

# Your maxon drive

consists of:

Planetary Gearhead GP 42 C Ø42 mm, 3 - 15 Nm, Ceramic Version

Part number 203126

RE 40 Ø40 mm, Graphite Brushes, 150 Watt

Part number 148866

#### **Your Contact**

maxon motor worldwide

http://www.maxongroup.com:80/maxon/view/content/contact\_page

E-Mail: info@maxongroup.com

Internet: http://www.maxongroup.com:80

retail price:

 0-4 Pieces
 €660.46

 5-19 Pieces
 €551.55

 20-49 Pieces
 €437.46

 from 50 Pieces
 On Request

Terms and conditions

# Planetary Gearhead GP 42 C Ø42 mm, 3 - 15 Nm, Ceramic Version

Part number 203126



# **General information**

Gearhead type	GP
Outer diameter	42 mm
Version	Ceramic version

### **Gearhead Data**

Reduction	113:1
Absolute reduction	338/3
Max. motor shaft diameter	8 mm
Number of stages	3
Max. continuous torque	15 Nm
Max. intermittent torque	22 Nm
Direction of rotation, drive to output	=
Max. efficiency	72 %
Average backlash no load	1 °
Mass inertia	9.4 gcm <sup>2</sup>
Gearhead length (L1)	70 mm
Max. transmittable power (continuous)	110 W
Max. transmittable power (intermittent)	160 W

# **Technical Data**

Bearing at output	ball bearing
Radial play	max. 0.06 mm, 12 mm from flange
Axial play	max. 0.3 mm
Max. radial load	360 N, 12 mm from flange
Max. axial load (dynamic)	150 N
Max. force for press fits	300 N
Max. continuous input speed	8000 rpm
Max. intermittent input speed	8000 rpm
Recommended temperature range	-40+100 °C
Number of autoclave cycles	0

### Product

Weight 460 g

# RE 40 Ø40 mm, Graphite Brushes, 150 Watt

Part number 148866



Values	at nominal	voltage
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Nominal voltage	12 V
No load speed	6920 rpm
No load current	241 mA
Nominal speed	6380 rpm
Nominal torque (max. continuous torque)	94.9 mNm
Nominal current (max. continuous current)	6 A
Stall torque	1720 mNm
Stall current	105 A
Max. efficiency	88 %

### Characteristics

Terminal resistance	$\mid$ 0.115 $_{\Omega}$
Terminal inductance	0.0245 mH
Torque constant	16.4 mNm/A
Speed constant	581 rpm/V
Speed / torque gradient	4.05 rpm/mNm
Mechanical time constant	5.89 ms
Rotor inertia	139 gcm <sup>2</sup>

# Thermal data

Thermal resistance housing-ambient	4.65 K/W
Thermal resistance winding-housing	1.93 K/W
Thermal time constant winding	41.9 s
Thermal time constant motor	809 s
Ambient temperature	-30+100 °C
Max. winding temperature	+155 °C

# Mechanical data

Bearing type	Waelzlager
Max. speed	12000 rpm
Axial play	0.05 - 0.15 mm
Radial play	0.025 mm
Max. axial load (dynamic)	5.6 N
Max. force for press fits (static)	110 N
(static, shaft supported)	1200 N
Max. radial load	28 N, 5 mm from flange

### Other specifications

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Number of pole pairs	1
Number of commutator segments	13
Number of autoclave cycles	0

### Product

Weight	480 g