We design and produce in order to support you

An international group for technology, a local support for service
Over 40 years of know how in design and production

Values

Collaboration
High level technical consulting
Cross competences in several industrial sectors for an effective problem-solving

Solutions
From a full range of standard products to fit-to-customer solutions for best performances

Applications

INTERIORS AND ARCHITECTURE
MEDICAL
SPECIAL VEHICLES
AERONAUTICS
RAILWAY
LOGISTICS
INDUSTRIAL MACHINERY
ROBOTICS
A complete range for linear motion which reaches every customer

**Actuator Line**
Linear actuators with different guide configurations and drives, available with belt, screw or rack and pinion drives according to different needs in terms of precision and speed. Guides with bearings or ball recirculating systems for different load capacities and critical environments.

**Telescopic Line**
Telescopic guides with ball bearings, with hardened raceways, high load capacities and high rigidity, resistant to shocks and vibrations. Suitable for partial, total or extension up to 200% of the length of the guide.

**Linear Line**
Linear and curved guides with ball and roller bearings, with hardened raceways, high load capacities, self-alignment and capable of working in dirty environments.

**Integrated actuators for industrial automation**
Wide ranging solutions that span industrial sectors: from machinery servo systems to high precision assembly systems, packaging lines and high speed production lines. Evolved from Actuator Line series in order to meet the most demanding customer needs.

**A global provider of solutions for applications for linear motion**
Linear Line

Self-aligning linear guides with bearings and a C-profile made of cold-drawn carbon steel. They have induction hardened and ground raceways.

Compact Rail

Optimal reliability in dirty environments.

Self-aligning system.

Cost effective bended steel profiles.

Anticorrosion.

Stainless Steel

Simple mounting.

X-Rail

Linear bearings with bended C-profile. Available in zinc-plated steel, stainless steel or hardened with Rollon NOX treatment.

Compact Rail

Available with Rollon NOX hardening process.

Optimal reliability in dirty environments.

Uniquely quiet with ground raceways.

Long life thanks to hardened raceways.

Compact Rail

High dynamics due to roller bearing: V= 9m/s, A=20m/s²

Compact Rail

Self-aligning system.

Up to 3,5 mm

X-Rail

Simple mounting.

Self-aligning system.

Up to 3,5 mm

X-Rail

Available with Rollon NOX hardening process.

Optimal reliability in dirty environments.

Cost effective bended steel profiles.
**Linear Line**

**Easyslide**
Smooth linear guides with balls and a C-profile made of cold-drawn carbon steel. They have induction hardened raceways.

- **Long life thanks to hardened raceways.**
- **Mounting and alignment even on imprecise surfaces.**
- **High load up to 12,000 kg per slider.**
- **Space saving solution with internal slider.**
- **High loads up to 12,000 kg per slider.**
- **Mounting and alignment even on imprecise surface.**

**Curviline**
Customized guides for constant and variable radii. Available in stainless steel and hardened or unhardened steel version.

- **Long life thanks to hardened raceways.**
- **Design freedom due to constant and variable radius.**
- **Anticorrosion.**

**O-Rail**
Modular linear guides with rollers. Versatile for the highest flexibility of configurations.

- **Versatile for multiple configurations and combinations.**
- **Resistant to wear through the Rollon NOX hardening process.**
- **Self-aligning system: Simple mounting.**

**Prismatic Rail**
Prismatic rails with bearings. They’re available with cylindrical rollers or with V-shaped rollers configuration.

- **Versatile for multiple configurations and combinations.**
- **High load capacity due to double row bearings.**
- **High dynamics due to roller bearing V = 7m/s, A = 20m/s².**
- **Self-aligning system.**
- **Optimal reliability in dirty environments.**
Linear Line

**Speedy Rail**
Self-supporting and self-aligning extruded aluminum linear guides. The slider is supported by steel bearings covered by plastic compound, available in cylindrical or V-shaped configuration.

- Optimal reliability in dirty environments.
- Self-supporting for greater design flexibility.
- Use as a linear guide or actuator.
- High dynamics: \( V=15 \text{m/s}, A=10 \text{m/s}^2 \).
- Absence of lubrication.
- Life time up to 80,000 Km.
- Self-aligning system.

