

# G-GIS013

Technical specifications



### Operating mode:

The internal grippers dip into drillings, enlarge their external diameter by expansion of the silicone membrane, under pressure, and thus frictionally engaged hold to the bore wall. When pressure is switched off, the silicone membrane self-reliant retracts into the grippers inside due to its elastic behavior.

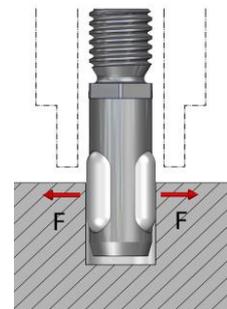
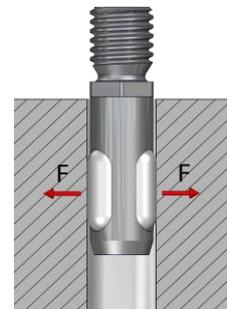
### Advantages:

- Minimum installation size possible
- Width across flats for assembly
- Minimum immersion depth
- Low gripper weight
- Simple gripper principle
- Cost-efficient
- Quick membrane replacement possible
- Indirect request via pressure switch in the supply line possible



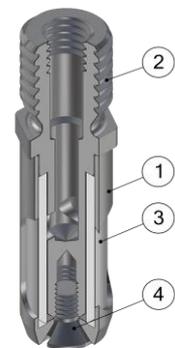
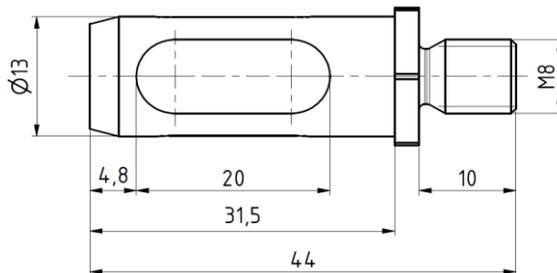
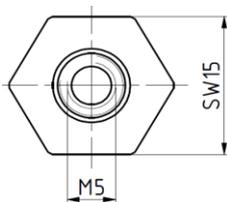
### Technical specifications

| Technical specifications                      | GIS013           |
|---|------------------|
| Working pressure [bar]                        | 3 - 6            |
| Grip force at 6 bar [N]                       | 40               |
| For bore diameter [mm]                        | 13,1 – 14,5      |
| Allowed component weight [kg]                 | 4                |
| Gripper weight [kg]                           | 0.027            |
| Compressed air connection Ø                   | M5               |
| Assembly Ø                                    | M8               |
| Stroke cycles at ideal application conditions | 500.000          |
| Membrane material                             | Silicone rubber  |
| Temperature range                             | -40° C to 300° C |



### Limits of the application range

|   |               |
|---|---------------|
| Minimum immersion depth of the membrane [%]                                       | 60            |
| To protect the membrane from damage at low installation depth, use customers hull | DH = DGIS+10% |
| Reduced grip force, when the membrane is not completely covered                   |               |



### Internal gripper lowering Ø013...

G-GIS013 External diameter 13, screw thread M8

### Replacement tube

EG-GI013-S for internal gripper counter bore GIS013

| Pos. | Description        |
|------|--------------------|
| 1    | Hull               |
| 2    | Arbor              |
| 3    | Tube               |
| 4    | Counter sunk screw |

# G-GIS013-12KL1

Technical specifications



### Operating mode:

The internal grippers dip into drillings, enlarge their external diameter by expansion of the silicone membrane, under pressure, and thus frictionally engaged hold to the bore wall. When pressure is switched off, the silicone membrane self-reliant retracts into the grippers inside due to its elastic behavior.

