



Young Regulator Co.

7100 Krick Rd • Walton Hills, OH 44146

P: 440-232-9700 • F: 440-232-8266

www.youngregulator.com

Submit 3092 – 1-10

Model 3092

Rectangular Bypass Damper

Application and Design

The Young Regulator 3092 rectangular bypass damper regulates the total airflow in the system by diverting the excess airflow through a ducted return or ceiling plenum.

An increase in static pressure is sensed by the built in static pressure sensor/controller through the probe. At the desired static pressure, sensed by the solid-state pressure controller and adjustable by the installer, motor will begin to modulate the damper open to bypass the excess air flow and pressure. The damper will open until the desired static pressure is attained. Damper blade will stall and pressure will be maintained until another change in pressure. If zones are satisfied and more zone dampers close, bypass damper will open further. If zones require more air and zone dampers open, pressure reducing damper sensor will sense a decrease in pressure and the bypass damper will close.



STANDARD CONSTRUCTION	
Bypass assembly of damper, actuator and static pressure sensor are pre-wired at the factory for a reliable, economical means of controlling pressure in a pressure dependant VAV system	
Frame	14 ga. Roll Formed Galvanized Steel
Blades	16 ga. Galvanized
Shaft	1/2" Plated Steel
Bearings	Oil Impregnated Bronze
Seal	Low Leak Rubber Blade and Stainless Steel Spring Jam Seals
Mounting Plate	5" Wide x Damper Height
STATIC PRESSURE SENSOR / CONTROLLER	
Solid State design with built-in LED lights to indicate damper operation and a 15 second time delay to protect the motor and static pressure switch from short cycling on the close	
Differential Pressure Setpoint Range	.17" w.c. to 2.0" w.c.

Operating Range	35° to 140°F
Electrical Switch	Floating Point, Single Pole/Double Throw with Integral Arc Suppression. Rated 1.0 amps @ 24 Vac
Compliance	UL Listed
Enclosure	NEMA 1
ACTUATOR	
Fast Response Honeywell ML6161. Non Spring Return, Direct-Coupled	
Volts	24V
Watts	2
VA	2.2
Amp	0.085
Timing	90 sec
Torque	35 in. lb.
Size	8x8 - 48x48
Built in motor stop for minimum and maximum air	

QUANTITY	WIDE	HIGH	NOTES

PROJECT	LOCATION
CONTRACTOR	DESIGN SPECIFIER