

## **Lifting modules Solid**

## Max. lifting force 4,000 N and 6,000 N, stroke from 200 to 400 mm manual-hydraulic version



Lifting modules for high demands on perfor-

mance and service life in the industrial assem-

• Ergonomic design of working places

• Assembly of drive components, axes and

Assembly of turbines, motors and gear

Applications with frequent load changes

Assembly of compressors, hydraulic compo-

• Industrial production plants

Automotive industry

nents and pumps

cardan shafts

Assembly of car seats

### **Advantages**

- Lifting force up to 6,000 N
- Displacement with low friction is also given with high torque load
- High load by roller guiding element with high section modulus
- Sturdy and tough
- Compact design

Description

module.

- Safe and precise handling
- Checked in compliance with DIN EN 1570 with quadruple static overload

The lifting module has an integrated roller guid-

ing element. This allows a backlash-free guid-

ing system with very good smooth running and

the introduction of high moments into the lifting

The guiding system is lifetime lubricated. To

obtain high robustness, all components are

made of high-quality materials. Characteristic

are applications with indifferent, dynamically

swelling rotating motions and shock motions.

All essential elements are made of steel to

obtain a high robustness.

- Better working with lower load
- Integrated stop for pedal

# modulog

## Lifting module



Part no. 8926-0X-X0-H

## Technical data

Max. lifting force: 4,000 N; 6,000 N Max. bending moment: 1,000 Nm Stroke: 200 to 400 mm

## Operations

Pedal



• Rotating modules - horizontal axis DMH 200 as per data sheet M 1.101,



• Tilting modules KMB 100 as per data sheet M 2.101 KME 100 as per data sheet M 2.201



• Rotating modules – vertical axis DMV 600 as per data sheet M 1.301, DMVe 600 as per data sheet M 1.201



WMS as per data sheet M 5.101



• Floor modules FMS as per data sheet M 6.101



## Combinable with the modules

DMHe 200 as per data sheet M 1.201



Cart modules



**Variants** 

**Material** 

Drive variants with brushless electric motor 48 VDC or hydraulic cylinder can be realised on request as per customer's specifications. Service life and lifting speed is perfect for

cycle-related assemblies.

## modulog interfaces

Top plate: 140 x 140 - M10 200 x 200 - Ø 10.5 mm Bottom plate: 200 x 200 - Ø 10.5 mm

### Accessories

- Base and adaptor plates as per data sheet M 8.100 and M 8.110
- Table plates as per data sheet M 8.130

## Fixing and installation

**Application** 

Principal use

bly.

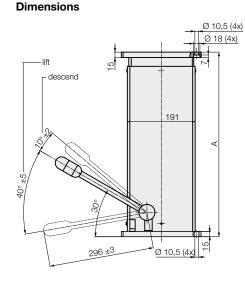
For fixing of modulog modules or other components of the user at the top plate, the lifting module has an interface 140 x 140 and 200 x 200.

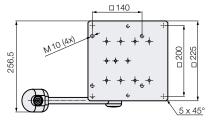
For fixing of modulog modules at the bottom plate, the lifting module has an interface 200 x 200. This plate can also be used to fix the lifting module on a flat level floor. For fixing, screws M10 of property class 10.9 as well as heavy-duty plugs are to be used.

For increased stability, a base plate, which can be mounted to the bottom plate, is available as accessory. Fixing on the floor is made by means of the base plate.

## operation with foot pedal







### Accessories

Base plate for increased stability as per data sheet M 8.100

### **Description**

The stroke movement is obtained by a manual-hydraulic lifting drive with single-lever actuation, with oil being pumped by means of a piston pump into a plunger cylinder.

During retraction, the oil returns due to the weight of the load from the cylinder back to the reservoir. A defined speed control is effected.

The manual-hydraulic version is particularly sturdy and durable. This variant meets high safety demands and withstands jerking and knocking loads in applications.

## Code for part numbers

Part no. 8926-0X-X0-H

Maximum lifting force

4 = 4,000 N
6 = 6,000 N

Stroke

2 = 200 mm
3 = 300 mm
4 = 400 mm

### Operation

To lift the load, the foot pedal has to be depressed by approx. 40° several times. The pedal returns to its off-position by means of a return spring.

To lower the load, the foot pedal has to be moved upwards by approx. 10°.

### **Technical data**

| Stroke<br>[mm] | <b>A</b><br>[mm] | A + stroke<br>[mm] | Weight<br>[kg] |
|----------------|------------------|--------------------|----------------|
| 200            | 420              | 620                | 56             |
| 300            | 520              | 820                | 64             |
| 400            | 620              | 1,020              | 73             |

| Lifting force | Pump strokes per 100 mm | Descent speed |  |
|---------------|-------------------------|---------------|--|
| [N]           | •                       | [mm/s]        |  |
| 4,000         | 7                       | approx. 22    |  |
| 6,000         | 9                       | approx. 22    |  |

## Important notes!

To descend the lifting module, a minimum load of approx. 200 N is required.

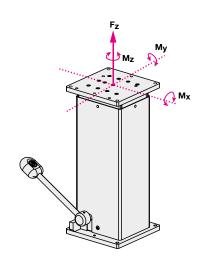
The lifting module must only be pressure loaded. The centre of gravity should be within the traverse of the fixing screws. If the centre of gravity is outside, the dowelled joint with the floor has to be dimensioned correspondingly. In such cases it is recommended to use a larger base plate.

In case of eccentric load of more than 250 mm, the column cannot descend automatically because of too high friction forces.

The lifting module is designed for applications within closed rooms.

The hydro-manual lifting drive can not be operated with synchronization control.

# Maximum lifting force and maximum admissible torque load



## Maximum lifting force Fz:

Alternatively 4,000 N or 6,000 N

## Maximum torque load:

**Total M<sub>X</sub>/y:** 1,000 Nm **M<sub>z</sub>:** 1,000 Nm

In the case of eccentric loads, it is recommended to compensate these by counterweights. In off-position, the indicated maximum torques may occur.

The forces and torques have to be considered by the operator. **During the lifting motion,** only 50 % of the maximum values are admitted.