

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the LR Type Approval System.

This certificate is issued to:

PRODUCER ELTORQUE AS

PLACE OF PRODUCTION Lyng Industrial Park
Vanvikan
N-7125 Norway

DESCRIPTION Electrical Actuator for quarter- turn valves and electronic controller allowing on-off or modulating operations. The controller accepts signals either of:
-Digital for on/off operation;
-Analogue 4-20mA for set position
-FieldBus: Modbus or CanOpen for. On/Off and position operations

TYPE QT250 with controllers QT250Digital 1.0 and QT250Digital 2.0
QT800 with controllers QT800Digital 1.0 and QT800Digital 2.0
QT2500 with controller QT2500Digital 1.0

Model	QT250 1.0/ 2.0	QT800 1.0/ 2.0	QT2500 1.0
Power Supply	230VAC 50/60 Hz	230VAC 50/60Hz	110-240 VAC 50/60Hz
Torque	50-250 Nm	250-800Nm	800- 2500Nm

APPLICATION Marine, offshore and industrial use in environmental categories ENV1, ENV2, ENV3 and ENV5 as defined in LR TA Test Specification No.1:2002 where the test specification is satisfactory for the intended operation.

ADDITIONAL TESTS Enclosure Protection to IP 68

Certificate No. 12/70030

Issue Date 06 December 2012

Expiry Date 05 December 2017

Sheet 1 of 2



Poul Erik Hansen

Copenhagen Design Support Office

Lloyd's Register EMEA
Strandvejen 104A, DK-2900 Hellerup

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STANDARD

Manufacturer's specification
EN60529

OTHER CONDITIONS

Valves installed in LR Classed vessels shall comply with the Ships Rules Part 5, Chapters 13 & 15 regarding requirements for local manual operation, direct status indication locally and remotely, failsafe position and fire properties.
Enclosure protection of electrical equipment shall be suitable for the environment in which it is located.

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The Design Appraisal Document No TA 12/70030 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 12/70030
Issue Date 06 December 2012
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Sheet 2 of 2


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Marine Design Appraisal Document

Lloyd's Register EMEA
Copenhagen Design Support Office
Strandvejen 104A- DK-2900 Hellerup
phone: +45 3296 1800
facsimile: +45 3296 1881

Date
21 November 2012

Please quote this reference number on all future communications
TA/I099198/1101316/PEH

THE LR TYPE APPROVAL SYSTEM, 2002
Issued to: ELTORQUE AS Norway
for: Electrical Actuators, types QT250, QT800 and QT2500
TYPE APPROVAL CERTIFICATE No. 12/70030


The undernoted document(s) have been reviewed for compliance with the requirements of the LR Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Request form	25.08.2011
Eltorque Product Data QT SERIES QT250 Quarter-Turn Actuator	-
Eltorque Product Data QT SERIES QT800 Quarter-Turn Actuator	-
Eltorque Product Data QT SERIES QT2500 Quarter-Turn Actuator	-
Nemko Cert No 900723 NS-EN ISO 9001:2008	22.01.2009

TEST REPORTS

DNV Tech Report no. 2005-3296 Rev 01 Lyng Motor AS - Vibration and IP Testing of QT800	24.06.2006
DNV Tech Report no. 2005-3200 Rev 01 Lyng Motor AS - Environmental Testing of Electr. Actuator, QT250	06.06.2005
NEMKO Report no. 10122.03 Eltorque AS – IACS – E10 for QT2500	10.11.2010
NEMKO Test Report No. 43316 – Electromagnetic Compability - Actuator QT250 Digital 1.0 and QT250 CanOpen 1.0 Supply 230VAC- 0.3A	
NEMKO Order 171756 Statement of Conformity Ingress Protection - IPX8	28.03.2011
NEMKO Statement no. 175904 Statement of Conformity High Voltage Tests of "QT250 ver 1.0/ 2.0/ 2.1 and QT800 ver 1.0/ 2.0/ 2.1	12.05.2011
NEMKO Test Report no. 43316 "EMC QT250 digital 1.0 & QT250 CanOpen 1.0"	30.06.2005


Poul Erik Hansen
Senior Surveyor, Electrical Section.

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.

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