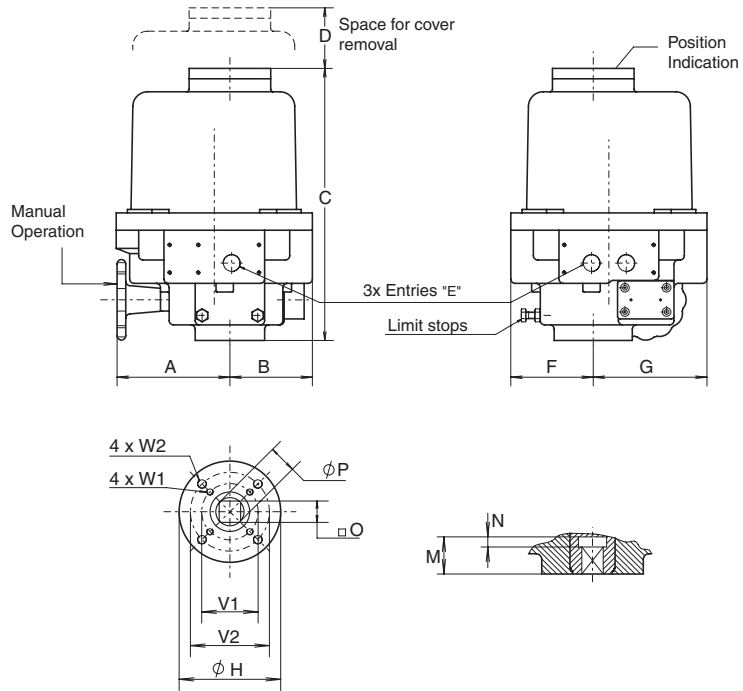


Data sheet

Sheet No.: A5.105 Rev. D
Date: May 2015

DIMENSIONS AND TECHNICAL DETAILS - ELECTRIC ACTUATOR

EL Exd



| Dim in inches | EL35 & 55 | EL100 | EL150 | EL200 | EL350 | EL500 | EL800 |
|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|
| A | 5.04 | 5.31 | 5.31 | 7.28 | 7.28 | 7.68 | 7.68 |
| B | 2.80 | 3.94 | 3.94 | 4.29 | 4.29 | 5.04 | 5.04 |
| C | 10.83 | 11.42 | 11.50 | 12.40 | 12.40 | 14.96 | 14.96 |
| D | 5.71 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 7.48 |
| 3x E | 1/2"NPT | 1/2"NPT | 1/2"NPT | 3/4"NPT | 3/4"NPT | 3/4"NPT | 3/4"NPT |
| F | 3.06 | 3.03 | 3.03 | 3.78 | 3.78 | 4.84 | 4.84 |
| G | 4.10 | 4.72 | 4.72 | 5.53 | 5.53 | 6.54 | 6.54 |
| H | 3.54 | 3.54 | 3.54 | 4.92 | 4.92 | 5.91 | 5.91 |
| M | 1.08 | 1.30 | 1.30 | 1.30 | 1.30 | 1.77 | 1.77 |
| N | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | - | - |
| O max. | 0.556 | 0.752 | 0.752 | 0.752 | 0.752 | 1.068 | 1.068 |
| O min. | 0.551 | 0.748 | 0.748 | 0.748 | 0.748 | 1.063 | 1.063 |
| P | 0.709 | 0.984 | 0.984 | 0.984 | 0.984 | 1.417 | 1.417 |
| V1 | 1.969 | 1.969 | 1.969 | 2.756 | 2.756 | 4.016 | 4.921 |
| V2 | 2.756 | 2.756 | 2.756 | 4.016 | 4.016 | - | - |
| W1 | 1/4-20 x .47 | 1/4-20 x .47 | 1/4-20 x .47 | 5/16-18 x .59 | 5/16-18 x .59 | 3/8-16 x .71 | 1/2-13 x .79 |
| W2 | 5/16-18 x .59 | 5/16-18 x .59 | 5/16-18 x .59 | 3/8-16 x .71 | 3/8-16 x .71 | - | - |

Description

Type EL actuators use worm and wormwheel reduction gearing to provide tight positioning control and the self locking feature necessary for controlling larger valves, particularly butterfly types.

The explosion proof housing consists of two aluminum castings, this contains the drive motor and worm gear assembly, together with the anti-condensation heater and main terminal strip.

EL actuators take the full range of control options, they have handwheel geared manual overrides, mechanical end position stops and torque switches on all the larger sizes. Visual position indication is by a window in the top cover.

General Specification

| | | | |
|--------------------------|---|------------------|---|
| Nominal Rotation | : 90° - factory set to ±3° | Stall protection | : By motor thermostat (all sizes) |
| | : Adjustable by limit switches 10° to 320° | | : By thermostat and by torque switches (EL 100-800) |
| Explosion proof | : II 2 G Ex db IIB T4, suitable for ATEX Zones 1, 2 (gas) | Identification | : Ex: EL 200 Exd |
| Certificate nr. | : DEKRA 12ATEX0001 X | | |
| Enclosure | : IP67 (Optional: IP68) | | |
| Temperature | : -4°F to + 140°F | | |
| Connections | : By 12 and/or 16 point internal terminal strip | | |
| Finish | : Two component polyurethane coating | | |
| Life | : 50,000 operations minimum | | |
| Heather | : 10 Watt | | |
| Motor voltages and types | | | |
| - DC | : 24VDC | | |
| - AC Single phase | : 24VAC 50/60Hz | | |
| | : 110-130VAC 50/60Hz | | |
| | : 220-280VAC 50/60Hz | | |
| - AC Three phase | : 380-460VAC 50/60Hz | | |

Minimum customer switch or contactor rating 16Amp.

| Performance | EL35 | EL55 | EL100 | EL150 | EL200 | EL350 | EL500 | EL800 |
|---------------------------|---------|-------|-------|-------|-------|-------|-------|-------|
| Torque (lb-in) | Break | 310 | 487 | 885 | 1328 | 1770 | 3098 | 4425 |
| | Run | 112 | 177 | 310 | 469 | 620 | 1089 | 1549 |
| Speed (Sec.) | 50Hz | 6 | 6 | 7.5 | 9 | 13.5 | 22 | 25.5 |
| | 110V AC | 1.1 | - | 2.9 | 2.9 | 2.9 | 2.9 | 4.5 |
| Current (A) (Max.) | 230V AC | - | 0.6 | 1.7 | 1.7 | 1.7 | 1.7 | 2.3 |
| | 24V DC | - | 5 | 8 | 8 | 8 | 8 | - |
| Power (W) | 110V AC | 100 | - | 225 | 225 | 225 | 225 | 315 |
| | 230V AC | - | 72 | 200 | 200 | 200 | 200 | 305 |
| | 24V DC | - | 45 | 118 | 118 | 118 | 118 | - |
| Switches-Indication | 4x16A | 4x16A | 4x16A | 4x16A | 4x16A | 4x16A | 4x16A | 4x16A |
| Torque SPDT at 110/240VAC | - | - | 2x16A | 2x16A | 2x16A | 2x16A | 2x16A | 2x16A |
| Weight (lb.) | 16 | 16 | 27 | 27 | 41 | 44 | 61 | 69 |
| Duty rating | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 30% |

EL-O-MATIC

www.El-O-matic.com

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Updated data sheets can be obtained from our website www.El-O-Matic.com or from your nearest Valve Automation Center **USA**: +1 281 477 4100 **Europe**: +31 74 256 10 10 **Asia-Pacific**: +65 6501 4600



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