









Technical Data         24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%           Power Supply         24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%           Power Consumption Running         3.5 W           Power Consumption Holding         1.25 W           Transformer Sizing         6 VA (class 2 power source)           Shaft Diameter         9/16" to 3/4" round           Electrical Connection         screw terminal (for 26 to 14 GA wire [heater 15 GA wire]), 1/2" conduit connector           Overload Protection         electronic throughout 0° to 95° rotation           Operating Range Y         DC 210 V (default), 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, floating point point 0, no/off)           Control Operating range variable         starting point DC 0.530 V end point DC 2.532 V           Input Impedance         100 kΩ for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA, 1500 Ω for PWM, floating point and 0n/Off           Feedback Output U         DC 210 V, Max. 0.5 mA, VDC variable           Angle of Rotation         Max. 95°, adjustable with mechanical stop           Torque motor         180 in-lbs [20 Nm]           Direction of Rotation (Motor)         reversible with built-in switch           Position Indication         pointer           Manual Override         external push button           Running Time (Motor)         150 sec           Ambient Temperat		REG. EQUIP. 0 03
Power Consumption Running         3.5 W           Power Consumption Holding         1.25 W           Transformer Sizing         6 VA (class 2 power source)           Shaft Diameter         9/16" to 3/4" round           Electrical Connection         screw terminal (for 26 to 14 GA wire [heater 15 GA wire]), 1/2" conduit connector           Overload Protection         electronic throughout 0° to 95° rotation           Operating Range Y         DC 210 V (default), 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, floating point, on/off)           Control Operating range variable         starting point DC 0.530 V end point DC 0.530 V end point DC 2.532 V           Input Impedance         100 kΩ for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA, 1500 Ω for PWM, floating point and On/Off           Feedback Output U         DC 210 V, Max. 0.5 mA, VDC variable           Angle of Rotation         Max. 95°, adjustable with mechanical stop           Torque motor         180 in-lbs [20 Nm]           Direction of Rotation (Motor)         reversible with built-in switch           Position Indication         pointer           Manual Override         external push button           Running Time (Motor)         150 sec           Ambient Humidity         5 to 95% RH non condensing (EN 60730-1)           Ambient Temperature Range         -22122 °F [-3050 °C]	Technical Data	
Power Consumption Holding       1.25 W         Transformer Sizing       6 VA (class 2 power source)         Shaft Diameter       9/16" to 3/4" round         Electrical Connection       screw terminal (for 26 to 14 GA wire [heater 15 GA wire]), 1/2" conduit connector         Overload Protection       electronic throughout 0° to 95° rotation         Operating Range Y       DC 210 V (default), 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, floating point, on/off)         Control Operating range variable       starting point DC 0.530 V end point DC 0.530 V end point DC 0.532 V         Input Impedance       100 kΩ for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA, 1500 Ω for PWM, floating point and On/Off         Feedback Output U       DC 210 V, Max. 0.5 mA, VDC variable         Angle of Rotation       Max. 95°, adjustable with mechanical stop         Torque motor       180 in-lbs [20 Nm]         Direction of Rotation (Motor)       reversible with built-in switch         Position Indication       pointer         Manual Override       external push button         Running Time (Motor)       150 sec         Ambient Humidity       5 to 95% RH non condensing (EN 60730-1)         Ambient Temperature Range       -22122 °F [-3050 °C]         Storage Temperature Range       -40176 °F [-4080 °C]         Degree of Protection <t< td=""><td>Power Supply</td><td>24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%</td></t<>	Power Supply	24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%
