ELEKTRONIK


Safety foot-switch, single pedal


Safety foot-switch, double pedal



The foot pedal FE-FS1-U1-U is equipped with a switching element, which contains one NC and one NO contact. It may e.g. be used for the selection of AKAS® Box bending function or opening of a press.

## Switching diagram:



## Switching elements:



| Execution | 1-aluminum foot pedal heavy version free standing on slip elastic feet |
| :---: | :---: |
| Operating voltage | max. 500 VAC, 40-60Hz |
| Switching current | max. 10 A |
| Operations | min. 10 Mio. |
| Contact Material | Silver |
| Connection type | Screwterminal |
| Electrical connection | 0,5-1,5 mm2 |
| Cable entry | M20x1,5 |
| Switching insert | 1 changeover contact, positive opening |
| Switching function | Changeover |
| Switching system | Creep mechanism |
| Housing | Die cast aluminum, powder-coated RAL 7021 (dark gray) |
| Pedal | Thermoplastic fiberglass reinforced PA6.6 black |
| Accident cover | Die cast aluminum, powder-coated |
| Attachment | For mounting of the footpedal in the housing bottom (pedal area) are provided $2 \times \varnothing 4,5$ and $2 \times \varnothing 6,5$ holes (see drawing) |
| Protection type | IP65 to IEC/EN 60529 |
| Operating temperature | $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
| Regulations | IEC/EN 60947-5-1 |
| Order code | $\begin{aligned} & \text { FE-FS1-U1-U-xx } \\ & (x x=\text { RD }=\text { cover firered RAL 3000 }) \\ & (x x=\text { YE }=\text { cover yellow RAL 1021) } \end{aligned}$ |



The foot pedal FE-FS1-SU1ASDU1-U have 3 positions with a pressure point, to control dangerous movements (for instance get down of a press brake ect...). It has 2 working contacts ( $1 \mathrm{NC}+1 \mathrm{NO}$ ) to drive the movement and one safety switches ( 1 positive opening NC contact +1 NO) to stop the movement. Pressing the foot pedal, till the pressure point, allows the changeover of the 2 working contacts. Once the pressure point is got over, the 2 working contacts return to their first position and the positive opening safety contact is activated in order to initiate immediately the dangerous movement. Thus a redundant information for the safety circuit is available. A restart of the machine is only possible after releasing the foot switch.

## Switching diagram:



## Switching elements:



| Execution | 1-aluminum foot pedal heavy version free standing on slip elastic feet |
| :---: | :---: |
| Operating voltage | max. 500 VAC, 40-60Hz |
| Switching current | max. 10 A |
| Operations | min. 10 Mio. |
| Contact Material | Silver |
| Connection type | Screwterminal |
| Electrical connection | 0,5-1,5 mm2 |
| Cable entry | M20x1,5 |
| Switching insert | 1 changeover contact, positive opening with tarnish after pressure point, 1 changeover contact, positive opening |
| Switching function | Sequential circuit with pressure point |
| pressure point | 200 N operating force |
| Switching system | Jump-/ creep mechanism |
| Housing | Die cast aluminum, powder-coated RAL 7021 (dark gray) |
| Pedal | Thermoplastic fiberglass reinforced PA6.6 black |
| Accident cover | Die cast aluminum, powder-coated |
| Attachment | For mounting of the footpedal in the housing bottom (pedal area) are provided $2 \times \varnothing 4,5$ and $2 x \varnothing 6,5$ holes (see drawing) |
| Protection type | IP65 to IEC/EN 60529 |
| Operating temperature | $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
| Regulations | IEC/EN 60947-5-1 |
| Order code | FE-FS1-SU1ASDU1-U-xx ( $x x=R D=$ cover firered RAL 3000 ) |



The foot pedal FE-FS1-SU1ASDO2-U have 3 positions with a pressure point to control dangerous movements (for instance get down of a press brake ect...). It has 2 working contacts ( 1 NO and 1 NC ) to drive the movement and one safety switches ( 2 positive opening NC contacts) to stop the movement.
Pressing the foot pedal, till the pressure point, allows the changeover of the 2 working contacts. Once the pressure point is got over, the 2 working contacts return to their first position and the positive opening safety contact is activated in order to initiate immediately the dangerous movement.
Thus a redundant information for the safety circuit is available.
A restart of the machine is only possible after releasing the foot switch.

