



Handling
The flexible
program
**More than
Motion.**

Yesterday. Today. Tomorrow.



Modular system

The Afag Group's modular system allows you to easily combine differently sized modules. As a result, you can even combine pneumatic modules with electric axes and grippers. Since nearly all of our pneumatic modules are equipped with shock absorbers and stop screws as standard, they have a very long service life. The wide variety of gripper designs and the solid construction of the gripper mechanism guarantee outstanding flexibility, precision and durability. If connecting plates are needed, then you will find that the suitable screws and centring rings are also part of the scope of delivery.

Your Advantages:

- › Wide range of linear, rotary and gripper modules
- › You can quickly access CAD data for all of our modules free of charge on our Part Server. You can also configure your systems there
- › Operating manuals with detailed descriptions can be downloaded on our website
- › The high availability of components and systems, as well as the optimal setup performed by our project engineers, guarantee a long service life
- › A guaranteed service life of 24 months reduces downtimes, which significantly lowers replacement costs
- › All documentations are available on mobile devices with the Afag App
- › Spare parts packages and a possible repair of the modules lead to additional saving potentials
- › Repair service for all components
- › Compatibility of the modules on the basis of the centring system
- › High precision of all individual components
- › Reproducible connection technology
- › Repeat accuracy of up to 0.01 mm
- › P&P movements < 1 sec are possible

Handling

Gripping



GM

Drive combinable with different grippers



SG

Programmable stroke range



GE

Very high number of cycles per minute



UG

Parts detection sensor



PG

High-precision gripper jaws



Handling

Turning

RE

High torque



DG

Shortest rotating gripper within its performance class



RA

Endless rotation without moving cables



CR

Compact style



RM

Optional intermediate positions



GM/RM

Modular combinations



GMQ/RE

Endless turnable Pneumatic grippers



Handling

Linear

OZ

Highly dynamic cantilever axis



PS

For heavy weights



CS

Compact style



HM

Torsional rigidity
Short style



LM

Extremely robust



ES

Freely programmable



SA

Flexible engine mounting



PDL

High torsional rigidity by double brackets



LE

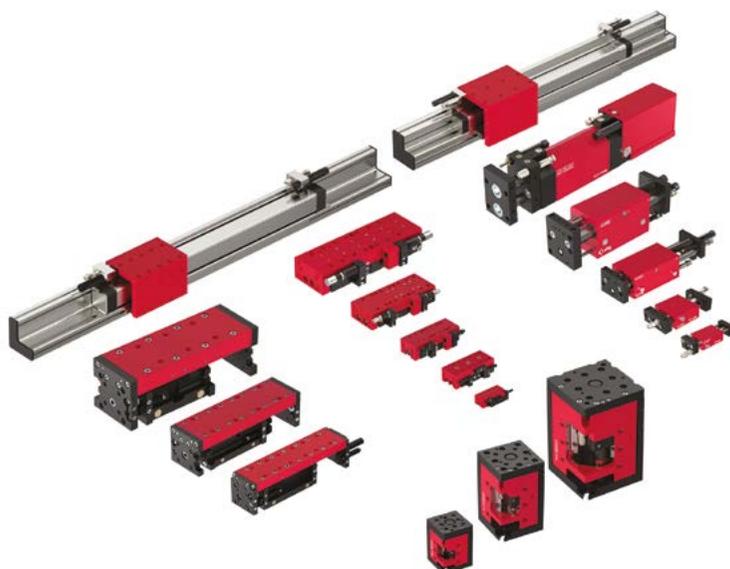
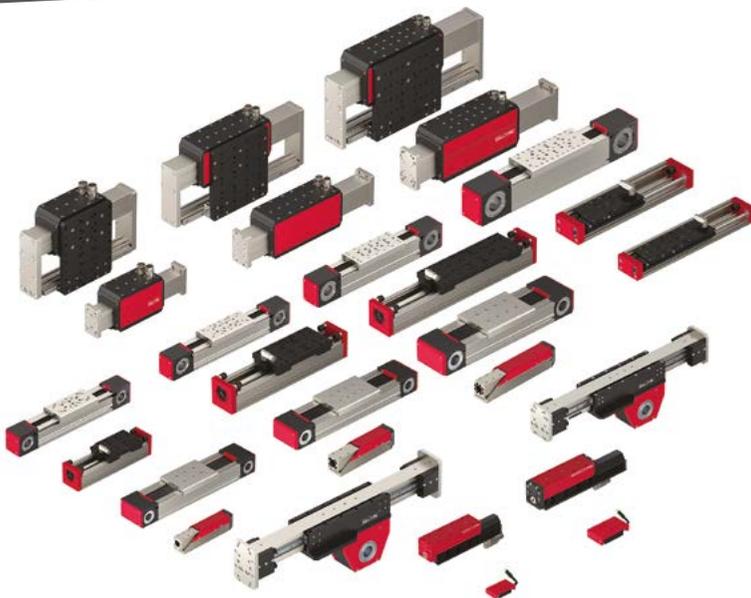
High-dynamic and precise



