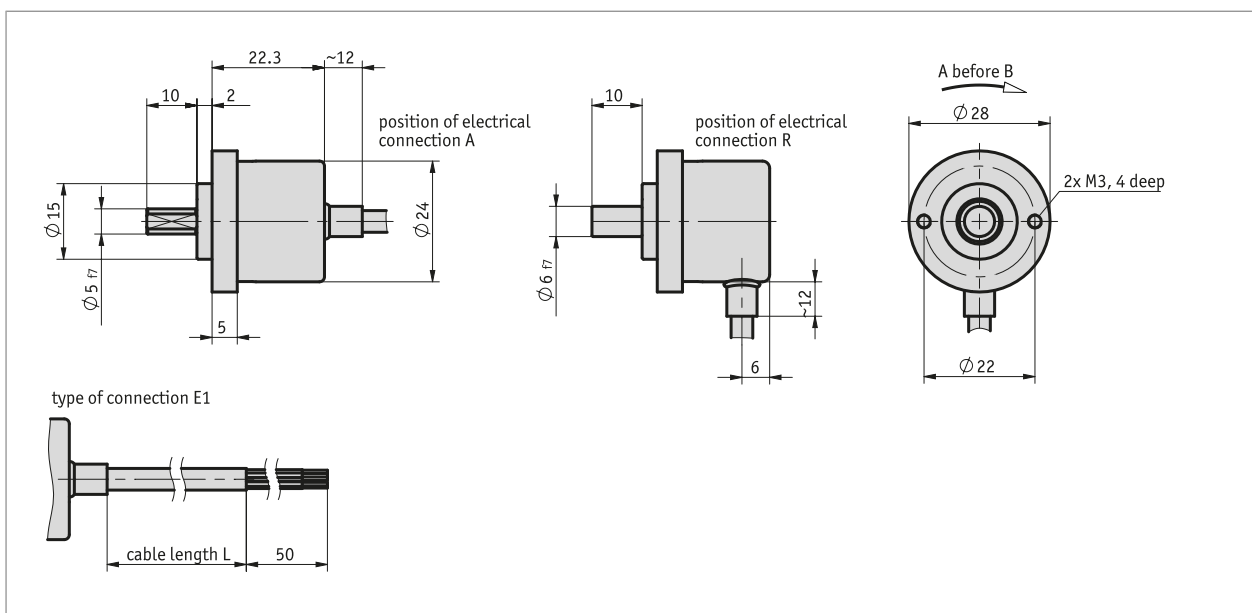


Profile

- Small design, \varnothing 28 mm
- Resolutions of max. 1024 pulses/revolution
- Robust bearing construction
- Short circuit-proof outputs



Mechanical data

Feature	Technical data	Additional information
shaft	rustproof stainless steel	
Housing	aluminum	
Speed	$\leq 12000 \text{ min}^{-1}$	
Moment of inertia	$\sim 0.1 \times 10^{-6} \text{ kgm}^2$	
Starting torque	0.01 Nm at 20 °C	
Shaft load rating	10 N	radial
	20 N	axial
Cable sheath	PVC	$\sim \varnothing 4.5 \text{ mm}$
Cable bending radius	25 mm	static
	75 mm	dynamic
Weight	$\sim 0.06 \text{ kg}$	

Electrical data

■ PP output circuit

Feature	Technical data	Additional information
Operating voltage	8 ... 30 V DC	reverse polarity protected, the power-supply unit corresponds to Class 2 (UL 1310)
Current consumption	50 mA, typical	without load
Output signal level high	$\geq U_B - 3.0 \text{ V}$	short-circuit proof
Output signal level low	$\leq 0.5 \text{ V}$	short-circuit proof
Pulse frequency	$\leq 160 \text{ kHz}$	
Load	$\pm 50 \text{ mA}$	max. adm.
Type of connection	open cable end	

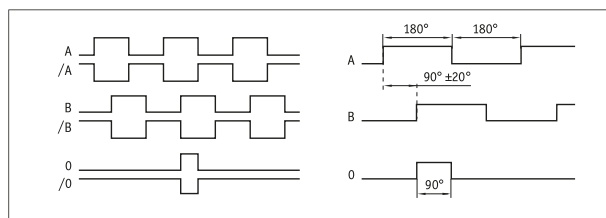
■ OP output circuit

Feature	Technical data	Additional information
Operating voltage	8 ... 30 V DC	reverse polarity protected, the power-supply unit corresponds to Class 2 (UL 1310)
Current consumption	50 mA, typical	without load
Output signal level high	$\geq U_B - 3.0 \text{ V}$	short-circuit proof
Output signal level low	$\leq 0.5 \text{ V}$	short-circuit proof
Pulse frequency	$\leq 160 \text{ kHz}$	
Load	$\pm 50 \text{ mA}$	max. adm.
Type of connection	open cable end	

■ LD5 output circuit

Feature	Technical data	Additional information
Operating voltage	5 V DC $\pm 5 \%$	reverse polarity protected, the power-supply unit corresponds to Class 2 (UL 1310)
Current consumption	$\leq 90 \text{ mA}$	without load
Output signal level high	$\geq 2.5 \text{ V}$	short-circuit proof
Output signal level low	$\leq 0.5 \text{ V}$	short-circuit proof
Pulse frequency	$\leq 300 \text{ kHz}$	
Load	$\pm 20 \text{ mA}$	max. adm.
Type of connection	open cable end	

■ Signal image



System data

Feature	Technical data	Additional information
Approval	UL	UL 61010-1, File No. E503367

■ Characteristics of functional safety

Feature	Technical data	Additional information
MTTFd	54.2 Year(s)	

Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-20 ... 85 °C	
EMC	EN 61000-6-2 EN 61000-6-3	interference resistance / immission emitted interference / emission
Safety regulations	UL 61010-1	indoor use, outdoor use possible, not intended for use involving direct exposure to UV light. Environment dry / wet. Protection class III as per EN 61140. Pollution degree 2 as per EN 61010. Maximum humidity 93% at 40 °C.
Protection category	IP65 (housing side) IP64 (shaft side)	EN 60529 (protection type not yet reviewed by UL) EN 60529 (protection type not yet reviewed by UL)
Shock resistance	1000 m/s ² , 6 ms	EN 60068-2-27
Vibration resistance	100 m/s ² , 10 ... 2000 Hz	EN 60068-2-6

pin assignment

Signal	Cable color PP	Cable color OP, LD
GND	white	white
+UB	brown	brown
A	green	green
/A		yellow
B	yellow	gray
/B		Pink
0	gray	blue
/0		red

Order

■ Ordering table

Feature	Ordering data	Spezifikation	Additional information
pulses/revolution	A ...	16, 36, 50, 100, 200, 250, 360, 400, 500, 512, 1000, 1024	
position of electrical connection	B A R	axial radial	
Cable length	C ...	00.5, 02.0, 03.0, 05.0, 08.0, 10.0, 15.0 in m	
Output circuit	D PP OP LD5	push-pull push-pull with inversion LineDriver, 5 V	
shaft diameter	E 5x10 6x10	ø5 mm, length 10 mm ø6 mm, length 10 mm	with area

■ Order key

IV2800 - **AB0** - **A** - **E1** - **B** - **C** - **F28** - **D** - **E** - **IP64**



Scope of delivery:
IV2800, Quick Start Guide



Accessories you can find:
Draw-wire encoder SG10
Draw-wire encoder SG21

www.siko-global.com
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