



JOYSTICK STATION

Juliet-PK joystick stations are control devices for all industrial machinery. They operate as auxiliary controllers of electrical motors through a power interface, such as a contactor. Designed for heavy duty use by qualified operators, Juliet-PK are aimed specifically for the industrial market.

DESIGN

Size and shape, resulting from a thorough analysis of the ergonomic features of the product, combined with the research of a graphic style suitable for a modern industrial environment, make Juliet-PK easy to operate.

The equipment has been designed to facilitate maintenance, thus saving on time and costs.

FEATURES

The emergency stop mushroom pushbutton complies with the EN 418 standard and it is equipped with mechanical positive opening NC switches. It has a central position on the joystick station for instinctive use in case of danger.

The variable length carrying strap can be quickly coupled and it can be either fastened around the waist or hung on the shoulder. The aluminium protection has been designed to guarantee maximum comfort when the equipment is used for a long time, and it protects the control elements against accidental operation.

Juliet-PK is available with different labels and colours and it can be supplied with different holes on the enclosure.

MATERIALS

Materials and components are wear resistant and protect the equipment against water and dust.



INDUSTRIAL LIFTING



CONSTRUCTION LIFTING



INDUSTRIAL AUTOMATION



STAGE TECHNOLOGY

STANDARDS - MARKINGS - HOMOLOGATIONS

 Conformity to Community Directives: 2006/95/CE: Low Voltage Directive 2006/42/CE: Machinery Directive

- Conformity to 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 EN 418 Safety of machinery. Emergency stop equipment

- Markings and homologations: < €

GENERAL TECHNICAL SPECIFICATIONS

- Storage ambient temperature: -40°C/+70°C - Operational ambient temperature: -25°C/+70°C

- Protection degree: IP 65 - Insulation category: Class II - Cable entry: rubber cable sleeve (Ø 14÷26 mm)

- Operating positions: any position

- Weight: ~1.5 kg

- Markings and homologations: C€ [∏

TECHNICAL SPECIFICATIONS OF THE MICROSWITCHES

- Utilisation category: AC 15 - Rated operational current: 3 A - Rated operational voltage: 250 V - Rated thermal current: 10 A

- Rated insulation voltage: 500 V~ - Mechanical life: 0.5x106 operations

- Terminal referencing: according to EN 50013

- Connections: screw-type terminals Wires: 1x2.5 mm². 2x1.5 mm²

(UL - (c)UL: use 60°C or 75°C copper (CU) conductor and wire 16-18

AWG)

- Tightening torque: 0.6 Nm

- Markings and homologations: 🕻 € ։ Միաս

The single switches PRSL1000PI have 1 NO contact with 2 connecting terminals.

The single switches PRSL1001PI have 1 NC contact with 2 connecting terminals.

All NC contacts are of the positive opening operation type. The switches have the following reference for internal wiring.



PRSL1000PI



TECHNICAL SPECIFICATIONS OF JULIET MICROSWITCHES

 Utilisation category: AC 15 - Rated operational current: 2 A - Rated operational voltage: 48 V - Rated thermal current: 8 A

- Rated insulation voltage: 60 V - Mechanical life: 0.5x106 operations - Connections: screw-type terminals - Wires: 0.14 mm² - 1.5 mm²

- Tightening torque: 0.22 Nm - 0.25 Nm - Markings and homologations: (€

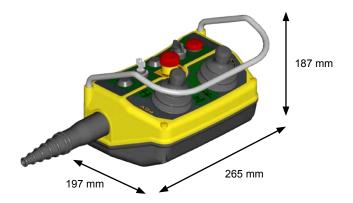
The single switch PRVV0804PE has 1 NO + 1 NC change over contacts. All NC contacts are of the positive opening operation type.

The switches have the following reference for internal wiring.



