (PG13.5 OR 1/2"NPT OPTION) |
| Travel Angle | : | 90° ± 5° |
| Ambient Temperature | : | -20°C to +70°C On/Off, -20° to +55° Modulating |
| External Coating | : | Hard Anodised before Dry Powder Polyester Coating |
| Manual Override | : | Handwheel with Declutch Mechanism |

## Option Specification:

| | | |
|---|---|---|
| PIU | : | Potentiometer Unit (1K - 10K) |
| PCU | : | Proportional Control Unit (In/Out: 0-10VDC,4-20mA) |
| CPT | : | Current Position Transmitter (Output 4-20mA) |
| LCU-B | : | Local Control Unit (Remote/Open/Stop/Close switch) |
| EXA | : | Explosion Proof Enclosure. ATEX II 2G Eexd IIB T4 |
| FPA | : | Fire Proof Actuator. 250°C/150 min |
| MRCT | : | Speed Control Card |

## Dimensions:

| MODEL | BASE | A | B | C | D | E | F | G | H ** | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HQ200 | F14*/F16 | 419 | 112 | 242 | 191 | 133 | 563 | 210 | 36 | 95 | 133 |
| HQ300 | F14*/F16 | 419 | 112 | 242 | 191 | 133 | 563 | 210 | 46 | 95 | 133 |

* ON REQUEST ** CAN BE MACHINED TO SUIT MOST VALVE STEMS (ON REQUEST)

## Performance:

| MODEL | | HQ200 | HQ300 |
|---|---|---|---|
| TORQUE (Nm) | | 2000 | 3000 |
| SPEED 90° 50/60Hz | | 112/93 | 112/93 |
| CURRENT (A) MAX | 110/1/50 | 5.7 | 6.9 |
| | 220/1/50 | 3.1 | 3 |
| | 380/3/50 | 1.7 | 1.8 |
| WEIGHT (Kg) | | 72 | 72 |
| MAX. SQ. DRIVE | | 55 | 55 |

DIMENSIONS AND TECHNICAL DETAILS HQ200 - HQ300

DATA SHEET No. 3.03

ISSUE DATE AUG 2025

ISSUE REF E

DOC: DS-01 1-9-2008