Transformer Sizing       6 VA (class 2 power source)         Shaft Diameter       9/16" to 3/4" round         Electrical Connection       screw terminal (for 26 to 14 GA wire [heater 15 GA wire]), 1/2" conduit connector         Overload Protection       electronic throughout 0° to 95° rotation         Operating Range Y       DC 210 V (default), 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, floating point, on/off)         Control Operating range variable       starting point DC 0.530 V end point DC 2.532 V         Input Impedance       100 kΩ for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA, 1500 Ω for PWM, floating point and On/Off         Feedback Output U       DC 210 V, Max. 0.5 mA, VDC variable         Angle of Rotation       Max. 95°, adjustable with mechanical stop         Torque motor       180 in-lbs [20 Nm]         Direction of Rotation (Motor)       reversible with built-in switch         Position Indication       pointer         Manual Override       external push button         Running Time (Motor)       150 sec         Ambient Humidity       5 to 95% RH non condensing (EN 60730-1)         Ambient Temperature Range       -22122 °F [-3050 °C]         Storage Temperature Range       -40176 °F [-4080 °C]         Degree of Protection       IP66/67, NEMA 4X, UL Enclosure Type 4X         Housing Material	Power Consumption Running	3.5 W
Shaft Diameter9/16" to 3/4" roundElectrical Connectionscrew terminal (for 26 to 14 GA wire [heater 15 GA wire]), 1/2" conduit connectorOverload Protectionelectronic throughout 0° to 95° rotationOperating Range YDC 210 V (default), 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, floating point, on/off)Control Operating range variablestarting point DC 0.530 V end point DC 2.532 VInput Impedance100 kΩ for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA, 1500 Ω for PWM, floating point and On/OffFeedback Output UDC 210 V, Max. 0.5 mA, VDC variableAngle of RotationMax. 95°, adjustable with mechanical stopTorque motor180 in-lbs [20 Nm]Direction of Rotation (Motor)reversible with built-in switchPosition IndicationpointerManual Overrideexternal push buttonRunning Time (Motor)150 secAmbient Humidity5 to 95% RH non condensing (EN 60730-1)Ambient Temperature Range-22122 °F [-3050 °C]Storage Temperature Range-40176 °F [-4080 °C]Degree of ProtectionIP66/67, NEMA 4X, UL Enclosure Type 4XHousing MaterialUL94-5VAAgency Listings†cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/ECNoise Level (Motor)<45 dB (A)	Power Consumption Holding	1.25 W
Electrical Connectionscrew terminal (for 26 to 14 GA wire [heater 15 GA wire]), 1/2" conduit connectorOverload Protectionelectronic throughout 0° to 95° rotationOperating Range YDC 210 V (default), 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, floating point, on/off)Control Operating range variablestarting point DC 0.530 V end point DC 2.532 VInput Impedance100 kΩ for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA, 1500 Ω for PWM, floating point and On/OffFeedback Output UDC 210 V, Max. 0.5 mA, VDC variableAngle of RotationMax. 95°, adjustable with mechanical stopTorque motor180 in-lbs [20 Nm]Direction of Rotation (Motor)reversible with built-in switchPosition IndicationpointerManual Overrideexternal push buttonRunning Time (Motor)150 secAmbient Humidity5 to 95% RH non condensing (EN 60730-1)Ambient Temperature Range-40176 °F [-4080 °C]Degree of ProtectionIP66/67, NEMA 4X, UL Enclosure Type 4XHousing MaterialUL94-5VAAgency Listings†cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/ECNoise Level (Motor)<45 dB (A)	Transformer Sizing	6 VA (class 2 power source)
