

## Ball Valve Rotary Actuator Modulating Control



■ NENUTEC is proud to offer the 02 and 05 Nm ball valve actuator of the NABM...02 / 05 Nm Series designed specifically applications for modulating control of cold and hot water.

■ NENUTEC high quality ball valve actuators have been designed for use with open/closed and characterized ball valve with the use of NENUTEC special designed adapter, fitted directly on top of the ball valve.

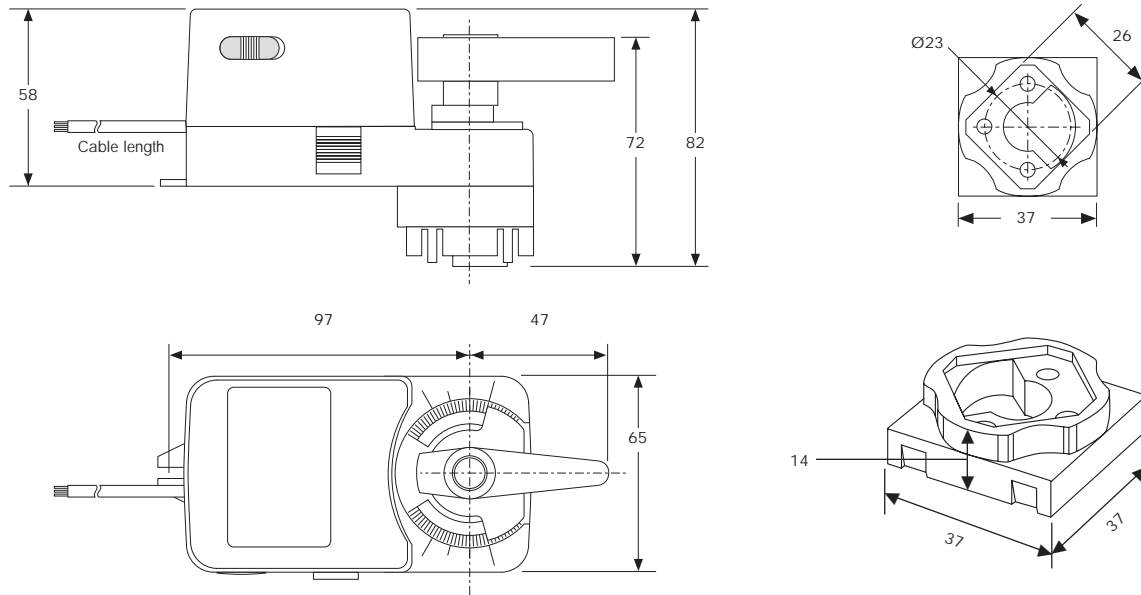
### Product Features

- From 2–3 way ball valves  
from 1/2" = 15 mm up to 2" = 50 mm
- Torque 2 Nm or 5 Nm,  
can be mounted in four different positions
- Nominal voltage AC/DC 24 V
- Simple direct mounting,  
square stem head for-fit out of rotary actuator
- Manual operation by lever by push button when  
required after disengaging the gearbox
- Selectable direction of rotation CW/CCW
- DC 0(2)...10 V Input Signal
- DC 0(2)...10 V Feedback Output Signal
- Actuators available with 1 m cable connection
- Customised version available, on request
- Ball valve actuators are controlled by analogue modulating  
control system and move the ball of the valve

### Model Selection Table

Torque	Running Time	Power Supply	Auxiliary Switches	Model/Type
2 Nm	60...90 sec	AC/DC 24 V ±10%	No	NABM 1.2-02
5 Nm	70...100 sec	AC/DC 24 V ±10%	No	NABM 1.2-05

### Actuator Dimensions (mm)

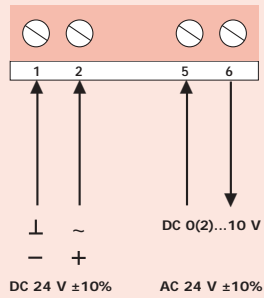


### Technical Specification

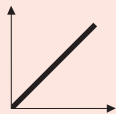
	NABM...02	NABM...05
Torque	2 Nm	5 Nm
Valve Size	15 mm	15 mm – 50 mm
Power Supply	AC/DC 24 V	AC/DC 24 V
Frequency	50-60 Hz	50-60 Hz
Power Consumption		
– Operating	2.0 W	2.0 W
– At the end stops	2.0 W	2.0 W
For wire sizing	4.0 VA	4.0 VA
Protection class	II	II
Input Control Signal 5	DC 0(2)...10 V	DC 0(2)...10 V
Output Control Signal 6	DC 0(2)...10 V	DC 0(2)...10 V
Angle of Rotation	90° (93° mechanical)	90° (93° mechanical)
Weight approx.	0.5 kg	0.5 kg
Service life	60,000 rotation	60,000 rotation
Sound Level	Max. 40 dB(A)	Max. 40 dB(A)
IP Protection	IP54	IP54
Ambient Temperature	-20°...+50°C / IEC 721-3-3	-20°...+50°C / IEC 721-3-3
Temperature medium	-20°...+115°C (ball valve)	-20°...+115°C (ball valve)
Inventory Temperature	-30°...+60°C / IEC 721-3-2	-30°...+60°C / IEC 721-3-2
Ambient Humidity	5...95% rH non condensing	5...95% rH non condensing
Maintenance	maintenance free	maintenance free
Impact	Typ I / EN 60730-1	Typ I / EN 60730-1
Standardize	89/336/CE	89/336/CE

