

Foot Switches With Enabling Switch (DGVU Approved)

The BERNSTEIN three-stage-enable foot switch combines robust design and advanced technology. With many years of experience and expertise, BERNSTEIN is the prefered partner for industrial foot switches in industrial applications. Through the development of the first approved enable foot switch, BERNSTEIN succeeded again to convert this experience and expertise into customer value and to set new standards in safety technology. The enable foot switch provides two enable contacts and one signalling contact and is available with or without latch.

If the pedal is pressed up to pressure point, the two enable contacts are closed. If the pedal is released, the enable contacts are open again. If the pedal is pressed up to the pressure point, the enable positive opening action contacts are opened. For the application of an enable device, the rules DIN EN ISO 12100 and DIN EN 60204-1 apply. Thanks to this signalling contact, a dynmic position detection is possible. Alternatively, a static position detection can be realised by means of a PNP output. It is thus possible to determine the actuation position one - the OFF position of the enable contacts (the actuator is not pressed) – or the position three – the OFF position of the operating contacts (the actuator is fully pressed) and to make this information directly available to the control system.

The approved enable foot switch can be only delivered in standard version without protective shroud UN.



The indicated travels and forces refer to the switch-in contact of the foot switch with latching function.

Example of a switching diagrams with static position monitoring in position 1.



Foot Switches With Enabling Function Uncovered (DGVU Approved)



Single pedal enable foot switch F1

| Article number | Designation | Switching contacts | Pressure point | Special feature |
|----------------|-------------|--------------------|----------------|--|
| 6061500559 | F1-ZSD | 1NC / 1NO | 200 N | Pressure point D |
| 6061500567 | | | 200 N | Pressure point D, Latching R |
| 6061500569 | F1-ZSP1D | 1NC / 1NO | 200 N | Additional board 1*, Pressure point D |
| 6061500570 | F1-ZSP3D | | 200 N | Additional board 3**, Pressure point D |
| | | | | |

Two pedal enable foot switch F2

| Article number | Designation | Switchin | Switching contacts | | int | Special feature |
|----------------|--------------|-------------------|--------------------|-------------------|--------------------|------------------------------|
| | | Pedal 1 (left) | Pedal 2 (right) | Pedal 1 (left) | Pedal 2 (right) | |
| 6062500561 | F2-U1Z/ZSD | 1NC / 1NO | 1NC / 1NO | | 200 N | Pressure point D (Pedal 2) |
| 6062500568 | F2-ZSDR/ZSDR | 1NC / 1NO | 1NC / 1NO | 200 N | 200 N | Pressure point D, Latching R |

* Additional board PNP for determination of switching position 1

** Additional board PNP for determination of switching position 3



Foot Switches With Enabling Function Covered

Foot switches are often used as so-called "hold-to-run control device" (touch control) to bring a machine into operation. For this purpose, the enable foot switches equiped with the approved enable contact are ideally suited as they satisfy very demanding safety standards.

The contact and the switching function of these switches is identical with those of the enable foot switches. The pedal position is recognizable dynamically with the signalling contact or statically with the additional board. The foot switches with enable function are with or without latching function and with protective shroud available.



Ordering Instructions for foot switch with enable function

| Single pedal foot switch F1 | | | | |
|-----------------------------|----------------|-----------------------|-------------------|--|
| Article number | Designation | Switching contacts | Pressure point | Special feature |
| 6061000558 | F1-ZSD UN | 1NC / 2NO | 200 N | Pressure point D, Prot. shroud UN |
| 6061000560 | F1-ZSDR UN | 1NC / 2NO | 200 N | Pressure point D, Latching R, Prot. shroud UN |
| 6061000564 | F1-ZSP1D UN | 1NC / 2NO | 200 N | Additional board 1*, Pressure point D, Prot. shroud UN |
| 6073700085 | F1-ASI-ZSD UN | | 200 N | ASI-ZS, Pressure point D, Prot. shroud UN |
| 6073700086 | F1-ASI-ZSDR UN | | 200 N | ASI-ZS, Pressure point D, Latching R, Prot. shroud UN |

* Additional board PNP for determination of switching position 1

Two pedal foot switch F2

| Article number Designation | | Switching contacts | | Pressure point | | Special feature |
|----------------------------|-------------------|--------------------|--------------|----------------|--------------|--|
| | | Pedal 1 (l.) | Pedal 2 (r.) | Pedal 1(l.) | Pedal 2 (r.) | |
| 6062000562 | F2-U1Z/ZSD UN | 1NC / 1NO | 1NC / 2NO | | 200 N | Pressure point D (Pedal 2), Prot. shroud UN |
| 6062000563 | F2-U1Z/ZSDR UN | 1NC / 1NO | 1NC / 2NO | | 200 N | Pressure point D (Pedal 2), Latching R, Prot. shroud UN |
| 6062000565 | F2-ZSP1D/ZSP1D UN | 1NC / 2NO | 1NC / 2NO | 200 N | 200 N | Additional board 1*, Press. point D (Pedal 1+2), Prot. shroud UN |
| 6062000566 | F2-ZSP3D/ZSP3D UN | 1NC / 2NO | 1NC / 2NO | 200 N | 200 N | Additional board 3**, Press. point D (Pedal 1+2), Prot. shroud UN |

* Additional board PNP for determination of switching position 1

** Additional board PNP for determination of switching position 3