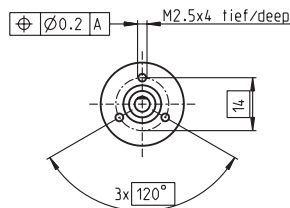
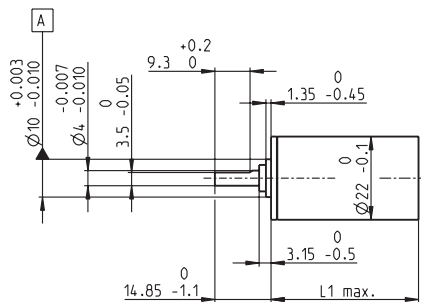


Planetary Gearhead GP 22 A Ø22 mm, 0.5–1.0 Nm



M 1:2

Technical Data

Planetary Gearhead	straight teeth
Output shaft	stainless steel, hardened
Bearing at output	ball bearing
Option	sleeve bearing
Radial play, 10 mm from flange	max. 0.2 mm
Axial play	max. 0.2 mm
Max. permissible axial load	100 N
Max. permissible force for press fits	100 N
Sense of rotation, drive to output	=
Recommended input speed	< 6000 rpm
Recommended temperature range	-40...+100°C
Number of stages	1 2 3 4 5
Max. radial load, 10 mm from flange	70 N 70 N 70 N 70 N 70 N

