



EA SERIES ELECTRIC ACTUATOR



Electric Actuator

CDG Actuator Manufacturer

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EA



COMPANY HISTORY

- 1963 : Founded CDG.
- 1985 : CDG brand creation.
- 1989 : Production of pneumatic actuators, and Italy FABIA to establish acooperation.
- 1992 : With the United States FAIRCHILD cooperation, Production of electric actuators.
- 2001 : Focus on the production and assembly of CDG.
- 2005 : Production of hydraulic actuators.
- 2006 : Production of valves.
- 2011 : Oil station development and use.
- 2016 : Set up a number of representative offices in China.

Company introduction

The CDG is a famous actuator manufacturers, the company is headquartered in America's largest city, Detroit, Michigan is located in the northeastern United States, Canada, Detroit river north of Windsor an important port city. With strong industrial base and freight advantage.

CDG products have unique design, short delivery time, competitive price and excellent after-sales support. As a professional manufacturer of valves, it quickly became the industry leader.

CDG has more than 50 years experience in the valve industry. The r&d department USES these experiences to constantly design new products, improve existing products, and adapt to changing market demands and constantly improving international standards.

CDG can provide standard and non-standard solutions that can be customized according to customer needs.

CDG has created a wide range of reliable products. CDG is favored and admired by the world's leading EPC and oil and gas companies because of its high performance in extreme conditions. Its products are

used in power plant, petrochemical, metallurgy, papermaking, automobile and more Product certification based on customer requirements and government legislation is a guarantee of product quality. CDG USES advanced testing laboratories to ensure the durability of its products. Fire safety, high temperature and low temperature testing can be carried out under extreme conditions.

CDG good position, provide comprehensive after-sales support, fast, efficient, with unparalleled expertise. Our skilled engineers and technicians work 24 hours a day to respond to customer queries, solve problems, and provide reliable solutions. A comprehensive after-sales service creates a complete solution, customer support, covering all requirements.

CDG is a long-term, reliable, available and cost- effective partner for your existing and new business.

CDG brand is comprehensive, including valve and oil station, pneumatic actuator, electric actuator and hydraulic actuator and other related fields. To enable CDG to meet different needs it can be sold separately, and can be matched in a complete set, so that users can reduce their worries.

Summary

EA series intelligent electric device is a new generation of intelligent products. Advanced ultra-large-scale digital integrated chip, professional digital moment sensor and digital displacement sensor, optional language operation and display, Mechatronics structure design, has created its perfect function, excellent performance, lightweight and beautiful, simple debugging and easy operation. It is more suitable for matching with various valves and forming actuator unit. It can be used in automatic control system of power station, petroleum, steel, chemical industry, oil pipeline and sewage treatment. It can not only meet the requirements of frequent regulation control, but also meet the requirements of intermittent control.

1. Main characteristics of intelligent electric devices:

*With large-scale digital integrated chip, it has powerful function and high precision.

*Mechatronics design, small size, light weight.

*Professional pressure sensors are used to measure the torque of the output shaft, because the accuracy of the torque measurement is improved, the error rate is less than 5%, and can be dynamically monitored and displayed. Over-torque and blockage can alarm.

*The displacement sensor adopts absolute encoder and the valve position will not be lost. It can ensure high accuracy, zero wear, long life, strong anti-interference ability and no need of battery support.

*The function, parameter setting, debugging and on-site electric operation of the intelligent electric device are all set by hand-held infrared remote controller without opening the lid of the box.

*Optional language and character display, menu operation, intuitive and clear, easy to learn, understand and operate.

2. Functions of Intelligent Electric Devices:

*Status Indicator Contact Function

- | | | |
|----------------------------------|-------------------------------|--------------------------------|
| 1) Halfway limit | 2) The electric device is on | 3) Electric device is closing |
| 4) Electric device in operation | 5) Stop on site | 6) In-situ control |
| 7) Remote Control | 8) Open valve interlock | 9) Shut-off interlock |
| 10) Handwheel operation | 11) Opening Torque Jump | 12) Closing Torque Break |
| 13) Torque Jump in Travel | | |

*Valve alarm function

- 1) Over-Torque Alarm Function
 - a. Turn-off Torque
 - b. Over-Torque in Open Direction
- 2) Blocking Alarm Function
 - a. Closing direction blocking
 - b. Open Direction Blockage

*Control and alarm function

- 1) Emergency (ESD) Alarm Protection
- 2) Break Signal Protection

*Alarm function of electric device

- 1) Internal system fault protection
- 2) Current Valve Position Signal Loss Protection
- 3) Overheat Protection of Internal Power Supply
- 4) On-site wiring failure alarm
- 5) Motor Overheat Protection
- 6) Phase-out and phase-out protection of power supply
- 7) Overheat protection of control box

*Remote Controller Setting Function

*Instantaneous reverse protection function

*Contact mode selection function

*External Chain Protection Function

*CONDITIONAL CONTROL AND PROTECTION FUNCTION

*Two-wire control and protection function

*Torque bypass protection function

*ESD Beyond Protection Function

*Additional Indicating Contact Function

*Display Function of Intelligent Electric Device

*Travel Limit Protection Function

*Torque Limit Protection Function

*Interrupt Setup Function

*Automatic Phase Sequence Discrimination Function of Three-phase Power Supply

*Local Control Point Dynamic/Self-Maintaining Selection Function

Working principle

EA series intelligent electric device is driven by three-phase servo motor, which reduces speed by worm wheel and worm, and drives the output shaft to rotate. In the reducer, there is a manual/automatic switching mechanism. When the switching handle is in the manual position, the operating handwheel drives the output shaft to rotate through the clutch. When the actuator is operated by electric power, the manual/automatic switching mechanism falls back automatically, the clutch and the turbine are geared together, and the output shaft is driven by a three-phase motor. At the same time, a force moment sensor is installed on the worm shaft of the motor drive, and the travel is transmitted to the position sensor through the bevel gear teeth on the output shaft.

EAT part rotary intelligent angular stroke electric device with rotation angle less than 360° can be directly used for switching or adjusting 90° partial rotary valves such as butterfly valves, ball valves, dampers, etc. EAM multi-rotation intelligent angular stroke electric device has rotation angle greater than 360°. The internal intelligent controller accepts standard analog current control signal or switch control signal. Compared with the position signal of the valve position sensor, the output axis of the electric device is positioned at the corresponding position of the input signal to complete positioning control. It can also be controlled according to interlock control, two-wire control or event message. No. 3 is located in the pre-set position of the control system. Unless the output shaft torque value of the electric device is greater than the rated torque value or the set torque value occurs during operation, the intelligent controller of the electric device will meet the requirements of the control system, issue the correct instructions, trigger the three-phase solid-state relay, make the motor connected to the three-phase power supply, and the electric device will operate normally.

EAM multi-rotation intelligent angular stroke electric device adopts non-intrusive design. The parameters and functions of the electric device can be modified or configured by hand-held remote controller.

EAMS, EAML intelligent electric device is based on EAM multi-rotation intelligent electric device, which is composed of trapezoidal nut screw, flange support and adjusting mechanism. The multi-rotation torque and speed are transformed into linear motion stroke and out-axis thrust.

