

# KE Series

ELECTRIC ACTUATORS



## Standard Features

- Convex lens visual position indicator makes it easier to observe without water collecting on the surface of the indicator
- Anti-condensation heater
- Two auxiliary limit switches
- Self-locking gear train
- Manual override with wrench
- Available motor voltages: 12VDC, 24VDC, 120VAC & 220VAC
- Optional 4-20mA & 0-10 VDC proportional control
- Duty Cycle (IEC60034-1), 50% max torque at 25°C/77°F
  - On/Off – S2 continuous 15 minutes max
  - Modulating – S4 intermittent, 50%, 1200 starts per hour
- Temperature Range: -4° F to 140° F

## Triac KE Series Actuators

The Triac KE Series electric actuators are the perfect match for resilient or high-performance butterfly valves and dampers because of the self-locking worm drive. The KE Series actuators are used to control rotary valves, such as butterfly valves, ball valves, plug valves, etc. Widely used in applications such as petroleum, chemical, water treatment, ship, paper, power stations, heating supply, building automation, light industry etc.

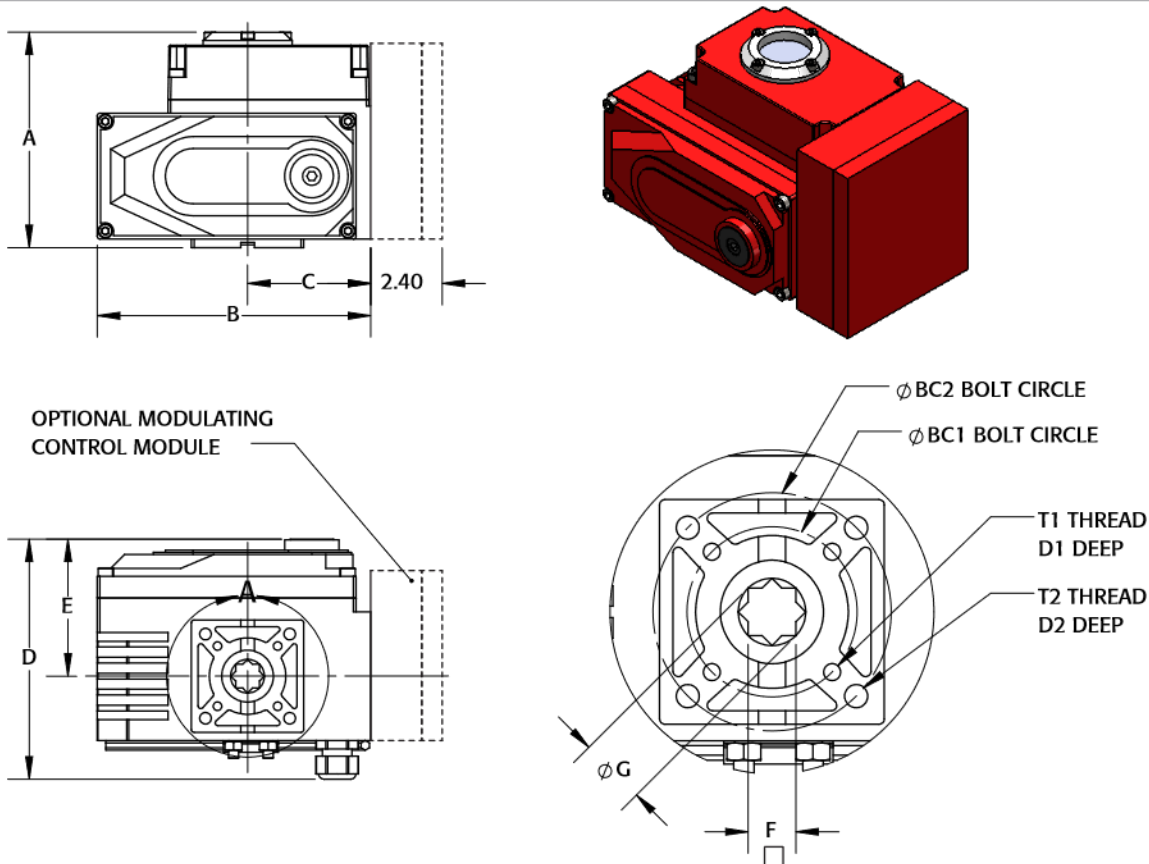


*Unique low profile actuator,  
