

6100

Footswitch



Footswitch for auxiliary control of industrial machines. It acts on the machine's motor through a power interface, like a contactor.

FEATURES

- The emergency stop mushroom pushbutton complies with standard EN 418.
- Positive opening NC contacts for safety functions.
- Mechanical life of switches: 1 million operations.
- IP protection degree: footswitch 6100 is classified IP53.
- Extreme temperature resistance: -25°C to +70°C.
- Made of plastic material or die-cast aluminium.
- Materials and components are shock and wear resistant.

OPTIONS

- Available with standard protection cover or large cover for safety shoes.
- Single or double footswitches fixed on a metal plate, with emergency mushroom pushbutton.
- Special footswitch design for pneumatic valve with fixing plate.
- It may be fitted with "lock-release" device used for keeping the pedal pressed or with safety device to prevent accidental operation.
- Snap or slow action switches with 1NO+1NC contacts, or slow action switches with 2NO+2NC contacts.

CERTIFICATIONS

- CE marking.




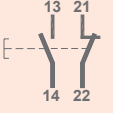
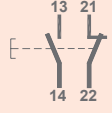
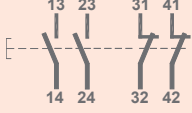


CERTIFICATIONS

| | |
|------------------------------------|--|
| Conformity to Community Directives | 2014/35/UE Low Voltage Directive |
| | 2006/42/CE Machinery Directive |
| Conformity to CE Standards | EN 60204-1 Safety of machinery - Electrical equipment of machines |
| | EN 60947-1 Low-voltage switchgear and controlgear |
| | EN 60947-5-1 Low-voltage switchgear and controlgear - Control circuit devices and switching elements - Electromechanical control circuit devices |
| | EN 60529 Degrees of protection provided by enclosures |
| Markings and homologations | EN 418 Safety of machinery - Emergency stop equipment, functional |
| | CE |

GENERAL TECHNICAL SPECIFICATIONS

| | |
|----------------------|-------------------------|
| Ambient temperature | Storage -40°C/+70°C |
| | Operational -25°C/+70°C |
| IP protection degree | IP 53 |
| Insulation category | Class I |
| Cable entry | Cable clamp M20 |

TECHNICAL SPECIFICATIONS OF THE MICROSWITCHES

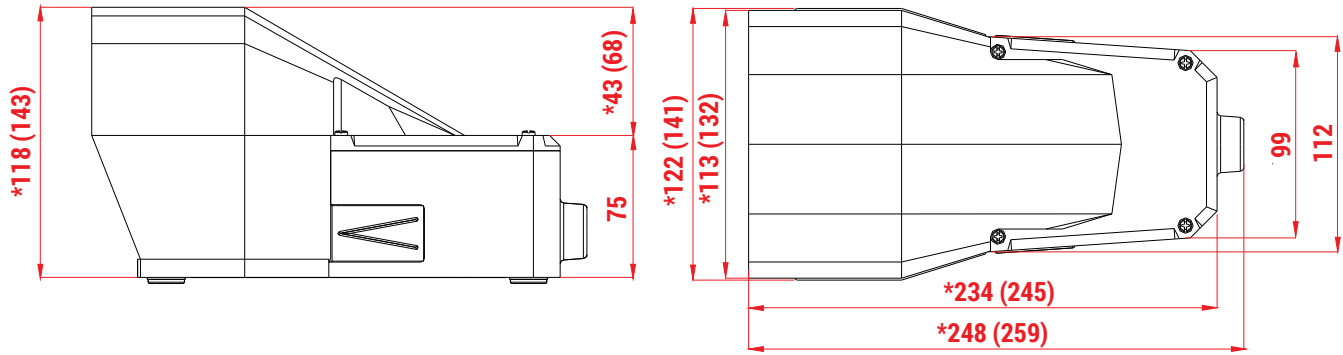
| Code | PRSL0036XX | PRSL0045PI | PRSL0047PI |
|----------------------------|---|---|---|
| Utilisation category | AC15 | | AC 15 |
| Rated operational current | 3 A | | 1,9 A |
| Rated operational voltage | 250 Vac | | 380 Vac |
| Rated thermal current | 10 A | | 10 A |
| Rated insulation voltage | 300 Vac | | 500 Vac |
| Mechanical life | 1x10 ⁶ operations | | |
| Connections | Screw-type terminal | | |
| Wires | 1x2.5 mm ² , 2x1.5 mm ² (UL - (c)UL: use 60°C or 75°C copper (CU) conductor and wire 16-18 AWG) | | |
| Tightening torque | 0.8 Nm | | |
| Microswitch type | Double break, snap action | Double break, slow action | Double break, slow action |
| Contacts | 1NO+1NC (All NC contacts are of the positive opening operation type ) | 1NO+1NC (All NC contacts are of the positive opening operation type ) | 2NO+2NC (All NC contacts are of the positive opening operation type ) |
| Scheme |  |  |  |
| Markings and homologations | CE  EAC | CE  | |

