Modulating, Spring Return, AC 24 V for DC $2 . . .10 \mathrm{~V}$ or $4 . . .20 \mathrm{~mA}$ Control Signal



5-year warranty


## Technical data

| Electrical data | Nominal voltage | AC/DC 24 V |
| :---: | :---: | :---: |
|  | Nominal voltage frequency | $50 / 60 \mathrm{~Hz}$ |
|  | Power consumption in operation | 2 W |
|  | Power consumption in rest position | 1 W |
|  | Transformer sizing | 4 VA (class 2 power source) |
|  | Electrical Connection | 18 GA plenum cable, $3 \mathrm{ft}\left[1 \mathrm{~m}\right.$ ], with $1 / 2^{\prime \prime}$ conduit connector |
|  | Overload Protection | electronic throughout $0 . . .95^{\circ}$ rotation |
| Functional data | Operating range $Y$ | 2... 10 V |
|  | Operating range Y note | $4 . . .20 \mathrm{~mA} \mathrm{w/} \mathrm{ZG-R01} \mathrm{( } 500 \Omega, 1 / 4 \mathrm{~W}$ resistor) |
|  | Input Impedance | $100 \mathrm{k} \Omega$ for $2 . . .10 \mathrm{~V}(0.1 \mathrm{~mA}), 500 \Omega$ for $4 . . .20 \mathrm{~mA}$ |
|  | Position feedback U | 2...10 V |
|  | Position Feedback | 2... 10 V , Max. 0.5 mA |
|  | Position feedback U note | Max. 0.5 mA |
|  | Direction of motion motor | selectable with switch 0/1 |
|  | Direction of motion fail-safe | reversible with $\mathrm{cw} / \mathrm{ccw}$ mounting |
|  | Angle of rotation | Max. $95^{\circ}, 90^{\circ}$ |
|  | Angle of rotation note | $90^{\circ}$ |
|  | Running Time (Motor) | 95 s |
|  | Running time fail-safe | $<25 \mathrm{~s}$ |
|  | Running time fail-safe note | $\operatorname{tamb}=68^{\circ} \mathrm{F}\left[20^{\circ} \mathrm{C}\right]$ |
|  | Noise level, motor | $35 \mathrm{~dB}(\mathrm{~A})$ |
|  | Noise level, fail-safe | 62 dB (A) |
|  | Position indication | Mechanical |
| Safety data | 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 |
|  | Ambient temperature | $-22 . . .122^{\circ} \mathrm{F}\left[-30 . . .50^{\circ} \mathrm{C}\right]$ |
|  | Storage temperature | $-40 . . .176^{\circ} \mathrm{F}\left[-40 . . .80^{\circ} \mathrm{C}\right]$ |
|  | Ambient humidity | max. $95 \%$ r.H., non-condensing |
|  | Servicing | maintenance-free |
| Weight | Weight | $1.6 \mathrm{lb}[0.80 \mathrm{~kg}$ ] |
| Materials | Housing material | UL94-5VA |

## Electrical installation

$\mathcal{X}$ 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 24 VDC .
5 Only connect common to negative (-) leg of control circuits.
7 A $500 \Omega$ resistor ( $\mathrm{ZG}-\mathrm{RO} 1$ ) converts the $4 . . .20 \mathrm{~mA}$ control signal to $2 . . .10 \mathrm{~V}$.
48. 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.

2... $10 \mathrm{~V} / 4 . . .20 \mathrm{~mA}$ Control

