



ACTUATOR Series VA2700



VAN-TEC is pleased to offer Electric Actuation for our valve products. VAN-TEC customers can now order both valve and custom-made actuator, from the same source, with complete, in-house testing and packaging. This saves time and money and helps complete any project with the correct valve and actuator products.

VAN-TEC Series >>>

Clutch Manual Override Quarter Turn Electric Actuator

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

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COMPANY PROFILE

VANTEC., is a world class manufacturer of valve and fluid control products.

Vantec is vertically integrated. Beginning with our Automated, State-of-The-Art foundry, we control all aspects of manufacturing, allowing Weflo to offer high quality products to our customers in Commercial and Industrial sectors.

VANTEC. focuses on Research and Development. Our Product Engineering team is constantly working to improve designs and offer our customers the best in valve and fluid control products. All Weflo products are designed to internationally recognized Standards and Specifications. The Actuators is an extension of this process.

■ VANTEC PRODUCTS

- CE Certified - European Union. Australian Watermark / Oceanmark / Gasmark Certified, German VdS Certified, UK UKCA, WRAS Certified, NSF Certified, China Compulsory Product Certification, CCCF, China Special Equipment Production License, among other Approvals, Listings and Certifications.

■ VANTEC TESTING LABORATORY

- Accredited to ISO 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories

■ VANTEC QUALITY MANAGEMENT SYSTEM

- Certified to ISO 9001:2015 Quality Management System
- Certified to ISO 14001 Environmental Management System
- Certified to ISO 45001 Occupational Health and Safety Management System

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 ►

WFO series adopt lightweight, high torque output, can output torque range of 5000-35N.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; Mechatronics type; Integrated type; Intelligent 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 FEATURES

- ◆ **Limit Function**
Integrated circuit board + double CAM design
- ◆ **Operational Safety**
Class H motor, with thermal protector up to 150°C (> 100N.m)
- ◆ **Over Torque Protection**
150N.m and above are equipped with Torque protection device
- ◆ **Manual Override**
Patented worm gear clutch design to prevent motorized hand wheel rotation.(> 100N.m)

- ◆ **Waterproof Seal**
Adopt long lasting O shape sealing ring ,effectively ensure water-proof grade
- ◆ **Worm gear and worm**
Two-stage Archimedes worm gear with higher bearing than helical gear design.Provides better loading and force efficiency.
- ◆ **Indicator**
3D indicator for observing valve travel position from all angles
- ◆ **Packaging design**
Packaged in pearl cotton, to ISO 2248 Packaging / Vertical Impact Test Standard



PRODUCT CLASSIFICATION ►

Basic Type (B) / Integral Type (M)

- Torque Range: 5000-35N.m
- Voltage 1 Phase: AC110V/AC220V±3%; 3 Phase AC380V±%10(only basic type), 50Hz/60Hz±%5; AC/DC24V
- Working System: On/Off type: S15-2min; Modulating type: S%25-4
- Electrical Interface: 2*PG13.5(<100N.m); 2*PG16(≥100N.m)
- Motor Specifications: Class H(≥100N.m)
- Indication: 3D open indicator
- Ingress Protection: IP67, Optional:IP68



Note: Single-phase voltage: Working System: On/Off type: S15-2min(above EOH100)



Mechatronics Type (S4/S5)

- Torque Range: 5000-100N.m
- Voltage: 1 Phase:AC110V/AC220V±%10(S4); 3 Phase AC380V±%10, 50Hz/60Hz±%5; AC/DC24V
- Working System: On/Off type: S15-2min; Modulating type: S%25-4
- Electrical Interface: 2*PG16
- Motor Specifications: Class H
- Indication: 3D open indicator / LED screen opening indicator
- Ingress Protection: IP67, Optional:IP68(S5)

Intelligent Type (S)

