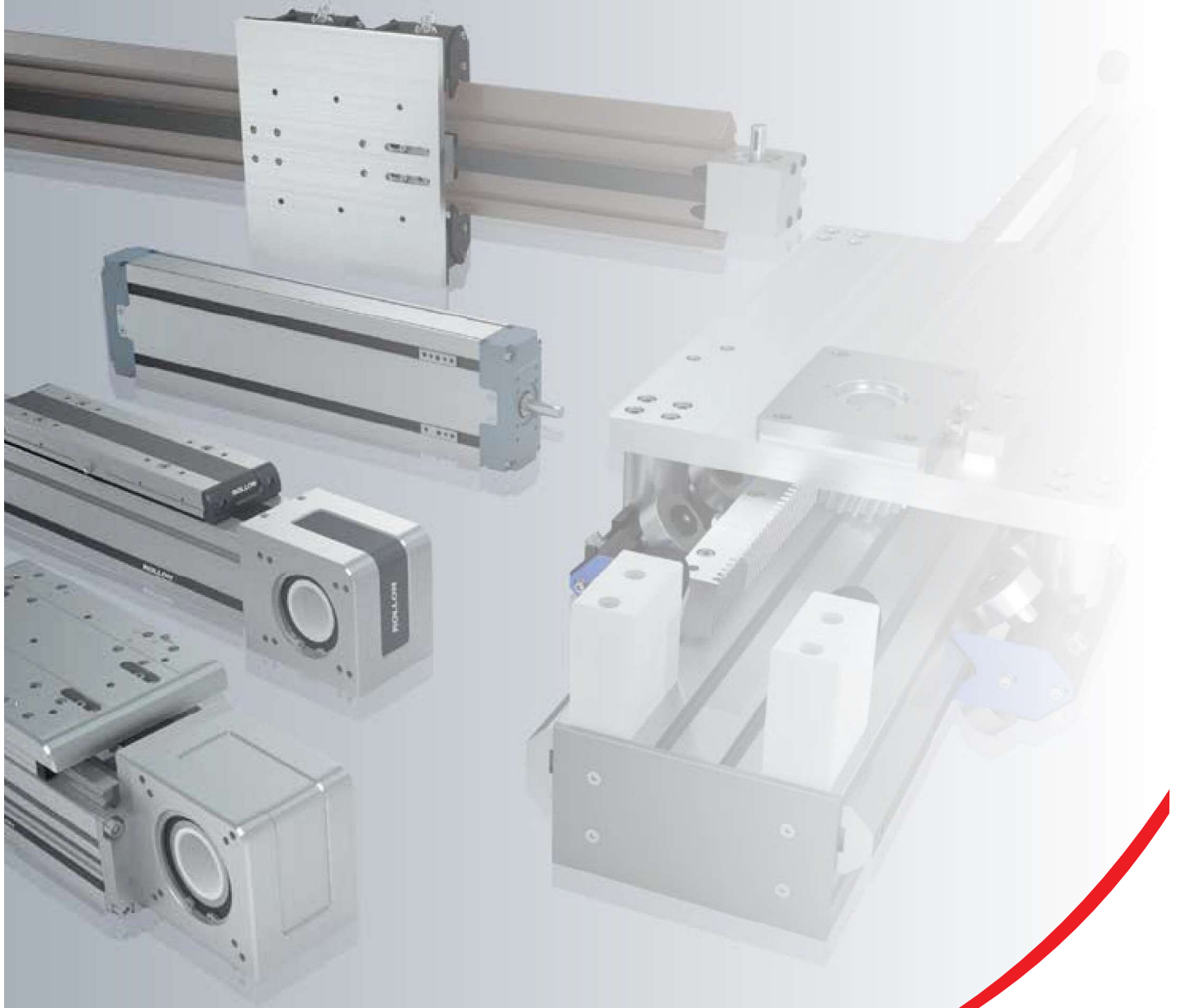


Actuator Line



Plus System

High performance linear actuators with steel re-enforced driving belt transmission. They have a high level of protection.



High protection for dirty environments.



High working cycles.



Available with fixed carriage and movable profile for Z axis solutions.



High dynamics:
 $V=5 \text{ m/s}$, $A= 50 \text{ m/s}^2$.



