Electro-Mechanical Rack and Pinion Actuator

24 Vac, Proportional or On/Off Control 0 to 10 Vdc or 2-position Spring Return



Flowrite Electro-Mechanical Rack and Pinion.

Description

The Flowrite Electronic Rack and Pinion is designed for use with 1/2- to 2-inch Flowrite two- and three-way valves with a 3/4-inch stroke. A linkage fastens the actuator and the valve body together and transforms the rotary movement of the actuator output shaft to the linear motion required to position the valve.

Features

- · Brushless DC motor technology with stall protection
- · Bi-directional fail-safe spring return
- All metal housing
- · UL and C-UL listed
- · Spring return to fail-safe position

Applications

The Flowrite Valves and Valve Actuators are used to control water and glycol solutions to 50 percent in small to large air handling units and central plant applications.



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Rack and Pinion Specifications

Power Supply Operating Voltage24 Vac, +20%, -15%
Frequency50/60 Hz
Power Consumption 599-03609 assembly (with GCA161.1U actuator)9 VA running, 5 VA holding
599-03611 assembly (with GCA121.1U actuator)8 VA running, 3 VA holding
Equipment RatingClass 2, in accordance with UL/CSA
Control Signal(599-03609 assembly with GCA161.1U actuator)
Input Signal
Voltage Input
Current Input
Position Output Feedback Signal0 to 10 Vdc, ±1 mA maximum

Mounting		
	90°	
Maximum Angular Rotation	95°	
Noise Level	<45 dBA (running)	
Enclosure	NEMA 2 in vertical to horizontal 90	
Ambient Operating Temperature	25 to +130° F (-32 to +55°C)	
Storage and Transport Temperature25 to +158° F (-32 to +70°C)		
Ambient Humidity	95% RH, non-condensing	
Agency Certification	UL873	
C-UL certified to Canadian Standard C22.2 No. 24-93		
Pre-connected Cable	18 AWG, 3 ft. (0.9 m)	

Rack and Pinion Product Ordering

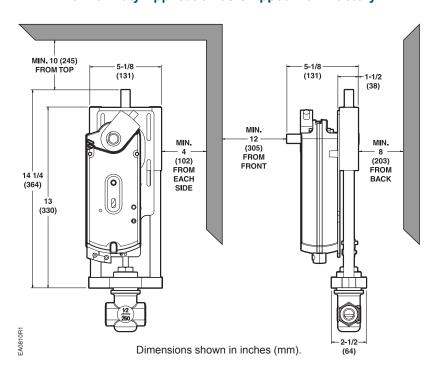
Description	Part No.	Actuator Prefix Code
0 to 10 Vdc, Spring Return	599-03609	298
2-position, Spring Return	599-03611	299
Bracket Only	599-03610	_

Table Note

The linkage, OpenAir Actuator, and Flowrite Valve are available as an assembly. Refer to: *TB 249, Flowrite Valve and Actuator Assembly Selection Technical Bulletin*, 155-304P25 for details and product numbers.

Dimensions

Normal Duty Application as Shipped from Factory



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