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

Article Numbers

Gearhead Data	134156	134158	134163	134168	134172	110340	134183	134186	134190	134195	134203
1 Reduction	3.8 : 1	14 : 1	53 : 1	104 : 1	198 : 1	370 : 1	590 : 1	742 : 1	1386 : 1	1996 : 1	3189 : 1
2 Reduction absolute	¹⁵ / ₄	²²⁵ / ₁₆	³³⁷⁵ / ₆₄	⁸⁷⁷²³ / ₈₄₅	⁵⁰⁶²⁵ / ₂₅₆	²⁹¹⁹⁸ / ₇₉	⁵⁹⁰⁴⁹ / ₁₀₀	⁷⁵⁹³⁷⁵ / ₁₀₂₄	¹⁵⁸³⁴⁰⁰¹⁵ / ₁₁₄₂₄₄	²⁸⁵⁰¹²⁰²⁷ / ₁₄₂₈₀₅	¹⁵⁹⁴³²³ / ₅₀₀
3 Max. motor shaft diameter	mm 4	4	4	3.2	4	3.2	4	4	3.2	3.2	4
Article Numbers	110337	134159	134164	134169	134173	134178	134184	134187	134193	134198	134204
1 Reduction	4.4 : 1	16 : 1	62 : 1	109 : 1	231 : 1	389 : 1	690 : 1	867 : 1	1460 : 1	2102 : 1	3728 : 1
2 Reduction absolute	⁵⁷ / ₁₃	⁸⁵⁵ / ₅₂	¹²⁸²⁵ / ₂₀₈	²¹⁸⁷ / ₂₀	¹⁹²³⁷⁵ / ₈₃₂	²⁶³¹⁶⁹ / ₆₇₆	¹¹²¹⁹³¹ / ₁₆₂₅	²⁸⁸⁵⁶²⁵ / ₃₃₂₈	³⁹⁴⁷⁵³⁵ / ₂₇₀₄	⁷¹⁰⁵⁵⁶³ / ₃₃₈₀	³⁰²⁹²¹³⁷ / ₈₁₂₅
3 Max. motor shaft diameter	mm 3.2	3.2	3.2	4	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Article Numbers	134157	110338	134165	134170	134174	134180	134185	134188	134196	134200	134205
1 Reduction	5.4 : 1	19 : 1	72 : 1	128 : 1	270 : 1	410 : 1	850 : 1	1014 : 1	1538 : 1	2214 : 1	4592 : 1
2 Reduction absolute	²⁷ / ₅	³²⁴⁹ / ₁₆₉	⁴⁸⁷³⁵ / ₆₇₆	⁴¹⁵⁵³ / ₃₂₅	⁷³¹⁰²⁵ / ₂₇₀₄	⁶⁵⁶¹ / ₁₆	⁵³¹⁴⁴¹ / ₆₂₅	¹⁰⁹⁶⁵³⁷⁵ / ₁₀₈₁₆	⁹⁸⁴¹⁵ / ₆₄	¹⁷⁷¹⁴⁷ / ₈₀	¹⁴³⁴⁸⁹⁰⁷ / ₃₁₂₅
3 Max. motor shaft diameter	mm 2.5	3.2	3.2	3.2	3.2	4	2.5	3.2	4	4	2.5
Article Numbers		134160	134166	134171	134176	134179		134191	110341	134199	
1 Reduction		20 : 1	76 : 1	157 : 1	285 : 1	455 : 1		1068 : 1	1621 : 1	2458 : 1	
2 Reduction absolute		⁸¹ / ₄	¹²¹⁵ / ₁₆	¹⁹⁶⁸³ / ₁₂₅	¹⁸²²⁵ / ₆₄	¹⁷⁰¹⁹³⁸ / ₃₇₃₉		²⁷³³⁷⁵ / ₂₅₆	⁶⁰¹⁶²⁰⁵⁷ / ₃₇₁₂₃₃	¹³⁵⁰⁰⁵⁶⁹⁷ / ₅₄₉₂₅	
3 Max. motor shaft diameter	mm	4	4	2.5	4	3.2		3.2	3.2	3.2	
Article Numbers		134161	110339		134175	134181		134189	134194	134201	
1 Reduction		24 : 1	84 : 1		316 : 1	479 : 1		1185 : 1	1707 : 1	2589 : 1	
2 Reduction absolute		¹⁵³⁹ / ₆₅	¹⁸⁵¹⁹³ / ₂₁₉₇		²⁷⁷⁷⁸⁹⁵ / ₈₇₈₈	¹²⁴⁶⁵⁹ / ₂₆₀		⁴¹⁶⁶⁸⁴²⁵ / ₃₅₁₅₂	¹⁵⁰⁰⁰⁶³³ / ₈₇₈₈	³³⁶⁵⁷⁹³ / ₁₃₀₀	
3 Max. motor shaft diameter	mm	3.2	3.2		3.2	3.2		3.2	3.2	3.2	
Article Numbers		134162	134167		134177	134182		134192	134197	134202	
1 Reduction		29 : 1	89 : 1		333 : 1	561 : 1		1249 : 1	1798 : 1	3027 : 1	
2 Reduction absolute		⁷²⁹ / ₂₅	⁴⁶¹⁷ / ₅₂		⁶⁹²⁵⁵ / ₂₀₈	²³⁶⁸⁵²¹ / ₄₂₂₅		¹⁰³⁸⁸²⁵ / ₈₃₂	³⁷³⁹⁷⁷ / ₂₀₈	⁶³⁹⁵⁰⁰⁶⁷ / ₂₁₁₂₅	
3 Max. motor shaft diameter	mm	2.5	3.2		3.2	3.2		3.2	3.2	3.2	
4 Number of stages		1	2	3	3	4	4	5	5	5	5
5 Max. continuous torque	Nm	0.5	0.5	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.0
6 Intermittently permissible torque at gear output	Nm	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
7 Max. efficiency	%	84	70	59	59	49	49	49	42	42	42
8 Weight	g	42	55	68	68	81	81	81	94	94	94
9 Average backlash no load	°	1.0	1.2	1.6	1.6	2.0	2.0	2.0	2.0	2.0	2.0
10 Mass inertia	gcm ²	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
11 Gearhead length L1*	mm	22.6	29.4	36.2	36.2	43.0	43.0	43.0	49.8	49.8	49.8

