

GEMOTEC System

The world of High Precision, Modular Assembly Automation

From individual, multi-axis assembly solutions right up to complete functional modules – the GEMOTEC system from SCHUNK is a high-tech, comprehensive handling system for small part handling and assembly automation based on a modular design. Modular and highly dynamic.

The possible combinations with the latest SCHUNK grippers open up brand new perspectives. For customer and industry-specific precision manufacturing, for complex gripping tasks, and for the configuration of both flexible and very exact handling and assembly solutions.

You can also benefit from the synergy of modular systems and SCHUNK gripper quality. Available for your industry.



Automotive



Electronics



Plastic



Medical technology

SCHUNK Gripping Modules

When maximum precision counts, perfect gripping technology is everything. With more than 400 possible combinations, using the latest SCHUNK grippers in the GEMOTEC system provides a wide range of individual solutions.

SCHUNK pneumatic gripping modules



SCHUNK adapter plates



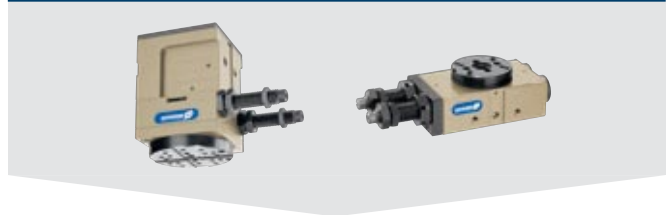
GEMOTEC System

Variety through modular design. With pneumatically and electrically driven standard modules, the self-contained modular design offers tens of thousands of possible solutions.

GEMOTEC pneumatic gripping modules



GEMOTEC pneumatic rotary modules

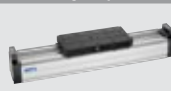


GEMOTEC linear modules + gantry modules

Pneumatic linear modules



Pneumatic gantry modules



Electric linear modules



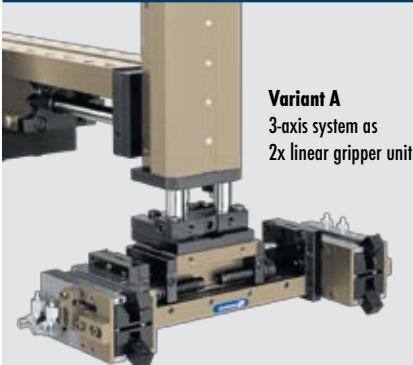
Electric gantry modules



Assembly systems



Combination examples



Variant A
3-axis system as
2x linear gripper unit



Variant B
Pick & place unit

CLM Mini-slide

Overall length optimized, with pneumatic drive and pre-loaded junction rollers with no play

Area of application

For use in assembly automation; for example, as pick & place solutions

Description of function

The upper part of the slide has linear extension and retraction. The drive is a compressed-air driven piston.



KLM Stroke Module

with pneumatic drive and ball bushing guide

Area of application

For use in clean and moderately contaminated environments. Simple economic linear movements or, in combination, multi-axis positioning systems for assembly and handling technology.

Description of function

The linear module is driven by a double-acting pneumatic cylinder which is integrated in the base body and guided by two opposing guide rods which are secure against over rotation.



LM Stroke module

with pneumatic drive and pre-loaded junction rollers without play, guided in prism rails.

Area of application

For use in clean environments, such as assembly and testing systems. Optimum standard solution for high-precision applications.

Description of function

The slide is guided with pre-loaded junction rollers on the base body and driven with a double-acting pneumatic cylinder which is integrated into the base body.



PMP Gantry Module

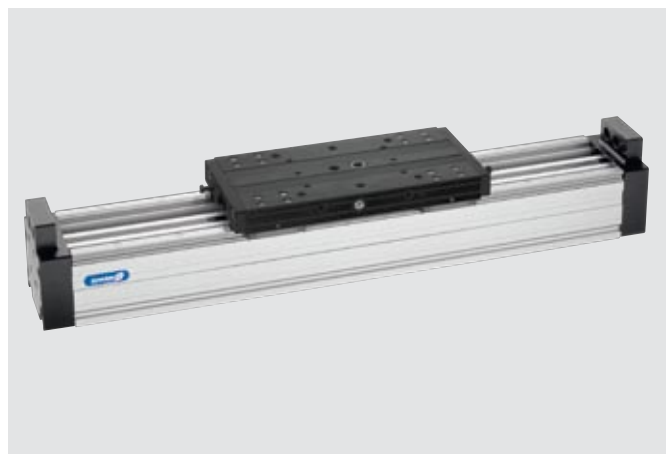
with integrated pneumatic drive cylinder and pre-loaded recirculating ball-bearing guides with no play

Area of application

For economical, robust and precise gantry systems with long stroke range. Use in dirty environments is also possible due to the "Bellow" option. Standardized connecting elements permit numerous combinations with other GEMOTEC system elements.

Description of function

The axis carriage is driven by a rodless pneumatic cylinder and precisely guided by profiled rail guides.



Linear Axes

Direct drive with profiled rail guide, integrated measuring system for position detection and temperature monitoring.

Area of application

For highly dynamic positioning tasks which are beyond what pneumatic drives can do; for example:

- Handling and assembly technology
- Measuring and testing technology
- Component marking and identification
- Component assembly and final inspection in microelectronics
- Medical technology

Description of function

The electric drive consists of a stator and a runner. The phase and the amplitude of the applied electrical current are regulated in the controller. This causes the runner, which is fitted with magnets, to move.



Gantry Axes

Direct drive with precision ball-bearing guide, integrated measuring system for position detection and temperature monitoring.

Area of application

For versatile and highly dynamic positioning tasks that are beyond what pneumatic drives can do; for example:

- Handling and assembly technology
- Measuring and testing technology
- Component marking and identification
- Component assembly and final inspection in microelectronics
- Medical technology

Description of function

The electric drive consists of a stator and a runner. The phase and the amplitude of the applied electrical current are regulated in the controller. This causes the runner, which is fitted with magnets, to move.



GEMOTEC catalog - all the information you need at a glance!

The full range of modular assembly technology from SCHUNK is available in a single catalog. Pneumatic or electric - the catalog provides an overview of the entire GEMOTEC modular system.

To help users to find what they need more quickly, all technical data, appropriate accessories and individual options are listed for every component.

