# **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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# Hydraulic test rig for hoisting equipment model RPYS-1215

#### Capacity max. 12t

For testing pul-lifts, lever hoists, chain blocks, wire rope pullers as well as other lifting equipment after repair or inspection.

#### **Testing of hoisting equipment**

The lifting unit is placed between upper and lower shackle, the chain is tensioned against the oil cushion of the partly advanced piston of the hydraulic cylinder. The applied force can be read at the pressure gauge.

#### Testing of the hoist brake

For a functional test of the hoist brake the hand pump may be used to apply a counter pressure and thus increase the pulling force after a general test.

#### Frequent use

For frequent testing, the hand pump may be replaced by a low-cost air hydraulic (model PAY-6) or electric pump (model PY-04/2/5/2 M).

#### Pressure gauge

To read pulling forces more easily, the test rig is equipped with two high-quality pressure gauges.

Quick couplers allow an easy replacement of pressure gauges.

Pressure gauge 1 for small test items: model: GGY-1005, display: 0-160 bar,  $\emptyset$  100 mm, Kl. 1.0%

Pressure gauge 2 for big test items: model: GGY-1003, display: 0-400 bar,  $\emptyset$  100 mm, Kl. 1.0%

# Mounted hollow cylinder model YCS-21/150

Single-acting, with spring return

- Chromium-molybdenum steel, heat-treated with bronze bearings.
- Pressure-/pulling force: 120 kN (12t).
  Operating pressure: 0 400 bar.
- Center hole Ø: 27 mm.

# Mounted hydraulic hand pump model HPS-2/0,7A

Two-stage, with quick action

- Operating pressure: 0 400 bar.
- Reservoir: 0.7 l.



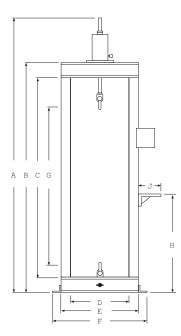
#### **Features**

- Fully welded, low-strain press-frame.
- Upper and lower hook suspension by means of shackles, incl. two 5 tons pull-rings for smaller test units.
- · Lateral pump table.
- Infinite adjustment of the pulling force.
- Chart for easy determination of test force.
- Removable lower suspension e.g. for testing of plate clamps.
- Base pre-drilled for mounting.
- High-quality hydraulic components.
- Hollow cylinder made from chromium-molybdenum steel, heat-treated, inside and outside with dirt wipers.
- Long cylinder stroke of 150 mm, piston hard chromium-plated with bronze bearings.
- High-strength threaded bar M27.
- Two-stage quick action hand pump.

#### **Technical data model RPYS**

Model	EAN-No. 4025092*			
RPYS-1215	*157469			

Model	RPYS-1215
A, mm	2580 - 2730
B, mm	2160
C, mm	1840
D, mm	500
E, mm	630
F, mm	760
G <sup>1</sup> , mm	1030 - 1425
H, mm	750
J, mm	150
Weight, kg	225



### **INFO**

The test rigs are delivered complete and ready to use.



# Hydraulic test rig for steel winches model RPYS-1535

#### Capacity max. 15t

For the testing of steel winches or similar lifting devices we offer a specific test rig.

#### **Features**

- Max. capacity 15t.
- With hydraulic cylinder model YS-15/350.
- Stroke: 350 mm.

#### Scope of delivery

- Incl. two-stage hand pump model: HPS-2/2 A.
- Fine-adjustment pressure valve 0-700 bar.
- Hydraulic hose 2 m, model: HHC-20.
- Pressure gauge model: GGY-1004, display: 0-700 bar,  $\emptyset$  100 mm, Kl. 1.0 %.



# Universal workshop presses model RPY and model RPES

#### Capacity 10 - 200t

For all repair and assembly jobs.

According to European standards, all Yale workshop presses can be used without any additional protection devices as the piston speed is below 10 mm/sec. For special applications additional safety equipment (e.g. protection grid or two-hand-safety-control) can be offered on request.

#### **Applications**

- · Pressing and removing of bolts, shafts, bearings.
- Straightening of beams, profiles, axles, shafts.
- Forming, bending, crimping.
- General load tests and tests of weld specimens.
- · Stamping, cutting, punching.
- · Pre-adjustment of tools.

## **Equipment of all presses**

#### **Features**

- All workshop presses are ready to use, including hydraulic oil, oil level gauge.
- High pressure-hydraulic hoses.
- · Glycerine-damped pressure gauges.
- Fixing holes in base profiles, adjusting device for press table and head, swivelling pump console, conversion chart: Pressure-force etc.

# Description of the hydraulic cylinders

#### **Features**

- Cylinders made from chromium-molybdenum steel, heattreated and with metric mounting threads in the piston.
- Double bronze bearing of the hard chromium-plated piston.
- Piston return through spring or hydraulically.
- Mounting thread in the piston.
- Available piston strokes from 150 up to 500 mm.

## Description of the pressframe

#### **Features**

- Robust, torsion-resistant construction.
- Solid, precision-welded press-frames.
- Open construction, easily accessible from all sides.
- 50 and 100 tons workshop presses with adjustable press table and press head (frames for adjustments are part of the delivery package).
- 200t press with adjustable table and fix welded press head.
- Four locking bolts ensure a precisely aligned press head and press table and increase the stability of the frame (50 and 100t).
- 50, 100 and 200t presses with pivoting pump table with peripheral passage for straigthening of exceptionaly long parts.
- Modular system: Large variety of combinations of hydraulic cylinders and pumps possible.
- Drive either by hand or electric hydraulic pumps.





## **INFO**

The press head of the 200t model is fix welded to the press-frame.

Workshop presses are delivered ready to use.

