

# HORIZONTAL CRIMPING MACHINES 0100B/0100P2/0100M

# **USE AND MAINTENANCE MANUAL**

(Original Instructions)



# *12. FOREWORD*

The following handbook has the purpose to give the user the necessary information in order to be able to use and manage the machine in the safest possible way. In case of doubts or ambiguous interpretation, the builder is completely available.

In the description of the machinery and its functions is clearly defined the purpose for which it was built, there are listed contraindications and possible residual risks, which are the dangers that cannot be completely avoided neither by planning correctly the machinery nor by using appropriate protections, thus allowing the user to perform effective information and training activities, aimed on personnel safety.

The builder has the faculty to make variations to its production and its own handbooks with no obligation to update the production and the previous handbooks. This handbook must be kept for future references. Neither the user nor any security supervisor can claim any demand or complaint if user has not fully accomplished to his own duties and obligations, both the ones expressed by the current legislations and those listed in this handbook.

In the handbook there are, where it's necessary, symbols that have the purpose to highlight the topic they represent and its quick identification. These symbols are shown hereunder.

F	<b>IMPORTANT</b> The instructions are particularly important
( <sup>p</sup>	<b>FORBIDDEN</b> What follows is forbidden
F	<b>CAUTION</b> Recalls the user to pay particular attention

#### SUPPLY CONDITIONS

The supply contract is improved with the written confirmation of the supplier in the order acceptance. The client has to inform the supplier, before signing the contract, of the existence of eventual regulations and particular laws to be respected in the final destination country of the goods.

*EXCLUSIONS*: The project and the technical dossier of the machinery, the installation and setup, special tests or trials, training courses, assistance during machine startup are not included in the supply, unless otherwise stated. Duties, stamp-duties, custom expenses, taxes and any other added burden are also excluded.

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**DELIVERY**: Unless otherwise stated, the supply will be made ex-works. By delivering the material to the carrier or directly to the client, COFLUID will be relieved of the delivery obligation and all the risks connected to materials and documents become responsibility of the customer, unless otherwise stated. The terms of delivery have an informational purpose and they are evaluated on working days. They become effective starting from date of the contract signature, unless the client has corresponded part of the price as a deposit, in which case the effective date of the terms is suspended until the client has completed the whole payment. The delivery terms will be extended by right if the customer does not give data or materials necessary to the supply in useful time, or if the customer requires variations during construction or if independent causes from the goodwill of the supplier impede the delivery within the established terms. In case the customer is not in order with previous payments, delivery can be suspended until the due amount will be paid.

*PAYMENT*: The payment must be made by the customer within the terms anticipated in the written order confirmation. In case of delay the client will have to pay the interests of late payment according to the official bank rate in effect in Italy, increased by three points. Possible claims that could rise among the parts, do not exempt the customer from the obligation to observe the conditions and terms of payment.

*GUARANTEE*: COFLUID guarantees the conformity of the supplied products, meaning that the products which are faultless in materials and working process, and that are conform to what is established in the contract accepted by the parts. The duration of the guarantee is 12 months, starting from the delivery of the products, and for substituted components, starting from the day of their substitution. Within such period, COFLUID, to whom the customer (not later than eight days after the delivery) has reported in a written statement the existence of any defects, will provide at its own discretion to repair or substitute the pieces which have defects, free of charge. The return of non-compliant materials shall be always authorized by COFLUID. Replacement and repair of the goods which are under warranty are usually carried out ex works, however if the customer chooses to carry out the repair work onsite, he shall bear the costs of journey and accommodation of the technical personnel provided.

The guarantee ceases when the products have been wrongly assembled or used, or they have received an inadequate maintenance or they have been modified/repaired without authorization from COFLUID.

*RESPONSIBILITY*: COFLUID is responsible of the good functioning of the machinery in relation to the characteristics and performances indicated. Otherwise COFLUID does not take any responsibility for the faulty functioning of the machinery and/or the systems made by the customer or by third parties, or any component not made by COFLUID. In any case the customer will not be able to claim neither compensation or damage for loss of profits or loss of production, nor to demand as compensation any amount higher than the value of the goods supplied.

*RETENTION OF TITLE:* COFLUID retains the property of the supplied products until the full amount of the agreed price has been paid.

*TERMINATION CLAUSE AND CONDITION SUBSEQUENT*: The supply contract will be terminated by law according to the article 1456 of the Italian Civil Code, as a result of COFLUID's written declaration to make use of this termination clause, in case that the customer omits or delays the due payments, delays or lacks to take the delivered goods in the established times, does not observe the obligation of confidentiality. The contract will be considered terminated by law in case the client is in liquidation or is subject to any bankruptcy procedure.

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*CONVENTIONAL WITHDRAWAL*: If the customer does not respect the given guarantees, COFLUID will be able to withdraw the contract without any notice.

*APPLICABLE LAWS*: All supply contracts disciplined by the current general conditions are regulated by the Italian Law.

