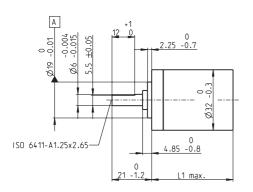
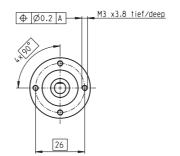
Planetary Gearhead GP 32 A Ø32 mm, 0.75-4.5 Nm



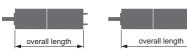


Technical Data						
Planetary Gearhead					straigh	t teeth
Output shaft				S	tainles	s steel
Shaft diameter as	option	ı				8 mm
Bearing at output					ball b	earing
Radial play, 5 mm fro	om flar	ige		r	nax. 0.	14 mm
Axial play					max. 0).4 mm
Max. axial load (dyna	amic)					120 N
Max. force for press	fits					120 N
Direction of rotation,	drive	to outp	ut			=
Max. continuous inp	ut spe	ed			600	00 rpm
Recommended temp	oeratui	e rang	е		-40	-100°C
Number of stages	1	2		3	4	5
Max. radial load, 10	mm					
from flange	90 N	140 N	200	Ν	220 N	220 N

M 1:2

Option: Low-noise version

	Stock program Standard program		Part N	umbers										
	Special program (on request)		166155	166158	166163	166164	166169	166174	166179	166184	166187	166192	166197	166202
Ge	arhead Data													
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	Absolute reduction		26/7	676/49	529/16	17576/343	13824/125	421824/1715	86112/175	19044/25	10123776/8575	8626176/4375	495144/175	109503/25
3	Max. motor shaft diameter	nm	6	6	3	6	4	4	3	3	4	4	3	3
	Part Numbers		166156	166159		166165	166170	166175	166180	166185	166188	166193	166198	166203
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	Absolute reduction		²⁴ / ₅	624/35		16224/245	6877/56	101062/343	331776/625	36501/40	2425488/1715	536406/245	1907712/625	839523/160
3	Max. motor shaft diameter	nm	4	4		4	3	3	4	3	3	3	3	3
	Part Numbers		166157	166160		166166	166171	166176	166181	166186	166189	166194	166199	166204
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	Absolute reduction		23/4	299/14		3887/49	3312/25	389376/1225	20631/35	279841/256	9345024/6125	2066688/875	474513/140	6436343/1024
3	Max. motor shaft diameter	nm	3	3		3	3	4	3	3	4	3	3	3
	Part Numbers			166161		166167	166172	166177	166182		166190	166195	166200	
1	Reduction			23:1		86:1	159:1	411:1	636:1		1694:1	2548:1	3656:1	
2	Absolute reduction			576/25		14976/175	1587/10	359424/875	79488/125		1162213/686	7962624/3125	457056/125	
3	Max. motor shaft diameter	nm		4		4	3	4	3		3	4	3	
	Part Numbers			166162		166168	166173	166178	166183		166191	166196	166201	
1	Reduction			28:1		103:1	190:1	456:1	706:1		1828:1	2623:1	4060:1	
2	Absolute reduction			138/5		3588/35	12167/64	89401/196	158171/224		2238912/1225	2056223/784	3637933/896	
3	Max. motor shaft diameter	nm		3		3	3	3	3		3	3	3	
4	Number of stages		1	2	2	3	3	4	4	4	5	5	5	5
5	Max. continuous torque	٧m	0.75	2.25	2.25	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
6	Max. intermittent torque at gear output	٧m	1.1	3.4	3.4	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
7	Max. efficiency	%	80	75	75	70	70	60	60	60	50	50	50	50
8	Weight	g	118	162	162	194	194	226	226	226	258	258	258	258
9	Average backlash no load	0	0.7	8.0	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
10	Mass inertia go	m ²	1.5	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
11	Gearhead length L1	nm	26.5	36.4	36.4	43.1	43.1	49.8	49.8	49.8	56.5	56.5	56.5	56.5