PRVV0804PE

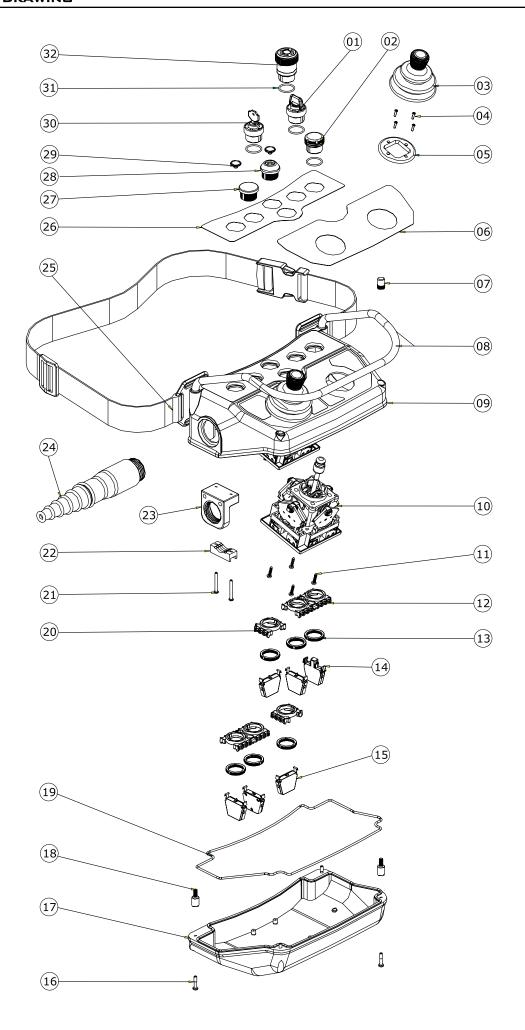
OVERALL DIMENSIONS



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SWITCHES

REF	DRAWING	DESCRIPTION	SCHEME	Code
14		Lamp holder		PRSL1004PI
15		1 NO switch	E\(\frac{13}{14} \)	PRSL1000PI
10		1 NC switch	E	PRSL1001PI

ACTUATORS

REF	DRAWING	DESCRIPTION	Code
27+31+13		Blanking plug	PRSL1023PI
12		Holding plate for 2+2 switches	PRSL8735PI
28+29+13	° (*)	Pushbutton	PRTS000001
20		Holding plate for 3 switches	PRSL8739PI

PILOT LIGHTS

REF	DRAWING	DESCRIPTION	CODE
		Red pilot light	PRSL1012PI
02+31+13		Yellow pilot light	PRSL1013PI
		Green pilot light	PRSL1014PI

MUSHROOM PUSHBUTTONS

REF	DRAWING	DESCRIPTION	CODE
32+31+13		Emergency stop mushroom pushbutton	PRSL1009PI

SELECTOR SWITCHES

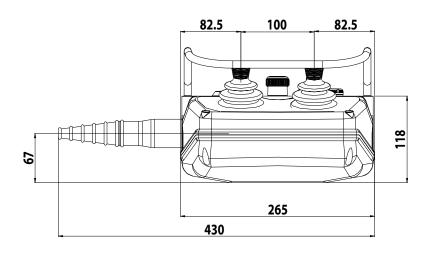
REF DRAWING		DESCRIPTION	Code
	•	Spring return selector switch (on-off)	PRSL1015PI
04.04.40	_	Selector switch (on-off)	PRSL1016PI
01+31+13		Spring return 3 position selector switch	PRSL1026PI
		3 position selector switch	PRSL1027PI
		Key selector switch (on-off)	PRSL1017PI
30+31+13		Sring return key selector switch	PRSL1024PI
	Ğ	90° key selector switch	PRSL1056PI

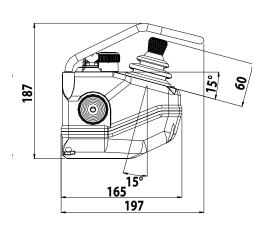
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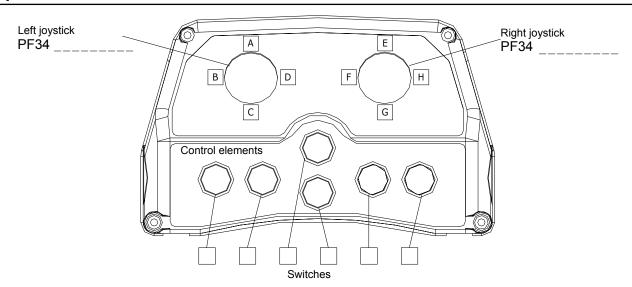
REF	DRAWING	DESCRIPTION	Code
23		Cable sleeve holder	PRSL9207PI
24		Cable sleeve	PRSL0145PE
25		Waist strap	PRSL0160PE
25		Shoulder strap	PRSL0161PE

OVERALL DIMENSIONS (MM)





REMARKS



Symbols and control elements GREEN YELLOW GREEN (8) GREEN BLACK YELLOW YELLOW WHITE (10 M (11) PRSL1009PI Mushroom pushbutton (12) PRSL1012PI Red pilot light (13) PRSL1013PI Yellow pilot light (14) PRSL1014PI Green pilot light (15) PRSL1015PI Spring return selector switch on-off (16) PRSL1016PI Selector switch on-off (17) PRSL1017PI Key selector switch on-off (18) PRSL1023PI Blanking plug ⁽¹⁹⁾ PRSL1024PI Spring return key selector switch Write the code number of the left and right Juliet joysticks (20) PRSL1026PI Spring return 3 position selector switch required. Write the number corresponding to the control element (21) PRSL1027PI 3 position selector switch required in the round boxes on the joystick station scheme. Write the number corresponding to the switches required (22) PRSL1056PI 90° key selector switch in the square boxes. Mark the appropriate box to show where the cable sleeve must be assembled.

