

# O-RING ASSEMBLY GRIPPERS, OUTER SERIES GS

## ▶ PRODUCT ADVANTAGES



### ▶ Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you





### ▶ Adjustable expanding stroke

Prevents the O-ring from overexpanding and ensures consistent production quality

### ▶ Query about magnetic field sensor technology

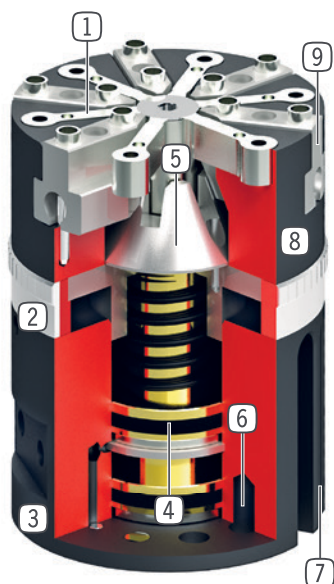
Detecting the end position allows you to have shorter cycle times and an integrated control system

## ▶ SERIES CHARACTERISTICS

| Installation size   |   |
|---|---|
| GSXXX   |   |
|  <b>5 million maintenance-free cycles (max.)</b> | ● |
|  <b>Inductive sensor</b>                         | ● |
|  <b>Magnetic field sensor</b>                    | ● |
|  <b>IP30</b>                                     | ● |



## ► BENEFITS IN DETAIL



- ① **Ejector jaw**
  - to shift off the O-ring
- ② **Stroke adjustment**
  - for adjustment of the spread stroke
- ③ **Energy supply**
  - possible from several sides
- ④ **Drive**
  - two single-acting pneumatic cylinders
- ⑤ **Force transfer**
  - direct via taper
- ⑥ **Mounting and positioning**
  - axial, on the gripper bottom
- ⑦ **Sensing slot**
  - mounting and positioning of magnetic field sensors
- ⑧ **Robust, lightweight housing**
  - Hard-coated aluminum alloy
- ⑨ **Gripper jaw**
  - individual gripper finger mounting

## ► TECHNICAL DATA

|                   | Opening stroke adjustable per jaw | Recommended O-ring diameter | Weight | IP class |
|-------------------|-----------------------------------|-----------------------------|--------|----------|
| Installation size | [mm]                              | [mm]                        | [kg]   |          |
| GS65              | 3 - 6                             | 4 - 60                      | 0.53   | IP30     |
| GS810             | 4 - 8                             | 30 - 120                    | 2.5    | IP30     |
| GS1015            | 1.6 - 10                          | 40 - 150                    | 6.2    | IP30     |

## ► FURTHER INFORMATION IS AVAILABLE ONLINE



All information just a click away at: [www.zimmer-group.com](http://www.zimmer-group.com). Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