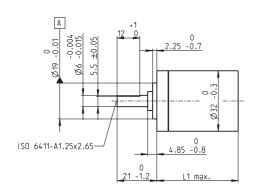


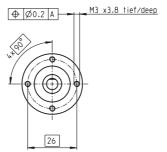


maxon Modu															
+ Motor	Page	+ Sensor/Brake	Page	Overall I	ength [m	m] = Moto	r length +	gearhead le	ength + (ser	nsor/brake)	+ assembly	y parts			
RE 25	179/181			81.1	91.0	91.0	97.7	97.7	104.4	104.4	104.4	111.1	111.1	111.1	111.1
RE 25	179/181	MR	392	92.1	102.0	102.0	108.7	108.7	115.4	115.4	115.4	122.1	122.1	122.1	122.1
RE 25	179/181	Enc 22	398	95.2	105.1	105.1	111.8	111.8	118.5	118.5	118.5	125.2	125.2	125.2	125.2
RE 25	179/181	HED_ 5540	399/401	101.9	111.8	111.8	118.5	118.5	125.2	125.2	125.2	131.9	131.9	131.9	131.9
RE 25	179/181	DCT 22	411	103.4	113.3	113.3	120.0	120.0	126.7	126.7	126.7	133.4	133.4	133.4	133.4
RE 25, 20 W	180			69.6	79.5	79.5	86.2	86.2	92.9	92.9	92.9	99.6	99.6	99.6	99.6
RE 25, 20 W	180	MR	392	80.6	90.5	90.5	97.2	97.2	103.9	103.9	103.9	110.6	110.6	110.6	110.6
RE 25, 20 W	180	HED_ 5540	400/403	90.4	100.3	100.3	107.0	107.0	113.7	113.7	113.7	120.4	120.4	120.4	120.4
RE 25, 20 W	180	DCT22	411	91.9	101.8	101.8	108.5	108.5	115.2	115.2	115.2	121.9	121.9	121.9	121.9
RE 25, 20 W	180	AB 28	446	103.7	113.6	113.6	120.3	120.3	127.0	127.0	127.0	133.7	133.7	133.7	133.7
RE 25, 20 W	180	HED_ 5540/AB 28	400/446	120.9	130.8	130.8	137.5	137.5	144.2	144.2	144.2	150.9	150.9	150.9	150.9
RE 25, 20 W	181	AB 28	446	115.2	125.1	125.1	131.8	131.8	138.5	138.5	138.5	145.2	145.2	145.2	145.2
RE 25, 20 W	181	HED_ 5540/AB 28	399/446	132.4	142.3	142.3	149.0	149.0	155.7	155.7	155.7	162.4	162.4	162.4	162.4
A-max 26	205-212			71.3	81.2	81.2	87.9	87.9	94.6	94.6	94.6	101.3	101.3	101.3	101.3
A-max 26	206-212	MEnc 13	410	78.4	88.3	88.3	95.0	95.0	101.7	101.7	101.7	108.4	108.4	108.4	108.4
A-max 26	206-212	MR	392	80.1	90.0	90.0	96.7	96.7	103.4	103.4	103.4	110.1	110.1	110.1	110.1
A-max 26	206-212	Enc 22	398	85.7	95.6	95.6	102.3	102.3	109.0	109.0	109.0	115.7	115.7	115.7	115.7
A-max 26	206-212	HED_ 5540	400/402	89.7	99.6	99.6	106.3	106.3	113.0	113.0	113.0	119.7	119.7	119.7	119.7
RE-max 29	227-230			71.3	81.2	81.2	87.9	87.9	94.6	94.6	94.6	101.3	101.3	101.3	101.3
RE-max 29	228/230	MR	392	80.1	90.0	90.0	96.7	96.7	103.4	103.4	103.4	110.1	110.1	110.1	110.1