## Switching diagram:



## Switching elements:



| Execution | 1-aluminum foot pedal heavy version free standing on slip elastic feet |
| :---: | :---: |
| Operating voltage | max. $500 \mathrm{VAC}, 40-60 \mathrm{~Hz}$ |
| Switching current | max. 10 A |
| Operations | min. 10 Mio. |
| Contact Material | Silver |
| Connection type | Screwterminal |
| Electrical connection | 0,5-1,5 mm2 |
| Cable entry | M20x1,5 |
| Switching insert | 1 changeover contact, positive opening with tarnish after pressure point, 2 NC contacts, positive opening |
| Switching function | Sequential circuit with pressure point |
| pressure point | 200 N operating force |
| Switching system | Jump-/ creep mechanism |
| Housing | Die cast aluminum, powder-coated RAL 7021 (dark gray) |
| Pedal | Thermoplastic fiberglass reinforced PA6.6 black |
| Accident cover | Die cast aluminum, powder-coated |
| Attachment | For mounting of the footpedal in the housing bottom (pedal area) are provided $2 \times \varnothing 4,5$ and $2 x \varnothing 6,5$ holes (see drawing) |
| Protection type | IP65 to IEC/EN 60529 |
| Operating temperature | $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
|  |  |
| Regulations | IEC/EN 60947-5-1 |
| Order code | FE-FS1-SU1ASDO2-U-xx <br> ( $x x=R D=$ cover firered RAL 3000 ) |



The foot pedal FE-FS1-S2DO2V-U have 3 positions with a pressure point and a pedal lock with manual release, to control dangerous movements (for instance get down of a press brake ect...). It has 2 working contacts (2NO) to drive the movement and one safety switches (2 positive opening NC contacts) to stop the movement. Pressing the foot pedal, till the pressure point, allows the changeover of the 2 working contacts. Once the pressure point is got over, the 2 working contacts return to their first position and the positive opening safety contact is activated in order to initiate immediately the dangerous movement.
Thus a redundant information for the safety circuit is available.
A restart of the machine is only possible after releasing the foot switch.

## Switching diagram:



## Switching elements:



| Execution | 1-aluminum foot pedal heavy version, Pedal lock with manual release, free standing on slip elastic feet |
| :---: | :---: |
| Operating voltage | max. 500 VAC, 40-60Hz |
| Switching current | max. 10 A |
| Operations | min. 10 Mio. |
| Contact Material | Silver |
| Connection type | Screwterminal |
| Electrical connection | 0,5-1,5 mm2 |
| Cable entry | M20x1,5 |
|  |  |
| Switching insert | 2 NO contacts, after pressure point, 2 NC contacts, positive opening |
| Switching function | Sequential circuit with pressure point |
| pressure point | 200 N operating force |
| Switching system | Jump-/ creep mechanism |
| Housing | Die cast aluminum, powder-coated RAL 7021 (dark gray) |
| Pedal | Thermoplastic fiberglass reinforced PA6.6 black |
| Accident cover | Die cast aluminum, powder-coated |
| Attachment | For mounting of the footpedal in the housing bottom (pedal area) are provided $2 \times \varnothing 4,5$ and $2 \times \varnothing 6,5$ holes (see drawing) |
| Protection type | IP65 to IEC/EN 60529 |
| Operating temperature | $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
| Regulations | IEC/EN 60947-5-1 |
| Order code | $\begin{aligned} & \text { FE-FS1-S2DO2V-U-xx } \\ & (x x=\text { RD }=\text { cover firered RAL } 3000) \end{aligned}$ |



The foot pedal FE-FS1-SU1ASDO2V-U have 3 positions with a pressure point and a pedal lock with manual release, to control dangerous movements (for instance get down of a press brake ect...). It has 2 working contacts (1NO and 1NC) to drive the movement and one safety switches (2 positive opening NC contacts) to stop the movement.
Pressing the foot pedal, till the pressure point, allows the changeover of the 2 working contacts. Once the pressure point is got over, the 2 working contacts return to their first position and the positive opening safety contact is activated in order to initiate immediately the dangerous movement.
Thus a redundant information for the safety circuit is available.
A restart of the machine is only possible after releasing the foot switch.

