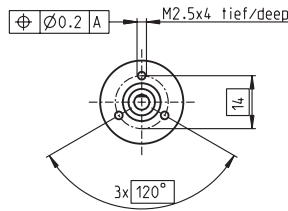
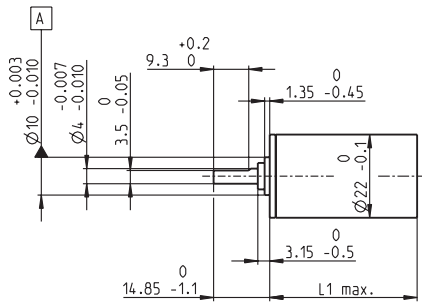


Planetary Gearhead GP 22 A $\varnothing 22$ mm, 0.5–1.0 Nm



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	30 N 50 N 55 N 55 N 55 N

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

Part Numbers

	134156	134158	134163	134168	134172	110340	134183	134186	134190	134195	134203
Gearhead Data											
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	¹⁰⁵⁵⁶⁰⁰¹ / ₂₈₅₆₁	⁵⁹⁰⁴⁹ / ₁₀₀	⁷⁵⁹³⁷⁵ / ₁₀₂₄	¹⁵⁸³⁴⁰⁰¹⁵ / ₁₁₄₂₄₄	²⁶⁵⁰¹²⁰²⁷ / ₁₄₂₈₀₅	¹⁵⁹⁴³²³ / ₅₀₀
3 Max. motor shaft diameter	mm 4	4	4	3.2	4	3.2	4	4	3.2	3.2	4
Part 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
Part 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	¹⁰⁹⁸⁵³⁷⁵ / 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
Part 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	⁵⁰⁰⁰²¹¹ / ₁₀₉₈₅		²⁷³³⁷⁵ / ₂₅₆	⁶⁰¹⁶⁹²⁰⁵⁷ / ₃₇₁₂₉₃	¹³⁵⁰⁰⁶⁹⁷ / ₅₄₈₂₅	
3 Max. motor shaft diameter		mm 4	4	2.5	4	3.2		4	3.2	3.2	
Part 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	
Part 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	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	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	1.6
7 Max. efficiency	% 84	70	59	59	49	49	49	42	42	42	42
8 Weight	g 42	55	68	68	81	81	81	94	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	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	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	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	125/126			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	126	MR	315/317	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	126	Enc 22	324	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	126	MEnc 13	334	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	127/128			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	128	MR	315/317	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	128	Enc 22	324	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	128	MEnc 13	334	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	129-132			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	130/132	MR	315/317	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	130/132	Enc 22	324	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	130/132	MEnc 13	334	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	155/156			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	156	MR	316/318	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	157/158			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	158	MR	316/318	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	178			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	178	MR	318	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	180			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	180	MR	318	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	221			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	221			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	222			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	223			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	223			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	224			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	224			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	225			39.8	46.6	53.4	53.4	60.2	60.2	60.2	67.0	67.0	67.0	67.0