

LINEAR SLIDES

*ELECTRO-MECHANICAL
HYDRAULIC AND PNEUMATIC*



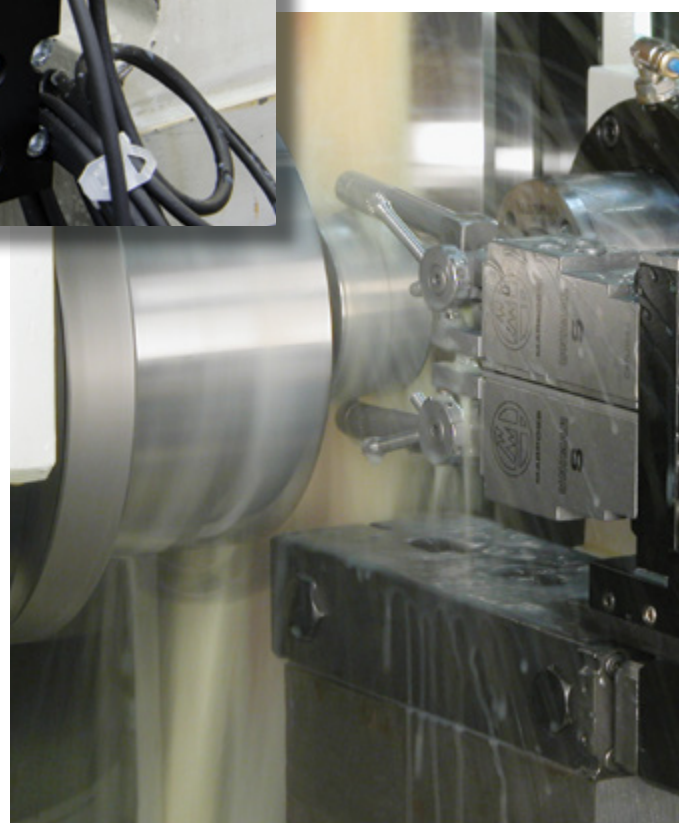
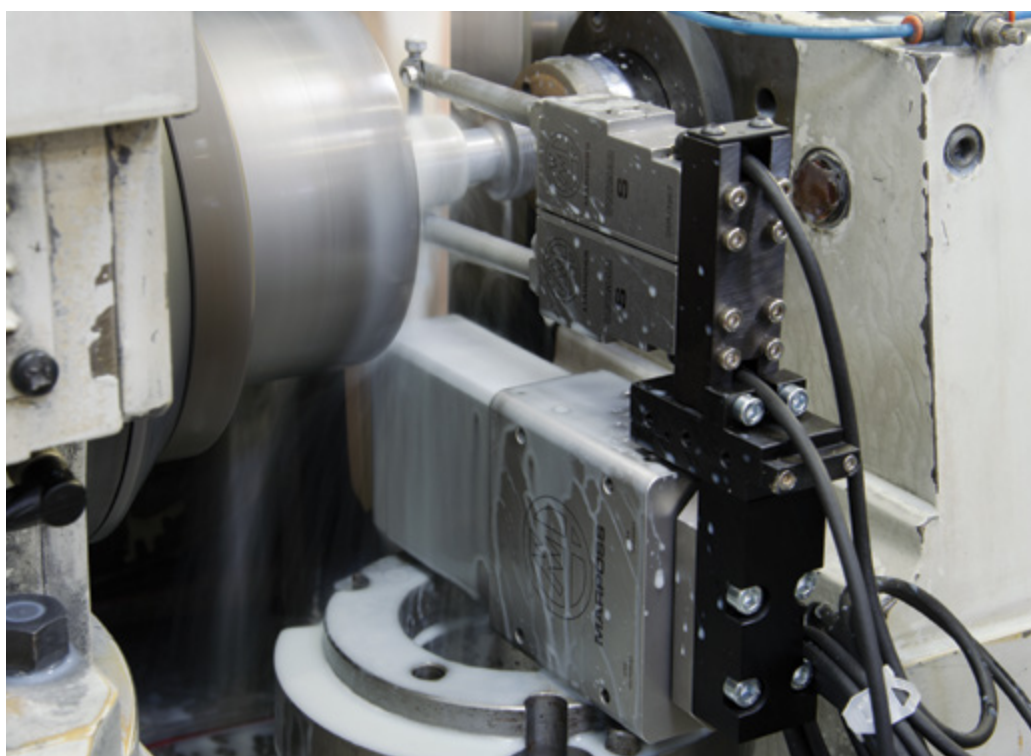
MARPOSS

