

Superior Clamping and Gripping



Gripping Systems

The Closest Thing to the Part







Henrik A. Schunk, Kristina I. Schunk 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 and stationary workholding systems so far.

This makes us proud and motivates 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 1900 employees in our innovative family-owned company.

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



Heinz-Dieter Schunk

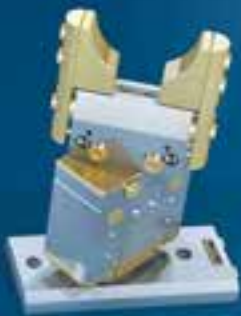


Henrik A. Schunk



Kristina I. Schunk

Superior Clamping and Gripping



PPG gripper

1983



PowerCube Walking robot

AUTOMATICA 2006



Dextrous Lightweight Arm LWA 4.10

AUTOMATICA 2008



Care-O-bot®

The Closest Thing Right from the Start.

Gripping systems are pivotal, forming a core issue in industrial automation and mobile robotics. We were quick to identify the importance of the front end and revolutionized automated handling by developing the first gripper suitable for industrial applications.

As a pioneer, we have always been focused on real industrial circumstances. We shape and change those circumstances. We listen and interpret needs with an eye on the future. The end result is product strategies that set new standards for market-driven innovation.

Superior Clamping and Gripping stands for our decades of experience, and our competence in being "The closest thing to the part".

Mechatronic Gripping Systems

Alternative, intelligent, adaptable

Modular Gripping Systems

From standard components through to customized systems

Mobile Gripping Systems

Technologies for handling the future



Powerball Lightweight Arm LWA 4.6

AUTOMATICA 2010



5-finger hand

AUTOMATICA 2012



INDUSTRIEPREIS

- 2008 Gripper with spindle interface
- 2008 SWS-I-011 industrial automation
- 2010 PPU-E Pick & Place unit



Process Innovation Award

- 2009 UNIPLACE



iF product design award

- 1999 TRIBOS toolholding system
- 2004 ROTA THW plus
- 2004 SRU
- 2005 TANDEM PZS
- 2009 ZENTRICO THL plus
- 2011 PHL
- 2012 ROTA NCL



MM Award

- 2008 Dextrous Hand SDH-2
- 2010 MPG-plus
- 2012 Powerball Lightweight Arm LWA 4.6



Dr. Rudolf Eberle Preis

- 1986 Gripper and gripper change system



Enterprise Medal from the State of Baden-Württemberg

- 2006 Heinz-Dieter Schunk



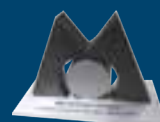
German Mechanical Engineering Prize

- 2008 Heinz-Dieter Schunk



Engelberger Robotics Award

- 2010 Heinz-Dieter Schunk



**"Training company of the Year"
Federal Association Metal Industries**

- 2011 SCHUNK GmbH & Co. KG



Quicker

More Cycles – Higher Productivity.

Pace-setters from SCHUNK offer more than high speed at the limit. Due to their intelligent structure, our modules can be quickly integrated and are soon ready for use. They drastically reduce your equipment and programming costs, as well as expenditure on everything from planning through to start-up. Your systems add value sooner and your processes get started quicker. It really is that simple.

0.58 second cycle time

3 000 000 parts a year

24 hours a day

365 days a year

If Things are getting faster, we set the Pace



The requirement

Handling concept for assembling components on a rotary table with cycle times of 5 or 0.5 seconds. Process reliability has to be maximized, downtime and maintenance work kept to a minimum.

The SCHUNK solution

Combining a servo-electric PPU-E Pick & Place unit and a PGN-plus universal gripper, including the complete set of sensors, provides the ideal solution. All the components from the SCHUNK modular system are integrated into the automated system quickly and securely. Using a single source speeds up the planning and process.



The requirement

Rapid and secure workpiece orientation on a rotary table assembly system.

The SCHUNK solution

A modular pick & place system made of CLM axes combined with a GSM-P module, including comprehensive sensor systems for gripping and swiveling optimizes the cycle time and makes the process extremely reliable.



The requirement

Reliable and maintenance-free handling concept for de-stacking 3 000 000 turned parts per year.

The SCHUNK solution

Modular four-axis surface gantry with servo-electric linear axes from the LDN and LDK universal modules, as well as a PGN-plus parallel gripper. No wear with an annual performance of about 3000 kilometers (1800 miles). Due to direct linear drives, it is significantly more precise, faster and virtually maintenance-free.



The Speedy Solution



Pick & Place Unit PPU-E

Impressive dynamism

The ultimate in high-speed assembly work. Due to maximum precision and force control, the servo-electric PPU-E is the perfect pick & place unit for flexible joining and pressing-in procedures.

- Up to 110 process reliable picks per minute
- 3 kg – 5 kg payload
- 4 m/s speed
- 10 μ repeat accuracy



Sensational record holder



Pick & Place Unit PPU-P

Nimble hard worker

The PPU-P is in no danger of slowing down. With 75 picks/min at a 3 kg payload and 95 picks/min at a 1 kg payload, the pneumatically driven pick & place unit keeps up a brisk pace.



Valve Control Unit VCU

Ready for action in no time

Making it even easier to save time and air. Connect the VCU, activate it and simply use the pre-programmed sequences. Plug & Play. Plug in, select and start in 10 minutes.



2-Finger Gripper for Small Components MPG-plus

The benchmark for small part handling

The MPG-plus is ready for use around the world, wherever small parts need to be handled reliably and quickly. 25% more power, up to 10% less weight. A concept tried and tested in hundreds of thousands of applications.



Swivel Unit SRU-mini

Powerful whirlwind

1.15 Nm torque with a weight of 690 g is really something. Swivelling in a small space – this makes for quite a performance.

The Fast Track to Efficiency



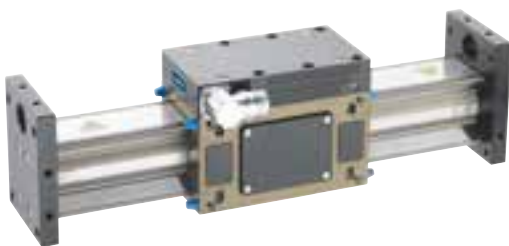
Quick-Change System SWS

End of arm tooling can be changed fully automatically in seconds

Two parts, one system. The standardized quick-change system seamlessly merges the effector with robots or a gantry. It holds securely and changes in an instant.

- 0.015 mm repeat accuracy
- 690 N – 93000 N locking forces
- 8 kg – 1350 kg payload
- Modules for air, current, signals, vacuum, BUS, etc.

As fast as the wind



Universal Linear Module LDN

Achieving high-precision faster

With 10 μ positioning accuracy and acceleration of up to 40 m/s², the directly driven linear axes master top speeds and precision. And all this with absolute-encoders referenced in seconds.



Parallel Swivel Gripping Module GSM-P

Works in the smallest spaces

Unbeatable when it comes to gripping and rotating in narrow spaces. And all this with a jaw stroke of up to 10 mm and a gripping force of up to 170 N.



2-Finger Radial Gripper PRG

Innovative damping optimizes the cycle time
Rapid angular gripping with integrated, maintenance-free damping system. 180° opening angle with opening/closing times from 0.1 seconds.



Magnetic Switch MMS 22-PI

Programmed in 15 seconds
An all-purpose magnetic switch. Non-contact teaching in seconds reduces the set-up time for switching points by up to 90%. Completely inserted, with no interfering contour on the gripper.



More Profitable

**Invest Cleverly.
Producing more Cost-Effectively,
in the long Term.**

SCHUNK products are aimed at the total benefit of ownership. Their operating costs and added benefits are crucial factors for greater economic efficiency in a running process. Greater productivity and less downtime, maximum reliability and security mean that what seems at first to be expensive is more cost-effectively over time. So it's worth taking a closer look.

100 000 pieces p. a. more

3 years longer

60 percent reduction in set-up time

80 percent more availability

If it should pay off, we have the Solutions.



The requirement

Highly dynamic fitting of boards starting from a batch size of 1, with maximum component variance. Cycle time 1.1 s per part with strokes of up to X = 195 mm, Y = 151 mm and Z = 70 mm.

The SCHUNK solution

Odd form placement with moving CLD linear axis made of carbon fiber, MRD-S servo-electric swivel unit and MPG-plus gripper for small components. 50% less weight thanks to carbon-fiber axis means greater dynamic. The cycle times can be speed up and the high-performance actuators can be utilized to the fullest.



The requirement

Electronic fitting of varying components between 3 g and 40 g of weight.

The SCHUNK solution

Gripping system based on the SCHUNK flagship PGN-plus. The universal gripper is robust, reliable and specialized in continuous fast cycle times.



The requirement

Automated filling of syringes with partially toxic medication.

The SCHUNK solution

A system made up of PG 70 and MEG mechatronic grippers that automatically handles a variety of vials and syringe sizes.

Invest properly – Reap the Rewards



2-Finger Parallel Gripper LEG

Versatile facilitator

Intralogistics, packaging, automotive. Various goods in a variety of sizes. The LEG flexibly handles situations that could previously only be performed by people.

- Modular design
- 280 mm stroke per jaw with 10 kg weight
- Servo motor drive can be customized to your preference
- Asynchronous jaw movement possible

Smart savers for your processes



2-Finger Angular Gripper PWG-plus

Multi-talented powerhouse

Reliable and robust for the greatest possible availability. The first choice for anyone who needs maximum gripping forces without downtime for maintenance.



Linear Axis CLD

Endless dynamism

Made of carbon. Carbon the money-saver. Moving axes are heavy and increases cycle times. The CFK profile of the CLM reduces the weight by more than 50%, speeding up your operations.



Miniature Rotary Module ERD

High-speed, space-saving and with a powerful torque
Swiveling in a small package. The highly integrated ERD brings power and precision to the smallest of spaces. With any angle of rotation you require and an absolute-value transducer. 0.01° repeat accuracy and 1.2 Nm torque. Reliable, due to integrated air and electrical feed-through. This means that no rotating power lines are necessary.



6-Axis Force/Torque Sensor FTNet

Where delicate sensitivity is key
The sensitive all-rounder for applications like polishing, chamfering and difficult insertion operations. 50% greater interface compatibility. 6 degrees of freedom, from 2 N to 40000 N range of measurement.

Balancing up at the bottom Line



Standard Gantry RPE

Conquers space quickly

When maximum spatial flexibility is crucial, the standard configurations offer maximum performance. Fitted, ready for operation, in assembly groups that are ready for use, all the units can start adding value in next to no time.

- 10 kg and 20 kg payload
- 500 mm to 1500 mm X-stroke/Y-stroke
- 100 mm to 500 mm Z-stroke
- 5 m/s² acceleration

Counting on the basics



Standard Gantries LPP and LPE

Pre-assembled for immediate start-up

Pneumatic or electric, the standardized configurations can be combined into customized gantries, saving up to 50% in investment, project planning, assembly and installation.



Optical Distance and Presence Sensor OAS

Can save on image processing

Differentiate parts, identify positions, can pick or de-stack "on the fly." The OAS allows your PGN-plus and MPG-plus to "see" cost efficiency with high resolution.



Linear Module LM

Long-term cost effectiveness

The reliable module for high-performance assembly systems. The robust cross roller guidance keeps guiding the axis long after other systems would have failed. Long-lasting functions save costs over the long term. Tried and tested thousands of times.



Modules GSW

Making machine tools more productive

Modules for greater opportunities. Quick and easy to fit to the machine spindle, they help your machine learn to grip, join and clean. Without any additional gantries or robot systems.



Hotter

When it gets hot, we grip harder.

Crossover solutions from SCHUNK for harsh, aggressive environments. Extreme tasks redefine possibilities in handling. From large and heavy to small and light, dry to wet, and hot to cold, our grippers are designed to handle the most difficult conditions, guaranteeing maximum process reliability. No situation is too tough.

1150 degrees Celsius

1.2 tons

100 percent humidity

250 mg/m³ dust content

If it is getting harsh, we tackle the Problem.



The requirement

Flexible gripping solution for handling about 40 variants of sand core.

The SCHUNK solution

Robust yet sensitive: PGN-plus universal gripper in dust-protection version with laser-formed polyamide gripper fingers with integrated damping elements. The jaws are customer-specific in line with the sand core's specific geometry. A quick-change jaw system makes it possible to change to another product within a few seconds, without any tools.



The requirement

Handling steel blanks for railway wheels. Workpiece weight: 800 kg.

The SCHUNK solution

SLG heavy-load gripper – the godzilla of SCHUNK grippers. The drive with its industrial motor can be adapted to the higher-level control architecture. Grippers and robots can be activated with the same set of commands.



The requirement

Depaneling electronic boards at high speed and with maximum precision.

The SCHUNK solution

Linear motor-driven axis gantry made up of LDN and LDK axes. Combined with a HWS change system at the front end and a special gripper based on PGN-plus.



They never give up



Heavy-Load Gripper SLG

Almost nothing is too heavy for it

The largest industrial robot of our times makes completely new handling concepts possible. But payloads of up to 1300 kg have to be handled first. The SLG sets new standards here.

- Component weights of up to 800 kg
- Electric drive
- Also available with optional change system

Tough performers



Swivel Unit SRU-plus H

Swivel high loads securely
H for hard. The SRU-plus with hard damping version handles double the load with the same unit sizes. A strong piece of equipment with all the benefits of the most powerful swivel unit on the market.



Sealed 3-finger Centric Gripper DPZ-plus

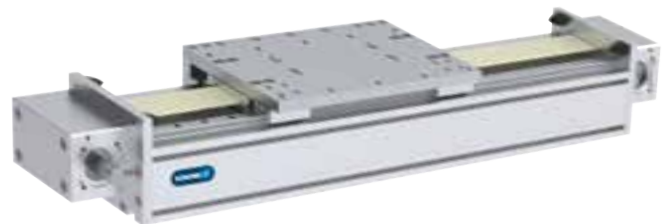
Reliable under the harshest of conditions
Impervious to dirt, water, cooling lubricant and dust. Tried and tested thousands of times in industrial conditions, the DPZ-plus specializes in harsh conditions, with IP67.



Universal Gripper with Heat Protective Sleeve PGN-plus

When things get really hot

A highly modular structure that enables the ideal version for the widest variety of requirements. A true all-rounder, PGN-plus can tackle hot iron without any trouble, due to its optional heat protective sleeve.



Linear Axis HSB Gamma

Super stable and self-supporting movements

The inherently rigid basic profile can bear many times its own weight. Maximum lengths of 8 m and payloads of up to 800 kg open up brand new handling horizons.

Reliable in tricky Situations



Assembly Gripper ORG

The all-rounder – O-rings on shafts and in ID bores

The standardized facilitator for internal and external assembly of O-rings, ORG redefines process reliability. The O-ring always finds the groove. No matter how difficult the situation.

- Variable Z insertion
- Integrated Z-stroke of 5 mm
- O-rings from 5 mm – 150 mm Ø
- Stroke up to 21 mm

Thinking and guiding together



2-Finger Parallel Gripper PG 70

Sensitive helper

From fragile light bulbs to sensitive laboratory samples, the mechatronic PG 70 always grips as tightly as necessary and as sensitively as possible.



Tolerance Compensation Unit TCU

Intelligent yielding

Tolerances in the workpiece or process can bring machines to a standstill. The TCU finds the ideal mounting and joining position and compensates if things don't fit properly.



