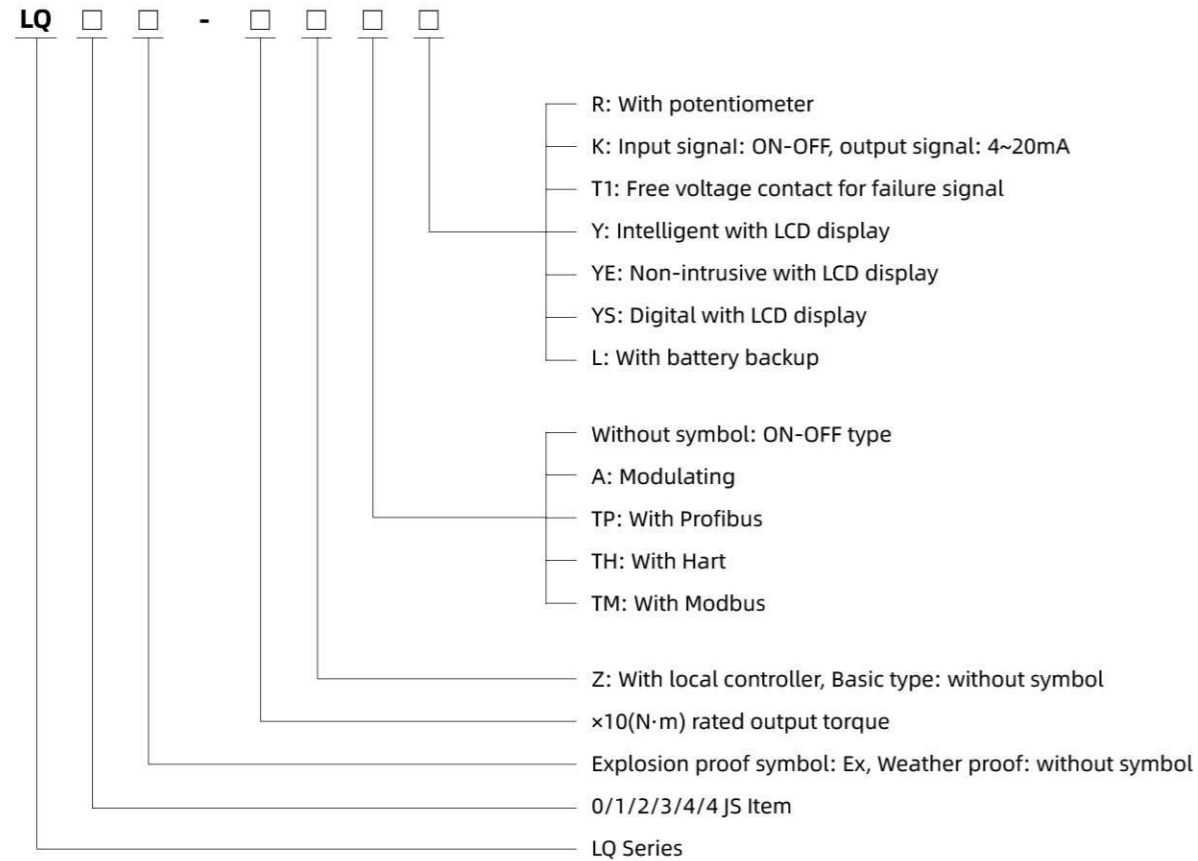


ORDERING INFORMATION



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LQ

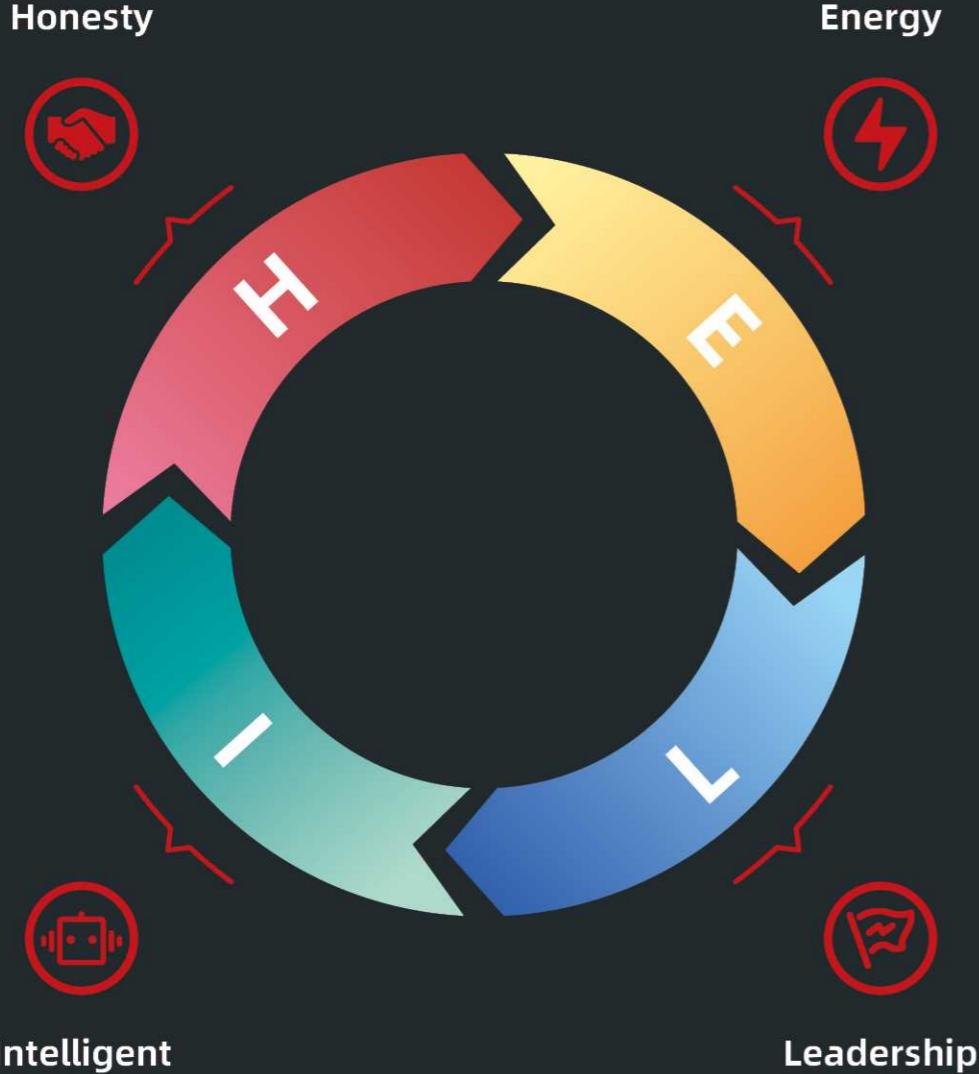
Series

QUARTER-TURN ELECTRIC ACTUATOR

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Valve&Actuator solutions

COMPANY CULTURE



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COMPANY INTRODUCTION



Wenzhou Heli Automatic Meter Co.,Ltd 's factory covers an area of 23,000 square meters and has more than 100 employees, owning 3 invention patents, 51 new utility patents and 2 software copyrights, having the CE, ROHS, SIL, ATEX, CNEX, 3C, IP67, IP68, ISO9001:2015 certificates.

Our main products are electric actuator, pneumatic actuator, damper actuator, electric butterfly valve, electric ball valve, electric gate valve, electric globe valve, pneumatic butterfly valve, pneumatic ball valve, pneumatic adjusting valve, which are widely used in industries inclusive of Oil&Gas, HVAC, Marine, Mining, Pulp&Paper, Food&Beverage, Power, Water&wasterwater, Pharmaceutical and Chemical industries around the world.

We insist on " Quality-driven, Technical innovator, Honest service" , providing the best valve&actuator solutions, cooperating with domestic and international companies to improve our globalization service.

1999, founded the company and researched the HL series electric actuator.

2000, launched the HL series quarter-turn electric actuator as the first company in electric actuator industry in Wenzhou city.

2003, got the export lisenze with a series of certificates.

2004, exported the electric actuator to europe.

2008, launched the HLF series damper actuator for HVAC.

2009, launched the HAT series quarter-turn pneumatic actuator.

2010, launched the LQ series quarter-turn electric actuator with explosion proof.

2013, sold out 40000 pieces actuators.

2014, launched the new design HEQ series electric actuator with a international company.

2016, launched the HEM series for multi-turn electric actuator.

2018, sold out 95000 picese electric actuators.

2019, reached 15 million dollars of company's sales.

2020, built the new factory covering an area of 23,000 square meters with developed production lines and facilities



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LQ

Series Quarter-Turn Electric Actuator

LQ series electric actuator are the new generation of our company and can be used for driving and controlling the butterfly valves, ball valves and plug valves with 90° movement.

Our products and services are widely used in industries inclusive of Oil&Gas, HVAC, Marine, Mining, Pulp&Paper, Food & Beverage, Power, Water&wasterwater, Pharmaceutical and Chemical industries around the world.

The enclosure protection is IP67, comply with d II BT6 or d II CT6.



HELI®



LQ Series Quarter-Turn Electric Actuator

Control types and structure

- > On-off and Modulating.
- > Options are available for local controller providing easy operation in field such as intelligent and battery backup.

Removable motor

- > Easy to maintain as the removable squirrel caged induction motor.

Terminal block

- > Spring loaded push type terminal block for tight wiring connection under severe vibration.
- > Enough number of terminal strips for customer's convenience.

Double wormgear

- > With a low noise and self-locking to keep position of valve unchanged against reverse torque from valve.

Space heater

- > Anti-condensation due to the temperature difference.

Torque switch

- > Auxiliary limit switch and torque switch to protect actuator from damage caused by overload.

Mechanical position indicator

- > Check the position of your valve at a glance, dome indicator option.

Handwheel

- > Manual override and handwheel for emergency manual operation.

Mounting base

- > Flange according to ISO5211 standard with removable bushing.

Multi-Enclosure

- > Explosion proof, Weather proof and watertight option.

Excellent enclosure

- > Better enclosure due to less interfaces.



LQ Series Selection Table

Item	LQ0		LQ1		LQ2		LQ3		LQ4		LQ4JS				
	-05		-06	-10	-16	-20	-35	-50	-80	-110	-200	-250	-300	-400	-600

Photo



Torque (N.m)	50	60	100	160	200	350	500	800	1100	2000	2500	3000	4000	6000
Working time (0~90°C /S)	21	26	26	28	28	32	32	36	36	110	110	150	180	180
Motor consumption (AC220V/W)	10	20	20	40	40	60	90	120	180	120	180	180	120	180
Options	Explosion Proof	×	√	√	√	√	√	√	√	√	√	√	√	√
	Modulating	×	√	√	√	√	√	√	√	√	√	√	√	√
	Local Controller	×	√	√	√	√	√	√	√	√	√	√	√	√
	Intelligent type	×	√	√	√	√	√	√	√	√	√	√	√	√
	Fieldbus communication	×	√	√	√	√	√	√	√	√	√	√	√	√
	Bluetooth/GPRS	×	√	√	√	√	√	√	√	√	√	√	√	√
	IP68	√	√	√	√	√	√	√	√	√	√	√	√	√
	LED indicator	×	√	√	√	√	√	√	√	√	√	√	√	√

PRODUCT STRUCTURE



LQZA Local Controller



LQA Modulating



LQEX-Z Explosion Proof Local Controller



LQY Intelligent type/
Fieldbus Communication



LQSR Spring return

Indicator

Motor

Torque switch

Shaft drive

Terminal block

Handwheel

Manual override



Standard Specification

Housing	Enclosure protection IP67, NEMA4 and 6	
Power supply	110/220VAC 1Phase, 380/440V AC 3Phase, 50/60Hz, ±10%	
Motor	Squirrel cage induction motor	
Limit switch	2 X Open/Close, SPDT, 250V AC 5A	
Auxiliary limit switch	2 X Open/Close, SPDT, 250V AC 5A	
Torque switch	Open/Close, SPDT, 250V AC 10A	Except for 06/10
Travel	90° ±10°	0° ~270° As option
Stall protection/ Set temperature	Built in thermal protection, Open 120°C ±5°C /Close 97°C ±5°C	
Indicator	Continuous mechanical indicator with arrow	
Manual operation	De-clutchable	
Self-locking	Provided by double worm gear (no brake)	
Mechanical stopper	1 each for each travel end (Open and Close), external & adjustable	
Space heater	30W (110/220V AC) Anti-condensation	
Cable entries	2×NPT 3/4	
Ambient temperature	-25°C ~+70°C	
Options	Bluetooth, LED indicator, GPRS, IP68, Fieldbus communication	
Material	Steel, Aluminum Alloy, Aluminum Bronze, Polycarbonate	
Ambient temperature	Max 90%RH	Non-Condensing

Working time and output torque table(Customized)

Item	LQ1			LQ2				LQ3			
Working time (s)	26 (Standard)	10	5	28 (Standard)	15	10	3-5	32 (Standard)	15	10	3-5
Torque (N.m)	100	60	40	240	200	150	80	500	400	350	150
Motor consumption (W)	20			45				90			

Item	LQ4			LQ4JS-250		LQ4JS-300		LQ4JS-600	
Working time (s)	36 (Standard)	18	12	3-5	110 (Standard)	55	160 (Standard)	180 (Standard)	90
Torque (N.m)	1100	800	600	300	2500	2000	3000	6000	5000
Motor consumption (W)	180								

Remarks: The electric actuator does not have the self-locking function and the torque switch does not work if the working time is less than 5 seconds(total 5 seconds).Please contact the salesman if you have any special requirements.

