

PORTABLE WELDING CARRIAGE

# WELDY-RAIL

SAFETY INSTRUCTIONS FOR USE AND MAINTENANCE



EDITION : EN  
REVISION : C  
DATE : 09-2018

Instructions for use

REF : **8695 5874**

**LINCOLN**<sup>®</sup>  
**ELECTRIC**

**Thank for the trust you have expressed by purchasing this equipment, which will give you full satisfaction if you follow its instructions for use and maintenance.**

**Its design, component specifications and workmanship comply with applicable European directives.**

**Please refer to the enclosed CE declaration to identify the directives applicable to it.**

**The manufacturer will not be held responsible where items not recommended by themselves are associated with this product.**

**For your safety, there follows a non-restrictive list of recommendations or requirements, many of which appear in the employment code.**

**Finally we would ask you kindly to inform your supplier of any error which you may find in this instruction manual.**

# CONTENTS

**A - IDENTIFICATION .....1**

**B - SAFETY INSTRUCTIONS.....2**  
1 - AIRBORNE NOISE .....2

**C - DESCRIPTION .....4**  
1 - DEFINITION .....4  
2 - DESCRIPTION RAIL WITH MAGNETIC GRIPS .....6  
3 - DESCRIPTION RAIL WITH PNEUMATIC SUCTION CUPS.....6  
4 - RAIL ASSEMBLY .....7  
5 - CHARACTERISTICS .....8

**D - MONTAGE INSTALLATION .....10**

**E - OPERATOR MANUAL .....12**

**F - MAINTENANCE.....13**  
1 - SPARE PARTS .....13  
2 - WIRING DIAGRAM .....17

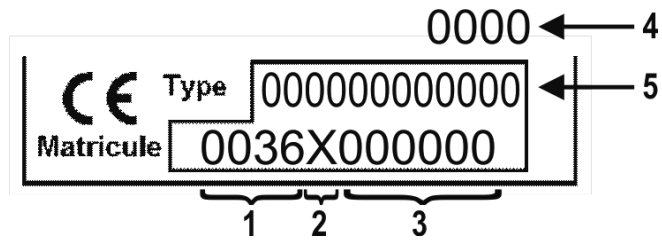
**PERSONNAL NOTES.....18**



# A - IDENTIFICATION

Please enter the number of your equipment in the following box.

Quote this information in all correspondence.



1	manufacturing factory code	4	year manufactured
2	manufacturing year code	5	product type
3	product serial no.		



## B - SAFETY INSTRUCTIONS

For general safety instructions, please refer to the specific manual supplied with the equipment.



### 1 - AIRBORNE NOISE

Please refer to the specific manual supplied with the equipment.



# C - DESCRIPTION

## 1 - DEFINITION

This welding carriage running on a guiding rail is able to support a MIG/MAG torch in order to make easier the job of the worker. This rail, able to be equipped with pneumatic suction cups or magnetic grips, can be easily fixed on a tank or a beam frame. These guiding rails are easily linked with a simple device which allows the positioning of the welding carriage all around the tank.

The carriage, mounted on the rail, is driven by a toothed pinion which fits in rectangle shape of the rail.

The rail with magnetic grips sticks easily on an iron material and the rails with pneumatic suction cups which uses a venturi device is more adapted on aluminium material or other stainless steel sheets.

It exists 2 sorts of carriage on rail **WELDY-RAIL** :

