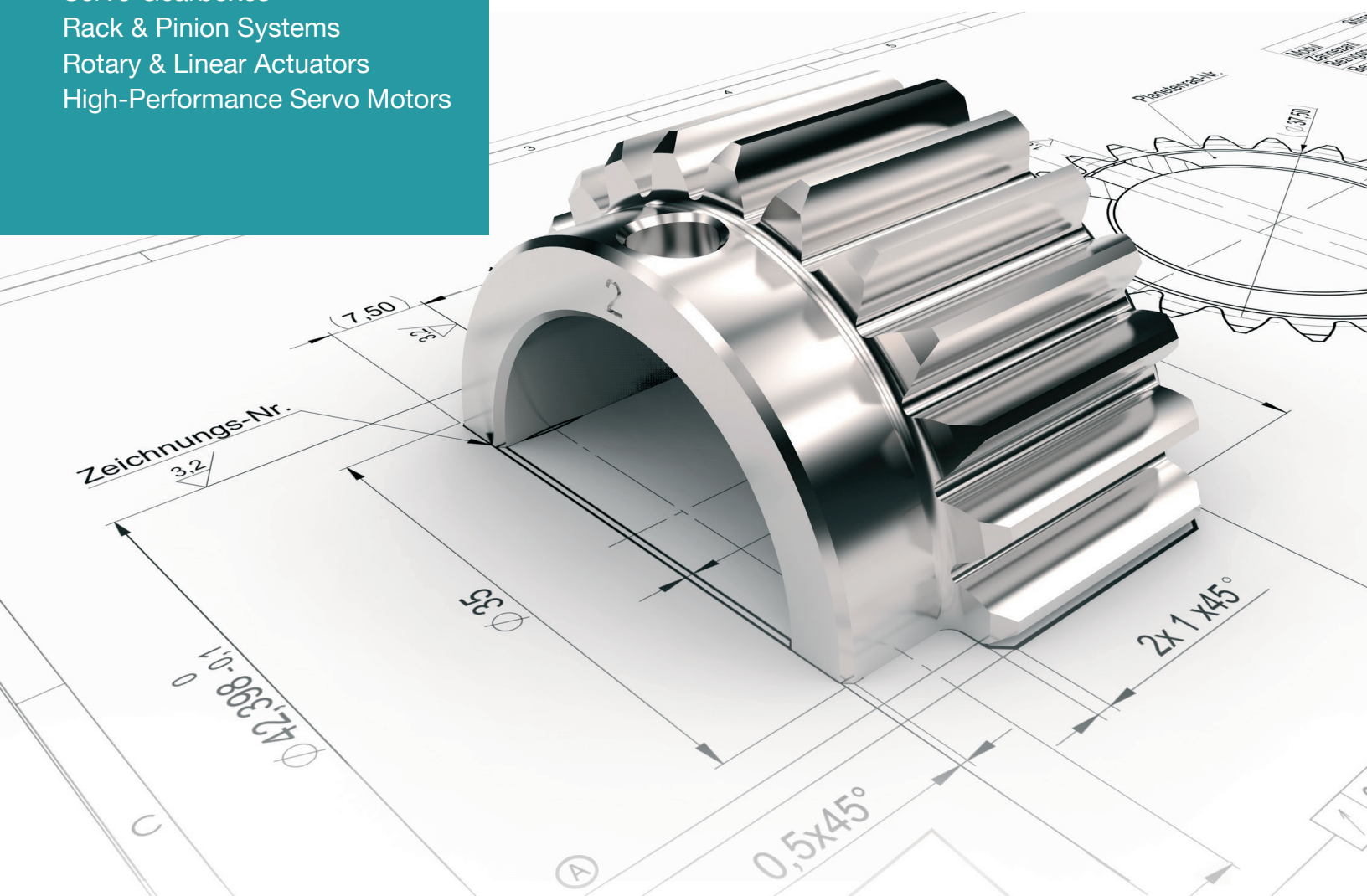




WITTENSTEIN

Mechatronic Motion Control Technology

Servo Gearboxes
Rack & Pinion Systems
Rotary & Linear Actuators
High-Performance Servo Motors



