# O-RING ASSEMBLY GRIPPER, 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

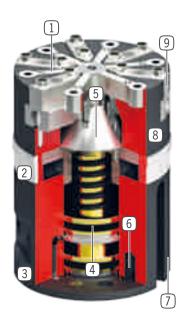
### Query about magnetic field sensor technology

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

# SERIES CHARACTERISTICS Installation size GSXXXX 5 million maintenance-free cycles (max.) Inductive sensor Magnetic field sensor IP30



### **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<br>per jaw | Recommended O-ring diameter | Weight | IP class |
|-------------------|--------------------------------------|-----------------------------|--------|----------|
| Installation size | [mm]                                 | [mm]                        | [kg]   |          |
| GS65              | 3 - 6                                | 4 - 60                      | 0.5    | IP30     |
| GS810             | 4 - 8                                | 30 - 120                    | 2.5    | IP30     |
| GS1015            | 1.6 -10                              | 40 - 150                    | 5.4    | IP30     |

### ► FURTHER INFORMATION IS AVAILABLE ONLINE



All information just a click away at: 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 GRIPPER, OUTER **INSTALLATION SIZE GS1015**

### PRODUCT SPECIFICATIONS



### **► INCLUDED IN DELIVERY**



2 [piece] Mounting block KB8K



20 [piece] Centering Disc DST60800

**SENSORS** 

### RECOMMENDED ACCESSORIES



### **GRIPPING COMPONENTS**









### MFS01-K-KHC-P1-PNP

Magnetic field sensor angled, cable 5 m



### UB1015-4

Expanding jaw set steel

10 [piece]



### MFS01-S-KHC-P1-PNP

**CONNECTIONS / OTHER** 

Magnetic field sensor angled, cable 0.3 m - M8 connector



### **ENERGY SUPPLY**



### GV1-8X8

Straight Fittings - Quick Connect Style



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





### **SENSORS**

NJ8-E2



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





Inductive proximity switch - Cable 5 m



Plug-in connector customizable Straight - Connector M8



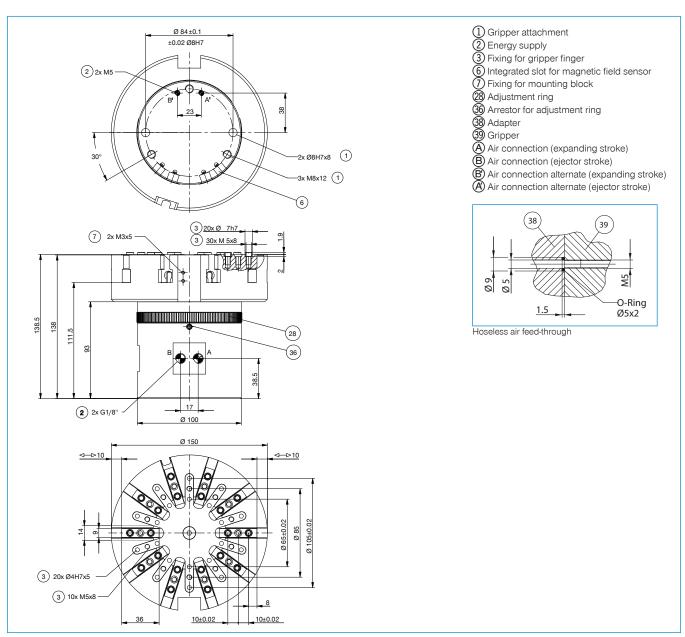


### NJ8-E2S

Inductive proximity switch - Connector M8



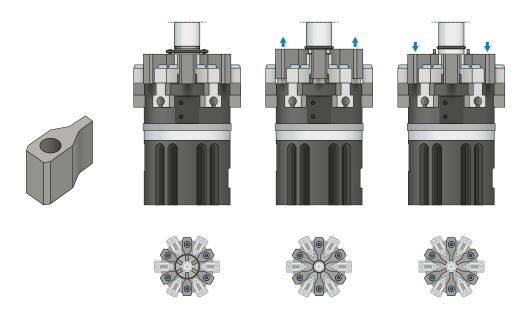
|   | ► Technical data |
|---|------------------|
| Order no.                                   | GS1015-B         |
| Opening stroke adjustable per jaw min. [mm] | 1.6              |
| Opening stroke adjustable per jaw max. [mm] | 10               |
| Stripping stroke [mm]                       | 15               |
| Opening force [N]                           | 1450             |
| Recommended O-ring diameter min. [mm]       | 40               |
| Recommended O-ring diameter max. [mm]       | 150              |
| Number of gripping jaws [Quantity]          | 10               |
| Closing time [s]                            | 0.05             |
| Opening time [s]                            | 0.05             |
| Repetition accuracy +/- [mm]                | 0.05             |
| Operating pressure min. [bar]               | 3                |
| Operating pressure max. [bar]               | 8                |
| Nominal operating pressure [bar]            | 6                |
| Operating temperature min. [°C]             | 5                |
| Operating temperature max. [°C]             | +80              |
| Weight [kg]                                 | 5.4              |



# O-RING ASSEMBLY GRIPPER, OUTER SERIES GS FUNCTIONAL DESCRIPTION



### **GRIPPING COMPONENTS**



### Removal jaws

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

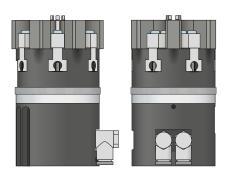


### **Clamping jaws**

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



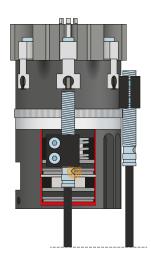


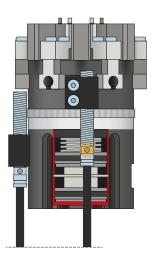


### **Pneumatic threaded connections**

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

# SENSORS





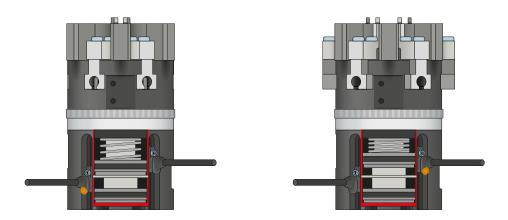
### Inductive sensors - NJ

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



MFS01

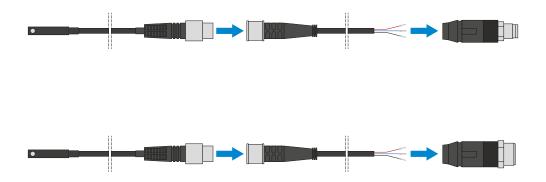


### 1-point magnetic field sensors - MFS

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.





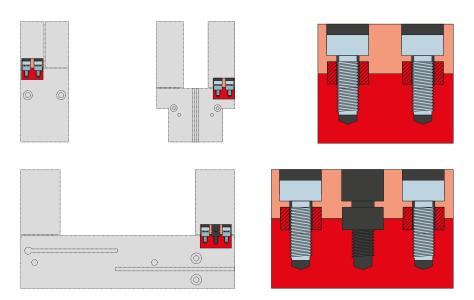
### **Plug-in connectors**

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.