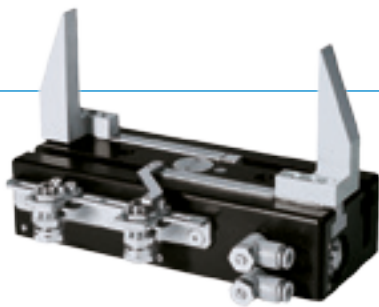


# 2-JAW PARALLEL GRIPPERS WITH LONG STROKE

## SERIES GH6000

### ▶ PRODUCT ADVANTAGES



#### “The robust”

▶ **Gripper jaws may be up to 25% longer in comparison to the benchmark**

The highest force and torque measurement enables flexible for maximum dynamics





▶ **Over 30% more powerful than the benchmark**

Optimisation of weight and force reduces your application costs since all components can have a smaller scale

▶ **Failure-free continuous operation**

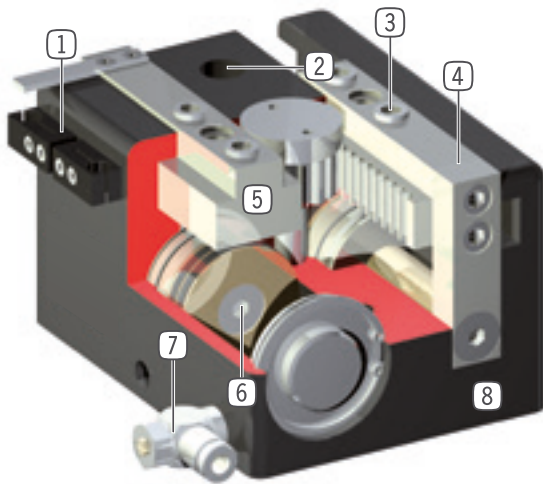
Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free cycles

### ▶ SERIES CHARACTERISTICS

Installation size		
GH60XX		
 10 million maintenance-free cycles (max.)		●
 Inductive sensor		●
 Magnetic field sensor		●
 IP 40		●



## ► BENEFITS IN DETAIL



- ① **Mounting block**
  - mounting for inductive proximity switch
- ② **Mounting and positioning**
  - mounting possible from several sides for versatile positioning
- ③ **Removable centering sleeves**
  - quick and economical positioning of the gripper fingers
- ④ **Gripper jaw**
  - individual gripper finger mounting
- ⑤ **Precise long T-Slot guides**
  - high forces and moments capacity
- ⑥ **Drive**
  - two double-acting pneumatic cylinders
  - synchronized by gearwheel
- ⑦ **Energy supply**
  - possible from several sides
  - CAUTION: always operate long stroke gripper with supplied exhaust air flow control valve (speed regulation)
- ⑧ **Robust, lightweight housing**
  - Hard-coated aluminum alloy

## ► TECHNICAL DATA

Installation size	Stroke per jaw [mm]	Gripping force [N]	Weight [kg]	IP class
GH6000	20 - 80	120 - 155	0,3 - 0,75	IP40
GH6100	40 - 80	370 - 530	1,5 - 2,2	IP40
GH6200	40 - 150	900 - 1400	3,3 - 7,5	IP40
GH6300	60 - 150	1520 - 2270	7 - 10,5	IP40
GH6400	60 - 200	2600 - 3400	10,4 - 22,7	IP40

## ► 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.

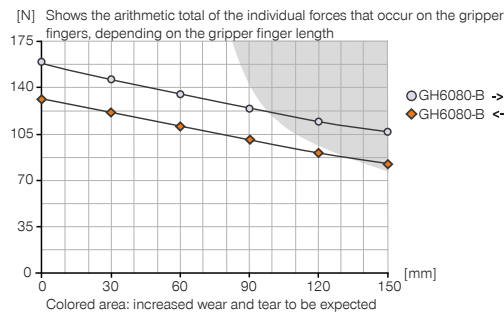
# 2-JAW PARALLEL GRIPPERS WITH LONG STROKE

## INSTALLATION SIZE GH6080

### PRODUCT SPECIFICATIONS

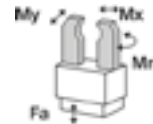


#### Gripping force diagram



#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	65
Mx [Nm]	65
My [Nm]	65
Fa [N]	500

