

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

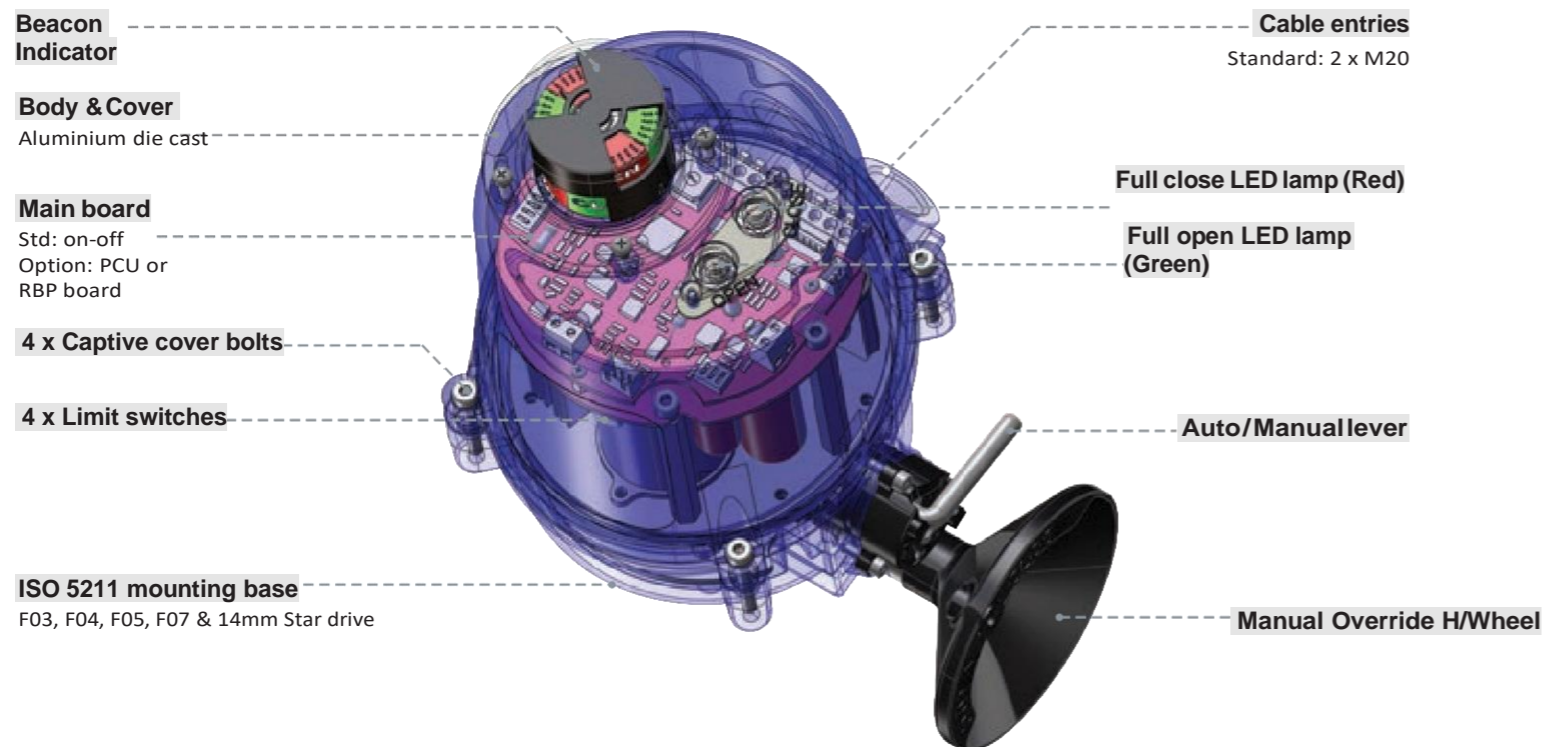


Description

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 kg
	kgf.m	NM				1 phase, 50/60 Hz		24 VAC/DC	S4	S2	
			110 VAC	220 VAC							
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) 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

