NABM...05 (S1) SERIES

VALVE AND VALVE ACTUATOR MODULATING CONTROL

High Neck
Ball Valve Actuator

Low Neck
Ball Valve Actuator

NABM...05 (S1) SERIES

NABM series standard valve actuators are especially designed and produced for applications in the HVAC systems. Our wide range of standard valve actuators has been developed to operate and position ball valves of different sizes.

PRODUCT FEATURE

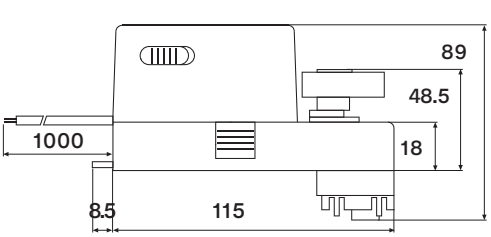
- Torque 5 Nm
- Valve size DN15(½“) / DN20(¾“) / DN25(1“) / DN32(1¼“)
- Power supply AC/DC 24V or AC 230V
- Control modulating DC 0(2)...10 V
- Shaft dimensions - □ 9.0 mm (fixed)
- Selectable direction of rotation of reversing actuator
- Available in high neck and low neck
- Optional 1 adjustable SPDT auxiliary switch
- Adjustable angle of rotation
- Manual over-ride push button when required

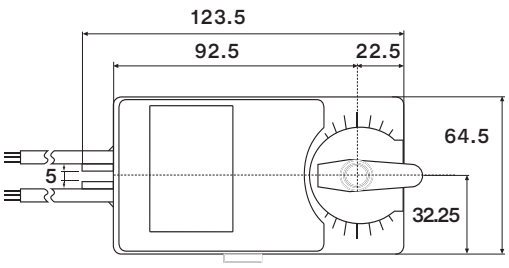
MODEL SELECTION TABLE

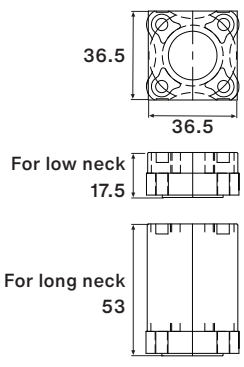
MODEL / TYPE	TORQUE	POWER SUPPLY	RUNNING TIME	AUXILIARY SWITCH
NABM 1.2-05 HN	5 Nm	AC/DC 24 V ± 10%	60...90 sec	-
NABM 1.2-05S1 HN	5 Nm	AC/DC 24 V ± 10%	60...90 sec	1 x SPDT (Adjustable)
NABM 2.2-05 HN	5 Nm	AC 230 V ± 10%	60...90 sec	-
NABM 2.2-05S1 HN	5 Nm	AC 230 V ± 10%	60...90 sec	1 x SPDT (Adjustable)

**Available in low neck*

DIMENSION (mm)







TECHNICAL SPECIFICATION

MODEL NUMBER	NABM 1.2-05 (S1)	NABM 2.2-05 (S1)
TORQUE	5 Nm	5 Nm
DAMPER SIZE	DN15(½“) / DN20(¾“) / DN25(1“) / DN32(1¼“)	DN15(½“)/ DN20(¾“) / DN25(1“) / DN32(1¼“)
SHAFT DIMENSION	☐ 9.0 mm (fixed)*	☐ 9.0 mm (fixed)*
POWER SUPPLY	AC/DC 24 V ± 10%	AC 230 V ± 10%
FREQUENCY	50...60 Hz	50...60 Hz
CONTROL SIGNAL (INPUT)	DC 0(2)...10 V	DC 0(2)...10 V
CONTROL SIGNAL (OUTPUT)	DC 0...10 V	DC 0...10 V
POWER CONSUMPTION • **OPERATING** • **END POSITION**	 3.0 W 2.0 W	 3.0 W 2.0 W
FOR WIRE SIZING	6.0 VA	6.0 VA
ELECTRICAL CONNECTION	1 m Cable	1 m Cable
AUXILIARY SWITCH RATING	2 (1.5) A, AC 250 V	2 (1.5) A, AC 250 V
PROTECTION CLASS	Class III ⏚	Class II ⧈
ANGLE OF ROTATION	90° (95° mechanical)	90° (95° mechanical)
WEIGHT	0.55 Kg	0.55 Kg
LIFE CYCLE	60,000 Rotation	60,000 Rotation
SOUND LEVEL	40 dB	40 dB
IP PROTECTION	IP54	IP54
OPERATING TEMPERATURE	-20°...50° as per IEC 721-3-3	-20°...50° as per IEC 721-3-3
NON-OPERATING TEMPERATURE	-30°...+60° C / IEC 721-3-2	-30°...+60° C / IEC 721-3-2
AMBIENT HUMIDITY	5%...95% rH non condensing / EN	5%...95% rH non condensing / EN
MAINTENANCE	Maintenance Free	Maintenance Free
MODE OF OPERATION	Type I / EN 60730-1	Type I / EN 60730-1
EMC	CE & ISO 9000 EN / EEC	CE & ISO 9000 EN / EEC

**Note that shaft dimension has a tolerance offset of ± 0.2mm.*

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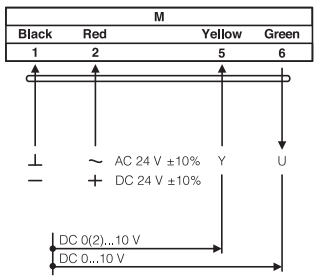
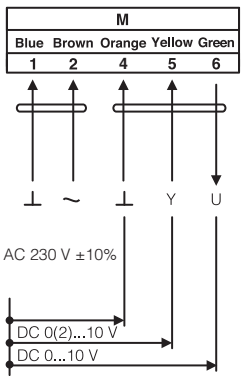
WIRING DIAGRAM NABM...05 (S1) POWER SUPPLY AC/DC 24V OR AC 230V