### INCLUDED IN DELIVERY



2 [piece]  
Mounting block  
**KB6.5-04**



4 [piece]  
Centering Disc  
**DST40400**



2 [piece]  
Flow Control Valves - with Swivel joint  
**DRV5X4**

### RECOMMENDED ACCESSORIES



#### GRIPPING COMPONENTS



**UB6000-B**  
Universal jaw set aluminium



#### SENSORS



**MFS01-S-KHC-P1-PNP**  
Magnetic field sensor Angled Cable 0,3 m - Connector M8



**MFS02-S-KHC-P1-PNP**  
Magnetic field sensor Straight Cable 0,3 m - Connector M8



#### ENERGY SUPPLY



**DSV1-8**  
Pressure safety valve



**DSV1-8E**  
Pressure safety valve with quick exhaust



#### CONNECTIONS / OTHER



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



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



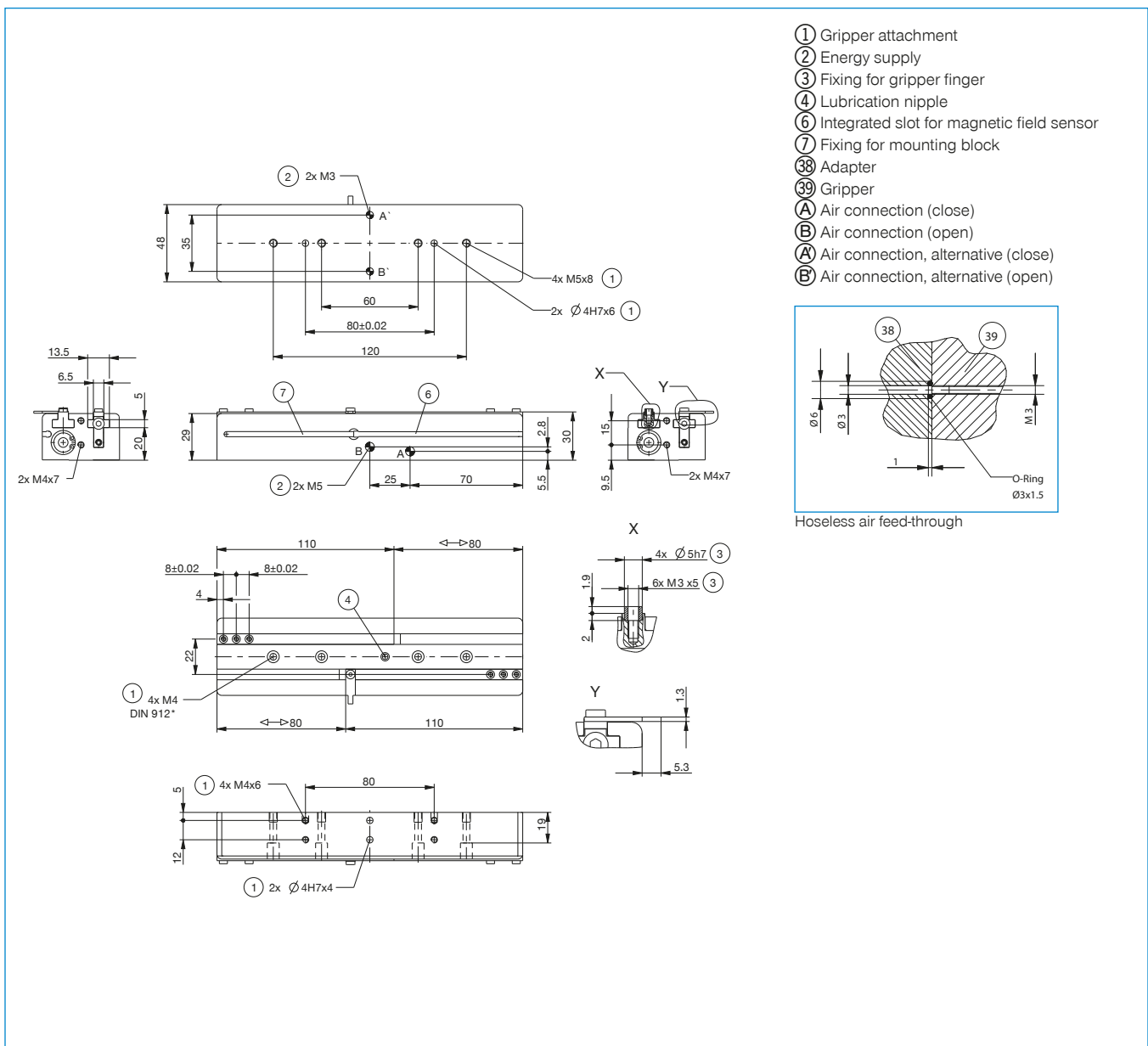
#### SENSORS



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



Order no.	Technical data
	<b>GH6080-B</b>
Stroke per jaw [mm]	80
Gripping force in closing [N]	155
Gripping force in opening [N]	130
Closing time [s]	0.3
Opening time [s]	0.3
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
Air volume per cycle [cm³]	40
Weight [kg]	0.75

