



Keeping the World Flowing  
for Future Generations



## IQTN Range

Marine Navy Applications

In a world where operability and reliability are of paramount importance, IQTN range actuators build on the success of 3rd generation IQT range electric actuators.

Specifically designed to meet the needs of modern warship design, IQTN range actuator have been independently tested for shock tolerance and meet the requirements of most worldwide surface ship applications.

The IQTN is a low cost, reliable, virtually maintenance free, lightweight 'fit and forget' solution which offers control options for integration with shipboard critical systems.

Rotork Insight 2 PC software, when used in conjunction with the Rotork Bluetooth® Setting Tool *Pro*, allows all IQ set-up configuration and datalogger information to be transferred to a PC, reviewed analysed and reconfigured. Reconfigured files can then be uploaded to the actuator.

### **IQTN offers the following powerful features**

- 3-phase and 1-phase power supplies
- Modulating duty option
- Part-turn and full-turn outputs
- Shock tested to MIL-S-901D
- Up to two option cards for additional control and monitoring
- Environmental protection to IP68 (20 m for 10 days)

### **Setting Tool *Pro* features**

- Stores downloaded data for analysis with Rotork Insight 2 PC software
- Fast, easy configuration of multiple actuators on-board using transferable settings feature
- Intrinsically safe robust construction

### Performance Data

Actuator	IQTFN50	IQTFN100	IQTN125 IQTFN125 IQTMN125	IQTN250 IQTFN250 IQTMN250	IQTN500 IQTFN500 IQTMN500	IQTN1000 IQTFN1000 IQTMN1000	IQTN2000 IQTFN2000 IQTMN2000
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Seating Torque	Torque		Nm	lbf.ft			
	50	100	125	250	500	1,000	2,000
37	74	92	185	369	738	1,476	

### Modulating Torque - IQTMN and IQTFN only

25	50	63	125	250	500	1,000
19	37	46	93	185	369	738

### Operating Time (seconds) - IQTN and IQTMN only

90° Min	-	-	5	8	15	30	60
90° Max	-	-	20	32	60	120	240

### Operating Speed - IQTFN only

rpm	2.5 - 10	1.5 - 6	0.75 - 3	0.5 - 1.88	0.25 - 1	0.125 - 0.5	0.125 - 0.5
max turns, min rpm	22	22	12	7.5	3.75	1.88	1.88
max turns, max rpm	22	22	22	22	15	8	4

IQTN/IQTMN/IQTFN actuator output torque is configurable to 40 - 100% of seating torque.  
Operating speed of IQTN/IQTMN/IQTFN 24 VDC actuators will vary with load.

### Mechanical Data

#### Approximate weight

kg	22	22	22	22	22	37	37
lbs	49	49	49	49	49	82	82

#### Handwheel details

Turns for 90°	26	26	88	88	88	83	83
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#### Flange

ISO5211	F10	F10	F10	F10	F10	F14	F14
MSS SP-101	FA10	FA10	FA10	FA10	FA10	FA14	FA14

#### Type B Coupling - Torque only

Bore & key max mm	42	42	42	42	42	60	60
Bore & key max in	1.65	1.65	1.65	1.65	1.65	2.36	2.36
Square AF max mm	32	32	32	32	32	41	41
Square AF max in	1.25	1.25	1.25	1.25	1.25	1.62	1.62
Shaft height max mm	45	45	45	45	45	65	65
Shaft height max in	1.77	1.77	1.77	1.77	1.77	2.56	2.56

A full listing of the Rotork sales and service network is available on our website.

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