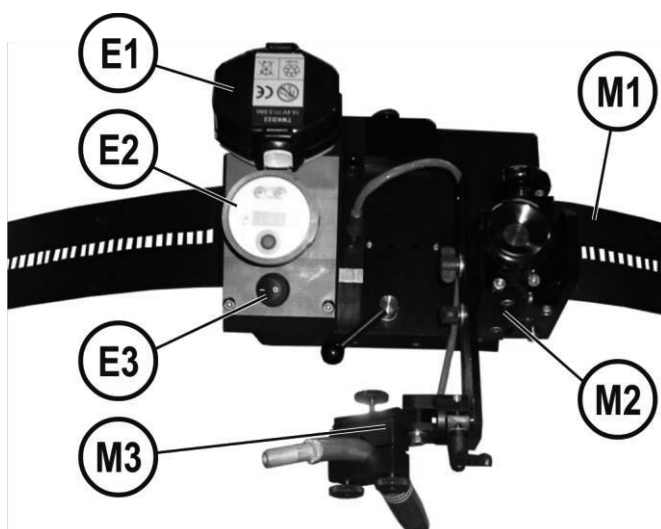
-Simple carriage

-Carriage with linear oscillator

The carriage display shows the real speed of the carriage during the movement thanks to motor equipped with his encoder. The speed of the carriage is done thanks to a numerical regulation.

### WELDY-RAIL SIMPLE VERSION

This version of **WELDY-RAIL** allows to have a carriage with a simple functioning. The torch support is mounted on simple crossed slides with 40mm stroke.

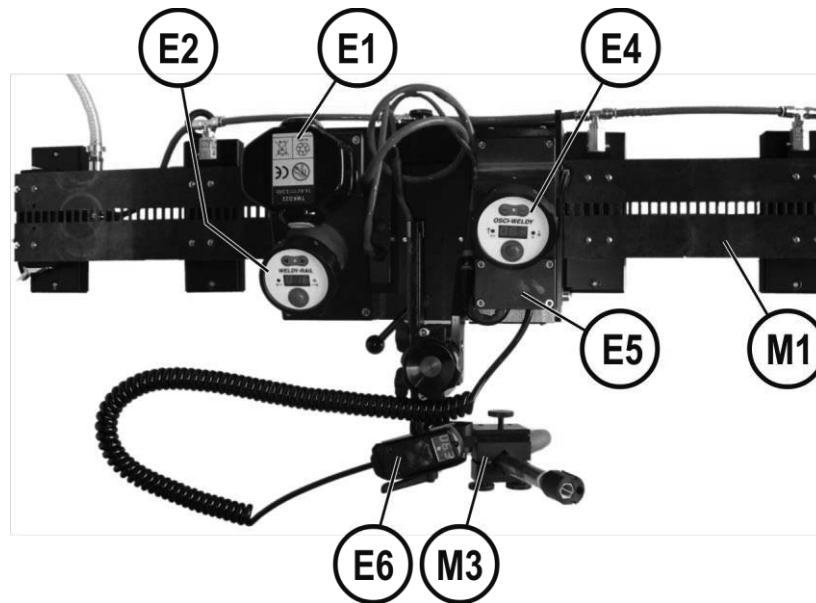


<b>E1</b>	Battery
<b>E2</b>	Carriage control panel
<b>E3</b>	Carriage start/stop button
<b>M1</b>	Flexible rail
<b>M2</b>	Manual crossed slides
<b>M3</b>	MIG torch support with detector



## WELDY-RAIL OSCILLATOR VERSION

This version of **WELDY-RAIL** with oscillator allows to have a full functioning of a carriage on rail. The torch support is mounted on a motorized slide with the oscillation function : the **OSCI-WELD**, the oscillator keeps all the characteristics of the **OSCI-WELD** W000276068 which is proposed actually on the **WELDY-CAR** (See **OSCI-WELD** offer).