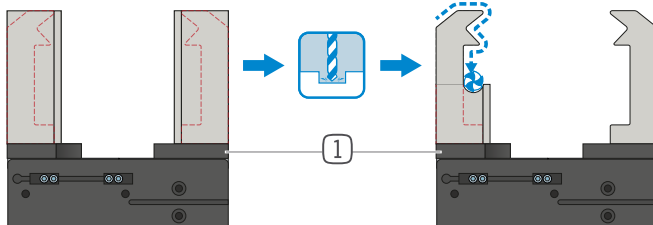


# 2-JAW PARALLEL GRIPPERS WITH LONG STROKE

## SERIES GH6000 FUNCTIONAL DESCRIPTION



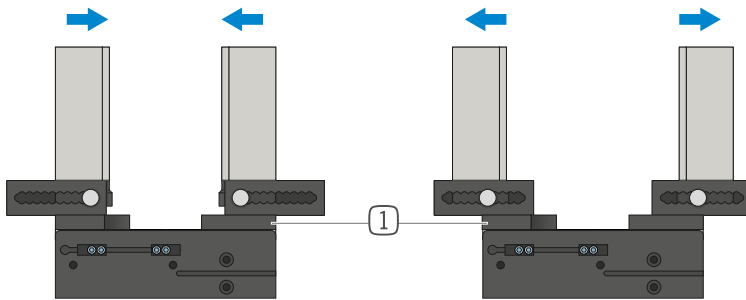
### GRIPPING COMPONENTS



#### Universal jaws – UB5000

Can be used immediately or for individual reprocessing

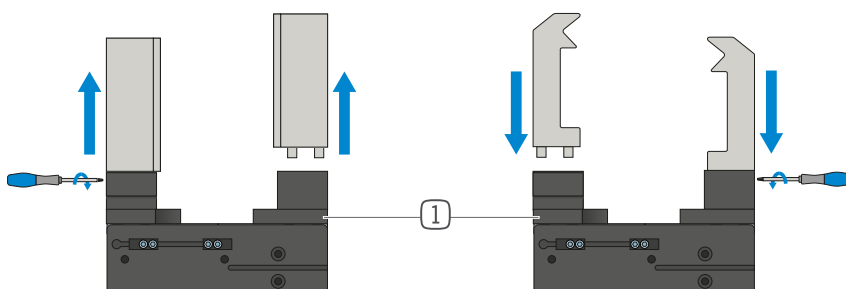
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.



#### Adjustment jaws – EB5000

For tool-free adaptation of the gripper range

By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.



#### Interchangeable jaws – WB5000

Enable fast change of individual gripper fingers

For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.

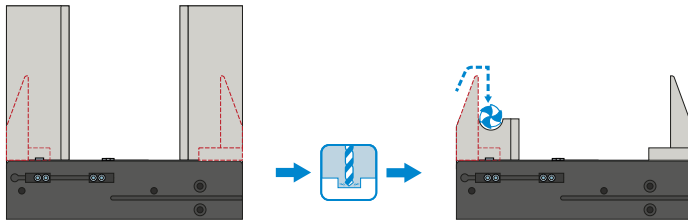


### THE GRIPPING COMPONENTS CAN BE COMBINED!

The gripping components listed above can be combined with each other. For connection to the gripper, the adapter plate ①, which is included in the recommended accessories for the gripper, is required.



