



Young Regulator Co.

7100 Krick Rd • Walton Hills, OH 44146
 P: 440-232-9700 • F: 440-232-8266
www.youngregulator.com

Submit 4081 – 1-10

Model 4081

*Round Variable Volume
 Pneumatic Damper*

Application and Design

The Young 4081 Round pneumatic damper is ideal for pressure dependent VAV zone control, air inlet, and exhaust vents, although it may be used to control air in any branch duct. Damper is designed to work with low pressure systems up to 1" W.C., and is driven by a 5 to 10 lb. spring range pneumatic actuator installed in the factory. Damper operation is direct-acting, normally closed. The actuator can be operated from a pneumatic thermostat or static pressure controls. Units are simple to understand and install while providing the comfort of modulating VAV. This damper is perfect for retrofit. Actuator change is quick and easy and the noise level and air velocity changes are kept to a minimum. The minimum position stop is easily adjusted.



STANDARD CONSTRUCTION	
One end straight, one end crimped	
Shell	4" – 10" – 24 ga. 10" – 20" – 20 ga. Galvanized Steel
Blade	20 ga. Galvanized "V" Blade
Shaft	½" Plated Steel
Bushing	Oil Impregnated Bronze
Seals	EPDM Rubber

SIZE INFORMATION	
One end straight, one end crimped, Rolled stiffening beads	
Diameter	4" – 20"
Shell Length	8"
Shells greater than 14" diameter will be spiral construction	

KMC MCP-3631-3000 PNEUMATIC ACTUATOR	
Direct coupled rotary, 5-10 lb. PSI. Gas filled nylon body w/ neoprene diaphragm. Pneumatic device must be supplied with clean, dry air. Any other medium (e.g. oil or moisture contaminate) will cause the devise to fail	
Normal Rotation	100 degrees
Spring Range	5 - 10 psi
Supply Pressure	0 - 20 psig, 30 psig maximum
Extended Torque	42/85 in. lbs. Based on 0 and 20 psi applied
Supply Connection	3/16" fitting for 1/4" OD polyethylene tube
For 1/2" round and 3/8" square damper shaft	

OPTIONS	
8-13 psi range	Normally Open

QUANTITY	DIAMETER	NOTES

PROJECT	LOCATION
CONTRACTOR	DESIGN SPECIFIER