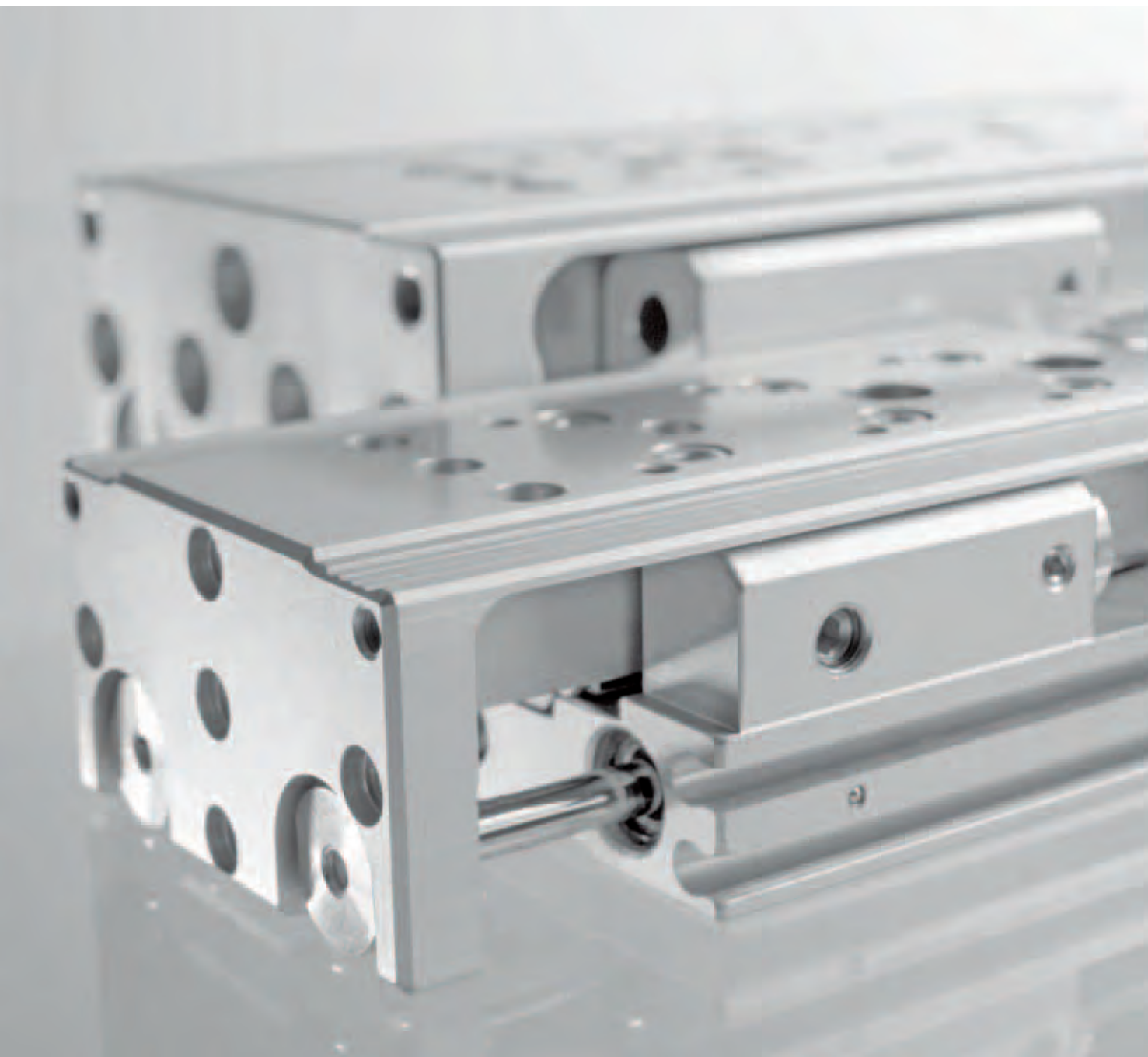


READY AT ANY TIME
AN OVERVIEW OF
PNEUMATIC CYLINDERS

Rexroth
Pneumatics





Everything you need

Today's cylinders must be perfect in every detail and be able to communicate in a variety of ways. Excellently equipped, both outside and inside: From the broad range of electronic and pneumatic connection technologies through the safe and precisely-controlled movements right up to reliable and exact sensors.

Competent and well-designed down to the last detail – application-oriented cylinder technology from AVENTICS

Our customers are demanding. They expect the highest performance from us and our solutions. And that is exactly what we want – because what our customers expect of us is what we expect of ourselves. That applies to all our services, as well as to every single element in our product range – right down to the last detail.

Perfection is our business

Our comprehensive range of perfected cylinder technology meets the demands of modern automation technology and offers suitable solutions for all applications, with all components reflecting our product philosophy of consistently high standards in quality and design.

