



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	1.5 W	
	Power consumption in rest position	0.4 W	
	Transformer sizing	3 VA	
	Electrical Connection	18 GA plenum cable, 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)	
	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. 1 mA	
	Direction of motion motor	selectable with switch 0/1	
	Manual override	external push button	
	Angle of rotation	90°	
	Angle of rotation note	adjustable with mechanical stop	
	Running Time (Motor)	90 s / 90°	
	Noise level, motor	35 dB(A)	
	Position indication	Mechanical, pluggable	
	Safety data	Power source UL	Class 2 Supply
Degree of protection IEC/EN		IP54	
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	
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	
Weight		Weight	1.4 lb [0.62 kg]
		Materials	Housing material

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

Accessories

Electrical accessories	Description	Type
	Battery backup system, for non-spring return models	NSV24 US
	Battery, 12 V, 1.2 Ah (two required)	NSV-BAT
	Auxiliary switch 1x SPDT add-on	S1A
	Auxiliary switch 2x SPDT add-on	S2A
	Feedback potentiometer 140 Ω add-on, grey	P140A GR
	Feedback potentiometer 1 kΩ add-on, grey	P1000A GR
	Feedback potentiometer 10 kΩ add-on, grey	P10000A GR
	Feedback potentiometer 2.8 kΩ add-on, grey	P2800A GR
	Feedback potentiometer 500 Ω add-on, grey	P500A GR
	Feedback potentiometer 5 kΩ add-on, grey	P5000A GR

Electrical installation

INSTALLATION NOTES

- Provide overload protection and disconnect as required.
- Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- Actuators may also be powered by DC 24 V.
- Only connect common to negative (-) leg of control circuits.
- A 500 Ω resistor (ZG-R01) converts the 4...20 mA control signal to 2...10 V.
- 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

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

