以人**为舟**，以严肃**为舵**，以智慧**为帆**

Consinder People As Boat,
Consider Seriousenss As Her Helm
And Consider Wisdom As Her Sail.

博恩
THEOBORN

浙江博恩自控阀门有限公司
Theoborn auto-control valves co.,ltd

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博恩

THEOBORN AUTO-CONTROL

BQSR Series Spring Return Electric Actuator

浙江博恩自控阀门有限公司
Zhejiang Theoborn Auto-control Valves Co.,Ltd.

www.theoborn.com

Company Profile

Zhejiang Theoborn Auto-Control Valves Co., Ltd. is dedicated to manufacturing pneumatic actuators and electric actuators.

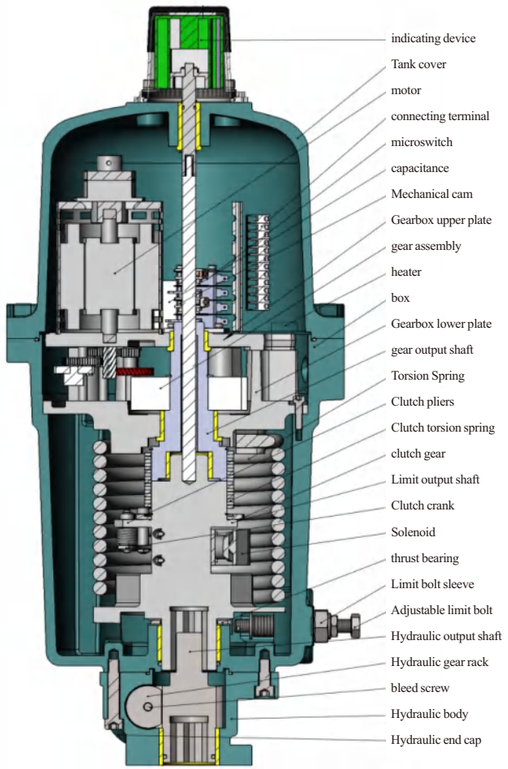
Our products fundamentally transform the complex traditional usage of valves,incorporating high technology with the control process of valves, greatly improving the efficient usage of valves,largely diminishing the controlling cost,and obtaining considerable profits for enterprises.

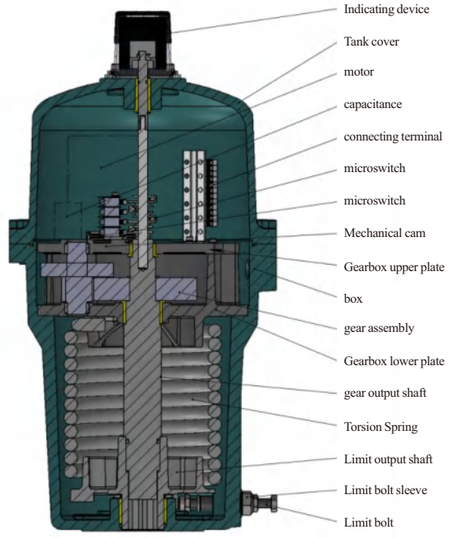
Our company is located in Wenzhou City which possesses a long history of manufacturing valves and actuators.Inspired by our experience of manufacturing valves and actuators,supported by exquisite manufacturing technique, and enveloped with the special innovative consciousness and serious spirit,Theoborn endeavors to culminate the wisdom,aspires to make the best products,and desires to benefit human beings.

Theoborn people believe that we should consider people as boat,consider wisdom as helm and consider seriousness as sail.Theoborn believes that professional technology, along with sincere service, will obtain customers' hearts, win customers' credits, and move customers.

