

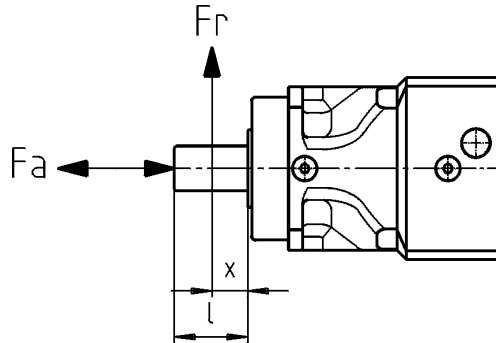
Permissible radial force

$$Fr_{zul} = Fr_{Tab} \text{ at } Fa = 0$$

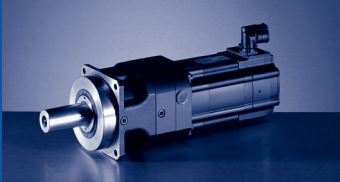
Permissible axial force

$$Fa_{zul} = Fa_{Tab} \text{ at } Fr = 0$$

At Fr and $Fa \neq 0$ please contact your Lenze sales office



Solid shaft with flange (GCN) Application of force Fr : centre of shaft journal ($x = l/2$) Fa_{Tab} only valid for $Fr = 0$												
	GPA00-1/2		GPA01-1/2		GPA02-1/2		GPA03-1/2		GPA04-1/2		GPA05-1/2	
n_2 [min ⁻¹]	Fr_{Tab} [N]	Fa_{Tab} [N]	Fr_{Tab} [N]	Fa_{Tab} [N]	Fr_{Tab} [N]	Fa_{Tab} [N]	Fr_{Tab} [N]	Fa_{Tab} [N]	Fr_{Tab} [N]	Fa_{Tab} [N]	Fr_{Tab} [N]	Fa_{Tab} [N]
1000	1550	2300	2325	3200	3700	5400	4950	9400	7170	13500	11390	22500
900	1600		2400		3825		5125		7400		11750	
800	1675		2475		3950		5300		7670		12180	
700	1725		2600		4125		5525		7980		12680	
600	1825		2700		4325		5775		8360		13280	
500	1925		2850		4550		6100		8830		14020	
400	2050		3050		4875		6525		9450		15000	
300	2250		3350		5300		7100		10300		16350	
200	2525		3775		6000		8025		11630		18000	
≤ 100	2600		3800		6000		9000		14000		18000	
Fr_{max}												



Backlash

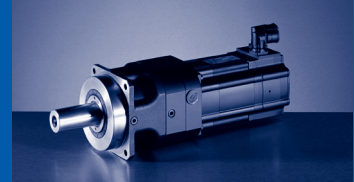
Gearbox type	Standard backlash (measured at 2% of gearbox output torque)
	[arcmin]
GPA00-1	Max. 6
GPA01-1	
GPA02-1	
GPA03-1	
GPA04-1	
GPA05-1	

Gearbox type	Standard backlash (measured at 2% of gearbox output torque)
	[arcmin]
GPA00-2	Max. 8
GPA01-2	
GPA02-2	
GPA03-2	
GPA04-2	
GPA05-2	

Torsional stiffness

Gearbox type	Torsional stiffness
	[Nm/arcmin]
GPA00-1	3
GPA01-1	8.8
GPA02-1	23
GPA03-1	47
GPA04-1	145
GPA05-1	225

Gearbox type	Torsional stiffness
	[Nm/arcmin]
GPA00-2	2.8
GPA01-2	8
GPA02-2	20
GPA03-2	42
GPA04-2	125
GPA05-2	195



GPA□□-1S GCN...RSO B0

	06C N41	06F N41	06I N41	09D N41	09F N38	09H N41	09L N41	12D N20	12D N41	12H N15	12H N30	12H N35	12L N20	12L N41	
GPA00...	4		5	6	7	8	10								
GPA01...	5	6		8	9	10	11	10		13				16	
GPA02...				11	12	13	14	13		16				19	
GPA03...								21		24				27	