- Torque Range: 5000-100N.m
- Voltage: 1 Phase:AC110V/AC220V±%10; 3 Phase AC380V±%10, 50Hz/60Hz±%5; AC/DC24V
- Working System: On/Off type: S15-2min; Modulating type: S%25-4
- Electrical Interface: 2*NPT1, 1/4/3*NPT1"
- Motor Specifications: Class H
- Indication: 3D open indicator / LCD display
- Ingress Protection: IP67, Optional:IP68

Torque setting: Support torque configuration and percentage display



◀ PRODUCT CLASSIFICATION

Integrated Type (I)

- Torque Range: 5000-100N.m
- Voltage: 1 Phase:AC110V/AC220V±%10; 3 Phase AC380V±%10, 50Hz/60Hz±%5; AC/DC24V
- Working System: On/Off type: S15-2min; Modulating type: S%25-4
- Electrical Interface: 2*NPT4/3"
- Motor Specifications: Class H
- Indication: 3D open indicator / LCD display
- Ingress Protection: IP67, Optional:IP68





TECHNICAL SPECIFICATION ▶

		Basic Type (B)	Integral Type (M)	Mechatronics Type (S4/S5)	Intelligent Type (I)	Integrated Type (S)
Control Mode	On/Off Type	✓	✓	✓	✓	✓
	Modulating Type	—	✓	✓	✓	✓
Ingress Protection	IP67, Optional:IP68*	✓	✓	✓	✓	✓
Indication	3D open indicator	✓	✓	✓	✓	✓
	On/Off/Remote control/Fault signal indicator	—	—	✓	✓	✓
	LCD digital display of the opening percentage	—	—	—	✓	✓
	LCD torque display percentage	—	—	—	—	✓
human- computer 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 Correction(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	Switching control	✓	✓	✓	✓	✓
	Analog control	—	✓	✓	✓	✓
	Modbus, Profibus	—	—	—	✓	✓

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



◀ TECHNICAL SPECIFICATION

Type	Power (W)	Max output torque (N.m)	Running 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					
WFO03	6	35	11	—	8	0.36	0.24	—	1.20	7	F03/F05/F07	□11x11 □14x14	≤20	Wrench operation
WFO05	6	50	15	—	10	0.36	0.24	—	1.20	7				
WFO03-H	10	35	14	—	14	0.36	0.24	—	1.20	18	F03/F05/F07	□11x11 □14x14	≤20	Handwheel operation
WFO05-H	10	50	19	—	19	0.36	0.24	—	1.20	18				
WFO08-H	10	80	28	—	28	0.36	0.24	—	1.20	36		□14x14		
WFO10	25	100	20		15	1.50	0.72	0.25	4.20	10	F05/F07	□17x17	≤32	Hand/ Electric switching device, Handwheel operation
WFO15	40	150	26		20	1.70	0.80	0.35	8.80	14	F07/F10	□22x22	≤44	
WFO20	50	200	26		20	2.10	0.98	0.40	10.0	14				
WFO26	60	260	26		20	2.40	1.05	0.45	11.0	14				
WFO35	90	350	25		19	3.00	1.32	0.60	13.0	13	F10/F12	□27x27	≤44	
WFO50	120	500	24		19	4.70	1.55	0.75	15.0	13				
WFO60	150	600	24		—	4.70	1.71	1.15	—	13				
WFO80	180	800	29		—	5.00	1.83	1.55	—	16	F12/F14	□36x36	≤50	
WFO100	200	1000	29		—	5.60	2.10	1.55	—	16				
WFO150	180	1500	61		—	5.60	2.10	1.55	—	16				
WFO200	200	2000	65		—	5.60	2.10	1.55	—	34	F14/F16	□36x36 □46x46	≤85	
WFO250	200	2500	136		—	5.60	2.10	1.55	—	34				
WFO300	180	3000	136		—	5.60	2.10	1.55	—	34				
WFO400	200	4000	183		—	5.60	2.10	1.55	—	52	F25	□46x46 □55x55	≤130	
WFO500	200	5000	183		—	5.60	2.10	1.55	—	52				

Note:

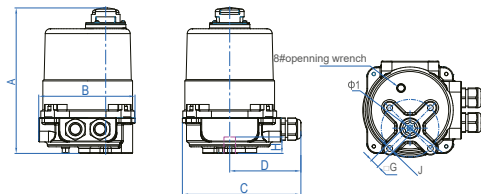
- 1. Product factory standard configuration.
- 2. Rated torque is 75% of the max torque.
- 3. The running time above is 50Hz, the running time of 60Hz is 5/6 of that of 50Hz. The max output torque is the same as above.
- 4. If the stem height of the valve is larger than the above size, please contact sales staff for customization.
- 5. WFO400/WFO500 Regulator switch time ≤10 minutes.



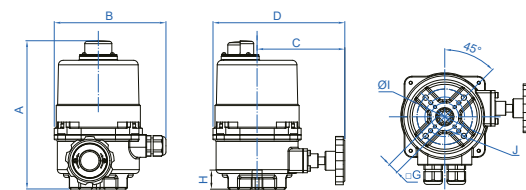
PRODUCT DIMENSION

Basic type/Integral type

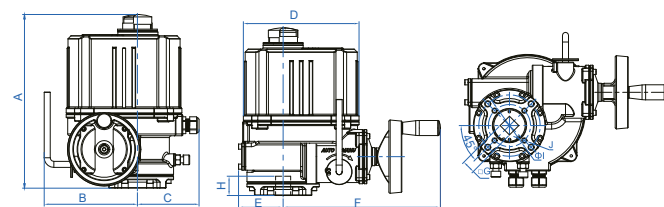
WFO03/05



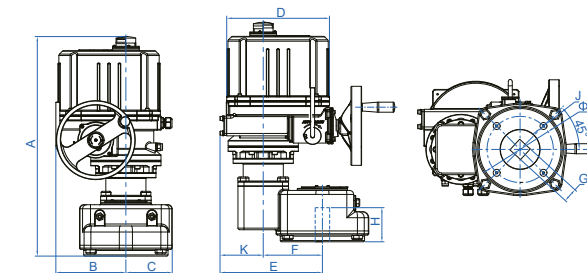
WFO03/05-H~WFO08



WFO10-150



WFO200-500



Unit:mm

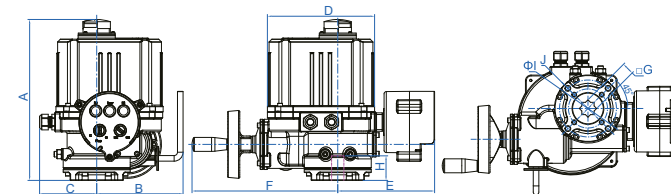
Type		A*	B*	C*	D*	E*	F*	□G	H	ΦI	J	K*	Weight(kg)
WFO03	On/Off	157	117	144	87	—	—	11x11 14x14	20	117	4-M5	—	3
WFO05	Modulating	177									4-M6		
WFO03-H	On/Off	182	145	112	170	—	—	11x11 14x14	20	145	4-M5	—	3
WFO05-H	Modulating	202									4-M6		
WFO10		258	118	96	164	54	252	17x17	32	118	4-M6 4-M8	—	9
WFO15		288	155	102	192	74	261	22x22	44	155	4-M8	—	11.5
WFO20											4-M10		
WFO26													
WFO35		324	162	112	225	83	276	27x27	44	162	4-M10	—	14
WFO50											4-M12		
WFO60													
WFO80		357	175	115	256	108	328	36x36	50	175	4-M12	—	24
WFO100											4-M16		
WFO150													
WFO200		547	175	115	256	255	148	36x36 46x46	85	175	4-M16	108	64
WFO250											4-M20		
WFO300													
WFO400		560	175	160	256	290	160	46x46 55x55	130	254	8-M16	108	95
WFO500													

