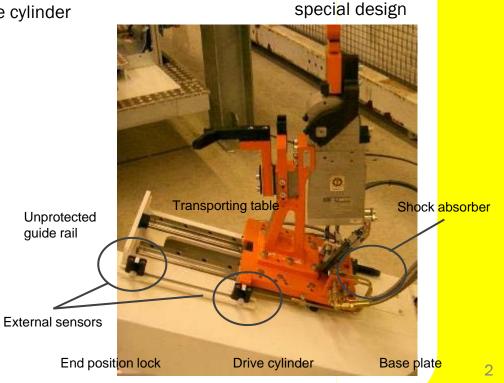


Linear unit with toggle lock in both end positions

Utilisation of linear units in body-in-white assembly



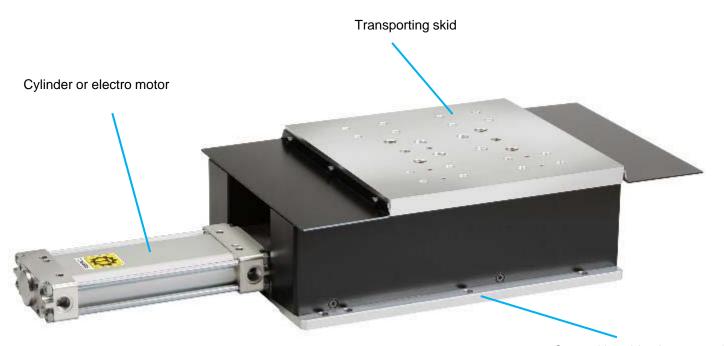
- Linear units are used e.g. for transporting components, clamps or contour elements.
- Usually, the working position e.g. "position forward" is defined by means of a pin or lock for a safe position without backlash.
- In some cases, as e.g. positioning of underbody clamps for various vehicle types, both end
 positions are working positions which must be locked accordingly.
- For this lock, several elements (brake, clamp, pin, cylinder) are required in addition to the drive cylinder of the linear unit, which must be controlled separately.
 - Additional valve
 - Loss of cycle time
 - Additional space



Typical linear unit as

New TÜNKERS linear unit with dual lock





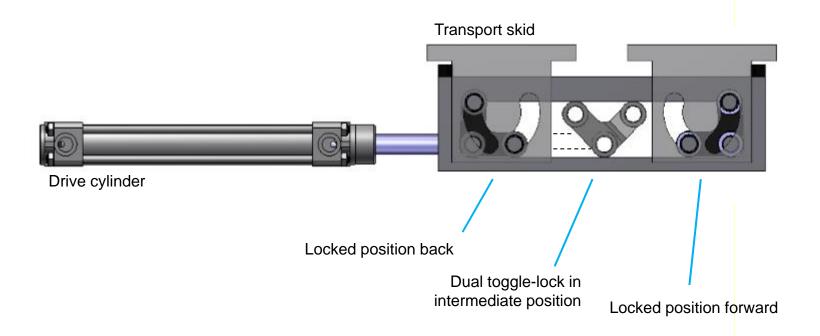
Case with guide element and dual lock

Linear unit in classical design

- Aluminium base plate
- Drive cylinder in flat design or alternatively with electric motor with spindle drive
- Guidance of the skid by means of four recirculating ball bearing slides

Patented: Dual toggle-lock mechanism



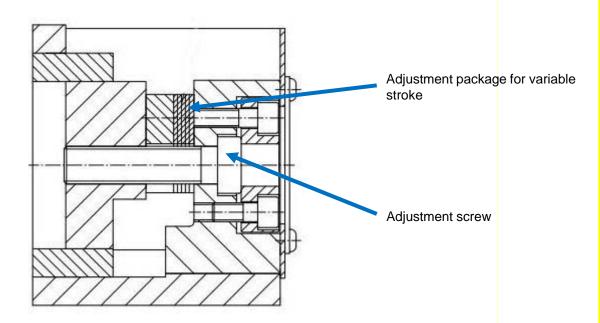


- Similar to the toggle-lock clamp, the piston rod of the cylinder does not actuate the skid directly, but via a toggle-lock mechanism
- In the end position, the joint moves beyond dead centre-lock which means that the position is mechanically locked, backlash-free and safe even in case of a pressure drop.
- The joint has a double-angle design, thus locking in both positions.