<b>E1</b>	Battery
<b>E2</b>	Carriage control panel
<b>E4</b>	Oscillator control panel
<b>E5</b>	Oscillator OSCI-WELD
<b>E6</b>	Oscillator remote control
<b>M1</b>	Flexible rail
<b>M3</b>	MIG torch support with detector

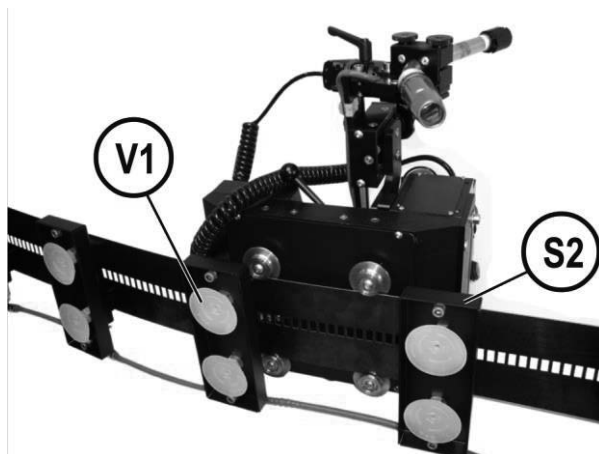
## 2 - DESCRIPTION RAIL WITH MAGNETIC GRIPS

The 1.5m guiding rail with magnetic grips is equipped with 15 magnetic supports (S1). Each support equipped with magnets allows the rail to grip against the metallic frame to weld. These rails have to be used on steel materials.



## 3 - DESCRIPTION RAIL WITH PNEUMATIC SUCTION CUPS

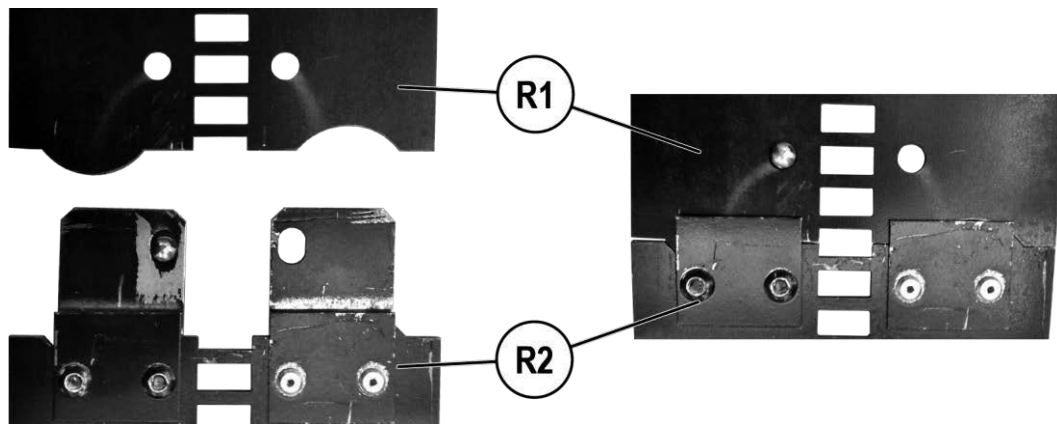
The 1.5 m guiding rail is equipped with 8 suction cups (S2). Each support equipped with 2 cups (V1) comes with a venturi wich allows the cups to be set against the support.



## 4 - RAIL ASSEMBLY

In order to link the rails, the support on the end of the rail is equipped with the link device (Same device for rail with pneumatic suction cups or rail with magnetic grips)

Assembly: slide the male part **item 1** into the female part **item 2**.



Once connected, leave the rail rest on the metal sheet using the magnetic force.



