Product Information

## Foot Switches

## Type A

Class 9002
Heavy Duty Industrial Foot Switches-Oiltight, Watertight, Dusttight and Driptight Enclosure,
NEMA 2, 4 and 13


HAZARDOUS APPLICATIONS
Do not use foot switches on machines without point-of-operation protection.

Failure to follow this precaution will result in serious injury.

## Foot Switch Selection

Foot switches are used to control many industrial processes, while leaving the operator's hands free to perform other functions. The type or model of foot switch suitable for each application will vary depending on factors such as the control function required, degree of protection required, production methods, unusual conditions, government regulations, etc. In some applications more than one foot switch may be required, as when two or more persons are operating a machine. In these cases, safe practice and regulations require that the foot switches be wired in series making it necessary that each operator's foot switch be actuated before the machine will cycle.
Only the user can be aware of all the conditions and factors present during setup, operation and maintenance of the machine; therefore, only the user can determine which foot switch(es) can be properly used. When selecting a foot switch for a particular application, the user should refer to the applicable ANSI standards and OSHA regulations. The National Safety Council's Accident Prevention Manual also provides much useful information.

In some applications, such as power presses, additional operator protection such as point-of-operation guarding must be provided when a foot switch is used as an actuator. This is necessary since the operator's hands and other parts of the body are free to enter the pinch point area and serious injury can occur. The shielding provided on foot switches cannot protect an operator from injury. For this reason the foot switch cannot be substituted for or take the place of point-of-operation protection.
A Trilingual Danger Sign regarding the need for point-of-operation protection is supplied with each foot switch. The sign incorporates three languages: English, Spanish and French. Additional copies of the sign are available by contacting your sales office.

Type AW Fully Shielded Foot Switch with Oversized Pedal Shield, Side Shields and Safety Door. The Safety Door is interlocked with the pedal to prevent operation due to shock or vibration. It prevents accidental pedal operation by requiring a simple but intentional motion to lift the door before inserting the foot.


| Description | Features | Fully Shielded with Oversized Pedal Shield, Side Shields and Safety Door |  | With Oversized Pedal Shield and Side Shields |  | With Pedal Shield and Side Shields |  | UNSHIELDED (See warning notev) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Type | Price | Type | Price | Type | Price | Type | Price |
| Single Pole Double Throw | Spring Return With Mechanical Latch | AW117 $\ldots$ | $\ldots$ | AW132 $\ldots$ | $\ldots$ | $\begin{aligned} & \text { AW2 } \\ & \text { AW7 } \end{aligned}$ |  | AW1 | ... |
| Two Pole ■ Double Throw | Spring Return With Mechanical Latch | AW124 4 | $\ldots$ | AW133 $\ldots$ | $\ldots$ | AW14 AW15 |  | AW13 $\ldots$ | $\ldots$ |
| Two Stage (One Pole Each Stage) Table 1 | Spring Return <br> With Mechanical Latch in 1st Stage With Mechanical Latch in 2nd Stage | AW119 $\ldots$ $\ldots$ | $\cdots$ | AW134 $\ldots$ $\ldots$ | $\cdots$ | AW6 AW9 AW10 |  | AW5 $\ldots$ $\ldots$ | $\ldots$ |
| Four Stage ■ (One Pole Each Stage) Table 2 | Spring Return | AW123 |  | $\ldots$ | $\cdots$ | AW22 |  | AW21 |  |
| Single Pole Single Throw | Maintained Contact-Push On/Push Off | $\ldots$ | $\cdots$ | $\ldots$ | $\ldots$ | AW12 |  | AW11 |  |
| Replacement Cover Assembly | $\cdots$ | AC5 |  | AC7 |  | AC8 ${ }^{\text {® }}$ |  | AC1 |  |



Type AW Foot Switch with Top Pedal Shield and Side Shields

2 N.O and 2 N.C. isolated, direct acting contacts

- A single pole snap switch that contains two double break contact elements ( 1 N.O. and 1 N.C.) must be used on circuits of same polarity.

A double pole snap switch contains two electrically separated sets of contact elements allowing use on circuits of opposite polarity. Each set that contains
two double break contact elements ( 1 N.O. and 1 N.C.) must be used on circuits of same polarity.

- In NEMA 1, General Purpose Enclosure. See Table 3 on page 17-121 for contact symbol.
$\star$ For replacement cover drilled to accept latch. For Series C foot switches order AC9. Price is $\mathbf{\$ 1 8 2}$. No replacement cover available for Series A or
devices driled to accept latch
WARNING: These foot switches must not be used to operate machines or equipment where the possibility of operator injury exists. Typical use include Emergency Stop functions, "Dead Man" controls, signal functions (lights, bells, etc.).