Torque (Power supply: AC220V) (Continuous working)

Item	Torque (N.m)	Working time (s)	Rated current (A)	Motor consumption (W)
LQ1-03 (Original item LQ1-10)	30	26	0.3	15
LQ2-12 (Original item LQ2-24)	120	28	0.42	28
LQ3-25 (Original item LQ3-50)	250	32	0.63	48
LQ4-50 (Original item LQ4-110)	500	36	1.37	100
LQ4JS-100 (Original item LQ4JS-250)	1000	55	1.40	100
LQ4JS-150 (Original item LQ4JS-600)	1500	90	1.46	100

QUARTER-TURN ELECTRIC ACTUATOR

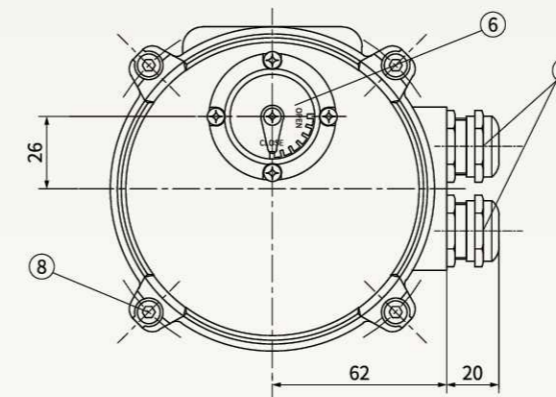
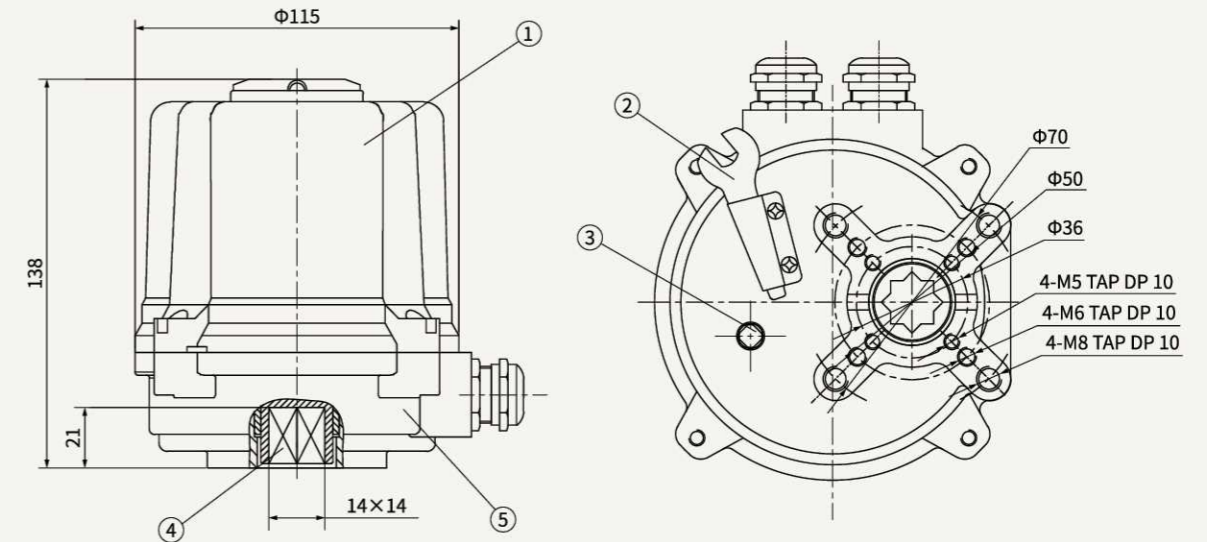
LQ0 Series Quarter-Turn Electric Actuator

Technical Specification

Item	Output torque (N.m)	90° Working time (S)	Motor consumption (W)	Rated current (A)	Motor class	Handwheel turns	Weight (Kg)	Power supply
LQ0-5	50	10	10	2.2	With brake	10	2	DC12V
				1.2				DC24V
				0.25	E			AC110V
				0.15				AC220V
		21		0.09	AC380V			
				0.11	AC415V			
				0.13	AC440V			

Remarks: Cable entries: M20×1.5

Dimension (mm)



No.	Name	Material/ Specification
1	Indication cover	ZL102
2	Hand lever	6.7×6.7
3	Manual shaft	6.5×6.5
4	Output shaft	14×14
5	Housing	ZL102
6	Indicator	0~90°
7	PG13.5 Cable entries	M20×1.5
8	Captive cover bolts	M5×22

QUARTER-TURN ELECTRIC ACTUATOR

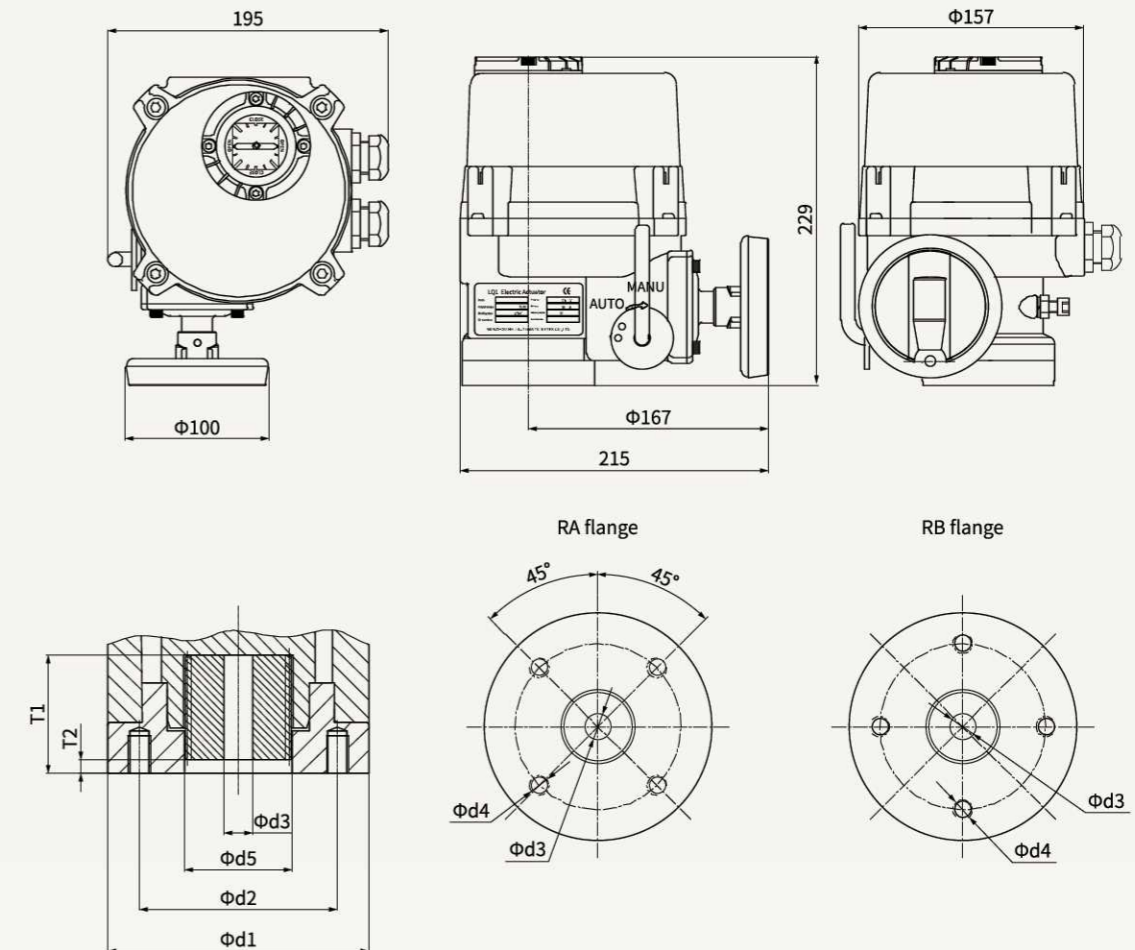
LQ1 Series Quarter-Turn Electric Actuator

Technical Specification

Item	Output torque (N.m)	90° Working time (S)	Motor consumption (W)	Rated current (A)	Handwheel turns	Weight (Kg)	Power supply
LQ1-06	60	26	20	0.45	10	8	AC220V
				1			AC110V
				0.22			AC380V
				0.26			AC440V
LQ1-10	100	26	20	0.5	10	8	AC220V
				1			AC110V
				0.22			AC380V
				0.26			AC440V
				25			DC24V

Remarks: All range actuators are dispatched with explosion proof plugs 2-NPT 3/4 fitted into the cable entries, it is the responsibility of the installer to ensure the appropriate cable adapters and packings with explosion proof.

Dimension (mm)



Item	Symbol	Flange	d1	d2		d3	d5	T1	T2	Flange
				Standard dimensions	Options					
LQ1	RA	F05/ F07	$\Phi 92$	$\Phi 50$		$\Phi 22$ *20	$\Phi 39$	42	3	4-M6 TAP DP 12
				$\Phi 70$	11x11 14x14 17x17					4-M8 TAP DP 12
	RB	2"		$\Phi 57.15$						4-M6 TAP DP 12
		3"								4-M6 TAP DP 12

Remarks: d2 and d3 dimensions can be processed in accordance with customer requirements of the corresponding size.

QUARTER-TURN ELECTRIC ACTUATOR

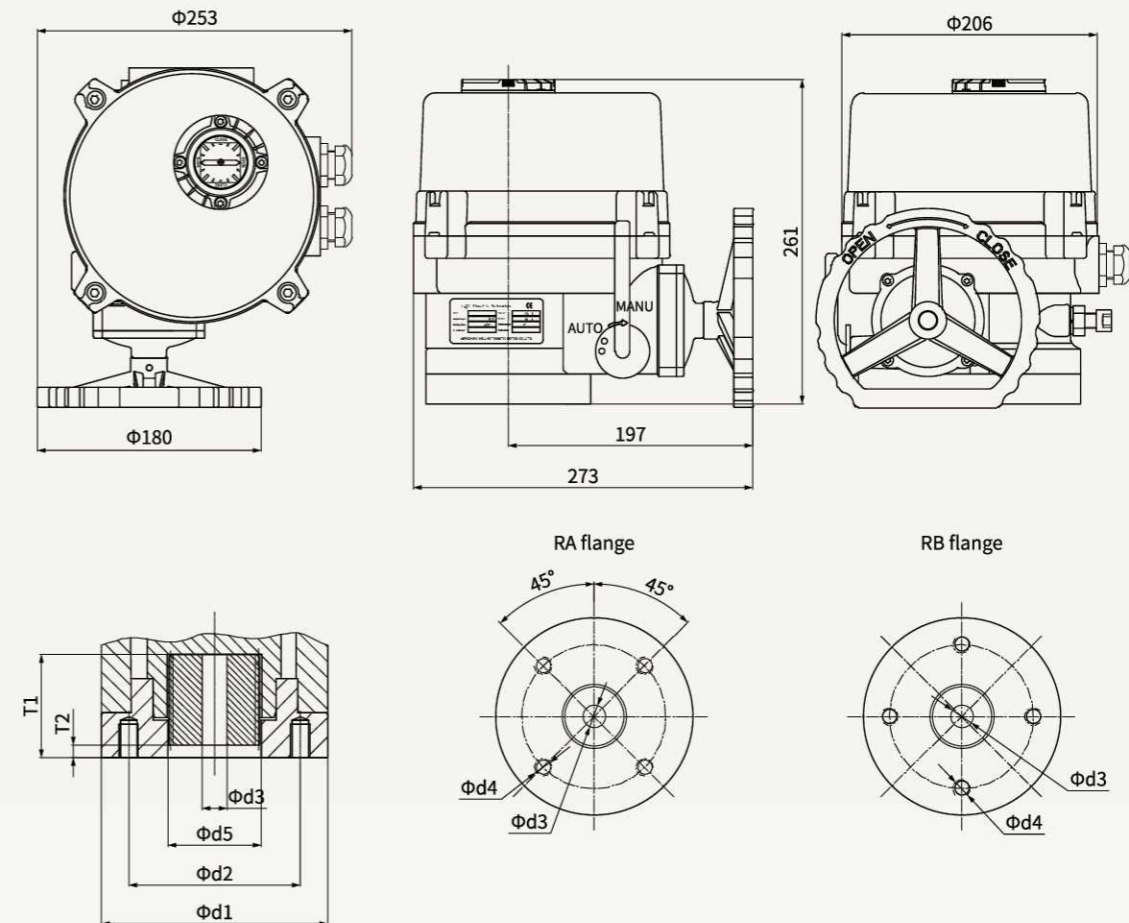
LQ2 Series Quarter-Turn Electric Actuator

Technical Specification

Item	Output torque (N.m)	90° Working time (S)	Motor consumption (W)	Rated current (A)	Handwheel turns	Weight (Kg)	Power supply
LQ2-16	160	28	40	0.6	12	14	AC220V
				1.45			AC110V
				0.25			AC380V
				0.3			AC440V
				2.0			DC24V
LQ2-20	200	28	40	0.6	12	14	AC220V
				1.5			AC110V
				0.3			AC380V
				0.35			AC440V
				2.2			DC24V
LQ2-24	240	28	40	0.7	12	14	AC220V
				1.6			AC110V
				0.35			AC380V
				0.39			AC440V
				2.8			DC24V

Remarks: All range actuators are dispatched with explosion proof plugs 2-NPT 3/4 fitted into the cable entries, it is the responsibility of the installer to ensure the appropriate cable adapters and packings with explosion proof.