# O-RING ASSEMBLY GRIPPERS, OUTER

## INSTALLATION SIZE GS65

### ▶ PRODUCT SPECIFICATIONS



### ▶ INCLUDED IN DELIVERY



12 [piece]  
Centering Disc  
**DST06510**

### ▶ RECOMMENDED ACCESSORIES



#### GRIPPING COMPONENTS



**UB65-3**  
Ejector jaw set aluminium  
6 [piece]



**UB65-4**  
Expanding jaw set steel  
6 [piece]



#### ENERGY SUPPLY



**GVM5**  
Straight Fittings - Quick Connect Style



#### SENSORS



**KB6.5-02**  
Mounting block



**NJ6.5-E2-01**  
Inductive proximity switch - Cable 5 m



#### SENSORS



**NJ6.5-E2S**  
Inductive proximity switch - Connector M8



**MFS01-K-KHC-P1-PNP**  
Magnetic field sensor angled, cable 5 m



**MFS01-S-KHC-P1-PNP**  
Magnetic field sensor angled, cable 0.3 m - M8 connector



#### CONNECTIONS / OTHER

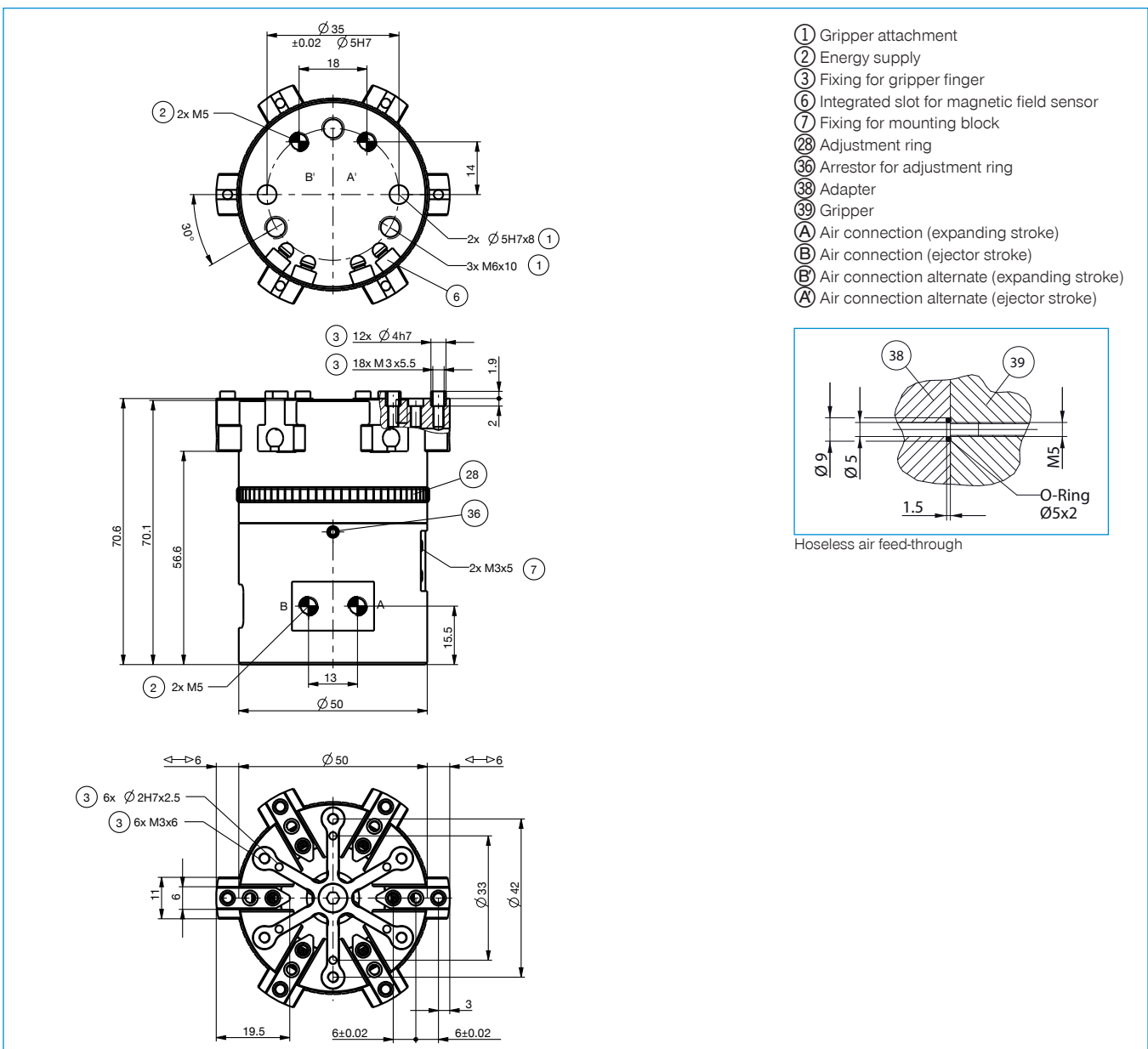


**KAG500**  
Plug-in connector Straight Cable 5m - Socket M8 (female)

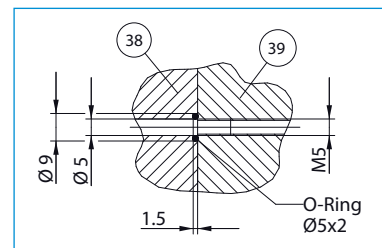


**KAW500**  
Plug-in connector Angled Cable 5m - Socket M8 (female)

| Order no.                                   | Technical data |
|---|----------------|
|   | <b>GS65-B</b>  |
| Opening stroke adjustable per jaw min. [mm] | 3              |
| Opening stroke adjustable per jaw max. [mm] | 6              |
| Stripping stroke [mm]                       | 5              |
| Opening force [N]                           | 300            |
| Recommended O-ring diameter min. [mm]       | 4              |
| Recommended O-ring diameter max. [mm]       | 60             |
| Number of gripping jaws [Quantity]          | 6              |
| Closing time [s]                            | 0.05           |
| Opening time [s]                            | 0.05           |
| Repetition accuracy +/- [mm]                | 0.05           |
| Operating pressure min. [bar]               | 4              |
| Operating pressure max. [bar]               | 8              |
| Nominal operating pressure [bar]            | 6              |
| Operating temperature min. [°C]             | 5              |
| Operating temperature max. [°C]             | +80            |
| Protection to IEC 60529                     | IP30           |
| Weight [kg]                                 | 0.53           |



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ⑲ Adjustment ring
- ⑳ Arrester for adjustment ring
- ㉑ Adapter
- ㉒ Gripper
- Ⓐ Air connection (expanding stroke)
- Ⓑ Air connection (ejector stroke)
- Ⓒ Air connection alternate (expanding stroke)
- Ⓓ Air connection alternate (ejector stroke)



