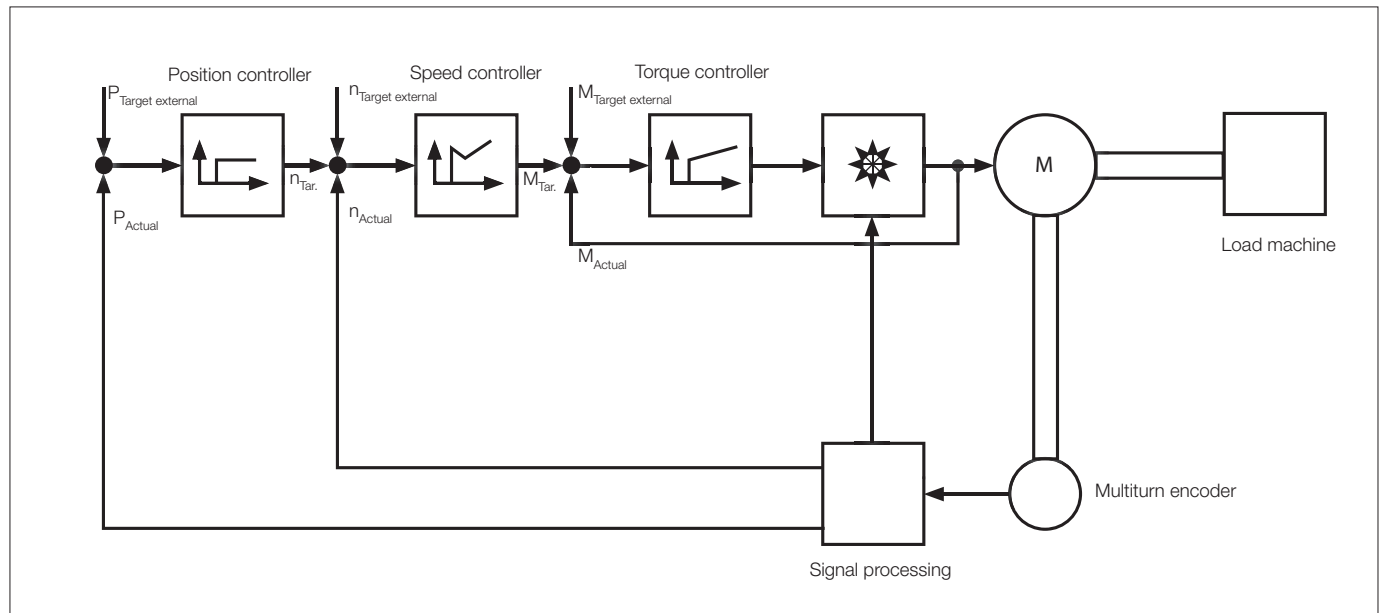


EL.MOTION AD 12.. Rotary actuating drive

- Decentralized drive technology with integrated control electronics, compact and tailor-made for customer-specific solutions
- Permanently excited synchronous machine (BLDC motor), particularly suitable for applications requiring very smooth running and long service life
- Constant torque across the entire rotational speed range
- High-resolution Multiturn encoder to detect the rotor position and the absolute position
- Absolute position detection, even in cases of voltage failure (without buffer battery)
- High power density and overload capability
- Integrated temperature monitoring
- Two-row slanting ball bearing offers protection for high axial loads
- Integrated fieldbus interface with certified standard protocols
- Simple configuration via web-based management on standard web browser
- Optionally with integrated logic card for end position limitation
- Optionally with additional "Safe Torque Off" function for functional safety in accordance with EN IEC 61508 with SIL 3 and EN ISO 13849-1 with Category 3 Performance Level d