	14D N15	14D N36	14H N15	14H N32	14L N15	14L N32	14P N14	14P N32	19F N14	19F N30	19J N14	19J N30	19P N14	19P N30	
GPA02...	17		22		27		31								
GPA03...	25		30		34		39		37		44		54		
GPA04...										53		60		70	
GPA05...										68		75		85	

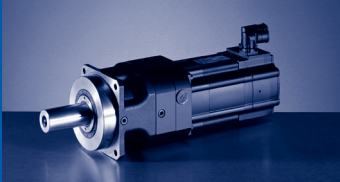
GPA□□-2S GCN...RSO B0

	06C N41	06F N41	06I N41	09D N41	09F N38	09H N41	09L N41	12D N20	12D N41	12H N15	12H N30	12H N35	12L N20	12L N41	
GPA00...	5		6												
GPA01...	6	7		9	10	11	12								
GPA02...				13	14	15	17	15		18				21	
GPA03...								26		30				33	

	14D N15	14D N36	14H N15	14H N32	14L N15	14L N32	14P N14	14P N32	19F N14	19F N30	19J N14	19J N30	19P N14	19P N30	
GPA03...	31		36		40		45								
GPA04...										62		69		79	
GPA05...										90		97		107	

Note additional weights.

Weights in [kg] with oil capacity for mounting position A, all given as approximate values



GPA [kg]

GPA□□-1A GCN...RSO B0

	10I N40 ...S00	13I N41 ...S00	13I N34 ...F10	14L N20 ...S00	14L N41 ...S00	14L N16 ...F10	14L N35 ...F10	17N N23 ...S00	17N N41 ...S00
GPA00...	9								
GPA01...	10	14	15						
GPA02...	13	17	19	22		24		29	
GPA03...		26	27	30		32		38	

	17N N17 ...F10	17N N35 ...F10	19S N23 ...S00	19S N42 ...S00	19S N17 ...F10	19S N35 ...F10	21X N25 ...S00	21X N42 ...S00	21X N17 ...F10	21X N35 ...F10
GPA01...										
GPA02...	32									
GPA03...	41		60		63		75		79	
GPA04...			75		78		90		94	
GPA05...			90		94		105		109	

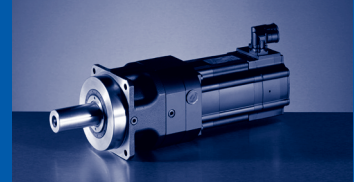
GPA□□-2A GCN...RSO B0

	10I N40 ...S00	13I N41 ...S00	13I N34 ...F10	14L N20 ...S00	14L N41 ...S00	14L N16 ...F10	14L N35 ...F10	17N N23 ...S00	17N N41 ...S00
GPA00...	9								
GPA01...	11	15	16						
GPA02...		19	21	24		26		32	
GPA03...									

	17N N17 ...F10	17N N35 ...F10	19S N23 ...S00	19S N42 ...S00	19S N17 ...F10	19S N35 ...F10	21X N25 ...S00	21X N42 ...S00	21X N17 ...F10	21X N35 ...F10
GPA02...	34									
GPA03...			65		68					
GPA04...			84		88		99		103	
GPA05...			111		115		126		130	

Note additional weights.

Weights in [kg] with oil capacity for mounting position A, all given as approximate values



Additional weights MCS servo motors

	06C N41	06F N41	06I N41	09D N41	09F N38	09H N41	09L N41	12D N20	12D N41	12H N15	12H N30	12H N35	12L N20	12L N41
...P1	0.3			0.8				0.9						
...P2				0.5				1.2						
...SCS/SCM/SRM/SRS ...ECN/EQN	0.4			0.2				0.3						

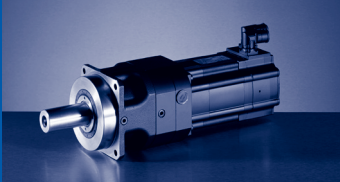
	14D N15	14D N36	14H N15	14H N32	14L N15	14L N32	14P N14	14P N32	19F N14	19F N30	19J N14	19J N30	19P N14	19P N30
...P1	1.9						1.5							
...P2	3.1									4.3				
...SCS/SCM/SRM/SRS ...ECN/EQN							0.3							

