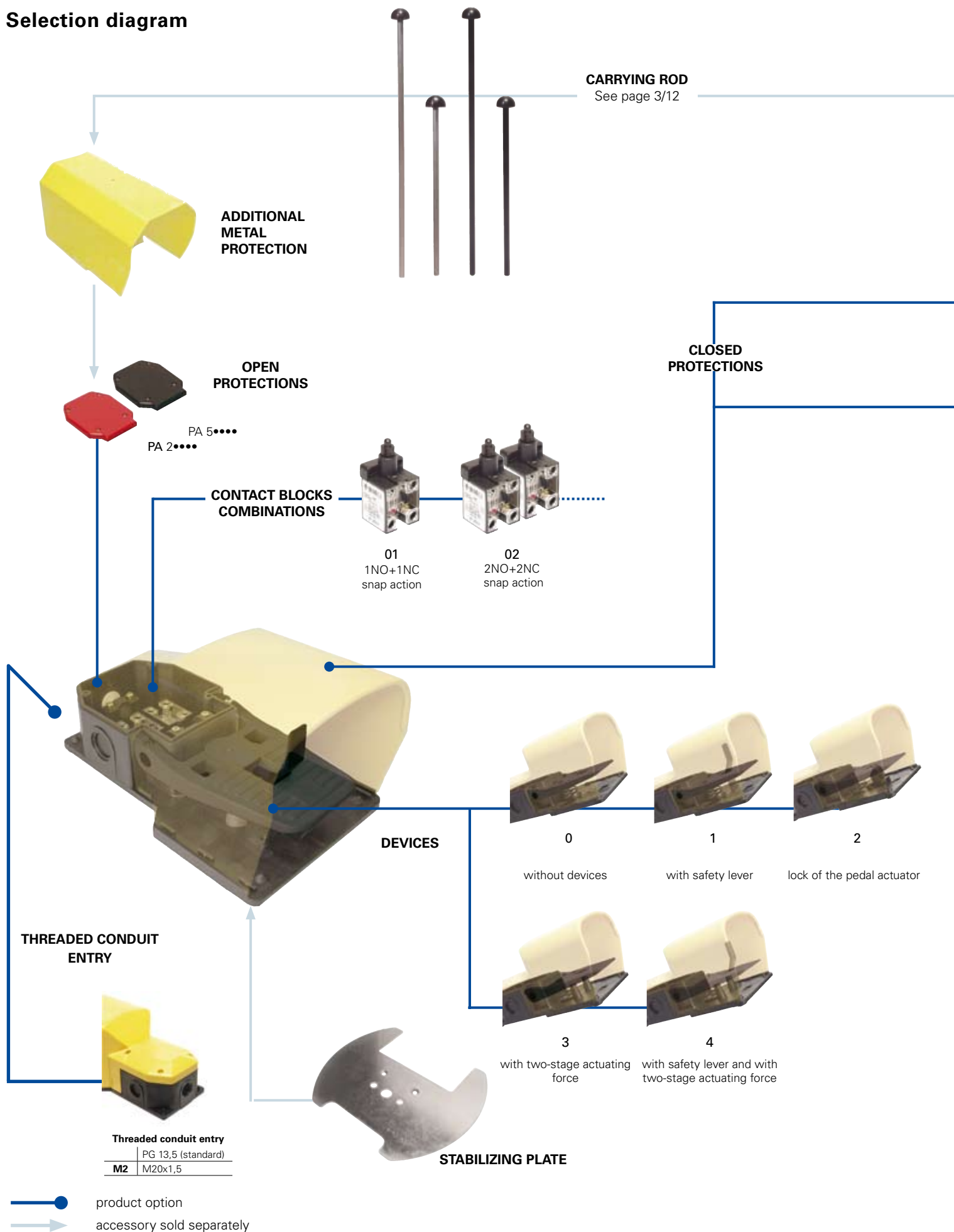
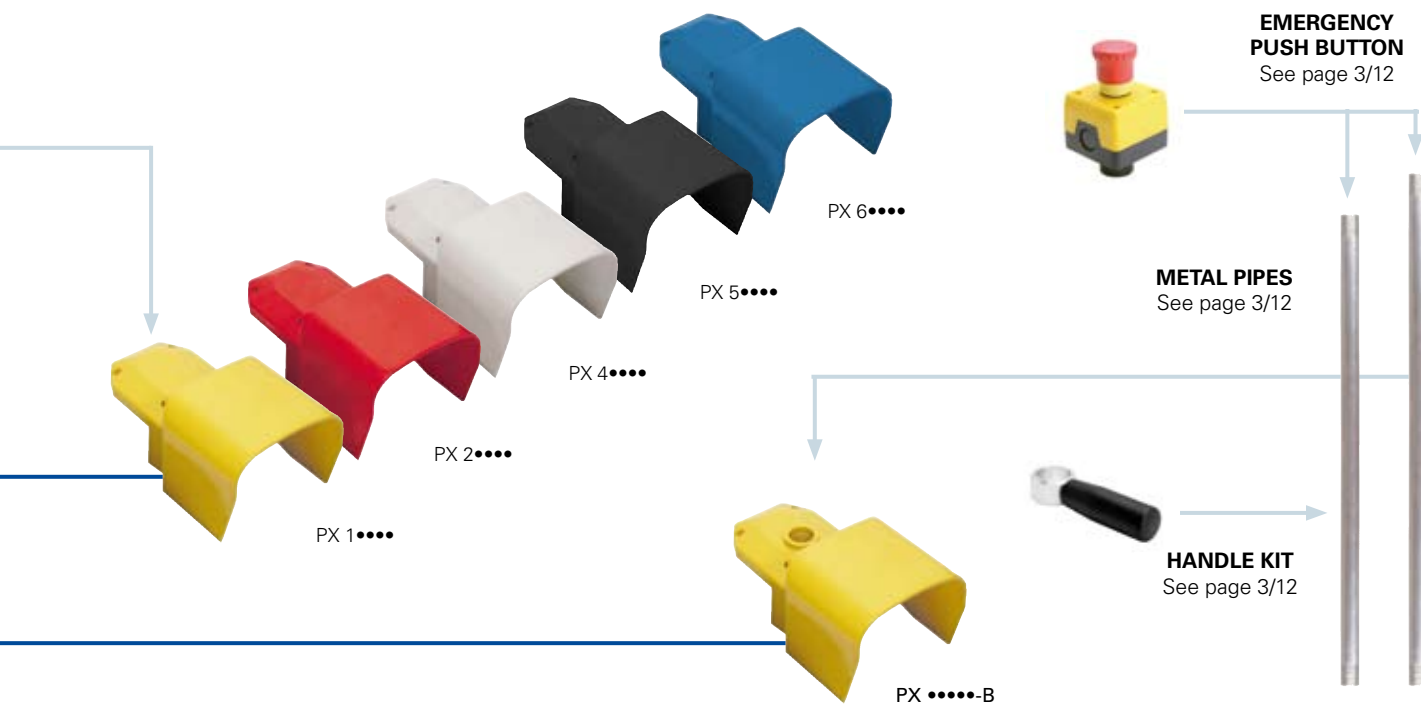


