

Your configured drive

Part number*: B7744E80C8AB Revision 3

maxon motor

driven by precision

Motor - DCX32L GB KL 24V
Planetary gearhead - GPX32HP 21:1

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.
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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=B7744E80C8AB>

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

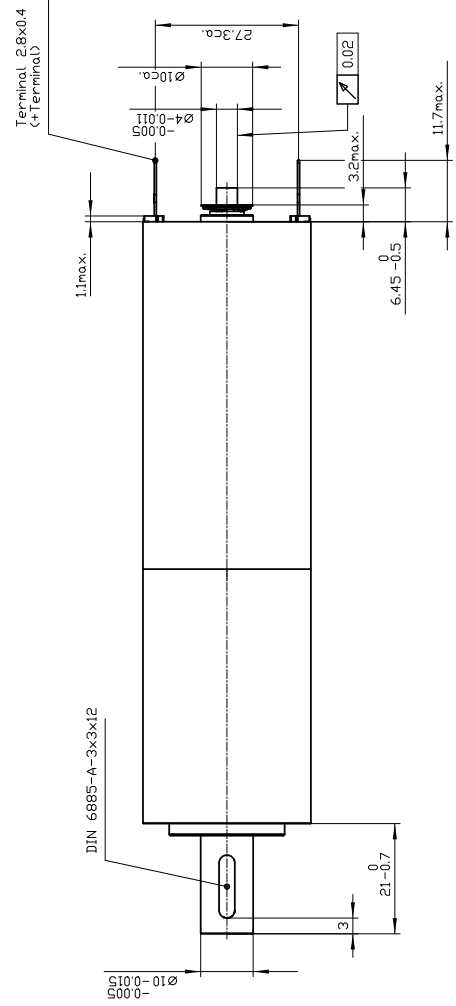
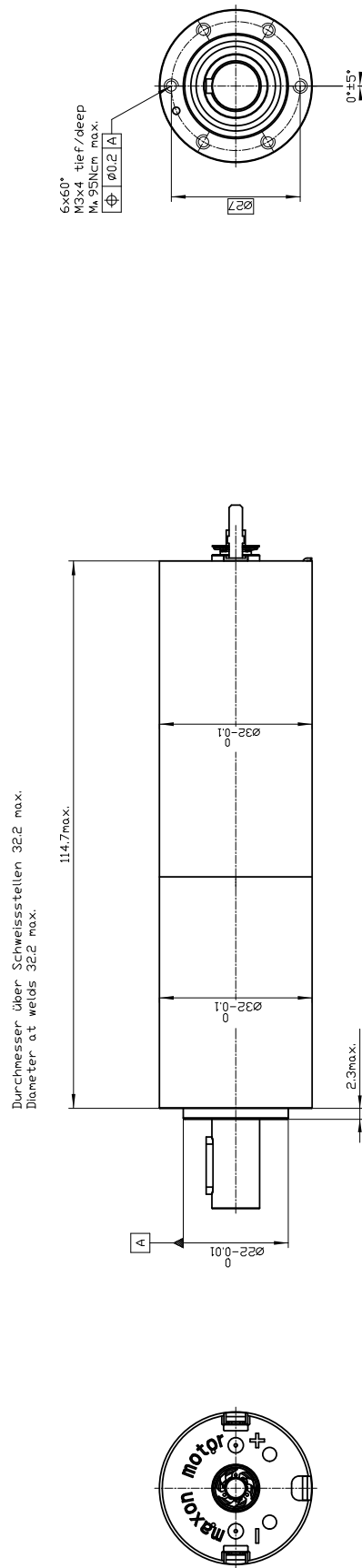
Attachments / CAD files

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.

B7744E80C8AB.stp (STP AP 214)

**Motor - DCX32L GB KL 24V
Planetary gearhead - GPX32HP 21:1**

Drawings are not to scale!



