

Product Instructions

Proportional Actuator For Mixing Station (0-10 V)



Applications

The Proportional Actuator for Mixing Stations is designed to provide control of a Viega Mixing Station or diverting valve.

The actuator is used in electronic temperature control systems which use hot and/or cold water as the controlled medium in radiant heating systems, snow melting, or other temperature mixing applications.

The actuator is designed for operation by a 0-10 V DC controller such as a DDC system. This actuator will not work with Viega controls such as the Basic or Advanced Heating Control.

Features

- Small size allows installation where space is limited
- Maintenance free actuator in plastic housing
- Suitable for 0-10 V DC control (i.e. DDC systems)
- No tools required for mounting
- Threaded adapter included for attachment to Viega Mixing Station or diverting valves
- Exercising function

Specifications

Power supply:

24 V AC

Power consumption:

2.5 W operating consumption

Control signal:

Proportional 0-10 V DC

Stroke:

0.2 inch

Running time:

75 seconds
(45 seconds for full valve travel)

Stem force:

20 lbs.

Connecting cable:

5 ft.

Weight:

0.5 lbs.

Mounting thread (actuator):

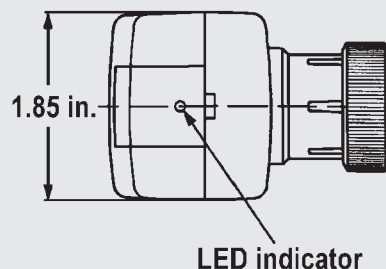
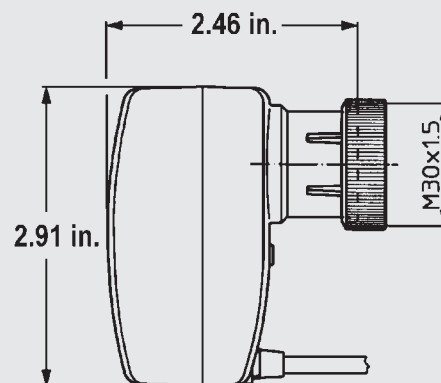
M30 x 1.5

Mounting thread (adapter):

M30 x 1.0

Ambient Temperature Limits:

32°F - 122°F



Product Instructions

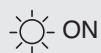
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Operation

The actuator has an automatic zero setting identification. Every time the power is switched on, the actuator closes the valve and then returns to the preset value.

Signal	Spindle	
	Actuator	Valve
decreasing (10 → 0 V)	Opens Up	Close
increasing (0 → 10 V)	Closes down	Opens



ON

- Power supply exists - motor not in operation



Flashing

- Motor in operation



Off

- No power supply

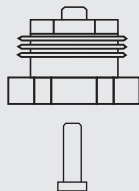
Mounting

The actuator is fixed to the valve body through a threaded adapter, both of which require no tools for mounting.

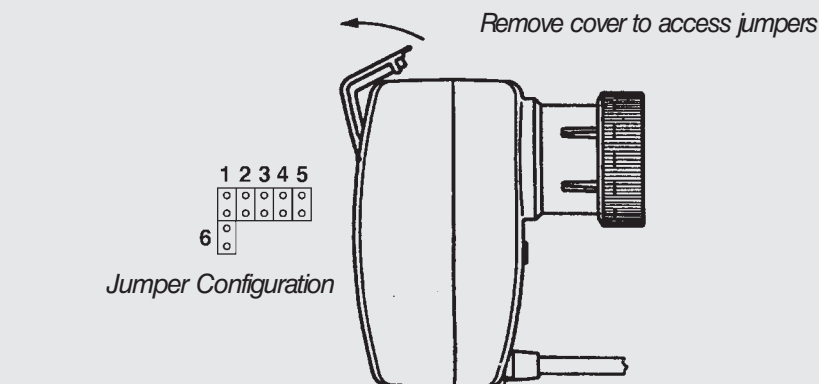
First attach adapter directly to the valve body. Insert pin as shown in illustration, then while holding onto the pin, attach adapter to valve body. Hand tighten (do not use pliers or wrench.) The actuator then mounts to the adapter via a threaded coupling ring.

Pin Setting

Insert pin so that flange is facing down towards valve body.



The actuator is maintenance free and supplied complete with a

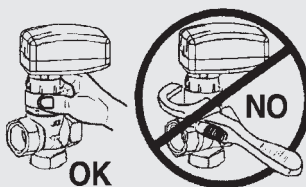


Jumper Configuration

Jumper Settings				
Function	Jumper	Default Setting	Other Setting	
Exercising Function	1	On	Off	
Incoming Signal	2	0-10V	5-10V	0-5V
	3			

Exercising Function: This function prevents the valve spindle from sticking. This is done by the actuator moving the piston up and down every 24 hours, then returning to the set position.

ready-to-wire connecting cable. For ease of installation, make sure that the actuator is in the open position before fitting the actuator to the valve. Thread the adapter and coupling nut hand tight only (do not use pliers or a wrench).

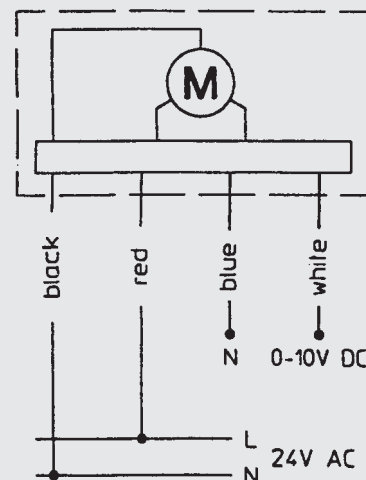


Troubleshooting

A functional check of the valve actuator can be made by suddenly changing the heating system adjustment. The

movement of the actuator stem indicates whether the valve is opening or closing.

Wiring Diagram



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