Collision and Overload Sensor OPR

When things get really tough

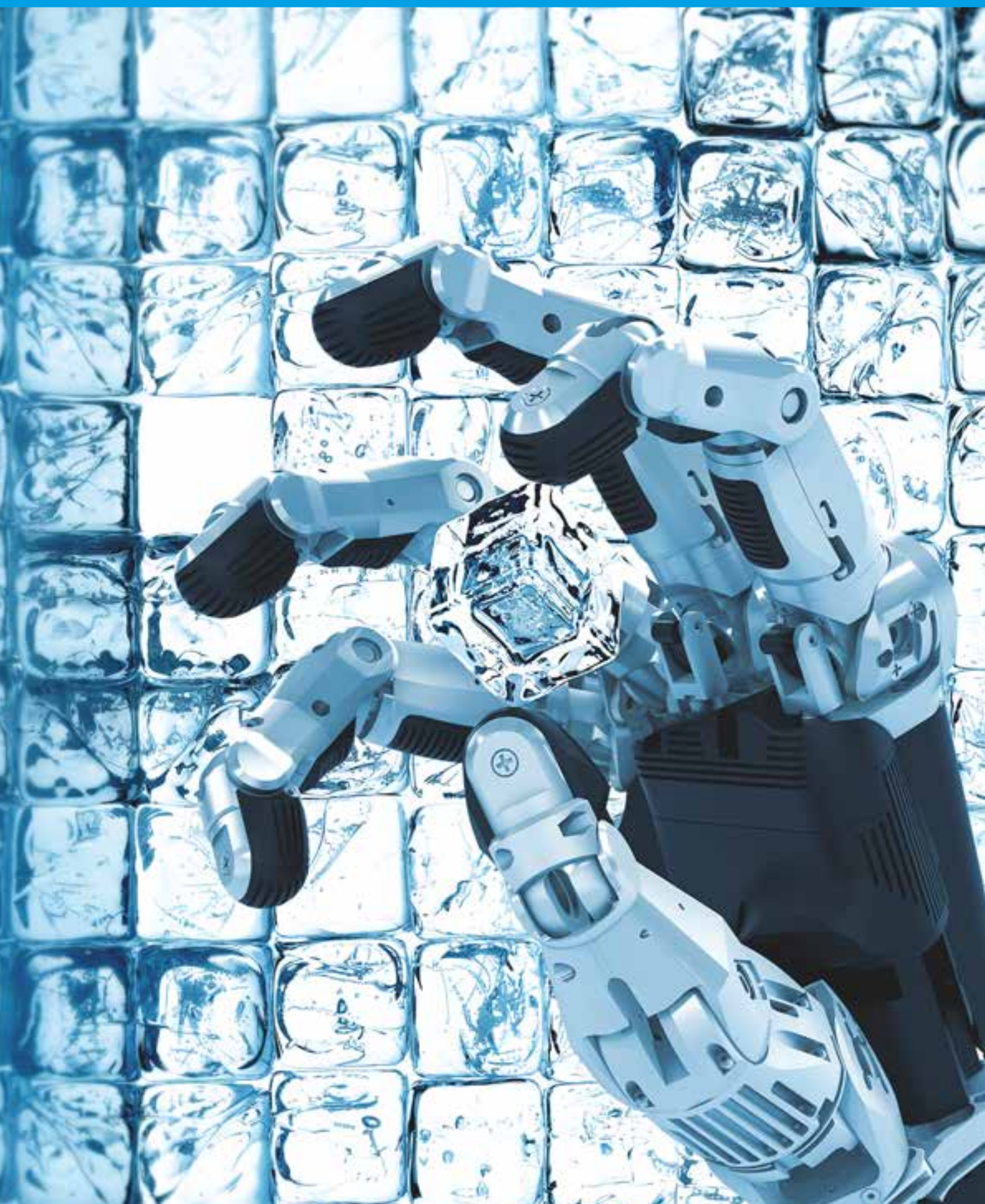
Good and effective protection for robots and handling devices, protecting them from lasting damage. The OPR yields at the right moment so that not every collision automatically means a long downtime.



Analog Position Sensor APS-M1

The essence of precision

For when there isn't enough space for quality control. The APS system turns your gripper into a measuring station with no interfering contour. With a measuring accuracy of 4 μm . And at a significantly lower total cost than non-integrated measuring solutions.



Cooler

Handling Tasks of the Future are everyday Reality at SCHUNK.

Inspection systems, applications on mobile platforms, human/machine and human/human interactions. On the economic side of things, service robotics is becoming increasingly dynamic. We think it's cool that our mechatronic products are already setting new standards. In both professional and private spheres. SCHUNK is pushing development forward.

14 degrees of freedom

3 joint modules

5 fingers

100 percent function

Where the Future is concerned, we are the Pioneer.



The requirement

All over the world, old military ordnance endangers the lives of people and animals. Remote-controlled EODs make it possible to safely remove explosive weapons without risking life and limb. The manipulators used here have to be robust, highly flexible and also very sensitive.

The SCHUNK solution

A modular lightweight arm based on PRL rotary modules with a total of 6 degrees of freedom.



The requirement

Fraunhofer IPA is a pioneer in service robotics. The Care-O-bot® flagship project needed a light and agile manipulator with a gripping hand to form the basis for researching future care applications.

The SCHUNK solution

A high-performance lightweight arm based on PRL modules with light cast connections and an SDH-2 gripping hand with tactile sensors. The design is predestined for mobile use and fulfills all the requirements in the minimum of space.

HoLLiE

HoLLiE is a mobile, two-armed service robot developed in FZI House of Living Labs (HoLL) in Karlsruhe, Germany. Due to the two Powerball Lightweight Arms LWA 4.6, HoLLiE features impressive mobility and flexibility.





The requirement

Concrete needs very precise properties, depending on the specification. The challenge here was to equip a fully automated laboratory with a highly flexible handling device.

The SCHUNK solution

A 5-axis lightweight arm made up of PRL modules, equipped with a PG 70 mechatronic gripper handles the concrete samples fully automatically. The robot is mounted on a mobile, battery-operated carrier system, and thus moves to the various stations. This solution provides for an extremely economical and modularly expandable quality control. Special feature: Human and robot share the working area in the laboratory.

Mobilizing and Shaping Technology

Powerball Lightweight Arm LWA 4.6

The lightweight arm with the world's best compact performance

Performance at its most beautiful. The arm has three highly integrated Powerball modules, offering 6 degrees of freedom. Integrated intelligence makes powerful, mobile handling possible as never before. The lightweight arm functions without a control cabinet. The pan-tilt unit's compact design permits especially dexterous manipulation in the tightest of spaces. Furthermore, the lightweight arm is designed to enable human/robot cooperation.

- Weight/load capacity ratio of 2:1
- Gripping radius of over 700 mm
- Excellent repeat accuracy of 60 µm
- 24 V DC supply for mobile applications



Competing with the future



Dextrous Lightweight Arm LWA 4.10

Tried and tested thousands of times
From mine detectors to the latest in rehabilitation systems. This lightweight arm has set standards and is used in service robots throughout the world. It can be perfectly combined with our sensitive gripping systems.



3-Finger Industrial Hand SDH-2

Very close to the human model
The 3-finger industrial hand features maximum flexibility when it comes to the shape, size and, above all, position of the gripped parts. Form-fit and force-fit gripping with integrated tactile sensors make it a sensitive helper.



FRIEND is a service robot developed by researchers from the University of Bremen for people with paraplegia. With its help, it should be possible in the future to give people with severe disabilities more independence and to help them to work again.

Intelligent modules and actuators



Rotary Module PRL

Endless power

The highly integrated rotary module has an output of up to 216 Nm continuous torque with a weight of 3.6 kg. With connection parts freely and flexibly fitted to the individual lightweight arm, it is designed for use in industrial automation and service robotics.



Powerball ERB

Well-rounded and intelligent

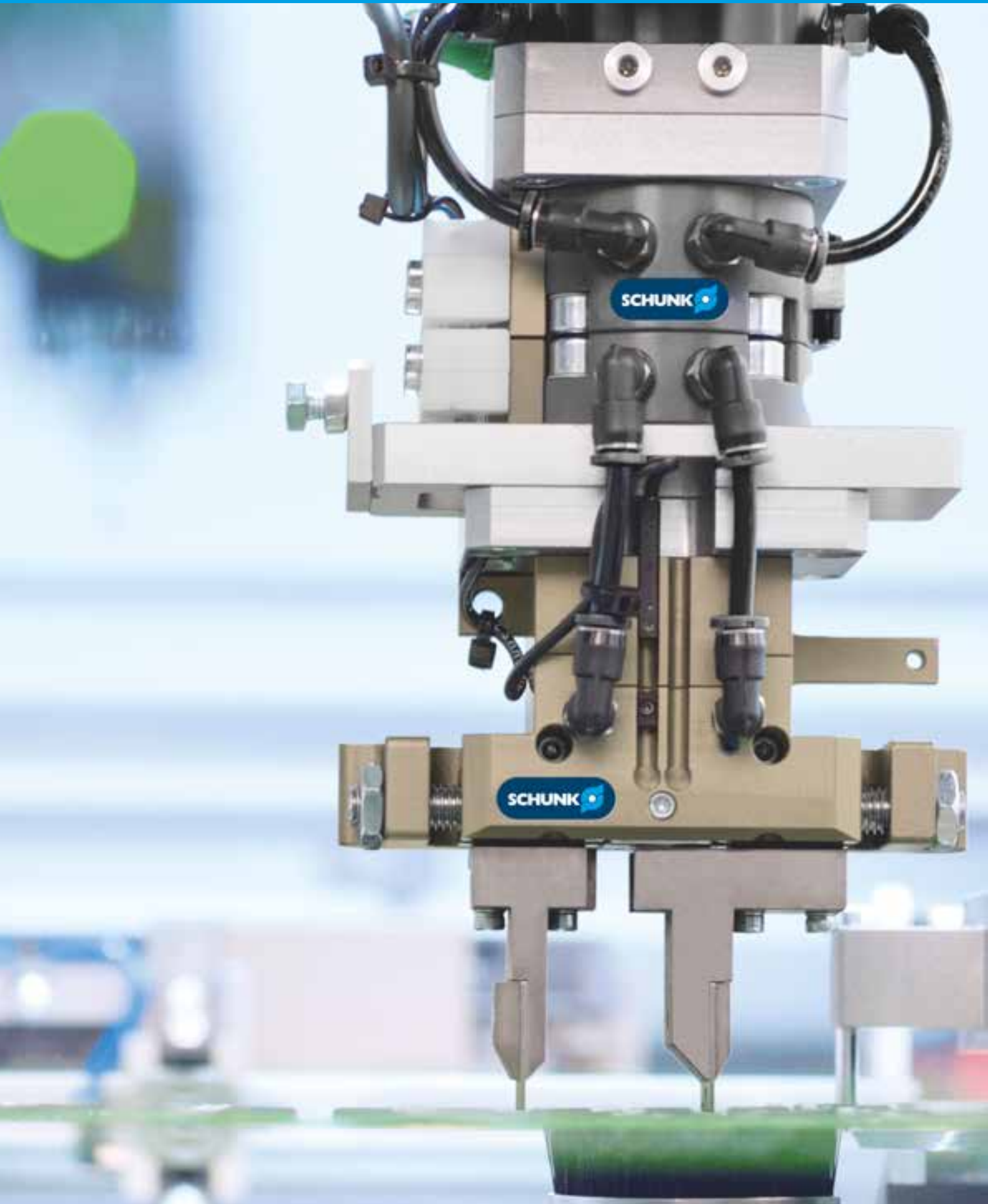
The unique rotary module with swiveling/tilting function combines high torque and precision in the smallest of spaces. With up to 34 Nm and a weight of 3 kg, the ERB sets benchmarks in mechatronic integration.



2-Finger Parallel Gripper WSG

Configured in 2 minutes

Sensitive handling. This sensitive gripper communicates via Profibus DP, CAN or Ethernet TCP/IP. Due to an integrated web server and tactile sensors, handling tasks of the future are child's play.



More Personal

Individuality means tailored cost-efficiency.

When the largest standardized modular gripping systems reach their limits, SCHUNK comes up with individual solutions. When it comes to customized tasks, the full range of our experience, customer orientation and development expertise come into their own. From standard components through to customized systems.

More than **1 000 000**
gripping modules

2 000 000 toolholders

∞ combination possibilities

We are the Experts for special Solutions.



The requirement

Gentle and safe handling of wafers with a diameter of 300 mm.

The SCHUNK solution

The solution is based on three LGP standard parallel grippers in cleanroom class 1 with a rapid prototyping connection structure and capacitive sensors for presence monitoring.



The requirement

Process-optimization measures focusing on efficient and flexible final assembly of peripheral intravenous catheters. Set-up times also had to be minimized – with up to 78 product variants.

The SCHUNK solution

A planned gripping unit consisting of a single servo-electric 2-finger parallel gripper. It also integrates mechanical connections and enhancements optimized to the workpiece, such as specially designed top jaws that reliably mount the catheters in the specified tolerance range. The pre-installed SCHUNK software makes it possible to operate the grippers in positioning and power modes.



The requirement

Gripper units for taking up cheese wheels and for inserting them in packaging. Minimum set-up times are required. The units should handle a quantity of five tons per hour.

The SCHUNK solution

A quadruple gripping system with customized, modified sealed DWG angular grippers. Swivel units exactly position the cheese wheels. A quick-change system developed by SCHUNK ensures set-up-time-optimized cleaning of the entire unit.



The requirement

Transferring aluminum rims in the paint shop from a roller conveyor to a spindle conveyor. It needs to be possible to adjust the rims' gauge for bore holes. The placing height on the spindle conveyor is subject to large tolerances. Clamping marks are not permissible.

The SCHUNK solution

Customized double gripping unit with pneumatic adjustment of one gripper. The gripper is designed with pneumatic cylinders as the drive, recirculating ball-bearing guides with clamping and rack and pinion synchronization. The cylinder's stroke is calibrated to the workpiece spectrum. The top jaws have rotary bearings and are designed in plastic.

For customized Applications, we offer our Industry Knowledge.



The requirement

Pick up of red-hot cast components which are then placed into cooling tanks.

The SCHUNK solution

For high temperature applications, the parallel grippers are equipped with stainless steel fingers. They provide for minimum heat conduction. In order to avoid penetration of dirt, the air purge connections are integrated. Air cooling from the outside avoids overheating of the gripper unit.



The requirement

Handling of aluminum-coated chocolate paper rolls weighing 50 kg.

The SCHUNK solution

Assembly groups for adaption to a palletizing robot consisting of a linear module, 3-jaw universal gripper, and corresponding pneumatic components. For being able to remove the paper rolls, the linear unit clamps the roll with its toothed top jaws in the center hole.



The requirement

Handling of salami sausages positioned at random. They are transported from the feeding belt to the packaging station.

The SCHUNK solution

The specifically developed unit is equipped with three high-speed stroke-gripping units. It picks up three sausages from the belt, which are positioned at random, and individually puts them into the thermoforming sheets.



**Tens of Thousands customer-specific SCHUNK Solutions
in various Industries worldwide.**



Rotary Feed-Through DDF-I
The world's first rotary feed-through
with integrated bus technology.

Newer

Always one Benchmark ahead.

Whenever a pioneering spirit meets a love of technology, SCHUNK innovations are on the agenda. As a competence leader, we know where to find the potential for efficient solutions, how to exploit them and how to standardize them. Each year, the results are convincing: benchmark products, innovations and assembly enhancements that set standards in our customer's added value chains, around the world.

2012 MOTEK:

More than **25** new benchmarks
in more than **70** sizes



Long-Stroke Gripper EGA

The most flexible
mechatronic standard
long-stroke gripper
on the market.

Content

	Page
Gripping Modules	46
2-Finger Gripper for Small Components MPG-plus	46
2-Finger Angular Gripper PWG-plus	48
2-Finger Long-stroke Gripper PHL	50
3-Finger Long-stroke Gripper PZH-plus	52
Heavy-duty Gripper	54
2-Finger Gripper for Small Components EGP	56
2-Finger Parallel Gripper WSG	58
2-Finger Long-stroke Gripper EGA	60
Magnetic Gripper EGM	62
Rotary Modules	64
Rotary Module SRU-plus 20-S with Valve Box VCU25-SRU-plus	64
Rotary Indexing Table RST-D	66
Rotary Module ERS with DDF	68
Rotary Module ERM	70
Linear Modules	72
Linear Modules LDx	72
Line and Room Gantries LPP/LPE/RPE	74
Robot Accessories	76
Rotary Feed-trough DDF-I	76
Rotary Feed-through DDF-plus	78
Collision and Overload Protection Device OPS-063-M	80
Quick-change Module NSR-A	82
Modular Assembly Automation	84
Rotary Lift Unit DRL	84
Pick & Place Unit PPU-P	86
Pick & Place Unit PPU-E 15	88
Accessories	90
Programmable Magnetic Switch MMS-22-PI	90
Blanks with Jaw Quick Change-System ABR/SBR with BSWs	92
Micro Valve MV	94

MPG-plus

Gripping Modules

2-Finger Small Component Gripper MPG-plus: The most powerful gripper in its class

Efficiency in a small package

The combination of oval piston drive and low-friction guidance boosts the efficiency of the MPG-plus enormously, making it the most powerful 2-finger small component gripper on the market. The high force and moment load enable longer gripper fingers and higher gripping forces without increasing the size.

Up to 25% higher gripping force

Compared with the previous MPG the gripping force for size 40 is increased 25% from 110 to 140 N. The maximum permissible finger length is then 50 mm instead of 40. In other words: instead of size 50, you only need size 40 in the future.



MM AWARD
zur **AUTOMATICA** 2010

Highest compact performance!

Smaller size – higher gripping force.