OVERALL DIMENSIONS (mm)

Simple

* with standard protection

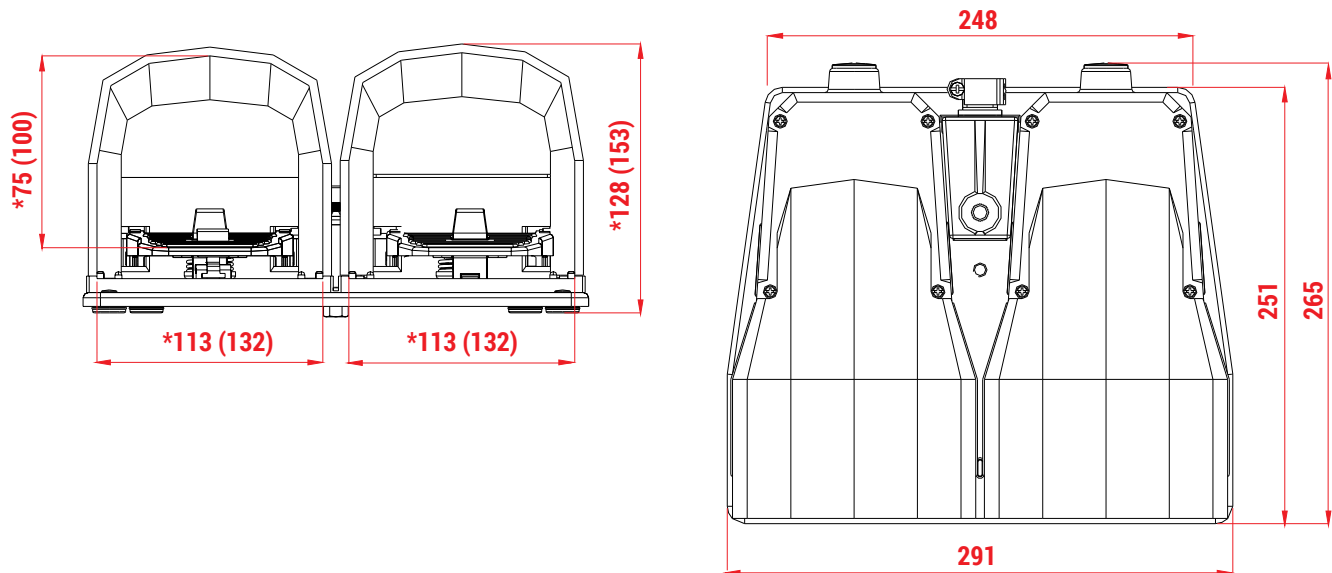
() with large protection



Double

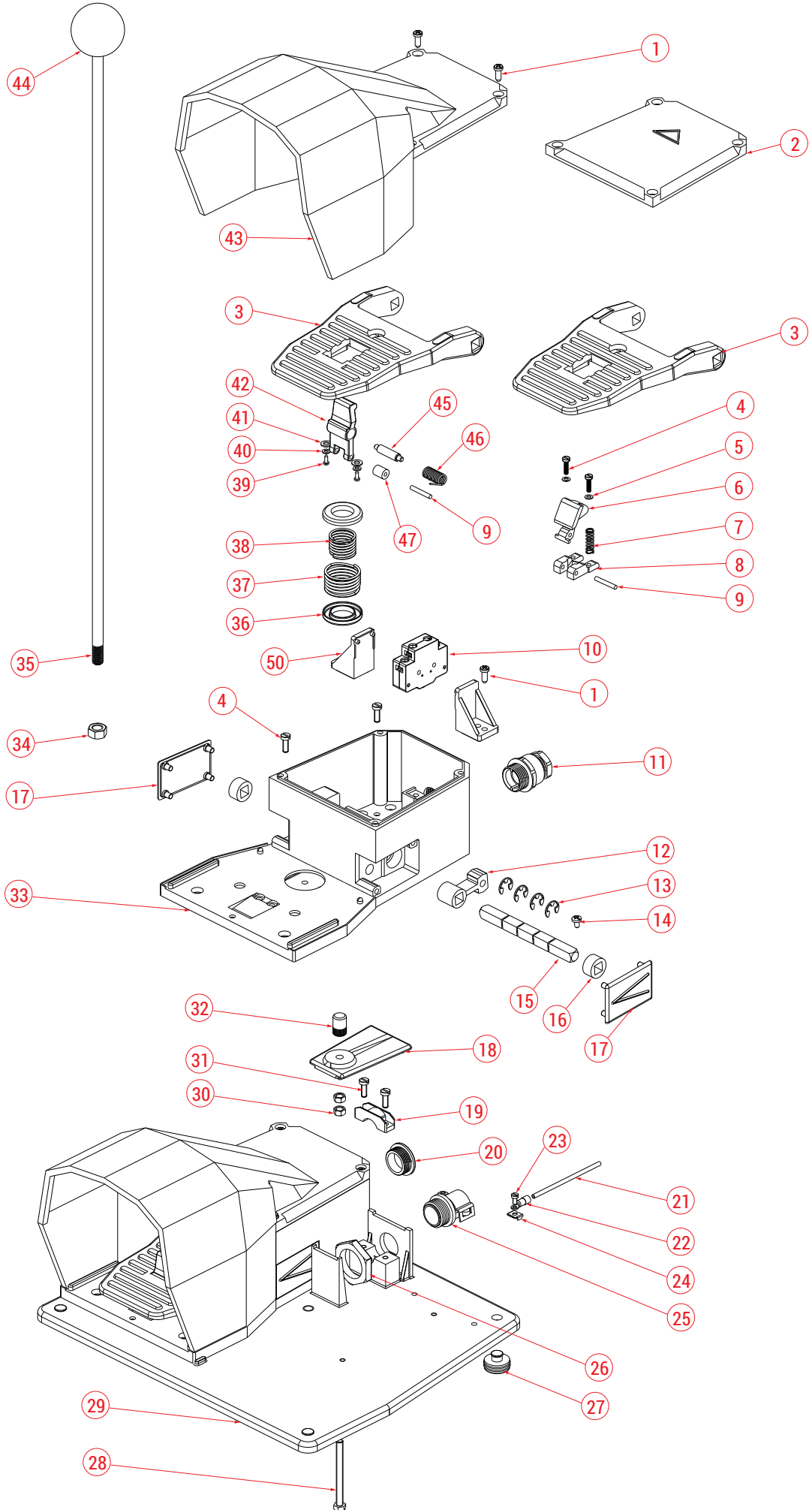
* with standard protection