Additional weights MCA servo motors

	10I N40 ...S00	13I N41 ...S00	13I N34 ...F10	14L N20 ...S00	14L N41 ...S00	14L N16 ...F10	14L N35 ...F10	17N N23 ...S00	17N N41 ...S00
...P1/P5								2.4	
...P2/P6	0.8	1.4		1.5					
...CDD ...ECN/EQN/EQI ...SCS/SCM/SRM/SRS/S20 ...T20	0.3	0.5		0.6			0.7		

	17N N17 ...F10	17N N35 ...F10	19S N23 ...S00	19S N42 ...S00	19S N17 ...F10	19S N35 ...F10	21X N25 ...S00	21X N42 ...S00	21X N17 ...F10	21X N35 ...F10
...P1/P5	2.4		4.8			5				
...P2/P6										
...CDD ...ECN/EQN/EQI ...SCS/SCM/SRM/SRS/S20 ...T20	0.7		1			1.1				

Weights in [kg]



GPA [Nm]

GPA□□-□S (MCS)

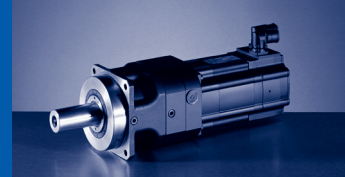
$M_{2GN} \leq 25 \text{ Nm}$

GPA00-1S				06CN41	06FN41	06IN41	09FN38	09HN41
				...S00	...S00	...S00	...S00	...S00
i	M_{2GN}	J_G	M_1	0.6	1.2	1.5	3.1	3.8
			n_1	4050	4050	4050	3750	4050
			I_{M230}	2.6	2.9	3.2	5	6.8
			I_{M400}	1.3	1.5	1.6	2.5	3.4
			P_N	0.25	0.51	0.64	1.2	1.6
			J_M	0.17	0.25	0.33	1.53	1.93
3	20	0.22	M_2		4	4		
			c		5.8	4.6		
			$n_{2 \text{ Eck}}$		1350	1350		
			$n_{2 \text{ th}}$		867	867		
4	25	0.16	M_2		5	6	12	15
			c		5.4	4.4	2.1	1.7
			$n_{2 \text{ Eck}}$		1013	1013	938	1013
			$n_{2 \text{ th}}$		825	825	825	825
5	25	0.13	M_2		6	7	15	19
			c		4.3	3.5	1.7	1.4
			$n_{2 \text{ Eck}}$		810	810	750	810
			$n_{2 \text{ th}}$		660	660	660	660
7	25	0.12	M_2		8	10		
			c		3.1	2.5		
			$n_{2 \text{ Eck}}$		579	579		
			$n_{2 \text{ th}}$		571	571		
10	15	0.11	M_2	6	12	15		
			c	2.5	1.3	1		
			$n_{2 \text{ Eck}}$	405	405	405		
			$n_{2 \text{ th}}$	400	400	400		

GPA00-2S				06CN41	06FN41	06IN41
				...S00	...S00	...S00
i	M_{2GN}	J_G	M_1	0.6	1.2	1.5
			n_1	4050	4050	4050
			I_{M230}	2.6	2.9	3.2
			I_{M400}	1.3	1.5	1.6
			P_N	0.25	0.51	0.64
			J_M	0.17	0.25	0.33
16	25	0.15	M_2	9	18	23
			c	2.8	1.4	1.1
			$n_{2 \text{ Eck}}$	253	253	253
			$n_{2 \text{ th}}$	253	253	253

$M \dots$ [Nm]
 $n \dots$ [min^{-1}]
 $J \dots$ [kgcm^2]

$P \dots$ [kW]
 $I \dots$ [A]
 $i \dots$ [-]
 $c \dots$ [-]



