

NRX24-MFT-T N4 Technical Data Sheet

NEMA 4X, Modulating Control, Non-Spring Return, 24 V, Multi-Function Technology®



5-year warranty



Technical Data	
Power Supply	24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%
Power consumption in operation	3.5 W
Power consumption in rest position	1.3 W
Transformer sizing	6 VA (class 2 power source)
Electrical Connection	Screw terminal (for 26 to 14 GA wire), 1/2" conduit connector
Overload Protection	electronic throughout 0...95° rotation
Operating Range	2...10 V (default), 4...20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, PWM, on/off, floating point)
Operating range Y variable	Start point 0.5...30 V End point 2.5...32 V
Input Impedance	100 kΩ for DC 2...10 V (0.1 mA), 500 Ω for 4...20 mA, 1500 Ω for PWM and On/Off
Position Feedback	2...10 V, Max. 0.5 mA, VDC variable
Angle of rotation	Max. 90°, adjustable with mechanical stop
Direction of motion motor	selectable with switch 0/1
Position indication	pointer
Manual override	external push button
Running Time (Motor)	default 150 s, variable 45...150 s
Ambient humidity	max. 95% r.H., non-condensing
Ambient temperature	-22...122°F [-30...50°C]
Storage temperature	-22...122°F [-30...50°C]
Degree of Protection	IP66/67, NEMA 4X, UL Enclosure Type 4X
Housing material	UL94-5VA
Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU
Noise level, motor	45 dB(A)
Servicing	maintenance-free
Quality Standard	ISO 9001
Weight	3.2 lb [1.5 kg]

†Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3

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Wiring Diagrams

INSTALLATION NOTES

- Provide overload protection and disconnect as required.
- Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- Actuators may also be powered by 24 VDC.
- Only connect common to negative (-) leg of control circuits.
- A 500 Ω resistor (ZG-R01) converts the 4 to 20 mA control signal to 2 to 10 VDC.
- For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller; the actuator internal common reference is not compatible.
- IN4004 or IN4007 diode. (IN4007 supplied, Belimo part number 40155).
- Actuators are provided with a numbered screw terminal strip instead of a cable.
- Meets cULus requirements without the need of an electrical ground connection.

WARNING! LIVE ELECTRICAL COMPONENTS!
 During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