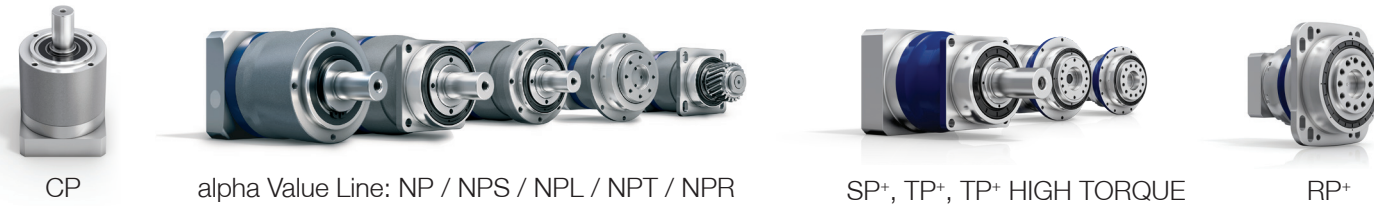
The Full Range of Motion

from WITTENSTEIN alpha

The depth of our product portfolio is unmatched in the industry.
For a complete listing visit www.wittenstein-us.com

Inline Gearboxes

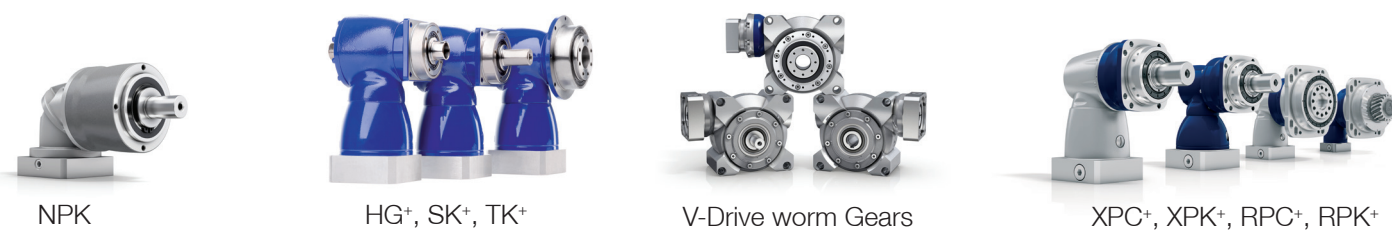
WITTENSTEIN quality across the full spectrum of performance requirements – from the highest precision and dynamics to the economy workhorse, our comprehensive portfolio covers the entire spectrum of application needs.



SERIES>	CP/CPS	NP/NPL/NPS/NPT/NPR	SP+ / SP+ HIGH SPEED	TP+ / TP+ HIGH TORQUE	RP+
Ratio (i)	3 – 100	3 – 100	3 – 100	4 – 302.5	3 – 220
Max Torsional Backlash (arcmin)	≤ 12	≤ 8	≤ 1 – 4	≤ 1 – 4	≤ 1
Max Torque (Nm)	17 – 800	18 – 800	48 – 5,700	43 – 40,000	540 – 10,450
Options	Food-grade Lubrication	Food-grade Lubrication Corrosion Resistant (NPL)	Food-grade Lubrication Corrosion Resistant ATEX	Food-grade Lubrication Corrosion Resistant	Food-grade Lubrication

