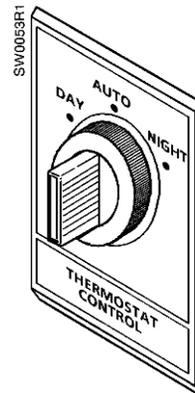


Powers™ Controls

SW 786 Selector Switches



Description

The SW 786 Selector Switches are used to deliver or stop the flow of compressed air to selected controllers, valves, or dampers. The common port may be connected to two or three ports depending on the switch model. These selector switches may be mounted on a wall, duct or control panel up to 1/4-inch (6 mm) thick.

Features

- Compact design and lightweight construction
- Click stop for positive positioning
- Easy panel mounting through 1.22-inch (33 mm) diameter knockout
- 10-32 female connection ports
- Dial label and nomenclature sheet for most applications

Product Numbers

Table 1.

| Product Number | Description |
|----------------|--------------------------------|
| 786-0600 | Two Position Selector Switch |
| 786-0610 | Three Position Selector Switch |
| 786-131 | Accessory Mounting Bracket |

Application

The SW 786 Selector Switches are used in compressed air systems to connect and direct supply and signal pressures. Typical applications are Open/Close damper position, Day/Night thermostat operation, and On/Off/Auto system operation.

| | | |
|-----------------------|--|-------------------------|
| Specifications | Medium | Air |
| | Port Threads | 10-32 NPT female |
| | Materials | |
| | Body | Acetal |
| | O-rings | Buna-N |
| | Inlet pressure | |
| | Nominal | 30 psi (206 kPa) |
| | Maximum | 125 psi (858 kPa) |
| | Operating Temperature | 35 to 150°F (2 to 66°C) |
| | Capacity at 1 psi (7 kPa) differential | |
| | 3/32 OD Fitting | 250 scim (68 ml/s) |
| | 1/4 OD fitting | 480 scim (130 ml/s) |
| Shipping weight | 0.21 lb (0.1 kg) | |
| Dimensions | See Figures 3, 4, and 5 | |

| | | |
|------------------|------------------|---------|
| Accessory | Mounting Bracket | 786-131 |
|------------------|------------------|---------|

Operation

Two Position Switch When the switch is rotated fully counterclockwise, the two-position selector switch connects the center common port to Port 1 and blocks Port 2. In the fully clockwise position, Port 2 is connected to common while Port 1 is blocked. Port 3 is not used. See Table 2.

Three Position Switch When the switch is rotated fully counterclockwise, the three-position selector switch connects the center common port to Port 1 and blocks Ports 2 and 3. In the center stop position, Port 2 is connected to common with Ports 1 and 3 blocked. In the fully clockwise position, Port 3 is connected to common while Ports 1 and 2 are blocked.

Table 2. Switch Connections.

| Position | Connection |
|-----------------------|------------------|
| Two Position Switch | |
| Counterclockwise | Common to Port 1 |
| Clockwise | Common to Port 2 |
| Three Position Switch | |
| Counterclockwise | Common to Port 1 |
| Center | Common to Port 2 |
| Clockwise | Common to Port 3 |

Mounting and Installation

Panel Mounting

NOTE: Insert the provided tubing connectors into ports on the back of the switch body. See Figure 1.

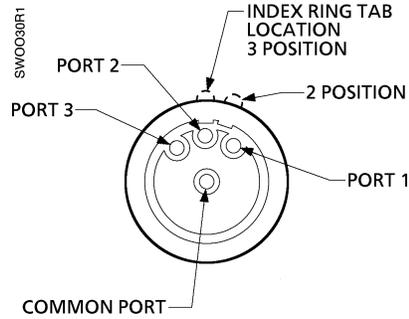


Figure 1. Selector Switch Ports.

1. Select the appropriate dial face label and nomenclature label from the sheet provided.
2. Remove the body locking ring and the index ring.
3. Place dial face label and the nomenclature label face down in the clear plastic bezel. Insert the switch body through the bezel, labels, and the panel cutout.
4. Place the index ring over the switch body with the index pin facing the back of the panel. Align the appropriate index groove on the switch body with the index tab on the index ring. See Figure 2.

