

EOH Series>>>

Clutch Manual Override Quarter Turn Electric Actuator

For butterfly valve, ball valve, plug valve, and other quarter turn valve applications

Long Life

Over 20000 times duty cycle

Safe Design

Patented manual override design, prevents motorized hand wheel rotation

Service

2 years warranty
7 days factory lead time
8 hours service feedback



FLOWINN (SHANGHAI) INDUSTRIAL CO.,LTD.

Headquarters

Flowinn (Shanghai) Industrial Co., Ltd

Branches

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Offices in China

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5+

Continents global sales

20%+

Annual business growth

60+

Product patents

500+

Customers served

150,000+

Reserve capacity

Company Profile

Founded in 2007, FLOWINN focuses on R&D, manufacturing and sales of electric actuator for control valves. With an annual production capacity of 150,000 units, FLOWINN has established strategic partnerships with many fortune 500 companies to provide with the best flow control solutions. Sales network has been expanded to all parts of the world, including Asia, Europe, United States and others. We follows the belief of 'Continuous Improvement and Pursuit of Excellence', implement lean production and 6 Sigma management mode, hence creating FLOWINN's core competitiveness.

Electric actuators can widely apply to water treatment, HVAC, chemical, petroleum, metallurgy, electric power, medicine, ship building projects. Our electric actuators products are also approved for a number of international certifications, FLOWINN also holds more than 100 patents itself. These include UL, SIL3, CE, CSA, explosion-proof (ATEX, IECEx), IP68, RoHS, REACH and others. Most of them are awarded by TUV, NEPSI, DNV, SGS, BSI and other internationally renowned institutions.

Valve duty cycle life

20,000 times

Long Life

Safe Design

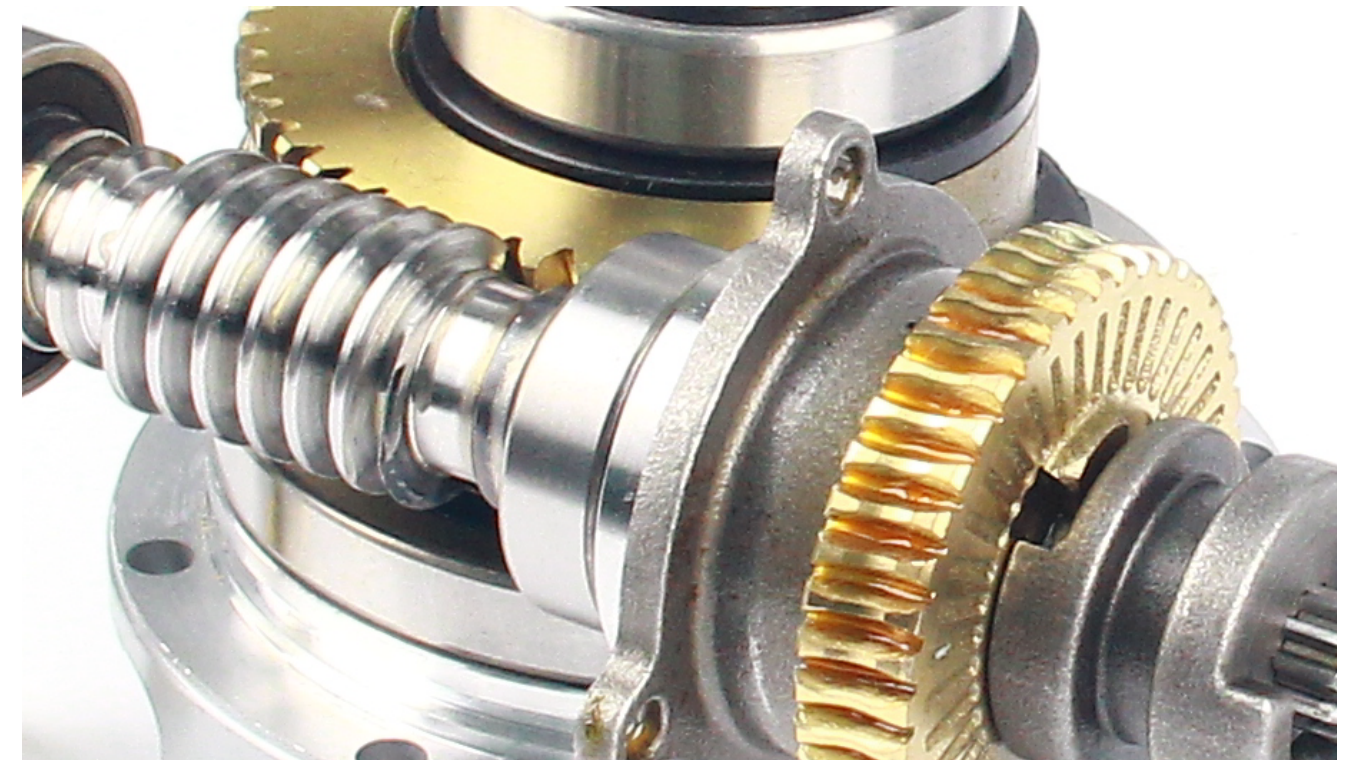
Clutch system
Patented manual override design, prevents motorized hand wheel rotation