*for EC 32fl. L1 is + 7.1 mm

maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts										
A-max 19	93/94			51.6	58.4	65.2	65.2	72.0	72.0	72.0	78.8	78.8	78.8	78.8
A-max 19, 1.5 W	94	MR	268/270	56.7	63.5	70.3	70.3	77.1	77.1	77.1	83.9	83.9	83.9	83.9
A-max 19, 1.5 W	94	Enc 22	275	66.0	72.8	79.6	79.6	86.4	86.4	86.4	93.2	93.2	93.2	93.2
A-max 19, 1.5 W	94	MEnc 13	284	59.1	65.9	72.7	72.7	79.5	79.5	79.5	86.3	86.3	86.3	86.3
A-max 19, 2.5 W	95/96			54.2	61.0	67.8	67.8	74.6	74.6	74.6	81.4	81.4	81.4	81.4
A-max 19, 2.5 W	96	MR	268/270	58.5	65.3	72.1	72.1	78.9	78.9	78.9	85.7	85.7	85.7	85.7
A-max 19, 2.5 W	96	Enc 22	275	68.6	75.4	82.2	82.2	89.0	89.0	89.0	95.8	95.8	95.8	95.8
A-max 19, 2.5 W	96	MEnc 13	284	61.7	68.5	75.3	75.3	82.1	82.1	82.1	88.9	88.9	88.9	88.9
A-max 22	97-100			54.6	61.4	68.2	68.2	75.0	75.0	75.0	81.8	81.8	81.8	81.8
A-max 22	98/100	MR	268/270	59.6	66.4	73.2	73.2	80.0	80.0	80.0	86.8	86.8	86.8	86.8
A-max 22	98/100	Enc 22	275	69.0	75.8	82.6	82.6	89.4	89.4	89.4	96.2	96.2	96.2	96.2
A-max 22	98/100	MEnc 13	284	61.7	68.5	75.3	75.3	82.1	82.1	82.1	88.9	88.9	88.9	88.9
RE-max 21	123/124			51.6	58.4	65.2	65.2	72.0	72.0	72.0	78.8	78.8	78.8	78.8
RE-max 21, 3.5 W	124	MR	269/271	56.7	63.5	70.3	70.3	77.1	77.1	77.1	83.9	83.9	83.9	83.9
RE-max 21, 6 W	125/126			54.2	61.0	67.8	67.8	74.6	74.6	74.6	81.4	81.4	81.4	81.4
RE-max 21, 6 W	126	MR	269/271	58.5	65.3	72.1	72.1	78.9	78.9	78.9	85.7	85.7	85.7	85.7
EC 16, 30 W	145			65.5	72.3	79.1	79.1	85.9	85.9	85.9	92.7	92.7	92.7	92.7
EC 16, 30 W	145	MR	271	76.2	83	89.8	89.8	96.6	96.6	96.6	103.4	103.4	103.4	103.4
EC 16, 60 W	147			81.5	88.3	95.1	95.1	101.9	101.9	101.9	108.7	108.7	108.7	108.7
EC 16, 60 W	147	MR	271	92.2	99.0	105.8	105.8	112.6	112.6	112.6	119.4	119.4	119.4	119.4
EC 20 flat, 3 W, A	183			33.1	39.9	46.7	46.7	53.5	53.5	53.5	60.3	60.3	60.3	60.3
EC 20 flat, 3 W, B	183			32.5	39.3	46.1	46.1	52.9	52.9	52.9	59.7	59.7	59.7	59.7
EC 20 flat, 5 W	184			36.7	43.5	50.3	50.3	57.1	57.1	57.1	63.9	63.9	63.9	63.9
EC 20 flat, IE, IP 00	185			39.7	46.5	53.3	53.3	60.1	60.1	60.1	66.9	66.9	66.9	66.9
EC 20 flat, IE, IP 40	185			40.8	47.6	54.4	54.4	61.2	61.2	61.2	68.0	68.0	68.0	68.0
EC 20 flat, IE, IP 00	186			43.7	50.5	57.3	57.3	64.1	64.1	64.1	70.9	70.9	70.9	70.9
EC 20 flat, IE, IP 40	186			44.8	51.6	58.4	58.4	65.2	65.2	65.2	72.0	72.0	72.0	72.0
EC 32 flat, 6 W	187			39.8	46.6	53.4	53.4	60.2	60.2	60.2	67.0	67.0	67.0	67.0