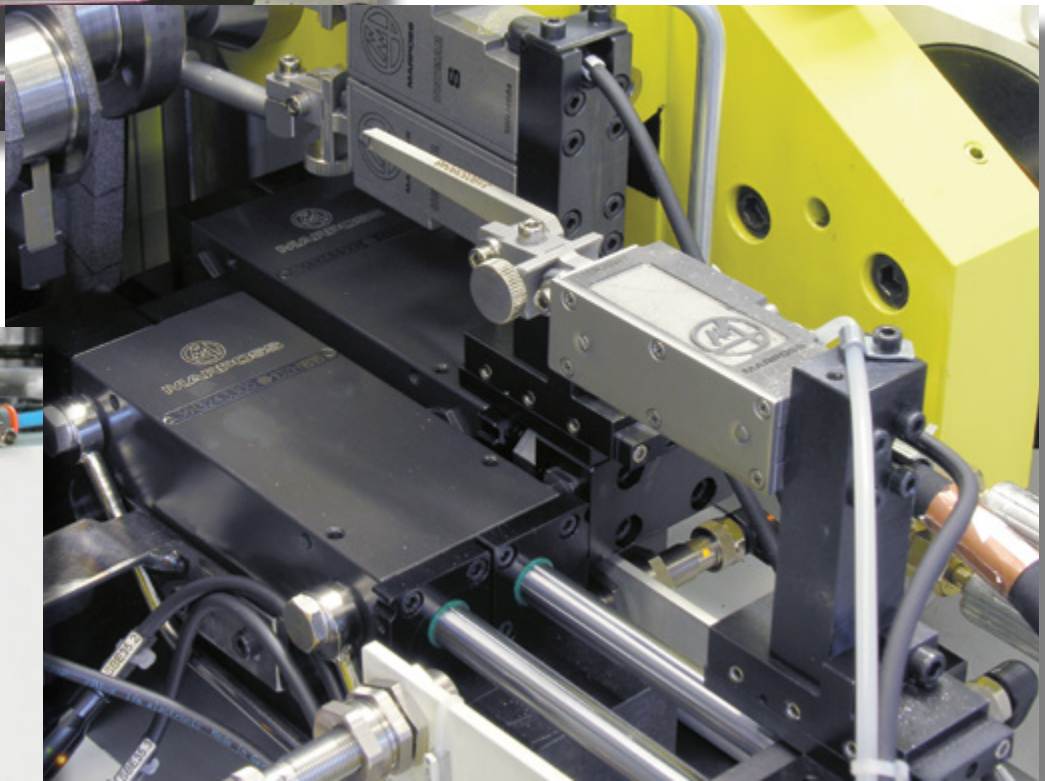
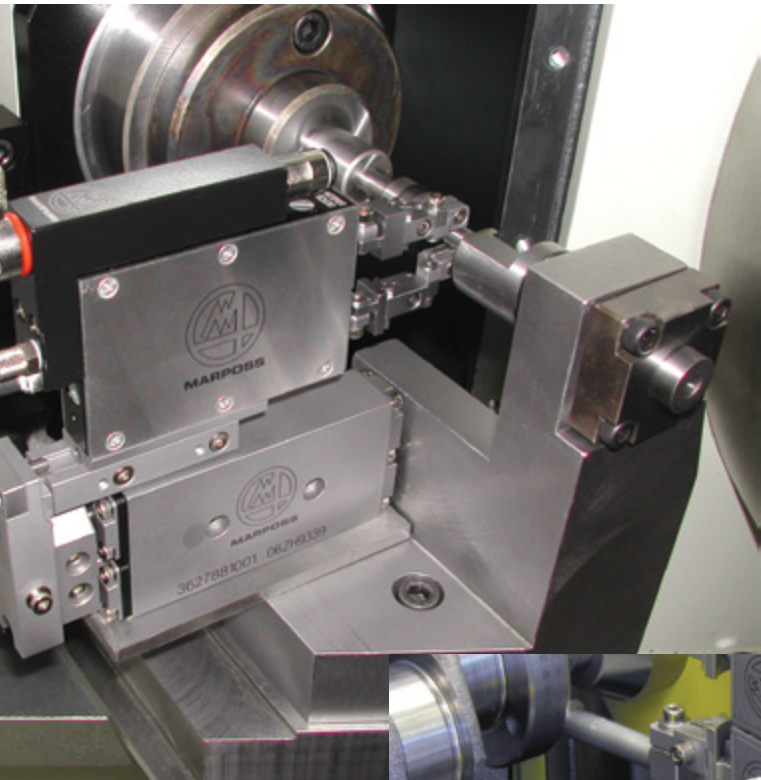
Description of the system

Compact, flexible and high-precision measurement applications - thanks to the reliability of its solutions, Marposs has been the world leader for in-process measurements and more for over 60 years.