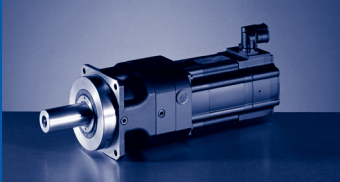
$M_{2GN} \leq 70 \text{ Nm}$

GPA01-1S				06FN41	06IN41	09FN38	09HN41	12HN15	12HN35	12LN20	12LN41
				...500	...500	...500	...500	...500	...500	...500	...500
i	M_{2GN}	J_G	M_1	1.2	1.5	3.1	3.8	10	7.5	13.5	11
			n_1	4050	4050	3750	4050	1500	3525	1950	4050
			I_{M230}	2.9	3.2	5	6.8	7.6		11.8	
			I_{M400}	1.5	1.6	2.5	3.4	3.8	5.7	5.9	10.2
			P_N	0.51	0.64	1.2	1.6	1.6	2.8	2.8	4.7
			J_M	0.25	0.33	1.53	1.93	7.42	7.42	10.72	10.72
3	56	0.71	M_2					29	22	40	32
			c					1.9	2.6	1.4	1.7
			$n_{2 \text{ Eck}}$					500	1175	650	1350
			$n_{2 \text{ th}}$					500	767	650	767
4	70	0.52	M_2					39	29	53	43
			c					1.8	2.4	1.3	1.6
			$n_{2 \text{ Eck}}$					375	881	488	1013
			$n_{2 \text{ th}}$					375	725	488	725
7	70	0.39	M_2			21	26	68	51		
			c			3.3	2.7	1	1.4		
			$n_{2 \text{ Eck}}$			536	579	214	504		
			$n_{2 \text{ th}}$			443	443	214	443		
10	45	0.36	M_2	12	15	30	37				
			c	3.9	3.1	1.5	1.2				
			$n_{2 \text{ Eck}}$	405	405	375	405				
			$n_{2 \text{ th}}$	310	310	310	310				

GPA01-2S				06CN41	06FN41	06IN41	09FN38	09HN41
				...500	...500	...500	...500	...500
i	M_{2GN}	J_G	M_1	0.6	1.2	1.5	3.1	3.8
			n_1	4050	4050	4050	3750	4050
			I_{M230}	2.6	2.9	3.2	5	6.8
			I_{M400}	1.3	1.5	1.6	2.5	3.4
			P_N	0.25	0.51	0.64	1.2	1.6
			J_M	0.17	0.25	0.33	1.53	1.93
16	70	0.16	M_2		18	23	47	58
			c		3.9	3.1	1.5	1.2
			$n_{2 \text{ Eck}}$		253	253	234	253
			$n_{2 \text{ th}}$		219	219	219	219
20	70	0.14	M_2		23	29		
			c		3.1	2.5		
			$n_{2 \text{ Eck}}$		203	203		
			$n_{2 \text{ th}}$		175	175		
28	70	0.12	M_2	16	32	40		
			c	4.4	2.2	1.8		
			$n_{2 \text{ Eck}}$	145	145	145		
			$n_{2 \text{ th}}$	136	136	136		

$M \dots$ [Nm]
 $n \dots$ [min^{-1}]
 $J \dots$ [kgcm^2]

$P \dots$ [kW]
 $I \dots$ [A]
 $i [-]$
 $c [-]$



GPA [Nm]

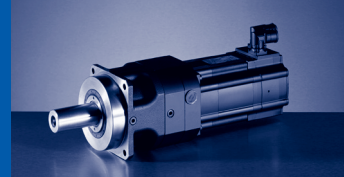
GPA□□-□S (MCS)

