

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 Slidwre	
0	100Ω
1	135Ω
2	500Ω
3	1000Ω

Specials	
00	None

Input			
00	Contact	Rain Tight Converters	
11	4-20mAdc658A-00001	21	4-20mAdc658A-00011
12	4-12mAdc658A-00002	22	4-12mAdc658A-00012
13	12-20mAdc658A-00003	23	12-20mAdc658A-00013
14	2-12mAdc658A-00004	24	2-12mAdc658A-00014
15	2-7mAdc658A-00005	25	2-7mAdc658A-00015
16	7-12mAdc658A-00006	26	7-12mAdc658A-00016
19	Special658A-00008-x*	29	Special658A-00018-x*
31	4-20mAdc659A-00000	41	Slidewire659A-00010

Logo/Label	
0	Barber-Colman
E	Eurotherm

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

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)

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.