This has been made possible due to the extremely high repeatability performance of both the measurement heads, which represent the heart of the applications, but also of the actuators whose role it is to move either the heads or the entire measurement stations.

Measurement head movements represent a fundamental and integral part of the applications on grinding machines and machine tools. The linear actuators have been designed to provide extremely high repeatability performance and for use in any environment, even in the severest conditions, such as those present in grinding environments.





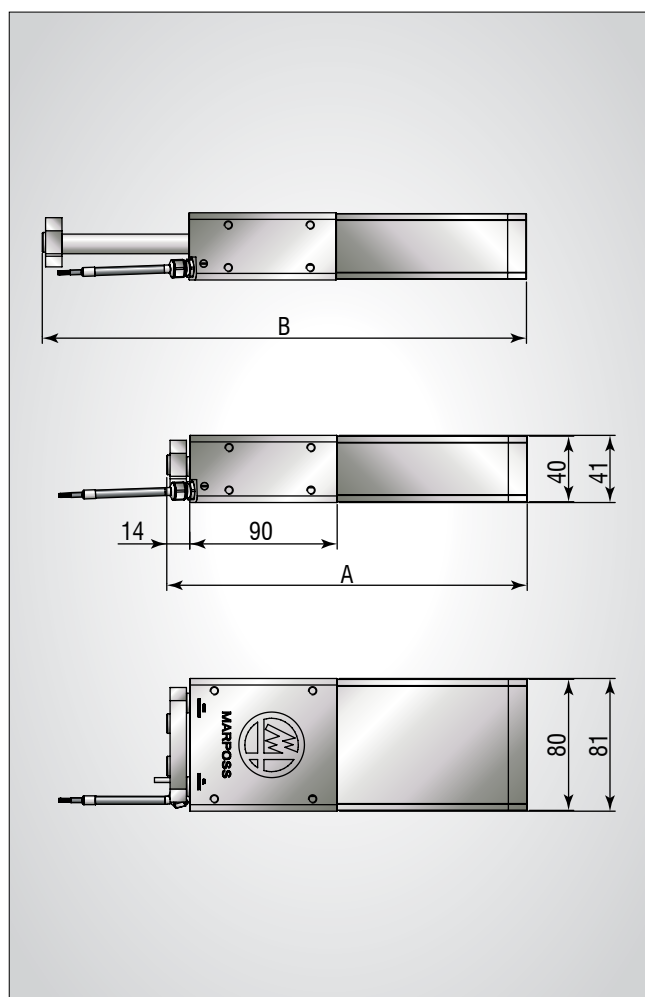
Electro-mechanical Slides

Extremely precise, resistant and compact: these are just a few of the features of the electro-mechanical slide. In addition to the high positional repeatability performance, which is standard on all Marposs products of this type, the slide also boasts a series of innovative features: the presence of integrated micro-switches controlled by the motor logic render the product extremely flexible; thanks to the stainless steel case, the product is ideal for use even in the most severe machining environments.

Electro-mechanical actuators represent the ideal solution for all applications where it is not possible to use pneumatic or hydraulic systems - taking into account the type of environment.

It is available with a wide range of different stroke lengths. 35, 50, 75, 100, 130; but that's not all: thanks to its extreme flexibility, the product can also be programmed to execute intermediate steps, and regulate the speed and acceleration in order to meet the needs of any possible application.

The electro-mechanical slides can be integrated into the BLÚ system, or controlled via the machine I/O.



STROKE	A	B
35	180	215.5
50	195	245.5
75	220	295.5
100	245	345.5
130	285	417.5

CASE MATERIAL	Stainless steel
REPEATABILITY <i>speed ≤ 75 mm/s</i>	1.5 μm (X / Y) 1.0 μm (Z)
OPERATING TEMPERATURE	4 to 45 °C
INTERNAL PRESSURE	0.3 ÷ 0.4 bar
MAX. SPEED	90 mm/s
MAX. LOAD	measurement application + positioning <i>(E.g. 3 Unimar heads⁹)</i>
INGRESS PROTECTION RATING <i>(Standard IEC 60529)</i>	IP65 / IP67

Operating modes

The device can be operated in manual or automatic mode. Manual mode is intended for use during set-up cycles: during this phase, the speed is limited in order to allow the operator a greater degree of accuracy. Automatic mode is used for the normal machine operating cycles.

Stop

It is possible to interrupt the slide stroke at any moment.

I/O

Both the Inputs and Outputs may be either Sink or Source. All the I/O are opto-isolated. The outputs are protected against short-circuits and inductive charges.

