

## Operating and installation instructions

# Parallel gripper

PG 502, PG 505

### Items included in the delivery

The parallel gripper is supplied fully packaged. A listing of delivery contents can be found in the catalog entitled „Domino handling components“.



#### Note:

Deliveries must be checked to ensure they are complete and in perfect condition.

### Technical data

Please see catalog: „Domino handling components“

### Safety notes



#### Warning:

When installing the gripper, you must switch the power supply off. Both local and product-specific safety instructions must be observed without fail.

## Installation and integration of PG 502, PG 505 parallel gripper

### Preliminary work

The travel path can be limited on the left and right by means of the M5×0.5 stop screw (1). Loosen counternut (2), adjust stop screw (1) and then retighten counternut (2).

### Adjustment of sensor, fig 1

- To test the working and initial positions, a sensor (3) with an M5×0.5 thread and associated nut (4) are to be used.
- Screw sensor (3) into thread provided until the appropriate setting is activated.
- Fix the sensor (3) with the sensor nut (4).



#### Caution:

The sensor must not touch the surface of the gripper jaw being scanned or it will be damaged. A distance of 0.5 mm between the sensor and sensor surface must be maintained without fail.

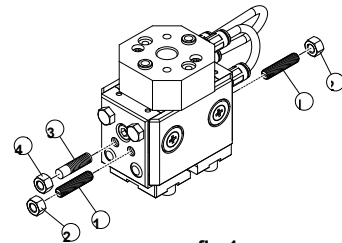


fig 1

### Compressed air connection (individual use), fig 2 + 3

- If necessary, remove M5 threaded stopper (1), remove protection plug (2) on parallel connection and then screw threaded stopper back in again.
- Fit exhaust air throttle.
- Connect pneumatic hoses as per diagram.
- Adjust exhaust air throttle (speed).



#### Note:

Exhaust air throttles must be used without fail in order to comply with permissible operating conditions. The fine adjustment of the throttle valves is to take place according to the manufacturer's instructions!

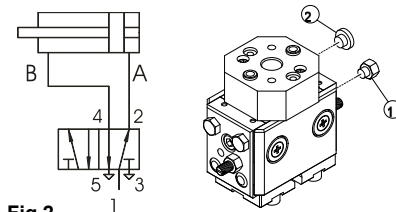


Fig 2

Fig 3

### Compressed air connection (use with DM), fig 4 + 6

- Screw centering connector (1) tight from above with M3 screw (2).
- Insert pneumatic connector (3) from above.
- Fit M5 compressed air connections (4) to body of connector (5) and gripper (6) and connect as per figure using a pneumatic hose (7).
- Fit M5 threaded stoppers (8) to free connections.



#### Note:

Lightly grease pneumatic connector (3) before use. By shifting the two centering connectors (1) by 90°, you can turn the gripper by 90° on the rotary module.

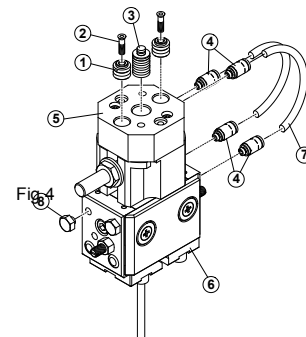


Fig 4

Fig 6

**Adjustment of part scanning in case of PG 505, fig 5 + 6.**

1. Fit gripper jaws specific to certain parts by means of adaptor plates (1) and clamp part.
2. Shorten scanning pin (2) according to part being gripped, so that the sensor is activated in the working position.

**Adjustment of sensor part scanning in case of PG 505, fig 5**

1. An M8×1 sensor (3) with 2 nuts is to be used for scanning.
2. Disassemble connector body (4).
3. Move sensor with front nut into groove and position it in such a way that it is activated in the working position of the scanning pin.
4. Fix the sensor with the second nut.
5. Fit connector body (4).

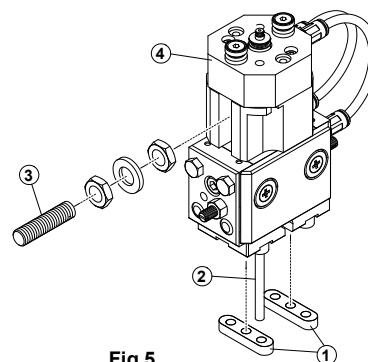


Fig 5

**Note:**

By shifting the two centering connectors (1) by 90°, you can turn the gripper by 90° on the rotary module.

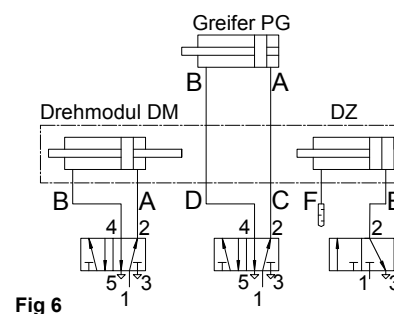


Fig 6

**Remedying faults**

Problem	Cause/Remedy
<b>Gripper does not move</b>	<ul style="list-style-type: none"> <li>▪ Check air supply (3 – 7 bar)</li> <li>▪ Pressure dropped below minimum limit</li> <li>▪ Air lines mixed up</li> <li>▪ Throttle valves closed</li> <li>▪ Unused connections not capped</li> <li>▪ Foreign body under gripper arms</li> </ul>
<b>Travel path incorrect</b>	<ul style="list-style-type: none"> <li>▪ Foreign body under gripper arms</li> <li>▪ Pressure dropped below minimum limit</li> <li>▪ Throttle valves missing or incorrectly set</li> </ul>
<b>Module moves jerkily or too quickly</b>	<ul style="list-style-type: none"> <li>▪ Load too great (please see data sheet in catalog)</li> <li>▪ Throttle valves set incorrectly</li> </ul>
<b>Module moves too slowly</b>	<ul style="list-style-type: none"> <li>▪ Check air supply</li> </ul>
<b>The force propelling motion is declining.</b>	<ul style="list-style-type: none"> <li>▪ Check seals</li> <li>▪ Clean and lubricate gripper</li> <li>▪ Check air supply (3 – 7 bar)</li> </ul>

**Maintenance**

To ensure perfect operation of the module the following must be observed:

- The compressed air must be filtered, dry, oiled or oilless.
- Modules must be inspected and cleaned regularly.

**Note:**

We recommend that you lightly lubricate all metallic sliding surfaces with grease as per DIN 51825, K2K after approx. 5 million cycles.