Selection diagram




Code structure

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

article		options	
PX 10110		-AM2X	
Foot switches PX with pedal actuator protection PA without pedal actuator protection		External metallic parts zinc plated steel (standard) X stainless steel	
Protections colour 1 yellow RAL 1023 2 red RAL 3020 4 grey RAL 7035 5 black RAL 9017 6 blue RAL 5017		Threadedconduitentries PG 13,5 (standard) M2 M20x1,5	
Contact blocks combination 01 1NO+1NC, snap action (VF B501) 02 2x (1NO+1NC), snap action (VF B501+VF B501) 03 1NO+1NC, slow action (VF B601) 04 2x (1NO+1NC), slow action (VF B601+VF B601) 05 2x 2NO, slow action (VF B1001+VF B1001) 06 2x 2NC, slow action (VF B901+VF B901) 07 2NC, slow action (VF B901) 08 2NO, slow action (VF B1001) 09 1NO+1NC, slow action overlapped (VF B701) 14 2NO, snap action (VF B1201) 15 2NC, snap action (VF B1101) 20 2x (1NO+1NC), snap action shifted (VF B501+VF B501) 24 (1NO+1NC) + (2NC), snap action shifted (VF B501+VF B1101)		Accessories (only PX series) without accessories A complete with polymer carrying rod (400 mm) B with M25 hole for VF KIT31 C with M25 hole for VF KIT31 complete with stabilizing plate D complete with polymer carrying rod (660 mm)	
Contact block features see page 2/179.		Protection degree 0 IP53 1 IP65	
		Devices 0 without devices 1 with safety lever 2 with lock of the pedal actuator 3 without safety lever and with two-stage actuating force (only for contact block combination 20) 4 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 ⊕. 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 7/1 to page 7/10.

