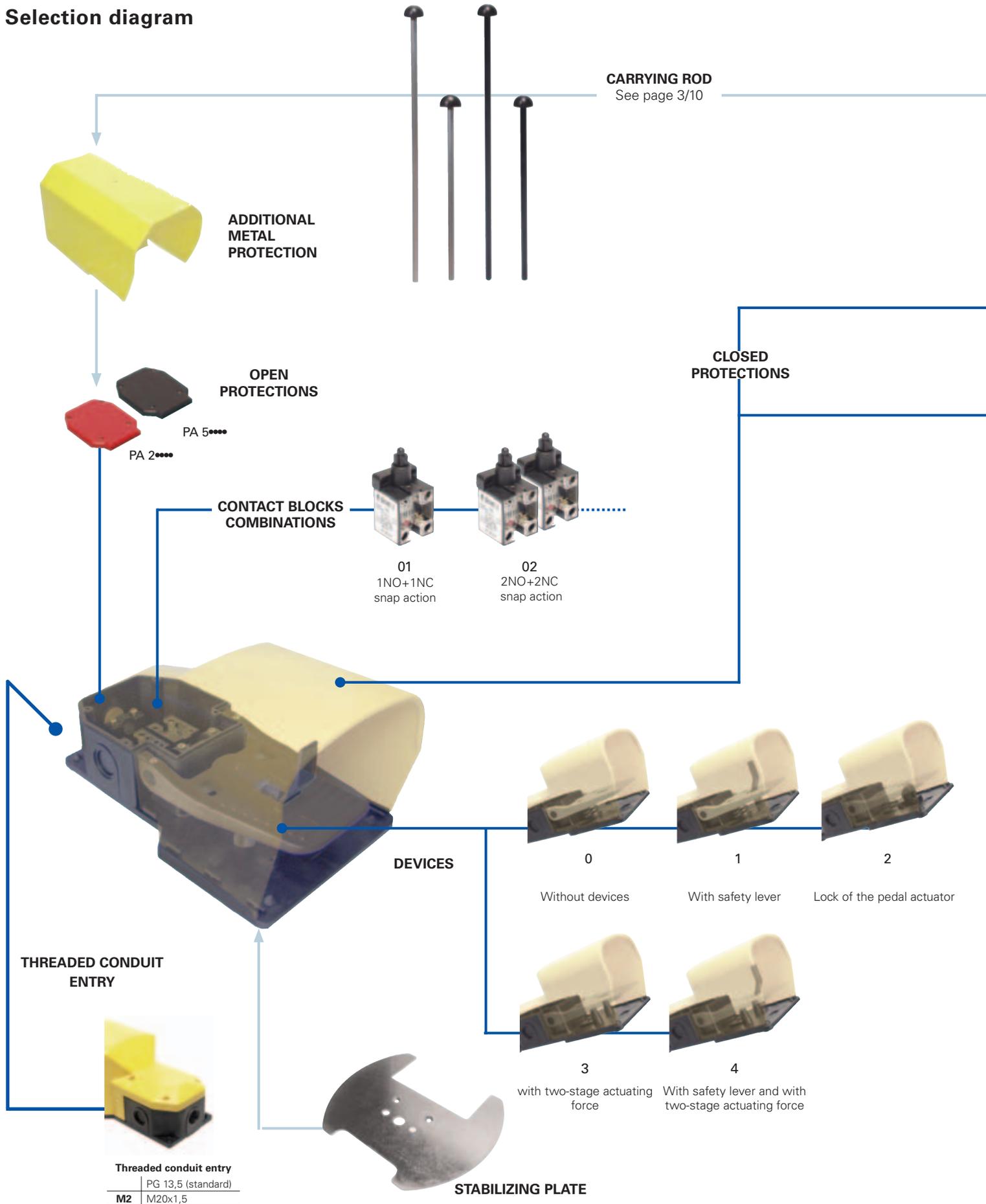