BQSR Series Spring Return Electric Actuator

Consinder People As a Boat
Consider Seriousenss As Her Helm
And Consider Wisdom As Her Sail



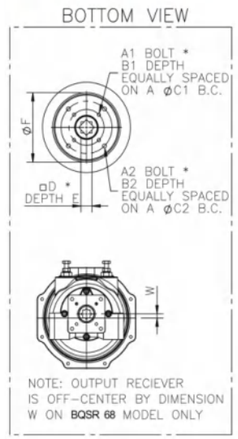


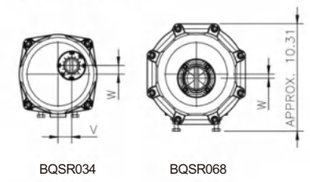
Standard Specifications

Power Supply:		24 VDC (BQSR-068 only) 120/220 VAC 1PH，50/60 Hz
Motor	**24VDC**	24V 100W 5A (BQSR-068 only)
	110VAC	110V，50/60Hz，30W，0.5A
	220VAC	220V，50/60Hz，30W，0.33A
Limit Switches	**24VDC**	15A 1/2HP @125/250VAC (BQSR-068 only)
	110VAC	11A 1/3HP @125/250/277VAC 1/2A 125VAC，1 1/4A 250VAC
	220VAC	11A 1/3HP @125/250/277VAC 1/2A 125VAC，1 1/4A 250VAC
Stall Protection:		Built in thermal protection, Open at 130±5°C,Close at 85±15°C
Travel Angle:		0 to 90°±10°
Indicator:		Continuous position indicator
Space Heater:		10W 2.5A Anti-Condensation
Cable Conduit:		Two 3/4" NPT (BQSR-034 has One 3/4" NPT)
Lubrication:		Grease Synthetic
Terminal Block:		Spring loaded lever push type
Materials:		Carbon Steel, Alloy Steel, Spring Steel, Stainless Steel, Aluminum Alloy, NBR, ABS and Polycarbonate Plastic
Ambient Temperature:		-40°F to 140°F (-40°C to 60°C)
External Coating:		Powder Coating

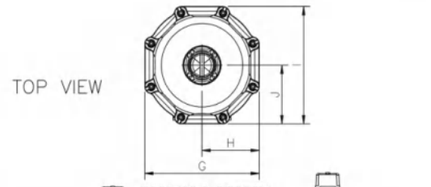
Technical and Dimensional Information

BQSR Models

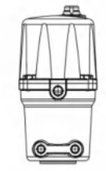




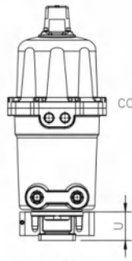
BQSR034 BQSR068



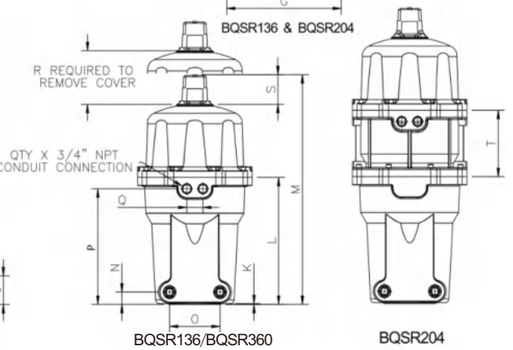
BQSR136 & BQSR204



BQSR 34



BQSR068



BQSR136/BQSR360

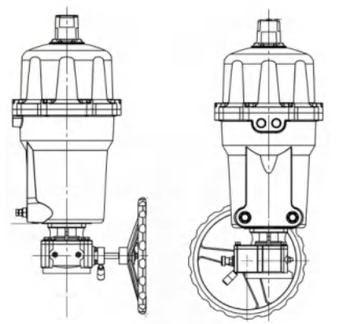
BQSR204

DIMENSIONS (MM)

Model	ISO5211	A1	A2	B1	B2	C1	C2	D	E	F	G	H	I	J	K	L	M	N
BQSR034	F07	5/16-18	-	12	-	70	-	17	29	96	195	97.5	202.4	105	7	195	383	35
BQSR068	F07/F10	5/16-18	3/8-16	15	15	70	102	19	48	-	246	123	245	123	5	322	572	105
BQSR136	F07/F10	5/16-18	3/8-16	12	15	70	102	22	31	135.6	286	143	286	143	2	309	559	30
BQSR204	F07/F10	5/16-18	3/8-16	12	15	70	102	22	31	135.6	286	143	286	143	2	309	721	30
BQSR360	F10/F12	3/8-16	1/2-13	18.8	22.6	102	125	27	43.7	155.7	357	178.6	357	178.6	2	466	766	40