Mounting

Horizontal or vertical

Diagnostics

Enables users to identify incorrect operating conditions quickly, and restore the normal conditions without any unnecessary delays.

Possible uses

- Active/passive positioning
- External/internal diameter gauging
- Length or thickness measurements
- Active/passive centring
- Multi-step gauging
- Pre-Process
- In-Process
- Post-Process

Application examples

- External grinding machines
- Internal grinding machines
- Match grinders
- Measurement stations

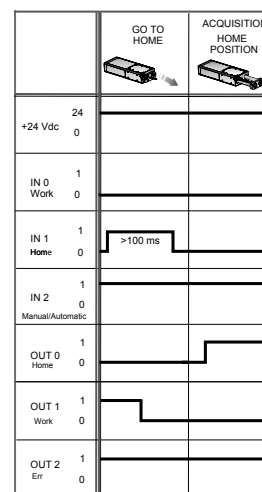
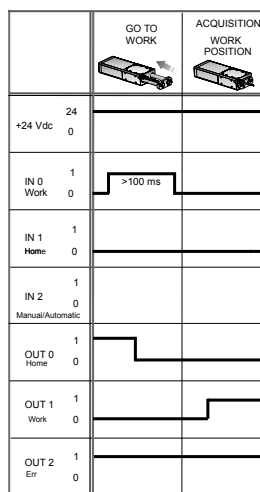
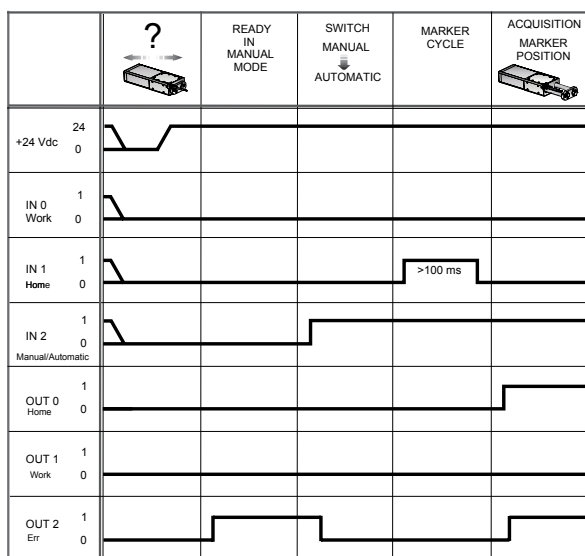
Logic controls

- Speed
- Acceleration/Deceleration
- Automatic/Manual mode
- Customisable cycles

Safeguarding the Environment

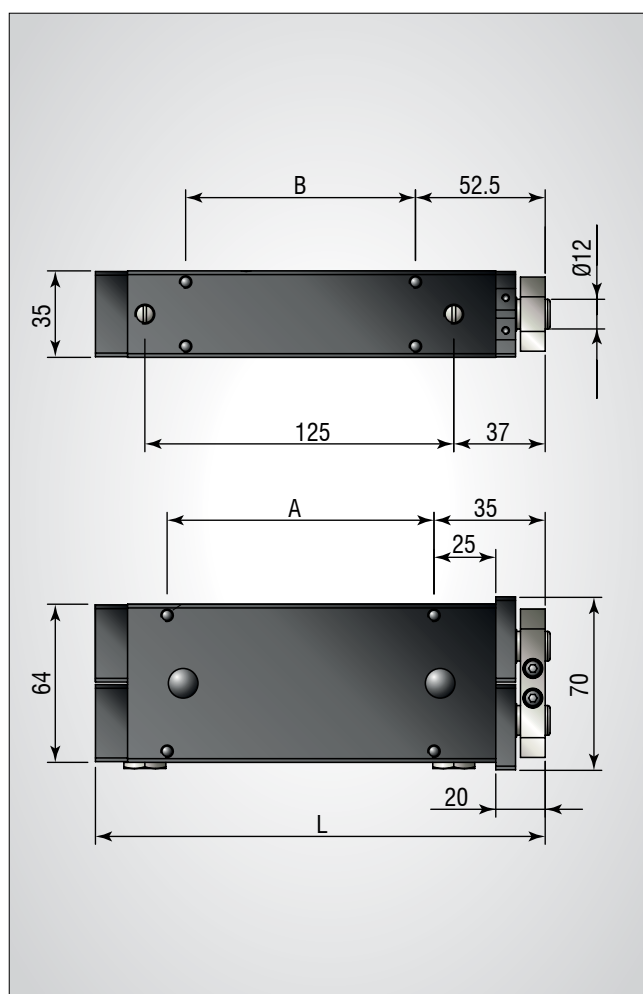
- No hydraulic connections required
- No pneumatic connections required

Operating Cycle Charts



Hydraulic and Pneumatic slides

Marposs hydraulically and pneumatically actuated slides represent a guarantee of precision, reliability and sturdiness. Their compact size, high repeatability performance and multiple stroke lengths render these slides the ideal, flexible solution for measurement head movements on grinding machines. Like all Marposs linear actuators, they have been designed for use in machine "wet areas". They are also available in a high speed, hydraulic version.



