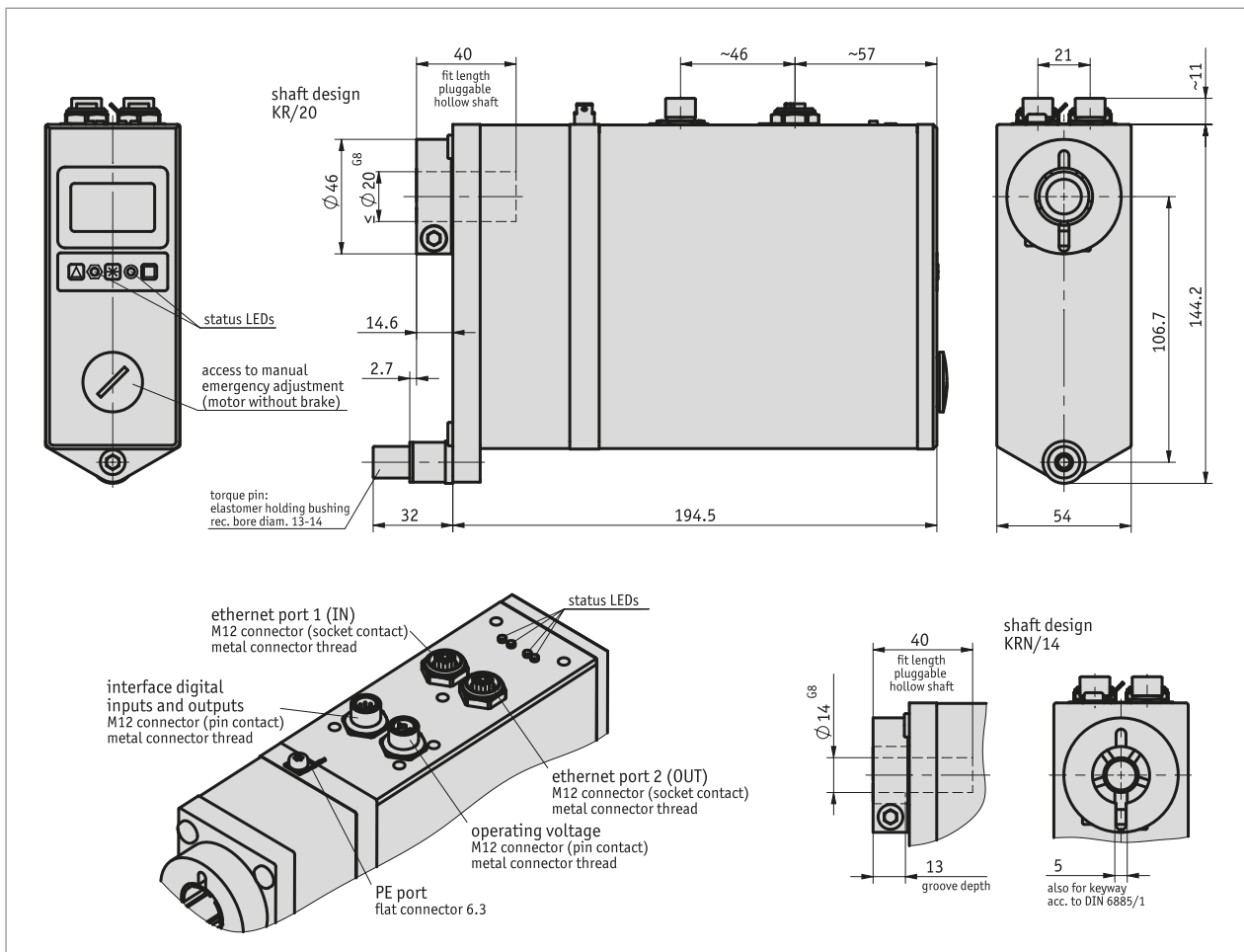


### Profile

- Stainless steel hollow shaft up to max.  $\varnothing 20$  mm, feather key groove at  $\varnothing 14$  mm
- " " "manual" " traveling without control unit by means of operator keys"
- Brushless 160 W, 24 V DC motor with long service life
- Integrated absolute position encoder on the output shaft
- Integrated positioning controller
- Integrated spring-operated brake (option)
- 2-line LCD for target and position value and operating keys
- Integrated Industrial-Ethernet-Fieldbus
- M12 component mounting technology
- Manual emergency adjustment with motor without brake
- Industry 4.0 ready