*COMPETENT COURT*: For any controversy linked to the execution, interpretation, validity, termination of the supply contracts drawn up by the parts, the competent court is AREZZO (Italy).

#### RECORD OF MACHINE ACCEPTANCE

- WE CONFIRM: that the machine has been delivered to the customer perfectly functioning in all its parts and components.
- WE CONFIRM: that the machine has been delivered to the customer with this use and maintenance handbook.
- WE CONFIRM: that we have informed the customer about the knowledge and presence of residual implied risks arising by the use of the machine, as indicated in this use and maintenance handbook.
- WE CONFIRM: that we will be at disposal of the customer for any necessary information.

#### DECLARATION OF CONFORMITY

CE declaration of conformity of the machinery with the following pertaining regulations is issued for the use of the operator:

- Directive 2006/42/EC relevant to the machines;
- Directive 2014/35/EU relevant to the used electric material with certain voltage limits;
- Directive 2014/30/EU relevant to the electromagnetic compatibility EMC.

Moreover COFLUID S.R.L. declares that the machine is not present in the list of the machineries indicated in the Attachment IV of the Legislative Decree 17/2010 and in the Directive 2006/42/CE

#### PERSONNEL IN CHARGE FOR THE USE OF THE MACHINE

The personnel that will be in charge of using and maintaining the machine shall understand the minimum general information, and particularly:

- Have a complete understanding of this handbook;
- Have a copy of this handbook at disposal;
- Knowing that if he loses this handbook another copy can be requested;
- Knowing that is forbidden to tamper or remove the protection and the protection devices of the machine;
- Understand that he is obligated to inform "immediately" the person in charge in the company if he becomes aware about any tampering or removal of protection or protection devices from the machine;



- Knowing the obligation to wear the individual protection devices in order to limit the residual risks generated by the machine usage;
- Understand to wear the appropriate clothing for the kind of job to carry out.



There are also specific security aspects for every phase of intervention in the machine, and in particular:

*RESPONSIBLE FOR THE MACHINE*: shall be the operator responsible for the correct functioning of the machine, who has been conveniently formed and trained for the security and the hygiene by the employer. He shall keep and manage the key of the padlock of the main electrical isolator.

*PERSONNEL IN CHARGE FOR THE USE OF THE MACHINE*: shall be an adult operator, competent and authorized to the ordinary use of the machine, who has read and understood this handbook, and who has been conveniently formed and trained for the security and the hygiene by the employer and has been equipped with the necessary individual protection devices, and that follows the instructions given by the responsible of the machine.

**MECHANICAL MAINTENANCE TECHNICIAN**: shall be the authorized person that will have the authorization to carry out any intervention on the mechanic and hydraulic equipment of the machine, who has carefully read this handbook and who has been conveniently formed and trained for the security and the hygiene by the employer, and has been equipped with the necessary individual protection devices, and who has a technical knowledge and understanding in the mechanic and hydraulics field.

#### TABLES AND PICTOGRAMS

On the machine is applied the following plate:

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	n
MATRICOLA	
ANNO	



# 13. FEATURES

#### DESCRIPTION OF THE MACHINES

#### *O100B*

O100B is a sturdy and light machine, designed to be easily transportable to the workplace; ideal for crimping flexible hoses used in hydraulic circuits. It does not require any particular maintenance, apart from periodic lubrication.

Briefly, the crimping machine consists of:

- Aluminum base to support the pressing unit;
- Pressing unit: consisting of a hydraulic cylinder with conical piston, in contact with special steel clamps, which exert a radial force, uniformly distributed on the fitting to be tightened

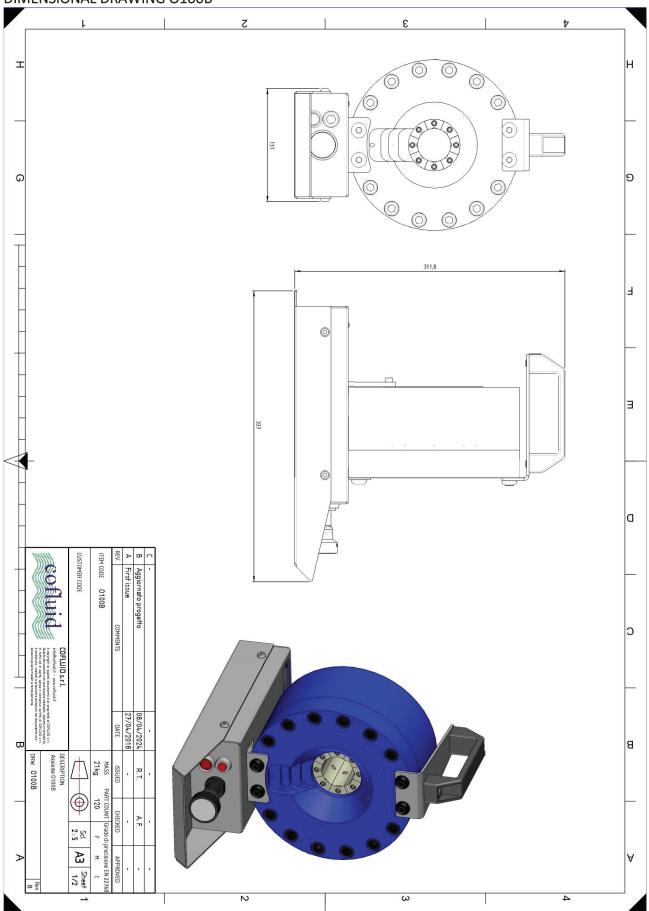
The return of the piston is ensured by the return springs. There are safety systems against the risks associated with processing.

