Strawinskylaan 1105 1077 XX Amsterdam, The Netherlands I FARN MORE





translation of the original instructions



TECHNICAL CARACHTERISTICS
STANDARD VERSIONS 3
STANDARD VERSIONS WIRING 4
CHARACTERISTICS OF CONTACT BLOCKS FOR STANDARD VERSIONS
CUSTOM KIT9
OPERATORS FOR CUSTOM KIT
CONTACT BLOCK FOR CUSTOM KIT12
CUSTOM PENDANT STATION ASSEMBLY
CHARACTERISTICS OF ADDITIONAL CONTACT BLOCKS

# P02

#### PENDANT STATION



Before use, read this booklet carefully to acquaint yourself with the features of the product. This booklet is an integral part of the product and therefore must be kept until the product is dismissed.



Giovenzana International B.V. reserves the right to change the features and data shown in this document at any time and without notice. This document cannot therefore be considered a contract with third parties.



P02 pendant stations are designed and manufactured according to IEC international standard and EN European regulations.



Improper installation or tampering can cause serious damage to people and property, therefore installation and maintenance must be carried out by specialized and authorized personnel.



The device is not intended for use in environments with a potentially explosive atmosphere or in the presence of corrosive substances and in salt fog.



Two push button pendant stations for small hoist, in single row:

- · Bi-directional, mechanically interlocked
- IP65 double insulation IEC / EN 60529
- Laser engraved symbols comply with EN 60204-1, FEM 9.941
- Shock proof and heat resistant
- · Single speed or two speed motor
- Direct motor control 1 kW 1 speed
- · Available in UL/CSA requirements
- · Kit version available

## **IMPORTANT INFORMATION**

THE INFORMATION SHOWN ON THIS PAGE IS ESSENTIAL FOR THE CORRECT INTERPRETATION OF WHAT HAS BEEN EXPOSED IN THIS BOOKLET.

#### **Symbols**

The following symbols are used in this booklet:



Read carefully before use.



Information note.



ATTENTION, the information highlighted by this symbol is very important.

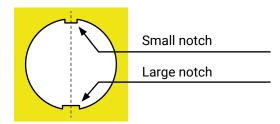


DANGER, the information highlighted by this symbol concerns environments with a potentially explosive atmosphere or the presence of corrosive substances and salt fog.



This symbol highlights the recommended tightening torques to guarantee the degree of protection of the product and to prevent it from breaking.

## Orientation and type of operators



The operators' housing holes follow the diagram shown in the figure (**vertical**).

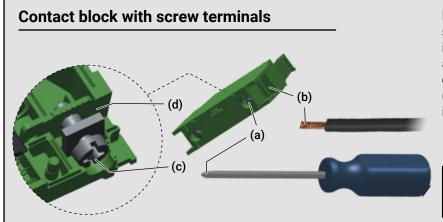


#### **ATTENTION**

IT IS DANGEROUS TO OPERATE THE PUSH-BUTTONS AT THE SAME TIME

### **Tools required (not supplied)**





Loosen the screw (a) with a Phillips screwdriver and insert the end of the cable into the opening (b). Tighten the screw with a torque screwdriver to lock the end of the cable. In detail, the action on the screw (c) loosens the stop (d) and allows you to insert the end of the cable.



#### TIGHTENING TORQUE

0.8 N×m / 7.2 lb×in (EN60947-1) 7.5 lb×in / 0.85 N×m (UL508)

## **TECHNICAL CHARACTERISTICS**

#### Pendant station technical data

Compliant to standards		IEC / EN60947-5-1
Material		PP
Material group		II
Pollution class		3
Temperature	operating	-25°C +70°C
	storage	-30°C +70°C
Climate resistance	IEC68 part 2-3	hot damp
	IEC68 part 2-30	unsettled hot damp
Cable entry		rubber cable sleeve Ø 7 18 mm
Weight	P02.RM / P02.1 / P02.2 / P02.D2	230 g
	P02.4 / P02.CD	250 g