Switches	
1 PRSL1000PI	1NO
2 PRSL1001PI	1NC
3 PRSL1004PI	Lamp holder
Position of cable s	
Left	
Label	
Pos. Lettering	
A	
В	
С	
D	
E	
F	
G	
Н	
Instructions	

Write the letterings required for each position on the label.

Remarks

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USE AND MAINTENANCE INSTRUCTIONS

The Juliet-PK Joystick Station 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 2006/95/CE and the Machine Directive 2006/42/CE.

The Juliet-PK joystick station 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.

The switches (14, 15) are designed for the auxiliary control of contacts or electromagnetic charges in general (utilisation category AC-15 in accordance with EN 60947-5-1). Do not connect more than one phase for each switch (14, 15). Do not oil or grease the control elements (01, 02, 10, 28, 30, 32) or the switches (14, 15).

The Juliet-PK joystick station should be installed by competent, trained personnel. The electric wiring must be done in a workmanlike manner in compliance with the regulations in force.

Before performing installation and maintenance of thejoystick station, disconnect the machine from the power mains.

Operations for correct installation of the joystick station

- Open the joystick station by unscrewing the bottom cover (17)
- Cut the rubber cable sleeve with variable cross-section (24) and insert the multi-pole cable so as to guarantee adequate interference and prevent penetration of water and/or dust
- Fasten the multi-pole cable to the sleeve (24) using a cable tie (not supplied)
- Strip the multi-pole cable for a length sufficient for electrical connection with the switches (14, 15)
- Tape the initial stripped part of the cable
- Fasten the special wire clamps to the multi-pole cable so as to prevent the possibility of external traction on the connections
- Connect the wires to the switches (14, 15) in accordance with the contact diagram shown on the switches (tighten the terminal screws with a torque of 0.6 Nm; insertability of wires into the terminals 1x2,5 mm2 2x1,5mm2) (UL (c)UL: use 60 or 75°C copper (CU) conductor).
- Close the control unit with attention to correct positioning of the rubber (19) assembled in the enclosure (09)

Operations of routine maintenance

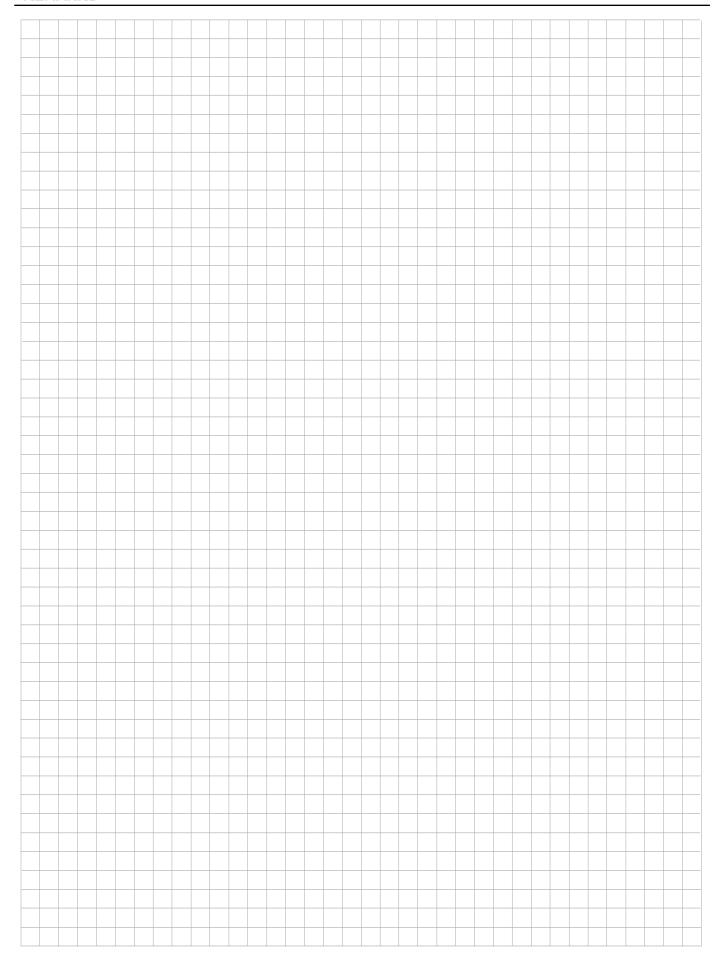
- Check the correct tightening of the screws (16) on the enclosure (09, 17)
- Check the correct tightening of the screws on the switch terminals (14, 15)
- Check the conditions of the wiring (in particular in the points where they are fastened/tightened on the switches)
- Check the conditions of the rubber (19) assembled in the joystick station enclosure (17), the rubber on the controllers and cable sleeve (24)
- Check the conditions of the plastic enclosure of the joystick station (09, 17)

Any change to parts of the joystick station 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 refere to the detailed drawing in the catalogue

REMARKS		
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