15 GA wire]), 1/2" conduit connector  Overload Protection electronic throughout 0° to 95° rotation  Operating Range Y  DC 210 V (default), 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, floating point, on/off)  Control Operating range variable starting point DC 0.530 V end point DC 2.532 V  Input Impedance 100 kΩ for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA, 1500 Ω for PWM, floating point and On/Off  Feedback Output U  DC 210 V, Max. 0.5 mA, VDC variable  Angle of Rotation Max. 95°, adjustable with mechanical stop  Torque motor 180 in-lbs [20 Nm]  Direction of Rotation (Motor) reversible with built-in switch  Position Indication pointer  Manual Override external push button  Running Time (Motor) 150 sec  Ambient Humidity 5 to 95% RH non condensing (EN 60730-1)  Ambient Temperature Range -40176 °F [-4080 °C]  Degree of Protection IP66/67, NEMA 4X, UL Enclosure Type 4X  Housing Material UL94-5VA  Agency Listings† cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC  Noise Level (Motor) <45 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Shaft Diameter	9/16" to 3/4" round
Operating Range Y       DC 210 V (default), 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, floating point, on/off)         Control Operating range variable         Imput Impedance       100 kΩ for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA, 1500 Ω for PWM, floating point and 0n/off         Feedback Output U       DC 210 V, Max. 0.5 mA, VDC variable         Angle of Rotation       Max. 95°, adjustable with mechanical stop         Torque motor       180 in-lbs [20 Nm]         Direction of Rotation (Motor)       reversible with built-in switch         Position Indication         Manual Override       external push button         Running Time (Motor)       150 sec         Ambient Humidity       5 to 95% RH non condensing (EN 60730-1)         Ambient Temperature Range       -40176 °F [-3050 °C]         Storage Temperature Range       -40176 °F [-4080 °C]         Degree of Protection       IP66/67, NEMA 4X, UL Enclosure Type 4X         Housing Material       UL94-5VA         Agency Listings†       cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC         Noise Level (Motor)       <45 dB (A)	Electrical Connection	
(500 Ω, 1/4 W resistor), variable (VDC, floating point, on/off)  Control Operating range variable starting point DC 0.530 V end point DC 2.532 V  Input Impedance 100 kΩ for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA, 1500 Ω for PWM, floating point and On/off  Feedback Output U DC 210 V, Max. 0.5 mA, VDC variable  Angle of Rotation Max. 95°, adjustable with mechanical stop  Torque motor 180 in-lbs [20 Nm]  Direction of Rotation (Motor) reversible with built-in switch  Position Indication pointer  Manual Override external push button  Running Time (Motor) 150 sec  Ambient Humidity 5 to 95% RH non condensing (EN 60730-1)  Ambient Temperature Range -40176 °F [-4080 °C]  Storage Temperature Range -40176 °F [-4080 °C]  Degree of Protection IP66/67, NEMA 4X, UL Enclosure Type 4X  Housing Material UL94-5VA  Agency Listings† cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC  Noise Level (Motor) <45 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Overload Protection	electronic throughout 0° to 95° rotation