Dimension (mm)



Item	Symbol	Flange	d1	d2		d3	d5	T1	T2	Flange	
				Standard dimensions	Options						
LQ2	RA	F07/ F10	$\Phi 132$	$\Phi 70$		14x14 17x17 22x22	$\Phi 32$ "25	49	3	4-M8 TAP DP 15	
				$\Phi 102$						4-M10 TAP DP 15	
	RB	5"	6"	$\Phi 69.85$							4-M10 TAP DP 15

Remarks: d2 and d3 dimensions can be processed in accordance with customer requirements of the corresponding size.

QUARTER-TURN ELECTRIC ACTUATOR

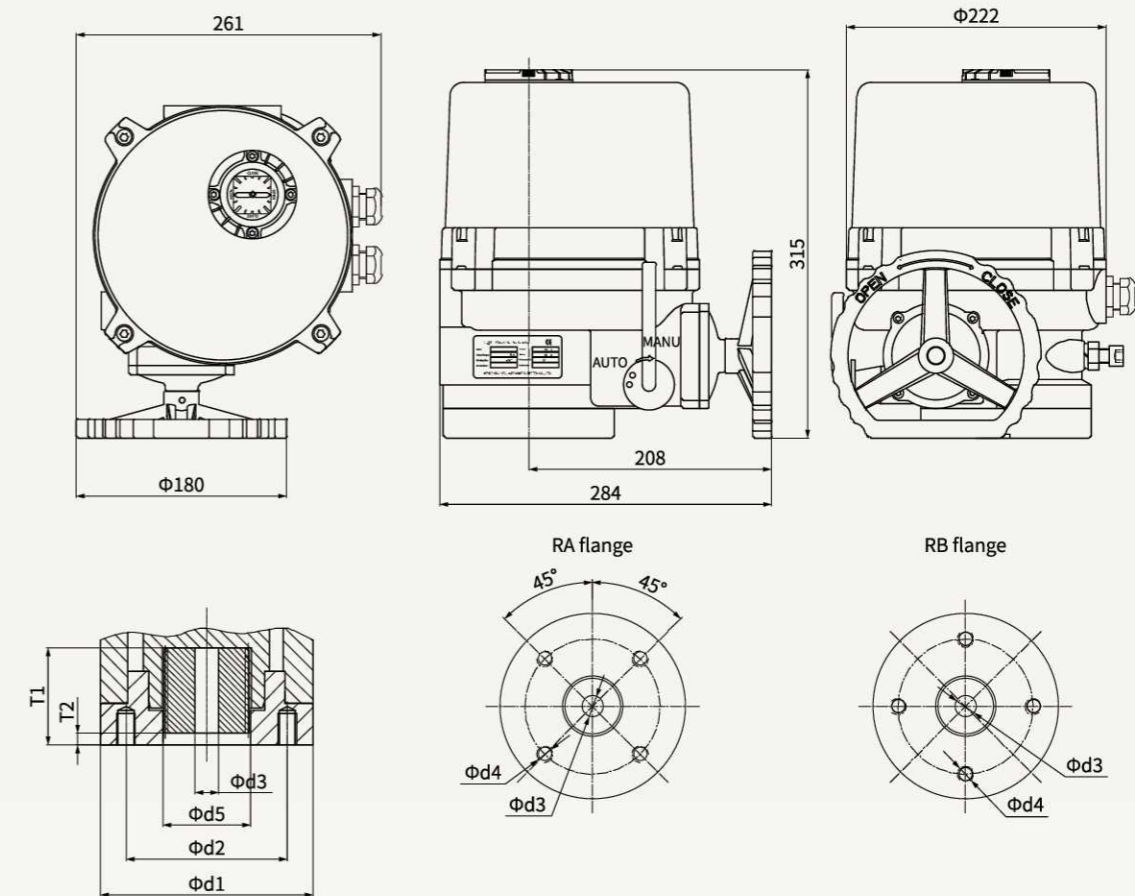
LQ3 Series Quarter-Turn Electric Actuator

Technical Specification

Item	Output torque (N.m)	90° Working time (S)	Motor consumption (W)	Rated current (A)	Handwheel turns	Weight (Kg)	Power supply
LQ3-35	350	32	60	0.9	13	18	AC220V
				1.8			AC110V
				0.38			AC380V
				0.42			AC440V
				4.0			DC24V
LQ3-50	500	32	90	1.3	13	19	AC220V
				3.2			AC110V
				0.8			AC380V
				0.86			AC440V
				6.9			DC24V

Remarks: All range actuators are dispatched with explosion proof plugs 2-NPT 3/4 fitted into the cable entries, it is the responsibility of the installer to ensure the appropriate cable adapters and packings with explosion proof.

Dimension (mm)



Item	Symbol	Flange	d1	d2		d3		d5	T1	T2	Flange							
				Standard dimensions	Options	Max. permission												
LQ3	RA	F10/ F12	$\Phi 146$	$\Phi 102$	14x14 17x17 22x22	$\Phi 32$ "25	$\Phi 48.5$	51	5		4-M10 TAP DP 15							
				$\Phi 125$							4-M12 TAP DP 15							
	RB	8"		$\Phi 88.9$														4-M12 TAP DP 15
		10"																4-M12 TAP DP 15

Remarks: d2 and d3 dimensions can be processed in accordance with customer requirements of the corresponding size.

QUARTER-TURN ELECTRIC ACTUATOR

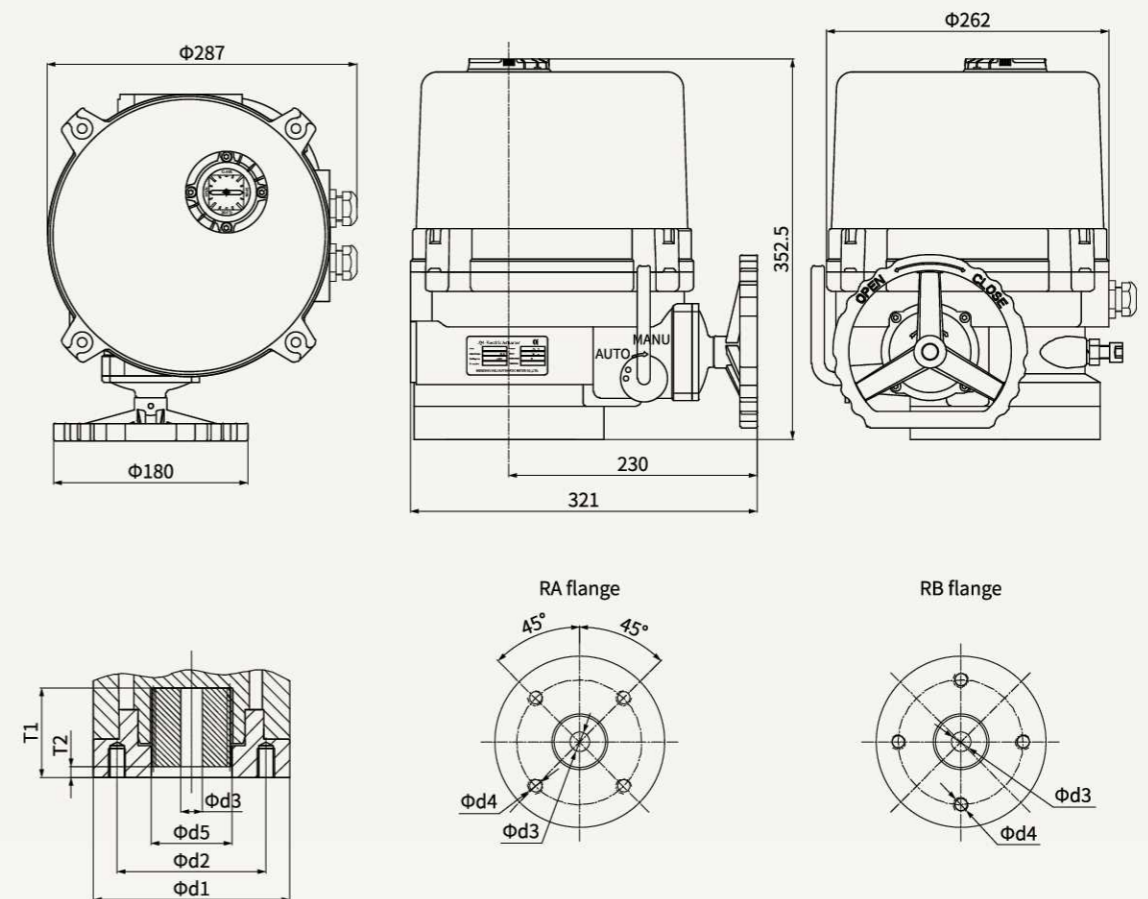
LQ4 Series Quarter-Turn Electric Actuator

Technical Specification

Item	Output torque (N.m)	90° Working time (S)	Motor consumption (W)	Rated current (A)	Handwheel turns	Weight (Kg)	Power supply
LQ4-80	800	36	120	1.5	14.5	24	AC220V
				3.9			AC110V
				1.1			AC380V
				1.2			AC440V
				9.8			DC24V
LQ4-110	1100	36	180	2.2	14.5	26	AC220V
				4.2			AC110V
				1.5			AC380V
				1.6			AC440V
				12.5			DC24V

Remarks: All range actuators are dispatched with explosion proof plugs 2-NPT 3/4 fitted into the cable entries, it is the responsibility of the installer to ensure the appropriate cable adapters and packings with explosion proof.

Dimension (mm)



Item	Symbol	Flange	d1	d2		d3		d5	T1	T2	Flange							
				Standard dimensions	Options	Max. permission												
LQ4	RA	F12/ F14	Φ176	Φ125	22×22 27×27 36×36	Φ42 "38	Φ90	62	7		4-M12 TAP DP 18							
				Φ140							4-M16 TAP DP 25							
	RB	12"		Φ107.95														4-M12 TAP DP 20
		14"																

Remarks: d2 and d3 dimensions can be processed in accordance with customer requirements of the corresponding size.

QUARTER-TURN ELECTRIC ACTUATOR

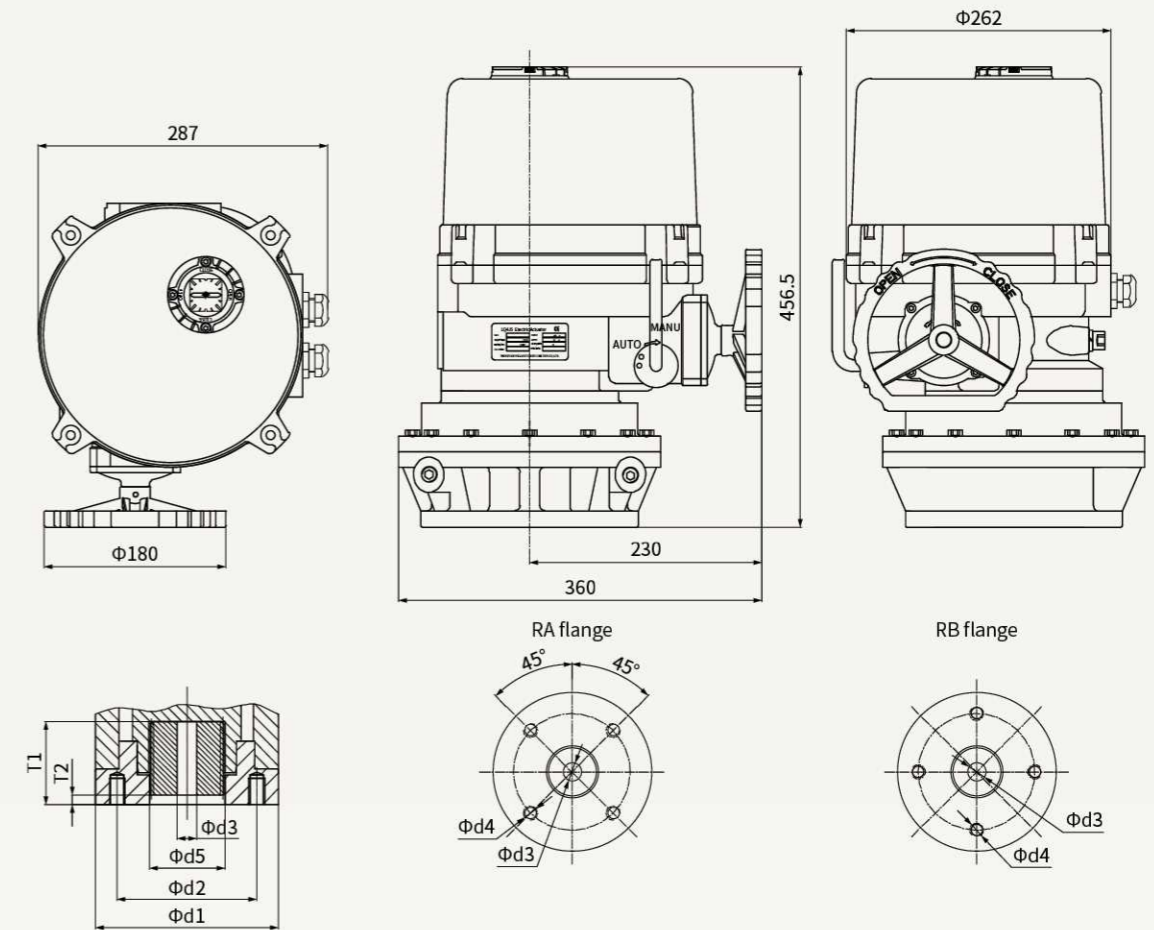
LQ4JS-200 Series 250 Quarter-Turn Electric Actuator

Technical Specification

Item	Output torque (N.m)	90° Working time (S)	Motor consumption (W)	Rated current (A)	Handwheel turns	Weight (Kg)	Power supply
LQ4JS-200	2000	110	120	1.5	46	50	AC220V
				3.9			AC110V
				1.1			AC380V
				1.2			AC440V
				9.8			DC24V
LQ4JS-250	2500	110	180	2.2	46	52	AC220V
				4.2			AC110V
				1.5			AC380V
				1.6			AC440V
				12.5			DC24V

Remarks: All range actuators are dispatched with explosion proof plugs 2-NPT 3/4 fitted into the cable entries, it is the responsibility of the installer to ensure the appropriate cable adapters and packings with explosion proof.

