

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

Please note our user instructions at the beginning of each chapter.

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Aluminium hydraulic jacks model AJH and model AJS

Capacities from 6.5 - 100t

Aluminium jacks combine light weight with high lifting capacity. The use of high tensile aluminium alloy allows lifting capacities of up to 100 tons resulting in a very favourable 1.8 tons lifting capacity per 1 kg weight ratio. Operation of Yale hydraulic jacks is very simple. Jacks are supplied ready for use, i.e. including hydraulic oil, operating lever and, where applicable, carrying handle and lifting claw.

Aluminium jacks with lifting claw

Jacks from 20 tons are available with a lifting claw. In this case the jacks are provided with an elongated base plate. The max. permissible working load of the lifting claws is 40% of the jack capacity.

Aluminium jacks with safety lock nut

Jacks from 20 tons can be supplied with a safety lock nut. This device allows absolute safe jacking over a long period. In this case the hydraulic jack can be operated like a mechanical support and the hydraulic system can be totally released.

Application

Hydraulic jacks are universally popular tools for use in workshops or on site for all kinds of lifting and assembly applications, for construction, shipbuilding, power plants, general engineering, metal fabrication and many more. Applications are unlimited. Standard jacks with plain piston and jacks with safety lock nuts cannot be used with a lifting claw. To increase stability, all jacks with long stroke (305 mm) are equipped with an elongated base plate.

Features

- Strokes from 75 - 305 mm.
- Extremely low weight.
- The 6.5 and 10 tons jacks can be operated in any position (also upside down) and are equipped with spring return piston and stop ring.
- The 20 to 100 tons jacks can be operated vertically or with front face in horizontal position.
- All jacks are provided with an overload protection valve.
- From 20 tons capacity with additional mechanical stroke limiter.
- All jacks with hardened alloy steel saddle and sensitive lowering valve which is activated by the operating lever.



AJH-630 SR

Technical data model AJH and model AJS

| Model | EAN-No. 4025092* | Capacity t | Capacity of lifting claw max. t | Stroke mm | Overall height mm | Base plate mm | Height of lifting claw min. mm | Weight kg |
|----------|---------------------|---------------|---------------------------------------|--------------|----------------------|------------------|--------------------------------------|--------------|
| AJS-65 | *157995 | 6.5 | – | 75 | 131 | 159x76 | – | 3.6 |
| AJS-104 | *158015 | 10 | – | 115 | 182 | 171x76 | – | 6.3 |
| AJH-620 | *158046 | 20 | – | 152 | 265 | 180x120 | – | 10.9 |
| AJH-1220 | *158107 | 20 | – | 305 | 440 | 250x120 | – | 16.7 |
| AJH-630 | *158169 | 30 | – | 152 | 265 | 200x140 | – | 15.4 |
| AJH-1230 | *158220 | 30 | – | 305 | 452 | 275x140 | – | 23.4 |
| AJH-660 | *158282 | 60 | – | 152 | 293 | 250x190 | – | 27.4 |
| AJH-1260 | *158343 | 60 | – | 305 | 500 | 340x190 | – | 43.7 |
| AJH-6100 | *158404 | 100 | – | 152 | 315 | 305x250 | – | 49.0 |