$M_{2GN} \leq 170 \text{ Nm}$

GPA02-1S				09FN38	09HN41	12HN15	12HN35	12LN20	12LN41	14DN15	
				...500	...500	...500	...500	...500	...500	...500	
i	M_{2GN}	J_G	M_1	3.1	3.8	10	7.5	13.5	11	9.2	
			n_1	3750	4050	1500	3525	1950	4050	1500	
			I_{M230}	5	6.8	7.6		11.8			
			I_{M400}	2.5	3.4	3.8	5.7	5.9	10.2	4.5	
			P_N	1.2	1.6	1.6	2.8	2.8	4.7	1.45	
			J_M	1.53	1.93	7.42	7.42	10.72	10.72	8.22	
3	135	3.1	M_2							27	
			c							5	
			n_2 Eck								500
			n_2 th								500
4	0	2.25	M_2			38					
			c			4.3					
			n_2 Eck			375					
			n_2 th			0					
4	170	2.25	M_2					53	43	36	
			c					3.2	4	4.7	
			n_2 Eck					488	1013	375	
			n_2 th					488	625	375	
5	170	1.52	M_2			49	37	66	54	45	
			c			3.5	4.6	2.6	3.2	3.8	
			n_2 Eck			300	705	390	810	300	
			n_2 th			300	500	390	500	300	
7	170	1.69	M_2			68	51	92	75	63	
			c			2.5	3.3	1.9	2.3	2.7	
			n_2 Eck			214	504	279	579	214	
			n_2 th			214	400	279	400	214	
10	110	1.18	M_2	30	37						
			c	3.6	3						
			n_2 Eck	375	405						
			n_2 th	280	280						

M ... [Nm]
 n ... [min⁻¹]
 J ... [kgcm²]

P ... [kW]
 I ... [A]
 i [-]
 c [-]

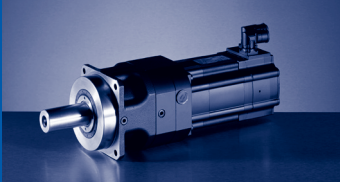


$M_{2GN} \leq 170 \text{ Nm}$

14DN36	14HN15	14HN32	14LN15	14LN32	14PN14	14PN32	GPA02-1S			
...500	...500	...500	...500	...500	...500	...500	M_1	J_G	M_{2GN}	i
7.5	16	14	23	17.2	30	21	n_1			
3600	1500	3225	1500	3225	1350	3225	I_{M230}			
							I_{M400}			
7.5	6.6	11.9	9.7	15	10.8	15.6	P_N			
2.8	2.5	4.7	3.6	5.8	4.2	7.1	J_M			
8.22	14.32	14.32	23.44	23.44	34.74	34.82	M_2			
	47	41	67	50	88	61	c	3.1	135	3
	2.9	3.3	2	2.7	1.5	3.3	$n_{2 \text{ Eck}}$			
	500	1075	500	1075	450	1075	$n_{2 \text{ th}}$			
	500	667	500	667	450	667	M_2			
							c	2.25	0	4
							$n_{2 \text{ Eck}}$			
							$n_{2 \text{ th}}$			
	62	55	90	67	117	82	M_2			
	2.7	3.1	1.9	2.5	1.5	2.1	c	2.25	170	4
	375	806	375	806	338	806	$n_{2 \text{ Eck}}$			
	375	625	375	625	338	625	$n_{2 \text{ th}}$			
37	78	68	112	84	146	102	M_2			
4.6	2.2	2.5	1.5	2	1.2	1.7	c	1.52	170	5
720	300	645	300	645	270	645	$n_{2 \text{ Eck}}$			
500	300	500	300	500	270	500	$n_{2 \text{ th}}$			
51	109	96	157	117		143	M_2			
3.3	1.6	1.8	1.1	1.5		1.2	c	1.69	170	7
514	214	461	214	461		461	$n_{2 \text{ Eck}}$			
400	214	400	214	400		400	$n_{2 \text{ th}}$			
							M_2			
							c	1.18	110	10
							$n_{2 \text{ Eck}}$			
							$n_{2 \text{ th}}$			

M ... [Nm]
n ... [min⁻¹]
J ... [kgcm²]

P ... [kW]
I ... [A]
i [-]
c [-]



GPA [Nm]

GPA□□-□S (MCS)

