



## DESCRIPTION

The Solenoid Disconnect is a keyed switch that enables the operator to put the solenoid release circuit that the switch is connected to in a “**DISARMED**” condition by electrically isolating the solenoid from the releasing circuit. This allows the operator to work either directly on the suppression system itself or in the area protected by the system without accidentally releasing the system. The switch can be ordered with or without status LEDs (Green – ARMED and Red – DISARMED). The LEDs provide positive indication of the status of the releasing circuit. LEDs require 24 VDC auxiliary power from the associated control panel for operation.

## ORDERING INFORMATION

10-2705 Solenoid Disconnect Switch, no LEDs  
10-2706 Solenoid Disconnect Switch, w/ LEDs

## COMPATIBILITY

The Solenoid Disconnect switch is compatible with all Fike intelligent control panels. The disconnect switch is compatible with “Class B” style releasing circuits only. Do NOT attempt to install this product on “Class A” style wiring.

## SPECIFICATIONS

Input Voltage:	15 – 30 VDC
Current Consumption:	13.1 mA (LED active)
Circuit Limitations:	Class B only
Dimensions (LxWxD):	4.5 in. x 4.5 in. x 1.875 in. (11.5cm x 11.5cm x 4.8cm)
Weight:	0.50 lb. (0.23 kg)
Operating Temp:	0° to 49° C (32° to 120° F)
Operating Humidity:	93% RH
Contact Ratings:	8A @ 24 VDC Resistive 4A @ 24 VDC Inductive

## LISTINGS AND APPROVALS

UL S3217  
FM Pending



**Exhibit 1: Solenoid Disconnect Switch  
with Status LEDs.**

## OPERATION

### Armed Mode

With the key switch in the ARMED (normal) position, the solenoid is connected to the releasing circuit. In this position, the switch does not interfere with panel supervision of the releasing circuit or releasing operations. The green LED on the faceplate illuminates steady to indicate the ARMED status of the circuit.

**Note:** The key can only be removed in the ARMED position.

### Disarmed Mode

With the key switch in the DISARMED (maintenance) position, the solenoid is electrically isolated from the releasing circuit and will not activate when the associated control panel enters the *Release State*. A trouble and supervisory event will be displayed on the associated control panel to indicate the open circuit. The Green LED on the faceplate will turn off and the Red LED will turn on to indicate the **DISARMED** status of the circuit.

## SAFETY NOTICES

Read all of the following safety notices before attempting to install or use this device. Personal injury or accidental release of the suppression system may result if the following instructions are not followed.

### WARNING

The SHP, SHP-Pro, Rhino, and Intella-Scan control panels are equipped with an ARM/DISABLE switch for the releasing circuit(s). If using the Solenoid Disconnect switch with these panels, the ARM/DISABLE switch on the panel must be in the ARM position for the switch to operate properly. DO NOT use the ARM/DISABLE switch simultaneously with the Solenoid Disconnect switch.

### Caution

Only solenoids that are connected to the Solenoid Disconnect switch will be disconnected by the user operated key switch.

## SWITCH ASSEMBLY

The disconnect switch is shipped unassembled and must be assembled in the field using the following instructions:

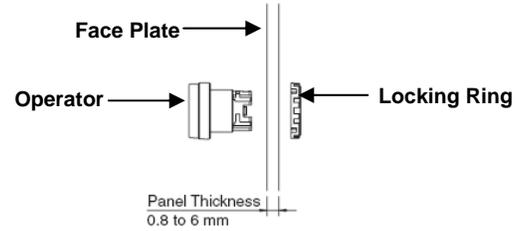
1. Remove the switch components (faceplate and switch) from the shipping package.
2. Remove the operator from the contact block by pulling up the locking lever and turning it to the left as shown in Exhibit 2.



- 1 Pull up the locking lever.
- 2 Turn the lever to the left.
- 3 Pull out the contact block.