Modules

Linear modules

Linear modules are the basis for our wide range of components. Pneumatic and electric linear modules are available in various sizes.



Electric

Technical details	
Stroke	0 – 5500 mm
Force	0 – 4000 N
Payload	0 – 300 kg
Load	0 – 930 Nm

Customer benefit:

- › Freely programmable
- › No air needed
- › Flexibility if products are changed, less wear and maintenance
- › Smooth, quiet, interpolating processes
- › Pneumatic units can be combined easily
- › Smooth surfaces allow for the use in clean rooms

Pneumatic

Technical details	
Stroke	0 – 3000 mm
Force	0 – 483 N
Payload	0 – 20 kg
Accuracy	+/- 0.01 mm
Load	0 – 650 Nm

Customer benefit:

- › The simplest combination for repeated handling is possible
- › Patented intermediate stop allows multiple positions
- › The perfect alignment of the guides permits high loads
- › A product that is well known, easy to understand and used often

Rotation modules

Afag provides a wide range of different rotation modules that are compatible with all linear and gripper modules.



Electric

Technical details	
Max. speed	200 U/min
Torque	0 – 9 Nm
Torque of inertia	0 – 1.7 kgm ²
Accuracy	± br (r;6")
Payload radial	0 – 1200 N

Customer benefit:

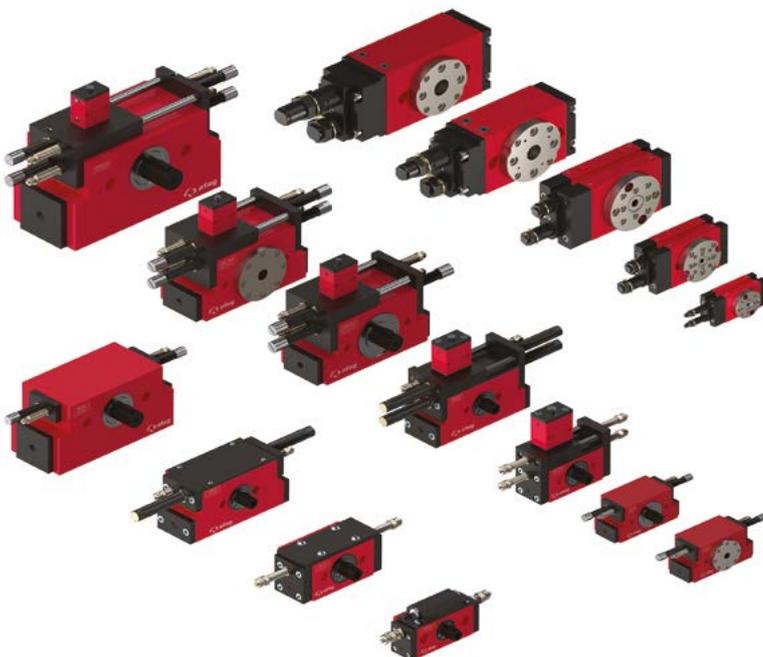
- › Compact size with high torque
- › Freely programmable and continuous rotation possible
- › Suitable for third party controller
- › Hollow shaft can be used for additional functions
- › All bus protocols available
- › Extremely high positioning accuracy
- › Free of play

Pneumatic

Technical details	
Angle of rotation	0 – 180°
Torque	0 – 27.5 Nm
Torque of inertia	0 – 2.4 kgm ²
Accuracy	< 6'

Customer benefit:

- › Complete range
- › Up to 4 angle positions possible
- › Variant diversity compared to the tool kit
- › Variable intermediate position is possible



Gripper modules

A wide range of gripper modules is available to you for gripping objects of different shapes and sizes.