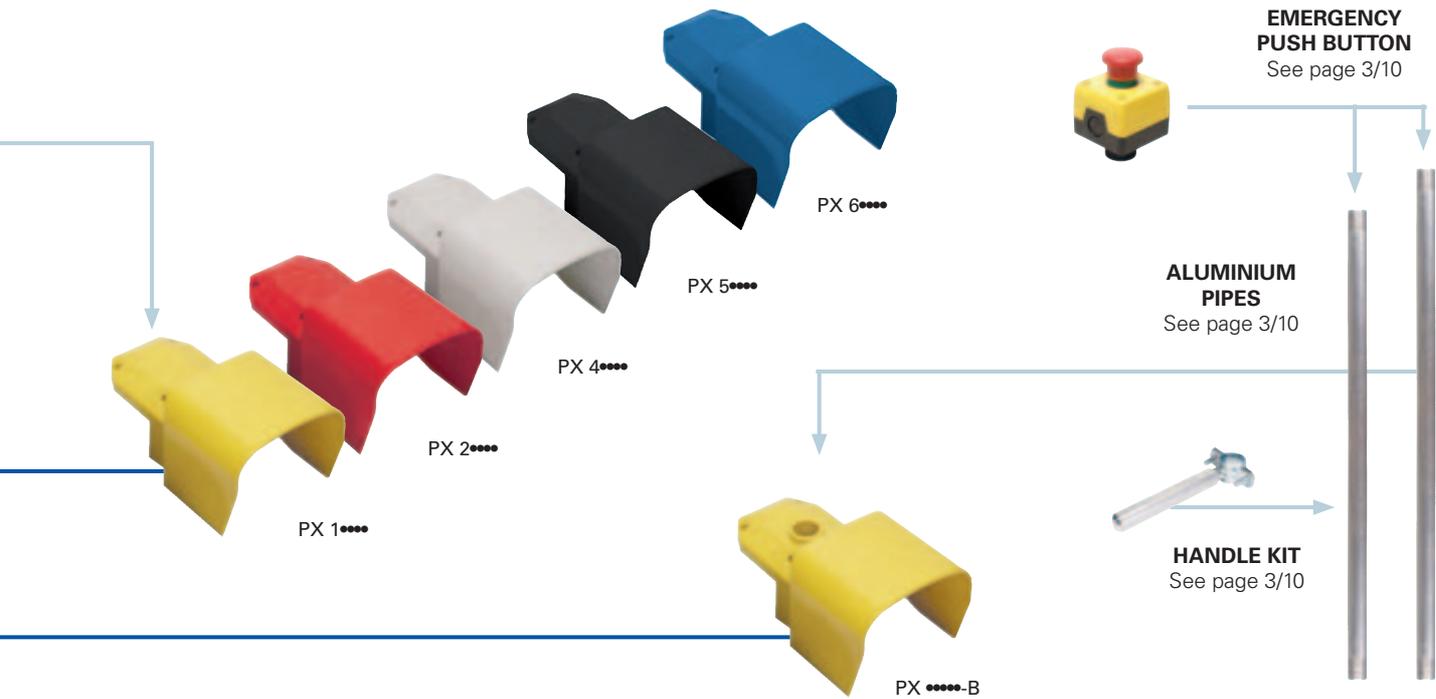


