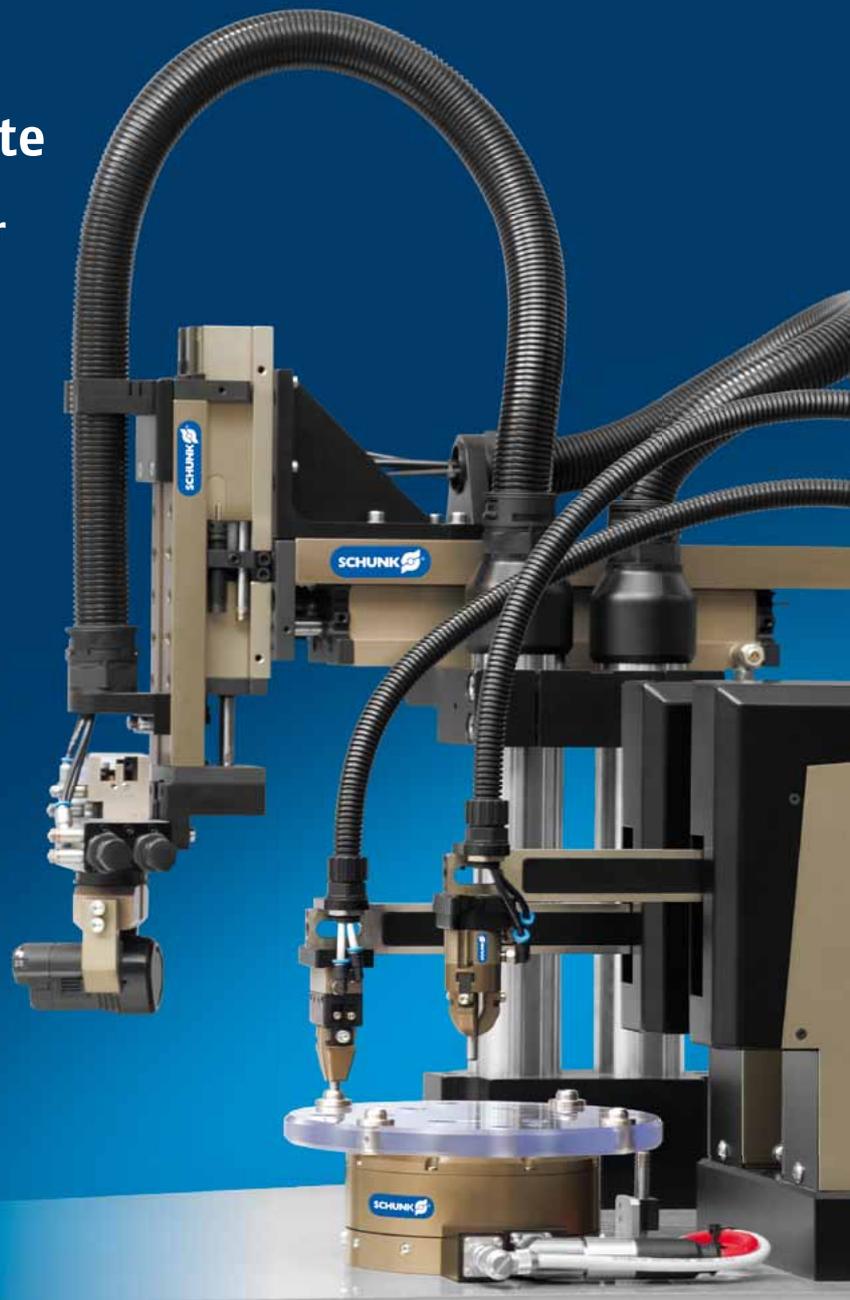


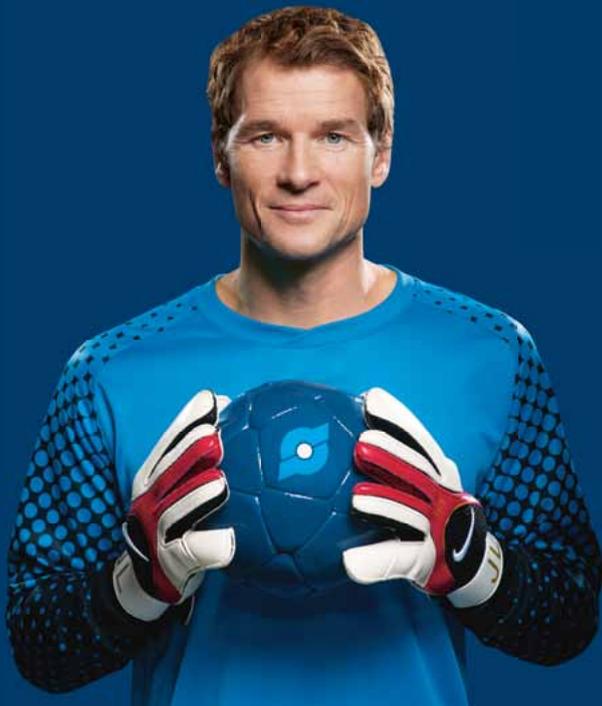
Superior Clamping and Gripping



Pick&Place up to 110 picks per minute

The unique spectrum of modular
and compact Pick&Place units





Superior Clamping and Gripping

Jens Lehmann stands for precise gripping, and concentrated safe holding. As a brand ambassador of the SCHUNK team, the No. 1 goalkeeper communicates our global competence leadership for clamping technology and gripping systems. The top performance of SCHUNK and Jens Lehmann is characterized by dynamics, precision, and reliability.

For more information visit our website:
www.gb.schunk.com/Lehmann

J. Lehmann
Jens Lehmann





Henrik A. Schunk, Kristina I. Schunk, brand ambassador Jens Lehmann and Heinz-Dieter Schunk

Top Performance in the Team

SCHUNK is the world's No. 1 for clamping technology and gripping systems – from the smallest parallel gripper to the largest chuck jaw program.

In order to boost efficiency, SCHUNK customers have bought more than 2 000 000 precision toolholders, 1 000 000 gripping modules, and 100 000 lathe chucks or stationary workholding systems so far.

This makes us proud and spurs us to attain new top performances.

As a competence leader, we recognize and develop standards with a large potential for the future, which will drive the rapid progress in many industries.

Our customers profit from the expert knowledge, the experience and the team spirit of more than 1800 employees of our innovative family-owned company.

The Schunk family wishes you improved end results with our quality products.



Heinz-Dieter Schunk



Henrik A. Schunk



Kristina I. Schunk

Four systems for the complete Pick&Place spectrum

From 45 to 110 picks per minute

Precise, fast, and process-reliable Pick&Place solutions are in demand today more than ever before:

In assembly and handling due to increasing price pressure and in electronic, solar, and optical applications due to the increasing number of variants and miniaturization.

SCHUNK is the manufacturer with the most extensive line of modules for every Pick&Place application.

Whether pneumatic or electric, modular or compact – SCHUNK determines the ideal solution based on the main performance data: strokes, mass, and above all, cycle times.

And the modular solutions from SCHUNK are suitable for every conceivable custom application. The compact Pick&Place units score especially well in high-speed applications.

