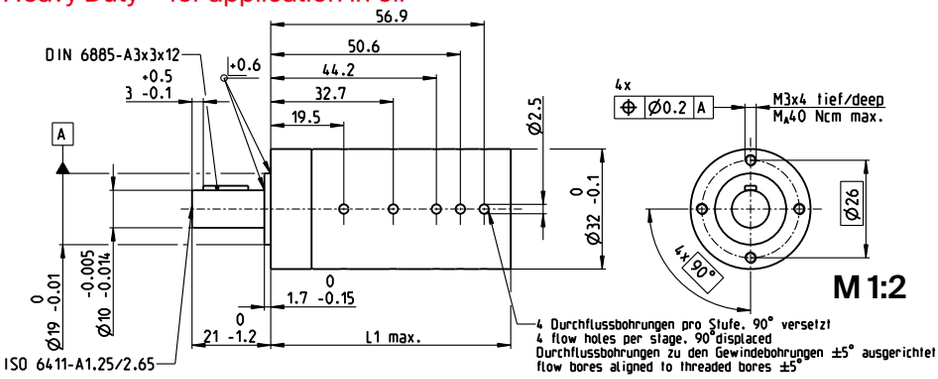
Planetary Gearhead GP 32 HD ∅32 mm, 3.0–8.0 Nm

Heavy Duty – for application in oil

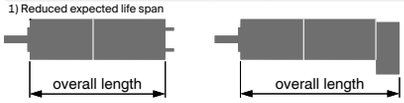


Technical Data	
Planetary Gearhead	straight teeth
Output shaft	stainless steel
Bearing at output	ball bearing
Radial play, 10 mm from flange	max. 0.14 mm
Axial play	max. 0.4 mm
Max. axial load (dynamic)	120 N
Max. force for press fits	120 N
Direction of rotation, drive to output	=
Max. continuous input speed	< 8000 rpm
Recommended temperature range	-55...+200°C
Extended range as option	-55...+260°C
Number of stages 1 2 3 4 5	
Max. radial load, 10 mm from flange 120 N 200 N 250 N 300 N 300 N	

Stock program
Standard program
Special program (on request)

Part Numbers		526077	526080	526086	526092	526095	526101	526106	526112	526117	526123
Gearhead Data (provisional)											
1 Reduction		3.7:1	14:1	51:1	123:1	190:1	492:1	707:1	1694:1	2548:1	4060:1
2 Absolute reduction		26/7	676/49	17576/343	6877/56	456976/2401	86112/175	11881376/16807	1162213/686	7962624/3125	3637933/896
3 Max. motor shaft diameter	mm	6	6	6	3	6	6	6	6	4	6
Part Numbers		526078	526081	526087	526093	526096	526102	526107	526113	526118	526124
1 Reduction		4.8:1	18:1	66:1	132:1	246:1	531:1	914:1	1828:1	2623:1	4380:1
2 Absolute reduction		24/5	624/35	16224/245	3312/25	421824/1715	331776/625	10967424/12005	2238912/1225	2056223/784	109503/25
3 Max. motor shaft diameter	mm	4	6	6	4	6	4	6	6	6	4
Part Numbers		526079*	526082	526088	526094*	526097	526103	526108	526114	526119	526125
1 Reduction		5.8:1	21:1	79:1	159:1	295:1	589:1	1094:1	1972:1	2829:1	5247:1
2 Absolute reduction		23/4	299/14	3887/49	1587/10	101062/343	20631/35	2627612/2401	8626176/4375	495144/175	839523/160
3 Max. motor shaft diameter	mm	3	6	6	3	6	6	6	4	6	4
Part Numbers			526083	526089		526098	526104	526109	526115	526120	526126*
1 Reduction			23:1	86:1		318:1	636:1	1181:1	2189:1	3052:1	6285:1
2 Absolute reduction			576/25	14976/175		389376/1225	79488/125	10123776/8575	536406/245	1907712/625	6436343/1024
3 Max. motor shaft diameter	mm		4	6		6	4	6	6	4	3
Part Numbers			526084	526090		526099	526105	526110	526116	526121	
1 Reduction			28:1	103:1		411:1	762:1	1414:1	2362:1	3389:1	
2 Absolute reduction			138/5	3588/35		359424/875	19044/25	2425488/1715	2066688/875	474513/140	
3 Max. motor shaft diameter	mm		4	6		6	4	6	6	6	
Part Numbers			526085*	526091		526100		526111		526122	
1 Reduction			33:1	111:1		456:1		1526:1		3656:1	
2 Absolute reduction			529/16	13824/125		89401/196		9345024/6125		457056/125	
3 Max. motor shaft diameter	mm		3	4		6		4		4	
4 Number of stages		1	2	3	3	4	4	5	5	5	5
5 Max. continuous torque	Nm	3	4	8	8	8	8	8	8	8	8
6 Max. intermittent torque at gear output	Nm	4.5	6	12	12	12	12	12	12	12	12
15 Max. overload torque[1]	Nm	9	12	24	24	24	24	24	24	24	24
7 Max. efficiency	%	95	87	78	78	65	65	53	53	53	53
8 Weight	g	176	234	277	277	309	309	340	340	340	340
9 Average backlash no load	°	0.7	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
10 Mass inertia	gcm^2	1.59	1.59	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
11 Gearhead length L1	mm	32.9	45.3	55.1	55.1	61.6	61.6	68.1	68.1	68.1	68.1
13 Max. transmittable power (continuous)	W	320	200	80	80	40	40	12	12	12	12
14 Max. transmittable power (intermittent)	W	480	300	120	120	60	60	18	18	18	18

1) Reduced expected life span



maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	**Overall length [mm]** = Motor length + gearhead length + (sensor/brake) + assembly parts									
EC-4pole 32 HD oil, A	263			194.0	206.5	216.5	216.5	223.0	223.0	229.5	229.5	229.5	229.5
EC-4pole 32 HD oil, B	263			174.0	186.5	196.5	196.5	203.0	203.0	209.5	209.5	209.5	209.5

*Overall length + 2 mm

Application

General
- extreme temperature applications
- vibration tested according to MIL-STD810F/ Jan2000 Fig. 514.5C-10
- operation in oil and high pressure

Oil & Gas Industry
- oil, gas and geothermal wells

Important Notice

This gearhead has been designed for applications in oil and is only equipped with minimum lubrication. Therefore it is not permitted to use it under normal air conditions.