**Mono Rail**
Recirculating balls linear guides. They have ground raceways and a ball contact angle of 45° in X-arrangement.

- Long life thanks to hardened raceways.
- High loads up to 24,000 Kg per slider.
- High rigidity and precision with recirculating balls system.
- Life time up to 20,000 Kg.
- AXIAL VARIATION MAX ± 1.5 mm
- AXIAL VARIATION MAX ± 4 mm
- High dynamics: \( V=15 \text{m/s}, A=10 \text{m/s}^2 \).
<table>
<thead>
<tr>
<th>Reference</th>
<th>Section</th>
<th>Shape of rail</th>
<th>Hardened raceways</th>
<th>Rollen NOX hardening process **</th>
<th>Self-alignment</th>
<th>Slider</th>
<th>Anticorrosion</th>
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<th>Dynamic coefficient [N] C 100</th>
<th>Max. moment capacity [Nm]</th>
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Reported data must be verified according to the application.

*1 The maximum value is defined by the application.
*2 A longer stroke is available for jointed versions.
*3 High depth nitride hardening treatment and oxidation.
*4 Value referred to a single bearing; it’s possible to configure the numbers of bearings to obtain the desired load capacity.

Available in stainless steel

For more information, please contact our technical department.
Telescopic Line

Telescopic Rail

Heavy duty telescopic rails with hardened raceways for extensions up to 150%. Available with different shapes according to load capacity and rigidity required.

Long life thanks to hardened raceways.

High loads up to 3,800 Kg. per pair of guides.

Suitable for automation with rack and pinion synchronization available.

Safe solutions with locking and damping systems.

Wide range of anticorrosion surface treatments.

Low deflection due to sturdy profiles.

Hegra Rail

Industrial telescopic rails for extensions up to 200%. Stainless steel and aluminum versions available.

High loads up to 2,000 Kg. per pair of guides.

Stainless Steel.

Anticorrosion.

Aluminum available for lightweight construction.

Low deflection due to sturdy profiles.

Safe solutions with locking and damping system.

Overextension up to 200%.
**Telescopic Line**

**Telerace**
Telescopic guides with bearings, suitable for vertical strokes and variable stroke working cycles.

- **Suitable for vertical and variable strokes.**
- **Ideal for continuous working cycles with low maintenance.**
- **Optimal reliability in dirty environments.**
- **High load capacity due to double row bearings.**

**Light Rail**
Bended steel telescopic rails with light structure for extensions up to 100%.

- **Good rigidity in relation to a lightweight design.**
- **Quiet sliding.**
- **Space saving, ideal for medium and lightweight drawers.**

**Stainless Steel**
- Available with stainless steel bearings.
- Stainless steel available.
- Good rigidity in relation to a lightweight design.
**Technical features overview**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Product name</th>
<th>Extension</th>
<th>Size</th>
<th>Profile</th>
<th>Self alignment</th>
<th>Slider</th>
<th>Material</th>
<th>Stroke direction</th>
<th>Snap</th>
<th>Locking closed position</th>
<th>Damping closed position</th>
<th>Max. load capacity per pair [N]</th>
<th>Max. rail length [mm]</th>
<th>Max. stroke [mm]</th>
<th>Max. extension speed* [m/s]</th>
<th>Rigidity (deflection)</th>
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* The maximum value is defined by the application. For more information, please contact our technical department.
### Technical features overview

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<th>Reference Product name</th>
<th>Extension</th>
<th>Size</th>
<th>Profile Type</th>
<th>Hardened raceways</th>
<th>Slider Type</th>
<th>Material</th>
<th>Stroke direction</th>
<th>Snap</th>
<th>Locking**</th>
<th>Damping</th>
<th>Max. load capacity per pair [N]</th>
<th>Max. rail length [mm]</th>
<th>Max. stroke [mm]</th>
<th>Max. extension speed** [m/s]</th>
<th>Rigidity (deflection) [°C]</th>
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*Reported data must be verified according to the application. In many cases, special designs or alternative surface treatments are possible. For more information, please contact our technical department.

