



HYDRAULICS

COLUMN PRESS WITH HYDROPNEUMATIC PUMP “EZ03012”



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ANNEX

➤ **GENERAL DRAWING**

1. ESSENTIAL SAFETY REQUIREMENTS.

GENERAL CONSIDERATIONS

Description



Due to the functional reasons, "dangerous area" is considered to be the space between the columns, the bed and the hydraulic cylinder piston. Due to the material pressed, "dangerous area" is supposed to be the surrounding area to the machine in case of metal parts being ejected during pressing.

Safety Principles

The speed of the hydraulic cylinder during its extension is less than 30 mm/second. Therefore the machine should be considered by the application of ANNEX V of the Declaration of CE Conformity. Operators standing in the dangerous area around the machine should protect their faces and feet from metal pieces being ejected during pressing.



Face Protection



Feet Protection

Used materials and components are not for the health and safety of operators. The electric pump contains hydraulic oil type ISO: HV46. The machine is delivered in a wooden pallet and fixed to it in order to be handled by means of a forklift truck or a crane. Once the machine is unpacked, it can be handled by using a crane and slings trespassing the arc formed by the columns and the head.

COMMANDS

- ❖ The cylinder is pushed when we operate the hydro-pneumatic foot.
- ❖ The pump pedal has three positions ; pull, push and locking .
- ❖ For the working of the cylinder we must connect the pump to the air net at a pressure of 6 bar
- ❖ In order to stop the pushing of the cylinder the pedal must be operated or the pump must be disconnected from the compressed air net.
- ❖ For re-start of the machine, that device that device should be unlocked and the start button should be pressed.

Failure in the energy feed.

The machine stops.

SAFETY PREVENTIVE ACTIONS AGAINST MECHANICAL RISKS



The machine is equipped with supporting plates in the columns for a perfect stability. The machine gets operated without fixing onto the floor, but it is strongly recommended to do it by drilling the plates in the place of your choice.

- ❖ The construction of machine has been calculated to bear without any breaking under conditions of foreseen utilization and for the whole life of the machine.
- ❖ The hydraulic components have been designed and calculated in compliance with the ANSI B30.1 and have been tested at 875 kg/cm² pressure.
- ❖ It is operator's responsibility to wear special protective clothes and attachments in both feet and face to prevent any damage as a result of accidental fallings and breakings of metal pieces under operation or machine components in touch with.
- ❖ Risks due to surfaces, bends and angles: The frame of the machine does not cause to be dangerous in that sense.

SAFETY PREVENTIVE ACTIONS AGAINST OTHER RISKS

- ❖ Risk due to power supply: The machine is provided with a protective device for the pump protection.
- ❖ Risk due to hydraulic power: The hydraulic pump is equipped with an internal security valve in the tank, out of operator's control and rated at 700 Kgr/cm².

MAINTENANCE

- ❖ All the maintenance operations must be performed while the machine is stopped, thus avoiding this way any potentially dangerous situation.
- ❖ A poor maintenance program of the press do not increase the risk, but obviously will revert in a lower performance.
- ❖ The hydraulic pump is mounted in the frame and access is very easy. To disassemble the pump unscrew the bolts in the tap cover. In order to disassemble the cylinder it is required to first disassemble the piping.
- ❖ Isolation of the power supply: Release the terminal wiring to disconnect the power supply.
- ❖ The machine is designed to assure that all maintenance tasks are performed by the operator in an easy and safe way. All the components that would require any maintenance operation are easy accessible.

INDICATIONS

Information Devices

In the pump:

- Cup of oil filling.
- Pressure relief valve.
- Additional gauge intake.
- Oil level.

In the cylinder:

- Gauge with tonnage scales

The press, the cylinder and the electric pump have their corresponding serial numbers marked on them. In addition to it, you can find an sticker label showing the commercial reference, capacity, working pressure, name and address of the manufacturer.

Warning signals

- Obligation to protect the face.
- Obligation to protect the feet.
- Risk of electric current.
- Read the operation manual before using.



