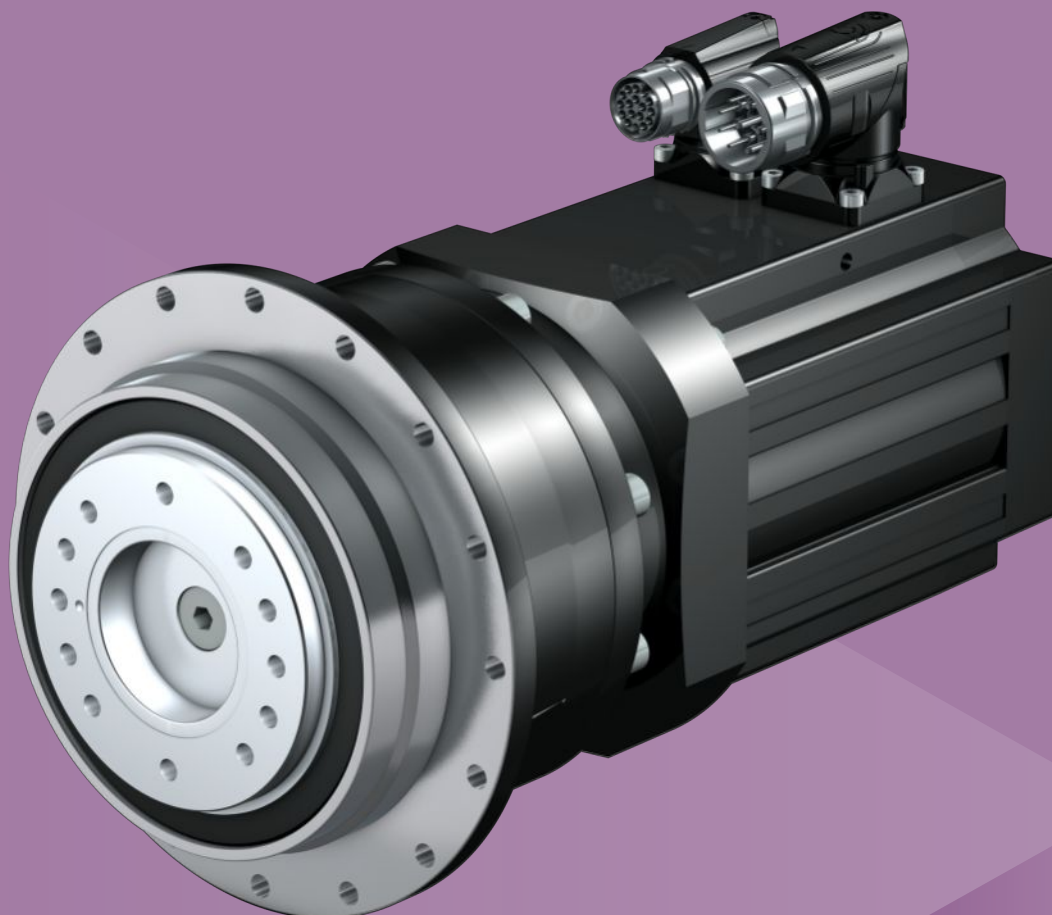




3

Planetary geared motors

PH

3.1 Overview

High-performance precision planetary geared motors

Features

Power density	★★★★☆
Backlash	★★★★★
Price category	€€€
Shaft load	★★★★★
Smooth operation	★★★★☆
Torsional stiffness	★★★★☆
Mass moment of inertia	★★★★★
Helical gearing	✓
Maintenance-free	✓
Any mounting position	✓
Continuous operation without cooling	✓
Stiff output bearings due to pretension	✓
Reinforced output bearing (PH3 – PH5)	✓ (optional)
Compact and highly dynamic due to direct motor attachment	✓

Key ★☆☆☆☆ good | ★★★★★ excellent

€ Economy | €€€€€ Premium

Technical data

i	4 – 100
M_{2acc}	24 – 7500 Nm
$\Delta\phi_2$	1 – 4 arcmin
η_{get}	93 – 96 %

3.2 Selection tables

The technical data specified in the selection tables applies to:

- Installation altitudes up to 1000 m above sea level
- Surrounding temperatures from 0 °C to 40 °C
- Drives with convection-cooled motors (e.g. EZ401U)

For the technical data on drives with forced ventilated motors (e.g. EZ401B), refer to

<https://configurator.stoeber.de/en-US/>.

In the case of the version with a reinforced bearing and gear ratios ≤ 5 , the maximum permitted input speed $n_{1\max ZB}$ is reduced. You can find values at <https://configurator.stoeber.de/en-US/>

An explanation of the formula symbols can be found in Chapter [▶ 20.1](#).

n_{2N} [rpm]	M_{2N} [Nm]	$M_{2,0}$ [Nm]	a_{th}	S	Type	M_{2acc} [Nm]	M_{2accHT} [Nm]	M_{2NOT} [Nm]	i	i_{exakt}	$n_{1\max DB}$ [rpm]	$n_{1\max ZB}$ [rpm]	J_1 [kgcm ²]	$\Delta\phi_2$ [arcmin]	$\Delta\phi_{2red}$ [arcmin]	C_2 [Nm/ arcmin]	m [kg]
PH3 ($n_{1N} = 3000 \text{ rpm}$, $M_{2acc,max} = 80 \text{ Nm}$)																	
60	43	44	1.4	1.2	PH332_0500 EZ301U	75	75	150	50.00	50/1	6000	8000	0.21	4.0	2.0	12	3.2
75	35	35	1.5	1.4	PH332_0400 EZ301U	67	67	134	40.00	40/1	6000	8000	0.22	4.0	2.0	9.0	3.2
86	30	31	1.6	1.7	PH332_0350 EZ301U	80	85	160	35.00	35/1	6000	8000	0.21	4.0	2.0	14	3.2
107	24	25	1.8	2.1	PH332_0280 EZ301U	73	73	150	28.00	28/1	6000	8000	0.22	4.0	2.0	12	3.2
107	41	44	3.1	1.2	PH332_0280 EZ302U	75	75	150	28.00	28/1	6000	8000	0.32	4.0	2.0	12	3.8
120	22	22	1.9	2.3	PH332_0250 EZ301U	65	65	160	25.00	25/1	6000	8000	0.21	4.0	2.0	14	3.2
120	37	39	3.3	1.4	PH332_0250 EZ302U	80	85	160	25.00	25/1	6000	8000	0.31	4.0	2.0	14	3.8
120	48	51	4.3	1.0	PH332_0250 EZ303U	80	85	160	25.00	25/1	6000	8000	0.42	4.0	2.0	14	4.3
150	17	18	2.4	2.6	PH332_0200 EZ301U	52	52	160	20.00	20/1	5500	8000	0.23	4.0	2.0	14	3.2
150	30	31	4.1	1.5	PH332_0200 EZ302U	80	85	160	20.00	20/1	5500	8000	0.33	4.0	2.0	14	3.8
150	39	41	5.4	1.2	PH332_0200 EZ303U	80	85	160	20.00	20/1	5500	8000	0.44	4.0	2.0	14	4.3
300	8.9	9.1	1.5	3.2	PH331_0100 EZ301U	27	27	120	10.00	10/1	5500	8000	0.21	4.0	2.0	9.2	2.7
300	15	16	2.6	1.9	PH331_0100 EZ302U	48	48	120	10.00	10/1	5500	8000	0.31	4.0	2.0	9.2	3.3
300	20	21	3.3	1.4	PH331_0100 EZ303U	60	60	120	10.00	10/1	5500	8000	0.42	4.0	2.0	9.2	3.8
300	27	29	4.5	1.1	PH331_0100 EZ401U	60	60	120	10.00	10/1	5500	8000	0.95	4.0	2.0	9.2	5.2
429	11	11	2.9	3.7	PH331_0070 EZ302U	34	34	150	7.000	7/1	5000	8000	0.33	4.0	2.0	13	3.3
429	14	15	3.7	2.8	PH331_0070 EZ303U	47	47	150	7.000	7/1	5000	8000	0.44	4.0	2.0	13	3.8
429	19	20	5.0	2.1	PH331_0070 EZ401U	57	57	150	7.000	7/1	5000	8000	0.97	4.0	2.0	13	5.2
429	32	35	8.4	1.2	PH331_0070 EZ402U	75	77	150	7.000	7/1	5000	8000	1.7	4.0	2.0	13	6.3
600	9.9	11	5.6	4.0	PH331_0050 EZ303U	34	34	160	5.000	5/1	4000	8000	0.48	4.0	2.0	15	3.8
600	13	14	7.5	2.9	PH331_0050 EZ401U	41	41	160	5.000	5/1	4000	8000	1.0	4.0	2.0	15	5.2
600	23	25	13	1.7	PH331_0050 EZ402U	77	77	160	5.000	5/1	4000	8000	1.7	4.0	2.0	15	6.3
PH3 ($n_{1N} = 6000 \text{ rpm}$, $M_{2acc,max} = 80 \text{ Nm}$)																	
86	26	29	0.6	1.7	PH332_0700 EZ202U	69	69	138	70.00	70/1	6000	8000	0.14	4.0	2.0	12	3.1
86	40	45	0.8	1.1	PH332_0700 EZ203U	69	69	138	70.00	70/1	6000	8000	0.18	4.0	2.0	12	3.4
120	19	20	0.7	2.2	PH332_0500 EZ202U	69	69	150	50.00	50/1	6000	8000	0.15	4.0	2.0	12	3.1
120	28	32	1.1	1.4	PH332_0500 EZ203U	75	75	150	50.00	50/1	6000	8000	0.19	4.0	2.0	12	3.4
150	15	16	0.8	2.8	PH332_0400 EZ202U	55	55	134	40.00	40/1	6000	8000	0.16	4.0	2.0	9.0	3.1
150	23	26	1.2	1.8	PH332_0400 EZ203U	67	67	134	40.00	40/1	6000	8000	0.20	4.0	2.0	9.0	3.4
150	33	35	1.8	1.2	PH332_0400 EZ301U	67	67	134	40.00	40/1	6000	8000	0.22	4.0	2.0	9.0	3.2
171	13	14	0.8	3.5	PH332_0350 EZ202U	48	48	160	35.00	35/1	6000	8000	0.15	4.0	2.0	14	3.1
171	20	22	1.2	2.3	PH332_0350 EZ203U	80	85	160	35.00	35/1	6000	8000	0.19	4.0	2.0	14	3.4
171	29	31	1.7	1.6	PH332_0350 EZ301U	80	85	160	35.00	35/1	6000	8000	0.21	4.0	2.0	14	3.2
214	10	11	0.9	4.0	PH332_0280 EZ202U	39	39	150	28.00	28/1	6000	8000	0.16	4.0	2.0	12	3.1
214	16	18	1.4	2.6	PH332_0280 EZ203U	70	70	150	28.00	28/1	6000	8000	0.20	4.0	2.0	12	3.4
214	23	25	2.1	1.8	PH332_0280 EZ301U	73	73	150	28.00	28/1	6000	8000	0.22	4.0	2.0	12	3.2
214	39	44	3.6	1.1	PH332_0280 EZ302U	75	75	150	28.00	28/1	6000	8000	0.32	4.0	2.0	12	3.8
240	9.3	10	0.9	4.8	PH332_0250 EZ202U	34	34	160	25.00	25/1	6000	8000	0.15	4.0	2.0	14	3.1
240	14	16	1.4	3.2	PH332_0250 EZ203U	63	63	160	25.00	25/1	6000	8000	0.19	4.0	2.0	14	3.4
240	21	22	2.1	2.2	PH332_0250 EZ301U	65	65	160	25.00	25/1	6000	8000	0.21	4.0	2.0	14	3.2
240	35	39	3.5	1.3	PH332_0250 EZ302U	80	85	160	25.00	25/1	6000	8000	0.31	4.0	2.0	14	3.8
300	11	13	1.9	3.3	PH332_0200 EZ203U	50	50	160	20.00	20/1	5500	8000	0.20	4.0	2.0	14	3.4
300	17	18	2.7	2.3	PH332_0200 EZ301U	52	52	160	20.00	20/1	5500	8000	0.23	4.0	2.0	14	3.2
300	28	31	4.6	1.4	PH332_0200 EZ302U	80	85	160	20.00	20/1	5500	8000	0.33	4.0	2.0	14	3.8
300	36	42	6.0	1.0	PH332_0200 EZ303U	80	85	160	20.00	20/1	5500	8000	0.44	4.0	2.0	14	4.3
600	8.5	9.1	1.8	2.7	PH331_0100 EZ301U	27	27	120	10.00	10/1	5500	8000	0.21	4.0	2.0	9.2	2.7
600	14	16	3.0	1.6	PH331_0100 EZ302U	48	48	120	10.00	10/1	5500	8000	0.31	4.0	2.0	9.2	3.3
600	19	22	4.0	1.2	PH331_0100 EZ303U	60	60	120	10.00	10/1	5500	8000	0.42	4.0	2.0	9.2	3.8
600	22	27	4.7	1.0	PH331_0100 EZ401U	60	60	120	10.00	10/1	5500	8000	0.95	4.0	2.0	9.2	5.2
857	10	11	3.4	3.1	PH331_0070 EZ302U	34	34	150	7.000	7/1	5000	8000	0.33	4.0	2.0	13	3.3
857	13	15	4.4	2.4	PH331_0070 EZ303U	47	47	150	7.000	7/1	5000	8000	0.44	4.0	2.0	13	3.8

