

# Heavy Duty Industrial Foot Switches

## Installation Instructions

P-1303  
819-0523



**⚠ WARNING** Failure to follow these instructions may result in product damage, equipment damage, and serious or fatal injury to personnel.

## Explanation of Model Identification Code for Foot Switches

**Number of Pedals**

Dash

**Contact Block Function**

Dash

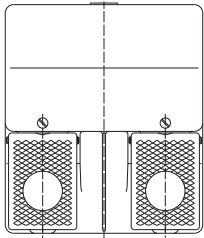
**Additional Features**



F1 = One Pedal Foot Switch

**U1** = Slow Action  
1 NO / 1NC Single Pole Break Before Make Momentary

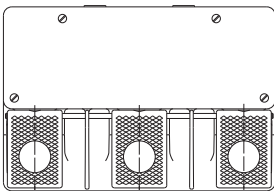
**SU1** = Snap Action  
1NO / 1NC Single Pole Momentary



F2 = Two Pedal Foot Switch

**U2** = Slow Action  
2 NO / 2 NC Double Pole Break Before Make Momentary

**SU2** = Snap Action  
2 NO / 2NC Double Pole Momentary



F3 = Three Pedal Foot Switch

**NO** = Normally Open

**NC** = Normally Closed

**Z** = (example U1Z) indicates a forced disconnect of the Normally Closed Contacts.

**Y** = (example U1Y) indicates a maintained contact. 1st depression of pedal latches switch on 2nd depression releases.

**D** = (example U2D) indicates a pressure point for operation with 2 contact blocks, 2 stage operation. 1st block operates up to pressure point, 2nd block operates after operation of pressure point switch.

**AT** = (example SU1Z AT) indicates an Anti-Trip Device. A lever must be pushed forward with a foot before the pedal can be pressed.

**UN** = (example F1-U1Z UN) indicates a Protective Guard over the pedal.

**Mi RG** = (example SU1 Mi RG) indicates a proportional output, fitted as standard is a variable resistor, 10K ohms, 2W.

**AP** = (example F1-U1 AP) Explosive proof switch for operation in medical areas "surgically safe".

### Multi Pedal Switches:

With multi-pedal switches, it is possible for each pedal to have its own function. The functions available are explained in the Contact Block Function area of the Identification Code.

**Note:** Special function and combinations of foot switches can be designed and manufactured to meet the customer's own design performance and requirements. For information consult the Sales Office at 1-800-451-8279.

**Ordering Example:**

The following order has to be observed.

1. The type of desired device by number of pedals.  
Example: **F1, F2, F3**
2. The number and type of contact block. For switches with several pedals indicate from left to right.  
Example: **F3-U1/U1Y/U2D UN**
3. The indications concerning additional functions, versions or pedals have to be given in the description, directly behind the corresponding switching element.  
Example with detent detent and pressure point: **F3-U1/U1Y/U2D UN**
4. Indciations on special equipment which does not depend on the pedal have to be given at the end of the type designation.  
Example: **F2-U1/U1 AP**
5. Versions with proection shield are marked at the end of the type designation by UN.  
Example: **F2-U1/U1 AP UN**

**Specification Overview**

**Mechanical Features:**

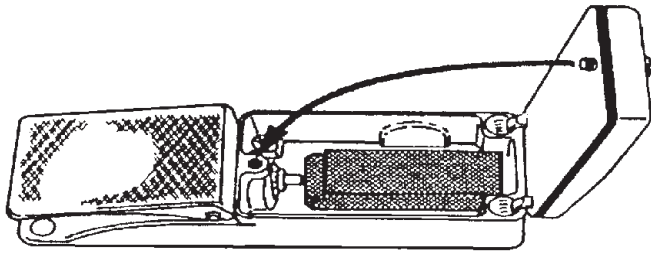
<b>Case Material</b>	Aluminum die cast
<b>Protective Guard</b>	Aluminum die cast
<b>Actuator</b>	Foot Lever
<b>Ambient Air Temperature</b>	-22°F to 176°F
<b>Switch Action</b>	Dependent upon switch selected
<b>Contacts</b>	Dependent upon switch selected
<b>Mechanical Life</b>	10 x 10 <sup>6</sup> Switch Operations
<b>Switching Frequency</b>	50 times per minute
<b>Mounting</b>	Free standing on rubber bumpers
<b>Terminals</b>	4 screw terminals per contact block
<b>Cable Entries</b>	All switches supplied with a 1/2 inch Conduit Adapter
<b>Weight</b>	Approximate: <b>Without Guards</b> F1 ≈1.5 lbs. (.7 kg) F2 ≈3.7 lbs. (1.7 kg) F3 ≈6.8 lbs. (3.1 kg)  <b>With Guards</b> F1 ≈3.3 lbs. (1.0 kg) F2 ≈5.7 lbs. (2.6 kg) F3 ≈11.9 lbs. (5.9 kg)