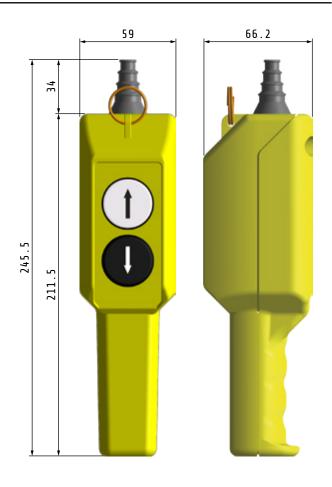
#### **Versions**

- P02.RM
- P02.1 P02.2 P02.4 P02.CD
- P02.D2

## **Compliance and certifications**

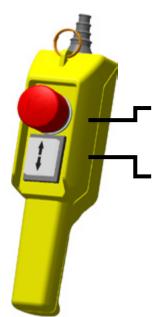
- 2014/35/UE
- 2011/65/UE RoHS
- EN 60947-1 (2007/A1: 2011/A2: 2014)
- EN 60947-5-1 (2004/A1 : 2009/AC : 2004/AC : 2005 EN ISO 13850 2015)
- EN 60204-1 (2006/A1: 2009)
- EN-ISO 13849-1 (2015)
- EN ISO 13849-2 (2012)
- EN 60529 (1991/A1 : 2000/A2 : 2013)

## **Dimensions**



Dimensions in mm Drawing NOT in scale

## **STANDARD VERSIONS**



## P02.RM \* Single speed



PL004001 (NC)

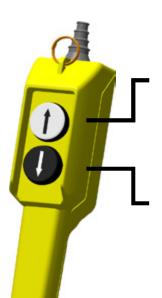


P02.1

11708237 (ON-OFF-ON)

\* With double pole commutator with center off 16 A - 250 Vac  $\frac{1}{2}$  HP

P02.2

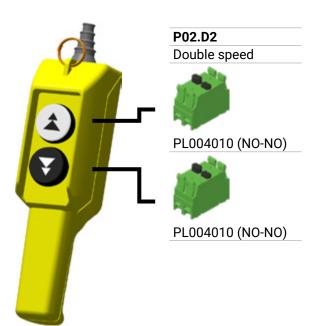


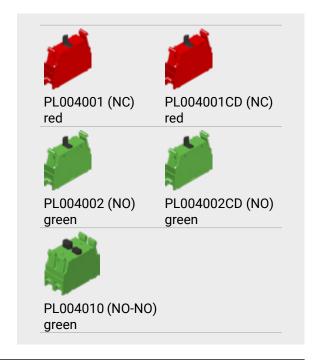
Single speed	Single speed	Single speed	Single speed **
PL004002 (NO)	PL004002 (NO) PL004002 (NO)	PL004001 (NC) PL004002 (NO)	PL004001CD (NC) PL004002CD (NO)
	PL004002 (NO)	PL004002 (NO)	PL004002CD (NO) PL004002CD (NO)
PL004002 (NO)	PL004002 (NO) PL004002 (NO)	PL004001 (NC) PL004002 (NO)	PL004001CD (NC) PL004002CD (NO) PL004002CD (NO)

P02.4

P02.CD

\*\* High power contacts direct motor control 1 kW 1 ph





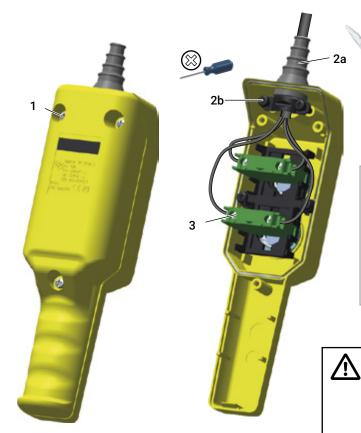
## STANDARD VERSIONS WIRING



#### **ATTENTION**

Is shown the wiring of a push-button panel with only one contact element per key. The procedure is identical for 2 or 3 contact elements per key.

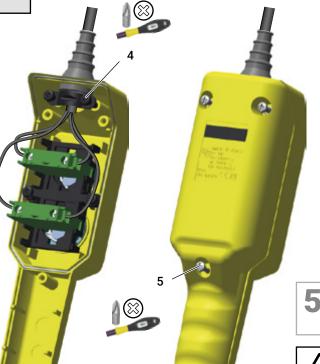
Loosen the screws to remove the bottom of the pendant station.