#### **TECHNICAL DATAS O100B**

Crimping force	110,23 US TONS
Operating range	0,25"-1,53"
Max crimping range	2,16"
4 spirals hose	3/4"
2 braids hose	1"
Industrial hose	1"
Max opening with dies	0,79"
Max opening without dies	2,32"
Dimensions LxWxH	7,87"x12,6"x13"
Weigth	46,3 Lbs



#### DIMENSIONAL DRAWING O100B





#### 0100P2

O100P2 is sturdy, lightweight and designed to be easily transportable in the workplace; ideal for swaging hoses used in hydraulic circuits. It does not require any special maintenance, except for periodic lubrication.

The machine, synthetically, is constituted by:

- A support for the swaging unit, made of light alloy, and manual pump separated from the frame.
- Swaging unit, constituted by a hydraulic cylinder with steel conical piston, in contact with the die sets made of special steel, which exert a radial force, uniformly distributed on the fitting to be tightened.
- Actuating member, constituted by a double speed manual pump, complete with oil tank and drain valve.

The manual includes technical and operating properties of the pump. In case that any spare parts are needed, contact the closest Cofluid distributor, in order to speed up the replacement. The return of the piston is carried out by springs.

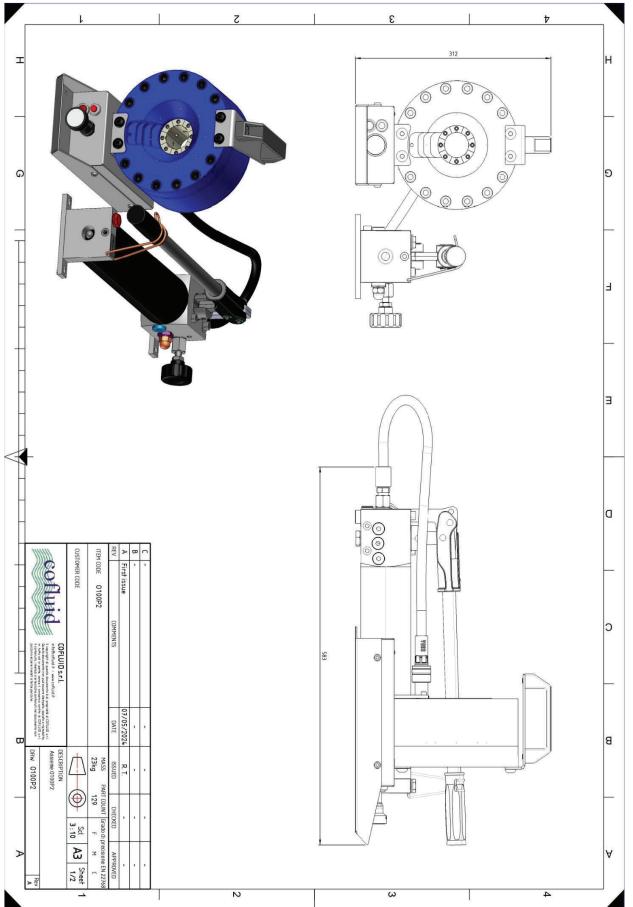
There are security systems against the risks associated to the processing phases

#### TECHNICAL DATAS O100P2

Crimping force	110,23 US TONS
Operating range	0,25"-1,53"
Max crimping range	2,16"
4 spirals hose	3/4"
2 braids hose	1"
Industrial hose	1"
Max opening with dies	0,79"
Max opening without dies	2,32"
Dimensions LxWxH	7,87"x12,6"x13"
Weigth	46,3 Lbs



#### DIMENSIONAL DRAWING O100P2





#### 0100M

O100M is a sturdy and light machine, designed to be easily transportable to the workplace; ideal for crimping flexible pipes used in hydraulic circuits. It does not require any particular maintenance, apart from periodic lubrication.

Briefly, the crimping machine consists of:

- Aluminum base to support the pressing unit and pneumo-hydraulic pump separated from the frame;
- Pressing unit: consisting of a hydraulic cylinder with conical piston, in contact with special steel clamps, which exert a radial force, uniformly distributed on the fitting to be tightened;
- Actuator, consisting of a single-acting pneumo-hydraulic pump, complete with oil tank

The manual contains the technical and operating characteristics of the pump. In the event that any spare parts are required, contact the nearest distributors, in order to speed up their replacement. The return of the piston is ensured by the return springs.