## Selection diagram



- product option
- accessory sold separately



- 1
- 1A
- 1B
- 2
- 2A
- 2B
- 2C
- 2D
- 2E
- 3
- 3A
- 3B
- 3C
- 4
- 4A
- 4B
- 4C
- 4D
- 4E
- 4F
- 4G
- 4H
- 5
- 6

### Code structure

**Attention!** The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

## PX 10110-AM2X

<p><b>Foot switches</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"><b>PX</b></td> <td>with pedal actuator protection</td> </tr> <tr> <td><b>PA</b></td> <td>without pedal actuator protection</td> </tr> </table> <p><b>Protections colour</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"><b>1</b></td> <td>yellow RAL 1023</td> </tr> <tr> <td><b>2</b></td> <td>red RAL 3020</td> </tr> <tr> <td><b>4</b></td> <td>grey RAL 7040</td> </tr> <tr> <td><b>5</b></td> <td>black RAL 9017</td> </tr> <tr> <td><b>6</b></td> <td>blue RAL 5017</td> </tr> </table>	<b>PX</b>	with pedal actuator protection	<b>PA</b>	without pedal actuator protection	<b>1</b>	yellow RAL 1023	<b>2</b>	red RAL 3020	<b>4</b>	grey RAL 7040	<b>5</b>	black RAL 9017	<b>6</b>	blue RAL 5017	<p><b>External metallic parts</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td>zinc plated steel (standard)</td> </tr> <tr> <td><b>X</b></td> <td>stainless steel</td> </tr> </table> <p><b>Threaded conduit entries</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td>PG 13,5 (standard)</td> </tr> <tr> <td><b>M2</b></td> <td>M20x1,5</td> </tr> </table> <p><b>Accessories (only PX series)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td>without accessories</td> </tr> <tr> <td><b>A</b></td> <td>complete with polymer carrying rod (400 mm)</td> </tr> <tr> <td><b>B</b></td> <td>with M25 hole for VF KIT31</td> </tr> <tr> <td><b>C</b></td> <td>with M25 hole for VF KIT31 complete with stabilizing plate</td> </tr> <tr> <td><b>D</b></td> <td>complete with polymer carrying rod (660 mm)</td> </tr> </table> <p><b>Protection degree</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"><b>0</b></td> <td>IP53</td> </tr> <tr> <td><b>1</b></td> <td>IP65</td> </tr> </table>		zinc plated steel (standard)	<b>X</b>	stainless steel		PG 13,5 (standard)	<b>M2</b>	M20x1,5		without accessories	<b>A</b>	complete with polymer carrying rod (400 mm)	<b>B</b>	with M25 hole for VF KIT31	<b>C</b>	with M25 hole for VF KIT31 complete with stabilizing plate	<b>D</b>	complete with polymer carrying rod (660 mm)	<b>0</b>	IP53	<b>1</b>	IP65
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<b>1</b>	IP65																																				

Contact blocks combination	
<b>01</b>	1NO+1NC, snap action (VF B501)
<b>02</b>	2x (1NO+1NC), snap action (VF B501+VF B501)
<b>03</b>	1NO+1NC, slow action (VF B601)
<b>04</b>	2x (1NO+1NC), slow action (VF B601+VF B601)
<b>05</b>	2x 2NO, slow action (VF B1001+VF B1001)
<b>06</b>	2x 2NC, slow action (VF B901+VF B901)
<b>07</b>	2NC, slow action (VF B901)
<b>08</b>	2NO, slow action (VF B1001)
<b>09</b>	1NO+1NC, slow action overlapped (VF B701)
<b>20</b>	2x (1NO+1NC), snap action shifted (VF B501+VF B501)

Contact block features see page 2/175

Devices	
<b>0</b>	without devices
<b>1</b>	with safety lever
<b>2</b>	with lock of the pedal actuator
<b>3</b>	without safety lever and with two-stage actuating force (only for contact block combination 20)
<b>4</b>	with safety lever and with two-stage actuating force (only for contact block combination 20)



### Main data

- Polymer housing, three conduit entries
- Protection degree IP53 or IP65
- Various contact blocks available
- Various auxiliary devices available
- Assembled through special joining kits

### Utilization categories

Alternate current: AC15 (50÷60 Hz)

Ue (V)	250	400	500
Ie (A)	6	4	1

Direct current: DC13

Ue (V)	24	125	250
Ie (A)	6	1,1	0,4

### Markings:



### Installation for safety applications:

Use only switches marked with the symbol  $\ominus$ . The safety circuit must always be connected with the **NC contacts** (normally closed contacts: 11-12, 21-22 or 31-32) as stated in the **standard EN 60947-5-1, encl. K, par. 2**.

**⚠ If not expressly indicated in this chapter, for the right installation and the correct utilization of all articles see requirements indicated from page 6/1 to page 6/10.**

### Housing

Made of glass-reinforced polymer, self-extinguishing, shock-proof thermoplastic resin and with double insulation  $\square$

Actuating force: 16 N

One threaded conduit entry

Protection degree: IP53 or IP65 according to EN 60529

### General data

Ambient temperature: from -25°C to +80°C

Max operating frequency: 3600 operations cycles<sup>1</sup>/hour

Mechanical endurance: 20 million operations cycles<sup>1</sup>

(1) One operation cycle means two movements, one to close and one to open contacts, as foreseen by EN 60947-5-1 standard.