Your advantage: SCHUNK guarantees a customized and cost-effective solution.

Take advantage of the innovative spirit of the family-owned company SCHUNK:

- Repeat accuracy up to 0.01 mm – for maximum precision
- Four solutions for all weight classes – handling from a few grams to several kilos
- The largest performance spectrum from a single source – cycle times of 45 to 110 picks per minute
- Comprehensive, high-quality modular system for ideal custom solutions
- With exactly matched components on request
- A broad product portfolio – the perfect Pick&Place solution for every application



Pneumatically modular The all-round modular system



For simple applications the modular Pick&Place pneumatic units from SCHUNK are the ideal all-round modular system.

You benefit from the diversity of the unique SCHUNK modular system with components that are proven a thousand times over. The units, which are customized to suit your individual requirements, are easy to integrate and absolutely reliable. On request they can be delivered pre-mounted or as single components.

Ideal use of this Pick&Place application

Loading and unloading of conveyor belts, pallets and machines, assembly automation, small parts handling, simple handling tasks, etc.

Your advantage

With two intermediate positions, the modular pneumatic units are the optimal solutions for a low investment – ideal for point-to-point handling tasks with the same pick and place height and for the assembly of parts which are always identical.

Your added value

- Modular design for more individuality and cost effectiveness
- High-quality components for a long life and process reliability
- Can be delivered pre-configured or pre-mounted, for fast use
- Efficient due to easy operation, maintenance and repair



Technical data

Attachment mass	max. 15 kg
Horizontal stroke	0 .. 450 mm
Vertical stroke	0 .. 450 mm
Repeat accuracy/axis	± 0.01 mm
Number of stand-by positions	2
Intermediate positions	horizontal and vertical are possible

* with a 145 mm horizontal stroke, 45 mm vertical stroke,
1 kg attachment mass, incl. 2 x 50 ms gripping time

Electrically modular The flexible ones, with linear direct drive



The modular solutions with linear direct drives offer maximum precision, flexibility, speed, and convenience. The Pick&Place units feature a contactless drive, which means they are non-wearing and maintenance-free.