- Functionality
- Modularity
- Quality and design

And whatever we do, the benefit for the customer is the focus of all our work – in advice and support, research and development, design and production. An absolute practice and solution orientation – but with an eye on trendsetting innovations that open up new possibilities. Function integration, component reduction, alternative materials management – those are just a few of the trends in modern product development that create future advantages and additional benefits that you can expect from AVENTICS as a global supplier of automation technology.



- ✓ Systems expertise
- ✓ Long-term product strategy
- ✓ Industry management
- ✓ International know-how
- ✓ Best-in-class components
- ✓ Global presence













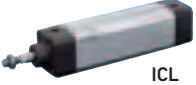
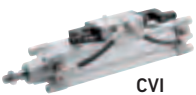
The right cylinder solution for every application – perfectly matched to each other

Insight – overview – outlook

This brochure is a fundamental orientation aid for selecting suitable products and provides information on the main features and fields of application of the cylinders. A summary of the program at the end of the brochure serves as an introduction to our detailed catalog.

A comprehensive program with a clear platform strategy

The modern applications for pneumatic cylinders dictate the portfolio. A perfect cylinder has to be not only well designed, easy to integrate, strong, durable and reliable, but also able to function both powerfully and sensitively and able to adapt to a wide variety of demands – it has to prove its high efficiency and cost-effectiveness day after day. Our product range of pneumatic cylinders meets these demands in every respect and is just as versatile as it is comprehensive.

| Product group | Mini cylinders | Round cylinders | Short-stroke and compact cylinders | Profile and tie rod cylinders |
|-------------------------------|---|--|--|---|
| Size/piston diameter | Ø 8 – 32 mm | Ø 25 – 125 mm | Ø 8 – 100 mm | Ø 25 – 320 mm |
| Industrial standard | ISO 6432 | | ISO 21287 ISO 15524 | ISO 15552 |
| Series |  MNI  ICM  CSL |  ICS  RPC |  CCI  SSI  KHZ  KPZ |  PRA  TRB  ITS  ICL  CVI |
| Improved corrosion resistance | ICM CSL | ICS | | ICL |
| Pages 6 – 7 | | Pages 8 – 9 | Pages 10 – 11 | Pages 12 – 13 |

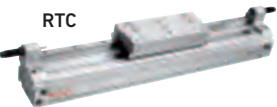
















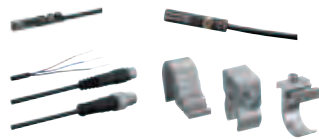
With all options for specific tasks

The spectrum ranges from extremely compact cylinders for small handling applications to larger cylinders for the most powerful tasks, as well as rodless cylinders with guide slides for long strokes right up to ISO cylinders with a clean design.

- Cylinders with piston rods
- Rodless cylinders
- Handling technology

Application-oriented solutions

We are continuously expanding our range of products to cover more tasks and applications in practice. The experience from our day-to-day cooperation with users is fed back directly into our world of products. We are also known as the specialist for customized solutions tailored to specific applications.

| Rodless cylinders | Handling technology | Special cylinders | Accessories |
|---|---------------------|-------------------|---------------|
| Ø 16 – 80 mm | Ø 6 – 100 mm | Ø 6 – 640 mm | |
| <div> <div>  <p>RTC</p>  <p>GSU</p>  <p>CKP</p> </div> <div>  <p>GPC</p>  <p>TWC</p>  <p>MSC</p>  <p>MSN</p>  <p>GSP</p>  <p>RCM</p> </div> </div> | | | |
| <div>  <p>SWN</p>  <p>RDC</p>  <p>BCP, BCS, BCE</p>  <p>BCC</p>  <p>BCR</p>  <p>BRB</p> </div> | | | |
| <div> <p>ISO 15552 ISO 8139</p> <p>Function units and shock absorbers</p>   <p>Cylinder and piston rod mountings</p> <p>Sensors and accessories</p>  </div> | | | |
| <div> <p>BCS</p> </div> | | | |
| Pages 14 – 15 | Pages 16 – 17 | Pages 18 – 19 | Pages 20 – 21 |

The mini range for maxi applications

Don't underestimate us! Our smallest cylinders go to work with extremely compact, integrated power and intelligence – and their range of applications is growing. The ongoing trend towards miniaturization of products and components is creating more and more new fields of application for our little all-rounders.

The ideal cylinders for small handling

The minimized dimensions are not the only reason why our mini cylinders are predestined for small handling applications. Maximum precision and reliability, a demand-driven and exactly regulated power control and light-weight thanks to the use of modern materials and trendsetting function integration provide additional benefits for users in a very wide range of industries.