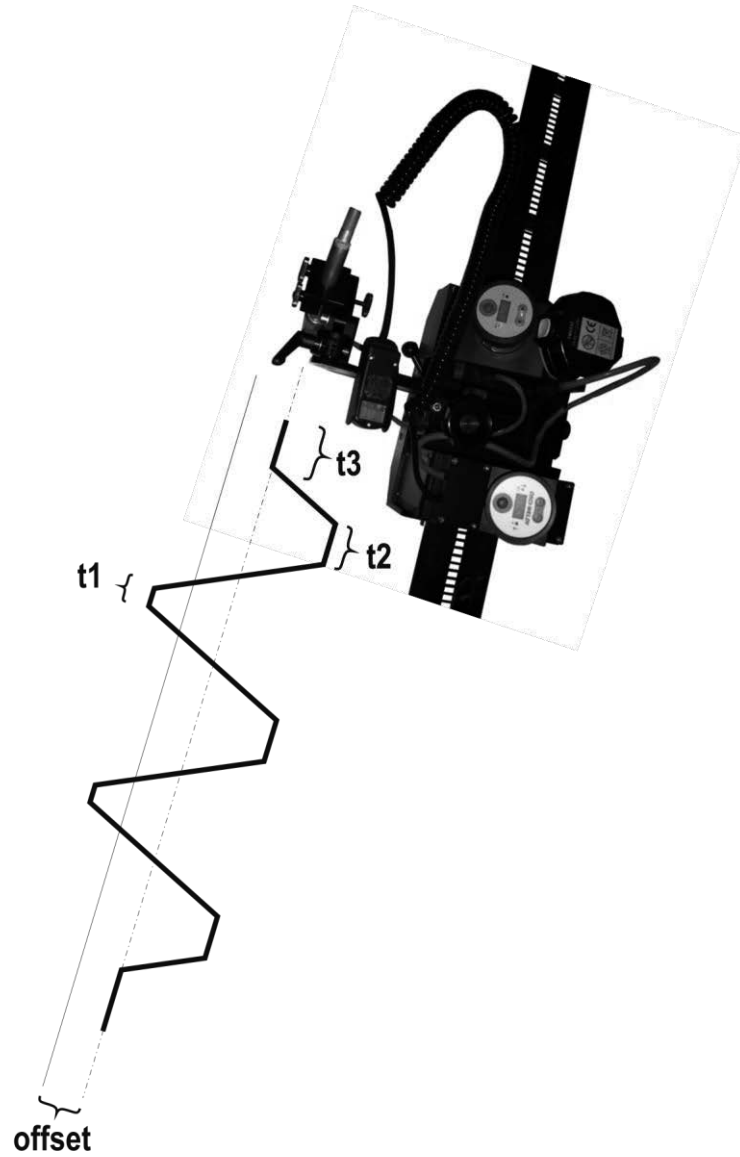
Disassembly: move the rail away from the part and remove the male part **item 1** from the female part **item 2**.

## 5 - CHARACTERISTICS

		WELDY-RAIL
Autonomy of working in simple version	-	5 h
Autonomy of working in linear oscillator version		2 h
Carriage speed	cm/min	min : 5 max : 80
Protection class	-	IP 23
Weight in simple version	Kg	7
Weight in linear oscillator version	Kg	9.5
Stroke of manual slide	mm	40
Dimensions (Length x width x height)	mm	270 x 220 x 230
Supply	-	Battery 14 V
Functioning temperature	-	-5°C to +50°C
Storage temperature	-	-10°C to +70°C
Relative humidity	-	< 90%
Rails with pneumatic suction cups		Rail-pneu-WELDY
Necessary service pressure	bar	5.5
Air consumption for 1 rail 1.5m	l/min	72

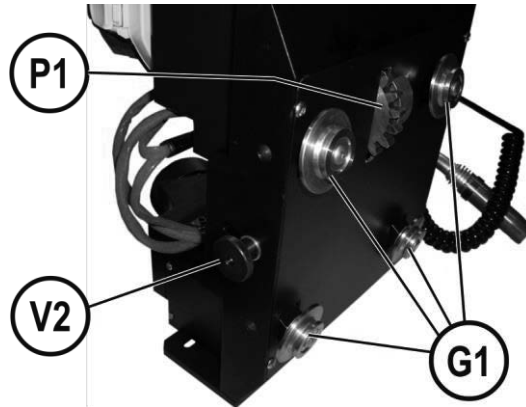
Additional characteristics for the version with linear oscillator OSCI-WELDY (W000276068).

