RECESSED
HIGH SECURITY CONTACTS
INSTALLATION INSTRUCTIONS

FLAIR ELECTRONICS

Recessed BMS Switches

PRINCIPAL OF OPERATION - Each Switch Case contains one reed switch of different magnetic sensitivity to the others. This is the magnetic tamper. When the door is closed and the Magnet is in the Balanced Position, two reed switches close and the magnetic tamper reed switch stays open. If an external magnet is placed next to the Switch in an effort to bypass the Magnetic Contact, the magnetic tamper will close causing an alarm.

PART NUMBERS: PFC48V BMS, PFC42YBMS, PFC42V BMS, MSS100-6Y BMS, MSS100-4Y BMS and MSS100-4V BMS

MOUNTING: Mount the Switch Case and Magnet Case in door frame and door or window and window frame making sure that the Magnet is aligned with the Switch. The Switch and Magnet Cases should be well fixed in place and there should not be any movement within the door or door frame. The gap between Switch and Magnet Cases must be no more than 5/8".

MAGNET ADJUSTMENT: The position of the Magnet within the Magnet Case may be adjusted by screwing in or out. One complete turn of the threaded Magnet Holder is equal to 1/16" of travel.

1. Hook meter to Tamper Loop, Black/White and Blue/White wires.
2. If the Tamper Loop is closed then screw the Magnet into the case, away from the Switch, in 1/16" increments (one complete turn) until the Tamper Loop is open. Screw in the Magnet 1/8" more (two complete turns). This is the final Balanced Position and is typically 3/8" from the Switch in a steel door.
3. If the Tamper Loop is open then screw out the Magnet, toward the switch, in 1/16" increments (one complete turn) until the Tamper Loop is closed. Reverse direction and screw in the Magnet 1/8"(two complete turns), away from the Switch. This is the final balanced position and is typically 3/8" from the Switch in a steel door.
4. Hook meter to oher Loops
5. Open door or window and other Loops will change state.

WIRING: There are two recommended wiring configurations, both involving the addition of resistors. One configuration uses a single zone input to monitor for alarm and tamper, see Figure B. The other configuration uses two zone inputs, one zone for monitoring alarm and door status, the other zone for monitoring tamper, see Figure C. The Figure B configuration is recommended if your alarm panel can be programmed to distinguish the difference between an open circuit for alarm and a short circuit for tamper. If this is not possible, then the Figure C configuration is recommended.

TESTING WITH RESISTORS: See Figure B - Make all loop test readings with door closed and a 1k Ohm resistor installed. Other switch loops may be used to trigger other devices.

1. With the door open the Supervised Alarm Lloop will read open (Infinite Ohms)

2. With the door closed and the Switch Balanced the Supervised Alarm Loop will read 1k Ohm

3. With the door closed and in a tamper condition the Supervise Alarm Loop will read 0.0 Ohms

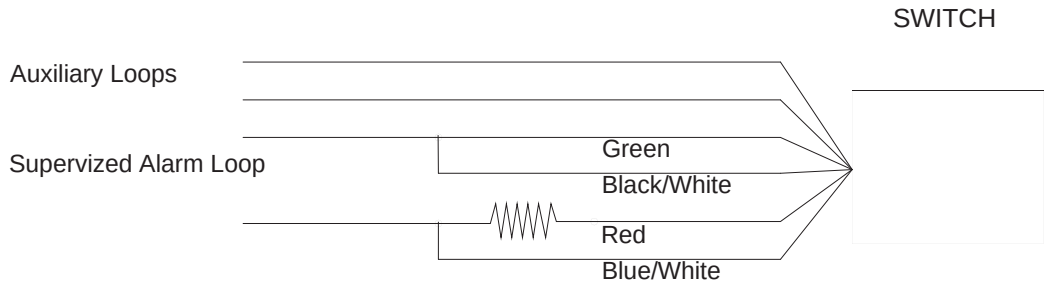

FIGURE B:

WIRING DIAGRAM
SINGLE ZONE INPUT
WITH 1k Ohm RESISTOR

TESTING WITH RESISTORS: See Figure C - Make all loop test readings with door closed and two (2) 1k Ohm resistors installed. Other switch loops may be used to trigger other devices.

1. With the door open the Alarm Loop will read open (Infinite Ohms) and the Tamper Loop will read 1k Ohm

2. With the door closed and the Switch Balanced the Alarm Loop will read 1k Ohm and the Tamper Loop will read 1k Ohm

3. With the door closed and showing a tamper condition the Alarm Loop will read 1k Ohm and the Tamper Loop will read 0.0 Ohms

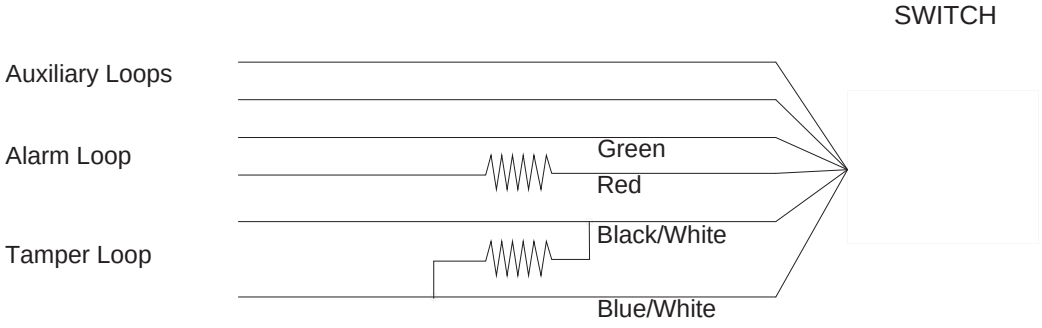

FIGURE C:

WIRING DIAGRAM
TWO ZONE INPUT
WITH 1k Ohm RESISTORS