2. TECHNICAL FEATURES.

HYDRAULIC CYLINDER SM03012

MODEL	EZ02013
Max. Pushing Capacity Tn.	30,92
Working Pressure Kg/cm ²	700
Hydraulic Stroke mm.	95
Effective area cm ²	44.1
Oil capacity cm ²	419.69
Extens. speed, without load mm/sg	30
Extension speed at 700 Kgr/cm ²	5.86

HYDRAULIC PUMP REF. Z12107

Oil tank capacity : 2,1 useful liters
 Maximum working pressure :700 Kg/cm².
 Distribution valve: Manual valve: 4 way, 3 position
 Pressure air flow.....2,8÷10 bar
 Max.nominal flow (l/min).....0,8 l/min
 Max. weight without oil.....4,65kgs

FRAME

Welded-Mechanized frame in ST-52.
 Mobile bed.

MODEL	EZ03012/P
Máy. working height mm.	930
Working width mm.	500
Total weight Kg.	131

3. TRANSPORT AND ERECTION.

The machine is delivered properly packed in a wooden pallet. For its handling, it is recommended to use a forklift truck or a crane. In the last case, it is necessary to make the slings trespass the arc of the frame. When doing this operation, you should be cautious and prevent the flexible hoses and coupling from any damage.

The machine is stable enough to operate without fixing, but if it is placed in an area commonly operated by mobile machinery (cranes, lifting equipment...) it is strongly recommended to fix it to the desired place by drilling the supporting plates.

HYDRAULIC CONNECTION

Remove the cap of the rapid coupling from the cylinder exit and connect the hose, threading the rapid coupling until the end with the hand.

REPLACEMENT OF THE TRANSPORT CAP

You should replace the a.m. cap on the tank cover by the pressurized cap supplied with the press (in the small plastic bag next to the lever of the distributor).

INSTALLING THE GAUGE

Replace the threaded tap in the top of the cylinder by the gauge which is supplied separately. Tighten the gauge cone to the gauge adaptor seat by using a flat wrench size 22. Hold the gauge screen by hand during threading process and after reaching a comfortable reading position set the gauge screen free so that it turns the last quarter solidarily with the thread.

There is an alternative gauge port in the electric pump with a 3/8" BSP thread.

PNEUMATIC CONNECTION

Connect the pump pedal to the air compressed net.

Assure that the foot is not pushed.

CHECKING THE RIGHT OPERATION OF ALL DEVICES AND MECHANISM

1. Select the maximum working pressure.
2. Put operator foot in the pump pedal.
3. Push the start-up foot.
4. Check that the cylinder is pushed.
5. Check that the cylinder piston goes back pushed by the internal spring. In both cases, to maintain the movement is necessary to push the pedal.
6. Without put anything in the press, repeat the push movement, pushing until reaching the cylinder full stroke (135 mm). In that moment the pressure will start to be increased and we can observe it now in the gauge. This pressure will go on increasing until reaching the installation maximum pressure, previously chosen. In this stage, the cylinder maintains the reached pressure (the gauge maintains the reading). Check there are no leaks in the installation (gauge intake, coupling, etc...).
7. To retract the cylinder and eliminate the installation pressure push the pedal. The piston retracts pushed by the internal spring.
8. Put the material to be treated in the press.

Once all the steps have been completed, the machine is ready to be used. Repeat the sequence as many times as required to get the knowledge on how to work the machine.

4. START-UP.

Operate the machine as per the previously mentioned indications.

Regulation of the maximum working pressure

The maximum pressure developed by the hydraulic system is 700 Kgr/cm². An internal security valve discharges when the system reaches that pressure.



IMPORTANT: In case of working with pressures superior to 400kg/cm², substitute the given gauge by one suitable for the required pressure.

5. MAINTENANCE.

The hydraulic circuit of the press is closed, so in normal conditions no oil leakage should be coming up.

In case of oil leakage, after the proper repairing work, you should fill up the tank with hydraulic oil by LARZEP (Ref: AZ8902). The electric pump is equipped with an oil level indicator to control the need quantity of oil.

As far as a non-continuous use of the press is concerned (1 hour per day), oil replacement should be done once a year. To empty the tank, you should remove the cover and take the oil out to another container. Please, bear in mind the existing rules for waste processing when handling the used oil.

Keep greasy and lubricated the pin bearings, the piston and in general all the parts that might be in friction.

