

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	■	■

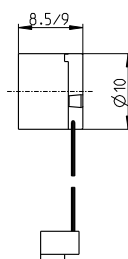
■ suitable ▲ suitable to a limited extent ● not suitable

Specifications	EASY incremental differential	QUAD incremental
Supply voltage V _{cc}	V 5 ±0.5	3.3 – 24
Typical current draw	mA 22	5.5
Max. operating frequency	kHz 1600	2
Max. Speed	rpm 30 000	30 000
Connector	10-pin 1.27 mm multipoint connector e.g. Samtec FFSD series 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	10-pin 2.54 mm multipoint connector (IEC/EN 60603-13 / DIN41651) 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

Modular system	Page	Dimensions standard configuration	M 1:1	Notes
DC motor				
DCX 10 S	99			¹ Applying voltage to these pins can destroy the encoder.
DCX 10 L	100			² maxon controllers require a resolution of at least 16 counts per turn.
DCX 12 S	101			³ FFC cable: 0.5 mm pitch, possible matching connector Molex 52745-1097; adapter 506579 required for maxon controllers.
DCX 12 L	102			⁴ For attachment to DCX motors: plus 2-4 mm thick intermediate plate.
DCX 14 L	103-104			⁵ No combination with 10 EASY, see page 42.
DCX 16 S	105-106			⁶ No combination with 10 QUAD, see page 46.
DCX 16 L	107-108			
DCX 19 S	109-110			
DCX 22 S	111-112			
DCX 22 L	113-114			
DCX 26 L	115-116			
DCX 32 L	117			
DCX 35 L	118			
DC-max 16 S	121			
DC-max 22 S	123			
DC-max 26 S ⁵	125-126			



Further technical details can be found in the product information in the online shop under Downloads.