



Optical Encoder Kit

- Incremental Encoder 250 PPR
- Double Measuring Wheels
- Rotatable Support with Springs
- Standard M12 connector



SENSORS

APPLICATIONS

- Conveyor speed control
- Linear measurement
- Object positioning
- Stop or cut to length



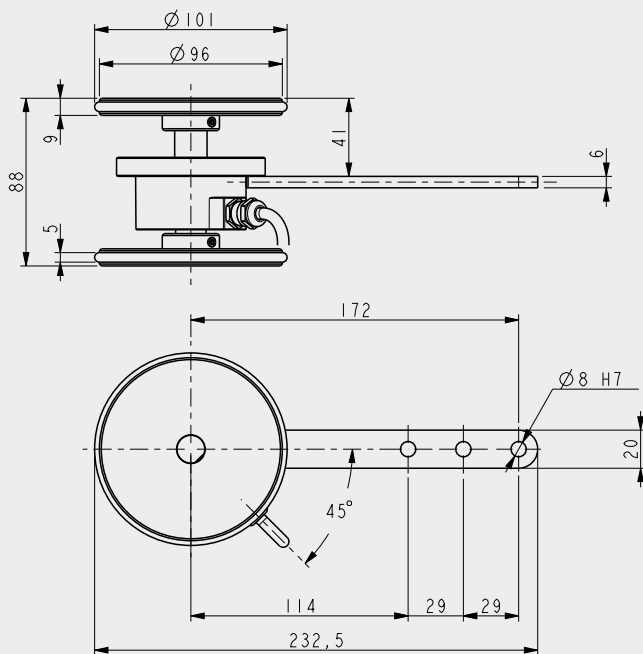
Electrical Specifications

| | | |
|-----------------|----------------|---|
| Supply voltage | | 5-30 Vdc |
| Supply current | | 70 mA max. (no load) |
| Output voltage | | High supply voltage – 2.5 Vdc / Low 1.5 Vdc max. |
| Output current | | 40 mA max. |
| Output circuit | | NPN PNP Push-pull and Line Driver |
| Output signal | | Single channel A |
| Output waveform | | 50/50 square wave with reduced jitter effect |
| Protection | | ESD, reverse voltage and short circuit |
| Resolution | Vdc | 250 pulses per revolution, 1.27mm (0.05") linear resolution |
| Rotation speed | PNP | 6000 rpm max. |
| | Counting freq. | 100 kHz max. |
| EMC rating | cable | According to EN61000-4-2 and EN61000-4-4 |
| | Light source | Ga-Al diodes (Life > 100000 hrs) |
| Connection | | M12 4-poles |

MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

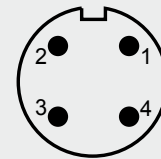
| | |
|-------------------|---|
| Kit weight | 1 kg |
| Bearing load | 100 N max. |
| Bearing type | 109 min. |
| Bearing material | ABEC 5 |
| Case material | Zamak die cast |
| Shaft material | Stainless steel non-magnetic UNI EN 4305 |
| Support material | Aluminium anticorrosion UNI EN AW-6082, anodized |
| Wheel material | Aluminium anticorrosion UNI EN AW-6082 with rubber O-ring |
| Wheel dimension | Ø 101mm, circumference 317.34mm (O-ring included) |
| Encoder IP rating | IP64 |
| Temperature | -25° to +85°C (operating/storage) 98% rH non condensing |

MECHANICAL DIMENSIONS



ELECTRICAL CONNECTIONS

M12 4-poles male connector
(encoder side view)



Pin 1 – brown wire: +5V 30Vdc
 Pin 2 – not connected
 Pin 3 – blue wire: 0Vdc
 Pin 4 – black wire: Output A

MODELS AND ACCESSORIES

| MODEL | DESCRIPTION | ORDER No. |
|------------------|---------------------------------------|-----------|
| OEK-4 | Encoder Kit PNP 250PPR M12+Spring | 95B081810 |
| ACCESSORY CABLES | | |
| CV-A1-22-B-03 | M12 connector with 3m shielded cable | 95ACC1480 |
| CV-A1-22-B-05 | M12 connector with 5m shielded cable | 95ACC1490 |
| CV-A1-22-B-10 | M12 connector with 10m shielded cable | 95ACC1500 |
| CV-A1-22-B-15 | M12 connector with 15m shielded cable | 95ACC2070 |
| CV-A1-22-B-25 | M12 connector with 25m shielded cable | 95ACC2090 |

Note: Accessory cables must be ordered separately