## Switching diagram:



## Switching elements:



| Execution | 1-aluminum foot pedal heavy version, Pedal lock with manual release, free standing on slip elastic feet |
| :---: | :---: |
| Operating voltage | max. $500 \mathrm{VAC}, 40-60 \mathrm{~Hz}$ |
| Switching current | max. 10 A |
| Operations | min. 10 Mio. |
| Contact Material | Silver |
| Connection type | Screwterminal |
| Electrical connection | 0,5-1,5 mm2 |
| Cable entry | M20x1,5 |
| Switching insert | 1 changeover contact, positive opening with tarnish after pressure point, 2 NC contacts, positive opening |
| Switching function | Sequential circuit with pressure point |
| pressure point | 200 N operating force |
| Switching system | Jump-/ creep mechanism |
| Housing | Die cast aluminum, powder-coated RAL 7021 (dark gray) |
| Pedal | Thermoplastic fiberglass reinforced PA6.6 black |
| Accident cover | Die cast aluminum, powder-coated |
| Attachment | For mounting of the footpedal in the housing bottom (pedal area) are provided $2 \times \varnothing 4,5$ and $2 \times \varnothing 6,5$ holes (see drawing) |
| Protection type | IP65 to IEC/EN 60529 |
| Operating temperature | $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
| Regulations | IEC/EN 60947-5-1 |
| Order code | FE-FS1-SU1ASDO2V-U-xx <br> ( $x x=$ RD = cover firered RAL 3000 ) |



The safety foot pedal FE-FS2-SU1ASDU1/U1-U use safety switches.
The right foot pedal have two positions (free position and pressed down position). It may e.g. be used for the selection of $A K A S ®$ Box bending function or opening of a press. The left foot pedal have 3 positions, with a pressure point, to control dangerous movements (for instance get down of a press brake ect...). It has 2 working contacts ( $1 \mathrm{NC}+1 \mathrm{NO}$ ) to drive the movement and one safety switch (1 positive opening NC contact + 1 NO ) to stop the movement. Pressing the foot pedal, till the pressure point, allows the changeover of the 2 working contacts. Once the pressure point is got over, the 2 working contacts return to their first position and the positive opening safety contact is activated in order to initiate immediately the dangerous movement. Thus a redundant information for the safety circuit is available.
A restart of the machine is only possible after releasing the foot switch.

## Left pedal:



Switching elements:


## Switching diagram:

Right pedal:

| Execution | 2 aluminum foot pedal heavy version free standing on slip elastic feet |
| :---: | :---: |
| Operating voltage | max. 500 VAC, 40-60Hz |
| Switching current | max. 10 A |
| Operations | min. 10 Mio. |
| Contact Material | Silver |
| Connection type | Screwterminal |
| Electrical connection | 0,5-1,5 mm2 |
| Cable entry | 1x M20x1,5 (middle), 2x PG13,5 |
| Switching insert | Left pedal: 1 changeover contact, positive opening with tarnish after pressure point, 1 changeover contact, positive opening |
|  | Rigth pedal: 1 changeover contact, positive opening |
| Switching function | Left pedal: sequential circuit with pressure point |
| Pressure point | Left pedal: 200 N operating force |
| Switching system | Left pedal: Jump-/ creep mechanism |
|  | Right pedal: Creep mechanism |
| Housing | Die cast aluminum, powder-coated RAL 7021 (dark gray) |
| Pedal | Thermoplastic fiberglass reinforced PA6.6 black |
| Accident cover | Die cast aluminum, powder-coated |
| Attachment | For mounting of the footpedal in the housing bottom (pedal area) are provided $2 \times \varnothing 4,5$ and $2 \times \varnothing 6,5$ holes (see drawing) |
| Protection type | IP65 to IEC/EN 60529 |
| Operating temperature | $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
| Regulations | IEC/EN 60947-5-1 |
| Order code | FE-FS2-SU1ASDU1/U1-U-xx ( $x x=R D=$ cover firered RAL 3000 ) |