### Exhibit 2: Removing and Installing the Contact Block

3. Remove the locking ring from the operator and insert the operator into the switch faceplate from the front as shown in Exhibit 3. Reinstall the locking ring onto the operator from the back and tighten with pliers or locking ring wrench (02-12318), making sure that the TOP marking on the operator is aligned with the top center of the faceplate.



### Exhibit 3: Operator Installation

4. Insert the operator into the contact block making sure that the idec marking on the contact block is facing the same direction as the TOP marking on the operator. Turn the locking lever to the right.

## SWITCH INSTALLATION AND TESTING INSTRUCTIONS

The Solenoid Disconnect switch is installed into the releasing circuit between the associated control panel or releasing module and the solenoid itself.

The following installation steps must be followed in order to properly install and test the operation of the solenoid disconnect switch. Failure to follow these steps could result in improper operation of the suppression system.

### Installation and Testing Steps:

1. Physically remove the solenoid coil from the associated releasing valve.
2. Disconnect all power to solenoid releasing circuits (i.e., panel releasing circuits or field located releasing modules).
3. Select appropriate location for mounting switch and secure back-box to wall with suitable anchors.

### **Back Box Options**

#### Switch without LEDs

For surface mounting, use a two-gang masonry box (Raco 691 or equal) with a depth of 2.5" (6.35cm). For flush mounting, use a two-gang mud ring (raised 1/2" minimum) on a 4 in square x 2-1/8" deep box.

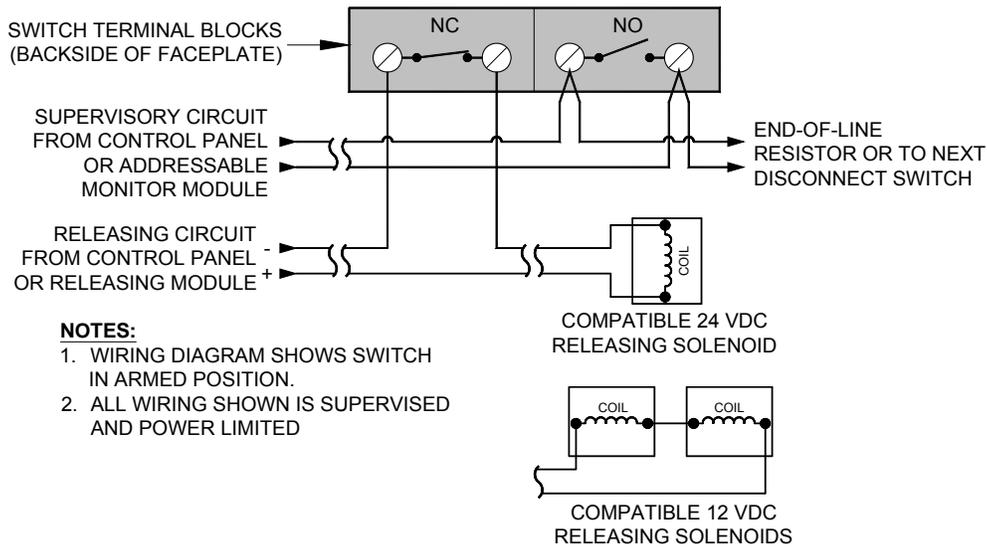
#### Switch with LEDs

For surface mounting, use a two-gang masonry box (Raco 696 or equal) with a depth of 3.5" (8.89cm). For flush mounting, use a two-gang mud ring on a 4 in square x 3-1/2" deep box (Raco 256 or equal).