3.2 Selection tables 3 PH planetary geared motors

n_{2N} [rpm]	M_{2N} [Nm]	$M_{2,0}$ [Nm]	a_{th}	S	Type	M_{2acc} [Nm]	M_{2accHT} [Nm]	M_{2NOT} [Nm]	i	i_{exakt}	n_{1maxDB} [rpm]	n_{1maxZB} [rpm]	J_1 [kgcm ²]	$\Delta\varphi_2$ [arcmin]	$\Delta\varphi_{2red}$ [arcmin]	C_2 [Nm/ arcmin]	m [kg]
PH3 ($n_{1N} = 6000$ rpm, $M_{2acc,max} = 80$ Nm)																	
857	15	19	5.2	2.0	PH331_0070 EZ401U	57	57	150	7.000	7/1	5000	8000	0.97	4.0	2.0	13	5.2
857	24	33	7.9	1.3	PH331_0070 EZ402U	75	77	150	7.000	7/1	5000	8000	1.7	4.0	2.0	13	6.3
1200	7.2	8.1	5.1	4.3	PH331_0050 EZ302U	24	24	160	5.000	5/1	4000	8000	0.37	4.0	2.0	15	3.3
1200	9.4	11	6.6	3.3	PH331_0050 EZ303U	34	34	160	5.000	5/1	4000	8000	0.48	4.0	2.0	15	3.8
1200	11	13	7.8	2.8	PH331_0050 EZ401U	41	41	160	5.000	5/1	4000	8000	1.0	4.0	2.0	15	5.2
1200	17	24	12	1.9	PH331_0050 EZ402U	77	77	160	5.000	5/1	4000	8000	1.7	4.0	2.0	15	6.3
PH4 ($n_{1N} = 3000$ rpm, $M_{2acc,max} = 170$ Nm)																	
43	61	62	0.6	1.8	PH432_0700 EZ301U	158	164	316	70.00	70/1	4500	8000	0.22	3.0	1.0	27	5.7
43	104	109	1.0	1.0	PH432_0700 EZ302U	158	164	316	70.00	70/1	4500	8000	0.32	3.0	1.0	27	6.3
60	43	44	0.7	2.5	PH432_0500 EZ301U	130	130	318	50.00	50/1	4500	8000	0.25	3.0	1.0	31	5.7
60	74	78	1.2	1.4	PH432_0500 EZ302U	159	174	318	50.00	50/1	4500	8000	0.35	3.0	1.0	31	6.3
60	96	102	1.6	1.1	PH432_0500 EZ303U	159	174	318	50.00	50/1	4500	8000	0.46	3.0	1.0	31	6.8
75	35	35	0.8	2.9	PH432_0400 EZ301U	104	104	310	40.00	40/1	4500	8000	0.28	3.0	1.0	30	5.7
75	59	62	1.4	1.7	PH432_0400 EZ302U	155	169	310	40.00	40/1	4500	8000	0.38	3.0	1.0	30	6.3
75	77	81	1.9	1.3	PH432_0400 EZ303U	155	169	310	40.00	40/1	4500	8000	0.49	3.0	1.0	30	6.8
86	30	31	0.9	3.5	PH432_0350 EZ301U	91	91	320	35.00	35/1	4500	8000	0.25	3.0	1.0	32	5.7
86	52	55	1.5	2.1	PH432_0350 EZ302U	160	163	320	35.00	35/1	4500	8000	0.35	3.0	1.0	32	6.3
86	67	71	1.9	1.6	PH432_0350 EZ303U	160	174	320	35.00	35/1	4500	8000	0.46	3.0	1.0	32	6.8
86	91	98	2.6	1.2	PH432_0350 EZ401U	160	174	320	35.00	35/1	4500	8000	0.99	3.0	1.0	32	8.2
107	24	25	1.1	3.9	PH432_0280 EZ301U	73	73	312	28.00	28/1	4500	8000	0.29	3.0	1.0	31	5.7
107	41	44	1.9	2.3	PH432_0280 EZ302U	130	130	312	28.00	28/1	4500	8000	0.39	3.0	1.0	31	6.3
107	54	57	2.4	1.8	PH432_0280 EZ303U	160	173	312	28.00	28/1	4500	8000	0.50	3.0	1.0	31	6.8
107	73	78	3.3	1.3	PH432_0280 EZ401U	160	173	312	28.00	28/1	4500	8000	1.0	3.0	1.0	31	8.2
120	22	22	1.1	4.6	PH432_0250 EZ301U	65	65	322	25.00	25/1	4500	8000	0.26	3.0	1.0	32	5.7
120	37	39	1.9	2.7	PH432_0250 EZ302U	116	116	322	25.00	25/1	4500	8000	0.36	3.0	1.0	32	6.3
120	48	51	2.4	2.1	PH432_0250 EZ303U	161	163	322	25.00	25/1	4500	8000	0.47	3.0	1.0	32	6.8
120	65	70	3.3	1.5	PH432_0250 EZ401U	161	174	322	25.00	25/1	4500	8000	1.0	3.0	1.0	32	8.2
150	30	31	2.2	3.2	PH432_0200 EZ302U	93	93	299	20.00	20/1	4000	8000	0.36	3.0	1.0	32	6.3
150	39	41	2.9	2.5	PH432_0200 EZ303U	130	130	299	20.00	20/1	4000	8000	0.47	3.0	1.0	32	6.8
150	52	56	3.9	1.8	PH432_0200 EZ401U	150	150	299	20.00	20/1	4000	8000	1.0	3.0	1.0	32	8.2
150	87	97	6.5	1.1	PH432_0200 EZ402U	150	150	299	20.00	20/1	4000	8000	1.7	3.0	1.0	32	9.3
188	24	25	2.6	3.8	PH432_0160 EZ302U	74	74	312	16.00	16/1	4000	8000	0.41	3.0	1.0	31	6.3
188	31	33	3.4	2.9	PH432_0160 EZ303U	104	104	312	16.00	16/1	4000	8000	0.52	3.0	1.0	31	6.8
188	42	45	4.6	2.2	PH432_0160 EZ401U	126	126	312	16.00	16/1	4000	8000	1.0	3.0	1.0	31	8.2
188	70	77	7.6	1.3	PH432_0160 EZ402U	160	173	312	16.00	16/1	4000	8000	1.7	3.0	1.0	31	9.3
300	27	29	2.4	2.2	PH431_0100 EZ401U	82	82	230	10.00	10/1	3500	7000	1.0	3.0	1.0	21	7.0
300	41	45	3.7	1.4	PH431_0100 EZ501U	115	115	230	10.00	10/1	3500	7000	3.0	3.0	1.0	21	8.0
300	45	50	4.1	1.3	PH431_0100 EZ402U	115	115	230	10.00	10/1	3500	7000	1.7	3.0	1.0	21	8.1
429	19	20	3.0	3.9	PH431_0070 EZ401U	57	57	320	7.000	7/1	3200	6000	1.1	3.0	1.0	31	7.0
429	29	32	4.6	2.6	PH431_0070 EZ501U	108	108	320	7.000	7/1	3200	6000	3.1	3.0	1.0	31	8.0
429	32	35	5.0	2.4	PH431_0070 EZ402U	108	108	320	7.000	7/1	3200	6000	1.8	3.0	1.0	31	8.1
429	46	58	7.4	1.6	PH431_0070 EZ404U	160	175	320	7.000	7/1	3200	6000	3.1	3.0	1.0	31	10
429	50	54	7.9	1.5	PH431_0070 EZ502U	160	175	320	7.000	7/1	3200	6000	5.4	3.0	1.0	31	9.5
429	65	75	10	1.1	PH431_0070 EZ503U	160	175	320	7.000	7/1	3200	6000	7.7	3.0	1.0	31	11
600	21	23	6.9	3.6	PH431_0050 EZ501U	77	77	344	5.000	5/1	3000	6000	3.2	3.0	1.0	37	8.0
600	23	25	7.5	3.3	PH431_0050 EZ402U	77	77	344	5.000	5/1	3000	6000	1.9	3.0	1.0	37	8.1
600	33	41	11	2.2	PH431_0050 EZ404U	139	139	344	5.000	5/1	3000	6000	3.3	3.0	1.0	37	10
600	36	38	12	2.1	PH431_0050 EZ502U	149	149	344	5.000	5/1	3000	6000	5.5	3.0	1.0	37	9.5
600	47	53	16	1.6	PH431_0050 EZ503U	172	189	344	5.000	5/1	3000	6000	7.9	3.0	1.0	37	11
600	65	77	22	1.1	PH431_0050 EZ505U	172	189	344	5.000	5/1	3000	6000	12	3.0	1.0	37	14
750	17	18	9.0	4.5	PH431_0040 EZ501U	61	61	273	4.000	4/1	2600	5000	3.4	3.0	1.0	39	8.0
750	18	20	9.8	4.1	PH431_0040 EZ402U	61	61	273	4.000	4/1	2600	5000	2.1	3.0	1.0	39	8.1
750	26	33	14	2.8	PH431_0040 EZ404U	111	111	273	4.000	4/1	2600	5000	3.5	3.0	1.0	39	10
750	28	31	15	2.6	PH431_0040 EZ502U	119	119	273	4.000	4/1	2600	5000	5.7	3.0	1.0	39	9.5
750	37	43	20	2.0	PH431_0040 EZ503U	136	165	273	4.000	4/1	2600	5000	8.1	3.0	1.0	39	11
750	52	61	28	1.4	PH431_0040 EZ505U	136	189	273	4.000	4/1	2600	5000	13	3.0	1.0	39	14
PH4 ($n_{1N} = 4500$ rpm, $M_{2acc,max} = 170$ Nm)																	
643	64	103	12	1.0	PH431_0070 EZ505U	160	175	320	7.000	7/1	3200	6000	12	3.0	1.0	31	14
900	46	73	17	1.4	PH431_0050 EZ505U	172	189	344	5.000	5/1	3000	6000	12	3.0	1.0	37	14
1125	36	59	23	1.8	PH431_0040 EZ505U	136	189	273	4.000	4/1	2600	5000	13	3.0	1.0	39	14
PH4 ($n_{1N} = 6000$ rpm, $M_{2acc,max} = 170$ Nm)																	
86	58	62	0.7	1.5	PH432_0700 EZ301U	158	164	316	70.00	70/1	4500	8000	0.22	3.0	1.0	27	5.7
120	41	44	0.9	2.1	PH432_0500 EZ301U	130	130	318	50.00	50/1	4500	8000	0.25	3.0	1.0	31	5.7
120	70	78	1.5	1.2	PH432_0500 EZ302U	159	174	318	50.00	50/1	4500	8000	0.35	3.0	1.0	31	6.3
150	33	35	1.0	2.4	PH432_0400 EZ301U	104	104	310	40.00	40/1	4500	8000	0.28	3.0	1.0	30	5.7

