

Modulating, Electronic fail-safe, 24 V

- Nominal voltage AC/DC 24 V
- Control Modulating 2...10 V



5-year warranty



## Technical data

|                 |                                    |                                                                                             |
|-----------------|------------------------------------|---------------------------------------------------------------------------------------------|
| Electrical data | Nominal voltage                    | AC/DC 24 V                                                                                  |
|                 | Nominal voltage frequency          | 50/60 Hz                                                                                    |
|                 | Nominal voltage range              | AC 19.2...28.8 V / DC 21.6...28.8 V                                                         |
|                 | Power consumption in operation     | 2.5 W                                                                                       |
|                 | Power consumption in rest position | 0.5 W                                                                                       |
|                 | Transformer sizing                 | 5 VA                                                                                        |
|                 | Electrical Connection              | 22 GA plenum cable, 3 ft [1 m], with 1/2" NPT conduit connector                             |
|                 | Overload Protection                | electronic throughout 0...90° rotation                                                      |
|                 | Electrical Protection              | actuators are double insulated                                                              |
| Functional data | Operating range Y                  | 2...10 V                                                                                    |
|                 | Operating range Y note             | 4...20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)                                                 |
|                 | Position feedback U                | 2...10 V                                                                                    |
|                 | Bridging time (PF)                 | 2 s                                                                                         |
|                 | Pre-charging time                  | 5...20 s                                                                                    |
|                 | Angle of rotation                  | 90°                                                                                         |
|                 | Angle of rotation note             | adjustable with mechanical stop                                                             |
|                 | Running Time (Motor)               | 75 s / 90°                                                                                  |
|                 | Running time fail-safe             | <60 s                                                                                       |
|                 | Noise level, motor                 | 35 dB(A)                                                                                    |
|                 | Noise level, fail-safe             | 35 dB(A)                                                                                    |
|                 | Position indication                | pointer                                                                                     |
| Safety data     | Power source UL                    | Class 2 Supply                                                                              |
|                 | Degree of protection IEC/EN        | IP40                                                                                        |
|                 | Degree of protection NEMA/UL       | NEMA 2                                                                                      |
|                 | Enclosure                          | UL Enclosure Type 2                                                                         |
|                 | Agency Listing                     | cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02<br>CE acc. to 2014/30/EU and 2014/35/EU |
|                 | Quality Standard                   | ISO 9001                                                                                    |
|                 | UL 2043 Compliant                  | Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC |
|                 | Ambient humidity                   | Max. 95% RH, non-condensing                                                                 |
|                 | Ambient temperature                | 35...104°F [2...40°C]                                                                       |
|                 | Storage temperature                | -40...176°F [-40...80°C]                                                                    |

## Technical data

|                    |                  |                   |
|--------------------|------------------|-------------------|
| <b>Safety data</b> | Servicing        | maintenance-free  |
| <b>Weight</b>      | Weight           | 0.55 lb [0.25 kg] |
| <b>Materials</b>   | Housing material | UL94-5VA          |

## Product features

- Application** Electronic fail-safe proportional ZoneTight actuator.
- Valve selection should be in accordance with flow parameters and system specifications. The actuator is mounted directly to the valve without the need for tools or additional linkage.
- The actuator operates in response to a 2...10 V, 0.5...10 V or 4...20 mA control signal.

## Electrical installation

### ✂ INSTALLATION NOTES

- A** Actuators with appliance cables are numbered.
- 2** Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- 3** Actuators may also be powered by DC 24 V.
- 5** Only connect common to negative (-) leg of control circuits.
- 7** A 500  $\Omega$  resistor (ZG-R01) converts the 4...20 mA control signal to 2...10 V.
- 18** Actuators with plenum cable do not have numbers; use color codes instead.
- ◆** Meets cULus requirements without the need of an electrical ground connection.
- ⚠ Warning! Live electrical components!**  
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

### Wiring diagrams

AC 24 V Transformer