April 2016 edition / subject to change maxon gear 339

Planetary Gearhead GP 32 A Ø32 mm, 0.75-4.5 Nm



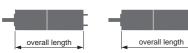


Technical Dat	a				
Planetary Gearhe	ad			straight	teeth
Output shaft			S	tainless	steel
Shaft diameter	as optior	1			8 mm
Bearing at output				ball b	earing
Radial play, 5 mm	from flar	nge	r	nax. 0.1	4 mm
Axial play				max. 0	.4 mm
Max. axial load (d	ynamic)				120 N
Max. force for pre	ss fits				120 N
Direction of rotation	on, drive	to outp	ut		=
Max. continuous i	nput spe	ed		600	0 rpm
Recommended te	mperatui	re range	е	-40+	100°C
Number of stages	1	2	3	4	5
Max. radial load,	I0 mm				
from flange	90 N	140 N	200 N	220 N	220 N

M 1:2

Option: Low-noise version

	Stock program		Part N	umbers										
	Standard program													
	Special program (on request)		166155	166158	166163	166164	166169	166174	166179	166184	166187	166192	166197	166202
Ge	arhead Data		100100	100100	100100	100101			100110	100101	100101	100102	100101	100202
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	Absolute reduction		26/7	676/49	529/16	17576/343	13824/125	421824/1715	86112/175	19044/25	10123776/8575	8626176/4375	495144/175	109503/25
3	Max. motor shaft diameter	mm	6	6	3	6	4	4	3	3	4	4	3	3
	Part Numbers		166156	166159		166165	166170	166175	166180	166185	166188	166193	166198	166203
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	Absolute reduction		24/5	624/35		16224/245	6877/56	101062/343	331776/625	36501/40	2425488/1715	536406/245	1907712/625	839523/160
3	Max. motor shaft diameter	mm	4	4		4	3	3	4	3	3	3	3	3
	Part Numbers		166157	166160		166166	166171	166176	166181	166186	166189	166194	166199	166204
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	Absolute reduction		23/4	299/14		3887/49	3312/25	38976/1225	20631/35	279841/256	9345024/6125	2066688/875	474513/140	6436343/1024
3	Max. motor shaft diameter	mm	3	3		3	3	4	3	3	4	3	3	3
	Part Numbers			166161		166167	166172	166177	166182		166190	166195	166200	
1	Reduction			23:1		86:1	159:1	411:1	636:1		1694:1	2548:1	3656:1	
2	Absolute reduction			576/25		14976/175	1587/10	359424/875	79488/125		1162213/686	7962624/3125	457056/125	
3	Max. motor shaft diameter	mm		4		4	3	4	3		3	4	3	
	Part Numbers			166162		166168	166173	166178	166183		100101	400400	166201	
1	Reduction					1 100100	100170	100170	100100		166191	166196	100201	
_				28:1		103:1	190:1	456:1	706:1		1828:1		4060:1	
2	Absolute reduction			28:1				456:1	706:1		1828:1		4060:1	
3		mm				103:1	190:1	456:1			1828:1	2623:1	4060:1	
3	Absolute reduction	mm	1	138/5	2	103:1 3588/35	190:1 12167/ ₆₄	456:1 89401/ ₁₉₆	706:1 158171/ ₂₂₄	4	1828:1 2238912/ ₁₂₂₅	2623:1 2056223/ ₇₈₄	4060:1 3637933/ ₈₉₆	5