Dimension (mm)



Item	Symbol	Flange	d1	d2		d3		d5	T1	T2	Flange
				Standard dimensions	Options	Max. permission					
LQ4JS-200/250	RA	F14/ F16	$\Phi 215$	$\Phi 125$	27×27 36×36	$\Phi 60$ "50	$\Phi 118$	75	7	7	4-M16 TAP DP 25
				$\Phi 140$							4-M20 TAP DP 25
	RB	16"		$\Phi 158.75$							4-M18 TAP DP 25
		18"									
		20"									

Remarks: d2 and d3 dimensions can be processed in accordance with customer requirements of the corresponding size.

QUARTER-TURN ELECTRIC ACTUATOR

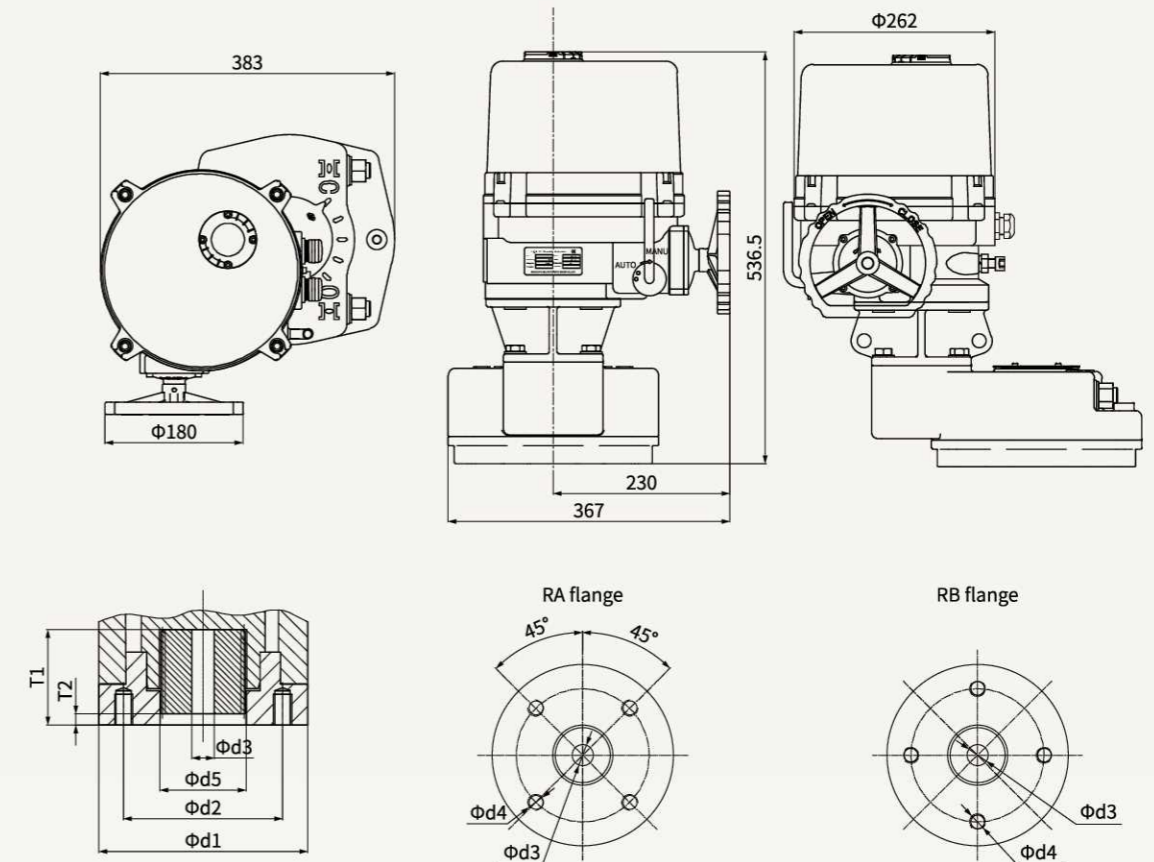
LQ4JS-300 Series Quarter-Turn Electric Actuator

Technical Specification

Item	Output torque (N.m)	90° Working time (S)	Motor consumption (W)	Rated current (A)	Handwheel turns	Weight (Kg)	Power supply
LQ4JS-300	3000	150	180	2.2	70	85	AC220V
				4.2			AC110V
				1.5			AC380V
				1.6			AC440V
				12.5			DC24V

Remarks: All range actuators are dispatched with explosion proof plugs 2-NPT 3/4 fitted into the cable entries, it is the responsibility of the installer to ensure the appropriate cable adapters and packings with explosion proof.

Dimension (mm)



Item	Symbol	Flange	d1	d2		d3		d5	T1	T2	Flange
				Standard dimensions	Options	Max. permission					
LQ4JS-300	RA	F16	$\Phi 350$	$\Phi 165$	$\Phi 0$	$\Phi 60/''50$	$\Phi 118$	118	8		4-M20 TAP DP 25
		F25		$\Phi 254$	$\Phi 70/''60$	4-M16 TAP DP 30					

Remarks: d2 and d3 dimensions can be processed in accordance with customer requirements of the corresponding size.

QUARTER-TURN ELECTRIC ACTUATOR

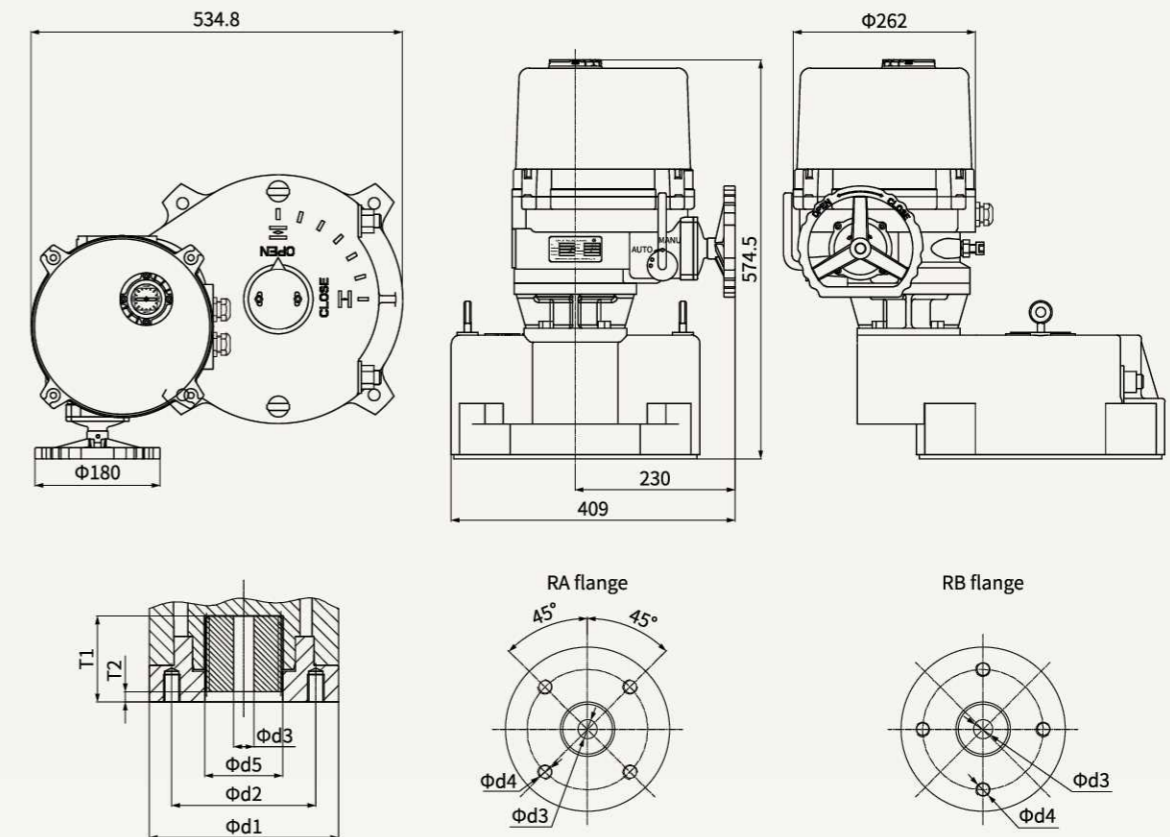
LQ4JS-400 Series 600 Quarter-Turn Electric Actuator

Technical Specification

Item	Output torque (N.m)	90° Working time (S)	Motor consumption (W)	Rated current (A)	Handwheel turns	Weight (Kg)	Power supply
LQ4JS-400	4000	180	120	1.5	73	104	AC220V
				3.9			AC110V
				1.1			AC380V
				1.2			AC440V
				9.8			DC24V
LQ4JS-600	6000	180	180	2.2	73	106	AC220V
				4.2			AC110V
				1.5			AC380V
				1.6			AC440V
				12.5			DC24V

Remarks: All range actuators are dispatched with explosion proof plugs 2-NPT 3/4 fitted into the cable entries, it is the responsibility of the installer to ensure the appropriate cable adapters and packings with explosion proof.

Dimension (mm)



Item	Symbol	Flange	d1	d2		d3		d5	T1	T2	Flange
				Standard dimensions	Options	Max. permission					
LQ4JS-400/600	RA	F16	Φ350	Φ165	Φ0	Φ60/"50	Φ118	118	8		4-M20 TAP DP 25
		F25		Φ254		Φ70/"60					4-M16 TAP DP 30
		F30		Φ298							4-M20 TAP DP 35

Remarks: d2 and d3 dimensions can be processed in accordance with customer requirements of the corresponding size.



LQA Series

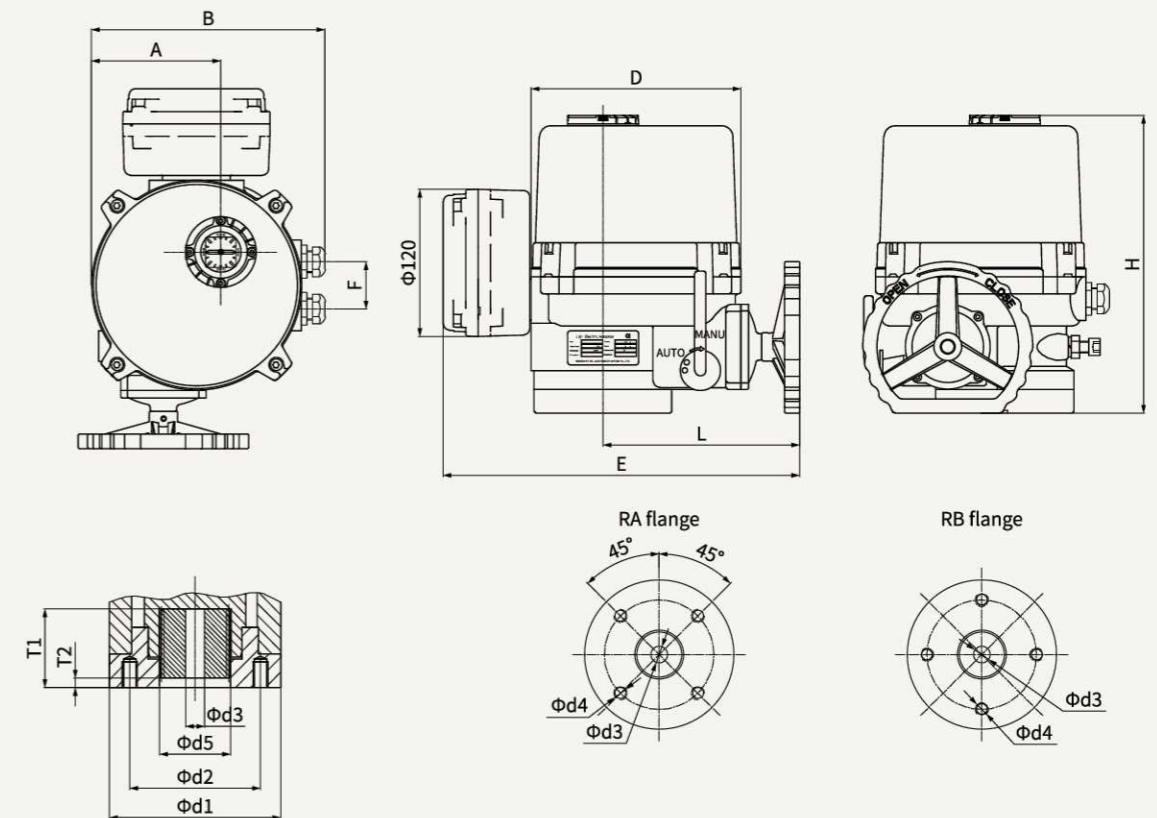
Modulating With External Module

Technical Specification

Item	LQ1		LQ2		LQ3		LQ4		LQ4JS											
	-6	-10	-16	-20	-24	-35	-50	-80	-110	-200	-250	-400	-600							
Output torque(N.m)	60	100	160	200	240	350	500	800	1100	2000	2500	4000	6000							
Working time (S)	26	26	28	28	28	32	32	36	36	110	110	180	180							
Motor consumption (W)	20	20	40	40	45	60	90	120	180	120	180	120	180							
Rated current (A)	AC220V	0.45	0.5	0.6	0.6	0.7	0.9	1.3	1.5	2.2	1.5	2.2	1.5	2.2						
	AC110V	-	1.0	1.45	1.5	1.6	1.8	3.2	3.9	4.2	3.9	4.2	3.9	4.2						
Handwheel turns	10		12		13		14.5		46		73									
Weight(Kg)	12		18		22		23		28		30		54		56		108		110	

Remarks: All range actuators are dispatched with explosion proof plugs 2-NPT 3/4 fitted into the cable entries, it is the responsibility of the installer to ensure the appropriate cable adapters and packings with explosion proof.

