WITTENSTEIN

Small servo drive system
connected to Siemens automation

dynamic
efficient
compact

Small servo drive system
Industrial-grade solution

Easy connection
via TIA Portal with GSD file

Real-time capable fieldbuses

PROFINET®

Full spectrum of
motion control functionalities
available

Easy and space-saving integration
due compact design
and top hat rail clip

Stainless steel
housing

High protection class
up to IP69

Protection class
IP20 or IP65*

Hygienic Design
with food grade
lubrication optional

Safety function
STO (Safe Torque Off)
according to SIL 3

Integrated sensor
Absolute singleturn
encoder with resolution
of 4096 positions
(12 Bit)

Double shielded
single cable solution
for use in cable
carriers

Automatic motor parameterization
due electronical
identification

Portfolio supplement

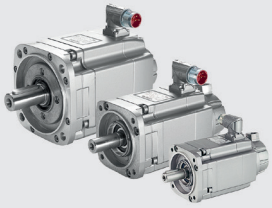
Shaft height:

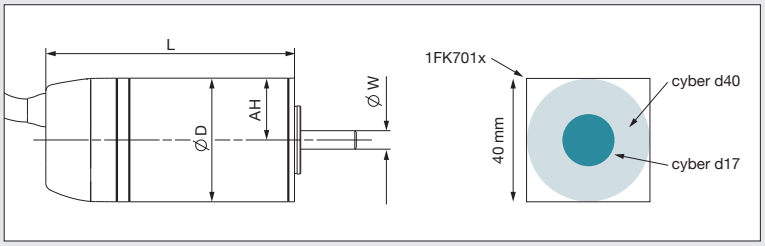
cyber® dynamic line

Simotics S-1FK7

8,5 mm

20 mm





	Size	Unit	cyber d 17	cyber d 22	cyber d 32	cyber d 40
Shaft height	SH	mm	8,5	11	16	20
Diameter	D	mm	17	22	32	40
Motor length	L	mm	47	49	69	81
Shaft diameter	W	mm	3	4	6	6

Industrial-grade small servo drive system

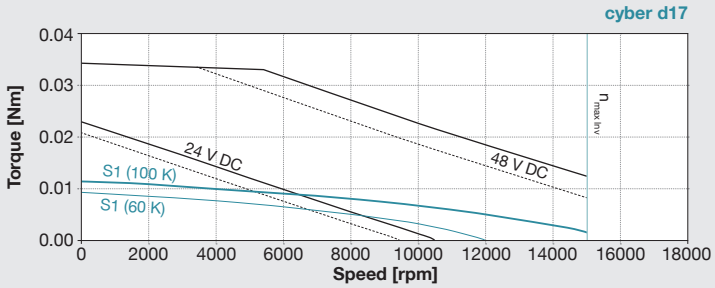
Technical overview
cyber® dynamic line & simco® drive

