

# Direct Coupled Damper Actuators—Non-Spring Return

## N05 Series: MN6105; MN7505

### Non-Spring Return Direct Coupled Actuator, 44 lb-in



The MN7505W is a 44 lb-in (5Nm), 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. This model includes a 3 foot whip.

- 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
- Models available with three-foot, 18 AWG color-coded cable.

**Actuator Type:** Damper; Valve  
**Rotational Stroke:** 95 ±3 degrees  
**Fail Safe Mode:** Non-Spring Return  
**Torque Rating:** 44 lb-in. (5 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  
**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	Cable Entry	Electrical Connections	Electrical Connection Length		Number of Internal Auxiliary Switch
									(inch)	(m)	
*	MN6105A1011/U	On/Off; SPDT; Floating	—	95 sec	—	5 VA	—	Enclosed screw terminal strip (22 to 14 AWG)	—	—	0
*	MN6105A1201/U		—	95 sec	30 Vdc max., 3 A Class II	5 VA	—		—	—	2
*	MN6105W1011/U		—	95 sec	—	5 VA	Threaded conduit connector	18 AWG color-coded cable	36 in.	0.9 m	0
*	MN7505A2001/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	—	Enclosed screw terminal strip (22 to 14 AWG)	—	—	0
*	MN7505A2209/U		(0)2-10 Vdc (max. output: ±1.0 mA)	95 sec	30 Vdc max., 3 A Class II	5 VA	—		—	—	2
*	MN7505W2001/U		(0)2-10 Vdc (max. output: ±1.0 mA)	95 sec	—	5 VA	Threaded conduit connector	18 AWG color-coded cable	36 in.	0.9 m	0

\* TRADELINE models • SUPER TRADELINE models

Commercial Components