ENX 6 MAG Encoder ⌀6 mm, 1...256 CPT

Key data		ENX 6 MAG incremental	ENX 6 MAG incremental, commutation signal
Number of channels		3	3
Max. counts per turn		256	256
Additional length at motor[4]	mm	6.2	0.0...2.1
Ambient temperature	°C	-40...+100	-40...+100
Weight	g	1	1

Selection criteria	ENX 6 MAG incremental	ENX 6 MAG incremental, commutation signal
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		ENX 6 MAG incremental	ENX 6 MAG incremental, commutation signal
Supply voltage V_{cc}	V	3.0...3.6	3.0...3.6
Typical current draw	mA	13	13
Max. operating frequency	kHz	500	500
Max. Speed	rpm	100 000	100 000
Connection[3]		FPC, 12 pole, pitch 0.5 mm	FPC, 12 pole, pitch 0.5 mm
		Pin 1 Motor+	Pin 1 W1
		Pin 2 Motor-	Pin 2 W2
		Pin 3 not connected	Pin 3 W3
		Pin 4 GND	Pin 4 GND
		Pin 5 V_{cc}	Pin 5 V_{cc}
		Pin 6 channel A	Pin 6 channel A
		Pin 7 channel B	Pin 7 channel B
		Pin 8 channel I	Pin 8 channel I
		Pin 9-12 do not connect[1]	Pin 9 H1
		Output signal: CMOS compatible	Pin 10 H2
		Output current per channel: ±4 mA	Pin 11 H3
			Pin 12 do not connect[1]
			Output signal: CMOS compatible
			Output current per channel: ±4 mA

Configuration	ENX 6 MAG incremental	ENX 6 MAG incremental, commutation signal
Counts per turn[2]	1...256	1...256

Modular system	Page
DC motor	
DCX 6 M	97
EC motor	
ECX SPEED 6 M	195–196
ECX PRIME 6 M	235

Dimensions standard version   M 1:1

Notes

[1] Applying voltage to these pins may destroy the encoder.

[2] maxon controllers require a resolution of at least 16 counts per turn.

[3] H1, index and angle zero are aligned with angle commutation zero (see p. 66).

[4] The additional length or total length of a motor-encoder combination can be found on the respective dimensional drawing.

Compatible connector:
Molex 52745-1297, TE 1-1734839-2
Adapter 498157 required for all maxon controllers

Please note: max. continuous current 0.5 A

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