3	Absolute reduction Max. motor shaft diameter	mm	1 0.75	138/ ₅ 3	2 2.25	103:1 3588/35 3	190:1 12167/ ₆₄ 3	456:1 89401/ ₁₉₆ 3	706:1 158171/ ₂₂₄ 3		1828:1 2238912/ ₁₂₂₅ 3	2623:1 2056223/ ₇₈₄ 3	4060:1 3637933/896 3	5 4.50
3	Absolute reduction Max. motor shaft diameter Number of stages Max. continuous torque			138/ ₅ 3 2	_	103:1 3588/35 3	190:1 12167/64 3 3	456:1 89401/ ₁₉₆ 3 4	706:1 158171/ ₂₂₄ 3 4	4	1828:1 2238912/ ₁₂₂₅ 3 5	2623:1 2056223/ ₇₈₄ 3 5	4060:1 3637933/896 3 5	
3	Absolute reduction Max. motor shaft diameter Number of stages	Nm	0.75	3 2 2.25	2.25	103:1 3588/35 3 4.50	190:1 12167/ ₆₄ 3 3 4.50	456:1 89401/ ₁₉₆ 3 4 4.50	706:1 158171/ ₂₂₄ 3 4 4.50	4 4.50	1828:1 2238912/ ₁₂₂₅ 3 5 4.50	2623:1 ²⁰⁵⁶²²³ / ₇₈₄ 3 5 4.50	4060:1 3637933/ ₈₉₆ 3 5 4.50	4.50
3 4 5 6	Absolute reduction Max. motor shaft diameter Number of stages Max. continuous torque Max. intermittent torque at gear output	Nm Nm	0.75 1.1	138/ ₅ 3 2 2.25 3.4	2.25	103:1 3588/35 3 4.50 6.5	190:1 12167/64 3 3 4.50 6.5	456:1 89401/ ₁₉₆ 3 4 4.50 6.5	706:1 158171/ ₂₂₄ 3 4 4.50 6.5	4 4.50 6.5	1828:1 2238912/ ₁₂₂₅ 3 5 4.50 6.5	2623:1 2056223/ ₇₈₄ 3 5 4.50 6.5	4060:1 3637933/896 3 5 4.50 6.5	4.50 6.5
3 4 5 6 7	Absolute reduction Max. motor shaft diameter Number of stages Max. continuous torque Max. intermittent torque at gear output Max. efficiency	Nm Nm %	0.75 1.1 80	138/ ₅ 3 2 2.25 3.4 75	2.25 3.4 75	103:1 3588/35 3 4.50 6.5 70	190:1 12167/ ₆₄ 3 3 4.50 6.5 70	456:1 89401/196 3 4 4.50 6.5 60	706:1 158171/224 3 4 4.50 6.5 60	4 4.50 6.5 60	1828:1 ²²³⁸⁹¹² / ₁₂₂₅ 3 5 4.50 6.5 50	2623:1 ²⁰⁵⁶²²³ / ₇₈₄ 3 5 4.50 6.5 50	4060:1 3637933/896 3 5 4.50 6.5 50	4.50 6.5 50
3 4 5 6 7	Absolute reduction Max. motor shaft diameter Number of stages Max. continuous torque Max. intermittent torque at gear output Max. efficiency Weight	Nm Nm %	0.75 1.1 80 118	138/ ₅ 3 2 2.25 3.4 75 162	2.25 3.4 75 162	103:1 3588/35 3 3 4.50 6.5 70 194	190:1 12167/ ₆₄ 3 3 4.50 6.5 70 194	456:1 89401/ ₁₉₆ 3 4 4.50 6.5 60 226	706:1 158171/ ₂₂₄ 3 4 4.50 6.5 60 226	4 4.50 6.5 60 226	1828:1 2238912/ ₁₂₂₅ 3 5 4.50 6.5 50 258	2623:1 2056223/ ₇₈₄ 3 5 4.50 6.5 50 258	4060:1 3637933/ ₈₉₆ 3 5 4.50 6.5 50 258	4.50 6.5 50 258
3 4 5 6 7 8 9	Absolute reduction Max. motor shaft diameter Number of stages Max. continuous torque Max. intermittent torque at gear output Max. efficiency Weight Average backlash no load	Nm Nm % g	0.75 1.1 80 118 0.7	3 2 2.25 3.4 75 162 0.8	2.25 3.4 75 162 0.8	103:1 3588/35 3 4.50 6.5 70 194 1.0	190:1 12167/ ₆₄ 3 3 4.50 6.5 70 194 1.0	456:1 89401/196 3 4 4.50 6.5 60 226 1.0	706:1 158171/224 3 4 4.50 6.5 60 226 1.0	4 4.50 6.5 60 226 1.0	1828:1 2238912/ ₁₂₂₅ 3 5 4.50 6.5 50 258 1.0	2623:1 2056223/ ₇₈₄ 3 5 4.50 6.5 50 258 1.0	4060:1 3637933/896 3 5 4.50 6.5 50 258 1.0	4.50 6.5 50 258 1.0