2 years warranty

7 days factory lead time

8 hours service feedback

Service



Product Profile

EOH series adopt lightweight, high torque output, can output torque range of 35-5000N.m. Control mode is mainly divided into two types: on/off type and modulating type; According to the different requirements of the site working conditions, it is mainly divided into Basic type; Integral type; Mechatronics type; Integrated type, widely used in buildings, water treatment, light industry and other fields, serialized product design can provide users with one-stop solutions to meet the needs of different users.



Product Feature

- 1 Limit Function**
Integrated circuit board + double CAM design
- 2 Operational Safety**
Class H motor, with thermal protector up to 150°C (>100N.m)
- 3 Over Torque Protection**
150N.m and above are equipped with Torque protection device
- 4 Manual Override**
Patented worm gear clutch design to prevent motorized hand wheel rotation. (>100N.m)
- 5 Reliable Sealing**
Adopt long lasting O shape sealing ring ,effectively ensure water-proof grade
- 6 Worm gear and worm**
Two-stage Archimedes worm gear with higher bearing than helical gear design. Provides better loading and force efficiency.
- 7 Indicator**
3D indicator for observing valve travel position from all angles
- 8 Packaging design**
Pearl cotton protection, complies to ISO2248 drop test.

Product Classification

Basic Type (B) / Integral Type (M)

- Torque Range: 35-5000N.m
- Voltage: 1 Phase: AC110V/AC220V±10%; 3 Phase AC380V±10% (Basic type must be EOH10 or higher), 50Hz/60Hz±5%; DC24V(Torque up to 80N.m AC/DC 24V can be produced)
- Working System: On/Off type: S2-15min; Modulating type: S4-25%
- Electrical Interface: 2*PG13.5 (< 100N.m); 2*PG16 (≥100N.m)
- Motor Specifications: Class H(≥100N.m)
- Indication: 3D position indicator; EOH03/EOH05 with optional flat pointer
- Ingress Protection: IP67, Optional: IP68



Note: Single-phase voltage: Motor duty: On/off type: S2-10min(above EOH100)

Product Classification

Mechatronics Type (S5)

- Torque Range: 100-5000N.m
- Voltage: 3 Phase: AC380V±10%; 50Hz/60Hz±5%;
- Working System: On/Off type: S2-15min; Modulating type: S4-25%
- Electrical Interface: 2*PG16
- Motor Specifications: Class H
- Indication: 3D position indicator/ LED screen opening indicator
- Ingress Protection: IP67, optional :IP68



Mechatronics Type (S4)

- Torque Range: 100-5000N.m
- Voltage: 1 Phase: AC110V/AC220V±10%; 50Hz/60Hz±5%; DC24V
- Working System: On/Off type: S2-15min; Modulating type: S4-25%
- Electrical Interface: 2*PG16
- Motor Specifications: Class H
- Indication: 3D position indicator / LED screen opening indicator
- Ingress Protection: IP67



Integrated Type (I)

- Torque Range: 100-5000N.m
- Voltage: 1 phase: AC110V/AC220V ±10%; 3 Phase AC380V±10%, 50Hz/60Hz±5%
- Working System: On/Off type: S2-15min; Modulating type: S4-25%
- Electrical Interface: 2*NPT3/4",
- Motor Specifications: Class H
- Indication: 3D position indicator / LCD display
- Ingress Protection: IP67, Optional: IP68