() with large protection



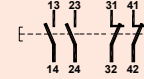


EXPLODED DRAWING

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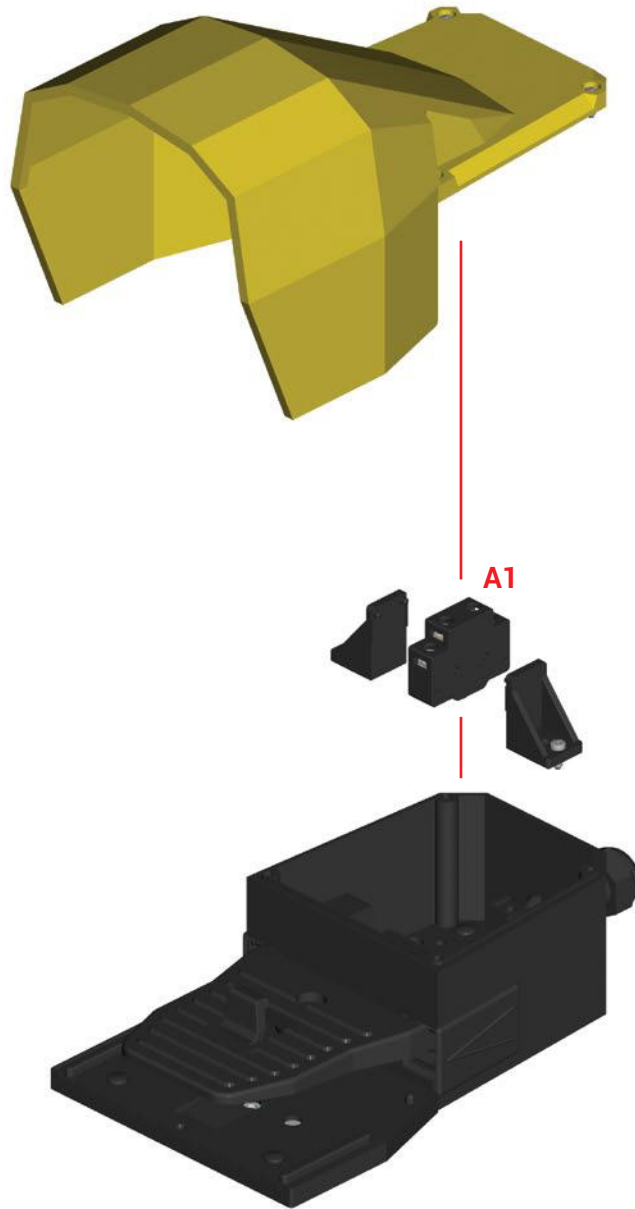