### Advantages:

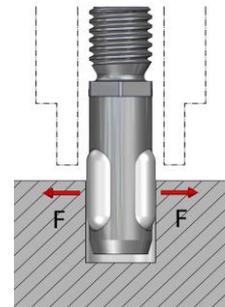
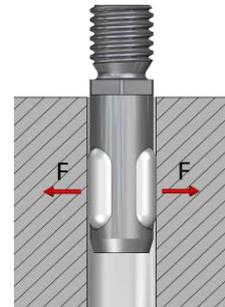
- Minimum installation size possible
- Width across flats for assembly
- Minimum immersion depth
- Low gripper weight
- Simple gripper principle
- Cost-efficient
- Quick membrane replacement possible
- Indirect request via pressure switch in the supply line possible



### Technical specifications

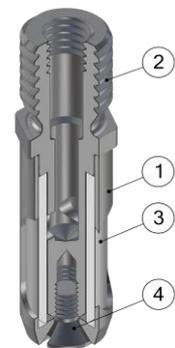
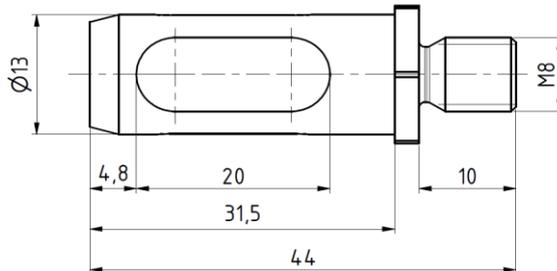
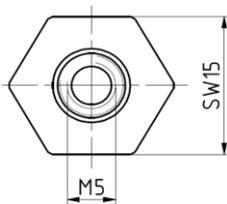
### GIS013-12KL1

|   |                  |
|---|------------------|
| Working pressure [bar]                        | 3 - 6            |
| Grip force at 6 bar [N]                       | 40               |
| For bore diameter [mm]                        | 13,1 – 14,5      |
| Allowed component weight [kg]                 | 4                |
| Gripper weight [kg]                           | 0.028            |
| Compressed air connection Ø                   | M5               |
| Assembly Ø                                    | M8               |
| Stroke cycles at ideal application conditions | 500.000          |
| Membrane material                             | Silicone rubber  |
| Temperature range                             | -40° C to 300° C |



### Limits of the application range

|   |                            |
|---|----------------------------|
| Minimum immersion depth of the membrane [%]                                       | 60                         |
| To protect the membrane from damage at low installation depth, use customers hull | DH = D <sub>GIS</sub> +10% |
| Reduced grip force, when the membrane is not completely covered                   |                            |



### Internal gripper lowering Ø013...

G-GIS013-12KL1 External diameter 13, screw thread M8, made of 1.4112

### Replacement tube

EG-GI013-S for internal gripper counter bore GIS013

| Pos. | Description        |
|------|--------------------|
| 1    | Hull               |
| 2    | Arbor              |
| 3    | Tube               |
| 4    | Counter sunk screw |

# G-GIS014

Technical specifications



### Operating mode:

The internal grippers dip into drillings, enlarge their external diameter by expansion of the silicone membrane, under pressure, and thus frictionally engaged hold to the bore wall. When pressure is switched off, the silicone membrane self-reliant retracts into the grippers inside due to its elastic behavior.

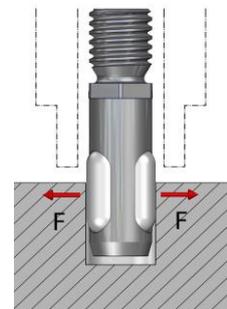
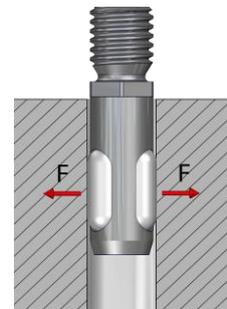
### Advantages:

- Minimum installation size possible
- Width across flats for assembly
- Minimum immersion depth
- Low gripper weight
- Simple gripper principle
- Cost-efficient
- Quick membrane replacement possible
- Indirect request via pressure switch in the supply line possible