n_{2N} [rpm]	M_{2N} [Nm]	$M_{2,0}$ [Nm]	a_{th}	S	Type	M_{2acc} [Nm]	M_{2accHT} [Nm]	M_{2NOT} [Nm]	i	i_{exakt}	n_{1maxDB} [rpm]	n_{1maxZB} [rpm]	J_1 [kgcm ²]	$\Delta\varphi_2$ [arcmin]	$\Delta\varphi_{2red}$ [arcmin]	C_2 [Nm/ arcmin]	m [kg]
PH4 ($n_{1N} = 6000$ rpm, $M_{2acc,max} = 170$ Nm)																	
150	56	62	1.7	1.4	PH432_0400 EZ302U	155	169	310	40.00	40/1	4500	8000	0.38	3.0	1.0	30	6.3
150	73	84	2.2	1.1	PH432_0400 EZ303U	155	169	310	40.00	40/1	4500	8000	0.49	3.0	1.0	30	6.8
171	29	31	1.0	2.9	PH432_0350 EZ301U	91	91	320	35.00	35/1	4500	8000	0.25	3.0	1.0	32	5.7
171	49	55	1.7	1.7	PH432_0350 EZ302U	160	163	320	35.00	35/1	4500	8000	0.35	3.0	1.0	32	6.3
171	64	73	2.3	1.3	PH432_0350 EZ303U	160	174	320	35.00	35/1	4500	8000	0.46	3.0	1.0	32	6.8
171	75	91	2.7	1.1	PH432_0350 EZ401U	160	174	320	35.00	35/1	4500	8000	0.99	3.0	1.0	32	8.2
214	23	25	1.2	3.7	PH432_0280 EZ301U	73	73	312	28.00	28/1	4500	8000	0.29	3.0	1.0	31	5.7
214	39	44	2.0	2.2	PH432_0280 EZ302U	130	130	312	28.00	28/1	4500	8000	0.39	3.0	1.0	31	6.3
214	51	59	2.6	1.7	PH432_0280 EZ303U	160	173	312	28.00	28/1	4500	8000	0.50	3.0	1.0	31	6.8
214	60	73	3.0	1.4	PH432_0280 EZ401U	160	173	312	28.00	28/1	4500	8000	1.0	3.0	1.0	31	8.2
240	21	22	1.2	4.1	PH432_0250 EZ301U	65	65	322	25.00	25/1	4500	8000	0.26	3.0	1.0	32	5.7
240	35	39	2.1	2.4	PH432_0250 EZ302U	116	116	322	25.00	25/1	4500	8000	0.36	3.0	1.0	32	6.3
240	46	52	2.7	1.9	PH432_0250 EZ303U	161	163	322	25.00	25/1	4500	8000	0.47	3.0	1.0	32	6.8
240	53	65	3.2	1.6	PH432_0250 EZ401U	161	174	322	25.00	25/1	4500	8000	1.0	3.0	1.0	32	8.2
240	81	114	4.8	1.0	PH432_0250 EZ402U	161	174	322	25.00	25/1	4500	8000	1.7	3.0	1.0	32	9.3
300	28	31	2.3	3.0	PH432_0200 EZ302U	93	93	299	20.00	20/1	4000	8000	0.36	3.0	1.0	32	6.3
300	36	42	3.0	2.3	PH432_0200 EZ303U	130	130	299	20.00	20/1	4000	8000	0.47	3.0	1.0	32	6.8
300	43	52	3.5	2.0	PH432_0200 EZ401U	150	150	299	20.00	20/1	4000	8000	1.0	3.0	1.0	32	8.2
300	65	91	5.4	1.3	PH432_0200 EZ402U	150	150	299	20.00	20/1	4000	8000	1.7	3.0	1.0	32	9.3
375	22	25	2.8	3.5	PH432_0160 EZ302U	74	74	312	16.00	16/1	4000	8000	0.41	3.0	1.0	31	6.3
375	29	33	3.6	2.7	PH432_0160 EZ303U	104	104	312	16.00	16/1	4000	8000	0.52	3.0	1.0	31	6.8
375	34	42	4.3	2.3	PH432_0160 EZ401U	126	126	312	16.00	16/1	4000	8000	1.0	3.0	1.0	31	8.2
375	52	73	6.5	1.5	PH432_0160 EZ402U	160	173	312	16.00	16/1	4000	8000	1.7	3.0	1.0	31	9.3
600	22	27	2.5	2.1	PH431_0100 EZ401U	82	82	230	10.00	10/1	3500	7000	1.0	3.0	1.0	21	7.0
600	33	42	3.7	1.4	PH431_0100 EZ501U	115	115	230	10.00	10/1	3500	7000	3.0	3.0	1.0	21	8.0
600	34	47	3.8	1.4	PH431_0100 EZ402U	115	115	230	10.00	10/1	3500	7000	1.7	3.0	1.0	21	8.1
857	15	19	3.1	3.8	PH431_0070 EZ401U	57	57	320	7.000	7/1	3200	6000	1.1	3.0	1.0	31	7.0
857	23	30	4.6	2.6	PH431_0070 EZ501U	108	108	320	7.000	7/1	3200	6000	3.1	3.0	1.0	31	8.0
857	24	33	4.7	2.5	PH431_0070 EZ402U	108	108	320	7.000	7/1	3200	6000	1.8	3.0	1.0	31	8.1
857	35	52	7.0	1.7	PH431_0070 EZ502U	160	175	320	7.000	7/1	3200	6000	5.4	3.0	1.0	31	9.5
857	39	56	7.8	1.5	PH431_0070 EZ404U	160	175	320	7.000	7/1	3200	6000	3.1	3.0	1.0	31	10
857	42	71	8.4	1.4	PH431_0070 EZ503U	160	175	320	7.000	7/1	3200	6000	7.7	3.0	1.0	31	11
1200	16	21	6.9	3.6	PH431_0050 EZ501U	77	77	344	5.000	5/1	3000	6000	3.2	3.0	1.0	37	8.0
1200	17	24	7.1	3.5	PH431_0050 EZ402U	77	77	344	5.000	5/1	3000	6000	1.9	3.0	1.0	37	8.1
1200	25	37	10	2.4	PH431_0050 EZ502U	149	149	344	5.000	5/1	3000	6000	5.5	3.0	1.0	37	9.5
1200	28	40	12	2.1	PH431_0050 EZ404U	139	139	344	5.000	5/1	3000	6000	3.3	3.0	1.0	37	10
1200	30	51	13	2.0	PH431_0050 EZ503U	172	189	344	5.000	5/1	3000	6000	7.9	3.0	1.0	37	11
PH5 ($n_{1N} = 3000$ rpm, $M_{2acc,max} = 390$ Nm)																	
43	182	195	0.8	1.5	PH532_0700 EZ401U	370	387	705	70.00	70/1	4000	8000	1.0	3.0	1.0	70	11
60	130	140	1.0	2.0	PH532_0500 EZ401U	385	395	705	50.00	50/1	4000	8000	1.1	3.0	1.0	79	11
60	200	219	1.6	1.3	PH532_0500 EZ501U	385	400	705	50.00	50/1	4000	8000	3.0	3.0	1.0	79	12
60	219	242	1.7	1.2	PH532_0500 EZ402U	385	400	705	50.00	50/1	4000	8000	1.8	3.0	1.0	79	12
75	104	112	1.4	2.0	PH532_0400 EZ401U	316	316	696	40.00	40/1	4000	8000	1.2	3.0	1.0	74	11
75	160	175	2.1	1.3	PH532_0400 EZ501U	355	356	696	40.00	40/1	4000	8000	3.1	3.0	1.0	74	12
75	175	193	2.3	1.2	PH532_0400 EZ402U	355	356	696	40.00	40/1	4000	8000	1.9	3.0	1.0	74	12
86	91	98	1.2	2.9	PH532_0350 EZ401U	277	277	705	35.00	35/1	4000	8000	1.1	3.0	1.0	84	11
86	140	153	1.8	1.9	PH532_0350 EZ501U	385	400	705	35.00	35/1	4000	8000	3.1	3.0	1.0	84	12
86	153	169	2.0	1.7	PH532_0350 EZ402U	385	400	705	35.00	35/1	4000	8000	1.8	3.0	1.0	84	12
86	225	280	2.9	1.2	PH532_0350 EZ404U	385	400	705	35.00	35/1	4000	8000	3.1	3.0	1.0	84	14
86	241	260	3.1	1.1	PH532_0350 EZ502U	385	400	705	35.00	35/1	4000	8000	5.4	3.0	1.0	84	13
107	73	78	1.4	3.3	PH532_0280 EZ401U	221	221	696	28.00	28/1	4000	8000	1.2	3.0	1.0	80	11
107	112	122	2.2	2.1	PH532_0280 EZ501U	355	387	696	28.00	28/1	4000	8000	3.1	3.0	1.0	80	12
107	122	135	2.4	2.0	PH532_0280 EZ402U	355	387	696	28.00	28/1	4000	8000	1.9	3.0	1.0	80	12
107	180	224	3.5	1.3	PH532_0280 EZ404U	355	387	696	28.00	28/1	4000	8000	3.2	3.0	1.0	80	14
107	193	208	3.8	1.2	PH532_0280 EZ502U	355	387	696	28.00	28/1	4000	8000	5.4	3.0	1.0	80	13
120	65	70	1.4	4.0	PH532_0250 EZ401U	198	198	705	25.00	25/1	3700	7500	1.1	3.0	1.0	85	11
120	100	109	2.2	2.6	PH532_0250 EZ501U	372	372	705	25.00	25/1	3700	7500	3.1	3.0	1.0	85	12
120	109	121	2.4	2.4	PH532_0250 EZ402U	372	372	705	25.00	25/1	3700	7500	1.8	3.0	1.0	85	12
120	160	200	3.5	1.6	PH532_0250 EZ404U	385	400	705	25.00	25/1	3700	7500	3.2	3.0	1.0	85	14
120	172	186	3.7	1.5	PH532_0250 EZ502U	385	400	705	25.00	25/1	3700	7500	5.4	3.0	1.0	85	13
120	226	258	4.9	1.2	PH532_0250 EZ503U	385	400	705	25.00	25/1	3700	7500	7.8	3.0	1.0	85	15
150	52	56	1.6	4.8	PH532_0200 EZ401U	158	158	705	20.00	20/1	3500	7000	1.1	3.0	1.0	86	11
150	80	87	2.5	3.1	PH532_0200 EZ501U	298	298	705	20.00	20/1	3500	7000	3.1	3.0	1.0	86	12
150	87	97	2.7	2.9	PH532_0200 EZ402U	298	298	705	20.00	20/1	3500	7000	1.8	3.0	1.0	86	12
150	128	160	4.0	1.9	PH532_0200 EZ404U	370	387	705	20.00	20/1	3500	7000	3.2	3.0	1.0	86	14