MPG-plus

Gripping Modules

New Product

Successor
Product

New Sizes

Sizes 25/32/40/50 are immediately available / Sizes 16/20/64 will be available starting December 2012



Sizes
16 .. 64



Weight
0.03 kg .. 0.7 kg



Gripping force
25 N .. 350 N



Stroke per finger
1.5 mm .. 10 mm



Workpiece weight
0.13 kg .. 1.25 kg

Product features

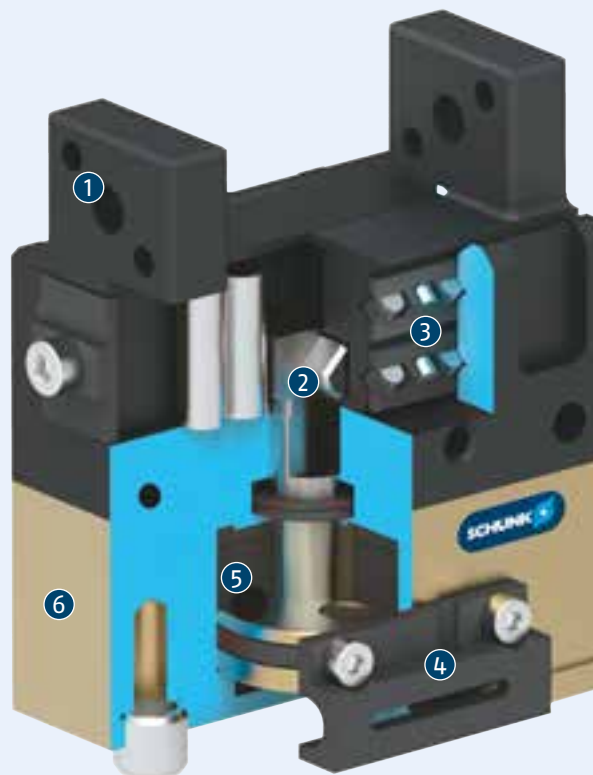
- Enormous efficiency – for 25% more gripping force
- 30% higher load rating enables 50% longer gripper fingers
- 10% weight reduction – for a gripper with higher dynamics

Your advantage

- More compact system designs due to higher gripping forces in a smaller space
- More flexible system designs due to longer finger length in a smaller space
- Reliable processes due to dependable magnetic switch monitoring
- Increased system productivity due to reduced wear-related downtimes

Function cross section

- 1 Base jaw
- 2 Wedge-hook design
- 3 Cross roller guide
- 4 Sensor system
- 5 Oval piston drive
- 6 Housing



PWG-plus

Gripping Modules

2-Finger Angular Gripper PWG-plus: Powerful for every need

Compact powerhouse

The oval piston drive, the one-piece, high-strength aluminum housing and the practically wear-free T-bar drive make the PWG-plus a compact and robust powerhouse. Depending on the application it can be equipped with or without mechanical gripping force maintenance. In addition, extensive accessories are available, including inductive sensors and magnetic sensors.

Modular design options

Both on the finger and bottom side it is equipped with a connecting pattern identical to that of the PGN-plus universal gripper, which allows direct combination with compensation units, attachment valves or quick-change jaw systems.



Maximum gripping forces!

Due to double piston version.

PWG-plus

Gripping Modules

New Product

Successor
Product

New Sizes

Sizes 50/80/160 are immediately available / Sizes 64/100/125 will be available starting November 2012 / Size 200 will be available from January 2013 / Size 240 will be available starting March 2013



Sizes
50 .. 240



Weight
0.25 kg .. 10.4 kg



Gripping torque
3.5 Nm .. 617 Nm



Opening angle per finger
min. 15°



Workpiece weight
0.5 kg .. 16.2 kg

Product features

- Variable top jaws
- One-piece, robust and high-strength aluminum housing
- Front face connecting threads and centering possibilities for creating workpiece support

Your advantage

- Maximum transfer of force and low wear due to robust dog bone drive
- High power density due to oval pistons
- Flexible design of workpiece supports due to threaded connection and centering options

Function cross section

- 1 Base jaw
- 2 Housing
- 3 Drive
- 4 T-Bar drive
- 5 Centering and mounting options



PHL

Gripping Modules

2-Finger Long-Stroke Gripper PHL: The new gripper generation

Choice of two guidance variants

The PHL is the first long-stroke gripper with the choice between multi-tooth guidance or profile rail guidance, which significantly increases the efficiency of the module. With powerful sliding multi-tooth guidance, the PHL is especially suitable for harsh environments. Profile rail guidance with roller bearings boosts the efficiency by about 25 percent.

Less air consumption

The new gripper generation significantly exceeds the performance of conventional long-stroke grippers with T-slots or round guidances. In the future, many applications will therefore be able to use smaller, less expensive and – due to the decreased air consumption – more efficient sizes. Alternatively, longer fingers can be used while maintaining approximately the same gripping force.



Diversity of variants!

More freedom in the process design.

Sizes 25/40/50 are immediately available / Sizes 32/63 will be available starting December 2012



Sizes
25 .. 63



Weight
1.5 kg .. 21 kg



Gripping force
390 N .. 3250 N



Stroke per finger
30 mm .. 160 mm



Workpiece weight
2.0 kg .. 16.6 kg

Product features

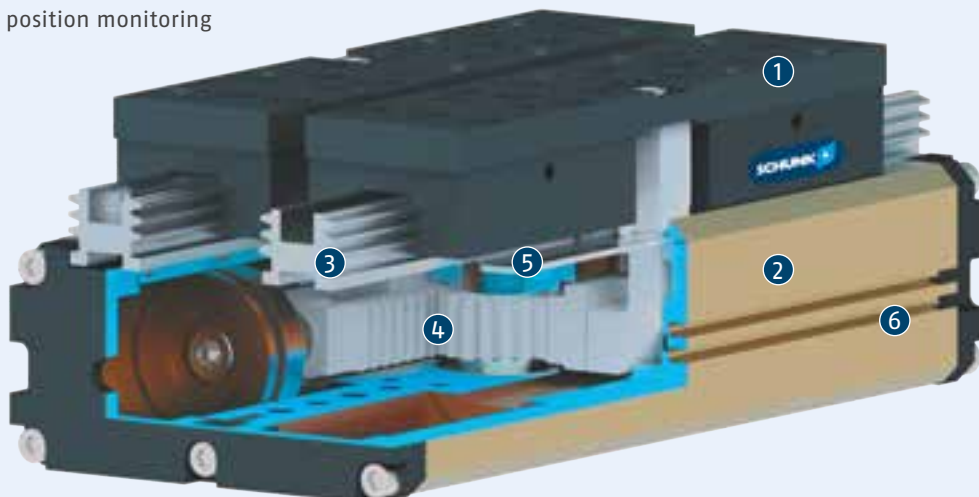
- Modular concept in 90 standardized variations
- Profile rail guidance boosts efficiency by 25%
- Optionally available as a special Viton version and as a high-temperature version for hot environments with temperatures up to 130 °C

Your advantage

- Lower system costs due to higher efficiency
- More compact system designs due to higher gripping forces in a smaller space
- More flexible system designs due to longer finger length in a smaller space

Function cross section

- 1 Base jaws for adaptation
- 2 Housing, weight-reduced
- 3 Multi-tooth guidance
- 4 Kinematics, rack-and-pinion principle
- 5 Protection against dirt and dust
- 6 Sensor for position monitoring



PZH-plus

Gripping Modules

3-Finger Long-Stroke Gripper PZH-plus: Long stroke and plenty of power

More efficiency in alternating gripping operations

The long stroke of the innovative PZH-plus, with its toothed belt drive, eliminates the need for top jaws or changing of grippers. Therefore, it is suitable for I.D. and O.D. gripping of workpieces with a weight of up to 19.3 kg – ideal for loading machining centers or for handling rims, unmachined cast parts or other serial parts.

Saves space and lowers energy consumption

The multi-tooth guidance and the housing made of high-strength aluminum provide for especially high power density. Compared with similar large and heavy grippers, the PZH-plus has approximately twice the gripping force. Smaller sizes are therefore sufficient to achieve a particular stroke and a particular force.



**Superior
precision!**

Multi Tooth Guidance



High compact performance!

Long stroke and high gripping force,
with low dead weight.

PZH-plus

Gripping Modules

New Product

Successor
Product

New Sizes

Sizes 25/30 are immediately available / Sizes 50/75 will be available starting December 2012



Sizes
20 .. 75



Weight
1.6 kg .. 33 kg



Gripping force
250 N .. 3800 N



Stroke per finger
20 mm ... 75 mm



Workpiece weight
1.25 kg .. 19.3 kg

Product features

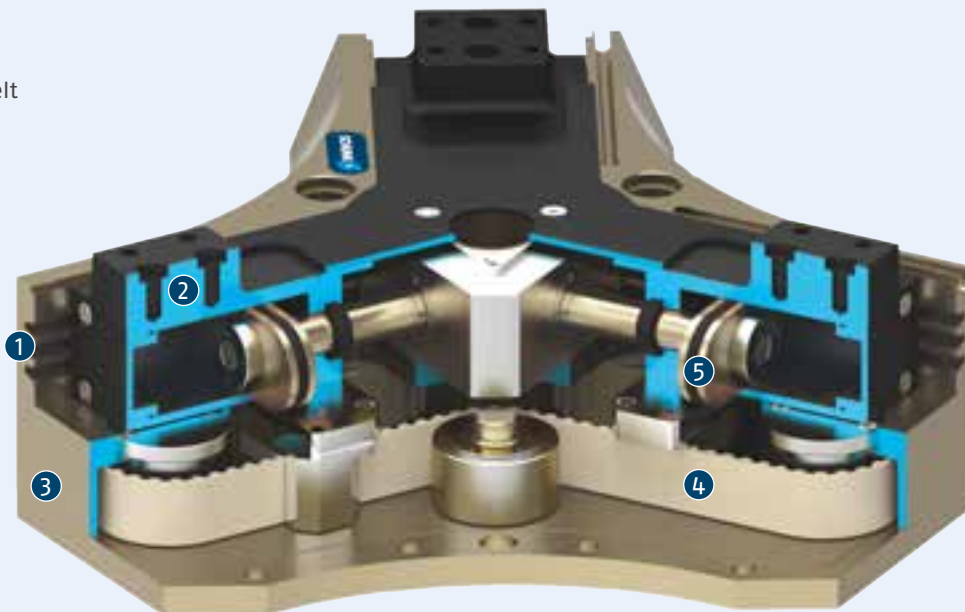
- Able to use quick change jaw system with product for efficiency and flexibility
- Large center bore for mounting a camera, supply of material or gripping of extra long workpieces
- Choice of monitoring with magnetic sensors or inductive sensors

Your advantage

- Maximum process flexibility due to longer gripper stroke
- Compact system designs due to higher gripping force in a small space
- Significant energy savings due to movement of smaller mass
- Smaller size for cost efficiency

Function cross section

- 1 Multiple-tooth guidance
- 2 Base jaw
- 3 Housing
- 4 Toothed belt
- 5 Drive



Heavy-Duty Gripper

Gripping Modules

SCHUNK Heavy-Duty Grippers: Standardized Powerhouses

Heavy-duty robotics boom. With a gripping module initiative, SCHUNK focuses on part weights between 40 and 700 kg, covering the major heavy duty requirements. Instead of costly specialty solutions, users can count on standardized modules for handling workpieces weighing more than 40 kg.

PGN-plus and PZN-plus: The powerful all-rounders

The SCHUNK Flagship heavy-duty grippers, the PGN-plus parallel gripper and the PZN-plus centric gripper, both use multi-tooth guidance and an oval piston drive to achieve high forces in small application spaces. These two powerhouses are available in basic versions as well as specialty versions.

PZB-plus: Powerful centric gripper with center bore

SCHUNK significantly extended the PZB-plus 3-finger centric gripper series. The center bore with the fitting is unique for a standard gripper. It is equipped with an internal thread for customer-specific attachments. Depending on the application, material or supply hoses can be fed through them.

DPG-plus: Sealed gripper for dirty environments

The DPG-plus 2-finger parallel gripper is an expert for handling tasks in wet areas, and dirty environments. With protection class IP 67 this powerhouse is the most sealed of its class.

SLG Heavy-duty Gripper: Powerful but light

The standardized, servo-electrically driven SLG heavy-duty gripper ranks highest in the weight category with only 700 kg. Since it is equipped with prism jaws, it can be used for handling 700 kg components or more.



Heavy duty standard!

Heavy-duty grippers for part weights from 40 to 700 kg.

Heavy-Duty Gripper

Gripping Modules

New Product

Successor
Product

New Sizes

Immediately available

				
	Sizes	Weight	Gripping force	Workpiece weight
PGN-plus	380	39.5 kg	21150 N	up to 80 kg (friction gripping)*
PZN-plus	380	73.5 kg	57000 N	up to 190 kg (friction gripping)*
PZB-plus	300	53.0 kg	27400 N	up to 100 kg (friction gripping)*
DPG-plus	380	41.0 kg	11250 N	up to 46 kg (friction gripping)*
SLG		350.0 kg	23000 N	up to 700 kg (friction gripping)*

* Safety factor 2. Due to the friction gripping, higher workpiece weights can be handled.

Product features

- Powerful, flexible, and reliable
- Appropriate option for various requirements and environments, e.g. dusty, corrosion risk, hot or explosive environments

Your advantage

- Cost effective due to standardized modules



PGN-plus



PZB-plus



PZN-plus



DPG-plus

EGP

Gripping Modules

Electric Small Components Gripper EGP: The perfect alternative to pneumatics

Size 25 is now available!

The EGP from SCHUNK is the electric small part gripper with the most compact performance on the market. Now SCHUNK extends this series with the EGP 25. The small, but speedy gripper weighs 200 g, uses a 3 mm stroke per finger, and its gripping force can be adjusted in four stages. It can handle workpieces up to 190 g. Compared with electrically driven, small part grippers which are available on the market, it ranks higher than the competition due to its high speed at a higher gripping force. Its closing time amounts to 0.15 s. It is the smallest electric small parts gripper with integrated electronics of its kind.

Ideal for fast small parts handling

The EGP is the electric counterpart to the time-tested pneumatic MPG-plus gripper for small components. Even the sensor system of the MPG-plus can be transferred to the EGP. Control of the gripper is simply done via digital inputs, the users can easily transfer its existing systems from pneumatics to electronics without any loss of the gripping force. Its powerful cross roller guide ensures that the EGP achieves a high efficiency, and makes it to a dynamic and energy efficient product for challenging Pick & Place applications.



High efficiency!
For challenging Pick & Place
applications.

Size 40 is immediately available / Size 25 will be available starting December 2012



Sizes
25 .. 40



Weight
0.32 kg



Gripping force
max. 140 N



Stroke per finger
3 mm .. 6 mm



Workpiece weight
max. 0.7 kg

Product features

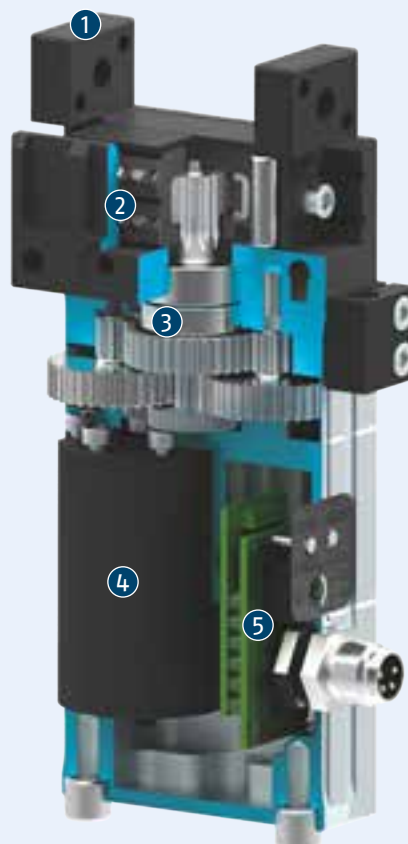
- High compact performance
- Extremely simple digital actuation
- Gripping force is adjustable in four stages for adaptation to the workpiece
- Space-saving integrated electronics
- Wear-free servo motor

Your advantage

- More flexible system designs, due to side and bottom mounting options for bolting through and bolting on
- The sensor system of the MPG-plus can be used in many cases for the EGP, too
- Increased system productivity due to reduced wear-related downtimes

Function cross section

- 1 Base jaw
- 2 Cross roller guide
- 3 Gears
- 4 Drive
- 5 Control electronics



WSG

Gripping Modules

2-Finger Parallel Gripper WSG: Sensitive handling – configured in 2 minutes

Extremely simple configuration – flexible actuation

The WSG is a sensitive gripper that communicates by means of Profibus DP, CAN, Ethernet TCP/IP or virtual, digital I/O. It also features an integrated web server for configuration and diagnosis. This makes programming, commissioning, remote maintenance and updating especially easy. The gripper is equipped with an internal micro SD card for storing programs and documents.

