



DUAL STAGE MANUAL PUMP



IMPORTANT



◁THIS DEVICE IS INTENDED FOR PROFESSIONAL USE ONLY▷

◁INSTALLATION, USE, CLEANING, AND MAINTENANCE MUST BE CONDUCTED EXCLUSIVELY BY QUALIFIED (AUTHORIZED) PERSONNEL▷

◁THE DEVICE MUST NOT BE INSTALLED BEFORE FULFILMENT OF THE OBLIGATIONS OF DIRECTIVE 2006/42/CE AND OTHER APPLICABLE STATUTORY STANDARDS▷

◁THE DEVICE MUST NOT BE INSTALLED OR STARTED UP IN AREAS CONSIDERED TO BE AT RISK OF EXPLOSION

- 👉 Read carefully at the time of delivery of the product and before stocking and/or installing and/or using.
- 👉 These instructions, that provide essential directions concerning safety during INSTALLATION and USE, are integral parts of the final product, therefore they must be included in the final documentation.
- 👉 Store these instructions in areas that are protected from umidity and heat for future consultation.

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Cofluid Srl guarantee their products only if installed and used in compliance with the indications of the present instructions or the company catalogue

*If customers fail to stipulate any additional requirements in the contractual documents, said requirements having been accepted and confirmed by **COFLUID SRL**, it is assumed that only the requirements stated in the present instructions or in the catalogue are satisfied.*

PRODUCT DESCRIPTION

This product is a oil-hydraulic pump actuable by human force alone, with built-in hydraulic cylinder that turns the hydraulic energy generated by the action on the lever, in a linear movement of a few millimeters on the stem.

The pumps are built with high quality materials. All the visible parts are treated with Anodizzato grigio/Zincatura elettrolitica coating (unless otherwise specified in the order).

Each pump is fitted with these information in order to provide a general knowledge and to give installation, use and maintenance instructions, so we ask you to read it **CAREFULLY BEFORE PROCEEDING IN ANY OPERATION**.

In order to better understand the text, we clarified that, from now on, by using the term **PRODUCT** or **MACHINE** or **DEVICE**, we refer to the object of the manual, which is the O100511 pump (700 bar) and the O100512 pump (300 bar).

This product is entirely made in Italy.

GENERAL POINTS

COFLUID S.R.L. does not provide guarantees of the technical/legal suitability of the environment where the product is installed, even if in this manual there are important information to install it correctly. Concerning this aspect, we advise the client to consult qualified personnel with expertise in the field, for compliance with any applicable law or regulation.

Do not allow anyone to put into service the product without:

- Making a risk evaluation that follows the incorporation of the product in a machine, according to the directive 2006/42/CE;
- Reading carefully and understanding all the information in this manual;
- Receiving appropriate instructions from an authorised person.

The product is manufactured in compliance with the applicable rules.

So, before proceeding with the incorporation, installation, use, maintenance and repairing, read carefully this manual, since you can find all the necessary information for a correct use, so that you can avoid dangerous situations.

These instructions must be considered as part of the product and must stick with it.

In case the product is placed in the market in a EU Member State other than Italy, it is a responsibility of the dealer or of the manufacturer of the machine in which COFLUID's product has become a part, to translate the instructions into the user's language.

If not reported immediately to the technical office of COFLUID, potential anomalies that can be found aren't COFLUID responsibility, neither are the damages to the product itself, to other materials, the other people, animals and/or objects: these are the people who caused the damage's responsibility.

Any alteration of the product made without being notified to the **TECHNICAL OFFICE** of COFLUID, will lead to the **ANNULMENT** of the Declaration of Incorporation, making the company forfeit all liability and warranty. The check and maintenance frequencies prescribed in the Manual must always be understood as the minimum necessary to guarantee the efficiency, safety, and the operating life of the product in normal conditions of use. Surveillance should in any case be constant with prompt intervention in cases of operating faults.

All our products are subject to continuous technological development. The company thus reserves the right to introduce changes to the construction and features which could change the operational characteristics.

GUARANTEE

The product is intended for professional use or for commercialization.

COFLUID guarantee the devices against material and constructional defects for a period of 12 months, starting from the date of dispatch from their warehouse.

The product is guaranteed for one year (12 months) starting from the date of purchase, based on the date on the transport document/ shipping invoice.

During this time COFLUID undertake to repair or substitute free any parts which, according to their incontestable judgement, exhibit manufacturing defects, free of charge, if the device is delivered to the company site in **CASTEL SAN NICCOLO' (AR)-ITALIA**.

Replaced defective parts become the property of COFLUID.

In cases of irreparable defects, COFLUID can avoid withdrawal from the contract by the Customer by offering the free replacement of the goods.

The guarantee does not extend to:

1. O-rings and gaskets in general, or consumable materials and/or those subject to wear/consumption.
2. Costs resulting from demounting and mounting from the user machine.

3. Unauthorized intervention involving modification and/or demounting, or any tampering with the product.
4. Incorrect application of the installation rules resulting in damage to the product.

5. Faulty parts resulting from transport/impact, bad or incorrect installation/start up, neglect or bad use, tampering, damage from atmospheric agents or other natural events and for any other causes over which COFLUID has no control.

Any further or additional claims for damage are excluded, other than those provided for in law.

COFLUID reserve the right to charge for the cost of repairs if a returned product is not covered by the guarantee.

Intervention for hypothetical faults or for precautionary checks are payable by customers.

Any transport costs for repair of the device to and from the "Technical Assistance Centre " of CASTEL SAN NICCOLO' (AR) - ITALIA is care of and payable by the customer.

The presence of oil residues on the outside of the product is not considered a product defect.

Any prohibitions of use of the product imposed by the competent local authorities or other competent bodies do not entitle the customer to return the product or to claim compensation.

Any external colour differences or chromatic contrasts between the various parts comprising the product and between multiple products comprising a supply lot are not considered as product defects.

The impossibility to guarantee interchangeability between the various parts comprising the product with parts originating from series/serial numbers/consignments not specifically purchased as spare parts is not considered as a product defect.

