

# Direct Coupled Damper Actuators—Non-Spring Return

## N10 Series: MN6110; MN7510

### Non-Spring Return Direct Coupled Actuator, 88 lb-in



The MN7510 is a 88 lb-in (10Nm), non-spring return, direct-coupled, low voltage actuator that accepts adjustable modulating (0/2-10 Vdc) or on/off (SPDT) control for: air dampers, air handling units, ventilation flaps, louvers, and ball valves.

- Declutch for manual adjustment
- Adjustable mechanical end limits
- Removable access cover for direct wiring
- Mountable in any orientation
- Function selection switch for selecting modulating or floating/2-position control

**Actuator Type:** Damper; Valve  
**Rotational Stroke:** 95 ±3 degrees  
**Fail Safe Mode:** Non-Spring Return  
**Torque Rating:** 88 lb-in. (10 Nm)  
**Dimensions, Approximate:** 5.23 in high x 2.60 in wide x 2.44 in deep (134 mm high x 66 mm wide x 62 mm deep.)  
**External Auxiliary Switches Available:** No  
**Electrical Connections:** Enclosed screw terminal strip (22 to 14 AWG)  
**Environmental Rating:** NEMA2  
**Ingress Protection Rating:** IP54  
**Frequency:** 50 Hz; 60 Hz  
**Manual operation:** Declutch mechanism  
**Mounting:** Direct Coupled  
**Maximum Noise Rating, Driving (dBA @ 1m):** 35  
**Rotation to Open:** By switch  
**Rotational Stroke Adjustment:** Dual Integral Adj. Stops (3 degree increments)

**Compatible Damper Shafts:** 1/4 to 1/2 in. square or 3/8 to 5/8 in. round (6 to 13 mm square or 8 to 16 mm round)  
**Shaft Adapter Type:** U-bolt clamp  
**Supply Voltage:** 24 Vac +20%, -15%, 24 Vdc  
**Materials:** Plenum rated plastic housing  
**Operating Humidity Range (% RH):** 5 to 95% RH, non-condensing  
**Ambient Temperature Range:** -5 F to +140 F (-20 C to +60 C)  
**Storage Temperature Range:** -22 F to +176 F (-30 C to +80 C)  
**Weight:** 1.5 lb (0.68 kg)  
**Includes:** Mounting bracket, screws, shaft adapter, water-tight strain-relief cable fittings  
**Comments:** Integral 1/2 in. NPSM conduit connection.  
**Approvals**  
**CE:** 89/336/ECC, 73/23/EEC  
**C-Tick:** N314  
**Underwriters Laboratories, Inc:** UL873, Plenum Rated  
**Canadian Underwriters Laboratories, Inc:** cUL C22.2 No. 24-93

	Product Number	Control Signal	Feedback	Timing (seconds) Nominal Driving @ 60 Hz	Switch Ratings	Power Consumption, Driving	Number of Internal Auxiliary Switch
*	MN6110A1003/U	On/Off; SPDT; Floating	—	95 sec	—	5 VA	0
*	MN6110A1201/U	On/Off; SPDT; Floating	—	95 sec	30 Vdc max., 3 A Class II	5 VA	2
*	MN7510A2001/U	(0)2-10 Vdc (4-20 mA w/500 ohm resistor); On/Off; SPDT; Floating	(0)2-10 Vdc (max. output: ±1.0 mA)	95 sec	—	5 VA	0
*	MN7510A2209/U	(0)2-10 Vdc (4-20 mA w/500 ohm resistor); On/Off; SPDT; Floating	(0)2-10 Vdc (max. output: ±1.0 mA)	95 sec	30 Vdc max., 3 A Class II	5 VA	2

\* TRADELINE models • SUPER TRADELINE models

Commercial Components