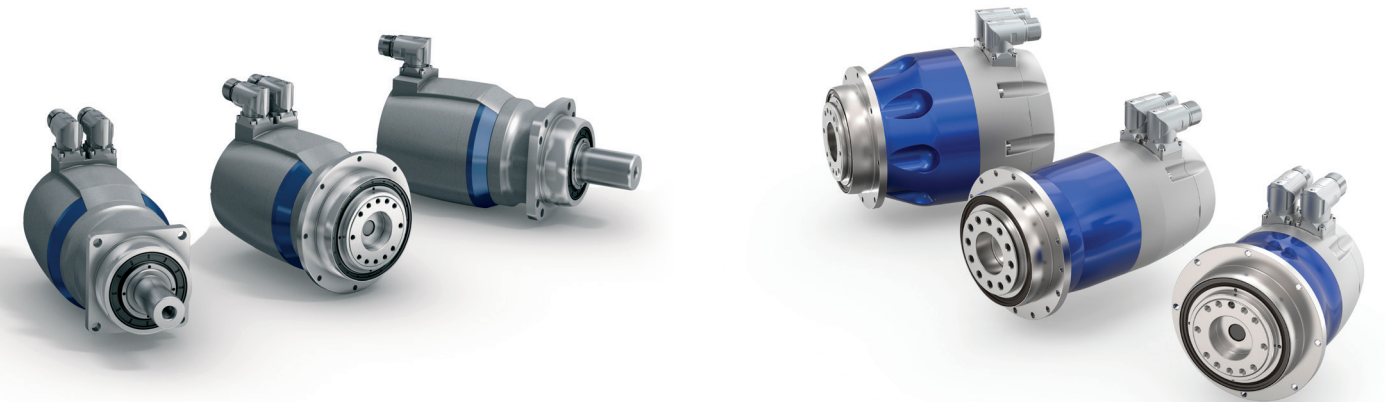
Servo Right-Angle Gearboxes

As the first manufacturer to develop a hollow-shaft gearbox for maximum speeds, WITTENSTEIN now supplies the optimum right angle gearbox for every application – worm, bevel or hypoid. We are constantly pushing the envelope in technology for our right angle gearboxes.



SERIES>	CVH (worm)	NPK (bevel)	NVH (worm)	HG+ (hypoid)	SK+ (hypoid)	TK+ (hypoid)	VT+, VS+ and VH	RPC+ (bevel)	XPC+ (bevel)	XPK+ (hypoid)	RPK+ (hypoid)
Ratio (i)	7 – 40	3 – 100	4 – 400	3 – 100	3 – 10,000	3 – 10,000	4 – 400	22 – 55	4 – 20	12 – 1,000	48 – 5,500
Max Torsional Backlash (arcmin)	≤ 15	≤ 11	≤ 6	≤ 4	≤ 2 – 4	≤ 1.3 – 4	≤ 2 – 3	≤ 1.3	≤ 2 – 4	≤ 2 – 4	≤ 1.3
Max Torque (Nm)	68 – 301	14 – 700	74 – 365	20 – 768	20 – 5,700	20 – 10,450	74 – 1,505	1,402 – 7,535	48 – 2,646	80 – 2,520	1,100 – 10,540
Options	Food-grade Lubrication	Food-grade Lubrication	Food-grade Lubrication Corrosion Resistant	Food-grade Lubrication Corrosion Resistant ATEX	Food-grade Lubrication Corrosion Resistant ATEX	Food-grade Lubrication Corrosion Resistant ATEX	Food-grade Lubrication Corrosion Resistant	Food-grade Lubrication	Food-grade Lubrication	Food-grade Lubrication	Food-grade Lubrication