**Electrical Features:**

<b>Maximum Voltage</b>	500 VAC
<b>Enduring Current</b>	20 AMPS
<b>Inrush Current</b>	Per IEC 947-5-1, AC 15, DC 13
<b>Standards</b>	According to VDE 0660, 0113, IEC 947-5-1
<b>Protection Class</b>	NEMA 4, IP65 According to DIN 40 050
<b>UL / CSA Approved</b>	10 AMP, 300 VAC, A300 (Same Polarity)

## Assembly Instructions

To assemble either the top safety cover or the protective shield onto the foot switch set it at a right-angle (90°) to the base and then swivel down. It is important to ensure the rubber seal and cover is seated correctly. The cover should be hand tightened (Max. 5Nm / 3.7 ft. lb.). Over tightening will damage the seal.



## **⚠ WARNING**

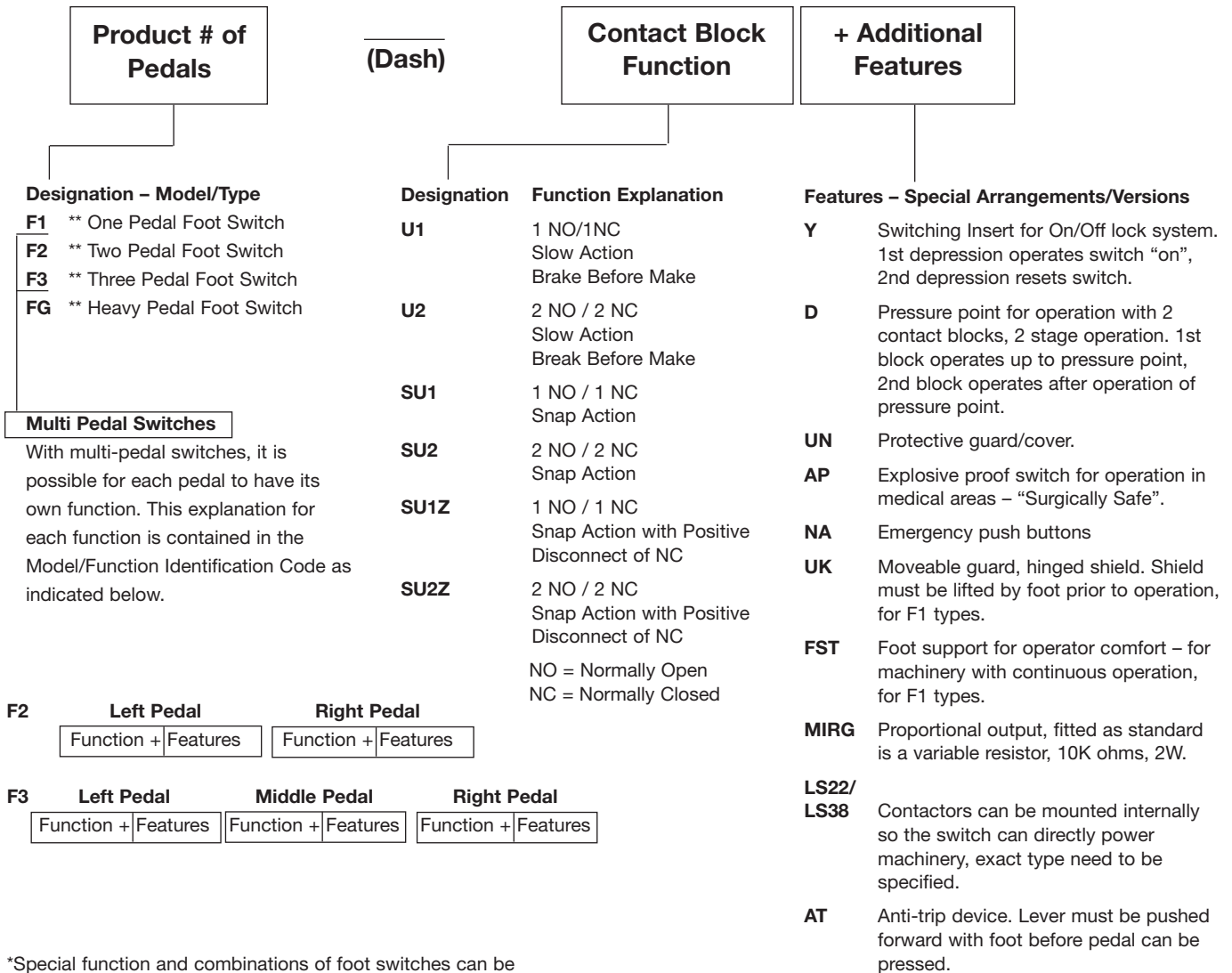
### Hazardous Applications

Do not use foot switches on machines without point-of-operation protection. Failure to observe this warning can result in serious injury or death.

Point of Operation - The point or area of the machine or equipment where the work piece or material is actually positioned and work is being performed during any process.

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. 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 or switches can be properly used. When selecting a foot switch for a particular application, the user should refer to the application ANSI standards and OSHA regulations.

## Foot Switch Model/Function Identification Code



\*Special function and combinations of foot switches can be designed and manufactured to meet the customer's own design performance and requirements. For Information consult the Sentec Sales Office.

## Warranty

Warner Electric LLC warrants that it will repair or replace (whichever it deems advisable) any product manufactured and sold by it which proves to be defective in material or workmanship within a period of one (1) year from the date of original purchase for consumer, commercial or industrial use.

This warranty extends only to the original purchaser and is not transferable or assignable without Warner Electric LLC's prior consent.

