

THE KNOW-HOW FACTORY



# GRIPPERLINE 5000

## PNEUMATIC. ELECTRICAL. THE GRIPPER.

# GRIPPER SERIES 5000

**ZIMMER**  
group

pneumatic



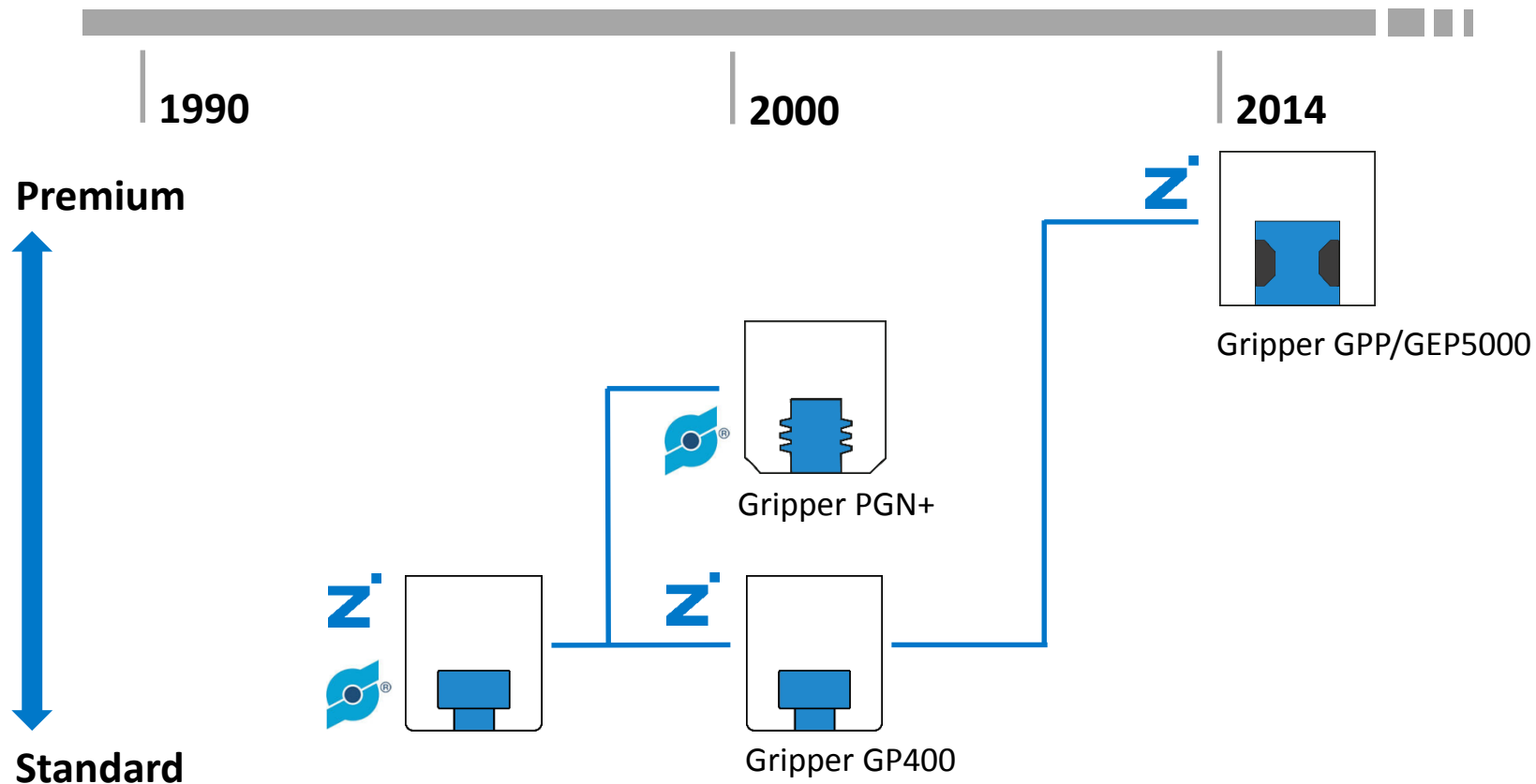
electric

# OUR GOAL – OUR MISSION

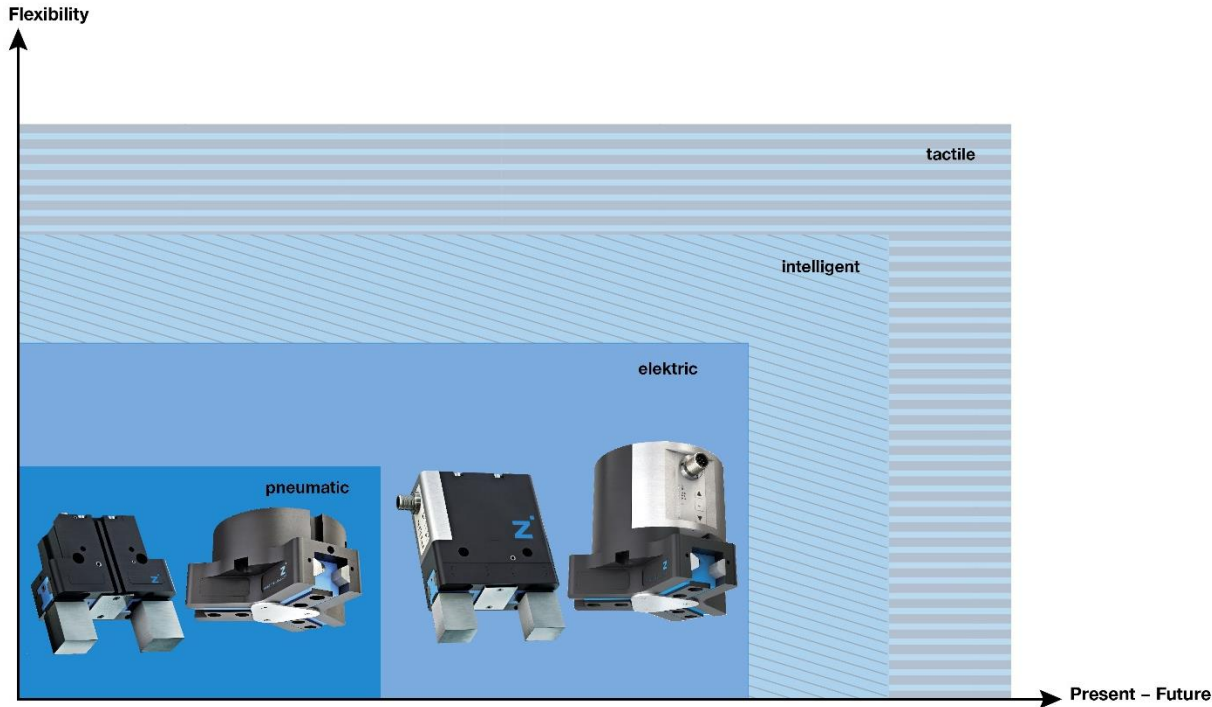


**"A premium gripper must have more functionality than any others. This is our goal and our mission - for our customers"**

# OUR GOAL – OUR MISSION



# OUR INTEGRATED PRODUCT PNEUMATIC AND ELECTRICAL



2-JAW PARALLEL GRIPPERS  
PNEUMATIC SERIES GPP5000  
+ PHYSICAL SIZE  
GPP5003 – GPP5030

3-JAW CENTERING GRIPPER  
PNEUMATIC SERIES GPD5000  
+ PHYSICAL SIZE  
GPD5003 – GPD5025

2-JAW PARALLEL GRIPPERS  
ELECTRICAL SERIES GEP5000  
+ PHYSICAL SIZE  
GEP5006 – GEP5010

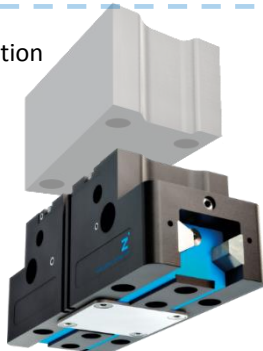
3-JAW CENTERING GRIPPER  
ELECTRICAL SERIES GED5000  
+ PHYSICAL SIZE  
GED5006 – GED5010