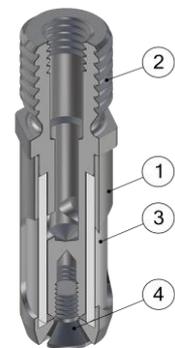
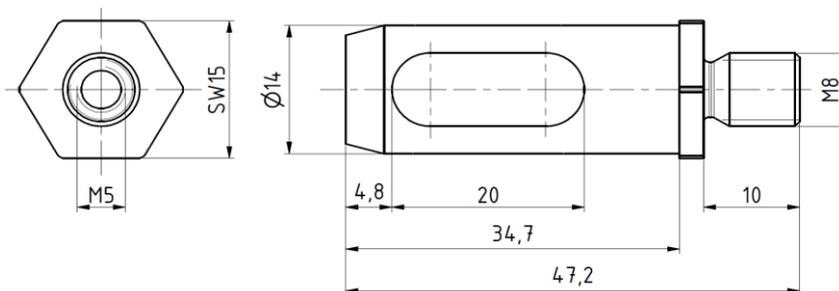
### Technical specifications

| Technical specifications                      | GIS014           |
|---|------------------|
| Working pressure [bar]                        | 3 - 6            |
| Grip force at 6 bar [N]                       | 45               |
| For bore diameter [mm]                        | 14,1 – 15,5      |
| Allowed component weight [kg]                 | 4,5              |
| Gripper weight [kg]                           | 0.034            |
| Compressed air connection Ø                   | M5               |
| Assembly Ø                                    | M8               |
| Stroke cycles at ideal application conditions | 500.000          |
| Membrane material                             | Silicone rubber  |
| Temperature range                             | -40° C to 300° C |



### Limits of the application range

|   |               |
|---|---------------|
| Minimum immersion depth of the membrane [%]                                       | 60            |
| To protect the membrane from damage at low installation depth, use customers hull | DH = DGIS+10% |
| Reduced grip force, when the membrane is not completely covered                   |               |



### Internal gripper lowering Ø014...

G-GIS014 External diameter 14, screw thread M8

### Replacement tube

EG-GI014-S for internal gripper counter bore GIS014

| Pos. | Description        |
|------|--------------------|
| 1    | Hull               |
| 2    | Arbor              |
| 3    | Tube               |
| 4    | Counter sunk screw |

# G-GIS015

Technical specifications



### Operating mode:

The internal grippers dip into drillings, enlarge their external diameter by expansion of the silicone membrane, under pressure, and thus frictionally engaged hold to the bore wall. When pressure is switched off, the silicone membrane self-reliant retracts into the grippers inside due to its elastic behavior.

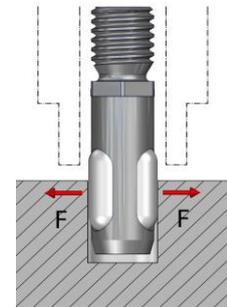
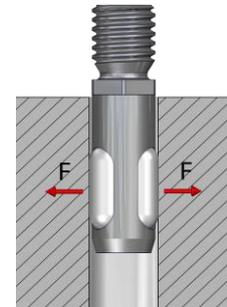
### Advantages:

- Minimum installation size possible
- Width across flats for assembly
- Minimum immersion depth
- Low gripper weight
- Simple gripper principle
- Cost-efficient
- Quick membrane replacement possible
- Indirect request via pressure switch in the supply line possible



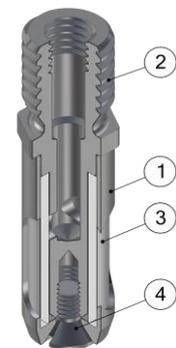
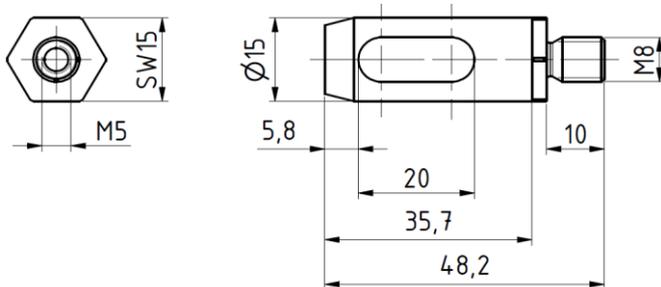
### Technical specifications

| Technical specifications                      | GIS015           |
|---|------------------|
| Working pressure [bar]                        | 3 - 6            |
| Grip force at 6 bar [N]                       | 45               |
| For bore diameter [mm]                        | 15,1 – 16,5      |
| Allowed component weight [kg]                 | 4,5              |
| Gripper weight [kg]                           | 0.04             |
| Compressed air connection Ø                   | M5               |
| Assembly Ø                                    | M8               |
| Stroke cycles at ideal application conditions | 500.000          |
| Membrane material                             | Silicone rubber  |
| Temperature range                             | -40° C to 300° C |



