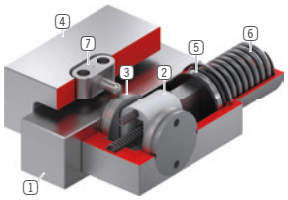
# CLAMPING ELEMENTS | PNEUMATIC
## MCPS2501H

### ▶ PRODUCT ADVANTAGES

- **small construction**
  For all common miniature profile rail guides
- **Energize to open (NC)**
  through spring-loaded energy storage
- **high durability**
  Up to 5 million static clamping cycles
- **Higher holding force**
  Via activation with PLUS air
- **Safety element**
  Safe clamping in case of energy failure

### ▶ TECHNICAL DETAILS




1 **Miniature profile rail guide**
- Available for all common miniature profile rail guides

2 **Wedge-type gear**
- Power transmission between piston and clamping jaw

3 **Clamping jaw**
- Pressed at the free surfaces of the profile rail guide

4 **Housing**

5 **Pneumatic piston**
- The piston moves the wedge-type gear longitudinally

6 **Spring-loaded energy storage**
- For non-pressurized closing of the clamping unit

7 **Sliding block**
- For floating bearings

### ▶ INFORMATION ON THE PRODUCTS

APPLICATION SCE-NARIOS

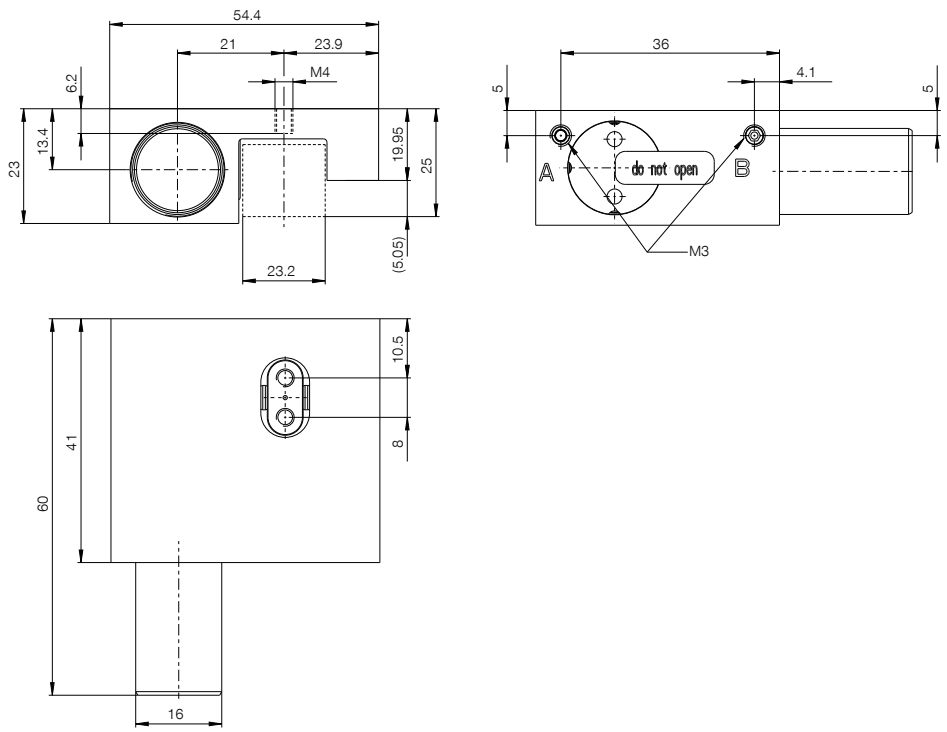
- **Clamping in case of pressure drop**
- **Clamping without energy requirement**

FURTHER INFORMATION

- **Special variants on request, e.g.**
  With low opening pressure (3.0 bar)
  With additional air connection (from above, from the front)
  made of stainless steel

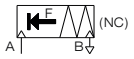
| Track manufacturer | Rail type | Rail size | Carriage type |
|---|---|---|---|
| **IKO** | **LWL** | **25** | **LWLG..B** |

## ▶ TECHNICAL DRAWINGS




Ⓐ Connection opening

Ⓑ Vent filter connection can be used for PLUS connection



## ▶ TECHNICAL DATA

| Order No. | MCPS2501H |
|---|---|
| Operation | pneumatic |
| Holding force | 400 [N] |
| Theoretical holding force (μ=0,1) | 500 [N] |
| PLUS connection possible | Yes |
| Holding force PLUS connection | 700 [N] |
| Operating pressure | 5.5 ... 6.5 [bar] |
| Nominal operating pressure | 6 [bar] |
| B10d value | 5,000,000 |
| Positioning accuracy +/- | 0,05 [mm] |
| Opening time | 0.02 [s] |
| Closing time | 0.015 [s] |
| Operating temperature | -10 ... +70 [°C] |
| Weight | 0.26 [kg] |
| Function | Clamping |
| Condition | NC (Normally Closed) closed without pressure |
| Installation direction | from above |
| Masking tape can be used | with masking tape |
| Air volume per cycle | 4 [cm³] |

Schematic drawing. General tolerances according to DIN ISO 2768 T1-f/T2-H. Edges according to ISO 13715. Element has no guiding properties. Guidance must be external. The holding force is the maximum force that can be applied in the axial direction. Each clamping and braking element is tested in a 100% inspection before delivery for the specified holding forces on a hardened steel rail with a lightly oiled lubricating layer (ISO-VG 68). The use of other lubricants or rail coatings can influence the coefficient of friction. The operating instructions must be observed before commissioning. We reserve the right to make technical changes in the course of further development. The latest and further data can be found online and in the operating instructions at www.zimmer-group.com.