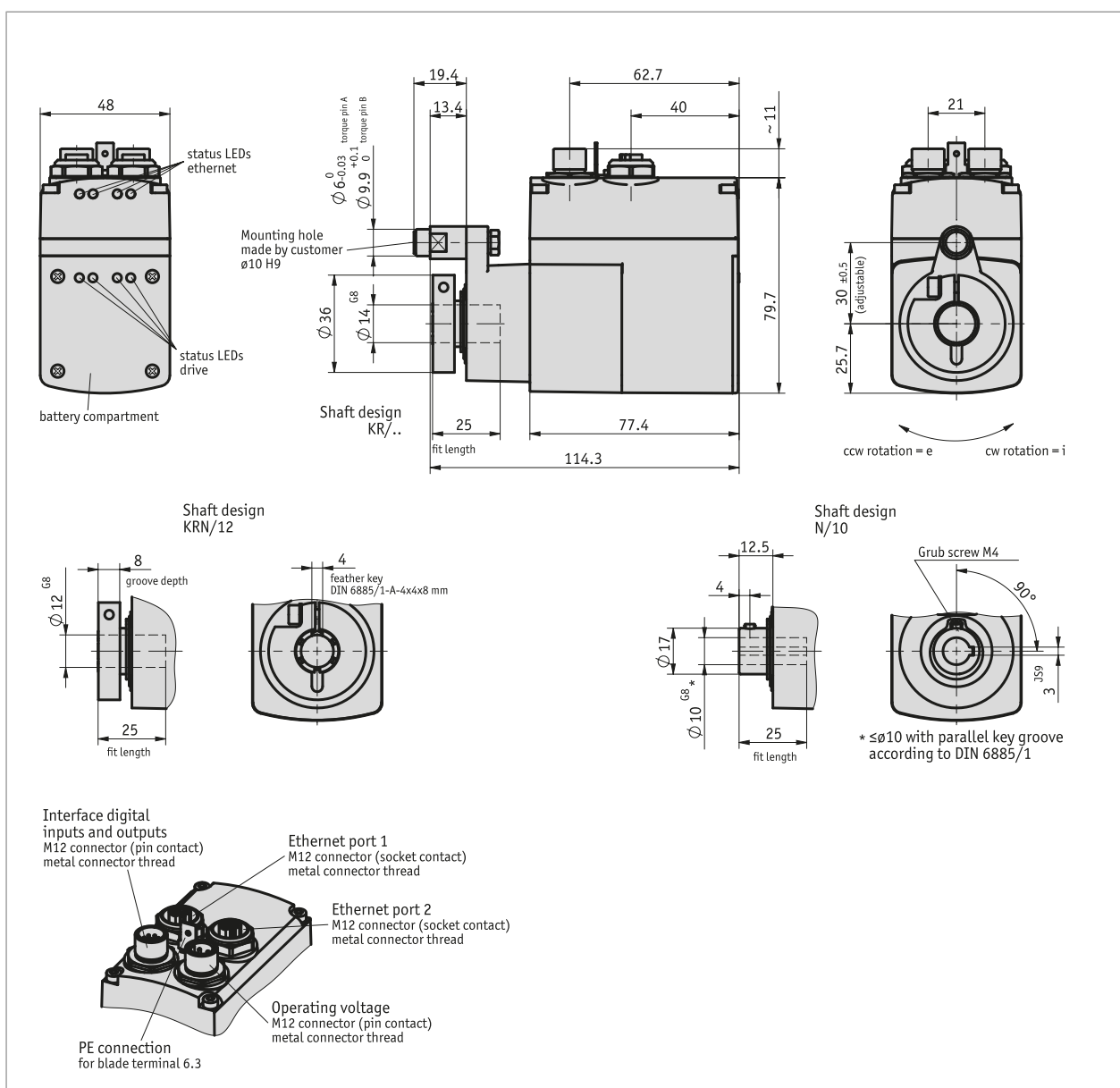


### Profile

- Small dimensions, high power density
- easy mounting and commissioning
- High flexibility, high protection class
- stainless steel 14 mm diam. hollow shaft, robust housing
- Brushless EC motor with a long service life
- solid absolute sensor, magnetic sensing technology
- integrated power and control electronics
- Integrated Industrial-Ethernet-Fieldbus
- Integrated positioning controller
- M12 component mounting technology
- Industry 4.0 ready



### Mechanical data

Feature	Technical data	Additional information
shaft	rustproof stainless steel	
Housing	glass-fiber reinforced plastic / zinc die-cast	
clamping ring	rustproof stainless steel	
Torque pin	rustproof stainless steel	form A
	rustproof stainless steel	form B
Nominal torque/rated speed	5 Nm at 50 min <sup>-1</sup> ±10%	i = 98
	3 Nm at 75 min <sup>-1</sup> ±10%	i = 66
Operating mode	S3 intermittent operation: 25 % DC, 10 min.	EN 60034-1
Weight	~0.8 kg	

### Electrical data

Feature	Technical data	Additional information
Operating voltage	24 V DC ±10 %	reverse polarity protected, output stage
	24 V DC ±10 %	reverse polarity protected, control
Current consumption	2.2 A ±10 %	at rated torque/speed (final stage)
	<150 mA	starting current >150 mA (control)
Power input	≤58 W	output stage
	≤3.6 W	control
Battery	CR2477N, 3 V lithium, 950 mAh	
Battery service life	~5 Year(s)	depending on ambient conditions
Parameter storage	10 <sup>6</sup> cycles	also applies to calibration operations
Digital inputs	17 ... 30 V DC	typically 10 mA
Status display	8 LEDs	
Keys	2 internal keys, internal DIP switch	
Switching outputs	24 V DC ±10 %	≤40 mA
Bus connection	EIP-EtherNet/IP	
	EPN-PROFINET	
	ECT-EtherCAT	
	EPL-POWERLINK	
Type of connection	2x M12 plug connectors (A-coded)	4-pole, 1x pin; 8-pole, 1x pin
	2x M12 plug connectors (D-coded)	4-pole, 2x socket
	grounding via flat connector 6.3 mm	

