# ROMEO-PK

# Joystick station



#### **FEATURES**

- · Designed for Romeo joysticks.
- Carry-on straps and aluminium handles provide for greater ease of use.
- The emergency stop mushroom pushbutton complies with standard EN 418 and is positioned in the middle for intuitive operation in case of danger.
- Mechanical life of switches: 1 million operations.
- IP protection degree: Romeo PK is classified min. IP43 max. IP65, depending on the joystick.
- Extreme temperature resistance: -25°C to +70°C.
- All materials and components used are wear resistant and guarantee protection of the unit against water and dust.

#### **OPTIONS**

- Wide range of actuators: pushbuttons, selector switches and key-selector switches, pilot lights.
- Single switches with NO or NC contacts and double switches with NO contacts, one or two speeds, with electrical interlock to prevent simultaneous operation of opposite functions.
- Available with customized labels and enclosures with different size holes.

#### **CERTIFICATIONS**

· CE marking and EAC certification.

Fill in the "request form" for accurate product configuration.

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# **CERTIFICATIONS**

Conformity to Community Directives	2014/35/UE Low Voltage Directive
	2006/42/CE Machinery Directive
	EN 60204-1 Safety of machinery - Electrical equipment of machines
	EN 60947-1 Low-voltage switchgear and controlgear
Conformity to CE Standards	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, functional
Markings and homologations	C € EAL

# **GENERAL TECHNICAL SPECIFICATIONS**

Ambient temperature	Storage -40°C/+70°C  Operational -25°C/+70°C
Grado di protezione IP Min. IP 43 - max. IP 65 depending on the joystick	
Insulation category	Class II
Cable entry	Cable sleeve (Ø 14÷26 mm)
Operating positions	Any position
Weight	~3.8 kg

# **TECHNICAL SPECIFICATIONS OF THE SWITCHES**

Code	PRSL1000PI	PRSL1000PI PRSL1001PI			
Utilisation category	AC	AC 15			
Rated operational current	3	3 A			
Rated operational voltage	250	Vac			
Rated thermal current	10	) A			
Rated insulation voltage	500	Vac			
Mechanical life	1x10 <sup>6</sup> op	1x10 <sup>6</sup> operations			
Connections	Screw-type	Screw-type terminals			
Wires	1x2.5 mm², 2x1.5 mm² (UL - (c)UL: use 60°C or 7	1x2.5 mm <sup>2</sup> , 2x1.5 mm <sup>2</sup> (UL - (c)UL: use 60°C or 75°C copper (CU) conductor and wire 16-18 AWG)			
Tightening torque	0.6	Nm			
Microswitch type	Double break, slow action	Double break, slow action			
Contacts	1NO	1NC			
Scheme	13 [ 14	E}			
Markings and homologations	C € c⊕us [FI[				



Code	PRSL1002PI	PRSL1003PI			
Utilisation category	Α	AC 15			
Rated operational current		3 A			
Rated operational voltage	25	i0 Vac			
Rated thermal current	1	10 A			
Rated insulation voltage	50	00 Vac			
Mechanical life	1x10 <sup>6</sup> c	operations			
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.	0.6 Nm			
Microswitch type	Double switch, 1 speed	Double switch, 2 speeds			
Contacts	2NO+common	3NO+common			
Scheme	13 4 23	13 4 33 23			
Markings and homologations	CE	cWus EAL			

# **TECHNICAL SPECIFICATIONS OF THE LAMP HOLDERS**

Code	PRSL1004PI
Maximum voltage	125 V
Maximum power	2.6 W
Lamp type	T5.5K 22 mm
Connections	Screw-type terminals
Wires	1x2.5 mm², 2x1.5 mm²
Tightening torque	0.6 Nm
Markings and homologations	(€

# TECHNICAL SPECIFICATIONS OF THE SWITCHES (JOYSTICK)

Code	PRVV0804PE		
Utilisation category	AC 15		
	Inductive load 48 Vac/1 A 125 Vac/1 A 250 Vac/0.5 A 30 Vdc/1 A		
Operating electrical usages	Resistive load 48 Vac/2 A 125 Vac/3 A 250 Vac/2 A 30 Vdc/3 A		
Rated thermal current	8 A		
Rated insulation voltage	1000 Vac		
Mechanical life	5x10 <sup>6</sup> operations		
Connections	Screw-type terminals		
Wires	0.2 mm <sup>2</sup> - 2.5 mm <sup>2</sup>		
Tightening torque	0.5 Nm - 0.6 Nm		
Microswitch type	Single break		
Contacts	1NC		
Scheme	E		
Markings and homologations	( E CFU us Voe		