The safety foot pedal FE-FS2-U1/SU1ASDU1-U use safety switches.
The left foot pedal have two positions (free position and pressed down position). It may e.g. be used for the selection of AKAS® Box bending function or opening of a press. The right foot pedal have 3
positions, with a pressure point, to control dangerous movements (for instance get down of a press brake ect...). It has 2 working contacts ( $1 \mathrm{NC}+1 \mathrm{NO}$ ) to drive the movement and one safety switch (1 positive opening NC contact +1 NO ) to stop the movement. Pressing the foot pedal, till the pressure point, allows the changeover of the 2 working contacts. Once the pressure point is got over, the 2 working contacts return to their first position and the positive opening safety contact is activated in order to initiate immediately the dangerous movement. Thus a redundant information for the safety circuit is available.
A restart of the machine is only possible after releasing the foot switch.

## Left pedal:

## Switching diagram:

## Switching elements:



Right pedal:


Contact closed Contact open

pressure point tarnish


Safety side

| Execution | 2 aluminum foot pedal heavy version free standing on slip elastic feet |
| :---: | :---: |
| Operating voltage | max. 500 VAC, 40-60Hz |
| Switching current | max. 10 A |
| Operations | min. 10 Mio. |
| Contact Material | Silver |
| Connection type | Screwterminal |
| Electrical connection | 0,5-1,5 mm2 |
| Cable entry | 1x M20x1,5 (middle), 2x PG13,5 |
|  |  |
| Switching insert | Left pedal: 1 changeover contact, positive opening |
|  | Right pedal: 1 changeover contact, positive opening with tarnish after pressure point, 1 changeover contact, positive opening |
| Switching function | Right pedal: sequential circuit with pressure point |
|  |  |
| Pressure point | Right pedal: 200 N operating force |
| Switching system | Left pedal: Creep mechanism |
|  | Right pedal: Jump-/ creep mechanism |
|  |  |
| Housing | Die cast aluminum, powder-coated RAL 7021 (dark gray) |
| Pedal | Thermoplastic fiberglass reinforced PA6.6 black |
| Accident cover | Die cast aluminum, powder-coated |
| Attachment | For mounting of the footpedal in the housing bottom (pedal area) are provided $2 \times \varnothing 4,5$ and $2 \times \varnothing 6,5$ holes (see drawing) |
|  |  |
| Protection type | IP65 to IEC/EN 60529 |
| Operating temperature | $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
|  |  |
| Regulations | IEC/EN 60947-5-1 |
| Order code | FE-FS2-U1/SU1ASDU1-U-xx <br> ( $\mathrm{xx}=\mathrm{RD}=$ cover firered RAL 3000 ) |



The safety foot pedal FE-FS2-S2DO2/U1-U use safety switches.
The right foot pedal have two positions (free position and pressed down position). It may e.g. be used for the selection of $A K A S ®$ Box bending function or opening of a press. The left foot pedal have 3 positions, with a pressure point, to control dangerous movements (for instance get down of a press brake ect...). It has 2 working contacts ( 2 NO ) to drive the movement and one safety switch ( 2 positive opening NC contact ) to stop the movement. Pressing the foot pedal, till the pressure point, allows the
changeover of the 2 working contacts. Once the pressure point is got over, the 2 working contacts return to their first position and the positive opening safety contact is activated in order to initiate immediately the dangerous movement.Thus a redundant information for the safety circuit is available.
A restart of the machine is only possible after releasing the foot switch.

