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Netter Pneumatic Impactors Series PKL



- Higher impact power than traditional impactors
- Lower compressed air requirement per impact
- Low-noise versions with elastomer insert EE
- Versions with automatic control ST
- ATEX or stainless steel versions available



PKL 450



PKL 740



PKL 2100



NetterVibration

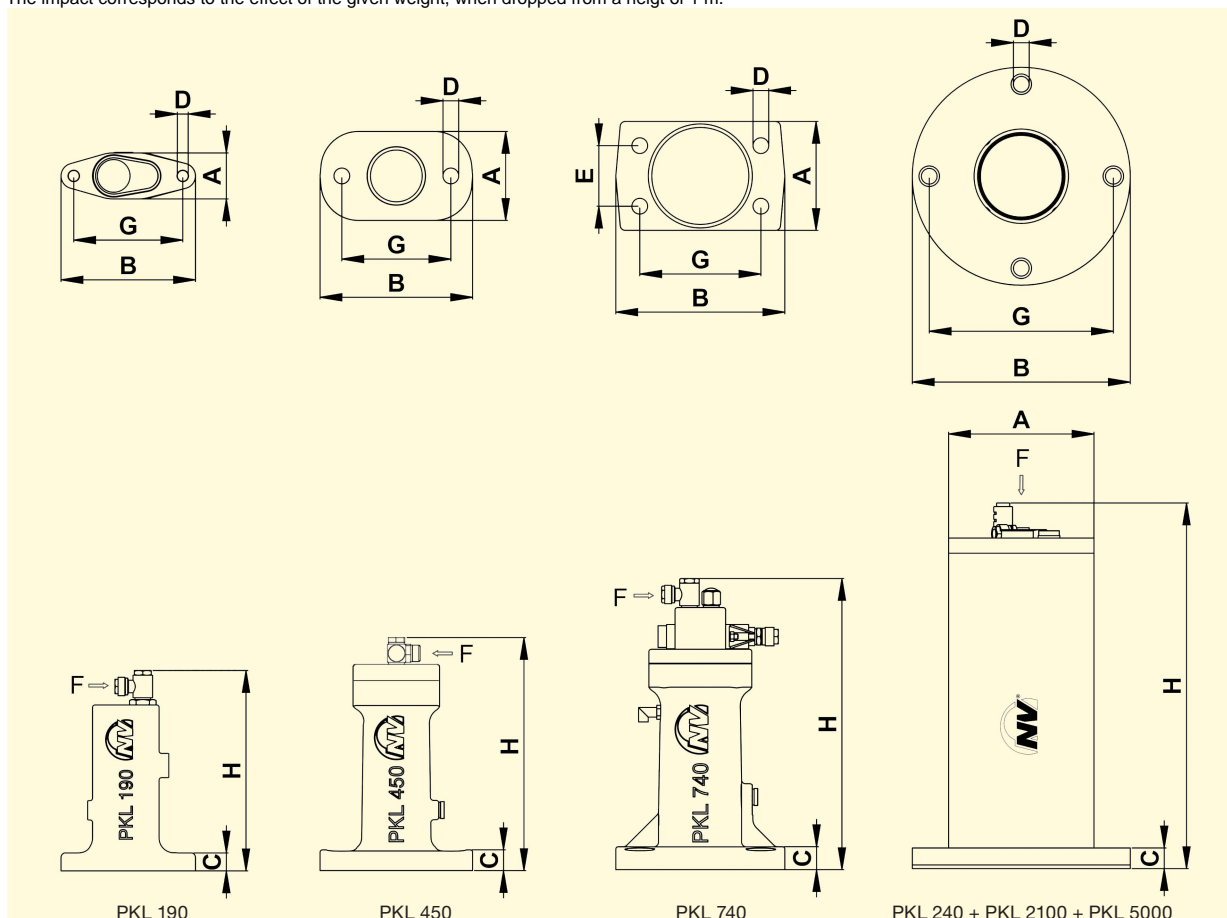


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| Type | Piston Weight [kg] | Impact Force* [kg] | Optimum Operating Pressure [bar] | Air Requirement/Impact at Optimum Pressure [Normalliter] | Total Weight [kg] | Suitable for Wall Thickness [mm] |
|--------------|--------------------|--------------------|----------------------------------|--|-------------------|----------------------------------|
| PKL 190/4 | 0,19 | 0,43 | 4,0 | 0,09 | 0,8 | 1 – 2 |
| PKL 190/6 | 0,19 | 0,60 | 6,0 | 0,14 | 0,8 | 1 – 2 |
| PKL 450/4 | 0,44 | 0,56 | 4,0 | 0,13 | 1,6 | 1 – 3 |
| PKL 450/6 | 0,44 | 0,92 | 6,0 | 0,18 | 1,6 | 1 – 3 |
| PKL 740/3 | 0,74 | 1,30 | 3,0 | 0,27 | 2,6 | 2 – 4 |
| PKL 740/4 | 0,74 | 1,80 | 4,0 | 0,38 | 2,6 | 2 – 4 |
| PKL 740/5 | 0,74 | 2,10 | 5,0 | 0,43 | 2,6 | 2 – 4 |
| PKL 740/6 | 0,74 | 2,70 | 6,0 | 0,54 | 2,6 | 2 – 4 |
| PKL 2100/4 | 2,10 | 4,20 | 4,0 | 1,55 | 6,7 | 3 – 5 |
| PKL 2100/5 | 2,10 | 6,20 | 5,0 | 1,93 | 6,9 | 3 – 5 |
| PKL 5000/4 | 4,96 | 6,60 | 4,0 | 1,50 | 16,0 | 4 – 8 |
| PKL 5000/4 S | 4,96 | 6,60 | 4,0 | 1,50 | 16,0 | 4 – 8 |
| PKL 5000/6 | 4,96 | 10,60 | 6,0 | 2,20 | 16,5 | 6 – 12 |
| PKL 5000/6 S | 4,96 | 10,60 | 6,0 | 2,20 | 16,5 | 6 – 12 |

| | | | | | | |
|-----------|-------|-------|-----|------|------|---------|
| PKL 240/4 | 10,50 | 12,40 | 4,0 | 2,00 | 24,0 | 10 – 12 |