Modbus®

Technical Specification

		Basic Type (B)	Integral Type (M)	Mechatronics Type (S4/S5)	Intelligent Type (I)
Control Mode	On/off Type	✓	✓	✓	✓
	Modulating Type	—	✓	✓	✓
Ingress Protection	IP67, Optional:IP68*	✓	✓	✓	✓
Indication	3D position indicator	✓	✓	✓	✓
	Full open/Full close/Remote control/Fault indicator	—	—	✓	✓
	LCD digital display of the opening percentage	—	—	—	✓
	LCD torque display percentage	—	—	—	—
human-machine interaction	Local control	—	—	✓	✓
	Infrared remote control	—	—	—	✓
Protection function	Torque protection	✓	✓	✓	✓
	Motor overheat protection	✓	✓	✓	✓
	Jammed valve protection	—	✓	✓	✓
	Broken signal protection	—	✓	✓	✓
	Instantaneous	—	✓	✓	✓
	Open Phase protection (3-phase only)	—	—	✓	✓
	Phase correctio(3-phase only)	—	—	✓	✓
	Non-invasive protection	—	—	✓	✓
	Data records	—	—	—	✓
	Password protection	—	—	—	✓
	Heat protection	✓	✓	✓	✓
Feedback signal	On/off travel limit; On/off torque switch; Position feedback potentiometer	✓	✓	✓	—
	1 group of comprehensive fault points; 5 groups of configurable contacts (contact capacity 5A@250Vac)	—	—	—	✓
	Extended configurable relay feedback contacts (Contact capacity 5A@250Vac)	—	—	—	—
Control signal	On-off control	✓	✓	✓	✓
	Analog control	—	✓	✓	✓
	Modbus, Profibus	—	—	—	✓

The definiton of IP68: Depth of water: Maximum 7m under water level. Duration of continous immersion in water: Max.(72 hours).

Technical Specification

Type	Power (W)	Max output torque (N.m)	Operating time(Sec) (50Hz)			Rated Current(A)				Handwheel Number of turns	ISO5211	Stem height (mm)	Weight (kg)	Remark
			AC110V AC220V	AC380V	AC/DC 24V	AC110V	AC220V	AC380V	AC/DC 24V					
EOH03	6	35	11	—	8	0.36	0.24	—	1.20	7	F03/F05/F07	□11x11 □14x14	≤20	Wrench operation
EOH05	6	50	15	—	10	0.36	0.24	—	1.20	7				
EOH03-H	10	35	14	—	14	0.36	0.24	—	1.20	18				
EOH05-H	10	50	19	—	19	0.36	0.24	—	1.20	18	F03/F05/F07	□11x11 □14x14	≤20	Handwheel operation
EOH08-H	10	80	28	—	28	0.36	0.24	—	1.20	36		□14x14		
EOH10	25	100	20	—	15	1.50	0.72	0.25	4.20	10	F05/F07	□17x17	≤32	
EOH15	40	150	26	—	20	1.70	0.80	0.35	8.80	14				
EOH20	50	200	26	—	20	2.10	0.98	0.40	10.0	14	F07/F10	□22x22	≤44	
EOH26	60	260	26	—	20	2.40	1.05	0.45	11.0	14				
EOH35	90	350	24	—	19	3.00	1.32	0.60	13.0	13				
EOH50	120	500	24	—	19	4.70	1.55	0.75	15.0	13	F10/F12	□27x27	≤44	
EOH60	150	600	24	—	—	4.70	1.71	1.15	—	13				
EOH80	180	800	37	—	—	5.00	1.83	1.55	—	16				
EOH100	200	1000	37	—	—	5.60	2.10	1.55	—	16	F12/F14	□36x36	≤50	Hand/ Electric switching device,
EOH150	180	1500	61	—	—	5.60	2.10	1.55	—	16				Handwheel operation
EOH200	200	2000	83	—	—	5.60	2.10	1.55	—	34				
EOH250	200	2500	136	—	—	5.60	2.10	1.55	—	34	F14/F16	□36x36 □46x46	≤85	
EOH300	180	3000	136	—	—	5.60	2.10	1.55	—	34				
EOH400	200	4000	183	—	—	5.60	2.10	1.55	—	52				
EOH500	200	5000	183	—	—	5.60	2.10	1.55	—	52	F25	□46x46 □55x55	≤130	

Note: 1.Product factory standard configuration.
2.Rated torque is 75% of the max torque.
3.The operating time above is 50Hz. The operating time of 60Hz is 5/6 of that of 50Hz. The max output torque is the same as above.
4.If the stem height of the valve is larger than the above size , please contact sales staff for customization.