3.2 Selection tables 3 PH planetary geared motors

n_{2N} [rpm]	M_{2N} [Nm]	$M_{2,0}$ [Nm]	a_{th}	S	Type	M_{2acc} [Nm]	M_{2accHT} [Nm]	M_{2NOT} [Nm]	i	i_{exakt}	n_{1maxDB} [rpm]	n_{1maxZB} [rpm]	J_1 [kgcm ²]	$\Delta\varphi_2$ [arcmin]	$\Delta\varphi_{2red}$ [arcmin]	C_2 [Nm/ arcmin]	m [kg]
PH5 ($n_{1N} = 3000 \text{ rpm}$, $M_{2acc,max} = 390 \text{ Nm}$)																	
150	138	149	4.3	1.8	PH532_0200 EZ502U	370	387	705	20.00	20/1	3500	7000	5.4	3.0	1.0	86	13
150	180	206	5.6	1.4	PH532_0200 EZ503U	370	387	705	20.00	20/1	3500	7000	7.8	3.0	1.0	86	15
188	64	70	3.0	3.6	PH532_0160 EZ501U	238	238	696	16.00	16/1	3500	7000	3.2	3.0	1.0	83	12
188	70	77	3.3	3.3	PH532_0160 EZ402U	238	238	696	16.00	16/1	3500	7000	1.9	3.0	1.0	83	12
188	103	128	4.9	2.2	PH532_0160 EZ404U	355	355	696	16.00	16/1	3500	7000	3.3	3.0	1.0	83	14
188	110	119	5.2	2.1	PH532_0160 EZ502U	355	355	696	16.00	16/1	3500	7000	5.5	3.0	1.0	83	13
188	144	165	6.9	1.6	PH532_0160 EZ503U	355	355	696	16.00	16/1	3500	7000	7.9	3.0	1.0	83	15
188	201	238	9.6	1.1	PH532_0160 EZ505U	355	355	696	16.00	16/1	3500	7000	12	3.0	1.0	83	18
300	41	45	1.7	3.5	PH531_0100 EZ501U	154	154	575	10.00	10/1	3300	6500	3.2	3.0	1.0	53	9.9
300	71	77	3.0	2.0	PH531_0100 EZ502U	288	288	575	10.00	10/1	3300	6500	5.5	3.0	1.0	53	11
300	71	80	3.0	2.0	PH531_0100 EZ701U	192	192	575	10.00	10/1	3300	6500	8.8	3.0	1.0	53	13
300	93	107	3.9	1.5	PH531_0100 EZ503U	288	288	575	10.00	10/1	3300	6500	7.8	3.0	1.0	53	13
300	115	138	4.8	1.2	PH531_0100 EZ702U	288	288	575	10.00	10/1	3300	6500	14	3.0	1.0	53	16
300	130	154	5.4	1.1	PH531_0100 EZ505U	288	288	575	10.00	10/1	3300	6500	12	3.0	1.0	53	16
429	50	54	3.6	3.7	PH531_0070 EZ502U	208	208	705	7.000	7/1	3000	6000	5.8	3.0	1.0	77	11
429	50	56	3.6	3.7	PH531_0070 EZ701U	134	134	705	7.000	7/1	3000	6000	9.1	3.0	1.0	77	13
429	65	75	4.7	2.8	PH531_0070 EZ503U	289	289	705	7.000	7/1	3000	6000	8.1	3.0	1.0	77	13
429	81	97	5.8	2.3	PH531_0070 EZ702U	276	276	705	7.000	7/1	3000	6000	14	3.0	1.0	77	16
429	91	108	6.5	2.0	PH531_0070 EZ505U	370	387	705	7.000	7/1	3000	6000	13	3.0	1.0	77	16
429	111	140	7.9	1.7	PH531_0070 EZ703U	370	387	705	7.000	7/1	3000	6000	22	3.0	1.0	77	18
429	143	203	10	1.3	PH531_0070 EZ705U	370	387	705	7.000	7/1	3000	6000	35	3.0	1.0	77	23
600	47	53	7.0	3.9	PH531_0050 EZ503U	206	206	562	5.000	5/1	2500	5500	8.6	3.0	1.0	97	13
600	58	69	8.6	3.2	PH531_0050 EZ702U	197	197	705	5.000	5/1	2500	5500	15	3.0	1.0	97	16
600	65	77	9.7	2.8	PH531_0050 EZ505U	322	322	562	5.000	5/1	2500	5500	13	3.0	1.0	97	16
600	79	100	12	2.3	PH531_0050 EZ703U	312	312	705	5.000	5/1	2500	5500	23	3.0	1.0	97	18
600	102	145	15	1.8	PH531_0050 EZ705U	385	400	705	5.000	5/1	2500	5500	35	3.0	1.0	97	23
750	37	43	9.1	4.9	PH531_0040 EZ503U	165	165	452	4.000	4/1	2200	5000	9.2	3.0	1.0	100	13
750	46	55	11	4.0	PH531_0040 EZ702U	157	157	696	4.000	4/1	2200	5000	15	3.0	1.0	100	16
750	52	61	13	3.5	PH531_0040 EZ505U	257	257	452	4.000	4/1	2200	5000	14	3.0	1.0	100	16
750	63	80	16	2.9	PH531_0040 EZ703U	250	250	696	4.000	4/1	2200	5000	23	3.0	1.0	100	18
750	82	116	20	2.2	PH531_0040 EZ705U	355	387	696	4.000	4/1	2200	5000	36	3.0	1.0	100	23
PH5 ($n_{1N} = 4500 \text{ rpm}$, $M_{2acc,max} = 390 \text{ Nm}$)																	
180	221	356	5.4	1.0	PH532_0250 EZ505U	385	400	705	25.00	25/1	3700	7500	12	3.0	1.0	85	18
225	177	285	6.0	1.3	PH532_0200 EZ505U	370	387	705	20.00	20/1	3500	7000	12	3.0	1.0	86	18
281	141	228	7.2	1.5	PH532_0160 EZ505U	355	355	696	16.00	16/1	3500	7000	12	3.0	1.0	83	18
450	91	147	4.4	1.4	PH531_0100 EZ505U	288	288	575	10.00	10/1	3300	6500	12	3.0	1.0	53	16
450	116	192	5.6	1.1	PH531_0100 EZ703U	288	288	575	10.00	10/1	3300	6500	22	3.0	1.0	53	18
643	64	103	5.2	2.5	PH531_0070 EZ505U	370	387	705	7.000	7/1	3000	6000	13	3.0	1.0	77	16
643	81	134	6.7	2.0	PH531_0070 EZ703U	370	387	705	7.000	7/1	3000	6000	22	3.0	1.0	77	18
643	110	202	9.0	1.5	PH531_0070 EZ705U	370	387	705	7.000	7/1	3000	6000	35	3.0	1.0	77	23
900	46	73	7.8	3.5	PH531_0050 EZ505U	322	322	562	5.000	5/1	2500	5500	13	3.0	1.0	97	16
900	58	96	10	2.8	PH531_0050 EZ703U	312	312	705	5.000	5/1	2500	5500	23	3.0	1.0	97	18
900	79	144	14	2.0	PH531_0050 EZ705U	385	400	705	5.000	5/1	2500	5500	35	3.0	1.0	97	23
1125	36	59	10	4.4	PH531_0040 EZ505U	257	257	452	4.000	4/1	2200	5000	14	3.0	1.0	100	16
1125	46	77	13	3.4	PH531_0040 EZ703U	250	250	696	4.000	4/1	2200	5000	23	3.0	1.0	100	18
1125	63	115	18	2.5	PH531_0040 EZ705U	355	387	696	4.000	4/1	2200	5000	36	3.0	1.0	100	23
PH5 ($n_{1N} = 6000 \text{ rpm}$, $M_{2acc,max} = 390 \text{ Nm}$)																	
86	150	182	0.9	1.4	PH532_0700 EZ401U	370	387	705	70.00	70/1	4000	8000	1.0	3.0	1.0	70	11
120	107	130	1.0	1.9	PH532_0500 EZ401U	385	395	705	50.00	50/1	4000	8000	1.1	3.0	1.0	79	11
120	158	205	1.6	1.3	PH532_0500 EZ501U	385	400	705	50.00	50/1	4000	8000	3.0	3.0	1.0	79	12
120	163	228	1.6	1.2	PH532_0500 EZ402U	385	400	705	50.00	50/1	4000	8000	1.8	3.0	1.0	79	12
150	86	104	1.4	1.9	PH532_0400 EZ401U	316	316	696	40.00	40/1	4000	8000	1.2	3.0	1.0	74	11
150	126	164	2.1	1.3	PH532_0400 EZ501U	355	356	696	40.00	40/1	4000	8000	3.1	3.0	1.0	74	12
150	130	182	2.2	1.3	PH532_0400 EZ402U	355	356	696	40.00	40/1	4000	8000	1.9	3.0	1.0	74	12
171	75	91	1.2	2.8	PH532_0350 EZ401U	277	277	705	35.00	35/1	4000	8000	1.1	3.0	1.0	84	11
171	111	143	1.8	1.9	PH532_0350 EZ501U	385	400	705	35.00	35/1	4000	8000	3.1	3.0	1.0	84	12
171	114	159	1.8	1.8	PH532_0350 EZ402U	385	400	705	35.00	35/1	4000	8000	1.8	3.0	1.0	84	12
171	169	254	2.7	1.2	PH532_0350 EZ502U	385	400	705	35.00	35/1	4000	8000	5.4	3.0	1.0	84	13
171	189	273	3.0	1.1	PH532_0350 EZ404U	385	400	705	35.00	35/1	4000	8000	3.1	3.0	1.0	84	14
171	202	345	3.3	1.0	PH532_0350 EZ503U	385	400	705	35.00	35/1	4000	8000	7.7	3.0	1.0	84	15
214	60	73	1.4	3.4	PH532_0280 EZ401U	221	221	696	28.00	28/1	4000	8000	1.2	3.0	1.0	80	11
214	89	115	2.1	2.3	PH532_0280 EZ501U	355	387	696	28.00	28/1	4000	8000	3.1	3.0	1.0	80	12
214	91	128	2.1	2.2	PH532_0280 EZ402U	355	387	696	28.00	28/1	4000	8000	1.9	3.0	1.0	80	12
214	135	203	3.2	1.5	PH532_0280 EZ502U	355	387	696	28.00	28/1	4000	8000	5.4	3.0	1.0	80	13
214	151	219	3.5	1.3	PH532_0280 EZ404U	355	387	696	28.00	28/1	4000	8000	3.2	3.0	1.0	80	14