** The extension corresponds to 150 % stroke (1=150 % extraction). For a 200 % stroke (2=200 % extraction) please contact our technical department.

*** Different temperature ranges from -30 °C to +250 °C. This must be verified according to the application.

**** The load capacity for aluminum is 40 % and for stainless steel 60 % of the stated values, if available in this material variant.

***** The availability of locking systems depends on the system length and varies per product group. For more information, please contact our technical department.

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</tbody>
</table>

*Reported data must be verified according to the application.

** High dept nitride hardening treatment and oxidation.

* Also available in TLN.HP version with greater load capacity.

*3 The maximum value is defined by the application. For more information, please contact our technical department.

---

### Light Rail

<table>
<thead>
<tr>
<th>Reference</th>
<th>Product name</th>
<th>Extension</th>
<th>Profile</th>
<th>Self alignment</th>
<th>Slider</th>
<th>Material</th>
<th>Stroke direction</th>
<th>Suitable for variable stroke cycles</th>
<th>Suitable for vertical stroke</th>
<th>Damping closed position</th>
<th>Max. load capacity per pair [N]</th>
<th>Max. rail length [mm]</th>
<th>Max. stroke [mm]</th>
<th>Max. extension speed* [m/s]</th>
<th>Rigidity (deflection)</th>
<th>Operating temperature [°C]</th>
</tr>
</thead>
</table>

**Reported data must be verified according to the application.**

* The maximum value is defined by the application. For more information, please contact our technical department.
**Actuator Line**

**Plus System**

High performance belt driven linear actuators with superior protection against dirty environments.

- Superior protection for dirty environments.
- Available with fixed carriage and movable profile for Z axis solutions.
- High working cycles.
- High dynamics: $V=5 \text{ m/s}, A=50 \text{ m/s}^2$.
- High repeatability: ±0.05 mm.
- Available in corrosion resistant version with stainless steel, aluminum, or special coated components.

**Clean Room System**

Clean Room certified belt driven linear actuators.

- Clean room class ISO 3.
- High dynamics: $V=5 \text{ m/s}, A=50 \text{ m/s}^2$.
- High repeatability: ±0.05 mm.
- Low particles emissions thanks to vacuum system.
- Anti-corrosion version with components made of stainless steel or suitable surface treatment.
**Actuator Line**

**Smart System**
Cost effective high performance belt driven linear actuators.

- Available with fixed carriage and movable profile for Z axis solutions.
- High load capacity with recirculating ball guides.
- Simple structure for effective cost.
- High repeatability: ±0.05 mm.
- High dynamics: \( V=4 \text{ m/s}, A=50 \text{ m/s}^2 \).

**Eco System**
Simple and protected belt driven linear actuators.

- Lightweight aluminum profile.
- Simple structure for effective cost.
- High dynamics: \( V=5 \text{ m/s}, A=50 \text{ m/s}^2 \).
- High repeatability: ±0.05 mm.

**Modline**
Versatile belt driven linear actuators. Available with recirculating ball guides or prismatic roller bearings.

- Available with fixed carriage and movable profile for Z axis solutions, even with patented pneumatic counterbalance system.
- High load capacity with recirculating ball guides.
- Simple structure for effective cost.
- High repeatability: ±0.05 mm.
- High dynamics: \( V=4 \text{ m/s}, A=50 \text{ m/s}^2 \).

**Uniline System**
Belt driven actuators with radial ball bearing sliders.

- Available with fixed carriage and movable profile for Z axis solutions.
- High speed: \( V=9 \text{ m/s} \).
- Optimal reliability in dirty environments.
- Long life and low maintenance.
- Smoother operations possible.
- Compact Rail linear guides inside.

**Uniline System**
Belt driven actuators with radial ball bearing sliders.

- Available with fixed carriage and movable profile for Z axis solutions, even with patented pneumatic counterbalance system.
- High load capacity with recirculating ball guides.
- Simple structure for effective cost.
- High repeatability: ±0.05 mm.
- High dynamics: \( V=4 \text{ m/s}, A=50 \text{ m/s}^2 \).

