

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 | 4.5 W | |
| | Power consumption in rest position | 2 W | |
| | Transformer sizing | 6.5 VA | |
| | Electrical Connection | 18 GA plenum cable, 1 m, with 1/2" NPT conduit connector, degree of protection NEMA 2 / IP54 | |
| | Overload Protection | electronic throughout 0...95° rotation | |
| Functional data | Torque motor | 40 Nm | |
| | 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 | |
| | Position feedback U note | Max. 0.5 mA | |
| | Direction of motion motor | selectable with switch 0/1 | |
| | Manual override | external push button | |
| | Angle of rotation | Max. 95° | |
| | Angle of rotation note | adjustable with mechanical stop | |
| | Running Time (Motor) | 150 s / 90° | |
| | Running time motor note | constant, independent of load | |
| | Noise level, motor | 45 dB(A) | |
| | Position indication | Mechanical, 30...65 mm stroke | |
| | 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 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 | |
| Weight | | Weight | 4.2 lb [1.9 kg] |
| | | Materials | Housing material Galvanized steel and plastic housing |

Footnotes †Rated Impulse Voltage 800V, Type action 1, 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 |
| | Feedback potentiometer 140 Ω add-on, grey | P140A GR |
| | Feedback potentiometer 500 Ω add-on, grey | P500A GR |
| | Feedback potentiometer 1 kΩ add-on, grey | P1000A GR |
| | Feedback potentiometer 2.8 kΩ add-on, grey | P2800A GR |
| | Feedback potentiometer 5 kΩ add-on, grey | P5000A GR |
| | Feedback potentiometer 10 kΩ add-on, grey | P10000A GR |
| | Auxiliary switch 1x SPDT add-on | S1A |
| | Auxiliary switch 2x SPDT add-on | S2A |

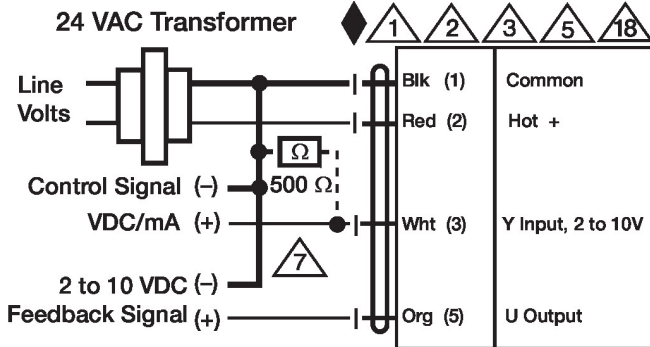
Electrical installation

✂ INSTALLATION NOTES

- ⚠1 Provide overload protection and disconnect as required.
- ⚠3 Actuators may also be powered by DC 24 V.
- ⚠5 Only connect common to negative (-) leg of control circuits.
- ⚠7 A 500 Ω resistor (ZG-R01) converts the 4...20 mA control signal to 2...10 V.
- ⚠11 Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.
- ⚠46 Actuators may be controlled in parallel. Current draw and input impedance must be observed.
- ⚠47 Master-Slave wiring required for piggy-back applications. Feedback from Master to control input(s) of Slave(s).
- ◆ Meets cULus requirements without the need of an electrical ground connection.
- ⚠1 **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



Primary - Secondary