Model	O	P	Q	R	S	T	U	V	W	X
BQSR034	85	195	-	148.6	22	-	-	34	21	25.4
BQSR068	100	298.5	40	136.4	72	-	70	-	10	50.8
BQSR136	126	309	40	138	72	-	-	-	-	50.8
BQSR204	126	443.5	40	139	72	162	-	-	-	50.8
BQSR360	160	436	50	180	72	-	-	-	-	50.8

BQSR with 2RDGO



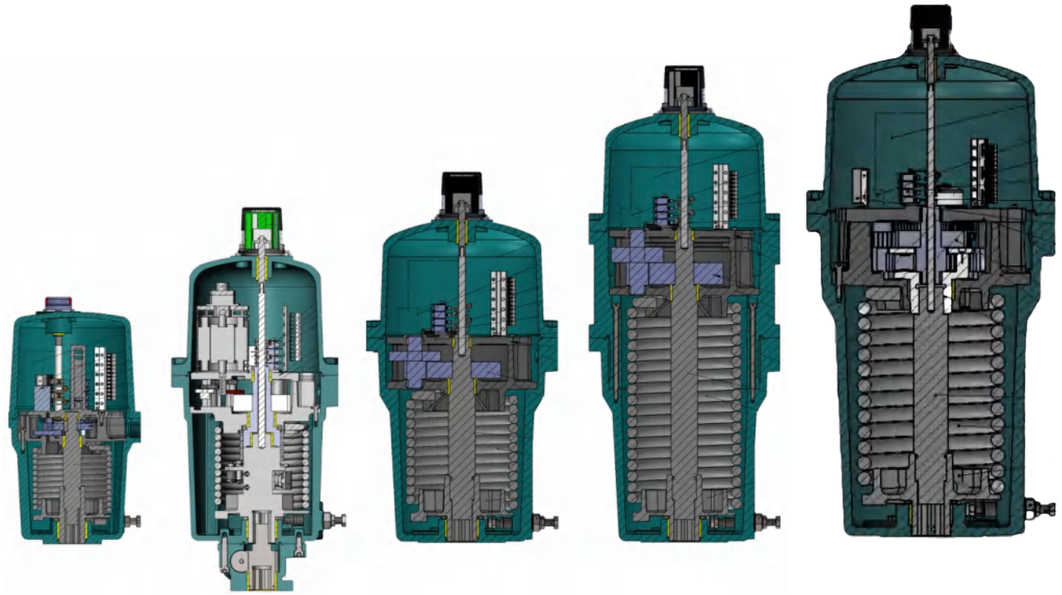
BQSR Series

Wiring Diagram Reference

Model	Description	Drawing
BQSR034 thru BQSR360	115/220 VAC 1PH, Two Position	SE01668
BQSR068	24 VDC	SE01669

Technical Data

Actuator Model	Spring End Torque	90°Cycle Time	Spring Fail Time	Motor Size	Rated Amps			Duty Cycle	Weight	
					DC	AC			Standard	w/Manua Override
SIZE	N·m	seconds	seconds	Watts	24V	110V	220V	%	KGs.	KGs.
BQSR034	34	10	4	30	N/A	1	0.5	50	14.4	32.4
BQSR068	68	30	2	30	2	1	0.5	50	27.9	45.9
BQSR136	136	30	7	30	N/A	1	0.5	50	36	54
BQSR204	204	30	7	30	N/A	1	0.5	50	54	72
BQSR360	360	30	4	80	5	1.4	0.7	50	96.8	126.5