# COMPATIBILITY



Gripper GEP5000

Height compensation  
spacer



Gripper GPP5000



Gripper PGN Plus



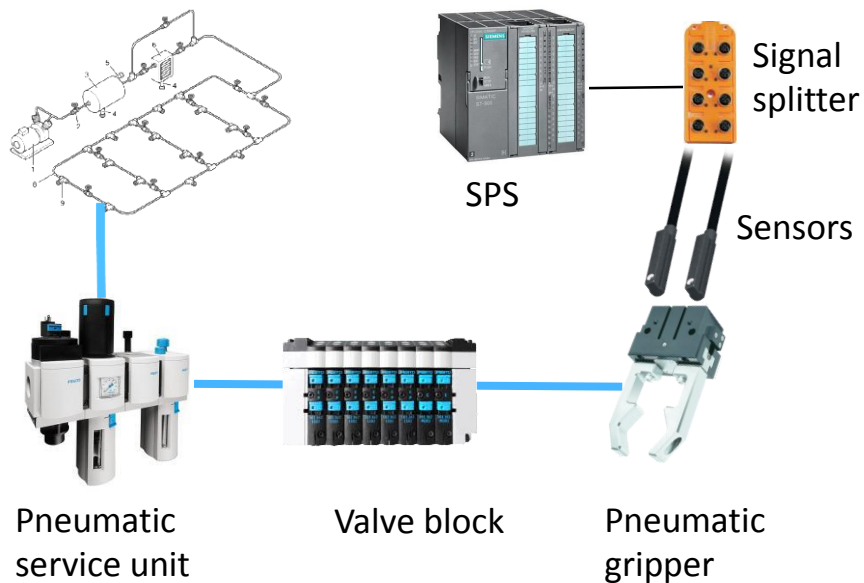
Gripper GPP5000



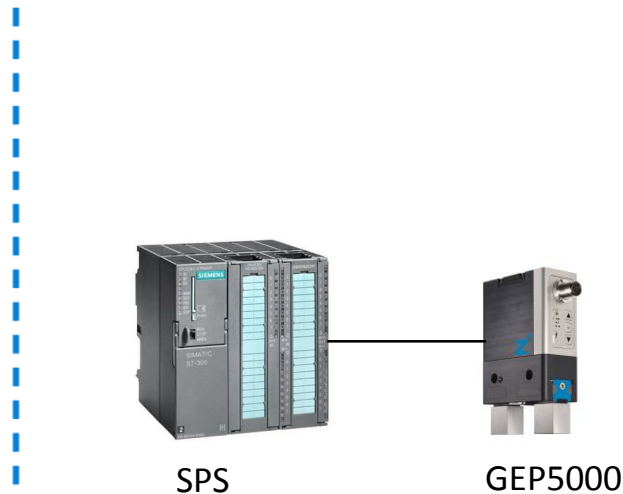
Gripper GP400

# THE NEW GEP/GED 5000 ELECTRICAL GRIPPER SERIES

## EASY TO INTEGRATE, EASY TO USE

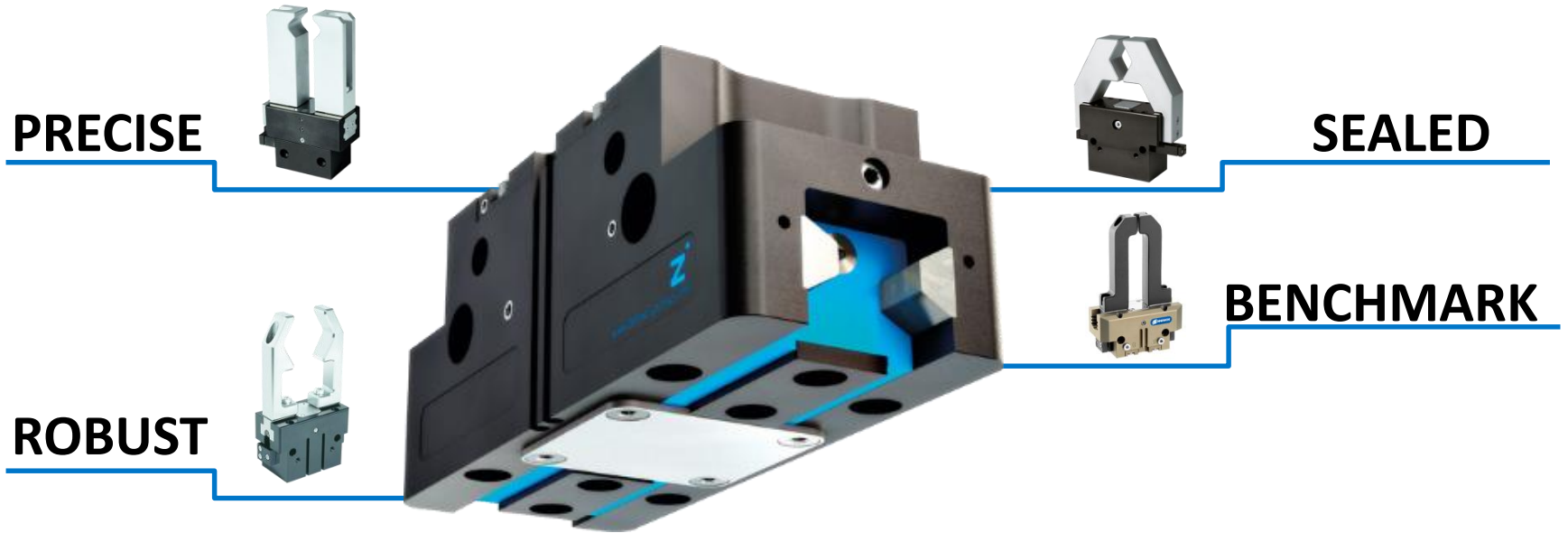


expensive to buy and maintain



simple, reliable, low-maintenance

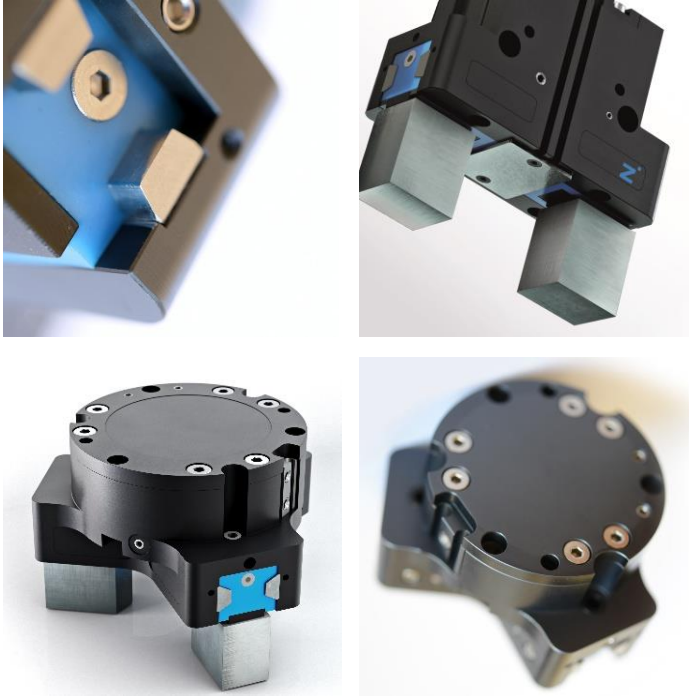
# THE BEST, PAST AND FUTURE





# 2-JAW PARALLEL GRIPPERS 3-JAW CENTERING GRIPPERS PNEUMATIC

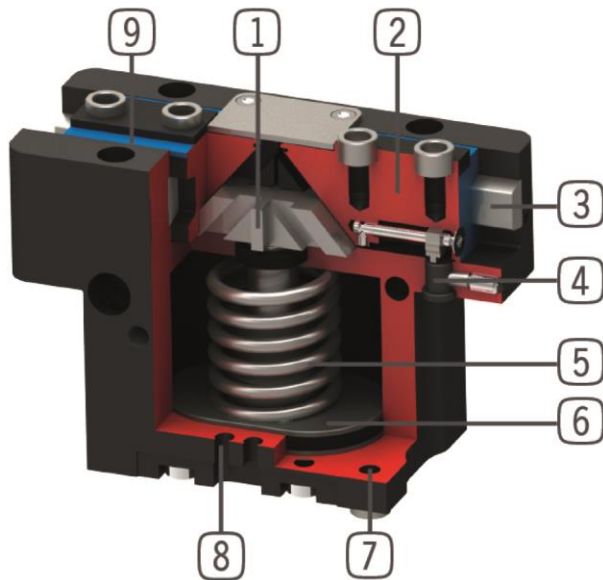
# 2-JAW PARALLEL GRIPPERS AND 3-JAW CENTERING GRIPPERS PNEUMATIC



## Unique selling points of the series

- + Up to 30% more gripping force
- + 10% higher static forces and moments than the benchmark
- + Gripper jaws 10% longer than the benchmark
- + Jaw weight 15% higher than the benchmark
- + Sealed guide IP64/Protector version IP67 (with purged air)
- + Protected against corrosion
- + Maintenance free up to 30 million cycles
- + Steel linear guide

# 2-JAW PARALLEL GRIPPERS PNEUMATIC SERIES GPP5000

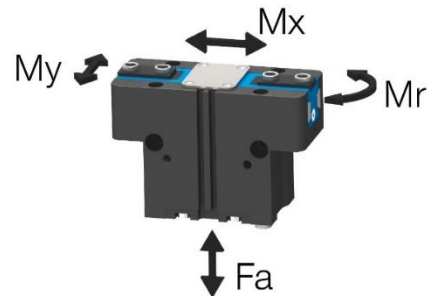