Mounting

Horizontal or vertical

Possible uses

- Active/passive positioning
- External/internal diameter gauging
- Length or thickness measurements
- Active/passive centring
- Multi-step gauging
- Pre-Process
- In-Process
- Post-Process

Application examples

- External grinding machines
- Internal grinding machines

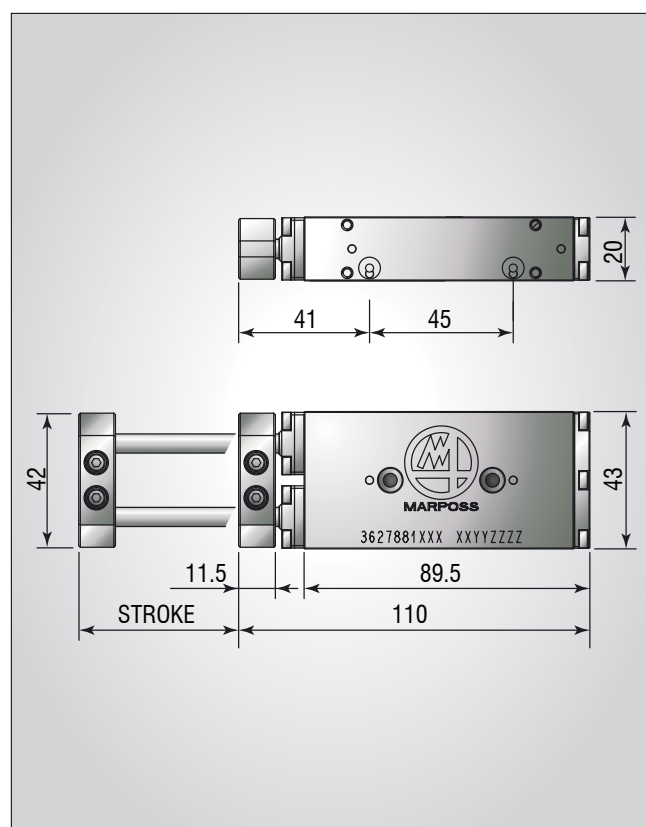
Stroke	50	75	100	130	170
A	58	108	108	138	178
B	43	93	93	123	173
L	132	182	182	212	252

CASE MATERIAL	Aluminium
REPEATABILITY <i>speed ≤ 75 mm/s</i>	1.5 µm (X / Y) 1.0 µm (Z)
OPERATING PRESSURE	6 - 10 bar (<i>pneumatic</i>) 8 - 30 bar (<i>hydraulic</i>)
OPERATING SPEED	70 mm/s (<i>infeed</i>) 80 mm/s (<i>outfeed</i>)
Protection rating (Standard IEC 60529)	IP65 / IP67

Miniaturized hydraulic slides

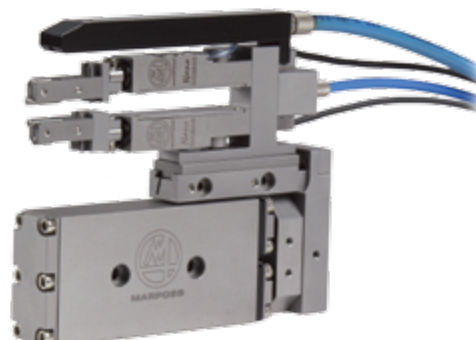
Big performance, small size: designed for use in measurement applications on small-scale machines, these slides are capable of maintaining excellent positional repeatability performance levels, guaranteeing the highest measurement specifications in machining environments.

Available with a wide range of stroke lengths: 25, 35 and 50 mm.



Stroke	25	35	50
L	132	182	182

CASE MATERIAL	Stainless steel
REPEATABILITY <i>speed ≤ 75 mm/s</i>	0.5 μm (X / Y) 0.2 μm (Z)
OPERATING PRESSURE	12 ÷ 30 bar
Protection rating <i>(Standard IEC 60529)</i>	IP65 / IP67





www.marposs.com

For a full list of address locations, please consult the Marposs official website

D6105800G0 - 10/2017 Edition - Specifications are subject to changes
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