# TECHNICAL SPECIFICATIONS OF THE BUTTONS (JOYSTICK)

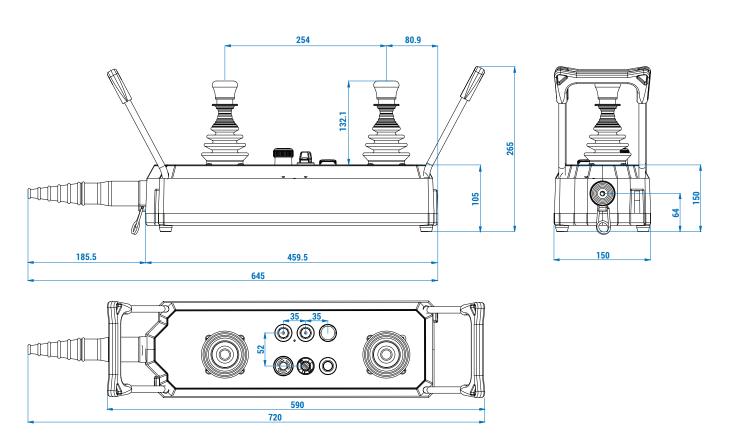
Code	PRVV5019PE	PRVV5020PE	PRVV5080PE
Color	Green	Black	Green
Contact rated current	Resistive load 32 Vac/400 mA Resistive load 50 Vdc/100 mA Resistive load 125 Vac/125 mA		Resistive load 28 Vdc/5 A Resistive load 125 Vac/125 mA
Contact resistance	50 mΩ		-
Mechanical life	1x10 <sup>6</sup> operations		1x10 <sup>6</sup> operations
Contacts	11	1NO	
Markings and homologations	(€		C€

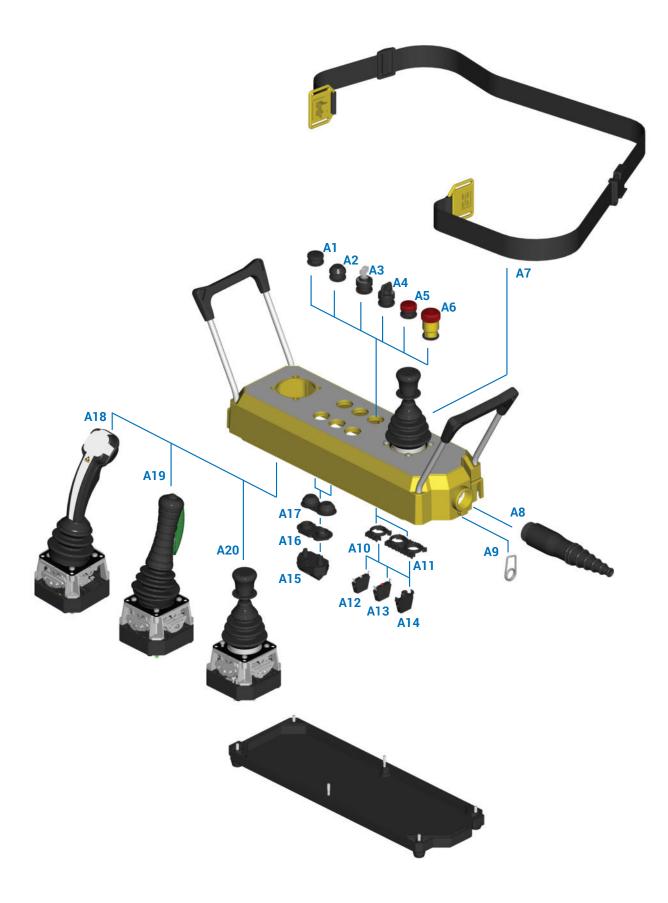


# TECHNICAL SPECIFICATIONS OF THE POTENTIOMETERS (JOYSTICK)

Code	PRVV9020PE	PRVV9025PE	PRVV9035PE		
Ohmic value	4.7 kΩ 10 kΩ 2.2 kΩ				
Indipendent linearity (over AEA -3°)	±0.25%				
Life time		3x10 <sup>6</sup> movements			
Operational ambient temperature	-55°C/+125°C				
Mechanical angle	360° continuous				
Actual Electrical Angle (AEA)	355°±5°				
Ohmic value tolerance	±5%				
Temperature drift	< 50 PPM/°C				
Dissipation	4 W				

# **OVERALL DIMENSIONS (mm)**







Refer to the following tables for descriptions of components: "Switches", "Actuators", "Pilot lights", "Selector switches", "Mushroom pushbuttons", "Joysticks" and "Accessories".