BQSR034 BQSR068 BQSR136 BQSR204 BQSR360

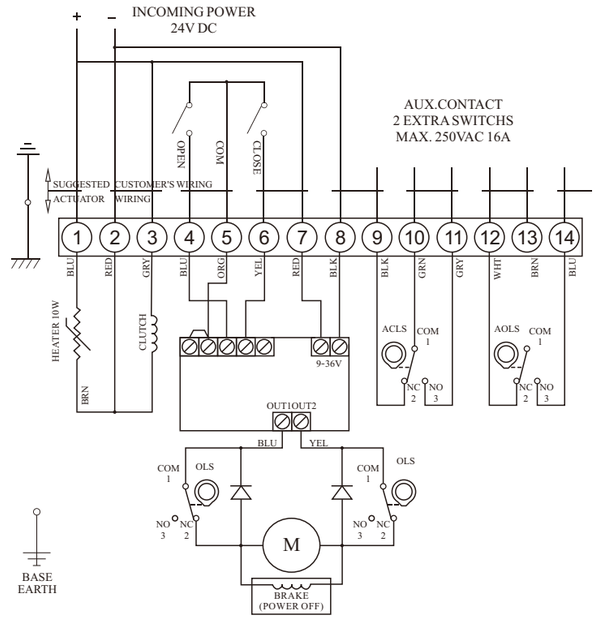
BE01669

LIMIT SWITCH OPERATION			
SWITCH	CLOSE ←	INTERMEDIATE →	OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS 1-2			
ACLS 1-3			
AOLS 1-2			
AOLS 1-3			

SYMBOL	DESCRIPTION	RATING
ACLS	AUX. CLOSE LIMIT SWITCH (TOP)	250VAC 15A
CLS	CLOSE LIMIT SWITCH	250VAC 15A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 15A
OLS	OPEN LIMIT SWITCH (BOT)	250VAC 15A

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

Operation Notes：
1.Power to terminal 2 & 4 will drive motor CCW.Brake energizes when NO of OLS closes to hold actuator in CCW position.
2.Power to terminal 2 & 6 will drive motor CW.Brake energizes when NO of CLS closes to hold actuator in CW position.
3.Power to terminal 2 & 5 will energize brake and hold actuator in intermediate STOP position.
4.Loss of power will release spring clutch and return actuator to fail position (limited by adjustable stop).



BE01668

LIMIT SWITCH OPERATION			
SWITCH	CLOSE ←	INTERMEDIATE →	OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS 1-2			
ACLS 1-3			
AOLS 1-2			
AOLS 1-3			

SYMBOL	DESCRIPTION	RATING
ACLS	AUX. CLOSE LIMIT SWITCH (TOP)	250VAC 15A
CLS	CLOSE LIMIT SWITCH	250VAC 15A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 15A
OLS	OPEN LIMIT SWITCH (BOT)	250VAC 15A

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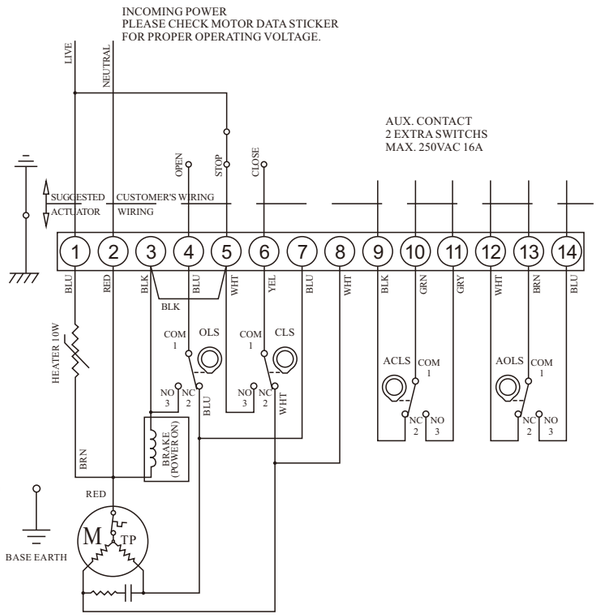
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2.Power to terminal 2 & 6 will drive motor CW.Brake energizes when NO of CLS closes to hold actuator in CW position.
3.Power to terminal 2 & 5 will energize brake and hold actuator in intermediate STOP position.
4.Loss of supply power will release brake and return actuator to fail position (limited by odjustable stop).