

Rotary, Electronic Damper Actuators Fail Safe and Fail-In-Place



53 lb.-in. Torque
2-Position Control
Floating Control
0-10/2-10 Vdc Modulating Voltage Control
(0) 4-20 mA Modulating Current Control



GNP/GAP Series Spring Return and Non-Spring Return Electronic Damper Actuator.

Description

Designed for control of critical environments, the OpenAir direct-coupled fail safe/fail-in-place electronic actuators are available in modulating, two-position, and floating control for laboratory fume hoods, supply and exhaust units.

Features

- Fast operation, 2 seconds runtime
- One model performs all control signals:
 - 2-position
 - Floating
 - Modulating (0(2) to 10 Vdc and 4 (0) to 20 mA)
- 24 Vac/dc compatible
- Selectable fail-safe position (fail open or closed)
- Feedback standard on all models
- Highly accurate positioning
- Self centering
- Unique self-centering shaft coupling
- Assembled in the U.S.A.
- Plenum rated
- UL and cUL listed, CE certified
- Manual Override
- Precabled

Options

- Available with dual, independently adjustable auxiliary switches

Applications

Used in laboratory fume hoods, constant or variable air volume installations for the control of supply and exhaust air terminals; 53 lb-in (6 Nm) torque.

Models designed for applications that require the damper to return to a fail-safe position when there is a power failure; or models for fail-in-place.

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Damper Actuators

Specifications

Operating Voltage (1-2)	24 Vac/dc ±20%
Frequency	50 to 60 Hz
Power Consumption	
GNP19x/GAP19x	
Running	28 VA (19 W)
Holding	8 VA (5 W)
Control Signal Y/Y1 (Wires 8-2)	
Modulating Input Signal	
Voltage Input Signal	0 to 10 Vdc (Max. 35 Vdc) or 2 to 10 Vdc (Max. 35 Vdc)
Current Input Signal	4-20 mA or 0-20 mA
Input Resistance	< 20k ohms
Floating Input Signal	0 or 24 Vac/dc Clockwise
Control Signal Y2 (Wires 7-2)	
Floating Input Signal	0 or 24 Vac/dc Clockwise
Position Output Signal (Wires 9-2)	
Voltage-Output	0 to 10 Vdc
Maximum Output Current DC	± 1 mA
Equipment Rating	Class 2, in Accordance with UL/CSA Class III per EN 60730
Dual Auxiliary Switches	
Contact Loading	6 A resistive, 2A inductive
Voltage (No Mixed Operation 24 Vac/230 Vac)	24 to 250 Vac
Switch Range	5° to 90°
Step Increments	5°
Feedback Signal (Wires 9-2)	
Position Output Signal	0 to 10 Vdc
Maximum Output Current	DC ± 1 mA
Torque	
Running Torque	53 lb-in (6 Nm)
Maximum Torque	142 lb-in (16 Nm)

Runtime for 90° Operating with Motor	< 2 seconds
Fail-safe position on power loss (for GNP19x only)	2 seconds
Nominal Angle Of Rotation	90°
Maximum Angular Rotation	95°
Fail-Safe Operation	
GNP Actuator Series	On initial power-up, and after a power-fail event, the GNP actuators require up to 90 seconds for the capacitors to fully charge. During this time the actuator will respond to positioning commands, but will not power-fail until the capacitors are fully charged.
Temperature	
Operation	-0°F to 122°F (-18°C to 50°C)
Storage and Transport	-26°F to 158°F (-32°C to 70°C)
Humidity	95% RH, Non-condensing
Shaft Size	1/4 to 3/4-inch (6.4 to 20.5 mm) dia. ● 1/4 to 1/2-inch (6.4 to 13 mm) square ■
Minimum Shaft Length	3/4-inch (20 mm)
Housing Enclosure	NEMA 1 IP54 according to EN 60 529*
Material	Die-cast Aluminum Alloy
Cable Length	3 Ft. (0.9 m)
Agency Approvals	UL 873 cUL C22, 2 No. 24-93 CE
Dimensions	8-3/8" H x 3-1/4" W x 2-3/8" D (212 mm H x 83 mm W x 60 mm D)
Shipping Weight	3 lbs 6 oz

*Limited positions; refer to OpenAir™ GNP/GAP Series Installation Instructions, 129-541.