In cases of repair/replacement of defective parts or replacement of goods during the guarantee period, the duration of guarantee remains unaltered, always starting from the original product purchase date.

For anything not specified here the general conditions will apply as stipulated in the commercial documentation/commercial catalogue current at the time of purchase.

RETURN PROCEDURE

Returns will not be accepted without the prior approval of COFLUID. The parts or entire product object of return must be delivered intact, in its original packaging, complete with all accessories originally consigned and with the original markings applied to the product by COFLUID. The resulting package must be further protected with additional packaging for protection during transport.

Transport costs for returns are payable by the customer.

Goods lacking one or more of the above-mentioned requirements will be rejected or returned to the sender, or alternatively the customer will be charged for check procedures, repair, and storage.

PRECAUTIONS, WARNINGS AND RESTRICTIONS



THE LEVER IS ACTIVATED WITH HUMAN FORCE ONLY. THE DIMENSIONS OF THE LEVER ARE DESIGNED FOR USE BY AN ADULT INDIVIDUAL IN GOOD HEALTH. BEFORE STARTING TO USE THE PRODUCT ALWAYS CHECK THAT THE REQUIRED OPERATIONAL FORCE, ON THE BASIS OF THE FREQUENCY OF ACTIVATION AND THE ERGONOMIC POSITION ASSUMED, IS COMPLIANT WITH INTERNAL COMPANY REGULATIONS REGARDING HEALTH AND SAFETY AT WORK.



- 1° BEFORE INSTALLING AND/OR STARTING UP THE PRODUCT, CHECK THAT THERE IS NO VISIBLE DAMAGE; DO NOT INSTALL OR START UP A PRODUCT THAT SHOWS SIGNS OF DAMAGE.
- 2nd THE PRODUCT MUST BE USED IN FULL COMPLIANCE WITH THE REGULATIONS IN FORCE IN THE PLACE OF USE AND BE COMPLIANT WITH ALL THE REQUIREMENTS RESULTING FROM THE SPECIFIC INTENDED FORM OF USE.
- 3° CERTAIN FORMS OF USE ARE EXPRESSLY FORBIDDEN BY COFLUID; CAREFULLY READ PARAGRAPH: **USO NON CONSENTITO USO NON CONSENTITO**, BEFORE INSTALLING THE DEVICE.
- 4th IT IS FORBIDDEN TO REMOVE AND/OR TAMPER WITH THE ORIGINAL LABELS AND SYMBOLS APPLIED BY COFLUID.
- 5° CHILDREN AND ANIMALS MUST BE KEPT OUTSIDE OF THE AREA OF OPERATION OF THE PRODUCT AND OUTSIDE ENVIRONMENTS IN WHICH IT IS LOCATED.
- 6th INDIVIDUALS WHO, DUE TO PHYSICAL, SENSORIAL, OR PSYCHIC INCAPACITY, INEXPERIENCE OR LACK OF KNOWLEDGE ARE NOT CAPABLE OF INSTALLING, STARTING UP, OR USING THE DEVICE AUTONOMOUSLY AND SAFELY, MAY PROCEED IN THESE ACTIVITIES ONLY IF SUPERVISED AND INSTRUCTED BY COMPETENT PERSONS WHO ASSUME FULL RESPONSIBILITY FOR THE SAME.
- 7th DURING THE OPERATION OF THE PRODUCT, THE OPERATOR MUST CONSTANTLY MONITOR THE SAME.
- 8th IT IS FORBIDDEN FOR PERSONS AND/OR OPERATORS AND/OR ANIMALS AFFECTED BY CARDIAC DISORDERS, USERS OF PACE-MAKERS, OR AFFECTED BY DYSFUNCTIONS OF ARTICULATION (E.G. ARTHRITIS/ARTHROSIS) TO USE THE PRODUCT UNLESS THEY HAVE PREVIOUSLY CONSULTED A DOCTOR.

- 9th BEFORE USING THE DEVICE IT IS NECESSARY TO THOROUGHLY UNDERSTAND THE OPERATING MODES AND THE CONTROL DEVICES. THESE SKILLS MUST ALWAYS BE LEARNED BEFORE STARTING USE. DO NOT PERMIT UNAUTHORIZED INDIVIDUALS LACKING THE NECESSARY KNOWLEDGE TO USE THE DEVICE.
- 10^o CAREFULLY READ ALL THE SAFETY INSTRUCTIONS IN THE PRESENT MANUAL AND ENSURE THAT ALL THE LABELS (SAFETY SIGNS) ON THE DEVICE ARE UNDERSTOOD (IF THESE ARE PRESENT). THE SIGNS APPLIED TO THE DEVICE MUST ALWAYS BE CLEARLY READABLE, REPLACE THEM IF THEY BECOME DAMAGED OR WORN OVER TIME.
- 11th NO GUARANTEE IS PROVIDED FOR THE GOOD OPERATION OF PRODUCT OR FOR THE SAFETY OF THE USER AND/OR AUTHORIZED PERSONNEL AND/OR OTHER INDIVIDUALS AND/OR THE ENVIRONMENT, IF THE PRODUCT IS INSTALLED OR PUT INTO OPERATION WITHOUT COMPLYING WITH THE INSTRUCTIONS PROVIDED IN THE PRESENT MANUAL.
- 12th THE OPERATIONAL SAFETY OF THE PRODUCT PERMITS IT TO BE ASSEMBLED AND PUT INTO OPERATION BY SKILLED AND AUTHORIZED PERSONNEL IN COMPLIANCE WITH THE INSTRUCTIONS IN THE PRESENT MANUAL AND WITH APPLICABLE STANDARDS.
- 13th THE USE OF THINNERS AND AGGRESSIVE SOLVENTS FOR CLEANING PARTS OF THE PRODUCT IS NOT PERMITTED.
- 14^o ALL ROUTINE MAINTENANCE, EXPERT INTERVENTION, CHECKS, CLEANING, AND ADJUSTMENTS MUST BE CONDUCTED WITH THE PRODUCT IN A HARMLESS CONDITION (ZERO ENERGY CONDITION) AND EXCLUSIVELY BY AUTHORIZED AND/OR FULLY INSTRUCTED PERSONNEL.
- 15th LIQUIDS OR POWDERY SUBSTANCES MUST NOT BE ALLOWED TO PENETRATE/FALL INSIDE THE PRODUCT; ENSURE THAT THIS DOES NOT OCCUR DURING INSTALLATION.
- 16th TAKE SPECIAL CARE TO AVOID SCRATCHING/ABRADING OR DAMAGING THE MOVING PARTS OF THE PISTON RODS.
- 17^o WHENEVER NECESSARY ALWAYS USE ADEQUATE PROTECTIVE CLOTHING OR INSTRUMENTS.
- 18^o NEVER INSERT HANDS OR OTHER BODY PARTS UNDER MACHINE PARTS THAT ARE NOT SOLIDLY FIXED IN POSITION OR INTO AREAS NOT DIRECTLY VISIBLE TO THE PERSON WHO IS OPERATING.
- 19^o KEEP THE PRESENT MANUAL WITHIN EASY REACH AND MAKE IT AVAILABLE TO AUTHORIZED PERSONNEL DURING INSTALLATION, AND THE FINAL USER WHEN IN USE.
- 20^o DO NOT APPLY NAKED FLAMES TO THE DEVICE OR NEAR TO THE SAME.
- 21^o DO NOT POUR HYDRAULIC FLUID IN THE PRESENCE OF NAKED FLAMES OR HEATED BODIES.
- 22^o DO NOT ATTEMPT TO EXTINGUISH FIRES USING WATER.
- 23^o DO NOT CONDUCT WELDING ON PARTS OF THE PRODUCT REGARDLESS OF WHETHER IT IS EMPTY OR CONTAINS HYDRAULIC FLUID.
- 24^o ALWAYS ABIDE BY THE LOCAL LAWS IN FORCE AS REGARDS THE DISPOSAL OF EXHAUSTED WASTE MATERIALS (E.G. HYDRAULIC FLUID).
- 25^o IMMEDIATELY WASH AWAY ANY SPILLED FLUID ON FLOORING OR WALKWAYS, ETC .