Oscillation stroke (amplitude)	mm	from 2 to 56 mm
Offset (O)	mm	from 0 to 27 mm (Depends on amplitude)
Oscillation speed	cm/min	from 20 to 200 cm/min
External temporisation (t1)	sec	from 0 to 10 sec
External temporisation (t2)	sec	from 0 to 10 sec



## D - MONTAGE INSTALLATION

1. Install the magnetic / Pneumatic rail in parallel position to the joint to weld
2. Adjust the rollers « G1 » direction according the curve of the rails with the device « V2 ».



3. Plug the carriage on the rail, be sure the pinion « P1 » in the rack
4. Adjust the torch position with the crossed slides
5. Start the carriage movement with the button Start/stop « E3 ».

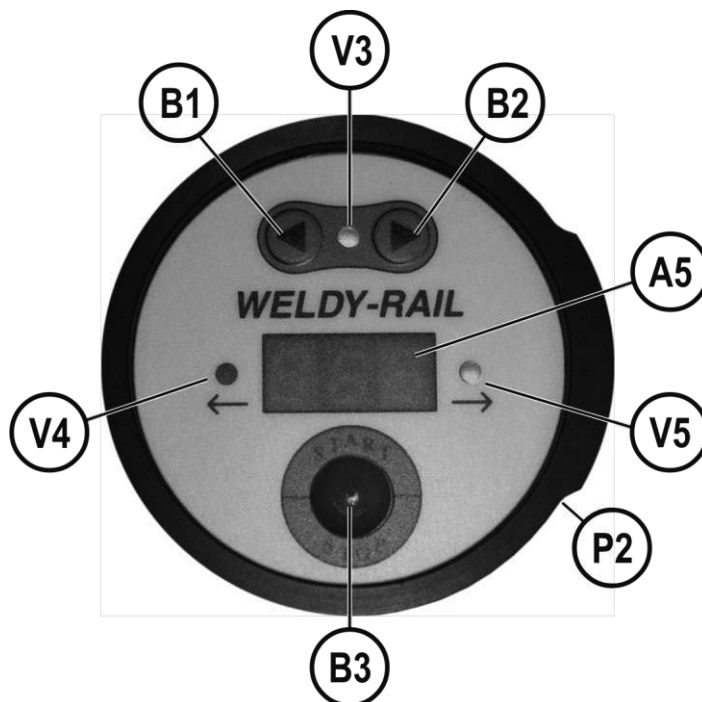
### En version Oscillateur linéaire

6. Start the Oscillator with the button Start/stop « E7 ».





# E - OPERATOR MANUAL



<b>B1</b>	« ◀ » Select the direction left
<b>B2</b>	« ▶ » Select the direction right
<b>B3</b>	Push the button to start the movement
<b>V3</b>	The light is on, when the carriage is moving
<b>V4</b>	The light is on, when the direction left is selected
<b>V5</b>	The light is on, when the direction right is selected
<b>P2</b>	The potentiometer to adjust the running speed
<b>A5</b>	Display of the running speed



# F - MAINTENANCE

## 1 - SPARE PARTS

### How to order

The photos or sketches identify nearly every part in a machine or an installation

The descriptive tables include 3 kinds of items:

- those normally held in stock: ✓
- articles not held in stock: ✗
- those available on request: no marks

(For these, we recommend that you send us a copy of the page with the list of parts duly completed. Please specify in the Order column the number of parts desired and indicate the type and the serial number of your equipment.)

For items noted on the photos or sketches but not in the tables, send a copy of the page concerned, highlighting the particular mark.

