

# Yale

## HYDRAULIC JACKS & TOOLS



## Hydraulic jacks & tools

A characteristic of this “force-oriented” hydraulic program is the operating pressure which can be as high as 700 bar. This guarantees a simple and safe generation of highest forces. In spite of this the units remain compact, portable and easy to operate. High-pressure hydraulic systems of this type are used in universal assembly and repair operations whereby their application in day-to-day operations is almost unlimited. The component program allows the individual configuration of simple and also complex system solutions.

### They are used in the following main industrial areas:

Heavy industry, mining, shipbuilding, offshore, aviation industries, power stations, steel construction, steel making and processing, building construction, bridge and tunnel construction, heavy steel and tank construction, metal processing workshops, and many more.

## INFO

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## Hydraulic puller with integrated hydraulics model BMZ

### Pulling force max. 6, 8 and 11 t

Hydraulic pullers are a valuable tool for the maintenance engineer. The pullers allow time and cost savings as they offer high working safety and can be operated in all positions. Hydraulic pullers are used in all kinds of industries, workshops and in many repair and assembly jobs to remove or install interference fit parts, such as: gears, couplings, bearings, wheels, pulleys, axles, shafts, break drums and many other press fit components. Damage to parts is minimized through the use of controlled hydraulic power, whilst machine down-time can be reduced drastically.

### Features

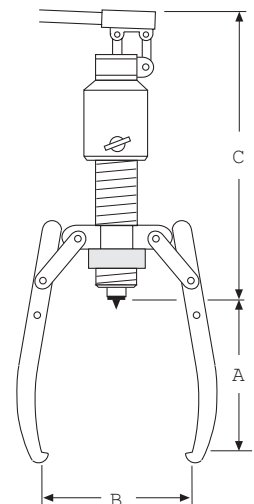
- Drop-forged alloy steel jaws.
- Hard chromium plated piston, spring return.
- No radial moment of torsion.
- No spindle wear.
- Integrated hydraulic cylinder and pump.
- Quick adjustment with trapezoid speed nut.
- 3 and 2-jaw design.
- Pump lever can rotate through 360°.
- Piston with durable, spring loaded centering tip.
- Supplied in a sturdy plastic box.

### Technical data model BMZ

| Model         | EAN-No. 4025092* | Pulling force max. t | Stroke mm | Weight kg |
|---------------|------------------|----------------------|-----------|-----------|
| <b>BMZ-6</b>  | *154499          | 6                    | 82        | 4.9       |
| <b>BMZ-8</b>  | *154505          | 8                    | 82        | 6.6       |
| <b>BMZ-11</b> | *154512          | 11                   | 82        | 8.0       |

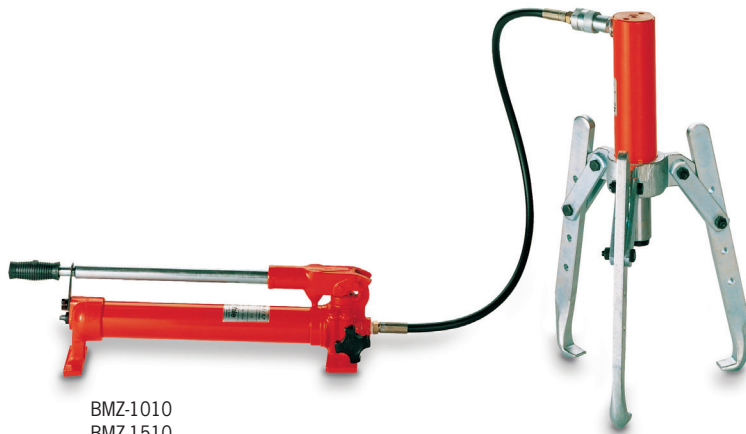
### Dimensions model BMZ

| Model                 | BMZ-6 | BMZ-8 | BMZ-11 |
|-----------------------|-------|-------|--------|
| Reach max. A, mm      | 160   | 200   | 230    |
| Diameter Ø max. B, mm | 200   | 250   | 280    |
| Length C, mm          | 320   | 320   | 345    |

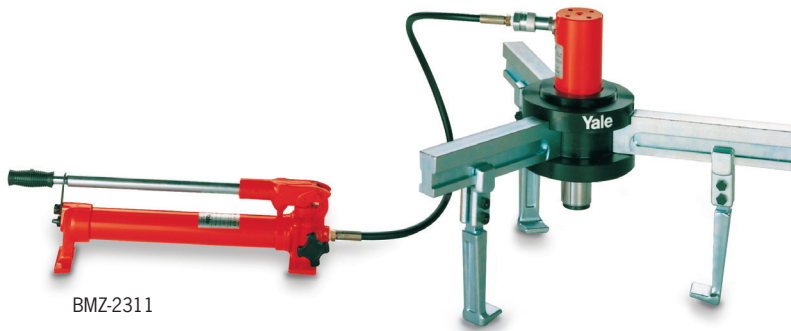








BMZ-1010  
BMZ-1510



BMZ-2311

## Puller sets with separate hydraulics 10, 15 and 23t model BMZ

### Pulling force max. 10 - 23t

The harder the pulling force, the tighter the grip of the jaws. Longer jaws up to 1000 mm are available on request.