RESPONSABILITY

COFLUID DO NOT ACCEPT ANY FORM OF RESPONSIBILITY FOR DAMAGE CAUSED TO THE PRODUCT, TO THINGS, ANIMALS AND/OR PERSONS, ALSO IMMEDIATELY VOIDING ANY FORM OF GUARANTEE, IN THE FOLLOWING CASES:

- *1 INSTALLATION NOT CONDUCTED BY AUTHORIZED PERSONNEL IN COMPLIANCE WITH THE APPLICABLE REGULATIONS.
- *2 THE PRODUCT IS NOT FIXED IN POSITION USING ADEQUATE MEANS CAPABLE OF GUARANTEEING SUBSEQUENT USE IN SAFETY (TYPE AND SIZING).
- *3 THE AUTHORIZED PERSONNEL AND/OR THE USER DO NOT ABIDE BY THE INSTRUCTIONS IN THE PRESENT MANUAL, OR AS A RESULT OF ANY MANOEUVRE NOT SPECIFICALLY DESCRIBED HEREIN. WHILE READING THE MANUAL SCRUPULOUSLY CHECK CORRESPONDENCE WITH THE PARTS OF THE PRODUCT, ENSURING THAT THEY HAVE NOT UNDERGONE DAMAGE DURING TRANSPORT AND THAT THEY WERE DELIVERED INTACT.

ANY MODIFICATION (THE DEFINITION OF MODIFICATION INCLUDES NON OBSERVANCE OF THE INSTRUCTIONS, NON-COMPLIANT INTERVENTION, AND THE USE OF NON ORIGINAL SPARE PARTS) CONDUCTED ON THE PRODUCT OR ITS SAFETY DEVICES, WHICH COULD ALTER THE FUNCTIONALITY FORESEEN BY COFLUID, ARE UNDER THE FULL RESPONSIBILITY OF THOSE CONDUCTING SAID MODIFICATIONS.

Any modification, even minor in nature, must be communicated by registered post with recorded delivery and approved in the same way by COFLUID, the latter giving approval only after assessment of each specific case in question.

All modifications made without informing COFLUID will result in ANNULMENT of the Manufacturer's Statement, cancelling all forms of responsibility and guarantee attributable to the same.

PERMITTED USE

The product may be used in different industrial, trade, agricultural, building, naval, and other applications.

The permitted and best known forms of use are:

- Manual emergency pump in systems,
- Manual high pressure pump in the strength testing and/or trials sector
- Manual pump applied to equip a machine,
- Manual pump applied for pressing, shearing, screwing, etc.

For applications in which the product becomes an integral component part, dedicated fixtures must be provided with the dimensions and characteristics indicated in par.: **DATI TECNIC - DATI TECNIC** and according to the overall dimensions indicated in Figure 6.

NON PERMITTED USE

IT IS NOT PERMITTED TO:

1. INSTALL THE PRODUCT BEFORE READING AND UNDERSTANDING THE CONTENTS OF THE PRESENT MANUAL.
2. PUT THE PRODUCT INTO SERVICE WITHOUT HAVING PREVIOUSLY SATISFIED THE OBLIGATIONS DERIVING FROM DIRECTIVE 2006/42/CE (IN RELATION TO THE QUASI-MACHINE) AND/OR OTHER RELEVANT APPLICABLE REGULATIONS.
3. USE THE PRODUCT, WITHOUT PRIOR AUTHORIZATION, IN HUMID OR WET ENVIRONMENTS, OUTDOORS, IN RAIN OR SNOW, CLOSE TO HEAT SOURCES, ETC.
4. USE THE PRODUCT, IN ANY WAY AND FOR ANY PURPOSE, IN ENVIRONMENTS IN WHICH THERE IS A RISK OF EXPLOSION OR IN ENVIRONMENTS POTENTIALLY AT RISK OF EXPLOSION. SAID USE IS PERMISSIBLE EXCLUSIVELY IF IT WAS SPECIALLY DESIGNED TO OPERATE IN SAFETY IN SUCH CONDITIONS (SPECIFIC ATEX MARKINGS).
5. REWORK THE PRODUCT OR ALTER ITS CYCLES AND PERFORMANCE.
6. UNLESS PREVIOUSLY AUTHORIZED, USE A DIFFERENT PUMP LEVER FROM THE ORIGINAL OR APPLY EXTENSIONS TO THE ORIGINAL LEVER.
7. ACTIVATE THE PRODUCT APPLYING A FORCE TO THE LEVER OTHER THAN THAT OF DIRECT HUMAN FORCE.
8. ACTIVATE THE PRODUCT USING A FOOT IF THE FORESEEN USE IS BY HAND (OR VICE-VERSA); IN THIS RESPECT SEE PAR.: **DATI TECNIC - DATI TECNIC**.
9. USE THE PRODUCT TO RAISE VEHICLE LIFTS OR FOR MACHINE CATEGORIES INCLUDED IN ANNEX IV OF DIRECTIVE 2006/42/CE, UNLESS OPERATING WITH THE REQUIRED MEASURES FOR THE SPECIFIC CASE AND IN COMPLIANCE WITH THE PROVISIONS OF THE ABOVE-MENTIONED DIRECTIVE.

IMPORTANT INFORMATION REGARDING THE SAFETY DEVICES WHICH MUST BE USED TO RENDER THE PRODUCT SUITABLE FOR USE

The product is delivered ready to be INSTALLED in places of diverse type and volume and for various applications.

It is not possible for the company to foresee and realize in advance all the ad hoc safety devices to ensure safe operation (in relation to the customer's specific application), and it is consequently the task of the INSTALLER or of whoever assumes responsibility for the incorporation of the product within the machine, to assess all risks and to equip the device with all devices required in order to render it safe for use (e.g. overpressure valve, fluid collection systems for cases of accidental leakage, etc.).

The state of the item when delivered might already include the provision of an overpressure valve or predisposal for the fitting of the same; in this respect see the instructions in par.: **DATI TECNIC - DATI TECNIC**, for the state of the item on delivery.

It remains the exclusive responsibility of the customer to assess the safety requirements of the specific application in which the COFLUID product will become an integral part, establishing in advance whether or not it is necessary to include overpressure and/or safety valves in the hydraulic system.



COFLUID do not accept responsibility for the overall safety of the system of which the supplied product is destined to become an integral part.



The presence or provision of an overpressure valve or other safety devices must be agreed and defined in advance when ordering on the basis of specific requirements stipulated by the customer.

THE USE OF PERSONAL PROTECTIVE EQUIPMENT AND SAFETY PROCEDURES

During the installation and/or use and/or cleaning and/or maintenance of the machine or for any other operations conducted on the product, measures must be taken to ensure adequate safety during work and utilizing procedures and behavioural codes that guarantee the safety of the operator and all other persons.

Do not act unless expressly authorized to do so by the relevant company manager, or if never previously authorized to operate by the employer on whose behalf the product is used.

A minimum of P.P.E. (personal protection equipment) must be used for all operations conducted on the product or in the vicinity of the same.

If intervening on the hydraulic system it is important to remember that it contains hydraulic fluid that could escape from the system, possibly under pressure, and come into contact with particularly delicate parts of the human body, like for example the eyes.

The recommended minimum P.P.E. is as follows (not an exhaustive list and modifiable by the user on the basis of specific contingencies):

- work shoes,
- protective goggles,
- fluid resistant and/or mechanically resistant gloves,
- work clothes or overalls

TRANSPORT

The packaging provided for transport should only be removed at the time of installation of the product on the machine of destination.

With reference to par. **DATI TECNIC - DATI TECNIC** check the effective weight of the product. If it is heavier than 25 Kg, the manual transport of the product requires at least two male individuals of over 18 years of age and in good conditions of health..

STORAGE

The guarantee is annulled if storage is not conducted according to the following rules and conditions.

1. Store at temperatures between 0°C and 40°C away from humidity and dust.
2. Do not store in the open, areas exposed to weather or excessively humid, or areas exposed to direct sunlight.
3. Do not protect with materials inclined to cause condensation or with easily degradable materials.
4. The hydraulic fluid loses its lubricating and self-oxidizing characteristics and so at least every six months it is necessary to move the product by activating the control lever.
5. Always avoid direct contact with the ground by inserting wooden panels or other materials between the parts of the product and the floor.
6. If the product is stored in a warehouse without its original packaging, take particular care to avoid the various parts of the product from impacting against each other or against other items, because this could result in irreparable damage.
7. It is not permitted to stack the products or support other items on top of the products.

INSTALLING OF THE PRODUCT

ENVIRONMENTAL CONDITIONS

If not specifically requested, the product is constructed to operate in a protected environment, in ambient conditions within the limits defined in par.: 15 - TECHNICAL DATA.

The device must be installed in indoor environments. Open areas are permitted on the condition that they are protected from weather, (rain, snow, ice, etc), direct sunlight.

POSITIONING

Before starting any installation procedures check that the product was not damaged during transport or storage on site.

The methods for fitting the product are, in each specific case, determined by the customer's requirements. In all cases the arrangements shown in **Figure 2** are forbidden, and the pump only functions correctly if installed vertically or horizontally as shown in **Figure 1**.

Some versions of the product are provided with a removable pump lever (4). In these cases the customer must assess the need to guarantee that the lever is always available, taking all necessary measures, for example, fixing it directly to the product or providing a suitable housing near to the same. It must be remembered that in emergency situations, the only way to use the hydraulic system is using the pump lever (4).

All installation operations must be conducted by skilled personnel and in all cases in compliance with the instructions contained in this manual.

Connect the fixing foot (6) of the pump on the support. The fixings must be sized taking into account the loading, fatigue and ageing phenomena for a number of operative cycles appropriate for the foreseen useful life and under the specific operating conditions of the application.



In relation to the positioning of the product and potential danger of accidental activation of the pressure release device (1), adequate protective measures must be taken.