For example:

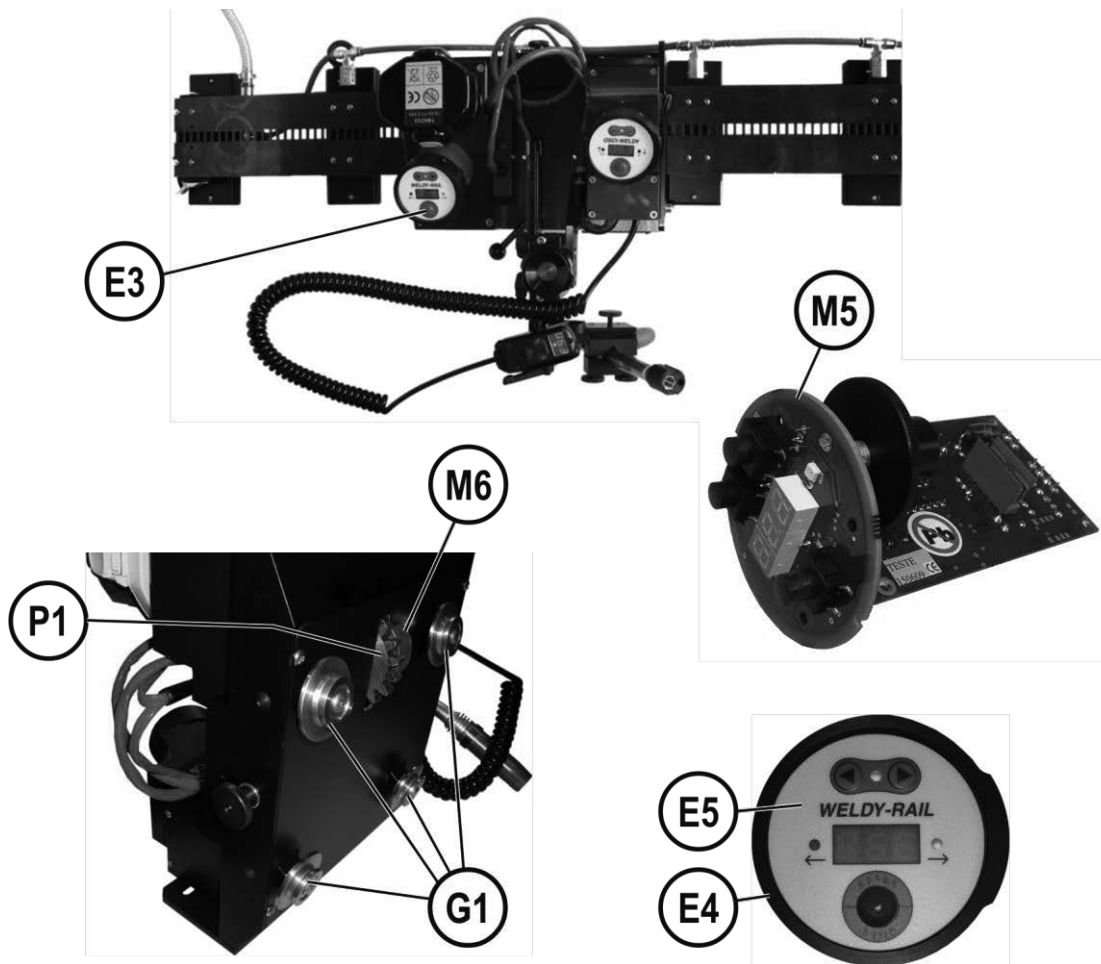
✓	normally in stock
✗	not in stock
	on request

Item	Ref.	Stock	Cde	Designation
<b>E1</b>	W000XXXXXX	✓		Machine interface board
<b>G2</b>	W000XXXXXX	✗		Flowmeter
<b>A3</b>	9357 XXXX			Silk-screen printed front panel

➤ For parts order, give the quantity required and put the number of your machine in the box below

<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;"> <small>CE Type</small>  <small>Matricule</small> </div> <div style="border: 1px solid black; width: 100px; height: 15px;"></div> </div>	TYPE : Number :
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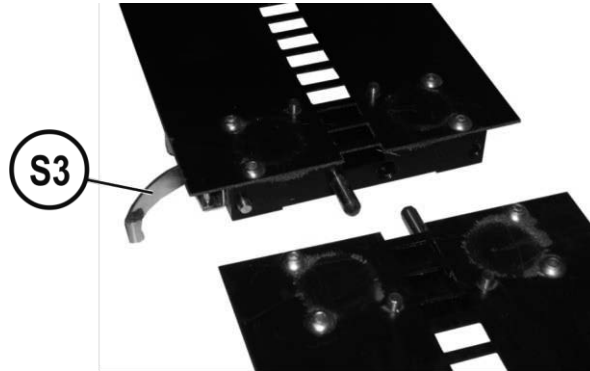
✓	normally in stock
✗	not in stock
	on request