You benefit once more from the diversity of the unique SCHUNK modular system with components that are proven a thousand times over. The units, which are customized to suit your individual requirements, are easy to integrate and absolutely reliable. On request we will deliver them to you pre-mounted or as single components.

Ideal use of this Pick&Place application

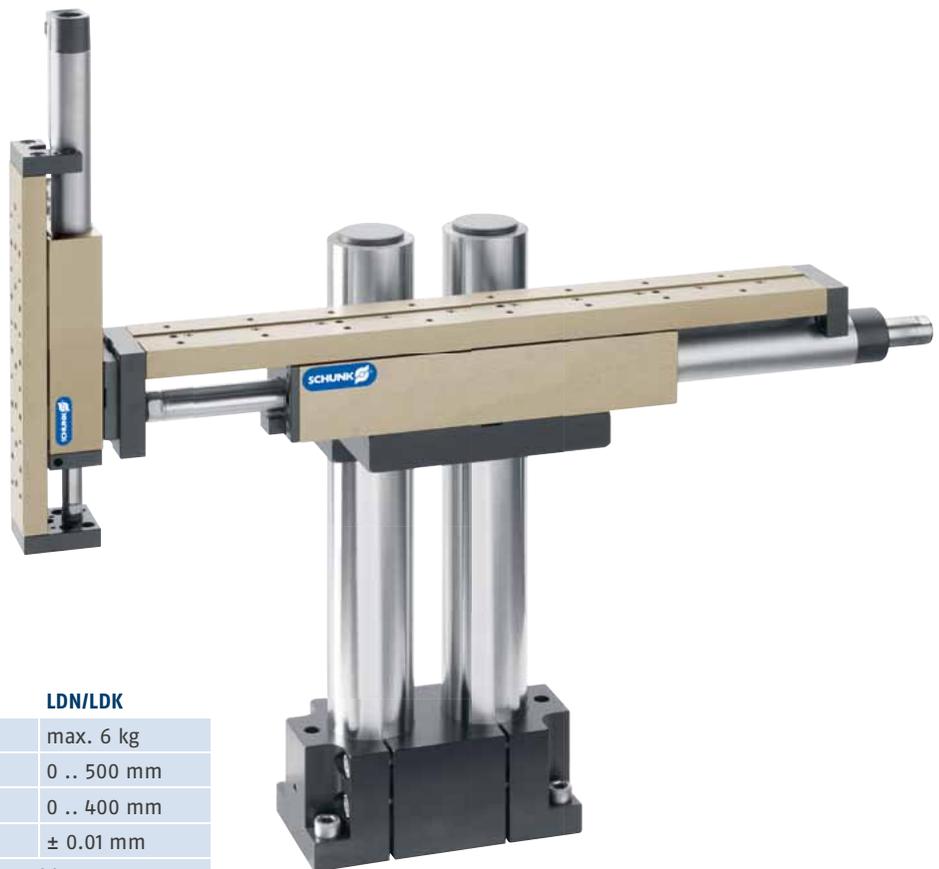
Handling and assembly technology, assembly automation, small parts handling, etc.

Your advantage

The free programmability of the strokes and driving forces. They give you freedom for a broad range of applications.

Your added value

- High repeat accuracy of ± 0.05 mm and high speed due to the linear direct drive
- More flexibility due to individual definition and control of stroke and driving forces
- Maintenance-free due to linear direct drive
- Modular design for more individuality and cost effectiveness
- Pre-configured or mounted, for fast use



Technical data	ELM/ELM	LDN/LDK
Attachment mass	max. 5 kg	max. 6 kg
Horizontal stroke	0 .. 260 mm	0 .. 500 mm
Vertical stroke	0 .. 260 mm	0 .. 400 mm
Repeat accuracy/axis	± 0.05 mm	± 0.01 mm
Number of stand-by positions	freely programmable	
Intermediate positions	freely programmable	

* with a 145 mm horizontal stroke, 45 mm vertical stroke, 1 kg attachment mass, incl. 2 x 50 ms gripping time

Pneumatically compact PPU-P – the fastest pneumatic Pick&Place unit on the market



95 cycles per minute – made possible by intelligent technology. Since the horizontal and vertical motions are force-driven, both can be actuated earlier. The effect: Cycle times are drastically reduced.

The compact pace-makers are fast and easy to commission and the strokes are adjusted via the end positions.

With the help of the controller, the effector can move directly via the respective target position into stand-by position until the feed-through or placing unit is ready. This improves both process reliability and cycle times.