EAM/MOW intelligent angular stroke electric device is a combination of EAM multi-rotation intelligent electric device and two-stage worm gear reducer.



EAT Partial Rotation Intelligent Angle Travel Electric Device



EAM Multi-Rotation Intelligent Angle Travel Electric Device



EAML Direct Travel Intelligent Electric Device

Description of Model Compilation of Electric Actuator

□ XXX - XX / X X X

Code number	Model	Protection Level	Power supply	Output Form	Revolutions
EAT	005	E 1 : EXd II CT4	1 : 380V/3P/50Hz	1 : A	1 : 18
EAM	006	W1 : IP68	2 : 220V/1P/50Hz	2 : Z	2 : 24
EAML	.		3 : 380V/3P/60Hz	3 : Z3	3 : 36
EAMS	.		4 : 220V/1P/60Hz	4 : B1	4 : 48
EAM/MOW	.		5 : 460V/3P/50Hz	5 : B3	
	500		6 : 其它	6 : B4	

Model Specification

According to the form of output axis displacement of intelligent electric device, it can be divided into:

- 1) Electric device with partial rotation angle stroke
- 2) Electric device with multi-rotation angle stroke
- 3) Intelligent electric device with straight stroke

According to the working system of the intelligent electric device, the connection duration rate and the number of connection times per hour, it can be divided into:

- 1) Valve Intelligent Electric Device (reversible, intermittent operation, 25% connection duration, less than 630 connection times per hour)
- 2) Intelligent adjustable electric device (reversible and intermittent operation, 25% of the connection duration, more than 630 times per hour, less than 1200 times) Therefore, the models of intelligent electric devices are divided into:
 - a) EAT series partial rotary angle stroke electric device;
 - b) EAM series multi-angle stroke electric device;
 - c) EAM/MOW series multi-rotation angle travel belt reducer electric device;
 - d) EAML Series Direct Travel Electric Device with Bracket
 - e) EAMS Series Direct Travel Electric Devices

Specific models and specifications of intelligent electric devices can be found in tables 1, 2, 3, 4 and 5.

Main technical parameters

- *Input signal: 1) Analog signal
 - a. Input impedance 250Ω of 4-20 mA.DC
 - b. Input impedance 250Ω of 0-10 mA.DC
- 2) Switching signal
- *Output signal: 1) Valve position feedback signal: 4-20 mA. DC load impedance $\leq 750\Omega$
- * The output shaft torque, speed, stroke and time are shown in tables 1, 2, 3, 4 and 5.
- * The power consumption of intelligent electric devices is shown in Tables 1 and 2.
- * Basic error: 1) Angular stroke electric device $\leq \pm 1\%$
 - 2) Direct-stroke Electric Device Travel $\geq 25\text{mm}$ Above $\leq \pm 1\%$
- *Midway Limit: Open Limit Setting Range 40%~100%
The range of limit setting is 0%~60%.
- * Clearance: 1) Intelligent Electric Device with Straight Travel $\leq 1\text{mm}$
 - 2) Intelligent Electric Device for Angular Travel $\leq 1^\circ$
- *Power supply: three-phase three-wire voltage : 220V、380V、415V、440V、460V.
Frequency: 50/60Hz
- *Protection Level: IP68
- *Explosion-proof grade: explosion-proof dIICT4
- *Output Contact Capacity: 220V.AC, 5A; 30V.DC, 5A
- *Use of environmental conditions:
 - 1) Environmental temperature: $-25\sim +70^\circ\text{C}$ (Flameproof type: $-20\sim +60^\circ\text{C}$)
 - 2) Relative humidity: 5%~98%
 - 3) Atmospheric pressure: 86~106kPa;
 - 4) Air medium: there is no corrosive gas in the surrounding air.
- *Anti-interference indicators:
 - 1) External magnetic field $\leq 400\text{A/m}$, 50Hz
 - 2) Common mode interference 250V, 50Hz
 - 3) AC Signal with Serial Mode Interference Effective Value of 1V The frequency is 50Hz , phase $0\sim 360^\circ$
 - 4) Electrostatic discharge: 4Kv
 - 5) Radio Frequency Interference: Frequency 80~1000MHz
TEST FIELD STRENGTH 3V/m, distance 1m
 - 6) Surge interference: 1kV



EAT Series Part Rotary Angle Travel Electric Device Model Specification Table 1

Specifications	Model	Output Torque N.m	Maximum stem diameter mm	Motor power W	Rated current A
EAT1	EAT006	60	22	25	0.26
	EAT009	90		25	0.26
EAT2	EAT015	150		40	0.57
	EAT020	200	32	60	0.65
EAT3	EAT030	300		60	0.65
	EAT040	400		90	0.72
	EAT050	500		90	0.72
EAT4	EAT060	600	42	120	0.85
	EAT080	800		180	1.3
	EAT100	1000		180	1.3
	EAT120	1200		180	1.3
	EAT200	2000	50	200	1.5
	EAT250	2500		200	1.5
	EAT300	3000		200	1.5
	EAT400	4000	60	250	1.7
	EAT500	5000		250	1.7



EAT Partial Rotation Intelligent
Angle Travel Electric Device



EAM Multi-Rotation Intelligent
Angle Travel Electric Device

EAM series multi-turn travel electric device model specification table 2

Model	Output Speed rpm	Rated torque N.m	Maximum stem diameter MM	Motor power kW	Rated current A	Flange number ISO5210	Remarks	Fuse A
EAM005	18 24 36 48	34 34 34 34	26	0.13	0.65	F10		5
EAM010	18 24 36 48	81 81 81 68	26	0.26	1.2	F10		10
EAM015	18 24	108 108	26	0.26	1.2	F10		10
EAM025	18 24 36 48	203 203 203 203	38	0.81	2.1	F14	Side-added handwheel (i=10:1)	20
EAM040	18 24 36 48	400 400 298 244	38	1.3	3.3	F14	Side-added handwheel (i=10:1)	30
EAM060	18 24 36 48	610 610 540 474	54	2.06	5	F16	Side-added handwheel (i=15:1)	50
EAM120	18 24 36 48	1020 1020 845 680	64	2.14	5.5	F25	Side-added handwheel (i=15:1)	60
EAM150	18 24	1490 1490	70	2.91	8.0	F25	Side-added handwheel (i=15:1) (i=20:1)	80
	36 48	1290 1020		4.41	11.8			
EAM200	18 24 36 48	2030 2030 1700 1350	70	4.46	12.0	F30	Side-added handwheel (i=15:1) (i=20:1)	80
EAM300	24	3000	70	5.81	14	F30	Side-added handwheel (i=15:1) (i=45:1)	80

EAM/MOW series multi-return angular stroke electric device with reducer model specification table 3

