

ENX 22 EASY INT Encoder Ø22 mm, 1...1024 CPT/4096 steps, Single Turn

Sterilizable, integrated into motor



Key data	EASY incremental differential	EASY Absolute
Number of channels	3	
Max. counts per turn	1024	
Steps per turn		4096
Resolution (bit single turn)		12
Encoder length L	mm -1.5 (integrated into motor)	-1.5 (integrated into motor)
Ambient temperature	°C -40...+125	-40...+125
Weight	g <5	<5

Selection criteria	EASY incremental differential	EASY Absolute
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	EASY Absolute
Supply voltage V_{cc}	V 5 ± 0.5	5 ± 0.5
Typical current draw	mA 22	22
Max. operating frequency	kHz 4000	
Max. Speed	rpm 200 000	200 000
Connector ²	10-pin 2.54 mm multipoint connector (IEC/EN 60603-13 / DIN41651) cable AWG 26	without connector
	<div> <div>Pin 1</div> <div>not connected</div> </div> <div> <div>Pin 2 (black)</div> <div>V_{cc}</div> </div> <div> <div>Pin 3 (brown)</div> <div>GND</div> </div> <div> <div>Pin 4</div> <div>not connected</div> </div> <div> <div>Pin 5 (red)</div> <div>channel A</div> </div> <div> <div>Pin 6 (orange)</div> <div>channel A</div> </div> <div> <div>Pin 7 (yellow)</div> <div>channel B</div> </div> <div> <div>Pin 8 (green)</div> <div>channel B</div> </div> <div> <div>Pin 9 (blue)</div> <div>channel I</div> </div> <div> <div>Pin 10 (violet)</div> <div>channel I</div> </div>	<div> <div>9 10</div> <div>2</div> <div>1</div> </div> <div> <div>cable AWG 26</div> <div>green Data</div> <div>black V_{cc}</div> <div>brown GND</div> <div>yellow CLK</div> </div>
	Output signal: EIA-Standard RS 422 Output current per channel: ± 20 mA	Output signal: CMOS compatible Output current per channel + 20 mA

Configuration	EASY incremental differential	EASY Absolute
Counts per turn ¹	1...1024	
Signalprotokoll		BiSS-C, SSI
Cable length	mm 200, 500	200, 500
Electric connection		cable length/pin connection/connector

Modular system	Page	Sterilization information	Notes
EC motor			
ECX SPEED 22 M	225-228	<div> <div>135°C</div> <div>SSS</div> </div> Typically 1000 autoclave cycles	¹ maxon controllers require a resolution of at least 16 counts per turn and commutation signals.
ECX SPEED 22 L	229-232		² H1, index and angle zero are aligned with angle commutation zero (see p. 66).
ECX TORQUE 22 M	243	Sterilization with steam Temperature $+134 \pm 4$ °C Compression pressure up to 2.3 bar Rel. humidity 100% Cycle length 18 minutes	
ECX TORQUE 22 L	244		
ECX TORQUE 22 XL	245		
		The connector is not sterilizable and needs to be removed first.	

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