



ELECTRIC CONTROL ACTUATOR





SUMMARY

"AHQ" 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 5000N.M.

PERFORMANCE PARAMETER

Model	Max Output Torque	Operating Time 60/50Hz	Max Drive Shaft Size	F-class Motor	Rated Curee Phases				Handwheel Revonlution	Weight
					Single Phase		Three Phase			
	N-M	90°(S)	mm	w	110v	220v	380v	440v	N	(kg)
AHQ-005	50	18/22	φ20	20	1.10/0.95	0.55/0.54	0.3/0.3	N/A	10	7.5
AHQ-008	80	18/22	φ20	20	1.10/0.95	0.55/0.54	0.3/0.3	N/A	10	7.5
AHQ-010	100	18/22	φ20	20	1.10/0.95	0.55/0.54	0.3/0.3	N/A	10	7.5
AHQ-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
AHQ-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
AHQ-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
AHQ-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
AHQ-060	600	26/31	φ45	120	3.65/3.62	1.60/2.20	0.60/0.59	0.59/0.58	13.5	23
AHQ-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
AHQ-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
AHQ-150	1500	78/93	φ45	180	4.20/4.10	2.15/2.20	0.85/0.85	0.79/0.79	49.5	83
AHQ-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
AHQ-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
AHQ-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
AHQ-500	5000	155/185	φ45	180	4.20/4.10	2.35/2.31	0.87/0.87	0.81/0.81	82.5	83

TECHNICAL PARAMETER

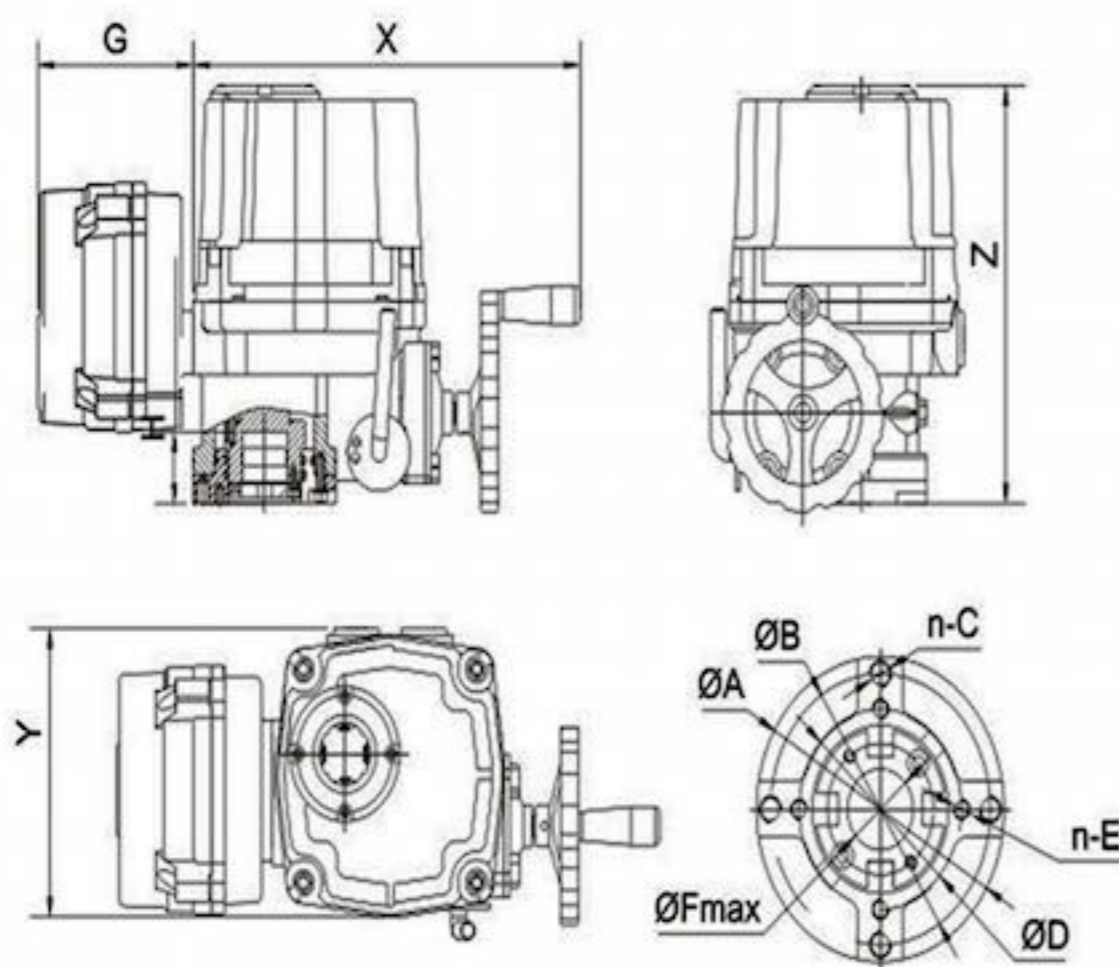
Shell	Enclosure : IP67,N4,NEMA4,Exd II CT5	
Power	Standard : 220VAC/1ph Optional : 110VAC/1ph,380V/440V3ph,50/60HZ,±10% 24VDC/110VDC/220VDC	
Motor	Asynchronous motor	
Limit switch	2xOpen/close,SPDT,250VAC 10A	
Auxilliary limit switch	2xOpen/close,SPDT,250VAC 10A	
Torque switch	Close/Open,each 1 , SPDT,250VAC 10A	ExceptAHQ-005/008/010
Traver	90°±10°	0°-270°
Fail safe/ Operating temperature	Internal-place thermal protection, Open 115°C ± 5°C/Close97°C ±5°C	
Indicator	Continuous position indicator	
Manual operate	Declutching mechanism, operate by handwheel	
Self-locking device	Self-locking by worm and worm gear	
Mechanical limit	2 x external adjustable stopper	
Space heater	7-10W(110V220VAC)	
Conduit entry	2xPF 3/4"	
Ambient temperature	-20°C -- +70°C	
Lubrication	Grease moly(EP type)	
Material	Steel,Aluminium alloy,Aluminium bronze,Ploycarbonate	
Ambient humidity	Max 90% RH	A1Non-Condensing
Anti-vibration	X Y Z 10g.2.0 -34 Hz,30 minutes	
External coating	Dry powder,Epoxy ployester,high anti-corrosion	