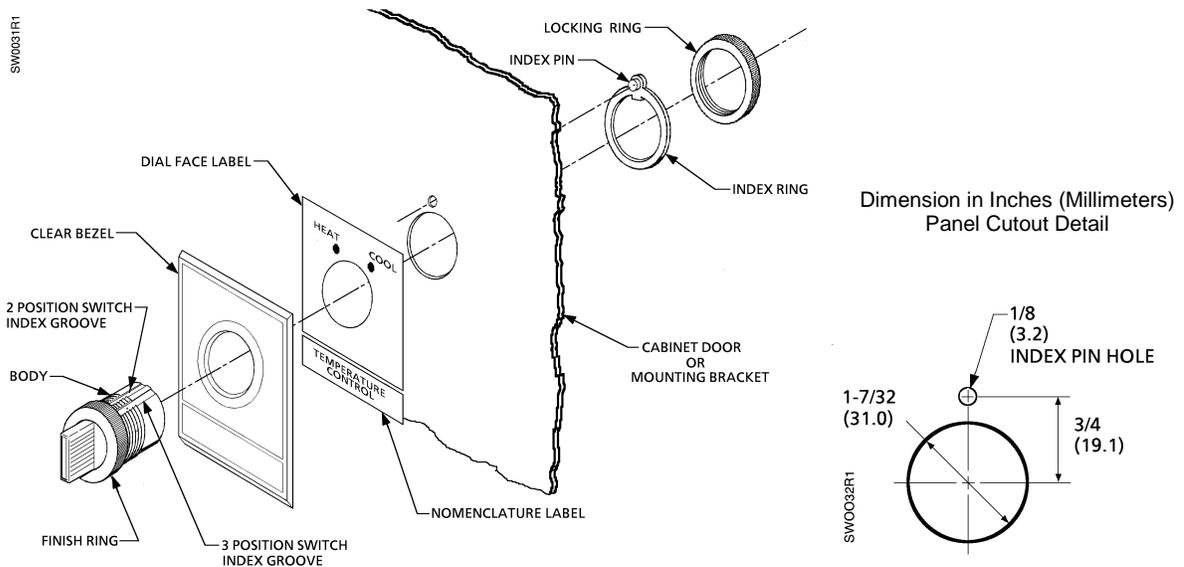


Figure 2. Panel Mounting of the Selector Switch.

Mounting and Installation, Continued

5. Snap the index pin into the small hole. Secure the switch assembly with the locking ring.
6. Pipe the selector switch noting that the center port is the common port (Figure 1).

The installation is now complete.

Surface Mounting

1. Using the bracket as a template, drill holes for mounting the bracket. See Figure 4. Mount the bracket.
2. Insert the provided tubing connectors into ports on the back of the switch body. See Figure 1.
3. Remove the body locking ring and the index ring. Insert the tubing through the rings and the opening in the mounting bracket from the back.
4. Select the appropriate dial label and nomenclature label from the sheet provided.
5. Insert the switch body through the clear plastic bezel and the dial label.
6. Attach the tubing to the appropriate ports. The center port is the common port. See Figure 1.
7. Place the nomenclature label face down in the clear plastic bezel. Insert the switch body, bezel, and labels through the opening in the bracket from the front. See Figure 2.
8. Place the index ring over the switch body with the index pin facing the back of the mounting bracket. Align the appropriate index groove on the switch body with the index tab on the index ring. See Figure 2.
9. Snap the index pin into the small hole in the bracket. Secure the switch assembly with the locking ring.

The installation is now complete.

References

| | |
|---|---------|
| TB 196 Cabinet Cutouts | 155-223 |
| CP 567-7 Pneumatic Control Cabinets | 155-272 |
| TB 197 How to Layout a Pneumatic Cabinet Door Installation Instructions | 155-224 |
| | 129-135 |

Service

No service is available for this product. If the selector switch is inoperative, replace it.

Dimensions

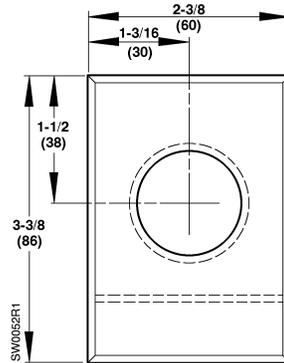


Figure 3. Dimensions of the Bezel.

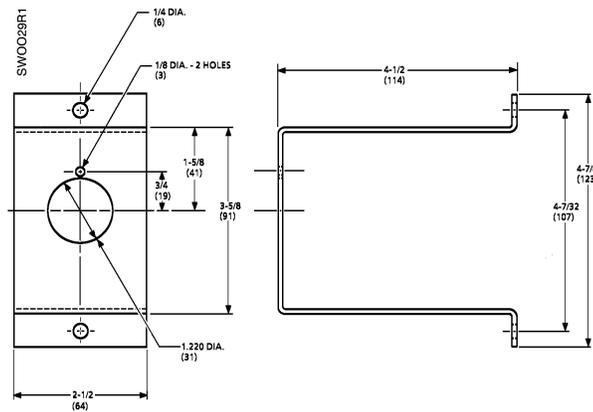


Figure 4. Dimensions of the Mounting Bracket.



Figure 5. Dimensions of the SW 786 Selector Switches.

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