- ① **Positively driven wedge hook transmission**
  - Supports to absorb high forces and moments
  - Synchronized gripper jaw movement
- ② **Gripper jaw**
  - DLC coated to protect against corrosion
  - Gripper fingers mounted using removable centring sleeves
  - Lubricated for life via incorporated lubrication slots
- ③ **Steel Linear Guide**
  - Steel in steel guide
  - Enables use of extremely long gripper fingers
- ④ **Mounting block**
  - mounting for inductive proximity switch
- ⑤ **Integrated gripping force safety device**
  - Spring built into cylinder chamber as an energy store
- ⑥ **Drive**
  - Double-acting pneumatic rotor cylinder
- ⑦ **Mounting and positioning**
  - Alternatively, on several sides for customized mounting
  - Pneumatic and electrical versions identical apart from height
- ⑧ **Sensing slot**
  - mounting and positioning of magnetic field sensors
- ⑨ **Dual lip seal**
  - IP64 and up to IP67 (with purged air) for Protector version
  - Prevents grease from being squeezed out, increasing service life

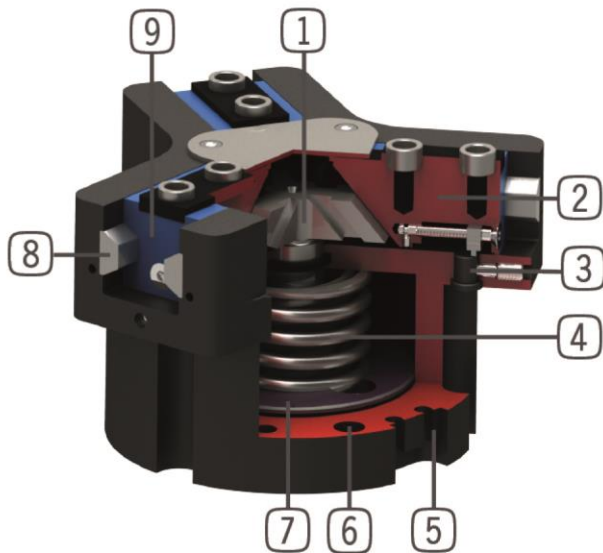
# 2-JAW PARALLEL GRIPPERS PNEUMATIC SERIES GPP5000

