



DESCRIPTION

The Manual Release/Main-Reserve switch is an accessory unit for use with Fike’s Fire Suppression control panels. It offers a pleasing, practical method of mounting a suppression system Manual Release and Main-Reserve switch in a common location. The Manual Release switch consists of a latching, dual-action push button switch with keyed reset, normally-open contact block, safety clip with security tie, and adhesive label. The Main-Reserve switch consists of a two position switch, two normally-open contact blocks, two normally-closed contact blocks, and adhesive label. The switches mount to a common stainless steel faceplate.

APPLICATION

The Manual Release switch is used to manually initiate the release of the suppression system, overriding any active abort switch inputs. To operate the switch, the operator must first pull the spring safety clip (breaking the seal), and then press the push button. The switch will remain engaged until released by unlocking the active switch with a key. This provides positive indication of switch activation. The Main-Reserve switch is required for all main-reserve fire suppression systems. Following a system discharge, emergency response personnel must restore the control unit to normal operation. The main-reserve switch can then be used to connect the “Reserve” agent supply to the control units releasing circuit, providing uninterrupted protection. The empty “Main” container(s) can then be removed for recharge. Once recharged, the “Main” container(s) can be reinstalled and the main-reserve switch can be set back to the “Main” position.

SPECIFICATIONS

- Operating temperature: 0°C to 49°C (32°F to 120°F)
- Operating humidity: 93% RH, non-condensing
- Weight: 0.90 lb. (408 grams)
- Mounting: Four-gang masonry box (RACO 698) or equivalent with a minimum depth of 3.5 inch (89 mm)
Electrical box not included.
- For indoor use only

ORDERING INFORMATION

| Part Number | Description |
|------------------------|---|
| 10-1644 | Manual Release/Main-Reserve switch assy. |
| 10-1422 ¹ | Manual Release switch |
| 10-1424 ¹ | Main-Reserve switch |
| 02-2150 ^{2,3} | Contact Block, normally open (NO) |
| 02-2130 ³ | Contact Block, normally closed (NC) |
| 02-2213 ² | Security Tie (beaded cable) |
| 02-2270 ² | Safety Clip |
| 02-2139 ² | Adhesive Label, Manual Release |
| 02-2140 ³ | Adhesive Label, Main-Reserve |
| 10-105 | Stainless Steel Face Plate w/ mtg. screws |
| 10-1372 ¹ | Stainless Steel Faceplate |
| 02-2316 ^{2,3} | Mounting Screws (4 required) |
| 02-4192 ² | Replacement Key, #0 |

¹Included in 10-1644 switch assembly.
²Included in 10-1422 switch assembly.
³Included in 10-1424 switch assembly.

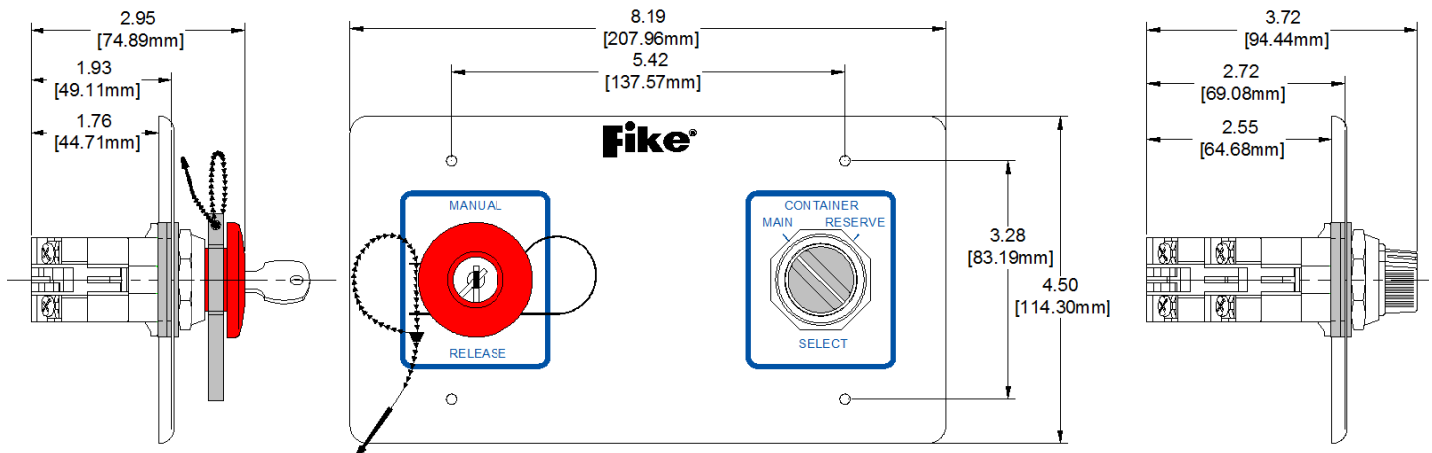


Figure 1 Switch Front and Side Views (inches/mm)

SWITCH ASSEMBLY

The switch components are shipped disassembled and must be assembled prior to installation using the following instructions.