INSTRUCTION MANUAL
Column Press with Hydropneumatic Pump "EZ03012"

	SYMPTONS	POSIBLE CAUSE	SOLUTIONS
1	Piston dos not extend	1.1 Prime less pump	1.1 Maintain the pump started for some minutes in "C" position.
		1.2 Filter is dirty.	1.2 Remove and clean it properly.
		1.3 Not enough oil in the tank	1.3 Check the oil level.
		1.4 Pressure retainer damaged.	1.4 Replace the retainer.
		1.5 Cylinder body damaged.	1.4 Repair the cylinder body.
		1.6 Distribution valve damaged.	1.5 Repair the valve.
		1.7 Pneumatic problem	1.7 Check the installation
2	Cylinder does not reach pressure.	2.1 Internal valve unrated	2.1 Rate again the valve.
		2.2 Pressure retainer damaged.	2.2 Replace the retainer.
		2.3 Cylinder body damaged.	2.3 Repair the cylinder body.
3	Cylinder does not hold pressure.	3.1 Pressure retainer damaged.	3.1 Replace the retainer.
		3.2 Distribution valve damaged	3.2 Repair the valve.
4	Cylinder does not retract.	4.1 Pressure retainer damaged.	4.1 Cambiar el retén.
		4.2 Distribution valve damaged.	4.2 Repair the valve.

Solutions written in bold face should be done by specially trained staff.

In the attached documents , the components of the Spare Kits are marked with (*), in order to effect the a.m. repair jobs. Use always original LARZEP repair kits.

6.WARRANTY.

LARZEP, S.A. guarantees its products against all design and manufacturing defects for the durations of two years from the date of purchase. This guarantee does not include the ordinary wear of both metal and non-metal parts, abuse, using the equipment beyond its rated capacity and any wear or damage incurred as a result of using a hydraulic fluid which is not recommended by **LARZEP, S.A.**

Please note that if the equipment is disassembled or serviced by anyone other than an authorized service dealer or by **LARZEP, S.A.**, this guarantee is rendered null and void.

In the event of a warranty claim, return the equipment, to **LARZEP, S.A.** or the authorized dealer which sold you the hydraulic equipment, **LARZEP, S.A.** will repair or replace the faulty equipment, whichever is deemed most appropriate. **LARZEP, S.A.** shall not be held liable for any consequential damages or losses, which may occur as a result of faulty equipment

7. DECLARACIÓN DE CONFORMIDAD.

DECLARACION DE CONFORMIDAD

LARZEP, S.A.
Dirección: Avda. Urtiaga, 6
48269 Mallabia ESPAÑA

E

Declaramos bajo nuestra exclusiva responsabilidad la conformidad de los productos a los que refiere esta declaración, con las disposiciones de la directiva: 89/392/CEE, 91/368/CEE, 93/44/CEE, 93/68/CEE, 98/37/CEE

DECLARATION OF CONFORMITY

Nous, LARZEP, S.A.
Adresse: Avda. Urtiaga, 6
48269 Mallabia SPAIN

F

Déclarons sous notre seule responsabilité que les produits auxquels se réfère cette déclaration sont conformes aux dispositions des Directives: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

DECLARAÇÃO DE CONFORMIDADE

Nós, LARZEP, S.A.
Endereço: Avda. Urtiaga, 6
48269 Mallabia SPAIN

P

Declaramos, sob nossa única responsabilidade, que os seguintes produtos, incluídos nesta declaração estão em conformidade com o disposto na Directiva: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

ÖVERENSSTEMMELSEERKLÄRING

Vi, LARZEP, S.A.
Adresse: Avda. Urtiaga, 6
48269 Mallabia SPAIN

DK

Erklærer på eget ansvar, at følgende produkter som er omfattet af denne erklæringen, er i overensstemmelse med bestemmelserne i Direktiv: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

ERKLÆRINGOM OVERENSSTEMMELSE

Vi, LARZEP, S.A.
Adresse: Avda. Urtiaga, 6
48269 Mallabia SPAIN

N

Erklærer på eget ansvar, at følgende produkter som dekkes av denne erklæringen, er i overensstemmelse med bestemmelsene i Direktiv: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

ÜBEREINSTIMMUNGSERKLÄRUNG

Wir, LARZEP, S.A.
Anschrift: Avda. Urtiaga, 6
48269 Mallabia SPAIN

D

Erklären auf eigene Verantwortung, daß folgende Produkte, auf die sich diese Erklärung bezieht, mit den Bedingungen der Direktiven 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC übereinstimmen.

