

When extended with the RPM⁺ integrated motor-gearhead unit from WITTENSTEIN motion control, the High Performance Linear System acquires another new dimension:

4 x 1= one

The High Performance Linear System and RPM⁺ actuator impress with optimal power density

- When your drive needs maximum output
- When an even more compact system is called for
- When precision is paramount to your application
- When optimal consulting is a key priority

A motor, gearhead, pinion and rack all from one supplier!



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Tel. +49 7931 493-0 Fax +49 7931 493-10915 E-Mail: info-wmc@wittenstein.de more compact more precise

High Performance Linear System HPLS with Actuator RPM⁺

more dynamic





WITTENSTEIN - being one with the future

www.wittenstein-motion-control.de

High Performance Linearsystem HPLS with Actuator RPM⁺

More dynamic, more compact, more precise

The RPM⁺ actuator is extremely dynamic, extremely compact and perfectly adapted to linear applications with a pinion and rack. It combines superior power density and a functional design in one unit - leading to effective length savings and a more compact design than ever!

The integrated motor guarantees extra performance while the unique architecture of the permanently excited synchronous motor results in unprecedented power density.

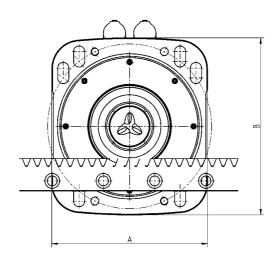


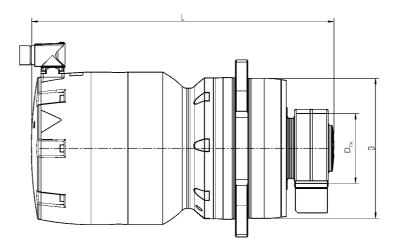
High Performance Linear System HPLS

The RPM⁺ actuator helps you maximize the synergy effects for your High Performance Linear System. The integrated motor gives you twice the power in a smaller space envelope. The four optimally interacting components provide maximum dynamics, compactness and precision

More Feed force and Power density

The new system delivers substantial benefits compared to the industry standard.





| Size HPLS | | | 4.3 | 4 | 1 | | 5.4 | | | 5 | | | 6 | | | 8 | |
|--------------------------------|------------------|---------------------------|----------|---------|----------|-----------|---------|-----------|-----------|---------|-----------|-----------|---------|-----------|-----------|---------|-----------|
| Modul size rack/pinion | | | 3 | 4 | 1 | 4 | | | 5 | | | 6 | | | 8 | | |
| Max. moving force up to | F _{2T} | N | 19.000 | 22000 | | 35.000 | | | 47.200 | | | 75.100 | | | 112.400 | | |
| Max. velociity up to** | V _{max} | m/min | 200 | 6 | 0 | | 65 | | | 78 | | 73 | | | 89 | | |
| Size RPM [⁺] | | | 040 | 04 | 10 | | 050 | | | 050 | | 060 | | | 080 | | |
| Ratio | | i | 4 - 10 | 22 - 66 | 88 - 220 | 22 - 38,5 | 55 - 88 | 110 - 220 | 22 - 38,5 | 55 - 88 | 110 - 220 | 22 - 38,5 | 55 - 88 | 110 - 220 | 22 - 38,5 | 55 - 88 | 110 - 220 |
| Torsional backlash | j _τ | j _⊤ arcmin < 1 | | <1 | | < 1 | | < 1 | | < 1 | | < 1 | | | | | |
| Motor size | | | 180-135* | 155-060 | 155-015 | 180-135* | 220-030 | 155-060 | 180-135* | 220-030 | 155-060 | 220-240* | 220-060 | 220-030 | 220-360* | 220-120 | 220-060 |
| Max. motor power up to | P _{max} | kW | 44,4 | 18,4 | 5,9 | 44,4 | 17,2 | 18,4 | 44,4 | 17,2 | 18,4 | 120,1 | 34,5 | 17,2 | 183,5 | 55,1 | 34,5 |
| Max. acceleration torque up to | T_2B | Nm | 700 | 950 | 950 | 3100 | 2600 | 2600 | 3100 | 2600 | 2600 | 5500 | 5500 | 5500 | 10000 | 10000 | 10000 |

*) Motor operation with water cooling possible

**) Calculation with lowest ratio and highest input speed

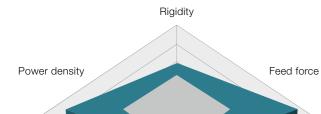
More technical Data upon request.

Quality & reliability

We define quality as a philosophy by which we live. The consistent application of our quality system, based on the most advanced measurement and testing techniques, is pivotal to the quality and reliability of your one-stop High Performance Linear System and RPM⁺ actuator.

Almost 30 years experience in drive technology

An unconditional commitment to innovation and constant openness to change have been pillars of WITTENSTEIN's success over the last thirty years. Trust in the technology leader in the market for servo actuator systems. With the High Performance Linear System and RPM⁺ actuator, you too can be optimally equipped for the future!





High Performance Linear System

Industry standard

Dimensions HPLS with RPM⁺

| HPLS | RPM [⁺] | i | L | D | D _{тк} | А | в | Pinion |
|------|------------------|----------|-------|-------|-----------------|-------|-----|----------|
| 4.3 | | 4-10 | 472 | | 63,662 | | | m3 z20 |
| 4 | 040 | 22-66 | 364 | 170h7 | 84,883 | 190h7 | 215 | m4 z20 |
| | | 88 - 220 | 354 | | | | | 1114 220 |
| 5.4 | | 22-38,5 | 555 | | 101,859 | 260h7 | 280 | |
| | 050 | 66-88 | 474 | 240h7 | | | | m4 z24 |
| | | 110-220 | 486 | | | | | |
| 5 | 050 | 22-38,5 | 565,5 | | 122,019 | 260h7 | 280 | |
| | | 66-88 | 484,5 | 240h7 | | | | m5 z23 |
| | | 110-220 | 496,5 | | | | | |
| 6 | | 22-38,5 | 795,5 | | 146,423 | 315h7 | 335 | |
| | 060 | 66-88 | 644,5 | 285h7 | | | | m6 z23 |
| | | 110-220 | 614,5 | | | | | |
| 8 | | 22-38,5 | 938 | | | 350h7 | 390 | |
| | 080 | 66-88 | 694 | 320h7 | 178,254 | | | m8 z21 |
| | | 110-220 | 629 | | | | | |

Dimensions w/o excess length of plug socket and screws

Consulting & engineering

Please do not hesitate to ask for information about a drive solution that is optimally aligned to your requirements. We will also be pleased to take care of the simulations on your behalf. Profit from the longstanding experience and rich expertise of our highly qualified staff and take advantage of the comprehensive services of WITTENSTEIN engineering.