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

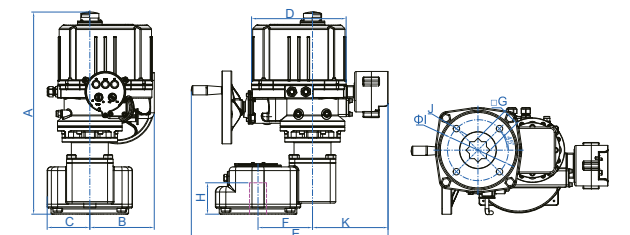
PRODUCT DIMENSION

Mechatronics type

S4(WFO10-150)



S4(WFO200-500)

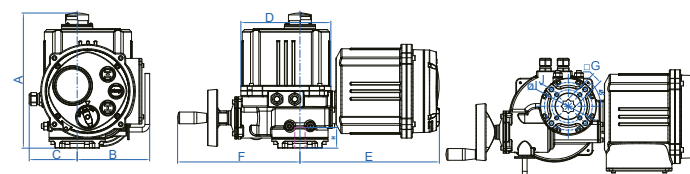


Unit:mm

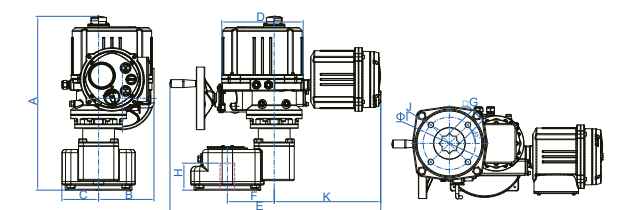
Type	A*	B*	C*	D*	E*	F*	G	H	ΦI	J	K*	Weight(kg)
WFO10	258	118	96	164	158	252	11x11/14x14/17x17	32	50/70	4-M6/4-M8	—	10
WFO15												
WFO20	288	155	102	192	174	261	14x14 17x17 19x19 22x22	44	70 102	4-M8 4-M10	—	12.5
WFO26												
WFO35												
WFO50	324	162	112	225	184	276	19x19 22x22 27x27	44	102 125	4-M10 4-M12	—	15
WFO60												
WFO80												
WFO100	357	175	115	256	205	328	27x27 36x36	50	125 140	4-M12 4-M16	—	25
WFO150												
WFO200												
WFO250	547	175	116	256	533	148	36x36 46x46	85	140 165	4-M16 4-M20	205	65
WFO300												
WFO400	560	175	160	256	547	183	46x46 55x55	130	254	8-M16	205	96
WFO500												

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

S5(WFO10-150)



S5(WFO200-500)



Unit:mm

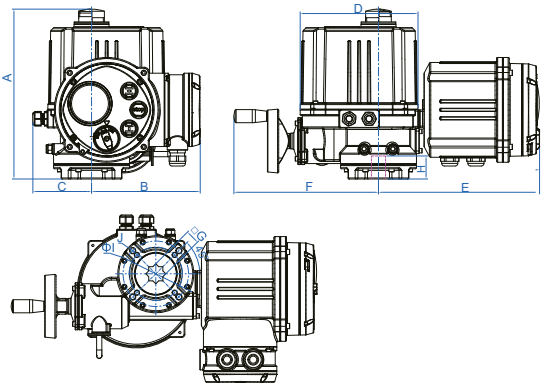
Type	A*	B*	C*	D*	E*	F*	G	H	ΦI	J	K*	Weight(kg)
WFO10	258	136	96	164	295	252	11x11/14x14/17x17	32	50/70	4-M6/4-M8	—	13
WFO15												
WFO20	288	155	103	192	298	261	14x14 17x17 19x19 22x22	44	70 102	4-M8 4-M10	—	15.5
WFO26												
WFO35												
WFO50	325	162	112	225	308	276	19x19 22x22 27x27	44	102 125	4-M10 4-M12	—	18
WFO60												
WFO80												
WFO100	357	175	115	256	336	329	27x27 36x36	50	125 140	4-M12 4-M16	—	28
WFO150												
WFO200												
WFO250	547	175	116	256	664	148	36x36 46x46	85	140 165	4-M16 4-M20	336	68
WFO300												
WFO400	560	175	160	256	678	183	46x46 55x55	130	254	8-M16	336	96
WFO500												