AC/DC 24V



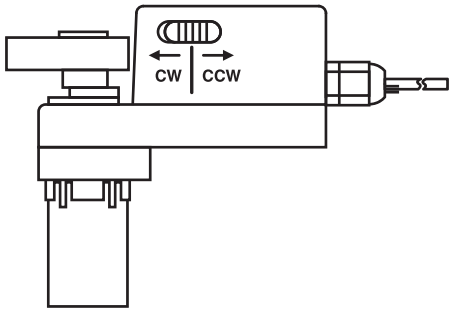
AC 230V



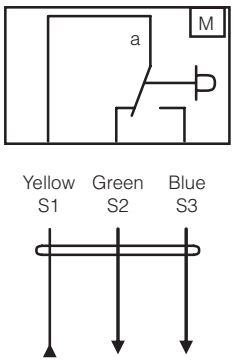
DIRECTION OF ROTATION NABM...05 (S1)

Default factory setting: CW.

Direction of rotation can be change by toggling between CW/ CCW switch on the actuator's housing.



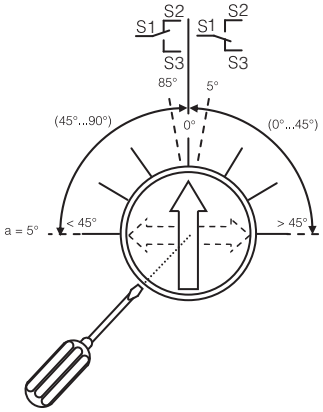
WIRING DIAGRAM NABM...05 (S1) AUXILIARY SWITCH



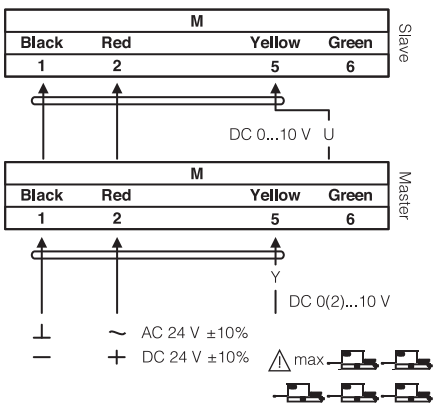
AUXILIARY SWITCH NABM...05 (S1)

Switch a factory-set at 5°.

The auxiliary switch can be optimally adjusted between 0°...90°.



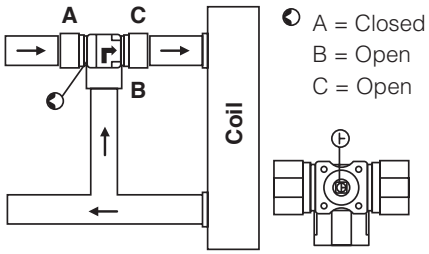
WIRING DIAGRAM NABM...05 (S1) PARALLEL CONNECTION



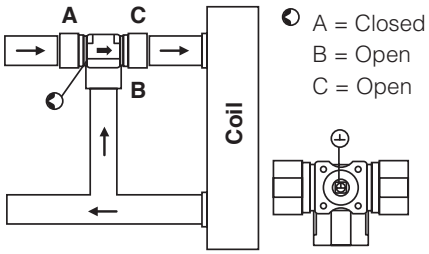
REMARK

During parallel operation, the output signal (terminal 6, DC 0...10 V) of the master actuator must be connected to terminal 5 of the next slave actuator.

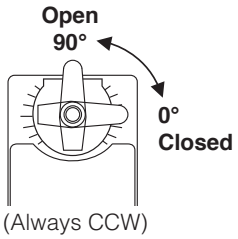
MIXING CLOSED



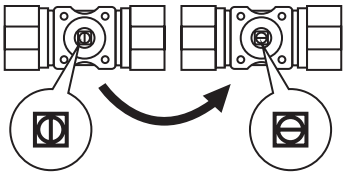
MIXING OPEN



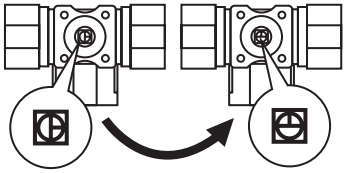
ACTUATOR POSITION

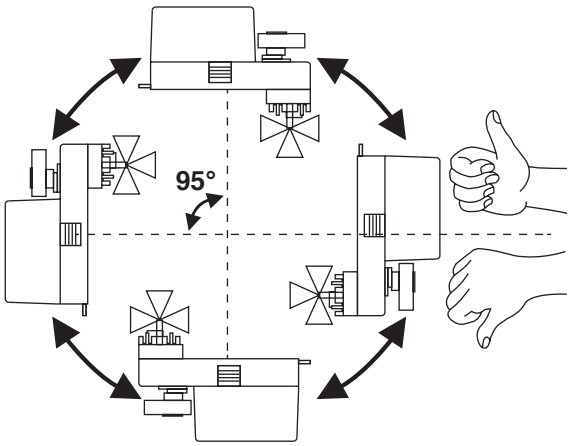


2-way Closed 2-way Open



3-way Closed 3-way Open





IMPORTANT REMARK

For special requirement, consult your local Nenutec's representative.

This actuator includes electrical and electronic components and may not be disposed as household garbage. Please consider the local valid legislation.

AC / DC 24 V: Connect via safety isolating transformer.
AC 230 V: To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductor (with at least a 3mm contact gap.)

The performance specifications are nominal and conform to acceptable industry standards. NENUTEC shall not be liable for damages resulting from misapplication or misuse of its products.