



Electric Actuator



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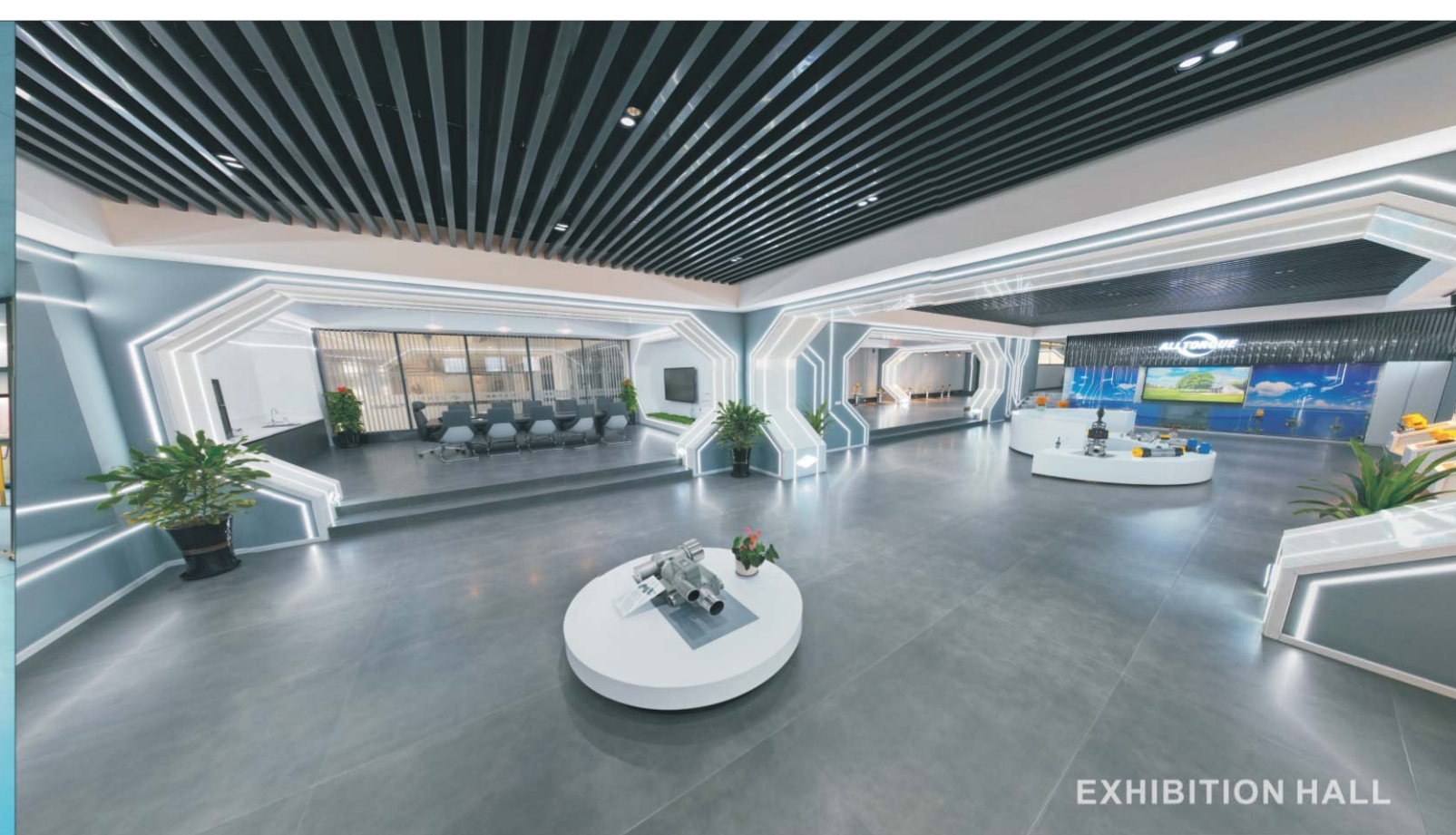
IP68 ISO 9001 RoHS

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LABORATORY



EXHIBITION HALL

■ About Us

Established in 1992, ALLTORQUE is a recognized high-tech enterprise and an industry leading manufacturer of electric actuators. With extensive experience in R&D, production, and sales, the company has supplied OEM and ODM products to many Fortune 500 companies worldwide. Our ISO5211-compliant electric actuators, which are designed to regulate and shut off flow control valves such as butterfly valves, ball valves, and plug valves, are widely used in various flow automation systems globally, including urban water supply and drainage, petroleum, chemical, food, medicine, papermaking, shipping, smelting, and energy systems.

Committed to quality management, ALLTORQUE follows ISO9001 and the Association of American Railroads quality management specifications. Our on-site management ensures efficient production processes based on the concept of 6σ and lean production. The electric actuators are certified by internationally renowned agencies such as TUV, CSA, AAR, SGS, and have obtained CE, CSA, ROHS, IP68, NEMA, SIL, and other certifications. As a responsible corporate entity, the company strictly complies with the laws and regulations of various countries and promotes environmental protection and energy conservation.

Dedicated to customer satisfaction and market feedback, the company seeks to win and achieve mutual development. Our goal is to cultivate a team of highly efficient, innovative, and cooperative professionals who embody integrity, unity, and continuous improvement. The company strives to become a leader in technological innovation and improvement in the flow control industry, providing high-quality products and services to the global flow control market.

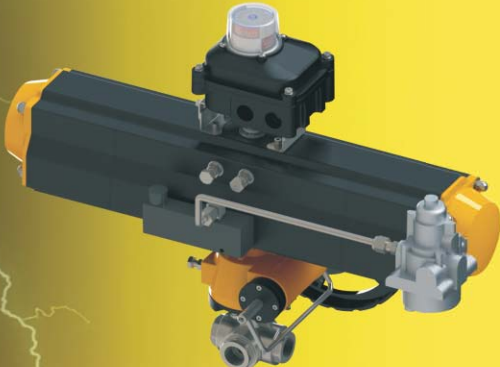
COMPANY

■ INTRODUCTION



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Electric Actuator	VS	Pneumatic Actuator
		
Electric three-position actuator		Pneumatic three-position actuator
Model	VS	
EPQ315+Capacitor return		DFS100+Spring return
Size	VS	
120x104x262mm		635x225x392mm
Torque	VS	
50N·m		50N·m
Accessories	VS	
• Electric Actuator		• 1 Pneumatic actuator • 3 limit switches • 1 solenoid valves • 1 filter reducing valve • 1 air compressor • 1 set of gas pipe assembly • 1 Manual override Gear Operator
Weight	VS	
2.6KGS		18KGS
Operation time	VS	
< 5S		< 5S
On-line partial stroke test	VS	
Y		N
Price	VS	
?		?

■ Characteristics

- Small volume
- Light weight
- Large torque
- High speed

For example:

Model	Volume	Weight	Torque	0~90° Speed
EPQ315	104x120x207mm	3kg	50N·m	≤5S



- Visible dial convenient for checking while adjusting the valve position.
- 360° visible position indicator with remote LED lights which can be interchanged according to field requirement.
- Three control types are available: E - Electronic on-off type, S - Smart on-off type, R - Smart modulating type.
- S type and R type contains an integrated smart field control modular which can operate, set and change signals on the OLED panel.
- E type can realize fine adjustment without remove the cover.



- Extra large shaft hole on the bottom make it compatibal with all kinds of valve stems by changing suitable adaptors.
- Corrosion protection standard ISO 12944 C03-02, aluminium alloy enclosure with 3 layers of epoxy polyester powder painting which can provide 5-15 years of protection in the urban industrial atmospheric environment/moderate level of sulfur dioxide.
- Brushless DC motor, high efficiency factor, lower heat, longer service life, brushless and no powder contamination.
- Multi-level protection, double-level over heat protection& over current protection.
- 4096 high resolution angle sensor providing high regulating precision.
- Control modular is convenient for disassembly and maintenance.
- No clutch is required for maunal control.
- Wide valve open angle design which can be set as any angle in the range of 0-270°.
- Drop-proof design for disassembly, connecting the cap with steel wire.
- Bluetooth, Fine adjustment for valve open&close position, Factory setting & product information, Matenance & Technical maunal containing the operation instruction and wiring diagram.
- Adjustable speed of closing valve to avoid water hammer and achieve precise flow rate control.
- Adjustable time of sending the relay signal.
- Integrated capacitor return function.
- Multiple authentication.



■ EP/EA Series General Parameter

Series	Model	Max Torque(N·m)			Max Torque(in·lb)			0~90° Travel time (S)				
		AC/DC 24V	AC110V AC220V	AC110V AC220V AC380 3PH	AC/DC 24V	AC110V AC220V	AC110V AC220V AC380 3PH	AC/DC 24V	AC110V AC220V	50HZ AC110V AC220V 3PH	60HZ AC110V AC220V 3PH	50HZ AC380 3PH
EP	EP20P1	10	10	/	89	89	/	9	6	/	/	/
	EP20P2	14	14	/	124	124	/	11	8	/	/	/
	EP20P3	20	20	/	177	177	/	15	11	/	/	/
	EP50P1	35	35	/	310	310	/	11	8	/	/	/
	EP50P2	50	50	/	443	443	/	14	12	/	/	/
	EP100P1	80	80	/	708	708	/	20	16	/	/	/
	EP100P2	100	100	/	885	885	/	27	18	/	/	/
	EP200P1	150	150	/	1328	1328	/	22	8	/	/	/
	EP200P2	200	200	/	1770	1770	/	31	10.5	/	/	/
	EP200P3	250	250	/	2213	2213	/	35	13	/	/	/
	EP200P4	/	300	/	/	2655	/	/	15	/	/	/
	EP200P5	/	400	/	/	3540	/	/	17	/	/	/
	EP500P1	/	300	/	/	2655	/	/	14	/	/	/
	EP500P2	/	400	/	/	3540	/	/	16	/	/	/
	EP500P3	/	500	/	/	4425	/	/	19	/	/	/
	EP500P4	/	650	/	/	5753	/	/	22	/	/	/
	EP500P5	/	800	/	/	7080	/	/	27	/	/	/
EA	EA200P1	/	/	150	/	/	1328	/	/	30	25	30
	EA200P2	/	/	200	/	/	1770	/	/	30	36	36
	EA500P1	/	/	300	/	/	2655	/	/	19	23	23
	EA500P2	/	/	400	/	/	3540	/	/	25	30	30
	EA500P3	/	/	500	/	/	4425	/	/	30	35	35

Note: 1. The motor for EP series is Brushless DC motor and for EA series is AC asynchronous motor.
2. The travel time for 60Hz is 1.2 times faster than 50Hz.