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

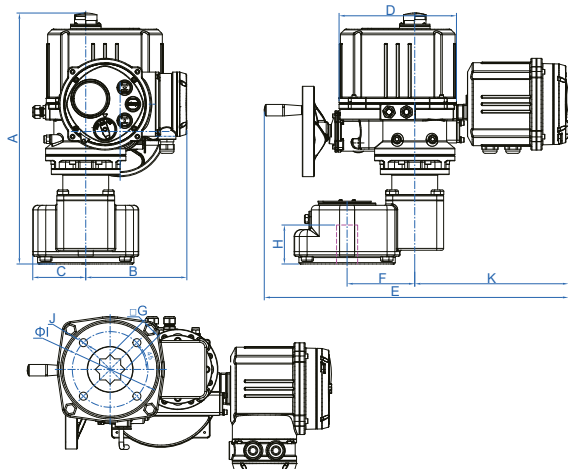
PRODUCT DIMENSION

Integrated type

WFO10-150



WFO200-500



Unit:mm

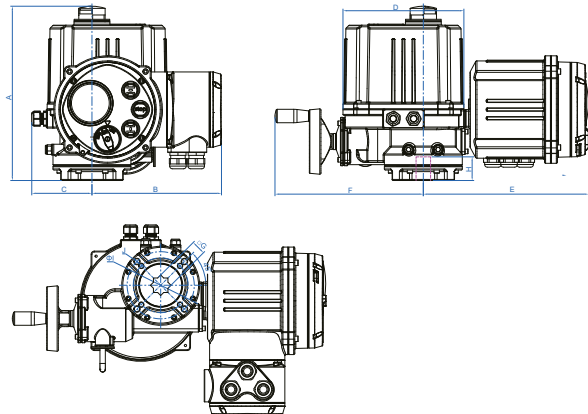
Type	A*	B*	C*	D*	E*	F*	□G	H	ΦI	J	K*	Weight(kg)
WFO10	258	193	96	164	295	252	11x11/14x14 17x17	32	50 70	4-M6 4-M8	—	14
WFO15	289	201	103	192	298	261	14x14 17x17 19x19 22x22	44	70 102	4-M8 4-M10	—	16.5
WFO20												
WFO26												
WFO35	325	208	112	225	308	276	19x19 22x22 27x27	44	102 125	4-M10 4-M12	—	19
WFO50												
WFO60												
WFO80	357	221	115	256	336	328	27x27 36x36	50	125 140	4-M12 4-M16	—	29
WFO100												
WFO150												
WFO200	547	221	116	256	664	148	36x36 46x46	85	140 165	4-M16 4-M20	336	69
WFO250												
WFO300												
WFO400	560	175	160	256	678	183	46x46 55x55	130	254	8-M16	336	100
WFO500												