| PKL 240/6 | 10,50 | 16,60 | 6,0 | 3,01 | 24,1 | > 10 |

*The impact corresponds to the effect of the given weight, when dropped from a height of 1 m.



| Type | A [mm] | B [mm] | C [mm] | Ø D [mm] | E [mm] | F | G [mm] | H [mm] |
|----------|---------|--------|--------|----------|--------|---------------|--------|--------|
| PKL 190 | 38 | 111 | 15 | 9,0 | — | G 1/8, NW 6×1 | 90 | 163,5 |
| PKL 450 | 73,5 | 126 | 14 | 13,0 | — | G 1/8, NW 6×1 | 90 | 192,0 |
| PKL 740 | 90 | 140 | 15 | 13,0 | 50 | G 1/8, NW 6×1 | 100 | 238,5 |
| PKL 2100 | Ø 120,0 | Ø 180 | 17 | 13,0 | — | G 1/8, NW 6×1 | Ø 152 | 301,5 |
| PKL 5000 | Ø 114,3 | Ø 180 | 22 | 17,0 | — | G 1/8, NW 6×1 | Ø 152 | 376,5 |

| | | | | | | | | |
|---------|---------|-------|----|------|---|---------------|-------|-------|
| PKL 240 | Ø 114,3 | Ø 180 | 27 | 17,0 | — | G 1/8, NW 6×1 | Ø 152 | 405,0 |
|---------|---------|-------|----|------|---|---------------|-------|-------|

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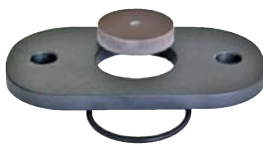
ST Kit

Applications

The ST kit enables a continuous impact sequence when connected to a permanent compressed air supply.

Impact Frequency

The impact frequency can be adjusted by means of a throttle valve installed in the air supply line. The maximum impact sequence must be observed.



EE Kit

Applications

The EE kit is used to produce a low-noise impact or "rubber hammer effect".

Design and Function

A spacer plate with an elastomer insert, is installed between the impactor and the mounting surface of types PKL 190, 450 and 740. The existing strike plate of PKL 240, 2100 and 5000 is replaced by an elastomer plate which reduces considerably the noise level.