Extremely sensitive gripping

The WSG 50 disposes of integrated sensor interfaces in the gripper jaws. The electronics integrated in the gripper jaws enable the WSG 50 to measure forces occurring in the gripping process directly by means of sensors. This sensitivity makes it ideal for handling sensitive samples in labs, pharmaceutical companies, research facilities and even for use in measuring and testing technology.



With larger stroke range now!

Sensitive and precise gripping of various handling parts.

Immediately available



Sizes
50



Weight
1.2 kg .. 1.6 kg



Gripping force
bis 80 N



Stroke per finger
55 mm .. 105 mm



Workpiece weight
0.8 kg

Product features

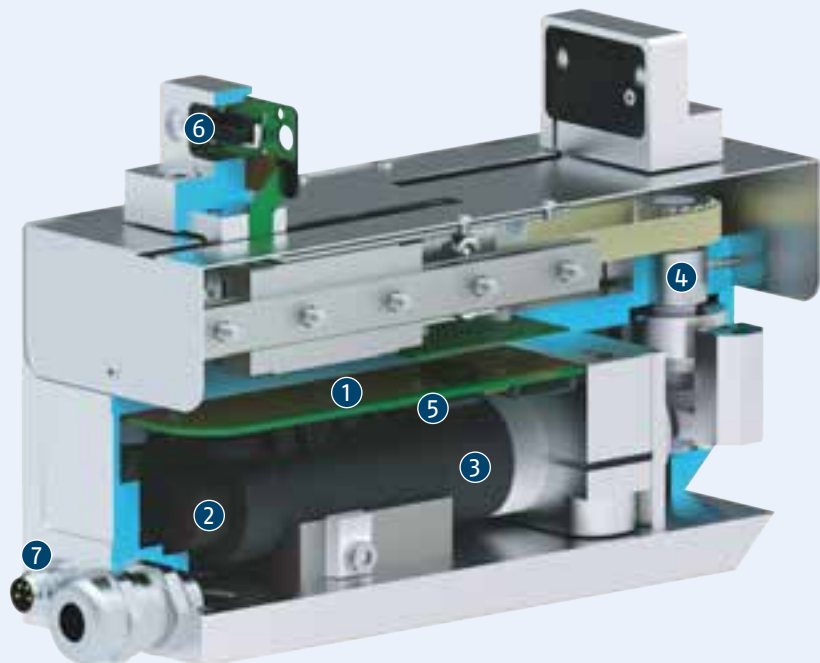
- Integrated web server, sensitive sensors and control via Profibus DP, CAN and Ethernet TCP/IP
- Standardized electric interfaces in the base jaws for direct integration of sensors in the gripper fingers
- Integrated scripting language for extended functions
- Efficient due to the integrated energy management

Your advantage

- More freedom in the process design due to integrated sensitive sensors
- Flexible control via Profibus DP, CAN and Ethernet TCP/IP
- Easy configuration and diagnosis via integrated web server
- Maximum flexibility for integration in higher level systems

Function cross section

- 1 Electronic controller
- 2 Encoder
- 3 Drive, DC servo motor
- 4 Toothed belt drive
- 5 Micro SD card
- 6 Electronic sensor
- 7 Electrical connection



EGA

Gripping Modules

2-Finger Long-stroke Gripper EGA: Adaptable, robust, compact

Integration in robots and gantries

With capability of adaptation for all standard servo motors, the electric long-stroke gripper EGA is the most flexible standard long-stroke gripper on the market. Due to the easy integration of the system's control unit, all the features with respect to programs, safety, and fieldbusses can be transferred from the current system onto the module, and offers the advantage of a direct interpolation of the other application axes. In other words easy control as an additional axis with the identical command set is ensured.

Time-tested technology

The robust EGA long-stroke gripper is based on the proven PHL, which is extremely flat and has a compact design with minimal interfering contours. The guidance carriages of its base jaws are bearing mounted, which minimizes friction, and optimally distributes the force. For robot or gantry applications, the motor can be mounted either parallel or at right angles to the direction of motion. In view to dynamics and energy-efficiency the whole system profits from the weight-optimized design of the gripper.



Universal!

All standard industrial servo motors can be used.

Size 40 will be available starting December 2012 / Sizes 25/63 will be available starting April 2013



Sizes
25 .. 63



Gripping force
650 N .. 4000 N



Stroke per finger
30 mm .. 160 mm



Workpiece weight
3.25 kg .. 20 kg

Product features

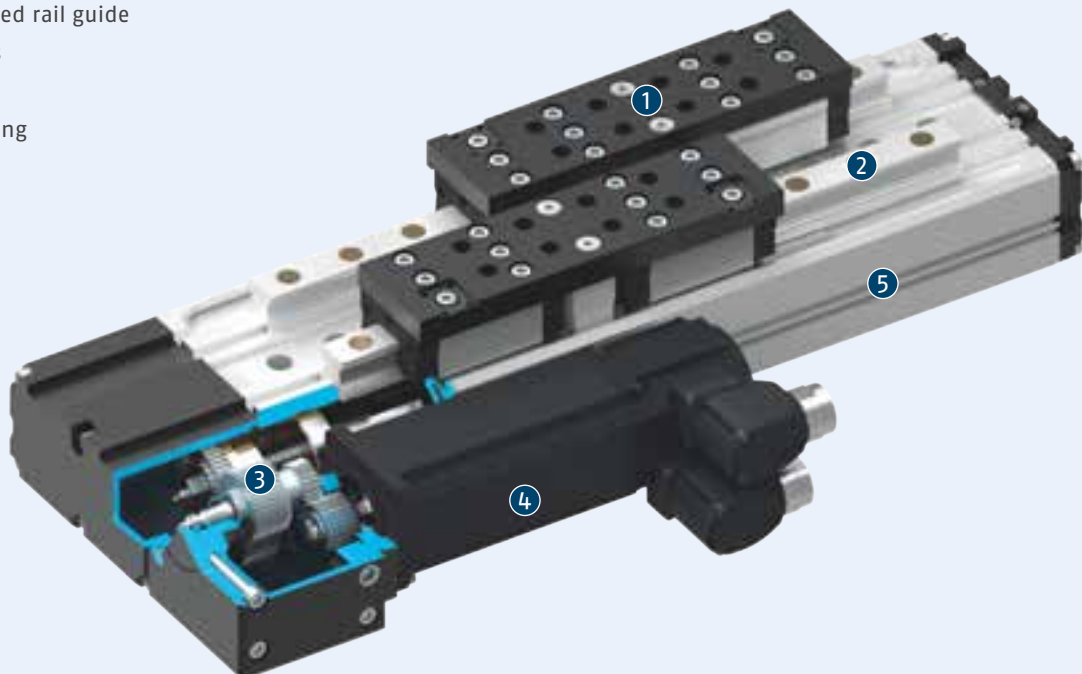
- Easy integration into existing control or feedback control electronics
- Flange-mounted servo motor
- Two versions with different motor positions for robot and gantry applications

Your advantage

- Higher dynamics and energy efficiency due to weight-optimized design
- Use of fieldbus and safety technology, as well as existing control and programming know-how

Function cross section

- 1 Base jaw
- 2 Profiled rail guide
- 3 Gears
- 4 Drive
- 5 Housing



EGM

Gripping Modules

Magnetic Gripper EGM: Maximum holding force in minimum space

Electricity instead of air

The EGM magnetic gripper is the powerhouse for flexible handling of ferromagnetic workpieces without interfering contours. In contrast to most of the magnetic grippers which are available on the market, the permanent magnets of the EGM are not pneumatically actuated, but with electricity in no time at all. Therefore the EGM is particularly energy-efficient and process reliable. For actuation and deactivation just a short electric pulse is necessary, and the workpiece can be securely held in a emergency stop situations, too.

Flexible workpiece handling

With minimal set-up time and without the interfering contours of gripper fingers, the EGM can handle very different workpieces in alternation. Five sides of the workpiece are available for machining. Due to the variable number of magnet pole pairs, and adaption options to every common robot, optimum adaption to the individual applications is ensured.



Energy efficient!

Electric actuation via electric pulse in no time at all.

Immediately available



Sizes

32Q, 50Q, 30L



Weight

2 kg .. 18 kg



Max. weight of workpiece

8 kg .. 147 kg



Maximum magnetic surface

110 mm x 260 mm

Product features

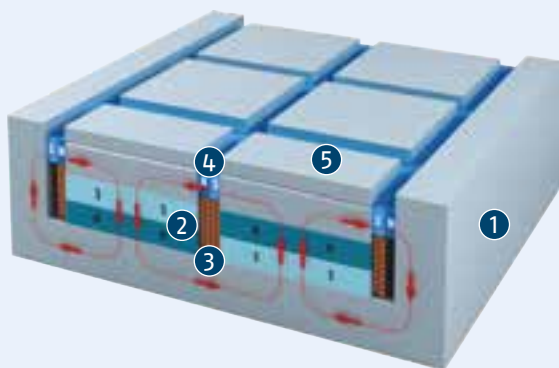
- Electro-permanent magnet technology
- Simple digital actuation
- Magnetic pole geometries for flat and round workpieces
- 3 pole sizes – optionally with two to eight poles
- High holding forces in minimum space

Your advantage

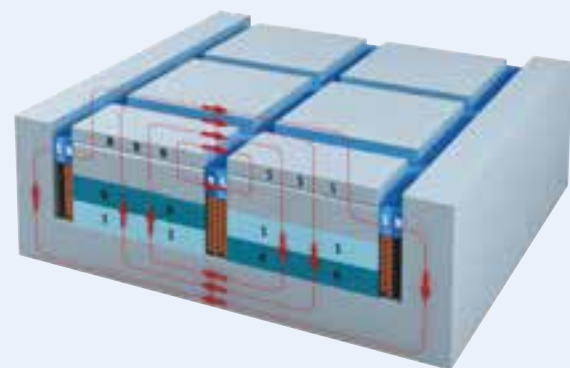
- More flexibility and diversity due to access to workpiece with no interfering contours
- Cost effective due to minimal energy requirements
- Optimal adaptation due to variable number of magnetic poles

Function cross section

- 1 Base body
- 2 AlNiCo magnets (pole-reversible)
- 3 Electromagnetic coil
- 4 Neodymium permanent magnets (not pole-reversible)
- 5 Magnetic poles made of steel



In deactivated state



Activated state

SRU-plus 20-S with Valve Box

Rotary Modules

Rotary Actuator SRU-plus 20-S: New standard in high-speed assembly

Speed squared

The SRU-plus 20-S is SCHUNK's new high-speed addition to the SRU-plus series of economical universal rotary units. Compared with other available rotary units of the same size, this high-speed module can increase the number of cycles by up to 100%. With lightweight parts, the module enables rotation times starting at 0.3 s and up to 3700 cycles per hour. A load up to 3 times or more than that of standard rotary units of the same size is possible.

High-speed version with high-performance damping

The secret of such high performance combined with process stability is a patented shock absorbing system that combines an elastomer with an oil-damped shock absorber. Arranged in a stack, the high-performance damping enables significantly shorter cycle times and a higher number of cycles, and the rotation of much higher mass inertias or loads.

Plug & Work for swiveling with valve box

For the SRU-plus 20-S a VCU25-SRU-plus compact valve box is offered now. This booster in productivity makes the commissioning of the rotary module simple, reducing the compressed air consumption, while accelerating the cycle time. Sequential programs for control of the rotary module are integrated, as well as three to six micro valves. The highlight is that the valve box is assembled, connected with tubing, and wired: The operator only has to define the swiveling angle and everything else is done by the valve box.



With Valve Box!

Minimum cycle times at maximum frequency.

SRU-plus 20-S with Valve Box

Rotary Modules

New Product

Successor
Product

New Sizes

Immediately available



Sizes
20



Weight
2.1 kg



Axial force
800 N



Torque
3.0 Nm



Swivel times
from 0.3 s



Cycle times
up to 3600 cycles

Product features

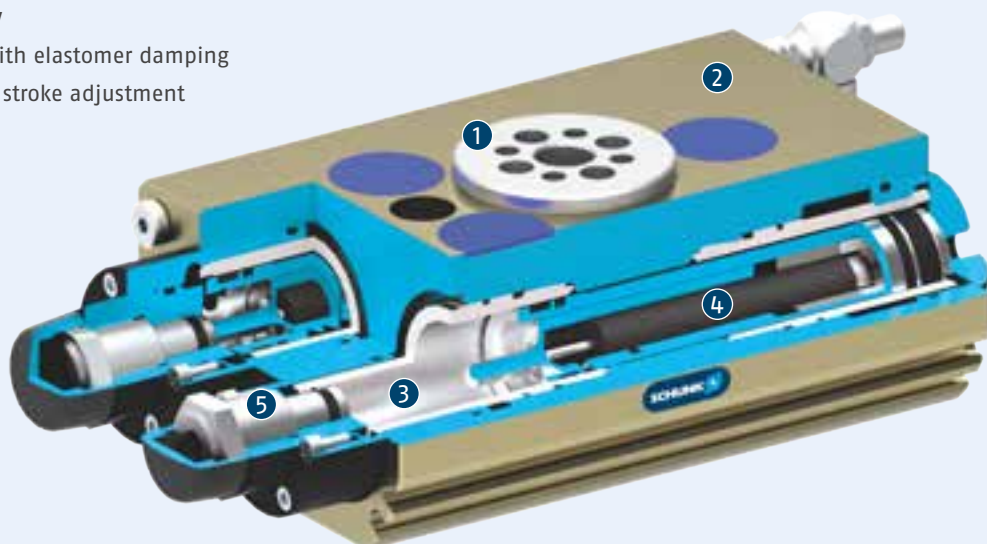
- Time-tested hydraulic high-performance shock absorbers in combination with elastomer
- Higher compact performance with respect to loading, cycle time and cycles per hour
- Protection class IP67
- The valve box can be controlled by digital inputs/outputs, or by Profibus, or CAN-Bus

Your advantage

- More compact system designs due to higher loads in a smaller space
- Higher system productivity due to reduced cycle times and increased cycles per hour
- Reliable turning processes due to internal high-performance damping
- Communication times with the PLC can be omitted due to the valve box. Control is done directly in the valve block

Function cross section

- 1 Drive flange
- 2 Housing
- 3 Sleeve technology
- 4 Shock absorber with elastomer damping
- 5 Shock absorber – stroke adjustment



RST-D

Rotary Modules

RST-D Rotary Indexing Table: Powerful for high-performance assembly

Modular high-performance assembly

The RST-D completes the SCHUNK program for modular high-performance assembly by a series of particularly compact and high-performance rotary indexing tables. The RST-D rotary indexing table is rigid in design, and is driven via a double-acting piston. Therefore, it offers a lot of power for larger attachments, and for up to six optional pneumatic feed-throughs, which can be retrofitted as required.

Flexible processes

Only the drive ring of the RST-D rotates, and different components and attachments can be attached to the large, fixed middle part. They can be reliably supplied via the large trough-hole with compressed air, current, and signals. Right, left, and alternating operation of the RST-D is possible, and the operation type can be changed as required via the pneumatic control unit. Spacers are available for converting the cycle operation into 4, 6, 12, or 16 cycle steps.



Flexible with Power!

Exceptionnally high torque.

