### Your maxon drive

consists of:

## Planetary Gearhead GP 52 C Ø52 mm, 4 - 30 Nm, Ceramic Version

Part number 223085

## EC 90 flat Ø90 mm, brushless, 90 Watt, with Hall sensors

Part number 323772

#### **Your Contact**

maxon motor worldwide

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

E-Mail: info@maxonmotor.com

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

retail price:

 1-4 Pieces
 USD 696.01

 5-19 Pieces
 USD 604.13

 20-49 Pieces
 USD 501.01

 from 50 Pieces
 On Request

Terms and conditions

# Planetary Gearhead GP 52 C Ø52 mm, 4 - 30 Nm, Ceramic Version

Part number 223085

General information	
Gearhead type	GP
Outer diameter	52 mm
Version	C
Gearhead Data	
Gearrieau Data	
Reduction	19:1
Absolute reduction	169/9
Max. motor shaft diameter	8 mm
Number of stages	2
Max. continuous torque	15 Nm
Max. intermittent torque	22.5 Nm
Direction of rotation, drive to output	=
Max. efficiency	83 %
Average backlash no load	0.8 °
Mass inertia	9.5 gcm <sup>2</sup>
Gearhead length (L1)	65 mm
Max. transmittable power (continuous)	500 W
Max. transmittable power (intermittent)	740 W
Technical Data	
Radial play	max. 0.06 mm, 12 mm from flange
Axial play	0 - 0.3 mm
Max. radial load	700 N, 12 mm from flange
Max. axial load (dynamic)	200 N
Max. force for press fits	500 N
Max. continuous input speed	6000 rpm
Max. intermittent input speed	6000 rpm -15+80 °C
Recommended temperature range	
Extended temperature range Number of autoclave cycles	-40+100 °C
Number of autoclave cycles	U
Product	
Weight	620 g

# EC 90 flat Ø90 mm, brushless, 90 Watt, with Hall sensors

Part number 323772

Values at no	ominal voltage		
	Nominal voltage	24 V	
	No load speed	3190 rpm	
	No load current	538 mA	
	Nominal speed	2590 rpm	
	Nominal torque (max. continuous torque)	444 mNm	
	Nominal current (max. continuous current)	6.06 A	
	Stall torque	4940 mNm	
	Stall current	70 A	
	Max. efficiency	83 %	
Characteris	tics		
	Terminal resistance	0.343 <sub>O</sub>	
	Terminal inductance	0.264 mH	
	Torque constant	70.5 mNm/A	
	Speed constant	135 rpm/V	
	Speed / torque gradient	0.659 rpm/mNm	
	Mechanical time constant	21.1 ms	
	Rotor inertia	3060 gcm <sup>2</sup>	
		g	
Thermal dat	a		
	Thermal resistance housing-ambient	1.57 K/W	
	Thermal resistance winding-housing	2.7 K/W	
	Thermal time constant winding	34.1 s	
	Thermal time constant motor	234 s	
	Ambient temperature	-40+100 °C	
	Max. winding temperature	+125 °C	
Mechanical data			
	Bearing type	ball bearings	
	Max. speed	5000 rpm	
	Axial play	0.14 mm	
	Max. axial load (dynamic)	12 N	
	Max. force for press fits (static)	180 N	
	(static, shaft supported)	8000 N	
	Max. radial load	68 N, 5 mm from flange	е
Other speci	fications		
Other specif	indulona		
	Number of pole pairs	12	
	Number of phases	3	
	Number of autoclave cycles	0	
Product			
	Weight	600 g	