

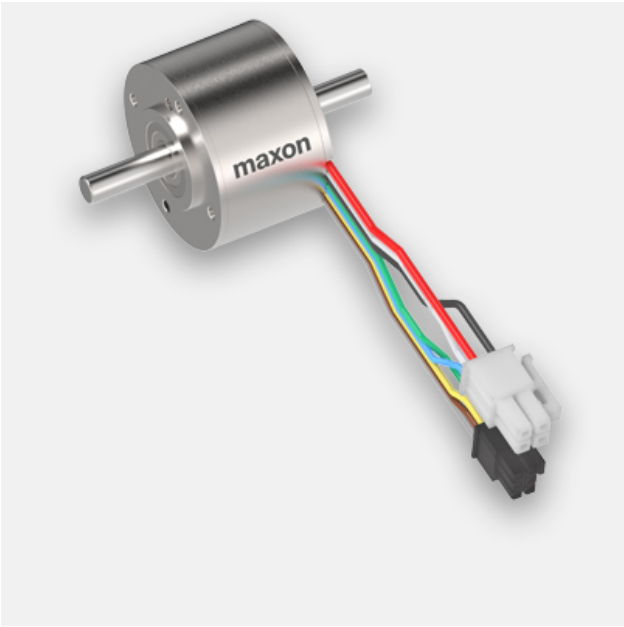
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DETAILS

EC-i 40 Ø40 mm, brushless, 50 Watt, with Hall sensors | High Torque

Part number 496653



PRICE SCALES	Quantity	Price per unit
Prices excluding VAT and shipping costs	1-4	€224.91
	5-19	€191.82
	20-49	€158.46
	from 50	On request

Start combination

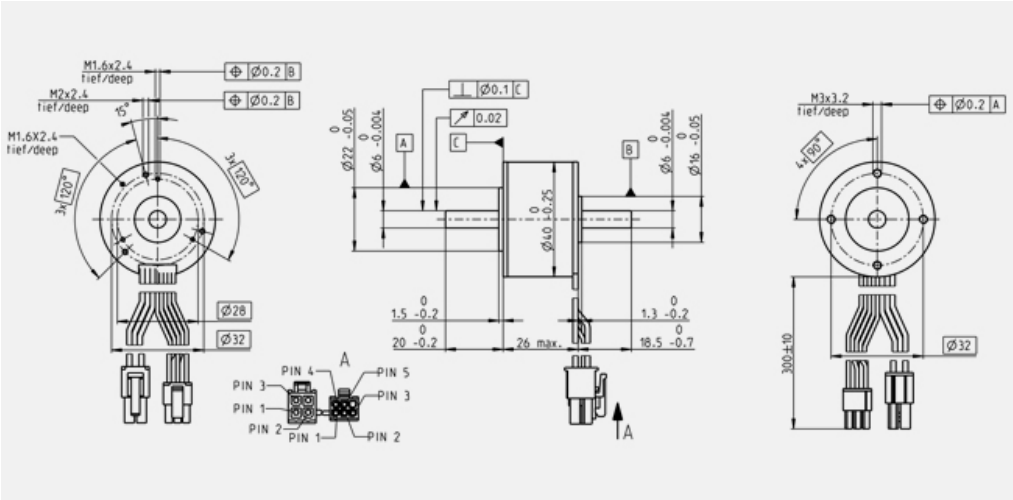
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Specifications	Description	Downloads
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Specifications

TECHNICAL ILLUSTRATIONS



Dimension drawing

Information: Drawings are not to scale.

VALUES AT NOMINAL VOLTAGE

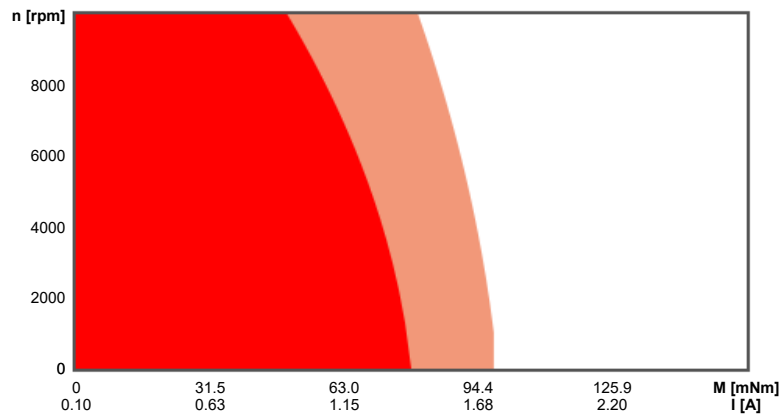
Nominal voltage	48 V
No load speed	7560 rpm
No load current	103 mA
Nominal speed	6310 rpm
Nominal torque (max. continuous torque)	73.3 mNm
Nominal current (max. continuous current)	1.18 A
Stall torque	1090 mNm
Stall current	18.2 A
Max. efficiency	85 %
CHARACTERISTICS	
Terminal resistance	2.63 $\Omega$
Terminal inductance	1.93 mH
Torque constant	59.6 mNm/A
Speed constant	160 rpm/V
Speed / torque gradient	7.07 rpm/mNm
Mechanical time constant	0.948 ms
Rotor inertia	12.8 gcm <sup>2</sup>
THERMAL DATA	
Thermal resistance housing-ambient	9.91 K/W
Thermal resistance winding-housing	3.77 K/W
Thermal time constant winding	23.8 s
Thermal time constant motor	892 s
Ambient temperature	-40...+100 °C
Max. winding temperature	+155 °C
MECHANICAL DATA	
Bearing type	ball bearings
Max. speed	10000 rpm
Axial play	0 mm, at radial load < 9 N
	0.15 mm, at radial load > 9 N
Max. axial load (dynamic)	7 N
Max. force for press fits (static)	87 N
(static, shaft supported)	6500 N
Max. radial load	21 N, 5 mm from flange
OTHER SPECIFICATIONS	
Number of pole pairs	7
Number of phases	3
Number of autoclave cycles	0

## PRODUCT

Weight

180 g

## OPERATING RANGE



Continuous operation range

Short term operation range

## Description

Because of their optimized magnetic core, the brushless EC-i motors with iron core windings offer a very high torque density and low cogging torque. The multi-pole internal rotor is extremely dynamic. Its solid design with a steel flange and housing make this motor suitable for a wide range of applications. Order your EC-i drive online now.

## Downloads

## CAD-FILES (STEP)

CAD model (STEP) (ZIP 235 KB)

Version 2017

## CATALOG PAGE

目录页 (chinesisch, PDF 398 KB)

Version 2020

Katalogseiten (deutsch, PDF 129 KB)

Version 2020

Catalog page (english, PDF 157 KB)

Version 2021

Catálogo Pagina (español, PDF 142 KB)

Version 2020

Page de catalogue (française, PDF 130 KB)

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カタログページ (日本語, PDF 388 KB)

Version 2020

## Videos

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