Item	Ref.	Stock	Cde	Designation
M5				Control Module
M6				Motoreducer
E3				Start / Stop button carriage movement
E4				Black plastic
E5				Screen print
P1				Pinion
G1				Roller guide

➤ For parts order, give the quantity required and put the number of your machine in the box below

	TYPE :
	Number :

# MAGNETIC RAIL VERSION



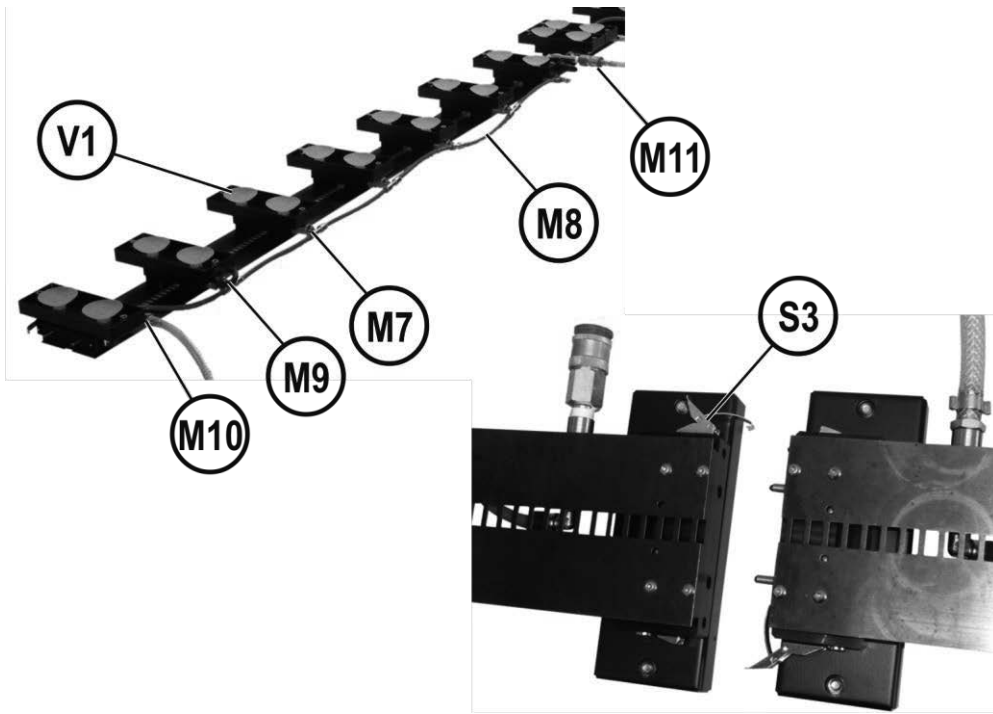
✓	normally in stock
✗	not in stock
	on request

Item	Ref.	Stock	Cde	Designation
<b>S3</b>				Hook clamp

➤ For parts order, give the quantity required and put the number of your machine in the box below

	TYPE :
	Number :

### PNEUMATIC RAIL VERSION



✓	normally in stock
✗	not in stock
	on request

Item	Ref.	Stock	Cde	Designation
S3				Hook clamp
V1				Suction cup
M7				Venturi with coupling
M8				Protected hose
M9				Sling ring
M10				Female coupling (output) Coupling in « T » + Female coupling
M11				Male coupling (input) Coupling in « T » + Input hose

➤ For parts order, give the quantity required and put the number of your machine in the box below

	TYPE :
	Number :