Rotary Servo Actuators



premo® Series

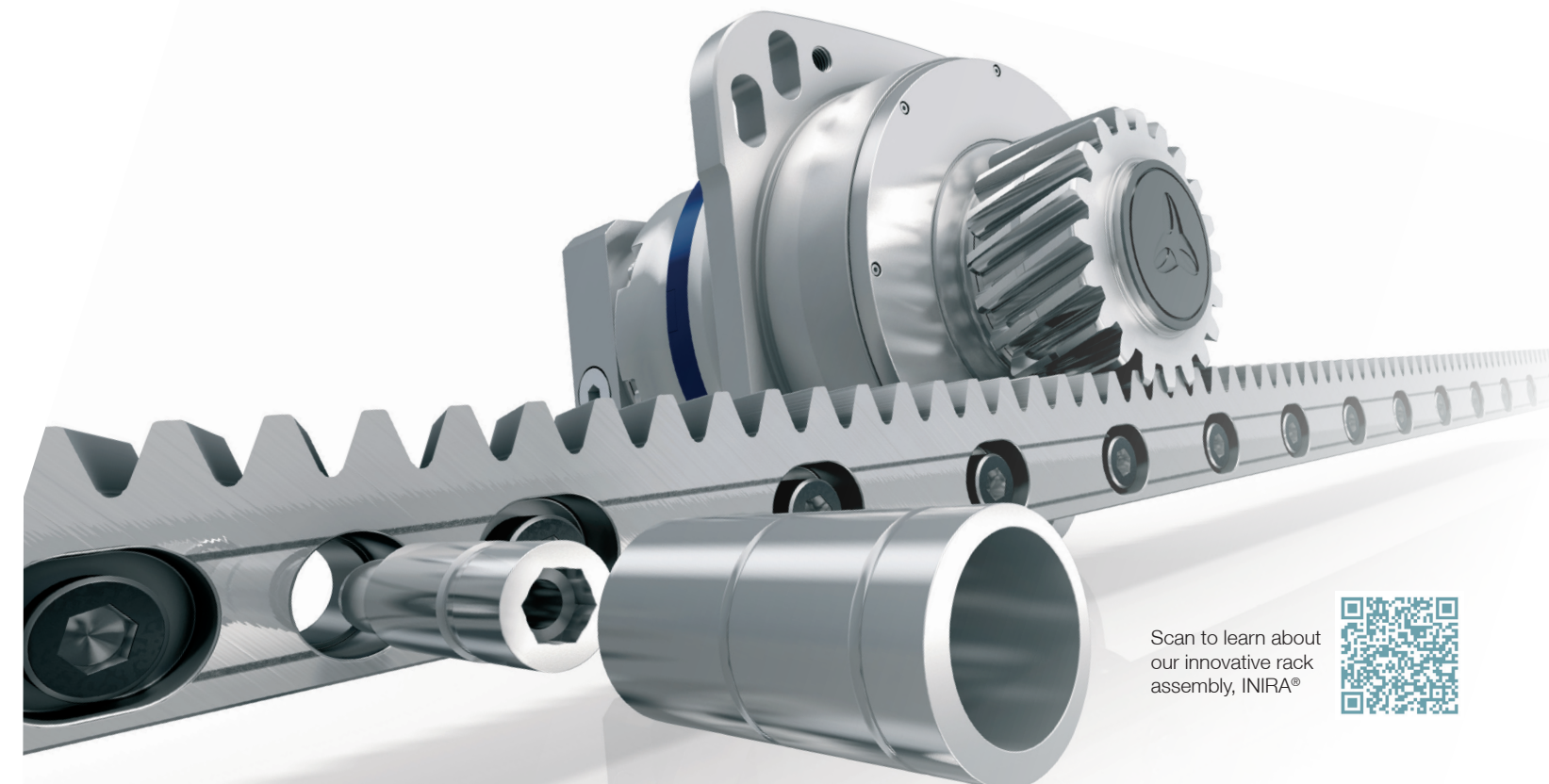
With premo® absolute precision meets perfect motion. The platform for scalable machine concepts can be flexibly used at all interfaces and can be mechanically and electrically adapted to customer requirements.

TPM+ Series

Productive, efficient, precise – these attributes characterize the proven TPM+ servo actuator family with drive flange. This is valid everywhere: from robotics to machine tools, from dynamic to high-load applications.

Rack & Pinion Systems

Complete drive solutions in one place. Our unique knowledge extends from the coupling of gearboxes, motors, rack and pinion to outstanding system solutions. Take advantage of this expertise in systems designed to your specific needs in terms of the smooth running, positioning accuracy and feed force of linear drives. Our innovative mounting concepts such as R-Flange and chipless pinning system give you even more flexibility and design advantage.



Scan to learn about our innovative rack assembly, INIRA®



Custom Servo Motors

WITTENSTEIN cyber® motor develops and produces servo motors and drive systems with maximum power density for demanding applications.

We specialize in motors for ultra-high vacuums, clean room, energy, medical, high temperature and radioactive environments.

cyber® dynamic motors

dynamic – high torque – efficient

Equipped with absolute feedback in stainless steel housing, these powerful motors deliver the highest performance, reliability, precision and value in the smallest package.



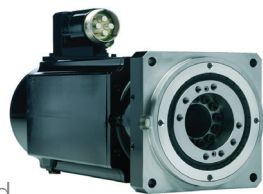
Diameter (mm)	17	22	32	40
Length (mm)	47	49	66	81
Weight	.04	.05	.25	.40
Shaft Diameter (mm)	5	4	6	6



cyber® power motors

powerful – efficient – enabled

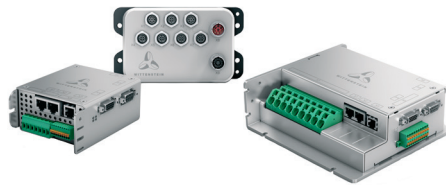
High-Performance Dynamic Servo Motors with up to 2x the acceleration rate of traditional low rotor inertia motors, designed for Rockwell Kinetix® 5700 series of drives.