- General pneumatics market
- Food & Beverage

Mini cylinders play a significant role in modern handling technology applications and adapt perfectly wherever they are used.



| Series | MNI | ICM | CSL |
|---------------------|-----|-----|-----|
| Resistance | ○ | + | ++ |
| Compactness | ○ | ++ | + |
| Variety of versions | ○ | ○ | ++ |
| ATEX | + | ○ | + |
| Easy to clean | ○ | + | + |

++ Highly recommended + Recommended ○ Suitable – Less suitable

Mini cylinders from AVENTICS – a wide variety of talents

The cylinder series cover the entire spectrum of applications

Series OCT, MNI, 131 and ICM mini cylinders from our program with their specific characteristics, strengths and properties are designed for special applications and industry solutions. The enormous breadth of the product range and variety of versions enable us to offer our customers inexpensive, application-specific tailored solutions with sophisticated combinations of standard components.

MNI series

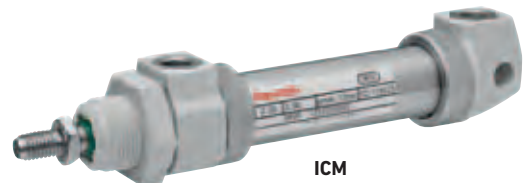
Our proven range of cylinders for general machine construction. This design is characterized by its robustness and long service life. A cylinder for users and developers who rely on the greatest efficiency.

ICM series

Mini cylinders from the ICM series offer high corrosion resistance and are a reliable, cost-efficient solution – even in harsh environments. The cylinder tube and piston rod are made of stainless steel, the cylinder covers are fashioned from a high-quality polymer.

CSL series

Round cylinder series CSL-RD Stainless Line, optionally in hygienic design or in accordance with DIN ISO 6432. The CSL-RD in a hygienic design has a smooth profile and low surface roughness, and uses with food grade lubricants and sealings.

**MNI****ICM****CSL**

Clean design as standard in AVENTICS round cylinders

A completely clean solution without any edges or corners. Exactly the right choice for applications in sensitive environments where even the slightest hygiene risk has to be ruled out. The consistently developed clean design in our round cylinder series predestines it for all applications in wet and dry areas.

A multitude of applications

The right selection of materials and a hygiene-oriented design make our round cylinders the first choice for a large number of applications. These include applications in the food industry, as well as in the pulp and paper industry with aggressive environments and high demands on corrosion protection and heat resistance. Or in the chemical industry, to help prevent contamination. A basic requirement for hygiene in the food and packaging industry is optimum cleaning of the components.



| Series | ICS-D2 | RPC |
|--------------------------------|--------|-----|
| Easy-to-clean surfaces | ++ | + |
| Configurability | — | ++ |
| Corrosion resistance | ++ | ○ |
| Temperature range | ○ | + |
| Diameter range | + | ○ |
| Flexibility/choice of versions | ○ | ++ |

++ Highly recommended + Recommended ○ Suitable — Less suitable

For food applications in sensitive environments

Acid-resistant or made of stainless steel

Our two round cylinder series for wash-down applications make it easy for the user to decide on components from AVENTICS. A wide choice of design variants and a comprehensive program of accessories with all connection options make all wishes possible. All that remains is to select the right materials, and the application-specific solution is yours.

ICS series

The hygienic design of the ICS with smooth surfaces, interlocking seals and cushioning screws prevents dirt pockets from the outset and guarantees optimum cleaning conditions. Series ICS stainless steel cylinders are suitable for food processing areas where components are intended to or could come into direct contact with food. All types of fluid, right up to aggressive acids, can be easily washed off these hygienically designed round cylinders.

- Hygienic design prevents dirt pockets
- Different materials, depending on the application
- Simple cleaning
- Wide variety of connection options

RPC series

The round cylinders from the RPC series offer a wide variety of connection options. They are easy to clean and can be used for packaging in the food industry thanks to food industry grease.



ICS



ICS



ICS



RPC

When things get tight, our compacts come out strong

They get very little room to work, but have to move a lot in the tightest spaces. Do a lot with very little – those are the ideal specifications for the use of our miniature power packs. In the strictest sense of the word you can say here: less is more.

Save where you can!

There is always room for compact AVENTICS cylinders. Save on installation space and costs during the design phase, because our short-stroke and compact cylinder series make it easy to come up with cost-efficient machine constructions. And all that without having to compromise on precision, reliability and innovative technology.

The products from our sophisticated program are backed by the experience from many years of cooperation with users in our core industries. They help to save without making compromises. The comprehensive program with large stroke ranges and piston diameters makes the use of our cylinder series the logical choice in practically any machine environment.



| Series | CCI | SSI | KPZ | KHZ |
|---------------------|-----------|-----------|-----------|-------|
| Compactness | + | ++ | + | ++ |
| Variety of versions | ++ | + | ++ | + |
| Standard | ISO 21287 | ISO 15524 | NFE 49004 | keine |
| Diameter range | + | ++ | + | ++ |
| Stroke range | ++ | + | ++ | + |
| Sensor installation | ++ | ++ | ++ | + |
| Attachments | ++ | + | ++ | ○ |

++ Highly recommended + Recommended ○ Suitable – Less suitable

Short-stroke and compact cylinders from AVENTICS

Concentrated power in a minimum of space

With three different product standards in sizes from 8 mm to 100 mm piston diameter in a very wide range of variants, our short-stroke and compact cylinder program is one of the largest and most varied on the market worldwide.