n_{2N} [rpm]	M_{2N} [Nm]	$M_{2,0}$ [Nm]	a_{th}	S	Type	M_{2acc} [Nm]	M_{2accHT} [Nm]	M_{2NOT} [Nm]	i	i_{exakt}	n_{1maxDB} [rpm]	n_{1maxZB} [rpm]	J_1 [kgcm ²]	$\Delta\varphi_2$ [arcmin]	$\Delta\varphi_{2red}$ [arcmin]	C_2 [Nm/ arcmin]	m [kg]
PH5 ($n_{1N} = 6000$ rpm, $M_{2acc,max} = 390$ Nm)																	
214	161	276	3.8	1.2	PH532_0280 EZ503U	355	387	696	28.00	28/1	4000	8000	7.8	3.0	1.0	80	15
240	53	65	1.4	3.9	PH532_0250 EZ401U	198	198	705	25.00	25/1	3700	7500	1.1	3.0	1.0	85	11
240	79	102	2.1	2.7	PH532_0250 EZ501U	372	372	705	25.00	25/1	3700	7500	3.1	3.0	1.0	85	12
240	81	114	2.2	2.6	PH532_0250 EZ402U	372	372	705	25.00	25/1	3700	7500	1.8	3.0	1.0	85	12
240	121	181	3.2	1.7	PH532_0250 EZ502U	385	400	705	25.00	25/1	3700	7500	5.4	3.0	1.0	85	13
240	135	195	3.6	1.6	PH532_0250 EZ404U	385	400	705	25.00	25/1	3700	7500	3.2	3.0	1.0	85	14
240	144	246	3.8	1.5	PH532_0250 EZ503U	385	400	705	25.00	25/1	3700	7500	7.8	3.0	1.0	85	15
300	43	52	1.6	4.9	PH532_0200 EZ401U	158	158	705	20.00	20/1	3500	7000	1.1	3.0	1.0	86	11
300	63	82	2.4	3.3	PH532_0200 EZ501U	298	298	705	20.00	20/1	3500	7000	3.1	3.0	1.0	86	12
300	65	91	2.4	3.2	PH532_0200 EZ402U	298	298	705	20.00	20/1	3500	7000	1.8	3.0	1.0	86	12
300	97	145	3.6	2.2	PH532_0200 EZ502U	370	387	705	20.00	20/1	3500	7000	5.4	3.0	1.0	86	13
300	108	156	4.0	1.9	PH532_0200 EZ404U	370	387	705	20.00	20/1	3500	7000	3.2	3.0	1.0	86	14
300	115	197	4.3	1.8	PH532_0200 EZ503U	370	387	705	20.00	20/1	3500	7000	7.8	3.0	1.0	86	15
375	51	65	2.8	3.9	PH532_0160 EZ501U	238	238	696	16.00	16/1	3500	7000	3.2	3.0	1.0	83	12
375	52	73	2.9	3.8	PH532_0160 EZ402U	238	238	696	16.00	16/1	3500	7000	1.9	3.0	1.0	83	12
375	77	116	4.3	2.5	PH532_0160 EZ502U	355	355	696	16.00	16/1	3500	7000	5.5	3.0	1.0	83	13
375	86	125	4.8	2.3	PH532_0160 EZ404U	355	355	696	16.00	16/1	3500	7000	3.3	3.0	1.0	83	14
375	92	158	5.2	2.1	PH532_0160 EZ503U	355	355	696	16.00	16/1	3500	7000	7.9	3.0	1.0	83	15
600	33	42	1.7	3.5	PH531_0100 EZ501U	154	154	575	10.00	10/1	3300	6500	3.2	3.0	1.0	53	9.9
600	50	75	2.6	2.3	PH531_0100 EZ502U	288	288	575	10.00	10/1	3300	6500	5.5	3.0	1.0	53	11
600	50	76	2.6	2.3	PH531_0100 EZ701U	192	192	575	10.00	10/1	3300	6500	8.8	3.0	1.0	53	13
600	60	102	3.1	1.9	PH531_0100 EZ503U	288	288	575	10.00	10/1	3300	6500	7.8	3.0	1.0	53	13
600	69	137	3.7	1.6	PH531_0100 EZ702U	288	288	575	10.00	10/1	3300	6500	14	3.0	1.0	53	16
857	35	52	3.2	4.2	PH531_0070 EZ502U	208	208	705	7.000	7/1	3000	6000	5.8	3.0	1.0	77	11
857	35	53	3.2	4.2	PH531_0070 EZ701U	134	134	705	7.000	7/1	3000	6000	9.1	3.0	1.0	77	13
857	42	71	3.8	3.5	PH531_0070 EZ503U	289	289	705	7.000	7/1	3000	6000	8.1	3.0	1.0	77	13
857	48	96	4.4	3.0	PH531_0070 EZ702U	276	276	705	7.000	7/1	3000	6000	14	3.0	1.0	77	16
PH7 ($n_{1N} = 2000$ rpm, $M_{2acc,max} = 880$ Nm)																	
286	294	444	11	1.5	PH731_0070 EZ805U	869	869	1720	7.000	7/1	2500	5000	134	3.0	1.0	166	55
400	210	317	16	2.1	PH731_0050 EZ805U	882	924	1720	5.000	5/1	2200	5000	136	3.0	1.0	208	55
500	168	254	21	2.6	PH731_0040 EZ805U	787	787	1680	4.000	4/1	1900	4000	138	3.0	1.0	243	55
PH7 ($n_{1N} = 3000$ rpm, $M_{2acc,max} = 870$ Nm)																	
43	280	306	0.7	2.0	PH732_0700 EZ501U	809	847	1617	70.00	70/1	3700	7000	3.2	3.0	1.0	154	18
43	482	521	1.2	1.2	PH732_0700 EZ502U	809	847	1617	70.00	70/1	3700	7000	5.5	3.0	1.0	154	20
43	482	540	1.2	1.2	PH732_0700 EZ701U	809	847	1617	70.00	70/1	3700	7000	8.8	3.0	1.0	154	21
60	200	219	0.9	2.8	PH732_0500 EZ501U	744	744	1660	50.00	50/1	3700	7000	3.4	3.0	1.0	176	18
60	344	372	1.5	1.6	PH732_0500 EZ502U	830	834	1660	50.00	50/1	3700	7000	5.7	3.0	1.0	176	20
60	344	386	1.5	1.6	PH732_0500 EZ701U	830	834	1660	50.00	50/1	3700	7000	9.0	3.0	1.0	176	21
60	451	516	1.9	1.2	PH732_0500 EZ503U	830	834	1660	50.00	50/1	3700	7000	8.1	3.0	1.0	176	21
75	160	175	1.1	3.0	PH732_0400 EZ501U	595	595	1540	40.00	40/1	3700	7000	3.7	3.0	1.0	182	18
75	275	298	1.9	1.7	PH732_0400 EZ502U	770	770	1540	40.00	40/1	3700	7000	6.0	3.0	1.0	182	20
75	275	309	1.9	1.7	PH732_0400 EZ701U	744	744	1540	40.00	40/1	3700	7000	9.3	3.0	1.0	182	21
75	361	413	2.5	1.3	PH732_0400 EZ503U	770	770	1540	40.00	40/1	3700	7000	8.4	3.0	1.0	182	21
75	446	536	3.1	1.1	PH732_0400 EZ702U	770	770	1540	40.00	40/1	3700	7000	15	3.0	1.0	182	24
86	140	153	1.1	3.9	PH732_0350 EZ501U	521	521	1720	35.00	35/1	3700	7000	3.5	3.0	1.0	183	18
86	241	260	1.8	2.2	PH732_0350 EZ502U	866	908	1720	35.00	35/1	3700	7000	5.8	3.0	1.0	183	20
86	241	270	1.8	2.2	PH732_0350 EZ701U	651	651	1720	35.00	35/1	3700	7000	9.1	3.0	1.0	183	21
86	316	361	2.4	1.7	PH732_0350 EZ503U	866	908	1720	35.00	35/1	3700	7000	8.1	3.0	1.0	183	21
86	391	469	2.9	1.4	PH732_0350 EZ702U	866	908	1720	35.00	35/1	3700	7000	14	3.0	1.0	183	24
86	439	521	3.3	1.2	PH732_0350 EZ505U	866	908	1720	35.00	35/1	3700	7000	13	3.0	1.0	183	24
86	537	677	4.0	1.0	PH732_0350 EZ703U	866	908	1720	35.00	35/1	3700	7000	22	3.0	1.0	183	26
107	112	122	1.2	4.8	PH732_0280 EZ501U	417	417	1540	28.00	28/1	3700	7000	3.8	3.0	1.0	194	18
107	193	208	2.0	2.8	PH732_0280 EZ502U	770	807	1540	28.00	28/1	3700	7000	6.1	3.0	1.0	194	20
107	193	216	2.0	2.8	PH732_0280 EZ701U	521	521	1540	28.00	28/1	3700	7000	9.4	3.0	1.0	194	21
107	253	289	2.7	2.1	PH732_0280 EZ503U	770	880	1540	28.00	28/1	3700	7000	8.5	3.0	1.0	194	21
107	312	375	3.3	1.7	PH732_0280 EZ702U	770	880	1540	28.00	28/1	3700	7000	15	3.0	1.0	194	24
107	352	417	3.7	1.5	PH732_0280 EZ505U	770	880	1540	28.00	28/1	3700	7000	13	3.0	1.0	194	24
107	430	542	4.5	1.3	PH732_0280 EZ703U	770	880	1540	28.00	28/1	3700	7000	23	3.0	1.0	194	26
120	172	186	2.3	2.9	PH732_0250 EZ502U	721	721	1720	25.00	25/1	3500	7000	5.8	3.0	1.0	186	20
120	172	193	2.3	2.9	PH732_0250 EZ701U	465	465	1720	25.00	25/1	3500	7000	9.1	3.0	1.0	186	21
120	226	258	3.0	2.2	PH732_0250 EZ503U	866	908	1720	25.00	25/1	3500	7000	8.2	3.0	1.0	186	21
120	279	335	3.8	1.8	PH732_0250 EZ702U	866	908	1720	25.00	25/1	3500	7000	14	3.0	1.0	186	24
120	314	372	4.2	1.6	PH732_0250 EZ505U	866	908	1720	25.00	25/1	3500	7000	13	3.0	1.0	186	24
120	384	484	5.2	1.3	PH732_0250 EZ703U	866	908	1720	25.00	25/1	3500	7000	22	3.0	1.0	186	26
120	495	702	6.7	1.0	PH732_0250 EZ705U	866	908	1720	25.00	25/1	3500	7000	35	3.0	1.0	186	31

