

# BLS-Series, Climbing Jacks

**ENERPA**  
POWERFUL SOLUTIONS. GLOB

Torque and tension specialist

▼ BLS-1006



- Climbing jacks include integral tilt saddles with maximum tilt angles up to 5 degree
- Large base with anti-rotation rod for stability and safety
- Built-in safety valve prevents accidental over-pressurization
- Ideal in combination with the stage lift work mode of the EVO-Series synchronous lifting system
- Baked enamel finish for increased corrosion resistance
- CR400 couplers included on all models.

▼ Synchronous Stage Lifting: 48 double-acting jacks (25 and 50 ton) are networked in to a 16 points synchronous system to lift this 50 metres long, 1000 ton building up to a height of 2,5 metres to construct a new floor level.



## A Simple Solution to Incremental Lifting



### Lifting Height

Climbing Jacks overcome the usual limitation of lifting height imposed by the cylinder's plunger stroke length. Large objects, such as oil tanks, can be lifted, held and lowered for maintenance without sending for a crane.



### Split-Flow Pumps

SFP-Series Pumps with multiple outlets with equal oil flow. For lifting and lowering applications on multiple points Split-Flow Pumps are a far better alternative than using separately operated pumps.

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### Synchronous Lifting System

The standard EVO-Series System is ideal for stage lifting, powering interlinked hydraulic cylinders. The EVO-system has 9 work modes including the stage lift work mode.

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### Jack-Up Systems

For incremental lifting with higher lifting capacities and up to 20 m lifting height, see our JS-Series Jack-Up Systems.

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Cylinder Capacity	Stroke	Model Number	Max. Cylinder Capacity (kN)	
			Push	Pull
ton	(mm)			
50	150	BLS-506	498	103
95	161	BLS-1006	933	435
140	151	BLS-1506	1386	668
200	151	BLS-2006	1995	1017

# Double-Acting Climbing Jacks



◀ Typical stage-lift application using a custom built Enerpac system to lift the 360 ton Akkerwinde wooden bridge in the Netherlands.

## BLS Series



Capacity per Lifting Point:

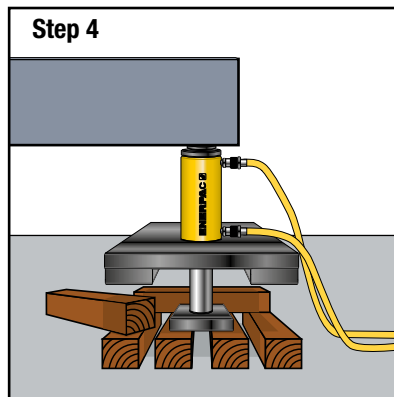
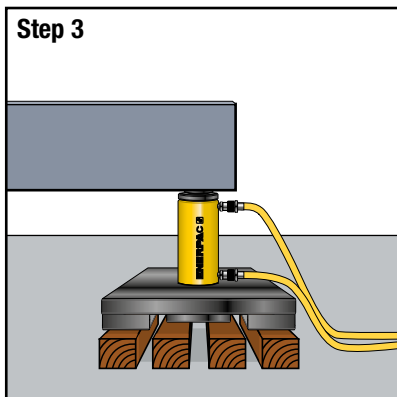
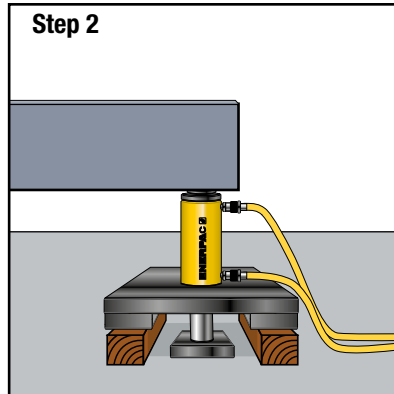
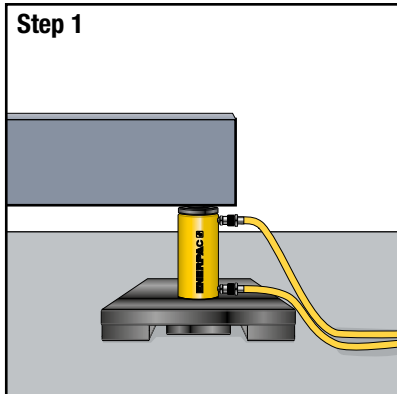
**50 - 200 ton**

Stroke per Stage:

**150 - 161 mm**

Maximum Operating Pressure:

**700 bar**



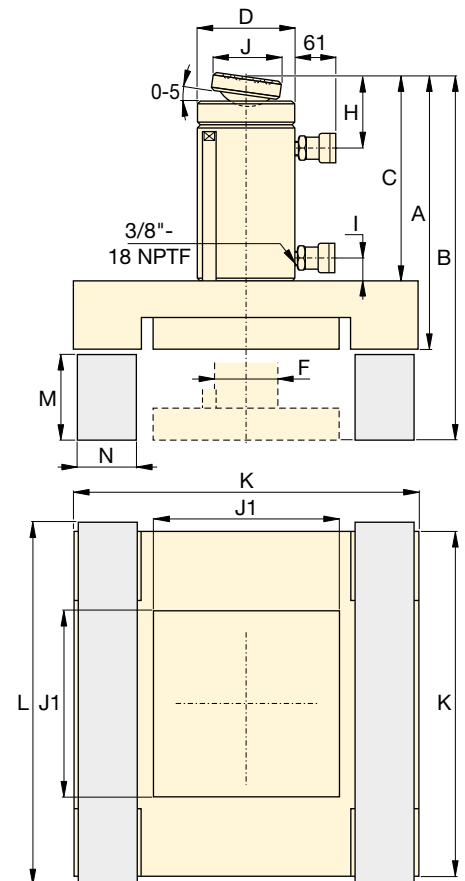
### ▲ Stage Lifting Sequence

**Step 1:** The climbing jack is placed on a solid support under the load (retracted plunger).

**Step 2:** Plunger extends, lifting the load and giving clearance to insert two outer blocks under the spreading plate.

**Step 3:** Plunger retracts, giving clearance to position the central blocks which will support the plunger plate for the next extension.

**Step 4:** Plunger extends, lifting the load, giving clearance to insert two new blocks, placed crosswise under the spreading plate.



Cylinder Effective Area (cm <sup>2</sup> )		Oil Capacity (cm <sup>3</sup> )		Dimensions (mm)										Cribbing Blocks * and Dimensions (mm)			Model Number		
Push	Pull	Push	Pull	A	B	C	D	F	H	I	J	J1	K	Material	L	M		N	(kg)
71,2	21,5	1111	335	406	556	318	127	79	56	36	50	240	515	Azobe Wood	565	140	120	170	<b>BLS-506</b>
133,3	62,2	2238	1045	445	606	343	177	95	76	24	71	330	670		720	150	160	315	<b>BLS-1006</b>
198,1	95,4	3090	1488	472	624	370	203	114	94	39	130	230	475	Solid Aluminium or Steel	500	140	115	322	<b>BLS-1506</b>
285,6	145,6	4332	2209	510	661	387	248	133	102	37	130	270	550		575	140	135	373	<b>BLS-2006</b>

\* Cribbing blocks are not supplied by Enerpac.