

# CHQ Electric Actuator Series

## EXPLOSION-PROOF SERIES

### OPTION SPECIFICATION

No.	Option scheme	Remark
1	Explosion-proof actuator(Exd II CT5)	CHQ series
2	Water-proof actuator (IP68,10M,250HR)	CHQ series
3	Potentiometer unit(1K-10K)	CHQ series
4	Proportion control unit (control signal 4-20mA DC/1-5V/1-10V)	CHQ series
5	Local control units (local control open/stop/close optional switch, local/remote switch)	CHQ series
6	Travel 120°, 180°,270°	CHQ series
7	Direct current motor (24VDC)	CHQ series
8	Torque switch (SPDT× 2 250VAC 10A)	Except CHQ-005/008/010
9	Electric current position transfer (output 4-20mA DC)	CHQ series
10	Self-reset when power failure	CHQ series
11	High temperature resistance actuator (-10°C~+100°C)	CHQ series
12	Low temperature resistance actuator (-40°C~+70°C)	CHQ series
13	Low speed actuator	CHQ series





## SUMMARY



"CHQ" series electric actuator is used for controlling 0°~270° rotation of the valves and other similar products, such as butterfly valve, ball valve, damper, flapper valve, cock valve etc. It widely applies to petroleum, chemical, water treatment, shipping, paper making, power plant, heating, light industry and other industries. Driven by 380V/220V/110VAC power or 24V/110VDC power, inputs 4-20mA or 0-10VDC control signal, moves valve to the right position, and achieves to automatic control, maximum output torque is 6000N.M.

## PERFORMANCE PARAMETER

Model	Max Output Torque	Operating Time 60/50Hz	Max Drive Shaft Size	Power	Rated Current(A)				Handwheel Revolution	Weight
					Single Phase		Three Phases			
					110V	220V	380V	440V		
CHQ-005	50	18/22	φ20	20	1.10/0.95	0.55/0.54	0.3/0.3	N/A	10	7.5
CHQ-008	80	18/22	φ20	20	1.10/0.95	0.55/0.54	0.3/0.3	N/A	10	7.5
CHQ-010	100	18/22	φ20	20	1.10/0.95	0.55/0.54	0.3/0.3	N/A	10	7.5
CHQ-015	150	21/25	φ22	40	1.65/1.67	0.88/0.84	0.31/0.31	0.30/0.31	11	17.3
CHQ-020	200	21/25	φ22	40	1.67/1.67	0.89/0.85	0.31/0.31	0.30/0.31	11	17.3
CHQ-030	300	26/31	φ35	90	1.85/1.86	0.92/0.92	0.35/0.35	0.34/0.34	13.5	22
CHQ-050	500	26/31	φ35	90	3.60/3.62	1.55/1.58	0.59/0.59	0.58/0.58	13.5	23
CHQ-060	600	26/31	φ35	120	3.65/3.62	1.60/2.20	0.60/0.59	0.59/0.58	13.5	23
CHQ-080	800	31/37	φ45	180	4.10/4.10	2.15/2.20	0.85/0.85	0.79/0.79	16.5	29
CHQ-120	1200	31/37	φ45	180	4.20/4.10	2.35/2.30	0.87/0.87	0.81/0.81	16.5	29
CHQ-150	1500	78/93	φ45	180	3.65/3.62	1.60/2.20	0.60/0.59	0.59/0.58	40.5	77
CHQ-200	2000	93/112	φ45	180	4.10/4.10	2.15/2.20	0.85/0.85	0.79/0.79	49.5	83
CHQ-300	3000	93/112	φ45	180	4.20/4.10	2.35/2.30	0.87/0.87	0.81/0.81	49.5	83
CHQ-400	4000	155/185	φ45	180	4.20/4.10	2.35/2.30	0.87/0.87	0.81/0.81	82.5	83
CHQ-500	5000	155/185	φ45	180	4.20/4.10	2.35/2.30	0.87/0.87	0.81/0.81	82.5	83
CHQ-600	6000	155/185	φ45	180	4.20/4.10	2.35/2.30	0.87/0.87	0.81/0.81	82.5	83

## TECHNICAL PARAMETER

Shell	Enclosure :IP67,NEMA4, Exd II CT5
Power	Standard:220VAC/1ph Optional:110VAC/1ph, 380V/440V/3ph,50/60HZ, ±10% 24VDC/110VDC/220VDC
Motor	Asynchronous motor
Limit switch	2×Open/ Close, SPDT,250VAC 10A
Auxiliary limit switch	2×Open/ Close, SPDT,250VAC 10A
Torque switch	Close/Open, each 1, SPDT,250VAC 10A
Travel	90°±10°
Fail safe/ Operating temperature	Internal-placed thermal protection, Open 115°C ±5°C/Close 97°C ± 5°C
Indicator	Continuous position indicator
Manual operate	Decutching mechanism, operate by handwheel
Self-locking device	Self-locking by worm and worm gear
Mechanical limit	2 × external adjustable stopper
Space heater	30 W(110V/220VAC)
Conduit entry	2×PF 3/4"
Ambient temperature	-20°C~+70°C
Lubrication	Grease moly(EP type)
Material	Steel, Aluminium alloy, Aluminium bronze,Polycarbonate
Ambient humidity	Max 90% RH
Anti-vibration	X Y Z 10g,0.2~34 Hz,30 minutes
External coating	Dry powder, Epoxy polyester,high anti-corrosion



