

ECX FLAT 22 S Ø22 mm, brushless, with integrated electronics

High Torque, 4-Q-Speed Controller

Key data: 16.7 W, 13.3 mNm, 14 000 rpm

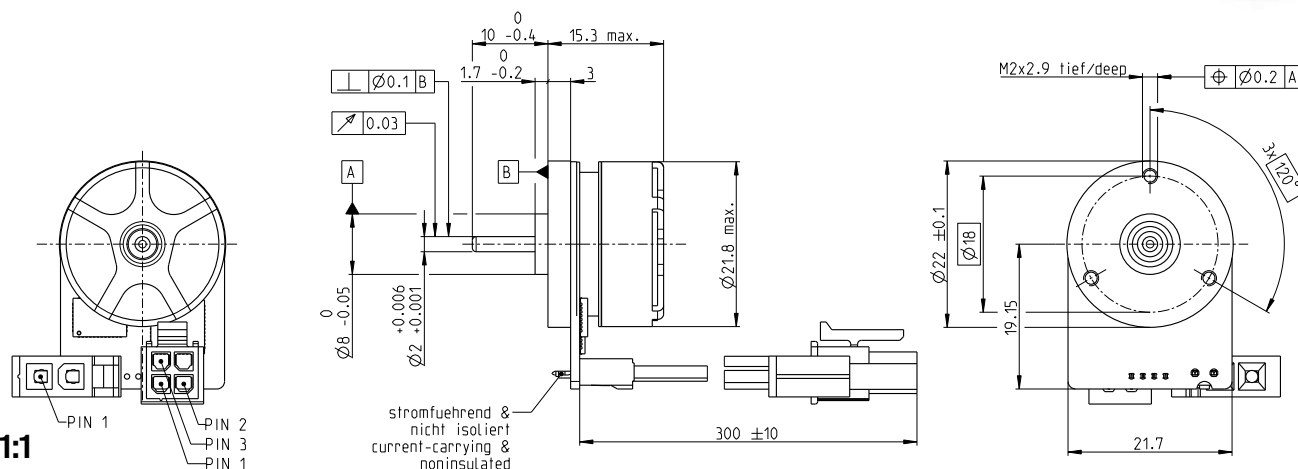
NEW

I/O ↔



ECX FLAT

M 1:1



Drive data

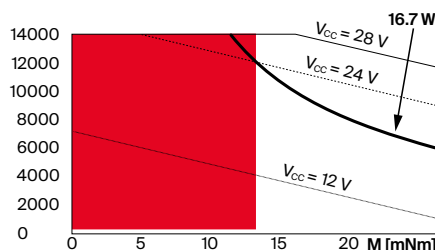
1_	Nominal power supply voltage	V	24
2_	Nominal speed	rpm	12 000
3_	Nominal torque at 25 °C	mNm	13.3
5_	Nominal supply current at 25 °C	A	1.25
7_	Maximum speed at nominal voltage	rpm	14 000
8_	Maximum permissible drive speed	rpm	14 000
9_	Maximum torque (short-time)	mNm	30.8
10_	Maximum supply current (short-time)	A	2.134
11_	Rotor inertia of the drive	gcm ²	4.84
12_	Nominal supply voltage + V _{CC}	V	8...28
13_	Mechanical time constant	ms	6.82
	Speed constant	rpm/V	682
37_	Speed set value input	V	0...10
38_	Scale speed set value input	rpm/V	1000
	Min. permissible drive speed	rpm	300
40_	Max. acceleration	rpm/s	20 000

Thermal data

14_	Thermal resistance housing-ambient	K/W	8.48
15_	Thermal resistance winding-housing	K/W	14
16_	Thermal time constant winding	s	11.9
17_	Thermal time constant drive	s	20.3
18_	Ambient temperature	°C	-25...+85

Operating range

n [rpm] 24-V-system



- Continuous operation
- Continuous operation with reduced thermal resistance R_{th2} 50%
- Short term operation

Mechanical data

19_	Axial play at axial load	< 4 N	0 mm
		> 4 N	0.14 mm
	Direction of force		Pull
20_	Radial play	preloaded	
21_	Max. axial load (dynamic)	N	1.8
22_	Max. force for press fits (static)	N	26
	(shaft supported)	N	200
23_	Max. radial load [mm from flange]	N	3.5 [5]

Other specifications

24_	Weight of the drive	g	27
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Drive data in the table is nominal data.

Protective functions

Overload protection, blockage protection, inverse-polarity protection, thermal overload protection, low/high voltage cut-off

Connection, Supply (Cable AWG 22)

red Pin 1 +V_{CC} 8...28 VDC

black Pin 2 GND

Connector Article number

Molex 39-01-2020

Connection, I/O's (Cable AWG 28)

white Pin 1 I/O 1

green Pin 2 I/O 2

grey Pin 3 I/O 3

brown Pin 4 I/O 4

Connector Article number

Molex 43025-0400

Modular system

Gear	Stages [opt.]
390_GPX 22 A/C	1-4
391_GPX 22 LN/LZ	1-4
392_GPX 22 HP	2-4
394_GPX 22 UP	1-4
396_GPX 26 A/C	3
397_GPX 26 LN/LZ	3
398_GPX 26 HP	4

Sensor integrated

Details on catalog page 44

Motor Control integrated

Configuration

Shaft, front: Length/shoulder/faces

Shaft, rear: Length/shoulder

Motor controller: I/O functionality/system parameters