STANDARD FOOTSWITCHES

| Material | Footswitch type | | | Protection | | No. of switches | | | Code |
|----------|-----------------|--------|------------|------------|-------|---|---|---|------------|
| | Simple | Double | For valves | Standard | Large | PRSL0036XX 1NO+1NC snap action  | PRSL0045PI 1NO+1NC slow action  | PRSL0047PI 2NO+2NC slow action  | |
| Plastic | X | | | | X | 1 | | | PF04612100 |
| | X | | | | X | 2 | | | PF04612200 |
| | X | | | | X | 3 | | | PF04612300 |
| | X | | | | X | | 1 | | PF04612500 |
| | X | | | | X | | | 1 | PF04612600 |
| | X | | | | X | | 1 | 1 | PF04612700 |
| | X | | | | X | | | 2 | PF04612800 |
| | | X | | | X | 2 | | | PF04613100 |
| | | | X | | X | 4 | | | PF04613200 |
| | | X | | | X | | 2 | | PF04613300 |
| | | | X | | X | | | 2 | PF04613400 |
| | | X | | | X | | | 4 | PF04613500 |
| | | X | | X | X | | | | PF04814100 |
| | | X | | X | X | | | | PF04814600 |
| | Aluminium | X | | | X | | 1 | | |
| X | | | | X | | 2 | | | PF04615200 |
| X | | | | X | | 3 | | | PF04615300 |
| X | | | | X | | | 1 | | PF04615500 |
| X | | | | X | | | | 1 | PF04615600 |
| X | | | | X | | | 1 | 1 | PF04615700 |
| X | | | | X | | | | 2 | PF04615800 |
| | | X | | X | | 2 | | | PF04616100 |
| | | | X | X | | 4 | | | PF04616200 |
| | | X | | X | | | 2 | | PF04616300 |
| | | | X | X | | | | 2 | PF04616400 |
| | | X | | X | | | | 4 | PF04616500 |
| | | X | | | X | | 1 | | PF04617100 |
| | | X | | | X | | 2 | | PF04617200 |
| | | X | | | X | | 3 | | PF04617300 |
| | X | | | X | | | 1 | PF04617500 | |
| | X | | | X | | | 1 | PF04617600 | |
| | X | | | X | | 1 | 1 | PF04617700 | |
| | X | | | X | | | 2 | PF04617800 | |
| | | X | | X | | 2 | | PF04618100 | |
| | | X | | X | | 4 | | PF04618200 | |
| | | X | | X | | | 2 | PF04618300 | |
| | | X | | X | | | 2 | PF04618400 | |
| | | X | | X | | | 4 | PF04618500 | |

ASSEMBLY DRAWING

7



COMPONENTS

Switches

| Ref. | Drawing | Description | Scheme | Code |
|------|---------|----------------------------|--------|------------|
| | | 1NO+1NC snap action switch | | PRSL0036XX |
| A1 | | 1NO+1NC slow action switch | | PRSL0045PI |
| | | 2NO+2NC slow action switch | | PRSL0047PI |

6100 - REQUEST FORM FOR NON STANDARD FOOTSWITCH

Footswitch type

- Simple
- Double

Protection

- Standard aluminium
- Large aluminium
- Large plastic

Switches

- 1NO+1NC snap action
- 1NO+1NC slow action
- 2NO+2NC slow action

Pedal

- With safety device
- Without safety device
- With lock-release device

Instructions

- Tick the box corresponding to the footswitch type required.
- Tick the boxes corresponding to the type of protection required.
- Write the number and type of switches required (max 3 snap action switches and max 2 slow action switches). It is not possible to assemble snap and slow action switches on the same footswitch.
- Tick the box corresponding to the type of pedal required.

USE AND MAINTENANCE INSTRUCTIONS

The footswitch 6100 is an electromechanical device for low voltage control circuits (EN 60947-1, EN 60947-5-1) for use as electric equipment on machines (EN 60204-1) in compliance with the essential requisites of the Low Voltage Directive 2014/35/UE and the Machine Directive 2006/42/CE.

The footswitch 6100 is designed for use in industrial environments with even very severe climatic conditions (working temperatures from -25°C to +70°C and is suitable for use in tropical environments). The equipment is not suitable for use in environments with a potentially explosive atmosphere, in the presence of corrosive agents or high percentage of sodium chloride (saline mist). Contact with oil, acids and solvents may damage the equipment; avoid using them for cleaning.

Instructions for wiring

- Unscrew the screws closing the cover (1)*, lift the cover (43), partly unscrew the locking on the wire clamp (11) so as to insert the wire.
- Insert the electric wire (from the outside towards the inside of the compartment) and proceed to wire the switches (10).

IMPORTANT! DO NOT DISMANTLE THE SWITCHES: THEY CAN BE WIRED WITHOUT REMOVING THEM FROM THEIR HOUSING. REMOVING THEM COULD CAUSE MALFUNCTION OF THE FOOTSWITCH.

