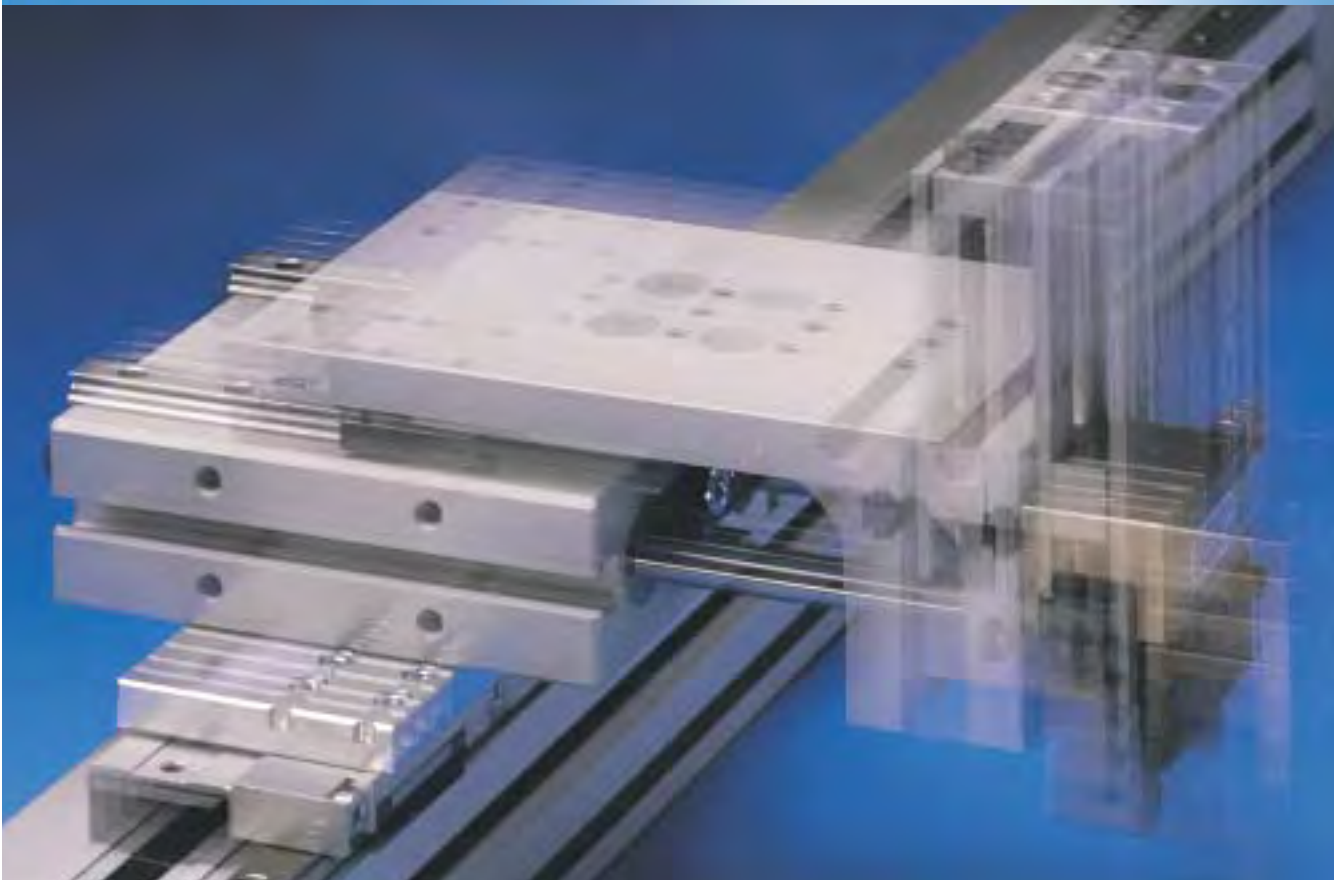


# Pneumatic Components for Automatic Systems

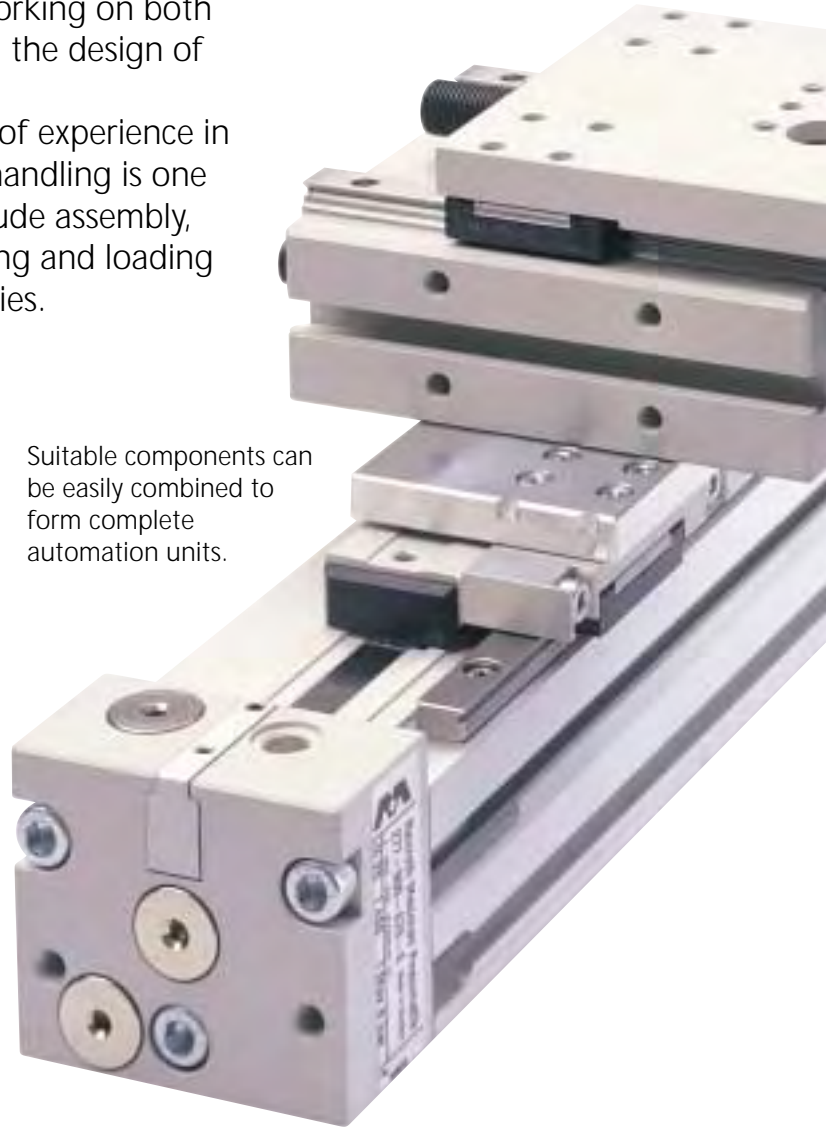
The Drive & Control Company



# Know-how in Automation

The reliability of automation components depends, to a large extent, on the expertise of those working on both the development of the components and the design of the system.

Bosch Rexroth has more than 50 years of experience in pneumatics; and know-how in material handling is one of our strengths. Typical applications include assembly, pick and place, test applications, palletising and loading and unloading in a wide range of industries.



Suitable components can be easily combined to form complete automation units.

From standardised elements to ready-to-mount systems, the Rexroth Applications Center offers solutions tailored to the requirements of the user. Modular assemblies can be incorporated into existing machine and plant plans.



Rexroth's shuttle cylinder, RexMover, is used to load the tortilla bread boxes carefully and efficiently on the pallet.





# More than just pneumatics

In response to the growing market demand for automation solutions, Bosch Rexroth, as one of the world's leading suppliers of drive and control technology, is focusing strongly on interdisciplinary teamwork.

The Rexroth Applications Center builds on a global support network and is represented at over 60 locations worldwide. Users can therefore count on competent contacts all around the world who can mobilise synergistic effects by systematic combination of Pneumatics as well as Linear Motion and Assembly Technologies; and Electrical Drives and Controls. Bosch Rexroth is thus taking yet another step on its way to becoming a leader in modular package solutions for all aspects of drive and control technology.



## The unique GPC

The Guided Precision Cylinder contains several unique features making it an outstanding automation product. For example, always can a smaller size be mounted directly on a bigger size. The toplayer version, with built-on mounting plate, simplifies assembly to other objects.



# Intelligent components in Automation Systems

The following four pages contain a selection of Rexroth pneumatic components that you can simply and effectively combine to form complete automation units. These are all standard components offering reasonably priced solutions.

