FAQ – Air Wave Switch

AW-10, 12 and 14 are Miller Edge air wave switch systems. Each system consists of an air pressure wave which is led, via a hose or pipe, to a diaphragm contact. This contact converts the positive or negative pressure wave respectively into an electrical contact and pulse. The contact is of short duration, due to the fact that the overpressure escapes through a valve opening.



- Q. What is an Air-Wave Switch?
- A. The patented Miller Edge Air-Wave Switch is an air pressure activated door/gate edge reversing switch.

Pressure on a Miller Air Wave (MAW) edge or a pneumatic hose, causes the internal contacts to make or break, thus causing the door or gate operator to respond accordingly.

- Q. Can I configure the air wave switch as a Normally Closed (N.C.) Switch?
- A. Yes. All Air-Wave switches ship Normally Open (N.O.), but can be changed in the field to N.C.
- Q. Is changing from N.O. (Normally Open) to N.C. (Normally Closed) a simple task?
- A. Yes. If your installation requires a N.C. input to the edge/safety terminal, just move the airline from the center nipple on the switch to the side nipple, and then, utilizing your DVM, you will re-adjust your switch contacts settings with the adjustment screw located on the switch.
- Q. How would I do that?
- A. Put your DVM on the ohms scale, and attach one probe to each Air Wave switch wire. Slowly turn the screw clockwise until the meter shows continuity. Apply pressure to the safety edge and observe that your meter reads no continuity upon edge compression. If it does not, go ccw on the adjustment screw ~ 1/8 of a turn, and check again. If ok, now check that when door is travelling down vibration isn't tripping the switch (causing door to reverse without pressure on the edge). If vibration is setting it off, go cw on the screw ~1/8 of a turn. All should be fine tuned now, of course verifying that door only reverses when edge comes in contact with an object.
- Q. My door is 30 feet wide. Will a Miller Edge Air Wave Edge (MAW) System be appropriate?
- A. Yes. Protecting openings up to 60 feet wide is achievable.
- Q. I purchased an AW-12 to use with my pneumatic hose kit. The hose diameters are different from the astragal hose to the air wave switch. What do I do?A. You need a hose adaptor 7/16" to 3/32". The ME P/N is 218-45-10.