

# NEUMAX®



**QT SERIES QUARTER TURN  
ELECTRIC ACTUATOR**

# ELECTRIC ACTUATOR

## NEUMAX QT SERIES QUARTER-TURN TRANSMISSION

### APPLICATIONS

NEUMAX "QT" series electric actuators are designed & engineered for robust, reliable and for high performance duty onto quarter turn valves.

The unique reliable motor module, adjustable cam plate limit switch, self locking mechanism, precision gearing system and ball bearings, the auto declutching mechanism, light force load on the handwheel, the adaptor drive bushing and bottom ISO 5211 mounting dimension, are added advantages against other make in the field of valve automation. CE approved.

It is suitable for used in heating, ventilation & air-conditioning, water treatment & water-works, power generation, petrochemical plants, oil storage facilities, chemical plants, effluent treatment works, pulp & paper mills, ship building industry, etc.



### SPECIFICATIONS

Housing & Cover	Aluminium, Anodized	Manual Override	HAND / AUTO Declutching Mechanism
Enclosure	Watertight IP67, Nema 4 and 6	Self Locking	Provide by means of Worm Gearing
Ambient Temperature	-30°C ... 70°C	End Stopper	External Adjustable Screws
Power Supply (60Hz/50Hz)	110 / 220VAC, 1 Phase 380 / 415VAC, 3 Phase	Space Heater	20W for Anti-Condensation
Control Power	110 / 220VAC, 1 Phase, 60/50Hz	Conduit Entries	Two G3/4"
Torque Switches	2XSPDT for QT15 and above	Lubrication	MoS2 Lithium Base Grease
Limit Switches	2XSPDT 15A	Materials	Steel, Aluminium Alloy, Aluminium Bronze
Stall Protection	Build-in Thermal Protection	External Coating	Dry Power, Epoxy-Polyester Munsell No. FJ-002
Travel Angle	90° ± 5°		
Indicator	Continuous Position Indicator		

Note : Other power supply available upon request.

### PERFORMANCE

(mm)

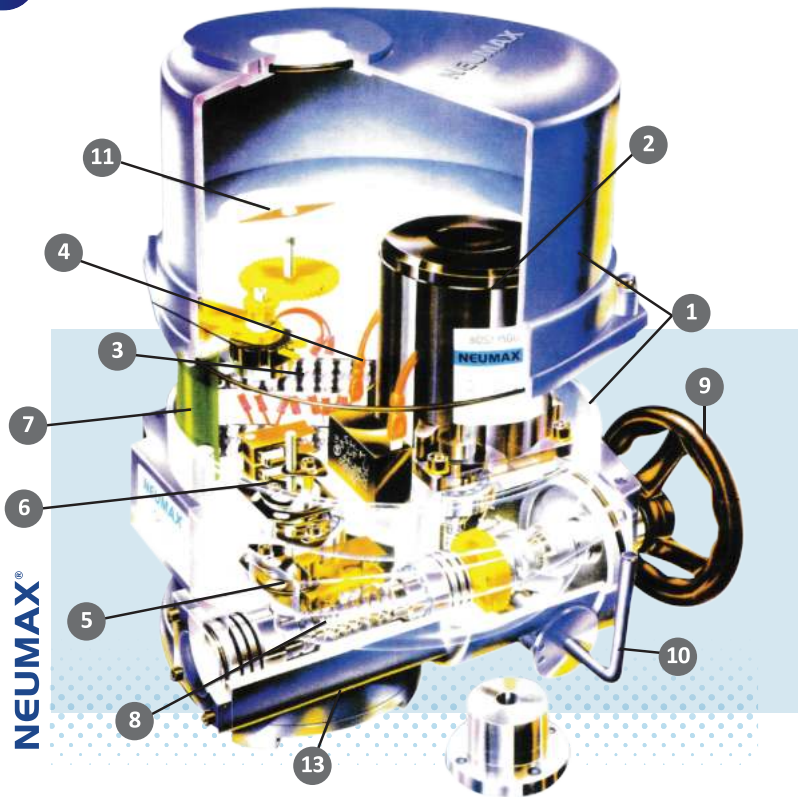
Type	Flange ISO5211	Max Output Torque (N*m)	Operating Time 60/50Hz (90 Deg.)	Max Stem Dia. (mm)	Motor 30 min Class F (W)	Rated Current (mA)				Number of Handle Turn	Weight (Kg)
						1 Phase		3 Phase			
						110V	220V	380V	415V		
QT04	F05 / F07	40	14/17	14	10	650	300	N/A	N/A	8.5	6
QT06	F07	60	14/17	22	15	1250	400	N/A	N/A	8.5	9
QT09	F07	90	14/17	22	25	1500	550	190	400	8.5	10
QT15	F07 / F10	150	17/20	22	40	2000	900	280	400	10	12
QT19	F07 / F10	190	17/20	22	40	2000	900	280	420	10	13
QT28	F10 / F12	280	22/26	32	40	2000	900	280	450	12.75	17
QT38	F10 / F12	380	22/26	32	60	2700	1250	400	450	12.75	18
QT50	F10 / F12	500	22/26	32	90	3300	1600	600	450	12.75	19
QT60	F10 / F12 / F14	600	24/29	42	120	5000	2400	800	500	14.5	22
QT80	F10 / F12 / F14	800	24/29	42	180	5800	2800	1200	850	14.5	23
QT100	F10 / F12 / F14	1000	24/29	42	200	8000	3000	1300	900	14.5	25
QT200	F16 / F14	2000	75/90	50	200	8000	3000	1300	900	45	35
QT250	F16 / F14	2500	75/90	50	200	8000	3000	1300	900	45	35

