Bray Controls Commercial Division 13788 West Road, Suite 200A Houston, Texas 77041
BCDSales@Bray.com
Phone: 1-888-412-2729
Fax: 1-888-412-2720
www.braycommercialdivision.com

## VAS24-70-T(A) — Submittal/Technical Data

02107119
70 Ib-in. — Direct Mount — Spring Return — On/Off or Floating — Auxiliary Switch Option

## Specifications:

Power Supply<br>Input Signal Auxiliary Switch Rating

Spring Return

Equipment Rating
Rotation Range
Electric Stall Detection Torque
Time: $90^{\circ}$ of Rotation

Enclosure
Manual Override
Ambient Conditions
Electrical Connections
Conduit Connections
Mechanical Connections
Life Cycle
Noise Rating

Dimensions
Weight
Agency Certification

AC 24 V (AC 19.2 V to 28.8 V ) at $50 / 60 \mathrm{~Hz}$ : Class 2 or SELV, 7.9 VA Running, 5.5 VA Holding Position DC 24 V (DC 21.6 V to 28.8 V ): Class 2 or SELV, 3.5 W Running, 1.9 W Holding Position Minimum Transformer Size: 8 VA per Actuator
AC 19.2 to 28.8 V at $50 / 60 \mathrm{~Hz}$ or DC $24 \mathrm{~V}+20 \% /-10 \%$, Class 2 or SELV, Minimum Pulse Width: 500 ms
(-A) Models) Two Single-Pole, Double-Throw (SPDT), Double-Insulated Switches with Gold over Silver Contacts:
AC 24 V, 50 VA Pilot Duty
Direction is Selectable with Mounting Position of Actuator:
Actuator Side A is away from damper or valve: CCW Spring Return
Actuator Side B is away from damper or valve: CW Spring Return
Class 2 or Safety Extra-Low Voltage (SELV)
Maximum Full Stroke: $95^{\circ}$
Adjustable Stop: 35 to $95^{\circ}$ Maximum Position
Protects from overload at all angles of rotation
$70 \mathrm{lb} \cdot \mathrm{in}$. ( $8 \mathrm{~N} \cdot \mathrm{~m}$ )
Power On (Running) 150 Seconds Constant for 0 to 70 lb -in (8-N m) Load, At All Operating Conditions
Power Off (Spring Returning) 17 to 25 Seconds for 0 to $70 \mathrm{lb} \cdot \mathrm{in}(8 \mathrm{~N} \cdot \mathrm{~m}$ ) Load, at Room Temperature
22 Seconds Nominal at Full Rated Load, 94 Seconds Maximum with $70 \mathrm{lb} \cdot$ in ( $8 \mathrm{~N} \cdot \mathrm{~m}$ ) Load, at $-40^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right)$
NEMA 2 (IP54) for all mounting orientations
Hex Head Screw
Standard Operating -40 to $140^{\circ} \mathrm{F}\left(-40\right.$ to $60^{\circ} \mathrm{C}$ ); $90 \%$ RH Maximum, Noncondensing
Storage $\quad-40$ to $185^{\circ} \mathrm{F}\left(-40\right.$ to $\left.85^{\circ} \mathrm{C}\right) ; 95 \%$ RH Maximum, Noncondensing
48 in. UL 758 Type AWM Halogen-Free Cable with 18 AWG ( $0.85 \mathrm{~mm}^{2}$ ) Conductors \& 0.25 in . ( 6 mm ) Ferrule Ends Integral Connectors for $3 / 8 \mathrm{in}$. $(10 \mathrm{~mm})$ Flexible Metal Conduit
Round Shafts $5 / 16$ to $5 / 8 \mathrm{in}$. ( 8 to 16 mm )
Square Shafts $1 / 4$ to $1 / 2$ in. ( 6 to 12 mm )
60,000 Full Stroke Cycles with $70 \mathrm{lb} \cdot \mathrm{in}$. ( $8 \mathrm{~N} \cdot \mathrm{~m}$ ) Load - 1,500,000 Repositions with $70 \mathrm{lb} \cdot \mathrm{in}$. ( $8 \mathrm{~N} \cdot \mathrm{~m}$ ) Load
Running
Holding
Spring Returning
$<35 \mathrm{dBA}$ at $70 \mathrm{lb} \cdot \mathrm{in}(8 \mathrm{~N} \cdot \mathrm{~m})$ Load, at a Distance of 39-13/32 in. ( 1 m )
$<20 \mathrm{dBA}$ at a Distance of 39-13/32 in. (1 m)
$<52 \mathrm{dBA}$ at $70 \mathrm{lb} \cdot \mathrm{in}$. ( $8 \mathrm{~N} \cdot \mathrm{~m}$ ) Load - (All at a Distance of 39-13/32 in. ( 1 m ))
Actuator Only - 6.33 (L) x 3.90 (W) $\times 2.26$ (H)
Actuator Only - 3.43 lb . ( 3.8 lb . w/ Aux. Switches)
UL Listed, CCN XAPX, File E27734; to UL 60730-1A: 2003-08, Ed. 3.1, Automatic Electrical Controls for Household and Similar Use; and UL 60730-2-14: 2002-02, Ed. 1, Part 2, Particular Requirements for Electric Actuators.

## Wiring: (Cable)




NOTE: WARNING: All DS-70 Series actuators are designed for use only in conjunction with operating controls. Where an operating control failure would result in personal injury and/or loss of property, it is the responsibility of the installer to add safety devices or alarm systems that protect against,and/or warn of, control failure.

To avoid excessive wear or drive time on the motor, use a controller and/or software that provides a time-out function to remove the signal at the end of rotation (stall).
The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the nearest Bray office. Bray controls shall not be liable for damages resulting from misapplication or misuse of its products.