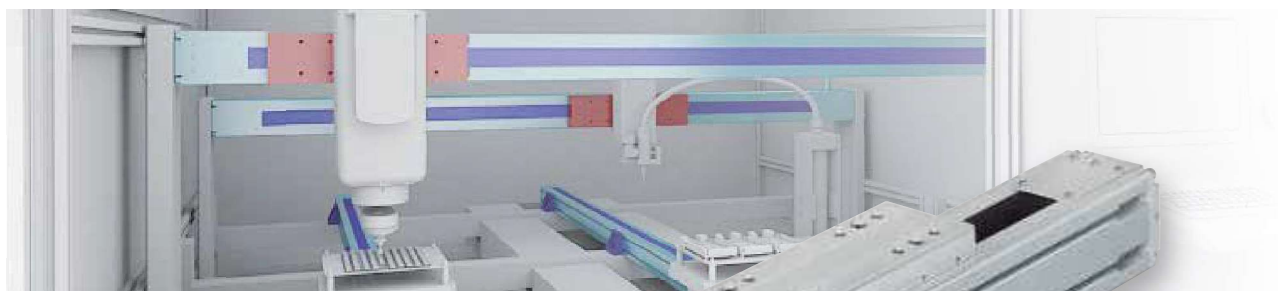
High repeatability accuracy:
 $\pm 0,05 \text{ mm}$



Anti-corrosion version available with stainless steel components.

Clean Room System

Clean Room certified belt driven linear actuators.



High repeatability accuracy:
 $\pm 0,05 \text{ mm}$



High dynamics:
 $V=5 \text{ m/s}$, $A= 50 \text{ m/s}^2$.



Anti-corrosion version with components made of stainless steel or suitable surface treatment.

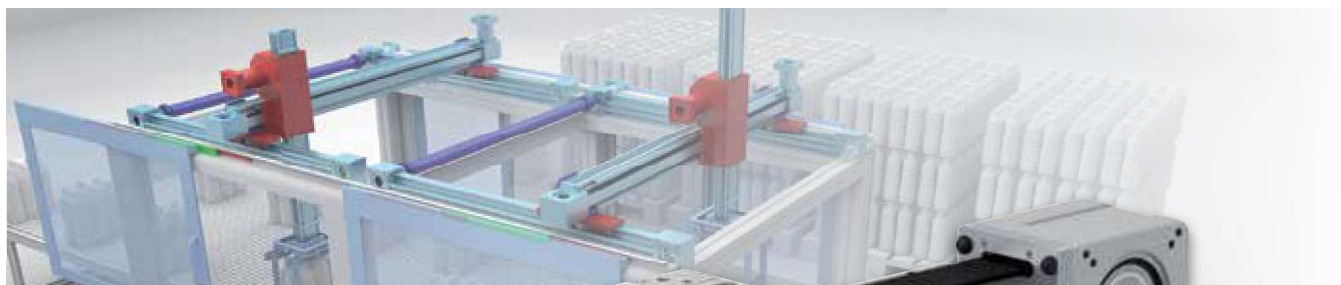


Low particles emissions thanks to vacuum system

Actuator Line

Smart System

Qualitative and cost effective belt driven linear actuators.



Available with fixed carriage and movable profile for Z axis solutions.



High repeatability accuracy:
 $\pm 0,05$ mm.



High dynamics:
 $V=4$ m/s, $A= 50$ m/s².



Simple structure
for effective cost.



High load capacity with
recirculating ball guides.

Eco System

Simple and protected belt driven linear actuators.



Simple structure
for effective cost.



High dynamics:
 $V=5$ m/s, $A= 50$ m/s².



Lightweight thanks
to aluminum profile.



High repeatability accuracy:
 $\pm 0,05$ mm.

Uniline System

Belt driven actuators with radial ball bearing sliders.



High speed:
 $V=9$ m/s.



Optimal reliability in
dirty environments.



Long life and
low maintenance.



Grease free operations possible.



Compact Rail linear guides inside.

Modline

Versatile belt driven linear actuators. They've recirculating ball guides or prismatic roller bearings.



Available with fixed carriage and movable
profile for Z axis solutions, even with
patented pneumatic counterbalance system.



Patented short belt solution for
very long multi-axes systems.



Versatile for multiple
configurations.



Wide range of aluminum profile
sizes up to 360 mm.



Optimal reliability in dirty environments
and high working cycles.



Available with recirculating ball guides
or prismatic roller bearings.

Actuator Line

Precision System

High precision ball screw driven actuators.



Simple and safe maintenance through separate lubrication for ball screw drive and guides.



Space saving thanks to compact design.