 $\triangle$ 

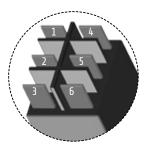
#### **ATTENTION**

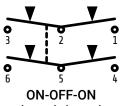
The sections that can be connected to the contact blocks are shown in the paragraph "CHARACTERISTICS OF CONTACT BLOCKS FOR STANDARD VERSIONS" on page 6. Wire the contact blocks following the procedure "Contact block with screw terminals" on page 2.



Cut the cable clamp (a) to match the selected cable size. Loosen the screws (b) of the cable holder and insert the cable into the cable clamp.

**ATTENTION P02.RM** only: wire with faston according to the diagram shown.





(mom)-(mom)

Tighten the cable holder screws.



TIGHTENING TORQUE

1.2-1.4 N×m 10.6-12.4 lb×in

Replace the bottom of the pendant station and screw it in place.



TIGHTENING TORQUE

1.3-1.7 N×m / 11.5-15 lb×in

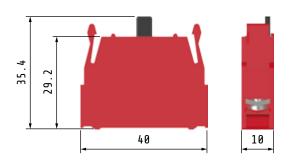
## **CHARACTERISTICS OF CONTACT BLOCKS FOR STANDARD VERSIONS**

## PL004001



NC Red

Contact block with screw terminals



Functions Scheme		Scheme	
<b>⊕</b>	1.5	6 mm	2















Rated insulation voltage	Ui	690 V *			
Rated impulse withstand voltage	Uimp	4 kV *			
Frequency		50/60 Hz *			
Rated thermal current	lth	16 A *			
Rated operating current	Ithe	10 A			
Rated operating current	le				
AC-15 alternate current		24 60 120 240 400 440 500 690 V			
		16* 12 8 6 4.5 3.5 3* 1 A			
DC-13 direct current		24 48 60 110 220 V			
		2* 1.2 0.85 0.4 0.25* A			
Conditional short circuit withstand current		1000 A *			
Fuses rating gG		10 A * - 500 V			
Contact insulation resistance		≤ 25 mΩ			
Switching mechanism		slow break double gap contacts			
Positive operation	'	NC contact block €			
Operating force		4 N			
Electric durability AC-15		1 2 3 A			
		1.5 0.5 0.25 millions of cycles			
Terminal type		M3.5 screw			
Terminal capactity		No. 1 or 2 flexible and solid conductor 1 2.5 mm <sup>2</sup>			
UL508 characteristics					
Rated insulation voltage	Ui	10 A - 600 V ac / 2.5 A - 125 V dc			
Rated impulse withstand voltage	Uimp	A600 - Q600			

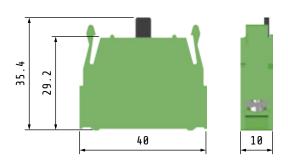
<sup>\*</sup> IMQ approved values

## PL004002



NO Green

Contact block with screw terminals



Functions S		Scheme	
0	3.5	6 mm	4 3















Rated insulation voltage	Ui	690 V *			
Rated impulse withstand voltage	Uimp	4 kV *			
Frequency		50/60 Hz *			
Rated thermal current	lth	16 A *			
Rated operating current	Ithe	10 A			
Rated operating current	le				
AC-15 alternate current		24 60 120 240 400 440 500 690 V			
		16* 12 8 6 4.5 3.5 3* 1 A			
DC-13 direct current 24 48 60 110 220		24 48 60 110 220 V			
		2* 1.2 0.85 0.4 0.25* A			
Conditional short circuit withstand current		1000 A *			
Fuses rating gG		10 A * - 500 V			
Contact insulation resistance		≤ 25 mΩ			
Switching mechanism		slow break double gap contacts			
Operating force		4 N			
Electric durability AC-15		1 2 3 A			
		1.5 0.5 0.25 millions of cycles			
Terminal type		screw M3.5			
Terminal capactity		No. 1 or 2 flexible and solid conductor 1 2.5 mm <sup>2</sup>			
UL508 characteristics					
Rated insulation voltage	Ui	10 A - 600 V ac / 2.5 A - 125 V dc			
Rated impulse withstand voltage	Uimp	A600 - Q600			

