

ENX 22 EMT

Encoder Ø22 mm, 65 536 turns, multi-turn
131 072 steps, single-turn

NEW



ENX

| Key data | | EMT |
|--------------------------------|----|--------------|
| Multi-turn: max. no. of turns | | 65 536 |
| Multi-turn: resolution (bits) | | 16 |
| Single-turn: steps per turns | | 131 072 |
| Single-turn: resolution (bits) | | 17 |
| Encoder length L ¹ | mm | 23.5 |
| Ambient temperature | °C | -40 ... +105 |
| Weight | g | 25 |

| Selection criteria | | EMT |
|---|--|-----|
| Multi-turn detection | | ■ |
| Detection of speed and rotation direction | | ■ |
| Speed and position control | | ■ |
| Compact and robust design | | ■ |
| High resolution | | ■ |
| Economical | | ▲ |

■ Suitable ▲ Suitable to a limited extent ● Not suitable

| Specifications | | EMT |
|--|-------------------|------------------------------------|
| Supply voltage Vcc | V | 5 ±0.5 |
| Typical current draw | mA | 80 |
| Max. speed | rpm | 12 000 |
| Data encoding | | Binary |
| Min. clock frequency CLK (MHz) | | BiSS-C: 0.1 (tbv) SSI: 0.08 (tbv) |
| Max. clock frequency CLK (MHz) | | BiSS-C: 10 (tbv) SSI: 1 (tbv) |
| Min. timeout (µs) | | BiSS-C: 7..12.5 (tbv) SSI: 6 (tbv) |
| Setup time after Power On | s | Max. 1 |
| Moment of inertia of pulse disk | g/mm ² | ≤ 1.55 |
| Plug manufacturer JST | | Pin 1: GND |
| Plug type no. BMO8B-NSHSS -TBT | | Pin 2: Not connected |
| Matching connector type no. NSHR-08V-S | | Pin 3: Not connected |
| | | Pin 4: Data+ / SLO+ |
| | | Pin 5: Data- / SLO- |
| | | Pin 6: CLK- / MA- |
| | | Pin 7: CLK+ / MA+ |
| | | Pin 8 V _{cc} |
| | | Output signals: EIA standard RS422 |
| | | Output current per channel: ±20 mA |



| Configuration | | EMT |
|-----------------|--|-------------|
| Signal protocol | | BiSS-C, SSI |

| maxon modular system | Page | Dimensions of standard configuration | M 3:4 | Additional information |
|------------------------|---------|--------------------------------------|-------|---|
| maxon EC motor | | | | |
| IDX 56 M | 221 | | | <p>¹ The length shown here refers to the encoder. An additional intermediate plate is required for motor mounting. For more detailed information, see the combined dimensional drawing.</p> <p>EC motors: The angle value 0 is calibrated to the commutation phase of coil 1 (equates to Hall signal 1 for motors with Hall sensors, block commutation), see p. 46.</p> <p>Ordering information: For motors that cannot be configured online, the part numbers 711113 (BiSS-C) and 711112 (SSI) must be used when ordering.</p> <p>You can find more information in the maxon online shop under Downloads.</p> |
| IDX 56 L | 222 | | | |
| EC-4pole 22 | 247-248 | | | |
| EC-4pole 30 | 249-251 | | | |
| maxon IDX drive | | | | |
| IDX 56 M | 315 | | | |
| IDX 56 L | 316 | | | |

Connecting cable 300 mm for EPOS4 Aux Enc **708590**

xdrives.maxongroup.com