



VALVETEK®

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ELECTRIC ACTUATOR



Performance Feature

1)Actuator body —The body is made of hard aluminum alloy with anodize treatment and polyester powder coating. It is highly corrosion-resistant and waterproof level is IP67. IP68 is optional.

2)Motor —Fully enclosed squirrel-cage motor with small size, large torque, small inertia force and F class insulation rating. Internal hot protection switch avoids damaging of the motor.

3)Manual Structure —The design of spanner is safe, reliable, labor-saving and small. When the actuator is not energized, it can be operated by handle. When you don t need manual operation, put the spanner in the slot on back side of the actuator.

4)Position Indicator - Installed in the center axis for observing position of valve. To avoid ponding and observe conveniently, it is designed by convex lens.

5)Seal — It has good seal performance. And its protection class is IP67, also IP68 is optional.

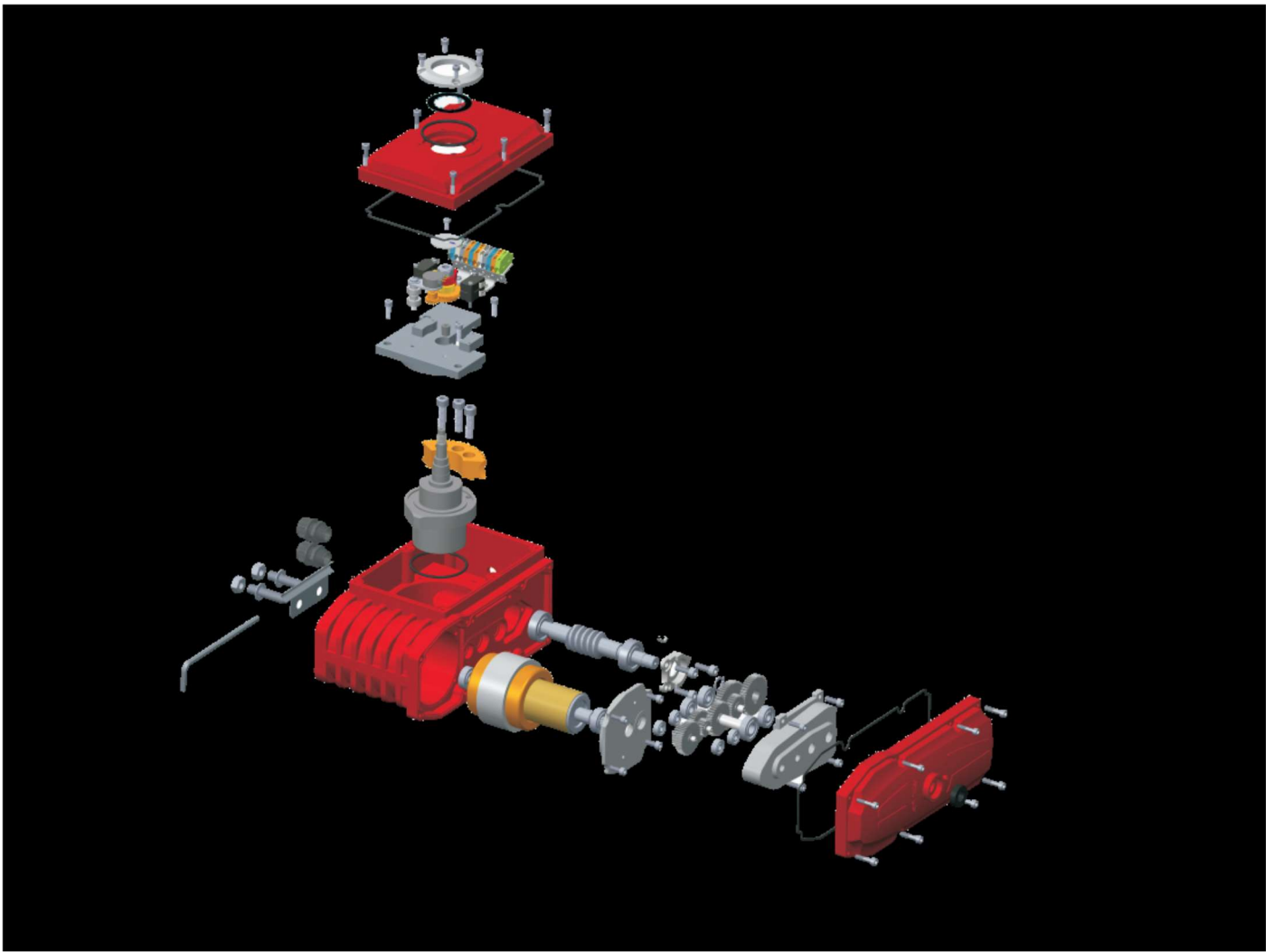
6)Limit Switch—Mechanical and electronic double limit. Mechanical limit screw is adjustable, safe and reliable. Electronic limit switch is controlled by the cam. Position of limit switch can be set accurately and conveniently by simple adjustment.