Serial number	Type of Electric Device	Output Torque N.m	travel time s	Serial number	Type of Electric Device	Output Torque N.m	travel time s
1	EAM005/MOW3-40	540 540 500 430	33 25 17 13	13	EAM025/MOW6R-140	6180 6180 5150 4120	116 88 58 44
2	EAM005/MOW3-70	710 710 650 570	58 44 29 22	14	EAM040/MOW7-60	7012 7012 5920 4670	50 38 25 19
3	EAM010/MOW4-40	1080 1080 970 860	33 25 17 13	15	EAM060/MOW7-60	10400 9350 9350	38 19 13
4	EAM010/MOW4-70	1420 1420 1280 1130	58 44 29 22	16	EAM025/MOW7R-180	10730 10730 8940 7154	150 113 75 56
5	EAM015/MOW4-40	1730	25	17	EAM120/MOW8-60	21420 21420 17745 14280 14280	50 38 25 19 13
6	EAM010/MOW5R-80	1960 1960 1770 1570	66 50 34 25	18	EAM040/MOW8R-180	20120 20120 16990 13410	150 113 75 56
7	EAM015/MOW5-70	2270	44	19	EAM150/MOW9-60	31290 31290 27090 21420 21420	50 38 25 19 13
8	EAM025/MOW5-40	2600 2600 2170 1730	33 25 17 13	20	EAM060/MOW9R-180	38480 38480 36080 28860	150 113 75 56
9	EAM010/MOW5R-120	2910 2910 2620 2330	100 75 50 38	21	EAM200/MOW9-60	42630 42630 35700 28455 28455	50 38 25 19 13
10	EAM025/MOW5-70	3200 3100 2950 2780	58 44 29 22	22	EAM120/MOW10R-180	48100 48100 38480	56 36 28
11	EAM025/MOW6-70	3410 3410 2840 2270	58 44 29 22	23	EAM300/MOW10-60	65000	38
12	EAM015/MOW6R-140	4120	88	24	EAM300/MOW12-80	80000	50

Maximum out-of-axis torque can reach 155000N.m

EAML Series Direct Travel Electric Device with Bracket Type Specification Table 4

Type of Electric Device	Output Speed rpm	Out-of-axis thrust KN	Maximum stem diameter mm	Maximum travel mm	Flange number ISO5210
EAML010	18	7.94	26	115	F10
	24	7.94			
	36	7.3			
	48	6.35			
EAML012	18	15.9	26	115	F10
	24	15.9			
	36	14.3			
	48	12.7			
EAML020	18	24.26	36	115	F14
	24	24.26			
	36	20.22			
	48	16.17			
	72	14.15			
EAML025	18	45.49	36	115	F14
	24	45.49			
	36	38.41			
	48	30.33			
	72	30.33			

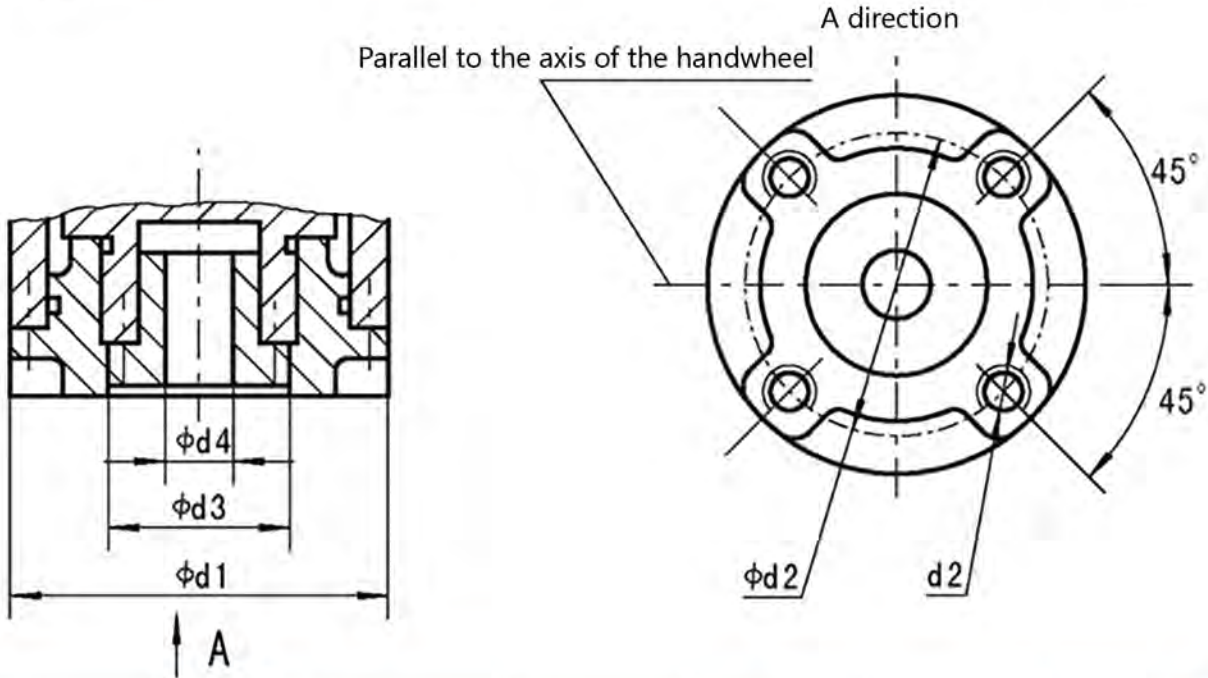
EAMS Series Direct Travel Electric Device Model Specification Table 5

Model	Output Speed rpm	Axial rated load KN	Maximum stem diameter MM	Motor power KW	Rated current A	Flange number ISO5210	Remarks	Fuse A
EAMS044	18	44	32	0.26	1.2	F10		10
	24							
	36							
	48							
EAMS100	18	100	51	0.96	3.3	F14	Side-added handwheel (i=10:1)	30
	24							
	36							
	48							
EAMS150	18	150	54	2.64	5.5	F16	Side-added handwheel (i=15:1)	50
	24							
	36							
	48							
EAMS220	18	220	70	2.91	8.0	F25	Side-added handwheel (i=15:1) (i=20:1)	80
	24			4.41	11.8			
	36							
	48							
EAMS334	18	334	70	4.46	12.0	F25	Side-added handwheel (i=15:1) (i=20:1)	80
	24							
	36							
	48							
EAMS445	24	445	70	5.81	14	F30		80

Shape and Installation Dimension of Intelligent Electric Device

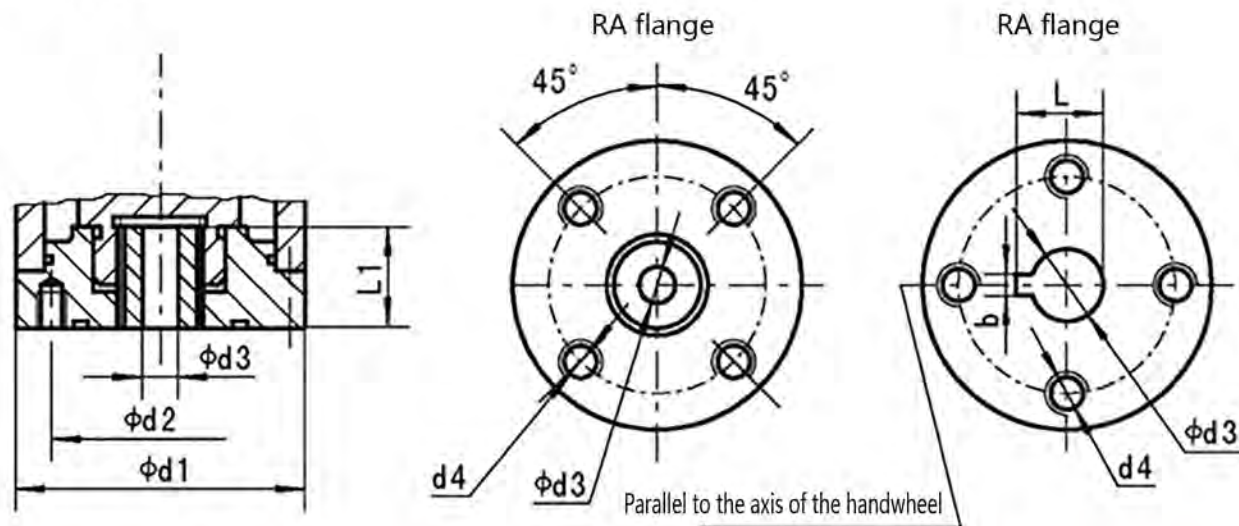
1. Installation Dimensions of EAT Part Rotary Angle Travel Electric Device:

Type I



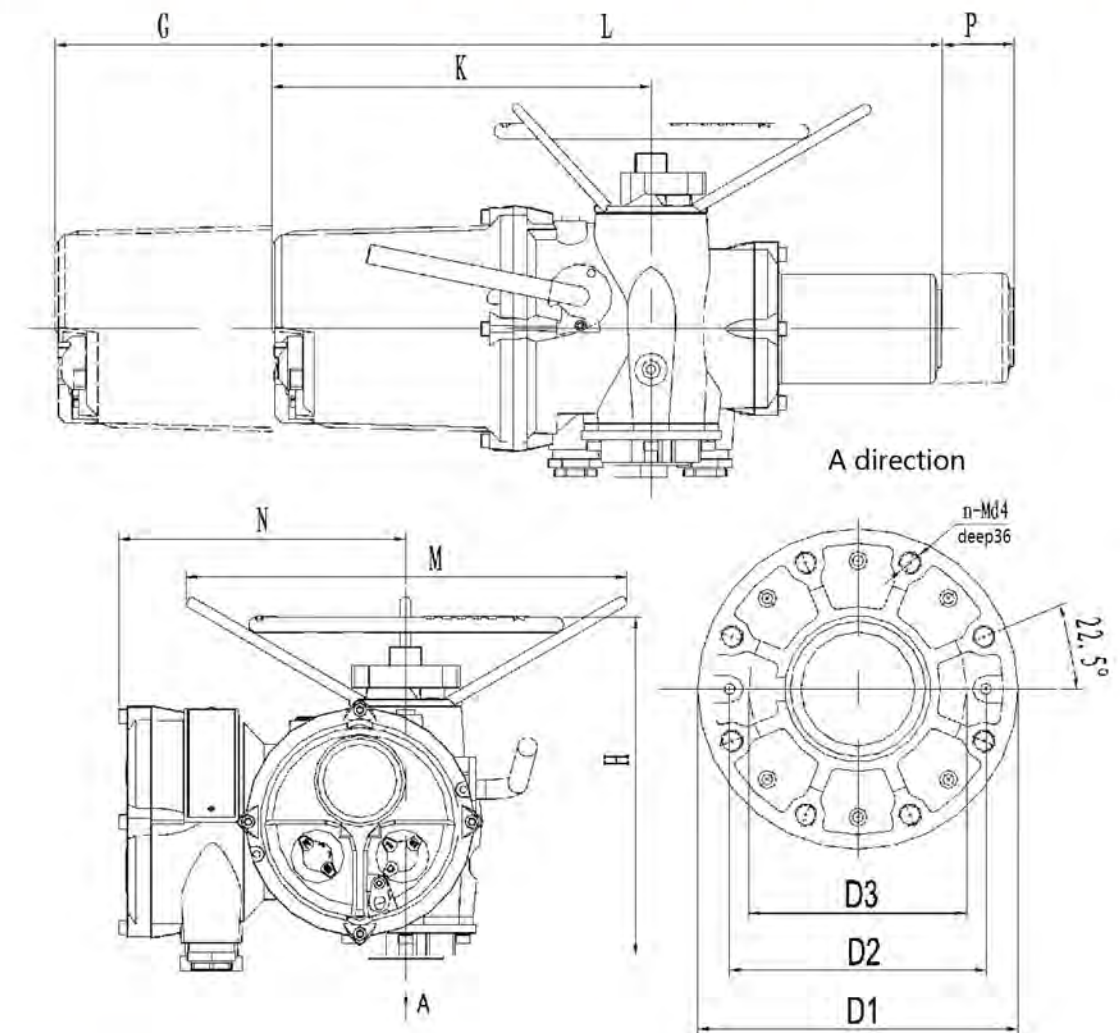
Model	Flange number	d1	d2	d3	d4 (max)	d5
EAT1	F05	$\Phi 102$	$\Phi 50$	$\Phi 40$	$\Phi 14$	4-M6deep12
	F07		$\Phi 70$	$\Phi 54$	$\Phi 22$	4-M8deep12
EAT2	F10	$\Phi 125$	$\Phi 102$	$\Phi 57$		4-M10deep15
EAT3	F12	$\Phi 150$	$\Phi 125$	$\Phi 75$	$\Phi 32$	4-M12deep18
EAT4	F14	$\Phi 175$	$\Phi 140$	$\Phi 85$	$\Phi 42$	4-M16deep20

Type II



Model	Flange number	d1	d2	d3			b	L	L1	d4			
				Standard size	Reserved size	Maximum permissibility							
EAT2	RA1	Φ125	Φ50	-	Φ10	Φ22	-	-	45	4-M6			
	RA2		Φ70		Φ15	Φ32				44	4-M8		
	RA3		Φ102								4-M10		
	RB1		Φ57.15	Φ12.6			3	13.80	4-M6				
	RB2		Φ69.85	Φ15.77	5	17.77	4-M8						
	RB3			Φ18.92		20.92							
EAT3	RA4	Φ150	Φ102	-	Φ15	Φ32	-	-	44	4-M10			
	RA5		Φ125							4-M12			
	RB4		Φ88.9								Φ22.10	5	24.10
	RB5										Φ28.45	8	31.45
EAT4	RA6	Φ175	Φ140	-	Φ20	Φ42	-	-	58		4-M16		
	RB6		Φ107.95							Φ31.60	34.60	4-M12	