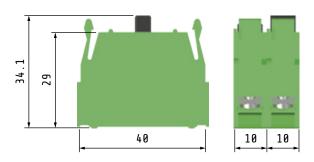
<sup>\*</sup> IMQ approved values

## PL004010



NO NO Green

Contact block with screw terminals



Functions			Scheme
0	3.5	6 mm	
			4 3
0	3.5	6 mm	
			4 3











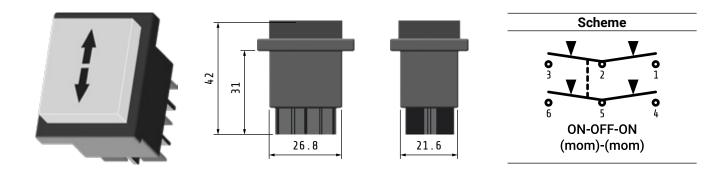




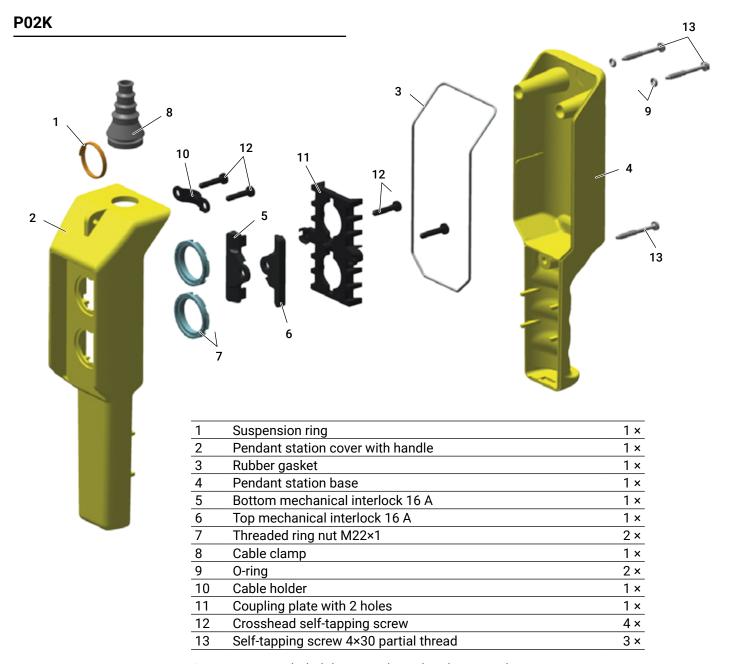
Rated insulation voltage	Ui	690 \	/*							
Rated impulse withstand voltage	Uimp	4 kV	*							
Frequency		50/6	0 Hz *							
Rated thermal current	lth	16 A	*							
Rated operating current	Ithe	10 A								
Rated operating current	le									
AC-15 alternate current		24	60	120	240	400	440	500	690	V
		16*	12	8	6	4.5	3.5	3*	1	Α
DC-13 direct current		24	48	60	11	0 22	20 V			
		2*	1.2	0.8			25* A			
Conditional short circuit withstand current		1000 A *								
Fuses rating gG		10 A * - 500 V								
Contact insulation resistance		≤ 25	mΩ							
Switching mechanism	1 <sup>st</sup> speed 2 <sup>nd</sup> speed	slow break double gap contacts snap break								
Operating force	•	4 N								
Electric durability AC-15		1	2	3	-	4				
		1.5	0.5	0.	25 r	nillions	s of cyc	cles		
Terminal type		screv	v M3.5	5						
Terminal capactity		No. 1 or 2 flexible and solid conductor 1 2.5 mm <sup>2</sup>			1 <sup>2</sup>					
UL508 characteristics										
Rated insulation voltage	Ui	10 A	- 600 \	/ ac / :	2.5 A -	125 V	dc			
Rated impulse withstand voltage	Uimp	A600	- Q60	0						

<sup>\*</sup> IMQ approved values

#### 11708237



## **CUSTOM KIT**



Components excluded that must be ordered separately:

- Operators
- Contact blocks

## **OPERATORS FOR CUSTOM KIT**

## Operators without wording (code PL...)

Pair with the contact block with the matching label



















PL005019

PL005004

PL005020

PL005005

PL005031

PL005016

PL005027

PL005012

















PL005028

PL005013

PL005032

PL005017

PL005023

PL005008

PL005024

PL005009



PL005033



PL005018



PL005001





Symbols according to FEM 9.941. Customized engraving available on minimum quantity request.