7)Self-lock— Precise worm and worm gear transfer large torque efficiently with low noise(max. 50 dB) and long life. The self-lock function prevents inversion and insure stability and reliability. High-effective lubricant oil has been added ex-factory, it doesn t need to add any more.

8)Anti-off bolt — The bolt will attach to the cover when removing the cover. All external bolts are made of stainless steel.

9)Installation — Installation size at the bottom of Electric Actuator meets international standard ISO5211 and DIN3337. The output hole is ditetragon that it is easy to install by linear or 45°. The actuator can be installed vertically or horizontally.

10)Circuit — Controlling circuit meets single-phase or three-phase power supply standard with reasonable and compact layout. Terminals meet various of additional functional requirements effectively.



Summary

VT 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, plug valve, louver valve and so on. It widely applies to petroleum, chemical, water treatment, shipping, paper making, power plant, heating, light industry and other industries. It can be driven by 380V/230V/220V AC power or 24V/110V DC power, inputs 4-20mA current signal or 0-10V DC voltage signal as control signal. It moves the valve to the right position, and achieves automatic control, its maximum output torque is 2000N·M. (CE certificate approved).

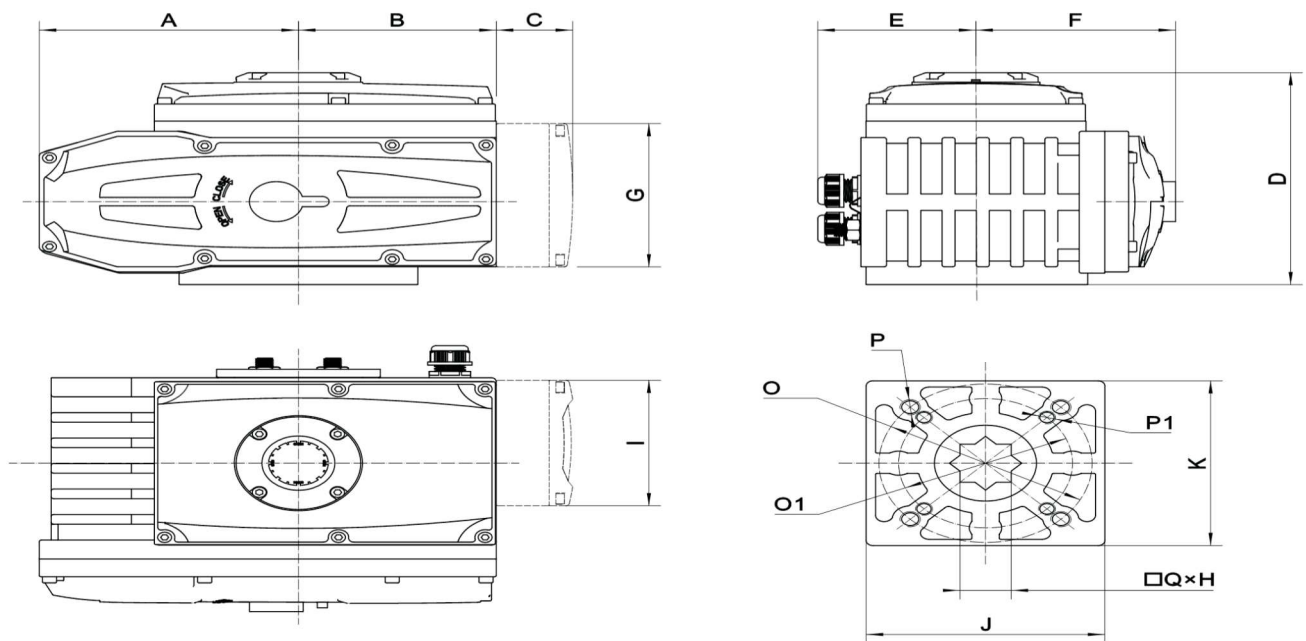
Standard Technical Parameter

Actuator Cover	Aluminum alloy, waterproof level: IP67, or NEMA 4/6	
Power supply	P/230V AC, 1 Phase; 380/440V AC, 3 Phase; 50/60HZ, ±10%	
Power supply of Control	220/230V AC, 1 Phase; 50/60HZ, ±10%	
Motor	Squirrel-cage Asynchronous Motor	
Limit Switch	2* on/off, SPDT, 250V AC, 10A	
Auxiliary Limit Switch	2* on/off, SPDT, 250V AC, 10A	
Stroke	90° ± 10°	Option: 0° - 270°
Failure Protection Temperature	Internal thermal protection; On: 120°C ± 5°C, off: 97°C ± 15°C	
Indicator	Continuous position indicate	
Manual Operation	Mechanical handle (option: handwheel)	
Self-lock Device	Self-lock by worm and worm gear	
Mechanical Limit	External adjusting bolts (2 pieces)	
Heater and Thermostat	7-10W (220/230V AC), Anti-condensation	
Connecting hole	M18 (2 pieces)	
Ambient Temperature	-20°C ~ +70°C	
Lubrication	Aluminum-base grease (EP type)	
Material	Steel, Aluminum alloy, Aluminum bronze, Polycarbonate	
Ambient Humidity	Max 90% RH	
Anti-vibration	X Y Z 10g, 0.2~34HZ, 30 minutes	
External Coating	Dry powder, Epoxy polyester	

