Specifications:

Power Supply
AC 24 V (AC 19.2 V to 28.8 V) at 50/60 Hz: Class 2 or (SELV) (Europe), 4.7 VA Running, 2.7 VA Holding Position
DC 24 V (DC 21.6 V to 28.8 V): Class 2 or SELV, 1.8 W, Running, 1 W Holding Position

Input Signal
AC 19.2 to 28.8 V at 50/60 Hz or DC 24 V +20%/-10% Class 2 or SELV. Minimum Pulse Width: 500 msec

Auxiliary Switch Rating
(-A) Models) One SPDT, Double Insulated Switch with Silver Contacts – AC 24V, 50 VA Pilot Duty

Spring Return
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

Equipment Rating
Class 2 or Safety Extra-Low Voltage (SELV)

Rotation Range
Maximum Full Stroke: 95°

Electric Stall Detection
Protects from overload at all angles of rotation

Torque
27 lb·in. (3 N·m)

Time: 90° of Rotation
Power On (Running) 150 Seconds Constant for 0 to 27 lb·in. (3 N·m) Load, at All Operating Conditions
Power Off (Returning) 12 to 17 Seconds for 0 to 27 lb·in. (3 N·m) Load, at Room Temperature
16 Seconds Nominal at Full Rated Load
22 Seconds Maximum with 27 lb·in. (3 N·m) Load at -22°F (-30°C)

Enclosure
NEMA 2 (IP54) for all mounting orientations

Ambient Conditions
Standard Operating -22 to 140°F (-30 to 60°C); 90% RH Maximum, Noncondensing
Storage -40 to 185°F (-40 to 85°C); 95% RH Maximum, Noncondensing

Electrical Connections
Without Aux Switches 120 in. UL 444 Type CMP Plenum Rated Cable w/ 19 AWG (0.75 mm²) Conductors & 0.25 in. (6 mm) Ferrule Ends
With Aux Switches 48 in. UL 758 Type AWM Halogen-Free Cable w/ 18 AWG (0.85 mm²) Conductors & 0.25 in. (6 mm) Ferrule Ends

Conduit Connections
Integral 1/2 in. (13 mm) Threaded Conduit Connector(s)

Mechanical Connections
Round Shafts 1/4 in. to 1/2 in. (6 to 12 mm) Square Shafts 1/4 in. to 5/16 in. (6 to 8 mm)

Life Cycle
60,000 Full Stroke Cycles with 27 lb·in. (3 N·m) Load, 1,500,000 Repositions with 27 lb·in. (3 N·m) Load

Noise Rating
Running <28 dBA at 27 lb·in. (3 N·m) Load, at a Distance of 39-13/32 in. (1 m)
Holding <20 dBA at a Distance of 39-13/32 in. (1 m)
Returning <56 dBA at 27 lb·in. (3 N·m) Load, at a Distance of 39-13/32 in. (1 m)

Dimensions
6-3/8" (L) x 3-15/16" (W) x 2-1/4 (H)

Weight
2.0 lb. (2.4 lb w/ Aux. Switches)

Agency Certification
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: Ed. 1, Part 2, Particular Requirements for Electric Actuators.

Wiring: (Cable)

IMPORTANT:
Do not install multiple DS-27 Series Actuators connected to the same mechanical load. Master-Slave application of DS-27 Series Actuators requires that each actuator be connected to independent loads.

Floating Control, Four Wire
- ~ 24 VAC 24 VDC

On/Off and Floating
- ~ 24 VAC 24 VDC

On/Off Control, Two Wire
- ~ 24 VAC 24 VDC

(-A) Auxiliary Switches

NOTE: WARNING: All DS-27 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.