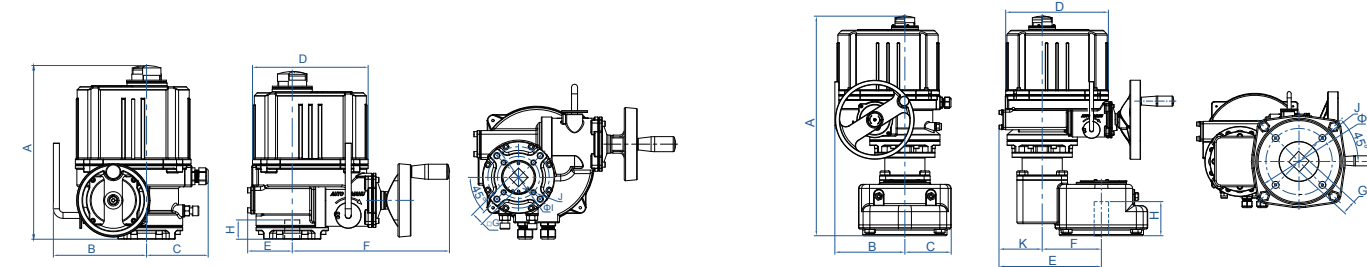
Basic type/Integral type
Product Dimension

Mechatronics type (S4)
Product Dimension

EOH03/05 EOH03/05-H~EOH08



EOH10-150 EOH200-500

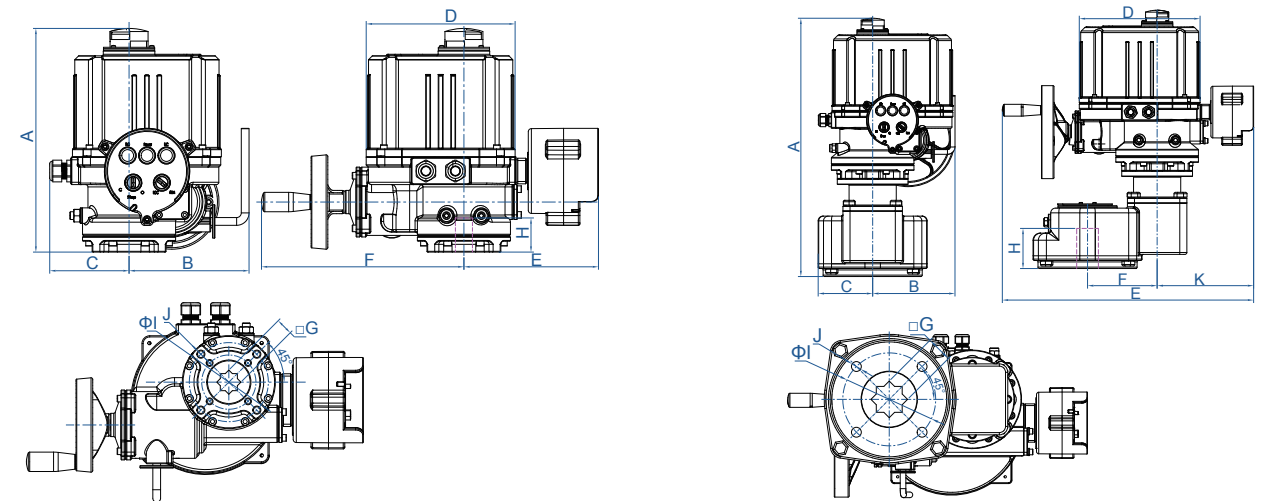


Unit:mm

Type	A*	B*	C*	D*	E*	F*	□G	H	ΦI	J	K*	Weight(kg)
EOH03 EOH05	On/Off 157/137 (flat pointer)	117	144	87	—	—	11x11 14x14	20	36 50 70	4-M5 4-M6 4-M8	—	3
	Modulating 177/157 (flat pointer)											
EOH03-H EOH05-H EOH08-H	On/Off	145	112	170	—	—	11x11 14x14	20	36 50 70	4-M5 4-M6 4-M8	—	3
	Modulating											
EOH10	258	118	96	164	54	252	17x17	32	50 70	4-M6 4-M8	—	9
EOH15	288	155	102	192	74	261	22x22	44	70 102	4-M8 4-M10	—	11.5
EOH20												
EOH26												
EOH35	324	162	112	225	83	276	27x27	44	102 125	4-M10 4-M12	—	14
EOH50												
EOH60												
EOH80	357	175	115	256	108	328	36x36	50	125 140	4-M12 4-M16	—	24
EOH100												
EOH150												
EOH200	547	175	115	256	255	147.5	36X36 46X46	85	140 165	4-M16 4-M20	108	64
EOH250												
EOH300												
EOH400	560	175	160	256	290	182.5	46X46 55X55	130	254	8-M16	206	95