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

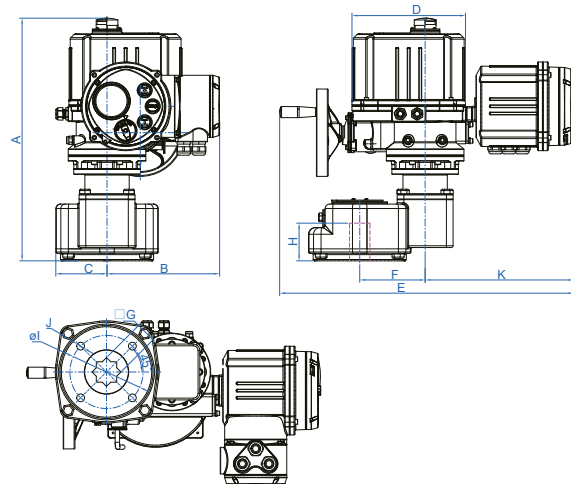
PRODUCT DIMENSION

Intelligent type

WFO10-150



WFO200-500



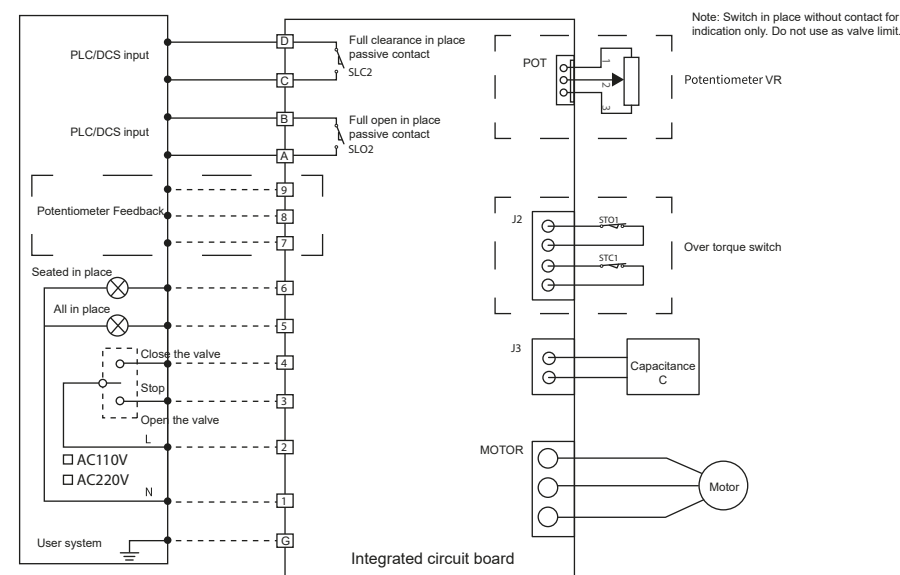
Unit:mm

Type	A*	B*	C*	D*	E*	F*	□G	H	ΦI	J	K*	Weight(kg)
WFO10	259	226	96	164	295	252	11x11/14x14 17x17	32	50 70	4-M6 4-M8	—	14.5
WFO15	289	234	103	192	298	261	14x14 17x17 19x19 22x22	44	70 102	4-M8 4-M10	—	17
WFO20												
WFO26												
WFO35	325	241	112	225	308	276	19x19 22x22 27x27	44	102 125	4-M10 4-M12	—	19.5
WFO50												
WFO60												
WFO80	357	254	115	256	336	328	27x27 36x36	50	125 140	4-M12 4-M16	—	29.5
WFO100												
WFO150												
WFO200	547	254	116	256	664	148	36x36 46x46	85	140 165	4-M16 4-M20	336	69.5
WFO250												
WFO300												
WFO400	560	254	160	256	678	183	46x46 55x55	130	254	8-M16	336	100.5
WFO500												

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

WIRING DIAGRAM ►

WFO Single phase On/Off type wiring diagram



☒ Make sure the grounding terminal's are properly connected G.