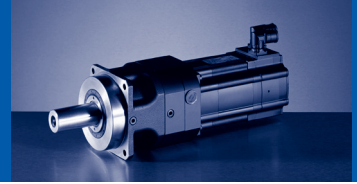
$M_{2GN} \leq 170 \text{ Nm}$

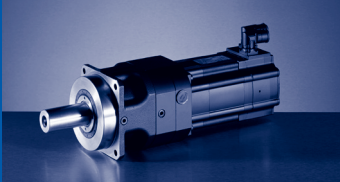
GPA02-2S				09FN38	09HN41	12HN15	12HN35	12LN41
				...500	...500	...500	...500	...500
i	M_{2GN}	J_G	M_1					
			n_1	3750	4050	1500	3525	4050
			I_{M230}	5	6.8	7.6		
			I_{M400}	2.5	3.4	3.8	5.7	10.2
			P_N	1.2	1.6	1.6	2.8	4.7
			J_M	1.53	1.93	7.42	7.42	10.72
16	170	0.58	M_2	47	58	152	114	167
			c	3.6	2.9	1.1	1.5	1
			$n_{2 \text{ Eck}}$	234	253	94	220	253
			$n_{2 \text{ th}}$	194	194	94	194	194
20	170	0.48	M_2	59	72			
			c	2.9	2.4			
			$n_{2 \text{ Eck}}$	188	203			
			$n_{2 \text{ th}}$	155	155			
28	170	0.41	M_2	83	101			
			c	2.1	1.7			
			$n_{2 \text{ Eck}}$	134	145			
			$n_{2 \text{ th}}$	125	125			
35	170	0.4	M_2	103	126			
			c	1.7	1.4			
			$n_{2 \text{ Eck}}$	107	116			
			$n_{2 \text{ th}}$	100	100			

$M \dots$ [Nm]
 $n \dots$ [min^{-1}]
 $J \dots$ [kgcm^2]

$P \dots$ [kW]
 $I \dots$ [A]
 i [-]
 c [-]

GPA [Nm]
GPA□□-□S (MCS)





GPA [Nm]

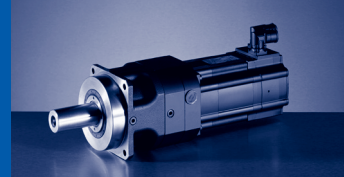
GPA□□-□S (MCS)

$M_{2GN} \leq 360 \text{ Nm}$

GPA03-1S				12HN15	12HN35	12LN20	12LN41	14DN15	14DN36	14HN15	14HN32	14LN15
				...500	...500	...500	...500	...500	...500	...500	...500	...500
i	M_{2GN}	J_G	M_1	10	7.5	13.5	11	9.2	7.5	16	14	23
			n_1	1500	3525	1950	4050	1500	3600	1500	3225	1500
			I_{M230}	7.6		11.8						
			I_{M400}	3.8	5.7	5.9	10.2	4.5	7.5	6.6	11.9	9.7
			P_N	1.6	2.8	2.8	4.7	1.45	2.8	2.5	4.7	3.6
			J_M	7.42	7.42	10.72	10.72	8.22	8.22	14.32	14.32	23.44
3	290	9.31	M_2 c $n_{2 \text{ Eck}}$ $n_{2 \text{ th}}$									
4	360	6.89	M_2 c $n_{2 \text{ Eck}}$ $n_{2 \text{ th}}$									
5	360	5.97	M_2 c $n_{2 \text{ Eck}}$ $n_{2 \text{ th}}$									
7	360	3.9	M_2 c $n_{2 \text{ Eck}}$ $n_{2 \text{ th}}$							109 3.3 214 214	96 3.8 461 371	157 2.3 214 214
10	220	3.53	M_2 c $n_{2 \text{ Eck}}$ $n_{2 \text{ th}}$	98 2.3 150 150	73 3 353 260	132 1.7 195 195	107 2.1 405 260	90 2.5 150 150	73 3 360 260	156 1.4 150 150	137 1.6 323 260	224 1 150 150