There are safety systems against the risks associated with processing.

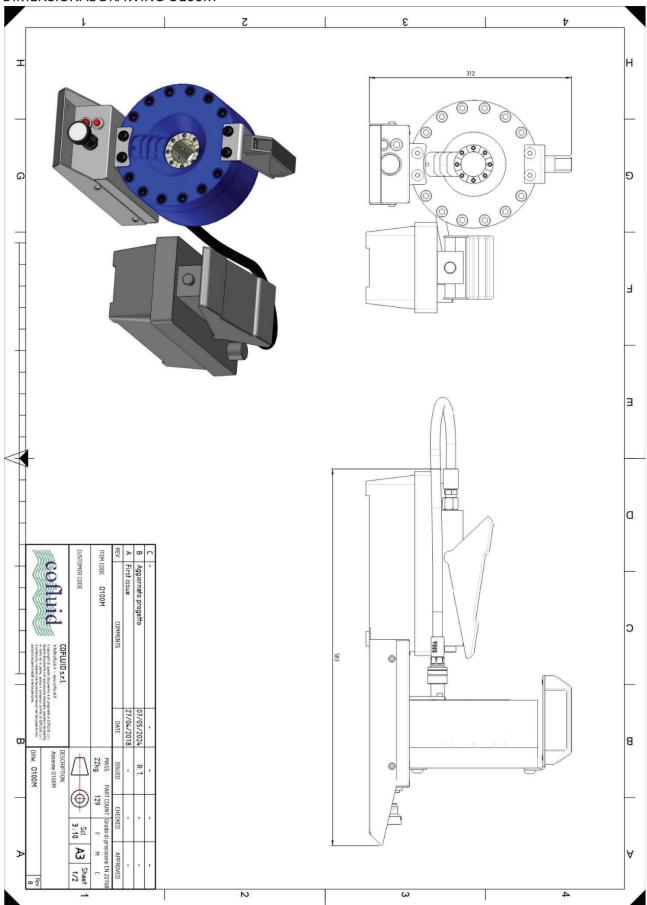
Crimping force	110,23 US TONS
Operating range	0,25"-1,53"
Max crimping range	2,16"
4 spirals hose	3/4"
2 braids hose	1"
Industrial hose	1"
Max opening with dies	0,79"
Max opening without dies	2,32"
Dimensions LxWxH	7,87"x12,6"x13"
Weigth	46,3 Lbs

#### TECHNICAL DATAS O100M

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#### DIMENSIONAL DRAWING O100M





# *14. SAFETY MEASURES*

In the table here below, you can find the short analysis about the risks and the necessary safety measures that the machine's operator must strictly follow.

Also, the eventual residual risks are indicated.

OPERATION	RISKS	SAFETY MEASURES	
Transport, Placement	Lifting, transport, crash, risks of mechanical type.	See the specific paragraph "Handling and carrying". Experienced and qualified staff shall perform the operations. OBLIGATORY: During the operations the unauthorized per- sonnel should stay away from the area of transport and placement. Wear the following injury-prevention devices: shoes and gloves.	
	Degradation by weathering.	OBLIGATORY: Do not leave the machine subject to the weathering (rain, wind, cold, heat, snow etc.)	
Installation	Stability, fall, collision	The machine has a very wide base plate and its barycenter is in- side this surface. OBLIGATORY: Place the machine on a strong, solid and flat support place, thus avoiding vibrations which could cause bad performances. Place the machine in an adequate manner to leave enough space on the workstation for the operator.	
and Startup	Places poorly lit, possibility of evaluation error.	The working area of the machinery has been built to be perfectly visible and controllable.           OBLIGATORY: Place the machinery in an area enough naturally and/or artificially enlightened to perform precision mechanical works.	

OPERATION	RISKS	SAFETY MEASURES	
Functioning	Contact with moving parts, me- chanical risks as crushing, col- lision, shearing.	OBLIGATORY: Only one operator must use the ma-         chine.         The hands of the operator must stay away from the danger-         ous working area, at the minimum distance of 120 mm. Operator         must wear suitable clothes and safety devices when he works with         the machine. Deliver this manual to the authorized personnel for         the use of the machinery. Ensure that the crimping operations will         be performed only in safe conditions. Use safety gloves and other         necessary protection devices. Follow the indications given on the         labels exposed on the machine.         FORBIDDEN: do not insert parts of body, animals, items of         plastic-glass-of any other kind in the working area. It is forbidden to         remove or tamper the safety guards or protection devices.	
	Risks due to components under hydraulic pressure.	All the elements under hydraulic pressure have been designed and tested under the foreseen working pressures. FORBIDDEN: it is forbidden to use the machine with higher working pressures than those foreseen.	
Maintenance and re- pairing of the ma- chine	Elements under pressure of the hydraulic circuit.	Possibility to eliminate the pressure from the hydraulic circuits.           OBLIGATORY: Strictly follow the instructions given in the specific chapter of this use and maintenance manual.	

