

# EA50 and EA60 Standard Series Medium Torque Non-Spring Return Rotary Actuators



## Features

- proportional actuators w/ built-in feedback potentiometer
- open/close contact closure input
- 24Vac, 120Vac and 240Vac
- 60, 220 and 450 in-lbs torque
- compatible with VB series valves

The EA50 and EA60 medium torque actuators are ideal for proportional positioning of a fuel valve, butterfly valve, damper and similar applications. Units are available with either fixed or adjustable speed. Timing of adjustable speed units can be increased (decreasing the speed) by turning a slotted adjustment screw on the outside of the case. Adjust range is approximately ten times rated. Standard features include a 100Ω feedback slidewire and a single SPDT switch. All models, except those with transformers, are UL/cUL listed. The EA50 and EA60 are compatible with the VB-7000 and VB-9000 valves in this catalog.

## Ordering codes

Model Series	Base Model	Input	Options	Motor Volt Frequency	Transformer	Feedback Slidewire	Logo/Label	Specials
EA								

Base Model					
51	90° travel limit, 12sec(adj), 60 in-lbs torque	55	90° travel limit, 40 sec. (adj), 220 in-lbs torque	60	90° travel limit, 65 sec., 450 in-lbs torque
52	180° travel limit, 25 sec. (adj), 60 in-lbs torque	56	180° travel limit, 80 sec. (adj), 220 in-lbs torque	61	180° travel limit, 130 sec., 450 in-lbs torque
53	90° travel limit, 12 sec., 60 in-lbs torque	57	90° travel limit, 40 sec., 220 in-lbs torque		
54	180° travel limit,25 sec., 60 in-lbs torque	58	180° travel limit, 80 sec., 220 in-lbs torque		

Transformer	
00	None
01	Built-in 120-24Vac**
02	Built-in 240-24Vac**

\*\* Not UL/cUL listed

Fdbk Slidwire	Specials
0	100Ω
1	135Ω
2	500Ω
3	1000Ω
	00 None

Logo/Label
0 Barber-Colman
E Eurotherm

Input	
00	Contact
11	4-20mA dc 658A-00001
12	4-12mA dc 658A-00002
13	12-20mA dc 658A-00003
14	2-12mA dc 658A-00004
15	2-7mA dc 658A-00005
16	7-12mA dc 658A-00006
19	Special 658A-00008-x*
31	4-20mA dc 659A-00000
Rain Tight Converters	
21	4-20mA dc 658A-00011
22	4-12mA dc 658A-00012
23	12-20mA dc 658A-00013
24	2-12mA dc 658A-00014
25	2-7mA dc 658A-00015
26	7-12mA dc 658A-00016
29	Special 658A-00018-x*
41	Slidewire 659A-00010

Motor Volt/Frequency	
0	120Vac, 60Hz
1	120Vac, 50Hz (n/a w/EA52 or EA54)
3	240Vac, 60Hz
4	240Vac, 50Hz (n/a w/EA53 or EA58)
5	24Vac, 60Hz (n/a with EA51, EA53, EA54)

Options	
Not NEMA 4 Rated	NEMA 4 Rated
00	None
01	Two auxiliary SPDT switches
02	Four auxiliary SPDT switches
03	Rear shaft
04	100Ω rear slidewire
05	100Ω rear slidewire with two switches
06	1000Ω rear slidewire
	31 One 100Ω rear slidewire and cover, NEMA 4
	32 Two 100Ω rear slidewires and cover, NEMA 4
	33 Three 100Ω rear slidewires and cover, NEMA 4
	37 NEMA 4 weather resistant cover

## Specifications

### Control action:

Floating. Requires SPDT switch with floating (center off) position rated at 0.9 amps.

Proportional electric with slidewire feedback.

### Connections:

Coded screw terminals

### Shaft rotation:

Reversible proportional can stop at any point in the stroke. Adjustable 45-320°

### Auxiliary switch:

Adjustable SPDT snap acting. Factory set to close one contact and open other at end of clockwise rotation.

### Ambient temperature:

-40 to 136°F (-40 to 58°C)

### Humidity:

5 to 95% RH, non-condensing.

### Case:

Die cast aluminum with two 1/2" conduit knockouts each side

### Motor and gear train:

Oil immersed

### Mounting:

Damper – upright recommended.

Valve – upright with actuator above centerline of valve body.

### Dimensions:

7" H x 5-3/8" W x 6-5/16" D

### Weight:

8 lbs.