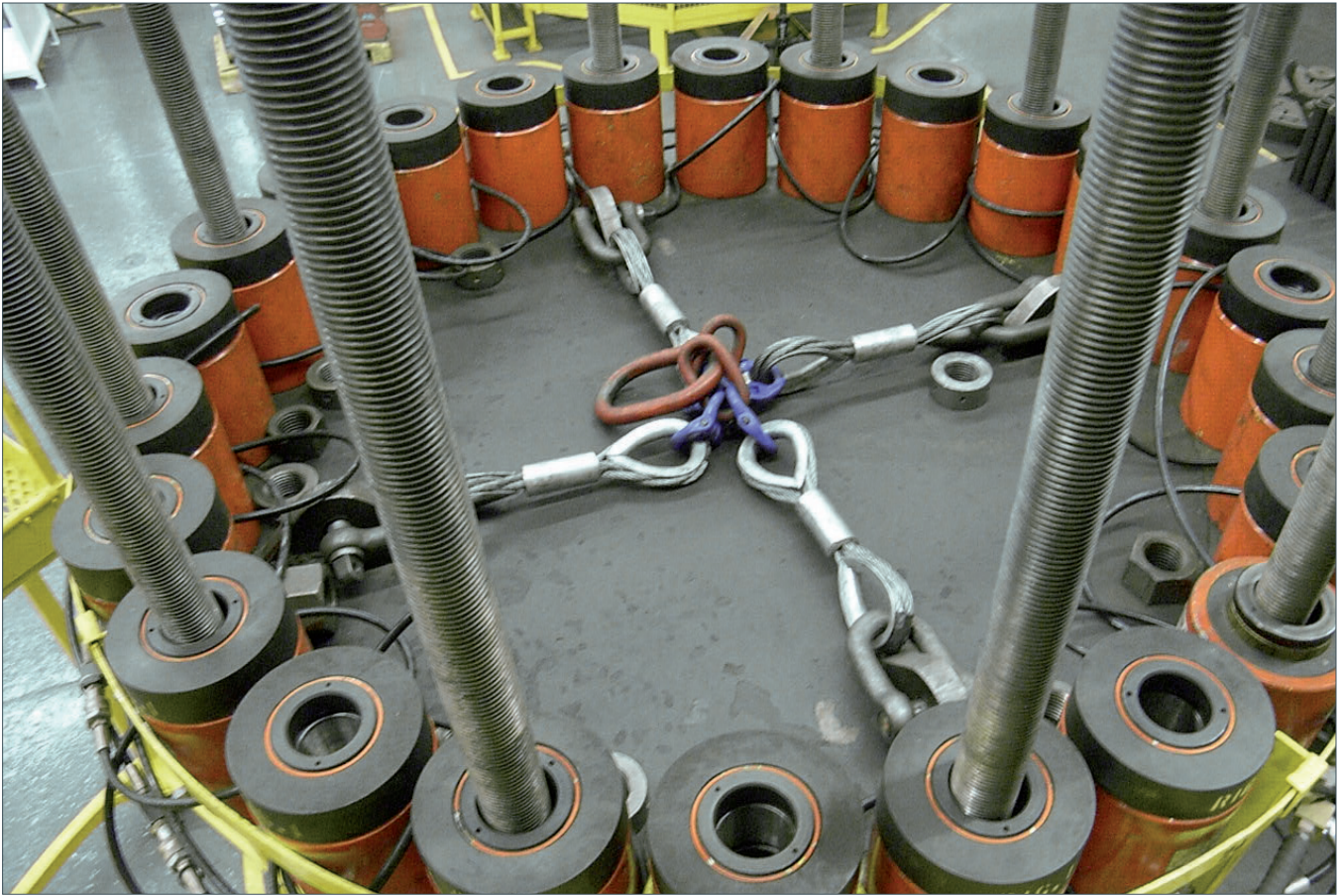
Jacks with lifting claw

| Model | EAN-No. 4025092* | Capacity t | Capacity of lifting claw max. t | Stroke mm | Overall height mm | Base plate mm | Height of lifting claw min. mm | Weight kg |
|------------|---------------------|---------------|---------------------------------------|--------------|----------------------|------------------|--------------------------------------|--------------|
| AJH-620 C | *158060 | 20 | 8 | 152 | 280 | 250x120 | 67 | 14.5 |
| AJH-1220 C | *158121 | 20 | 8 | 305 | 452 | 250x120 | 67 | 22.2 |
| AJH-630 C | *158183 | 30 | 12 | 152 | 284 | 275x140 | 72 | 20.3 |
| AJH-1230 C | *158244 | 30 | 12 | 305 | 472 | 275x140 | 72 | 31.0 |
| AJH-660 C | *158305 | 60 | 24 | 152 | 327 | 340x190 | 72 | 43.1 |
| AJH-1260 C | *158367 | 60 | 24 | 305 | 533 | 340x190 | 72 | 64.9 |