Technical data

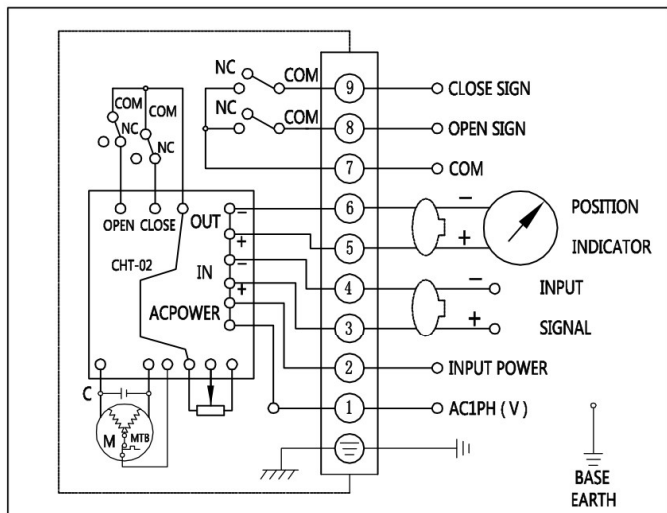
Model	Max output torque	Speed time /90°	Output axis	Motor	Single-phase rated current (220V/230V 50HZ)	Weight
	N·m	S	mm	W	A	Kg
VT-003	30	10	9*9/Φ12.6	8	0.15	2.2
			11*11/Φ12.6			
VT-005	50	30	11*11/Φ12.6	10	0.25	3.6
			14*14/Φ12.6			
VT-010	100	30	14*14/Φ15.78	15	0.35	4.6
			17*17/Φ18.95			
VT-015	150	30	14*14/Φ18.95	15	0.37	4.6
			17*17/Φ18.95			
VT-020	200	30	22*22/Φ22.13	45	0.3	13
VT-040	400	30	22*22/Φ28.48	60	0.33	13.8
VT-060	600	30	27*27/Φ31.65	90	0.33	14
VT-100	1000	135	27*27/Φ31.65	180	0.47	14

Dimensions and Connection(mm)

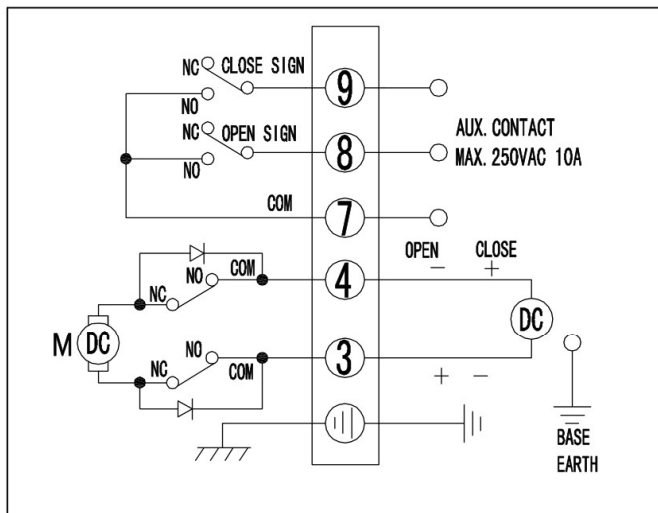


Circuit Diagram

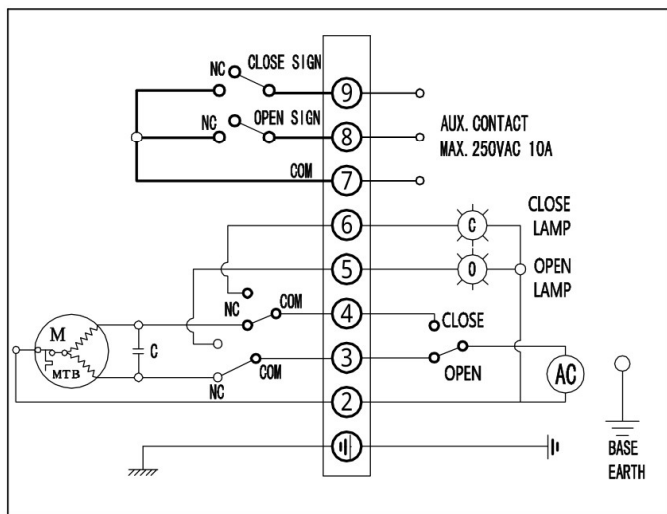
Modulating type 220V



24V DC on-off passive type



220V AC on-off passive type



380V 50 /60 HZ on-off type