CCI series

CCI means: innovative, compact construction and an easy-to-clean design. The Internet configurator offers a wide range of variants and design details. For example, non-rotating, with a front plate or in an ATEX version. The CCI is also available in a US version with special threads. It is ideal for long strokes and increased requirements for optimized cycle times and moving masses. The sensors can be installed quickly and easily on all sides and over the entire stroke range.

SSI series

SSI – the short stroke cylinder in accordance with the latest ISO standard 15524. The cylinders are particularly compact and up to 30% lighter than comparable cylinders thanks to weight-optimized profiles and fewer components. In addition, they provide a high degree of flexibility in sensor assembly and extremely effective elastic cushioning.

KPZ series

Series KPZ compact cylinders offer a wide variety of variants. They can be used very flexibly and are suitable for a multitude of applications thanks to their sizing based on the widely used standard NFE 49 004.

KHZ series

The special short-stroke cylinders in the KHZ series are available from a piston diameter of 8 mm and are ideal for extremely confined installation environments. The wide range of variants ensure simple and reliable machine integration.

- For strokes from 4 mm
- Also in a non-rotating variant
- For applications without solenoids



▲ Depending on the piston diameter, CCI cylinders are up to 60% shorter than comparable profile cylinders in accordance with ISO 15552.



CCI, non-rotating



CCI with sensors



SSI



KPZ



KHZ

Sturdy and reliable – quality for standard applications

Standardized to international norms and with an outstanding profile. Our profile and tie rod cylinders, in accordance with ISO-15552, have stood the test of decades of user-oriented practice and have established a firm position in professional pneumatics applications. Sturdy and reliable – and all that worldwide.

Universal solutions in numerous industries

With sizes from 32 mm to 320 mm piston diameter, the profile and tie rod cylinders in these series cover the entire range of applications. Our customers rely on the indestructible quality of our cylinder solutions in machine and system construction with tasks requiring high precision and regulated force, as well as in industries where enormous forces are needed.



- ▲ Cylinder valve units are especially suitable for decentralized applications in large-scale systems.
- ◀ Specific applications include wood and aluminum, steel and automotive, heavy-duty machinery and mining industry, as well as machinery and system engineering.



| Series | PRA | TRB | ITS | ICL |
|------------------------|-----|-----|-----|-----|
| Resistance | ○ | ○ | + | ++ |
| Easy to clean | ○ | ○ | ○ | ++ |
| Compactness | ++ | ○ | ○ | + |
| Variety of versions | + | ++ | + | ○ |
| Configurability | ++ | ++ | ++ | ++ |
| Temperature resistance | ++ | ++ | ++ | ○ |

++ Highly recommended + Recommended ○ Suitable – Less suitable

ISO cylinders with tie rods and profiles

The standardized classic

Innumerable design variants and sizes in the different cylinder series make it easy for the user to select the most suitable cylinder solutions for his specific application. The broad range of cylinders allows the cylinders to be specifically chosen, not only the basis of function and quality, but also under strict cost considerations.

PRA series

The PRA cylinder program is based on a compactly designed profile with integrated sensor grooves. Thanks to incomparable pneumatic cushioning, it is no problem for the PRA cylinders to transform load into speed and strain into control.

TRB series

TRB cylinders are among the most frequently employed cylinders in the process industry, automotive industry, and wood processing industry. The series meets every wish for product variety, durability and adaptability to existing processes.

ITS series

The cylinders in the ITS series are the "big brothers" of the TRB series cylinders. They are always specifically used when extremely large masses are involved that have to be moved efficiently and under control with the familiar ease of operation.

ICL series

This cylinder in clean design is produced specially for packaging applications in the food industry. It is characterized by practical sensor mountings and its hygiene-oriented design that combines simple cleaning with maintenance.

CVI series

Typical uses for the CVI series are open/close functions such as flap controls and spool applications. With two ISO cylinder series and five freely combinable valve series, you can custom-configure individual units online.



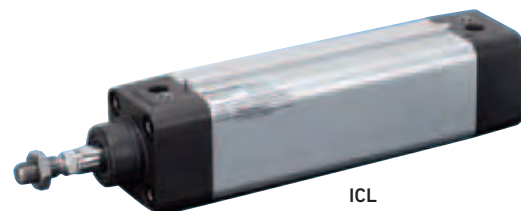
PRA



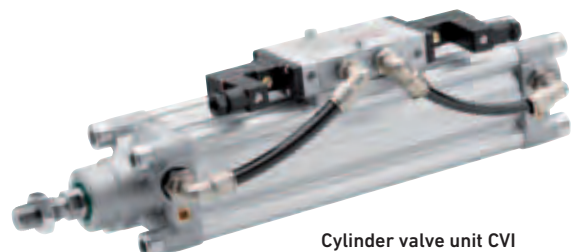
TRB



ITS



ICL



Cylinder valve unit CVI

Precise guidance, large distances, enormous flexibility – and “Easy-2-Combine”

The ideal shuttle service: operates exactly as required. Quick, direct, without detours and always on time. The rodless cylinder concept impresses with absolute repetitive precision, functions highly dynamically with reliable accuracy and is thereby highly cost-effective.