Always ensure that the positioning of the product allows access for:

- normal operational manoeuvres,
- mounting and demounting,
- maintenance.
- If it is necessary to operate under the parts maintained in a raised position by the product, the restraint guaranteed by the hydraulic system is not sufficient for the safety of the exposed operator/s. It is OBLIGATORY in such cases to equip the system with a mechanical safety stop device.



IT IS FORBIDDEN TO PUT THE PRODUCT INTO OPERATION WITHOUT HAVING ANCHORED IT IN POSITION WITH SUITABLE FIXTURES



If it is necessary to operate under the parts maintained in a raised position by the product, the restraint guaranteed by the hydraulic system is not sufficient for the safety of the exposed operator/s.

It is OBLIGATORY in such cases to equip the system with a mechanical "safety stop device."



Figure 1



Figure 2



FLUID

The product is supplied without oil;

For topping up use only fluid as indicated in par.: **DATI TECNIC - DATI TECNIC**. (fluid type ISO 6743/4)

The fluid used must be compatible with standard gaskets in NBR (ACRYLONITRILE BUTADIENE RUBBER) material and absolutely clean or filtered with a filter of 30-35 µm.



Never in any circumstances use brake fluid, motor oil, or other types of fluid. The use of a particular fluid may require gaskets in special materials. Contact the manufacturer for further information.



PIPES

If flexible pipes are used, or the installation of the product requires the use of pipes, the following instructions must be complied with.

For the connections use new components, not parts dismantled from other systems.

Rigid pipes are preferable to flexible.

For steel pipe work, it is very important to ensure correct: pipe fittings, deburring, bending, and cleaning of the various sections for the extended useful life of the various connected components.

Not permitted are: pipes that are difficult to fit and demount, pipes that prevent the adjustment and/or demounting of machine parts, pipes inadequately supported and thus subject to, or generators of, vibrations, pipes not proportionally sized for the capacity and the operating and peak pressures, pipes excessively constricted at bends, etc.

The customer must refer to the regulations in force for the construction and installation of the above-mentioned piping, compliance with which is necessary for the validity of the product guarantee.

STARTING UP

It is FORBIDDEN to modify the adjustments/calibrations indicated as the maximum operating conditions (see par.: **DATI TECNICO DATI TECNICO**) or to modify the hydraulic flow rates/connections.

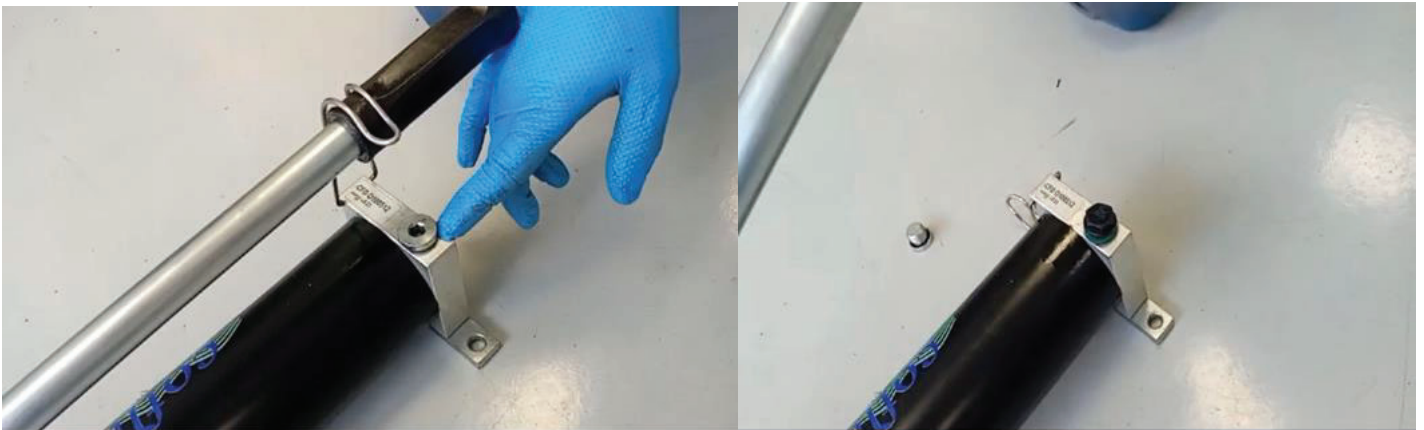
FIRST START-UP

Before starting up the product for THE FIRST TIME:

- If necessary, fill the oil tank with the amount indicated in the table, which is mandatory for proper functioning (see par.: TECHNICAL DATA).



ATTENTION: the oil tank must be closed with the given oil filler, equipped with air vent hole. **in no case shall the pump be operated with a hermetically sealed container.**
Hermetically sealing is only permitted for transport operations.



- Connect the supply (5) to the pressurized application with the appropriate pipes (not supplied)
- Check that the connectors/caps are securely tightened.
- Check that the hydraulic system is equipped with an overpressure valve (if foreseen).

STARTING UP

After the initial operations visually check that none of the flanges and pipes (the latter if present) are not leaking fluid; conduct all movements exploiting the maximum pump stroke.

After the initial operations, if necessary, bleed any air from the system; in some cases air bleeding is obligatory depending on the positioning of the device.

Normally air will collect in the highest points of the hydraulic circuit.

USING THE PRODUCT

ACTIONING OF THE PUMP (Figure 6)

- Check that the fluid release (1) is completely rotated in a clockwise direction (closed) to the stop point.
- Insert the pump lever (4) onto the relevant pin (4a)
- Using the pump lever (4), it is necessary to apply a force F (Figure 5) alternating from above downwards in order to pressurize the pump and achieve movement of the cylinder. With release (1) closed, the pump works until maximum pressure.

Note: the Pump is supplied with an automatic commutation system that change between the 2 speed of the pump when the pressure reach ~25 Bar. The force required on the pump lever is proportional to the maximum pressure to be raised (Figure 5) .

- Once the required range has been achieved, to cause the release of pressure, simply open the release (1) (rotation in reverse direction).