Housing

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

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 actuation frequency:

3600 operations cycles¹/hour

Mechanical endurance:

20 million operations cycles¹

(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

Rated impulse withstand voltage U_{imp}:

6 kV

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 ²	(1 x AWG 20)
max.	2 x 2,5 mm ²	(2 x AWG 14)

In conformity with standards:

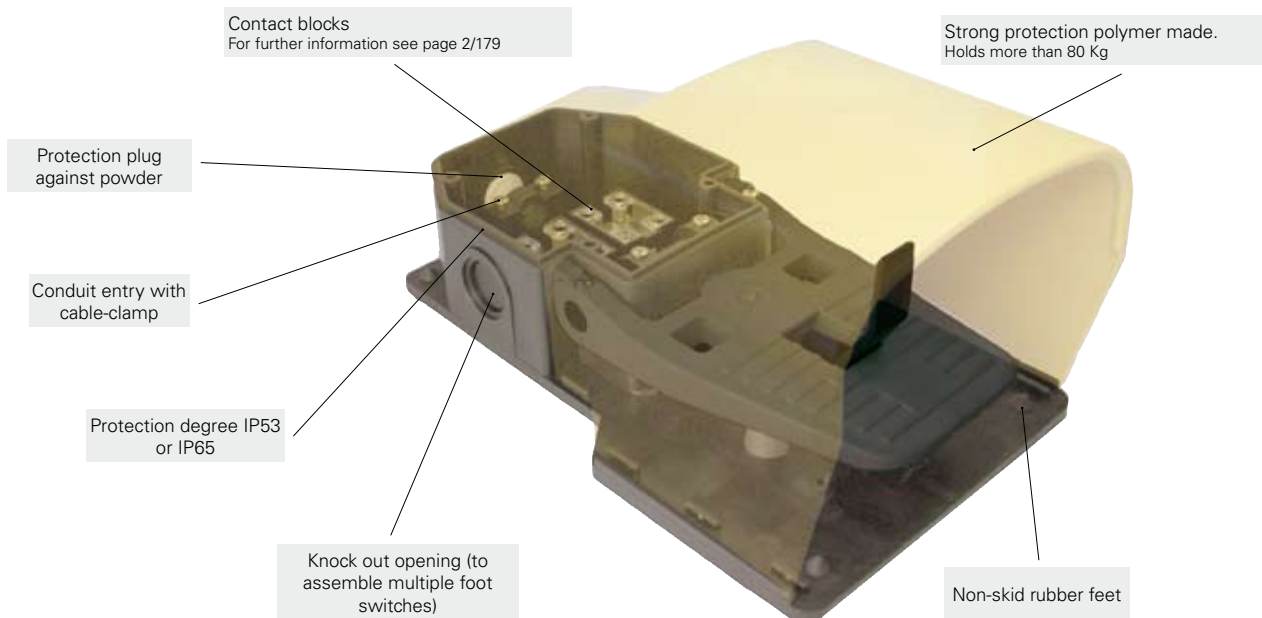
IEC 60947-5-1, EN 60947-5-1, IEC 60529, EN 60529, VDE 0660-200, CENELEC EN 50013.

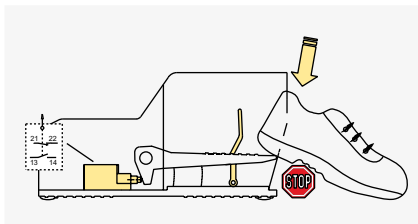
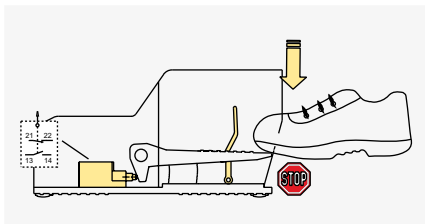
In conformity with requirements requested by:

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

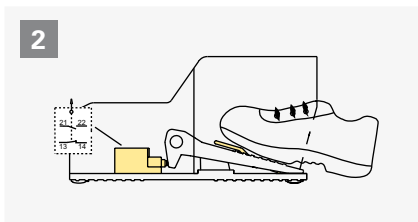
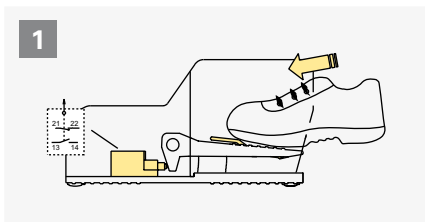
Positive contact opening in conformity with standards:

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

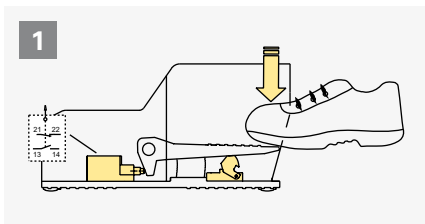


Devices: safety lever (e.g. article PX 10110)


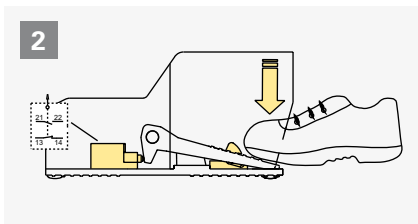
The safety lever prevents the pedal actuator from lowering when the foot is not completely inserted, thus preventing casual or accidental actuation.



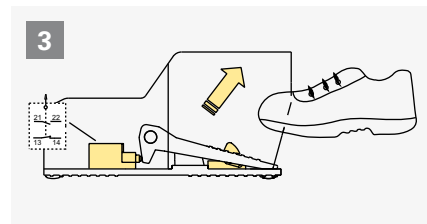
The foot must be completely inserted in order to lower the safety lever and push down the pedal actuator.

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


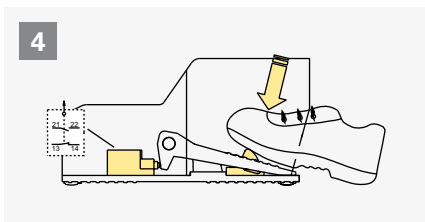
Insertion of the foot in the foot switch



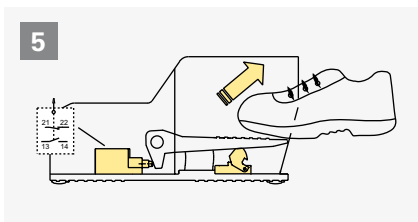
Pushing down the pedal actuator, the contact switches and the device locks the actuator



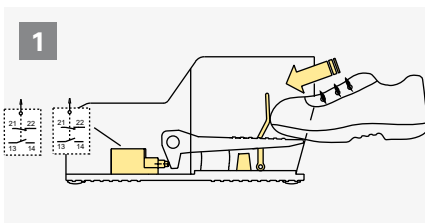
Releasing the pedal actuator, the lock device keeps it down



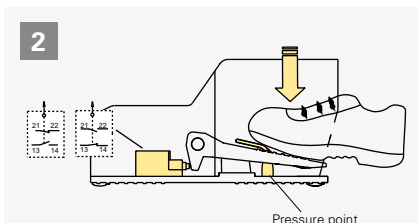
To unlock the pedal actuator, push the locking device



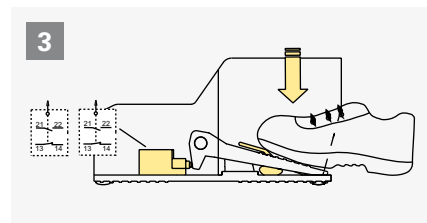
With drawing the foot from the foot switch, the pedal actuator and the contacts return to their initial positions

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

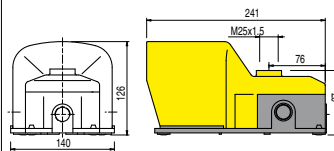
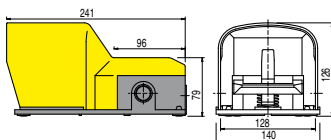
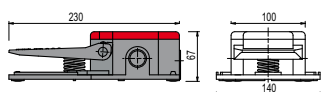


Pushing down with higher force (~ 180 N) on the pedal actuator, the second contact block switches as well. In this position both contact blocks have been switched.

