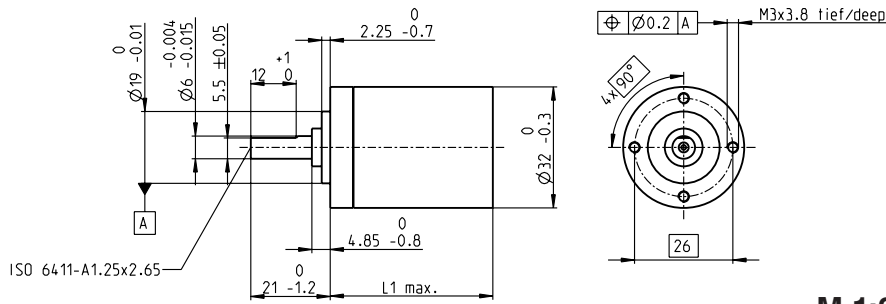


# Planetary Gearhead GP 32 C $\varnothing 32$ mm, 1.0 - 6.0 Nm

Ceramic Version

## Technical Data

Planetary Gearhead	straight teeth
Output shaft	stainless steel
Shaft diameter as option	8 mm
Bearing at output	ball bearing
Radial play, 5 mm from flange	max. 0.14 mm
Axial play	max. 0.4 mm
Max. radial load, 10 mm from flange	140 N
Max. permissible axial load	120 N
Max. permissible force for press fits	120 N
Sense of rotation, drive to output	=
Recommended input speed	< 8000 rpm
Recommended temperature range	-40 ... +100°C



M 1:2

Option: Low-noise version

- Stock program
- Standard program
- Special program (on request)