### Limits of the application range

|   |               |
|---|---------------|
| Minimum immersion depth of the membrane [%]                                       | 60            |
| To protect the membrane from damage at low installation depth, use customers hull | DH = DGIS+10% |
| Reduced grip force, when the membrane is not completely covered                   |               |



### Internal gripper lowering Ø015...

G-GIS015 External diameter 15, screw thread M8

### Replacement tube

EG-GI015-S for internal gripper counter bore GIS015

| Pos. | Description        |
|------|--------------------|
| 1    | Hull               |
| 2    | Arbor              |
| 3    | Tube               |
| 4    | Counter sunk screw |

# G-GIS016

Technical specifications



### Operating mode:

The internal grippers dip into drillings, enlarge their external diameter by expansion of the silicone membrane, under pressure, and thus frictionally engaged hold to the bore wall. When pressure is switched off, the silicone membrane self-reliant retracts into the grippers inside due to its elastic behavior.

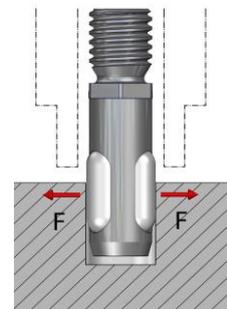
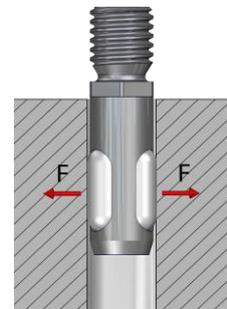
### Advantages:

- Minimum installation size possible
- Width across flats for assembly
- Minimum immersion depth
- Low gripper weight
- Simple gripper principle
- Cost-efficient
- Quick membrane replacement possible
- Indirect request via pressure switch in the supply line possible



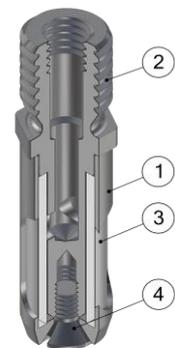
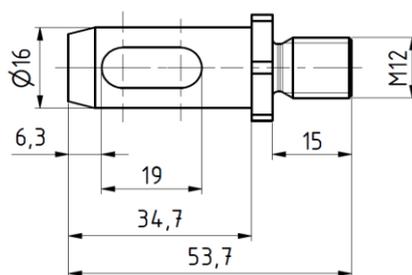
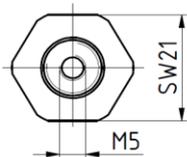
### Technical specifications

| Technical specifications                      | GIS016           |
|---|------------------|
| Working pressure [bar]                        | 3 - 6            |
| Grip force at 6 bar [N]                       | 50               |
| For bore diameter [mm]                        | 16,1 – 17,5      |
| Allowed component weight [kg]                 | 5                |
| Gripper weight [kg]                           | 0.061            |
| Compressed air connection Ø                   | M5               |
| Assembly Ø                                    | M12              |
| Stroke cycles at ideal application conditions | 500.000          |
| Membrane material                             | Silicone rubber  |
| Temperature range                             | -40° C to 300° C |



### Limits of the application range

|   |               |
|---|---------------|
| Minimum immersion depth of the membrane [%]                                       | 60            |
| To protect the membrane from damage at low installation depth, use customers hull | DH = DGIS+10% |
| Reduced grip force, when the membrane is not completely covered                   |               |



### Internal gripper lowering Ø016...

G-GIS016 External diameter 16, screw thread M12

### Replacement tube

EG-GI016-S for internal gripper counter bore GIS016

| Pos. | Description        |
|------|--------------------|
| 1    | Hull               |
| 2    | Arbor              |
| 3    | Tube               |
| 4    | Counter sunk screw |