

EA Series Actuators

• Spring Return Actuator – EA40 Series



EA40 Series

The spring return actuator will proportionately position a fuel valve, butterfly valve, damper and similar devices which require return to a normal position on power interruption. The output shaft is power operated in both directions. An internal electrical holding circuit maintains the proper damper position at setpoint. The enclosed spring drives the output shaft and gear train to return the damper to a normal position on power interruption. Power consumption is 28 W. Standard features includes 100 Ω internal feedback slidewire and single internal SPDT switch. Shipping weight, 8 lbs.

EA42 and EA44 120 Vac 60 Hz, 24 Vac 60 Hz and 240 Vac 60 Hz models except those with weather resistant cover are UL listed. Specials and 50 Hz models are not UL listed or CSA approved. Weather resistant models are NEMA 4. The following models are CSA approved:

EA41-00000-000-0-00	EA44-00000-000-0-00
EA42-00003-000-0-00	EA44-00000-003-0-00
EA42-00005-000-0-00	EA44-00000-005-0-00

Specifications

Control Action:	1) Floating. Requires SPDT switch with floating (center off) position rated at 0.9 amps. 2) Proportional, electric. 3) Proportional, electronic. Requires 658A converter.
Connections:	Coded screw terminals.
Shaft Rotation:	Reversible proportional can stop at any point in the stroke. Adjustable 45 to 320°.
Spring Return:	To normal position on power interruption.
Auxiliary Switch:	Adjustable SPDT snap acting. Factory set to close one contact and open the other at end of clockwise rotation.
Ambient Temperature Limits:	-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.
Mounting:	Damper – upright. Valve – upright with actuator above centerline of valve body.
Dimensions:	7" H x 5-3/8" W x 8-1/8" D (178 mm x 137 mm x 206 mm)

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Ordering Information

MODEL EA - - 0 0 - -

Field No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Fields 1, 2. Model Series

Fields 3, 4. Base Model - Spring Return Actuator

Travel Time Torque
Limit (Seconds)(Lbs./in.)

41 -	90°	45	50 (clockwise return)
42 -	180°	90	50 (clockwise return)
44 -	180°	90	50 (counter-clockwise return)

Fields 5, 6. Input

Note: Model 658A is a current to position converter; model 659A is a resistance to position converter.

	<u>Input Signal</u>	<u>Converter Model</u>
00 -	Contact	
11 -	4 to 20 mAdc	658A-00001
12 -	4 to 12 mAdc	658A-00002
13 -	12 to 20 mAdc	658A-00003
14 -	2 to 12 mAdc	658A-00004
15 -	2 to 7 mAdc	658A-00005
16 -	7 to 12 mAdc	658A-00006
19 -	Other, Special	658A-00008-000-X-XX*
31 -	Slidewire	659A-00000

The following codes are rain tight input converters mounted to the series EA. To order the series EA weather resistant, you must select cover option 37 (fields 7, 8).

Rain Tight Converters:

21 -	4 to 20 mAdc	658A-00011
22 -	4 to 12 mAdc	658A-00012
23 -	12 to 20 mAdc	658A-00013
24 -	2 to 12 mAdc	658A-00014
25 -	2 to 7 mAdc	658A-00015
26 -	7 to 12 mAdc	658A-00016
29 -	Other, Special	658A-00018-000-X-XX*
41 -	Slidewire	659A-00010

*Consult factory.

Fields 7, 8. Options

- 00 - None
- 37 - NEMA 4 weather resistant cover. This option must be included if rain tight converter is ordered

Field 9. Motor Voltage/Frequency

- 0 - 120 Vac 60 Hz
- 3 - 240 Vac 60 Hz (not available with EA41)
- 4 - 240 Vac 50 Hz (not available with EA41)
- 5 - 24 Vac 60 Hz (not available with EA41 or 658A or 659A)

Fields 10, 11. Reserved

Field 12. Feedback Slidewire

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

Fields 13, 14, 15. Special

- 0-00 None