### Electrical data

Thermal current (Ith): 10 A

Rated insulation voltage (Ui): 500 Vac 600 Vdc

Conditional short circuit current: 1000 A according to EN 60947-5-1

Protection against short circuits: fuse 10 A 500 V type aM

Pollution degree: 3

### Cross section of the conductors (flexible copper wire)

Contact block combinations: min. 1 x 0,5 mm<sup>2</sup> (1 x AWG 20)

max. 2 x 2,5 mm<sup>2</sup> (2 x AWG 14)

### In conformity with standards:

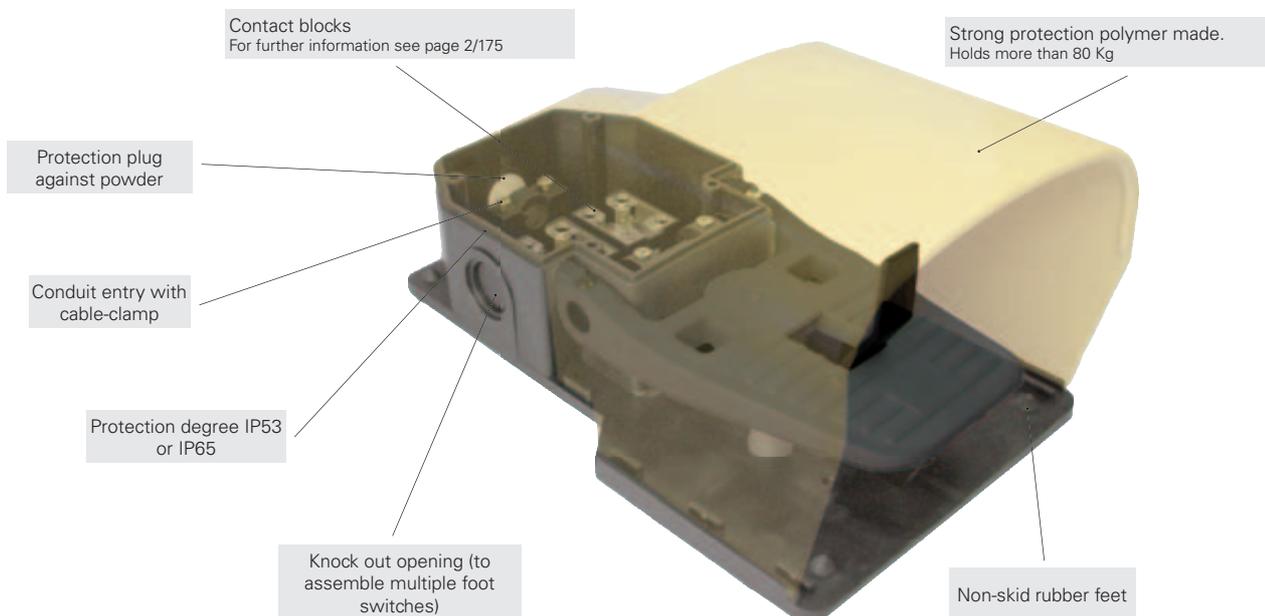
IEC 60947-5-1, EN 60947-5-1, IEC 60529, EN 60529, VDE 0660-200, CENELEC EN 50013.

### In conformity with requirements requested by:

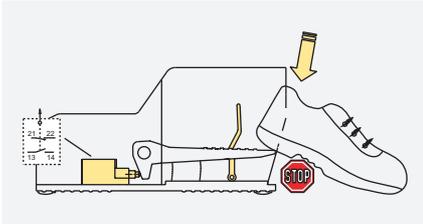
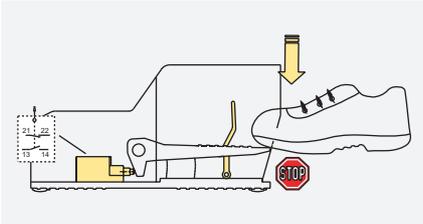
Low Voltage Directive 2006/95/EC, Machinery Directive 2006/42/EC and Electromagnetic Compatibility 2004/108/EC.