Electric

Technical details

Grip strength	0 – 57 N
Opening path	0 – 20 mm
Accuracy	+/- 0.05 mm

Customer benefit:

- › Low energy costs
- › Compact design
- › Self-locking in a currentless state
- › In a multiple gripper setup tremendous wiring savings

Pneumatic

Technical details

Grip strength	0 – 235 N
Opening angle	0 – 176 °
Opening path	0 – 16 mm
Accuracy	+/- 0.025 mm

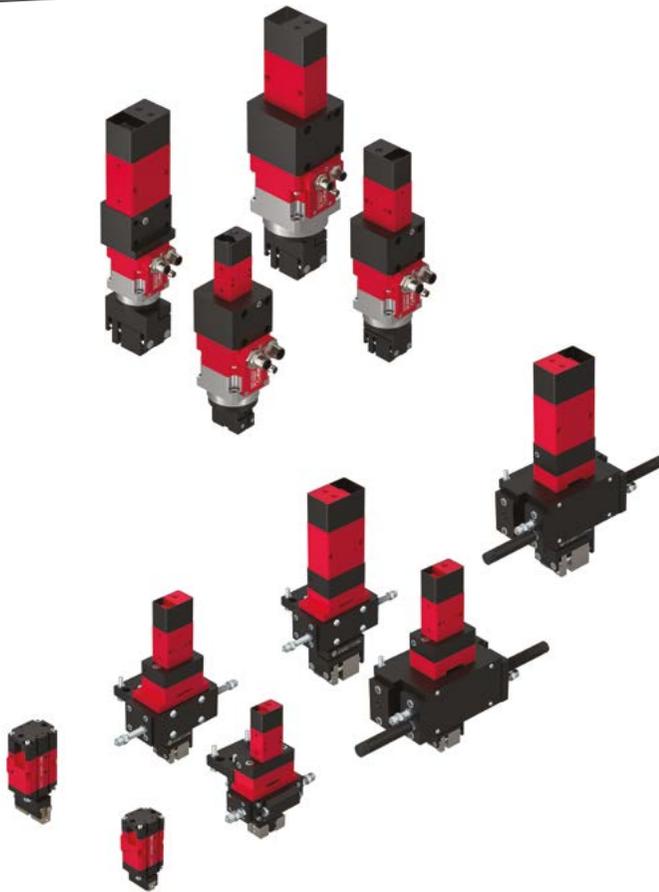
Customer benefit:

- › Same size but quicker and with greater clamping forces
- › Modular design allows extreme flexibility and minimal stock levels
- › Unique functions, such as adjustable opening position, length of stroke, tongs assembly angle
- › Maximum rigidity of the gripper fingers through L-design
- › High precision and repeat accuracy



Gripping rotary modules

With Afag's linear, rotary and gripper modules with pneumatic or electric drives, individual handling tasks can be accomplished with a manageable number of standard modules. The large selection of combined gripping rotary modules is put together with components from Afag's standard range.



Electric

Technical details	
Max. speed	200 U/min
Torque	0 – 9 Nm
Torque of inertia	0 – 1.7 kgm ²
Accuracy	± br (r;6")
Payload radial	0 – 1 N

Customer benefit:

- › Compact design
- › Endlessly turning
- › Exact positioning possible
- › Different tongs can be selected
- › High torques and speeds

Pneumatic

Technical details	
Angle of rotation	0 – 180°
Torque	0 – 2.5 Nm
Torque of inertia	0 – 0.4 kgm ²
Accuracy	< 5'

Customer benefit:

- › Individual handling tasks can be accomplished with a manageable number of standard modules
- › The compact design does not require a lot of space
- › The gripper function can be requested
- › A maximum of 4 positions can be selected
- › Different tongs can be selected



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