EOH500												

Note: The tolerance of the above dimension with "*" is ±3mm;
The above EOH10 are non-super-torqued external dimensions.

S4(EOH10-150) S4(EOH200-500)



Unit:mm

Type	A*	B*	C*	D*	E*	F*	□G	H	ΦI	J	K*	Weight(kg)
EOH10	258	118	96	164	158	252	11x11/14x14 17x17	32	50 70	4-M6 4-M8	—	10
EOH15	288	155	102	192	174	261	14x14 17x17 19x19 22x22	44	70 102	4-M8 4-M10	—	12.5
EOH20												
EOH26												
EOH35	324	162	112	225	184	276	19x19 22x22 27x27	44	102 125	4-M10 4-M12	—	15
EOH50												
EOH60												
EOH80	357	175	115	256	205	328	27x27 36x36	50	125 140	4-M12 4-M16	—	25
EOH100												
EOH150												
EOH200	547	175	115	256	534	147.5	36X36 46X46	85	140 165	4-M16 4-M20	206	65
EOH250												
EOH300												
EOH400	560	175	160	256	548	182.5	46X46 55X55	130	254	8-M16	206	96
EOH500												

Note: The tolerance of the above dimension with "*" is ±3mm.

Mechatronics type (S5)

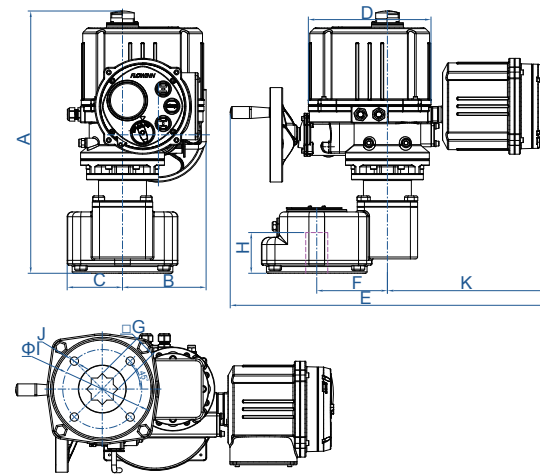
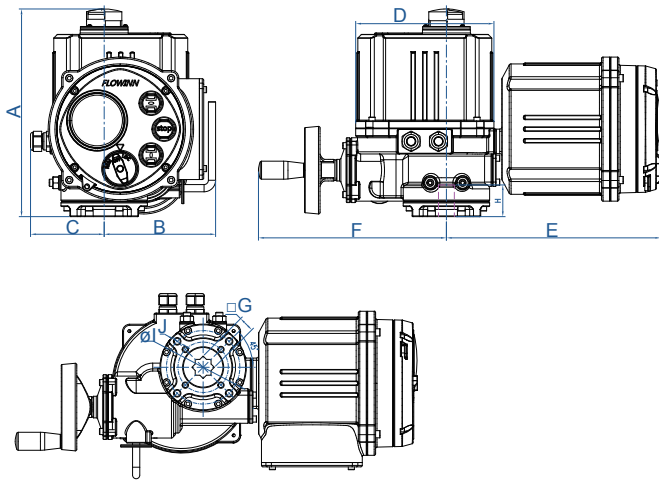
Intelligent type