Hoseless air feed-through

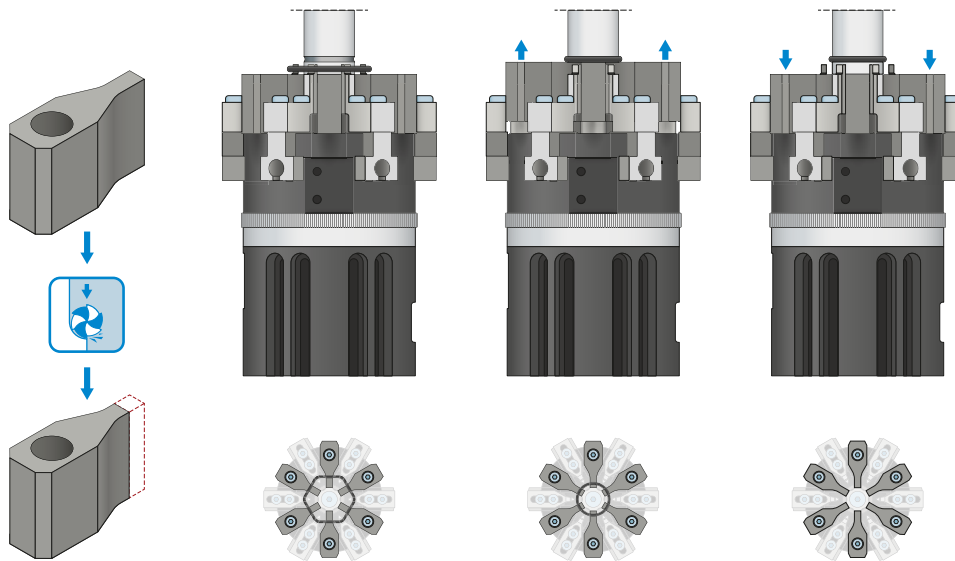


# O-RING ASSEMBLY GRIPPER, OUTER

## SERIES GS FUNCTIONAL DESCRIPTION

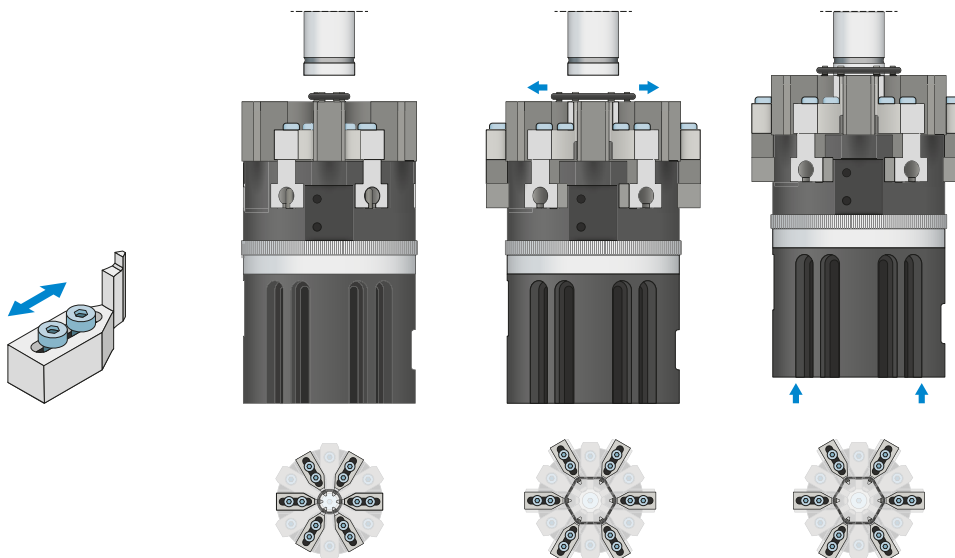


### GRIPPING COMPONENTS



#### Removal jaws

The removal jaws remove the spread O-ring on the workpiece.

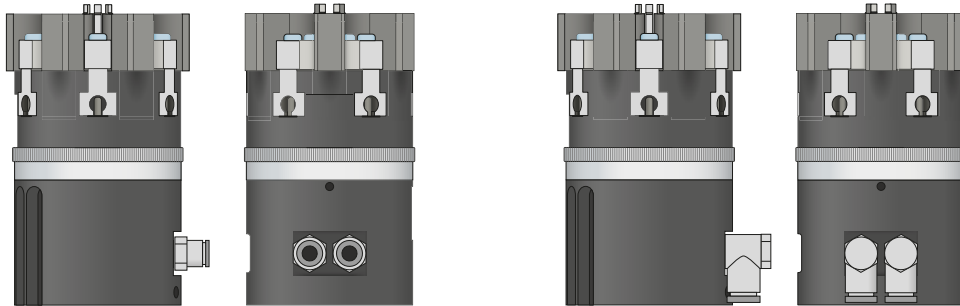


#### Clamping jaws

Using the clamping jaws, the O-ring is expanded to the expanding stroke set previously on the gripper via the adjustment ring.



## ENERGY SUPPLY

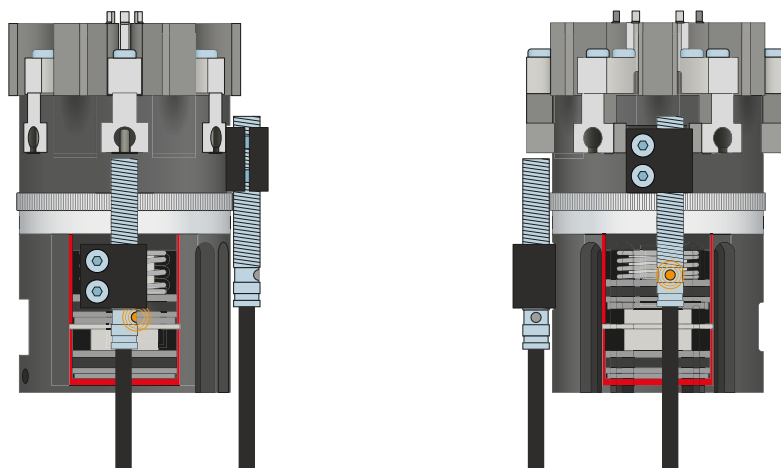


### Pneumatic threaded connections

Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.



## SENSORS



### Inductive sensors – NJ

The expanding stroke can be sensed using an inductive sensor in combination with a mounting block. The cam switch must be manufactured on an application-specific basis.

