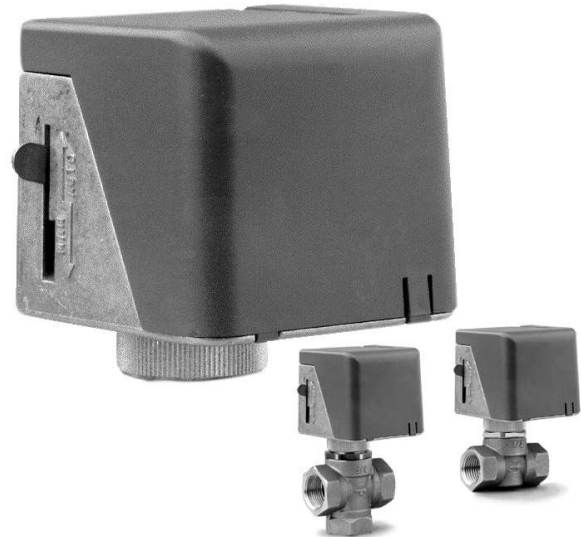


## NVMZ Series Electric On/Off Actuator

### Introduction

The NVMZ electric on/off actuator provides a two-position (open-closed) control and can easily be mounted with a threaded coupling onto forged brass valves.

A lever at the side of the actuator housing can be used to manually open a 2-way valve, or the normally closed port of a 3-way valve.



Features and Benefits	
_ <b>Low or Line voltage models available</b>	Provides application flexibility
_ <b>AC stall type motor</b>	Ensures quiet operation
_ <b>Manual lever</b>	Allows manual position mode for servicing
_ <b>Flat profile design with small side clearance</b>	Provides mounting close to flat surfaces; saves space
_ <b>Actuator can be mounted after valve body is Installed</b>	Simplifies installation in confined spaces; allows application flexibility
_ <b>Actuator can be rotated after mounting</b>	Provides easier wiring by locating the wiring conduit entry in any direction

## Operation

When energised, the actuator motor drives a sector gear and arm assembly, which pushes down axially on the valve stem against the force of the return spring. When the actuator is deenergised, the return spring in the valve brings back the valve to its normal position. (see “valve action summary”)

## Manual Override

The NVMZ actuator features a manual operating lever (shown in “Dimensions”) for manually opening 2-way Push Down To Open valves or Normally Closed port of 3-way valves. The lever will not fully close 2-way Push Down To Close valves or the Normally Opened port of 3-way valves.

## Wirings instructions

When wiring the actuator, please follow the instructions below:

- \_ Before mounting, wiring or adjusting the actuator, make sure that the power supply has been disconnected to avoid possible harm to material or person.
- \_ Make sure that the line power supply is in accordance with the power supply specified on the actuator.
- \_ All wiring should conform to local codes and must be carried out by authorised personnel only.

## Dimensions (in mm)

TYPE	DIMENSIONS (mm)		
	A	B	C
G1/2" , 2-way	54	14	100
G1/2" , 3-way	54	30	100
G3/4" , 2-way	63	19	103
G3/4" , 3-way	63	32	103
G1" , 2-way	78	20	106
G1" , 3-way	78	38	106

## Mounting instructions

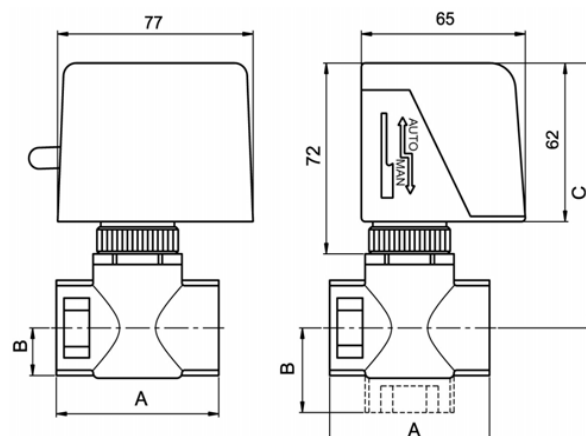
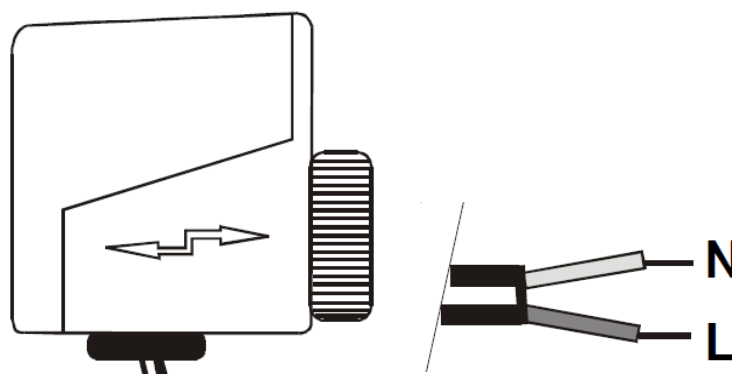
**Observe the following recommendations when mounting the actuator:**

- \_ Make sure the actuator is easily accessible for the electrical connections.
- \_ Make sure actuator is free of thermal insulation material.
- \_ Leave at least 25 mm clearance above the actuator for mounting purposes.

To mount the actuator on a valve:

1. Place the threaded coupling over the valve stem on the bonnet.
2. Rotate the actuator to desired position and tighten the coupling securely by hand.

Note: Never use actuator as a mounting lever.



## Specifications

Model	NVMZ Series		
Type of motor	Synchronous stall		
Action	On / Off		
Supply voltage (50/60 Hz)	230 ± 10%		
Power consumption	7 VA		
Minimum force	90 N (at minimum power supply and maximum temperature 50°C)		
Nominal stroke	3 mm (max. 5 mm)		
Full stroke time "On"	~ 10 s		
Full stroke time "Off"	~ 5 s		
Protection	IP20 (EN 60529), NEMA1		
Connection to Valves	M28x1.5 for series valves		
Ambient Operating condition	+2 to +50°C, non condensing		
Ambient Storage condition	-20 to +65°C, non condensing		
Compliance	EMC directive (89 / 336 EEC): EN 50081-1 EN 50082-1 LVD directive (73 / 23 / EEC): EN 60335		
Material	Body: Forged brass Stem: Stainless steel Seal: Synthetic rubber Actuator cover: Fireproof ABS engineering plastic		
Valve body pressure rating	232 psi ( PN16 or 1,600 Kpa ) Meets requirements of ANSI B16.15, Class 250		
Fluid / Ambient temperature limits	2 to 105 °C at an ambient temperature of 40 °C		
Valve sizes, Kv & Close off pressure	Sizes	Flow Coefficients	Close off pressure (Kpa)
	DN15	Kv =1.6	414
	DN20	Kv =3.5	276
	DN25	Kv =5.5	208
Service	Chiller & Hot Water, up to 50% Glycol solutions		

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