- Loosen the terminals on the switches (10) by loosening the screws so they can be wired.
- Tighten the terminal screws with a torque of 0.8 Nm; insertability of wires into the terminals 1x2.5 mm² - 2x1.5mm² (UL - (c)UL: use 60 or 75°C conductor and wire size No. 16-18 AWG, stranded or solid).
- To close the footswitch tighten the wire clamp by turning the locking (11), close the footswitch with its guard (43) and tighten the screws (1).

Instructions for use and maintenance

- The footswitch does not require any particular maintenance: a few simple, rapid controls will maintain the device in perfect working order for many years.
- Check and tighten the screws closing the cover (43), make sure the wire clamp (11) is securely fastened and the sheathing on the wire protects it completely.
- Remove any chips, stones, rags, etc. and remove any obstacles preventing use of the pedal (3).
- Check periodically that the safety device (42) is intact and working: to test it, try pressing the pedal (3) from the edge (it should not work).
- Check that the cover (43) is intact.
- To clean the device use compressed air (1 Atm) and a damp cloth: do not use detergents, and/or additives.
- If you notice any malfunctions, replace the footswitch.
- Do not grease and/or oil the internal organs for any reason: any parts that rub together have lifetime self-lubrication.

Any change to parts of the footswitch will invalidate the rating plate data and identification of the device, and render the warranty null and void. In case of replacement of any part, use only original replacements.

TER is not liable for damages caused by improper use of the device and installation which is not made correctly.

* Please refer to the exploded drawing in the catalogue.

6200

Footswitch



Footswitch for auxiliary control of industrial machines. It acts on the machine's motor through a power interface, like a contactor.

FEATURES

- The emergency stop mushroom pushbutton complies with standard EN 418.
- Positive opening NC contacts for safety functions.
- Mechanical life of switches: 1 million operations.
- IP protection degree: footswitch 6200 is classified IP53.
- Extreme temperature resistance: -25°C to +70°C.
- Made of plastic material.
- Materials and components are shock and wear resistant.

OPTIONS

- Single or double footswitches fixed on a metal plate, with emergency mushroom pushbutton.
- It may be fitted with "lock-release" device used for keeping the pedal pressed or with safety device to prevent accidental operation.
- Snap or slow action switches with 1NO+1NC contacts, or slow action switches with 2NO+2NC contacts.

CERTIFICATIONS

- CE marking.




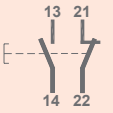
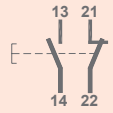
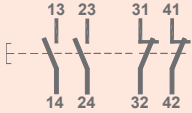
CERTIFICATIONS

| | |
|---|--|
| Conformity to Community Directives | 2014/35/UE Low Voltage Directive |
| | 2006/42/CE Machinery Directive |
| Conformity to CE Standards | EN 60204-1 Safety of machinery - Electrical equipment of machines |
| | EN 60947-1 Low-voltage switchgear and controlgear |
| | EN 60947-5-1 Low-voltage switchgear and controlgear - Control circuit devices and switching elements - Electromechanical control circuit devices |
| | EN 60529 Degrees of protection provided by enclosures |
| Markings and homologations | CE |
| EN 418 Safety of machinery - Emergency stop equipment, functional | |

GENERAL TECHNICAL SPECIFICATIONS

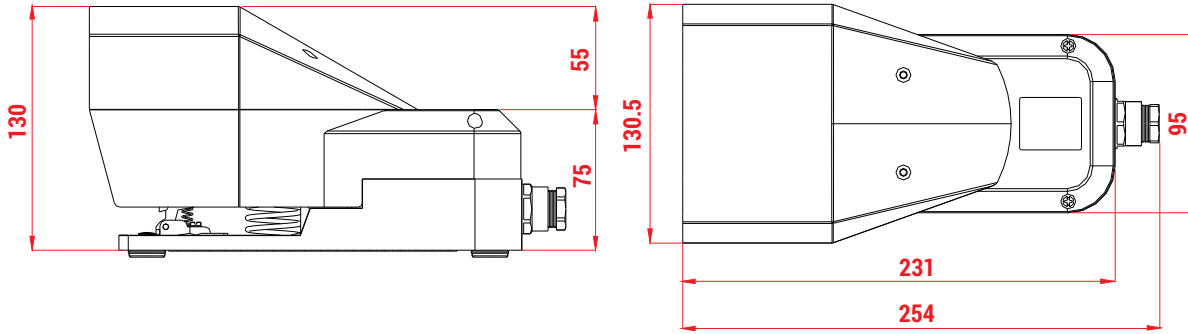
| | |
|----------------------|--|
| Ambient temperature | Storage -40°C/+70°C Operational -25°C/+70°C |
| IP protection degree | IP 53 |
| Insulation category | Class I |
| Cable entry | Cable clamp M20 |