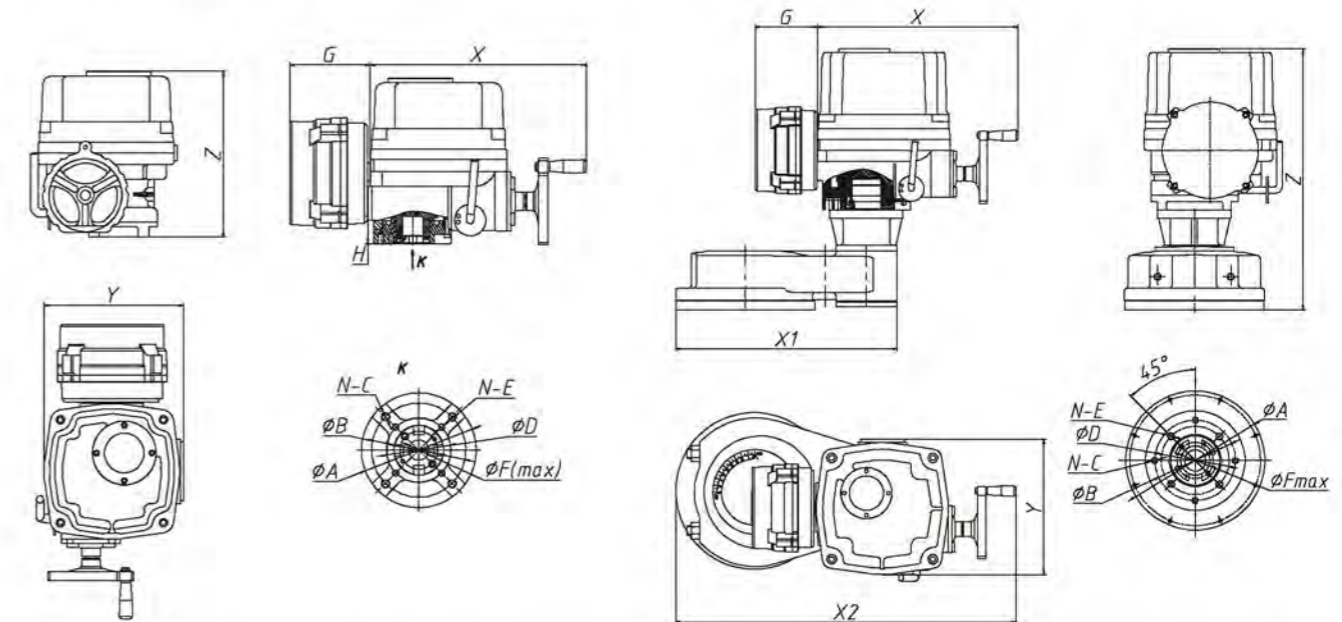
# CHQ Electric Actuator Series

## EXPLOSION-PROOF SERIES

### GENERAL DRAWING

CHQ-005~120

CHQ-150~600



Unit: mm

Model	X	Y	Z	φA	φB	N-C	φD	N-E	F	G	H	X1	X2
CHQ-005	260	161	236	φ90	φ70	4-M8	///	///	20	140	40	///	///
CHQ-008	260	161	236	φ90	φ70	4-M8	///	///	20	140	40	///	///
CHQ-010	260	161	236	φ90	φ70	4-M8	///	///	20	140	40	///	///
CHQ-015	351	227	270	φ125	φ102	4-M10	φ70	4-M8	22	140	45	///	///
CHQ-020	351	227	270	φ125	φ102	4-M10	φ70	4-M8	22	140	45	///	///
CHQ-030	367	242	290	φ150	φ125	4-M12	φ102	4-M10	35	140	55	///	///
CHQ-050	367	242	290	φ150	φ125	4-M12	φ102	4-M10	35	140	55	///	///
CHQ-060	367	242	290	φ150	φ125	4-M12	φ102	4-M10	35	140	55	///	///
CHQ-080	410	276	330	φ180	φ140	4-M16	φ125	4-M12	45	140	65	///	///
CHQ-120	410	276	330	φ180	φ140	4-M16	φ125	4-M12	45	140	65	///	///
CHQ-150	410	276	330	φ285	φ165	4-M18	φ140	4-M16	45	140	///	454	696
CHQ-200	410	276	330	φ285	φ165	4-M18	φ140	4-M16	45	140	///	454	696
CHQ-300	410	276	330	φ285	φ165	4-M18	φ140	4-M16	45	140	///	454	696
CHQ-400	410	276	330	φ285	φ165	4-M18	φ140	4-M16	45	140	///	454	696
CHQ-500	410	276	330	φ285	φ165	4-M18	φ140	4-M16	45	140	///	454	696
CHQ-600	410	276	330	φ285	φ165	4-M18	φ140	4-M16	45	140	///	454	696