Product Dimension

Product Dimension

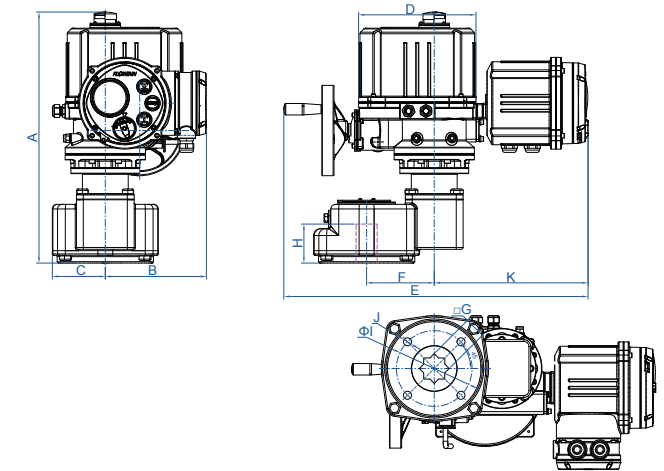
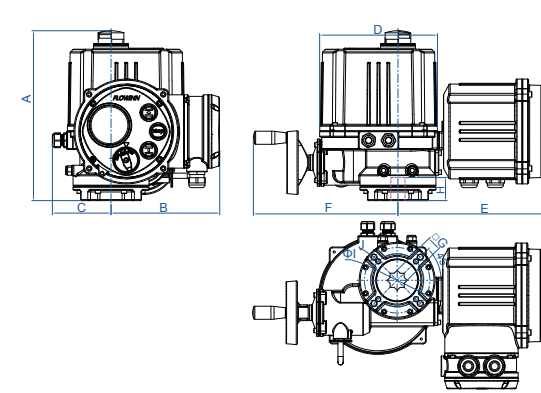
S5(EOH10-150)

S5(EOH200-500)



EOH10-150

EOH200-500



Unit:mm

Type	A *	B *	C *	D *	E *	F *	□G	H	ΦI	J	K*	Weight(kg)
EOH10	258	136	96	164	295	252	11x11/14x14 17x17	32	50 70	4-M6 4-M8	—	13
EOH15	288	155	102	192	312	261	14x14 17x17 19x19 22x22	44	70 102	4-M8 4-M10	—	15.5
EOH20												
EOH26												
EOH35	324	162	112	225	322	276	19x19 22x22 27x27	44	102 125	4-M10 4-M12	—	18
EOH50												
EOH60												
EOH80	357	175	115	256	343	328	27x27 36x36	50	125 140	4-M12 4-M16	—	28
EOH100												
EOH150												
EOH200	547	175	115	256	670	147.5	36X36 46X46	85	140 165	4-M16 4-M20	343	68
EOH250												
EOH300												
EOH400	560	175	160	256	686	182.5	46X46 55X55	130	254	8-M16	343	99
EOH500												

Note: The tolerance of the above dimension with "*" is ±3mm.