Manual Release Switch

See Figure 2 for switch assembly diagram.

1. Remove protective plastic film from stainless steel face plate and apply the adhesive label, oriented as shown in Figure 1.
2. Remove locking ring bezel from switch base.
3. Remove single anti-rotation ring washer from the switch base.
4. From the backside of the face plate, insert switch base through the mounting hole provided.
5. Install anti-rotation ring washer removed in Step 3 over the switch base as it protrudes through the front side of the face plate.
6. Install and hand tighten lock ring bezel (45 in-lb.).
7. Install and hand tighten mushroom head (15 in-lb.).
8. Do not install safety clip and security tie until testing is complete. See Switch Installation.
9. Install contact blocks to switch base.

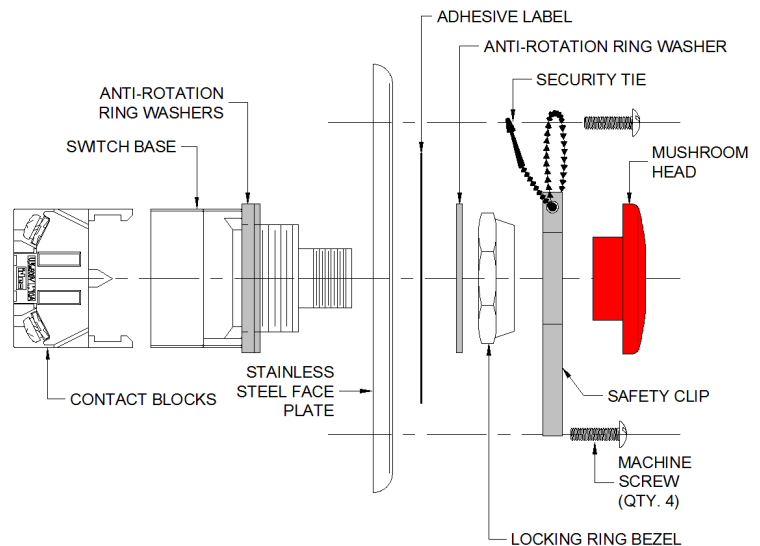


Figure 2 Manual Release Switch Assembly

Main-Reserve Switch

See Figure 3 for switch assembly diagram.

1. Apply adhesive label to the stainless steel face plate, orientated as shown in Figure 1.
2. Remove locking ring bezel from switch base.
3. Remove single anti-rotation ring washer from the switch base.
4. From the backside of the face plate, insert switch base through the mounting hole provided.
5. Install anti-rotation ring washer removed in Step 3 over the switch base as it protrudes through the front side of the face plate.
6. Install and hand tighten locking ring bezel (45 in-lb.).
7. Install white insert into selector knob.
8. Install selector knob onto switch base by snapping it into place, observing proper orientation of white insert.
9. Install contact blocks to switch base.

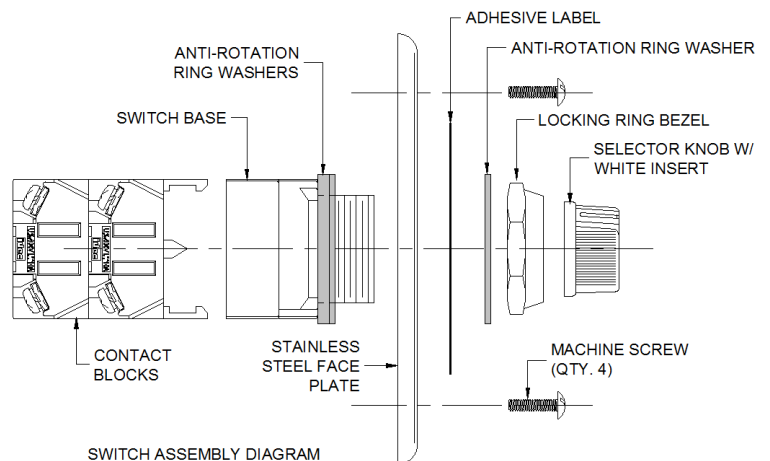


Figure 3 Main-Reserve Switch Assembly

SWITCH INSTALLATION



WARNING: *If installing the switch in an operational system: 1) Disconnect the releasing mechanism from all suppression cylinders/containers prior to installation to prevent accidental system discharge. 2) Power down the system by removing all power sources feeding the control unit (AC and DC).*

The mounting location for the switch should be free from excessive vibration, dust, and moisture.

1. Install mounting box (recess or surface mount), as shown in Figure 4.
2. Pull field wiring into mounting box.
3. Connect field wiring to contact blocks. See Figures 5 and 6 for wiring diagrams.
4. Secure stainless steel faceplate to mounting box with supplied machine screws.
5. Reapply power and test switch operation prior to reconnecting releasing mechanism to all suppression cylinders/containers.
6. Install the safety clip onto manual release switch between mushroom head and locking ring bezel, as shown in Figure 2.
7. Install beaded security tie through holes provided in safety clip. Pull tight making sure the safety clip is held firmly in place preventing the red mushroom head from being pressed without removal of the safety clip.
8. Store switch keys in a secure location.