RST-D

Rotary Modules

New Product

Successor
Product

New Sizes

Available starting February 2013



Sizes

134
60 / 87 available
starting 4/2013



Pitch

4 .. 16



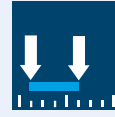
Torque

max. 29.3 Nm



Mass moment of inertia

max 0.6 kgm²



Repeat accuracy

0.06 °

Product features

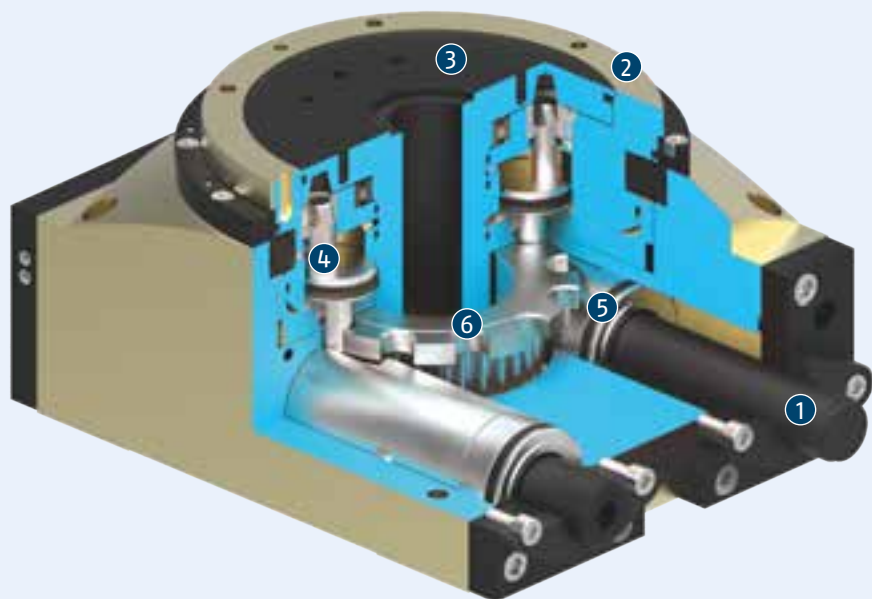
- Right, left and alternating operation is possible with this actuator
- Large trough-hole for reliable supply of compressed air, and signals
- Air connection and adjustment of the shock absorbers from one side
- Spacers are available for converting the cycle operation into 4, 6, 12, or 16 cycle steps
- With 6 optional air feed through available (can be retrofitted)

Your advantage

- Fast adaptation due to conversion with spacers
- Ideal for confined spaces
- Stable and reliable supply of rotating pneumatic modules

Function cross section

- 1 Damping
- 2 Drive ring
- 3 Fixed middle part with through-hole
- 4 Locking mechanism
- 5 Drive
- 6 Synchronized gear tooth system



ERS with DDF

Rotary Modules

Rotary Module ERS with DDF: Compact and extremely flexible

New benchmark for rotary modules

The electric ERS rotary module has a new option, a pneumatic and electric rotary feed-through. The unit is driven by a torque motor with hollow shaft, and combined with the DDF unit. It is the most compact electrical rotary module with integrated pneumatic and electric feed-through. The standard DDF version is equipped with 8 signal feed-throughs and one pneumatic air channel. For distributing the air on various actuators, micro valves can be switched via the electric feed-throughs.

Modular design for maximum flexibility

In order to ensure maximum flexibility of the control and regulation strategy, the ERS can be operated either with the SCHUNK Motion Controller MC212 (48 V DC) or a Bosch or Siemens standard controller (560 V DC). Depending on the application, the ERS is available with a pneumatic holding brake, and as an IP54 version.



Unique! Also available in IP54!

Combination of pneumatic and electric feed-throughs.

ERS with DDF

Rotary Modules

New Product

Successor
Product

New Sizes

Immediately available



Sizes

170 .. 210



Nominal torques

5 Nm .. 10 Nm



Repeat accuracy

0.01°



Air feed-through

1 x



Electrical feed-throughs

8 x

Product features

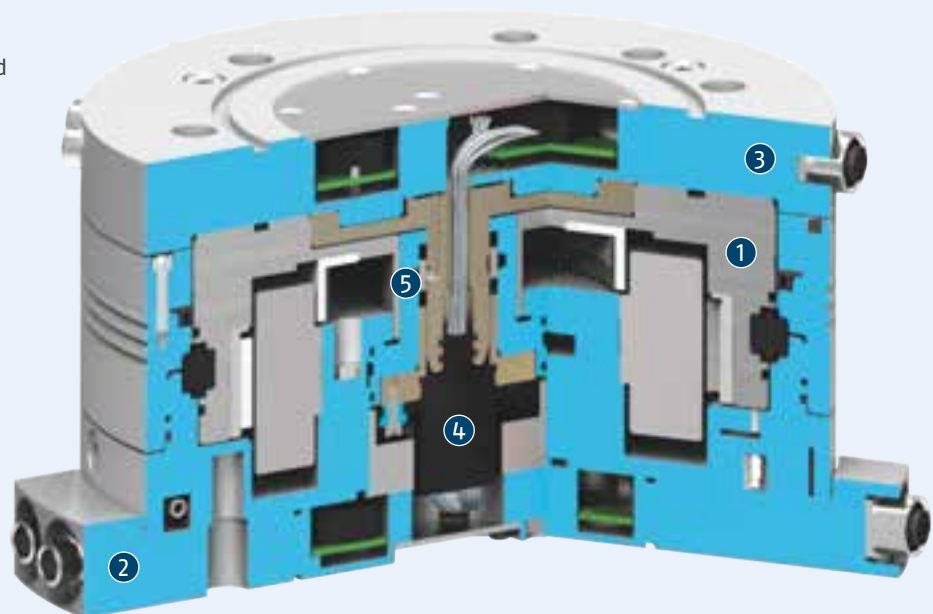
- Extremely thin design
- Dynamic, stable and torsionally rigid
- Pneumatic and electric feed-throughs
- Continuous rotating up to 250 rpm^{-1}
- Optional holding brake
- Standard encoder interface
- On option in protection class IP54

Your advantage

- Highly flexible processes due to variable intermediate positions
- Compact system designs due to a low overall height
- Easy system integration
- High acceleration and short cycle times due to high torque

Function cross section

- ① ERS
- ② Base plate connection side
- ③ Connection flange tool-sided
- ④ Electric feed-through
- ⑤ Pneumatic feed-through



ERM

Rotary Modules

Rotary Module ERM: Extremely adaptable

Seamless implementation

The electrically operated rotary module ERM can be equipped with all standard industrial servo motors and therefore offers maximum flexibility with respect to the control and regulation strategy. Equipped with the right motor, the characteristics of the system controller with respect to programming, safety or field buses can be directly transferred to the module.

Precision force

The ease of adaptability makes it comparably easy to compensate between different regional standards from Europe, the USA and Asia. In addition, a 90° swiveling drive allows optimal adaptation of the rotary module's interfering contour to the conditions of gantries or robots. Also ideal as a rotary indexing table, positioning device, for rotating, turning and reorientation of workpieces.



High-precision force!

Precise positioning of large loads.

Available from December 2012



Sizes
160



Weight
15 kg



Torque
60 Nm



Air feed-through
8



Speed
60 min⁻¹

Product features

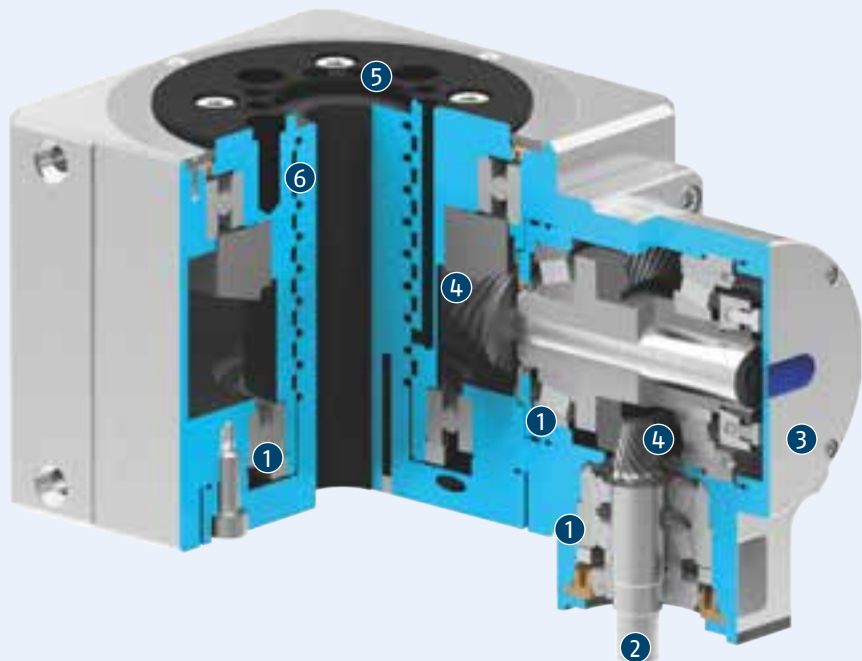
- Swiveling adaptive drive
- Continuous rotation
- Protection type IP65
- Air feed-throughs and center bore for media feed-through
- All standard industrial servo drives can be connected

Your advantage

- Compact system designs due to standard center bore
- Flexible process design due to variable intermediate positions

Function cross section

- 1 Bearings
- 2 Drive shaft
- 3 Reduction transmission
- 4 Double bevel gear stage
- 5 Drive flange
- 6 Integrated air feed-through with connection bores



LDx

Linear Modules

Linear Modules LDx:

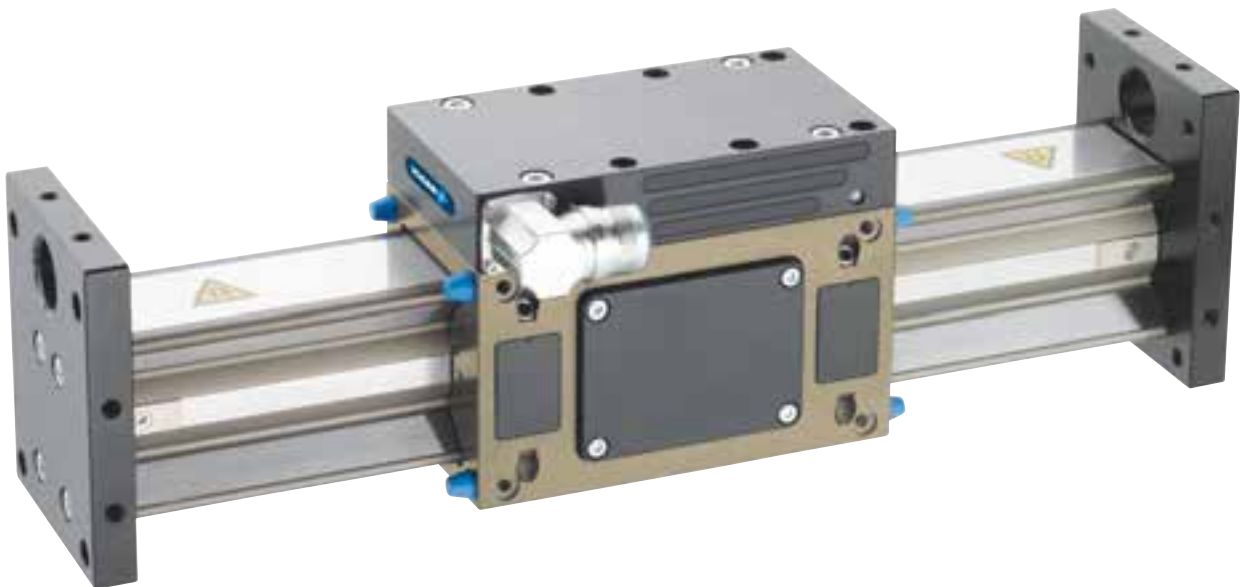
The next generation of high-speed modules

For high-precision, high-speed applications

The new LDx series from SCHUNK sets a new benchmark: Compared with the previous modules, powerful servo motors achieve a 15% higher rated force in a module of the same size. In the future it will therefore be possible to use smaller modules to achieve the same performance. Alternatively, higher masses can be moved in vertical applications.

Compact and cost-effective

The basic modules are the three universal linear modules LDN, LDM and LDT, the short-stroke modules LDK and LDH and the flat linear module LDF. The absolute encoder eliminates the need for time-consuming programming of reference runs, as well as the reference runs themselves.



Large portfolio!

Unique diversity of modules and variants for every application.

Immediately available



Sizes
50 .. 600



Maximum stroke
3800 mm



Driving force
750 N



Repeat accuracy
0.01 mm



Maximum speed
4 m/s

Product features

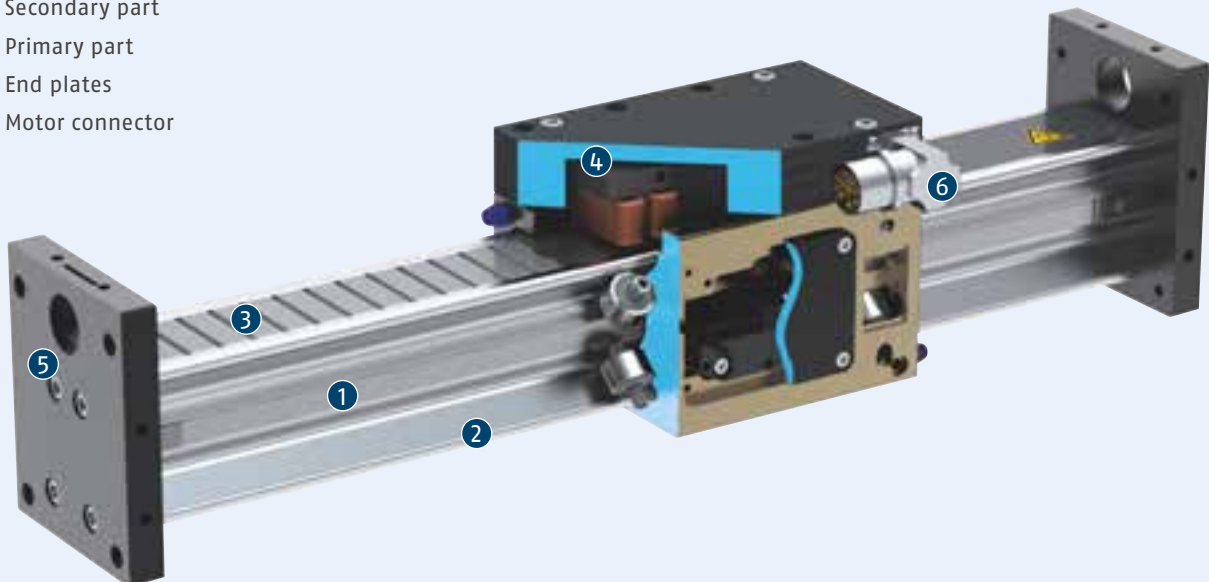
- Optionally with absolute encoders for a repeat accuracy of 0.01 mm per axis
- 15% higher rated force
- Can be used horizontally and vertically
- Choice of static profile and moving slide or static slide and moving profile

Your advantage

- Shortest cycle times due to high dynamics
- Long life, since there are hardly any wear parts
- Reduced costs due to elimination of limit and reference sensors
- Absolute encoder reduces commissioning time and increases process reliability

Function cross section

- 1 Aluminum profile
- 2 Steel guide rail
- 3 Secondary part
- 4 Primary part
- 5 End plates
- 6 Motor connector



LPP/LPE/RPE

Modular Assembly Automation

Line and Room Gantries LPP/LPE/RPE: Standard gantries from the modular system

Ready to mount, price optimized, more quickly available

With the modular system for linear and room gantries, users and system integrators can reduce their configuration, installation and commissioning costs for gantries by up to 50%. Instead of configuring each axis system separately for assembly and handling stations, you can simply choose the suitable gantry solution from the extensive standard product line. All mechanical connecting elements and energy feed-throughs are already pre-mounted in the ready-to-install assemblies.

Pneumatic and electric drive

The modular system includes both pneumatic and electric solutions. The pneumatic 2-axis gantries and electric 2- and 3-axis gantries cover the most frequent requirements.



Ready to install!

More than 500 ready-to-install combinations available.

LPE

LPP/LPE/RPE

Modular Assembly Automation

New Product

Successor
Product

New Sizes

Immediately available



Sizes
50 .. 200



Horizontal strokes
max. 1500 mm



Vertical stroke
500 mm



Maximum payload
20 kg

Product features

- Pneumatic and electric drives
- Standard product line with more than 500 possible combinations
- Available with BoschRexroth drives or optionally without drives

Your advantage

- Up to 30% lower configuration and engineering due to ready-to-install standard solutions
- Minimal assembly and immediate commissioning due to pre-mounted units
- Up to 20% lower investment costs due to standardized design



RPE

DDF-I

Robot Accessories

Rotary Feed-Through DDF-I: The world's first rotary feed-through with integrated bus technology

Especially process-stable actuation

The pneumatic/electric feed-through DDF-I is the world's first rotary feed-through with integrated bus technology. It can be used for connecting mechatronics gripper modules, valves or sensors located downstream from a rotary axis for especially stable control of processes. Up to 26 electric signals are transmitted simultaneously, 13 of which are for the actuation of valves. Air and vacuum are supplied to the actuators through a fluid feed-through.

360° endless

The center bore of the DDF-I allows the feed-through of cables, liquids, workpieces or the use of a camera. Continuous rotary movements are also possible with the module. Due to the ISO flange pattern it can be connected to many different robots without the use of an adapter.



Unique!

Integrated bus technology for process-reliable applications.

