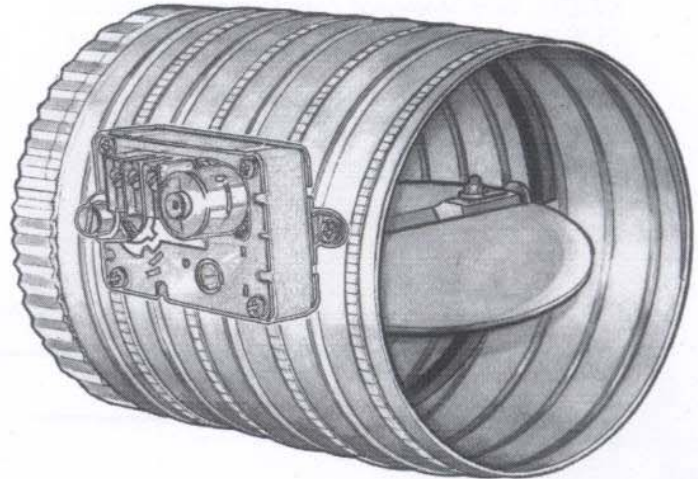


4075 Variable Volume Low or Medium Pressure Modulating Damper

The Young 4075 round modulating damper can be used on medium pressure systems up to 3" W.C. to provide zone temperature control.

FEATURES

- Heavy duty spiral shell with rolled-in stiffening beads for superior rigidity. Shell has one crimped and one straight end, with side mounted motor control box.
- New 18 ga. "V" style damper blade is secured with steel shafts and oil impregnated bronze bearings requiring no lubrication.
- Open/close cycle.
- Available for heat or cool only or with manual or automatic changeover. For auto-changeover see model 2075.
- Hunting and temperature overruns are held to a minimum.
- Adjustable minimum position setting. Simple set screw adjustment and instructions included.



OPERATION

The 4075 is operated by a 3-wire, 24 volt, stall-type reversing motor. In normal zone control operations, the damper takes 6 minutes to go from the full open to the full closed position and vice versa. A SPDT thermostat with center-off dead-band for floating control must be used.

- T-312 or T-641 dead-band floating control thermostat for heat only or cool only (for automatic changeover, see 2075).
- T-313-CE dead-band floating control thermostat for manual changeover.
- T-322 proportional digital thermostat.
- A201052 auxiliary switch for micro switch control of exterior equipment.

AVAILABLE SIZES

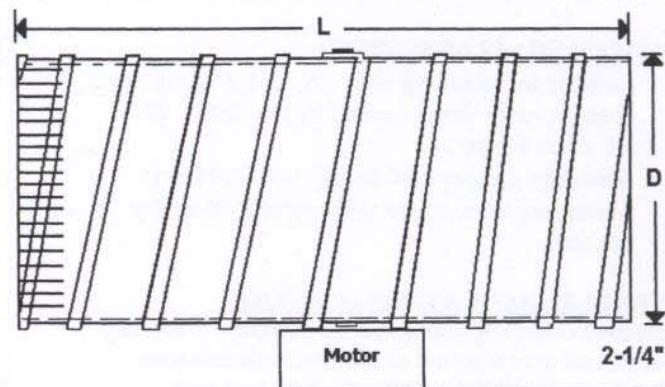
6", 8", 10", 12", 14", 16", 18" and 20". Damper length is 10" for 6" - 10" diameters. Length for 12" - 20" is diameter plus 1". Please call the factory for intermediate sizes.

OPTIONS

- 90 second timing (4075-ML6161H90 for faster response time.)
- 0-10 or 4-20 MA motor (4075-ML7161)
- Spring return motor (4075-BLF24)

OPTIONAL CONTROLS

- Variety of other manufacturer's motors.
- T-stats
- Auxiliary micro switch.



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IMPORTANT: The motor specifications given in this publication do not include normal manufacturing tolerances. Therefore, a given unit may not exactly match the listed specifications. Also, this product is tested and calibrated under closely controlled conditions, and some minor differences in performance can be expected if those conditions are changed.

MODEL 4075 Motorized Zone Damper actuators are 35 lb-in. torque with 7 minute timing, which control 90° dampers.

ELECTRICAL RATINGS (Actuators):

Input Voltage: 24 VAC + 20%/-30%, 50-60 Hz.

Power Consumption (Maximum) at 24 VAC: 2.0W, 8.5mA, 2.2 VA.

TEMPERATURE RATINGS:

Ambient: 32° F to 130° F (0° C to 52° C).

Shipping and storage: -20° F to 130° F (-29° C to 40° C).

HUMIDITY RATINGS: 5% TO 95% RH non-condensing

DAMPER LEAKAGE: 1% nominal of flow.

TORQUE RATINGS:

Running: 35 lb-in. (4.0 N.m)

Breakaway: 35 lb-in. (4.0 N.m)

Stall: 45 lb-in (5.0 N.m) minimum. 65 lb-in (7.4) N.m) maximum.

MOTOR TIMING: 7 minutes

APPROVALS: Underwriter's Laboratories.

Component Recognized: File No. E4436, Guide No. XAPX, CSA certified.

TABLE 1 - DAMPER DIMENSIONS

Diameter in.	Length in.	Pressure Drop* in. wc	Flow Chart cfm
6	12"	.05	180
		.075	210
		.1	240
8	12"	.05	410
		.075	485
		.1	580
10	12"	.05	693
		.075	849
		.1	980
12	13"	.05	1200
		.075	1460
		.1	1600
14	15"	.05	1336
		.075	1636
		.1	1890
16	17"	.05	1690
		.075	2080
		.1	2400

* Pressure drop in zone dampers: .05 to .075 in. wc normal operating range.

DAMPER SHAFT MOUNTING

- Suitable for mounting onto 3/8" to 1/2" square or round damper shafts secured by two 1/4 in. 28 NF Allen screws.
- Minimum damper shaft length 1-3/4" (45mm).
- Motor may be mounted with motor shaft in any position.

CAUTION

- Disconnect power supply before beginning installation to prevent electrical shock or equipment damage.
- Never turn the motor shaft by hand or with a wrench because damage to the gear train can result.

PARALLEL ACTUATORS - CAUTION

Actuators of similar timing can vary slightly in driving speeds, and over a period of time multiple actuators driving in parallel may not be in synch with each other. In normal operation, if all actuators are driven to the fully open or fully closed position, the actuators will again start out in synch with each other.

	Watts	Amperes	VA
ML6161A,B	2.0	0.085	2.04
ML7161A	4.5	0.2	4.8