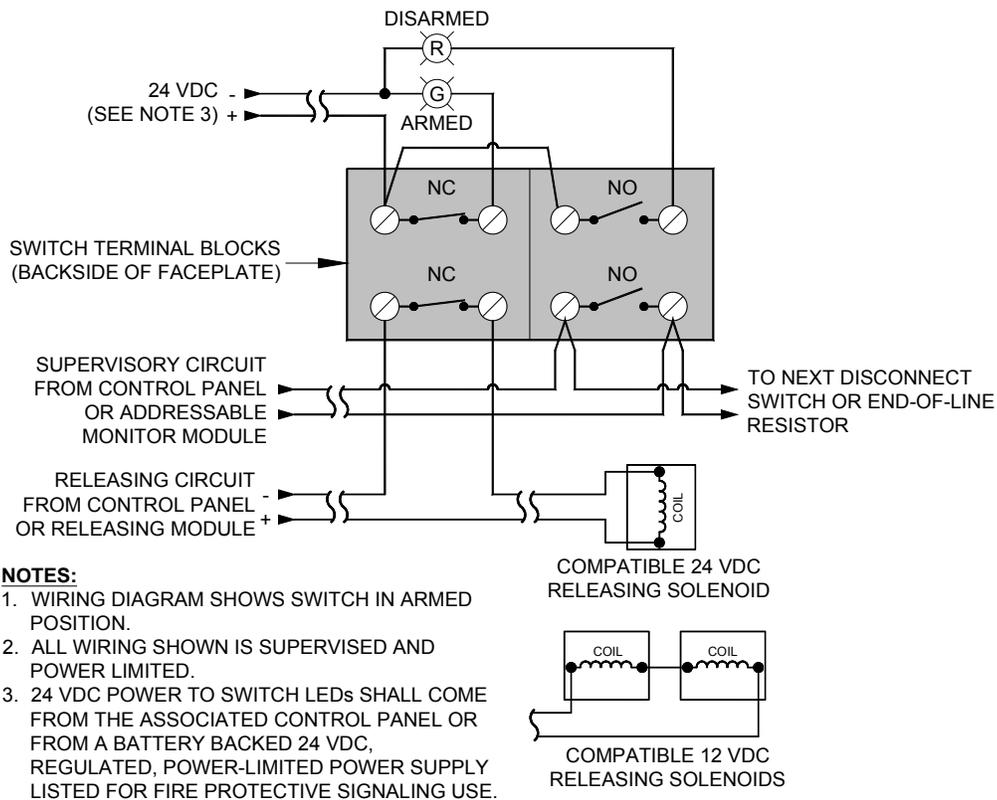
4. Route conduit and field wiring (i.e., releasing circuit, supervisory circuit and auxiliary power if applicable) into back-box. Verify that wiring is free from ground fault or short-circuit conditions before proceeding.
5. Connect field wiring to appropriate terminals on the switch contact block as shown in Exhibit 4 or 5, making sure to observe circuit polarity.
6. Connect the releasing circuit wiring from the solenoid to the switch contact block as shown in Exhibit 4 or 5, making sure to observe circuit polarity.
7. Reconnect all power to solenoid releasing circuits. Do NOT reinstall solenoid coils onto the releasing valves at this time.
8. Functionally test the operation of the disconnect switch in both the ARMED and DISARMED modes.
9. Attach the Solenoid Disconnect faceplate to the back-box with supplied mounting screws and turn key switch to ARMED position.
10. Verify that solenoid releasing coils are not energized then reinstall coil onto associated releasing valve(s).

#### SPARE PARTS

02-12294	Double contact block (2 NC)
02-12295	Double contact block (2 NO)
02-12296	Replacement keys
02-12297	4 block switch
02-12298	5 block switch
02-12300	Single contact block (NO)
02-12314	2 block switch
02-12315	3 block switch
02-12316	Single contact block (NC)
02-12317	Double contact block (1 NC / 1 NO)
02-12318	Locking ring wrench
02-3013	Green LED
02-3009	Red LED
02-1553	2.2K, .5W, 5% resistor
10-2714	Cover plate w/o LED holes
10-2713	Cover plate with LED holes



**Exhibit 4: Wiring Diagram of Switch without LEDs**



**Exhibit 5: Wiring Diagram of Switch with LEDs**