# **Description of the hand pumps**

#### **Features**

- All hand pumps with two-stage displacement.
- Glycerine-damped pressure gauge,  $\emptyset$  63 mm, class 1.6%.
- Hydraulic hose,  $L = 2.0 \,\text{m}$  with male coupler half.

# Description of the hydraulic power packs

#### **Features**

- Longlife radial piston pumps, from 50 t with two-stage displacement.
- Pressure pre-set valve on request (standard equipment for the solenoid valves).
- Glycerine-damped pressure gauge,  $\emptyset 100\,\text{mm}$ , class 1.0%.
- Control by manual directional valve (with motor startstop remote control) or solenoid valve with pendant remote control box.



RPES 10 ... (10t press)

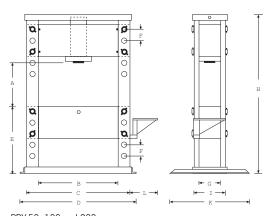
### Technical data model RPY and model RPES

Model	EAN-No. 4025092*	Frame design	Capacity t	Cylinder model	Cylinder stroke in mm	Piston return	Type of pump	Valve control	Pump model
RPY-1015 M-2	*157346	bench press	10	YS-10/150	150	spring	manual	manual	HPS-2/0,7 A
RPY-1025 EM-PYE 07	*250214	bench press	10	YS-10/250	250	spring	electric	manual	PYE-07/3/10/3M-RPY
RPY-2316 M-2	*157360	bench press	23	YS-23/160	160	spring	manual	manual	HPS-2/0,7 A
RPY-2325 M-2	*157384	bench press	23	YS-23/250	250	spring	manual	manual	HPS-2/2 A
RPY-2325 EM-PYE07	*651059	bench press	23	YS-23/250	250	spring	electric	manual	PYE-07/3/10/3M-RPY
RPES-1015 M-2	*160766	floor press	10	YS-10/150	150	spring	manual	manual	HPS-2/0,7 A
RPES-1025 EM-PYE07	*651059	floor press	10	YS-10/250	250	spring	electric	manual	PYE-07/3/10/3M-RPY
RPES-2316 M-2	*160780	floor press	23	YS-23/160	160	spring	manual	manual	HPS-2/0,7 A
RPES-2325 M-2	*160797	floor press	23	YS-23/250	250	spring	manual	manual	HPS-2/2 A
RPES-2325 EM-PYE07	*243728	floor press	23	YS-23/250	250	spring	electric	manual	PYE-07/3/10/3M-RPY
RPY-5015 EM	*158992	floor press	50	YH-50/150	150	hydraulic	electric	manual	PY-04/2/5/4M
RPY-5035 EM	*157575	floor press	50	YH-50/350	350	hydraulic	electric	manual	PY-04/2/5/4M
RPY-5035 EE	*157582	floor press	50	YH-50/350	350	hydraulic	electric	solenoid	PYS-07/3/10/4 E
RPY-5050 EE	*159012	floor press	50	YH-50/500	500	hydraulic	electric	solenoid	PYS-07/3/10/4 E
RPY-10035 EM	*157599	floor press	100	YH-100/350	350	hydraulic	electric	manual	PY-07/3/20/4 M-RPY
RPY-10035 EE	*157605	floor press	100	YH-100/350	350	hydraulic	electric	solenoid	PY-07/3/20/4 E
RPY-10050 EM	*157612	floor press	100	YH-100/500	500	hydraulic	electric	manual	PY-07/3/20/4 M-RPY
RPY-10050 EE	*158978	floor press	100	YH-100/500	500	hydraulic	electric	solenoid	PY-07/3/20/4 E
RPY-20035 EM	*157629	floor press	200	YH-200/350	350	hydraulic	electric	manual	PY-11/3/20/4 M-RPY
RPY-20035 EE	*157636	floor press	200	YH-200/350	350	hydraulic	electric	solenoid	PY-11/3/20/4 E
RPY-20050 EM	*157643	floor press	200	YH-200/500	500	hydraulic	electric	manual	PY-11/3/20/4 M-RPY
RPY-20050 EE	*159142	floor press	200	YH-200/500	500	hydraulic	electric	solenoid	PY-11/3/20/4 E

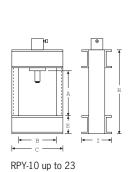
Code explanation	on .
Valve control Pump Piston stroke Capacity max.	: M = manual pump, E = solenoid valve with pendant remote control : M = manual pump, E = electric pump : $15 = 150  \text{mm}$ , $16 = 160  \text{mm}$ , $25 = 250  \text{mm}$ , $35 = 350  \text{mm}$ , $50 = 500  \text{mm}$ : $10 = 10t$ , $23 = 23t$ , $50 = 50t$ , $100 = 100t$ , $200 = 200t$

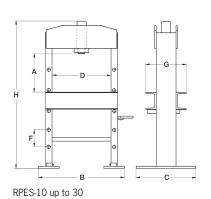
## Dimensions model RPY and model RPES (only frame)

Model	RPY-10	RPY-23	RPES-10	RPES-23	RPY-50	RPY-100	RPY-200
A min., mm	_	-	50	50	280	270	320
A max., mm	440	440	930	930	1120	830	1000
B, mm	380	380	700	700	820	1000	1000
C, mm	510	510	650	650	1020	1300	1400
D, mm	_	-	500	500	1200	1480	1580
E, mm	180	180	_	_	920	860	1040
F, mm	_	-	150	150	140	140	170
G, mm	_	-	240	240	255	335	450
H, mm	840	840	1695	1695	2000	2000	2430
l, mm	300	300	245	245	315	395	550
K, mm	_	-	_	_	1000	1000	1000
L, mm	_	-	_	-	383	333	400
Weight approx., kg	77	77	94	94	450	950	2380



RPY-50, 100 and 200





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