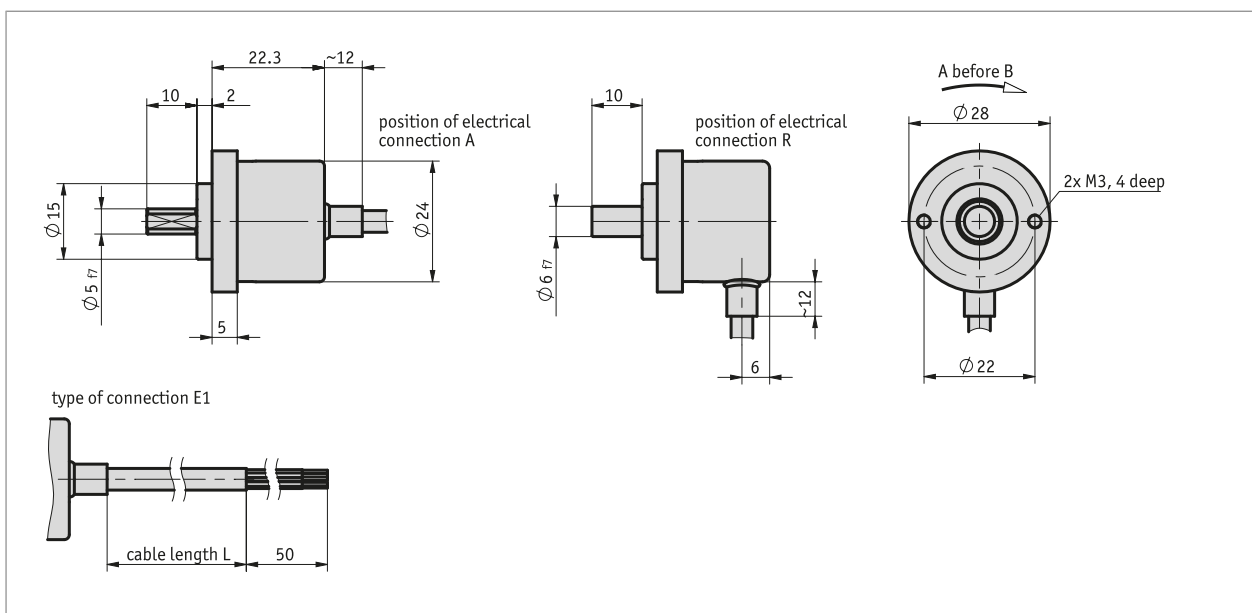


Profile

- 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 | |

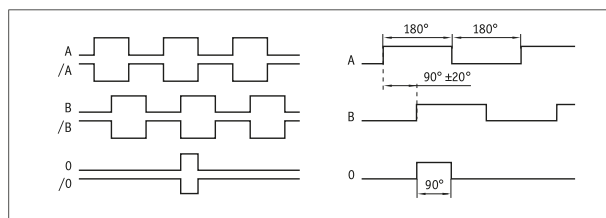
■ OP output circuit

| 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
Measurement display MA10/4
Measurement display MA48
Measurement display MA55

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