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Hydra	ulic circuit fluid	OBLIGATORY: The operator must use appropriate fluid lub- ricant, find the safety card and carry out the necessary evaluation of the chemical and/or biological risk.

#### CONDITIONS OF USE



*FORESEEN USE*: The machinery has been designed and built to perform the crimping of flexible hoses used in the hydraulic circuits.

The preventive measures to be observed are:

- The operator must keep his hands away from the dangerous working area at the minimum distance of 120 mm;
- Do not insert parts of body, animals, items of plastic-glass-of any other kind in the working area.



FIRE EXTINGUISHING: Use only carbon dioxide as fire extinguishers.

<u>It is absolutely forbidden</u> to use the machinery in explosive or potentially explosive atmosphere (ATEX environments) because it has not been designed and built to work in such kind of environment

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<u>CAUTION:</u> every use and installation except for those ones allowed, is considered "INCORRECT USE" and/or "INCORRECT INSTALLATION", therefore the manufacturer refuses all responsibility for the eventual damages caused to things, persons or animals



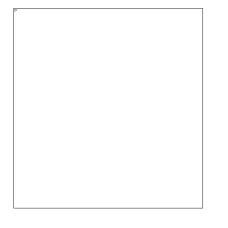
# 15. **INSTALLATION**



*FORESEEN INSTALLATION*: The operational environment of the machine must be an interior, in artisan or/and industrial buildings. Around the machine shall be left enough space for repairing and maintenance works. The floor and the eventual workbench must have adequate mechanical resistance features. The pavement must be perfectly flat without holes or protrusions. The installation must be carried out considering ergonomics principles. The installation area must have a good natural and artificial lighting.

When installing the crimping machine O100P2 (O100B with the manual pump), it is important to make sure that the tube is connected correctly to the manual pump.

First of all, you have to unscrew the red cap and the transparent one, then insert the connection tube, supplied with the machine.



When installing the crimping machine O100M (O100B with the pneumo-hydraulic pedal), it is important to make sure that the tube is connected correctly to the pedal.

First of all, you have to unscrew the black plastic cap and then screw the connection pipe, supplied with the machine.



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The precautions to observe during installation are:

- do not put the machinery too much close to walls or other working tools, in order to allow maintenance or restoration operations;
- do not place the machinery on inappropriate supporting surfaces;



Read the safety measures indicated on paragraphs 14 of this manual.



*STABILITY:* ensure that the machinery has been placed in a stable manner. Ensure that the support surface will not cause vibrations which can provoke malfunctioning of the machinery.



*LIGHTING*: the machinery has not been equipped with its own lighting system, thus ensure that the working area is correctly enlightened. If the working area is not sufficiently lit do not authorize the use of the machinery.

#### 16. STORAGE AND HANDLING

#### STORAGE

If case of need of storage, store the machinery inside a building, the machinery shall not be left outdoor or exposed to weathering (e.g. rain, for, snow, wind, etc.).

The place of storage must be stable and must not allow any movement of the machinery, such as falls, overturning. Store the machinery in a dry place.

#### HANDLING

The machinery can be handled and transported without be disassembled.

Use the following precautions:

- The machinery is light and compact, then can be manually transported without being disassembled.
- Be careful to not unbalance the machinery because the oil could come out from the tank, or even the machine could overturn and fall;
- Avoid blows and sudden shakes during the transportation, handling and lifting;
- In case that the machinery has to be shipped, ensure that it has been correctly hooked inside the mean of transportation, in order to prevent any shock or vibration; the machinery shall be appropriately protected from any external damage.



# 17. USE INSTRUCTION

#### CONTROLS DESCRIPTION

- 1) Battery charge status control button. To check the battery charge status, push this button, then if the battery is charged the red light turns on;
- 2) Red light, which turns on once the settled diameter has been reached.
- 3) Draining hole that discharges the oil residues when the gaskets are not under pressure..
- 4) See explanation at paragraph "FINAL PRESSING DIAMETER"



#### WORKING PROCEDURE

As defined in paragraph 14 of this manual only one (1) person shall be the operator for this machine. The working area of the machinery is situated on the front side of the machine.

#### INSERTION AND REPLACEMENT OF THE DIE SET

Once the die set has been chosen, proceed as follow:

- Make move backward the piston up to its end-stroke by rotating counterclockwise the return valve until you have enough space to insert the dies;
- Insert the pin of the die on its appropriate seat on the die-set holder, and push until the die is hooked. Repeat this operation for each die of the set.
- To remove the die, rotate it around the pin and pull it until the pin on its back will be unhooked from the die-set holder.

#### ADJUSTMENT/REPLACEMENT OF THRUST SPRING SCREWS

- Close the crimping machine until the thrust spring screw holes are uncovered.
- Remove the grain M6X6 (1)
- Unscrew the thrust spring screw (5)
- If the sphere is not dented and it works well then put it back together, otherwise replace the thrust spring screw
- To regulate the thrust spring screw, insert a die then tighten the screw until it can hold the pin of the die (a Loctite drop would be useful). At this point unscrew the thrust spring screw for just a rotation and try to pull off the die. If it does not exit then unscrew just a little more the thrust spring screw.