AHQ Electric Actuator Series

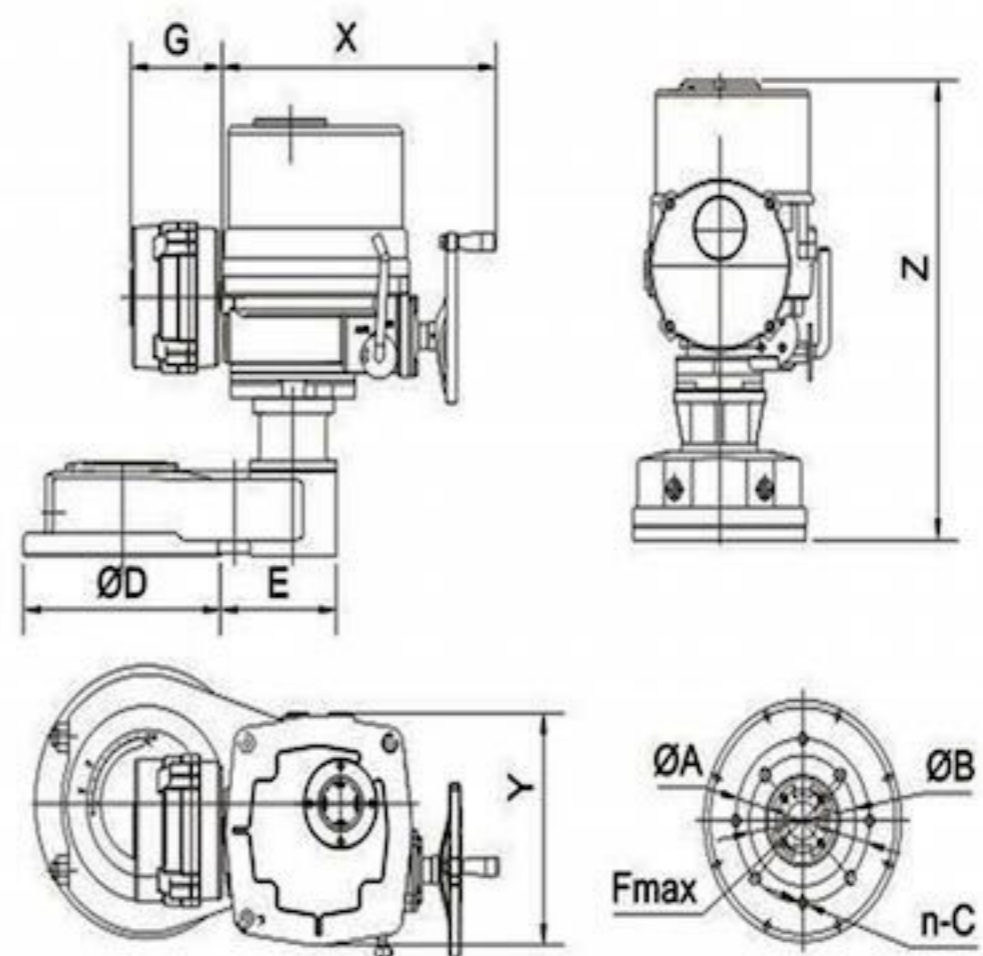
EXPLOSION-PROOF SERIES

GENERAL DRAWING

AHQ-005 - AHQ-080



AHQ-120 - AHQ-500



Model	x	y	Z	A	B	N-C	D	N-E	F	G	H
AHQ-005	270	161	233.5	Φ90	Φ70	4-M8			Φ20	140	40
AHQ-008	270	161	233.5	Φ90	Φ70	4-M8			Φ20	140	40
AHQ-010	270	161	233.5	Φ90	Φ70	4-M8			Φ20	140	40
AHQ-015	351	226	270	Φ125	Φ102	4-M10	Φ70	4-M8	Φ22	140	45
AHQ-020	351	226	270	Φ125	Φ102	4-M10	Φ70	4-M8	Φ22	140	45
AHQ-030	358	240	290	Φ150	Φ125	8-M12	Φ102	4-M10	Φ35	140	55
AHQ-050	358	240	290	Φ150	Φ125	8-M12	Φ102	4-M10	Φ35	140	55
AHQ-060	410	240	290	Φ150	Φ125	8-M12	Φ102	4-M10	Φ35	140	55
AHQ-080	410	276	335	Φ180	Φ140	8-M16	Φ125	8-M12	Φ45	140	65
AHQ-120	410	276	335	Φ180	Φ140	8-M16	Φ125	8-M12	Φ45	140	65
AHQ-150	410	276	335	Φ165	Φ140	8-M16	Φ285	147	Φ45		
AHQ-200	410	276	335	Φ165	Φ140	4-M16-M20	Φ285	147	Φ45		
AHQ-300	410	276	335	Φ165	Φ140	4-M16-M20	Φ285	147	Φ45		
AHQ-400	410	276	335	Φ165	Φ140	4-M16-M20	Φ285	147	Φ45		
AHQ-500	410	276	335	Φ165	Φ140	4-M16-M20	Φ285	147	Φ45		



AHQ Electric Actuator Series

EXPLOSION-PROOF SERIES

OPTION SPECIFICATION

NO	Option scheme	Remark
1	Explosion-proof actuator(Exd II CT5)	AHQ series
2	Water-proof actuator(IP68,10M,250HR)	AHQ series
3	Potentiometer unit(1K-10K)	AHQ series
4	Proportion control unit(control signal4-20mA DC/1-5V/1-10V)	AHQ series
5	Local control units(local control open/stop/close optional switch,local/remote switch)	AHQ series
6	Travel 120°,180°,270°	AHQ series
7	Direct current(24VDC)	AHQ series
8	Torque switch(SPDTx2 250VAC 10A)	Except AHQ-005/008/010
9	Electric current position transfer(output4-20mA DC)	AHQ series
10	Self-reset when power failure	AHQ series
11	High temperature resistance actuator (-10°C~+100°C)	AHQ series
12	Low temperature resistance actuator (-40°C~+70°C)	AHQ series
13	Low speed actuator	AHQ series



SUMMARY

"AE" series electric actuator is used for controlling 0°~270° rotation 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 or 24V/110VDC power, input 4-20mA or 0-10VDC control signal, moves valve to the right position, and achieves to automatic control, the maximum output torque is 6000N.M