\* Without torque switches

# ELECTRIC ACTUATOR

## NEUMAX QT SERIES QUARTER-TURN TRANSMISSION

### FEATURES



#### 1. ENCLOSURE

Standard enclosure to water jet proof and water tight proof IP67, NEMA 4&6.

#### 2. MOTOR

Squirrel cage motor is of encapsulated type, on high stall torque and low inherent force for seating and unseating of valves. All motors are intergrated with build-in thermal protection.

#### 3. TERMINAL CONNECTION & WIRING

Terminal connections are of "WAGO" push on type, making wiring connection very easy and without fuss. Electrical wiring circuit is standardized for single and three phase voltage. Addition termination is available on request.

#### 4. INTERNAL COMPONENTS ARRANGEMENT

Internal mechanical and electrical components are design in modular mounting arrangement, and can be easily remove for maintenance purposes. Additional optional accessories are also possible.

#### 5. LIMIT SWITCHES

A pair limit switches are activated by means of simple, reliable and adjustable cam plates, mounted directly onto, and driven by center column. The unique cam plate design prevent over travel of limit switches.

#### 6. TORQUE SWITCHES

Electric actuators of 100 N·m and above, are install with torque switches for ove-load protection.

#### 7. HEATER

For prevention of condensation due to weather and temperature changes, and also keeps internal components clean and dry, a 20 watt space heater is provided inside all the electric actuators.

#### 8. SELF LOCKING MECHANISM

Self locking mechanism with improved worm gear design.

#### 9. HANDWHEEL

Correct size of handwheel on the electric actuator ensure adequate strength for safe and efficient emergency operation.

#### 10. MANUAL OVER-RIDE

Engage by pulling and piling the lever and turning the handwheel. Lever is auto declutch when power supply is switch on, and handwheel does not turn as extra safety feature.

#### 11. VISUAL POSITION INDICATOR

The visual position indicator is directly mounted onto the center drive column to provide the visual position of the valve.

#### 12. END STOPPERS

1 each for open and close position (adjustable), are for over travel protection.

