



5-year warranty



## Technical data

<b>Electrical data</b>	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	1 W	
	Transformer sizing	4 VA	
	Electrical Connection	18 GA plenum cable, 1 m, with 1/2" conduit connector	
	Overload Protection	electronic throughout 0...95° rotation	
<b>Functional data</b>	Operating range Y	2...10 V	
	Operating range Y note	4...20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)	
	Input Impedance	100 kΩ for 2...10 V (0.1 mA), 500 Ω for 4...20 mA	
	Position feedback U	2...10 V	
	Position feedback U note	Max. 0.5 mA	
	Direction of motion motor	selectable with switch 0/1	
	Direction of motion fail-safe	reversible with cw/ccw mounting	
	Angle of rotation	Max. 95°	
	Running Time (Motor)	95 s	
	Running time fail-safe	<25 s @ 20°C	
	Noise level, motor	35 dB(A)	
	Noise level, fail-safe	62 dB(A)	
	Position indication	Mechanical	
<b>Safety data</b>	Power source UL	Class 2 Supply	
	Degree of protection IEC/EN	IP42	
	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 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	-22...122°F [-30...50°C]	
	Storage temperature	-40...176°F [-40...80°C]	
	Servicing	maintenance-free	
	<b>Weight</b>	Weight	1.6 lb [0.80 kg]
	<b>Materials</b>	Housing material	UL94-5VA

Footnotes †Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3

## Electrical installation

### ✂ INSTALLATION NOTES

- ⚠<sub>1</sub> Provide overload protection and disconnect as required.
- ⚠<sub>2</sub> Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- ⚠<sub>3</sub> Actuators may also be powered by DC 24 V.
- ⚠<sub>5</sub> Only connect common to negative (-) leg of control circuits.
- ⚠<sub>7</sub> A 500 Ω resistor (ZG-R01) converts the 4...20 mA control signal to 2...10 V.
- ⚠<sub>18</sub> Actuators with plenum cable do not have numbers; use color codes instead.
- ◆ Meets cULus requirements without the need of an electrical ground connection.
- ⚠<sub>!</sub> **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

2...10 V / 4...20 mA Control