PERFORMANCE PARAMETER

Model	Max output torque (N.M)	Operating time 90°(S)	Drive shaft (mm)				Motor (W)	Rated current(A) 220VAC/1ph	Weight (kg)
			Square	Deep	Round	Deep			
AE-003	30	20	9x9 11x11	13.5 15.5	φ12.6	26	8	0.15	2.1
AE-005	50	30	11x11 14x14	15.5 18	φ12.6	26	10	0.25	3.6
AE-008	80	30	11x11 14x14	15.5 18	φ15.78	26	10	0.25	3.6
AE-010	100	30	14x14 17x17	18 22.5	φ15.78 φ18.95	28	15	0.35	4.6
AE-015	150	30	14x14 17x17	18 22.5	φ18.95	28	15	0.37	4.6
AE-020	200	30	22x22	26	φ22.13	45	45	0.3	13
AE-030	300	30	22x22	26	φ28.48	45	45	0.31	13.4
AE-040	400	30	22x22	26	φ28.48	45	60	0.33	13.8
AE-060	600	30	27x27	32.5	φ31.65	45	90	0.33	14
AE-080	800	40	27x27	32.5	φ31.65	45	180	0.47	14.3
AE-100	1000	40	27x27	32.5	φ31.65	45	180	0.47	14.5
AE-160	1600	120	Maxφ45		Maxφ65		180	0.85	68
AE-200	2000	120	Maxφ45		Maxφ65		180	0.85	68
AE-300	3000	120	Maxφ45		Maxφ65		180	0.85	68
AE-400	4000	200	Maxφ45		Maxφ65		180	0.85	68
AE-500	5000	200	Maxφ45		Maxφ65		180	0.85	68
AE-600	6000	200	Maxφ45		Maxφ65		180	0.85	68

STANDARD TECHNICAL PARAMETER

Sheel	Aluminium alloy Shell, Enclosure : IP67,IP68 is optional	
Power	Stander:220VAC/1ph Pptional:110VAC/1ph, 380V/440V/3ph, 50/60HZ, ±10% 24VDC/110VDC/220VDC	
Controlling power	110/220V AC 1Phase, 50/60Hz, ±10%	
Motor	Squirrel-cage Asynchronous Motor	
Limit switch	2xopen/ Close, SPDT, 250V AC 10A	
Auxiliary limit switch	2xopen/ Close, SPDT, 250V AC 10A	
Traval	90°~270°±10° (Please specify in advance if over 90°)	
Fail safe/ Operating temperature	Internal-placed thermal protection, On 120°C ±5°C/Off 97°C ±5°C	0°~ 270°
Indicator	Continuous situation indication	
Manul operation	Mechanical handle (Handwheel is optional)	
Self-licking device	Self-locking by worm and worm gear	
Mechanical Limit	2 X external adjustable stopper	
Space heater	7-10W(110/220V AC) Anti-condensation	
Conduit entries	2 Pieces M18	
Ambient temperature	-20°C~+70°C	
Lubrication	Grease moly(EP byte)	
Material	Steel, Aluminium alloy, Aluminium bronze, Polycarbonate	
Ambient humidity	Max 90% RH	Non-Condensing
Anti-vibration	X Y Z 10g, 0.2~34 Hz, 30minutes	
External coating	Dry powder, Epoxy polyester	