TECHNICAL SPECIFICATIONS OF THE MICROSWITCHES

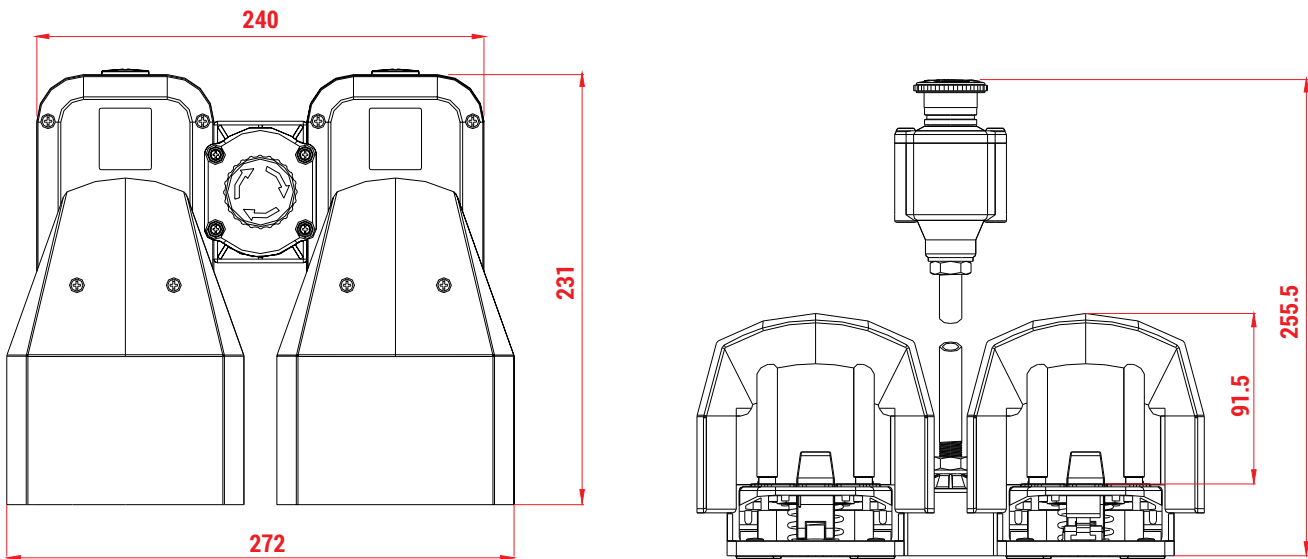
| Code | PRSL0036XX | PRSL0045PI | PRSL0047PI |
|----------------------------|---|---|---|
| Utilisation category | AC15 | | AC 15 |
| Rated operational current | 3 A | | 1.9 A |
| Rated operational voltage | 250 Vac | | 380 Vac |
| Rated thermal current | 10 A | | 10 A |
| Rated insulation voltage | 300 Vac | | 500 Vac |
| Mechanical life | 1x10 ⁶ operations | | |
| Connections | Screw-type terminal | | |
| Wires | 1x2.5 mm ² , 2x1.5 mm ² (UL - (c)UL: use 60°C or 75°C copper (CU) conductor and wire 16-18 AWG) | | |
| Tightening torque | 0.8 Nm | | |
| Microswitch type | Double break, snap action | Double break, slow action | Double break, slow action |
| Contacts | 1NO+1NC (All NC contacts are of the positive opening operation type ) | 1NO+1NC (All NC contacts are of the positive opening operation type ) | 2NO+2NC (All NC contacts are of the positive opening operation type ) |
| Scheme |  |  |  |
| Markings and homologations | CE cUL _{us} EAC | | CE cUL _{us} |

OVERALL DIMENSIONS (mm)