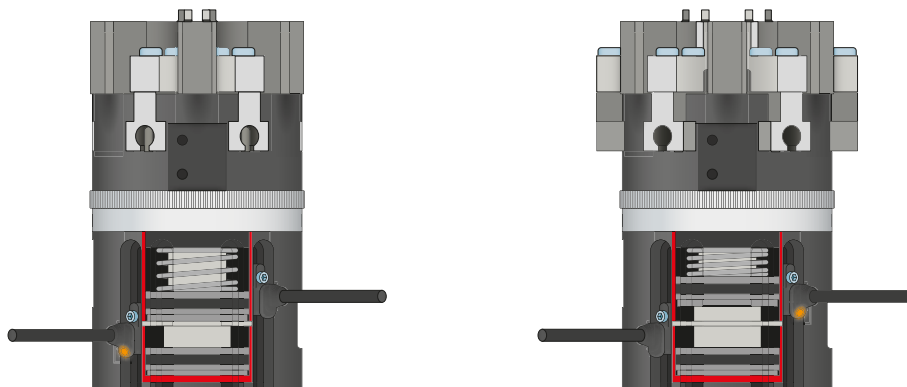
# O-RING ASSEMBLY GRIPPER, OUTER

## SERIES GS FUNCTIONAL DESCRIPTION



### SENSORS

MFS01



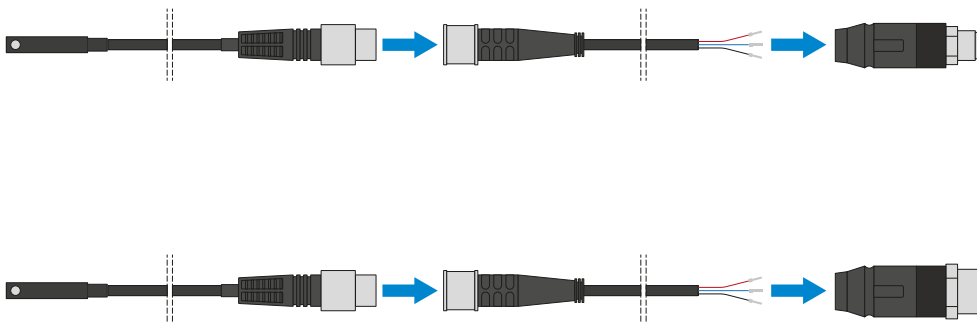
#### 1-point magnetic field sensors – MFS

For non-contact sensing of the piston position

The sensor is clamped in the C-groove of the gripper and detects the magnet attached to the gripper jaws. The MFS01 is available in versions with 5 m cables with exposed leads and 0,3 m cable with connector.



### CONNECTIONS / OTHER



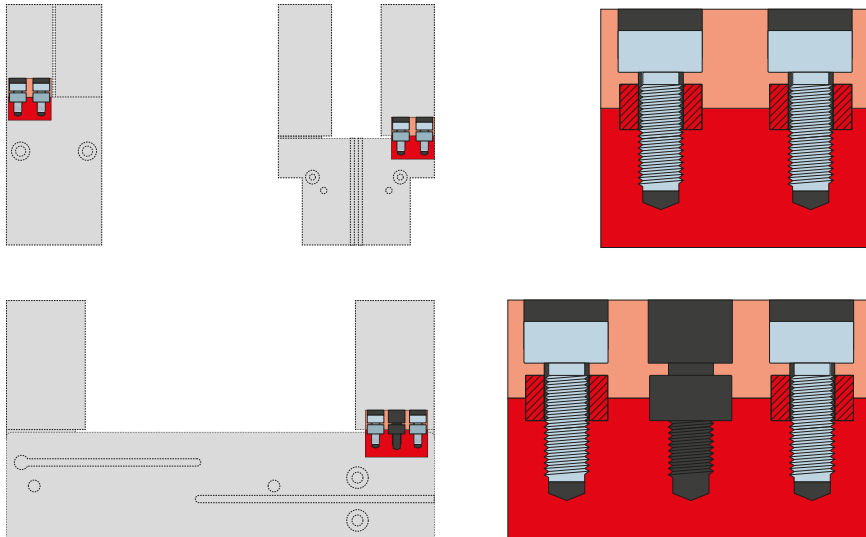
#### Plug-in connectors

For extending and fabricating the connection lines for the sensors

Cables with a length of 5 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M8 and M12.



## CONNECTIONS / OTHER



### Centering sleeves

#### For defined position measurement of the spread jaws

The centering sleeves are inserted into the fits of the gripper jaws to define the position of the spread jaws. The centering sleeves are comparable to a pin connection.