PERIODICAL CHECK-UPS (MAINTENANCE) AND CLEANING



It is obligatory, before any intervention or work on the device, to release the pressure in all parts of the device, putting it into the so-called ZERO ENERGY state.



THE RELEASE OF PRESSURE FROM THE HYDRAULIC SYSTEM CAN CAUSE SUDDEN UNEXPECTED MOVEMENTS OF THE PRODUCT AND CONSEQUENTLY ALSO OF THE MECHANISMS/PARTS CONNECTED TO IT



All MAINTENANCE/PERIODIC CHECKS/CLEANING operations must OBLIGATORILY be conducted only by PERSONNEL QUALIFIED and AUTHORIZED to carry it out



ANY INTERVENTION ON THE DEVICE EXECUTED WITHOUT COMPLIANCE WITH THE METHODS DESCRIBED AND THE LOGIC OF GOOD PRACTICE FOR PERSONAL SAFETY AND THAT OF OTHER PERSONS, WILL RESULT IN THE ANNULMENT OF ALL FORMS OF GUARANTEE.

The pump does not require any specific maintenance.

In cases of fluid leakage, top up the reservoir with clean fluid by opening the relevant cap (2). Close the cap with care when finished. The total quantity of fluid required for correct operation of the pump is stated in par.: **DATI TECNIC - DATI TECNIC**.

COFLUID do not accept responsibility for any damage and/or malfunctions resulting from lack of maintenance.

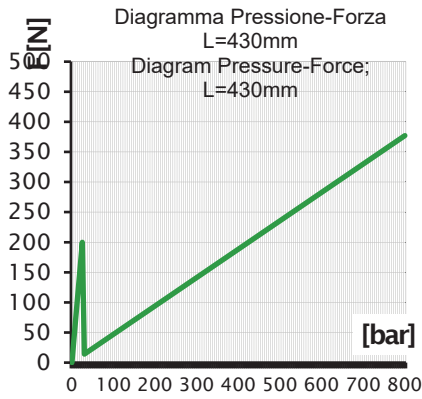
SUMMARY TABLE OF INTERVENTION

DESCRIPTION OF MAINTENANCE	RECOMMENDED MAINTENANCE INTERVALS					QUALIFICATION
	Every month	Every 3 months	Every 12 months	Every 18 months	Every 36 months	
Fluid level check		●				PERSONALE ABILITATO DELL'UTILIZZATORE
Fluid change					●	PERSONNEL AUTHORIZED BY THE USER
External cleaning			●			PERSONNEL AUTHORIZED BY THE USER
Replacement of flexible pipes (if present)					●	PERSONNEL AUTHORIZED BY THE USER
State of fixtures			●			PERSONNEL AUTHORIZED BY THE USER
Clean the filter			●			PERSONNEL AUTHORIZED BY THE USER
Gaskets				●		PERSONNEL AUTHORIZED BY THE USER

TECHNICAL DATAS

DATA		O100511	O100512	U.M
ENVIRONMENTAL CONDITIONS FOR STORAGE AND OPERATION	Ambient temperature	From-20 to + 60	From-20 to + 60	°C
	Humidity	from 30 to 95 WITHOUT CONDENSATION	from 30 to 95 WITHOUT CONDENSATION	%
	Ionizing radiation	Does not support direct action of this radiation	Does not support direct action of this radiation	-
	Non-ionizing radiation	Does not support direct action of this radiation	Does not support direct action of this radiation	-
	Environments at risk of explosion	Use of product forbidden	Use of product forbidden	-
SAFETY COEFFICIENTS	Static	>1.5	>1.5	-
	Dynamic	>1.5	>1.5	-
	MAXIMUM OPERATING PRESSURE	700	300	bar
	DELIVERY	See Figure 4	See Figure 6A	Cc/colpo
	RESERVOIR CAPACITY			L.
	SERVICE	1.5	1.5	-
HYDRAULIC FLUID	Type	INTERMITTENT	INTERMITTENT	-
	Viscosity	mineral ISO 6743/4	minerale ISO 6743/4	-
ACTIVATION	Mode	ISO VG 46	ISO VG 32/46	-
	Type	Manual	Manual	-
	OPERATION	Hand operation	Hand operation	-
	Control CYLINDER	Simple effect, 2 speed	Simple effect , 2 speed	-
	CIRCUIT TYPE	Simple effect	Simple effect	-
OVERPRESSURE VALVE	READY FOR FITTING	Open	Open	-
	PRESENT	<input type="checkbox"/> Yes • No	<input type="checkbox"/> Sì • No	-
LOWERING ADJUSTMENT SCREW	PRESENT	<input type="checkbox"/> Yes • No	<input type="checkbox"/> Sì • No	-
	READY FOR FITTING	<input type="checkbox"/> Yes • No	<input type="checkbox"/> Sì • No	-
	PRESENT	• Yes <input type="checkbox"/> No	• Sì <input type="checkbox"/> No	-
	OVERALL WEIGHT	• Yes <input type="checkbox"/> No	• Sì <input type="checkbox"/> No	-
	MAIN COLOUR	See Figure 4	See Figure 6A	-
	DIMENSIONS			mm
	WEIGHT	White Oxidization/electrolytic galvanizing	Grey Oxidization//electrolytic galvanizing	Kg.