Dimension (mm)



Item	Flange	A	B	D	E	F	L	H	T1	T2	Φd1	Φd2	Φd3	Φd4	Φd5
LQ1-6/10A	RA F05											Φ50	11×11	4-M6 TAP DP 12	
	F07	90.5	182.5	Φ157	285	46	167	229	42	3	Φ92	Φ70	14×14	4-M8 TAP DP 12	Φ39
	RB 2"3"											Φ57.15	17×17	4-M6 TAP DP 12	
LQ2-16/20/24A	RA F07											Φ70	14×14	4-M8 TAP DP 15	
	F10	126.5	232	Φ206	343	50	197	261	49	3	Φ132	Φ102	17×17	4-M10 TAP DP 15	Φ48.5
	RB 4"5"6"											Φ69.85	22×22	4-M10 TAP DP 15	
LQ3-35/50A	RA F10											Φ102	14×14	4-M10 TAP DP 15	
	F12	136.5	247	Φ222	354	50	208	315	51	5	Φ146	Φ125	17×17	4-M12 TAP DP 15	Φ48.5
	RB 8"10"											Φ88.9	22×22	4-M12 TAP DP 15	
LQ4-80/110A	RA F12											Φ125	22×22	4-M12 TAP DP 18	
	F14	166	287	Φ262	391	50	230	352.5	62	7	Φ176	Φ140	27×27	4-M16 TAP DP 25	Φ90
	RB 12"14"											Φ107.95	36×36	4-M12 TAP DP 20	
LQ4JS-200/250A	RA F14											Φ140		4-M16 TAP DP 25	
	F16	166	287	Φ262	391	50	230	456.5	75	7	Φ215	Φ165	27×27	4-M20 TAP DP 25	Φ118
	RB 16"18"20"											Φ158.75	36×36	4-M18 TAP DP 25	
LQ4JS-300A	RA F16											Φ165	Φ0	4-M20 TAP DP 25	Φ118
	F25	166	287	Φ262	391	50	230	536.5	118	8	Φ350	Φ254	Φ0	4-M16 TAP DP 30	Φ150
												Φ165		4-M20 TAP DP 25	
LQ4JS-400/600A	RA F16											Φ165	Φ0	4-M20 TAP DP 25	Φ150
	F25	166	287	Φ262	391	50	230	574.5	118	8	Φ350	Φ254	Φ0	4-M16 TAP DP 30	Φ150
	F30											Φ298		4-M20 TAP DP 35	

LOCAL CONTROLLER



LQZA Series Local Controller

Technical Specification

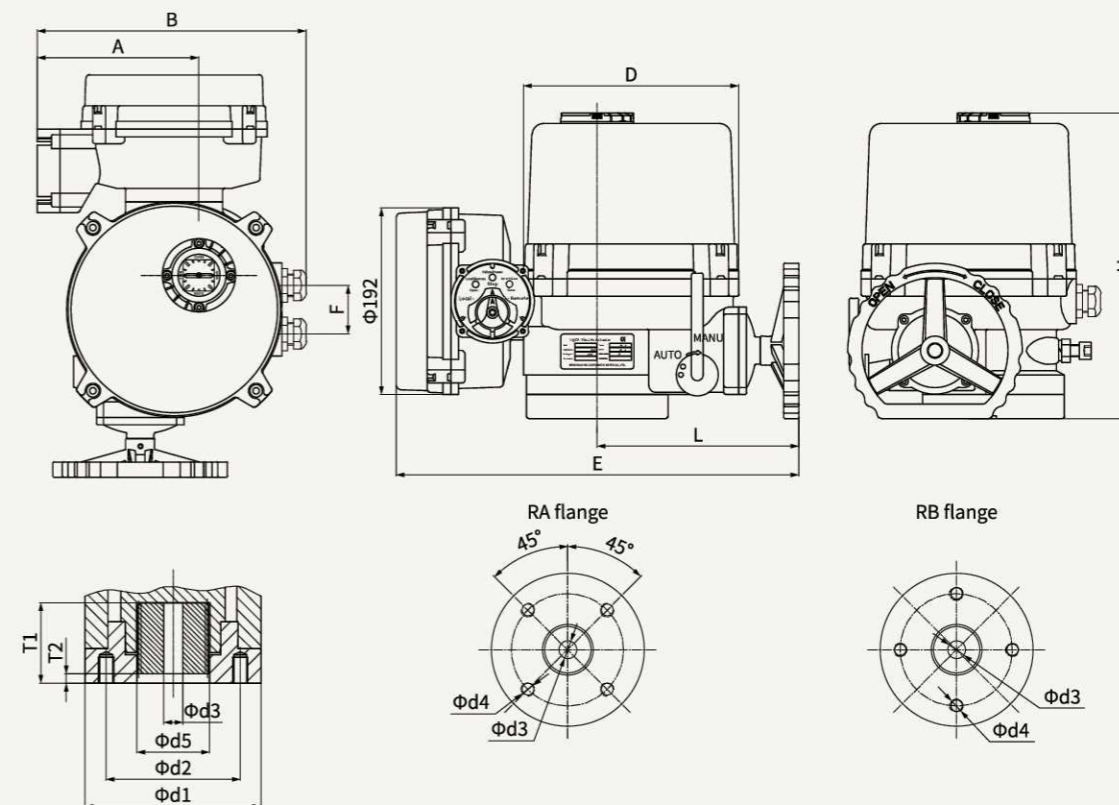
Item	LQ1		LQ2		LQ3		LQ4		LQ4JS											
	-6	-10	-16	-20	-24	-35	-50	-80	-110	-200	-250	-400	-600							
Output torque(N.m)	60	100	160	200	240	350	500	800	1100	2000	2500	4000	6000							
Working time (S)	26	26	28	28	28	32	32	36	36	110	110	180	180							
Motor consumption (W)	20	20	40	40	45	60	90	120	180	120	180	120	180							
Rated current (A)	AC220V	0.45	0.5	0.6	0.6	0.7	0.9	1.3	1.5	2.2	1.5	2.2	1.5	2.2						
	AC110V	-	1.0	1.45	1.5	1.6	1.8	3.2	3.9	4.2	3.9	4.2	3.9	4.2						
	AC440V	-	0.26	0.30	0.35	0.39	0.42	0.86	1.2	1.6	1.2	1.6	1.2	1.6						
	AC415V	-	0.24	0.28	0.32	0.37	0.40	0.81	1.15	1.55	1.15	1.55	1.15	1.55						
	AC380V	-	0.22	0.25	0.3	0.35	0.38	0.8	1.1	1.5	1.1	1.5	1.1	1.5						
	AC/DC 24V	-	1.7	2.0	2.2	2.8	4.0	6.9	9.8	12.5	9.8	12.5	9.8	12.5						
Handwheel turns	10		12		13		14.5		46		73									
Weight(Kg)	12		18		22		23		28		30		54		56		108		110	

Remarks: All range actuators are dispatched with explosion proof plugs 2-NPT 3/4 fitted into the cable entries, it is the responsibility of the installer to ensure the appropriate cable adapters and packings with explosion proof.

LQZA Series · Local Controller



Dimension (mm)



Item	Flange	A	B	D	E	F	L	H	T1	T2	Φd1	Φd2	Φd3	Φd4	Φd5
LQ1-6/10ZA	RA F05											Φ50	11x11	4-M6 TAP DP 12	
	F07	153	245	Φ157	346	46	167	229	42	3	Φ92	Φ70	14x14	4-M8 TAP DP 12	Φ39
	RB 2"3"											Φ57.15	17x17	4-M6 TAP DP 12	
LQ2-16/20/24ZA	RA F07											Φ70	14x14	4-M8 TAP DP 15	
	F10	164.5	270	Φ206	404	50	197	261	49	3	Φ132	Φ102	17x17	4-M10 TAP DP 15	Φ48.5
LQ3-35/50ZA	RB 4"5"6"											Φ69.85	22x22	4-M10 TAP DP 15	
	RA F10											Φ102	14x14	4-M10 TAP DP 15	
LQ4-80/110ZA	F12											Φ125	17x17	4-M12 TAP DP 15	Φ48.5
	F14	176	297	Φ262	452	50	230	352.5	62	7	Φ176	Φ140	27x27	4-M16 TAP DP 25	Φ90
LQ4JS-200/250ZA	RB 12"14"											Φ107.95	36x36	4-M12 TAP DP 20	
	RA F14											Φ140		4-M16 TAP DP 25	
LQ4JS-300ZA	F16											Φ165	27x27	4-M20 TAP DP 25	Φ118
	F16	176	297	Φ262	452	50	230	456.5	75	7	Φ215	Φ165	36x36	4-M20 TAP DP 25	Φ118
LQ4JS-400/600ZA	RB 16"18"20"											Φ158.75		4-M18 TAP DP 25	
	RA F16											Φ165	Φ0	4-M20 TAP DP 25	Φ118
LQ4JS-400/600ZA	F25											Φ254		4-M16 TAP DP 30	Φ150
	F16											Φ165		4-M20 TAP DP 25	
	F25	176	297	Φ262	452	50	230	574.5	118	8	Φ350	Φ254	Φ0	4-M16 TAP DP 30	Φ150
	F30											Φ298		4-M20 TAP DP 35	



EXPLOSION PROOF LOCAL CONTROLLER

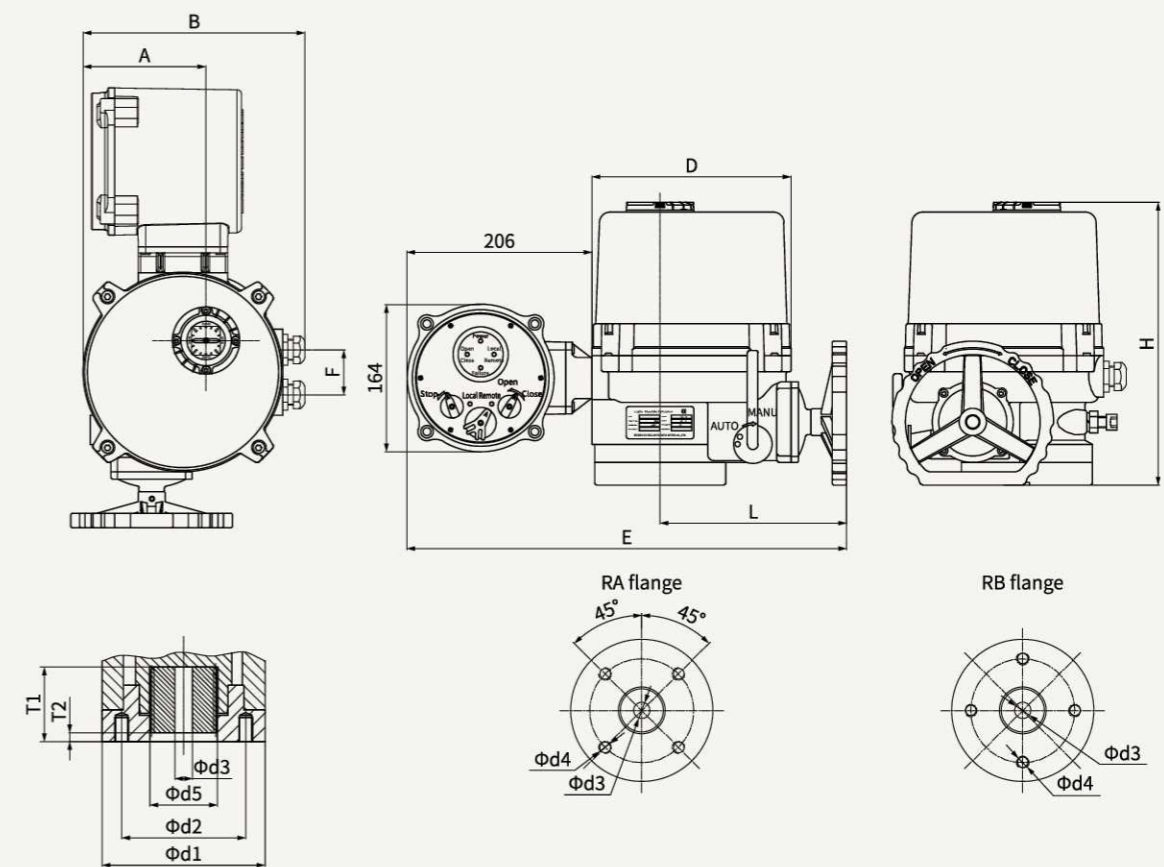
LQEx Series Explosion Proof Local Controller