$M \dots [\text{Nm}]$
 $n \dots [\text{min}^{-1}]$
 $J \dots [\text{kgcm}^2]$

$P \dots [\text{kW}]$
 $I \dots [\text{A}]$
 $i [-]$
 $c [-]$

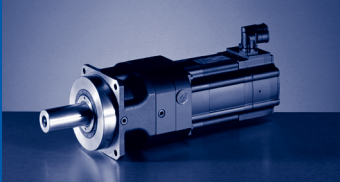


$M_{2GN} \leq 360 \text{ Nm}$

14LN32	14PN14	14PN32	19FN14	19FN30	19JN14	19JN30	19PN14	19PN30	GPA03-1S			
...500	...500	...500	...500	...500	...500	...500	...500	...500	M_1	J_G	M_{2GN}	i
17.2	30	21	27	21	40	29	51	32	n_1			
3225	1350	3225	1425	3000	1425	3000	1350	3000	I_{M230}			
15	10.8	15.6	8.6	14	12.3	18.5	14.3	19	I_{M400}			
5.8	4.2	7.1	4	6.6	6	9.1	7.2	10	P_N			
23.44	34.74	34.82	65.12	65.04	105.04	105.12	160.12	160.04	J_M			
			79	61	117	85	149	94	M_2			
			3.7	4.7	2.5	3.4	2	3.1	c	9.31	290	3
			475	1000	475	1000	450	1000	$n_{2 \text{ Eck}}$			
			475	567	475	567	450	567	$n_{2 \text{ th}}$			
			105	82	156	113	199	125	M_2			
			3.4	4.4	2.3	3.2	1.8	2.9	c	6.89	360	4
			356	750	356	750	338	750	$n_{2 \text{ Eck}}$			
			356	525	356	525	338	525	$n_{2 \text{ th}}$			
			132	102	195	141	249	156	M_2			
			2.7	3.5	1.9	2.6	1.5	2.3	c	5.97	360	5
			285	600	285	600	270	600	$n_{2 \text{ Eck}}$			
			285	420	285	420	270	420	$n_{2 \text{ th}}$			
117	205	143	184	143	273	198	348	218	M_2			
3.1	1.8	2.5	2	2.5	1.3	1.8	1	1.7	c	3.9	360	7
461	193	461	204	429	204	429	193	429	$n_{2 \text{ Eck}}$			
371	193	371	204	371	204	371	193	371	$n_{2 \text{ th}}$			
168		205							M_2			
1.3		1.1							c	3.53	220	10
323		323							$n_{2 \text{ Eck}}$			
260		260							$n_{2 \text{ th}}$			

M ... [Nm]
n ... [min⁻¹]
J ... [kgcm²]

P ... [kW]
I ... [A]
i [-]
c [-]



GPA [Nm]

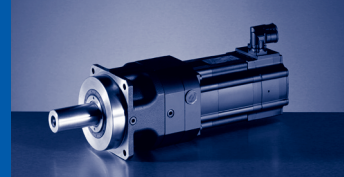
GPA□□-□S (MCS)

$M_{2GN} \leq 360 \text{ Nm}$

GPA03-2S				12HN15	12HN35	12LN20	12LN41	14DN15	14DN36	14HN15	14HN32	14LN15	14LN32	14PN32	
				...S00	...S00	...S00	...S00	...S00	...S00	...S00	...S00	...S00	...S00	...S00	
i	M_{2GN}	J_G	M_1	10	7.5	13.5	11	9.2	7.5	16	14	23	17.2	21	
			n_1	1500	3525	1950	4050	1500	3600	1500	3225	1500	3225	3225	
			I_{M230}	7.6		11.8									
			I_{M400}	3.8	5.7	5.9	10.2	4.5	7.5	6.6	11.9	9.7	15	15.6	
			P_N	1.6	2.8	2.8	4.7	1.45	2.8	2.5	4.7	3.6	5.8	7.1	
			J_M	7.42	7.42	10.72	10.72	8.22	8.22	14.32	14.32	23.44	23.44	34.82	
16	360	2.37	M_2	152	114	205	167	140	114	243	213	350	261	319	
			c	2.4	3.2	1.8	2.2	2.6	3.2	1.5	1.7	1	1.4	1.1	
			$n_{2 \text{ Eck}}$	94	220	122	253	94	225	94	202	94	202	202	202
			$n_{2 \text{ th}}$	94	181	122	181	94	181	94	181	94	181	181	181
20	360	2.02	M_2	190	143	257	209	175	143	304	266		327		
			c	1.9	2.5	1.4	1.7	2.1	2.5	1.2	1.4		1.1		
			$n_{2 \text{ Eck}}$	75	176	98	203	75	180	75	161		161		
			$n_{2 \text{ th}}$	75	145	98	145	75	145	75	145		145		
28	360	1.74	M_2	266	200	359	293								
			c	1.4	1.8	1	1.2								
			$n_{2 \text{ Eck}}$	54	126	70	145								
			$n_{2 \text{ th}}$	54	114	70	114								