## Block cylinder

Multi mounting cylinder, easy to use together with other axis. Hollowed rod version, ideal for pick and place with suction cups.  
Stroke length range 0–50 mm.



## GPC cylinders

The Guide Precision Cylinders combine precise movement with high side load capacity. Plain bearing and ball bearing versions in diameter 12 to 63 mm and stroke length range up to 200 mm.



## Duo cylinder

Compact twin rod cylinder with hollowed rod version for vacuum technology application and suction cups.  
Stroke length range 0–100 mm.



*Diameters 16, 25 and 32 mm.*

## Shuttle cylinders – the right version for your application

### Internal guiding

Robust linear drive

- Piston sizes 16–80 mm
- Stroke length range 0–9900 mm

### Plain bearing guide

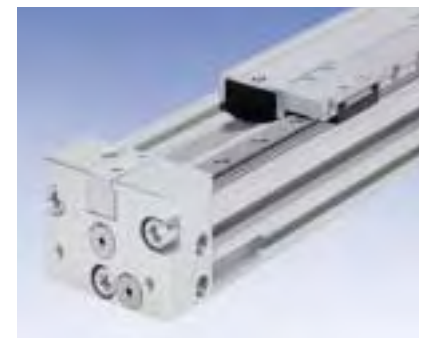
Robust linear drive for precision transportation

- Piston sizes 16–32 mm
- Adjustable stop with shock absorber
- Stroke length range 0–9900 mm

### Mini-guide

Robust linear drive with compact ball bearings for high precision transportation

- Piston size 25–32 mm
- Stroke length range 0–1700 mm





## Mini Slides

Better performance than standard cylinders in respect of carrying a load with great precision.

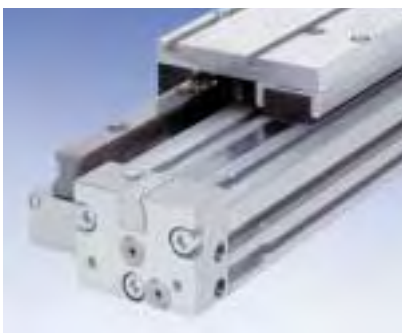
Mini Slides are widely used for carrying grippers, nut tighteners, fixtures etc. in automatic assembly machinery with electronic and medical equipment industries as typical sectors. Rexroth has developed three different versions:

- MST
- MSS
- MSN

## Heavy-duty guide

Robust linear drive with ball bearings for heavy loads with high precision

- Piston size 16–63 mm
- T-grooves in shuttle for easy mounting of additional devices
- Stroke length range 0–4300 mm



## Combination system

In most handling applications, there is a need of combining suitable actuators and "pick and place" products. The Rexroth products are possible to combine with either adapter plates, specific interfaces or standardized grooves for nuts.

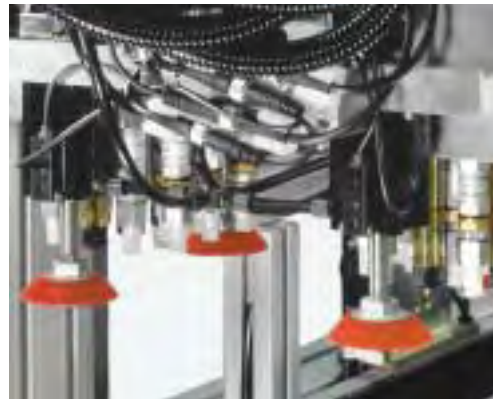


## Accessories

All from one source means that we want to be responsible for everything, right down to the smallest detail, even shock absorbers and other installation materials that may be required.



## Pick and place the easy way with vacuum technology



Our wide range of ejectors, suction cups and accessories offers interesting possibilities for vacuum applications.

## Pick and place with precision!

Pneumatic grippers, parallel and angle versions, in super quality for a secure and precise grip at the end of the axes in a material handling system.







## Compact valves for bus control

High flow, yet compact in design – short cycle times – low weight.  
The HF series, Cube Line 10, V15 and Plug-In 20 is a full range of valves all available with bus communication.

## e-design

Get on to the Internet and visit [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics)  
Our on-line services will give you access to advanced design tools such as an extensive CAD library, calculation programs, product configurators and full product information.



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