1800

PRESSURE


## FEATURES/BENEFITS

- Compact size and repeatability provide a high-value switch useful in many industrial applications
- Designed for panel and wall mounting to easily meet mounting requirements in most industrial settings
- Pressure ranges from 0.07 in w.c. to 85 in w.c. make this switch suitable for a wide range of applications


## APPLICATIONS

- Process applications
- Mechanical equipment control


## DESCRIPTION

Essential for industrial environments, the Series 1800 Low Differential Pressure Switch for General Industrial Service combines small size and low price with $2 \%$ repeatability for all but the most demanding applications. Set point adjustment inside the mounting stud permits mounting the switch on one side of a wall or panel with adjustment easily accessible on the opposite side. UL and CSA listed, and FM approved.

## SPECIFICATIONS

| Service | Air and non-combustible, compatible gases. |
| ---: | :--- |
| Wetted Materials | Consult factory. |
| Temperature Limits | -30 to $180^{\circ} \mathrm{F}\left(-34\right.$ to $\left.82.2^{\circ} \mathrm{C}\right) ; 1823-00:-20$ to $180^{\circ} \mathrm{F}\left(-28.9\right.$ to $\left.82.2^{\circ} \mathrm{C}\right)$. |
| Pressure Limits | 10 psig $(68.95 \mathrm{kPa})$ continuous, $25 \mathrm{psig}(172.4 \mathrm{kPa})$ surge. |
| Switch Type | Single-pole double-throw (SPDT). |
| Repeatability | $\pm 2 \%$. |
| Electrical Rating | $15 \mathrm{~A} @ 120-480 \mathrm{VAC}, 60 \mathrm{~Hz}$. Resistive $1 / 8 \mathrm{HP}$ @ $125 \mathrm{VAC}, 1 / 4 \mathrm{HP}$ @ $250 \mathrm{VAC}, 60 \mathrm{~Hz}$. De-rate to 10 A for <br> operation at high cycle rates. |
| Electrical Connection | 3 screw type, common, normally open and normally closed. |
| Process Connection | $1 / 8^{\prime \prime}$ female NPT. |
| Mounting Connection | Diaphragm in vertical position. Consult factory for other position orientations. |
| Set Point Adjustment | Screw type inside mounting spud. |
| Weight | 1 lb 5 oz (595 g). |
| Agency Approvals | CE, CSA, FM, UL. Optional -EXPL explosion-proof enclosure does not possess any agency approvals. |

## DIMENSIONS



## HOW TO ORDER

Use the bold characters from the chart below to construct a product code.

SERIES
1820: Pressure switch
1823: Pressure switch with conduit
1824: Pressure switch without conduit
RANGE
-00: 0.07-0.22 in w.c.
-0: 0.15-0.5 in w.c.
-1: 0.3-1.0 in w.c.
-2: 0.5-2.0 in w.c.
-5: 1.5-5.0 in w.c.
-10: 2.0-10.0 in w.c.
-20: 3.0-22.0 in w.c.
-40: 5.0-44.0 in w.c.
-80: 9.0-85.0 in w.c.

## OPTIONS

-AT: Aluminum tag
-B: Buna-N elastomers
-BGAP: B-gap micro switch
-EXPL: Cast iron explosion-proof housing
-GOLD: Gold contact switch
-LC: Less conduit (1820 only)
-MIL: MIL switch
-MR: Manual reset
-PRESET: Preset
-SF: Silicone free (includes Buna-N elastomers)
-ST: Stainless steel tag
-WP: Weatherproof housing

## ACCESSORIES

| Model | Description |
| :--- | :--- |
| A-389 | Mounting bracket; 16 ga. steel, zinc plated and dichromate dipped for corrosion resistance |
| A-489 | $4 "$ straight static pressure tip with flange |
| A-491 | $6 "$ straight static pressure tip with flange |
| A-493 | $8 "$ straight static pressure tip with flange |
| A-302F-A | 303 SS static pressure tip with mounting flange; for $3 / 16^{\prime \prime \prime}$ ID rubber or plastic tubing; 4" insertion depth; includes mounting screws |
| A-302F-B | 303 SS static pressure tip with mounting flange; for $3 / 16^{\prime \prime}$ ID rubber or plastic tubing; $6^{\prime \prime}$ insertion depth; includes mounting screws |
| A-302F-C | 303 SS static pressure tip with mounting flange; for $3 / 16^{\prime \prime}$ ID rubber or plastic tubing; $8^{\prime \prime}$ insertion depth; includes mounting screws |