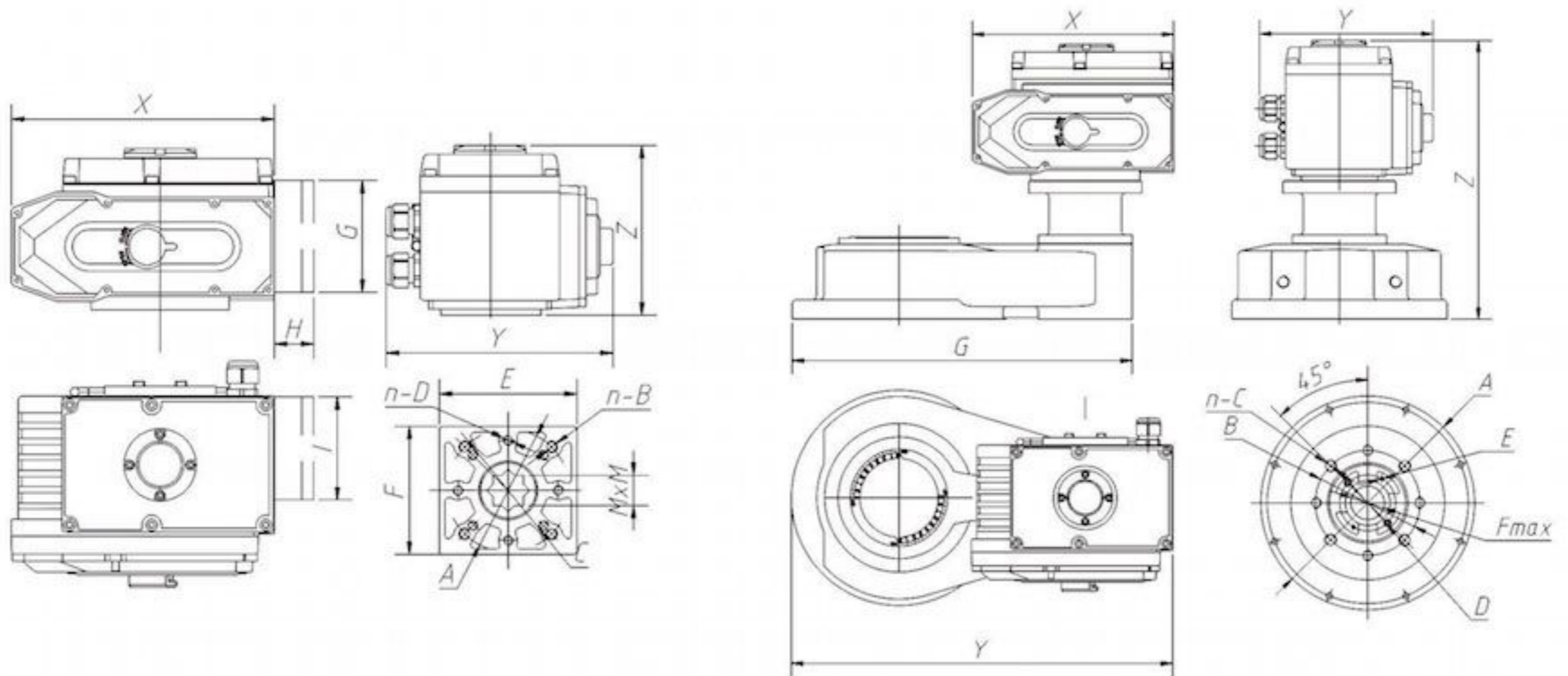
AE Electric Actuator Series

QUICK OPENING SERIES

GENERAL DRAWING

AE-003 ~ AE-100

AE-160 ~ AE-600



Model	X	Y	Z	A	B	C	N-D	E	F	G	H	I	M-M
AE-003	123	100	113	φ50	4-M8	φ42 / φ36	8-M5	50	50	114	40	150	11X11
AE-005	160	121	121	φ70	4-M8	φ50	4-M6	4-M6	66	114	40	150	14X14
AE-008	160	121	121	φ70	4-M8	φ50	4-M6	4-M6	66	114	40	150	14X14
AE-010	189	145	129	φ70	4-M8	φ50	4-M6	4-M6	90	114	40	150	17X17
AE-015	189	145	129	φ70	4-M8	φ50	4-M6	4-M6	90	114	40	150	17X17
AE-020	266	255	164	φ125	4-M12	φ102	4-M10	4-M10	130	114	40	150	27X27
AE-030	266	255	164	φ125	4-M12	φ102	4-M10	4-M10	130	114	40	150	27X27
AE-040	266	255	164	φ125	4-M12	φ102	4-M10	4-M10	130	114	40	150	27X27
AE-060	266	255	164	φ125	4-M12	φ102	4-M10	4-M10	130	114	40	150	27X27
AE-080	266	255	164	φ125	4-M12	φ102	4-M10	4-M10	130	114	40	150	27X27
AE-100	266	255	164	φ125	4-M12	φ102	4-M10	4-M10	130	114	40	150	27X27
AE-160	266	255	349	φ285	φ140/165	4-m16/m20	φ75	2-M6	φ45	454			
