**FIRE SPRINKLER SYSTEMS, ACTUATOR SUPERVISION FOR PREACTION AND DELUGE SYSTEMS**

1. Solenoid Coil Supervisory Switch

A. Furnish and install the solenoid coil supervisory switch on all releasing solenoid valves with removeable coils that are not energized when the releasing panel is in a normal, non-alarm condition. Approved solenoid coil supervisory switches are:

1. Potter Electric CoilKeeper™ Coil Supervisory Switch, model CSS
2. Potter Electric model RBVS mechanical coil supervisory switch.

B. Preferred – Potter CoilKeeper™ Coil Supervisory Switch, CSS

1. The solenoid coil supervisory switch shall electronically monitor the inductance and continuity of the solenoid valve’s coil.
2. The status of the solenoid valve’s coil shall be signaled to the releasing panel via relay outputs that are suitable for monitoring by the supervisory or trouble inputs of the releasing panel.
3. Removal of the coil from the solenoid valve shall be detected by the solenoid coil supervisory switch and result in the releasing panel indicating either a supervisory condition or trouble condition as required per local authorities. The solenoid coil supervisory switch shall provide local visual indication of this state.
4. The solenoid coil supervisory switch shall require a local manual reset operation after the coil has been restored to proper operating position.
5. The solenoid coil supervisory switch shall have no effect on the operation of the releasing circuit or the solenoid valve.
6. The solenoid coil supervisory switch shall visually indicate that its power is applied and that the solenoid coil supervisory switch is actively monitoring the solenoid valve’s coil.
7. The coil supervisory switch shall visually indicate that the releasing circuit is energized to prevent replacement of the removed coil resulting in activation of the releasing system during testing.

C. Alternative – Potter RBVS mechanical coil supervisory switch

1. The mechanical coil supervisory switch shall provide switch outputs that are suitable for monitoring by the supervisory or trouble inputs of the releasing panel.
2. The mechanical coil supervisory switch shall be installed such that removal of the solenoid valve’s coil results in an off normal indication of the mechanical supervisory switch.
3. Removal of the coil from the solenoid valve shall be detected by the mechanical coil supervisory switch and result in the releasing panel indicating either a supervisory condition or trouble condition as required per local authorities.