ideal for tight spaces*



## Dimensional Drawing

### KE-440 to -3500



### KE SERIES Dimensions (IN)

Model	A	B	C	D	E	Mounting Pad								
						ISO 5211	F	G	BC1	BC2	T1	D1	T2	D2
KE-440	5.14	6.74	3.07	5.44	3.12	F05/F07	0.551 x 0.67 Deep	0.76	1.969	2.756	M6 x 1	0.4	M8 x 1.25	0.5
KE-880	5.31	7.69	3.50	6.24	3.43	F05/F07	0.669 x 0.89 Deep	0.92	1.969	2.756	M6 x 1	0.4	M8 x 1.25	0.5
KE-1700	6.65	11.63	4.93	8.37	4.57	F10/F12	1.063 x 1.28 Deep	1.47	4.016	4.921	M10 x 1.5	0.6	M12 x 1.75	0.7
KE-3500	6.65	11.63	4.93	8.37	4.57	F10/F12	1.063 x 1.28 Deep	1.47	4.016	4.921	M10 x 1.5	0.6	M12 x 1.75	0.7

### KE Motor Technical Data

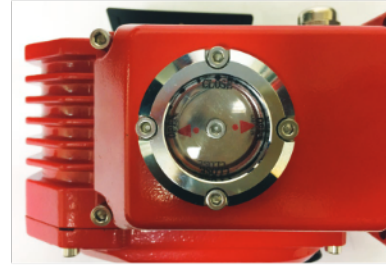
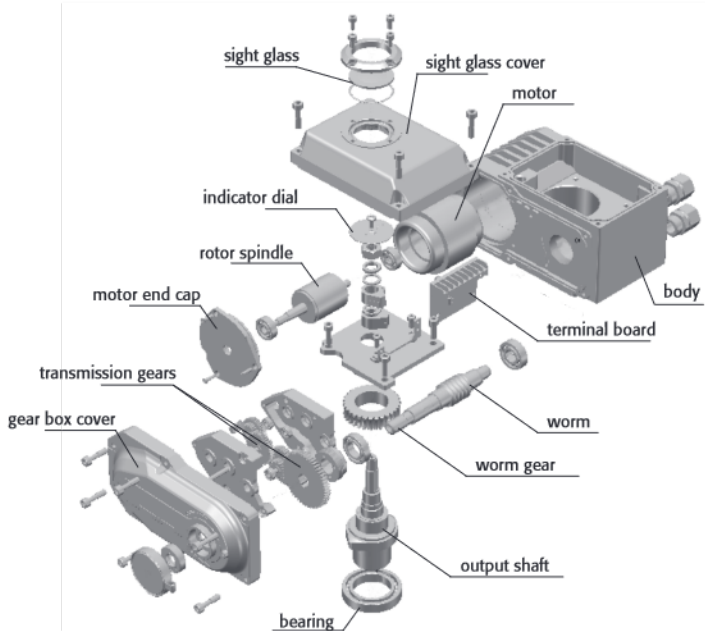
Actuator Model	Output Torque		90° Cycle Time (sec)				Rated Current				Lbs
			AC		DC		DC		1 Phase		
	In-Lbs	Nm	50 Hz	60 Hz	12V	24V	12V	24V	110VAC	220VAC	
KE-440	440	50	15	13	25	20	3.0	1.8	1.2	0.65	7.5
KE-880	880	100	15	13	25	20	5.3	2.8	1.3	0.9	12
KE-1700	1700	200	20	17	N/A	20	N/A	7.5	1.3	0.6	21
KE-3500	3500	400	20	17	N/A	30	N/A	7.5	2.5	1.2	21

A-T Controls reserves the right to change product designs and technical/dimensional specifications without notice.