### Features

- High quality components from our standard hydraulic program.
- Modular system, hydraulic parts can also be used for many other applications.
- Long-life hydraulic cylinders manufactured from chromium-molybdenum steel.
- Two-stage quick-action hand pumps.
- Incl. high pressure hydraulic hose with quick coupler, L = 2.0 m.
- All complete sets are supplied in metal box model HPK-10 or wooden case.
- All sets are supplied ready to use.

### Scope of delivery:

- Pressure gauge set model GYA-63.



Accessories for model BMZ-2311:  
Model BMZ-2308 extensions of pulling arms increase the reach (A) up to 395 mm.  
Model BMZ-2309 up to 495 mm.



Pressure gauge set model GYA-63 is part of the scope of delivery.

## Model BMZ-1000 and 1510

The harder the pulling force, the tighter the grip of the jaws. Longer jaws up to 1000 mm are available on request.

## Model BMZ-2311

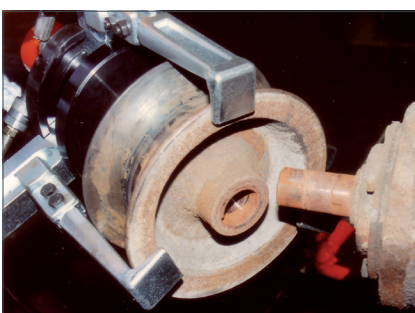
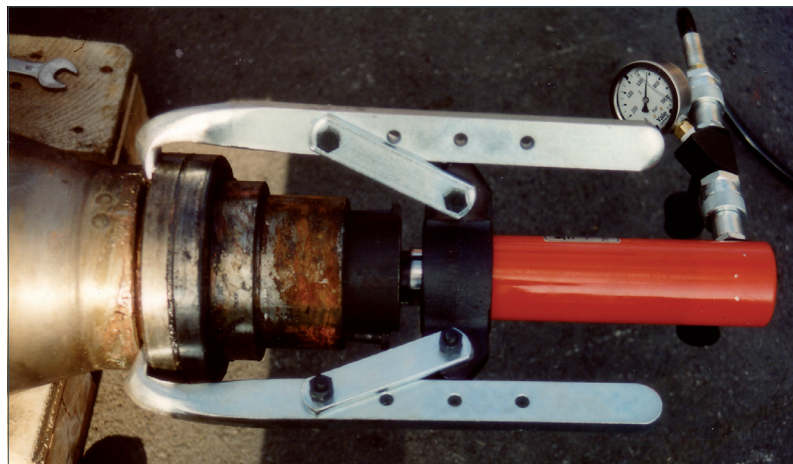
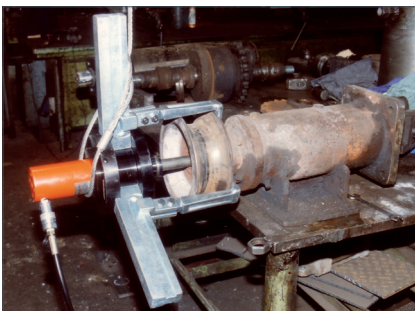
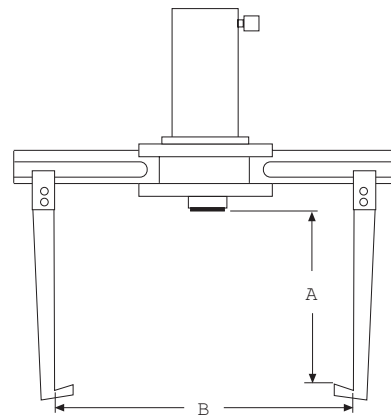
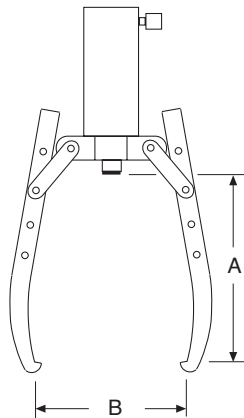
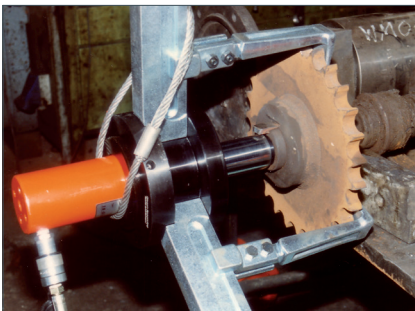
The radially adjustable pulling arms can be locked in any position.