DDF-I

Robot Accessories

New Product

Successor
Product

New Sizes

Immediately available



Sizes
040 .. 063



Speed
max. 120 rpm



Air feed-through
2 x



Electrical feed-through
26 x

Product features

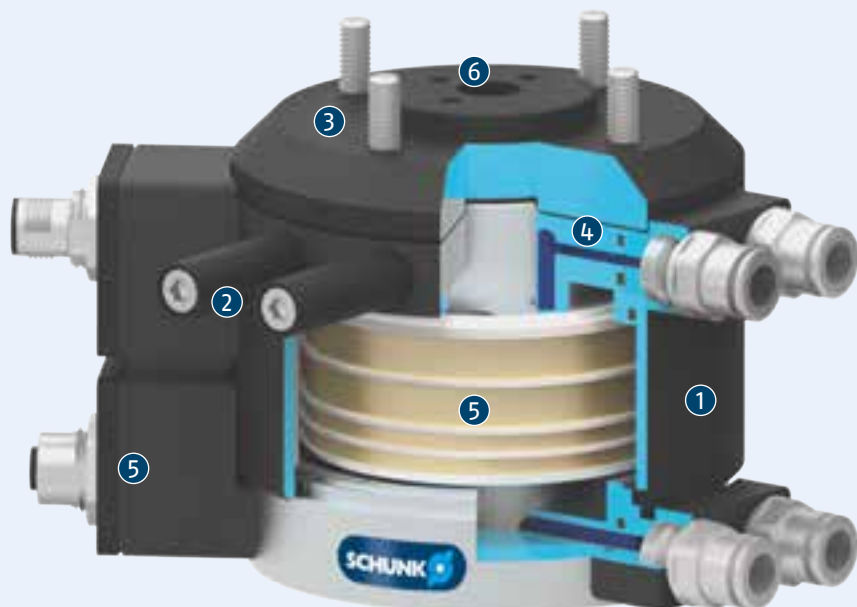
- With integrated air feed-through
- With integrated electric feed-through
- ISO flange pattern
- Sealing air connection

Your advantage

- Modularity to other SCHUNK products with SWK bolt pattern
- For all robot applications with 360° continuous rotary movement

Function cross section

- 1 Housing
- 2 Torque support
- 3 ISO bolt pattern
- 4 Pneumatic feed-through
- 5 Electric feed-through
- 6 Center bore



DDF-plus

Robot Accessories

DDF-plus Rotary Feed-Through: Long-lasting and with a compact performance

Latest Standard

The revised version of the DDF-plus version defines a new standard, which adapts to the high occurring forces and moments of modern robots. The dynamic forces and moments of the DDF-plus are absorbed by a steel shaft instead of an aluminum shaft. Smooth-running and long-lasting seals were particularly developed, and ensure a low starting torque. Smaller and more economic drives can be used, allowing particularly easy rotary motions.

Three versions

The DDF-plus is offered in three versions: For pneumatic feed-through, feed-through of electric signals, and for the combined feed-through of pneumatics and electrics. The high number of electric and pneumatic transmissions is exceptional. Dependent from the module size, the DDF-plus comprises between two and four pneumatic feed-throughs, and four and ten electric transmissions for signals up to 1 A/60 V. Optionally, many more electric signals can be transferred.



Now in 3 variations!

Process reliable control without tangling cables.

DDF-plus

Robot Accessories

New Product

Successor
Product

New Sizes

Available from February 2013



Sizes
31 .. 160



Speed
70 .. 120 rpm



Air feed-through
2 x .. 4 x



Electrical feed-through
4 x .. 10 x

Product features

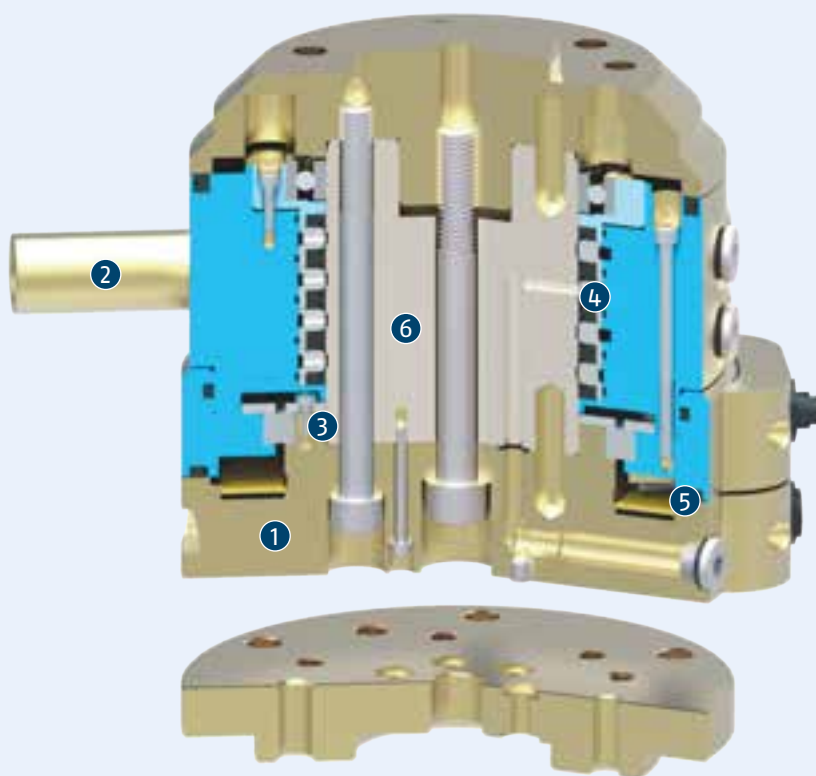
- With integrated air transmission
- With integrated electric transmission
- With integrated, combined air and electric transmission
- ISO flange pattern
- Protection class IP65
- Air purge connection

Your advantage

- The DDF-plus is fully compatible to its predecessor, and is 1:1 exchangeable
- For all robot applications with 360° continuous rotary movement

Function cross section

- 1 Housing
- 2 Torque support
- 3 ISO adapter plate
- 4 Pneumatic feed-through
- 5 Slip ring
- 6 Shaft



OPS-063-M

Robot Accessories

Collision and Overload Protection OPS-063-M Fast-responding collision protection

Fast and lightweight

With a response time of just 1 ms the anti-collision and overload protection OPS-063-M sets a new standard for robot applications. Fast and lightweight, the housing is made of hard anodized, high-strength aluminum alloy, weighing only 290 g and is designed especially for use on small robots. Instead of internal proximity switches, the OPS-063-M uses external exchangeable magnetic switches for monitoring.

Easy operation

After a collision the unit only has to be returned to starting position; disassembly is not necessary. This simplifies operation, minimizes susceptibility to malfunctions and reduces your spare parts inventory. The triggering force and torque can be set by means of the operating pressure. Standardized adapter plates make integration of the module in the system fast and easy.



Quick as lightning!

Response time: 1 ms.

OPS-063-M

Robot Accessories

New Product

Successor
Product

New Sizes

Immediately available



Sizes
063



Triggering force F_z
100 N .. 650 N



Triggering torque M_x
1 Nm .. 4.5 Nm



Triggering torque M_y
1 Nm .. 4.5 Nm



Triggering torque M_z
1 Nm .. 13 Nm

Product features

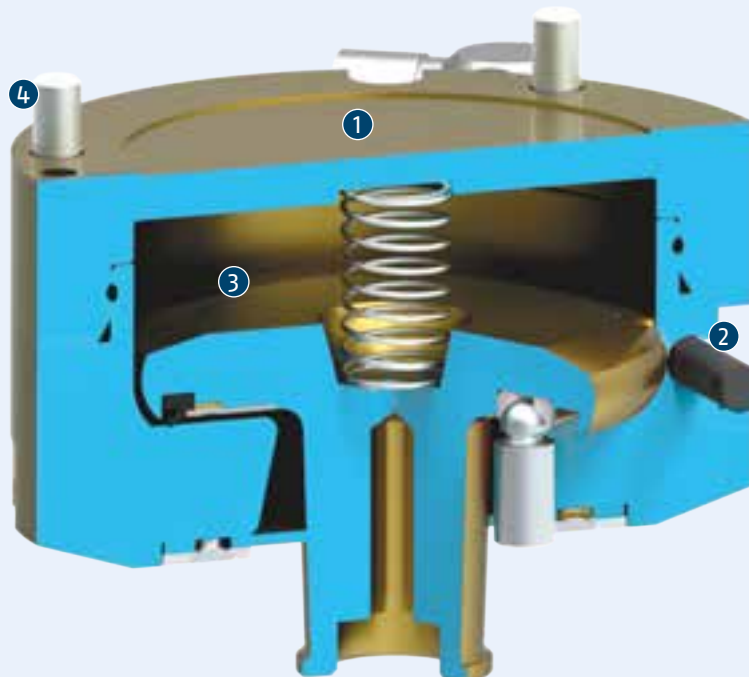
- With integrated electronics
- Monitoring by magnetic switches
- Triggering force and torque can be set by means of the operating pressure

Your advantage

- Fast response time due to magnetic switches

Function cross section

- 1 Housing
- 2 Sensor system
- 3 Drive
- 4 Centering and mounting option



NSR-A

Robot Accessories

NSR-A Quick-Change Module: Compact Quick-Change Module

Space-saving at maximum flexibility

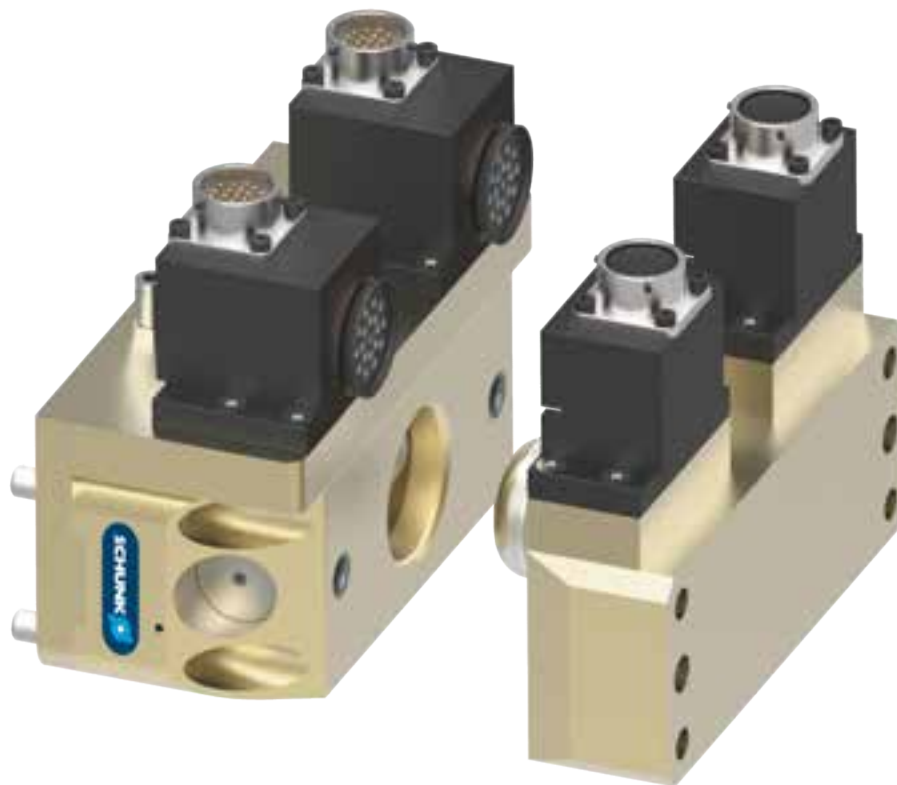
The NSR-A is the new slim quick-change module for pallet loading very close to the assembly or machine table. Very low attachments to the clamping station and pallet are feasible, and there is enough space for the components and the axis motion. For supplying the modules, handling, and assembly tools, the module can be additionally equipped with a SCHUNK standard media transfer for pneumatics, electrics, or fluids.

Slim and light, but powerful

At a dead weight of 1.6 kg (size 160), the NSR-A has a locking force of 14 kN, and therefore is an exceptionally rigid system. It is suitable for reliable handling of pallets up to 350 kg (measuring 400 x 400 mm) and for handling of tools. The SCHUNK locking system with the patented fast stroke and clamping stroke makes the handling of such an enormous amount of mass possible.

Control for a higher process reliability

The locking and unlocking process is monitored by magnetic switches, the pallet and tool presence is determined by inductive proximity switches.



Stronger!

High 14 kN locking force.

NSR-A

Robot Accessories

New Product

Successor
Product

New Sizes

Immediately available



Sizes
160



Weight
1.6 kg



Workpiece weight
max. 350 kg



Pull-down force
14000 N



Repeat accuracy
< 0.01 mm

Product features

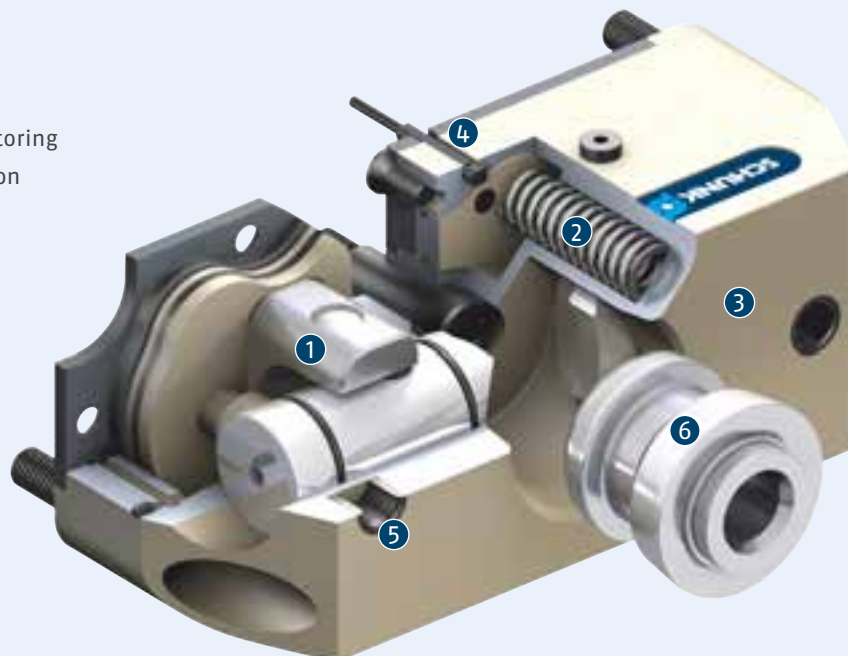
- Patented fast stroke and clamping stroke for a high locking force of 14 kN
- The module is completely sealed
- Form-fit locking with patented self-locking
- Every power transmitting part is made of hardened steel
- No lubricated air is necessary
- Pneumatic system pressure of 3.5 bar is sufficient for unlocking

Your advantage

- Optimum ratio of rigidity, robustness and weight due to the high-strength, hard-coated aluminum for parts outside the power transmission
- Reliable pallet or tool change in confined environments
- Secure process due to an excellent repeat accuracy

Function cross section

- 1 Locking mechanism
- 2 Pressure spring
- 3 Housing
- 4 Piston stroke monitoring
- 5 Anti-twist protection
- 6 Clamping pin



DRL

Modular Assembly Automation

Rotary Lift Unit DRL: High-speed assembly with integrated rotary motion

Highly dynamic

The pneumatic rotary lift unit DRL 025 SC is SCHUNK's latest addition to its fast products for modular high-speed assembly. In the assembly of electronics, medical technology and consumer goods. The rotary unit enables highly dynamic, yet smooth Pick & Place operations with 90 and 180 degree rotation angles.

High system productivity

With a minimal load and a rotation angle of 180° it achieves up to 75 cycles per minute. To boost productivity and process stability even more, the effector can be stopped by means of the flexible controller directly over the respective target position and switched to stand-by position until the feed-through or placing unit is ready.



Fast!

Up to 90 cycles per minute.

Immediately available



Sizes
25



Max. rotation angle
180°



Vertical stroke
40 mm



Lifting force
320 N



Torque
3.7 Nm

Product features

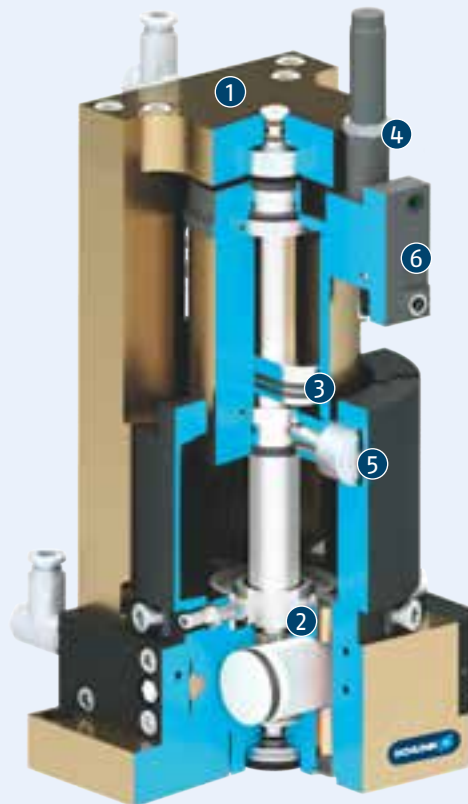
- Transfer and turning in one step
- Rotation angle adjustable by $\pm 2^\circ$ per side
- Vertical end position adjustable by 10 mm per side
- Pick and place heights can be different
- Two stand-by positions can be achieved by actuation

Your advantage

- Significantly higher productivity due to higher cycle rates
- Higher process reliability due to highly flexible actuation
- Fewer shock absorbers than comparable pneumatic solutions

Function cross section

- 1 Housing
- 2 Rotary drive
- 3 Vertical drive
- 4 Shock absorber/end position adjustment
- 5 Cam roller/disk
- 6 Mounting attachment



PPU-P

Modular Assembly Automation

Pick & Place Unit PPU-P 30: Time-optimized pace setter

Minimum cycle times

The PPU-P 30 is designed for payloads of up to 3 kg and is pre-destined to share in the success of the smaller PPU-P 10. In their respective sizes, both are the fastest pneumatic units on the market worldwide. With a full payload, the PPU-P 30 achieves up to 75, and the PPU-P 10 even 95 cycles per minute. That makes them twice as fast as the existing conventional Pick & Place solutions.