Summary of your selected configuration

Motor - DCX32L GB KL 24V

Planetary gearhead - GPX32HP 21:1

Total weight of the drive: 546 g

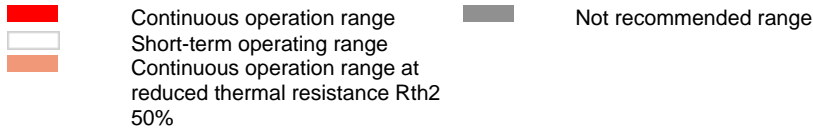
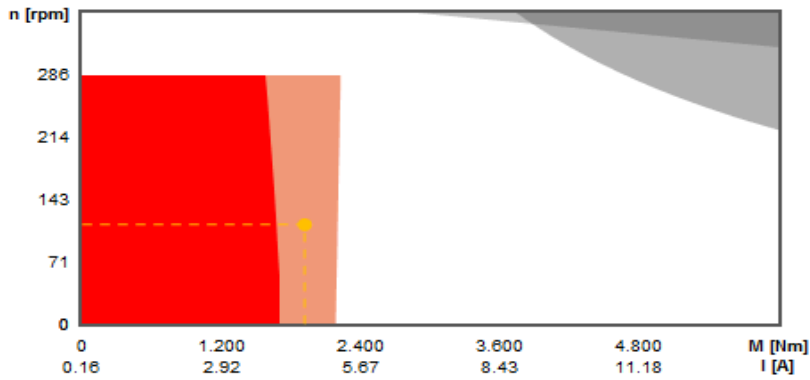
Motor: DCX32L GB KL 24V

Commutation	Graphite brushes
Nominal voltage	24 V
Motor bearings	Preloaded ball bearing

Gearhead GPX32HP 21:1

Gearhead type	High Power
Reduction	21:1
Number of stages	2

Operating range



Motor - DCX32L GB KL 24V



Values at nominal voltage

Nominal voltage	24 V
No load speed	8270 rpm
No load current	164 mA
Nominal speed	7710 rpm
Nominal torque (max. continuous torque)	108 mNm
Nominal current (max. continuous current)	4.12 A
Stall torque	1980 mNm
Stall current	72.5 A
Max. efficiency	88.6 %

Characteristics

Max. output power	102 W
Terminal resistance	0.331 Ohm
Terminal inductance	0.103 mH
Torque constant	27.3 mNm/A
Speed constant	350 rpm/V
Speed/torque gradient	4.24 rpm/mNm
Mechanical time constant	3.24 ms
Rotor inertia	72.8 gcm ²

Thermal data

Thermal resistance housing-ambient	7.28 K/W
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Thermal resistance winding-housing	2.3 K/W
Thermal time constant of the winding	42.2 s
Thermal time constant of the motor	837 s
Ambient temperature	-40..100 °C
Max. winding temperature	155 °C

Mechanical data

Max. permissible speed	11300 rpm
Min. axial play	0 mm
Max. axial play	0.1 mm
Radial backlash	0.02
Max. axial load (dynamic)	7 N
Max. force for press fits (static)	22.6 N
Max. radial load 5 mm from flange	65.3 N

Further specifications

Number of pole pairs	1
Number of commutator segments	11
Weight	305.5 g
Number of autoclave cycles	0
Typical noise level	47 dBA

Information about motor data: http://www.maxonmotor.com/medias/CMS_Downloads/DIVERSES/12_137_EN.pdf

Planetary gearhead - GPX32HP 21:1



Gearhead data

Reduction	21:1
Absolute reduction	5175/247
Max. transmittable power (continuous)	110 W
Max. transmittable power (intermittent)	140 W
Number of stages	2
Max. continuous torque	4 Nm
Max. intermittent torque	6 Nm
Direction of rotation, drive to output	=
Max. efficiency	76 %
Weight	240 g
Average backlash no-load	0.7 degree
Mass inertia	13.075 gcm ²
Gearhead length	46.3 mm

Technical data

Output shaft bearing	Ball bearings
Gearhead type	GPX
Max. radial play	0.1 mm
mm from flange	10 mm
Min. axial play	0 mm
Max. axial play	0.1 mm
Max. permissible radial load	200 N
mm from flange	10 mm
Max. axial load (dynamic)	110 N
Max. force for press fits	200 N
Max. continuous input speed	6000 rpm
Max. intermittent input speed	7500 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