3.2 Selection tables 3 PH planetary geared motors

n_{2N} [rpm]	M_{2N} [Nm]	$M_{2,0}$ [Nm]	a_{th}	S	Type	M_{2acc} [Nm]	M_{2accHT} [Nm]	M_{2NOT} [Nm]	i	i_{exakt}	n_{1maxDB} [rpm]	n_{1maxZB} [rpm]	J_1 [kgcm ²]	$\Delta\varphi_2$ [arcmin]	$\Delta\varphi_{2red}$ [arcmin]	C_2 [Nm/ arcmin]	m [kg]
PH7 ($n_{1N} = 3000$ rpm, $M_{2acc,max} = 870$ Nm)																	
150	138	149	2.8	3.3	PH732_0200 EZ502U	577	577	1610	20.00	20/1	3000	6000	5.9	3.0	1.0	188	20
150	138	154	2.8	3.3	PH732_0200 EZ701U	372	372	1610	20.00	20/1	3000	6000	9.2	3.0	1.0	188	21
150	180	206	3.7	2.6	PH732_0200 EZ503U	800	800	1610	20.00	20/1	3000	6000	8.3	3.0	1.0	188	21
150	223	268	4.6	2.1	PH732_0200 EZ702U	763	763	1610	20.00	20/1	3000	6000	14	3.0	1.0	188	24
150	251	298	5.1	1.8	PH732_0200 EZ505U	805	845	1610	20.00	20/1	3000	6000	13	3.0	1.0	188	24
150	307	387	6.3	1.5	PH732_0200 EZ703U	805	845	1610	20.00	20/1	3000	6000	22	3.0	1.0	188	26
150	396	562	8.1	1.2	PH732_0200 EZ705U	805	845	1610	20.00	20/1	3000	6000	35	3.0	1.0	188	31
188	110	119	3.2	4.1	PH732_0160 EZ502U	461	461	1480	16.00	16/1	3000	6000	6.3	3.0	1.0	202	20
188	110	124	3.2	4.1	PH732_0160 EZ701U	298	298	1480	16.00	16/1	3000	6000	9.6	3.0	1.0	202	21
188	144	165	4.2	3.1	PH732_0160 EZ503U	640	640	1480	16.00	16/1	3000	6000	8.7	3.0	1.0	202	21
188	179	214	5.2	2.5	PH732_0160 EZ702U	610	610	1480	16.00	16/1	3000	6000	15	3.0	1.0	202	24
188	201	238	5.9	2.2	PH732_0160 EZ505U	740	740	1480	16.00	16/1	3000	6000	13	3.0	1.0	202	24
188	246	310	7.2	1.8	PH732_0160 EZ703U	740	740	1480	16.00	16/1	3000	6000	23	3.0	1.0	202	26
188	317	449	9.2	1.4	PH732_0160 EZ705U	740	740	1480	16.00	16/1	3000	6000	35	3.0	1.0	202	31
300	71	80	1.8	3.9	PH731_0100 EZ701U	192	192	1150	10.00	10/1	2500	5000	9.3	3.0	1.0	125	18
300	115	138	3.0	2.4	PH731_0100 EZ702U	394	394	1150	10.00	10/1	2500	5000	15	3.0	1.0	125	20
300	158	200	4.1	1.8	PH731_0100 EZ703U	575	575	1150	10.00	10/1	2500	5000	22	3.0	1.0	125	22
300	204	290	5.3	1.4	PH731_0100 EZ705U	575	575	1150	10.00	10/1	2500	5000	35	3.0	1.0	125	28
300	214	356	5.5	1.3	PH731_0100 EZ802U	575	575	1150	10.00	10/1	2500	5000	59	3.0	1.0	125	36
300	255	463	6.6	1.1	PH731_0100 EZ803U	575	575	1150	10.00	10/1	2500	5000	84	3.0	1.0	125	42
429	81	97	3.3	4.8	PH731_0070 EZ702U	276	276	1545	7.000	7/1	2500	5000	15	3.0	1.0	166	20
429	111	140	4.5	3.5	PH731_0070 EZ703U	437	437	1545	7.000	7/1	2500	5000	23	3.0	1.0	166	22
429	143	203	5.9	2.7	PH731_0070 EZ705U	699	699	1545	7.000	7/1	2500	5000	36	3.0	1.0	166	28
429	150	249	6.1	2.6	PH731_0070 EZ802U	672	672	1720	7.000	7/1	2500	5000	60	3.0	1.0	166	36
429	179	324	7.3	2.2	PH731_0070 EZ803U	869	869	1720	7.000	7/1	2500	5000	85	3.0	1.0	166	42
600	79	100	6.8	4.9	PH731_0050 EZ703U	312	312	1107	5.000	5/1	2200	5000	25	3.0	1.0	208	22
600	102	145	8.8	3.8	PH731_0050 EZ705U	499	499	1107	5.000	5/1	2200	5000	37	3.0	1.0	208	28
600	107	178	9.2	3.6	PH731_0050 EZ802U	480	480	1720	5.000	5/1	2200	5000	61	3.0	1.0	208	36
600	128	231	11	3.0	PH731_0050 EZ803U	696	696	1720	5.000	5/1	2200	5000	87	3.0	1.0	208	42
750	82	116	11	4.7	PH731_0040 EZ705U	399	399	889	4.000	4/1	1900	4000	39	3.0	1.0	243	28
750	86	142	12	4.5	PH731_0040 EZ802U	384	384	1680	4.000	4/1	1900	4000	63	3.0	1.0	243	36
750	102	185	14	3.8	PH731_0040 EZ803U	557	557	1680	4.000	4/1	1900	4000	89	3.0	1.0	243	42
PH7 ($n_{1N} = 4500$ rpm, $M_{2acc,max} = 870$ Nm)																	
90	442	711	2.2	1.1	PH732_0500 EZ505U	830	834	1660	50.00	50/1	3700	7000	13	3.0	1.0	176	24
113	353	569	2.8	1.2	PH732_0400 EZ505U	770	770	1540	40.00	40/1	3700	7000	13	3.0	1.0	182	24
129	309	498	2.6	1.6	PH732_0350 EZ505U	866	908	1720	35.00	35/1	3700	7000	13	3.0	1.0	183	24
129	394	651	3.3	1.2	PH732_0350 EZ703U	866	908	1720	35.00	35/1	3700	7000	22	3.0	1.0	183	26
161	247	398	2.9	2.0	PH732_0280 EZ505U	770	880	1540	28.00	28/1	3700	7000	13	3.0	1.0	194	24
161	315	521	3.7	1.5	PH732_0280 EZ703U	770	880	1540	28.00	28/1	3700	7000	23	3.0	1.0	194	26
161	427	781	5.0	1.1	PH732_0280 EZ705U	770	880	1540	28.00	28/1	3700	7000	35	3.0	1.0	194	31
180	221	356	3.2	2.1	PH732_0250 EZ505U	866	908	1720	25.00	25/1	3500	7000	13	3.0	1.0	186	24
180	281	465	4.1	1.6	PH732_0250 EZ703U	866	908	1720	25.00	25/1	3500	7000	22	3.0	1.0	186	26
180	381	698	5.6	1.2	PH732_0250 EZ705U	866	908	1720	25.00	25/1	3500	7000	35	3.0	1.0	186	31
225	177	285	3.7	2.6	PH732_0200 EZ505U	805	845	1610	20.00	20/1	3000	6000	13	3.0	1.0	188	24
225	225	372	4.7	2.0	PH732_0200 EZ703U	805	845	1610	20.00	20/1	3000	6000	22	3.0	1.0	188	26
225	305	558	6.4	1.5	PH732_0200 EZ705U	805	845	1610	20.00	20/1	3000	6000	35	3.0	1.0	188	31
281	141	228	4.1	3.2	PH732_0160 EZ505U	740	740	1480	16.00	16/1	3000	6000	13	3.0	1.0	202	24
281	180	298	5.3	2.5	PH732_0160 EZ703U	740	740	1480	16.00	16/1	3000	6000	23	3.0	1.0	202	26
281	244	446	7.1	1.8	PH732_0160 EZ705U	740	740	1480	16.00	16/1	3000	6000	35	3.0	1.0	202	31
450	101	331	3.0	2.4	PH731_0100 EZ802U	575	575	1150	10.00	10/1	2500	5000	59	3.0	1.0	125	36
450	116	192	3.4	2.1	PH731_0100 EZ703U	575	575	1150	10.00	10/1	2500	5000	22	3.0	1.0	125	22
450	157	288	4.7	1.5	PH731_0100 EZ705U	575	575	1150	10.00	10/1	2500	5000	35	3.0	1.0	125	28
643	71	232	3.3	4.8	PH731_0070 EZ802U	672	672	1720	7.000	7/1	2500	5000	60	3.0	1.0	166	36
643	81	134	3.8	4.1	PH731_0070 EZ703U	437	437	1545	7.000	7/1	2500	5000	23	3.0	1.0	166	22
643	110	202	5.2	3.0	PH731_0070 EZ705U	699	699	1545	7.000	7/1	2500	5000	36	3.0	1.0	166	28
900	79	144	7.7	4.3	PH731_0050 EZ705U	499	499	1107	5.000	5/1	2200	5000	37	3.0	1.0	208	28
PH7 ($n_{1N} = 6000$ rpm, $M_{2acc,max} = 870$ Nm)																	
86	221	286	0.7	2.0	PH732_0700 EZ501U	809	847	1617	70.00	70/1	3700	7000	3.2	3.0	1.0	154	18
86	339	508	1.1	1.3	PH732_0700 EZ502U	809	847	1617	70.00	70/1	3700	7000	5.5	3.0	1.0	154	20
86	339	514	1.1	1.3	PH732_0700 EZ701U	809	847	1617	70.00	70/1	3700	7000	8.8	3.0	1.0	154	21
86	404	690	1.3	1.1	PH732_0700 EZ503U	809	847	1617	70.00	70/1	3700	7000	7.9	3.0	1.0	154	21
120	158	205	0.9	2.8	PH732_0500 EZ501U	744	744	1660	50.00	50/1	3700	7000	3.4	3.0	1.0	176	18
120	242	363	1.3	1.8	PH732_0500 EZ502U	830	834	1660	50.00	50/1	3700	7000	5.7	3.0	1.0	176	20
120	242	367	1.3	1.8	PH732_0500 EZ701U	830	834	1660	50.00	50/1	3700	7000	9.0	3.0	1.0	176	21
120	288	493	1.6	1.5	PH732_0500 EZ503U	830	834	1660	50.00	50/1	3700	7000	8.1	3.0	1.0	176	21