Technical Specification

Item	LQ1		LQ2		LQ3		LQ4		LQ4JS											
	-6	-10	-16	-20	-24	-35	-50	-80	-110	-200	-250	-400	-600							
Output torque (N.m)	60	100	160	200	240	350	500	800	1100	2000	2500	4000	6000							
Working time (S)	26	26	28	28	28	32	32	36	36	110	110	180	180							
Motor consumption (W)	20	20	40	40	45	60	90	120	180	120	180	120	180							
Rated current (A)	AC220V	0.45	0.5	0.6	0.6	0.7	0.9	1.3	1.5	2.2	1.5	2.2	1.5	2.2						
	AC110V	-	1.0	1.45	1.5	1.6	1.8	3.2	3.9	4.2	3.9	4.2	3.9	4.2						
	AC440V	-	0.26	0.30	0.35	0.39	0.42	0.86	1.2	1.6	1.2	1.6	1.2	1.6						
	AC415V	-	0.24	0.28	0.32	0.37	0.40	0.81	1.15	1.55	1.15	1.55	1.15	1.55						
	AC380V	-	0.22	0.25	0.3	0.35	0.38	0.8	1.1	1.5	1.1	1.5	1.1	1.5						
	AC/DC 24V	-	1.7	2.0	2.2	2.8	4.0	6.9	9.8	12.5	9.8	12.5	9.8	12.5						
Handwheel turns	10		12		13		14.5		46		73									
Weight(Kg)	12		18		22		23		28		30		54		56		108		110	

Remarks: All range actuators are dispatched with explosion proof plugs 2-NPT 3/4 fitted into the cable entries, it is the responsibility of the installer to ensure the appropriate cable adapters and packings with explosion proof.

Dimension (mm)



Item	Flange	A	B	D	E	F	L	H	T1	T2	Φd1	Φd2	Φd3	Φd4	Φd5	
LQ1-6/10Ex	RA F05	90.5	182.5	Φ157	421	46	167	229	42	3	Φ92	Φ50	11x11	4-M6 TAP DP 12		
	F07											Φ70	14x14	4-M8 TAP DP 12		Φ39
	RB 2"3"											Φ57.15	17x17	4-M6 TAP DP 12		
LQ2-16/20/24Ex	RA F07	126.5	232	Φ206	479	50	197	261	49	3	Φ132	Φ70	14x14	4-M8 TAP DP 15		
	F10											Φ102	17x17	4-M10 TAP DP 15		Φ48.5
	RB 4"5"6"											Φ69.85	22x22	4-M10 TAP DP 15		
LQ3-35/50ZAEx	RA F10	136.5	247	Φ222	490	50	208	315	51	5	Φ146	Φ102	14x14	4-M10 TAP DP 15		
	F12											Φ125	17x17	4-M12 TAP DP 15		Φ48.5
	RB 8"10"											Φ88.9	22x22	4-M12 TAP DP 15		
LQ4-80/110Ex	RA F12	166	287	Φ262	527	50	230	352.5	62	7	Φ176	Φ125	22x22	4-M12 TAP DP 18		
	F14											Φ140	27x27	4-M16 TAP DP 25		Φ90
	RB 12"14"											Φ107.95	36x36	4-M12 TAP DP 20		
LQ4JS-200/250Ex	RA F14	166	287	Φ262	527	50	230	456.5	75	7	Φ215	Φ140	27x27	4-M16 TAP DP 25		
	F16											Φ165	36x36	4-M20 TAP DP 25		Φ118
	RB 16"18"20"											Φ158.75		4-M18 TAP DP 25		
LQ4JS-300Ex	RA F16	166	287	Φ262	527	50	230	536.5	118	8	Φ350	Φ165	Φ0	4-M20 TAP DP 25		
	F25											Φ254		4-M16 TAP DP 30		Φ150
	RB 16"18"20"											Φ158.75		4-M16 TAP DP 30		
LQ4JS-400/600Ex	RA F16	166	287	Φ262	527	50	230	574.5	118	8	Φ350	Φ165	Φ0	4-M20 TAP DP 25		
	F25											Φ254	Φ0	4-M16 TAP DP 30		Φ150
	F30											Φ298		4-M20 TAP DP 35		

INTELLIGENT TYPE/FIELDBUS COMMUNICATION



LQY Series Intelligent Type/Fieldbus Communication

Summary

- The advanced display allows large segment character position display while the matrix display provides detailed setting, status and diagnostic multilingual screens.
- Reliable valve position sensing is critical, using the latest technology, absolute encoder has redundancy and self checking functions.
- Non-intrusive design, functions and data set by remote controller and local selector, there is no need to remove the cover to adjust.
- Functions with automatic phase correction, phase failure protection, thermal protection, torque protection and ESD emergency operation.
- 5 programmable relays can set-up configuration of feedback signals.

Intelligent type

Digital Control
(YS series)

Non-intrusive
(YE series)

Intelligent
(Y series)

Profibus Bus

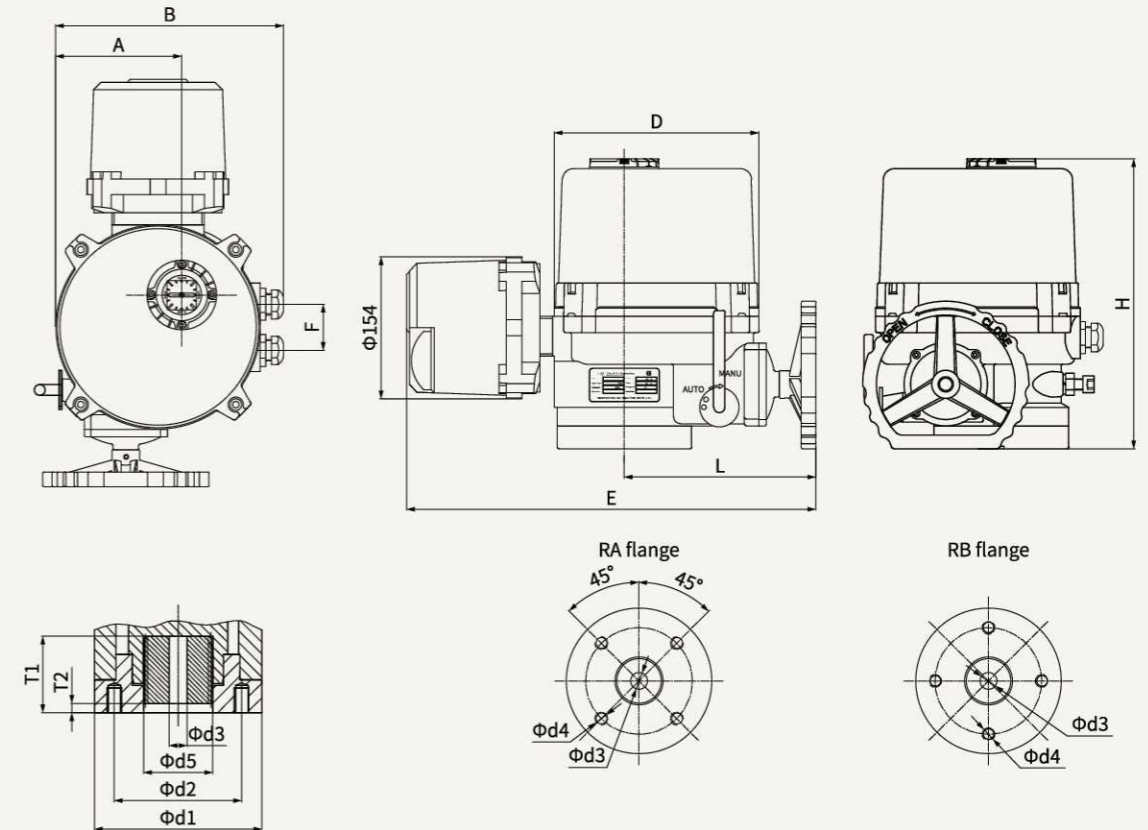
DP version DP-V0 DP-V1 DP-V2

Bus type Single channel Double channel

Using system Emerson ABB Siemens Hollysys Sciyon Others _____

Documents required GSD EDD DD DTM

Dimension (mm)



Item	Flange	A	B	D	E	F	L	H	T1	T2	Φd1	Φd2	Φd3	Φd4	Φd5
LQ1-6/10Y	RA	F05	90.5	182.5	Φ157	373	46	167	229	42	3	Φ92	Φ50	11×11	4-M6 TAP DP 12
		F07											Φ70	14×14	4-M8 TAP DP 12
	RB	2"3"											Φ57.15	17×17	4-M6 TAP DP 12
LQ2-16/20/24Y	RA	F07	126.5	232	Φ206	431	50	197	261	49	3	Φ132	Φ70	14×14	4-M8 TAP DP 15
		F10											Φ102	17×17	4-M10 TAP DP 15
	RB	4"5"6"											Φ69.85	22×22	4-M10 TAP DP 15
LQ3-35/50Y	RA	F10	136.5	247	Φ222	442	50	208	315	51	5	Φ146	Φ102	14×14	4-M10 TAP DP 15
		F12											Φ125	17×17	4-M12 TAP DP 15
	RB	8"10"											Φ88.9	22×22	4-M12 TAP DP 15
LQ4-80/110Y	RA	F12	166	287	Φ262	479	50	230	352.5	62	7	Φ176	Φ125	22×22	4-M12 TAP DP 18
		F14											Φ140	27×27	4-M16 TAP DP 25
	RB	12"14"											Φ107.95	36×36	4-M12 TAP DP 20
LQ4JS-200/250Y	RA	F14	166	287	Φ262	479	50	230	456.5	75	7	Φ215	Φ140	27×27	4-M16 TAP DP 25
		F16											Φ165	36×36	4-M20 TAP DP 25
	RB	16"18"20"											Φ158.75		4-M18 TAP DP 25
LQ4JS-300Y	RA	F16	166	287	Φ262	479	50	230	536.5	118	8	Φ350	Φ165	Φ0	4-M20 TAP DP 25
		F25											Φ254		4-M16 TAP DP 30
		F16											Φ165		4-M20 TAP DP 25
LQ4JS-400/600Y	RA	F16	166	287	Φ262	479	50	230	574.5	118	8	Φ350	Φ165	Φ0	4-M20 TAP DP 25
		F25											Φ254		4-M16 TAP DP 30
		F30											Φ298		4-M20 TAP DP 35

SPRING RETURN

LQSR Series Spring Return

Summary

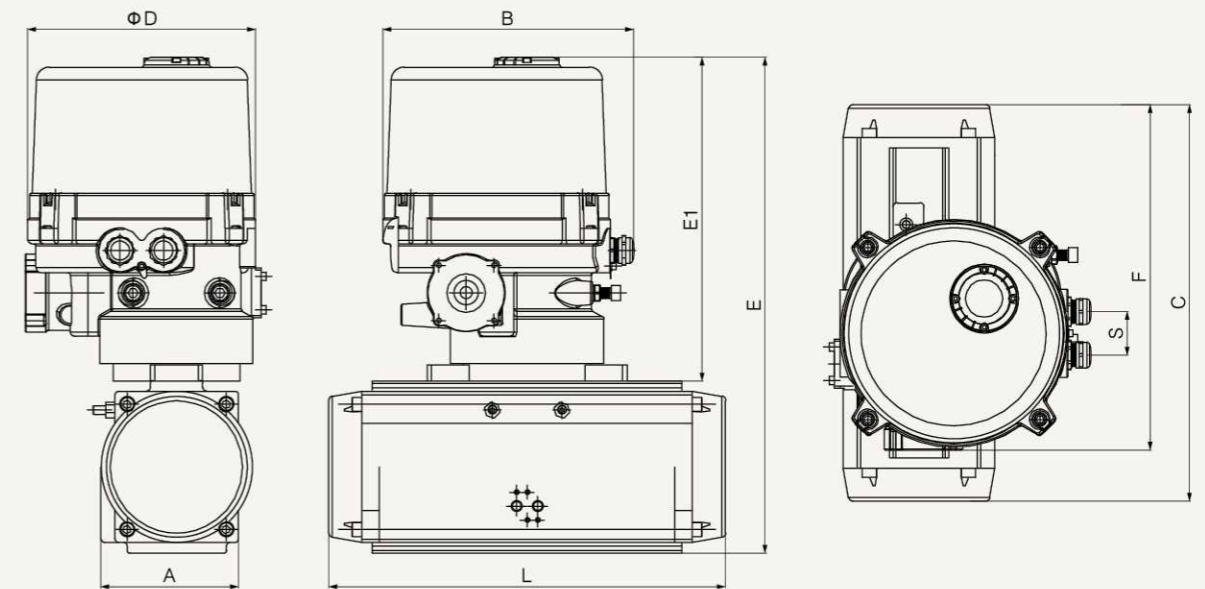
LQ-SR electric actuator with spring return is a quarter-turn actuator equipped with a mechanical spring module to achieve safe fail. When the power supply is normal, the spring mold stores energy. When the power is off, the spring releases the stored energy to drive the actuator, so that the valve returns to the preset safe position (fully open or fully closed). The reset speed is accurately controlled, and the reset process is safe and stable to prevent pipeline fluid leakage or cause environmental explosions.