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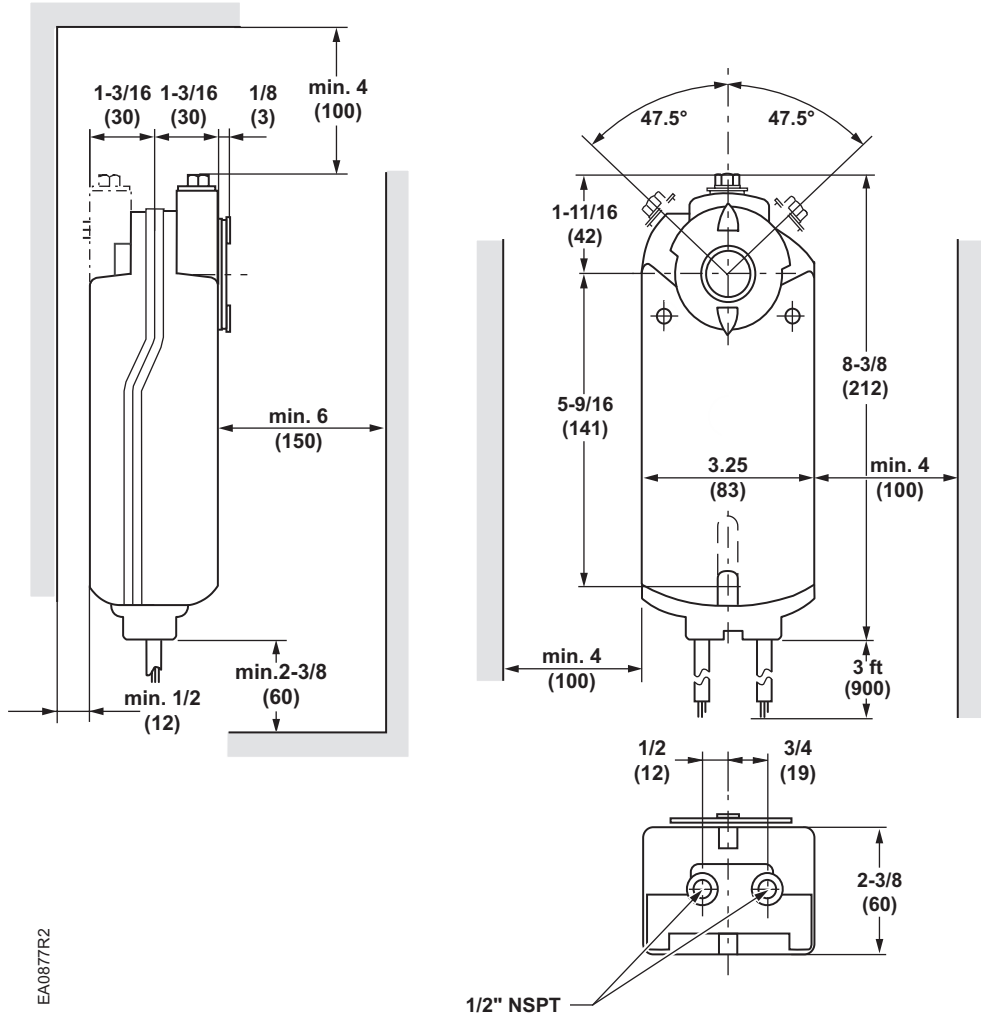
Damper Actuators

Product Ordering

Input Signal	Standard Model with Plenum Cable	Dual Adjustable Auxiliary Switches	Mutli-Packed Actuators
Fail Safe 2P, Floating, 0-10 Vdc, 2-10 Vdc, 4-20 mA	GNP191.1P	GNP196.1P	GNP191.1P/M10
Fail-in-place 2P, Floating, 0-10 Vdc, 2-10 Vdc, 4-20 mA	GAP191.1P	GAP196.1P	—

Dimensions

GNP/GAP Series Rotary, Electronic Damper Actuators



EA0877R2

Dimensions shown in inches (mm).

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Damper Actuators