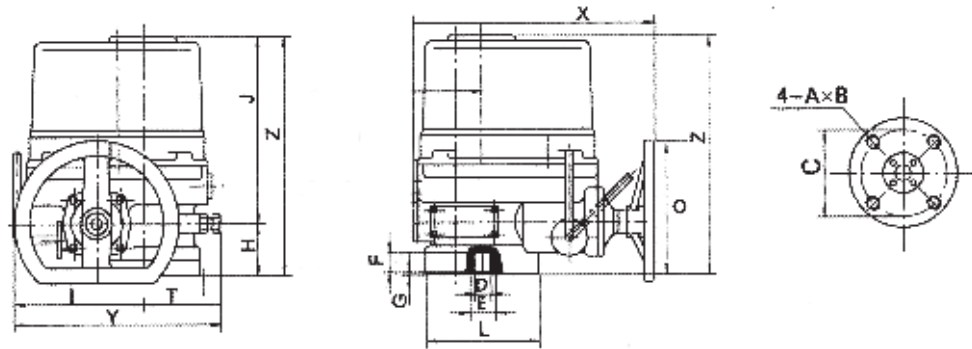
#### 13. MOUNTING & ADAPTATION

Bottom flange mounting dimension conform to ISO 5211. An adaptor drive bushing is provided for every electric actuator. It is removable and for machining to suite valve stem size.

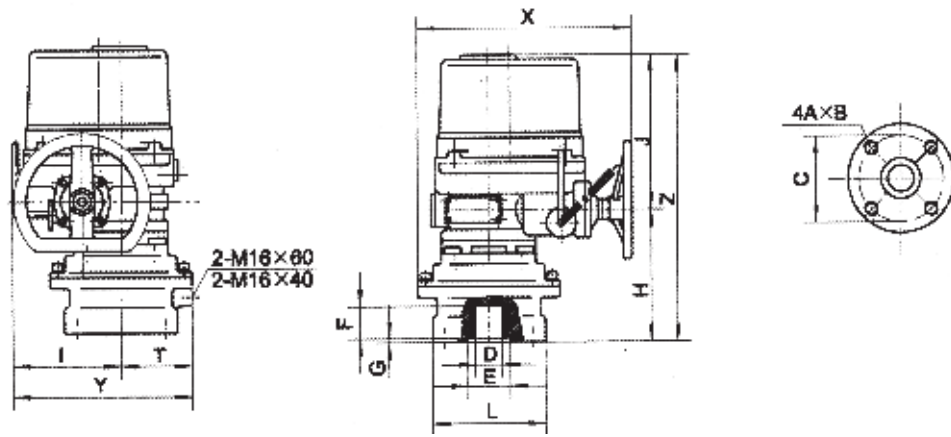
# ELECTRIC ACTUATOR

## NEUMAX QT SERIES QUARTER-TURN TRANSMISSION

QT04 - QT100



QT200 - QT250



### DIMENSIONS

(mm)

Type	C	A	B	D (Max)	E	F	G	H	I	J	L	O	T	X	Y	Z
QT04	50	M6	10	14	40	25	5	60	133	196	102	200	75	241	208	256
QT06	70	M8	14	22	55	35	5	60	133	196	102	200	75	241	208	256
QT09	70	M8	14	22	55	35	5	60	133	196	102	200	75	241	208	256
QT15	102	M10	14	22	57	35	5	64	154	199	125	250	85	272	239	263
QT19	102	M10	14	22	57	35	5	64	154	199	125	250	85	272	239	263
QT28	102	M10	17	32	75	42	5	70	174	228	145	350	100	290	274	298
QT38	102	M10	17	32	75	42	5	70	174	228	145	350	100	290	274	298
QT50	102	M10	17	32	75	42	5	70	174	228	145	350	100	290	274	298
QT60	125	M12	19	42	85	50	5	78	191	264	175	350	115	331	306	342
QT80	125	M12	19	42	85	50	5	78	191	264	175	350	115	331	306	342
QT100	125	M12	19	42	85	50	5	78	191	264	175	350	115	331	306	342
QT200	160	M20	30	50	95	60	4	241	191	264	210	350	132	357	323	505
QT250	160	M20	30	50	95	60	4	241	191	264	210	350	132	357	323	505