ENX 22 EMT Encoder ∅22 mm, 65 536 turns, Multi Turn 131 072 steps, Single Turn

Key data		EMT absolute differential
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	22.7
Ambient temperature	°C	-40...+105
Weight	g	25

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

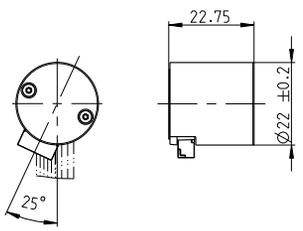
■ suitable ▲ suitable to a limited extent ● not suitable

Specifications		EMT absolute differential	
Supply voltage Vcc	V	5 ± 0.5	
Typical current draw	mA	90	
Max. speed	rpm	12 000	
Data encoding		Binary	
Min. clock frequency CLK	MHz	BiSS-C: 0.08	SSI: 0.3
Max. clock frequency CLK	MHz	BiSS-C: 5	SSI: 1
Timeout	µs	BiSS-C: 18	SSI: 7
Setup time after Power On	s	Max. 0.1	
Moment of inertia of pulse disk	gmm²	≤ 1.55	
Plug manufacturer JST Plug type no. BM08B-NSHSS -TBT Matching connector type no. NSHR-08V-S		Pin 1 GND Pin 2 do not connect Pin 3 do not connect 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 absolute differential
Signal protocol	BiSS-C, SSI

maxon modular system	Page
EC motor	
EC-4pole 22	283–284
EC-4pole 30	285/287
EC-i 30	294–297
EC-i 40	298–303
EC-i 52	304–305
DC motor	
DCX 22 S	109–110
DCX 22 L	111–112
DCX 26 L	113–114
DCX 32 L	115
DCX 35 L	116

Dimensions of standard configuration M 1:2



Connecting cable 300 mm for EPOS4 Aux Enc 708590

Additional information

[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.

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. 64.

Ordering information: For motors that cannot be configured online, the part numbers 711113 (BiSS-C) and 711112 (SSI) must be used when ordering.

You can find more information in the maxon online shop under downloads.

xdrives.maxongroup.com

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