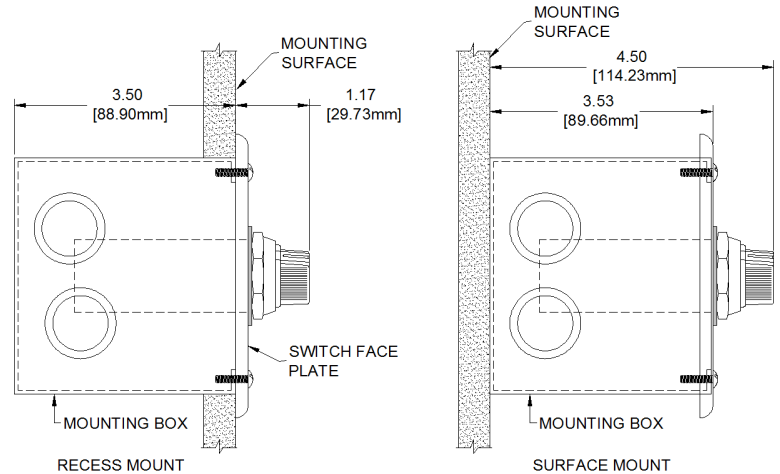
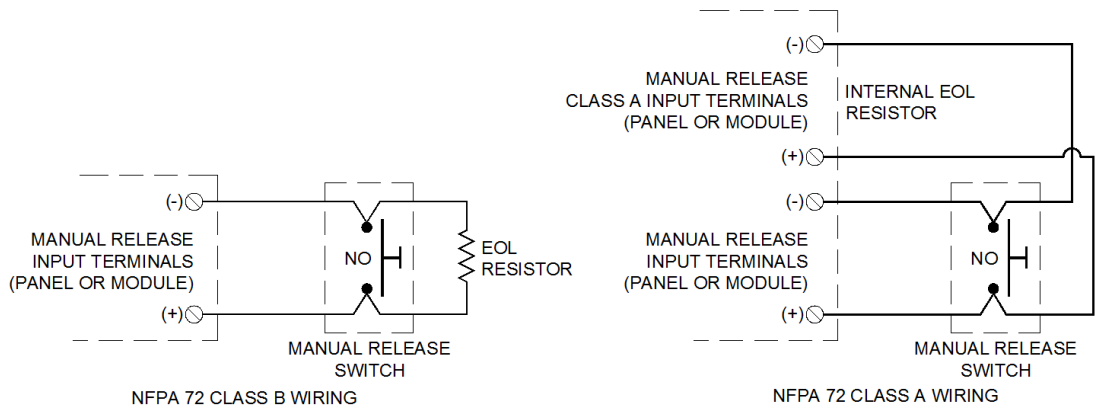


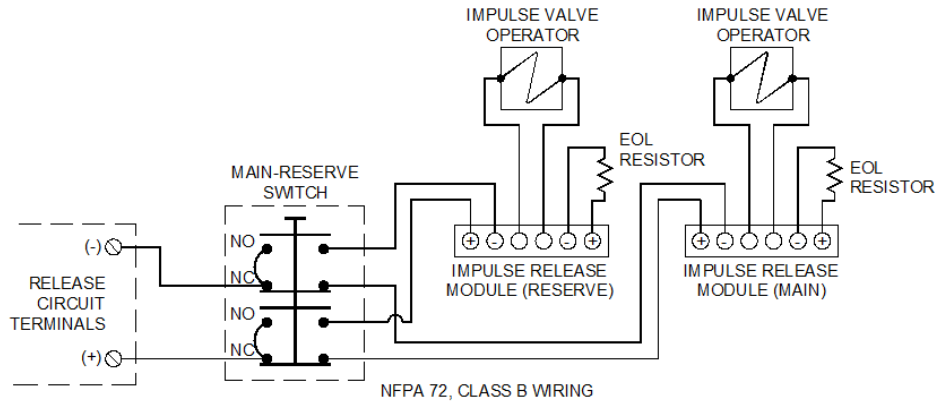
Figure 4 Mounting Options

SWITCH WIRING



SEE CONTROL UNIT MANUAL FOR SPECIFIC WIRING REQUIREMENTS.

Figure 5 Typical Manual Release Switch Wiring



SEE CONTROL UNIT MANUAL FOR SPECIFIC WIRING REQUIREMENTS.

Figure 6 Typical Main-Reserve Switch Wiring

Warranty

Fike provides a one-year limited manufacturer's warranty on this product. All warranty returns must be returned from an authorized Fike Distributor. Contact Fike's Marketing department for further warranty information.

Fike maintains a repair department that is available to repair and return existing electronic components or exchange/purchase previously repaired inventory components (advance replacement). All returns must be approved prior to return. A Material Return Authorization (MRA) number must be indicated on the box of the item being returned. Contact the appropriate Regional Sales Manager for further information regarding product return procedures.

Limitations of Liability

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