### System data

Feature	Technical data	Additional information
Resolution	720 Steps/revolution, shaft	
Repeat accuracy	±1 Steps/revolution	
Travel range	±1300 rotation(s)	i = 98
	±1980 rotation(s)	i = 66
Failure rate	28.3 Year(s)	at 60° C (MTBF) according to SN 29500
Approval		UL 2011, CSA C22.2 No. 14-18, File No. E502992

### Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	0 ... 45 °C	
Storage temperature	-20 ... 60 °C	
Relative humidity		condensation inadmissible
EMC	EN 61800-3, second environment	interference resistance / immission
	EN 61800-3, C2	emitted interference / emission
Protection category	IP54, IP65	EN 60529, with mating connectors (degree of protection not tested by UL)
Shock resistance	500 m/s <sup>2</sup> , 11 ms	EN 60068-2-27
Vibration resistance	≤100 m/s <sup>2</sup> , 5 ... 150 Hz	EN 60068-2-6

### pin assignment

#### ■ EtherCAT, EtherNet/IP, POWERLINK, PROFINET

Signal	PIN
Tx+	1
Rx+	2
Tx-	3
Rx-	4

#### ■ Digital inputs / outputs

Signal	PIN
Input 1	1
Input 2	2
Input 3	3
Input 4	4
"Output 1"	5
RXD	6
TXD	7
SGND*	8

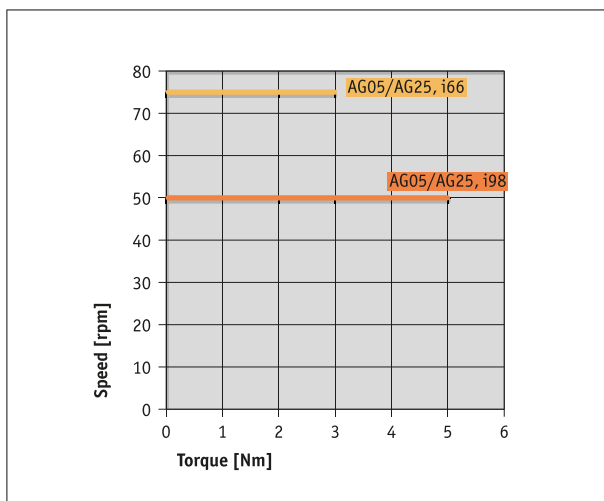
\* internally connected with GND of operating voltage

#### ■ Operating voltage (output stage / control)

Signal	PIN
+UB (output stage)	1
+UB (control)	2
GND (output stage)*	3
GND (control)*	4

\* internally connected with SGND

### Performance curve



### Industry 4.0

In most cases, data exchange with the actuators is limited to the exchange of process data. In addition to the process data, intelligent drives provide additional information that can be evaluated for condition monitoring up to predictive maintenance:

Process data	Smart Value	Smart Function
Actual position	Temperature	Overload, ambient temperature
"Target position"	current	Torque, overload
Speed	Volatage load Voltage control	Voltage drop, line break
	On/Off time	Operating time
	Battery voltage	Battery change planning
		Web server (EPN, EIP)

### Order

#### ■ Ordering table

Feature	Ordering data	Spezifikation	Additional information
Gear ratio	A 66	i = 66	

Feature	Ordering data	Spezifikation	Additional information
	98	i = 98	
Protection category	<b>B</b> IP54 IP65	IP54 IP65	
shaft design/diameter	<b>C</b> KR/14 KRN/12 N/10	clamping ring ø14 mm clamping ring/feather key groove, ø12 mm keyway, ø10 mm	only with gear ratio i = 98
Torque pin	<b>D</b> A B	bolt, ø6 mm bolt, ø10 mm	
interface/protocol	<b>E</b> ECT EIP EPL EPN	EtherCAT EtherNet/IP POWERLINK PROFINET	

### ■ Order key

AG25 -  - 50W -  -  -  - ABM -  - SW



#### Scope of delivery:

AG25, Quick Start Guide



#### Accessories you can find:

Cable extension KV04S2	<a href="http://www.siko-global.com">www.siko-global.com</a>
Cable extension KV08S2	<a href="http://www.siko-global.com">www.siko-global.com</a>
Programming software ProTool DL	<a href="http://www.siko-global.com">www.siko-global.com</a>
Angular gear WG05	<a href="http://www.siko-global.com">www.siko-global.com</a>
Overview, Mating connector, Overview	<a href="http://www.siko-global.com">www.siko-global.com</a>
Mating connector, Operating voltage, 4-pole, angle socket	Order key 83091
Mating connector, digital inputs/outputs, 8-pole, socket	Order key 83525
Mating connector, Operating voltage, 4-pole, socket	Order key 83526
Mating connector, digital inputs/outputs, 8-pole, angle socket	Order key 87599
Mating connector, port 1 + port 2, 4-pole, angular pin	Order key 87600
Mating connector, port 1 + port 2, 4-pole, pin	Order key 87601