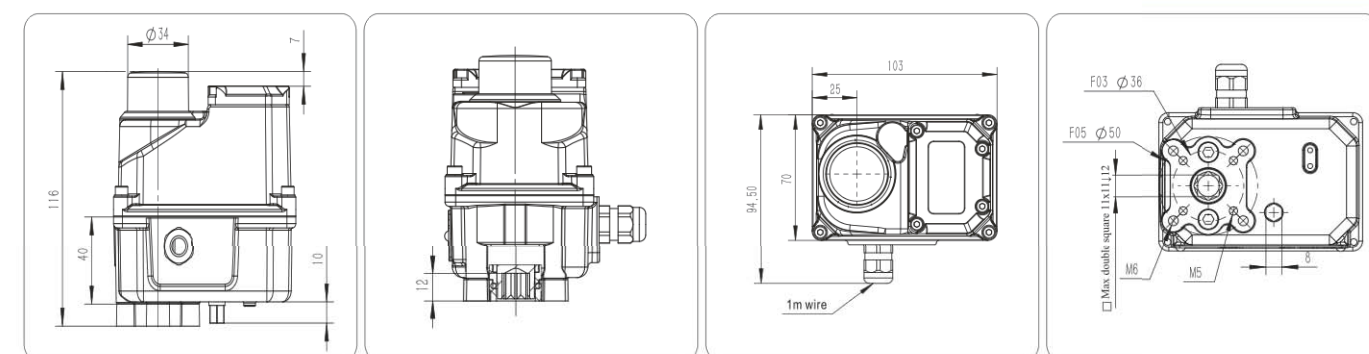
■ EP20 General Parameter / Outline Drawing

General Parameter	0~90° Travel Time (S)	Model		P1	P2	P3
		Voltage		10N·m	14N·m	20N·m
		24V AC/DC		9	11	15
		110V AC		6	8	11
General Parameter	0~90° Travel Time (S)	220V AC		6	8	11
		Control Mode		E-Electronic on-off S-Smart on-off R-Smart modulating		
		Rotation Angle		0~90° 0~90°~180°/0~270° 0~90°		
		Duty Cycle		S2 100% (15min) S4 30%		
		Environment Temp.		-25~70°C		
		Weight		1.4KGS		
		Field Operation Modular		N	Y	Y
		Manual Operation Type		Wrench		
		Protection Grade		IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P		
		Electric Connection		M18 cable gland with 1m wire		
		Motor		Brushless DC motor		
		Multi-level protection		Double-level over heat protection (motor/interior actuator) & Over current protection		
		Indicator		360° Visible indicator	360° Visible LED indicator	360° Visible indicator
		Heater		3W, The heater works when the ambient temperature is lower than 15°C		
		Corrosion Protection		Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting		
Modulating type parameter	Modulating type parameter	Feedback Signal		Open/Close/Error 3 programmable relays output feedback signals		
		Bus Type		Modbus		
		Optional Function		Bluetooth/IP68/360° Visible LED indicator/25°C heater/C05 corrosion protection		

Modulating type parameter	Modulating type parameter	Regulating Number		Up to 5 million times, 1200 times starts max/hour		
		Step Accuracy		0.62%/ 160 steps		
		Dead Zone		±0.5% (0.5°)		
		Reaction Time		<1S		
		Linearity		0.02		
		Bus Type		Modbus		
		Input Signal		1-5V, 2-10V, 4-20mA		
		Output Signal		1-5V, 2-10V, 4-20mA		
Modulating type parameter	Modulating type parameter	Feedback Signal		3 programmable relays output feedback signals		

Model	Power W	Rated current(A)				Locked-rotor current(A)			
		DC24V	AC24V	AC110V	AC220V	DC24V	AC24V	AC110V	AC220V
EP20P1-P3	10	0.7	1	0.32	0.18	1.35	2.25	0.45	0.35

EP20P1-P3



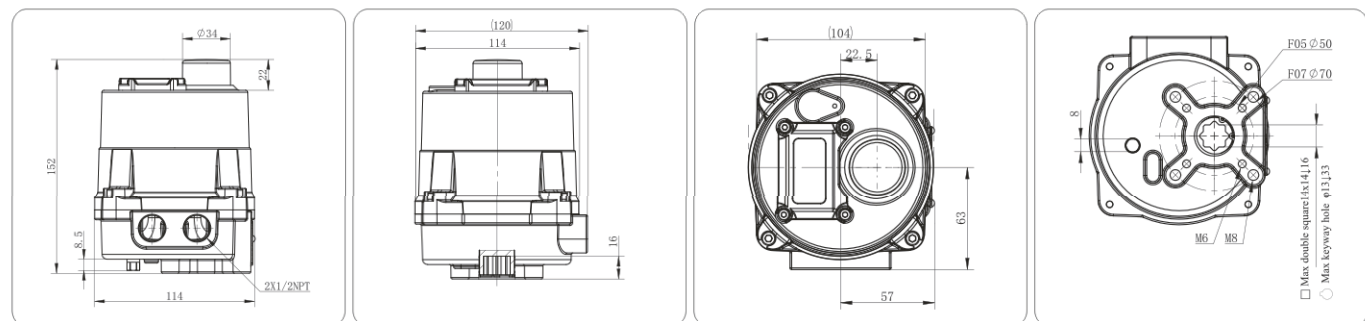
■ EP50 General Parameter / Outline Drawing

General Parameter	0~90° Travel Time (S)	Model		P1	P2
		Voltage	35N·m		50N·m
		24V AC/DC	11		14
		110V AC	8		12
		220V AC	8		12
	Control Mode	E-Electronic on-off	S-Smart on-off		R-Smart modulating
	Rotation Angle	0~90°	0~90~180°/0~270°		0~90°
	Duty Cycle	S2 100% (15min)			S4 30%
	Environment Temp.	-25~70℃			
	Weight	2.1kg			
	Field Operation Modular	N	Y		Y
	Manual Operation Type	Wrench			
	Protection Grade	IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P			
	Electric Connection	2*1/2NPT cable gland with 1m wire			
	Motor	Brushless DC motor			
	Multi-level protection	Double-level over heat protection (motor/interior actuator) & Over current protection			
Indicator	360° Visible indicator	360° Visible LED indicator	360° Visible indicator		
Heater	15W,The heater works when the ambient temperature is lower than 15℃				
Corrosion Protection	Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting				
Feedback Signal	Open/Close/Error	3 programmable relays output feedback signals			
Bus Type	Modbus				
Optional Function	Bluetooth/IP68/360° Visible LED indicator/25℃ heater/C05 corrosion protection				

Modulating type parameter	Regulating Number	Up to 5 million times, 1200 times starts max/hour
	Step Accuracy	0.62%/ 160 steps
	Dead Zone	±0.5% (0.5°)
	Reaction Time	<1S
	Linearity	0.02
	Bus Type	Modbus
	Input Signal	1-5V,2-10V,4-20mA
	Output Signal	1-5V,2-10V,4-20mA
	Feedback Signal	3 programmable relays output feedback signals

Model	Power	Ratedcurrent(A)				Locked rotor current(A)			
	W	DC24V	AC24V	AC110V	AC220V	DC24V	AC24V	AC110V	AC220V
EP50P1-P2	15	1.4	1.9	0.65	0.45	3.75	3.15	1.55	0.78

EP50P1-P2



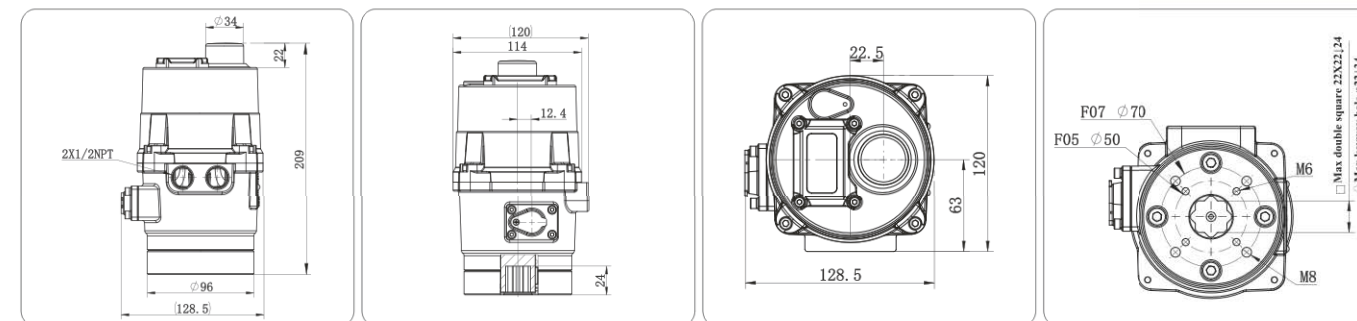
■ EP100 General Parameter / Outline Drawing

General Parameter	0~90° Travel Time (S)	Model		P1	P2
		Voltage		80N·m	100N·m
		24V AC/DC		20	27
		110V AC		16	18
		220V AC		16	18
	Control Mode	E-Electronic on-off	S-Smart on-off	R-Smart modulating	
	Rotation Angle	0~90°	0~90~180°/0~270°	0~90°	
	Duty Cycle	S2 100% (15min)			S4 30%
	Environment Temp.	-25~70℃			
	Weight	3.8kgs			
	Field Operation Modular	N	Y	Y	
	Manual Operation Type	Wrench			
	Protection Grade	IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P			
	Electric Connection	2*1/2NPT cable gland with 1m wire			
	Motor	Brushless DC motor			
	Multi-level protection	Double-level over heat protection (motor/interior actuator) & Over current protection			
	Indicator	360° Visible indicator	360° Visible LED indicator	360° Visible indicator	
	Heater	15W,The heater works when the ambient temperature is lower than 15℃			
	Corrosion Protection	Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting			
	Feedback Signal	Open/Close/Error	3 programmable relays output feedback signals		
Bus Type	Modbus				
Optional Function	Bluetooth/IP68/360° Visible LED indicator/25℃ heater/C05 corrosion protection				

Modulating type parameter	Regulating Number	Up to 5 million times, 1200 times starts max/hour
	Step Accuracy	0.62%/ 160 steps
	Dead Zone	±0.5% (0.5°)
	Reaction Time	<1S
	Linearity	0.02
	Bus Type	Modbus
	Input Signal	1-5V,2-10V,4-20mA
	Output Signal	1-5V,2-10V,4-20mA
	Feedback Signal	3 programmable relays output feedback signals

Model	Power	Rated current(A)				Locked-rotor current(A)			
	W	DC24V	AC24V	AC110V	AC220V	DC24V	AC24V	AC110V	AC220V
EP100P1-P2	15	1.4	1.8	0.65	0.45	2.65	3.70	1.07	0.72