**Eco System**
Simple and protected belt driven linear actuators.

- Lightweight aluminum profile.
- Simple structure for effective cost.
- High dynamics: \( V=5 \text{ m/s}, A=50 \text{ m/s}^2 \).
- High repeatability: ±0.05 mm.

**Modline**
Versatile belt driven linear actuators. Available with recirculating ball guides or prismatic roller bearings.

- Available with fixed carriage and movable profile for Z axis solutions, even with patented pneumatic counterbalance system.
- High load capacity with recirculating ball guides.
- Simple structure for effective cost.
- High repeatability: ±0.05 mm.
- High dynamics: \( V=4 \text{ m/s}, A=50 \text{ m/s}^2 \).
**Actuator Line**

**Precision System**
High precision ball screw driven actuators.

- Simple and safe maintenance through dedicated lubrication for ball screw drive and guides.
- Wide range of aluminum profile sizes up to 360 mm.
- Available with recirculating ball guides or prismatic roller bearings.
- Multiple independent carriages.
- High protection for dirty environments.
- High load capacities up to 4,000 kg.
- Very long strokes allowed by rack and pinion drive system.
- High reliability: ± 0.005 mm.

**Speedy Rail A**
Self-supporting and self-aligning extruded aluminum linear guides. They can be driven by belt or rack and pinion.

- Optimal reliability in dirty environments.
- Life time up to 80,000 km.
- High dynamics: $V = 15 m/s$, $A = 10 m/s^2$.
- Use as a linear guide or actuator.
- Maintenance free: Washable lubricated rollers.
- Self-supporting for greatest design freedom.

**Tecline**
Rack and pinion driven linear actuators. Available with recirculating ball guides or prismatic roller bearings.

- High protection for dirty environments.
- Very long strokes allowed by rack and pinion drive system.
- Optimal reliability in dirty environments and high working cycles.
- Multiple independent carriages.
- Available with recirculating ball guides or prismatic roller bearings.
- High load capacities up to 4,000 kg.
- Wide range of aluminum profile sizes up to 360 mm.
- Space saving compact design.
## Technical features overview

<table>
<thead>
<tr>
<th>Reference</th>
<th>Linear motion system</th>
<th>Drive</th>
<th>Corrosion</th>
<th>Protection</th>
<th>Size</th>
<th>Max. load capacity per carriage [N]</th>
<th>Max. static moment per carriage [Nm]</th>
<th>Max. speed [m/s]</th>
<th>Max. acceleration [m/s²]</th>
<th>Repeatability accuracy [mm]</th>
<th>Max. stroke (per system) [mm]</th>
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</thead>
<tbody>
<tr>
<td><strong>Product Family</strong></td>
<td><strong>Product</strong></td>
<td><strong>Balls</strong></td>
<td><strong>Rollers</strong></td>
<td><strong>Toothed belt</strong></td>
<td><strong>Ball screw</strong></td>
<td><strong>Rack and pinion</strong></td>
<td><strong>F&lt;sub&gt;x&lt;/sub&gt;</strong></td>
<td><strong>F&lt;sub&gt;y&lt;/sub&gt;</strong></td>
<td><strong>F&lt;sub&gt;z&lt;/sub&gt;</strong></td>
<td><strong>M&lt;sub&gt;x&lt;/sub&gt;</strong></td>
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</table>

*Reported data must be verified according to the application.

* Longer stroke is available for jointed versions.
### Technical features overview

<table>
<thead>
<tr>
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<th>Protection</th>
<th>Size</th>
<th>Max. load capacity per carriage [N]</th>
<th>Max. static moment per carriage [Nm]</th>
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<th>Max. acceleration [m/s²]</th>
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</tr>
</tbody>
</table>

Reported data must be verified according to the application.

* Longer stroke is available for jointed version.
Increases a robot’s range of motion. Available in 7 different sizes, Rollon Seventh Axis is easy to integrate and can move any type of robot weighing up to 2000 Kg.