The basis for numerous handling applications

Thanks to their high functionality and drive force in a minimum of space and the wide range of sizes and design variants, the rodless cylinders and slide units are predestined for use as basic modules in handling technology. The great flexibility of the pneumatic connections and mechanical interfaces facilitates machine design and integration into existing configurations. Perfect function integration and practical details, such as size-optimized connections and ducts and optimized cushioning systems, are further guaranties of safe and reliable continuous operation.

The wide range of design variants with different connection options allow targeted use in automated handling technology in many industries.



Here, AVENTICS focuses on Easy-2-Combine interfaces that do not require transition plates and thus enable simplified machine designs.



| Series | RTC-BV | RTC-CG | RTC-HD | CKP | GSU |
|--|--------|--------|--------|-----|-----|
| Load capacity | ○ | + | ++ | ++ | + |
| Precision | – | + | + | ++ | ++ |
| Easy-2-Combine interface | – | ++ | ++ | ++ | ++ |
| Longer strokes | ++ | ○ | + | + | – |
| Stroke limitation with shock absorbers | ○ | ++ | ++ | ++ | ++ |

++ Highly recommended + Recommended ○ Suitable – Less suitable

Rodless cylinders and slide units with perfect guidance

Precision and speed for long strokes

The rodless cylinders permit an optimum stroke length in relation to their size. This saves space and facilitates machine design. The application range covers piston diameters from 16 mm to 80 mm and stroke lengths up to 9,900 mm. A wide speed range of 0.05 m/s to 5 m/s can be achieved with extremely high repetitive precision.

RTC series

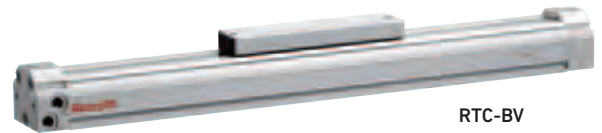
The compact form and unique properties of the RTC series open up completely new application possibilities. Compared with a round piston, the oval piston can withstand higher loads and torques. Slide and piston as a single unit mean high load capacity and reliability. High load capacity with small cylinder dimensions enables a simplified and compact machine design. The RTC series program is based on three variants with different key strengths. For large loads, very precise movement and positioning and a wide range of speeds. Stroke lengths and porting available in metric and inch.

CKP series

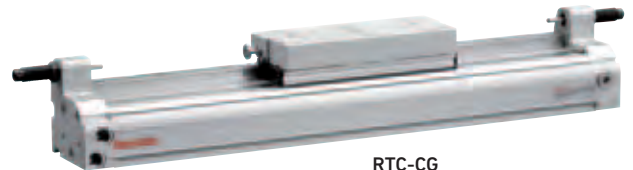
CKP series cylinders are particularly suitable for moving high loads in machine environments with limited space. They are equipped with integrated pneumatic cushioning and ensure extremely precise, sturdy guidance with high repetitive precision.

GSU series

This high-performance slide unit forms a sturdy basis for a large number of handling applications. Stroke length and position can be set variably over the entire length of the slide unit – individually from both sides, further underlining the enormous flexibility for installation. The very low overall height and an option for ventilation and exhaust on one side further expand the integration possibilities.



RTC-BV



RTC-CG



RTC-HD



CKP



GSU

We are the guide for handling technology

Gripping, turning and driving – no more, no less. And all from a single source. AVENTICS. We not only guide objects and workpieces exactly into their positions with our components and complete solutions – we have also established a leading position for ourselves as providers of handling technology.

Great solutions for small handling

Adequate solutions for practically all conceivable functions in handling technology can be found in AVENTICS comprehensive pneumatics program. Finely-tuned components and elements that perfectly fit together thanks to this consistent product philosophy, combined with sophisticated sensor technology for high precision, make these pneumatic solutions perfect. Modularity and ease of installation of the individual components are always key features of our product offerings in addition to pure functionality. Easy-2-Combine with the online configurator – it pays off!