EP100P1-P2



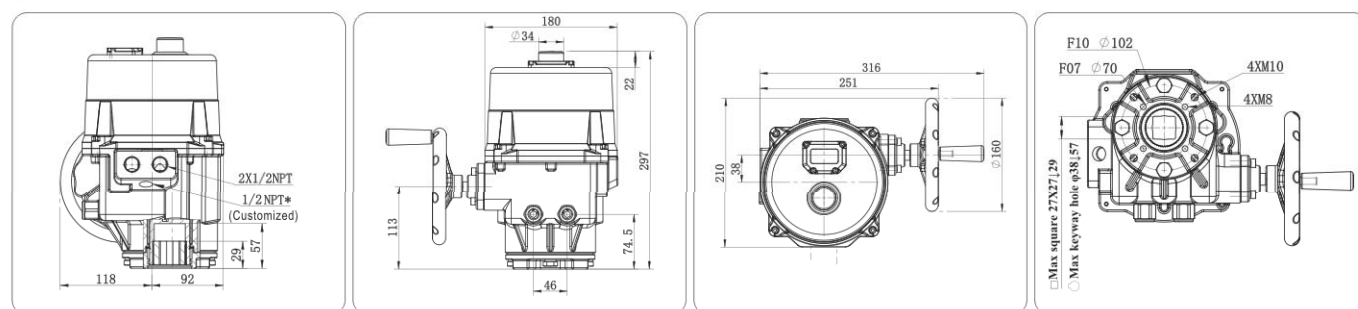
■ EP200 General Parameter / Outline Drawing

General Parameter	0~90° Travel Time (S)	Model				
		Voltage	P1	P2	P3	P4
		24V AC/DC	22	31	35	15
		110V AC	8	10.5	13	17
General Parameter	Control Mode	220V AC	8	10.5	13	15
		E-Electronic on-off	S2 100% (30min)			S4 50%
		S-Smart on-off	0~90~180°/0~270°			0~90°
		R-Smart modulating	0~90°			0~90°
General Parameter	Rotation Angle	Duty Cycle	S2 100% (30min)			S4 50%
		Environment Temp.	-25~70°C			13.7kgs
		Weight	13.7kgs			N
		Field Operation Modular	Y			Y
General Parameter	Manual Operation Type	Protection Grade	IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P			2*1/2NPT
		Electric Connection	2*1/2NPT			Brushless DC motor
		Motor	Brushless DC motor			Double-level over heat protection(motor/interior actuator)&Over current protection
		Multi-level protection	Double-level over heat protection(motor/interior actuator)&Over current protection			360° Visible indicator
General Parameter	Indicator	Heater	25W,The heater works when the ambient temperature is lower than 15°C			360° Visible LED indicator
		Corrosion Protection	Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting			360° Visible indicator
		Feedback Signal	Open/Close/Error			25W,The heater works when the ambient temperature is lower than 15°C
		Bus Type	Modbus			Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting
General Parameter	Optional Function	Feedback Signal	3 programmable relays output feedback signals			Open/Close/Error
		Bus Type	Modbus			3 programmable relays output feedback signals
		Optional Function	Bluetooth/IP68/360° Visible LED indicator/25°C heater/C05 corrosion protection			Modbus
		Optional Function	Bluetooth/IP68/360° Visible LED indicator/25°C heater/C05 corrosion protection			Bluetooth/IP68/360° Visible LED indicator/25°C heater/C05 corrosion protection

Modulating type parameter	Regulating Number	Up to 2 million times, 600 times starts max/hour				
		Step Accuracy	0.62%/ 160 steps			0.62%/ 160 steps
		Dead Zone	±0.5% (0.5°)			±0.5% (0.5°)
		Reaction Time	<1S			<1S
Modulating type parameter	Linearity	Bus Type	Modbus			0.02
		Input Signal	1-5V,2-10V,4-20mA			1-5V,2-10V,4-20mA
		Output Signal	1-5V,2-10V,4-20mA			1-5V,2-10V,4-20mA
		Feedback Signal	3 programmable relays output feedback signals			3 programmable relays output feedback signals

Model	Power W	Rated current(A)				Locked-rotor current(A)			
		DC24V	AC24V	AC110V	AC220V	DC24V	AC24V	AC110V	AC220V
EP200P1-P3	100/80(24V)	1.25	1.3	1.32	0.85	1.88	1.95	1.98	1.28
EP200P4-P5	100			2.2	1.2			3.3	1.8

EP200P1-P5



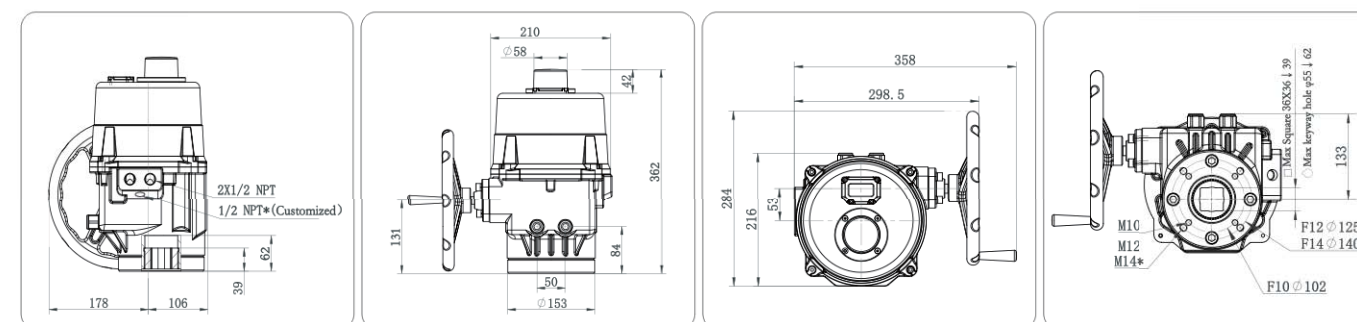
■ EP500 General Parameter / Outline Drawing

General Parameter	0~90° Travel Time (S)	Model				
		Voltage	P1	P2	P3	P4
		110V AC	14	16	19	22
		220V AC	14	16	19	22
General Parameter	Control Mode	E-Electronic on-off	S2 100% (60min)			S4 50%[P1-P3]/S4 70%[P4-P5]
		S-Smart on-off	0~90~180°/0~270°			0~90°
		R-Smart modulating	0~90°			0~90°
		Rotation Angle	0~90°			0~90°
General Parameter	Duty Cycle	Environment Temp.	-25~70°C			24kgs
		Weight	24kgs			N
		Field Operation Modular	Y			Y
		Manual Operation Type	Handwheel			IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P
General Parameter	Protection Grade	Electric Connection	2*1/2NPT			Brushless DC motor
		Motor	Brushless DC motor			Double-level over heat protection(motor/interior actuator)&Over current protection
		Multi-level protection	Double-level over heat protection(motor/interior actuator)&Over current protection			360° Visible indicator
		Indicator	360° Visible indicator			360° Visible LED indicator
General Parameter	Heater	Corrosion Protection	Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting			360° Visible indicator
		Feedback Signal	Open/Close/Error			25W,The heater works when the ambient temperature is lower than 15°C
		Bus Type	Modbus			Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting
		Optional Function	Bluetooth/IP68/360° Visible LED indicator/25°C heater/C05 corrosion protection			Open/Close/Error
General Parameter	Optional Function	Feedback Signal	3 programmable relays output feedback signals			3 programmable relays output feedback signals
		Bus Type	Modbus			Modbus
		Optional Function	Bluetooth/IP68/360° Visible LED indicator/25°C heater/C05 corrosion protection			Bluetooth/IP68/360° Visible LED indicator/25°C heater/C05 corrosion protection
		Optional Function	Bluetooth/IP68/360° Visible LED indicator/25°C heater/C05 corrosion protection			Bluetooth/IP68/360° Visible LED indicator/25°C heater/C05 corrosion protection

Modulating type parameter	Regulating Number	Up to 2 million times, 600 times starts max/hour				
		Step Accuracy	0.62%/ 160 steps			0.62%/ 160 steps
		Dead Zone	±0.5% (0.5°)			±0.5% (0.5°)
		Reaction Time	<1S			<1S
Modulating type parameter	Linearity	Bus Type	Modbus			0.02
		Input Signal	1-5V,2-10V,4-20mA			1-5V,2-10V,4-20mA
		Output Signal	1-5V,2-10V,4-20mA			1-5V,2-10V,4-20mA
		Feedback Signal	3 programmable relays output feedback signals			3 programmable relays output feedback signals

Model	Power W	Rated current(A)		Locked-rotor current(A)	
		AC110V	AC220V	AC110V	AC220V
EP500P1-P5	100	2.2	1.2	3.30	1.80

EP500P1-P5



Order Instruction for EP series

EP 20 P1 - E 0 0 N 0 0 T 0 0 A 12

Model	Size	Control mode	Operation angle	Outage mode	Corrosion protection	Water-proof grade	Customize function (Multi-choice)	Condensate preventing	Position indication	Outer hanging unit	Working temperature	Input voltage
EP20	P1	E Electronic On-off Type	1 0°~90°	1 Manual override	D C3-02	1 IP67	0 None	A None	0 None	0 None	T -25~70°C	1 12V DC
EP50	P2	S Smart On-off Type	2 0°~45°~90° (S Type)	2 Rechargeable li-ion battery	E C3-03	2 IP68	1 Labor-saving manual operation modular	B Yes	1 360° visible indicator	1 Field control unit	L -25~65°C	2 24V AC/DC
EP100	P3	R Modulating type	3 0°~180° (S Type)	3 Rechargeable supercapacitor	F C3-04	3 NEMA 4	2 Mechanical over-torque protection		2 360° visible LED indicator	2 Smart field control unit	M -25~60°C	3 110V AC/1PH
EP200	P4	G Switch On-off Type	4 0°~90°~180° (S Type)	4 Spring return, fail close(developing)	G C3-05	4 NEMA 4X	Remark : Items marked with (12) refers to both 1&2 functions are selected.			3 Non-invasive junction box	C -40~50°C	4 220V AC/1PH
EP500	P5		5 0°~270° (S Type)	5 Spring return, fail open(developing)		5 NEMA 6				4 External power failure reset unit		
EP2000												
EP3000												
EP4000												

Note:

- For outage mode selection, capacitor reset mode is only available for EP200 and below sizes. Please refer to Page 21-23 for parameters and outline drawings.
- The customized functions are available for EP200 and above sizes.