### Positive contact opening in conformity with standards:

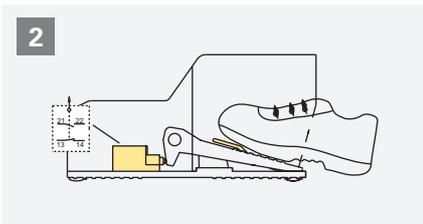
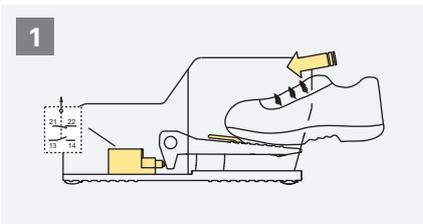
IEC 60947-5-1, EN 60947-5-1, VDE 0660-206.



**Devices: safety lever** (e.g. article PX 10110)

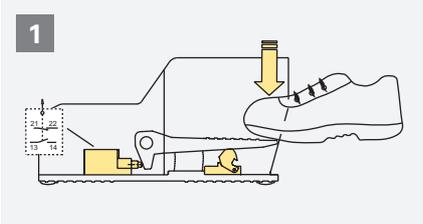


The safety lever prevents the pedal actuator from lowering when the foot is not completely inserted, thus preventing casual or accidental actuation.

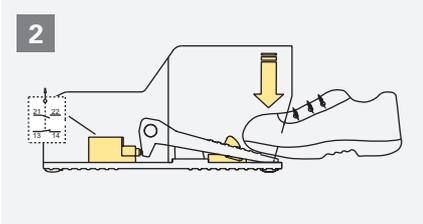


The foot must be completely inserted in order to lower the safety lever and push down the pedal actuator.

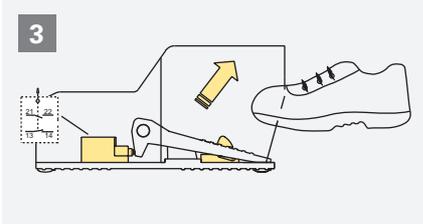
**Devices: lock of the pedal actuator** (e.g. article PX 10120)



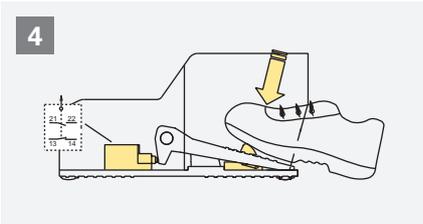
Insertion of the foot in the foot switch



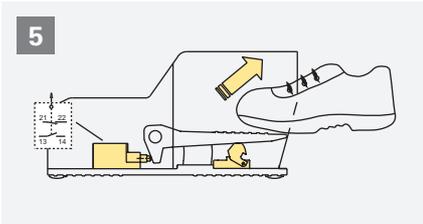
Pushing down the pedal actuator, the contact switches and the device locks the actuator



Releasing the pedal actuator, the lock device keeps it down

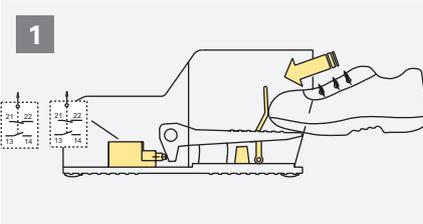


To unlock the pedal actuator, push the locking device

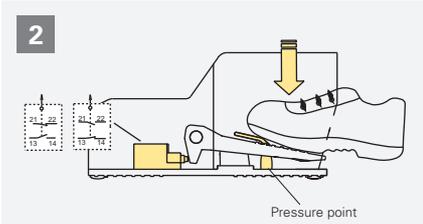


With drawing the foot from the foot switch, the pedal actuator and the contacts return to their initial positions

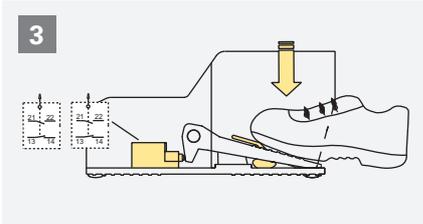
**Devices: actuating force in 2 stages** (e.g. article PX 12040)



PX foot switches with two overlapped snap action contact blocks (2x 1NO+1NC), two steps actuation force and safety lever.