AE-200	266	255	349	φ285	φ140/165	4-m16/m20	φ75	2-M6	φ45	454			
AE-300	266	255	349	φ285	φ140/165	4-m16/m20	φ75	2-M6	φ45	454			
AE-400	266	255	349	φ285	φ140/165	4-m16/m20	φ75	2-M6	φ45	454			
AE-500	266	255	349	φ285	φ140/165	4-m16/m20	φ75	2-M6	φ45	454			
AE-600	266	255	349	φ285	φ140/165	4-m16/m20	φ75	2-M6	φ45	454			

AE Electric Actuator Series

QUICK OPENING SERIES

OPTION SPECIFICATION

No.	Option scheme	Remark
1	Heater	Except AE-003
2	Water-proof actuator(IP68, 10M, 250HR)	AE series
3	Potentiometer unit (1K-10K)	Except AE-003
4	Proportion control unit (control signal 4-20mA DC/1-5V/1-10V)	Except AE-003
5	Local control unit (local control open/stop/close optional switch, local/remote)	Except AE-003
6	Travel 120°, 180°,270°	AE series
7	Direct current motor (24VDC)	Except AE-003
8	Electric current position sensor (output 4-20mA DC)	Except AE-003
9	Self-reset when power failure	AE series
10	Quick opening (2.8S, 5S, 10S, 15S)	AE series