Ideal use of this high-speed Pick&Place application

Handling and assembly technology, assembly automation, small parts handling, etc.

Your advantage

The ideal solution when high cycle rates are required – without conversion to mechatronic solutions.

Your added value

- Higher system productivity due to 30% shorter cycle times of only 0.63 s*
- More flexibility due to compensation of different pick and place heights
- Easy integration in processes due to integrated tolerance compensation
- Easy commissioning due to Plug&Play functionality
- Full compatibility with modules for modular assembly automation



Technical data	PPU-P 10	PPU-P 30
Attachment mass	max. 1 kg	max. 3 kg
Horizontal stroke (adjustable)	145 mm	210 mm
Vertical stroke (adjustable)	45 mm	60 mm
Repeat accuracy/axis	± 0.01 mm	± 0.01 mm
Number of stand-by positions	2	2
Intermediate positions	–	–

* with a 145 mm horizontal stroke, 45 mm vertical stroke, 1 kg attachment mass, incl. 2 x 50 ms gripping time

Electrically compact PPU-E – the fastest electric Pick&Place unit on the market



Lightning fast Pick&Place applications with utmost precision – the highly efficient electric PPU-E is the fastest Pick&Place unit on the market.

Your advantage: Less moving mass; no moving motor cables due to fixed motors. The effect: Maximum speed – maintenance-free and non-wearing.

The slim design and the media feed-through via the back panel enable a compact, low-maintenance and easy-to-install sandwich assembly of several units next to each other. Two integrated position measuring systems provide for high repeat accuracy.

Ideal use of this high-speed Pick&Place application

Handling and assembly technology, assembly automation, joining processes, measuring and testing technology, etc.

Your advantage

The compact unit is the ultimate solution for high-speed assembly tasks. Its regulation of forces also makes it perfect for use in joining processes, pressing, and measuring forces.

Your added value

- Higher system productivity due to minimal cycle times of an incredible 0.54 s*
- Reliable processes due to excellent repeat accuracy of 0.01 mm
- Minimized energy costs due to consistently lightweight design
- Higher system availability due to elimination of moving motor cables
- Broad spectrum of different requirements due to six standard modular devices



Industry prize 2010 of the Hanover Show in the manufacturing engineering and mechanical engineering category



Product of the Month November 2009 – Awarded by the trade publication ke Konstruktion & Engineering



Technical data	PPU-E 30	PPU-E 50
Attachment mass	max. 3 kg	max. 5 kg
Horizontal stroke	0 .. 270 mm	0 .. 280 mm
Vertical stroke	0 .. 100 mm	0 .. 150 mm
Repeat accuracy/axis	0.01 mm	0.01 mm
Number of stand-by positions	freely programmable	
Intermediate positions	freely programmable	

* with a 145 mm horizontal stroke, 45 mm vertical stroke, 1 kg attachment mass, incl. 2 x 50 ms gripping time

Everything from a single source

Efficiently combined

Pick&Place with gripping and rotary modules from SCHUNK

SCHUNK is the world's competence leader for clamping technology and gripping systems. With our gripping modules, rotary modules, linear modules, and robot accessories, we offer maximum-efficiency solutions for automated processes.

Take advantage of the diverse range of gripping modules and highly innovative rotary modules for a more efficient Pick&Place solution from a single source. Talk to us about your challenges. We will be glad to assist you in choosing the optimal actuators.

Wherever Pick&Place tasks require maximum precision and cost effectiveness, SCHUNK is the driving force for the perfect implementation of these requirements.