Optional variable stroke



- For those cases in which the total stroke must be adjusted or corrected on site, we offer the LEV unit also with a variable stroke.
 - Adjustment area \pm 25 mm
 - Locking function remains unchanged
 - Stepless adjustment by screw with shims package/adjustment plates



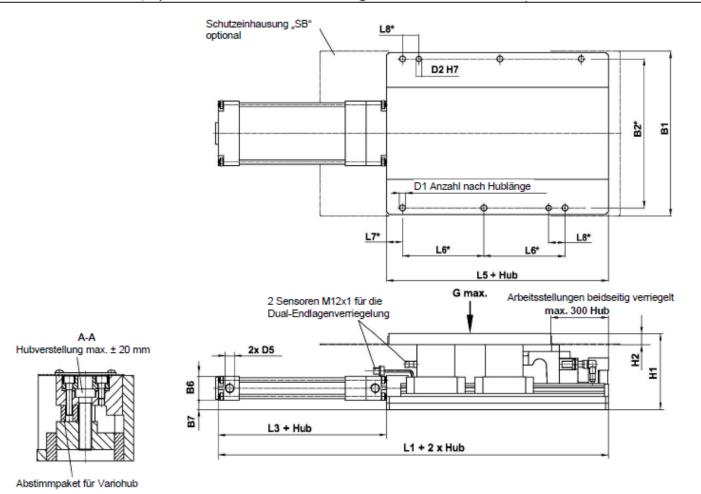
Technical data LEV 100



Lineareinheit

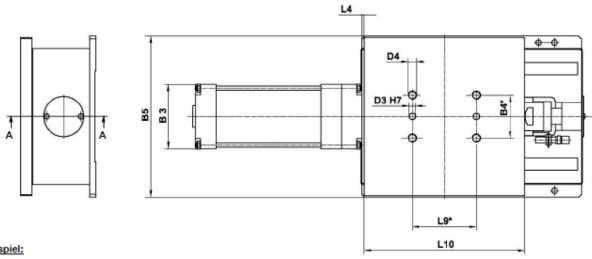
max. 300 mm Hub, mit Kniehebelverriegelung in beiden Endlagen, für horizontalen Einbau, optional mit Schutzeinhausung

LEV 100



Technical data LEV 100





Bestellbeispiel:

LEV 100 200 SB T02

LE 100: Тур 200: Hub

G max.: Option: Schutzeinhausung LEV 100 = 100 kg

T02: Abfragesystem

Sonderhübe auf Anfrage.

Bestellschlüssel Tünkers Abfragesysteme:

...T00 Ohne Abfrage

...T02 Induktivabfrage 24 V, 2 Abgänge

ohne LED Anzeige

Für Belastungsangaben siehe separates Datenblatt.

*Toleranz für Stiftbohrungen ± 0,02 für

Gewindebohrungen ± 0,1.

Тур	Anstellkraft bei 6 bar		Drehmoment M max.			Gewicht bei 100 Hub ~ (kg)		L1	L3	L4	L5	L6	L7	L8	L9	L10
LEV 100	1,75 kN		100 Nm	100, 200, 300 ± 20 mm		40		525	215	4	310	150	30	30	120	300
Tim	D4	D2	D2	D4	D.E.	De	D7	D4 Ø	D2	~	D2 Ø	D4	D/		U4	เมา

LEV 100 305 276 120 300 17 M16 3/8 140

P000021653.D.DOC

Stand: 06.01.2015

Technische Änderungen vorbehalten.



Benefits of the LEV unit at a glance



- Toggle-lock, backlash-free end position
- The transporting motion is stopped by the toggle-lock.
- Locked by the drive cylinder, no additional actuator required
- Standard strokes 100 mm, 200 mm, 300 mm
- Optional variable stroke ± 25 mm
- Max. load100 kg



Contact:

Christian Kleinschmidt

TÜNKERS Maschinenbau GmbH Am Rosenkothen 4-12 D-40880 Ratingen

Phone +49 (0) 2102-45 17-595 Fax +49 (0) 2102-45 17-9999

E-Mail christian.kleinschmidt@tuenkers.de

Internet <u>www.tuenkers.de</u>