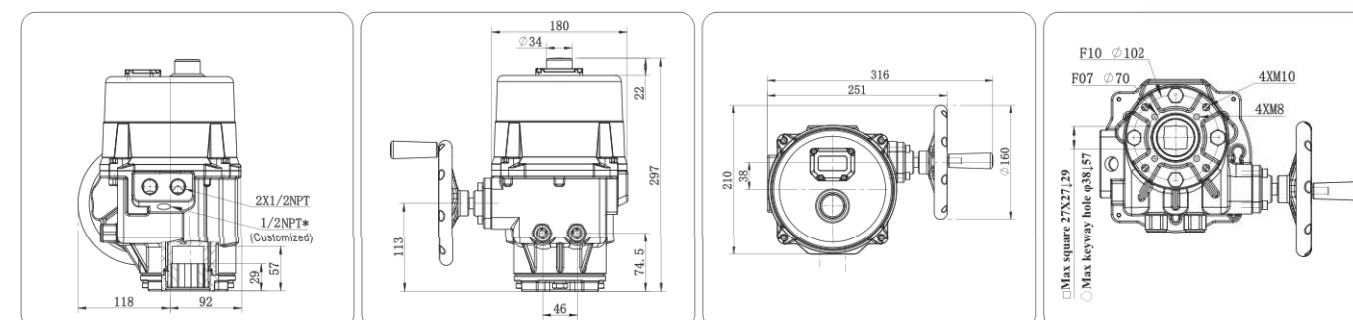
EA200 General Parameter / Outline Drawing

General Parameter	0~90° Travel Time (S)	Model		P1	P2
		Voltage		150N·m	200N·m
		110V AC 1PH	50/60HZ	30/25	36/30
		220V AC 1PH	50/60HZ	30/25	36/30
		380V AC 3PH	50/60HZ	30/25	36/30
		Control Mode		G-Switch on-off	
		Rotation Angle		R-Smart modulating	
		Duty Cycle		S2 100% (30min)	
		Environment Temp.		-25~70°C	
		Weight		13kgs	
		Field Operation Modular		N	
		Manual Operation Type		Handwheel	
		Protection Grade		IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P	
		Electric Connection		2*1/2NPT	
		Motor		AC asynchronism motor	
		Multi-level protection		Double-level over heat protection (motor/interior actuator) & Over current protection	
		Indicator		360° Visible indicator	
		Heater		25W,The heater works when the ambient temperature is lower than 15 °C	
		Corrosion Protection		Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting	
		Feedback Signal		Open/Close/Error	
		Bus Type		Modbus	
		Optional Function		Bluetooth/IP68/360° Visible LED indicator/25 °C heater/C05 corrosion protection	

Modulating type parameter	Regulating Number		Up to 2 million times, 600 times starts max/hour
	Step Accuracy		0.62%/ 160 steps
	Dead Zone		±0.5% (0.5°)
	Reaction Time		<1S
	Linearity		0.02
	Bus Type		Modbus
	Input Signal		1-5V,2-10V,4-20mA
	Output Signal		1-5V,2-10V,4-20mA
	Feedback Signal		3 programmable relays output feedback signals

Model	Power W	Rated current(A)		
		AC110V 1PH	AC220V 1PH	AC380V 3PH
EA200P1-P2	40	0.5	0.3	0.15

EA200P1-P2

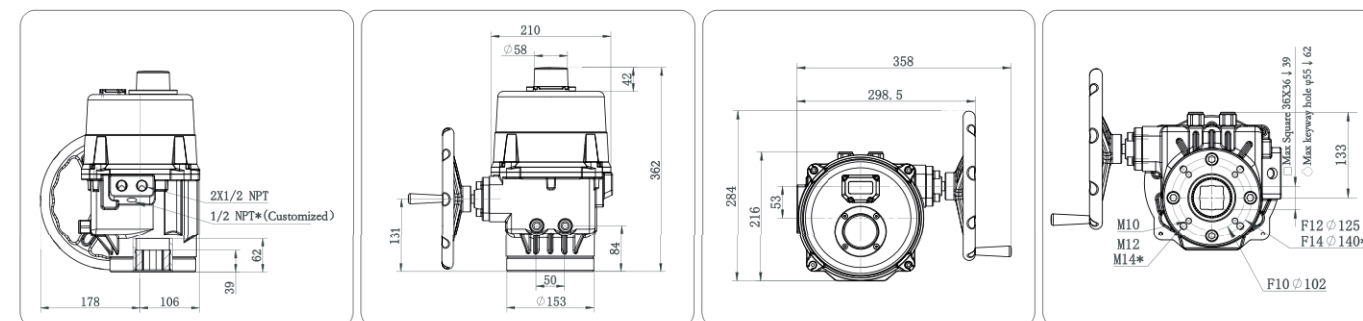


EA500 General Parameter / Outline Drawing

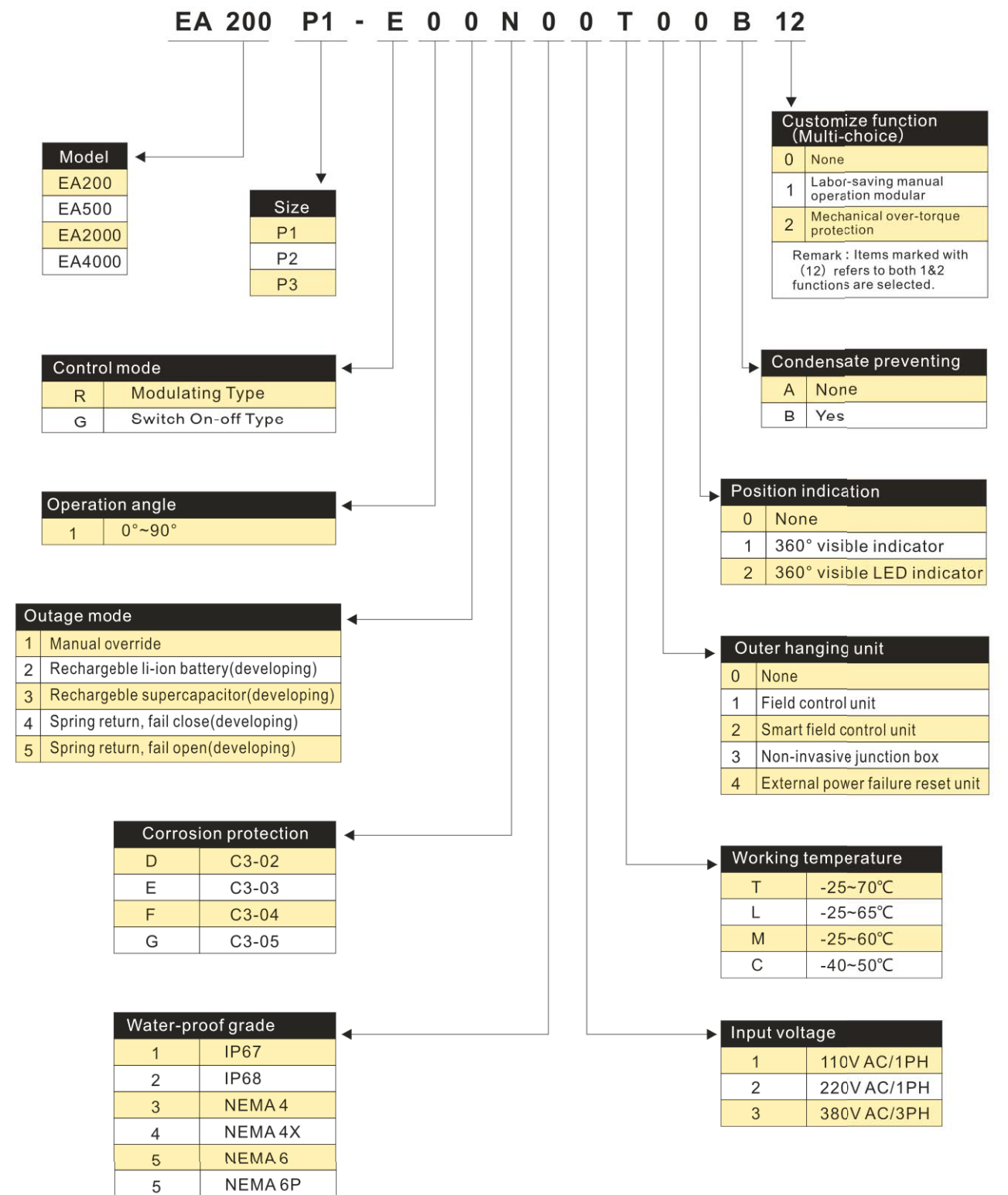
General Parameter	0~90° Travel Time (S)	Model		P1	P2	P3
		Voltage		300N·m	400N·m	500N·m
		110V AC 1PH 50/60Hz	23/19	30/25	35/30	35/30
		220V AC 1PH 50/60Hz	23/19	30/25	35/30	35/30
Modulating type parameter	Control Mode		G-Switch on-off		R-Smart modulating	
	Rotation Angle		0~90°			
	Duty Cycle		S2 100% (30min)		S4 50%	
	Environment Temp.		-25~70°C			
	Weight		24kgs			
	Field Operation Modular		N		Y	
	Manual Operation Type		Handwheel			
	Protection Grade		IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P			
	Electric Connection		2*1/2NPT			
	Motor		AC asynchronism motor			
	Multi-level protection		Double-level over heat protection(motor/interior actuator)&Over current protection			
	Indicator		360° Visible indicator			
	Heater		25W,The heater works when the ambient temperature is lower than 15 °C			
	Corrosion Protection		Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting			
	Feedback Signal		Open/Close/Error		3 programmable relays output feedback signals	
	Bus Type		Modbus			
	Optional Function		Bluetooth/IP68/360° Visible LED indicator/25 °C heater/C05 corrosion protection			
Regulating Number	Up to 2 million times, 600 times starts max/hour					
	Step Accuracy		0.62%/ 160 steps			
	Dead Zone		±0.5% (0.5°)			
	Reaction Time		<1S			
	Linearity		0.02			
	Bus Type		Modbus			
	Input Signal		1-5V,2-10V,4-20mA			
	Output Signal		1-5V,2-10V,4-20mA			
Feedback Signal	3 programmable relays output feedback signals					

Model	Power	Rated current(A)		
	W	AC110V 1PH	AC220V 1PH	AC380V 3PH
EA500P1-P3	90	1.4	0.6	0.3