LQ-SR series electric actuators with spring return can be equipped with an external clutch type manual control device. The actuator can be manually operated to move the valve to the locked position by the manual control device. After power on, it will be automatically unlocked.

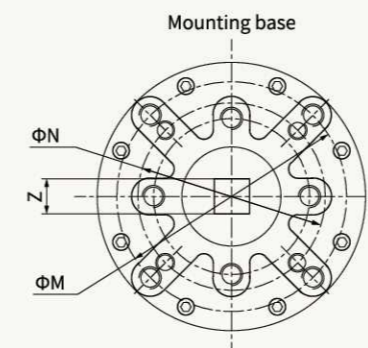
Technical Specification

Item	LQ-SR050	LQ-SR100	LQ-SR200	LQ-SR300
Max.Torque(N.m)	50	100	200	300
Motor consumption(W)	45	45	80	80
Electric operation time(S)	≤ 20	≤ 20	≤ 25	≤ 25
Spring return time(S)	≤ 5	≤ 5	≤ 8	≤ 8
Mounting base(ISO5211)	F07/F10	F10/F12	F10/F12	F14
Power supply	1Ph/220VAC (Options: 1Ph/110VAC, 3Ph/380VAC or 440VAC)			
Duty rating(ON-OFF)	S2, 15 min			

Dimension (mm)



Item	A	B	C	ΦD	E	E1	F	L	S	Weight/Kg
LQ-SR050	135	247	320	222	490	315	302	302	50	33
LQ-SR100	142	247	320	222	490	315	302	398	50	33
LQ-SR200	161	287	418	262	569.5	352	459	456	50	53
LQ-SR300	189	287	418	262	569.5	352	459	534	50	53



Item	ΦM	ΦN	Z	Depth
LQ-SR050	102	70	22*22	25
LQ-SR100	125	102	27*27	30
LQ-SR200	125	102	27*27	30
LQ-SR300	146	N/A	36*36	40



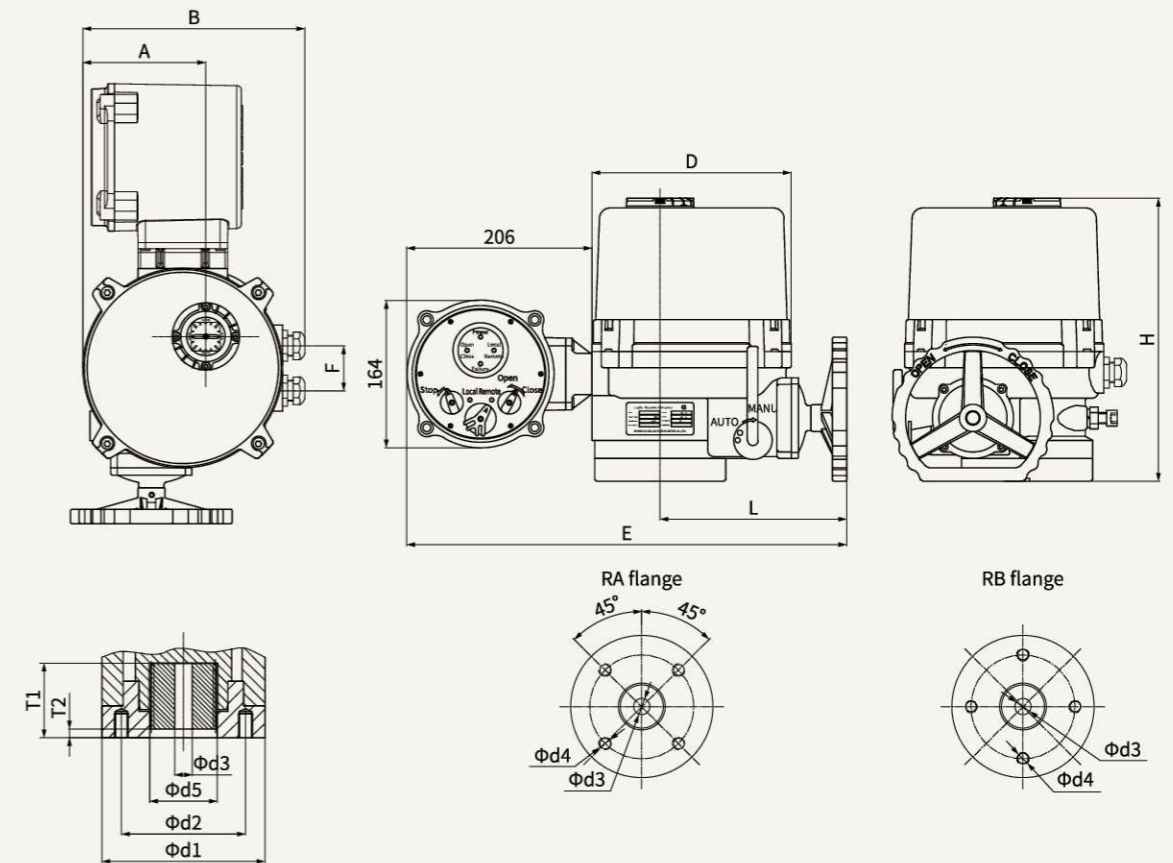
BATTERY BACKUP

LQZL Series Battery Backup

Summary

- Basic Features:**
 Inside of this type of product are installed with the large-capacity lithium battery and the corresponding control circuit. When external power failure or cable disconnection due to an accident, the valve can not only go to the preset good position, but also continue to operate the actuators more than five times to avoid accidents.
- External power failure:** at least 5 times to be operated at the control cabinet without any exchanges, also with at least 5 times to operate the actuator over selector on site.
- External power failure and control circuit interrupted at the same time due to Cable disconnection:** ON-OFF type can be operated at least 5 times by the simple way of connecting the two wires of control lines of the cable interrupted, you also can connect all wires of control lines of the cable interrupted if there is not with torque signal output for the ON-OFF type.
- Either the external power failure or power cable disconnected,** there is no body harm and trip caused by fire accident or other hazards, because the actuators and cables only exist DC24V , and the current no exceed 200mA.
- The lithium battery can be automatically recharged** by an external power supply, high reliability and long service life.
- Actuator with lithium battery is for ON-OFF control with weatherproof only.**

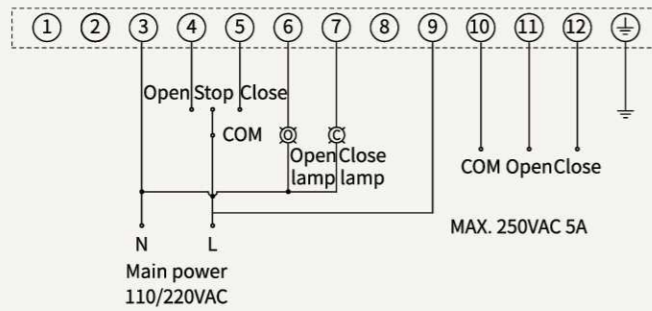
Dimension (mm)



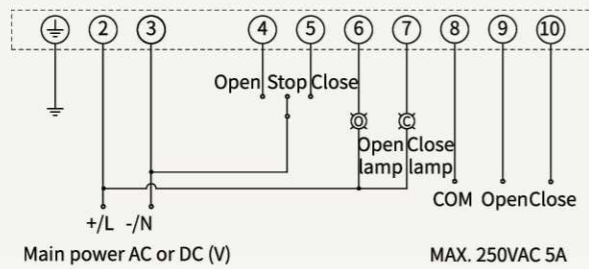
Item	Flange	A	B	D	E	F	L	H	T1	T2	Φd1	Φd2	Φd3	Φd4	Φd5	
LQ1-6/10ZL	RA	F05	90.5	182.5	Φ157	421	46	167	229	42	3	Φ92	Φ50	11×11	4-M6 TAP DP 12	
		F07											Φ70	14×14	4-M8 TAP DP 12	Φ39
	RB	2"3"											Φ57.15	17×17	4-M6 TAP DP 12	
LQ2-16/20/24ZL	RA	F07	126.5	232	Φ206	479	50	197	261	49	3	Φ132	Φ70	14×14	4-M8 TAP DP 15	
		F10											Φ102	17×17	4-M10 TAP DP 15	Φ48.5
LQ3-35/50ZL	RA	F10	136.5	247	Φ222	490	50	208	315	51	5	Φ146	Φ102	14×14	4-M10 TAP DP 15	
		F12											Φ125	17×17	4-M12 TAP DP 15	Φ48.5
LQ4-80/110ZL	RA	F12	166	287	Φ262	527	50	230	352.5	62	7	Φ176	Φ88.9	22×22	4-M12 TAP DP 15	
		F14											Φ125	22×22	4-M12 TAP DP 18	
LQ4JS-200/250ZL	RA	F14	166	287	Φ262	527	50	230	456.5	75	7	Φ215	Φ140	27×27	4-M16 TAP DP 25	
		F16											Φ140	36×36	4-M16 TAP DP 25	Φ118
LQ4JS-300ZL	RA	F16	166	287	Φ262	527	50	230	536.5	118	8	Φ350	Φ158.75	36×36	4-M20 TAP DP 25	
		F25											Φ165	Φ0	4-M18 TAP DP 25	Φ118
LQ4JS-400/600ZL	RA	F16	166	287	Φ262	527	50	230	574.5	118	8	Φ350	Φ165		4-M20 TAP DP 25	
		F25											Φ254	Φ0	4-M16 TAP DP 30	Φ150
		F30											Φ298		4-M20 TAP DP 35	

Wiring Drawing

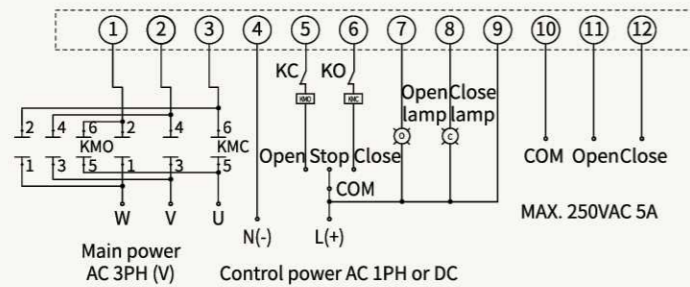
• LQ1 ON-OFF (1PH AC110V/220V)



• LQ1 ON-OFF (24VDC/AC)

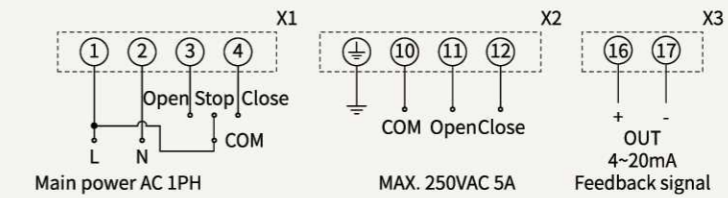


• LQ1 ON-OFF (3PH AC380V/415V/440V)

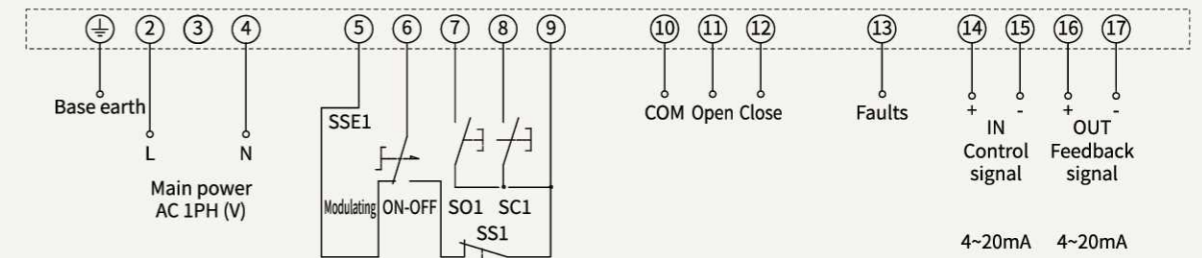


Wiring Drawing

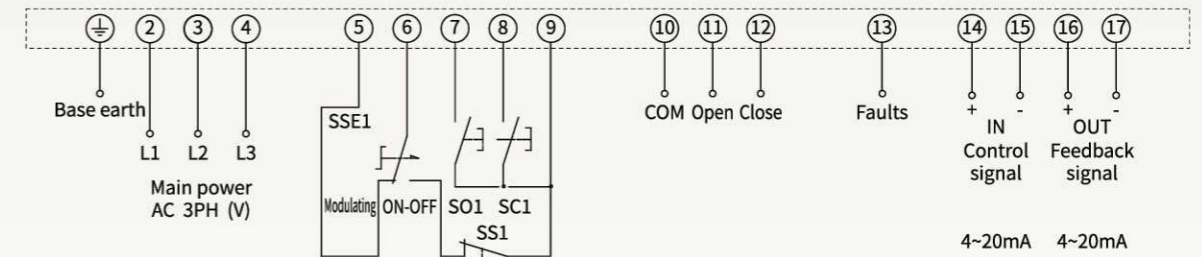
• LQ1 R/I Converter (K type)