## Order Number

Gearhead Data	166930	166933	166938	166939	166944	166949	166954	166959	166962	166967	166972	166977
1 Reduction	3.7 : 1	14 : 1	33 : 1	51 : 1	111 : 1	246 : 1	492 : 1	762 : 1	1181 : 1	1972 : 1	2829 : 1	4380 : 1
2 Reduction absolute	<sup>26</sup> / <sub>7</sub>	<sup>676</sup> / <sub>49</sub>	<sup>529</sup> / <sub>16</sub>	<sup>17576</sup> / <sub>343</sub>	<sup>13824</sup> / <sub>125</sub>	<sup>421824</sup> / <sub>1715</sub>	<sup>86112</sup> / <sub>175</sub>	<sup>19044</sup> / <sub>25</sub>	<sup>10123776</sup> / <sub>8575</sub>	<sup>8626176</sup> / <sub>4375</sub>	<sup>495144</sup> / <sub>175</sub>	<sup>109503</sup> / <sub>25</sub>
3 Max. motor shaft diameter	mm 6	6	3	6	4	4	3	3	4	4	3	3
<b>Order Number</b>	<b>166931</b>	<b>166934</b>		<b>166940</b>	<b>166945</b>	<b>166950</b>	<b>166955</b>	<b>166960</b>	<b>166963</b>	<b>166968</b>	<b>166973</b>	<b>166978</b>
1 Reduction	4.8 : 1	18 : 1		66 : 1	123 : 1	295 : 1	531 : 1	913 : 1	1414 : 1	2189 : 1	3052 : 1	5247 : 1
2 Reduction absolute	<sup>24</sup> / <sub>5</sub>	<sup>624</sup> / <sub>35</sub>		<sup>16224</sup> / <sub>245</sub>	<sup>6877</sup> / <sub>56</sub>	<sup>101062</sup> / <sub>343</sub>	<sup>331776</sup> / <sub>625</sub>	<sup>36501</sup> / <sub>40</sub>	<sup>2425488</sup> / <sub>1715</sub>	<sup>536406</sup> / <sub>245</sub>	<sup>1907712</sup> / <sub>625</sub>	<sup>839523</sup> / <sub>160</sub>
3 Max. motor shaft diameter	mm 4	4		4	3	3	4	3	3	3	3	3
<b>Order Number</b>	<b>166932</b>	<b>166935</b>		<b>166941</b>	<b>166946</b>	<b>166951</b>	<b>166956</b>	<b>166961</b>	<b>166964</b>	<b>166969</b>	<b>166974</b>	<b>166979</b>
1 Reduction	5.8 : 1	21 : 1		79 : 1	132 : 1	318 : 1	589 : 1	1093 : 1	1526 : 1	2362 : 1	3389 : 1	6285 : 1
2 Reduction absolute	<sup>23</sup> / <sub>4</sub>	<sup>299</sup> / <sub>14</sub>		<sup>3887</sup> / <sub>49</sub>	<sup>3312</sup> / <sub>25</sub>	<sup>389376</sup> / <sub>1225</sub>	<sup>20631</sup> / <sub>35</sub>	<sup>279841</sup> / <sub>256</sub>	<sup>9345024</sup> / <sub>6125</sub>	<sup>2066688</sup> / <sub>875</sub>	<sup>474513</sup> / <sub>140</sub>	<sup>6436343</sup> / <sub>1024</sub>
3 Max. motor shaft diameter	mm 3	3		3	3	4	3	3	4	3	3	3
<b>Order Number</b>		<b>166936</b>		<b>166942</b>	<b>166947</b>	<b>166952</b>	<b>166957</b>		<b>166965</b>	<b>166970</b>	<b>166975</b>	
1 Reduction		23 : 1		86 : 1	159 : 1	411 : 1	636 : 1		1694 : 1	2548 : 1	3656 : 1	
2 Reduction absolute		<sup>576</sup> / <sub>25</sub>		<sup>14976</sup> / <sub>175</sub>	<sup>1587</sup> / <sub>10</sub>	<sup>359424</sup> / <sub>875</sub>	<sup>79488</sup> / <sub>125</sub>		<sup>1162213</sup> / <sub>686</sub>	<sup>7962624</sup> / <sub>3125</sub>	<sup>457056</sup> / <sub>125</sub>	
3 Max. motor shaft diameter		mm 4		4	3	4	3		3	4	3	
<b>Order Number</b>		<b>166937</b>		<b>166943</b>	<b>166948</b>	<b>166953</b>	<b>166958</b>		<b>166966</b>	<b>166971</b>	<b>166976</b>	
1 Reduction		28 : 1		103 : 1	190 : 1	456 : 1	706 : 1		1828 : 1	2623 : 1	4060 : 1	
2 Reduction absolute		<sup>138</sup> / <sub>5</sub>		<sup>3588</sup> / <sub>35</sub>	<sup>12167</sup> / <sub>64</sub>	<sup>89401</sup> / <sub>196</sub>	<sup>158171</sup> / <sub>224</sub>		<sup>2238912</sup> / <sub>1225</sub>	<sup>2056223</sup> / <sub>784</sub>	<sup>3637933</sup> / <sub>896</sub>	
3 Max. motor shaft diameter		mm 3		3	3	3	3		3	3	3	
4 Number of stages		1	2	2	3	3	4	4	5	5	5	5
5 Max. continuous torque		Nm 1	3	3	6	6	6	6	6	6	6	6
6 Intermittently permissible torque at gear output		Nm 1.25	3.75	3.75	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
7 Max. efficiency		% 80	75	75	70	70	60	60	60	50	50	50
8 Weight		g 118	162	162	194	194	226	226	226	258	258	258
9 Average backlash no load		° 0.7	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
10 Mass inertia		gcm <sup>2</sup> 1.5	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
11 Gearhead length L1		mm 26.5	36.4	36.4	43.1	43.1	49.8	49.8	49.8	56.5	56.5	56.5