EA500P1-P3



Order Instruction for EA series



■ EPQ 0~90° ≤5 Sec Quick Open Series General Parameter

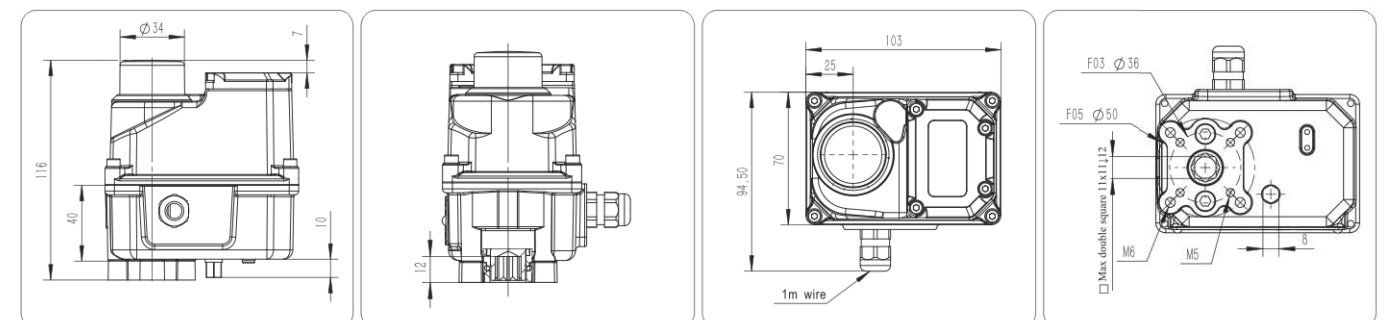
Series	Model	0~90° Travel time(S)		Max Torque(N·m)		Max Torque(in-lb)	
		AC/DC24V	AC110V AC220V	AC/DC24V	AC110V AC220V	AC/DC24V	AC110V AC220V
EPQ	EPQ115	≤5	≤5	8	8	71	71
	EPQ215	≤5	≤5	23	23	204	204
	EPQ315	≤5	≤5	50	50	443	443
	EPQ415	≤5	≤5	80	80	708	708
	EPQ425	≤5	≤5	120	150	1062	1328
	EPQ515	/	≤5	/	300	/	2655
	EPQ525	/	≤5	/	400	/	3540
	EPQ535	/	≤5	/	500	/	4425
	EPQ545	/	≤5	/	650	/	5753



■ EPQ115 General Parameter / Outline Drawing

General Parameter	Model	EPQ115			
	0~90° Travel Time	≤5S			
	Max Torque	9N·m			
	Motor power	10W			
	Voltage	AC24V	DC24V	AC110V	AC220V
	Rated Current(A)	1	0.7	0.32	0.18
	Locked-rotor current(A)	2.25	1.35	0.45	0.35
	Control Mode	E-Electronic on-off		S-Smart on-off	
	Rotation Angle	0~90°		0~90~180°/0~270°	
	Duty Cycle	30%			
	Environment Temp.	-25~70℃			
	Weight	1.4kgs			
	Field Operation Modular	N		Y	
	Manual Operation Type	Wrench			
	Protection Grade	IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P			
	Electric Connection	M18 cable gland with 1m wire			
	Motor	Brushless DC motor			
	Multi-level protection	Double-level over heat protection(motor/interior actuator)&Over current protection			
	Indicator	360° Visible indicator / 360° Visible LED indicator			
	Heater	3W,The heater works when the ambient temperature is lower than 15℃			
	Corrosion Protection	Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting			
	Feedback Signal	Open/Close/Error		3 programmable relays output feedback signals	
	Bus Type	Modbus			
	Optional Function	Bluetooth/IP68/25℃ heater/C05 corrosion protection			

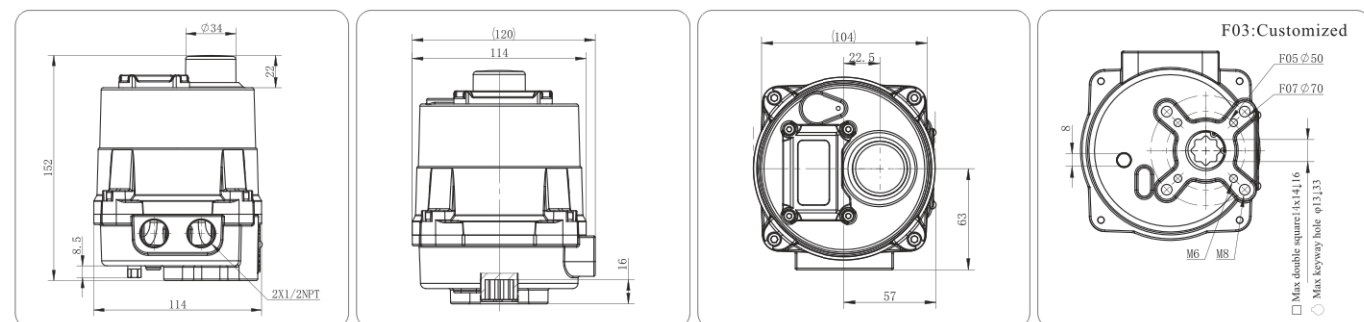
EPQ115



■ EPQ215 General Parameter / Outline Drawing

General Parameter	Model	EPQ215			
	0~90° Travel Time	≤5S			
	Max Torque	23N·m			
	Motor power	30W			
	Voltage	AC24V	DC24V	AC110V	AC220V
	Rated Current(A)	1.9	1.4	0.65	0.45
	Locked-rotor current(A)	3.13	3.75	1.55	0.78
	Control Mode	E-Electronic on-off		S-Smart on-off	
	Rotation Angle	0~90°		0~90~180°/0~270°	
	Duty Cycle	30%			
	Environment Temp.	-25~70℃			
	Weight	2.1kgs			
	Field Operation Modular	N		Y	
	Manual Operation Type	Wrench			
	Protection Grade	IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P			
	Electric Connection	2*1/2NPT cable gland with 1m wire			
	Motor	Brushless DC motor			
	Multi-level protection	Double-level over heat protection(motor/interior actuator)&Over current protection			
	Indicator	360° Visible indicator / 360° Visible LED indicator			
	Heater	15W,The heater works when the ambient temperature is lower than 15℃			
	Corrosion Protection	Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting			
	Feedback Signal	Open/Close/Error		3 programmable relays output feedback signals	
	Bus Type	Modbus			
	Optional Function	Bluetooth/IP68/25℃ heater/C05 corrosion protection			

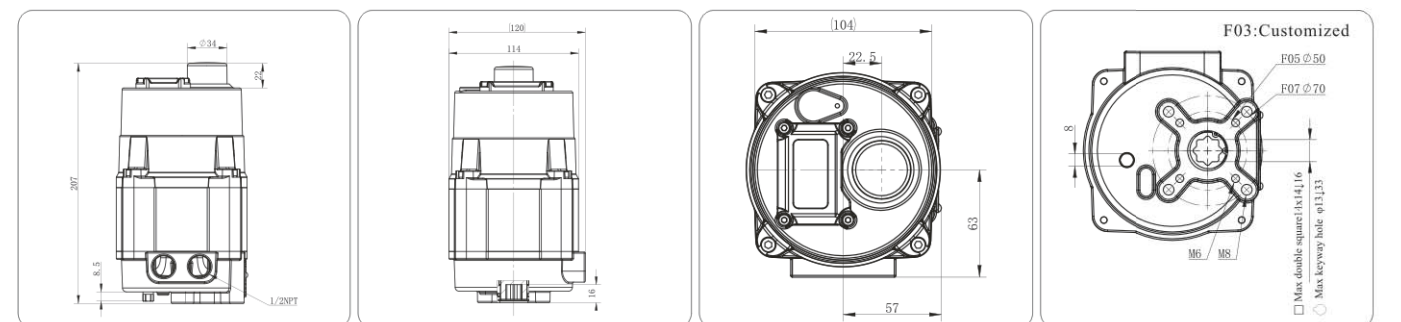
EPQ215



■ EPQ315 General Parameter / Outline Drawing

General Parameter	Model	EPQ315			
	0~90° Travel Time	≤5S			
	Max Torque	50N·m			
	Motor power	30W			
	Voltage	AC24V	DC24V	AC110V	AC220V
	Rated Current(A)	5	4	1.7	0.75
	Locked-rotor current(A)	6.9	6.3	2	1.3
	Control Mode	E-Electronic on-off		S-Smart on-off	
	Rotation Angle	0~90°		0~90~180°/0~270°	
	Duty Cycle	25%			
	Environment Temp.	-25~65℃			
	Weight	2.6kgs			
	Field Operation Modular	N		Y	
	Manual Operation Type	Wrench			
	Protection Grade	IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P			
	Electric Connection	2*1/2NPT cable gland with 1m wire			
	Motor	Brushless DC motor			
	Multi-level protection	Double-level over heat protection(motor/interior actuator)&Over current protection			
	Indicator	360° Visible indicator / 360° Visible LED indicator			
	Heater	15W,The heater works when the ambient temperature is lower than 15℃			
	Corrosion Protection	Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting			
	Feedback Signal	Open/Close/Error		3 programmable relays output feedback signals	
	Bus Type	Modbus			
	Optional Function	Bluetooth/IP68/25℃ heater/C05 corrosion protection			

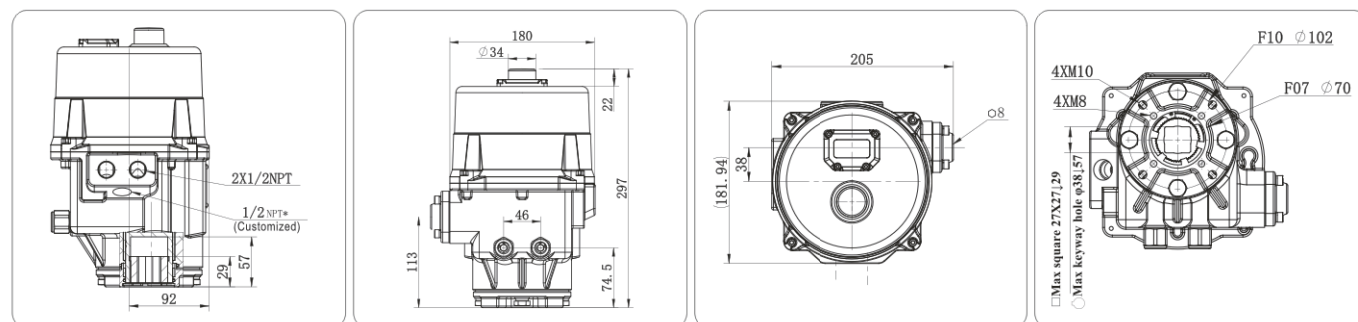
EPQ315



■ EPQ415 General Parameter / Outline Drawing

General Parameter	Model	EPQ415			
	0~90° Travel Time	< 5S			
	Motor power	80W(24V)/100W(AC110V、 AC220V)			
	Max Torque	80N·m			
	Voltage	AC24V	DC24V	AC110V	AC220V
	Rated Current(A)	1.3	1.25	1.32	0.85
	Locked-rotor current(A)	1.95	1.88	1.98	1.28
	Control Mode	E-Electronic on-off		S-Smart on-off	
	Rotation Angle	0~90°		0~90~180°/0~270°	
	Duty Cycle	30%			
	Environment Temp.	-25~70℃			
	Weight	12.2kgs			
	Field Operation Modular	N		Y	
	Manual Operation Type	Wrench			
	Protection Grade	IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P			
	Electric Connection	2*1/2NPT			
	Motor	Brushless DC motor			
	Multi-level protection	Double-level over heat protection(motor/interior actuator)&Over current protection			
	Indicator	360° Visible indicator / 360° Visible LED indicator			
	Heater	15W,The heater works when the ambient temperature is lower than 15℃			
	Corrosion Protection	Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting			
	Feedback Signal	Open/Close/Error		3 programmable relays output feedback signals	
	Bus Type	Modbus			
	Optional Function	Bluetooth/IP68 /25℃ heater/C05 corrosion protection			