Jacks with safety lock nut

| Model | EAN-No. 4025092* | Capacity t | Capacity of lifting claw max. t | Stroke mm | Overall height mm | Base plate mm | Height of lifting claw min. mm | Weight kg |
|-------------|---------------------|---------------|---------------------------------------|--------------|----------------------|------------------|--------------------------------------|--------------|
| AJH-620 SR | *158084 | 20 | – | 152 | 291 | 180x120 | – | 10.9 |
| AJH-1220 SR | *158145 | 20 | – | 305 | 464 | 250x120 | – | 16.7 |
| AJH-630 SR | *158206 | 30 | – | 152 | 294 | 200x140 | – | 15.4 |
| AJH-1230 SR | *158268 | 30 | – | 305 | 480 | 275x140 | – | 23.4 |
| AJH-660 SR | *158329 | 60 | – | 152 | 330 | 250x190 | – | 27.4 |
| AJH-1260 SR | *158381 | 60 | – | 305 | 536 | 340x190 | – | 43.7 |
| AJH-6100 SR | *158428 | 100 | – | 152 | 366 | 305x250 | – | 53.0 |

Hydraulic Jacks & Tools



Machine jacks with lifting claw model YAM

Capacity 2 - 15 t

Machine jacks with lifting claw are used in applications where space below the load is restricted, thus preventing the use of traditional lifting equipment.

Typical applications for machine jacks are lifting, positioning and transportation of machines, heavy steel constructions or similar loads, as well as general repair and assembly applications.

The jacks are also useful for applications like leveling of high-rise warehouses, heavy-duty scaffolds, large frameworks etc.

Features

- Offers safe lifting of machines with an extremely low clearance.
- Incl. safety pressure valve to prevent overload.
- Large base offers increased stability under load.
- Pump lever can rotate through 270° (excluding YAM-2).
- Same load can be lifted on either the head or the claw of jack.
- Spring return of the lifting claw (only YAM-5 and YAM-10).
- Precision-adjustable lowering valve.
- Jacks are supplied ready to use incl. pump lever, and are filled with oil.

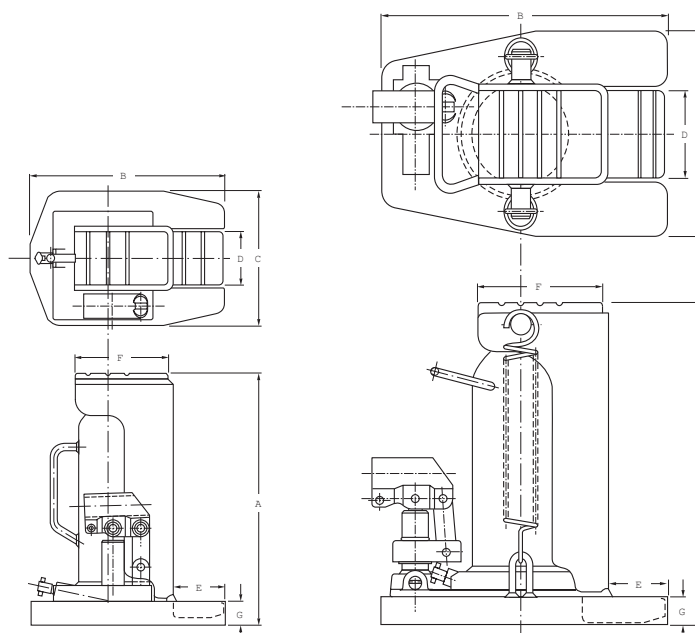


Technical data model YAM

| Model | EAN-No. 4025092* | Capacity on the claw t | Stroke mm | Weight kg |
|----------|---------------------|------------------------------|--------------|--------------|
| YAM-2 | *157711 | 2 | 113 | 8 |
| YAM-5 | *153997 | 5 | 120 | 19 |
| YAM-10 | *154000 | 10 | 145 | 38 |
| YAM-15.1 | *338851 | 15 | 140 | 53 |