Motor Type	MR-SH130A-230L	MR-SH178A-195L	MR-SH220A-240L
Maximum power KW	32	31	102
Maximum torque Nm	132	273	682
Continuous stall torque Nm	81	162	325
Rated speed rpm	3,422	1,972	2,184
Rockwell Drive	K5700-S130	K5700-S130	K5700-S312

cyber® simco® drive

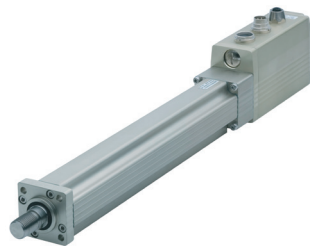
The cyber® simco® drive is a servo drive for sine-commutated servo motors in the voltage range of 16 to 56 VDC and a maximum capacity of up to 5 kW. The cyber® simco® drive is available as a control cabinet variant or in a decentralized design with protection rating IP65. In combination with the intuitive MotionGUI software, simple parameterization, commissioning and optimization of the system as well as flexible programming of applications is possible.



Electronic Actuators

Linear – Rotary – Integrated

Completely integrated electronic actuators include power and control electronics, stepper or servo motor with encoder. Rotary actuators available with inline or right angle gearboxes.



	TL5B046
Peak Force (N)	Up to 1000*
Peak Speed (mm/sec)	Up to 1000*
Repeatability (mm)	+/-0.009
Stroke (mm)	Up to 400*

*depending on ball screw version

cyber® special motors

extreme conditions – application specific

Custom-designed for use in the world's most extreme environments, including highest temperature extremes, ultra-high vacuum and nuclear radiation conditions. Put cyber® special motors where you need reliable motion and nothing less will do.

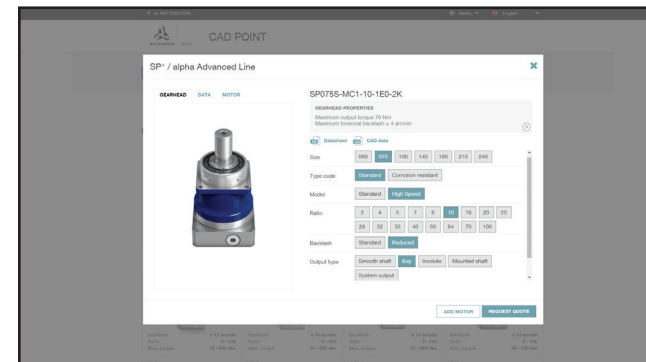


High Temperature Motors	Radiation Resistant Motors	Ultra-High Vacuum Motors
Operating environments to 300 C	Operating environments to 150 C	Operating pressure to 1x10 ⁻¹¹ torr
Operating pressures to 2100 bar	Radiation field 10x10 ⁶ Gy TID	Extremely low outgassing materials
Shock resistance to 500m/sec ²	Integrated rad-hard feedback	
Oil resistant		

Sizing Tools

Our software portfolio helps you choose the right drive

Download dimension sheets and CAD data, select the best gearbox quickly and easily design complex sequences in detail – our software solutions offer various methods of selecting the best, most reliable drive on all axes.

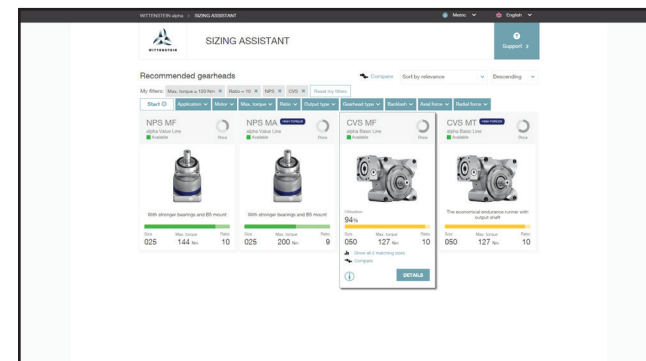


CAD POINT

– Your Smart Catalog

- Performance data, dimension sheets and CAD data for all types of gearboxes
- Available online without logging in
- Comprehensive documentation of the selection