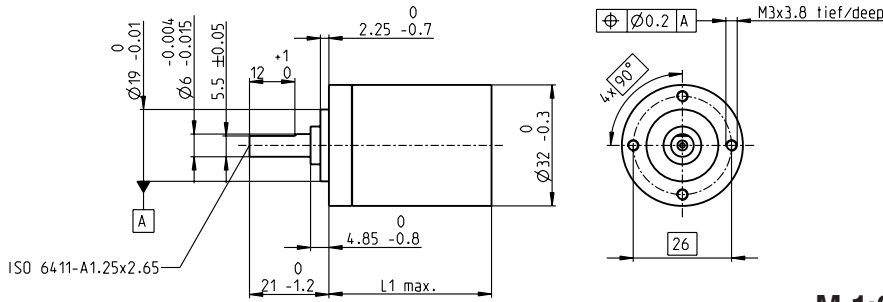


## maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor / brake) + assembly parts									
RE 25, 10 W	77/79			81.1	91.0	91.0	97.7	97.7	104.4	104.4	111.1	111.1	111.1
RE 25, 10 W	77/79	MR	262	92.1	102.0	102.0	108.7	108.7	115.4	115.4	122.1	122.1	122.1
RE 25, 10 W	77/79	Enc 22	264	95.2	105.1	105.1	111.8	111.8	118.5	118.5	125.2	125.2	125.2
RE 25, 10 W	77/79	HED_ 5540	266/268	101.9	111.8	111.8	118.5	118.5	125.2	125.2	131.9	131.9	131.9
RE 25, 10 W	77/79	DCT 22	276	103.4	113.3	113.3	120.0	120.0	126.7	126.7	133.4	133.4	133.4
RE 25, 20 W	78			69.6	79.5	79.5	86.2	86.2	92.9	92.9	99.6	99.6	99.6
RE 25, 20 W	78	MR	262	80.6	90.5	90.5	97.2	97.2	103.9	103.9	110.6	110.6	110.6
RE 25, 20 W	78	HED_ 5540	267/270	90.4	100.3	100.3	107.0	107.0	113.7	113.7	120.4	120.4	120.4
RE 25, 20 W	78	DCT22	276	91.9	101.8	101.8	108.5	108.5	115.2	115.2	121.9	121.9	121.9
RE 25, 20 W	78	AB 28	318	103.7	113.6	113.6	120.3	120.3	127.0	127.0	133.7	133.7	133.7
RE 25, 20 W	78	HED_ 5540 / AB 28	267/318	120.9	130.8	130.8	137.5	137.5	144.2	144.2	150.9	150.9	150.9
RE 25, 20 W	79	AB 28	318	103.4	113.3	113.3	120.0	120.0	126.7	126.7	133.4	133.4	133.4
RE 25, 20 W	79	HED_ 5540 / AB 28	318	132.3	142.2	142.2	148.9	148.9	155.6	155.6	162.3	162.3	162.3
RE 30, 60 W	80			94.6	104.5	104.5	111.2	111.2	117.9	117.9	124.6	124.6	124.6
RE 30, 60 W	80	MR	263	106.0	115.9	115.9	122.6	122.6	129.3	129.3	136.0	136.0	136.0
RE 35, 90 W	81			97.6	107.5	107.5	114.2	114.2	120.9	120.9	127.6	127.6	127.6
RE 35, 90 W	81	MR	263	109.0	118.9	118.9	125.6	125.6	132.3	132.3	139.0	139.0	139.0
RE 35, 90 W	81	HED_ 5540	266/268	118.3	128.2	128.2	134.9	134.9	141.6	141.6	148.3	148.3	148.3
RE 35, 90 W	81	DCT 22	277	115.7	125.6	125.6	132.3	132.3	139.0	139.0	145.7	145.7	145.7
RE 35, 90 W	81	AB 28	318	133.7	143.6	143.6	150.3	150.3	157.0	157.0	163.7	163.7	163.7
RE 35, 90 W	81	HEDS 5540 / AB 28	266/318	150.8	160.7	160.7	167.4	167.4	174.1	174.1	180.8	180.8	180.8
A-max 26	101-108			71.3	81.2	81.2	87.9	87.9	94.6	94.6	101.3	101.3	101.3
A-max 26	102-108	MEnc 13	275	78.4	88.3	88.3	95.0	95.0	101.7	101.7	108.4	108.4	108.4
A-max 26	102-108	MR	262	80.1	90.0	90.0	96.7	96.7	103.4	103.4	110.1	110.1	110.1
A-max 26	102-108	Enc 22	265	85.7	95.6	95.6	102.3	102.3	109.0	109.0	115.7	115.7	115.7
A-max 26	102-108	HED_ 5540	267/268	90.1	100.0	100.0	106.7	106.7	113.4	113.4	120.1	120.1	120.1
A-max 32	109/111			89.5	99.4	99.4	106.1	106.1	112.8	112.8	119.5	119.5	119.5
A-max 32	110/112			88.1	98.0	98.0	104.7	104.7	111.4	111.4	118.1	118.1	118.1
A-max 32	110/112	MR	263	99.3	109.2	109.2	115.9	115.9	122.6	122.6	129.3	129.3	129.3
A-max 32	110/112	HED_ 5540	267/268	108.9	118.8	118.8	125.5	125.5	132.2	132.2	138.9	138.9	138.9

# Planetary Gearhead GP 32 C $\varnothing 32$ mm, 1.0 - 6.0 Nm

Ceramic Version



## Technical Data

Planetary Gearhead	straight teeth
Output shaft	stainless steel
Shaft diameter as option	8 mm
Bearing at output	ball bearing
Radial play, 5 mm from flange	max. 0.14 mm
Axial play	max. 0.4 mm
Max. radial load, 10 mm from flange	140 N
Max. permissible axial load	120 N
Max. permissible force for press fits	120 N
Sense of rotation, drive to output	=
Recommended input speed	< 8000 rpm
Recommended temperature range	-40 ... +100°C

