

IDEAS THAT WORK.



Variolock[®] VL30/80

**Full automatic
quick coupler systems
Mini & compact excavators**

Lehnhoff® Variolock system

- ✓ Compatible with all Lehmatic attachments such as backhoes, rippers etc.
- ✓ Safely integrated into the proven Lehnhoff quick coupler system
- ✓ Accurate hydraulic connection through patented valve clamping technology
- ✓ Minimal pressure loss and less heat development with high oil flow rates
- ✓ Robust, easy to clean and maintain
- ✓ All Lehnhoff quick coupler systems are Euro Test certified
- ✓ Shovel bucket option by using **Symlock**® adapter (also for tilt bucket)



Technical specification

Excavator category	Mini excavator		Compact excavator
Operating weight	0,7 - 2t	1,5 - 5t	5 - 12t
Lehnhoff quick coupler	MS/HS01	MS/HS03	MS/HS08
New ! Lehnhoff Variolock		VL 30/3	VL 80/8
Lehnhoff short stroke valves			
Type	Size	Flow rate (l/min)	
KV1	> DN12 \triangle 1/2"	5	3
KV2	> DN16 \triangle 5/8"		2

Variolock reduces costs.

Existing backhoes with Lehnhoff adapter can still be used!

All types of buckets and attachments with original **Lehnhoff** adapters without hydraulic function can still be used. In this case, only a slight modification is required to ensure the protection of the valve block on the quick coupler.

- No modification of the quick coupler adapter required
- Simple and effective valve block protection
- Simple retrofitting to existing backhoe buckets

Valve block protection for backhoe buckets and tools without hydraulics



Lehnhoff® Variolock, the intelligent quick coupler system

Each attachment is ready for safe use in a matter of seconds.

Changing any attachment with the Variolock full automatic energy circuit coupling system, is effortless, safe and fast. The operator can change any tool including the hydraulic connection at the touch of a button from the comfort of his cab. The hydraulic unit and the tried and tested original Lehnhoff quick coupler form a compact unit.



e.g. from **grab** to **tilt bucket** in a matter of **seconds**



Lehnhoff® quick coupler systems are proven on over 100,000 excavators



It's worth it: fully automatic changing of attachments with Variolock

- ✓ Increased efficiency by saving time and manpower
- ✓ More efficient working - tool changes are viable even for short working cycles
- ✓ Cutting costs by treating machinery, attachments and hydraulic hoses with care
- ✓ More safety and comfort for the operator
- ✓ Less contamination of the hydraulic system, environmentally friendly
- ✓ Prevention of hydraulic hose failure

Variolock turns an excavator into a multi-functional all-rounder



Tilt bucket

Hydraulic hammer

Sorting grab

..... with integrated energy circuit coupling

Fits to Leihhoff
quick coupler SW03
MS03 . HS03 . VL30

Standard feature:
2 load hooks

Valve block integrated into
the quick coupler (S-block)

Valve block on the adapter
of the attachment (A-block)

Locking operation

When locking the quick coupler to the adapter, the valves are automatically opened and kept pressurised by an active clamping support. The extreme short stroke of 0 - 3.5mm now allows full oil flow. The quick coupler is always locked securely and without play by using continuous pressure.

**5 short stroke valves for all tools
all functions including oil leakage pipe**

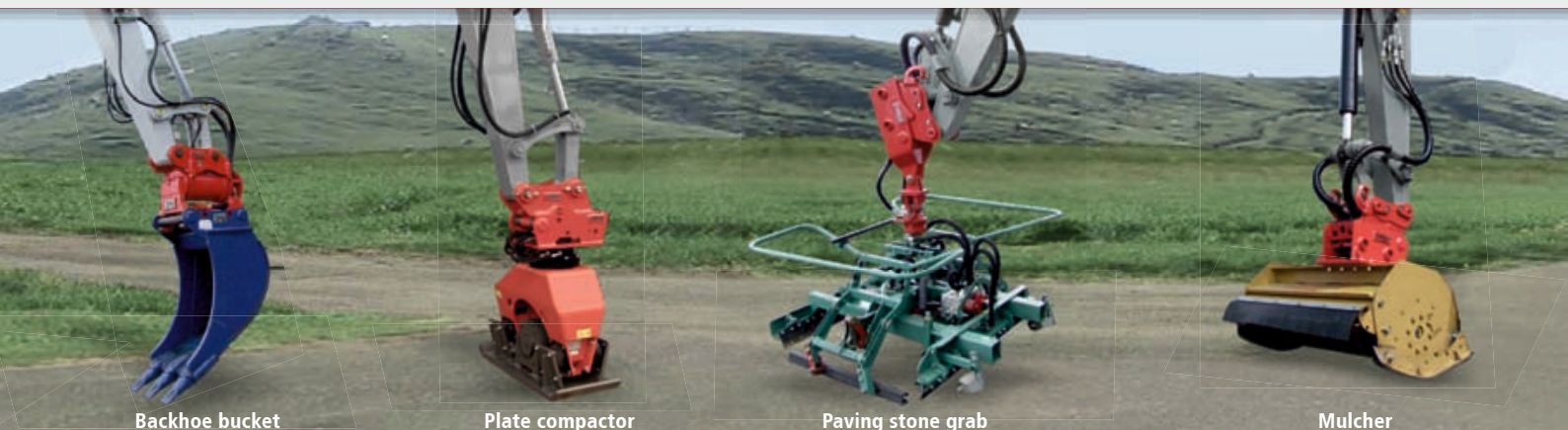
S-block:

KV2 = 160 l/min.

A-block:

S-block: Valve block in the quick coupler

The S-block is flexibly and centrally mounted on the underside of the quick coupler and consists of 5 short stroke valves which connect all the hydraulic circuits of the attachments securely and sealed with the working hydraulics of the excavator.



Backhoe bucket

Plate compactor

Paving stone grab

Mulcher

... **Proven technology for maximum performance and success.**

VL80

Fits to Lehnhoff
quick coupler SW08
MS08 . HS08 . VL80

Flexible mounting of the
S-block with silent dampers

A-block on tilt bucket with
symmetric arrangement

NEW!

Lehnhoff short stroke valves KV

These have been specifically designed for excavators and attachment tools with maximum oil flow.

- Maximum flow rate means:
 - ✓ No dynamic pressure
 - ✓ Less heat development
 - ✓ Lower fuel consumption
 - ✓ Higher efficiency
- Easy cleaning and maintenance

KV1 = 110 l/min.

A-block: Valve block on the adapter/attachment

The A-block which is attached to the adapter of the working tool can be optimally adapted to the respective tool functions with up to five valves. The Lehnhoff short stroke valve forms a plane surface with the surface of the block and is easy to maintain.



Unique features for mini & compact excavators

Variolock VL30/VL80

Symlock® tilt bucket

"Never change the winning team!" - Inspired by this motto, we have not only considered the continued use of your existing attachments by keeping the Lehmatic housing and adapter sizes. Thanks to symmetric valve geometry, you can also use hydraulic tilt buckets as shovel buckets with the help of a Symlock adapter.



Variolock with shovel bucket
Hydraulic tilt bucket with Symlock adapter
and symmetrically arranged A-block.

Dealers/partners



Lehnhoff Hartstahl GmbH & Co. KG

Rungsstrasse 10-14
D-76534 Baden-Baden

P.O. Box address:
Postfach 11 01 65
D-76487 Baden-Baden
Germany

Phone +49 (0)7223 / 966 - 140
Fax +49 (0)7223 / 966 - 109
E-Mail: info@lehnhoff.de

Visit us online
www.lehnhoff.com