# KE Series

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## KE Series Actuators



Convex lens visual position indicator



4-20mA/0-10 VDC Modulating Control Module

### TRIAC® KE Series Electric Actuator Part Number Reference

1. Model	
KE	Weather-Proof IP67 Electric Actuator

2. Main Control	
Blank	(2) Position Control (Open / Close)
M	Standard Modulating Control Card with transmitter
E	Ethernet/IP (go to 3)
P	Profibus DP (go to 3)
R	Modbus RTU Single Channel (go to 3)
T	Modbus/TCP (go to 3)
U	Modbus RTU Dual Channel Isolated (go to 3)
4	TMC4 Modulating Card

3. Main Control Type (with Communication Option)	
Blank	No Communication Control Type
A	Communication Control, Proportional Control/Feedback
B	Communication Control, (2) Position Control (Open/Close)

4. Actuator Sizes	
440	440 In-Lbs
880	880 In-Lbs
1700	1700 In-Lbs
3500	3500 In-Lbs

5. Motor	
X	110/120VAC/1PH Place holder only - omit when at end of the part number
A	24VDC On/Off (includes motor reversing control card)
C	24VDC (DC motor only unless with 2 - Main Control option)
N	12VDC/VAC On/Off (Size 440 & 880 only) (includes motor reversing control card)
B	12VDC (DC motor only unless with 2 - Main Control option)
D	24VAC/1PH
E	220VAC/1PH

6. Secondary Control Options	
X	No options/Standard - Omit when at end of the part number
B	Semi-Integral Control
D	Local/Remote Control
E	RCT Electronic Speed Control <sup>(1)</sup> (both directions standard)
F	AMI AC Motor Interface & Speed Control
G	AST Sequence Timer
HS1	High Speed
R	2-Wire Control <sup>(1)</sup> (110 VAC control voltage)
S	2-Wire Control <sup>(1)</sup> (24 VAC control voltage)
T	2-Wire Control <sup>(1)</sup> (24 VDC control voltage)

7. Miscellaneous Options 1	
Blank	No designation, Actuator Series Standard
X	Multiple Option Designation
T	0-10VDC or 4-20mA Transmitter (On/Off)
N	1000 Ohm Potentiometer
G	General I/O Module (with TMC4 only, CF for options)
Y	180° Operation
Z	270° Operation

other options available upon request

<sup>(1)</sup> Use 10 Miscellaneous Options 2 to specify direction

8. Conduit Thread Options	
Blank	No designation, Actuator Series Standard
X	Multiple Option Designation
M	M20

9. Drive Bushing	
Blank	No designation, Actuator Series Standard
X	Multiple Option Designation

10. Miscellaneous Options 2	
Blank	No designation, Actuator Series Standard
X	Multiple Option Designation
L	CCW Operation
R	CW Operation
S	125 g Shock Configuration
P	Non Standard Coating Color

other options available upon request

HOW TO ORDER ELECTRIC ACTUATORS											
1	2	3	-	4	5	6	7	-	8	9	10
↓	↓	↓		↓	↓	↓	↓		↓	↓	↓
KE	M		-	440	X	X	X	-	X	-	X
											C

#### Example

**KEM-880**  
Triac Worm Drive Electric Actuator, Weather-Proof IP67, 880 In-Lbs Torque Output, 13 Sec Cycle Speed, 110VAC/1PH, 0.75 Rated Amps, Modulating Control, (2) Auxiliary Limit Switches, Heater & Thermostat, Diecast Aluminum Powder Coated Construction, Manual Override with Wrench, (2) 1/2" NPT Conduit Entries, F05, F07, F10 Mounting Pad, 0.669 (17MM) Star Output Drive



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