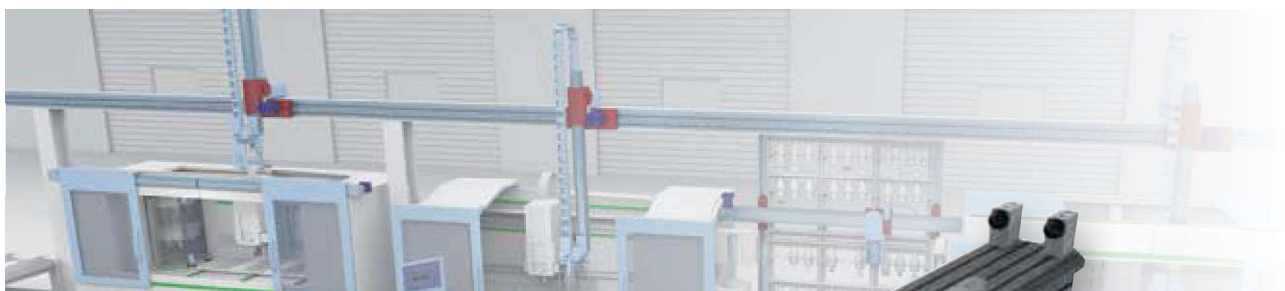
High repeatability accuracy: till $\pm 0,005$ mm



High protection for dirty environments.

Tecline

Rack and pinion driven linear actuators. They've recirculating ball guides or prismatic roller bearings.



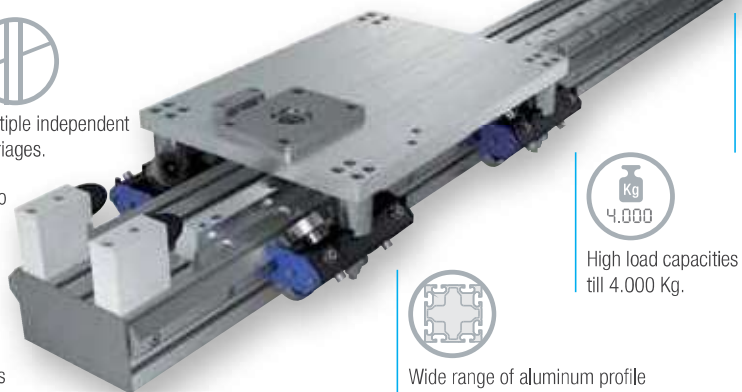
Suitable for very long strokes thanks to rack and pinion driving system.



Multiple independent carriages.



Optimal reliability in dirty environments and high working cycles.



Available with recirculating ball guides or prismatic roller bearings.



High load capacities till 4.000 Kg.



Wide range of aluminum profile sizes up to 360 mm.

Speedy Rail A

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



Life time up to
80.000 Km.



Optimal reliability in
dirty environments.



High dynamics:
 $V = 15\text{m/s}$, $A = 10\text{m/s}^2$.



Self-supporting
for greatest design freedom.






Absence of lubrication.



Use as a linear guide or
actuator.

Technical features overview

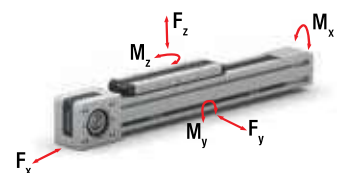


| Reference | | Linear motion system | | Driving | | | Anticorrosion | Protection |
|-------------------|-------------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Product Family | Product | Balls | Rollers | Toothed belt | Ball screw | Rack and pinion | | |
| Plus System |  | ELM |  |  |  |  |  |  Protected |
| |  | ROBOT |  |  |  |  |  |  Protected |
| |  | SC |  |  |  |  |  |  Semi-protected |
| Clean Room System |  | ONE |  |  |  |  |  |  Protected with suction |
| Smart System |  | E-SMART |  |  |  |  |  |  Semi-protected |
| |  | R-SMART |  |  |  |  |  |  Semi-protected |
| |  | S-SMART |  |  |  |  |  |  Semi-protected |
| Eco System |  | ECO |  |  |  |  |  |  Semi-protected |
| Uniline System |  | A/C/E/ED/H |  |  |  |  |  |  Semi-protected |
| Modline |  | MCR MCH |  |  |  |  |  |  Semi-protected |
| |  | TCR TCS |  |  |  |  |  |  Semi-protected |
| |  | ZCR ZCH |  |  |  |  |  |  Semi-protected |

Reported data must be verified according to the application.