► Technical data								
Size	Stroke [mm]	Gripping force [N]	Weight [kg]	IP class	Mr [Nm]	Mx [Nm]	My [Nm]	Fa [N]
<b>GPP5003</b>	2,5	140 - 205	0,08 - 0,12	IP64 / IP67*	7	14	13	550
<b>GPP5004</b>	2 - 4	200 - 630	0,16 - 0,3	IP64 / IP67*	14	29	23	750
<b>GPP5006</b>	3 - 6	330 - 1080	0,28 - 0,44	IP64 / IP67*	43	70	46	1250
<b>GPP5008</b>	4 - 8	520 - 1670	0,53 - 0,76	IP64 / IP67*	60	105	65	1900
<b>GPP5010</b>	5 - 10	885 - 2890	0,87 - 1,31	IP64 / IP67*	75	125	95	2700
<b>GPP5013</b>	6 - 13	1410 - 4400	1,5 - 2,26	IP64 / IP67*	110	150	130	3300
<b>GPP5016</b>	8 - 16	2090 - 6600	2,9 - 4,4	IP64 / IP67*	145	195	185	5200
<b>GPP5025</b>	14 - 25	3280 - 9130	6,1 - 8,75	IP64 / IP67*	180	205	225	7500
<b>GPP5030</b>	17 - 30	5000 - 13550	9,2 - 13,7	IP64 / IP67*	210	290	310	9500

\* with purged air



# 3-JAW CENTERING GRIPPER PNEUMATIC SERIES GPD5000

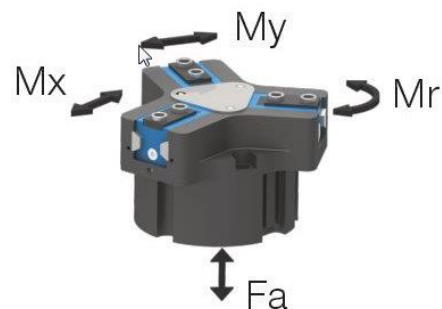
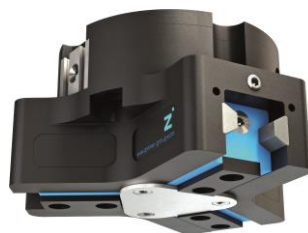


- ① **Positively driven wedge hook transmission**
  - high forces and moments capacity
  - Synchronized gripper jaw movement
- ② **Gripper jaw**
  - DLC coated to protect against corrosion
  - Gripper fingers mounted using removable centring sleeves
  - Lubricated for life via incorporated lubrication slots
- ③ **Mounting block**
  - mounting for inductive proximity switch
- ④ **Integrated gripping force safety device**
  - Spring built into cylinder chamber as an energy store
- ⑤ **Sensing slot**
  - mounting and positioning of magnetic field sensors
- ⑥ **Mounting and positioning**
  - Alternatively, on several sides for customized mounting
  - Pneumatic and electrical versions identical apart from height
- ⑦ **Drive**
  - Double-acting pneumatic rotor cylinder
- ⑧ **Steel Linear Guide**
  - Steel in steel guide
  - Enables use of extremely long gripper fingers
- ⑨ **Dual lip seal**
  - IP64 and up to IP67 (with purged air) for Protector version
  - Prevents grease from being squeezed out, increasing service life

# 3-JAW CENTERING GRIPPER PNEUMATIC SERIES GPD5000

► Technical data								
Size	Stroke [mm]	Gripping force [N]	Weight [kg]	IP class	Mr [Nm]	Mx [Nm]	My [Nm]	Fa [N]
<b>GPD5003</b>	2,5	310 - 465	0,18 - 0,22	IP64 / IP67*	7	14	13	550
<b>GPD5004</b>	2 - 4	460 - 1520	0,35 - 0,41	IP64 / IP67*	14	29	23	750
<b>GPD5006</b>	3 - 6	740 - 2370	0,61 - 0,71	IP64 / IP67*	43	70	46	1250
<b>GPD5008</b>	4 - 8	1260 - 3910	0,83 - 1,2	IP64 / IP67*	60	105	65	1900
<b>GPD5010</b>	5 - 10	2290 - 7160	1,45 - 2,23	IP64 / IP67*	75	125	95	2700
<b>GPD5013</b>	6 - 13	3770 - 11450	2,6 - 4,05	IP64 / IP67*	110	150	130	3300
<b>GPD5016</b>	8 - 16	6870 - 20330	5,7 - 8,6	IP64 / IP67*	145	195	185	5200
<b>GPD5025</b>	14 - 25	8430 - 22850	11,8 - 17,6	IP64 / IP67*	180	205	225	7500
<b>GPD5030</b>	17 - 30	12130 - 32400	21,0 - 30,5	IP64 / IP67*	210	290	310	9500

