

WITTENSTEIN motion control provides intelligent and integrated electromechanical drive systems of the highest reliability for rotary and linear motion. They are easy and intuitive to handle and to control.

Leading edge technology know-how and broad experience combined with creativity and awareness of the future are the main factors for successful development projects. The close cooperation of our experts with yours guarantees solutions that best fit your requirements. All WITTENSTEIN employees take pride in our convincing solutions, superior product quality, on-time-delivery as well as fast track service and support.



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Serving
Technology Markets

Military
Aerospace
Ground robotics
Oil & Gas / Subsea
Railway

WITTENSTEIN – one with the future
www.wittenstein-us.com/defense

Technical changes reserved
WMC-S-Defense-Flyer_en_2020_I



Solutions for Special Applications under
Extreme Conditions for Air, Ground and Sea

Your Benefits:

- Customer oriented system engineering
- Short term development and manufacturing of customized designs
- Production and assembly based on tried-and-tested manufacturing processes
- Maintenance free products
- Worldwide customer support
- Systems easy and intuitive to handle and to control

Mechatronic Actuators for Your Military Applications

Integrated Systems
from a Single Source



Our Know-how:

- Design and manufacture of electromechanical actuators which are:
- Highly reliable
 - Highly integrated
 - Highly precise and dynamically optimised
 - Of compact style and functional design
 - Built for extreme environmental conditions

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Specialized in low-backlash planetary gearheads

Specialized in brushless servo motors with high performance technology

Specialized in power and control electronics for high and low voltage applications

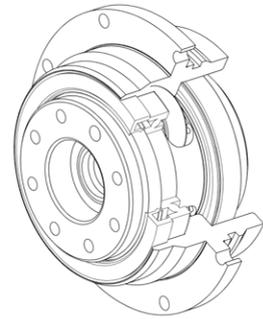
Mechatronic Actuators for Your Military Applications

Based on proven WITTENSTEIN technology, all our customized products are designed according to military standards for extreme environmental conditions – built and assembled in reliable manufacturing processes of the WITTENSTEIN group

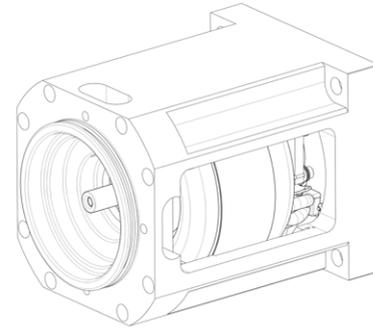
For example:

Actuation of high performance ground surveillance radar system including

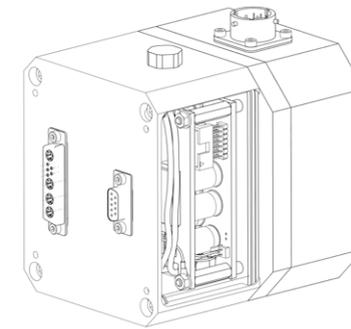
- 6 axes self-aligning radar pedestal
- Highly integrated rotative and linear servo systems



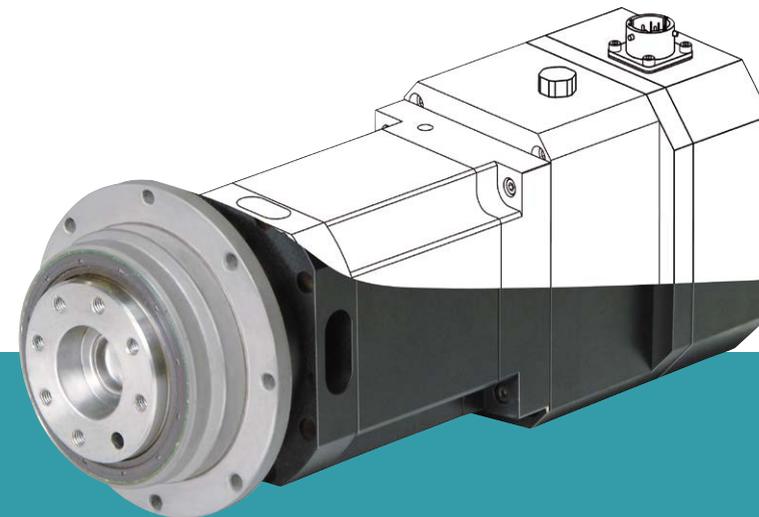
- Standard backlash < 1 arcmin
- Output torque up to 40.000 Nm
- Planetary gear ratio from 4:1 up to 220:1
- Extraordinary overload capacity
- Extremely high mechanical stiffness
- Ambient temperature -56° C ... +125° C



- Permanent magnet excitation
- Motor power from 10 W up to 200 kW
- High power density
- Extraordinary overload capacity
- Extremely low magnetic cogging torque
- Operation in oil and other fluids possible
- Ambient temperature -56° C ... +250° C



- Bus voltage from 18 V up to 600 V DC
- Output current from 15 A up to 1.000 A
- Customized housings and electrical connectors
- CAN bus or customized interface
- All digital control
- EMC-qualified
- Shock and vibration proof tested
- Ambient temperature -40° C ... +63° C



Integrated Systems from a Single Source:
WITTENSTEIN motion control