Dimensional drawings

Contacts type:

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

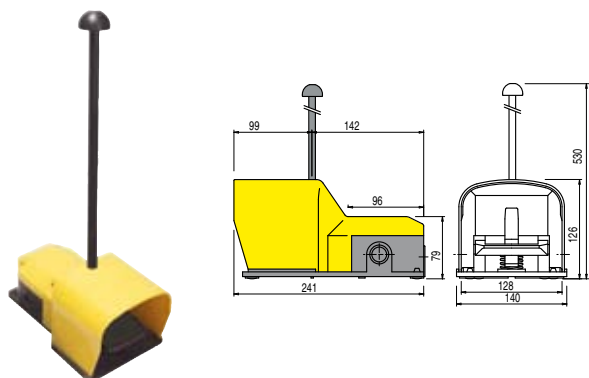


Contact block combination

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

Legend

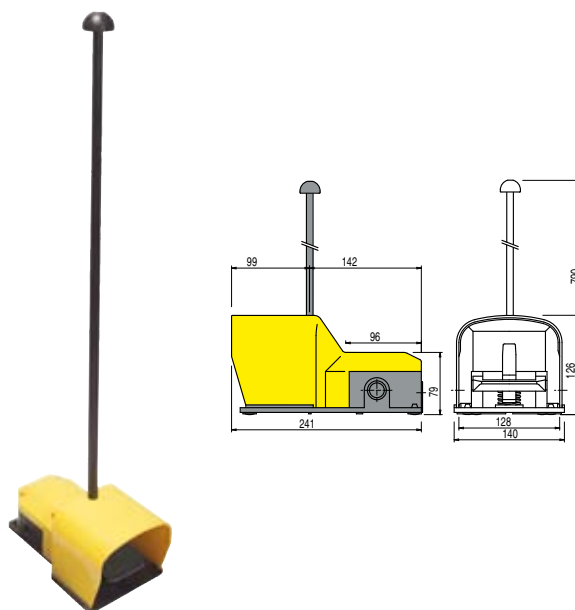
- Contact closed
- Contact open
- Positive opening stroke
- Pressing the switch / Releasing the switch

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


How to order:

PX 10110	VF KIT21			

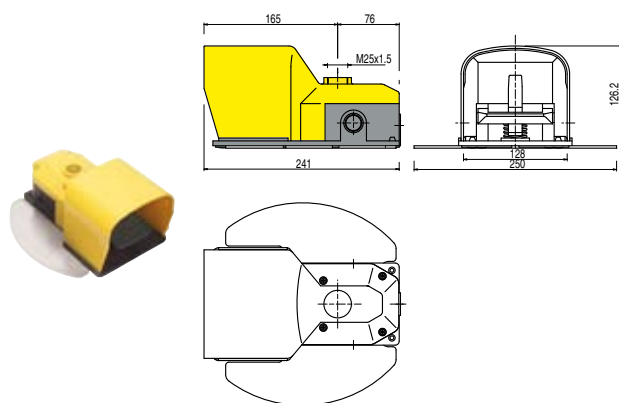
This article can be bought also with single code PX 10110-A. In this case the cover is supplied already pierced for the carrying rod fixing.

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


How to order:

PX 10110	VF KIT22			

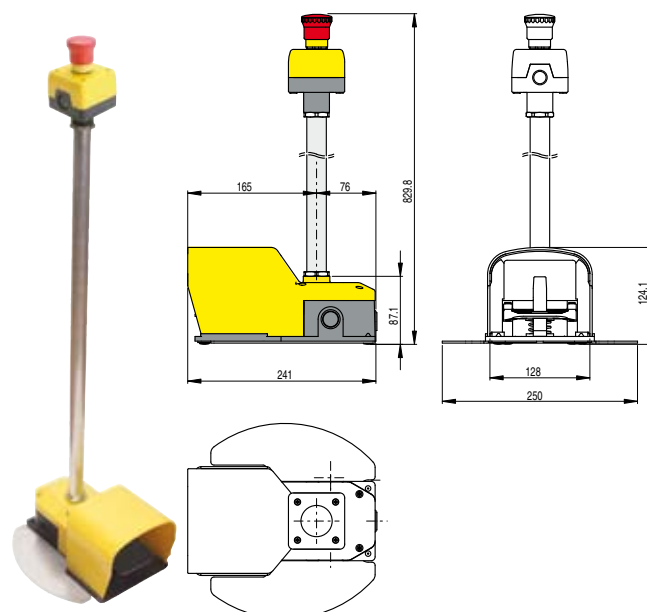
This article can be bought also with single code PX 10110-D. In this case the cover is supplied already pierced for the carrying rod fixing.

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 metal pipe, stabilizing plate and emergency push button 1NC


How to order:

PX 10110-B	VF KIT60	VF KIT31	VF KIT32	