\* with purged air



# 2-JAW PARALLEL GRIPPERS

# 3-JAW CENTERING GRIPPERS

# ELECTRICAL

# 2-JAW PARALLEL GRIPPERS AND 3-JAW CENTERING GRIPPERS

## ELECTRICAL

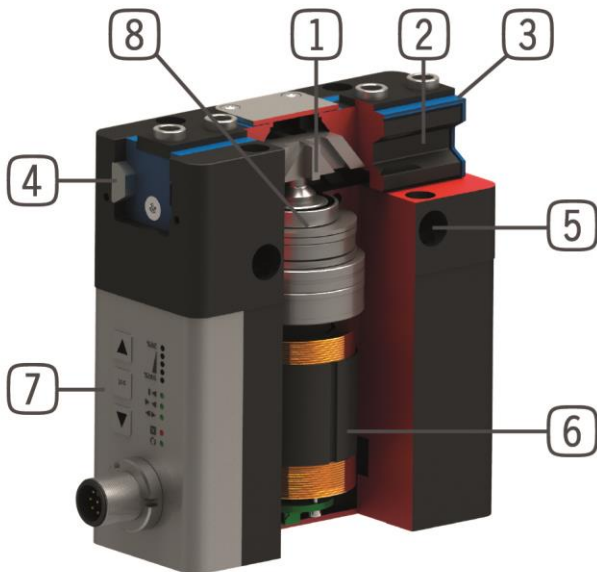


### Unique selling points of the series

- + Integrated position sensing
- + Selectable closing time and gripping force
- + Single-cable solution – Plug and Play
- + Integrated ACM (Advanced Control Module)
- + Up to 30% more gripping force/at eye level with the pneumatic gripper
- + 10% higher static forces and moments than the benchmark
- + Gripper jaws 10% longer than the benchmark
- + Jaw weight 15% higher than the benchmark
- + Sealed guide IP64
- + Protected against corrosion
- + Maintenance free up to 30 million cycles
- + Steel Linear Guide



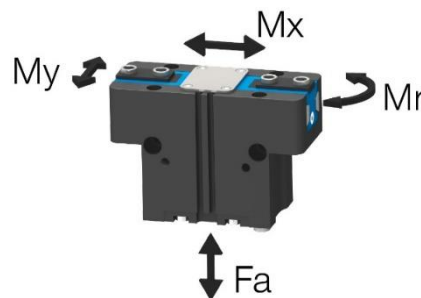
# 2-JAW PARALLEL GRIPPERS ELECTRICAL SERIES GEP5000



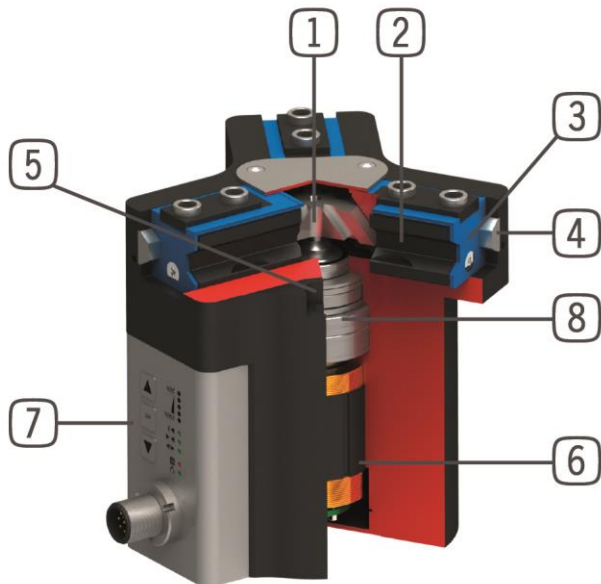
- ① **Positively driven wedge hook transmission**
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  - Synchronized gripper jaw movement
- ② **Gripper jaw**
  - DLC coated to protect against corrosion
  - Gripper fingers mounted using removable centring sleeves
  - Lubricated for life via incorporated lubrication slots
- ③ **Dual lip seal**
  - Enables IP64
  - Prevents grease from being squeezed out, increasing service life
- ④ **Steel Linear Guide**
  - Steel in steel guide
  - Enables use of extremely long gripper fingers
- ⑤ **Mounting and positioning**
  - Alternatively, on several sides for customized mounting
  - Pneumatic and electrical versions identical apart from height
- ⑥ **BLDC motor**
  - Wear-resistant brushless DC motor
- ⑦ **Advanced control module**
  - Integrated control module with single-cable solution
  - Gripping force, travel time and query programmable via the control panel on the housing
- ⑧ **Drive train**
  - Combination of trapezoidal spindle and planetary gear
  - Durable and robust

# 2-JAW PARALLEL GRIPPERS ELECTRICAL SERIES GEP5000

Size	▶ Technical data								
	Stroke [mm]	Gripping force [N]	Weight [kg]	IP class	Max. current consumption per cycle [A]	Mr [Nm]	Mx [Nm]	My [Nm]	Fa [N]
<b>GEP5006</b>	6	500 - 1000	0,79	IP64	5 A	43	70	46	1250
<b>GEP5008</b>	8	750 - 1350	1,16	IP64	5 A	60	105	65	1900
<b>GEP5010</b>	10	1000 - 1600	1,66	IP64	5 A	75	125	95	2700



# 3-JAW CENTERING GRIPPERS ELECTRICAL SERIES GED5000

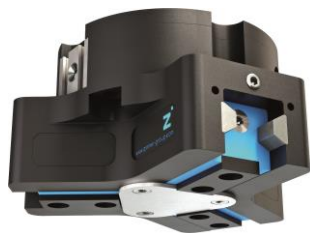


- 1 Positively driven wedge hook transmission**
  - high forces and moments capacity
  - Synchronized gripper jaw movement
- 2 Gripper jaw**
  - DLC coated to protect against corrosion
  - Gripper fingers mounted using removable centring sleeves
  - Lubricated for life via incorporated lubrication slots
- 3 Dual lip seal**
  - Enables IP64
  - Prevents grease from being squeezed out, increasing service life
- 4 Steel Linear Guide**
  - Steel in steel guide
  - Enables use of extremely long gripper fingers
- 5 Mounting and positioning**
  - Alternatively, on several sides for customized mounting
  - Pneumatic and electrical versions identical apart from height
- 6 BLDC motor**
  - Wear-resistant brushless DC motor
- 7 Advanced control module**
  - Integrated control module with single-cable solution
  - Gripping force, travel time and query programmable via the control panel on the housing
- 8 Drive train**
  - Combination of trapezoidal spindle and planetary gear
  - Durable and robust