## Technical data model BMZ

| Model           | EAN-No.<br>4025092* | Pulling force<br>max.<br>t | Hydraulic cylinder<br>model | Hand pump<br>model | Hydraulic hose<br>model | Stroke<br>of the cylinder<br>mm | Weight<br>kg |
|-----------------|---------------------|----------------------------|-----------------------------|--------------------|-------------------------|---------------------------------|--------------|
| <b>BMZ-1000</b> | *154529             | 10                         | without                     | without            | without                 | –                               | 9.5          |
| <b>BMZ-1010</b> | *154536             | 10                         | with YS-10/150              | with HPS-2/0,7 A   | HHC-20                  | 150                             | 21.5         |
| <b>BMZ-1500</b> | *154543             | 15                         | without                     | without            | without                 | –                               | 9.5          |
| <b>BMZ-1510</b> | *154550             | 15                         | with YS-15/150              | with HPS-2/0,7 A   | HHC-20                  | 150                             | 23.5         |
| <b>BMZ-2300</b> | *154567             | 23                         | without                     | without            | without                 | –                               | 56.8         |
| <b>BMZ-2311</b> | *154482             | 23                         | with YS-23/160              | with HPS-2/0,7 A   | HHC-20                  | 160                             | 106.0        |

## Dimensions model BMZ

| Model                 | BMZ-1000 | BMZ-1500 | BMZ-2300 |
|-----------------------|----------|----------|----------|
| Reach max. A, mm      | 300      | 300      | 190      |
| Diameter Ø max. B, mm | 350      | 350      | 700      |



## Hydraulic puller sets model YHP

### Pulling force max. 10 - 50t

These professional puller sets are designed for removing and installing press-fitted or heat-fitted parts. Hydraulic puller sets eliminate time-consuming and costly repairs as they avoid the damage of parts and reduce machine downtimes. All parts are manufactured from high quality drop-forged steel.

### Scope of delivery

The complete sets are supplied ready to use and include all necessary components such as hollow cylinder, hydraulic hand pump, pressure gauge (to control the pulling force) and 2 meter hydraulic hose with quick-connect coupler.



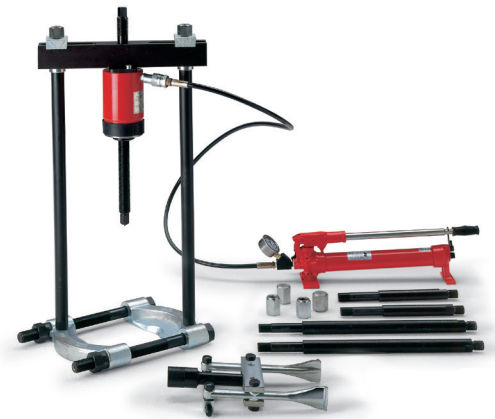
## 3-Grip puller sets

For all pulling jobs where solid parts have to be removed, e.g. gears, belt pulleys, sprockets, flywheels, couplers, shafts, axles etc. The sets can be used as both 3-jaw and 2-jaw puller.

| Model     | EAN-No.<br>4025092* | Pulling force max.<br>t |
|-----------|---------------------|-------------------------|
| YHP-252 G | *161992             | 20                      |
| YHP-352 G | *162005             | 30                      |
| YHP-552 G | *162012             | 50                      |

## INFO

The set "Cross-bearing puller" have reduced max. pulling forces.



## Cross-bearing puller sets

For all pulling jobs where multi-segmented parts have to be removed: ball bearings, roller bearings and similar parts. Puller sets are supplied complete with bearing puller attachment and bearing cup puller.

| Model     | EAN-No.<br>4025092* | Pulling force max.<br>t |
|-----------|---------------------|-------------------------|
| YHP-262 G | *162029             | 10                      |
| YHP-362 G | *162036             | 20                      |
| YHP-562 G | *162043             | 25                      |



## Multi-purpose puller sets

These multi-purpose puller sets are universal combinations of both a.m. sets and include all necessary parts from 3-grip puller set and crosshead puller set.

| Model      | EAN-No.<br>4025092* | Pulling force max.<br>t |
|------------|---------------------|-------------------------|
| YHP-2752 G | *161787             | 20/10                   |
| YHP-3752 G | *161824             | 30/20                   |
| YHP-5752 G | *162050             | 50/25                   |



