

# QT1000

# QUARTER-TURN ACTUATOR

**COMPACT QUALITY**

**QT1000** is suitable for a wide range of small to medium sized butterfly and ball valves with an operating torque of 250-1000 Nm.

Excellent control options, low cost of installation and operation and no need for maintenance make **ELTORQUE** actuators the obvious choice.

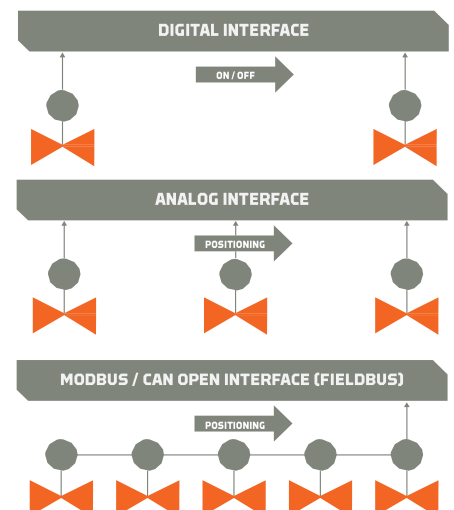


## FEATURES:

- Max torque: 1000 Nm
- Valve range: DN250-DN400
- Absolute position feedback (true feedback)
- Removable cover for hand wheel protection
- IP68 enclosure
- Configurable torque, closing time and position
- Type approved
- Easy commissioning
- Savings on installation
- Compact design
- Maintenance free actuator
- Full valve control with positioning on IAS
- Low power consumption
- Manual emergency override as standard
- High efficiency, greensolution

## FEATURES:

- Outdoor
- EX
- Failsafe, providing an UPS back-up battery



# QT1000

## STANDARD SPECIFICATIONS

QT1000 STANDARD	
MAX-MIN TORQUE <sup>1</sup>	250-1000 Nm
MIN-MAX CLOSING TIME 0-100% / 0-90 °	63 - 127 sec
VALVE SPINDLE ADAPTER	SQ27,45 mm depth
VALVE FLANGE and RELATED TORQUE (According to ISO5211) 2001E	F10,F12
VALVE APPLICATIONS	Butterfly or ball valves with part-turn operation. Examples butterfly valves: DN250-DN400
PHYSICAL PROPERTIES	
WEIGHT	21 kg
DIMENSIONS H/W/D	333/200/239 mm
HOUSING	IP68 (10m 72hr) - Corrosion protected aluminium and steel enclosure
COLOR	Black
OPERATING CONDITIONS	-25 - 55°C Not designed for use on open deck of ships, outdoor or exposure to corrosive chemicals
TEMPERATURE PROTECTION	Motor current is switched off in case of over-heating. Stator coils serve as heating elements in case of low temperatures.
ELECTRICAL AND CONTROL PROPERTIES	
POWER SUPPLY	110-240 VAC, 50/60 Hz, Max 240VA
CABLE GLANDS	Up to five M20 glands allows serial connection of power supply and field-bus wiring. Threaded holes in actuator capsule. Use IP68 glands for all wires, EMC type for field-bus wiring.
INTERFACE OPTIONS	<b>Digital:</b> 2 DI (Open - Close) & 3 DO (Open - Closed - Alarm) <b>Analogue:</b> AI (Set position), AO (Feedback position) & DO (Alarm). 4-20 mA AI/AO signal. <b>Modbus Field-bus:</b> Max 31 nodes per network (Except for Gen 2.5 QT series). <b>CANopen Field-bus:</b> Max 127 nodes per network. Field-bus allows positioning and other extended control of actuator. Number of nodes will be limited by control system.
POSITION SENSOR	Resolution 0,39%/ 0,35° & range 360° Absolute position sensor, provides correct feedback even after a power failure.
CONFIGURATION	USB connection to PC with Eltorque Manager & E3C software
CONFIGURABLE PARAMETERS	Open and Closed positions. Actuator speed, torque and valve position regions.
TEMPERATURE PROTECTION	Motor current is switched off in case of over-heating. Stepper or claw motor coils serve as heating elements in case of low temperatures.
EMERGENCY AND SAFETY	
MANUAL OPERATION	Standard feature using fixed hand-wheel. Mechanical valve position indicator.
COVER OF HAND WHEEL	Can be removed and refitted without tools. Protects mechanism against mechanical damage and foreign objects.
NUMBER OF TURNS	103 turns for 0-100% / 0-90° valve operation
CERTIFICATIONS <sup>2</sup>	CE-marked Type approved by DNV, GL, CCS, ABS (PRODUCT DESIGN ASSESSMENT - PDA), BV and LR.

<sup>1</sup> Configurable using Eltorque Manager 3 PC & E3C software.

<sup>2</sup> Adapted flange bracket and spindle connection is required and must be ordered with the actuator.

<sup>3</sup> Weight and Dimensions do not include valve adapter

# QT1000 OPTIONS

## DEVIATIONS FROM STANDARD SPECIFICATIONS

QT1000 OUTDOOR & OPEN DECK	
COLOUR	Silver - reflective paint that prevents heat buildup from sunlight exposure.
OPERATING CONDITIONS	-25 - 70 °C
QT1000 EX	
COLOUR	Silver - reflective paint that prevents heat buildup from sunlight exposure.
OPERATING CONDITIONS	-25 - 70 °C
CERTIFICATIONS	IECEX - Certificate of conformity
EX PROTECTION	1) Temperature class T4-maximum surface temperature 135°C in given ambient temperature 2) Gas group IIC 3) Equipment protection level Gb-zone 1