www.wittenstein-cad-point.com

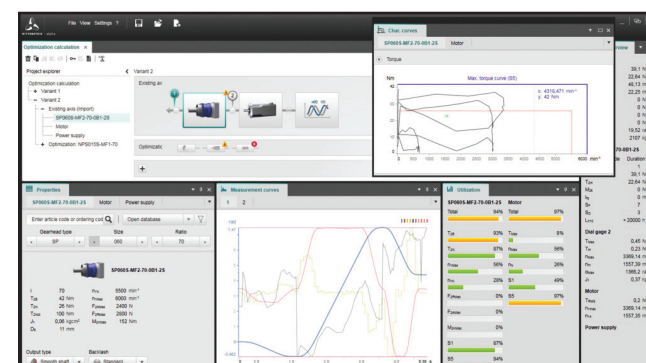


SIZING ASSISTANT

– Your Gearbox within Seconds

- Efficient gearbox selection in seconds
- Available online without logging in
- Access by specifying application or motor
- Information about price and delivery time
- Possibility of requesting quotation directly

www.sizing-assistant.com



cymex®5

– Calculate on the Best

- Detailed calculation of complete drive trains
- Precise simulation of motion and load variables
- Downloadable software for complex designs

www.wittenstein-cymex.com

Hygienic & Corrosion Resistant



HDV, HDP in Maximum Protection



SP+, TP+ in Medium Protection



cyber® dynamic Line in Medium Protection



NPL in Basic Protection
(shown in optional white finish)

Hygienic Design Benefits

- Suited for hygienic and sterile production
- Direct contact with food allowed
- Fast, efficient and reliable cleaning
- Resistant to chemical cleaning materials and disinfectants
- Optimal sealing properties
- Maximum resistance to corrosion

We designed the world's first Hygienic Design Gearbox to meet FDA, 3-A and EHEDG standards, and today offer the most comprehensive portfolio of hygienic design and corrosion resistant gearboxes in the full range of protection classes:

	BASIC Protection	MEDIUM Protection	MAXIMUM Protection
Design	Nickel plated with two-part epoxy coating, optional steel-IT coating	Nickel-plated with stainless steel output configuration	Hygienic Stainless Steel 316L
Seals	VITON	VITON	PTFE
Output	High-grade stainless steel	High-grade stainless steel	High-grade stainless steel
Lubrication	NSF Approved	NSF Approved	NSF Approved
Rating	IP65	IP65	IP69
Available Series	All gearboxes are available in basic design	SP+, TP+, SK+, SPK+, HG+, TK+, TPK+	HDV, HDP, cyber® dynamic line

Corrosion Resistant Benefits

- Protection against external influences (splash-proof to IP65)
- Protection against flash rust and oxidation
- Easy removal of fouling (germs, microorganisms, etc.)
- Stable processes thanks to WITTENSTEIN quality

WITTENSTEIN Service Portal



The **WITTENSTEIN Service Portal** supports you throughout the entire life cycle of your WITTENSTEIN product - from the initial installation to servicing or replacement.

- Access to portal to obtain technical details, documentation and contact info for your product.
- Request replacement products quickly and easily
- Notify us of products that you wish to return to us for inspection or repair.

Access the portal from your desktop at the entry URL, then enter the serial number or article code. Or, simply scan the product's data matrix code with your preferred reader application from your smart phone or tablet to quickly see all relevant information for your specific product.

Service, Replacements and Reorders At Your Fingertips:

Try It Now



Scan to see service portal data for SK+025



Scan to see service portal data for LPB+090



Scan to see service portal data for SP+140





WITTENSTEIN

WITTENSTEIN

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alpha Advanced Line. Maximum power density and outstanding positioning accuracy for complex applications.



alpha Basic Line & alpha Value Line. Reliable, flexible and economical solutions for a wide range of applications.



alpha Linear Systems. Precise, dynamic system solutions for every requirement.



alpha Mechatronic Systems. Energy-efficient, versatile and flexible mechatronic drive systems.

www.wittenstein-us.com