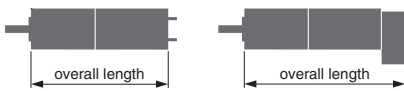
M 1:2

Option: Low-noise version

- Stock program
- Standard program
- Special program (on request)

## Order Number

	166930	166933	166938	166939	166944	166949	166954	166959	166962	166967	166972	166977
<b>Gearhead Data</b>												
1 Reduction	3.7 : 1	14 : 1	33 : 1	51 : 1	111 : 1	246 : 1	492 : 1	762 : 1	1181 : 1	1972 : 1	2829 : 1	4380 : 1
2 Reduction absolute	$\frac{26}{7}$	$\frac{676}{49}$	$\frac{529}{16}$	$\frac{1756}{343}$	$\frac{13824}{125}$	$\frac{421824}{1715}$	$\frac{86112}{175}$	$\frac{19044}{25}$	$\frac{10123776}{8575}$	$\frac{8626176}{4375}$	$\frac{495144}{175}$	$\frac{109503}{25}$
3 Max. motor shaft diameter	mm 6	6	3	6	4	4	3	3	4	4	3	3
<b>Order Number</b>	166931	166934		166940	166945	166950	166955	166960	166963	166968	166973	166978
1 Reduction	4.8 : 1	18 : 1		66 : 1	123 : 1	295 : 1	531 : 1	913 : 1	1414 : 1	2189 : 1	3052 : 1	5247 : 1
2 Reduction absolute	$\frac{24}{5}$	$\frac{624}{35}$		$\frac{16224}{245}$	$\frac{6877}{56}$	$\frac{101062}{343}$	$\frac{331776}{625}$	$\frac{36501}{40}$	$\frac{2425488}{1715}$	$\frac{536406}{245}$	$\frac{1907712}{625}$	$\frac{839523}{160}$
3 Max. motor shaft diameter	mm 4	4		4	3	3	4	3	3	3	3	3
<b>Order Number</b>	166932	166935		166941	166946	166951	166956	166961	166964	166969	166974	166979
1 Reduction	5.8 : 1	21 : 1		79 : 1	132 : 1	318 : 1	589 : 1	1093 : 1	1526 : 1	2362 : 1	3389 : 1	6285 : 1
2 Reduction absolute	$\frac{23}{4}$	$\frac{299}{14}$		$\frac{3887}{49}$	$\frac{3312}{25}$	$\frac{389376}{1225}$	$\frac{20631}{35}$	$\frac{279841}{256}$	$\frac{9345024}{6125}$	$\frac{2066688}{375}$	$\frac{474513}{140}$	$\frac{6436343}{1024}$
3 Max. motor shaft diameter	mm 3	3		3	3	4	3	3	4	3	3	3
<b>Order Number</b>		166936		166942	166947	166952	166957		166965	166970	166975	
1 Reduction		23 : 1		86 : 1	159 : 1	411 : 1	636 : 1		1694 : 1	2548 : 1	3656 : 1	
2 Reduction absolute		$\frac{576}{25}$		$\frac{14976}{175}$	$\frac{1587}{10}$	$\frac{359424}{875}$	$\frac{79488}{125}$		$\frac{1162213}{688}$	$\frac{7962624}{3125}$	$\frac{457056}{125}$	
3 Max. motor shaft diameter		mm 4		4	3	4	3		3	4	3	
<b>Order Number</b>		166937		166943	166948	166953	166958		166966	166971	166976	
1 Reduction		28 : 1		103 : 1	190 : 1	456 : 1	706 : 1		1828 : 1	2623 : 1	4060 : 1	
2 Reduction absolute		$\frac{138}{5}$		$\frac{3588}{35}$	$\frac{12167}{64}$	$\frac{89401}{196}$	$\frac{158171}{224}$		$\frac{2238912}{1225}$	$\frac{2056223}{784}$	$\frac{3637933}{696}$	
3 Max. motor shaft diameter		mm 3		3	3	3	3		3	3	3	
4 Number of stages		1	2	2	3	3	4	4	5	5	5	5
5 Max. continuous torque	Nm	1	3	3	6	6	6	6	6	6	6	6
6 Intermittently permissible torque at gear output	Nm	1.25	3.75	3.75	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
7 Max. efficiency	%	80	75	75	70	70	60	60	60	50	50	50
8 Weight	g	118	162	162	194	194	226	226	226	258	258	258
9 Average backlash no load	°	0.7	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
10 Mass inertia	gcm <sup>2</sup>	1.5	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
11 Gearhead length L1	mm	26.5	36.4	36.4	43.1	43.1	49.8	49.8	49.8	56.5	56.5	56.5



## maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor / brake) + assembly parts										
RE-max 29	131-134			71.3	81.2	81.2	87.9	87.9	94.6	94.6	101.3	101.3	101.3	101.3
RE-max 29	132/134	MR	262	80.1	90.0	90.0	96.7	96.7	103.4	103.4	110.1	110.1	110.1	110.1
EC 32, 80 W	154			86.6	96.5	96.5	103.2	103.2	109.9	109.9	116.6	116.6	116.6	116.6
EC 32, 80 W	154	HED_ 5540	267/269	105.0	114.9	114.9	121.6	121.6	128.3	128.3	135.0	135.0	135.0	135.0
EC 32, 80 W	154	Res 26	277	106.7	116.6	116.6	123.3	123.3	130.0	130.0	136.7	136.7	136.7	136.7
EC-max 22, 25 W	165			75.1	85.0	85.0	91.7	91.7	98.4	98.4	105.1	105.1	105.1	105.1
EC-max 22, 25 W	165	MR	261	84.8	94.7	94.7	101.4	101.4	108.1	108.1	114.8	114.8	114.8	114.8
EC-max 22, 25 W	165	AB 20	316	111.6	121.5	121.5	128.2	128.2	134.9	134.9	141.6	141.6	141.6	141.6
EC-max 30, 40 W	166			68.9	78.8	78.8	85.5	85.5	92.2	92.2	98.9	98.9	98.9	98.9
EC-max 30, 40 W	166	MR	262	81.1	91.0	91.0	97.7	97.7	104.4	104.4	111.1	111.1	111.1	111.1
EC-max 30, 40 W	166	HEDL 5540	269	89.5	99.4	99.4	106.1	106.1	112.8	112.8	119.5	119.5	119.5	119.5
EC-max 30, 40 W	166	AB 20	316	104.5	114.4	114.4	121.1	121.1	127.8	127.8	134.5	134.5	134.5	134.5
EC-max 30, 40 W	166	HEDL 5540 / AB 20	269/316	125.1	135.0	135.0	141.7	141.7	148.4	148.4	155.1	155.1	155.1	155.1
EC-4pole 22, 90 W	173			75.2	85.1	85.1	91.8	91.8	98.5	98.5	105.2	105.2	105.2	105.2
EC-4pole 22, 90 W	173	HEDL 5540	270	96.7	106.6	106.6	113.3	113.3	120.0	120.0	126.7	126.7	126.7	126.7
EC-4pole 22, 120 W	174			92.6	102.5	102.5	109.2	109.2	115.9	115.9	122.6	122.6	122.6	122.6
EC-4pole 22, 120 W	174	HEDL 5540	270	114.1	124.0	124.0	130.7	130.7	137.4	137.4	144.1	144.1	144.1	144.1
EC 32 flat, 15 W	188			44.5	54.4	54.4	61.1	61.1	67.8	67.8	74.5	74.5	74.5	74.5
EC 32 flat IE, IP 00	189			54.6	64.5	64.5	71.2	71.2	77.9	77.9	84.6	84.6	84.6	84.6
EC 32 flat IE, IP 40	189			56.3	66.2	66.2	72.9	72.9	79.6	79.6	86.3	86.3	86.3	86.3
EC-i 40, 50 W	190			58.1	68.0	68.0	74.7	74.7	81.4	81.4	88.1	88.1	88.1	88.1
EC-i 40, 50 W	190	MR	263	73.8	83.7	83.7	90.4	90.4	97.1	97.1	103.8	103.8	103.8	103.8
EC-i 40, 50 W	190	HEDL 5540	270	81.5	91.4	91.4	98.1	98.1	104.8	104.8	111.5	111.5	111.5	111.5
EC-i 40, 70 W	191			68.1	78.0	78.0	84.7	84.7	91.4	91.4	98.1	98.1	98.1	98.1
EC-i 40, 70 W	191	MR	263	83.8	93.7	93.7	100.4	100.4	107.1	107.1	113.8	113.8	113.8	113.8
EC-i 40, 70 W	191	HEDL 5540	270	91.5	101.4	101.4	108.1	108.1	114.8	114.8	121.5	121.5	121.5	121.5
MCD EPOS, 60 W	313			150.2	160.1	160.1	166.8	166.8	173.5	173.5	180.2	180.2	180.2	180.2
MCD EPOS P, 60 W	313			150.2	160.1	160.1	166.8	166.8	173.5	173.5	180.2	180.2	180.2	180.2