n_{2N} [rpm]	M_{2N} [Nm]	$M_{2,0}$ [Nm]	a_{th}	S	Type	M_{2acc} [Nm]	M_{2accHT} [Nm]	M_{2NOT} [Nm]	i	i_{exakt}	n_{1maxDB} [rpm]	n_{1maxZB} [rpm]	J_1 [kgcm ²]	$\Delta\varphi_2$ [arcmin]	$\Delta\varphi_{2red}$ [arcmin]	C_2 [Nm/ arcmin]	m [kg]
PH7 ($n_{1N} = 6000$ rpm, $M_{2acc,max} = 870$ Nm)																	
120	335	665	1.8	1.3	PH732_0500 EZ702U	830	834	1660	50.00	50/1	3700	7000	14	3.0	1.0	176	24
150	126	164	1.1	3.0	PH732_0400 EZ501U	595	595	1540	40.00	40/1	3700	7000	3.7	3.0	1.0	182	18
150	193	290	1.7	1.9	PH732_0400 EZ502U	770	770	1540	40.00	40/1	3700	7000	6.0	3.0	1.0	182	20
150	193	294	1.7	1.9	PH732_0400 EZ701U	744	744	1540	40.00	40/1	3700	7000	9.3	3.0	1.0	182	21
150	231	394	2.0	1.6	PH732_0400 EZ503U	770	770	1540	40.00	40/1	3700	7000	8.4	3.0	1.0	182	21
150	268	532	2.4	1.4	PH732_0400 EZ702U	770	770	1540	40.00	40/1	3700	7000	15	3.0	1.0	182	24
171	111	143	1.0	4.0	PH732_0350 EZ501U	521	521	1720	35.00	35/1	3700	7000	3.5	3.0	1.0	183	18
171	169	254	1.6	2.6	PH732_0350 EZ502U	866	908	1720	35.00	35/1	3700	7000	5.8	3.0	1.0	183	20
171	169	257	1.6	2.6	PH732_0350 EZ701U	651	651	1720	35.00	35/1	3700	7000	9.1	3.0	1.0	183	21
171	202	345	1.9	2.2	PH732_0350 EZ503U	866	908	1720	35.00	35/1	3700	7000	8.1	3.0	1.0	183	21
171	234	465	2.2	1.9	PH732_0350 EZ702U	866	908	1720	35.00	35/1	3700	7000	14	3.0	1.0	183	24
214	89	115	1.1	5.0	PH732_0280 EZ501U	417	417	1540	28.00	28/1	3700	7000	3.8	3.0	1.0	194	18
214	135	203	1.7	3.2	PH732_0280 EZ502U	770	807	1540	28.00	28/1	3700	7000	6.1	3.0	1.0	194	20
214	135	206	1.7	3.2	PH732_0280 EZ701U	521	521	1540	28.00	28/1	3700	7000	9.4	3.0	1.0	194	21
214	161	276	2.1	2.7	PH732_0280 EZ503U	770	880	1540	28.00	28/1	3700	7000	8.5	3.0	1.0	194	21
214	187	372	2.4	2.3	PH732_0280 EZ702U	770	880	1540	28.00	28/1	3700	7000	15	3.0	1.0	194	24
240	121	181	2.0	3.4	PH732_0250 EZ502U	721	721	1720	25.00	25/1	3500	7000	5.8	3.0	1.0	186	20
240	121	184	2.0	3.4	PH732_0250 EZ701U	465	465	1720	25.00	25/1	3500	7000	9.1	3.0	1.0	186	21
240	144	246	2.3	2.9	PH732_0250 EZ503U	866	908	1720	25.00	25/1	3500	7000	8.2	3.0	1.0	186	21
240	167	332	2.7	2.5	PH732_0250 EZ702U	866	908	1720	25.00	25/1	3500	7000	14	3.0	1.0	186	24
300	97	145	2.2	4.2	PH732_0200 EZ502U	577	577	1610	20.00	20/1	3000	6000	5.9	3.0	1.0	188	20
300	97	147	2.2	4.2	PH732_0200 EZ701U	372	372	1610	20.00	20/1	3000	6000	9.2	3.0	1.0	188	21
300	115	197	2.6	3.6	PH732_0200 EZ503U	800	800	1610	20.00	20/1	3000	6000	8.3	3.0	1.0	188	21
300	134	266	3.1	3.1	PH732_0200 EZ702U	763	763	1610	20.00	20/1	3000	6000	14	3.0	1.0	188	24
375	92	158	3.0	4.4	PH732_0160 EZ503U	640	640	1480	16.00	16/1	3000	6000	8.7	3.0	1.0	202	21
375	107	213	3.4	3.8	PH732_0160 EZ702U	610	610	1480	16.00	16/1	3000	6000	15	3.0	1.0	202	24
PH8 ($n_{1N} = 2000$ rpm, $M_{2acc,max} = 2100$ Nm)																	
57	1422	2152	4.3	1.0	PH832_0350 EZ805U	2100	2300	4200	35.00	35/1	3000	6000	135	3.0	1.0	511	79
80	1016	1537	5.7	1.3	PH832_0250 EZ805U	2100	2300	4200	25.00	25/1	2700	5500	135	3.0	1.0	521	79
100	813	1229	6.6	1.5	PH832_0200 EZ805U	2100	2300	4200	20.00	20/1	2500	4500	136	3.0	1.0	526	79
125	650	984	8.4	1.7	PH832_0160 EZ805U	2000	2200	3929	16.00	16/1	2500	4500	138	3.0	1.0	501	79
200	420	635	4.2	1.8	PH831_0100 EZ805U	1392	1392	2784	10.00	10/1	2200	4000	137	3.0	1.0	344	72
286	294	444	5.0	3.4	PH831_0070 EZ805U	1378	1378	3442	7.000	7/1	2000	4000	142	3.0	1.0	463	72
400	210	317	7.5	4.8	PH831_0050 EZ805U	984	984	2487	5.000	5/1	1600	4000	149	3.0	1.0	604	72
500	168	254	12	4.8	PH831_0040 EZ805U	787	787	1998	4.000	4/1	1400	3500	160	3.0	1.0	620	72
PH8 ($n_{1N} = 3000$ rpm, $M_{2acc,max} = 2100$ Nm)																	
30	688	772	0.7	1.3	PH832_1000 EZ701U	1380	1380	2760	100.0	100/1	3000	6000	9.1	3.0	1.0	333	41
43	482	540	0.6	2.6	PH832_0700 EZ701U	1302	1302	3696	70.00	70/1	3000	6000	9.6	3.0	1.0	425	41
43	781	937	1.0	1.6	PH832_0700 EZ702U	1848	1936	3696	70.00	70/1	3000	6000	15	3.0	1.0	425	44
43	1074	1354	1.3	1.2	PH832_0700 EZ703U	1848	1936	3696	70.00	70/1	3000	6000	23	3.0	1.0	425	46
60	344	386	0.7	3.7	PH832_0500 EZ701U	930	930	4200	50.00	50/1	3000	6000	11	3.0	1.0	491	41
60	558	670	1.1	2.3	PH832_0500 EZ702U	1907	1907	4200	50.00	50/1	3000	6000	16	3.0	1.0	491	44
60	767	967	1.6	1.7	PH832_0500 EZ703U	2100	2300	4200	50.00	50/1	3000	6000	24	3.0	1.0	491	46
60	990	1404	2.0	1.3	PH832_0500 EZ705U	2100	2300	4200	50.00	50/1	3000	6000	36	3.0	1.0	491	51
60	1037	1725	2.1	1.2	PH832_0500 EZ802U	2100	2300	4200	50.00	50/1	3000	6000	60	3.0	1.0	491	60
60	1237	2241	2.5	1.0	PH832_0500 EZ803U	2100	2300	4200	50.00	50/1	3000	6000	86	3.0	1.0	491	66
75	275	309	1.0	3.7	PH832_0400 EZ701U	744	744	3840	40.00	40/1	3000	6000	12	3.0	1.0	453	41
75	446	536	1.6	2.3	PH832_0400 EZ702U	1525	1525	3840	40.00	40/1	3000	6000	17	3.0	1.0	453	44
75	614	774	2.2	1.7	PH832_0400 EZ703U	1920	1936	3840	40.00	40/1	3000	6000	25	3.0	1.0	453	46
75	792	1123	2.8	1.3	PH832_0400 EZ705U	1920	1936	3840	40.00	40/1	3000	6000	38	3.0	1.0	453	51
75	830	1380	2.9	1.2	PH832_0400 EZ802U	1920	1936	3840	40.00	40/1	3000	6000	62	3.0	1.0	453	60
75	990	1793	3.5	1.0	PH832_0400 EZ803U	1920	1936	3840	40.00	40/1	3000	6000	87	3.0	1.0	453	66
86	391	469	1.4	3.2	PH832_0350 EZ702U	1335	1335	4200	35.00	35/1	3000	6000	16	3.0	1.0	511	44
86	537	677	1.9	2.3	PH832_0350 EZ703U	2100	2116	4200	35.00	35/1	3000	6000	24	3.0	1.0	511	46
86	693	983	2.4	1.8	PH832_0350 EZ705U	2100	2300	4200	35.00	35/1	3000	6000	36	3.0	1.0	511	51
86	726	1208	2.5	1.7	PH832_0350 EZ802U	2100	2300	4200	35.00	35/1	3000	6000	60	3.0	1.0	511	60
86	866	1569	3.0	1.5	PH832_0350 EZ803U	2100	2300	4200	35.00	35/1	3000	6000	86	3.0	1.0	511	66
107	312	375	1.9	3.2	PH832_0280 EZ702U	1068	1068	3929	28.00	28/1	3000	6000	18	3.0	1.0	480	44
107	430	542	2.6	2.3	PH832_0280 EZ703U	1693	1693	3929	28.00	28/1	3000	6000	25	3.0	1.0	480	46
107	555	786	3.4	1.8	PH832_0280 EZ705U	2000	2000	3929	28.00	28/1	3000	6000	38	3.0	1.0	480	51
107	581	966	3.5	1.7	PH832_0280 EZ802U	2000	2000	3929	28.00	28/1	3000	6000	62	3.0	1.0	480	60
107	693	1255	4.2	1.5	PH832_0280 EZ803U	2000	2000	3929	28.00	28/1	3000	6000	87	3.0	1.0	480	66
120	279	335	1.6	4.5	PH832_0250 EZ702U	953	953	4200	25.00	25/1	2700	5500	16	3.0	1.0	521	44
120	384	484	2.2	3.3	PH832_0250 EZ703U	1511	1511	4200	25.00	25/1	2700	5500	24	3.0	1.0	521	46
120	495	702	2.9	2.5	PH832_0250 EZ705U	2100	2300	4200	25.00	25/1	2700	5500	37	3.0	1.0	521	51