Tipo, Type, Typ, Tyypit.

SM / SX / SP / SMX / SMP / SH / DH / D / SL / STX / TE / T / SMA / SHA / SS / DD / ST / KC / CT / C / CY / W / X / WA / XA / WH / WI / Z / YA / YG / YZ / A / AB / AC / AF / BL / B / F / HN / EC / EE / EG / EM / EZ / CC / CN / CK / CD / VA / VB / VC / VZ / CA / CS / DL / DP / DLG / AA / AU

Mallabia, ESPAÑA 2000 / 01 / 01

Lugar y fecha, place and date, lieu et date, plats och datum, paikka ja päivämäärä, udstedelsessted og dato, ort und datum, plaats en datum, local e data, luogo e data.

DECLARATION OF CONFORMITY

We, LARZEP, S.A.
Address: Avda. Urtiaga, 6
48269 Mallabia SPAIN

GB

Declare under our sole responsibility that the following products to which this declaration relates conform with the provisions of Directives: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

DICHIARAZIONE DI CONFORMITÀ

Noi, LARZEP, S.A.
Indirizzo: Avda. Urtiaga, 6
48269 Mallabia SPAIN

I

Dichiariamo sotto la nostra esclusiva responsabilità che i prodotti ai quali questa dichiarazione si riferisce sono conformi quanto previsto dalle Direttive: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

VAATIMUSTEMUKAISUUSVAKUUTUS.

Me, LARZEP, S.A.
Osoite: Avda. Urtiaga, 6
48269 Mallabia SPAIN

FIN

Vakuutamme yksinomaan omalla vastuullamme, että seuraavat tuotteet, joihin tämä vakuutus liittyy, ovat seuraavien Direktiivien vaatimusten mukaisia: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

VERKLARING VAN OVEREENKOMST.

Wij, LARZEP, S.A.
Adres: Avda. Urtiaga, 6
48269 Mallabia SPAIN

NL

Verklaren geheel onder eigen verantwoordelijkheid dat de volgende producten, waarop deze verklaring heeft in overeenstemming zijn met de bepalingen van Richtlijn: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

FÖRSÄKRAN OM ÖVERESSTÄMMELSE

Vi, LARZEP, S.A.
Adress: Avda. Urtiaga, 6
48269 Mallabia SPAIN

S

Försäkrar under eget ansvar att följande produkter som omfattas av denna försäkran är i överensstämmelse med villkoren i Direktiv: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC



LARZEP, S.A.

Nombre y firma, name and signature, nom et signature, namn och underskrift, nimi ja nimikirjoitus, navn og underskrift, name und underskrift, naam en handtekening, nome e assinatura, nome e firma.

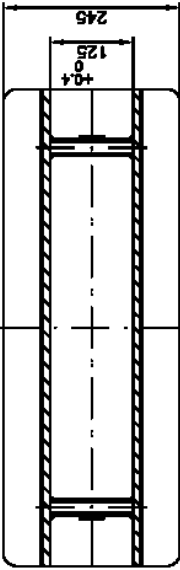
INSTRUCTION MANUAL
Column Press with Hydropneumatic Pump "EZ03012"

PRENSA HIDRAULICA DE COLUMNA

Ref. Comercial: EZ03012

DATOS DE LA PRENSA:

- CAPACIDAD 30 Tm
- LUZ ENTRE COLUMNAS 500 mm
- ALTURA MINIMA TRABAJO 30mm
- ALTURA MAXIMA TRABAJO 930 mm
- RECORRIDO HIDRAULICO 95 mm
- RECORRIDO HUSILLO 65 mm
- PLANO ESPECIAL N° 4632



N°	DENOMINACION	CODIGO	N°
1	ESTRUCTURA	25A0003	1
2	CILINDRO	SMG3012	1
3	ETIQUETA ADHESIVA	30A0049	1
4	MANOMETRO	AY03008	1
5	TORNILLO ALLEN M10x30	14A0068	4
6	PROTECTOR ROSCA	15L0018	1
7	ESPARRAGO	14F0014	1
8	MANGUERA	AP2030	1
9	BOMBA HIDRONEUMATICA	Z12107	1
10	ENCHUFE H G/C	AZ3140	1
11	ENCHUFE MACHO G/C	AZ3120	2