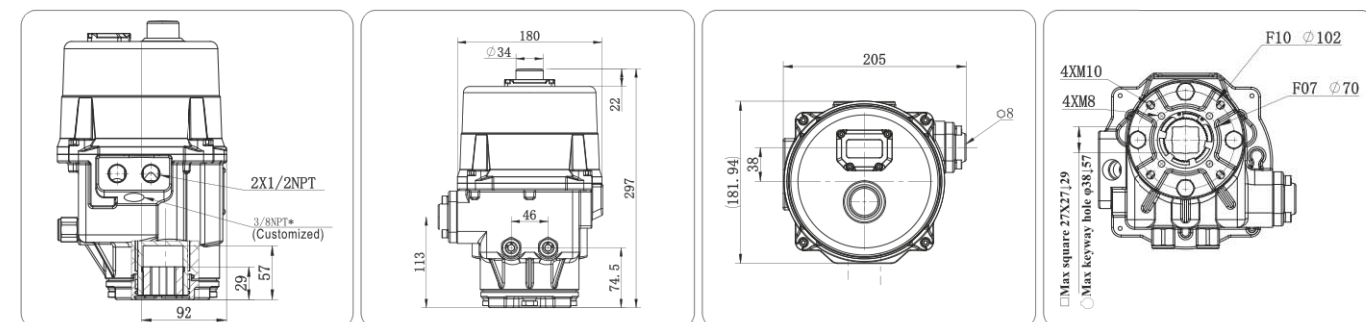
EPQ415



■ EPQ425 General Parameter / Outline Drawing

General Parameter	Model	EPQ425		
	0~90° Travel Time	≤5S		
	Motor power	80W(24V)/100W(AC110V、AC220V)		
	Max Torque	120N·m	150N·m	
	Voltage	DC24V	AC110V	AC220V
	Rated Current(A)	4.5	2.2	1.2
	Locked-rotor current(A)	6.5	3.3	1.8
	Control Mode	E-Electronic on-off		S-Smart on-off
	Rotation Angle	0~90°		0~90~180°/0~270°
	Duty Cycle	30%		
	Environment Temp.	-25~70℃		
	Weight	12.2kgs		
	Field Operation Modular	N		Y
	Manual Operation Type	Wrench		
	Protection Grade	IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P		
	Electric Connection	2*1/2NPT		
	Motor	Brushless DC motor		
	Multi-level protection	Double-level over heat protection(motor/interior actuator)&Over current protection		
	Indicator	360° Visible indicator / 360° Visible LED indicator		
	Heater	15W,The heater works when the ambient temperature is lower than 15℃		
	Corrosion Protection	Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting		
	Feedback Signal	Open/Close/Error		3 programmable relays output feedback signals
	Bus Type	Modbus		
	Optional Function	Bluetooth/IP68 /25℃ heater/C05 corrosion protection		

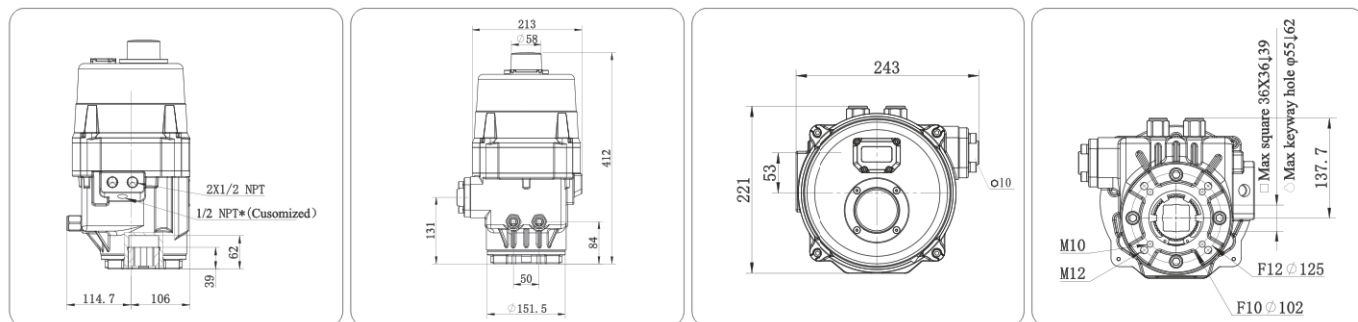
EPQ425



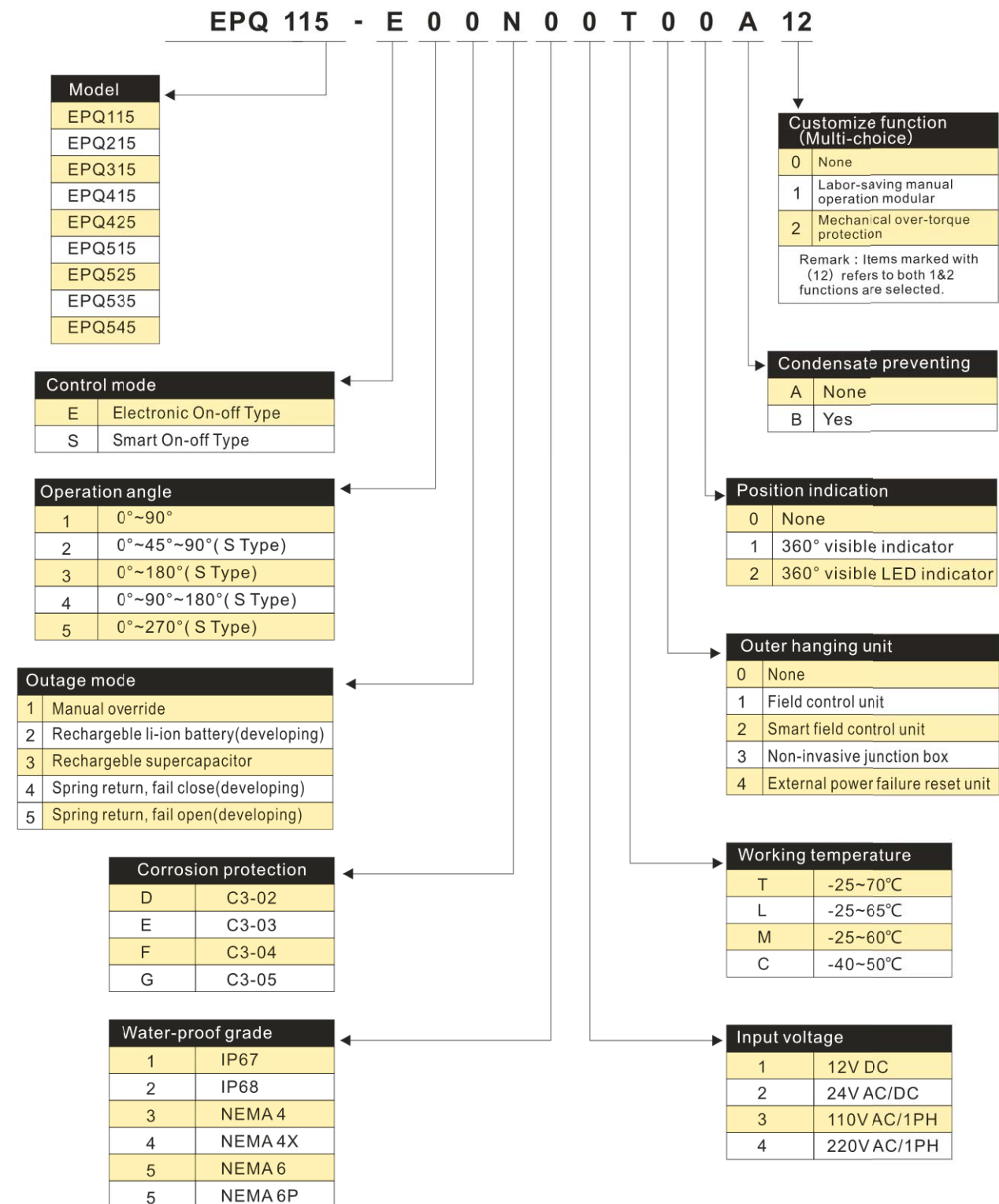
■ EPQ515/525/535/545 General Parameter / Outline Drawing

General Parameter	Model	EPQ515	EPQ525	EPQ535	EPQ545
	Max Torque	300N·m	400N·m	500N·m	650N·m
	Voltage	AC110V/AC220V	AC110V/AC220V	AC110V/AC220V	AC110V/AC220V
	Rated Current(A)	4.3A/2.3A	4.8A/2.4A	5.9A/2.9A	6.9A/3.4A
	Locked-rotor current(A)	5.6A/3.0A	6.3A/3.1A	7.7A/3.7A	9.0A/4.4A
	0~90° Travel Time	≤5S			
	Motor power	550W			
	Control Mode	E-Electronic on-off		S-Smart on-off	
	Rotation Angle	0~90°		0~90~180°/0~270°	
	Duty Cycle	30%			
	Environment Temp.	-25~65℃			
	Weight	24.8kgs			
	Field Operation Modular	N		Y	
	Manual Operation Type	Wrench			
	Protection Grade	IP67/NEMA 4/NEMA4X/NEMA6/NEMA6P			
	Electric Connection	2*1/2NPT			
	Motor	Brushless DC motor			
	Multi-level protection	Double-level over heat protection(motor/interior actuator)&Over current protection			
	Indicator	360° Visible indicator / 360° Visible LED indicator			
	Heater	25W,The heater works when the ambient temperature is lower than 15 °C			
	Corrosion Protection	Aluminium alloy enclosure with ISO 12944 C03-02 standard powder painting			
	Feedback Signal	Open/Close/Error		3 programmable relays output feedback signals	
	Bus Type	Modbus			
Optional Function	Bluetooth/IP68 /25℃ heater/C05 corrosion protection				

EPQ515-545



■ Order Instruction for EPQ series



Note:

- For outage mode selection, capacitor reset mode is only available for EPQ115/EPQ215/EPQ315. Please refer to Page 21-23 for parameters and outline drawings.
- The customized functions are available for EPQ415 and above sizes.