## GRIPPING COMPONENTS



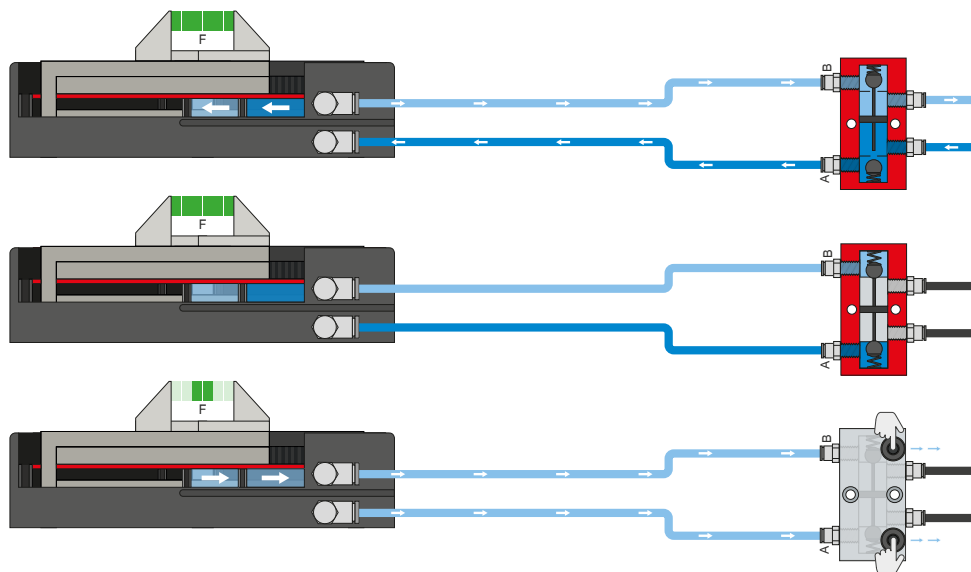
### Universal jaws – UB6000-B

Can be used immediately or for individual reprocessing

The gripper blanks are available in an aluminum (AL) version and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw set is required for each gripper.



## ENERGY SUPPLY



### Pressure safety valve – DSV

Ensures safe retention of force and position if the system pressure drops

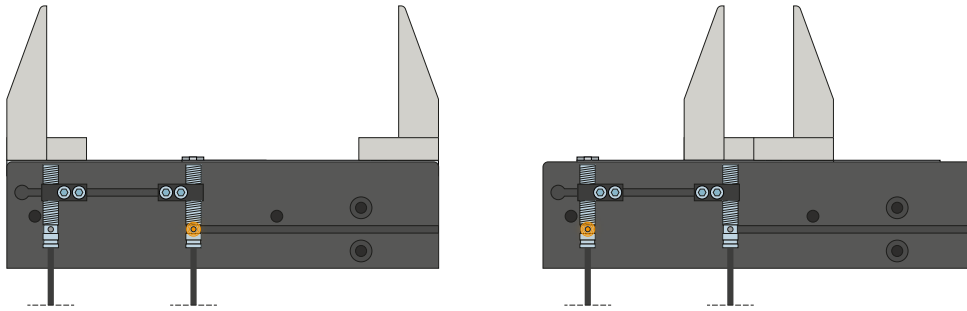
The integrated double check valve, which can be unlocked, retains the system pressure of the gripper in case of EMERGENCY STOP. To ensure the function, the valve must be installed as close to the gripper's air connection as possible. In variant E, two pushbuttons are installed that allow for controlled bleeding of the gripper.

# 2-JAW PARALLEL GRIPPERS WITH LONG STROKE

## SERIES GH6000 FUNCTIONAL DESCRIPTION

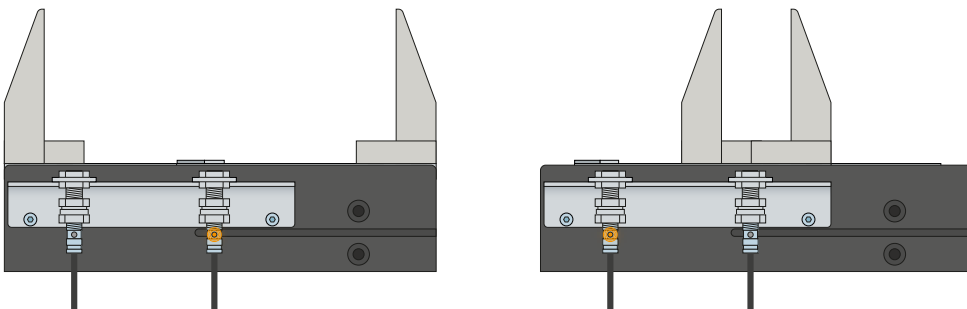


### SENSORS



#### Inductive sensors – NJ

The mounting block is aligned to the cam switch, and the sensor is guided into the mounting block until the required switching distance to the cam switch is reached. Fine adjustment can be made by moving the mounting block again. The sensors are available in versions with 5 m cables with exposed leads and 0,3 m cable with connector, as well as with direct plug orientation.