With a light pressure (~19 N) on the pedal actuator, the first contact block switches while the second keeps its state. The pedal actuator stops at pressure point

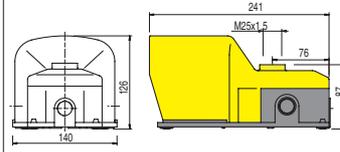
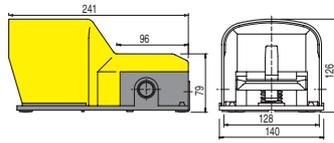
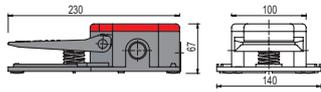


Pushing down with higher force (~180 N) on the pedal actuator, the second contact block switches as well. In this position both contact blocks have been switched.

## Dimensional drawings

Contacts type:

- R** = snap action
- L** = slow action
- LO** = slow action overlapped
- RS** = snap action shifted



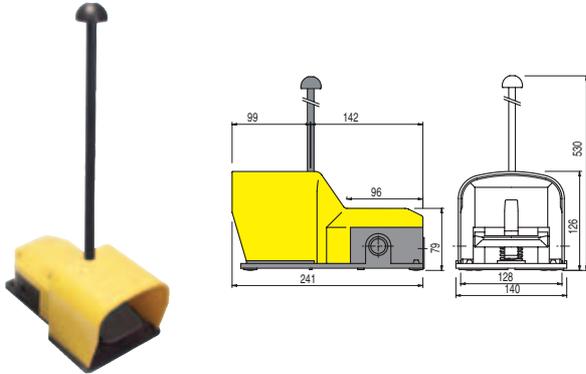
Contact block combination

01	<b>R</b>	PA 20100	➔ 1NO+1NC	PX 10110	➔ 1NO+1NC	PX 10110-B	➔ 1NO+1NC	
02	<b>R</b>	PA 20200	➔ 2x (1NO+1NC)	PX 10210	➔ 2x (1NO+1NC)	PX 10210-B	➔ 2x (1NO+1NC)	
03	<b>L</b>	PA 20300	➔ 1NO+1NC	PX 10310	➔ 1NO+1NC	PX 10310-B	➔ 1NO+1NC	
04	<b>L</b>	PA 20400	➔ 2x (1NO+1NC)	PX 10410	➔ 2x (1NO+1NC)	PX 10410-B	➔ 2x (1NO+1NC)	
05	<b>L</b>	PA 20500	2x 2NO	PX 10510	2x 2NO	PX 10510-B	2x 2NO	
06	<b>L</b>	PA 20600	➔ 2x 2NC	PX 10610	➔ 2x 2NC	PX 10610-B	➔ 2x 2NC	
07	<b>L</b>	PA 20700	➔ 2NC	PX 10710	➔ 2NC	PX 10710-B	➔ 2NC	
08	<b>L</b>	PA 20800	2NO	PX 10810	2NO	PX 10810-B	2NO	
09	<b>LO</b>	PA 20900	➔ 1NO+1NC	PX 10910	➔ 1NO+1NC	PX 10910-B	➔ 1NO+1NC	
20	<b>LS</b>	PA 22000	➔ 2x (1NO+1NC)	PX 12010	➔ 2x (1NO+1NC)	PX 12010-B	➔ 2x (1NO+1NC)	



### Combination examples

Foot switch with pedal actuator protection and polymer carrying rod (400 mm)