Clever solution

The strokes can be adapted horizontally 18 mm per side and vertically 15 mm per side. Also, the end positions can be adjusted separately from each other, vertically. This makes compensation of height differences between the pickup and placing position fast and easy, with no intermediate stop.



Fast as lightning!

Up to 90 process-reliable picks/minute –
very robust, flexible cam control.

PPU-P

Modular Assembly Automation

New Product

Successor
Product

New Sizes

Immediately available



Sizes
10 .. 30



Max. horizontal stroke
210 mm



Max. vertical stroke
60 mm



Repeat accuracy
 ± 0.01 mm



Max. payload
3 kg

Product features

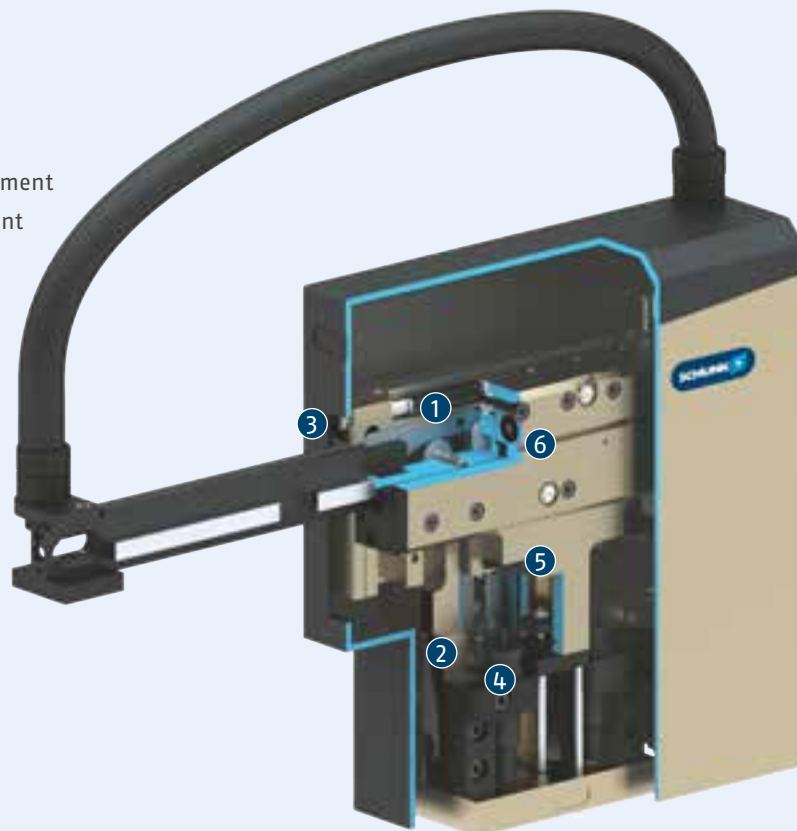
- Positively driven by a cam roller – up to 50% shorter cycles compared with conventional Pick & Place units
- Adaptation of the stroke by up to 18 mm horizontally and 20 mm vertically per side – fast compensation of built-up tolerances
- Compatibility with the SCHUNK modular system
- Proven cam control with a positive transmission of motion

Your advantage

- Higher system productivity due to 30% shorter cycle times
- Extremely easy commissioning due to Plug & Play functionality
- Full compatibility with modules for modular assembly automation
- Consistently reliable system operation

Function cross section

- 1 Cam roller
- 2 Junction roller guide
- 3 Horizontal end position adjustment
- 4 Vertical end position adjustment
- 5 Vertical drive cylinder
- 6 Horizontal drive cylinder



PPU-E 15

Modular Assembly Automation

PPU-E 15 Pick & Place Unit: Slim high speed unit for electronics assembly

For particularly compact system designs

With the PPU-E 15, the series of the fastest pick & place unit is enlarged with a freely programmable pace setter, which is custom-tailored for the use in electronic and small part assembly. With a width of just 60 mm, and a complete media supply via the back panel, it allows a particularly compact sandwich construction of several units. If rotary indexing tables are used, more units can be arranged in a circle, or smaller round table diameters can be chosen.

For shorter cycle times

For carrying out a complete cycle at a horizontal stroke of 145 mm, and a vertical one of 45 mm, this booster in productivity requires 0.6 seconds at an additional weight of 1 kg, and 2 x 50 ms gripping time. At its peak, the PPU-E 15 achieves 100 picks per minute. As all the linear directly driven pick & place units from SCHUNK, the compact PPU-E 15 is also moved via a wear-free direct drive, and not by a guidance transmission, which is susceptible to wear. This minimizes the maintenance effort, increases the continuous repeat accuracy, and simplifies programming.



Sensational!

Up to 100 picks/min without a susceptible kinematics.

PPU-E 15

Modular Assembly Automation

New Product

Successor
Product

New Sizes

Sizes 30/50 are immediately available / size 15 will be available starting February 2013



Sizes

15
30
50



Maximum work level

150 mm x 60 mm
270 mm x 100 mm
280 mm x 150 mm



Repeat accuracy

0.01 mm
0.01 mm
0.01 mm



Speed

4 m/s
4 m/s
4 m/s



Maximum payload

1,5 kg
3,0 kg
5,0 kg

Product features

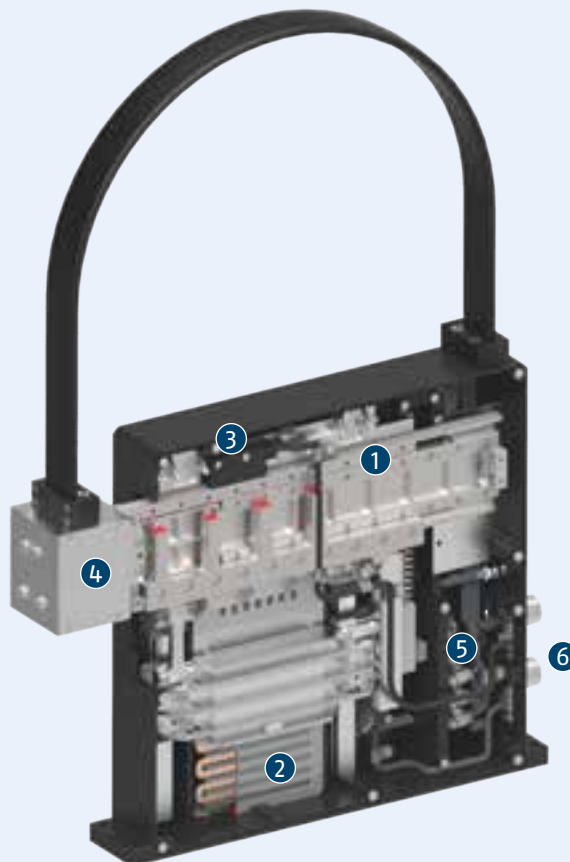
- All in one – Plug & play
- Every connection is plugged into the backpanel – optimum accessibility
- No moving motor cable, therefore no cable breaks
- Single axis can be individually programmed
- Interpolation of the axes is possible

Your advantage

- Higher system productivity due to the minimum cycle times
- Secure processes due to an excellent repeat accuracy
- Minimized energy costs due to the lightweight design
- Higher system availability since there is no wear of moving motor cables
- All the advantages of a direct drive – without any susceptible transmission of motion. No wear.

Function cross section

- 1 Cross roller guide
- 2 Fixed primary component
- 3 Absolute encoder
- 4 Valve box
- 5 Micro valve
- 6 Motor connector



MMS 22-PI (-HD)

Accessories

Magnetic Switch MMS 22-PI (-HD): One magnetic switch for everything

Fast assembly and adjustment

The MMS 22-PI series lets you program up to two switching points, depending on the sensor variant. As opposed to tedious mechanical setting of the switching points, programming of the sensors is easy.

Setup times reduced by up to 90%

Compared with conventional magnetic switches, users save up to 90% on set-up time. To increase process stability, it is also possible to program the switch-off points of the sensors. The hysteresis is configurable. In addition to the basic versions the programmable C-groove sensors are also available as HD variants for heavy-duty applications.



Speed!

Programming takes only 15 seconds.

MMS 22-PI (-HD)

Accessories

New Product

Successor
Product

New Sizes

Immediately available



Sizes
22

Product features

- Contactless programming via magnet teaching tool
- Decentral programming via plug teaching tool
- Integrated electronics

Your advantage

- Programming of sensor takes only 15 seconds
- One universal sensor reduces inventory
- Reliable processes and position monitoring due to configurable hysteresis
- More compact system designs due to minimal interfering contour on actuator

Function cross section

- 1 Actuator
- 2 C-groove sensor MMS 22-PI2
- 3 Teach tool, contactless
- 4 Teach tool, cable connected



ABR/SBR

Accessories

Quick-Change Fingers ABR-BSWS / SBR-BSWS: Exchange of fingers within seconds

The set-up time killer

SCHUNK now introduces a new type of finger blank with a quick-change system already integrated as a standard feature. Compared with conventional jaw changing the new system reduces setup times by up to 90%.

Available in aluminum and steel

The fingers can be adapted over their entire length to the respective workpiece, without having to worry about jaw changing and the corresponding screw connections. The finger blanks featuring an integrated quick-change system are available in aluminum (ABR-BSWS) or steel (SBR-BSWS).



Fast and individual!

Maximum freedom in the design
of the finger contour.

Available from February 2013



Sizes

50 .. 200

Product features

- Finger blanks with integrated quick-change jaw system
- Finger changing with repeat accuracy due to easily accessible, form-fit locking mechanism

Your advantage

- Increased system flexibility due to easy and reliable quick-change jaw system
- Boost in productivity due to fast conversion to a new parts spectrum
- More diversity in options for design of top jaws

Function cross section

- 1 Locking mechanism
- 2 Adapter pin BSWS-A
- 3 ABR-/SBR-PGZN-plus
- 4 Spring-loaded thrust piece



MV 10

Accessories

Micro Valve MV 10: Efficiency booster for small part handling

Specially designed for small actuators

With the micro valve MV 10 you can easily boost the productivity and energy efficiency of Pick & Place applications for small parts. This efficiency booster is so small, with a maximum interfering contour of only 9 mm, that it can be integrated directly in grippers or other pneumatic actuators. Instead of refilling the long supply lines between the valve block and the gripper for each pressure change, the compressed air consumption with the MV 10 is reduced to the volume of the piston chamber in the actuator. This makes it possible to save up to 90 percent on the compressed air. The response behavior is also improved, which reduces the cycle time.

Optimal flow rates

With an outer diameter of 9 mm and a nominal diameter of 1 mm, the micro valve enables a flow rate of up to 30 l/min, which is substantially higher than any comparable solution on the market. It can be plugged or screwed into the actuator.



Lasts forever!

More than 400 million switching cycles.

MV 10

Accessories

New Product

Successor
Product

New Sizes

Immediately available



Sizes
10

Product features

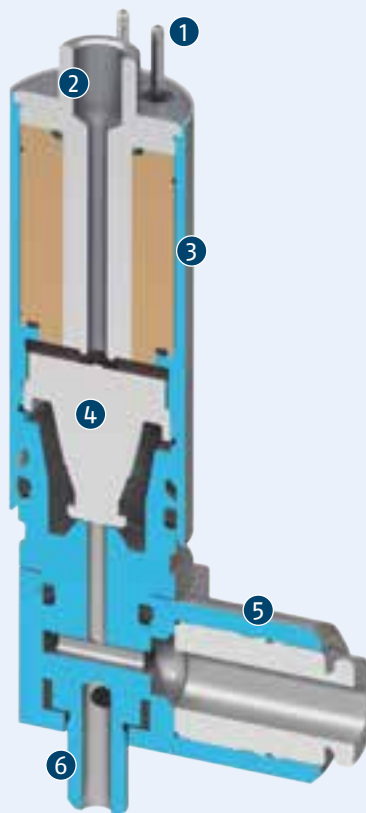
- High flow rate in a compact design
- Flow rate and switching time are configurable to customer requirements
- Variable mounting concepts: plug-in or screw-in
- Switching time < 3 ms

Your advantage

- Suitable for non-aggressive gases and liquids, due to complete media separation
- Fast movement of grippers due to short switching times
- Direct mounting on actuator saves air and reduces cycle times

Function cross section

- ① Electrical connection
- ② Pneumatic connection R
- ③ Valve body
- ④ Valve piston
- ⑤ Pneumatic connection P
- ⑥ Pneumatic connection A



Subsidiaries



Germany – Head Office

SCHUNK GmbH & Co. KG
Spann- und Greiftechnik
Bahnhofstr. 106 – 134
74348 Lauffen/Neckar
Tel. +49-7133-103-0
Fax +49-7133-103-2399
info@de.schunk.com
www.schunk.com



Austria

SCHUNK Intec GmbH
Holzbauernstr. 20 | 4050 Traun
Tel. +43-7229-65770-0
Fax +43-7229-65770-14
info@at.schunk.com
www.at.schunk.com



Belgium, Luxembourg

SCHUNK Intec N.V./S.A.
Bedrijvententrum Regio Aalst
Industrielaan 4 | Zuid III
9320 Aalst-Erembodegem
Tel. +32-53-853504
Fax +32-53-836351
info@be.schunk.com
www.be.schunk.com



Brazil

SCHUNK Intec-BR
Av. Santos Dumont, 733
BR 09015-330 Santo André – SP
Tel. +55-11-4468-6888
Fax +55-11-4468-6883
info@br.schunk.com
www.schunk.com



Canada

SCHUNK Intec Corp.
370 Britannia Road E, Units 3
Mississauga, ON L4Z 1X9
Tel. +1-905-712-2200
Fax +1-905-712-2210
info@ca.schunk.com
www.ca.schunk.com



China

SCHUNK Intec Precision Machinery Trading
(Shanghai) Co., Ltd.
Xinzhuan Industrial Park,
479 Chundong Road
Minhang District | Shanghai 201108
Tel. +86-21-51760266
Fax +86-21-51760267
info@cn.schunk.com
www.cn.schunk.com



Czech Republic

SCHUNK Intec s.r.o.
Drážni 7b | 627 00 Brno-Slatina
Tel. +420-531-022066
Fax +420-531-022065
info@cz.schunk.com
www.cz.schunk.com



Denmark

SCHUNK Intec A/S
Flegmade 11L | 7100 Vejle
Tel. +45-43601339
Fax +45-43601492
info@dk.schunk.com
www.dk.schunk.com



Finland

SCHUNK Intec Oy
Hatanpään valtatie 34 A/B
33100 Tampere
Tel. +358-9-23-193861
Fax +358-9-23-193862
info@fi.schunk.com
www.fi.schunk.com



France

SCHUNK Intec SARL
Parc d'Activités des Trois Noyers
15, Avenue James de Rothschild
Ferrières-en-Brie
77614 Marne-la-Vallée, Cedex 3
Tel. +33-1-64663824
Fax +33-1-64663823
info@fr.schunk.com
www.fr.schunk.com



Great Britain, Ireland

SCHUNK Intec Ltd.
Cromwell Business Centre
10 Howard Way
Interchange Park
Newport Pagnell MK16 9QS
Tel. +44-1908-611127
Fax +44-1908-615525
info@gb.schunk.com
www.gb.schunk.com



Hungary

SCHUNK Intec Kft.
Széchenyi út. 70. | 3530 Miskolc
Tel. +36-46-50900-7
Fax +36-46-50900-6
info@hu.schunk.com
www.hu.schunk.com



India

SCHUNK Intec India Private Ltd.
80 B, Yeshwanthpur, Industrial Suburbs
Bangalore 560022
Tel. +91-80-40538999
Fax +91-80-40538998
info@in.schunk.com
www.in.schunk.com



