

Please note that the dimensions and weights can vary upon the use of different accessories like drive caps and sleeves. PVE is continuously improving their range of equipment. Developments in relation to emission standards and fuel efficiency might result in different specifications. No rights can be attached to the dimensions and specifications mentioned on this leaflet because they might have changed without further notification. All data is subject printing and conversion errors.

PVE Piling and Drilling Rigs BV is specialized in the worldwide supply of high quality piling and drilling rigs and accessories. The majority of the equipment is assembled in the new production facility of PVE Piling and Drilling Rigs BV in Oosterhout, the Netherlands. Besides a wide range of hydraulic hammers, PVE offers a full line of different piling and drilling rigs, rotary heads and power packs. PVE is using the best available components and is selecting the components on quality and worldwide availability and support. Examples are Caterpillar engines and Bosch Rexroth hydraulic pumps.

PVE Piling and Drilling Rigs is a business unit of the Van Es Holding Group. The Van Es Holding Group has offices and yards with technical support all over the world. With this worldwide network and help of a big number of dedicated dealers the best possible service and response is guaranteed. All companies that are part of or affiliated with the Van Es Holding Group are specialized in the worldwide supply of heavy construction equipment. A brief overview of some of the products offered for rent and sales are:

Jack up barges (modular and monohull) www.jackupbarge.com

Tug boats, pontoons and other heavy equipment www.wwefareast.com & www.worldwidecaribbean.com

Vibratory hammers, power packs and accessories www.diesekogroup.com

Crawler cranes (50 – 1000 tons capacity) www.pyecranes.com

Piling and drilling rigs, impact hammers & power packs www.pvepiling.com

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PVE 'NL Series' Hammers

and MeasureStrike system

Powerful, Versatile and Efficient



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PVE 'NL Series' hydraulic hammers and 'MeasureStrike' system

PVE has introduced the fully new line of 'NL Series' hydraulic hammers. PVE's strategy is to integrate the latest available environmental friendly technologies to optimize performance and efficiency. The 'NL Series' type hammers are accelerated, sound insulated and guarantee the highest quality and they are made in the Netherlands. Still the hammers are versatile in use, easy to maintain and light in weight. The new 'NL Series' hammers are able to give very small blows and are also offered with the unique 'MeasureStrike' system. The 'MeasureStrike' data monitoring system provides data measurement and registration on the energy, blow count and parameters like depth, driving time and pile number.

Unique product features

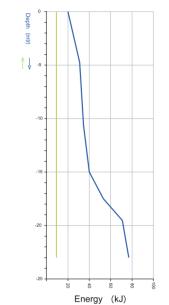
- Cylinder assembly in a way that minimizes wear and tear on bearings
- High quality and easy to exchange drive cap assembly
- Shock-resistant electronic connectors & HQ electronic cable
- Accelerated mode to optimize the efficiency
- Modulair construction which makes parts exchangeable
- Solid construction of leader guidance assembly
- High frequent blow rate is possible with the new 'NL Series' models

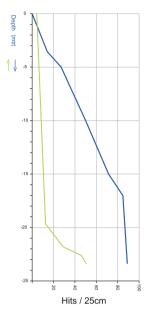
The 'NL Series' hammers are not only very efficient and fast in their operation, they are also sound insulated making the noise decrease by about 25%. With help of the new accumulator and cylinder system the impact hammers are accelerated by 20% creating a higher efficiency and a higher daily pile production. PVE is also able to offer hydraulic power packs with bio-degradable oil, stage 4 engines and full sound insulation. PVE offers the 'NL Series' hammer in a range of 3 till 18 tons dropweight. Separate datasheets on the PVE 'NL Series' hammers are available.

Example of a typical read-out of the PVE MeasureStrike system.

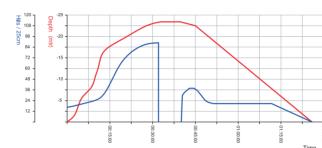
These details are based upon the installation of cast-in-situ driven piles as per mentioned data.







Timediagram





PVE hydraulic impact hammers

Model, PVE	3 NL	4 NL	5 N	L 7	NL	9 NL	12 NL	14 NL	16 NL	18 NL
Maximum potential energy (kJ)	43	57	72	101	127	212	247	282	318	
Maximum net. energy (kJ)	36	48	60	84	106	177	206	235	265	
Maximum stroke (mm)	1.200	1.200	1.200	1.200	1.200	1.500	1.500	1.500	1.500	
Minimum stroke (mm)	200	200	200	200	200	200	200	200	200	
Blowrate at max. stroke (bl/min)	40	40	40	40	40	30	30	30	30	
Ram weight (ton)	3	4	5	7	9	12	14	16	18	
Hammer weight excl. sleeve (ton)	6	8,5	9,5	11,5	13,9	21,8	23,8	26,8	29,8	
Maximum pressure (bar)	140	155	165	185	235	170	200	230	260	
Required oilflow (ltr/min)	390	390	390	390	390	650	650	650	650	
Length indication (mm)	5.940	5.940	5.940	6.640	7.740	8.690	8.690	9.490	10.290	
Max. width indication (mm)	940	940	940	940	940	1.500	1.500	1.500	1.500	
Max. height indication (mm)	904	940	940	940	940	1.500	1.500	1.500	1.500	

Recommended power pack

Power pack model, PVE	250 NL	500 NL	. 500 NI	L 500 NL	500 NL						
Hammer model, PVE	3 NL	4 NL	5 NL	7 NL	9 NL	12	NL 14	NL 16 N	NL 18 N	IL .	
Engine output (HP) min.	220	220	220	22	0 2	220	470	470	470	470	
Max. oilflow (ltr/min)	400	400	400	40	0 4	100	800	800	800	800	
Max. working pressure (bar)	250	250	250	250) 2	50	250	250	250	250	
Operational weight (kg)	5.500	5.500	5.50	0 5.50	00 5.5	500	6.900	6.900	6.900	6.900	
Length indication (mm)	3.500	3.500	3.50	00 3.5	00 3.	500	4.255	4.255	4.255	4.255	
Width indication (mm)	1.540	1.540	1.54	1.5	40 1.	540	1.750	1.750	1.750	1.750	148
Height indication (mm)	2.045	2.04	5 2.04	15 2.0	45 2.	045	2.115	2.115	2.115	2.115	

PVE offers a wide range of high quality accessorie

- Inserts for different diameters precast concrete piles
- Sleeves for different diameters of steel casings
- Accessories to drive sheet piles

- Accessories to drive sheet piles
- Custom made sleeves for spun piles
- Spare parts packages