## Left pedal:

## Switching diagram:

## Switching elements:

Right pedal:

 Contact closed Contact open

R


Contact closed
Contact open


Safety side

| Execution | 2 aluminum foot pedal heavy version free standing on slip elastic feet |
| :---: | :---: |
| Operating voltage | max. 500 VAC, 40-60Hz |
| Switching current | max. 10 A |
| Operations | min. 10 Mio. |
| Contact Material | Silver |
| Connection type | Screwterminal |
| Electrical connection | 0,5-1,5 mm2 |
| Cable entry | 1x M20x1,5 (middle), 2x PG13,5 |
| Switching insert | Left pedal: <br> 2 NO contacts, after pressure point, 2 NC contacts, positive opening |
|  | Rigth pedal: 1 changeover contact, positive opening |
| Switching function | Left pedal: sequential circuit with pressure point |
| Pressure point | Left pedal: 200 N operating force |
| Switching system | Left pedal: Jump-/ creep mechanism |
|  | Right pedal: Creep mechanism |
| Housing | Die cast aluminum, powder-coated RAL 7021 (dark gray) |
| Pedal | Thermoplastic fiberglass reinforced PA6.6 black |
| Accident cover | Die cast aluminum, powder-coated |
| Attachment | For mounting of the footpedal in the housing bottom (pedal area) are provided $2 \times \varnothing 4,5$ and $2 \times \varnothing 6,5$ holes (see drawing) |
| Protection type | IP65 to IEC/EN 60529 |
| Operating temperature | $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
| Regulations | IEC/EN 60947-5-1 |
| Order code | $\begin{aligned} & \text { FE-FS2-S2DO2/U1-U-XX } \\ & \text { (xx = RD = cover firered RAL } 3000 \text { ) } \end{aligned}$ |



The safety foot pedal FE-FS2-SU1ASDO2/U1-U use safety switches.
The right foot pedal have two positions (free position and pressed down position). It may e.g. be used for the selection of AKAS® Box bending function or opening of a press. The left foot pedal have 3 positions, with a pressure point, to control dangerous movements (for instance get down of a press brake ect...). It has 2 working contacts ( $1 \mathrm{NC}+1 \mathrm{NO}$ ) to drive the movement and one safety switch ( 2 positive opening NC contacts) to stop the movement. Pressing the foot pedal, till the pressure point, allows the changeover of the 2 working contacts. Once the pressure point is got over, the 2 working contacts return to their first position and the positive opening safety contact is activated in order to initiate immediately the dangerous movement. Thus a redundant information for the safety circuit is available.
A restart of the machine is only possible after releasing the foot switch.

## Left pedal:

## Switching diagram:

## Switching elements:

Right pedal:

pressure point


Safety side

| Execution | 2 aluminum foot pedal heavy version free standing on slip elastic feet |
| :---: | :---: |
| Operating voltage | max. 500 VAC, 40-60Hz |
| Switching current | max. 10 A |
| Operations | min. 10 Mio. |
| Contact Material | Silver |
| Connection type | Screwterminal |
| Electrical connection | 0,5-1,5 mm2 |
| Cable entry | 1x M20x1,5 (middle), 2x PG13,5 |
|  |  |
| Switching insert | Left pedal: 1 changeover contact, positive opening with tarnish after pressure point, 2 positive opening contacts |
|  | Rigth pedal: 1 changeover contact, positive opening |
| Switching function | Left pedal: sequential circuit with pressure point |
| Pressure point | Left pedal: 200 N operating force |
| Switching system | Left pedal: Jump-/ creep mechanism |
|  | Right pedal: Creep mechanism |
| Housing | Die cast aluminum, powder-coated RAL 7021 (dark gray) |
| Pedal | Thermoplastic fiberglass reinforced PA6.6 black |
| Accident cover | Die cast aluminum, powder-coated |
| Attachment | For mounting of the footpedal in the housing bottom (pedal area) are provided $2 \times \varnothing 4,5$ and $2 \times \varnothing 6,5$ holes (see drawing) |
|  |  |
| Protection type | IP65 to IEC/EN 60529 |
| Operating temperature | $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
| Regulations | IEC/EN 60947-5-1 |
| Order code | $\begin{aligned} & \text { FE-FS2-SU1ASDO2/U1-U-XX } \\ & (X X=\text { RD = cover firered RAL } 3000 \text { ) } \end{aligned}$ |