# 3-JAW CENTERING GRIPPERS ELECTRICAL SERIES GED5000

► Technical data

Size	Stroke [mm]	Gripping force [N]	Weight [kg]	IP class	Max. current consumption per cycle [A]	Mr [Nm]	Mx [Nm]	My [Nm]	Fa [N]
<b>GED5006</b>	6	500 - 1000	1,09	IP64	5 A	43	70	46	1250
<b>GED5008</b>	8	750 - 1350	1,66	IP64	5 A	60	105	65	1900
<b>GED5010</b>	10	1000 - 1600	2,33	IP64	5 A	75	125	95	2700

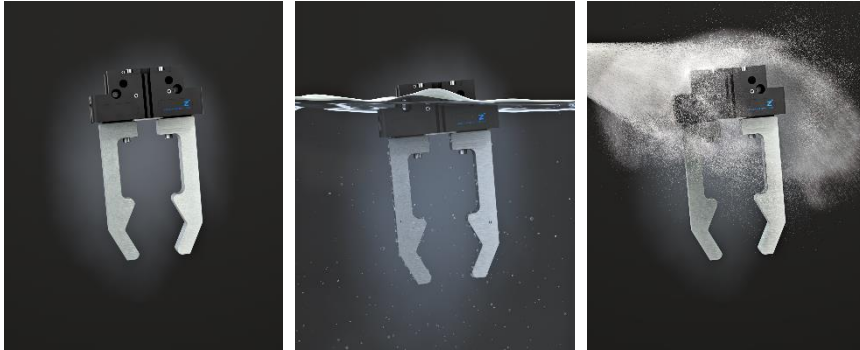


# GRIPPER SERIES 5000

# "THE FIRST GENUINE UNIVERSAL GRIPPER"

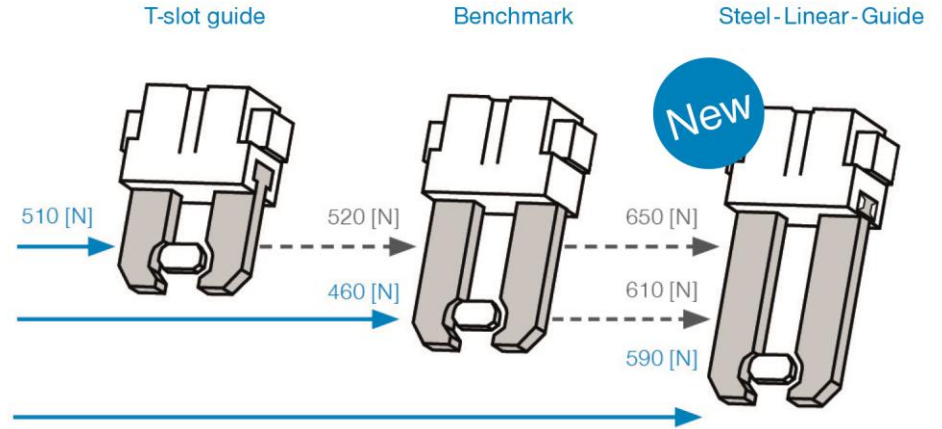
**Do you want to use one gripper for any task?**

- + Reduce the number of articles to manage
- + Cut your design and stock-keeping costs to a minimum
- + The gripper guarantees you process reliability, no matter what the environmental conditions
- + Protected against corrosion
- + Select either a pneumatic or electric drive to give you maximum flexibility when creating your design