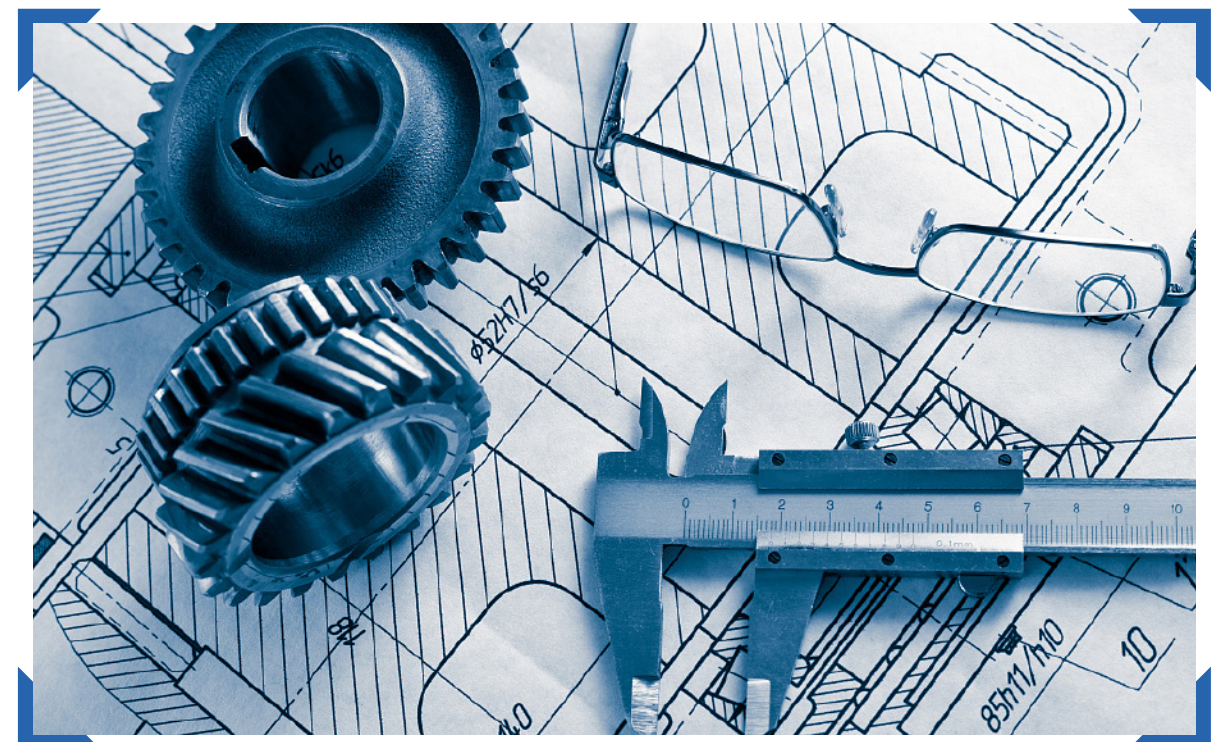
QUALITY & SERVICE ►

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

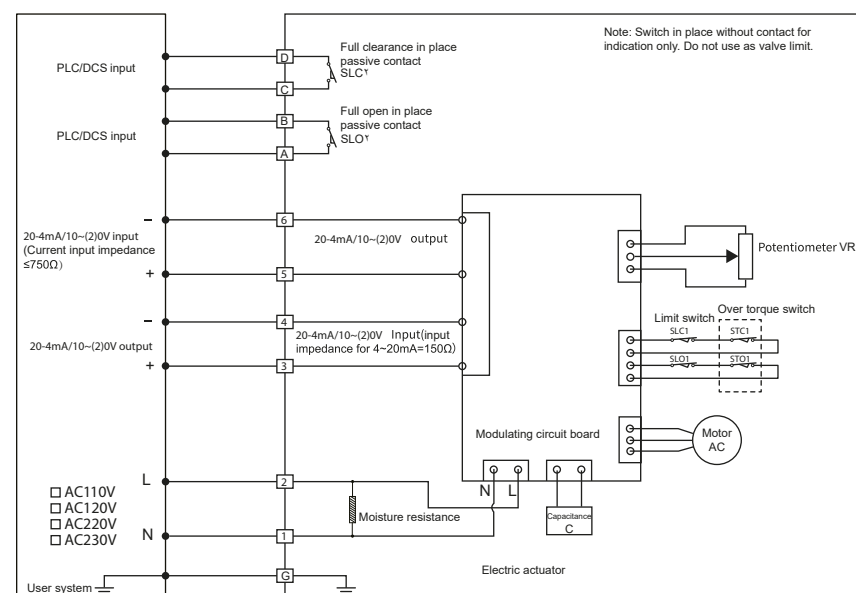
- No matter it is by phone, mail or on the website, we are standing by for your inquiry
- Stable delivery time
- On-site installation and debugging
- Regularly follow up our products status and maintenance
- We provide training for structure knowledge, operation, debugging, maintenance and more.

CUSTOMIZED PRODUCTION ►

For special requirements, we provide customized solutions.



WFO Single phase modulating type wiring diagram



☒ Make sure the grounding terminal's are properly connected G.

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