Spring Return Direct Coupled Actuator

S05 Series (MS4105; MS7105; MS7405; MS7505; MS8105)

MS4105, MS7405, MS7505, MS8105 Spring Return Direct Coupled Actuators (DCA) are used within heating, ventilating, and air-conditioning (HVAC) systems. They can drive a variety of quarter-turn, final control elements requiring spring return fail-safe operation.

FEATURES

- Volume control dampers, mounted directly to the drive shaft or remotely (with the use of accessory hardware).
- Quarter-turn rotary valves, such as ball or butterfly valves mounted directly to the drive shaft.
- Linear stroke globe or cage valves mounted with linkages to provide linear actuation.

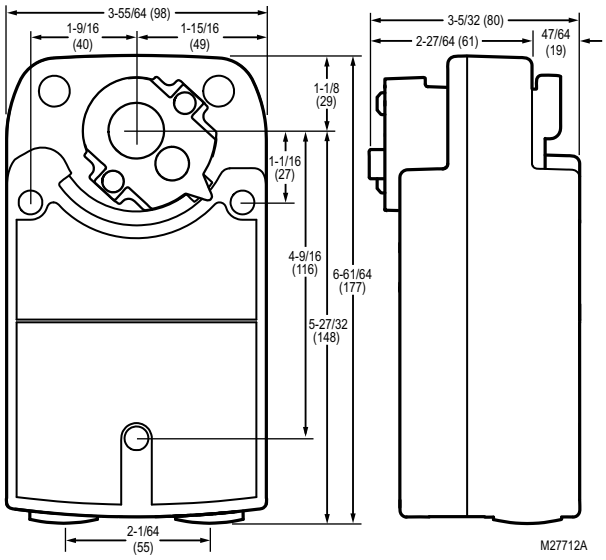
SPECIFICATIONS

Actuator Type	Damper, Valve
Rotational Stroke	95 ±3 degrees
Fail Safe Mode	Spring Return
Rated Torque	44 lb-in. (5 Nm)
External Auxiliary Switches Available	No
Electrical Connections	Enclosed screw terminal strip (22 to 14 AWG)
Environmental Rating	NEMA2
Frequency	50 Hz, 60 Hz
Mounting	Direct Coupled
Maximum Noise Rating, Holding (dBA @ 1m)	20 (no audible noise)
Maximum Noise Rating, Driving (dBA @ 1m)	50
Timing, Nominal Driving at 60 Hz	45 sec. or 90 sec.
Power Consumption, Driving	7.5 VA, 8 VA, or 11 VA
Rotation to Open	By switch
Rotational Stroke Adjustment	Mechanically limited 5 degree increments
Compatible Damper Shafts	3/8 to 5/8 round or 1/4 to 1/2 square (9 to 16 round or 6 to 13 square)
Shaft Adapter Type	Self-centering clamping
Materials	Plenum rated plastic housing
Ingress Protection Rating	IP54
Operating Humidity Range (% RH)	5 to 95% RH, non-condensing
Ambient Temperature Range	-40 F to 149F (-40 C to 65 C) -22 F to 150 F (-30 C to 65 C) Two-position models only
Temperature Ratings (Shipping)	-40 F to 150F (-40 C to 65 C)
Storage Temperature Range	-40 F to 150F (-40 C to 65 C)
Weight	3.5 lb (1.6 kg)
Includes	Mounting bracket, self-centering shaft adapter

APPROVALS

CE	2006/95/EC (Low Voltage Directive) EMC 2004/108/EC
C-Tick	N314
International Electrotechnical Commission	IEC 60730-1 and Part 2—14
Underwriters Laboratories, Inc.	UL 873 UL1097 for Double Insulation

DIMENSIONS DIAGRAM



SUBMITTAL SHEETS