

## The technology at a glance:

- Stroke lengths up to 250 mm
- Breaking load: 28,000 N
- Optional emergency release via push-pull cable
- Corrosion protection level up to C4



### Your advantages:

- 100% burn-in test before delivery
- Highest reliability
- Extremely low maintenance
- Noiseless and stepless adjustment of restraining bracket



„The acceptance of the ride, whether at the initial acceptance or by the operator on site, is significantly accelerated by the TÜV certification.“

„The ready-to-install delivery shortens the assembly time and thus reduces our costs.“

P\_LE-X Flyer EN - 10/2019

#### HAWE Micro Fluid GmbH

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**HAWE**  
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## Hydraulic locking unit „LE-X“

State-of-the-art safety solution for passenger restraint systems in amusement rides

**NEW**  
in 2020



Solutions for a World under Pressure

**HAWE**  
HYDRAULIK

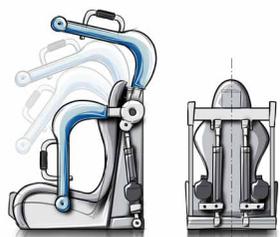
## Designed and built by the industry leader – Made in Germany

### Proven technology rethought

The new generation of hydraulic locking units type „LE-X“ is designed for highest loads, just as accustomed by type HLU-LE32V. The breaking load is 28,000 N. This design ensures the safety of the passenger even in the most demanding rides. By achieving very compact dimensions, the installation will be easier and can be completely integrated into the seat housing. IP 65 protection has been implemented for the relevant components as standard for use even in dusty or humid environmental conditions. Optionally, we offer corrosion protection up to level C4.

### Various options are available

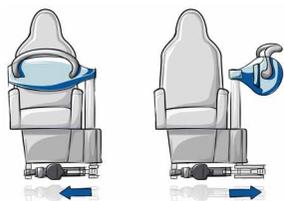
The manual emergency release can now be operated even more conveniently via an up to 5 m long Bowden cable (push-pull cable). This also facilitates installation in confined spaces and difficult installation conditions. A selection of available pressure accumulators allow a customer-specific configuration for different seat sizes and types.



Shoulder bar



Lap bar



Waist bar



## Certified for the safety of your customers and passengers

HAWE Micro Fluid GmbH has been successful with its HLU hydraulic locking systems in the market for rides since 1995. In addition to roller coasters, robot simulators and water rides, VR rides and 4D cinemas are now increasingly being added as applications. The company is ISO 9001 certified. All associated advantages for manufacturers and operators also benefit the new LE-X product line.

### Certifications

- ISO 17842-01:2015
- DIN EN 13814
- ASTM 2291-15
- ISO 9001
- TÜV Süd
- RoHS
- REACH

### Main dimensions

| Stroke [mm] | LO [mm] | W [mm] | D [mm] |
|-------------|---------|--------|--------|
| 80          | 323     | 104    | 59     |
| 140         | 383     | 104    | 59     |
| 150         | 393     | 104    | 59     |
| 190         | 433     | 104    | 59     |
| 250         | 493     | 104    | 59     |