(SEE DRAWING IN THE FOLLOWING PAGE)



#### **OPERATING INSTRUCTIONS**

Before starting the pressing operations, read CAREFULLY the instructions contained in this manual, relating to:

- Characteristics of the machine
- Periodic maintenance
- Safety
- Preliminary checks
- Lighting
- Insertion and replacement of die sets

#### FINAL PRESSING DIAMETER

#### **!!!Verify the pressing diameter, the final diameter is provided by the manufacturers of connections. Always stick to the indications!!!**

To adjust the pressing diameter, bear in mind that each millimeter of movement of the knurled handwheel on the millimeter plate (1 turn) corresponds to a variation of +/-1 mm. on closing the terminals. The position of the knurled handwheel on the 0 of the millimeter plate corresponds to the nominal diameter of the terminal, that is to that stamped on it. Each division of the handwheel corresponds to +/-0.1 mm on the diameter

**Example:** to obtain a final pressing diameter of 21 mm, it is necessary to mount the series of clamps of 19. Considering that the difference between the two diameters is 2 mm, it is necessary to make the knurled handwheel two complete turns, positioning at Nr. 2 in reference to the graph line. Insert the pipe with the fitting and the bush already pre-assembled on the clamps. Close the oil return valve by turning the lever and start manual pumping until the clamps rest on the bush. Once the pressing diameter has been adjusted, activate the manual pump (or the pneumo-hydraulic pedal), so that, once the desired pressing diameter has been reached, the indicator light on the front of the machine turns on. Slowly open the oil return valve, by turning the lever, to allow the piston to retract (O100P2LL)

For the O100MLL, in order to close the machine, you have to press the pedal.

#### Caution!!!

Once the red light turns on, stop pumping, otherwise there is the risk of damaging the endstroke regulating system.



### 18. *MAINTENANCE*

#### PRELIMINARY REMARKS

- Place the machinery on a stable position, comfortable for work.
- Ensure that the oil level is enough.
- Ensure that the moving parts will be clean and greased.
- Ensure that the red light whom indicates the reaching of the final diameter is always working, by pushing the appropriate button.

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#### OIL LEVEL/GREASING AND PERIODIC MAINTENACE

Machinery's maintenance has to be performed by qualified personnel, as stated on chapter 2 of this manual.

During maintenance operations machinery has to be absolutely shut down, and the operator can safely work on it. In particular:

- Ensure that the moving parts are always clean and greased: leave the machine opened and lubricate between the piston and the die-set holder. (Use high anti-seize capability grease) – it is important to lubricate also the rear eyelet where slides the piston bracket.
- Periodically check the manual pump oil level.
- Occasionally check pump efficiency and tightening of the connections.
- Periodically check the red light which indicates the reaching of the final diameter by pushing the appropriate button. If it does not work replace the battery by removing the bottom base
- Daily check the wear status and the readability of the warning signals.

#### In the suggested type of oil is Mobil Nuto H32 III



#### MAINTENANCE REGISTER

Record the maintenance operations performed on an appropriate register, which shall be kept with the machine.

Shown below an example of a maintenance register.

Nr. Data	Esecutore	Descrizione operazioni di manutenzione	Esito della manutenzione		
				Favorevole	Sfavorevole

#### FLUIDS LEAKAGES

#### HYADULIC OIL

It is forbidden to ingest the fluid.

Keep at disposal the MSDS (material safety data sheet) of the used hydraulic oil and to follow the security and hygiene instructions.

In case of fire of the fluid do not use water to extinguish the fire.

Avoid skin and eye contact. Wear appropriate personal protective equipment (PPE) such as pvc gloves, rubber boots, protective glasses, etc.

Avoid to spread of the fluids and to dump on drains, ditches or rivers by using sand, earth or other appropriate barriers. Inform local authorities if the spread of waste cannot be avoided.

Absorb the fluid with sand or earth. Gather it on an appropriate labelled container, then start the right procedure for waste disposal as requested from the laws in force



# *19. DEMOLITION*

The demolition of the machine must be entrusted to qualified personnel on the basis of their relevant competencies as already explained the chapter 14 of the present manual. The demolition procedures must be planned according to a specific operational security plan.

Insulate the machine electrically and discharge the internal pressure of the hydraulic circuits. Use the necessary safety guards (basic equipment: safety goggles, helmet, shoes, gloves against the mechanic aggressions).

It is particularly important to have at disposal suited equipment for lifting and transport of the loads, especially for all the heavy parts.

In case of the demolition, it is necessary to plan it following the order described here below:

disassembly of each part.

The dismantled parts must be subdivided into different waste disposal categories and treated according to the procedures laid down by law. Pay special attention to the waste disposal of the liquid products (oils of hydraulic circuits, lubricants, etc.).