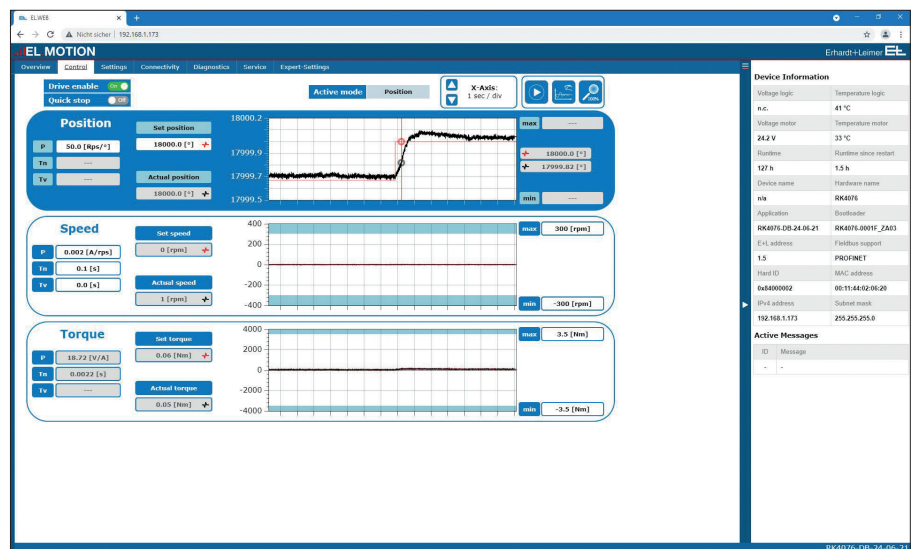
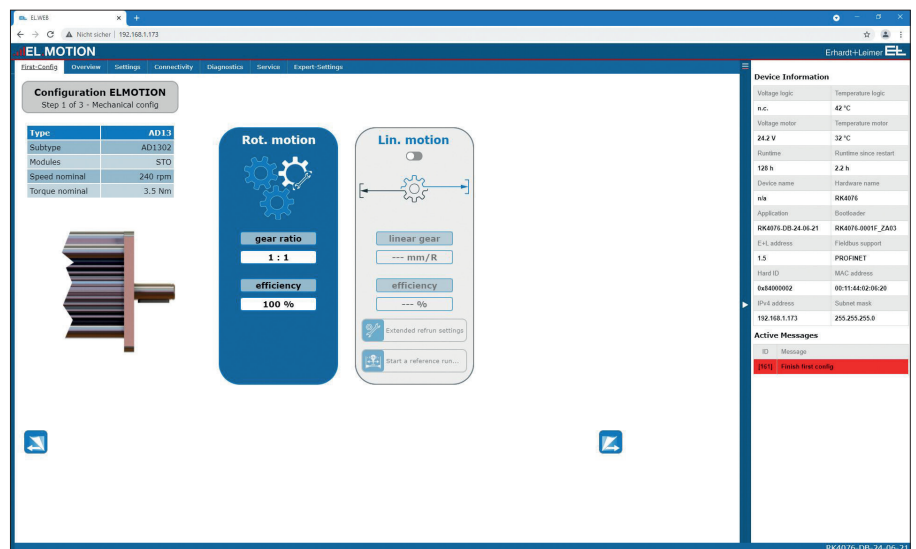


Smart Drive control structure

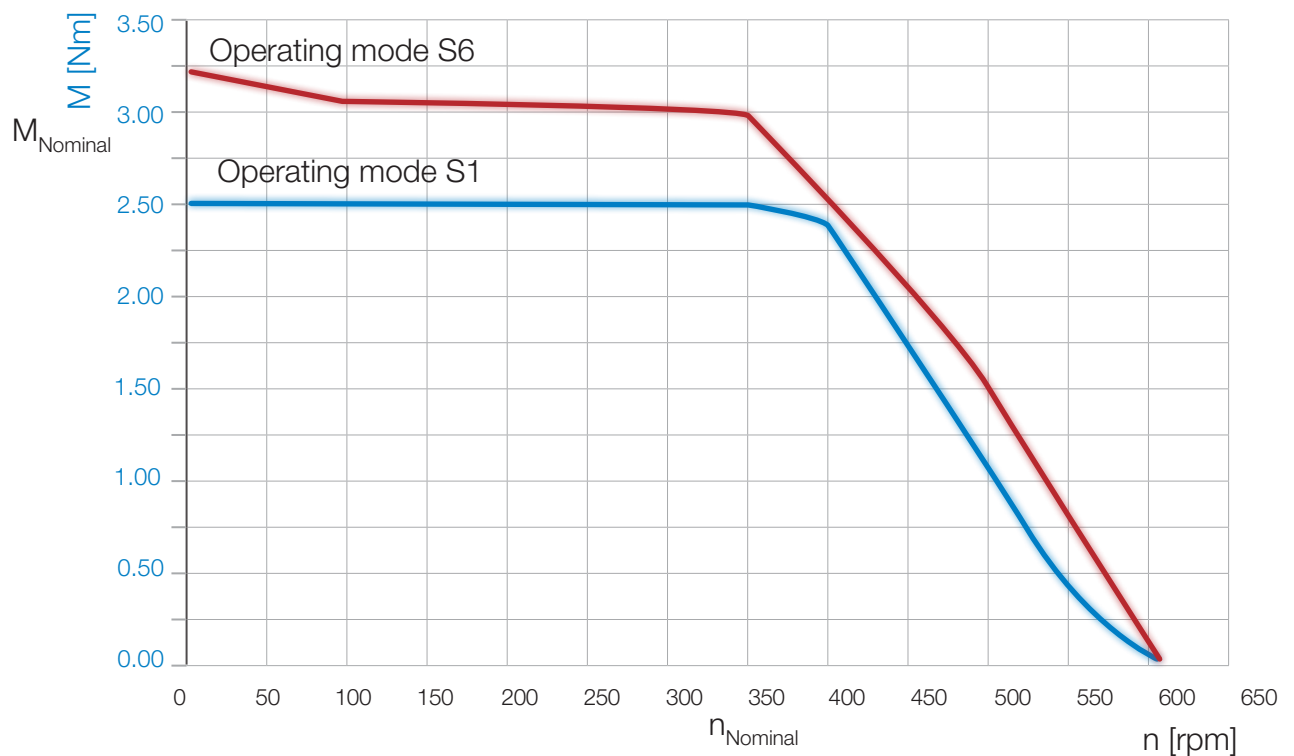


Commissioning and service via WBM (web-based management)

