

10Tm Hydraulic puller 1020HF and 1120HF and 1310LTH

ENERPAC.

Manual

# ÍNDICE



#### 1. HYDRAULIC PART

#### **Hydraulic part:**

The hydraulic part of the extractor consists of:

Hydraulic cylinder, is the part that exerts the force in the extractor. It is a hollow cylinder of simple effect and which returns by spring.

Pump, is the part that introduces the oil under pressure in the cylinder. Forza supplies it with the manometer and the 0,9m hose.

The pumps can work up to 700 Bar, when working with pullers DO NOT exceed the red pressure zone of the manometer (not included in this set), as an additional safety measure.

When the pullers are mounted, if they are not well centred, this can produces load asymmetry in the legs

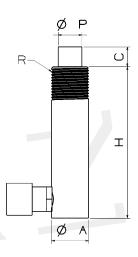
# Complete hydraulic equipment



Reference	TON	Weigth	
00904	5	5	

# Hydraulic cylinders





Reference	ØA	Stroke	Н	ØP	R	TON	Weigth
091041	38	76	160	25	1 1/2"UN16h	5	1,5



# **Hydraulic pumps**



Referencia	Peso	Bar. Máx	Fuerza de bambeo Kg.	Equipo de TON
09102	8,5	700	49,0	10

It is a one speed bomb.

Maximum pressure: 700 bar.

The oil cap has a dual purpose of ventilation and filling. In case of an accidental pressurization of the tank, acts as a pressure relief valve

Model 0095102 includes 900mm long hose.

To work with the pump, always put the lid in the ventilation (VENT) position.

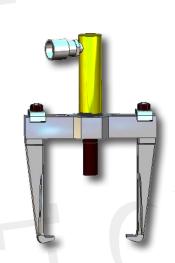
#### 2. 1020H PULLER

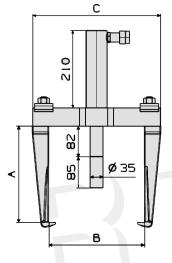
# 2.1. Technical features

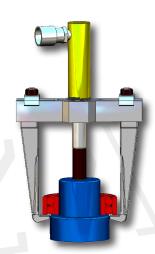
2 Forged jaws.

For external and internal applications

#### 2.2. Puller dimensions



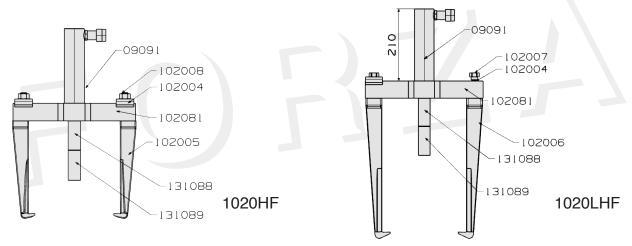




Reference	Α	В	С	Weigth	Hydraulic part	Stroke	Complete wigth
1020HF	260	50	345	12	00909	156	26
1020LHF	300	245	345	14	00909	156	28



# 2.3. Mechanical part exploded view



The four models are formed by:

Two different size crosshead, 102081 and 101082 for wider pullers and 2 different length arms: 102005 long legs and 102015 for extra long legs.

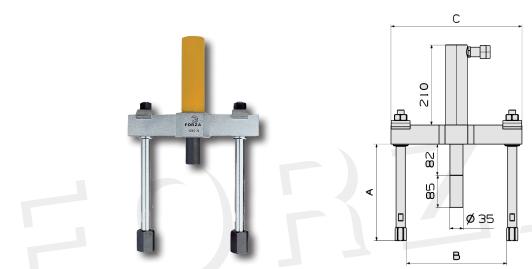
The 89 part (131089) is an extension for the hydraulic cylinder.

#### 3. 1108H PUSH PULLER.

#### 3.1. Technical features

Two extenders push puller Combines with 1204B and 1206B splitters.