Figure 5

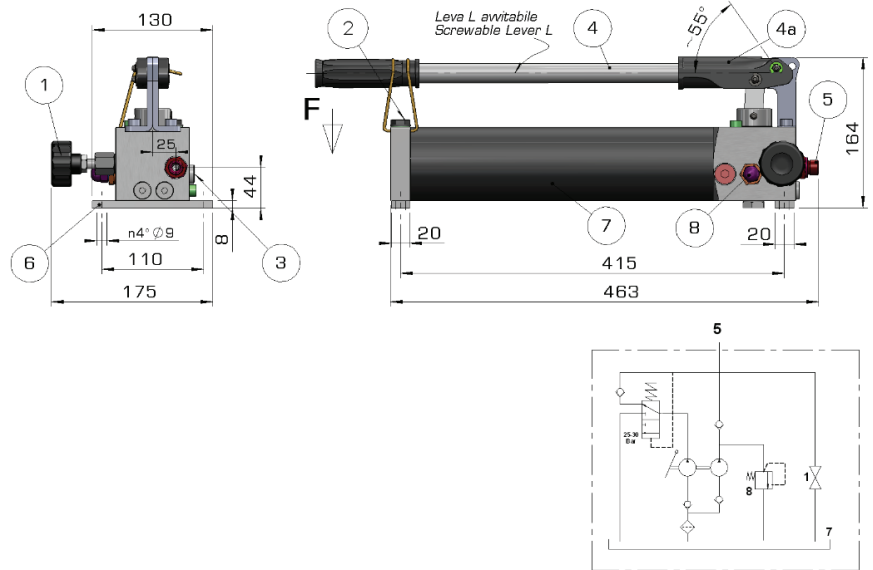


Quote d'ingombro non impegnative.
La ditta si riserva di apportare modifiche

Figure 6 PUMP MOD. O100511

Pompa a mano O100511-O100512 Manual pump O100511-O100512

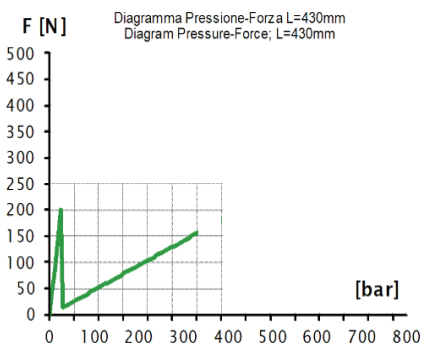
2 velocità, Funzionamento semplice effetto con Invertitore per comando cilindri doppio effetto
2 speed, Single acting functioning with flow diverter for double-stroke function cylinders



- 1 Volantino di Scarico
- 2 Tappo Carico Olio (con sfiato)
- 3 attacco manometro (su richiesta)
- 4 Prolunga Leva d'azionamento
- 4a Perno portaleva azionamento

- 5 Mandata 3/8" Gas bspp
- 6 Fori fissaggio pompa
- 7 Serbatoio 1.2L
- 8 Valvola di massima pressione

Figura 5A

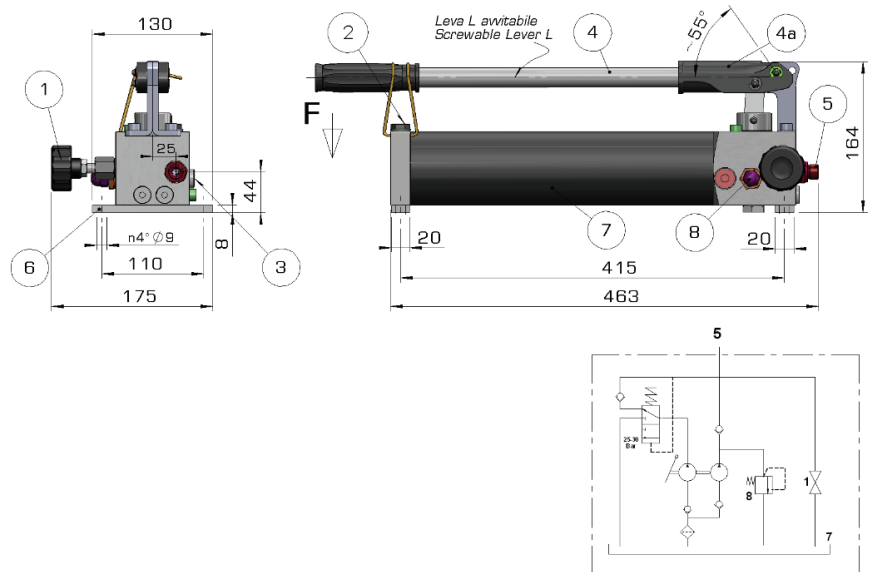


Quote d'ingombro non impegnative.
La ditta si riserva di apportare modifiche

Figura 6A POMPA MOD. O100512

Pompa a mano O100511-O100512 Manual pump O100511-O100512

2 velocità, Funzionamento semplice effetto con Invertitore per comando cilindri doppio effetto
2 speed, Single acting functioning with flow diverter for double-stroke function cylinders



- 1 Volantino di Scarico
- 2 Tappo Carico Olio (con sfiato)
- 3 attacco manometro (su richiesta)
- 4 Prolunga Leva d'azionamento

- 5 Mandata 3/8" Gas bspp
- 6 Fori fissaggio pompa
- 7 Serbatoio 1.2L
- 8 Valvola di massima pressione

REMOVAL/ELIMINATION OF WASTE MATERIALS/RESIDUE CREATED DURING MAINTENANCE

The removal of deposits and residues must be conducted in compliance with the normal precautionary measures and warnings contained in the present instructions, the rules of good practice, and all APPLICABLE REGULATIONS, in order to protect the personal safety of the operator and of other persons and/or animals and/or things.

For the removal of deposits/residues (e.g. detritus), suitable clothing must be worn including, for example, gloves and overalls. When possible use only suction systems. If using compressed air wear at least a protective face mask and goggles. Always dispose of deposits and residues (e.g. hydraulic fluid) with respect for the environment and in compliance with the laws in force