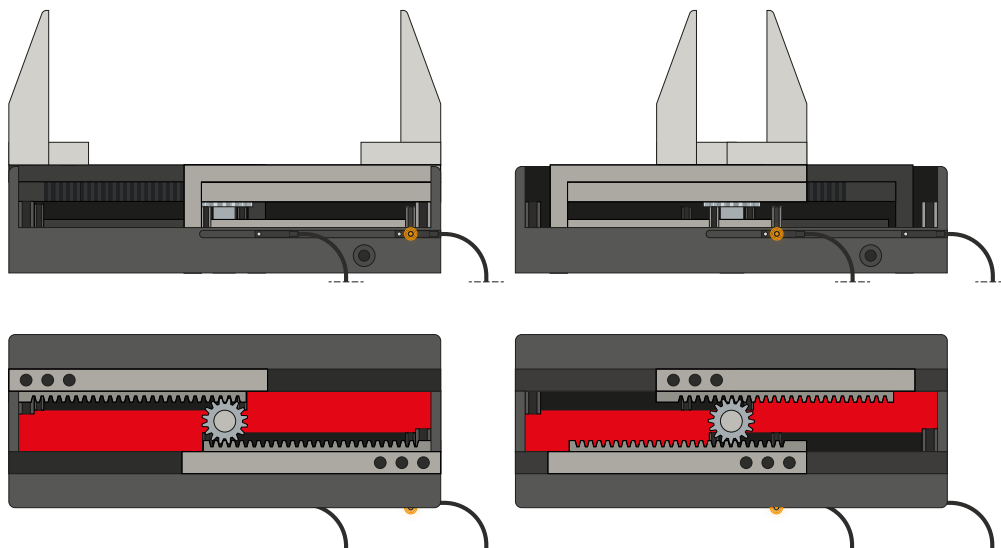
#### Clamping bracket – KHA

The KHA can be used as an alternative to installing the sensor via the mounting block. The sensor is inserted into the clamping bracket as far as it will go and secured. Tuning to the cam switch then takes place. Fine adjustment can be made by moving the clamping bracket again.

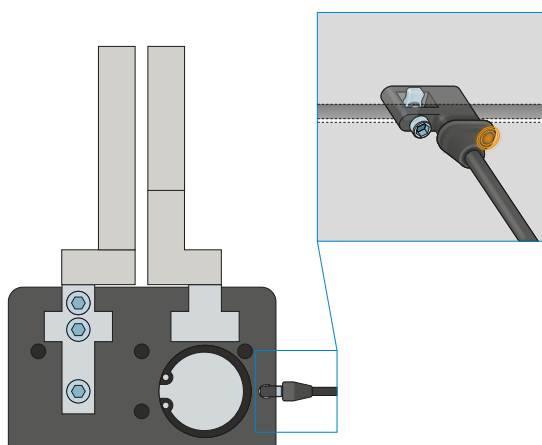


## SENSORS

MFS02



MFS01



### 1-point magnetic field sensors – MFS

#### For non-contact sensing of the piston position

These sensors are installed in the C-groove of the gripper and detect the magnet attached to the piston of the gripper. To ensure use in a wide variety of space conditions, the sensors are available in two variants. While the horizontal MFS02, with straight cable outlet, disappears into the C-groove of the gripper almost completely, the vertical MFS01 is taller, but has a cable outlet that is offset at an angle of 90°. The variants are available in versions with 5 m cables with exposed leads and 0,3 m cable with connector.

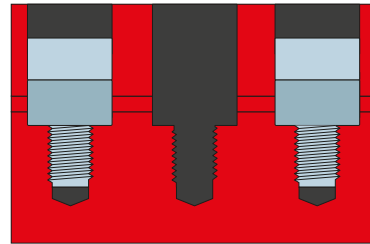
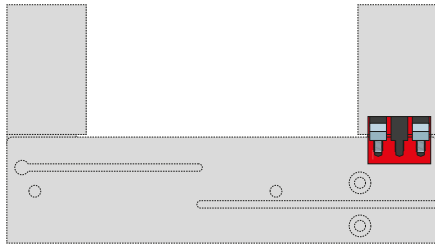
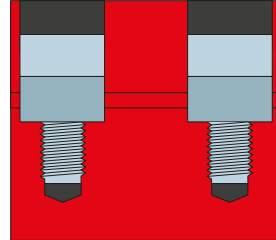
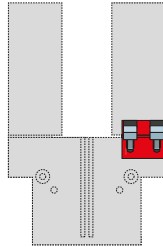
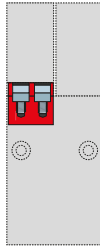


# 2-JAW PARALLEL GRIPPERS WITH LONG STROKE

## SERIES GH6000 FUNCTIONAL DESCRIPTION



### CONNECTIONS / OTHER



### Centering sleeves

#### For defined position measurement of the gripper fingers

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