$\begin{array}{c} \text{end point DC } 2.532 \text{ V} \\ \text{Input Impedance} \\ \hline \\ 100 \text{ k}\Omega \text{ for 2 to 10 VDC (0.1 mA), 500 }\Omega \text{ for } 4 \text{ to 20 mA, 1500 }\Omega \text{ for PWM, floating point and On/Off} \\ \hline \\ \hline \\ \text{Feedback Output U} \\ \hline \\ \text{Angle of Rotation} \\ \hline \\ \text{Angle of Rotation} \\ \hline \\ \text{Max. 95}^\circ, \text{ adjustable with mechanical stop} \\ \hline \\ \text{Torque motor} \\ \hline \\ \text{Direction of Rotation (Motor)} \\ \hline \\ \text{Position Indication} \\ \hline \\ \text{Manual Override} \\ \hline \\ \text{Running Time (Motor)} \\ \hline \\ \text{Ambient Humidity} \\ \hline \\ \text{Ambient Temperature Range} \\ \hline \\ \text{-22122}^\circ \text{F [-3050}^\circ \text{C]} \\ \hline \\ \text{Storage Temperature Range} \\ \hline \\ \text{-40176}^\circ \text{F [-4080}^\circ \text{C]} \\ \hline \\ \text{Degree of Protection} \\ \hline \\ \text{Housing Material} \\ \hline \\ \text{Agency Listings}^\dagger \\ \hline \\ \text{cULus acc. to UL60730-1A/-2-14, CAN/CSA} \\ \hline \\ \text{E60730-1, CSA C22.2 No 24-93, CE acc. to } \\ \hline \\ \text{89/336/EC} \\ \hline \\ \hline \\ \text{Quality Standard} \\ \hline \\ \hline \\ \text{ISO 9001} \\ \hline \end{array}$	Operating Range Y	(500 Ω, 1/4 W resistor), variable (VDC,
4 to 20 mA, 1500 Ω for PWM, floating point and On/Off  Feedback Output U DC 210 V, Max. 0.5 mA, VDC variable  Angle of Rotation Max. 95°, adjustable with mechanical stop  Torque motor 180 in-lbs [20 Nm]  Direction of Rotation (Motor) reversible with built-in switch  Position Indication pointer  Manual Override external push button  Running Time (Motor) 150 sec  Ambient Humidity 5 to 95% RH non condensing (EN 60730-1)  Ambient Temperature Range -22122 °F [-3050 °C]  Storage Temperature Range -40176 °F [-4080 °C]  Degree of Protection IP66/67, NEMA 4X, UL Enclosure Type 4X  Housing Material UL94-5VA  Agency Listings† cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC  Noise Level (Motor) <45 dB (A)  Servicing maintenance free  Quality Standard	. 5 5	end point DC 2.532 V
Angle of Rotation Max. 95°, adjustable with mechanical stop Torque motor 180 in-lbs [20 Nm]  Direction of Rotation (Motor) reversible with built-in switch Position Indication pointer  Manual Override external push button  Running Time (Motor) 150 sec  Ambient Humidity 5 to 95% RH non condensing (EN 60730-1)  Ambient Temperature Range -22122 °F [-3050 °C]  Storage Temperature Range -40176 °F [-4080 °C]  Degree of Protection IP66/67, NEMA 4X, UL Enclosure Type 4X  Housing Material UL94-5VA  Agency Listings† cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC  Noise Level (Motor) <45 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Input Impedance	4 to 20 mA, 1500 $\Omega$ for PWM, floating point
Torque motor 180 in-lbs [20 Nm]  Direction of Rotation (Motor) reversible with built-in switch  Position Indication pointer  Manual Override external push button  Running Time (Motor) 150 sec  Ambient Humidity 5 to 95% RH non condensing (EN 60730-1)  Ambient Temperature Range -22122 °F [-3050 °C]  Storage Temperature Range -40176 °F [-4080 °C]  Degree of Protection IP66/67, NEMA 4X, UL Enclosure Type 4X  Housing Material UL94-5VA  Agency Listings† cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC  Noise Level (Motor) <45 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Feedback Output U	DC 210 V, Max. 0.5 mA, VDC variable