RM Cube **RMPG** **RM flat** **RST-P** **RP** **RM Mini**

Modular and compact Pick&Place units



Pneumatically modular



Electrically modular



Pneumatically compact



Electrically compact

Rotary modules **Rotary modules**

Gripping modules **Gripping modules**

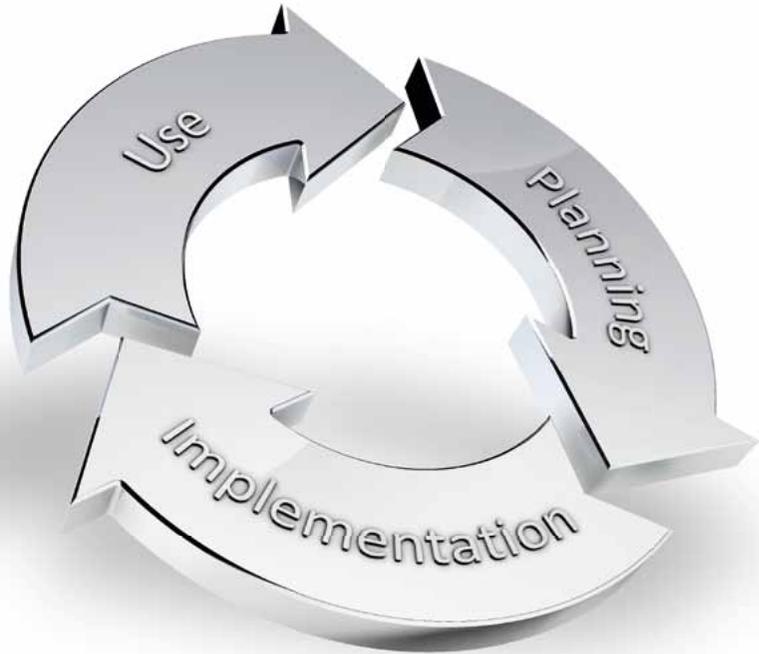
MPG-plus **PGN-plus** **SWG** **PZN-plus** **GMP** **MPZ**

SCHUNK Service for Gripping Systems

Reliability and efficiency for the entire product life cycle

Service for us means ensuring the optimal availability of your SCHUNK products. That is why our SCHUNK service for gripping systems focuses on what is most important: Competent service for planning, delivery, installation and maintenance throughout the entire product life cycle.

This service philosophy is your guarantee for reliability in **planning, implementation** and **use**.



SCHUNK Service – Your advantages at a glance:

Planning

More individuality due to customized solutions. More planning security with respect to quality, time and costs.



- CAD data free of charge
- Configuration software
- Trial delivery
- Gripping system hotline
- Feasibility analyses
- Customizing
- Order-related development services

Implementation

Fast start of production due to more effective implementation. More cost effectiveness from the beginning.



- Preliminary commissioning
 - On-site commissioning support
 - Customer-specific documentation
 - Express assembly*
 - Rapid prototyping
- * On request

Use

Focused support throughout the entire product life cycle. More cost effectiveness and reliability in the entire process.



- Service hotline
- Replacement parts service
- Repair service
- Maintenance service
- Customer training
- Product optimization
- SCHUNK Longlife guarantee

Inquiry form

Copy form, complete and fax to +49-7133-103-2679

Drive

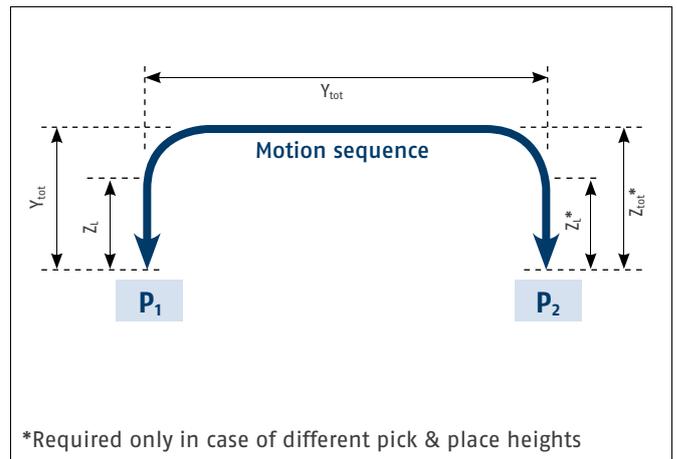
pneumatic electrical

Preferred design

modular compact (PPU-P/-E)

Technical data

Attachment mass	m		kg
Total horizontal stroke	Y_{tot}		mm
Total vertical stroke	Y_{tot}	max.	mm
Linear vertical stroke	Z_L	min.	mm
Total vertical stroke*	Z_{tot}^*	max.	mm
Linear vertical stroke*	Z_{L^*}	min.	mm
Gripping time	P_1		ms
Gripping time	P_2		ms
Picks per minute	PPM		ppm
Repeat accuracy per axis			mm



Intermediate positions required horizontally? no yes, number

Intermediate positions required vertically? no yes, number

Control interfaces (Only for electrical units)

Ethercat Sercos III PROFINET IO Ethernet/IP Profibus CAN open Device Net Parallel

Contact data

Company _____ Department _____

Name _____

Street _____ City / ZIP _____

Phone / Fax _____ E-mail _____



Exceptional precision from the competence leader for clamping technology and gripping systems.

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Jens Lehmann stands for precise gripping,
and concentrated safe holding.
For more information visit our website:
www.gb.schunk.com/Lehmann

J. Lehmann

Jens Lehmann,
SCHUNK brand ambassador since 2012