

## Your configured drive

Part number\*: B7744E742B5F Revision 1

**maxon motor**

**driven by precision**

Motor - DC-max22S GB SL 12V

maxon motor worldwide

[http://www.maxonmotor.com/maxon/view/content/contact\\_page](http://www.maxonmotor.com/maxon/view/content/contact_page)

E-Mail: [e-shop@maxonmotor.com](mailto:e-shop@maxonmotor.com)

Internet: [www.maxonmotor.com](http://www.maxonmotor.com)

After an order is placed at the e-shop, the product is manufactured in Switzerland and delivered after 11 working days.  
General Terms and Conditions: [http://www.maxonmotor.com/maxon/view/content/terms\\_and\\_conditions\\_page](http://www.maxonmotor.com/maxon/view/content/terms_and_conditions_page)

### Interactive 3D model

Click on the icon to activate your 3D model



Your configuration can be viewed here:

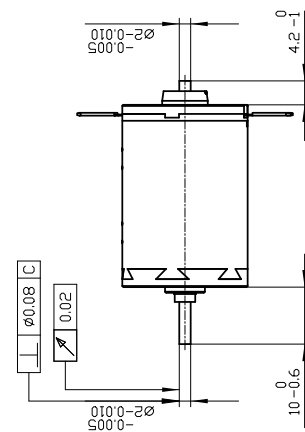
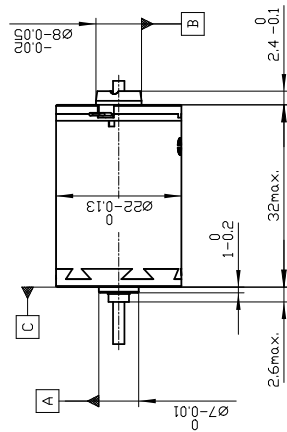
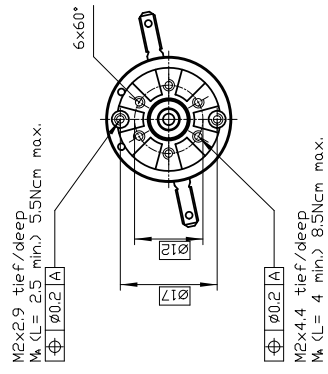
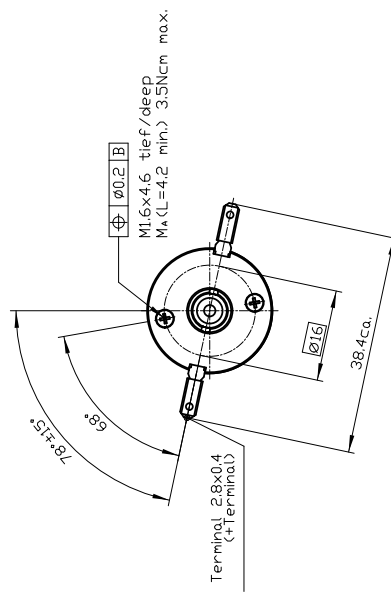
<http://www.maxonmotor.co.uk/maxon/view/configurator/?ConfigID=B7744E742B5F>

\*If the link doesn't work, you can open your configuration with the part number from the catalog.

### Attachments / CAD files

Please double click with left mouse button on a pushpin symbol to open a file. You could also save a file when you click the symbol with the right mouse button.

B7744E742B5F.stp (STP AP 214)



## Summary of your selected configuration

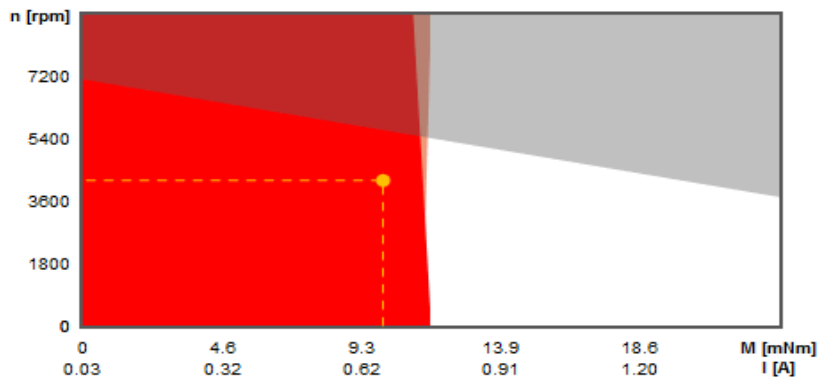
### Motor - DC-max22S GB SL 12V

Total weight of the drive: 47 g

#### Motor: DC-max22S GB SL 12V

Commutation	Graphite brushes
Nominal voltage	12 V
Motor bearings	Sintered sleeve bearings

## Operating range



- Continuous operation range
- Short-term operating range
- Continuous operation range at reduced thermal resistance  $R_{th2}$  50%
- Not recommended range

## Motor - DC-max22S GB SL 12V



### Values at nominal voltage

Nominal voltage	12 V
No load speed	7140 rpm
No load current	29.5 mA
Nominal speed	5260 rpm
Nominal torque (max. continuous torque)	12.5 mNm
Nominal current (max. continuous current)	0.818 A
Stall torque	49.4 mNm
Stall current	3.14 A
Max. efficiency	80.3 %

### Characteristics

Max. output power	10.4 W
Terminal resistance	3.83 Ohm
Terminal inductance	0.274 mH
Torque constant	15.8 mNm/A
Speed constant	606 rpm/V
Speed/torque gradient	147 rpm/mNm
Mechanical time constant	8.57 ms
Rotor inertia	5.57 gcm <sup>2</sup>

### Thermal data

Thermal resistance housing-ambient	20 K/W
Thermal resistance winding-housing	6 K/W
Thermal time constant of the winding	17.2 s
Thermal time constant of the motor	538 s
Ambient temperature	-30..85 °C
Max. winding temperature	125 °C

**Mechanical data**

Max. permissible speed	9000 rpm
Min. axial play	0.05 mm
Max. axial play	0.15 mm
Radial backlash	0.012
Max. axial load (dynamic)	1 N
Max. force for press fits (static)	80 N
Max. radial load 5 mm from flange	2.8 N

**Further specifications**

Number of pole pairs	1
Number of commutator segments	9
Weight	47 g
Number of autoclave cycles	0
Typical noise level	55 dBA

Information about motor data: [http://www.maxonmotor.com/medias/CMS\\_Downloads/DIVERSES/12\\_137\\_EN.pdf](http://www.maxonmotor.com/medias/CMS_Downloads/DIVERSES/12_137_EN.pdf)