# 3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE **SERIES GED6000IL**

# PRODUCT ADVANTAGES **IO**-Link

## "Highest performance"

- > 5 million maintenance-free cycles
- Integrated sensing via IO-Link
- Servo drive with integrated controller

Brushless drive technology, position, speed and force control guarantee the highest amount of functionality

#### ► IO-Link on board

In addition to the unshielded single-cable solution, the future-proof, hot-pluggable activation provides you with a wide variety of travel profiles for easy implementation into your control system

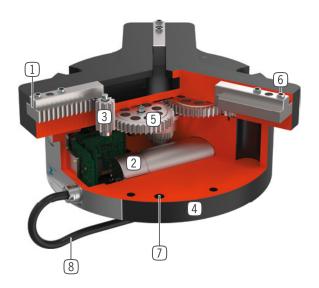
#### Gentle yet powerful

Power version -03 for handling heavy workpieces with mechanical self-locking and version -31 for gently gripping of delicate parts

## SERIES CHARACTERISTICS

Installation size	Version		
GED60XXIL	-03	-31	
Powerful	•		
Gentle		•	
Gripping force adjustable	•	•	
High movement speed		•	
Integrated sensing	•	•	
Positionable	•	•	
<b>♦ IO</b> -Link	•	•	
Self locking mechanism	•		
5 million maintenance-free cycles (max.)	•	•	
Clean room certified	•	•	
IP 54 IP54	•	•	

## **BENEFITS IN DETAIL**



#### 1 Precise T-Slot guide

- high forces and moments capacity

## 2 Drive

- Brushless DC servomotor

#### 3 Rack and pinion gear

- synchronized the movement of the gripper jaws
- high force transfer

#### 4 Robust, lightweight housing

- Hard-coated aluminum alloy

#### (5) Helical worm gear

- self locking mechanism in case of power drop (only version -03)

#### 6 Removable centering sleeves

- quick and economical positioning of the gripper fingers

#### 7 Mounting and positioning

- mounting possible from several sides for versatile positioning

#### 8 Energy supply

- standardized connector

## **TECHNICAL DATA**

	Stroke per jaw, adjustable	Gripping force	Weight	IP class
Installation size	mm	[N]	[kg]	
GED6000IL	40	15 - 800	2,8	IP54
GED6100IL	40	210 - 1700	4,9	IP54

#### ► 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.

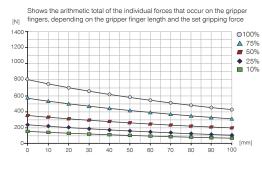
# 3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE **INSTALLATION SIZE GED6040IL**