2. Shape and installation dimensions of EAM multi-rotation intelligent angular stroke electric device:

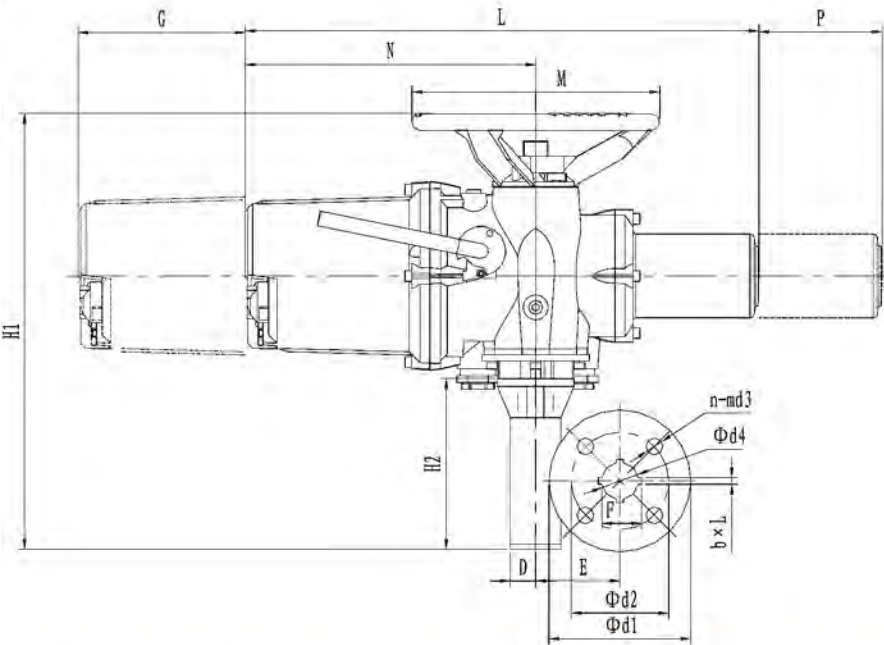


Type of Electric Device	G	H	K	L	M	N	P	D1	D2	D3	n-Md4
EAM/005/010/015	180	320	320	560	Φ300	265	180	Φ125	Φ102	Φ70	4-M10
EAM/025/040	180	380	340	678	Φ508	280	220	Φ176	Φ140	Φ100	4-M16
EAM/060	180	420	365	715	Φ762	302	226	Φ215	Φ165	Φ130	4-M20
EAM120	180	460	450	900	Φ830	358	282	Φ300	Φ254	Φ200	8-M16

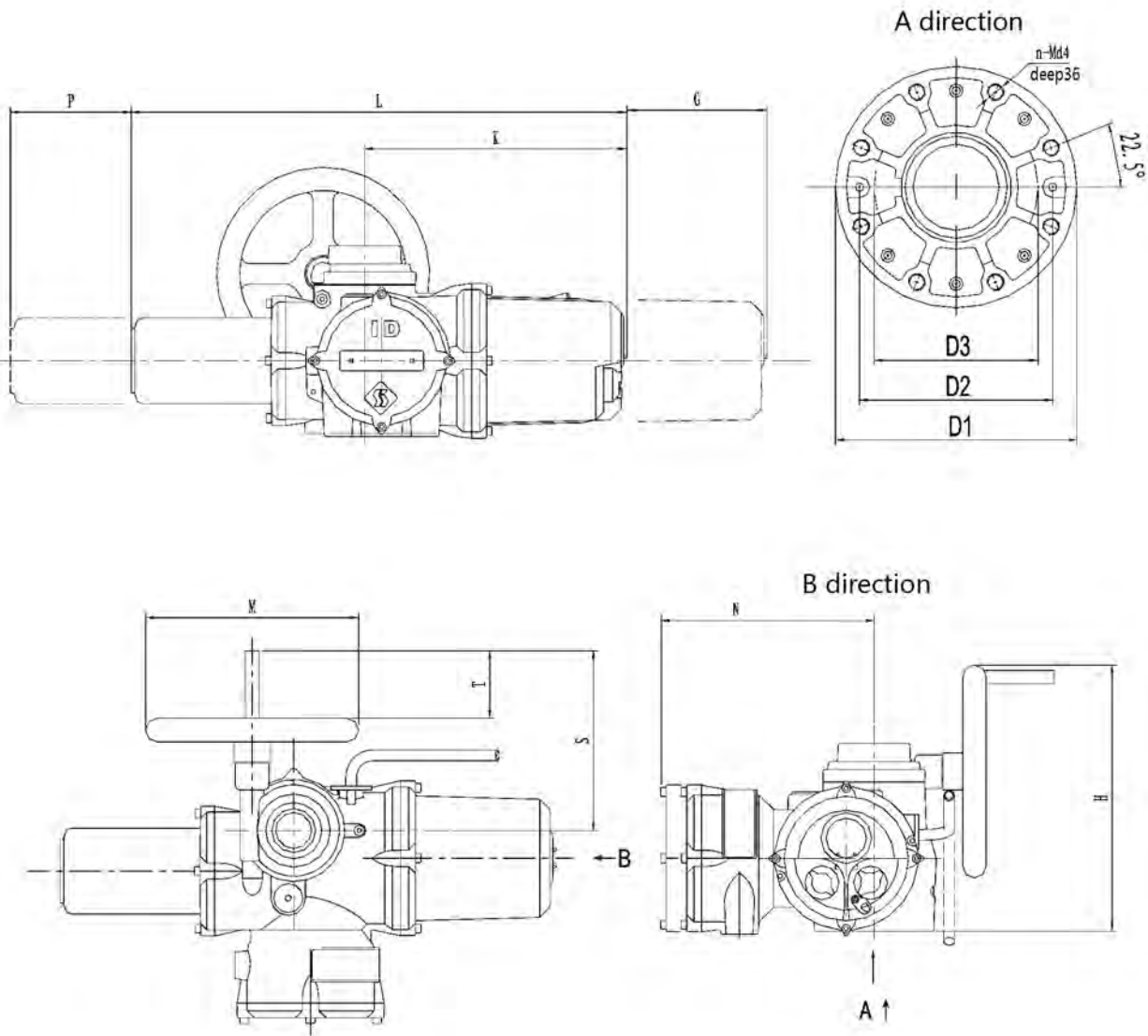
3. The shape and installation dimensions of EAM/MOW multi-angle travel electric device with reducer:

1) Direct Installation Form

a.First-order deceleration

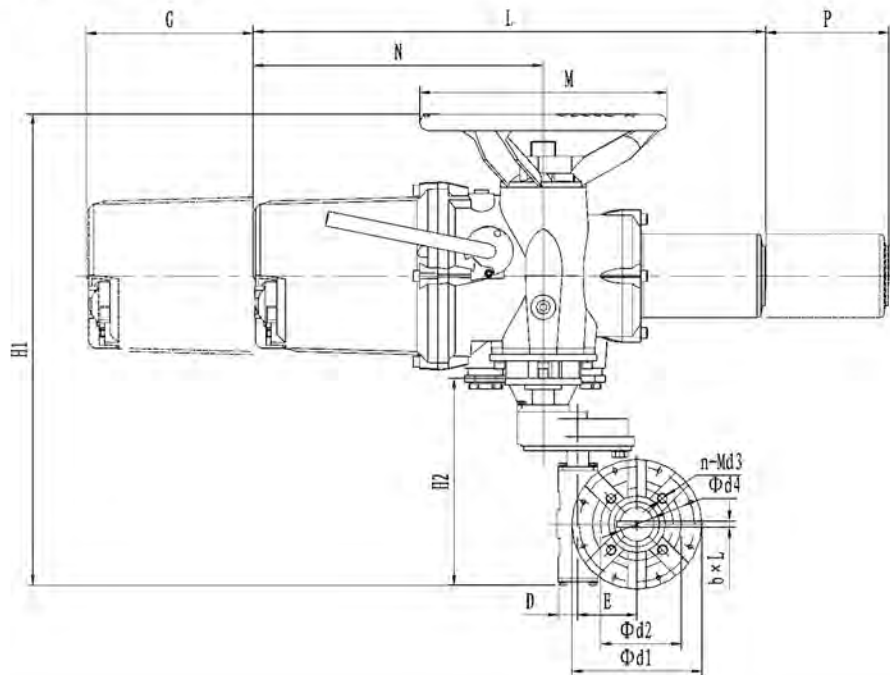


Type of Electric Device	D	E	H ₁	H ₂	G	L	M	N	P	b×L	Φd ₁	Φd ₂	N-md ₃	Permissible maximum diameter	Secondary gearbox	
															Input flange	Input flange
EAM035/MOWE-30 EAM035/MOWE-70	35	76	524	204	180	560	Φ300	320	180	14×80	170	102	4-M10deep 22 45°Uniform distribution	45	F10	F14
EAM010/MOW4-40 EAM010/MOW4-70	39	102	570	250	180	560	Φ300	320	180	18×90	230	140	4-M16deep 22 45°Uniform distribution	60	F10	F14
EAM015/MOW5-70	50	136	640	320	180	560	Φ300	320	180	22×105	285	165	4-M20deep 16 45°Uniform distribution	76	F14	F16
EAM025/MOW5-40	50	136	700	320	180	678	Φ508	340	220	22×105	285	165		76	F14	F16
EAM025/MOW6-70	50	178	710	330	180	678	Φ508	340	220	28×143	375	254	8-M16deep 16 22.5°Uniform distribution	102	F14	F25
EAM040/MOW7-50	70	210	845	465	180	678	Φ508	340	220	28×143	450	254	8-M16deep 24 22.5°Uniform distribution	127	F14	F25
EAM060/MOW7-60	70	210	885	465	180	715	Φ762	365	260	28×143	450	254		127	F16	F25



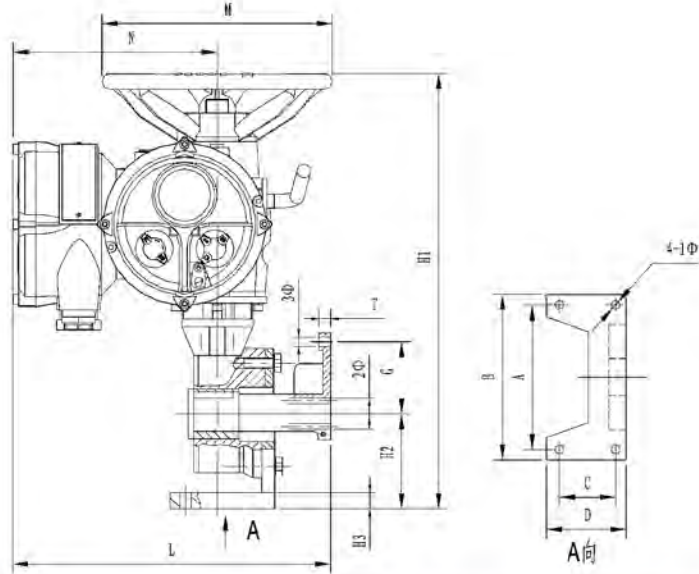
Type of Electric Device	G	H	K	L	M	N	P	S	T	D1	D2	D3	n-Md4
EAM150	230	557	503	1024	Φ432	358	335	438	116	Φ300	Φ254	Φ200	8-M16
EAM200/300	230	577	503	1024	Φ432	358	335	438	116	Φ350	Φ298	Φ200	8-M20

b.Secondary deceleration



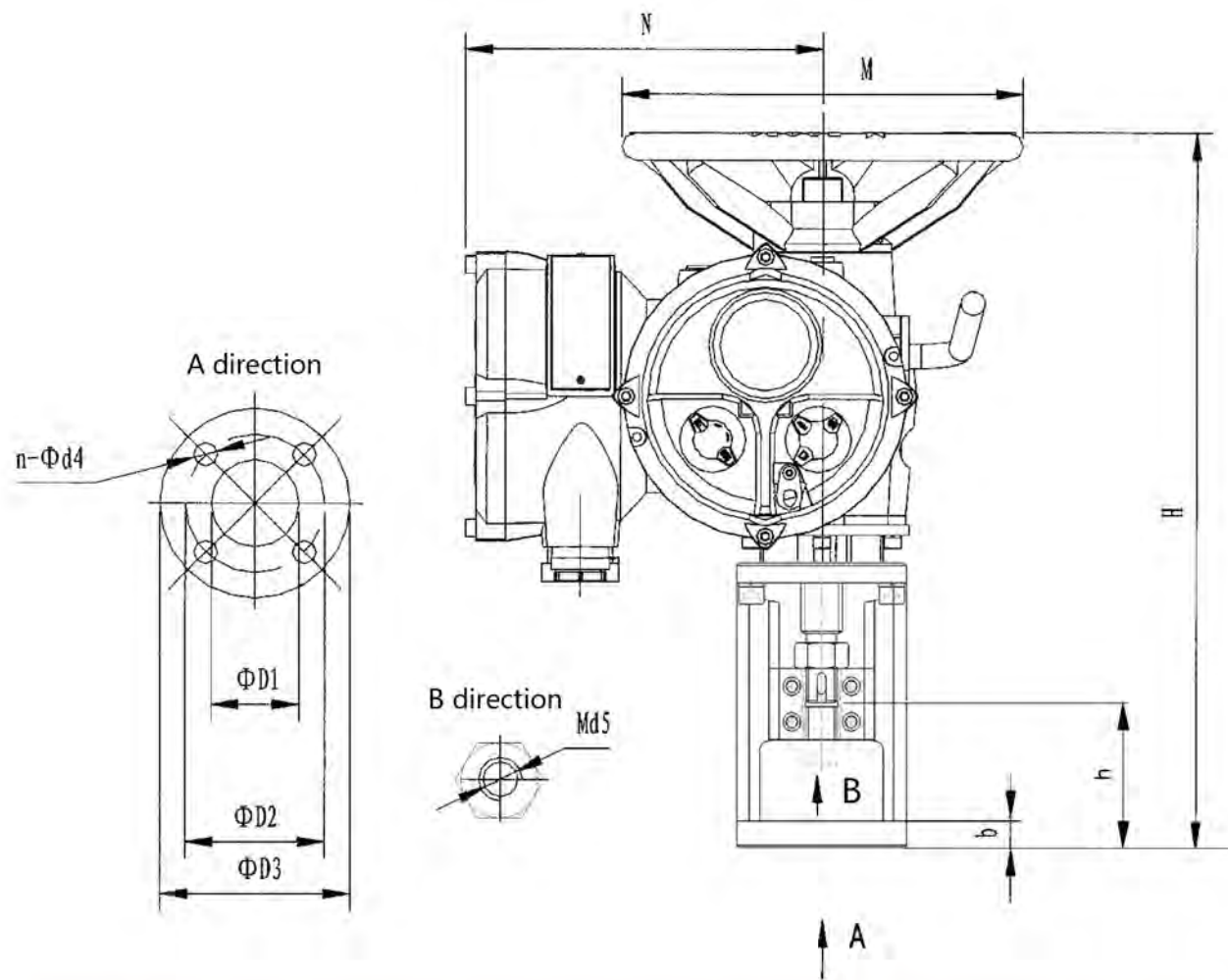
Type of Electric Device	D	E	H ₁	H ₂	G	L	M	N	P	b×L	Φd ₁	Φd ₂	N-md ₃	Permissible maximum diameter	Secondary gearbox
EAM010/MQW5R-80 EAM010/MQW5R-120	50	150	767	447	180	560	Φ300	320	180	22×105	285	165	4-M20deep 20 45°Uniform distribution	76	F10 F16
EAM015/MQW6R-140	50	192	777	457	180	560	Φ300	320	180	28×143	375	254	4-M20deep 20 45°Uniform distribution	102	F10 F25
EAM025/MQW6R-140	50	192	837	457	180	678	Φ508	320	220	28×143	375	254	4-M20deep 20 45°Uniform distribution	102	F14 F25
EAM025/MQW7R-180	70	210	1035	655	180	678	Φ508	340	220	28×143	450	254	4-M20deep 20 45°Uniform distribution	127	F14 F25
EAM040/MQW8R-180	87.5	245	1105	725	180	678	Φ508	340	220	40×120	520	254	8-M16deep 24 225°Uniform distribution	153	F14 F25
EAM060/MQW9R-180	85	280	1320	900	180	715	Φ762	365	260	40×120	590	298	8-M20deep 30 225°Uniform distribution	178	F16 F30
EAM120/MQW10R-180	100	343	1412	952	180	900	Φ830	450	320	40×120	725	356	8-M30deep 36 225°Uniform distribution	203	F25 F35
EAM060/MQW11R-350	125	450	1406	986	180	715	Φ762	365	260	52×230	972	406	8-M30deep 36 225°Uniform distribution	250	F16 F40