+ Motor	Page	+ Sensor/Brake	Page	Overall I	ength [m	m] = Moto	r length + g	gearhead le	ength + (ser	nsor/brake)	+ assembl	y parts			
RE 30, 15 W	182			94.6	104.5	104.5	111.2	111.2	117.9	117.9	117.9	124.6	124.6	124.6	124.6
RE 30, 15 W	182	MR	393	106.0	115.9	115.9	122.6	122.6	129.3	129.3	129.3	136.0	136.0	136.0	136.0
RE 30, 15 W	182	HED_ 5540	399/401	115.4	125.3	125.3	132.0	132.0	138.7	138.7	138.7	145.4	145.4	145.4	145.4
RE 30, 60 W	183			94.6	104.5	104.5	111.2	111.2	117.9	117.9	117.9	124.6	124.6	124.6	124.6
RE 30, 60 W	183	MR	393	106.0	115.9	115.9	122.6	122.6	129.3	129.3	129.3	136.0	136.0	136.0	136.0
RE 30, 60 W	183	HED_ 5540	399/401	115.4	125.3	125.3	132.0	132.0	138.7	138.7	138.7	145.4	145.4	145.4	145.4
RE 35, 90 W	184			97.6	107.5	107.5	114.2	114.2	120.9	120.9	120.9	127.6	127.6	127.6	127.6
RE 35, 90 W	184	MR	393	109.0	118.9	118.9	125.6	125.6	132.3	132.3	132.3	139.0	139.0	139.0	139.0
RE 35, 90 W	184	HED_ 5540	399/401	118.3	128.2	128.2	134.9	134.9	141.6	141.6	141.6	148.3	148.3	148.3	148.3
RE 35, 90 W	184	DCT 22	411	115.7	125.6	125.6	132.3	132.3	139.0	139.0	139.0	145.7	145.7	145.7	145.7
RE 35, 90 W	184	AB 28	446	133.7	143.6	143.6	150.3	150.3	157.0	157.0	157.0	163.7	163.7	163.7	163.7
RE 35, 90 W	184	HEDS 5540/AB 28	399/446	150.9	160.8	160.8	167.5	167.5	174.2	174.2	174.2	180.9	180.9	180.9	180.9
A-max 32	213/215			89.5	99.4	99.4	106.1	106.1	112.8	112.8	112.8	119.5	119.5	119.5	119.5
A-max 32	214/216			88.1	98.0	98.0	104.7	104.7	111.4	111.4	111.4	118.1	118.1	118.1	118.1
A-max 32	214/216	MR	393	99.3	109.2	109.2	115.9	115.9	122.6	122.6	122.6	129.3	129.3	129.3	129.3
A-max 32	214/216	HED_ 5540	400/402	108.9	118.8	118.8	125.5	125.5	132.2	132.2	132.2	138.9	138.9	138.9	138.9
EC 32, 80 W	251			86.6	96.5	96.5	103.2	103.2	109.9	109.9	109.9	116.6	116.6	116.6	116.6
EC 32, 80 W	251	HED_ 5540	400/403	105.0	114.9	114.9	121.6	121.6	128.3	128.3	128.3	135.0	135.0	135.0	135.0
EC 32, 80 W	251	Res 26	412	106.7	116.6	116.6	123.3	123.3	130.0	130.0	130.0	136.7	136.7	136.7	136.7
EC 32 flat, 15 W	296			44.5	54.4	54.4	61.1	61.1	67.8	67.8	67.8	74.5	74.5	74.5	74.5
EC 32 flat, IE, IP 00	297			54.6	64.5	64.5	71.2	71.2	77.9	77.9	77.9	84.6	84.6	84.6	84.6
EC 32 flat, IE, IP 40	297			56.3	66.2	66.2	72.9	72.9	79.6	79.6	79.6	86.3	86.3	86.3	86.3