The safety foot pedal FE-FS2-U1/SU1ASDO2S-U use safety switches and a lever.
The left foot pedal have two positions (free position and pressed down position). It may e.g. be used for the selection of AKAS® Box bending function or opening of a press. The right foot pedal have 3
positions, with a pressure point, to control dangerous movements (for instance get down of a press brake ect...). It has 2 working contacts ( $1 \mathrm{NC}+1 \mathrm{NO}$ ) to drive the movement and one safety switch (1 positive opening NC contact +1 NO ) to stop the movement. Pressing the foot pedal, till the pressure point, allows the changeover of the 2 working contacts. Once the pressure point is got over, the 2 working contacts return to their first position and the positive opening safety contact is activated in order to initiate immediately the dangerous movement. Thus a redundant information for the safety circuit is available.
A restart of the machine is only possible after releasing the foot switch.

## Left pedal:

## Switching diagram:



## Switching elements:



Right pedal:



| Execution | 2 aluminum foot pedal heavy version, with lever, free standing on slip elastic feet |
| :---: | :---: |
| Operating voltage | max. 500 VAC, 40-60Hz |
| Switching current | max. 10 A |
| Operations | min. 10 Mio. |
| Contact Material | Silver |
| Connection type | Screwterminal |
| Electrical connection | 0,5-1,5 mm2 |
| Cable entry | 1x M20x1,5 (middle), 2x PG13,5 |
|  |  |
| Switching insert | Left pedal: 1 changeover contact, positive opening |
|  | Right pedal: 1 changeover contact, positive opening with tarnish after pressure point, 2 positive opening contacts |
| Switching function | Right pedal: sequential circuit with pressure point |
|  |  |
| Pressure point | Right pedal: 200 N operating force |
| Switching system | Left pedal: Creep mechanism |
|  | Right pedal: Jump-/ creep mechanism |
|  |  |
| Housing | Die cast aluminum, powder-coated RAL 7021 (dark gray) |
| Pedal | Thermoplastic fiberglass reinforced PA6.6 black |
| Accident cover | Die cast aluminum, powder-coated |
| Attachment | For mounting of the footpedal in the housing bottom (pedal area) are provided $2 x \oslash 4,5$ and $2 x \oslash 6,5$ holes (see drawing) |
|  |  |
| Protection type | IP65 to IEC/EN 60529 |
| Operating temperature | $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
|  |  |
| Regulations | IEC/EN 60947-5-1 |
| Order code | $\begin{aligned} & \text { FE-FS2-U1/SU1ASDO2S-U-xx } \\ & (x x=\text { RD }=\text { cover firered RAL } 3000) \end{aligned}$ |



## Service

As a special feature for training our customers, Fiessler Elektronik offers one-day safety workshops. Our service team provides you with expert advice and information for the reliable integration of our safety equipment into your machine.

## HOMOLOGATIONS

In order to ensure and maintain the high quality level of the Fiessler safety products, a quality control security system has been established early. Fiessler Elektronik holds the DIN ISO EN 9001 Certificate and, thanks to the company-owned EMC laboratory, all products must pass a inspection without exception before they leave the company. All safety equipment comply with the applicable national and international standards. Development and Design is made in close cooperation with the German employer`s liablility insurance associations. All homologations are obtained only after having passed strict tests by the German surveyor organisation TÜV.

## AWARD OF APPRECIATI-

ON for exemplary performance in the development of the press brake protection system AKAS.
The award was bestowed upon Fiessler Elektronik by the ministry of trade and commerce of the federal state of Baden-Württemberg.



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Fiessler Elektronik has respresentations in all major industrial nations.