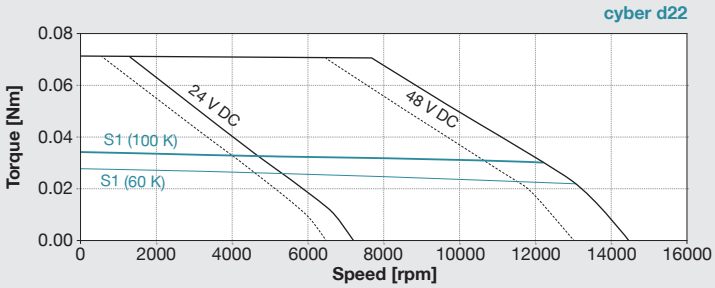
Servo motors

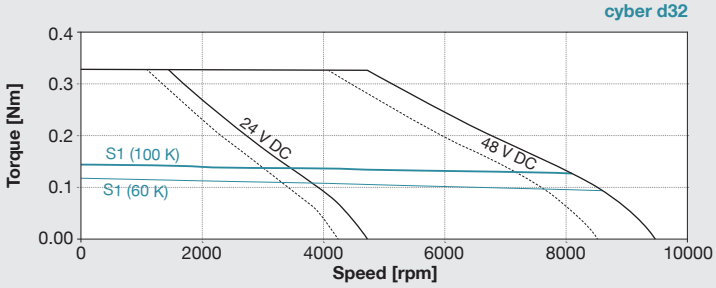
Type of motor	Nominal speed n_N min^{-1}	Shaft height SH mm	Rated power P_N for ΔT = 100 K W	Continuous stall torque M_0 for ΔT = 100 K Nm	Rated torque M_N for ΔT = 100 K Nm	Nominal current I_N for ΔT = 100 K A	Number of pole pairs p –	Drive inertia J kgm²	Weight m kg
circuit voltage	DC 48 V								
cyber d17	9690	8,5	7	0,012	0,0068	0,41	4	$5.2*10^{-8}$	0,04
cyber d22	12400	11	39	0,034	0,03	0,86	4	$1.2*10^{-7}$	0,06
cyber d32	8140	16	110	0,14	0,13	2,3	4	$5.7*10^{-7}$	0,22
cyber d40	5090	20	164	0,35	0,31	3,3	4	$2.5*10^{-6}$	0,43
Integrated sensor	Absolute singleturn encoder (BISS C)								
Protection class	IP 54, IP 66/67								
Planetary gearbox	1 to 3 stages (ratio i4 to i100)								

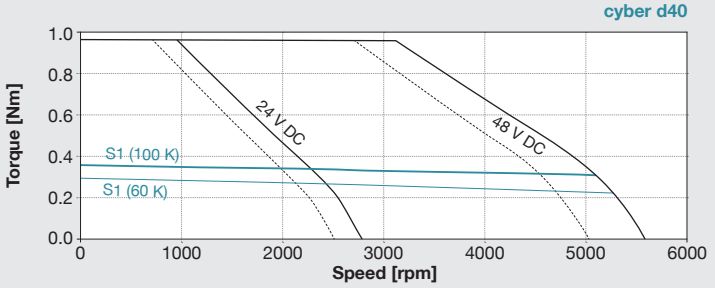
Servo drives

Type of drive	Protection class IP –	Supply voltage (power) U_{DC} V_{DC}	Supply voltage (logic) U_{DC} V_{DC}	Nominal current I_N A_{eff}	Peak current I_{max} for 5 s A_{eff}	Rated power P_N W	Peak power P_{max} W	Current control resolution – Bit	Switching frequency f_{PWM} kHz	Weight m kg
circuit voltage	DC 48 V									
SIM2002	20	+24…+48	+24 (+/-10%)	2,5	5	125	250	14	8…32	0,3
SIM2002*	65	+24…+48	+24 (+/-10%)	2,5	5	125	250	14	8…32	0,85
SIM2010	20	+24…+48	+24 (+/-10%)	10	20	500	1000	14	8…32	0,3
SIM2010*	65	+24…+48	+24 (+/-10%)	10	20	500	1000	14	8…32	0,85