Dimensions model YAM

| Model | YAM-2 | YAM-5 | YAM-10 | YAM-15.1 |
|-------|-------|-------|--------|----------|
| A, mm | 235 | 290 | 325 | 344 |
| B, mm | 180 | 257 | 280 | 321 |
| C, mm | 125 | 182 | 240 | 258 |
| D, mm | 50 | 75 | 100 | 110 |
| E, mm | 50 | 57 | 60 | 60 |
| F, mm | 85 | 117 | 150 | 168 |
| G, mm | 16 | 26 | 33 | 33 |





Hydraulic machine jacks model YAP

Capacity 4.5 - 50t

Hydraulic machine jacks are designed for the safe lifting and positioning of machines and similar heavy equipment.

Features

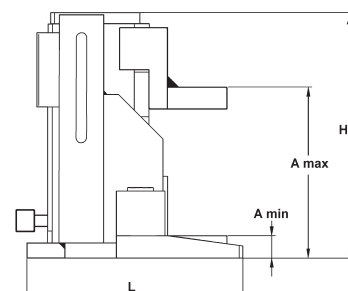
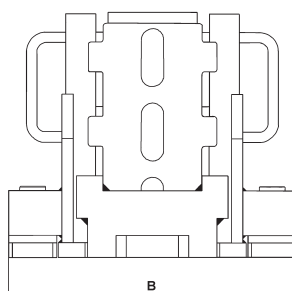
- These jacks are operated with external pumps, e.g. hand or motor pumps but also with synchronous power packs.
- The compact construction allows operation even in extremely confined areas.
- 3 hook-in positions of the lifting claw provide high flexibility (model YAP-5130 4 hook-in positions).
- The load can be lifted with either the lifting claw or with the head of the jack.
- Welded, distortion-proof steel construction.
- High quality, durable hydraulic components.
- The flat lifting claw allows low jacking height.
- Safe stability due to swivel-mounted support feet.
- The connection between jack and pump is made by a hydraulic hose.
- The jacks are delivered ready-to-use inclusive of carrying handles and coupling half.

Technical data model YAP

| Model | EAN-No. 4025092* | Capacity t | Stroke mm | Height for applications min. in mm | Pressure max. bar | Weight approx. kg |
|-----------|---------------------|---------------|--------------|---------------------------------------|----------------------|----------------------|
| YAP-5130 | *160018 | 4.5 | 133 | 15 | 700 | 13.5 |
| YAP-10150 | *160025 | 10 | 155 | 20 | 700 | 23.0 |
| YAP-15150 | *160032 | 15 | 155 | 25 | 700 | 40.0 |
| YAP-25150 | *160049 | 23 | 155 | 30 | 700 | 60.0 |
| YAP-50150 | *160056 | 50 | 155 | 35 | 700 | 165.0 |

Dimensions model YAP

| Model | YAP-5130 | YAP-10150 | YAP-15150 | YAP-25150 | YAP-50150 |
|------------|----------|-----------|-----------|-----------|-----------|
| A min., mm | 15 | 20 | 25 | 30 | 35 |
| A max., mm | 232 | 273 | 291 | 300 | 375 |
| B, mm | 228 | 277 | 328 | 387 | 540 |
| H, mm | 252 | 283 | 316 | 330 | 405 |
| L, mm | 161 | 194 | 245 | 278 | 375 |



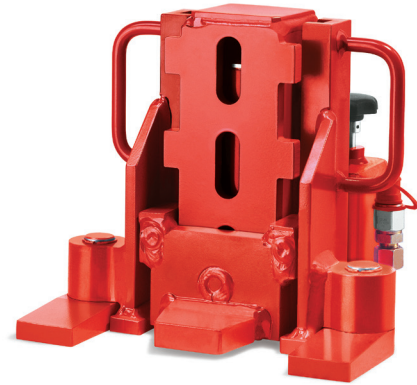
Hydraulic machine jacks model YAS

Capacity 3 - 25 t

Hydraulic machine jacks are designed for the safe lifting and positioning of machines and similar heavy equipment.

