

ENX 10 EASY / QUAD

Encoder Ø10 mm, 1...1024 CPT



ENX

Key Data	EASY Incremental Differential	QUAD Incremental
Number of channels	3	2
Max. counts per turn	1024	1
Encoder length L ⁴	mm 8.5	9.0
Ambient temperature	°C -40 ... +100	-40 ... +100
Weight	g <5	<5

Selection criteria	EASY Incremental Differential	QUAD Incremental
Speed and rotation direction detection	■	■
Speed and position control	■	▲
Compact and robust design	■	■
High resolution	■	●
Cost effective	■	■

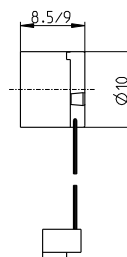
■ suitable ▲ suitable to a limited extent ● not suitable

Specifications	EASY Incremental Differential	QUAD Incremental
Supply voltage V _{cc}	V 5 ±0.5	3.0 – 24
Typical current draw	mA 22	5.5
Max. operating frequency	kHz 500	2
Max. Speed	rpm 30000	30000
Connector	10-pin 1.27 mm multipoint connector e.g. Samtec FFSD series	10-pin 2.54 mm multipoint connector ³ (IEC/EN 60603-13 / DIN41651)
	Pin 1 Do not connect ¹ (BiSS-C Data) Pin 2 V _{cc} Pin 3 GND Pin 4 Do not connect ¹ (BiSS-C CLK) Pin 5 Channel A Pin 6 Channel A Pin 7 Channel B Pin 8 Channel B Pin 9 Channel I Pin 10 Channel I Output signal: EIA-Standard RS 422 Output current per channel: ± 20 mA	Pin 1 Not connected Pin 2 V _{cc} Pin 3 Channel A Pin 4 Channel B Pin 5 GND Pin 6 Not connected Pin 7 Not connected Pin 8 Not connected Pin 9 Not connected Pin 10 Not connected Output signal: TTL compatible Output current per channel: + 10 mA



Configuration	EASY Incremental Differential	QUAD Incremental
Counts per turn ²	1 ... 1024	1
Electrical connection	Flat band cable / flexible cable FFC ³	Connector 6-pin, 10-pin
Cable length	mm 50, 100, 150, 200, 300, 500, 1000 / FFC ³ : 138 mm	50, 100, 150, 200, 300, 500, 1000
Alignment of cable outlet in relation to motor flange °	15	15

maxon Modular System	Page	Dimensions Standard Configuration	M 1:1	Notes
maxon DC motor				
DCX 10 S	EASY, QUAD 77			¹ Applying voltage to these pins can destroy the encoder.
DCX 10 L	EASY, QUAD 78			
DCX 12 S	EASY, QUAD 79			
DCX 12 L	EASY, QUAD 80			
DCX 14 L	EASY, QUAD 81–82			² maxon controllers require a resolution of at least 16 counts per turn.
DCX 16 S	EASY, QUAD 83–84			
DCX 16 L	EASY, QUAD 85–86			³ FFC cable: 0.5 mm pitch, possible matching connector Molex 52745-1097; adapter 506579 required for maxon controllers.
DCX 19 S	EASY, QUAD 87–88			
DCX 22 S	EASY, QUAD 89–90			⁴ For attachment to DCX motors: plus 2-4 mm thick intermediate plate.
DCX 22 L	EASY, QUAD 91–92			
DCX 26 L	EASY, QUAD 93–94			
DCX 32 L	EASY, QUAD 95			
DCX 35 L	EASY, QUAD 96			
DC-max 16 S	EASY, QUAD 99–100			
DC-max 22 S	EASY, QUAD 101–102			
DC-max 26 S	QUAD 103–104			



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