- Assembly and handling
- Electronics industry
- Semiconductor production



◀ In addition to mechanical grippers, rotary modules and guide components, AVENTICS also offers the appropriate valve technology for optimum solutions.



| Series | GPC | TWC | MSC | MSN |
|---------------------|-----|-----|-----|-----|
| Compactness | – | + | ++ | ++ |
| Load capacity | ○ | ○ | ++ | – |
| Precision | + | ○ | ++ | ++ |
| Easy-2-Combine | + | – | ++ | ++ |
| Cushioning capacity | + | – | ++ | – |
| Stroke range | + | + | + | – |
| Stroke limitation | ○ | – | ++ | – |

++ Highly recommended + Recommended ○ Suitable – Less suitable

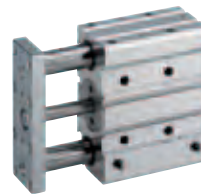
Components for gripping, moving and positioning

Handling technology from a single source

Mechanical grippers, rotary drives and modules, mini slides, guide units, compact and rodless cylinders – the program offers the right components for a full range of applications.

GPC series

The GPC series sets itself apart with high side load capacities and torsion protection. The robust, precise drive and guide absorb high torques and transverse forces.



GPC

TWC series

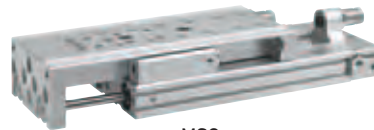
Double pistons make the TWC extremely powerful at a normal bearing capacity. At the same time, they ensure torsion protection and increase the load capacity of the cylinder with minimum piston rod play.



TWC

MSC series

The mini slides from the MSC series have a compact design, require little installation space and reliably ensure the necessary dynamics in the system. They provide maximum rigidity for high torques and loads and feature particularly gentle operation thanks to a unique cushioning system. Air supply options from three sides ensure maximum flexibility when installing the system and variable stroke adjustment enables different strokes within the individual sizes.



MSC

MSN series

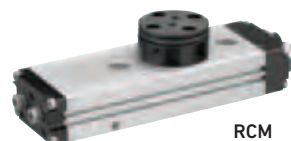
The mini slides offer a precise guide without play in a slim package. Thanks to an especially wide variety of mounting and air supply options, they can be used in virtually any position and location.



MSN

RCM, GSP series

Practically all standardized rotary and swivel movements can be performed with the rotary modules in the RCM series. These modules can be installed directly on mini slides and equipped with the mechanical GSP grippers.



RCM



GSP

Special cylinders for special applications

The extraordinary has always been something quite normal to us. Under this aspect, components and solutions for specific applications have been developed over decades of user-oriented cooperation with our customers and now form part of our standard program.

Active in all industries

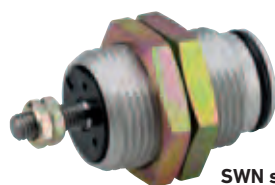
Our customers know that AVENTICS is always the right address for standardized solutions for users, no matter whether it's a question of developing or modifying products, finding adequate solutions for new applications or creating alternative solutions that can efficiently replace other technologies in every respect. The AVENTICS cylinder program offers an enormous range of standardized solutions for specific applications in practically every industry. The spectrum of components ranges from screw-in cylinders, various flexible diaphragm cylinders and special power transducers right up to the individual series of bellows actuators with totally individual application solutions.

SWN series screw-in cylinders

The cylinders in the SWN series can be easily installed without further accessories. Thanks to a thread integrated directly into the cylinder body, they can be installed in their working environment without taking up space.

RDC series flexible diaphragm cylinders

Thanks to their low friction, the RDC cylinders can be actuated at low pressure. These cylinders permit precise balancing of forces, particularly in finely-tuned systems.



SWN series



RDC series



Bellow actuators – high forces at low costs

AVENTICS offers six series of bellows actuators. The various designs, equipment, and materials mean that each series is predestined for specific tasks. All bellows actuators permit high forces in small installation spaces. They operate practically without wear or the need for maintenance.

Solutions with bellow actuators – single, double, triple success

BCP series – Bellows cylinders with plate

"Standard bellows cylinders" with permanently crimped galvanized steel plates and NR elastomer as standard.

BCC series – Bellows cylinders combined (rings & plates)

Bellows cylinders with removable mounting parts. Mounting via internal thread or threaded bolts.

BCC Ø 2-6 inches (internal thread): aluminum mounting parts, CR elastomer bellows.

BCC Ø 8-16 inches (threaded bolts): galvanized steel mounting parts, NR elastomer bellows.

Customers have the option of replacing the rubber bellow themselves.

BCE series – Bellows cylinder epichlorohydrin

Heat-resistant products with epichlorohydrin rubber (ECO) bellows. Cover made of galvanized steel.

BCS series – Bellows cylinder stainless steel

Corrosion-resistant products with high-alloyed steel plates. NR elastomer bellows.

BCR series – Bellows cylinders with ring

Bellows cylinders designed for high forces with aluminum mounting ring (no plate) and NR elastomer bellows. For direct mounting on suitable connection surfaces in the system. Thus, connection geometry is freely selectable

BRB series – Bellow rolling lobe actuators

The inexpensive option for light duty. Flexible rolling bellow actuator with plastic mounting parts and CR elastomer bellows. Low weight, nearly constant force output over the stroke range.