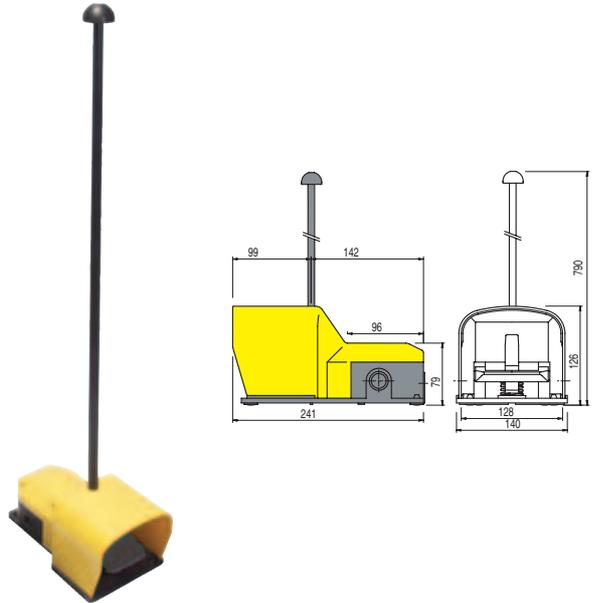


How to order:

PX 10110	VF KIT21			

This article can be bought also with single code PX 10110-A. In this case the cover is supplied already pierced for the carrying rod fixing.

Foot switch with pedal actuator protection and polymer carrying rod (660 mm)

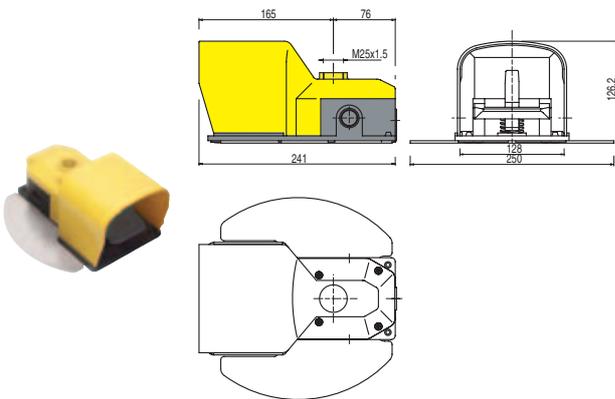


How to order:

PX 10110	VF KIT22			

This article can be bought also with single code PX 10110-D. In this case the cover is supplied already pierced for the carrying rod fixing.

Foot switch with pedal actuator protection having a hole M25x1,5 and stabilizing plate

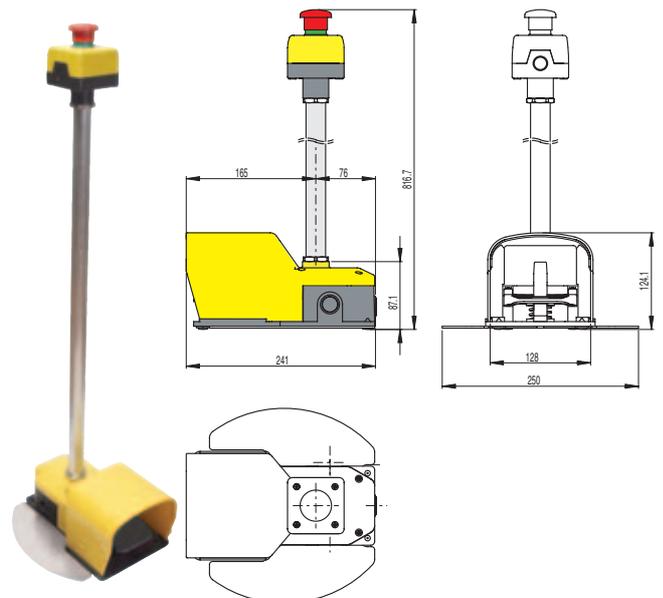


How to order:

PX 10110-B	VF KIT60			

This article can be bought also with single code PX 10110-C.

Foot switch with pedal actuator protection and aluminium pipe, stabilizing plate and emergency push button 1NC



How to order:

PX 10110-B	VF KIT60	VF KIT31	VF KIT32	

- 1
- 1A
- 1B
- 2
- 2A
- 2B
- 2C
- 2D
- 2E
- 3
- 3A**
- 3B
- 3C
- 4
- 4A
- 4B
- 4C
- 4D
- 4E
- 4F
- 4G
- 4H
- 5
- 6