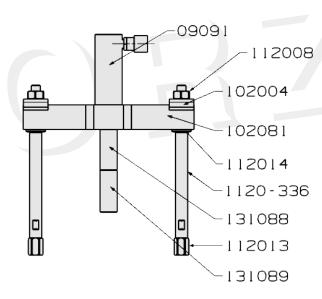
#### 3.2. Puller dimensions



Reference	Α	В	С	Weigth	Cylinder	Stroke	Complete weigth
1120HF	255	325	345	11	00909	156	25



# 3.3. Spare parts of the puller mechanical part.



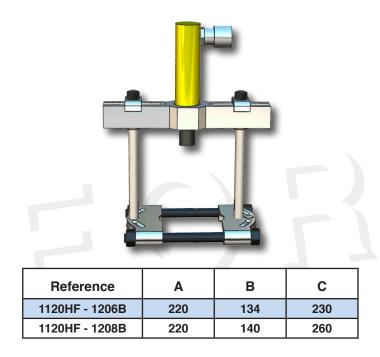
The ref. 131088 is the normal length extension of the hydraulic cylinder.

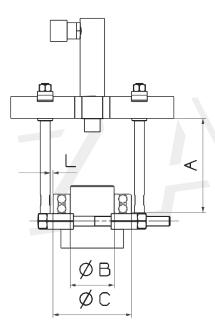
The ref. 131089 is the longer extension.

# 3.4. Combination with 1200 splitters.

The 11020HF pullers combine with the series1200:

the size of the piece to be pulled out cannot be determined considering the B measuremente, but instead the C measuring distance between arms.





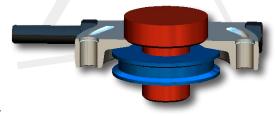


#### Correct set up of the spliter.

The 1200 puller must press against the fla face.

Arms must be positioned as closest as possible to the piece to be pulled out.

It is the C distance which must be almost equal to te B.



#### Incorrect spliter set up.

The 1200 puller is NOT placed in the flat side position.

Arms are too far off the piece to be pulled out. The C distance is much greater than the B.

In this position the torque on the arm tip is multiplied by L.

In this position one cannot reach the maxumum force.

Monitor the spindle bending and stop pulling when excessive.

#### 4. 1310LTH PULLER

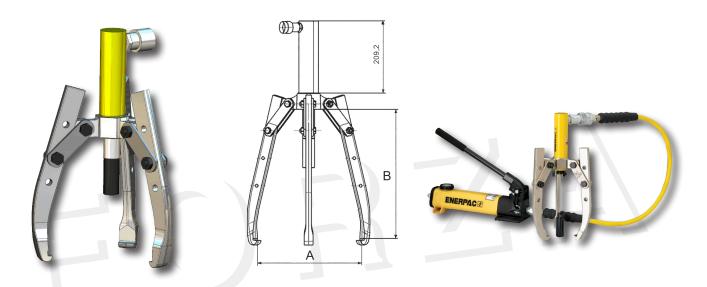
#### 4.1. Technical features

Two and three arms.

Two arms length: The lon ones with 3 hole and etra long ones with 4 holes.

Forges and tempered arms.

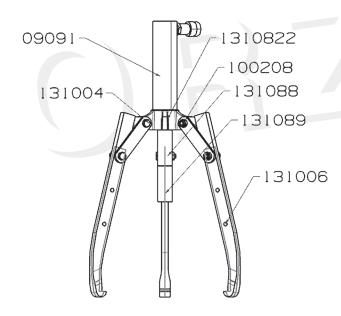
#### 4.2. Puller dimensions



Reference	А	В	Ton	Weigth	Hydraulic part	Total weigth
1310LTH	400	350	10	9,5	00909	23,5
1310XTH	480	405	10	12	00909	26



# 4.3. Puller spare parts



The ref. 131088 is the normal length extension of the hydrualic cylinder. The ref. 131089 is the longer extension.

#### 5. USER INSTRUCTIONS



- 1- Check that shaft is punched. Otherwise use a point protector.
- 2- See that arms are evenly spread.
- 3- Wear all necssary safety equipments.
- 4- Put pressure with the pump while always monitoring the gauge and te puller deformations alike.



The hydrualic puller set allow to assemble the following pullers:





# FORZA 🍞

S.L. de Herramientas Especiales Forza C/ San Miguel de Atxa, 24 01010 Vitoria www.forza.es