3.2 Selection tables 3 PH planetary geared motors

n_{2N} [rpm]	M_{2N} [Nm]	$M_{2,0}$ [Nm]	a_{th}	S	Type	M_{2acc} [Nm]	M_{2accHT} [Nm]	M_{2NOT} [Nm]	i	i_{exakt}	n_{1maxDB} [rpm]	n_{1maxZB} [rpm]	J_1 [kgcm ²]	$\Delta\varphi_2$ [arcmin]	$\Delta\varphi_{2red}$ [arcmin]	C_2 [Nm/ arcmin]	m [kg]
PH8 ($n_{1N} = 3000$ rpm, $M_{2acc,max} = 2100$ Nm)																	
120	518	863	3.0	2.4	PH832_0250 EZ802U	2100	2300	4200	25.00	25/1	2700	5500	61	3.0	1.0	521	60
120	618	1121	3.6	2.0	PH832_0250 EZ803U	2100	2300	4200	25.00	25/1	2700	5500	86	3.0	1.0	521	66
150	307	387	2.5	4.1	PH832_0200 EZ703U	1209	1209	4200	20.00	20/1	2500	4500	25	3.0	1.0	526	46
150	396	562	3.2	3.2	PH832_0200 EZ705U	1934	1934	4200	20.00	20/1	2500	4500	37	3.0	1.0	526	51
150	415	690	3.4	3.0	PH832_0200 EZ802U	1860	1860	4200	20.00	20/1	2500	4500	61	3.0	1.0	526	60
150	495	897	4.0	2.5	PH832_0200 EZ803U	2100	2300	4200	20.00	20/1	2500	4500	87	3.0	1.0	526	66
188	246	310	3.5	4.1	PH832_0160 EZ703U	967	967	3451	16.00	16/1	2500	4500	27	3.0	1.0	501	46
188	317	449	4.5	3.2	PH832_0160 EZ705U	1548	1548	3451	16.00	16/1	2500	4500	39	3.0	1.0	501	51
188	332	552	4.7	3.0	PH832_0160 EZ802U	1488	1488	3929	16.00	16/1	2500	4500	63	3.0	1.0	501	60
188	396	717	5.6	2.5	PH832_0160 EZ803U	2000	2158	3929	16.00	16/1	2500	4500	88	3.0	1.0	501	66
300	214	356	2.5	3.2	PH831_0100 EZ802U	960	960	2784	10.00	10/1	2200	4000	62	3.0	1.0	344	52
300	255	463	2.9	2.6	PH831_0100 EZ803U	1392	1392	2784	10.00	10/1	2200	4000	88	3.0	1.0	344	58
429	179	324	3.5	4.9	PH831_0070 EZ803U	974	974	3442	7.000	7/1	2000	4000	93	3.0	1.0	463	58
PH8 ($n_{1N} = 4500$ rpm, $M_{2acc,max} = 2100$ Nm)																	
64	684	2246	1.0	1.6	PH832_0700 EZ802U	1848	1936	3696	70.00	70/1	3000	6000	59	3.0	1.0	425	60
64	788	1302	1.1	1.4	PH832_0700 EZ703U	1848	1936	3696	70.00	70/1	3000	6000	23	3.0	1.0	425	46
64	1068	1953	1.5	1.0	PH832_0700 EZ705U	1848	1936	3696	70.00	70/1	3000	6000	35	3.0	1.0	425	51
90	488	1604	1.1	2.3	PH832_0500 EZ802U	2100	2300	4200	50.00	50/1	3000	6000	60	3.0	1.0	491	60
90	563	930	1.3	2.0	PH832_0500 EZ703U	2100	2300	4200	50.00	50/1	3000	6000	24	3.0	1.0	491	46
90	763	1395	1.8	1.5	PH832_0500 EZ705U	2100	2300	4200	50.00	50/1	3000	6000	36	3.0	1.0	491	51
113	391	1283	1.6	2.3	PH832_0400 EZ802U	1920	1936	3840	40.00	40/1	3000	6000	62	3.0	1.0	453	60
113	450	744	1.8	2.0	PH832_0400 EZ703U	1920	1936	3840	40.00	40/1	3000	6000	25	3.0	1.0	453	46
113	610	1116	2.5	1.5	PH832_0400 EZ705U	1920	1936	3840	40.00	40/1	3000	6000	38	3.0	1.0	453	51
129	342	1123	1.4	3.2	PH832_0350 EZ802U	2100	2300	4200	35.00	35/1	3000	6000	60	3.0	1.0	511	60
129	394	651	1.6	2.8	PH832_0350 EZ703U	2100	2116	4200	35.00	35/1	3000	6000	24	3.0	1.0	511	46
129	534	977	2.1	2.1	PH832_0350 EZ705U	2100	2300	4200	35.00	35/1	3000	6000	36	3.0	1.0	511	51
161	273	898	1.9	3.2	PH832_0280 EZ802U	2000	2000	3929	28.00	28/1	3000	6000	62	3.0	1.0	480	60
161	315	521	2.2	2.8	PH832_0280 EZ703U	1693	1693	3929	28.00	28/1	3000	6000	25	3.0	1.0	480	46
161	427	781	3.0	2.1	PH832_0280 EZ705U	2000	2000	3929	28.00	28/1	3000	6000	38	3.0	1.0	480	51
180	244	802	1.6	4.5	PH832_0250 EZ802U	2100	2300	4200	25.00	25/1	2700	5500	61	3.0	1.0	521	60
180	281	465	1.9	3.9	PH832_0250 EZ703U	1511	1511	4200	25.00	25/1	2700	5500	24	3.0	1.0	521	46
180	381	698	2.5	2.9	PH832_0250 EZ705U	2100	2300	4200	25.00	25/1	2700	5500	37	3.0	1.0	521	51
225	225	372	2.1	4.9	PH832_0200 EZ703U	1209	1209	4200	20.00	20/1	2500	4500	25	3.0	1.0	526	46
225	305	558	2.8	3.6	PH832_0200 EZ705U	1934	1934	4200	20.00	20/1	2500	4500	37	3.0	1.0	526	51
281	180	298	2.9	4.9	PH832_0160 EZ703U	967	967	3451	16.00	16/1	2500	4500	27	3.0	1.0	501	46
281	244	446	3.9	3.6	PH832_0160 EZ705U	1548	1548	3451	16.00	16/1	2500	4500	39	3.0	1.0	501	51
PH8 ($n_{1N} = 6000$ rpm, $M_{2acc,max} = 1910$ Nm)																	
60	484	735	0.6	1.4	PH832_1000 EZ701U	1380	1380	2760	100.0	100/1	3000	6000	9.1	3.0	1.0	333	41
60	670	1330	0.9	1.0	PH832_1000 EZ702U	1380	1380	2760	100.0	100/1	3000	6000	14	3.0	1.0	333	44
86	339	514	0.5	3.0	PH832_0700 EZ701U	1302	1302	3696	70.00	70/1	3000	6000	9.6	3.0	1.0	425	41
86	469	931	0.7	2.1	PH832_0700 EZ702U	1848	1936	3696	70.00	70/1	3000	6000	15	3.0	1.0	425	44
120	242	367	0.6	4.2	PH832_0500 EZ701U	930	930	4200	50.00	50/1	3000	6000	11	3.0	1.0	491	41
120	335	665	0.9	3.0	PH832_0500 EZ702U	1907	1907	4200	50.00	50/1	3000	6000	16	3.0	1.0	491	44
150	193	294	0.9	4.2	PH832_0400 EZ701U	744	744	3840	40.00	40/1	3000	6000	12	3.0	1.0	453	41
150	268	532	1.2	3.0	PH832_0400 EZ702U	1525	1525	3840	40.00	40/1	3000	6000	17	3.0	1.0	453	44
171	234	465	1.0	4.3	PH832_0350 EZ702U	1335	1335	4200	35.00	35/1	3000	6000	16	3.0	1.0	511	44
214	187	372	1.4	4.3	PH832_0280 EZ702U	1068	1068	3929	28.00	28/1	3000	6000	18	3.0	1.0	480	44
PH9 ($n_{1N} = 2000$ rpm, $M_{2acc,max} = 5000$ Nm)																	
33	2438	3688	1.5	1.4	PH942_0600 EZ805U	5000	5000	10000	60.00	60/1	2800	4500	136	3.0	1.0	1065	109
42	1951	2951	1.6	1.8	PH942_0480 EZ805U	5000	5000	10000	48.00	48/1	2800	4500	138	3.0	1.0	1084	109
48	1707	2582	1.8	2.1	PH942_0420 EZ805U	5000	5000	10000	42.00	42/1	2800	4500	139	3.0	1.0	1103	109
50	1626	2459	2.2	1.8	PH942_0400 EZ805U	4600	4600	9200	40.00	40/1	2800	4500	136	3.0	1.0	1068	109
63	1301	1967	2.3	2.4	PH942_0320 EZ805U	4600	4600	9200	32.00	32/1	2800	4500	139	3.0	1.0	1112	109
67	1219	1844	2.2	2.7	PH942_0300 EZ805U	5000	5000	10000	30.00	30/1	2500	4000	145	3.0	1.0	1117	109
71	1138	1721	2.2	3.1	PH942_0280 EZ805U	5000	5000	10000	28.00	28/1	2800	4500	140	3.0	1.0	1156	109
83	975	1475	2.7	3.1	PH942_0240 EZ805U	4576	4576	10000	24.00	24/1	2000	3500	152	3.0	1.0	1124	109
100	813	1229	3.0	3.7	PH942_0200 EZ805U	3813	3813	9548	20.00	20/1	2500	4000	147	3.0	1.0	1193	109
111	732	1107	3.1	4.1	PH942_0180 EZ805U	3432	3432	8655	18.00	18/1	1800	3000	178	3.0	1.0	1141	109
125	650	984	3.3	4.6	PH942_0160 EZ805U	3050	3050	7670	16.00	16/1	2000	3500	155	3.0	1.0	1211	109
PH9 ($n_{1N} = 3000$ rpm, $M_{2acc,max} = 5000$ Nm)																	
50	1244	2070	0.8	2.8	PH942_0600 EZ802U	5000	5000	10000	60.00	60/1	2800	4500	61	3.0	1.0	1065	90
50	1484	2690	0.9	2.4	PH942_0600 EZ803U	5000	5000	10000	60.00	60/1	2800	4500	87	3.0	1.0	1065	96
63	995	1656	0.8	3.5	PH942_0480 EZ802U	4464	4464	10000	48.00	48/1	2800	4500	63	3.0	1.0	1084	90
63	1187	2152	1.0	2.9	PH942_0480 EZ803U	5000	5000	10000	48.00	48/1	2800	4500	89	3.0	1.0	1084	96

n _{2N} [rpm]	M _{2N} [Nm]	M _{2,0} [Nm]	a _{th}	S	Type	M _{2acc} [Nm]	M _{2accHT} [Nm]	M _{2NOT} [Nm]	i	i _{exakt}	n _{1maxDB} [rpm]	n _{1maxZB} [rpm]	J ₁ [kgcm ²]	Δφ ₂ [arcmin]	Δφ _{2red} [arcmin]	C ₂ [Nm/ arcmin]	m [kg]
PH9 (n _{1N} = 3000 rpm, M _{2acc,max} = 5000 Nm)																	
71	871	1449	0.9	4.0	PH942_0420 EZ802U	3906	3906	10000	42.00	42/1	2800	4500	64	3.0	1.0	1103	90
71	1039	1883	1.1	3.4	PH942_0420 EZ803U	5000	5000	10000	42.00	42/1	2800	4500	90	3.0	1.0	1103	96
75	830	1380	1.3	3.1	PH942_0400 EZ802U	3720	3720	9200	40.00	40/1	2800	4500	62	3.0	1.0	1068	90
75	990	1793	1.5	2.6	PH942_0400 EZ803U	4600	4600	9200	40.00	40/1	2800	4500	87	3.0	1.0	1068	96
94	664	1104	1.3	4.0	PH942_0320 EZ802U	2976	2976	9200	32.00	32/1	2800	4500	64	3.0	1.0	1112	90
94	792	1434	1.6	3.4	PH942_0320 EZ803U	4315	4315	9200	32.00	32/1	2800	4500	89	3.0	1.0	1112	96
100	742	1345	1.3	4.4	PH942_0300 EZ803U	4046	4046	10000	30.00	30/1	2500	4000	95	3.0	1.0	1117	96
107	693	1255	1.4	4.8	PH942_0280 EZ803U	3776	3776	10000	28.00	28/1	2800	4500	91	3.0	1.0	1156	96
PH10 (n _{1N} = 2000 rpm, M _{2acc,max} = 7500 Nm)																	
33	2438	3688	1.2	1.8	PH1042_0600 EZ805U	7000	–	14000	60.00	60/1	2800	4500	136	3.0	–	1615	124
48	1707	2582	1.3	2.9	PH1042_0420 EZ805U	7500	–	15000	42.00	42/1	2800	4500	139	3.0	–	1702	124
67	1219	1844	1.6	4.1	PH1042_0300 EZ805U	5720	–	14323	30.00	30/1	2500	4000	145	3.0	–	1737	124
83	975	1475	1.9	4.7	PH1042_0240 EZ805U	4576	–	11506	24.00	24/1	2000	3500	153	3.0	–	1754	124
PH10 (n _{1N} = 3000 rpm, M _{2acc,max} = 7000 Nm)																	
50	1244	2070	0.7	3.1	PH1042_0600 EZ802U	5580	–	14000	60.00	60/1	2800	4500	61	3.0	–	1615	105
50	1484	2690	0.9	2.6	PH1042_0600 EZ803U	7000	–	14000	60.00	60/1	2800	4500	87	3.0	–	1615	111
71	1039	1883	0.8	4.8	PH1042_0420 EZ803U	5664	–	15000	42.00	42/1	2800	4500	90	3.0	–	1702	111