

Your configured drive

Part number*: B7744E73F733 Revision 2

maxon motor

driven by precision

Motor - DC-max22S GB SL 12V
Planetary gearhead - GPX22 C 243:1

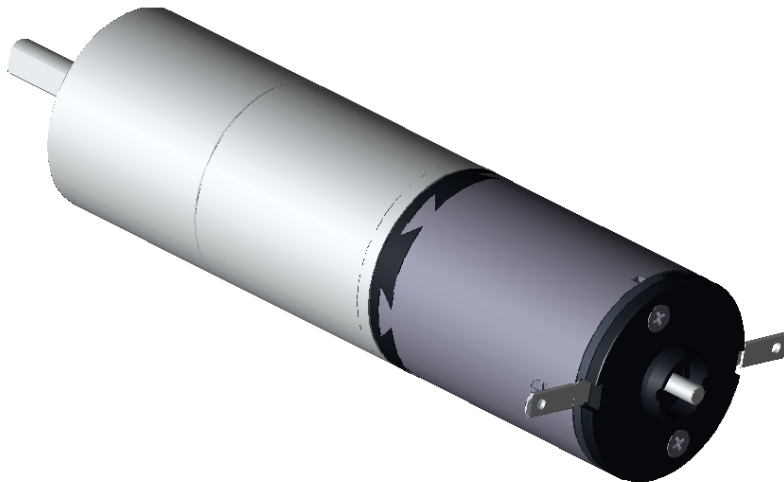
maxon motor worldwide
http://www.maxonmotor.com/maxon/view/content/contact_page

E-Mail: e-shop@maxonmotor.com
Internet: 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

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=B7744E73F733>

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

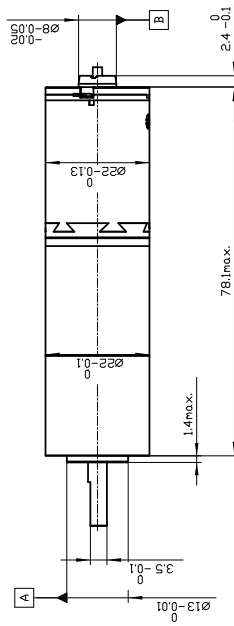
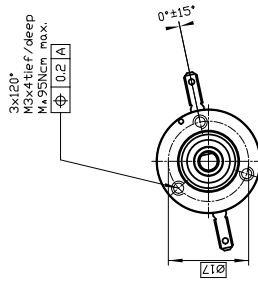
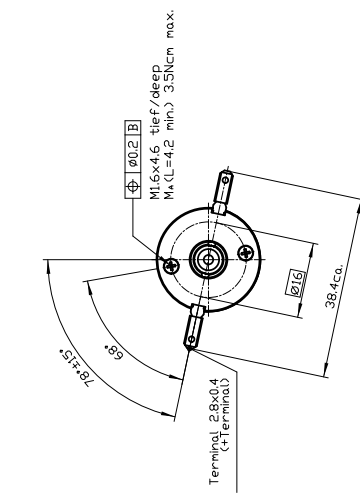
Attachments / CAD files

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.

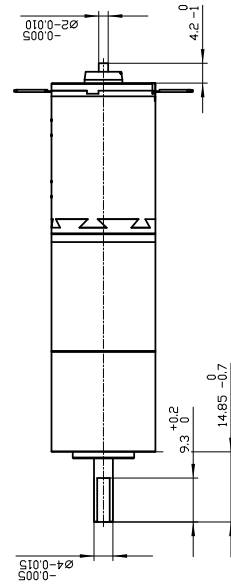
B7744E73F733.stp (STP AP 214)

**Motor - DC-max22S GB SL 12V
Planetary gearhead - GPX22 C 243:1**

Drawings are not to scale!



Durchmesser über Schweisstellen 22.2 max.
Diameter at welds 22.2 max.



Summary of your selected configuration

Motor - DC-max22S GB SL 12V
Planetary gearhead - GPX22 C 243:1

Total weight of the drive: 142 g

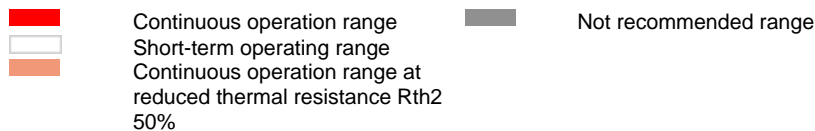
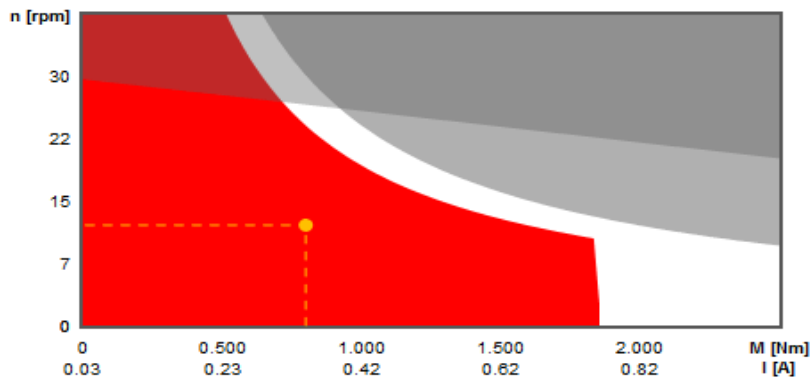
Motor: DC-max22S GB SL 12V

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

Gearhead GPX22 C 243:1

Gearhead type	Ceramic version
Reduction	243:1
Number of stages	4

Operating 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 ²

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

Planetary gearhead - GPX22 C 243:1



Gearhead data

Reduction	243:1
Absolute reduction	31640625/130321
Max. transmittable power (continuous)	2 W
Max. transmittable power (intermittent)	2.5 W
Number of stages	4
Max. continuous torque	2 Nm
Max. intermittent torque	2.5 Nm
Direction of rotation, drive to output	=
Max. efficiency	66 %
Weight	95 g
Average backlash no-load	1.4 degree
Mass inertia	0.56 gcm ²
Gearhead length	42.9 mm

Technical data

Output shaft bearing	Ball bearings
Gearhead type	GPX
Max. radial play	0.2 mm
mm from flange	10 mm
Min. axial play	0 mm
Max. axial play	0.2 mm
Max. permissible radial load	120 N
mm from flange	10 mm
Max. axial load (dynamic)	40 N
Max. force for press fits	100 N
Max. continuous input speed	12000 rpm
Max. intermittent input speed	15000 rpm
Min. recommended temperature range	-40..100 °C
Number of autoclave cycles	0

Information about gearhead data: http://www.maxonmotor.com/medias/CMS_Downloads/DIVERSES/12_203_EN.pdf