Features

- Integrated hydraulic pump.
- Pump lever swivel mounted 270° for operation even in extremely confined areas.
- Same load can be lifted on either the head or the claw of jack.
- Welded, distortion-proof steel construction.
- High quality, durable hydraulic components.
- The flat lifting claw allows low jacking height.
- The additional connect coupler (10t capacity and larger) for external pump operation, allows connection of hand, motor or synchronous lifting pumps (max. pressure 520 bar).
- Safe stability due to swivel-mounted support feet.
- Sensitive lowering valve for slow lowering of loads without jerks.
- When operating the jack with an external pump the installation of a manometer is mandatory.
- The integrated hydraulic pump is protected by a pressure-limiting valve.
- The jacks are delivered ready-to-use inclusive of carrying handles, hydraulic oil filling and pump lever.

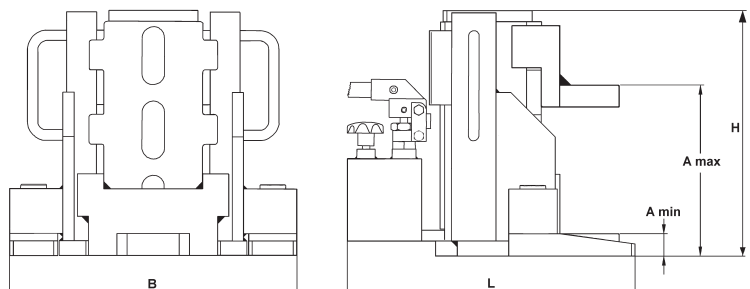


Technical data model YAS

| Model | EAN-No. 4025092* | Capacity t | Stroke mm | Height for applications min. in mm | Pressure max. bar | Weight approx. kg |
|--------|---------------------|---------------|--------------|---------------------------------------|----------------------|----------------------|
| YAS-3 | *160063 | 3 | 140 | 12 | 520 | 15.0 |
| YAS-5 | *160070 | 5 | 140 | 15 | 520 | 19.0 |
| YAS-10 | *160087 | 10 | 140 | 20 | 520 | 28.0 |
| YAS-15 | *160094 | 15 | 140 | 25 | 520 | 50.0 |
| YAS-25 | *160100 | 25 | 140 | 30 | 520 | 72.0 |

Dimensions model YAS

| Model | YAS-3 | YAS-5 | YAS-10 | YAS-15 | YAS-25 |
|------------|-------|-------|--------|--------|--------|
| A min., mm | 12 | 15 | 20 | 25 | 30 |
| A max., mm | 230 | 232 | 300 | 291 | 300 |
| B, mm | 207 | 228 | 277 | 328 | 387 |
| H, mm | 250 | 252 | 252 | 316 | 330 |
| L, mm | 198 | 216 | 271 | 345 | 388 |





Hydraulic stage lifts model ST

Capacity 50 - 200 t

For compact, low-headroom and universal applications. Stage lifts are hydraulic lifting devices which are designed to lift and lower loads over high distances.

Stage lifts overcome the usual limitations of their lifting height imposed by stroke length. Stage lifts operate with “double-acting” hydraulic cylinders (return stroke by hydraulic pressure) and are equipped with a load spreading plate and a piston support plate.

Operation

A stage lift operates inverted and lifts the load via the bottom of the cylinder whilst it climbs on a pile of support bars (wood or aluminium). In principle, the load can be lifted to any height although stage lifts are still compact and versatile for low-headroom lifting applications.

The simple “3-step operation” eliminates the need for additional holding arrangements and the repositioning or replacing of cylinders which are normally required for a higher lifting distance. A stage lift climbs up and down on its own.

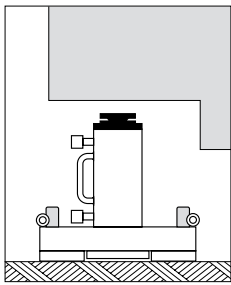
Control

Depending on the power pack, selected stage lifts can be controlled individually (by hand or motor pump) or together in a synchronized arrangement with multi-flow pumps.