Warranty service can be obtained in the U.S.A. by returning any defective product, transportation charges prepaid, to the appropriate Warner Electric LLC factory. Additional warranty information may be obtained by writing the Customer Satisfaction Department, Warner Electric LLC, 449 Gardner Street, South Beloit, Illinois 61080, or by calling 815-389-3771.

A purchase receipt or other proof of original purchase will be required before warranty service is rendered. If found defective under the terms of this warranty, repair or replacement will be made, without charge, together with a refund for transportation costs. If found not to be defective, you will be notified and, with your consent, the item will be repaired or replaced and returned to you at your expense.

This warranty covers normal use and does not cover damage or defect which results from alteration, accident, neglect, or improper installation, operation, or maintenance.

Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

Warner Electric LLC's obligation under this warranty is limited to the repair or replacement of the defective product and in no event shall Warner Electric LLC be liable for consequential, indirect, or incidental damages of any kind incurred by reason of the manufacture, sale or use of any defective product. Warner Electric LLC neither assumes nor authorizes any other person to give any other warranty or to assume any other obligation or liability on its behalf.

WITH RESPECT TO CONSUMER USE OF THE PRODUCT, ANY IMPLIED WARRANTIES WHICH THE CONSUMER MAY HAVE ARE LIMITED IN DURATION TO ONE YEAR FROM THE DATE OF ORIGINAL CONSUMER PURCHASE. WITH RESPECT TO COMMERCIAL AND INDUSTRIAL USES OF THE PRODUCT, THE FOREGOING WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

### Changes in Dimensions and Specifications

All dimensions and specifications shown in Warner Electric catalogs are subject to change without notice. Weights do not include weight of boxing for shipment. Certified prints will be furnished without charge on request to Warner Electric.



**Warner Electric LLC**  
449 Gardner Street • South Beloit, IL 61080  
815-389-3771 • Fax: 815-389-2582  
www.warnerelectric.com