### Wiring diagram NABM1.2-...

#### Modulating

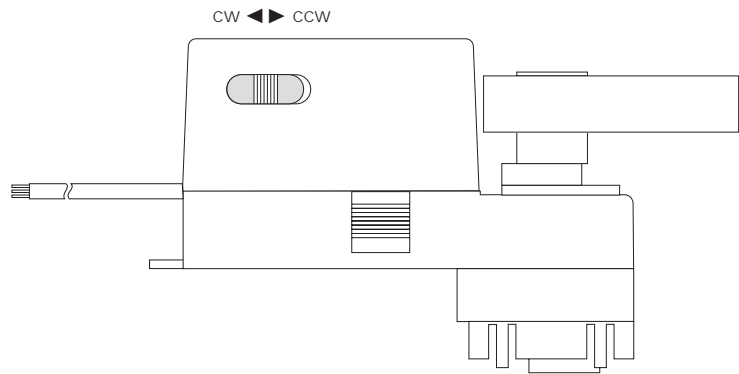


S1 ON 0° → 90°  
OFF 0° → 90°



### Changing direction of rotation

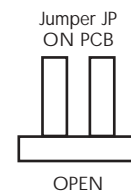
The rotation can be reversed by pushing the CCW/CW switch on the housing of actuator.



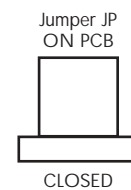
AC/DC 24 V: Connect via safety isolating transformer

### Adjusting control signals NABM1.2-...

Control Signal 5 DC 0...10 V  
Input Resistance Ri 100 k Ohm  
**Factory default setting**



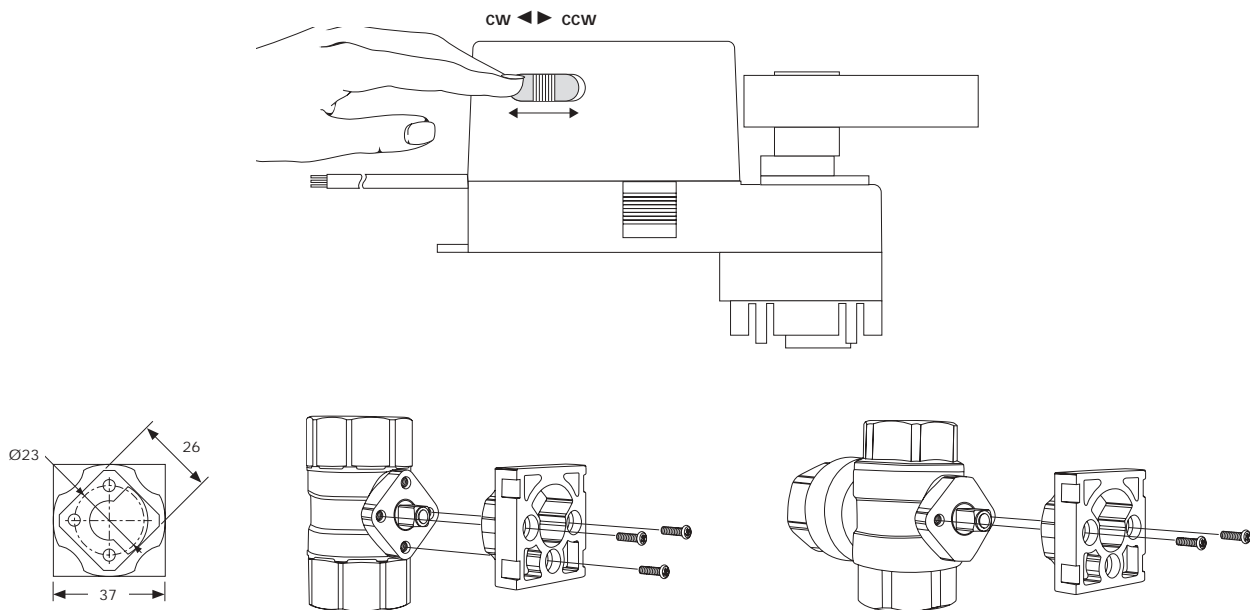
Control Signal 5 DC 2...10 V  
Input Resistance Ri 500 Ohm  
**On request**



### OEM – customized version

TELIMA/NENUTEC offer you as well ball valve actuators in a customized version on request in your own brandname. Please contact us for further more detail information.

### Fitting / Mounting ball valve actuator with 2-3 way valve



### Important Remark

The NENUTEC NABA...(S1) / NABM1.2... ball valve actuator series can be equipped with a variety of NENUTEC products. Characterized 2- or 3-way ball valves the NVCB... series. Consult NENUTEC representatives or factory for the specific requirements and material selection for your intended application.

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