## Double speed operators (code PL...)

Pair with the contact block with the matching label













PL005029



Symbols according to FEM 9.941. Customized engraving available on minimum quantity request.

PL005021

PL005006

PL005025

PL005010

PL005014

## Neutral operators (code PL...)

Pair with the contact block with the matching label















PL005034 (blue)

PL005035 (white) PL005036 (black)

PL005037 (red)

PL005038 (green) PL005039 (yellow)

Gems















PL008001 (red)

PL008002 (green)

PL008003 (yellow)

PL008004 (blue)

PL008005 (white)

#### Mushrooms and selectors

Pair with the contact block with the matching label



Emergency momentary



PL013003

Emergency mushroom Ø40 mushroom Ø40 key unlock



PPFN1C4NX

Emergency mushroom Ø30 rotation unlock



PL013001 with vision

Emergency mushroom Ø30 rotation unlock



PL013002 standard

Handle selector

PL007001 0-1 / 90° PL007002 1-0-2 / 45° PL007003 1>0<2 / 45°

Handle selector with removable key in "0"



PL006001 0-1 / 90° PL006002 1-0-2 / 45° PL006004 1>0<2 / 45°

## Other components











## **CONTACT BLOCK FOR CUSTOM KIT**

### **Contact blocks**

Pair with the operator with the matching label

Pair with the operator with the matching label









NO PL004002



NC PL004001CD



NO PL004002CD

## Lights





PL0045L12 (AC/DC 12 V) PL0045L24 (AC/DC 24 V) PL0045L48 (AC/DC 48 V) PL0045L110 (AC/DC 110 V) PL0045L220 (AC 220 V)