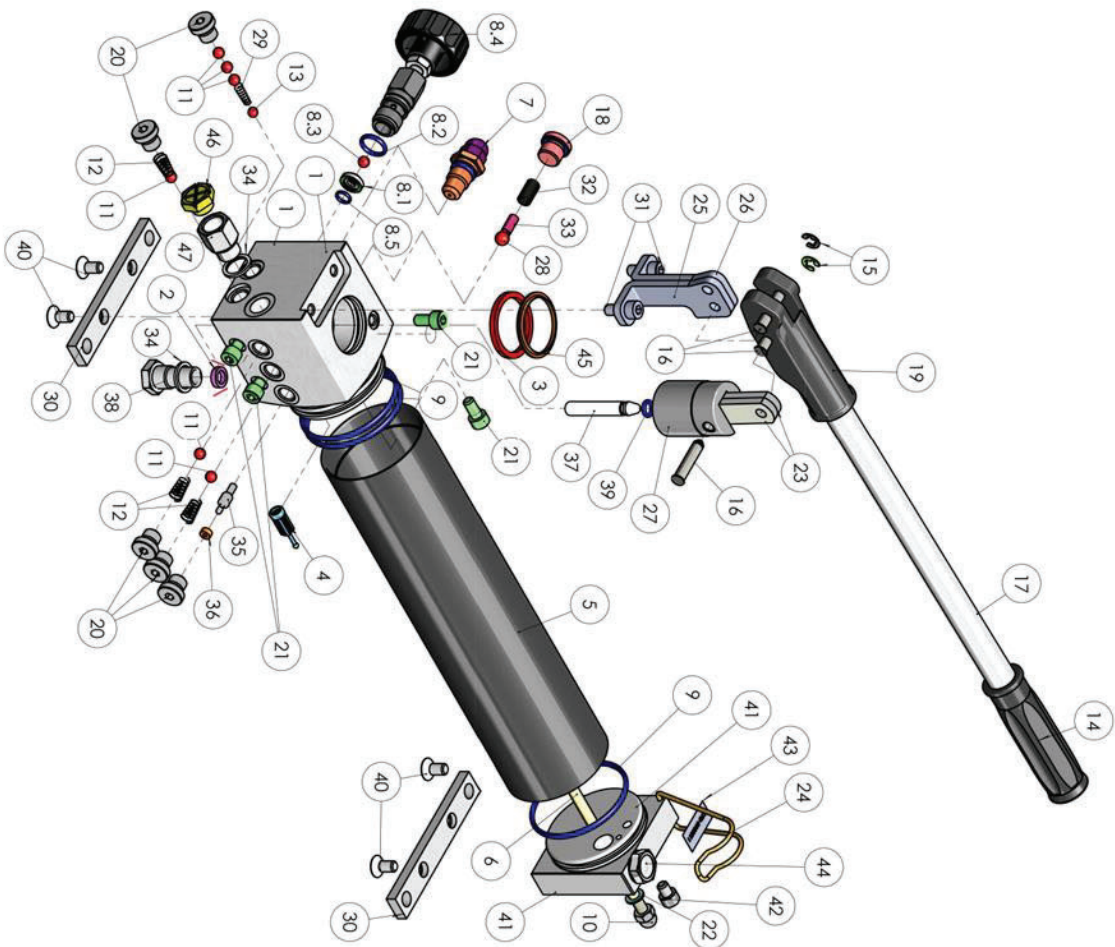
DISMANTLING

Before starting to dismantle the device and connected parts, it must be put into the ZERO ENERGY STATE (harmless state). Dismantling operations must OBLIGATORILY be conducted by competent personnel, trained for said operations. Eliminate all parts of the product with respect for the environment, recycling all materials/substances including: steel/iron, plastic, rubber gaskets, hydraulic fluid, etc. An adequate differentiated collection for subsequent forwarding of the product for recycling, treatment and ecologically compatible disposal helps avoid any possible negative effects on the environment and health. An abusive disposal of the product can result in the application of sanctions for the persons responsible.

PROBLEMS RESOLUTION

PROBLEM	CAUSE / SOLUTION
When the pump is activated the connected cylinder rod does not move or the pump does not retain pressure	<ul style="list-style-type: none"> → Check that the release (1) are completely rotated and locked in the clockwise direction (closed). → Check the fluid level in the reservoir.
The lever (4) tends to return automatically to the initial position (spring effect)	<ul style="list-style-type: none"> → The suction filter is blocked (contact the manufacturer).
The pump leaks fluid	<ul style="list-style-type: none"> → Sealing gaskets damaged or worn. With reference to the specific gasket materials, replace the gaskets with the relevant spare parts kit, supplied on request. → Top up with clean fluid.

POS.	DESCRIZIONE	PZ
1	Corpo pompa (rev1)	1
2	Guarnizione labbro	1
3	Guarnizione labbro	1
4	Filtro hpl	1
5	Corpo Serbatoio	1
6	Tirante	1
7	Gruppo VMax (OR3056)	1
8	Vol. di scarico antisvitamento	1
8.1	Pastiglia valv. ritegno	1
8.2	Guarnizione	1
8.3	Sfera	1
8.4	Gruppo semi assemblato	1
8.5	Guarnizione	1
9	Guarnizione Nbr	3
10	DADOIECO M8	1
11	Sfera	6
12	Molla Conica	3
13	Sfera	1
14	Manopola	1
15	Seger per Albeni D7	2
16	spina 1Sg	3
17	Lava di Comando	1
18	3/8"Gas plug with seal	1
19	Manico	1
20	Tappo 1/4"G Ap e lesia 19	5
21	Vite TCEI	4
22	Rondella	1
23	Biella	2
24	Garndo inox	1
25	Staffa manico sinistrz	1
26	Staffa manico destra	1
27	Pompanie	1
28	Sfera	1
29	Molla conica	1
30	Piede di appoggio int 110	2
31	Vite TCEI	2
32	Molla tarata	1
33	Distanziale	1
34	Rondella	2
35	Pistoncino bypass	1
36	Guarnizione 3-8	1
37	Stelo Pistone	1
38	Guida pompanie	1
39	Guarnizione NBR	1
40	Vite TSEI	4
41	Fondello 10063-20	1
42	Vite TCEI	1
43	ETICHETTA-17x35-Cofluid	1
44	Tappo Carico e sfilato Olio	1
45	Raschiatore	1
46	Tappo plastica 3/8"	1
47	Colonnina 3/8" M - 3/8" F	1



Documento riservato ai termini di legge	
Pompa Tipo:	Programma:
Note: 7008eur; 1.L. olio	Traffimento:
Modello:	
Codice: O100511	Descrizione: 2 velocità per cilindri s.e
Data App Rev: 14/05/2024	Data mod: 14/05/2024
Disegnato da: smorab 603k4d7	Scalati: 1:5
Disegno N° 10306	Modo Rev: 27
	Rev: 04/27/2024

