

Electric Quarter Turn Actuator HQ-005



ACTUATED SOLUTIONS LIMITED
Valve Automation Specialists

Features

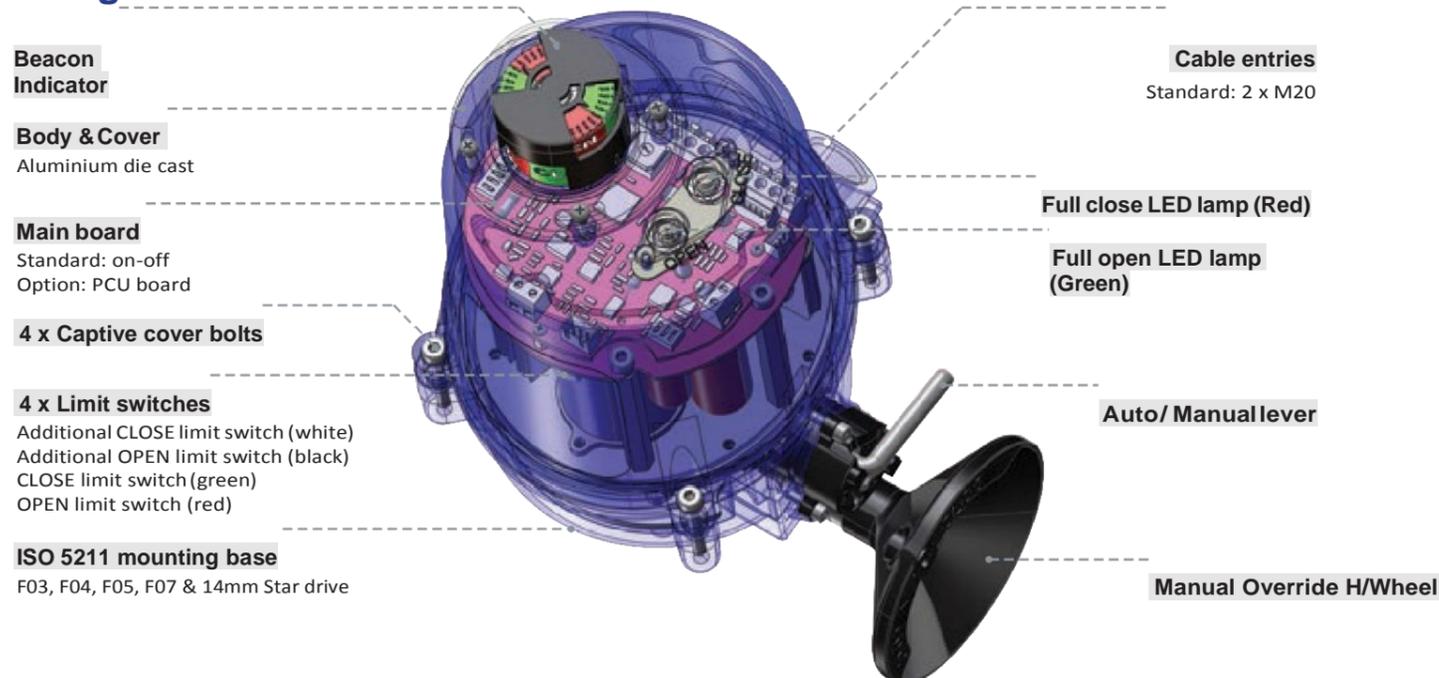
- Multi voltage design (Single phase & 24V)
- High corrosion resistance, anodized & painted housing
- 4 off Limit switches
- Torque output: 50 Nm
- low current, long-life actuator due to unique brushless DC motor ensuring high reliability
- 2 off M20 cable entries
- IP67 weatherproof enclosure
- F03/F04/F05/FO7 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 polyester painting on the external surface. Rugged design with tight O-ring system means the HQ-005 is rated to IP67 as standard. The actuator is fitted with manual override handwheel and declutch system for use when power is lost or in an emergency. Available options include modulating positioner card for all voltages (single phase & 24VAC/DC) and torque overload indication system via flashing LED lamps

Design Construction



Performance Data

Model	Max. output torque		Operating time 50/60 Hz	Mounting base	Motor stop electric 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	0.1 A	0.05 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	Standard: 2 x M20
Movement angle	320 ± 10° (0 - 330°)
Ambient temperature	-20 to +80 °C

Optional Specification

PIU	Potentiometer unit (1-10 kΩ)
PCU	Proportional control unit (in/out: 0-10V or 4-20 mA)
*CPT	Current position transmitter (output: 4-20 mA dc)
WTA	Watertight enclosure actuator (IP68 10 m 72 hr)
*PRO1	Profibus DP interface module (single & redundancy)
*MOD1	Modbus module (single & redundancy)
TS	Torque overload indicator via flashing LED module

*Note: These options are currently under development.

Dimensional Drawing