■ Super capacitor return model Parameter/Outline drawing

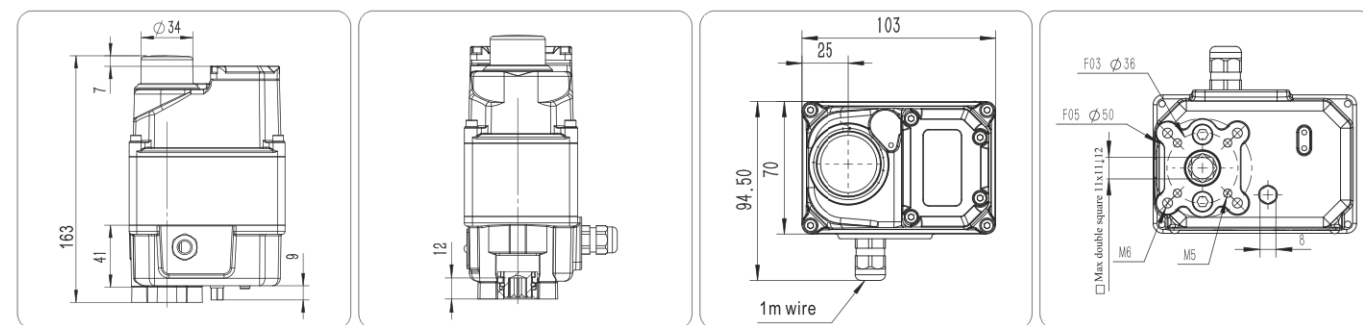
	EP20P1				EP20P2			
Voltage	AC24V	DC24V	AC110V	AC220V	AC24V	DC24V	AC110V	AC220V
Rated Current(A)	1	0.7	0.32	0.18	1	0.7	0.32	0.18
Locked-rotor current(A)	2.25	1.35	0.45	0.35	2.25	1.35	0.45	0.35
Max torque	10N·m	10N·m	10N·m	10N·m	14N·m	14N·m	14N·m	14N·m
0~90° Travel Time	9S	9S	6S	6S	11S	11S	8S	8S
Weight	1.7kg				1.7kg			
Capacitor charging time	3min	3min	3min	3min	3min	3min	3min	3min
0~90° travel@Max torque	≥2times	≥3times	≥2times	≥2times	≥2times	≥3times	≥2times	≥2times
0~90° travel@Max torque*0.8	≥3times	≥4times	≥3times	≥3times	≥3times	≥4times	≥3times	≥3times

	EP20P3				EPQ115			
Voltage	AC24V	DC24V	AC110V	AC220V	AC24V	DC24V	AC110V	AC220V
Rated Current(A)	1	0.7	0.32	0.18	1	0.7	0.32	0.18
Locked-rotor current(A)	2.25	1.35	0.45	0.35	2.25	1.35	0.45	0.35
Max torque	20N·m	20N·m	20N·m	20N·m	8N·m	8N·m	8N·m	8N·m
0~90° Travel Time	15S	15S	11S	11S	≤5S	≤5S	≤5S	≤5S
Weight	1.7kg				1.7kg			
Capacitor charging time	3min	3min	3min	3min	3min	3min	3min	3min
0~90° travel@Max torque	≥3times	≥3times	≥3times	≥3times	≥2times	≥3times	≥2times	≥2times
0~90° travel@Max torque*0.8	≥4times	≥4times	≥4times	≥4times	≥3times	≥4times	≥3times	≥3times

	EPQ215				EPQ315			
Voltage	AC24V	DC24V	AC110V	AC220V	AC24V	DC24V	AC110V	AC220V
Rated Current(A)	1.7	1.2	0.66	0.33	3	3	1.5	0.8
Locked-rotor current(A)	2.3	2.1	1.5	0.6	4.7	6.8	2.1	1.3
Max torque	23N·m	23N·m	23N·m	23N·m	40N·m	50N·m	50N·m	50N·m
0~90° Travel Time	≤5S	≤5S	≤5S	≤5S	≤5S	≤5S	≤5S	≤5S
Weight	2.4kg				3kg			
Capacitor charging time	3min	3min	3min	3min	3min	3min	3min	3min
0~90° travel@Max torque	≥4times	≥5times	≥5times	≥5times	≥2times	≥3times	≥2times	≥2times
0~90° travel@Max torque*0.8	≥6times	≥7times	≥7times	≥7times	≥3times	≥4times	≥3times	≥3times

	EP50P1				EP50P2			
Voltage	AC24V	DC24V	AC110V	AC220V	AC24V	DC24V	AC110V	AC220V
Rated Current(A)	1.9	1.4	0.65	0.45	1.9	1.4	0.65	0.45
Locked-rotor current(A)	3.13	3.75	1.55	0.78	3.13	3.75	1.55	0.78
Max torque	35N·m	35N·m	35N·m	35N·m	50N·m	50N·m	50N·m	50N·m
0~90° Travel Time	11S	11S	8S	8S	14S	14S	12S	12S
Weight	2.4KG				2.4KG			
Capacitor charging time	3min	3min	3min	3min	3min	3min	3min	3min
0~90° travel@Max torque	≥3times	≥3times	≥3times	≥3times	≥2times	≥3times	≥2times	≥2times
0~90° travel@Max torque*0.8	≥4times	≥4times	≥4times	≥4times	≥3times	≥4times	≥3times	≥3times

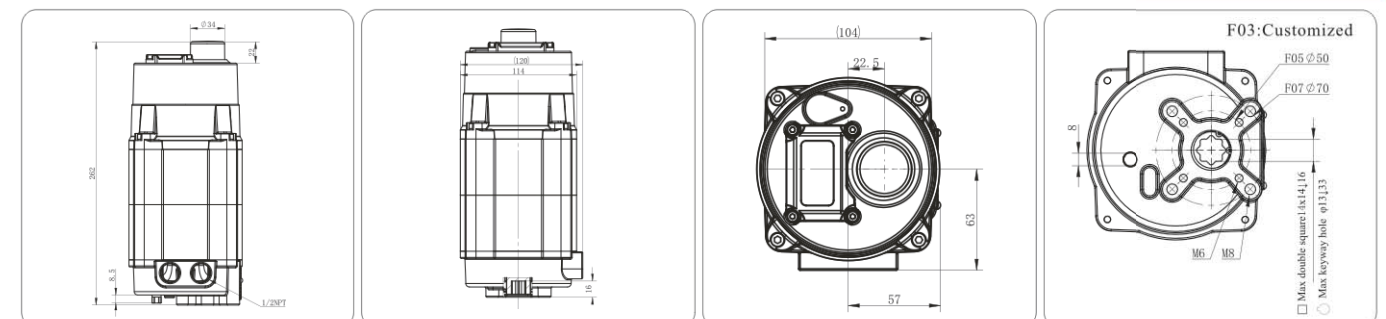
EP20P1-P3/EPQ115



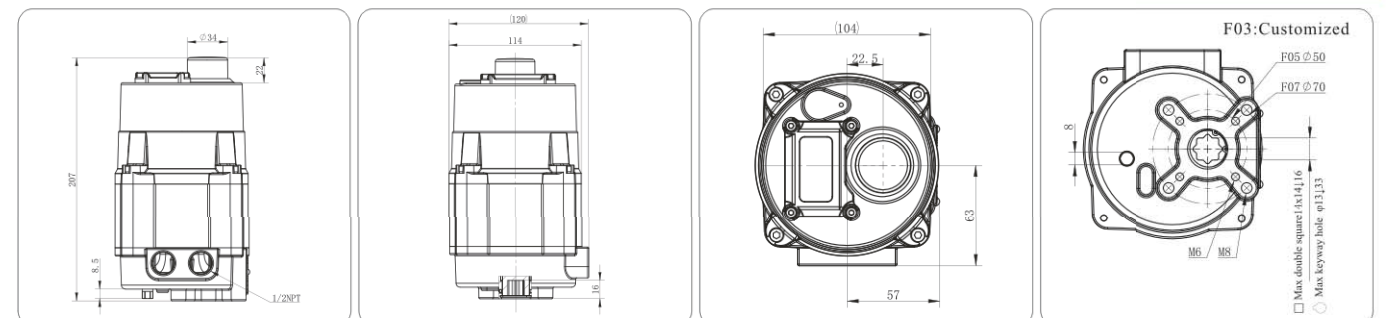
Note:

- 1.Operation Temperature:-25℃~65℃
- 2.Equipped with LED screen, easy to operate on site and check the electric quantity of the capacitor

EPQ315



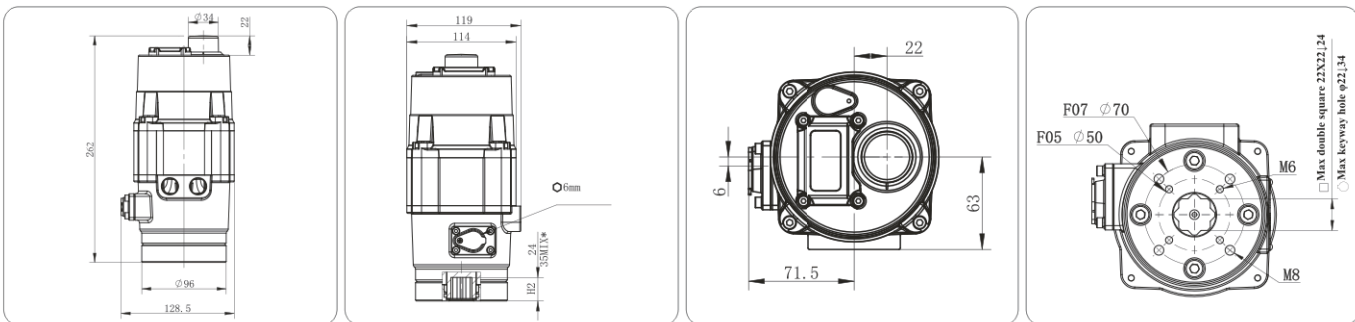
EP 50P1-P2/EPQ215



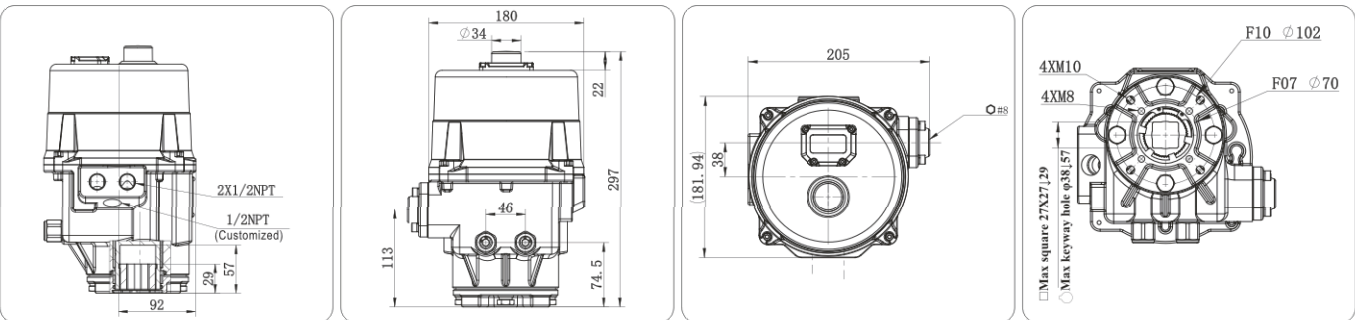
	EP100P1				EP100P2			
Voltage	AC24V	DC24V	AC110V	AC220V	AC24V	DC24V	AC110V	AC220V
Rated Current(A)	1.8	1.4	0.65	0.45	1.8	1.4	0.65	0.45
Locked-rotor current(A)	3.7	2.65	1.07	0.72	3.7	2.65	1.07	0.72
Max torque	80N·m	80N·m	80N·m	80N·m	100N·m	100N·m	100N·m	100N·m
0~90° Travel Time	20S	20S	16S	16S	27S	27S	18S	18S
Weight	4.1KG				4.1KG			
Capacitor charging time	3min	3min	3min	3min	3min	3min	3min	3min
0~90° travel@Max torque	≥2times	≥2times	≥2times	≥2times	≥1time	≥1time	≥1time	≥1time
0~90° travel@Max torque*0.8	≥3times	≥3times	≥3times	≥3times	≥2times	≥2times	≥2times	≥2times