Simple

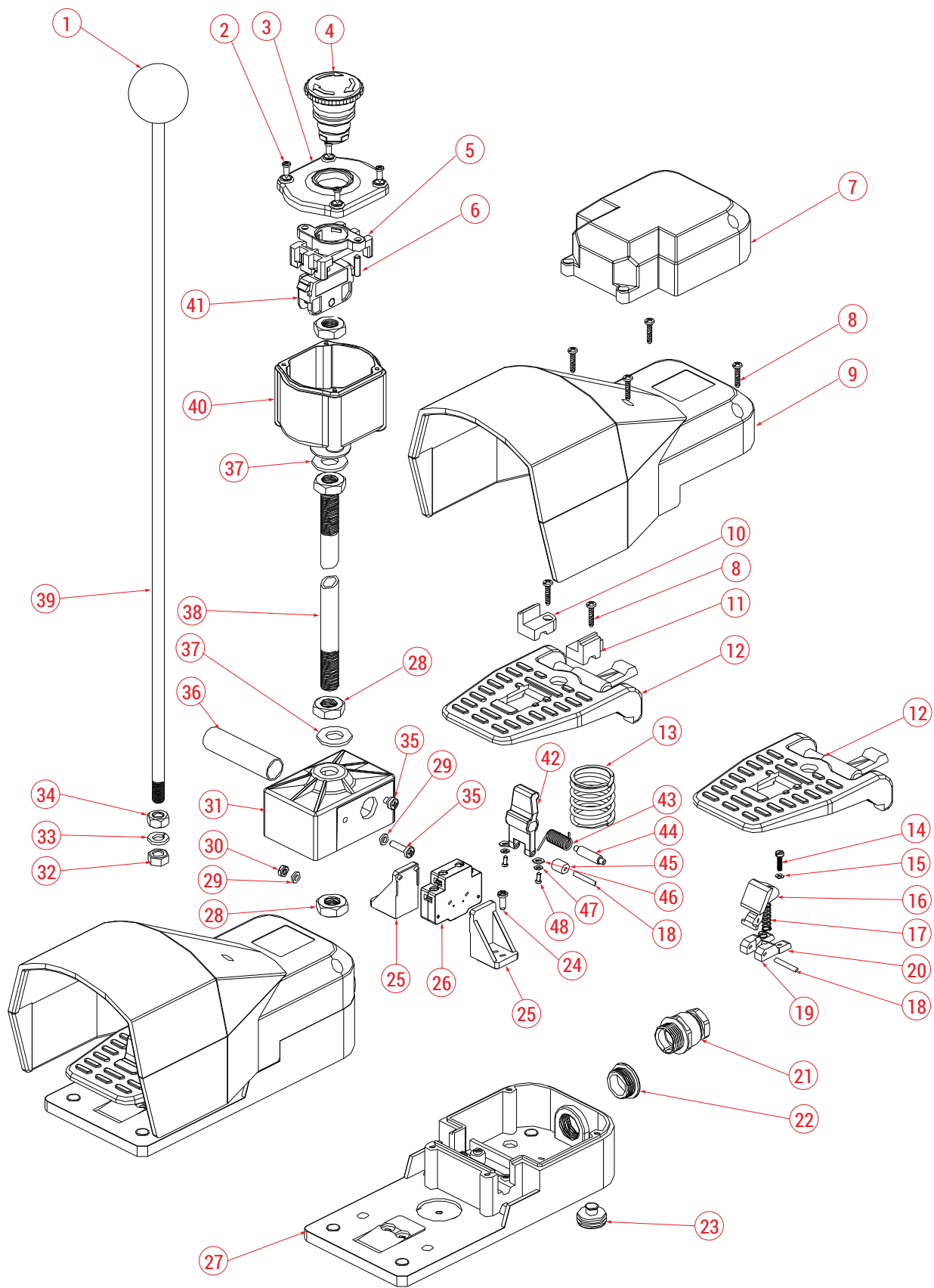


Double



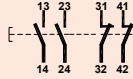


EXPLODED DRAWING

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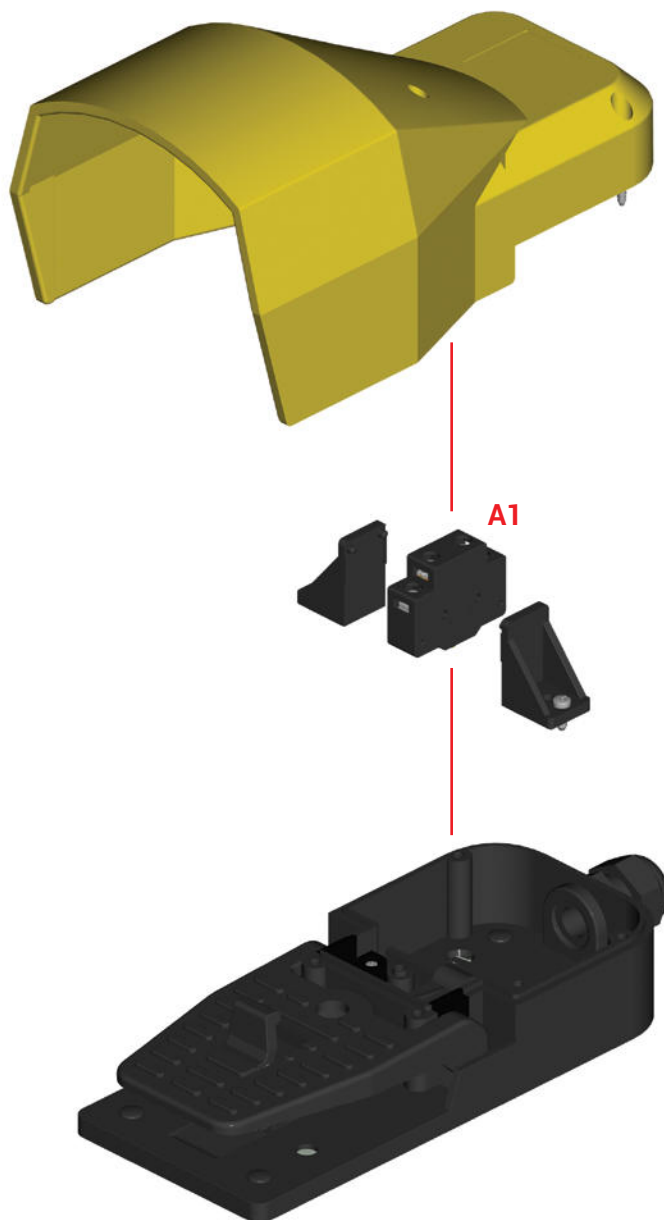