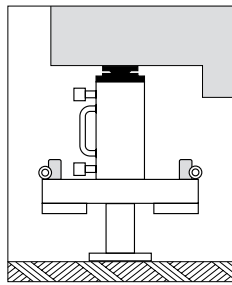
Features

- Yale ChroMo-Design.
- Low-cost lifting systems possible, (3-point resp. 4-point).
- Low weight (e.g. 60 kg for a 50t unit).
- Stage lift body made from high-grade aluminium.
- Hydraulic cylinders are made from robust chromium-molybdenum steel with double bronze bearings ensure a longlife service system.
- Large-diameter tilt saddle.
- Incl. coupler halves and carrying handles on request.

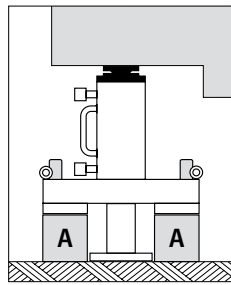




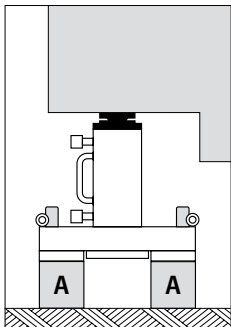
1. Stage: Initial position, stage lift rests on the ground under the load.



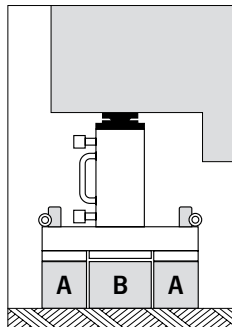
2. Stage: Step 1, load is raised.



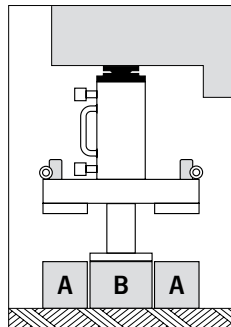
3. Stage: Two support bars type "A" are positioned in place.



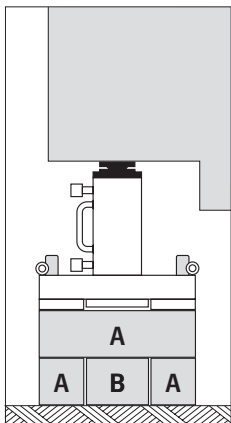
4. Stage: Piston is retracted and load rests on support bars type "A".



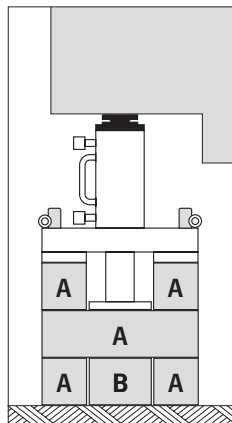
5. Stage: Broader middle bar type "B" is inserted.



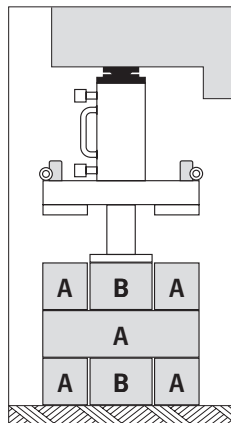
6. Stage: Step 2, load raised on broader middle bar "B".



7. Stage: Two bars "A" are inserted and rotated at 90°, piston is retracted and middle bar is inserted.



8. Stage: Load is lifted on middle bar (3rd step), two support bars type "A" are positioned at 90° and load rests on support bars "A".



9. Stage: Piston is retracted, middle bar type "B" is inserted and lifts the 4th step on middle bar "B" and so on...

Technical data model ST

| Model | EAN-No. 4025092* | Capacity max. t | Stroke mm | Overall height mm | Load- spreading plate Ø mm | Piston plate Ø mm | Weight approx. kg |
|----------|---------------------|-----------------------|--------------|-------------------------|-------------------------------------|-------------------------|-------------------------|
| ST-5015 | *157810 | 50 | 150 | 396 | 425 x 425 | 160 | 60 |
| ST-10015 | - | 100 | 150 | 455 | 525 x 525 | 180 | 115 |
| ST-20015 | - | 200 | 150 | 510 | 600 x 600 | 210 | 196 |

