Rotating Module – Vertical Axis DMV 600

Max. load 6,000 N
manual operation

Advantages
- Rotating in both directions
- Safe indexing
- Compact device
- Sturdy design for industrial assembly
- Allows ergonomic working
- Safe and quick handling in assembly processes
- Easily combinable with other *modulog* modules

Application
Highly-stressable rotating module for universal use in assembly and handling processes in the industry.

Principal use
- Assembly of car seats
- Motor assembly
- Plant construction
- Construction of power units

Material

Body:	steel, black oxide
Rotating plate:	steel, black oxide
Indexing mechanism:	steel, hardened
Bearing:	PTFE

Mounting
To fix *modulog* modules or components of the user, the rotating module has a 140 x 140 *modulog* interface in the flange plate and the body.
As accessory for individual fixing holes a round flange plate without 140 x 140 interface is available.

Description
The rotating module - horizontal axis DMV is a plain bearing rotation axis that can compensate high axial and radial forces. The angle of rotation in both directions is 360°.
Due to special bearings it is insensitive to shocks and thrusts.
The design of the rotating module allows its integration in applications with light as well as with heavy loads.
When using the rotating module in assembly processes, component parts can be rotated rationally, quickly and safely and can be assembled ergonomically from all sides.
The rotating module is equipped with an optional indexing (see page 3).

Operation
The basic version of the rotating modules does not have any operating elements.
The rotating operation is manually effected at the workpiece or at the assembly fixture.
The indexing is operated by a foot pedal.

modulog
Rotating module – vertical axis DMV 600
Part-no. 650X-10-XX-O-X

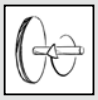
Technical characteristics

Max. load:	6,000 N
Max. torque:	
axial:	800 Nm
radial:	800 Nm
Angle of rotation:	360°

Operations
- Manual

Indexing
Operation with
- Foot pedal

Combinable with the modules
- Rotating module – horizontal axis DMH 200 as per data sheet M 1.101



- Tilting module KMB 100 as per data sheet M 2.101

- Lifting module as per data sheet M 4.XXX

modulog interfaces
- Flange plate: 140 x 140 - M10
- Body: 140 x 140 - Ø 10.5 mm

Accessories
- Flange plate as per data sheet M 8.120

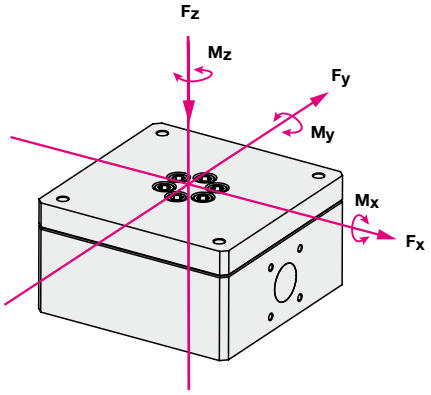
Description
The rotating module - vertical axis DMV 600 does not have an indexing in its basic version. The rotating operation is manually effected at the workpiece or at the assembly fixture.

Part-no.: **6506-10-36-O**

Technical characteristics

Operation:	manual at the component part
Angle of rotation:	360°
Direction of rotation:	both directions
Indexing:	without
Weight:	15 kg

Maximum admissible load

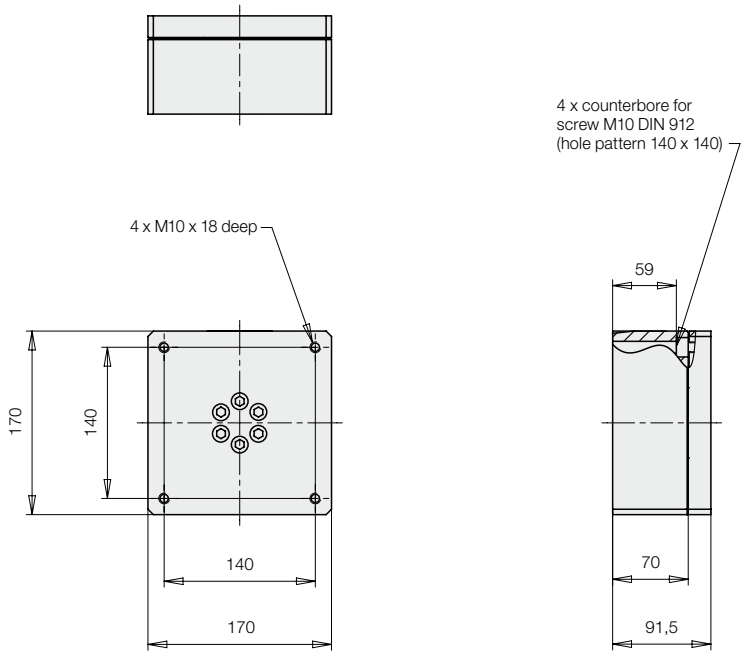


Maximum admissible forces:
F_x = ± 2,000 N
F_y = ± 2,000 N
F_z = + 6,000 N

Maximum admissible torques
Total $M_{x/y}$ = 800 Nm
M_z: only for type with indexing (see page 3)

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 rotating motion only 50 % of the maximum values are admitted.

Dimensions



Important notes!
The fixing screws M10 are not included in our delivery. (Recommended property class min. 8.8)
The rotating module is designed for applications within closed rooms.