# 20. RESPONSABILITIES

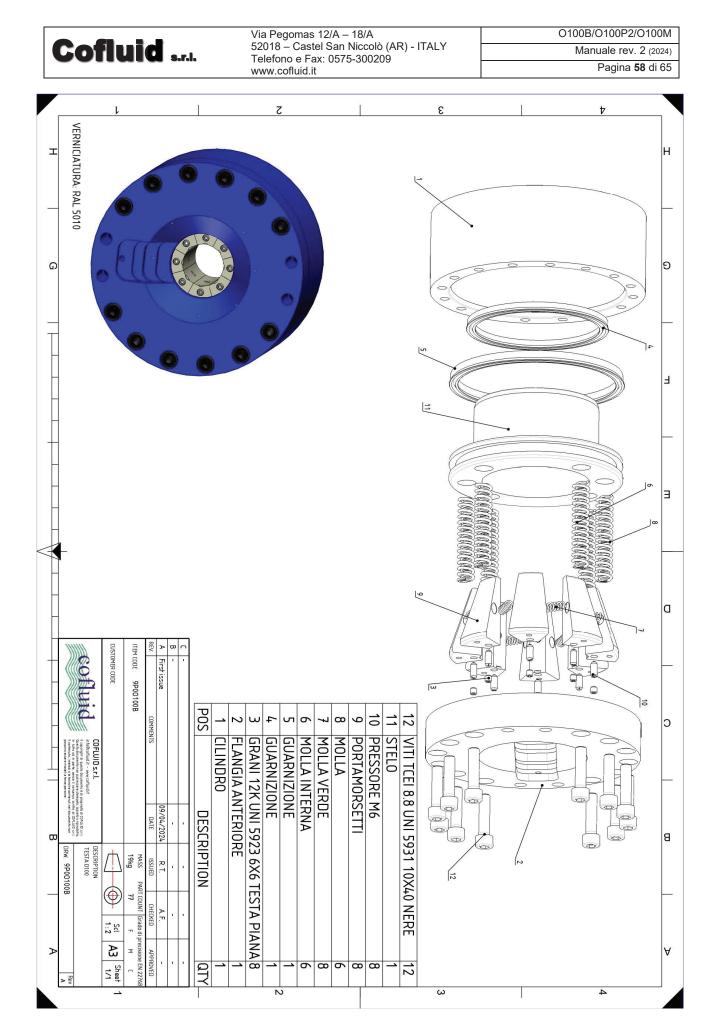
The manufacturing company refuses all responsibility in case of:

- Incorrect use of the machine;
- Unforeseen and/or incorrect use of the machine;
- The machine has been modified;
- Removal or tampering of the protections and safety guards;
- Use of the machine in unfit places;
- Installation of the machine in unfit places;
- The provided injury-prevention guards have not been used;
- Delivery of the machine to personnel without knowledge about the risks;
- Suited operators lack the knowledge about the safety and health risks due to the use of machine;
- Periodical controls and maintenance of the protections and safety guards have not been carried out;
- Inexact require of spare parts;
- Dismantling of the machine is not in compliance with the current standards;
- The operator has not got authorization requested by law for the use of the machine.



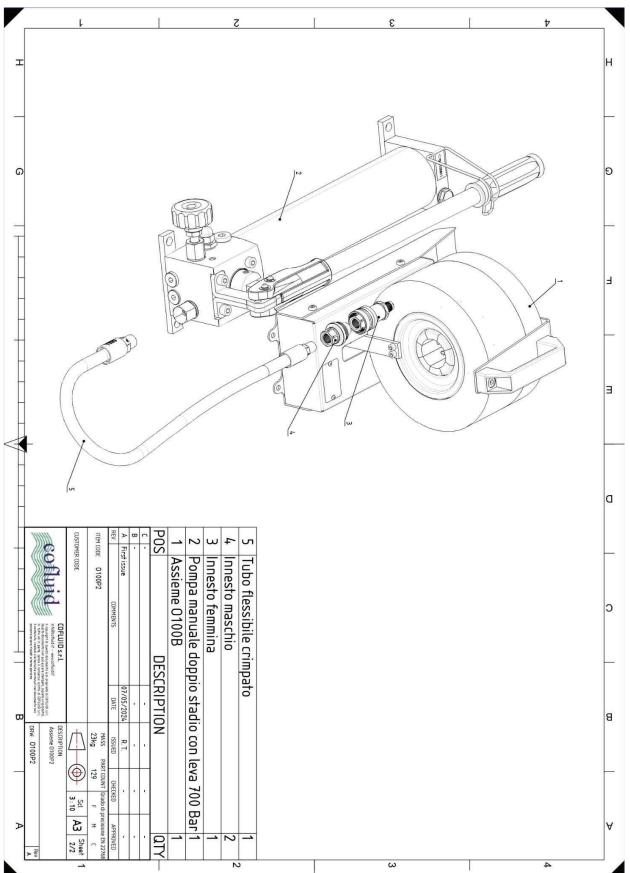
# 21. SPARE PARTS

EXPLODED DRAWING O100B





#### EXPLODED DRAWING 0100P2





MANUAL PUMP

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	S.F.I.