## Type of puller set

| Model                                       | 3-grip puller set |           |           | Crosshead puller set |           |           | Multi purpose puller set |            |            |
|---|-------------------|-----------|-----------|----------------------|-----------|-----------|--------------------------|------------|------------|
|   | YHP-252 G         | YHP-352 G | YHP-552 G | YHP-262 G            | YHP-362 G | YHP-562 G | YHP-2752 G               | YHP-3752 G | YHP-5752 G |
| EAN-No. 4025092*                            | *161992           | *162005   | *162012   | *162029              | *162036   | *162043   | *161787                  | *161824    | *162050    |
| Capacity, t                                 | 20                | 30        | 50        | 10                   | 20        | 25        | 20/10                    | 30/20      | 50/25      |
| Hand pump, model HPS-1/07 A (part 1)        | •                 | •         | -         | •                    | •         | -         | •                        | •          | -          |
| Hand pump, model HPS-2/2 A (part 1)         | -                 | -         | •         | -                    | -         | •         | -                        | -          | •          |
| Pressure gauge set, model GYA-63 (part 2)   | •                 | •         | •         | •                    | •         | •         | •                        | •          | •          |
| Hydraulic hose, model HHC-20 (part 3)       | •                 | •         | •         | •                    | •         | •         | •                        | •          | •          |
| Hollow cylinder (part 4), model             | YCS-21/50         | YCS-33/60 | YCS-57/70 | YCS-21/50            | YCS-33/60 | YCS-57/70 | YCS-21/50                | YCS-33/60  | YCS-57/70  |
| Triple crosshead (part 5)                   | •                 | •         | •         | -                    | -         | -         | •                        | •          | •          |
| Double crosshead (part 6)                   | •                 | •         | •         | -                    | -         | -         | •                        | •          | •          |
| Grip arm, 3 pcs. (part 8)                   | •                 | •         | •         | -                    | -         | -         | •                        | •          | •          |
| Spindle (part 9)                            | •                 | •         | •         | •                    | •         | •         | •                        | •          | •          |
| Strap, 6 pcs. (part 10)                     | •                 | •         | •         | -                    | -         | -         | •                        | •          | •          |
| Strap screws + strap nuts, 6 pcs. (part 11) | •                 | •         | •         | -                    | -         | -         | •                        | •          | •          |
| Mounting screws, 2 pcs. (part 13a)          | •                 | •         | •         | -                    | -         | -         | •                        | •          | •          |
| Mounting screws, 2 pcs. (part 13b)          | -                 | -         | -         | •                    | •         | •         | •                        | •          | •          |
| Saddle with internal thread (part 14)       | •                 | •         | •         | •                    | •         | •         | •                        | •          | •          |
| Smooth saddle (part 15)                     | •                 | •         | •         | •                    | •         | •         | •                        | •          | •          |
| Slotted crosshead (part 16)                 | -                 | -         | -         | •                    | •         | •         | •                        | •          | •          |
| Slide plate, 2 pcs. (part 17)               | -                 | -         | -         | •                    | •         | •         | •                        | •          | •          |
| Nut, 2 pcs. (part 18)                       | -                 | -         | -         | •                    | •         | •         | •                        | •          | •          |
| Washer, 2 pcs. (part 19)                    | -                 | -         | -         | •                    | •         | •         | •                        | •          | •          |
| Pulling leg, short, 2 pcs. (part 20), mm    | -                 | -         | -         | 280                  | 255       | 455       | 280                      | 255        | 455        |
| Pulling leg, long, 2 pcs. (part 21), mm     | -                 | -         | -         | 460                  | 505       | 773       | 460                      | 505        | 773        |
| Leg end, 2 pcs. (part 24)                   | -                 | -         | -         | •                    | •         | •         | •                        | •          | •          |
| Leg connector, 2 pcs. (part 25)             | -                 | -         | -         | •                    | •         | •         | •                        | •          | •          |
| Bearing puller attachment (part 26)         | -                 | -         | -         | •                    | •         | •         | •                        | •          | •          |
| Bearing cup pulling attachment (part 27)    | -                 | -         | -         | •                    | •         | •         | •                        | •          | •          |
| Storage case (part 29)                      | •                 | •         | •         | •                    | •         | •         | •                        | •          | •          |
| Weight, kg                                  | 40                | 65        | 120       | 46                   | 86        | 156       | 91                       | 172        | 295        |

## Dimensions hydraulic puller set model YHP

| Model        | 20t      | 30t      | 50t      |
|--------------|----------|----------|----------|
| 3-grip A, mm | 300      | 520      | 700      |
| C, mm        | 0 - 817  | 0 - 977  | 0 - 1233 |
| 3-grip B, mm | 500      | 900      | 1200     |
| D, mm        | 25 - 155 | 30 - 250 | 75 - 330 |
| 2-grip A, mm | 300      | 520      | 700      |
| E, mm        | 152      | 250      | 330      |
| 2-grip B, mm | 420      | 700      | 1000     |
| F, mm        | 140      | 150      | 150      |
| G, mm        | 30 - 180 | 75 - 230 | 75 - 230 |

