

Floor-Lock-Sets

Lock, stabilizing aid, and damping for surgical robots, operating tables and mobile medical equipment

Floor-Lock Sets

During use, mobile medical equipment such as operating tables or surgical robots must be secured and supported, regardless of flooring. At the same time, maximum safety must be ensured - a top priority in ongoing clinical operations. With the increasing emergence of hybrid operating rooms, these topics will be of tremendous importance in the future. HAWE offers you a number of solutions.

- Locking, damping, and stabilizing aid
- Versatile use, such as for operating tables or surgical robots
- Increased patient safety: improved stability under load during movement/during treatment
- Easy to integrate into existing systems
- Usage with even or uneven flooring

Product Portfolio

Traditional system

In traditional systems, the caster and support cylinder are implemented separately from each other. These systems are preferred in price-sensitive markets. Integrated into the medical equipment in a compact design, these versatile systems made by HAWE play a crucial role in achieving greater mobility and flexibility.

HAWE / RHOMBUS twin caster system

The twin caster series developed in conjunction with the renowned caster manufacturer RHOMBUS (Colson) offer an optimal expansion for the HAWE floor lock systems. A HAWE hydraulic cylinder incorporated into the caster makes this a highly integrated and versatile system compared to the traditional solution, allowing customers to meet the growing needs of the markets for even more flexibility, mobility and safety.

Floor-Lock „Selfcompensating“

Two cylinders extend completely and raise the medical device by approx. 3 mm. The two other cylinders are extended until they make contact with the floor. The integrated pressure switch indicates this to the control unit, and the movement stops after a brief shut-off delay. The medical equipment is raised on this side in accordance with the load and the setting of the pressure switch.

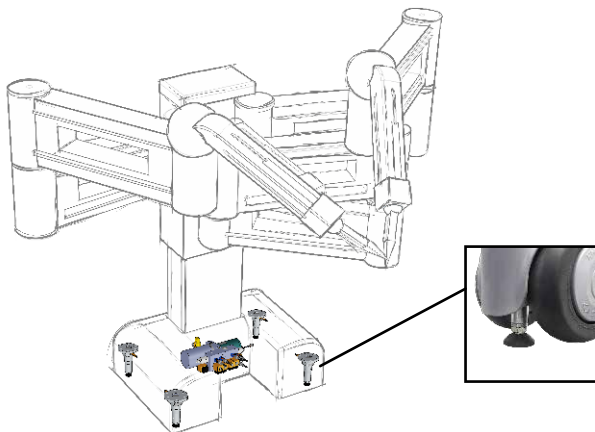
Floor-Lock „Non-selfcompensating“

The four cylinders are extended to the end stop and lift the medical device about 3 mm off the castors.

Passive „Vibration damping system“

Four cylinders are extended until they make contact with the floor. The medical device (e.g., surgical robot) will not be raised. Since a force is applied toward the floor in all four corners, the system does not rock.

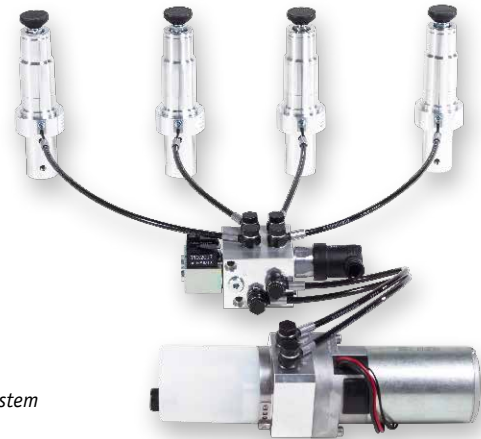
Application example



Floor-Lock-System

Force (nominal)	up to 250 kg per cylinder*
Stroke	up to 30 mm
Leveling	up to 10 mm
Traditional floor lock system	Cylinder and caster separate from each other
HAWE/RHOMBUS-CASTOR SYSTEM	Highly integrated, compact system
CASTOR SYSTEM	system
Vibration damping system	Passive behavior

* statical, 4 times safety against bursting



Example:
HAWE
Floor lock system

Power Unit

Type	A065
Size	65 x 65 mm
Pressure (standard)	120 bar
Pressure (max)	150 bar
Rate of delivery	approx. 0.6 l/min
Protection class	IP50
Order No.	607-8002-2



Power unit A065

Valve manifolds

Non self-compensating type

Emergency release	yes
Order No.	590-8015-0



Valve block
Non self-compensating

Self-compensating type

Emergency release	no
Order No.	590-8018-1



Valve Block
Self-compensating

Cylinder

Type LF16

Design	Stand-Alone without caster
Stroke	15 mm
Order No.	190-8018-3



Cylinder
LF16

Type RHOMBUS

Design	Integrated into Rhombus- twin caster
Stroke	30 mm
Order No.	190-8062-0



Twin caster
with integrated cylinder

i HAWE standard floor lock sets offer optimally matched solutions. Customized solutions are possible as well. Our extensive experience with individual needs allows us to quickly and efficiently implement your requirements. Feel free to contact us.

Versatile flexibility

Components of the floor lock set				Advantages
Models	Power unit	Valve block	Cylinder	
Traditional system		Non self-compensating for level floors	LF16 Stroke 15	<ul style="list-style-type: none"> ■ Entry into floor lock applications ■ Favorable price-to-performance ratio
HAWE RHOMBUS CASTOR SYSTEM	A065 (for all sets)	Self-compensating for uneven floors	for RHOMBUS caster	<ul style="list-style-type: none"> ■ Compensation for uneven flooring ■ Greater design freedom due to reduced installation space ■ Increased patient safety as a result of improved stability under load during movement or during treatment ■ Better stability, especially with heavier patients

Note: Power unit can be arbitrarily combined with valve block and cylinder

HAWE Micro Fluid GmbH

Borsigstraße 11
 93092 Barbing
 Germany
 Phone: +49 89 379 100 6000
 E-mail: info@hawe-microfluid.com
 Website: www.hawe.com

HAWE Hydraulik SE

Einsteinring 17
 85609 Aschheim/München
 Germany
 Phone: +49 89 379100-1000
 Fax: +49 89 379100-91000
 E-mail: info@hawe.de
 Website: www.hawe.com