Direction of Rotation (Motor)  Position Indication  Manual Override  Running Time (Motor)  Ambient Humidity  Ambient Temperature Range  Degree of Protection  Housing Material  Agency Listings†  CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC  Noise Level (Motor)  Pointer  Running Time (Motor)  150 sec  25 to 95% RH non condensing (EN 60730-1)  5 to 95% RH non condensing (EN 60730-1)  5 to 95% RH non condensing (EN 60730-1)  6 to 95% RH non condensing (EN 60730-1)  7 to 95% RH non condensing (EN 60730-1)  8 to 95% RH non condensing (EN 60730-1)  8 to 95% RH non condensing (EN 60730-1)  C22122 °F [-3050 °C]  8 to 95% RH non condensing (EN 60730-1)  C22122 °F [-3050 °C]  8 to 95% RH non condensing (EN 60730-1)  C22122 °F [-3050 °C]  8 to 95% RH non condensing (EN 60730-1)  C22122 °F [-3050 °C]  Storage Temperature Range  -40176 °F [-4080 °C]  C22122 °F [-3050 °C]  C22122 °F [-3050 °C]  C33164 °F [-4080 °C]  C45164 °F [-4080 °C]  C45 dB (A)  Servicing  Maintenance free  Quality Standard	Angle of Rotation	Max. 95°, adjustable with mechanical stop
Position Indication pointer  Manual Override external push button  Running Time (Motor) 150 sec  Ambient Humidity 5 to 95% RH non condensing (EN 60730-1)  Ambient Temperature Range -22122 °F [-3050 °C]  Storage Temperature Range -40176 °F [-4080 °C]  Degree of Protection IP66/67, NEMA 4X, UL Enclosure Type 4X  Housing Material UL94-5VA  Agency Listings† cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC  Noise Level (Motor) <45 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Torque motor	180 in-lbs [20 Nm]
Manual Override external push button  Running Time (Motor) 150 sec  Ambient Humidity 5 to 95% RH non condensing (EN 60730-1)  Ambient Temperature Range -22122 °F [-3050 °C]  Storage Temperature Range -40176 °F [-4080 °C]  Degree of Protection IP66/67, NEMA 4X, UL Enclosure Type 4X  Housing Material UL94-5VA  Agency Listings† cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC  Noise Level (Motor) <45 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Direction of Rotation (Motor)	reversible with built-in switch
Running Time (Motor)  Ambient Humidity  5 to 95% RH non condensing (EN 60730-1)  Ambient Temperature Range  -22122 °F [-3050 °C]  Storage Temperature Range  -40176 °F [-4080 °C]  Degree of Protection  IP66/67, NEMA 4X, UL Enclosure Type 4X  Housing Material  UL94-5VA  Agency Listings†  cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC  Noise Level (Motor)  Agency Listings†  waintenance free  Quality Standard	Position Indication	pointer
Ambient Humidity  Ambient Temperature Range Storage Temperature Range Pegree of Protection Housing Material Agency Listings†  CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC  Noise Level (Motor)  Ambient Humidity  -22122 °F [-3050 °C] -40176 °F [-4080 °C] -401	Manual Override	external push button
Ambient Temperature Range         -22122 °F [-3050 °C]           Storage Temperature Range         -40176 °F [-4080 °C]           Degree of Protection         IP66/67, NEMA 4X, UL Enclosure Type 4X           Housing Material         UL94-5VA           Agency Listings†         cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC           Noise Level (Motor)         <45 dB (A)		150 sec
Storage Temperature Range	Ambient Humidity	5 to 95% RH non condensing (EN 60730-1)
Degree of Protection IP66/67, NEMA 4X, UL Enclosure Type 4X Housing Material UL94-5VA Agency Listings† CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC  Noise Level (Motor) <45 dB (A) Servicing maintenance free  Quality Standard ISO 9001	Ambient Temperature Range	
Housing Material   UL94-5VA	Storage Temperature Range	
Agency Listings†         cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC           Noise Level (Motor)         <45 dB (A)	Degree of Protection	IP66/67, NEMA 4X, UL Enclosure Type 4X
E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC     Noise Level (Motor)   <45 dB (A)     Servicing   maintenance free     Quality Standard   ISO 9001	Housing Material	UL94-5VA
Servicing maintenance free  Quality Standard ISO 9001	Agency Listings†	E60730-1, CSA C22.2 No 24-93, CE acc. to
Quality Standard ISO 9001	Noise Level (Motor)	<45 dB (A)
	Servicing	maintenance free
Weight 3.5 lb [1.6 kg]	-	1
	Weight	3.5 lb [1.6 kg]