Italy

SCHUNK Intec S.r.l.
Via Barozzo | 22075 Lurate Caccivio (CO)
Tel. +39-031-495131
Fax +39-031-4951301
info@it.schunk.com
www.it.schunk.com



Japan

SCHUNK Intec K.K.
45-28 3-Chome Sanno
Ohta-Ku Tokyo 143-0023
Tel. +81-3-37743731
Fax +81-3-37766500
info@jp.schunk.com
www.jp.schunk.com



Mexico, Venezuela

SCHUNK Intec S.A. de C.V.
Calle Pirineos # 513 Nave 6
Zona Industrial Benito Juárez
Querétaro, Qro. 76120
Tel. +52-442-211-7800
Fax +52-442-211-7829
info@mx.schunk.com
www.mx.schunk.com



Netherlands

SCHUNK Intec B.V.
Speldenmakerstraat 3d
5232 BH 's-Hertogenbosch
Tel. +31-73-6441779
Fax +31-73-6448025
info@nl.schunk.com
www.nl.schunk.com



Norway

SCHUNK Intec AS
Kjellstadsveien 5 | 3400 Lier
Tel. +47-210-33106
Fax +47-210-33107
info@no.schunk.com
www.no.schunk.com



Poland

SCHUNK Intec Sp. z o.o.
ul. Puławska 40A
05-500 Piaseczno
Tel. +48-22-7262500
Fax +48-22-7262525
info@pl.schunk.com
www.pl.schunk.com



Russia

SCHUNK Intec OOO
ul. Samojlovoj, 5, lit. C
St. Petersburg 192102
Tel. +7-812-326-78-35
Fax +7-812-326-78-38
info@ru.schunk.com
www.ru.schunk.com



Slovakia

SCHUNK Intec s.r.o.
Mostná 62 | 949 01 Nitra
Tel. +421-37-3260610
Fax +421-37-6421906
info@sk.schunk.com
www.sk.schunk.com



South Korea

SCHUNK Intec Korea Ltd.
Ace High-End Tower 11th
#1207 Gwangyang-dong | Dongan-gu
Anyang-si, Gyeonggi-do | 431-804, Korea
Tel. +82-31-3826141
Fax +82-31-3826142
info@kr.schunk.com
www.kr.schunk.com



Spain, Portugal

SCHUNK Intec S.L.U.
Foneria, 27 | 08304 Mataró (Barcelona)
Tel. +34-937 556 020
Fax +34-937 908 692
info@es.schunk.com
www.es.schunk.com



Sweden

SCHUNK Intec AB
Morabergsvägen 28
152 42 Södertälje
Tel. +46-8 554 421 00
Fax +46-8 554 421 01
info@se.schunk.com
www.se.schunk.com



Switzerland, Liechtenstein

SCHUNK Intec AG
Im Ifang 12 | 8307 Effretikon
Tel. +41-52-35431-31
Fax +41-52-35431-30
info@ch.schunk.com
www.ch.schunk.com



Turkey

SCHUNK Intec Bağlama Sistemleri ve
Otomasyon San. ve Tic. Ltd. Şti.
Küçükyalı İş Merkezi, Girne Mahallesi
İrmak Sokak, A Blok, No: 9
34852 Maltepe | İstanbul
Tel. +90-216-366-2111
Fax +90-216-366-2277
info@tr.schunk.com
www.tr.schunk.com



USA

SCHUNK Intec Inc.
211 Kitty Hawk Drive
Morrisville, NC 27560
Tel. +1-919-572-2705
Fax +1-919-572-2818
info@us.schunk.com
www.us.schunk.com

Distribution Partners



Argentina

Ruben Costantini S.A.
Luis Angel Huergo 1320,
Parque Industrial San Francisco
2400 San Francisco-Córdoba
Tel. +54-3564-421033
Fax +54-3564-428877
alejandro.costantini@costantini-sa.com
www.costantini-sa.com



Australia

Romheld Automation PTY. LTD.
Unit 30 | 115 Woodpark Road
Smithfield NSW 2164
Tel. +61-2-97211799
Fax +61-2-97211766
sales@romheld.com.au
www.romheld.com.au



Chile

Comercial Araneda y CIA. LTDA.
Quinta Normal
Vargas Fontecilla # 4550 | Santiago
Tel. +56-2-7248123
Fax +56-2-7102036
caraneda@rotar.cl | www.rotar.cl



Colombia

Cav
Control y Automatización Virtual Ltda.
43 Oficina 101 Avenida Experanza N. 72B
Bogotá D.C.
Tel. +57-1-6608719
Fax +57-1-4109846
info@cavingenieros.com
www.cavingenieros.com

Colombia

MIKRA CAD CAM CAE, LTDA
AC-3 # 31D-97, Bogotá
Tel. +571-201-6379



Costa Rica

RECTIFICACION ALAJUELENSE, S.A.
100m al Oeste y 75m al Sur del
Cementerio Central de Alajuela,
Alajuela
Tel. +506-2430-5111



Croatia

Bibus Zagreb d.o.o.
Anina 91 | 10000 Zagreb
Tel. +385-138-18004
Fax +385-138-18005
info@bibus.hr | www.bibus.hr



Czech Republic

Bibus s.r.o.
Videňská 125 | 63927 Brno
Tel. +420-5-45233707
Fax +420-5-45221444
adam@bibus.cz | www.bibus.cz



Ecuador

ELIMED CIA. LTDA.
Calle El Progreso OEI-111 y Manglaralto
Quito
Tel. +59-39-7784740



Estonia

DV-Tools OÜ
Peterburi tee 34/4 | 11415, Tallinn
Mobile Phone +372-56-655954
Fax +372-6030508
info@dv-tools.ee



Finland

Nurminen Tools Oy
Rautakatu 4 | 21110 NAANTALI, FINLAND
Tel. +358-2-4389668
Fax +358-2-4389669
sales@nurminentools.fi
www.nurminentools.fi



Greece

Georg Gousoulis Co. O.E.
27, Riga Fereou Str.
14452 Metamorfosi-Athens
Tel. +30-210-2846771
Fax +30-210-2824568
mail@gousoulis.gr | www.gousoulis.gr



Iceland

Formula 1 ehf
Breidamörk 25 | P.O. Box 1 61
810 Hveragerdi
Tel. +354-5172200 | Fax +354-5172201
formula1@formula.is



Indonesia

PT. Metaltech Indonesia
Komplek Puri Niaga 1 Blok K7/IT
Puri Kencana | Jakarta Barat
Tel. +62-21-58350434
Fax +62-21-5918553
info@metaltechindonesia.com



Iran

Iran Int. Procurement of Industries Co.
(I.I.P.I.)
No. 10, First alley, Golshan St.,
Khoramshahr Ave. | Tehran, 1554814771
Tel. +98-21-88750965
Fax +98-21-88750966
info@iipico.com



Israel

Ilán and Gavish Automation Service
Ltd.
26, Shenkar St. | Qiryat-Arie 49513
P.O. Box 10118 | Petach-Tikva 49001
Tel. +972-3-9221824
Fax +972-3-9240761
nava@ilan-gavish.com
www.ilan-gavish.co.il

M. K. Sales
Arimon 41 St. | Mosave Gealya 76885
Tel. +972-52-8283391
Fax +972-7133-103942528
moti@mk-sales.com
www.mk-sales.com



Latvia

Sia Instro
Lacplesa 87 | Riga, 1011
Tel. +371-67-288546
Fax +371-67-287787
maris@instro.lv | www.instro.lv



Malaysia

Precisetech Sdn. Bhd
Plant 1, 15 Lorong Perusahaan Maju 11
13600 Perai | Prai Penang
Tel. +604-5080288
Fax +604-5080988
sales@precisetech.com.my
www.precisetech.com.my

SK-TEC
Automation & Engineering Sdn. Bhd
No. 54-A, Jalan PU7/3,
Taman Puchong Utama
47100 Puchong
Selangor Darul Ehsan
Tel. +603-8060-8771
Fax +603-8060-8772
jeffery.koo@sk-tec.com.my
www.sk-tec.com.my



Perú

ANDES TECHNOLOGY S.A.C.
Avenida Flora Tristan 765
Lima
Tel. +51-1-3487611

MAQUINAS CNC, S.A.C.
Los Jazmines #143, Lima
Tel. +51-1-2750649



Philippines

Bon Industrial Sales
35 Macapa St. | Sta. Mesa Heights
Quezon City
Tel. +63-2-7342740
Fax +63-2-7124771
bonind@skynet.net



Poland

Bibus Menos Sp. z o.o.
ul. Spadochroniarzy 18
80-298 Gdansk
Tel. +48-58-6609570
Fax +48-58-6617132
info@bibusmenos.pl
www.bibusmenos.pl



Romania

S.C. Inmaacro S.R.L.
Industrial Machines and Accessories
Romania
Avram Iancu Nr. 86
505600 Sacele-Brasov
Tel. +40-368-443500
Fax +40-368-443501
info@inmaacro.com
www.inmaacro.com



Russia

Haltec Ltd.
Federazia St. 8
432063 Ulyanovsk
Tel. +7-8422-31-07-38
Fax +7-8422-31-06-01
info@haltec.ru
www.haltec.ru



Saudi Arabia

Alruqee Machine Tools Co. Ltd.
Head Office
P.O. Box 36 57 | Alkhobar 31952
Tel. +966-3-8470449
Fax +966-3-8474992
mailbox2@alruqee.com
www.alruqee.net



Singapore

Balluff Asia Pte Ltd.
BLK 1004, Toa Payoh Industrial Park,
Lorong 8, # 03-1489
Singapore 319076
Tel. +65-625-24384
Fax +65-625-29060
alvin@balluff.com.sg
www.balluff.com.sg

Eureka Tools Pte Ltd.
194 Pandan Loop, # 04-10 Pantech,
Industrial Complex | Singapore 128383
Tel. +65-687-45781
Fax +65-687-45782
eureka@eureka.com.sg
www.eureka.com.sg



Slovakia

Bibus SK, s.r.o.
Priemyselná 4 | 94901 Nitra
Tel. +421-37-7412525
Fax +421-37-6516701
sale@bibus.sk | www.bibus.sk



Slovenia

MB-Naklo Trgovsko Podjetje D.O.O.
Toma Zupana 16 | 04202 Naklo
Tel. +386-42-771700
Fax +386-42-771717
mb-naklo@mb-naklo.si
www.mb-naklo.si



South Africa

Agm Maschinenbau (Pty) Ltd.
P.O. Box 4246 · Germiston South, 1411
Tel. +27-11-825-4246
Fax +27-11-872-0690
agrau@iafrica.com
www.agm-maschinenbau.co.za



South Korea

Mapal Hiteco Co., Ltd.
INA-502, Shiwha Ind. Complex 1254-10,
Jungwang-dong, Shihung-city
Kyunggi-do, 429-450
Tel. +82-31-3190-860
Fax +82-31-3190-861
hiteco@kornet.net | www.hiteco.co.kr



Taiwan

Accudyna Engineering Co., Ltd.
2 F, No. 885, Youn-Chun East 1st. Rd
40877 Taichung City
Tel. +886-4-23801788
Fax +886-4-23805511
sales@accudyna.com.tw
www.accudyna.com.tw

Yonchin Enterprises, Inc.
5F, No. 100, Hsing Der Rd.
San Chung City 241, Taiwan
Tel. +886-2-2278-9330
Fax +886-2-2278-9330
yon.chin@msa.hinet.net
www.yonchin.com



Thailand

Thai Precision Engineering Co., Ltd.
Banga Towers A, 2nd Floor, Unit 218 2/3
Moo14 Banga-Trad. km 6,5
Banglaew, Bangplee
Samutprakarn 10540 Thailand
Tel. +66-2-7519115 | Fax +66-2-7519117
info@thai-precision.com
www.thai-precision.com



Ukraine

Center of Technical Support „Mem“ LLC
Malysheva str., 11/25
Dnipropetrovsk 49026
Tel. | Fax. +38-056-378-4905
maxim.bayer@gmail.com
www.ctp-mem.com.ua



Venezuela

Alpin de Venezuela, C.A.
Calle G - Residencias Rosita
Local No. 6-P.B.-El Paraiso
Sector El Pinar-Caracas 1020
Tel. +58-212-4510484
Fax +58-212-4515886
alpin@cantv.net

Werke | Plants

Deutschland | Germany



Lauffen/Neckar

SCHUNK GmbH & Co. KG | Spann- und Greiftechnik
Bahnhofstr. 106 – 134 | 74348 Lauffen/Neckar
Tel. +49-7133-103-0
Fax +49-7133-103-2399
info@de.schunk.com | www.schunk.com



Brackenheim-Hausen

SCHUNK GmbH & Co. KG | Spann- und Greiftechnik
Robert-Bosch-Str. 12 | 74336 Brackenheim-Hausen
Hotline Verkauf/Technical Sales +49-7133-103-2503
Hotline Technik/Technical Support +49-7133-103-2696
Fax +49-7133-103-2189
automation@de.schunk.com | www.schunk.com



Mengen

Heinz-Dieter SCHUNK GmbH & Co. Spanntechnik KG
Lothringer Str. 23 | 88512 Mengen
Tel. +49-7572-7614-0
Fax +49-7572-7614-1099
futter@de.schunk.com | www.schunk.com

Ihr Fachberater vor Ort | *Your local technical consultant*
www.schunk.com/services/ansprechpartner/aussendienst

International | International



Morrisville, North Carolina, USA

SCHUNK Intec Inc.
211 Kitty Hawk Drive | Morrisville, NC 27560
Tel. +1-919-572-2705
Fax +1-919-572-2818
info@us.schunk.com | www.us.schunk.com

Copyright

Das Copyright für Text, grafische Gestaltung sowie bildliche Darstellung der Produkte liegt ausschließlich bei SCHUNK GmbH & Co. KG

Technische Änderungen

Die Angaben und Abbildungen in diesem Katalog sind unverbindlich und stellen nur eine annähernde Beschreibung dar. Wir behalten uns Änderungen des Liefergegenstandes gegenüber den Angaben und Abbildungen in diesem Katalog, z. B. im Hinblick auf technische Daten, Konstruktion, Ausstattung, Material und äußerem Erscheinungsbild vor.

Copyright

All text drawings and product illustrations are subject to copyright and are the property of SCHUNK GmbH & Co. KG

Technical Changes

The data and illustrations in this catalogue are not binding and only provide an approximate description. We reserve the right to make changes to the product delivered compared with the data and illustrations in this catalogue, e.g. in respect of technical data, design, fittings, material and external appearance.

Katalogbestellung | Catalog Order

Kopieren, ausfüllen, faxen an +49-7133-103-2779 | Copy, complete, fax to +49-7133-103-2779

Greifsysteme | Gripping Systems

☐ Gesamtprogramm Greifsysteme
Complete program Gripping Systems



☐ Greifmodule
Gripping Modules



☐ Drehmodule
Rotary Modules



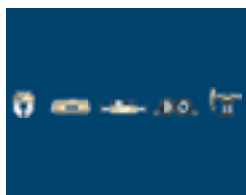
☐ Linearmodule
Linear Modules



☐ Roboterzubehör
Robot Accessories



☐ Modulare Montagetechnik
Modular Assembly Technology



☐ Produktübersicht
Product Overview



☐ Highlights
Neuheiten/New Products



☐ Sonderkomponenten
Special Components



☐ Mechatronik
Mechatronics



☐ Linien-/Raumportale
Modular Line/Room Gentries

Spanntechnik | Toolholding and Workholding

☐ Gesamtprogramm Spanntechnik
Complete program Toolholding and Workholding



☐ Werkzeughaltersysteme
Toolholding Systems



☐ Stationäre Spannsysteme
Stationary Workholding



☐ Drehfutter
Lathe Chucks



☐ Spannbacken
Chuck Jaws



☐ Magnetspanntechnik
Magnetic Clamping Technology



☐ Produktübersicht
Product Overview



☐ Hydro-Dehnspanntechnik
Sonderlösungen | Hydraulic
Expansion Technology
Special Solutions



☐ Highlights
Neuheiten | New Products

Firma | Company

Name | Name

Abteilung | Department

Straße | Street

PLZ | ZIP

Ort | City

Tel.

Fax

E-Mail



Reg. No. 003496 QM08

Exceptional Precision from the Competence Leader for Clamping Technology and Gripping Systems.

SCHUNK GmbH & Co. KG
Spann- und Greiftechnik

Bahnhofstr. 106 – 134
D-74348 Lauffen/Neckar
Tel. +49-7133-103-2503
Fax +49-7133-103-2189

automation@de.schunk.com
www.schunk.com



www.youtube.com/SCHUNKHQ



www.twitter.com/SCHUNK_HQ



www.facebook.com/SCHUNK.HQ