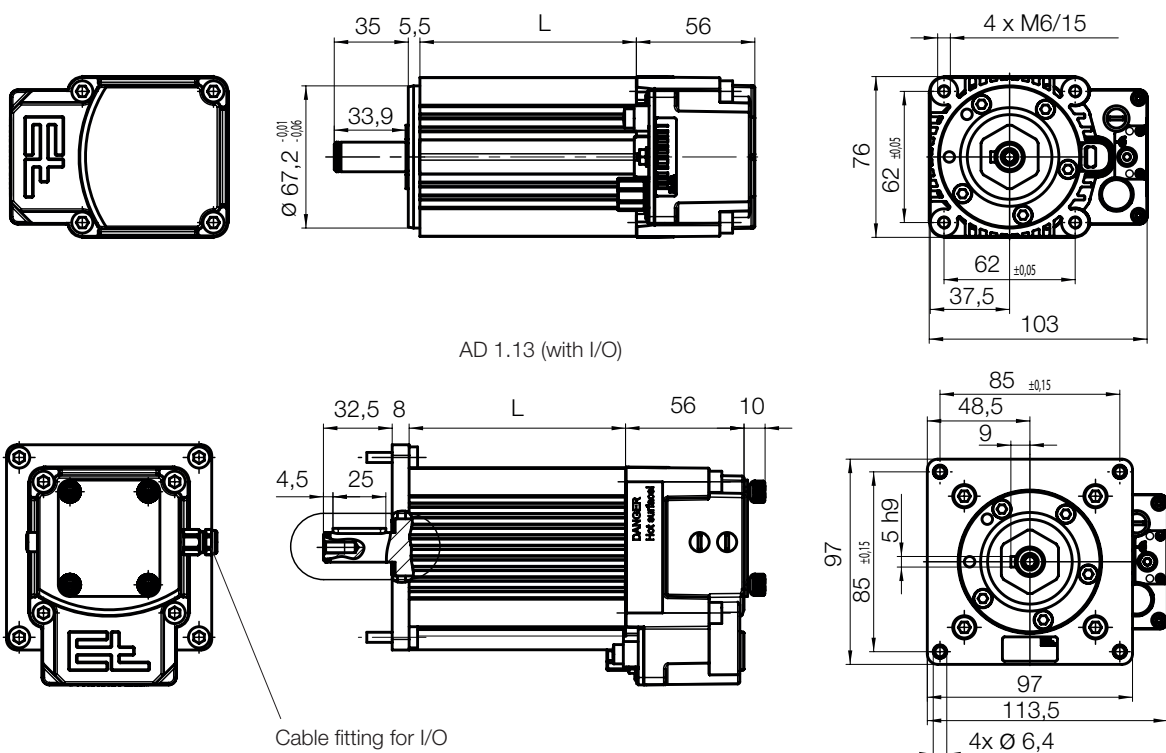
- Smart Drive with integrated web server
- Setup of the functions for drive control
- Setting the fieldbus interfaces



Characteristic curve for rotational speed



$L = 102.3$ (for type AD 12..)



Use dimensioned drawing AD_1103 - 158972.



Technical Data

Operating voltage	
Nominal value	24 V DC
Nominal range	20 to 30 V DC
Nominal current *	6.6 A (S1) / 8.6 A (S6)
Nominal torque *	2.4 Nm (S1) / 3.0 Nm (S6)
Nominal speed	350 1/min
Maximum torque	3.2 Nm
Stall torque *	2.5 Nm (S1) / 3.1 Nm (S6)
Radial force (distance 24 mm)	800 N
Axial force	3000 N
Constant torque	0.4 Nm/A
Rotor moment of inertia	106 kg mm ²
Motor weight	3.4 kg
Shaft diameter	14 mm (H7)
Insulation class	F
Multiturn encoder resolution	12 bits/revolution (4096 increments) 701 revolutions (determination of absolute position)
Fieldbus protocols	Ethernet UDP, Ethernet/IP, Profinet / M8 D-coded 4-pin
Operating voltage	M12 L-coded 5-pin
Limit switch inputs (optional)	4 x digital input / spring terminal
Housing material	Aluminum
Installation altitude	Max. 3000 m above sea level
Ambient temperature	+10 to +50 °C
Storage temperature	-25 to +80 °C
Relative air humidity	15 to 95 % (without condensation)
Certifications	CE NRTL certificate CU 72170613 05
Protection class	IP 54

EtherNet/IP®
 ODP-A



* dependent on the operating mode

Subject to technical change without notice