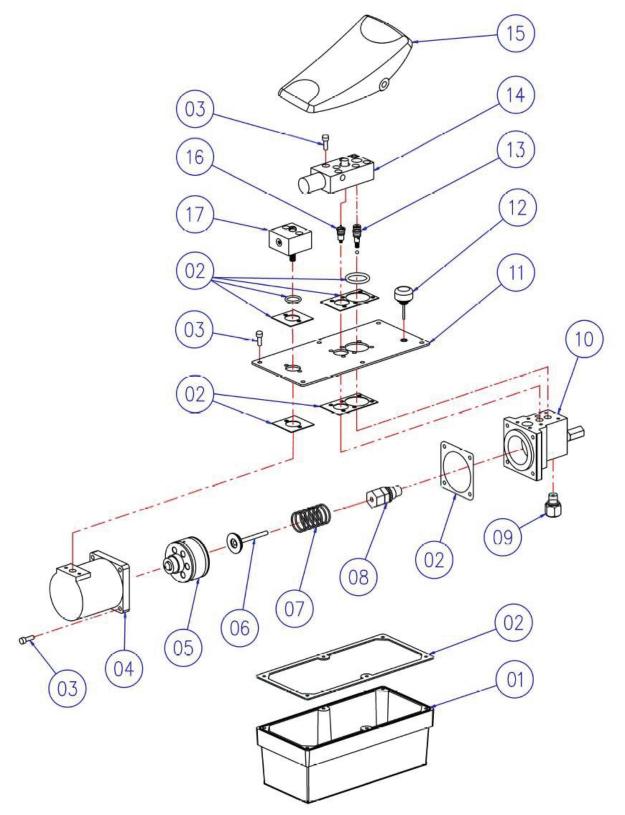


## EXPLODED DRAWING O100M

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B	DESCRIPTION Assieme 0100M	Д		07/05/2024 R.T. 27/04/2018 - DATE ISSUED	DESCRIPTION	)0B	mina	chio	Imoidr	ile cri	۲" G					В
		Scl 3:10	PART COUNT Grado di precisione EN 22768 129 F M C	- CHECKED					aulica	mpato						
A		A3 Sheet 1	precisione EN 22768 M C	- APPROVED	QTY	<u> </u>	<b>_</b>	<b></b>	-	-	<b>_</b>	ω			4	A



# PNEUMO-HYDRAULIC PEDAL





n°/nr.	Descrizione	Description	Cod./Code	
01 Vaschetta		Tank	70.01PC	Plastica
			70.01PF	Alluminio
02	Kit guarnizioni	Sealing kit	KIT.70	
03	Kit viti	Screws kit	KIT.71	
04	Cilindro	Cylinder	70.12C	
05	Pistone Compl.	Compl. Piston	70.11C	
06	Pompante Compl.	Compl. Plunge	70.08K1C	ø 6.3
			70.08K2C	ø 7
			70.08K3C	ø 10
			70.08K4C	ø 8
07	Molla pompante	Spring plunge	70.14	
08	Porta pompante Compl.	Compl. Plunger casing	70.05P1C	ø 6.3
			70.05P2C	ø 7
			70.05P3C	ø 10
			70.05P4C	ø 8
09	Filtro Compl.	Compl. Filter	70.03C	
10	Corpo Pompa Compl.	Compl. Body pump	70.04C	
11	Coperchio vaschetta	Cover tank	7017C	
12	Tappo da Lavoro	Work Cap	8A.22	1
13	Valvola non Ritorno Compl.	Compl. No return valve	70.31C	
14	Blocchetto olio Compl.	Compl. Oil Block	70.25C	1
15	Pedale Compl.	Compl. Pedal	G2500.04C	1
16	Perno di scarico Compl.	Compl. Unloading pin	70.18C	1
17	Blocchetto aria Compl.	Compl. Air Block	70.21C	1



# 22. ATTACHMENTS

#### ELECTRICAL DIAGRAM

		SCRIZIONE ESCRIPTION		
	1 PILA 9V ,	battery 9v		
		, battery holder ST , test button		
	4 LAMPADA ,	NAME AND ADDRESS OF ADDRESS AND AD		
	5 MICROSWICH	, microswich		
2 DENOMINAZIONE SCHE	<u>1</u> - MA ELETTRICO C	4	DISEGNO N.	DI FG.
	.Q. FINITURA X 45' PESO GREZZO	PESO FINITO	XXXXXXXX 1	1
EMESSO DATA ISSUED DATE REV. R.T. 17/06/2024 / EMISSI	DESCRIZIONE DESCRIPTION	DATA CONTR DATE CHECKED 17/06/2024	E' vietata a termini di legge la riproduzione parziale a totale FILE : e la comunicazione a terzi del presente disegno XXX APPROV. APPROV.	
APPROV. DATA APPROV. DATE R.T. 00/00/00				