Accessories
• Flange plate
round for individual fixing holes
Part-no. 6311-400
See data sheet M 8.120

Description

The rotating module - vertical axis DMV 600 with pedal-operated indexing is a compact and functional unit.
It consists of a basic module with integrated indexing mechanism and an operating unit with foot pedal, connected by a 2 m long hydraulic hose.
This flexible connection allows the individual placement of the operating unit at the most favourable ergonomic position.
The rotating operation is manually effected at the workpiece or at the assembly fixture.

Operation of the indexing

By operating the foot pedal by 35° downwards the index is released and the workpiece or the fixture can be rotated.
If the foot pedal is not operated, the index bolt engages automatically by spring force into the next indexing position. Release of the index is made by means of the sturdy hydraulics.
The operation with a foot pedal guarantees that the operator always has both hands free.
The standard indexing positions are set to 8 x 45°, 6 x 60°, 4 x 90° and 3 x 120°.
Other angles are available on request.

Code for part numbers

Part-no.: 6509-10-XX-O-I

Engagement position

45 = 8 x 45°
60 = 6 x 60°
36 = 4 x 90°
12 = 3 x 120°

Technical characteristics

Operation:	manual at the component part
Angle of rotation:	360°
Direction of rotation:	both directions
Indexing:	hydromechanical Operation with foot pedal
Weight:	25 kg

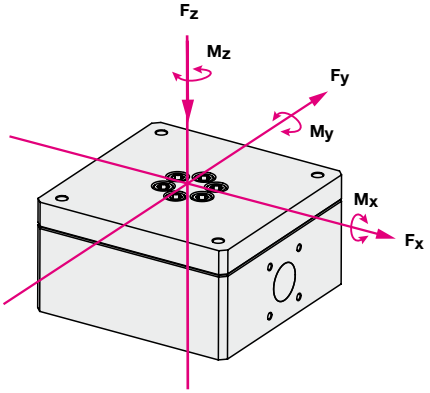
Delivery

The rotating module and the indexing unit including hydraulic hose and hydraulic oil are delivered as completely assembled unit ready for use.

Important notes!

The fixing screws M10 are not included in our delivery.
The rotating module is designed for applications within closed rooms.
The module may only be moved in a controlled way to the indexing positions. If the indexing bolt engages in full motion, the module will be dynamically overloaded.

Maximum admissible load

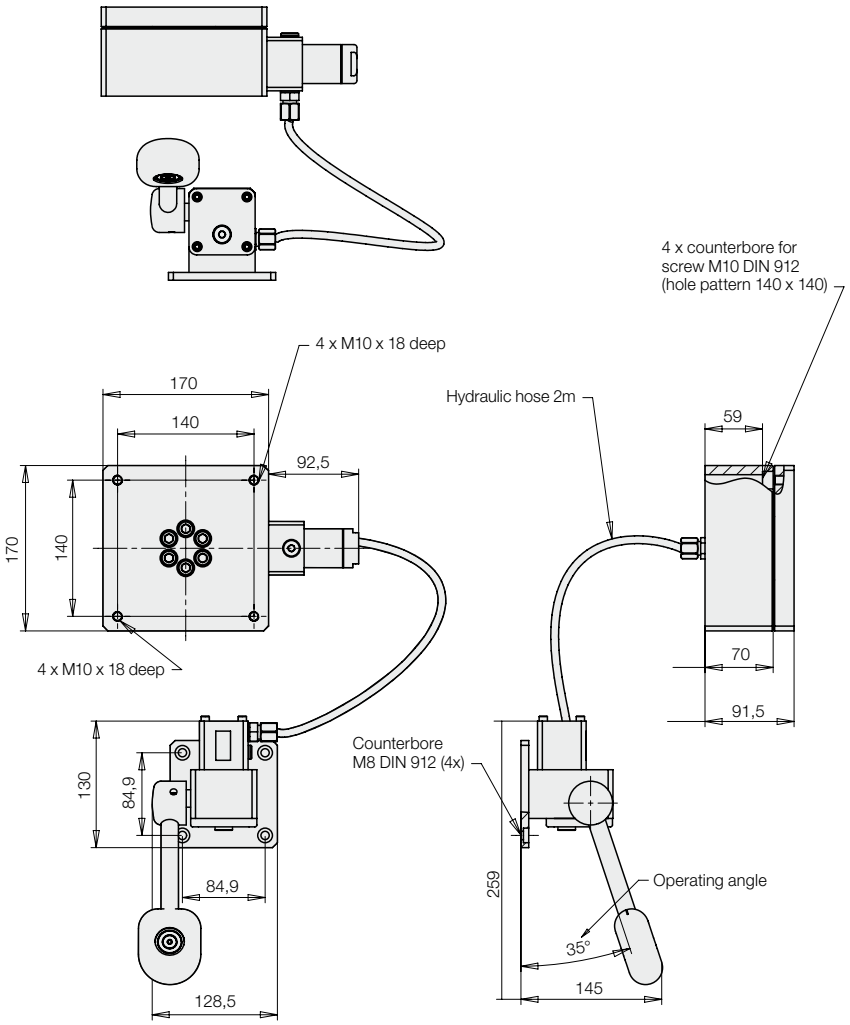


Maximum admissible forces:
F_x = ± 2,000 N
F_y = ± 2,000 N
F_z = + 6,000 N

Maximum admissible torques
Total $M_{x/y}$ = 800 Nm

Maximum admissible torque around the rotation axis M_Z
The maximum torque around the rotation axis of the rotating module M_Z in engaged mode is **800 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 rotating motion only 50% of the maximum values are admitted.

Dimensions



Accessories

• Flange plate
round for individual fixing holes
Part-no. 6311-400
See data sheet M 8.120