#### PRODUCT SPECIFICATIONS



#### Gripping force diagram

#### GED6040IL-03-A



#### Forces and moments

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



Mr [Nm]	25
Mx [Nm]	25
My [Nm]	25
Fa [N]	500

Gripping force diagram

## **► INCLUDED IN DELIVERY**



6 [piece] Centering Disc DST40400

#### ► RECOMMENDED ACCESSORIES



# **CONNECTIONS / OTHER**





# **CONNECTIONS / OTHER**



SCM-C-00-00-A Smart Communication Module



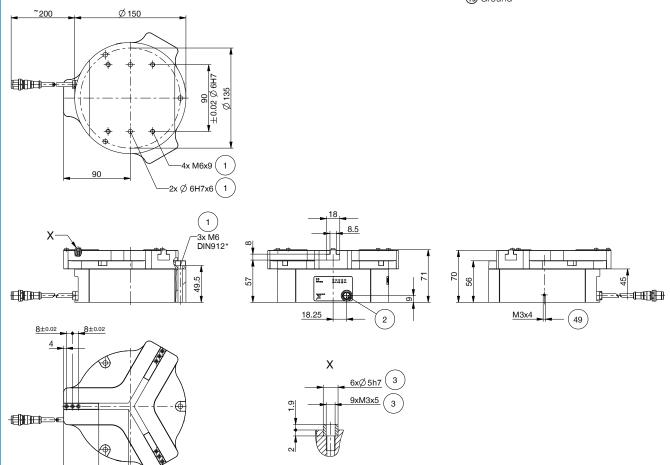
@ 10-Link

B12-Y-5IL Y-Plug-in Connector



	► Technical data			
Order no.	GED6040IL-03-A	GED6040IL-03-A-UL	GED6040IL-31-A	GED6040IL-31-A-UL
Control	<b>② IO</b> -Link	<b>② IO</b> -Link	<b>② IO</b> -Link	<b>⊘ IO</b> -Link
Type of drive	electrical	electrical	electrical	electrical
Stroke per jaw, adjustable [mm]	40	40	40	40
Nominal gripping force [N]	800	800	165	165
Gripping force min. [N]	150	150	15	15
Voltage [V]	24	24	24	24
Current consumption max. [A]	5	5	2	2
Self locking mechanism	mechanical	mechanical		
Dead weight of mounted gripper finger max. [kg]	0.3	0.3	0.3	0.3
Length of the gripper fingers max. [mm]	100	100	100	100
Minimum positioning path per jaw [mm]	4	4	4	4
Jaw speed in positioning mode max. [mm/s]	60	60	120	120
Repetition accuracy +/- [mm]	0.02	0.02	0.02	0.02
Operating temperature [°C]	1	1	1	1
Clean room applications according to DIN EN ISO 14644-1	4	4	4	4
UL approval		c <b>FL</b> °us		c <b>'FL</b> 'us
Protection to IEC 60529	IP54	IP54	IP54	IP54
Weight [kg]	2.8	2.8	2.8	2.8



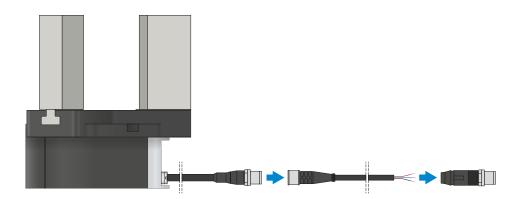




# 3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE **SERIES GED6000IL FUNCTIONAL DESCRIPTION**



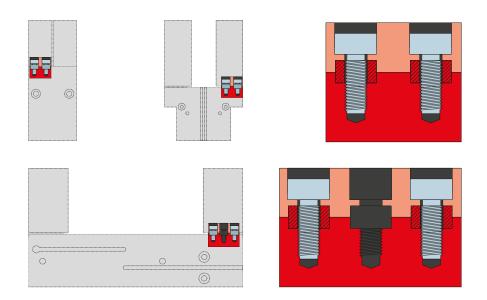
# **CONNECTIONS / OTHER**



#### **Plug-in connectors**

For extending and fabricating the connection lines

Cables with a length of 10 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M12. A 5 m long cable with connector / socket is available for the IO-Link connection.



#### **Centering sleeves**

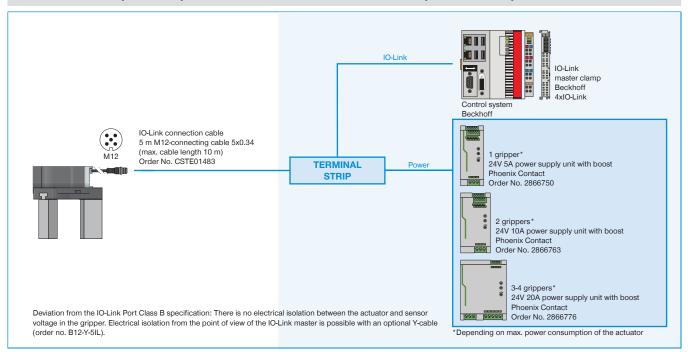
For defined position measurement of the gripper fingers

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.