2) Installation in situ



Type of Electric Device	A	B	C	D	G	H ₁	H ₂	H ₃	L	M	N	1Φ	Permissible Maximum Machining Size2Φ	3Φ	T
EAM005/MQW3-40 EAM005/MQW3-70	220	245	130	160	100	618	128	20	380	Φ300	Φ260	Φ12	Φ36	Φ14	14
EAM010/MQW4-40 EAM010/MQW4-70	320	360	130	160	120	645	170	20	435	Φ300	Φ260	Φ14	Φ37	Φ16	23
EAM015/MQW5-70	390	420	180	210	165	725	215	20	450	Φ300	Φ260	Φ14	Φ61	Φ20	23
EAM025/MQW5-40	390	430	180	210	165	785	215	20	465	Φ508	Φ260	Φ14	Φ61	Φ20	25
EAM010/MQW5R-80 EAM010/MQW5R-120	390	430	180	210	165	790	215	20	465	Φ300	Φ286	Φ14	Φ61	Φ20	25
EAM025/MQW6-70	430	480	200	250	170	875	280	25	470	Φ508	Φ260	Φ14	Φ61	Φ30	25
EAM015/MQW6R-140	430	480	200	250	170	830	250	25	470	Φ300	Φ260	Φ14	Φ61	Φ30	25
EAM025/MQW6R-140	430	480	200	250	170	890	250	25	534	Φ300	Φ286	Φ14	Φ61	Φ30	25
EAM040/MQW7-80	510	560	270	315	170	1005	295	30	488	Φ508	Φ286	Φ22	Φ61	Φ30	25
EAM060/MQW7-80	510	560	270	305	170	1050	300	30	510	Φ762	Φ305	Φ22	Φ80	Φ30	25
EAM025/MQW7R-180	510	560	270	315	170	1010	300	30	510	Φ762	Φ305	Φ22	Φ80	Φ30	25
EAM040/MQW8R-180	590	640	320	370	250	1105	340	35	525	Φ762	Φ305	Φ22	Φ80	Φ30	35
EAM060/MQW9R-180	700	785	340	395	290	1295	395	35	552	Φ762	Φ365	Φ30	Φ125	Φ33	36
EAM120/MQW10R-180	816	896	385	450	320	1412	460	55	618	Φ830	Φ450	Φ33	Φ130	Φ40	40
EAM060/MQW11R-180	860	940	440	520	320	1406	480	40	572	Φ762	Φ365	Φ40	Φ160	Φ50	35

4. EAML Direct Travel Intelligent Electric Device Shape and Installation Dimension:



Type of Electric Device	N	M	H	b	ΦD1	ΦD2	ΦD3	N-Φd4	Md5	h	Trip
EAML040	265	300	660	22	60	80	140	2-Φ10	M8	86	10
										79	16
										74	25
EAML050	265	300	660	22	80	105	140	4-Φ12	M12×1.25	105	40
								4-Φ14	M16×1.5	114	60
EAML250	280	508	720	30	95	118	200	4-Φ12	M12×1.25	105	40
								4-Φ14	M16×1.5	114	60
								4-Φ18	M20×1.5	95	100
								4-Φ14	M16×1.5	114	60
EAML300	280	508	720	30	100	130	200	4-Φ14	M16×1.5	114	60
								4-Φ18	M20×1.5	95	100

Driving Connection of EAM Intelligent Angle Travel Electric Device

Before the installation of the electric device, check the installation size of the flange of the electric device to see if the driving sleeve matches the valve. Otherwise, the driving sleeve is unloaded from the base of the electric device and processed into the form of valve matching, and then reinstalled.

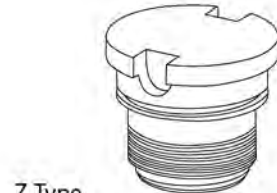
The driving connection of EAM multi-rotation intelligent angle stroke electric device has two kinds of base: EAM005/010/015/025/040/060 type base is removable, and EAM120/150/200/300 type base is integral. Both bases are equipped with flanges and drive bushes that meet ISO5210 standards.

EAM005/010/015/025/040/060Type Electric Device

Thrust type



A Type
For EAM005 to 060

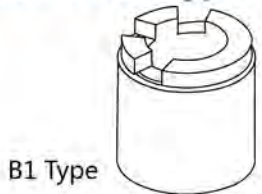


Z Type
For EAM025-060
Stem suitable for larger diameter

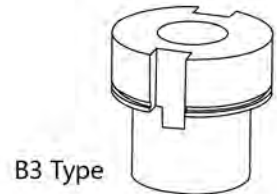


Z3 Type
For EAM025-060
Stem suitable for larger diameter and length

Non-thrust type



B1 Type



B3 Type



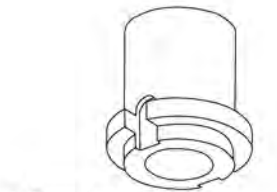
B4 Type

EAM120/150/200/300Type Intelligent Electric Device

Thrust type



A Type Location 1
For EAM120/150/200

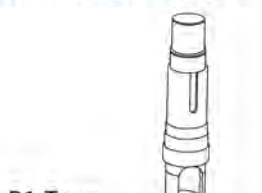


A Type Location2
For EAM120/150/200/300

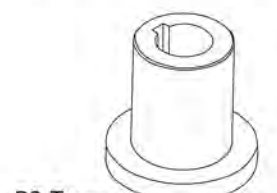


Z3 Type
Stem suitable for larger diameter and length

Non-thrust type



B1 Type
For EAM120/150/200
With larger fixed holes
Holes and keyways conform to ISO standards