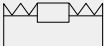



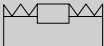








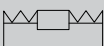











* Longer stroke is available for jointed version

| | Size | Max. load capacity per carriage [N] | | | Max. static moment per carriage [Nm] | | | Max. speed [m/s] | Max. acceleration [m/s²] | Repeatability accuracy [mm] | Max stroke (per system) [mm] |
|--|------------------------------------|-------------------------------------------|----------------|----------------|--------------------------------------------|----------------|----------------|------------------------|--------------------------------|-----------------------------------|------------------------------------|
| | | F _x | F _y | F _z | M _x | M _y | M _z | | | | |
| | 50-65-80-110 | 4980 | 129400 | 129400 | 1392 | 11646 | 11646 | 5 | 50 | ± 0.05 | 6130* |
| | 100-130- 160-220 | 9545 | 258800 | 258800 | 22257 | 28986 | 28986 | 5 | 50 | ± 0.05 | 6100* |
| | 100-130-160 | 5810 | 153600 | 153600 | 13555 | 31104 | 31104 | 5 | 50 | ± 0.05 | 2500 |
| | 50-65-80-110 | 4980 | 104800 | 104800 | 1126 | 10532 | 10532 | 5 | 50 | ± 0.05 | 6000* |
| | 30-50-80-100 | 4980 | 189200 | 189200 | 2680 | 19204 | 19204 | 4 | 50 | ± 0.05 | 6145* |
| | 120-160-220 | 9960 | 283800 | 283800 | 24123 | 36894 | 36894 | 4 | 50 | ± 0.05 | 6050* |
| | 50-65-80 | 2523 | 55400 | 55400 | 700 | 4044 | 4044 | 4 | 50 | ± 0.05 | 2000 |
| | 60-80-100 | 4565 | 55400 | 55400 | 700 | 5485 | 5485 | 5 | 50 | ± 0.05 | 6000* |
| | 40-55-75 | 19360 | 11000 | 17400 | 800,4 | 24917 | 18788 | 7 | 15 | ± 0.05 | 5700* |
| | 65-80-105 | 3984 | 55400 | 55400 | 700 | 5983 | 5983 | 5 | 50 | ± 0.1 | 10100* |
| | 140-170 200-220-230 280- 360 | 9960 | 266400 | 266400 | 42624 | 61272 | 61272 | 5 | 50 | ± 0.1 | 11480 |
| | 60-90-100 170-220 | 7470 | 189200 | 189200 | 13665 | 38691 | 38691 | 4 | 25 | ± 0.1 | 2500 |



Technical features overview



| Reference | | Linear motion system | | Driving | | | Anticorrosion | Protection |
|------------------|-------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Product Family | Product | Balls | Rollers | Toothed belt | Ball screw | Rack and pinion | | |
| Precision System |  | TH |  | |  | | |  Semi-protected |
| |  | TT |  | |  | | |  Semi-protected |
| |  | TV |  | |  | | |  Semi-protected |
| |  | TVS |  | |  | |  |  Semi-protected |
| Tecline |  | PAR PAS |  | | |  |  | |
| Speedy Rail A |  | SAB | |  | |  | | |
| |  | ZSY | |  | | | | |
| |  | SAR | | | |  | | |

Reported data must be verified according to the application.

* Longer stroke is available for jointed version

| | Size | Max. load capacity per carriage [N] | | | Max. static moment per carriage [Nm] | | | Max. speed [m/s] | Max. acceleration [m/s ²] | Repeatability accuracy [mm] | Max stroke (per system) [mm] |
|--|-----------------------------------------|-------------------------------------------|----------------|----------------|--------------------------------------------|----------------|----------------|------------------------|---------------------------------------------|-----------------------------------|------------------------------------|
| | | F _x | F _y | F _z | M _x | M _y | M _z | | | | |
| | 70-90-110-145 | 32600 | 153600 | 153600 | 6682 | 5053 | 5053 | 2 | | ± 0.005 | 1500 |
| | 100-155- 225-310 | 30500 | 230500 | 274500 | 30195 | 26625 | 22365 | 2,5 | | ± 0.005 | 3000 |
| | 60-80-110 | 11538 | 85000 | 85000 | 1080 | 2316 | 2316 | 2,5 | | ± 0.01 | 3000 |
| | 170-220 | 66300 | 258800 | 258800 | 19410 | 47360 | 47360 | 1 | 5 | ± 0.02 | 3500 |
| | 118-140-170- 200-220-230- 280-360 | 10989 | 386400 | 386400 | 65688 | 150310 | 150310 | 4 | 10 | ± 0.05 | 10800* |
| | 60-120- 180-250 | 4980 | 5431 | 5431 | 558 | 597 | 644 | 15 | 10 | ± 0.2 | 7150 |
| | 180 | 4980 | 2300 | 2600 | 188 | 806 | 713 | 8 | 8 | ± 0.2 | 6640 |
| | 120-180-250 | 1905 | 7240 | 7240 | 744 | 1521 | 1521 | 3 | 10 | ± 0.15 | 7150* |