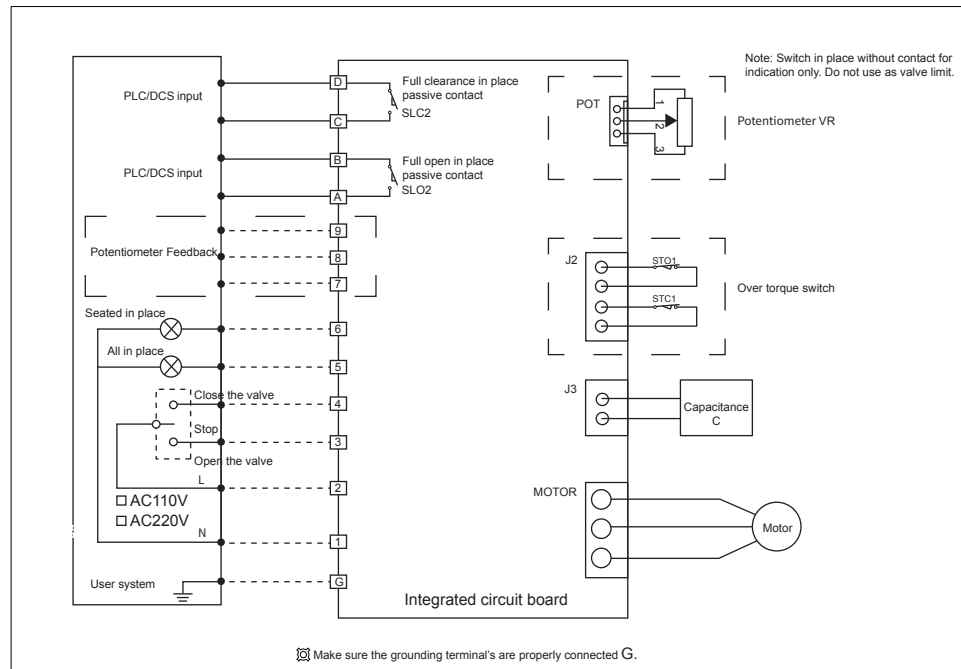
Unit:mm

Type	A *	B *	C *	D *	E *	F *	□G	H	ΦI	J	K*	Weight(kg)
EOH10	258	193	96	164	295	252	11x11/14x14 17x17	32	50 70	4-M6 4-M8	—	14
EOH15	288	201	102	192	312	261	14x14 17x17 19x19 22x22	44	70 102	4-M8 4-M10	—	16.5
EOH20												
EOH26												
EOH35	324	207	112	225	322	276	19x19 22x22 27x27	44	102 125	4-M10 4-M12	—	19
EOH50												
EOH60												
EOH80	357	220	115	256	343	328	27x27 36x36	50	125 140	4-M12 4-M16	—	29
EOH100												
EOH150												
EOH200	547	220	115	256	670	147.5	36X36 46X46	85	140 165	4-M16 4-M20	343	69
EOH250												
EOH300												
EOH400	560	220	160	256	686	182.5	46X46 55X55	130	254	8-M16	343	100
EOH500												

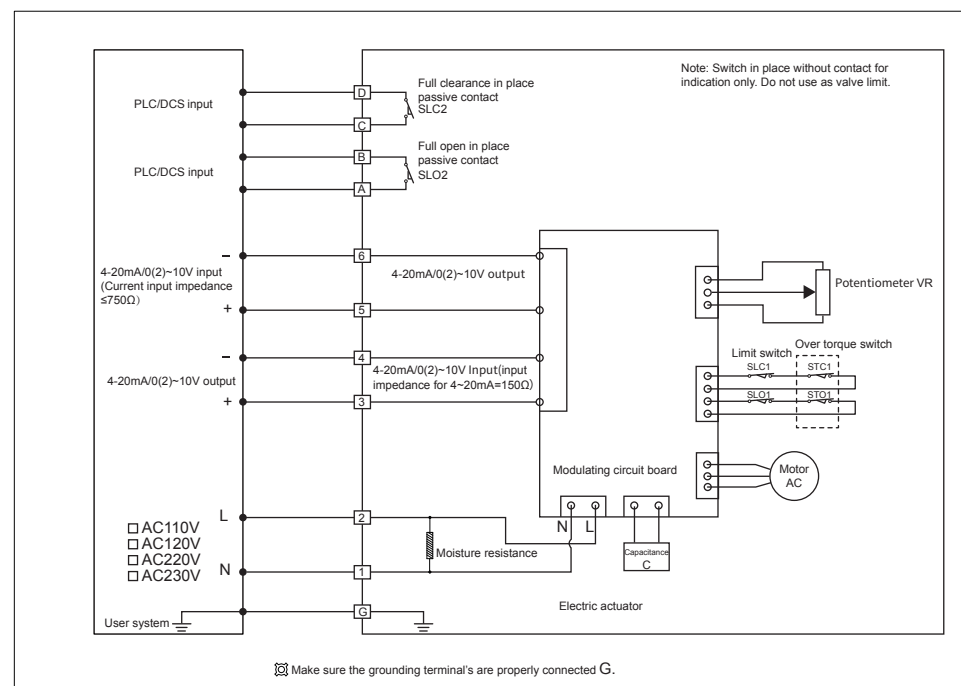
Note: The tolerance of the above dimension with "*" is ±3mm.

Wiring Diagram

EOH Singal phase on/off type wiring diagram



EOH Singal phase modulating type wiring diagram



Note: the above is the wiring diagram of single phase basic switch type and adjustable type, other models can be obtained from our company.



Quality & Service

FLOWINN professional service team is ready to provide users with comprehensive services and professional technical supports at all time:

- No matter is it by phone, mail or on the site, we are standing by for your inquiry
- Stable delivery time
- On-site installation and debugging
- Regularly follow up our products status and maintenance
- We provide training for structure knowledge, operation, debugging, maintenance and more.

Customized Production:

As to Flowinn, there is no such thing called IMPOSSIBLE. For special requirements, we provide customized solutions.