**LOAD CAPACITY ACCORDING TO DYNAMICS**

<table>
<thead>
<tr>
<th>Size</th>
<th>SEV220-1</th>
<th>SEV80-2</th>
<th>SEV280-1</th>
<th>SEV170-2</th>
<th>SEV220-2</th>
<th>SEV280-2</th>
<th>SEV360-2</th>
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<tr>
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<td>300</td>
<td>400</td>
<td>500</td>
<td>600</td>
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Reported data must be verified according to the application. For more information, please contact our technical department.
### Technical Features

#### Reference Section Drive

<table>
<thead>
<tr>
<th>Family</th>
<th>Product</th>
<th>Rollers</th>
<th>Ball Bearings</th>
<th>Rack</th>
<th>Belt</th>
<th>Drive</th>
<th>Drive and rails</th>
<th>Load supporting cover</th>
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<tr>
<td>SEV220-1</td>
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<tr>
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<td>360x200</td>
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</tbody>
</table>

#### Mounting Options

- **Wall mount**
- **Floor mount**
- **Ceiling mount**

---

**The data shown must be verified on the basis of the application.**

* The values shown refer to the maximum dynamics reported in this table. The load capacities refer to floor mount version.

** The load capacities refer to floor mount version. For more information, contact the Rollon technical office.

*** Robot example mentioned are approximate. For a correct choice and size of the robot contact the Rollon technical office.

---

**Mounting Options**

- **Wall mount**
- **Floor mount**
- **Ceiling mount**
**Actuator System Line**

**Multi-Axes Pick and Place**

Multi-axes system for automated feeding of production and assembly lines.

- Short belt technology patented system allow very long Y axis.
- Both rack and pinion and belt drive systems allow for independent movement of carriage groups.
- Z axis with integrated pneumatic cylinder allows for energy saving and smaller motors.
- Both rack and pinion and belt drive systems allow for independent movement of carriage groups.
- Light and rigid aluminum beams allow high dynamics and fast duty cycles.
- Energy chains, safety systems and other accessories are available.

**LOAD CAPACITY ACCORDING TO DYNAMICS**

Reported data must be verified according to the application. For more information, please contact our technical department.

**Multi Gantry**

Gantry solutions designed for each specific application in different industrial sectors.

- Light and rigid aluminum beams allow very long Y axis.
- Integrated lubrication system allows long life and low maintenance.
- Dedicated omega technology for Z axis allow space saving and higher dynamics.
- Recirculating ball or prismatic roller guides accommodate the varying dynamics, precision, and environment requirements of different applications.
- Belt, ball screw and rack and pinion driving systems allow to achieve the right precision and dynamics for any application.

**LOAD CAPACITY ACCORDING TO DYNAMICS**

Reported data must be verified according to the application. For more information, please contact our technical department.
**Actuator System Line**

**Transfer Press**

Dedicated solution for transfer press.

- Light and rigid aluminum beams allow high dynamics and fast duty cycles.
- Ready-to-use solution with high reliability due to 40 years experience.
- Integrated lubrication system allows long life and low maintenance.

**Telescopic Actuator - Horizontal**

Double stroke telescopic actuator for sheet metal handling.

- Short belt technology (patent) system allows very long Y axis.
- Compact and space saving 3 or 4-stage solutions.
- Connectable with vertical linear axes.
- High dynamics due to the multiplication of speed of each level.
- Synchronized belt system optimizes extension movement profile.
- Light and rigid aluminum beams allow for high dynamics.

**LOAD CAPACITY ACCORDING TO DYNAMICS**

Reported data must be verified according to the application. For more information, please contact our technical department.

<table>
<thead>
<tr>
<th>Load (Kg)</th>
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</tr>
</tbody>
</table>

Lower load - Higher dynamics
Higher load - Lower dynamics
Double stroke telescopic actuator with vertical axis for pick and place in limited spaces.

Vertical telescopic actuator for pick and place in spaces with limited ceiling height.

LOAD CAPACITY ACCORDING TO DYNAMICS
Reported data must be verified according to the application. For more information, please contact our technical department.
All addresses of our global sales partners can also be found at www.rollon.com

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