Type AW with Oversized Pedal Shield and Side Shields


Type AW Foot Switch without Pedal Shield

Replacement Parts:
For Class 9002 Type AW: See Bulletin No. 6501301031H


File E42259 $\stackrel{\text { File }}{\text { CCN }}$ E42259
NKCR CCN
 $\begin{array}{ll}\text { File } & \text { LR25490 } \\ \text { Class } & 184 \text { N } 13.1 U\end{array}$

Foot Switches-Class 9002 Type A
Dimensions

## Approximate Dimensions



Types AW1, AW5, AW11, AW13 and AW21



Types AW2, AW6, AW12, AW14 and AW22

Maximum Current Ratings For Control Circuit Contacts

| Type | Volts | AC Amperes |  |  | Volts | DC Amperes <br> Inductive and Resistive |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Inductive 35\% Power Factor |  | Resistive 75\% Power Factor <br> Make, Break and Continuous |  |  |  |  |
|  |  | Make | Break |  |  | Make and Break |  | Continuous |
|  |  |  |  |  |  | Single <br> Throw | Double Throw |  |
| AW1 through AW10, AW117, AW119, AW132 | $\begin{aligned} & \hline 120 \\ & 240 \\ & 480 \\ & 600 \end{aligned}$ | $\begin{array}{r} 40 \\ 20 \\ 10 \\ 8 \end{array}$ | $\begin{array}{r} 15 \\ 10 \\ 6 \\ 5 \end{array}$ | $\begin{array}{r} 15 \\ 10 \\ 6 \\ 5 \end{array}$ | $\begin{aligned} & 125 \\ & 250 \\ & 600 \end{aligned}$ | $\begin{aligned} & 2.0 \\ & 0.5 \\ & 0.1 \end{aligned}$ | $\begin{aligned} & 0.5 \\ & 0.2 \\ & 0.02 \end{aligned}$ | $\begin{aligned} & 15 \\ & 15 \\ & 15 \end{aligned}$ |
| AW13, AW14, AW15, AW133 | $\begin{aligned} & 120 \\ & 240 \\ & 480 \\ & 600 \end{aligned}$ | $\begin{aligned} & \hline 30 \\ & 15 \\ & 7.5 \\ & 6 \end{aligned}$ | $\begin{aligned} & 3 \\ & 1.5 \\ & 0.75 \\ & 0.6 \end{aligned}$ | $\begin{aligned} & 3 \\ & 1.5 \\ & 0.75 \\ & 0.6 \end{aligned}$ | $\begin{aligned} & 125 \\ & 250 \\ & 600 \end{aligned}$ | $\begin{aligned} & 1.0 \\ & 0.3 \\ & 0.1 \end{aligned}$ | $\begin{aligned} & 0.2 \\ & 0.1 \end{aligned}$ | $\begin{aligned} & 10 \\ & 10 \\ & 10 \end{aligned}$ |
| AW11, AW12 | $\begin{aligned} & \hline 115 \\ & 230 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 36 \\ & 18 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 6 \\ & 3 \end{aligned}$ | $\ldots$ | $\begin{aligned} & 125 \\ & 250 \end{aligned}$ | $\begin{aligned} & 2.2 \\ & 1.1 \end{aligned}$ | $\cdots$ | $\ldots$ |
| AW21, AW22, AW123 | $\begin{aligned} & \hline 120 \\ & 240 \\ & 480 \\ & 600 \end{aligned}$ | $\begin{aligned} & \hline 15.0 \\ & 7.5 \\ & 3.75 \\ & 3.0 \end{aligned}$ | $\begin{aligned} & 1.5 \\ & 0.75 \\ & 0.375 \\ & 0.3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 10 \\ & 10 \\ & 10 \\ & 10 \\ & \hline \end{aligned}$ | $\cdots$ $\cdots$ $\cdots$ | $\cdots$ $\cdots$ $\cdots$ | $\cdots$ $\cdots$ $\cdots$ | $\cdots$ $\cdots$ $\cdots$ |
| AW124 | $\begin{aligned} & 120 \\ & 240 \\ & 480 \\ & 600 \\ & \hline \end{aligned}$ | $\begin{aligned} & 60 \\ & 30 \\ & 15 \\ & 12 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 6 \\ & 3 \\ & 1.5 \\ & 1.2 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 10 \\ & 10 \\ & 10 \\ & 10 \\ & \hline \end{aligned}$ | $\begin{aligned} & 120 \\ & 240 \\ & 600 \end{aligned}$ | $\begin{aligned} & 1.1 \\ & 0.55 \\ & 0.2 \end{aligned}$ | $\ldots$ | $\begin{aligned} & 10 \\ & 10 \\ & 10 \end{aligned}$ |

Note: Double throw switches are rated 250 Vdc maximum.

TABLE 1
Contact Symbol-Two Stage

| Snap Switch |  | Pedal |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Unit | Circuit | Up | Half Down | Full Down |
| 1 | A1 | 0 | 1 | 1 |
|  | B1 | 1 | 0 | 0 |
| 2 | A2 | 1 | 1 | 0 |
|  | B2 | 0 | 0 | 1 |

TABLE 2
Contact Symbol—Four Stage

| Snap Switch |  | Pedal Position |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unit | Circuit | Up $\rightarrow$ Down |  |  |  |  |
| 1 | 1A1 | 0 | 0 | 1 | 1 | 1 |
|  | 1B1 | 1 | 1 | 0 | 0 | 0 |
|  | 2 A 1 | 0 | 1 | 1 | 1 | 1 |
|  | 2B1 | 1 | 0 | 0 | 0 | 0 |
|  | 1 A 2 | 1 | 1 | 1 | 0 | 0 |
|  | 1B2 | 0 | 0 | 0 | 1 | 1 |
|  | 2 A 2 | 1 | 1 | 1 | 1 | 0 |
|  | 2 B 2 | 0 | 0 | 0 | 0 | 1 |

