

# Rotary gripping module EHMD

FESTO



## Rotation and gripping

### Highlights

- Choice of fully electric or with pneumatic gripper
- Very compact
- Optional compensation module for compensating for the thread pitch of caps (decapping without movement of the Z-axis) by up to 10 mm during rotation
- Easy configuration of the Festo motor controller CMMO-ST or CMMT-ST

The most compact rotary gripping module in its class is ideal for handling small objects in a wide variety of applications. With wipe-down surfaces and a number of features in a clean, compact design, the EHMD is particularly suitable for laboratory automation and the easy opening of a large range of bottles and vials. The unique Z module automatically adjusts to the thread pitches of the caps, eliminating the need for head/adaptor changeover times. The EHMD easily integrates with the motor controller CMMO, offering modes of control including force control.

### Equipped for many tasks

Whether for in-vitro diagnostics, cell or genome research or sample inspection in the biotech and pharmaceutical industries, the EHMD is completely reliable. When preparing and analysing samples, when loading centrifuges, when gripping, rotating and placing microwell plates or even when opening and closing bottles and vials of different sizes.

Combined with a 3D gantry and a camera, it can support quality inspections, rotating samples in front of a barcode reader, or labels printed with a laber printer, not just in batch throughput but also light assembly tasks in the electronics industry or for the food and beverage sector.

### Pneumatic or electric?

The EHMD comes in two versions: fully electric or with a pneumatic gripper. Both permit infinite rotation.

# Rotary gripping module EHMD

The rotary gripping module EHMD comes in two versions: electric rotation and gripping or electric rotation and pneumatic gripping.

Rotation: electric, infinite, with encoder	
Max. torque [Nm]	0.3, sufficient for opening bottles of up to 15 ml
Precision [°]	0.2
Max. speed [rpm]	150, at lower torque up to 240

Gripping: electric or pneumatic	
Stroke [mm]	2x 5, 2x 15
Speed [mm/s]	6
Max. gripping force [N]	35 N with 2x 5 mm, 14 N with 2x 15 mm
Opening time	< 0.4 s at a stroke of 2x 2 mm in positioning mode
Version with electric gripper	Positioning or force control, self-locking in case of energy loss, weight 681 g
Version with pneumatic gripper	Force control with force adjustment via operating pressure, with T-slot for proximity sensor, weight 577 g
Temperature [°C]	0 ... 40
Protection class	IP20



### Wide range of accessories

These include, for example, a mounting adapter for extended thread pitch compensation on bottle and vial capping and decapping. This means that the Z-axis does not need to be used during rotation – the capping and decapping process becomes

easier, faster and applicable for a wide variety of cap types and thread pitches.

Further adapter plates for different Z-axes are also available.

## System overview including accessories

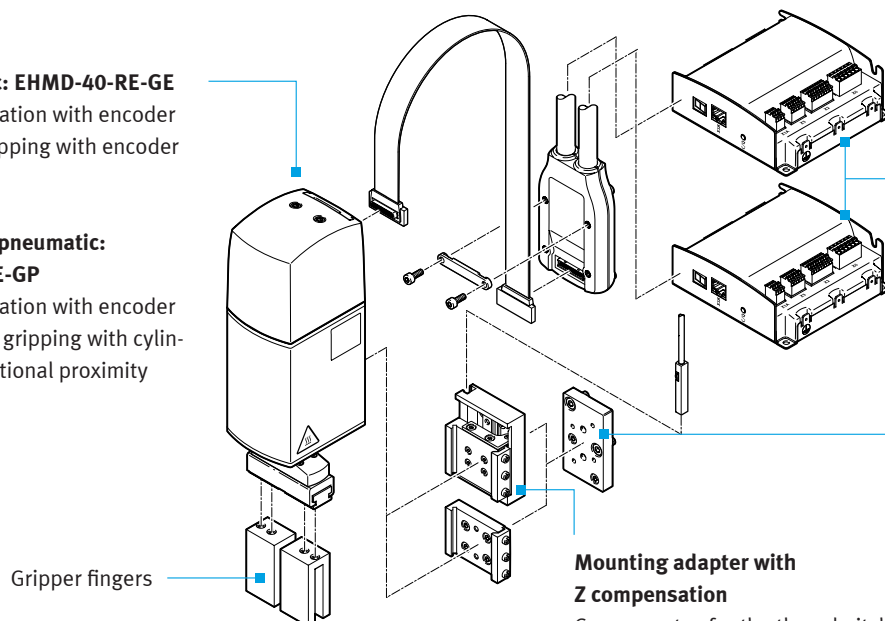
### Fully electric: EHMD-40-RE-GE

- Electric rotation with encoder
- Electric gripping with encoder

Not shown:

### Electric and pneumatic: EHMD-40-RE-GP

- Electric rotation with encoder
- Pneumatic gripping with cylinder and optional proximity sensor



### Motor controller CMMO-ST or CMMT-ST

- Motion, Ethernet, IO-Link®
- Motor controller with encoder input

Adapter plate for mounting on a Z-axis

### Mounting adapter with Z compensation

Compensates for the thread pitch of the caps by up to 10 mm when opening/closing bottles or tubes.