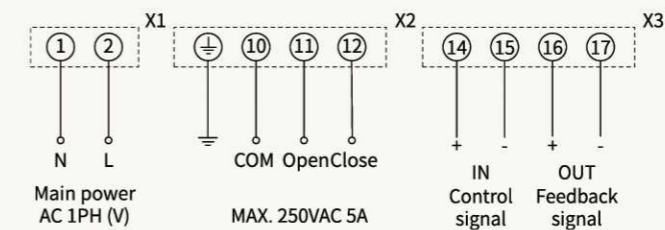
• LQ1 Local Controller (1PH AC110V/220V)



• LQ1 Local Controller (3PH AC380V/415V/440V)

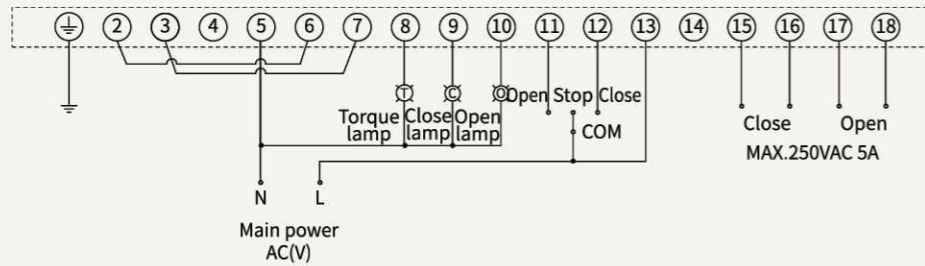


• LQ1 Modulating (1PH AC110V/220V)

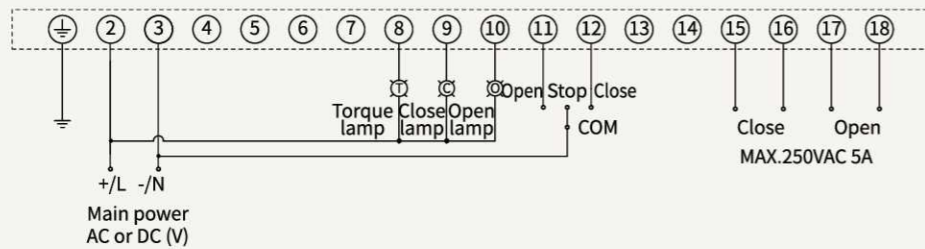


Wiring Drawing

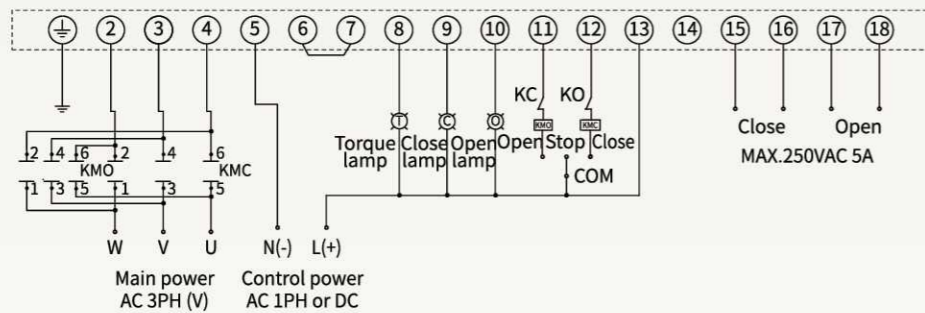
• LQ2~4 ON-OFF (1PH AC110V/220V)



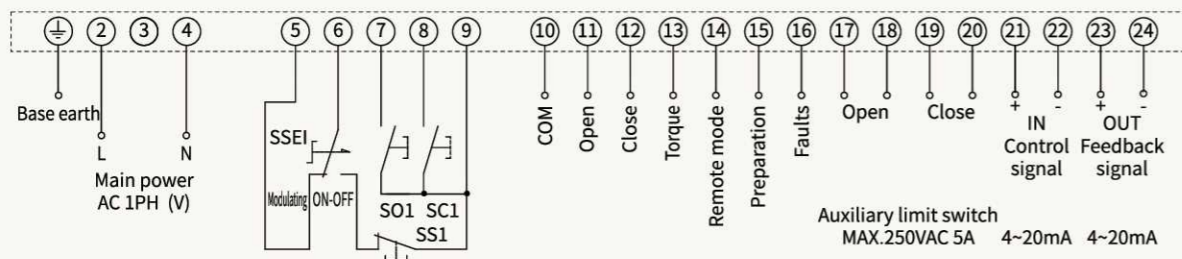
• LQ2~4 ON-OFF (24VDC/AC)



• LQ2~4 ON-OFF (3PH AC380V/415V/440V)

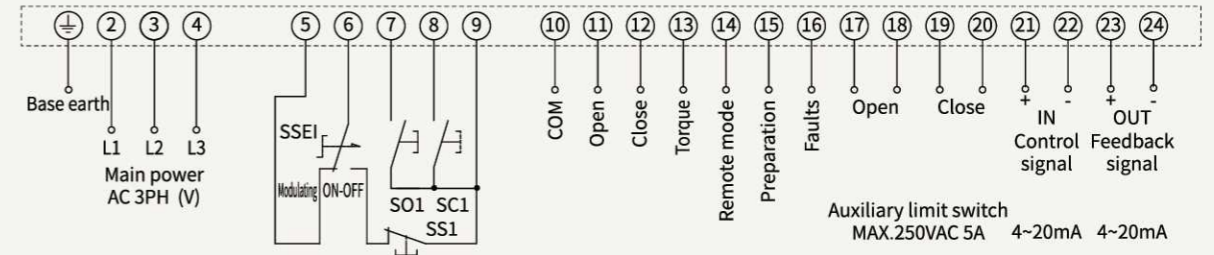


• LQ2~4 Local Controller (1PH AC110V/220V)

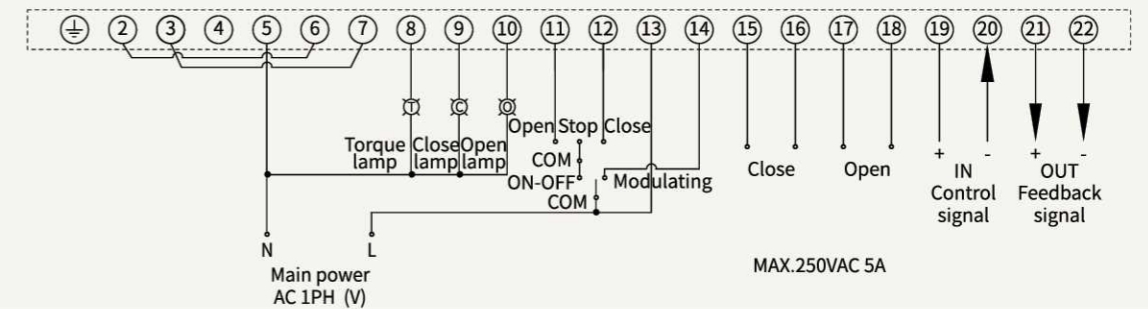


Wiring Drawing

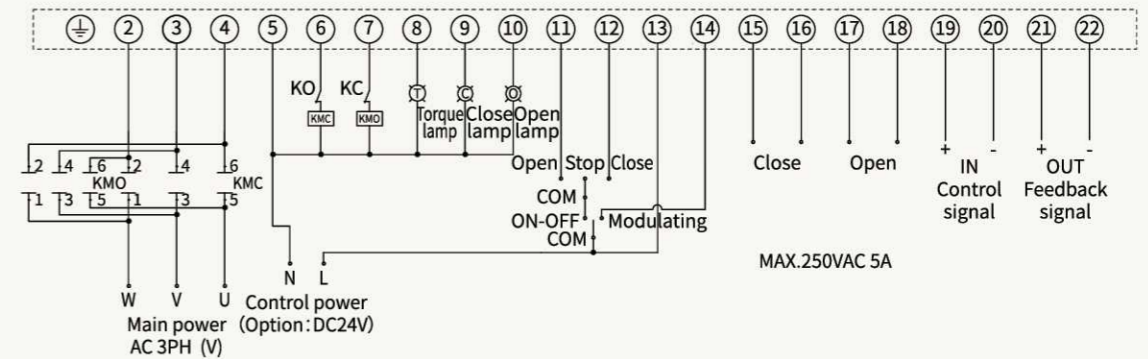
• LQ2~4 Local Controller (3PH AC380V/415V/440V)



• LQ2~4 Modulating (1PH AC110V/220V)

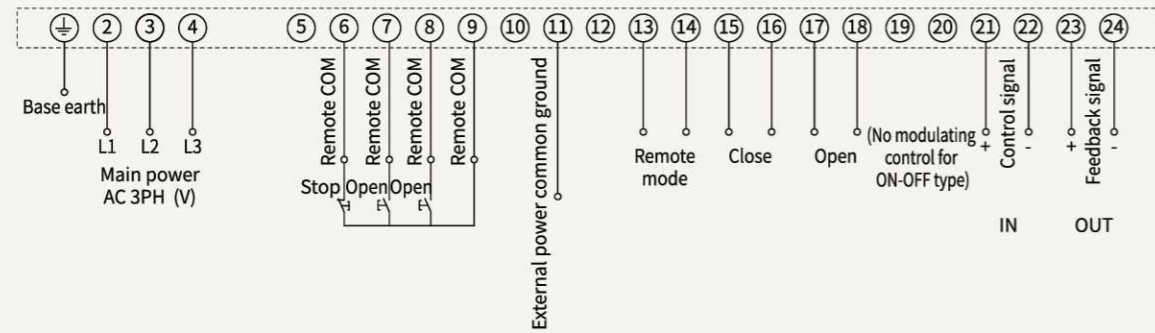


• LQ2~4 Modulating (3PH AC380V/415V/440V)

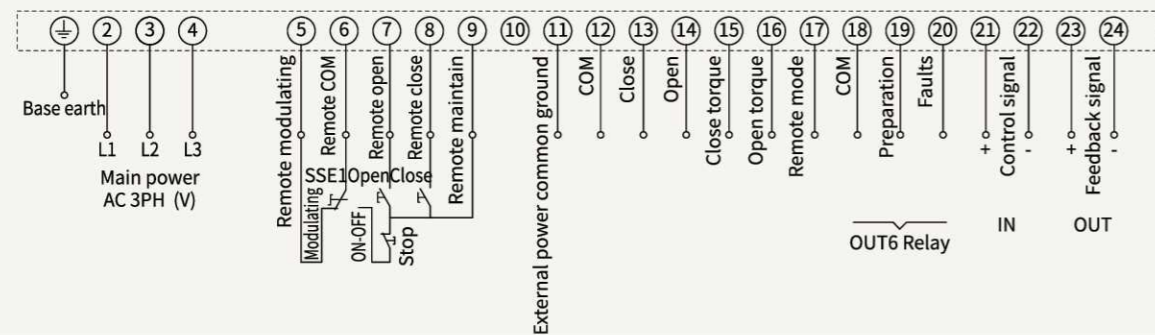


Wiring Drawing Of Intelligent Control

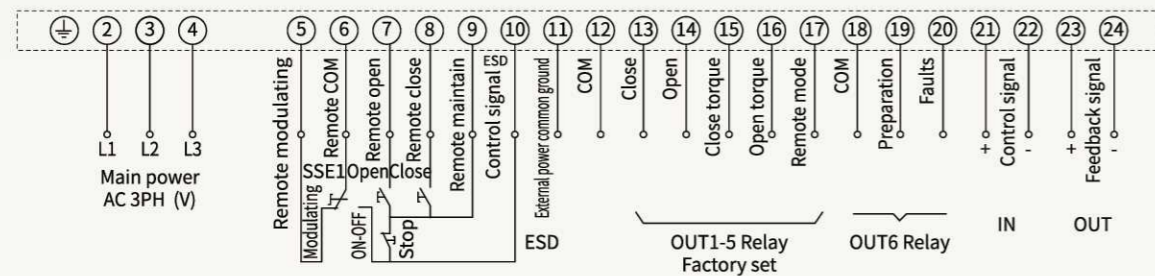
• Digital Control (YS series)



• Non-intrusive (YE series)



• Intelligent (Y series)



Our main products are electric actuators, pneumatic actuators, electric butterfly valves, electric ball valves, electric gate valves, electric regulating valves and a series of fluid products.
 Providing OEM/ODM service.
 Welcome to inquire for any .



HL series quarter-turn electric actuator
 Smart appearance, light weight,
 Easy to install, economical and durable.



ZX series small electric actuator
 Torque: 9N.m~24N.m
 Explosion proof, Weather proof



LQ series quarter-turn electric actuator
 Overtorque protection, explosion proof
 as option, intelligent control to meet
 more industrial application.



HLF series damper electric actuator
 Suitable for heating, ventilation, air
 conditioning, refrigeration, building
 automation etc.



HEM series multi-turn electric actuator
 LCD display, Local/remote control operation
 selector, suitable for big size butterfly valves, ball
 valves, globe valves, gate valves etc.



**HAT series rack and pinion
 pneumatic actuator**
 Maximum torque: 9340N.m



HEQ series electric actuator
 New optimized design, high enclosure protection,
 low noise, Double anti-condensation, independent
 control unit.



Electric valves series
 Butterfly valves, ball valves, gate valves, regulating
 valves, etc. With different pressure
 class, mounting bases and operation methods.