B3 Type
For EAM120/150/200
Fixed hole
Holes and keyways conform to ISO standards



B4 Type
For EAM120/150/200
Solid drive sleeve,
To be processed by the user

Explanation of Terminal Number of EA Series Intelligent Electric Actuator



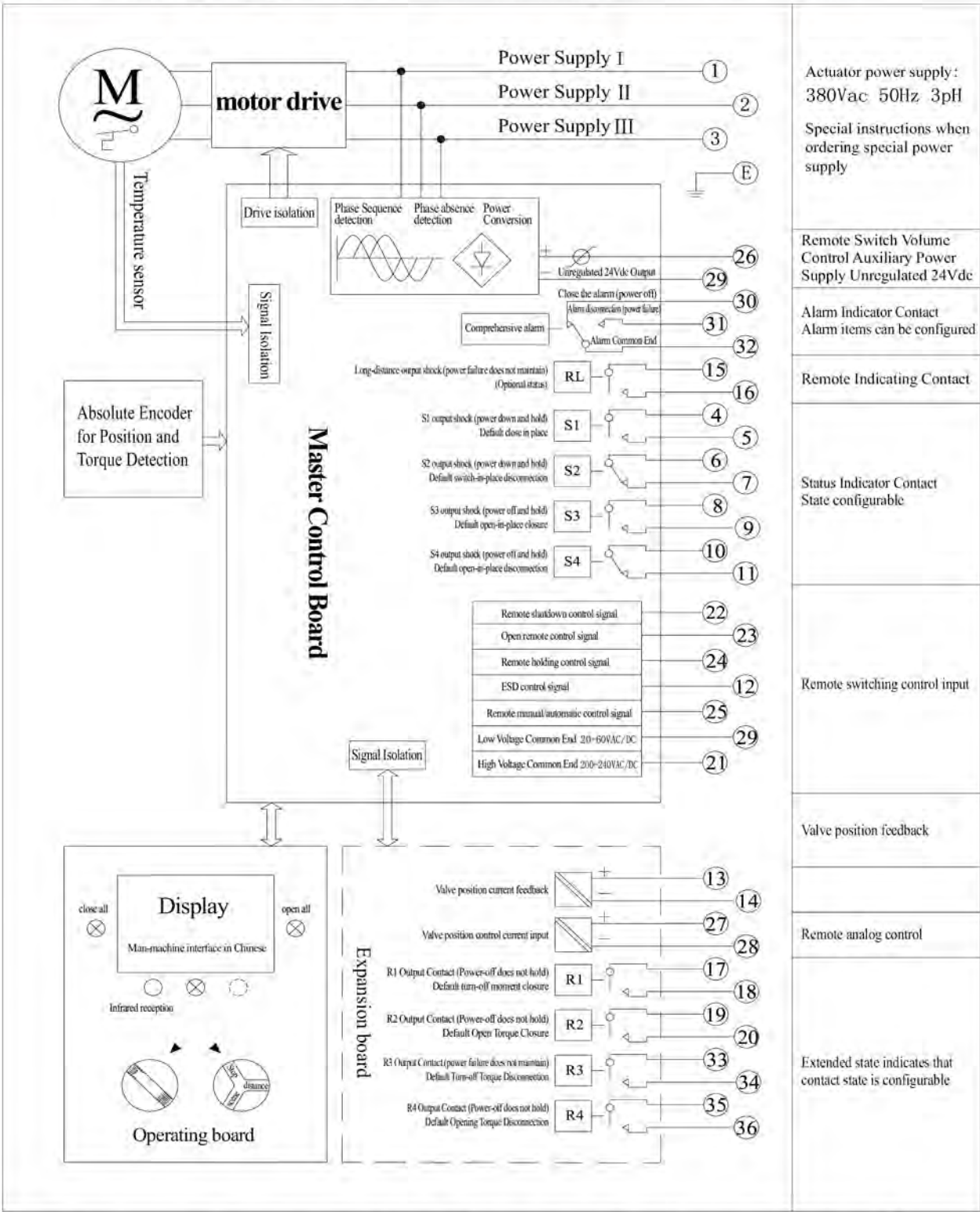
Terminal number	Terminal name	Terminals Meaning	Terminal number	Terminal name	Terminals Meaning
1	U**	AC power supply input 1	19	*R2-RELAY-1	R2 Output Contact 1
2	V**	AC power supply input 2	20	*R2-RELAY-2	R2 output contact 2
3	W**	AC power supply input 3	21	R-H-COM	Common terminal of remote high voltage signal
4	S1-RELAY-1	S1 Output Contact 1 (default close in place)	22	R-CLOSE	Close remote control signal input terminal
5	S1-RELAY-2	S1 Output Contact 2 (default close in place)	23	R-OPEN	Open remote control signal input terminal
6	S2-RELAY-1	S2 Output Contact 1 (default open-in-place close)	24	R-HOLD	Remote holding signal input
7	S2-RELAY-2	S2 Output Contact 2 (default open-in-place close)	25	R-AUTO	Remote automatic control signal input terminal
8	S3-RELAY-1	S3 Output Contact 1 (default turn-off moment closure)	26	24Vdc	Unregulated 24Vdc input
9	S3-RELAY-2	S3 Output Contact 2 (default turn-off moment closure)	27	*APC(+)	Valve position control current input (+) end
10	S4-RELAY-1	S4 Output Contact 1 (Default Open Torque Close)	28	*APC(-)	Valve position control current input (-) end
11	S5-RELAY-2	S4 Output Contact 2 (Default Open Torque Close)	29	R-L-COM/0V	Common terminal of remote low voltage signal
12	ESD	ESD control signal input	30	MONI-NC	Closed end of alarm output contact (when alarming)
13	*CPT(+)	Valve Position Current Feedback (+) End	31	MONI-NO	Alarm Output Contact Disconnection End (when alarming)
14	*CPT(-)	Valve position current feedback (-) end	32	MONI-COM	Common end of alarm output contact
15	R-RELAY-1	Mode button indicates contact 1 at a distance	33	*R3-RELAY-1	R3 Output Contact 1
16	R-RELAY-2	Mode button indicates contact 2 at a distance	34	*R3-RELAY-2	R3 Output Contact 2
17	*R1-RELAY-1	R1 Output Contact 1	35	*R4-RELAY-1	R4 Output Contact 1
18	*R1-RELAY-2	R1 Output Contact 2	36	*R4-RELAY-2	R4 Output Contact 2

Note: 1. **: For single-phase actuators, terminals 1 and 2 are connected to 220VAC and terminals 3 are idle.

2. The output contact capacities in the table are 5A/250VAC or 5A/30VDC.

3. The content with * number is optional and must be stated when ordering.

Internal wiring diagram of EA series intelligent electric actuator



Note: If you need to expand more status indication contacts or bus control and special control requirements, please contact the representative office.
The dotted line in the figure is the function of selection.