# **COMPONENTS**

# **Switches**

Ref.	Drawing	Description	Scheme	Code
A12		1NO switch	E\( \frac{13}{14} \)	PRSL1000PI
A13	G	1NC switch	E7	PRSL1001PI
A14		Lamp holder	-	PRSL1004PI
A15	<b>4</b>	1 speed, 2NO+common double switch	E E 23	PRSL1002PI
		2 speeds, 3NO+common double switch	13 4 33 23	PRSL1003PI

#### **Actuators**

Ref.	Drawing	Description	Code
A1		Blanking plug	PRSL1023PI
A2	90	Single pushbutton	PRTS000001
A16		Holding plate for double pushbutton	PRSL8737PI
A17		Double pushbutton with rubber	PRTD000001

# **Pilot lights**

Ref.	Drawing	Color	Code
A5		Red	PRSL1012PI
		Yellow	PRSL1013PI
		Green	PRSL1014PI

# **Selector switches**

Ref.	Drawing	Positions	Spring return	Maintained positions	Pull-out position	Code
40	<u> </u>	0/1		Χ	0	PRSL1017PI
A3		0/1	Χ		0	PRSL1024PI
		0/1	Χ			PRSL1015PI
		0/1		Χ		PRSL1016PI
A4		1/0/2	Χ			PRSL1026PI
		1/0/2		Χ		PRSL1027PI

# **Mushroom pushbuttons**

Ref.	Drawing	Description	Code
A6		Latched mushroom pushbutton for emergency stop	PRSL1009PI

# **Joysticks**

Ref.	Drawing	Description	Code
A15		Romeo Joystick with ergonomic handle	PF58 Refer to joystick Romeo documentation
A16		Romeo Joystick with handle	PF58 Refer to joystick Romeo documentation
A17		Romeo Joystick with knob	PF58 Refer to joystick Romeo documentation

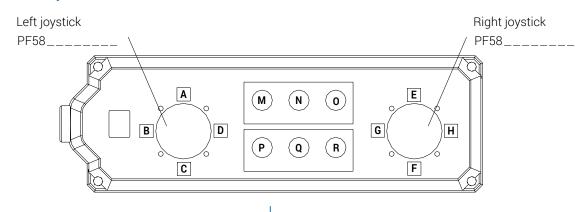
# **Accessories**

Ref.	Drawing	Description	Code
A7		Shoulder strap	PRSL0161PE
A8		Cable sleeve	PRSL0145PE
A9	8	Hook	PRGA0001PE
A10		Holding plate for 3 switches	PRSL8739PI
A11		Holding plate for 3+3 switches	PRSL8736PI



#### **ROMEO-PK - REQUEST FORM FOR JOYSTICK STATION**

**Switches** 



# Control elements and switches Control element

M	 	 
N	 	 
0	 	 
P	 	 
Q	 	 
R	 	

#### Joystick label Text

#### Control elements label

Н

	Symbol	Label color	Text
M			
N			
0			
Р			
Q			
R			

#### **Control elements**

(1) PRSL1009PI Mushroom pushbutton 〔2〕 PRTS000001 Single pushbutton (3) PRTD000001 Double pushbutton (4) PRSL1023PI Blanking plug 5 PRSL1012PI Red pilot light (6) PRSL1013PI Yellow pilot light (7) PRSL1014PI Green pilot light (8) PRSL1015PI Selector switch 0/1 spring return (9) PRSL1016PI Selector switch 0/1 maintained positions (10)PRSL1026PI Selector switch 1/0/2 spring return (11)PRSL1027PI Selector switch 1/0/2 maintained positions (12) PRSL1017PI Key selector switch 0/1 maintained positions (13) PRSL1024PI Key selector switch 0/1 spring return

#### Single switches

 (20)
 PRSL1000PI
 1NO

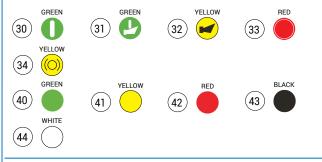
 (21)
 PRSL1001PI
 1NC

 (22)
 PRSL1004PI
 Lamp holder

#### Double switches

- PRSL1002PI 1 speed
- PRSL1003PI 2 speeds

#### Symbols and colors of control element label



#### Position of cable sleeve

Right

#### Left

#### Instructions

- Write the code number of the left and right joysticks required.
- Write the number or the code corresponding to the control elements and switches (max 3) required in each position.
- Write the text required on the label for each position of the joystick.
- Write the symbol, the color and the text required on the label for each control element.
- Tick the appropriate box to show where the cable sleeve must be assembled.

REMARKS		