# "THE FIRST GENUINE UNIVERSAL GRIPPER"

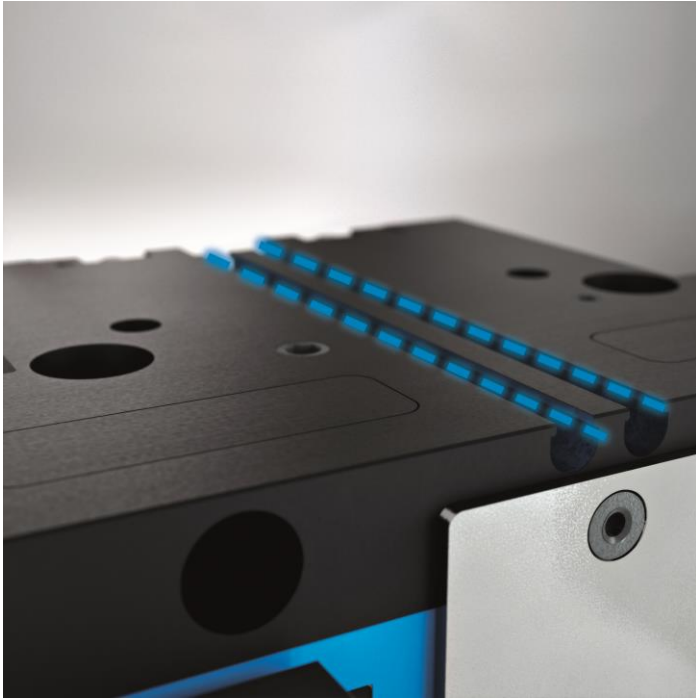
## GRIPPER SERIES 5000



### Is installing the most powerful components important to you?

- + Increase the safety of your machine by installing a gripper from this series
- + It offers you up to 30% higher gripping force and up to 10% higher static forces and moments
- + Using it means you can install gripper fingers that are up to 10% longer than the best-known models in the market
- + And you can be sure that these grippers give you the same performance as electrically driven grippers.

# "THE FIRST GENUINE UNIVERSAL GRIPPER"



## Are details important to you?

- + The transverse sensor grooves mean you can change the piston position sensing quickly and easily, wherever the gripper is installed
- + Only one interference contour check required, because a spacer compensates for the height difference between the electrical and pneumatic gripper
- + With additional pin holes underneath the cover plate for customer-specific attachments
- + With integrated lubrication reservoir



# "THE FIRST GENUINE UNIVERSAL GRIPPER"



Universal jaw steel



Changeable jaw, loose-part-set



Changeable jaw, fix-part



2-Position-Sensor Cable  
0,3 m - Connector M8



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



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



Angled Fittings - Quick  
Connect Style



Straight Fittings - Quick  
Connect Style



Quick Exhaust Valve

**Do you want a wide range of accessories, perfectly tailored to your gripper?**

- + Our product range has quick-release jaws that fit every Series 5000 gripper, so you can reduce setup times to a minimum
- + 2-position sensors that enable you to space saving position sensing
- + Our multitude of tools and accessories means you get everything you need for your gripper from one source

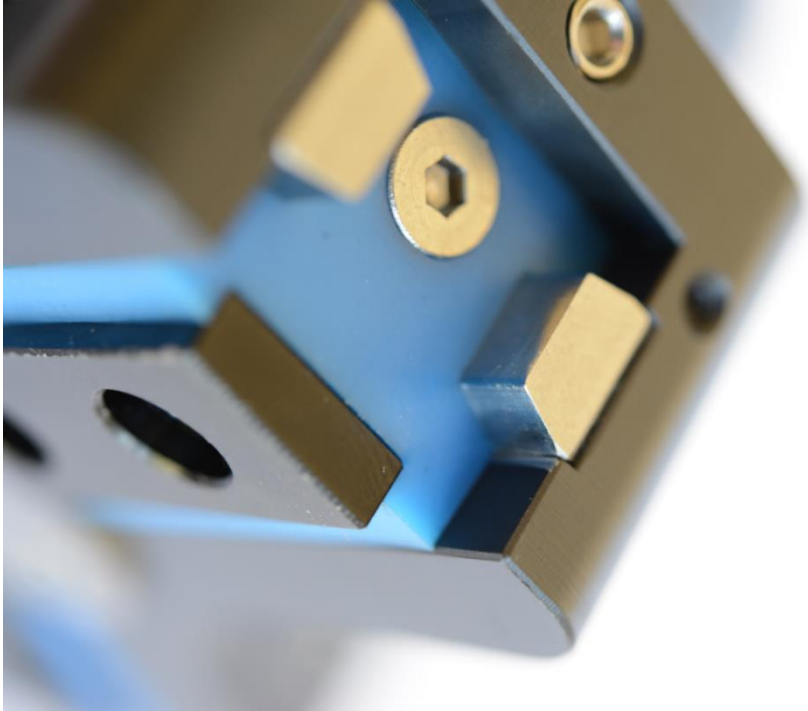
# "THE FIRST GENUINE UNIVERSAL GRIPPER"



## Any concerns about using an electrical gripper?

- + Our electrical grippers don't need an additional control unit or any extra sensors like the others
- + You can use the Advanced Control Module, the first ever developed for this purpose, with its intuitive menu-driven user interface, to individually adjust the gripping force, travel time and 3 positioning signals
- + To save space, the power supply and I/O control share a cable

# "THE FIRST GENUINE UNIVERSAL GRIPPER"



**Do you want state-of-the art technology in your machine?**

- + The gripper's Steel Linear Guide combines proven linear guide principles with the very latest sealing and DLC coating technology
- + You benefit from one of the most robust and long-lasting grippers currently available on the market, with a maintenance-free working life of up to 30 million cycles

# FUTURE BENEFITS



- + Logical and easy to set up and use
- + Technical parameters and information can be set and modified easily
- + Intelligent components can be integrated in a higher-level control system with ease
- + Non-platform-specific: easy to integrate in modern control systems (HTML5 and OPC)
- + The Zimmer Group HMI is non-platform-specific and app-enabled, for quick updates and upgrades.
- + Modern, intelligent components need a transparent, user-friendly HMI
- + The Zimmer HMI enables users to display and run each one of a component's functions, during commissioning, whilst the system is running and for servicing
- + Intelligent components networked via IO link



THE KNOW-HOW FACTORY



THANK YOU FOR YOUR ATTENTION