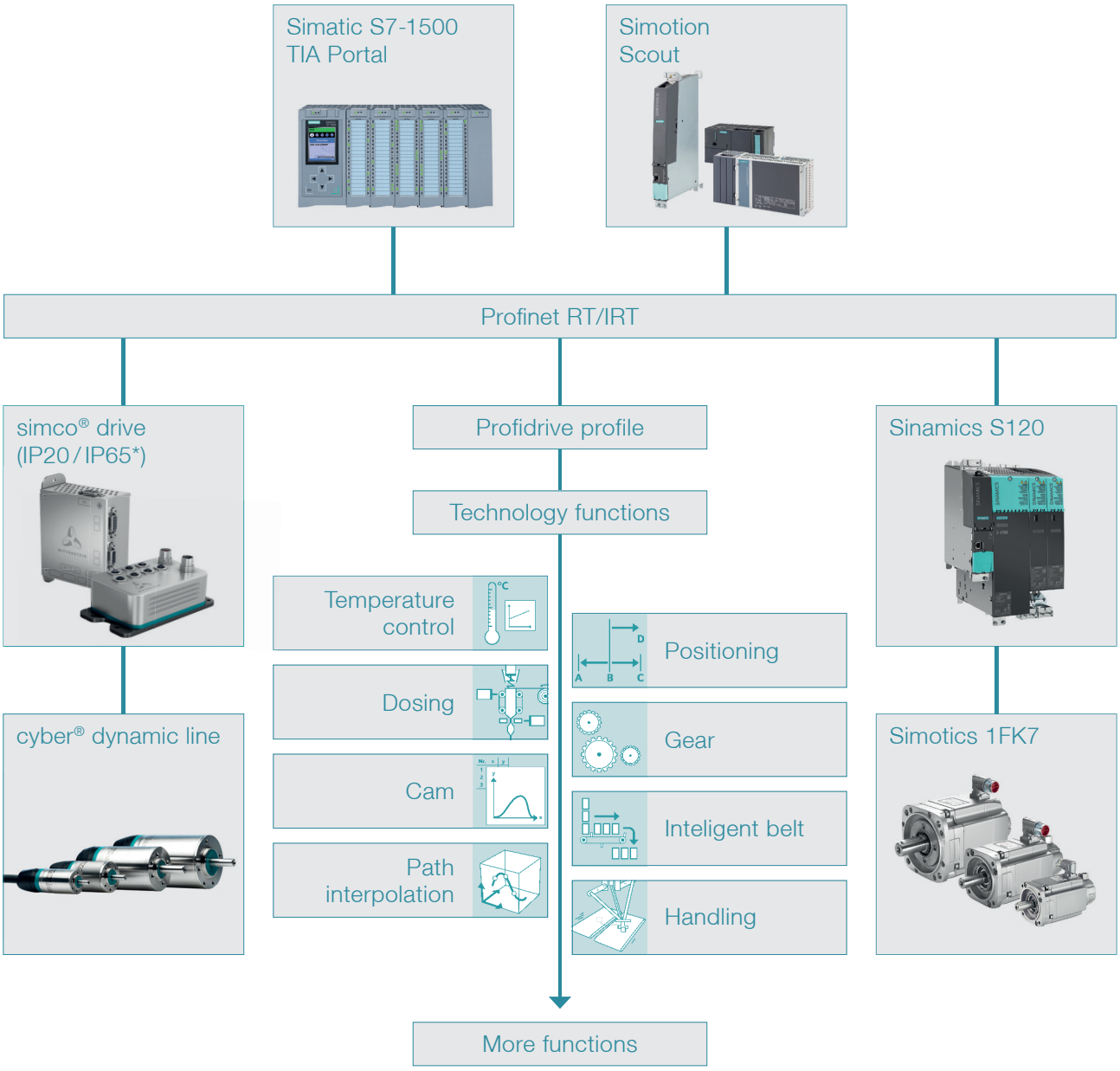




dynamic · efficient · compact

Topology
Easy integration via Profidrive profile

- Integration of the WITTENSTEIN drive system to Siemens Software (TIA Portal, Simotion Scout) via GSD-XML
- Complete range of motion control related functional blocks and standard applications available for Simatic and Simotion can be used (e.g. camming, intelligent belt, ...)
- Connectivity to Siemens controller with Profinet RT/IRT (Simatic and Simotion) via Profidrive profile
- Easy configuration of the drive via GSD-XML and scripting in Simotion Scout
- Support of Profidrive application classes 1, 3, 4



*Availability on request

WITTENSTEIN – one with the future
www.wittenstein.de/en

WITTENSTEIN SE
Walter-Wittenstein-Straße 1 · 97999 Igersheim · Germany
Tel. +49 7931 493-15700 · servodrive@wittenstein.de