	EP200A				EP200B			
Voltage	AC24V	DC24V	AC110V	AC220V	AC24V	DC24V	AC110V	AC220V
Rated Current(A)	2.4	1.9	1.1	0.6	2.4	1.9	1.1	0.6
Locked-rotor current(A)	4.7	6.8	2.1	1.3	4.7	6.8	2.1	1.3
Max torque	150N·m	150N·m	150N·m	150N·m	200N·m	200N·m	200N·m	200N·m
0~90° Travel Time	22S	22S	22S	22S	32S	32S	32S	32S
Weight	13.7KG				13.7KG			
Capacitor charging time	9min	9min	9min	9min	9min	9min	9min	9min
0~90° travel@Max torque	≥2times	≥2times	≥2times	≥2times	≥1time	≥1time	≥1time	≥1time
0~90° travel@Max torque*0.8	≥3times	≥3times	≥3times	≥3times	≥2times	≥2times	≥2times	≥2times

EP100P1-P2

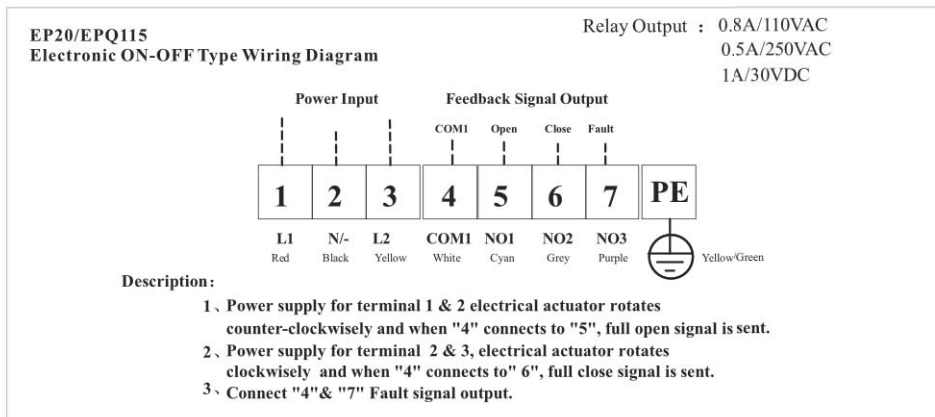


EP200A/EP200B

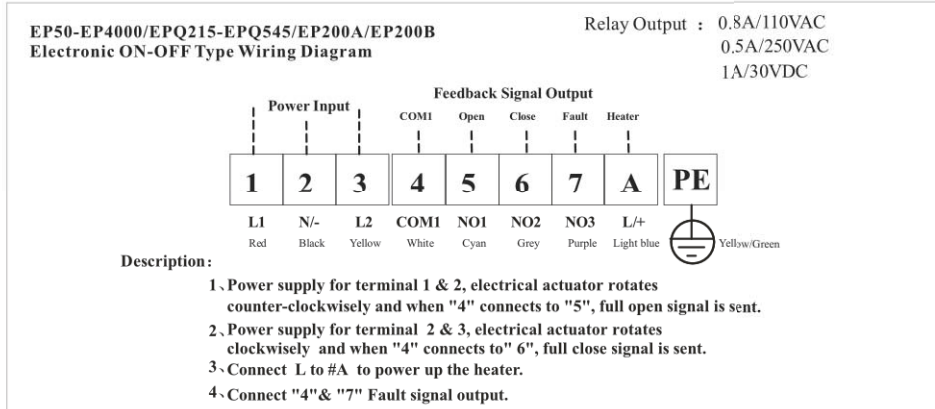


■ Wiring Diagram

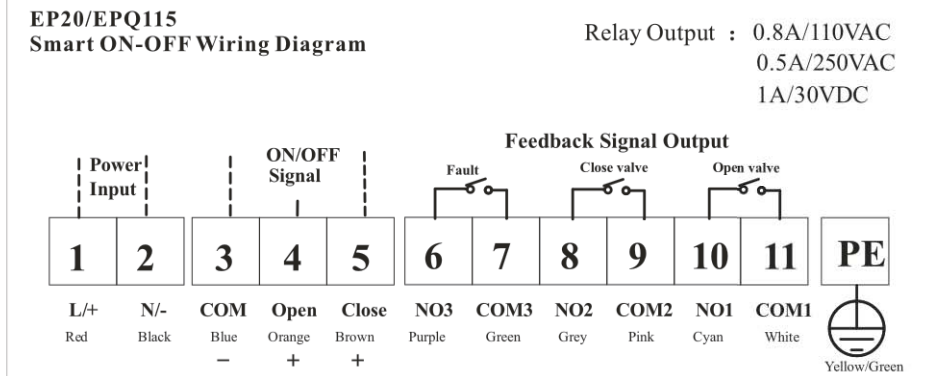
Electronic ON-OFF



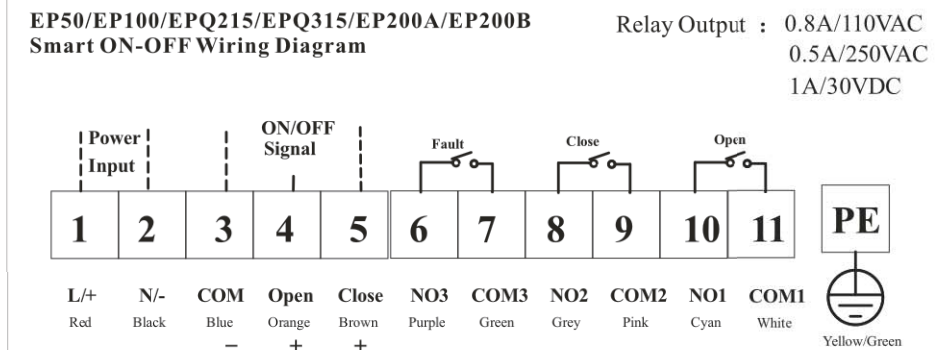
Electronic ON-OFF



EP20/EPQ115 Smart ON-OFF Wiring Diagram

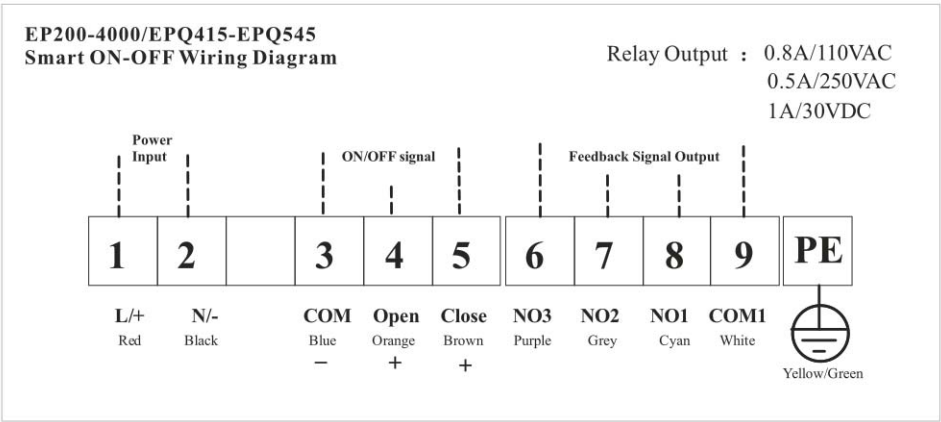


EP50/EP100/EPQ215/EPQ315/EP200A/EP200B Smart ON-OFF Wiring Diagram

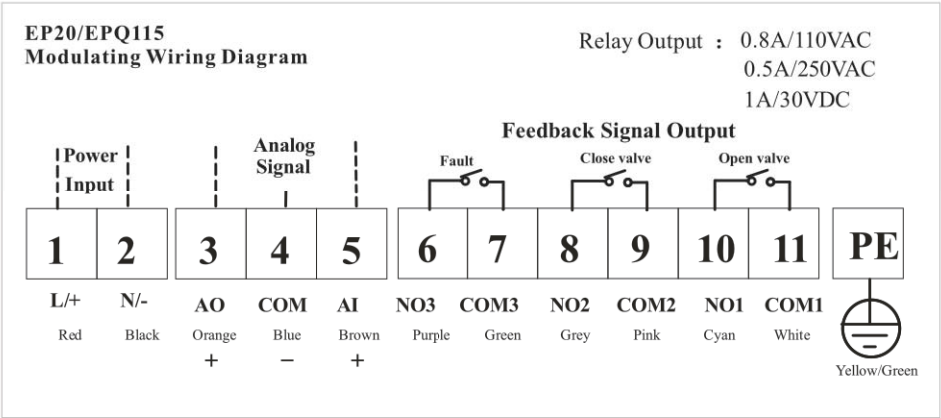


■Wiring Diagram

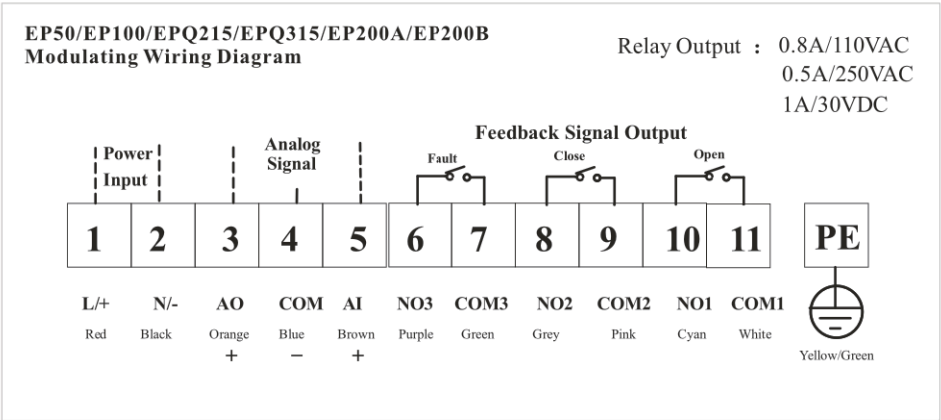
Smart ON-OFF



Modulating



Modulating



Modulating