Special Versions ATEX / Stainless Steel / High Temperature

PKL E (ATEX)

Netter series PKL E pneumatic impactors comply with directive 94/9/EC (ATEX product directive) device group II and are suitable for use in potentially explosive areas of category 2 (2G and 2D 85°C[T6]) in zones 1, 2, 21 and 22.

PKL S (Stainless Steel)

Stainless steel intermittent impactors satisfy the specific requirements for chemical resistance of the surfaces.

PKL HT (High Temperature)

The HT series is designed for use at ambient temperatures of up to 160°C.



Weld-On Consoles

Applications

Welding consoles ASB and welding plates ASP, available as straight or round versions, are suitable for attachment to square, round and conical containers.

They allow optimum transfer of the impulses produced by the impactor, while reducing the loads on weld seams and container walls.

Design and Function

The weld-on consoles are welded directly to the container. The impactor is then screwed to the console using fixing set NBS.



Fixing Sets NBS

Applications

NBS fixing sets provide a safe and permanent fixing of PKL impactors.

NBS fixing sets consist of special screws,

damping elements, washers and nuts, to suit the respective application.

The fixing sets are available in different executions.



Control Valves

Applications

Directional control valves are necessary for the control of impactors.

They can be activated either by hand or by means of an electronic timer.

Our product range includes electric, pneumatic and manually operated valves.



Electronic Timer AP and PAP

Applications

Electronic timers are used for the control of impactors, solenoid valves and contactors, wherever a process requires variable timing.

Design and Function

The adjustable duty time or pause time of the AP 116 has a control function by means of an electric signal (e.g. to a solenoid valve). The pneumatic duty-pause controls (PAP 115 and PAP 116) directly control the compressed air supplied to the system and can be used in wet areas.

Controlling the duty time reduces energy consumption and noise levels.



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Insulation hoods

Applications

The use of hoods is particularly worthwhile for bunkers with insulation covers.

Attaching the insulation hood to the insulation cover fully insulates the source of the noise (bunker).



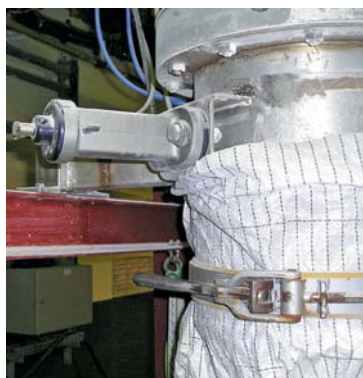
Vacuum Fixing Devices VAC

Applications

Series VAC vacuum fixing devices serve the fast fixation of impactors on smooth or, under certain circumstances, rough or curved surfaces. They allow quick and simple attachment without welding or screwing.

Design and Function

As soon as compressed air is supplied to the VAC mounting, the device is sucked tight, ensuring a force-locked connection between the impactor and the mounting surface. ATEX compliant mountings and units with stainless steel plates are available.



Cleaning pipes



Cleaning bunker walls



Cleaning weighing containers

Applications

Series PKL pneumatic impactors are particularly suitable for knocking stubborn residues from walls, pipes and containers.

Examples of applications include: elimination of tubeforming, bridging and evacuation of residues.

Design and Function

The impact (similar to a hammer) is created by the piston. With PKL 190 to 740 the impact is produced directly against the surface upon which the impactor is mounted. From PKL 240 to PKL 2100 and PKL 5000 the piston hits the base plate. The compressed air pushes the piston against one or two springs.

The fast exhausting of the piston chamber causes the piston to strike abruptly against the impact surface. Series PKL impactors can be operated using nonlubricated compressed air. A directional control valve is necessary for activation (not included).

The maximum impact sequence is 10 impacts in a row, at a rate of 15 impacts per minute and 180 impacts per hour.

Permissible Operating Conditions:

Drive Medium:

Compressed air or nitrogen (filter $\leq 5 \mu\text{m}$), Preferably with oil mist

Operating Pressure:

2,5 bar to 6 bar

Ambient Temperature:

-20°C to 60°C

HT version up to 160°C

NetterVibration offers the accessories required for the mounting, installation, control and monitoring of vibrators and impactors.

Netter provides solutions.

Consult our experienced application technicians.

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