PL004007

## **Contact blocks**

Pair with the operator with the matching label

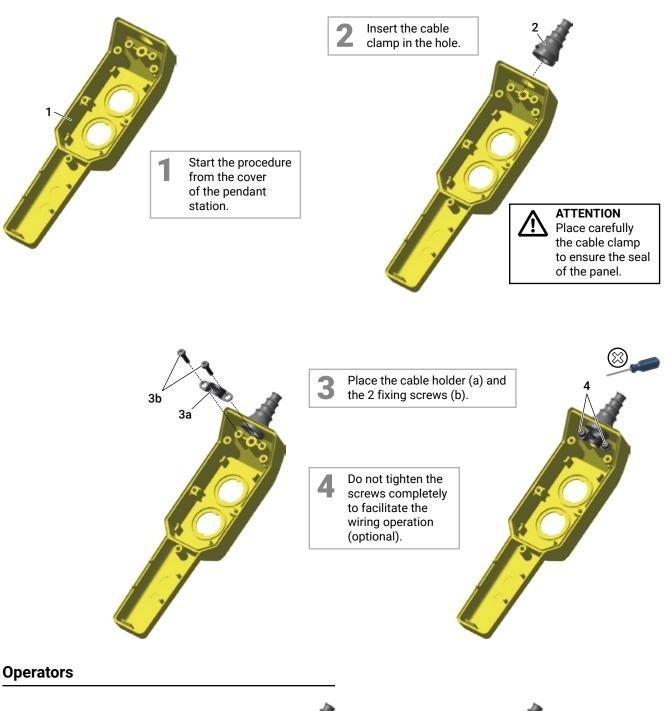


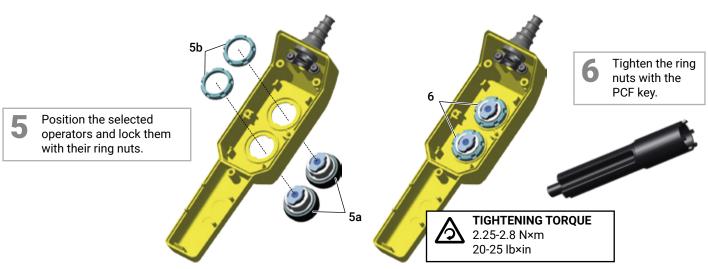


double step NO+NO PL004010

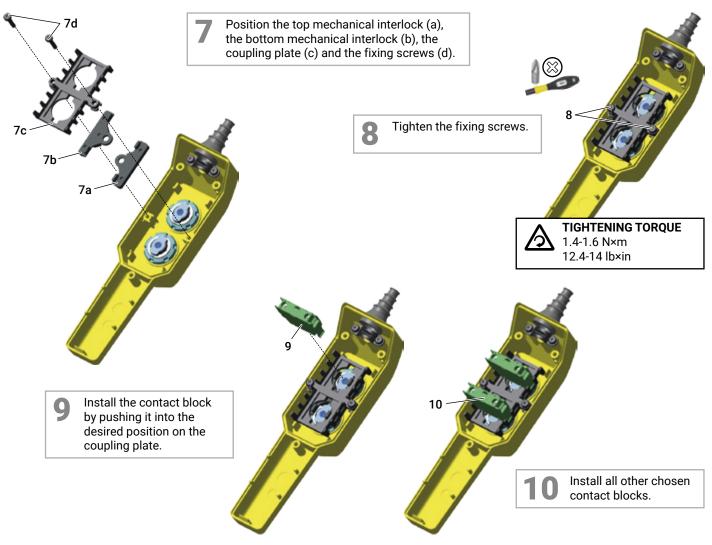
## **CUSTOM PENDANT STATION ASSEMBLY**

## Cable clamp and cable holder





## Coupling plate and contact blocks



#### Pendant station base

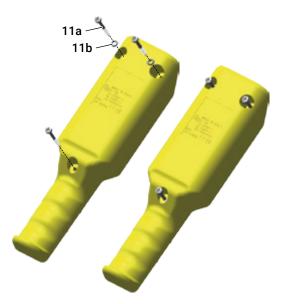
Place the fixing screws (a) and the o-rings (b) in the respective holes in the pendant station base.



Wiring

#### ATTENTION

Wire as shown in the paragraph "CHARACTERISTICS OF CONTACT BLOCKS FOR STANDARD VERSIONS" on page 6





#### **ATTENTION**

Wiring is optional and can be carried out later.

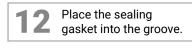


#### **ATTENTION**

The sections that can be connected to the contact blocks are shown in the paragraph "CHARACTERISTICS OF CONTACT BLOCKS FOR STANDARD VERSIONS" on page 6 e nel paragrafo "CHARACTERISTICS OF ADDITIONAL CONTACT BLOCKS" on page 16



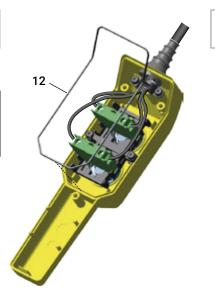
## Close the pendant station

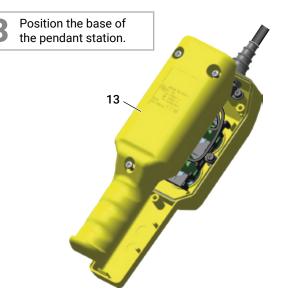




#### ATTENTION

Carefully position the sealing gasket to ensure tightness.





Tighten the fixing screws of the base of the pendant station.



TIGHTENING TORQUE

1.3-1.7 N×m 11.5-15 lb×in



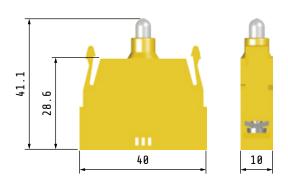
## **CHARACTERISTICS OF ADDITIONAL CONTACT BLOCKS**

#### PL0045L...



Yellow

Contact block with screw terminals



















Power supply	PL0045L12	AC/DC 12 V	
	PL0045L24	AC/DC 24 V	
	PL0045L48	AC/DC 48 V	
	PL0045L110	AC/DC 110 V	
	PL0045L220	AC 220 V	

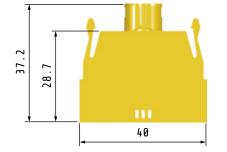
## PL004007



Yellow

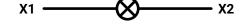
Contact block with screw terminals

Light bulb non included





Scheme













Connection		BA9s	
Power supply	max	400 V	
Absorbed power	max	2.4 W	