

# CLAMPING ELEMENT | PNEUMATIC

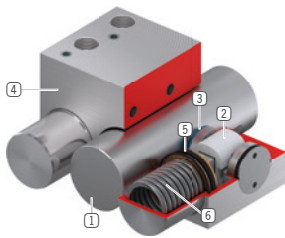
## MKRS5000A

### ► PRODUCT ADVANTAGES



- **Independent of the manufacturer**  
For circular guides and shaft guides
- **Energize to open (NC)**  
through spring-loaded energy storage
- **high durability**  
5 million static clamping cycles
- **Safety element**  
Safe clamping in case of energy failure

### ► TECHNICAL DETAILS



- ① **Circular guide**
  - Compatible with circular and shaft guides
- ② **Wedge-type gear**
  - Power transmission between piston and clamping jaw
- ③ **Clamping jaw**
  - Pressed at the circular 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

### ► INFORMATION ON THE PRODUCTS

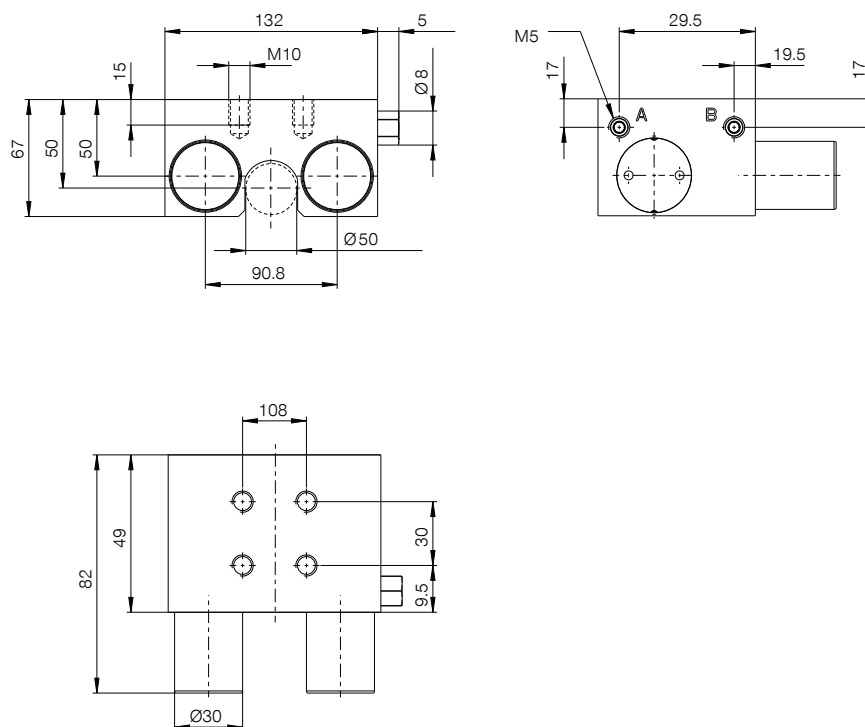
#### APPLICATION SCENARIOS

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

#### FURTHER INFORMATION

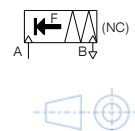
- **Special variants on request, e.g.**
  - With proximity switch monitoring
  - With low opening pressure (3.0 bar)
  - With additional air connection (from above, from the front)
  - made of stainless steel

## ► TECHNICAL DRAWINGS



Ⓐ Connection opening (both sides possible, only one connection necessary)

Ⓑ Vent filter (one-sided) Connection can be used as PLUS-connection (both sides possible, only one connection necessary)



## ► TECHNICAL DATA

| Order no.                                   | MKRS5000A                                    |
|---------------------------------------------|----------------------------------------------|
| Operation                                   | pneumatic                                    |
| Holding force [N]                           | 1650                                         |
| Theoretical holding force ( $\mu=0,1$ ) [N] | 2,063                                        |
| PLUS connection possible                    | No                                           |
| Operating pressure [bar]                    | 5.5 ... 6.5                                  |
| B10d value                                  | 5,000,000                                    |
| Positioning accuracy +/- [mm]               | 0,02                                         |
| Opening time [s]                            | 0.03                                         |
| Closing time [s]                            | 0.035                                        |
| Operating temperature [°C]                  | -10 ... +70                                  |
| Weight [kg]                                 | 2.6                                          |
| Shaft Ø [mm]                                | 50                                           |
| Function                                    | Clamping                                     |
| Condition                                   | NC (Normally Closed) closed without pressure |
| Installation direction                      | from above                                   |
| Air volume per cycle [cm³]                  | 23                                           |
| Certifications                              | CE / UKCA / LABS / REACH / RoHS              |

Schematic drawing. General tolerances in accordance with DIN ISO 2768 T1-T2-H. Edges in accordance with ISO 13715. The element may only be used in the axial direction of movement. For rotational use, clarification with the technical department is required. Element has no guiding properties. Guidance must be provided externally. 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 round 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](http://www.zimmer-group.com).