The classic fields of application for bellow actuators include:

- Presses
- Roller tensioners
- Tilt devices and tensioning devices
- Actuation of scissors-type lifting tables and use in vibration isolation as air springs.



The right accessories for all operating conditions and machine environments

They are unimposing but essential. They simply belong there: the right accessories for the job. AVENTICS has always attached great importance to having an extensive program of accessories in order to ideally meet the needs of the most varied applications.

We've thought of everything!

Whether it's a secure cylinder mounting, simple piston rod nut, or plain sensor bracket – the importance of these small parts only becomes apparent when they are missing or don't fit. That is no problem for AVENTICS customers.

Accessories are an integral part of the scope of supply and have the same high quality as the entire product range. Practical experience from decades of user-oriented work has also gone into perfecting product accessories. This is a precondition and

guarantee for efficient and generally trouble-free continuous operation of machines and systems.

- Exactly matched to the product program
- Mountings complying with ISO standard
- Best material and manufacturing quality
- Delivery units configured exactly to the product



Function units and shock absorbers

- Guide units
- Piston rod holding units
- Piston rod locking units
- Industrial shock absorbers



Cylinder and piston rod mountings

- Nuts for cylinder and piston rod mountings
- Foot and flange mountings
- Clevis mountings, clevis mountings, bearing blocks, bolts
- Intermediate flanges, trunnion mountings
- Compensating couplings, piston rod extensions
- Rod clevises, ball eye rod ends

Sensor technology from AVENTICS – always alert and responsive

Improved results thanks to optimized sensors

Intelligent sensor technology is a prerequisite for precise, safe cylinder operation. Measurement precision, as well as flexible assembly and adjustable measurement ranges, are essential for meeting a wide variety of requirements. The AVENTICS range has the right sensors and accessories for every cylinder.

- Sensors with cable connection, push-in fitting, M8 plug with knurled screw, contactless, in an ATEX version
- Sensor solutions for all AVENTICS cylinder series
- Mountings, cable holders, connecting cables, angled connector

ST4 series

Sensors for 4-mm slots offer high-tech in the tightest space and are always the right choice when every millimeter counts – ideal for pneumatic actuators in small handling.

ST6 series

Universal sensors for standardized 6-mm slots: their optimized form permits flush fitting in the existing slots and even space-saving integration in any machine environment using sensor mountings.

SM6, SM6-AL series

With four versions, series SM6 distance measuring sensors flexibly cover any required measurement range. They are easy to assemble and can be adjusted as needed within the maximum measurement range.

The SM6-AL analog distance measuring sensor also enables high-resolution distance measurement across the entire range of 107 to 1,007 millimeters. The distance measuring sensor is thus ideal for the continuous recording of piston movements in pneumatic cylinders. A robust, chemical-resistant aluminum housing, as well as a cable sleeve support, guarantee a long sensor service life and reduce maintenance costs.



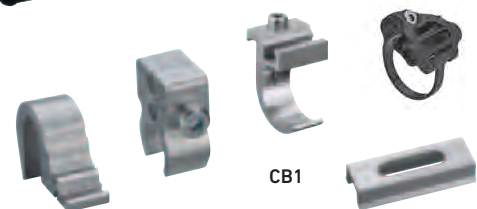
ST4



ST6



Mountings, connecting cables and plugs



CB1



SM6

SM6-AL

Configure your application online

Use the interactive tools – save time and money

With AVENTICS unique product configurator, you come to a result quickly and easily online. Just describe the intended application and you get a reply within a few seconds showing the proposed cylinder dimensions. The result also includes recommended cylinder speeds and the corresponding valve sizes and hose dimensions. The final result is a complete parts list including, for example, the cylinder switches and fittings. Furthermore, a material number is created that, depending on the user's wishes, represents the product as a kit including assembly parts or as a preassembled unit. For the project documentation, the user receives the relevant documents, the parts list, defined application parameters, calculation results, and complete assembly instructions. CAD data is also supplied. As we said – unique!



Your homepage for non-stop service

The AVENTICS Internet Portal never sleeps. In the online catalog, you can find additional information covering the entire product range, including all technical details, as well as the use of user-friendly Engineering Tools.



Online catalog

The fastest point of entry is via our online catalog. Here you can start your search directly by entering a part number or keyword.



CAD

Your desired object can be issued here directly as a CAD file in various formats, as a PDF file, or for further configuration in your software.



Configurators

The configurator can be reached by clicking the selected product. After selecting your product, you can begin to adapt it to your own specifications.



Calculation programs

Here you can specify the dimensions or loadbearing capacity of your components with a wide variety of calculation options. We also provide an air consumption calculator as a special feature.



Circuit diagram software

With the D&C Scheme Editor, you can quickly and easily create circuit diagrams that are based on your component layout and linked to your catalog selection.



eShop

The eShop is our online shop that answers your price requests and monitors the whole order process up to delivery.

