

Rotary Servo Actuator



More dynamic • Shorter • Smoother

TPM⁺



TPM+

The **TPM+** rotary servo actuator serves as the perfect solution for packaging, automation and robotic applications.



The **TPM⁺** the next step in TPM **servo actuator innovation**

Unequaled dynamic performance utilizing the latest in brushless servomotor technology

- Smoother & quieter running with helical gears
- Unmatched power density in the world of servo actuation
- Design so compact it fits where others won't
- Design so sleek you'll want the servo actuators out front!



WITTENSTEIN motion control develops field bus enabled electromechanical, rotary and linear servo actuators and systems. These systems are characterized by the complete integration of the following components: motor, precision gearhead, electronics, sensor technology and software.

Servo systems from WMC are used in automation, special applications, handling systems, highly dynamic robots, machine tools and production machines.

WITTENSTEIN motion control – a company of the US WITTENSTEIN group that has established a name for itself with a variety of innovations in servo technology.

More dynamic...

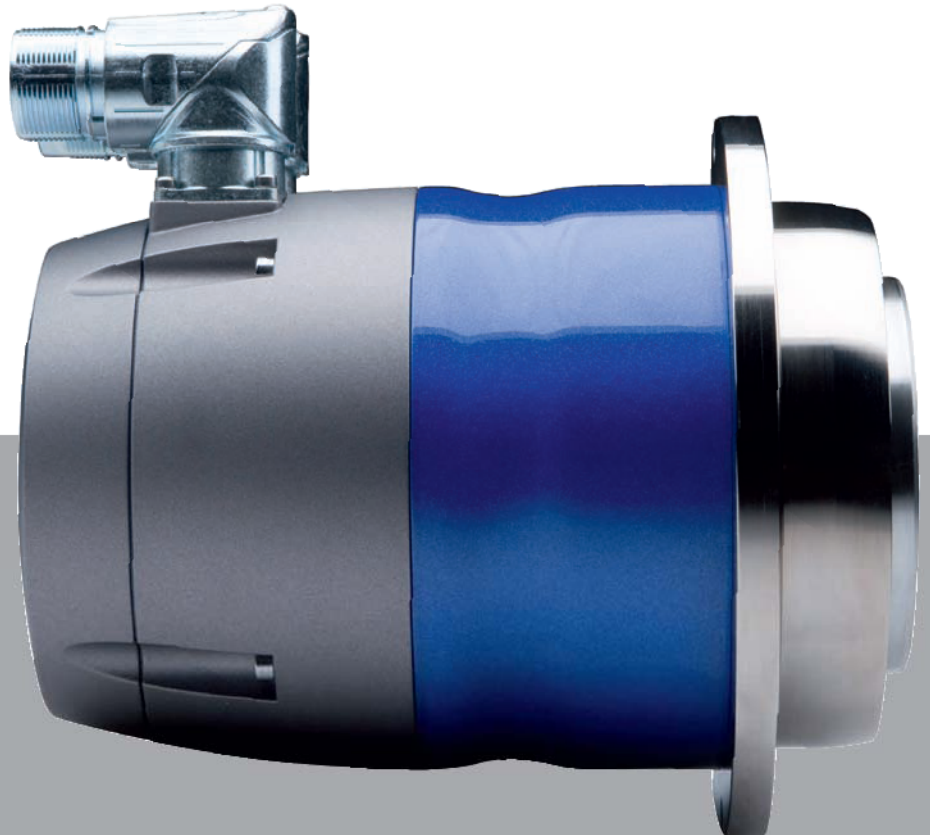
Outstanding technical characteristics due to the high rotational rigidity and the clamping hub-free integration between the motor and gear, making applications with load-to-motor inertia ratio of over 50 easily obtainable. This high allowable load-to-motor inertia ratio allows for a much smaller motor, thereby decreasing the torque used by the motor to accelerate itself. This increases efficiency and allows a natural convection cooled motor to work where a water-cooled design was once necessary.

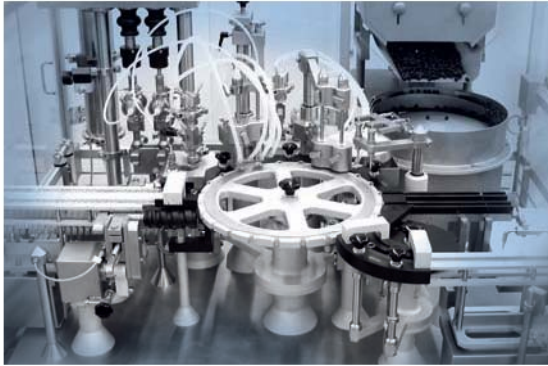
Shorter...

In the new TPM+, the planetary gear reducer and the AC servomotor are closer than ever before: the sun gear and the rotor are joined without a coupling. Through refined research, the development engineers of WITTENSTEIN have managed to create a space envelope that is further reduced by up to 20% compared to the previous TPM. The result is amazing: with the TPM+, not an inch of space is wasted. The length savings when compared with a comparable motor / gearhead are up to 50%.

Smoother...

Besides the basic equipment with resolver, the newest generation of Heidenhain and Stegmann encoders also provide noticeable technical advances. The maintenance-free permanent magnet brakes are also connected closer with the stator. The helical precision gearing provided extremely smooth and quiet operation.





Packaging Industry

Source: groninger & co. GmbH



Robotics Source: Sigpack Systems AG

Applications

Optimal applications for the TPM+ can be found in robotics (as the driving axis in manipulator robots, swivel drives in the production of optical media and semiconductors), in automation, in packaging machines (as the drive in packing hygienic products) and woodworking and tool changer machines.



Further features at a glance:

Direct mounting of drive components (pinion, belt drive rotary indexing tables) to standard flange

Strong output bearings eliminate the need for additional bearings or supports

Ready-made cables and start up guides for over 20 servo controllers

Easy start up in minutes with quick start guides available for most servo drives

UL-model as standard

Electrical connections with time-saving bayonet fasteners

Reduced backlash to as little as 1 arcmin



The new TPM+: the new servo rotary actuator of WITTENSTEIN motion control is another example of our corporate philosophy: **"Intelligence in motion"**.

TPM+