### Mechanical data

Feature	Technical data	Additional information
shaft	rustproof stainless steel	
Housing	anodized aluminum	
clamping ring	rustproof stainless steel	
Nominal torque/rated speed	6 Nm at 150 min <sup>-1</sup> (±10%)	i = 30.6
	10 Nm at 90 min <sup>-1</sup> (±10%)	i = 50
	14 Nm at 64 min <sup>-1</sup> (±10%)	i = 70.8
Operating mode	S3 intermittent operation: 25 % DC, 10 min.	EN 60034-1
Brake momentum	brake-induced stop momentum corresponds at least to the nominal torques of the individual transmissions, at ambient temperature 20 ° C	
Weight	~3.2 kg	

### Electrical data

Feature	Technical data	Additional information
Operating voltage	24 V DC ±10 %	reverse polarity protected, output stage + control unit
Power input	~160 W	
Parameter storage	10 <sup>6</sup> cycles	also applies to calibration operations
Rated current	6 A ±5 %	at rated torque/speed (final stage)
No-load current	350 mA ±20 %	(with transmission)
Display/display range	6-digit LCD 14-segment, ~8 mm high	decimal points, 2 rows, special characters (backlit LED red/white)
Status display	6 LEDs	
Keys	configuring, inching operation, setting of the IP address	
Bus connection	EIP-EtherNet/IP	
	EPN-PROFINET	
	ECT-EtherCAT	
	EPL-POWERLINK	
Type of connection	1x M12-plug connector (A-coded)	8-pole, 1x pin
	1x M12 plug connector (T-coded)	4-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	1024 Steps/revolution, shaft	singleturn / 10 bit
Travel range	4096 rotation(s)	12 bit multiturn
Failure rate	27.5 Year(s)	at 60° C (MTBF) according to SN 29500
Approval	UL	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 ... 80 °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 mounted (degree of protection not tested by UL)
Shock resistance	500 m/s <sup>2</sup> , 11 ms	EN 60068-2-27, half-sine, 3 axes (+/-), each 3 shocks
Vibration resistance	≤100 m/s <sup>2</sup> , 10 ... 55 Hz	EN 60068-2-6, 3 axes, each 10 cycles

### 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

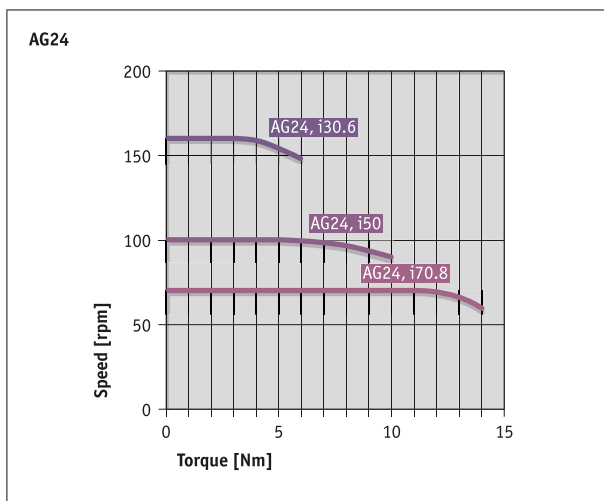
\* internally connected with GND of operating voltage

#### ■ 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
		Web server (EPN, EIP)

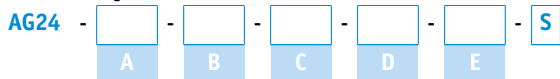
### Order


#### ■ Ordering table

Feature	Ordering data	Spezifikation	Additional information
Gear ratio	A 70.8	i = 70.8	


Feature	Ordering data	Spezifikation	Additional information
	50 30.6	i = 50 i = 30.6 others on request	
motor/brake	B 160W/MB 160W/OB	160 W EC motor with brake 160 W EC motor without brake	
Protection category	C IP54 IP65	IP54 IP65	
shaft design/diameter	D KR/20 KRN/14	clamping ring, ø20 mm Clamping ring and feather key groove, ø14 mm others on request	
interface/protocol	E EIP EPN ECT EPL	EtherNet/IP PROFINET EtherCAT POWERLINK	

### ■ Order key



 **Scope of delivery:**  
AG24, Quick Start Guide

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 **Accessories you can find:**

- Cable extension KV04S4 www.siko-global.com
- Cable extension KV08S2 www.siko-global.com
- Programming software ProTool DL www.siko-global.com
- Overview, Mating connector www.siko-global.com
- Mating connector, digital inputs/outputs, 8-pole, socket Order key 83525
- 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
- Mating connector, Operating voltage, 4-pole, socket Order key 89115