When you need a highly specialized solution: tailor-made cylinders and components

Customized solutions

Our special departments develop customized solutions with functions that are tailored to specific applications. This can include newly designed cylinders or slightly but vitally modified components from the standard cylinder program. Contact our experts! They have know-how from decades of individual design and development work. If there's an individual solution for your application, we'll find it.

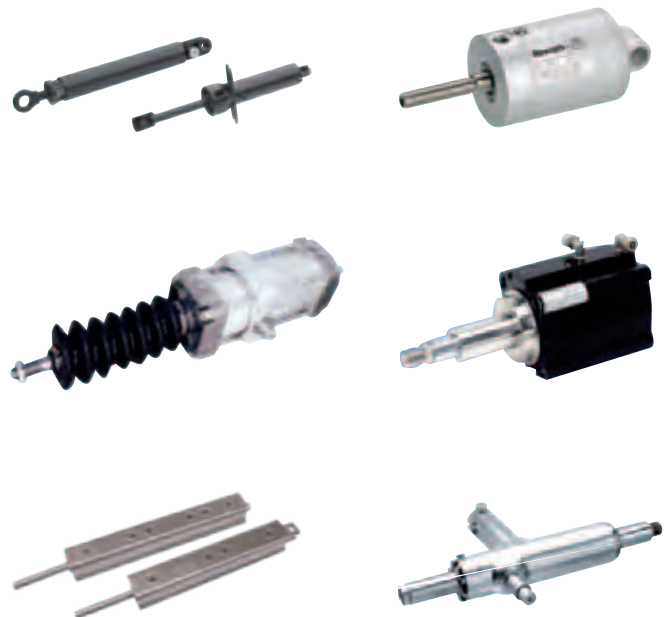
- Task analysis and function definition
- Application-specific configuration
- Punctual delivery and installation
- Test run with function optimization

Rely on our competence from the outset! From the first discussion, the search for a solution, building of prototypes through the test phases, right up to series production of your individual pneumatics solution.

- Modification of standard components
- Combining different functions in a single product
- Product development with additional specifications



▲ Square today, round tomorrow.
Tailor-made products are the icing on the cake



▶ Cylinder with modified piston rods, specially designed profiles, materials and additional functions

The crucial difference: All-round support until everything is running

Based on proven expertise and a first-class product range

Our understanding of cooperation goes well beyond the boundaries of individual projects. We are constantly in dialog with our customers and are always a competent contact for both technical and economic questions. The know-how contained in our comprehensive pneumatic product range gives us a solid foundation for our work.

- Cylinders and sensor technology
- Valves, valve systems, field bus connections
- Gripper and vacuum technology
- Compressed air preparation, assembly material, accessories
















A two-way flow of ideas keeps us a step ahead of the competition and ensures solutions ideally matched to our customers' needs. The outcome? We're right where the action is, staying on the offensive to safeguard technological edges for ourselves and our customers.

- Cross-technology solutions
- Technological updates
- User-friendly Engineering Tools



We are only satisfied when you are!

Apart from competent advice on the implementation of future-oriented solutions with products of the highest quality, our exemplary support is what customers can also count on. On request, that also includes professional assembly as well as thorough instruction in the operation of the machines and systems until everything is running smoothly.

| Cylinders | | |
|---------------|---|------------------|
| Diameter | | Series |
| 6 – 16 mm |  | SWN |
| 10 – 25 mm |  | MNI ISO 6432 |
| 8 – 32 mm |  | ICM |
| 16 – 25 mm |  | CSL |
| 32 – 63 mm |  | RPC |
| 25 – 125 mm |  | ICS |
| 16 – 100 mm |  | CCI ISO 21287 |
| 12 – 100 mm |  | SSI |
| 8 – 100 mm |  | KHZ |
| 16 – 100 mm |  | KPZ |
| 32 – 125 mm |  | PRA ISO 15552 |
| 160 – 320 mm |  | ITS ISO 15552 |
| 25 – 125 mm |  | ICL ISO 15552 |
| 32 – 125 mm |  | TRB ISO 15552 |
| 52,5 – 115 mm |  | RDC |

| Cylinders/handling technology | | |
|-------------------------------|---|------------------|
| Diameter | | Series |
| 32 – 125 mm |  | CVI ISO 15552 |
| 16 – 80 mm |  | RTC |
| 16 – 32 mm |  | CKP |
| 16 – 25 mm |  | GSU |
| 145 – 640 mm |  | BCP, BCE, BCS |
| 80 – 435 mm |  | BCC |
| 442 – 950 mm |  | BCR |
| 60 – 173 mm |  | BRB |
| 6 – 16 mm |  | MSN |
| 8 – 25 mm |  | MSC |
| 6 – 32 mm |  | TWC |
| 10 – 100 mm |  | GPC |
| 0,17 – 6,5 Nm |  | RCM |
| 0,11 – 6 Nm |  | GSP |

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The data specified only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.