

RECOMMENDED

EC 45 flat Ø42.8 mm, brushless, 50 Watt, with Hall sensors

Part number 251601



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Price scales

Price per unit	1-4	€107.00
	5-19	€91.91
	20-49	€75.36
	from 50	On request

Prices excluding VAT and shipping costs

Order quantity

1

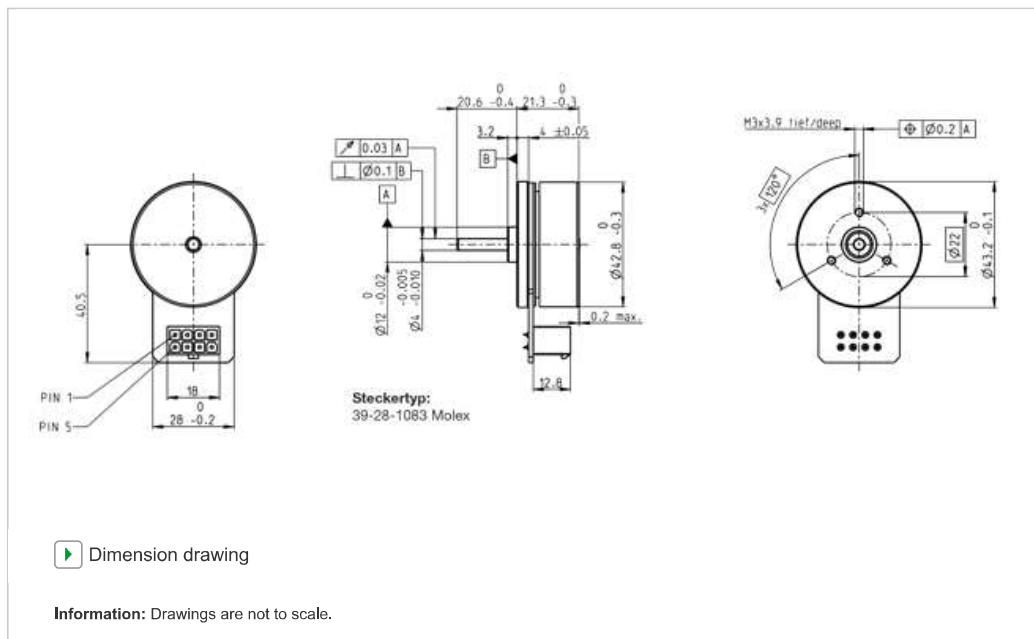
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Description

Thanks to their flat design, the **brushless EC flat motors** are exactly the right drive for many applications. The well-conceived, simple engineering allows mainly automated production which results in a favorable price.

Specifications

Technical illustrations



Values at nominal voltage

Nominal voltage	24 V
No load speed	6710 rpm
No load current	185 mA
Nominal speed	5240 rpm
Nominal torque (max. continuous torque)	83.4 mNm
Nominal current (max. continuous current)	2.33 A
Stall torque	780 mNm
Stall current	23.3 A
Max. efficiency	83 %

Characteristics

Terminal resistance	1.03 Ω
Terminal inductance	0.572 mH
Torque constant	33.5 mNm/A
Speed constant	285 rpm/V
Speed / torque gradient	8.77 rpm/mNm
Mechanical time constant	12.4 ms
Rotor inertia	135 gcm ²

Thermal data

Thermal resistance housing-ambient	4.53 K/W
Thermal resistance winding-housing	4.75 K/W
Thermal time constant winding	17.7 s
Thermal time constant motor	227 s
Ambient temperature	-40...+100 °C
Max. winding temperature	+125 °C
Mechanical data	
Bearing type	ball bearings
Max. speed	10000 rpm
Axial play	0 - 0.14 mm
Max. axial load (dynamic)	3.8 N
Max. force for press fits (static)	53 N
(static, shaft supported)	1000 N
Max. radial load	20 N, 5 mm from flange
Other specifications	
Number of pole pairs	8
Number of phases	3
Number of autoclave cycles	0
Product	
Weight	110 g

Downloads

 **CAD-Files (STEP)**
[> CAD drawing \(STEP\) \(ZIP 66 KB\)](#)

Version 2017

 **Catalog page**
[> Katalogseiten \(deutsch, PDF 88 KB\)](#)

Version 2018

[> Catalog page \(english, PDF 90 KB\)](#)

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[> カタログページ \(日本語, PDF 107 KB\)](#)

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