STANDARD FOOTSWITCHES

| Footswitch type | | No. of switches | | | Code |
|-----------------|--------|---|---|--|------------|
| Simple | Double | PRSL0036XX 1NO+1NC snap action  | PRSL0045PI 1NO+1NC slow action  | PRSL0047PI 2NO+2NC slow action  | |
| X | | 1 | | | PF18620010 |
| X | | 2 | | | PF18620025 |
| X | | | 1 | | PF18620037 |
| X | | | | 1 | PF18620050 |
| | X | 2 | | | PF18620053 |
| | X | 4 | | | PF18620054 |
| | X | | 2 | | PF18620055 |
| | X | | | 2 | PF18620056 |

ASSEMBLY DRAWING

7



COMPONENTS

Switches

| Ref. | Drawing | Description | Scheme | Code |
|------|---------|----------------------------|--------|------------|
| | | 1NO+1NC snap action switch | | PRSL0036XX |
| A1 | | 1NO+1NC slow action switch | | PRSL0045PI |
| | | 2NO+2NC slow action switch | | PRSL0047PI |

6200 - REQUEST FORM FOR NON STANDARD FOOTSWITCH

Footswitch type

- Simple
- Double

Switches

- 1NO+1NC snap action
- 1NO+1NC slow action
- 2NO+2NC slow action

Pedal

- With safety device
- Without safety device
- With lock-release device

Instructions

- Tick the box corresponding to the footswitch type required.
- Write the number and type of switches required (max 2 snap action switches and max 1 slow action switch). It is not possible to assemble snap and slow action switches on the same footswitch.
- Tick the box corresponding to the type of pedal required.

USE AND MAINTENANCE INSTRUCTIONS

The footswitch 6200 is an electromechanical device for low voltage command/control and maneuvers (EN 60947-1, EN 60947-5-1) for use as electric equipment on machines (EN 60204-1) in compliance with the essential requisites of the Low Voltage Directive 2014/35/UE and the Machine Directive 2006/42/CE.

The footswitch is designed for use in industrial environments with even very severe climatic conditions (working temperatures from -25°C to +70°C and is suitable for use in tropical environments). The equipment is not suitable for use in environments with a potentially explosive atmosphere, in the presence of corrosive agents or high percentage of sodium chloride (saline mist). Contact with oil, acids and solvents may damage the equipment; avoid using them for cleaning.

Instructions for wiring

- Unscrew the screws closing the cover (8)*, lift the cover (9), partly unscrew the lockring on the wire clamp (21) so as to insert the wire.
- Insert the electric wire (from the outside towards the inside of the compartment) and proceed to wire the switches (27).

IMPORTANT! DO NOT DISMANTLE THE SWITCHES: THEY CAN BE WIRED WITHOUT REMOVING THEM FROM THEIR HOUSING. REMOVING THEM COULD CAUSE MALFUNCTION OF THE FOOTSWITCH.

- Loosen the terminals on the switches (27) by loosening the screws so they can be wired.
- Tighten the terminal screws with a torque of 0.8 Nm; insertability of wires into the terminals 1x2.5 mm² - 2x1.5mm² (UL - (c)UL: use 60 or 75°C conductor and wire size No. 16-18 AWG, stranded or solid).
- To close the footswitch tighten the wire clamp by turning the lockring (21), close the footswitch with its guard (9) and tighten the screws (8).

Instructions for use and maintenance

- The footswitch does not require any particular maintenance: a few simple, rapid controls will maintain the device in perfect working order for many years.
- Check and tighten the screws (8) closing the cover (9), make sure the wire clamp (21) is securely fastened and the sheathing on the wire protects it completely.
- Remove any chips, stones, rags, etc. and remove any obstacles preventing use of the pedal (12).
- Check periodically that the safety device (42) is intact and working: to test it, try pressing the pedal (12) from the edge (it should not work).
- Check that the cover (9) is intact.
- To clean the device use compressed air (1 Atm) and a damp cloth: do not use detergents, and/or additives.
- If you notice any malfunctions, replace the footswitch.
- Do not grease and/or oil the internal organs for any reason: any parts that rub together have lifetime self-lubrication.

Any change to parts of the footswitch will invalidate the rating plate data and identification of the device, and render the warranty null and void. In case of replacement of any part, use only original replacements.

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* Please refer to the exploded drawing in the catalogue.