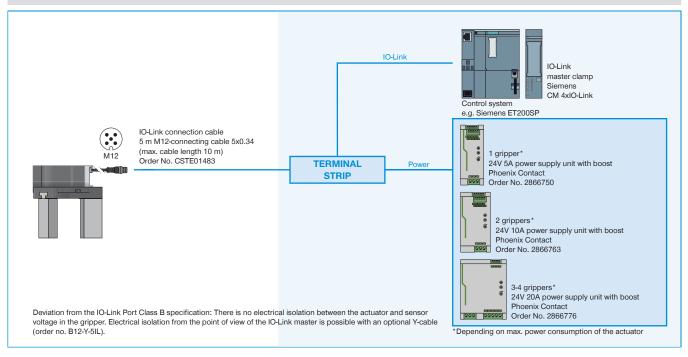
# **SECURED CONFIGURATION EXAMPLES**

# **GED6000IL SERIES**

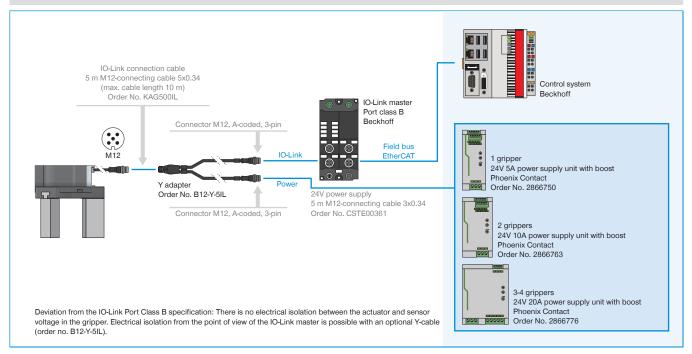
# ► GED6000IL (IO-LINK) WIRING TO CONTROL CABINET (BECKHOFF)



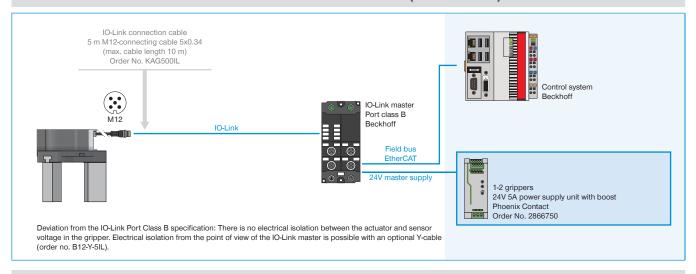
# ► GED6000IL (IO-LINK) WIRING TO CONTROL CABINET (SIEMENS)



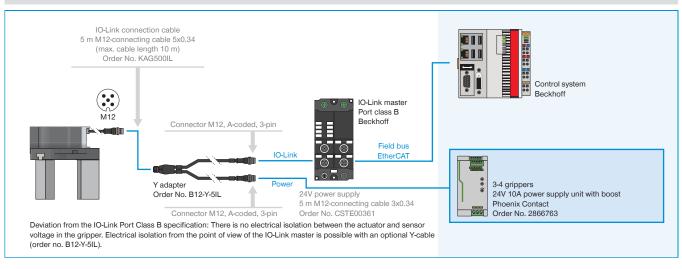
# ► GED6000IL-03-A WIRING TO IO-LINK MASTER IP67 (BECKHOFF)



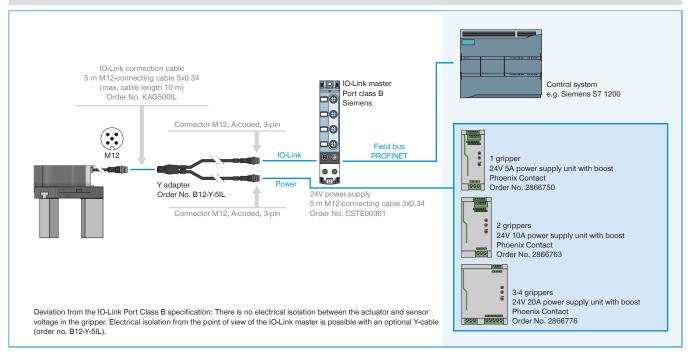
## ▶ GED6000IL-31-A WIRING TO IO-LINK MASTER IP67 (BECKHOFF) WITH 1-2 GRIPPERS



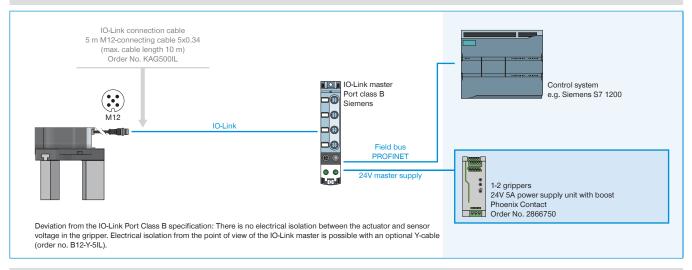
# ► GED6000IL-31-A WIRING TO IO-LINK MASTER IP67 (BECKHOFF) WITH 3-4 GRIPPERS



# ► GED6000IL-03-A WIRING TO IO-LINK MASTER IP67 (BECKHOFF)



# ► GED6000IL-31-A WIRING TO IO-LINK MASTER IP67 (SIEMENS) WITH 1-2 GRIPPERS



# ► GED6000IL-31-A WIRING TO IO-LINK MASTER IP67 (SIEMENS) WITH 3-4 GRIPPERS