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

Torque min. 180 in-lb, for control of damper surfaces up to 45 sq. ft.

## **Application**

For proportional modulation of dampers in HVAC systems. Actuator sizing should be done in accordance with the damper manufacturer's specifications. The actuator is mounted directly to a damper shaft up to 34" in diameter by means of its universal clamp. The default parameters for 2 to 10 VDC applications of the ...MFT actuator are assigned during manufacturing. If necessary, custom versions of the actuators can be ordered. The parameters can be changed by two means: pre-set and custom configurations from Belimo or on-site configurations using the Belimo PC-Tool software.

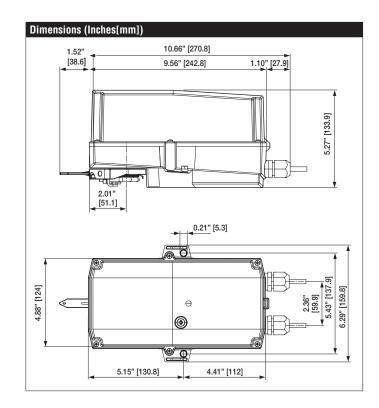
### Operation

The actuator is not provided with and does not require any limit switches, but is electronically protected against overload. The anti-rotation strap supplied with the actuator will prevent lateral movement.

The AMX24-MFT-T N4 provides 95° of rotation and a visual indicator indicates position of the actuator. When reaching the damper or actuator end position, the actuator automatically stops. The gears can be manually disengaged with a button on the actuator cover.

The AMX24-MFT-T N4 actuator uses a brushless DC motor, which is controlled by an Application Specific Integrated Circuit (ASIC). The ASIC monitors and controls the actuator's rotation and provides a digital rotation sensing (DRS) function to prevent damage to the actuator in a stall condition. Power consumption is reduced in holding mode.

Add-on auxiliary switches or feedback potentiometers are easily fastened directly onto the actuator body for signaling and switching functions.





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

### Typical Specification

Proportional control damper actuators shall be electronic direct-coupled type, which require no crank arm and linkage and be capable of direct mounting to a shaft up to 1.05" diameter. Actuators must provide proportional damper control in response to a 2 to 10 VDC or, with the addition of a 500  $\Omega$  resistor, a 4 to 20 mA control input from an electronic controller or positioner. Actuators shall have brushless DC motor technology and be protected from overload at all angles of rotation. Actuators shall have reversing switch and manual override on the cover. If required, actuator will be provided with screw terminal strip for electrical connections (AMX24-SR-T and NMX24-SR-T). Run time shall be constant and independent of torque. A 2 to 10 VDC feedback signal shall be provided for position indication. Actuators shall be cULus listed, have a 5-year warranty, and be manufactured under ISO 9001 International Quality Control Standards. Actuators shall be as manufactured by Belimo.

#### **Wiring Diagrams**



Actuators with appliance cables are numbered.



Provide overload protection and disconnect as required.



Actuators may also be powered by 24 VDC.



Only connect common to negative (-) leg of control circuits.



A 500  $\Omega$  resistor (ZG-R01) converts the 4 to 20 mA control signal to 2 to 10 VDC.



Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 VAC line.



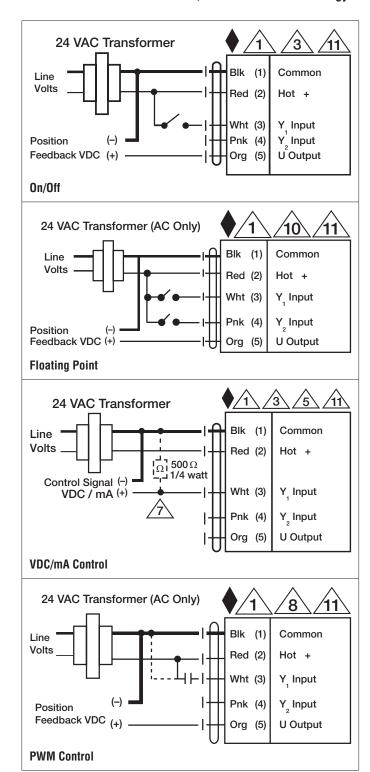
For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller; the actuator internal common reference is not compatible.



Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.



IN4004 or IN4007 diode. (IN4007 supplied, Belimo part number 40155).



# **AMX24-MFT N4**

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



