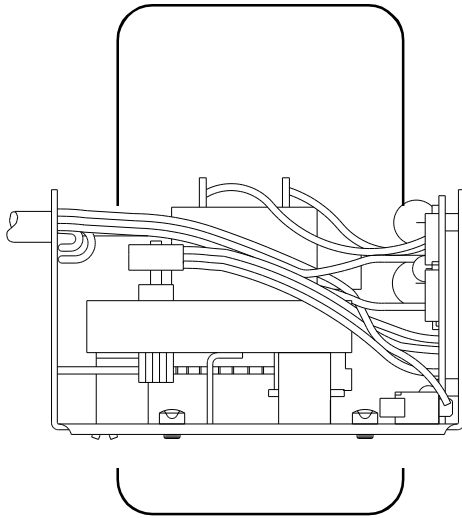


☆STAR DAMPERS REGULUS ACTUATOR (DR SERIES)

A Damper Actuator with Infinite Proportional Control.



Regulus Actuator



BENEFITS & SPECIAL FEATURES

- Actuator is removable without removing or dismantling the damper housing or vane.
- Actuator is interchangeable with all ☆Star series actuators
- Actuator fits all ☆Star series dampers and may be linked to virtually any other damper.
- Motor is replaceable without removing the actuator
- Power open - power close
- No current draw while stopped
- 0 - 90 degree travel with Autostop™ and Seek™ features
- Very high temperature ratings using class "E" coil motor
- Analog 2-wire control signal
- 90 second complete cycle time
- Delrin bearing for long life
- Position indicator
- Auxiliary switch available

Description

A motorized proportional actuator. Controlled by a PI or PID thermostat with 0-10 volt or 4-20 milliamp output. May be stopped at any intermediate position for variable flow.

Application

The Regulus ☆Star damper is used where infinite proportional control is required. Applications include but are not limited to the control of duct mounted zone dampers for heating and cooling, humidity control, and industrial and process control. Other applications include fresh air inlets on fan coils, and air control for burners.

Installation Notes

Dampers may be installed without regard to direction. Damper rods may be mounted at any angle but care should be taken to avoid placement of actuator in an inaccessible location, directly above a heating duct if maximum exhaust temperature may be exceeded or where condensation or leaking water could enter the actuator. Several mounting systems and linkages are available.

Operation

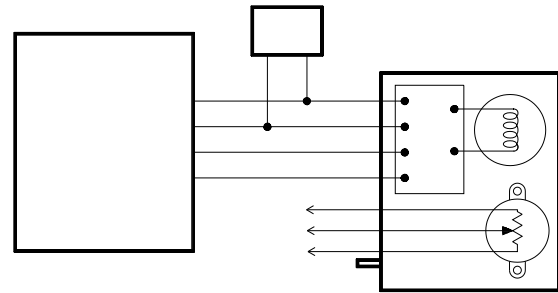
The Regulus ☆Star actuator utilizes a powerful dc motor which drives a shaft in either direction. The stop is electronically controlled without using a limit switch. With this unique feature, the Regulus has the ability to detect end of travel or a malfunction and stop automatically. It is self-adjusting for wear. The actuator can "seek" a predetermined position chosen by the controller. An optional feedback control can transmit exact position to this controller. The actuator may be replaced or upgraded (and reused elsewhere) to another ☆Star series actuator without disabling the system.

Warranty

All ☆Star dampers and actuators are warranted against defects in materials and workmanship for a period of 30 months. Some restrictions apply. See complete warranty for details.

SPECIFICATIONS

POWER REQUIREMENTS	24VDC.
MINIMUM WIRING REQUIREMENTS	18 gauge 90° C.
ACTUATOR MOTOR	
Power draw requirements	6 watts when opening or closing. No draw while at rest.
Torque (running)	62.6 in./oz. (.44 N/M) minimum at 90% of rated power at the valve stem
Timing	motor cycles in 30 seconds (.5 min.)
Characteristics	power close, power open; can be stopped and/or reversed at any point.
Type	dc
FEEDBACK	0-10V or 4-20mA (selectable) feedback position indicator
WIRE TYPE	BX, cable, leads, plenum cable, modular plug-in cable.
WIRE LENGTH	4 - 96", 10 - 244cm.
TEMPERATURE RATINGS (ambient)	classE motor - 275° F / 135° C auxiliary switch - 185° F / 85° C
GROSS WEIGHT (average)	
Individually packed, actuator only	12 ozs. (340g)



MATERIALS

- | | |
|---|-----------------------------------|
| 1. Motor leads | 9. Cover screw |
| 2. Motor retainer tab | 10. Cover (aluminum) |
| 3. Motor mounting plate (galvanized) | 11. Motor |
| 4. Eyelet | 12. Extension spring |
| 5. Sector gear/position indicator (brass) | 13. Mounting screw |
| 6. <i>Strain relief</i> | 14. <i>Auxiliary switch</i> |
| 7. Bushing (delrin) | 15. <i>Feedback potentiometer</i> |
| 8. Frame (galvanized steel) | 16. Position indicator |

Items in italic type are optional. Other options not shown.

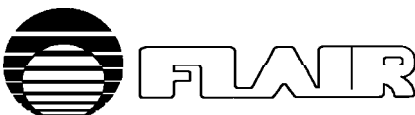
OPTIONS

- See power, auxiliary switch, wire type and wire length in "specifications".
- Packaging: Actuators may be ordered assembled with a damper, individually packed. Actuators may also be ordered separately and bulk packed with like actuators or in mixed lots of 24.
- Deluxe: All actuators are available in a deluxe model suitable for harsh and high humidity environments. Upgrade includes: stainless steel: springs and screws, sealed auxiliary switch, and heavy duty condensate protected motor.

REFERENCE

- For more information on:
- compatible dampers
 - other ☆Star damper actuators
 - mounting and linkage accessories
 - other Flair products
 - reference material
 - weight & shipping information
 - suggested pricing
- See:
- damper pages
 - actuator pages (this section)
 - actuator pages (this section)
 - other sections
 - appendix
 - appendix
 - pricing section

Flair pursues a policy of constant improvement. For this reason, all specifications are subject to change without notice.



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