M ... [Nm]
 n ... [min⁻¹]
 J ... [kgcm²]

P ... [kW]
 I ... [A]
 i [-]
 c [-]



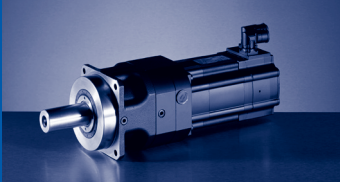
$M_{2GN} \leq 620 \text{ Nm}$

GPA04-1S				19FN14	19FN30	19JN14	19JN30	19PN14	19PN30
				...500	...500	...500	...500	...500	...500
i	M_{2GN}	J_G	M_1	27	21	40	29	51	32
			n_1	1425	3000	1425	3000	1350	3000
			I_{M400}	8.6	14	12.3	18.5	14.3	19
			P_N	4	6.6	6	9.1	7.2	10
			J_M	65.12	65.04	105.04	105.12	160.12	160.04
5	550	19.46	M_2	132		195	141	249	156
			c	4.2		2.8	3.9	2.2	3.5
			$n_{2 \text{ Eck}}$	285		285	600	270	600
			$n_{2 \text{ th}}$	285		285	340	270	340
7	550	25.9	M_2	184	143	273	198	348	218
			c	3	3.8	2	2.8	1.6	2.5
			$n_{2 \text{ Eck}}$	204	429	204	429	193	429
			$n_{2 \text{ th}}$	204	343	204	343	193	343
10	340	24.89	M_2	263	205				312
			c	1.3	1.7				1.1
			$n_{2 \text{ Eck}}$	143	300				300
			$n_{2 \text{ th}}$	143	240				240
10	360	24.89	M_2				283		
			c				1.3		
			$n_{2 \text{ Eck}}$				300		
			$n_{2 \text{ th}}$				240		

GPA04-2S				19FN14	19FN30	19JN14	19JN30	19PN30
				...500	...500	...500	...500	...500
i	M_{2GN}	J_G	M_1	27	21	40	29	32
			n_1	1425	3000	1425	3000	3000
			I_{M400}	8.6	14	12.3	18.5	19
			P_N	4	6.6	6	9.1	10
			J_M	65.12	65.04	105.04	105.12	160.04
16	550	7.33	M_2			550		
			c			1		
			$n_{2 \text{ Eck}}$			89		
			$n_{2 \text{ th}}$			89		
16	620	7.33	M_2	410	319		441	486
			c	1.5	1.9		1.4	1.3
			$n_{2 \text{ Eck}}$	89	188		188	188
			$n_{2 \text{ th}}$	89	169		169	169

M ... [Nm]
n ... [min⁻¹]
J ... [kgcm²]

P ... [kW]
I ... [A]
i [-]
c [-]



GPA [Nm]

GPA□□-□□ (MCS)

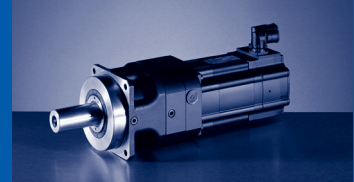
$M_{2GN} \leq 1000 \text{ Nm}$

GPA05-1S				19FN14	19FN30	19JN14	19JN30	19PN14	19PN30
				...500	...500	...500	...500	...500	...500
i	M_{2GN}	J_G	M_1	27	21	40	29	51	32
			n_1	1425	3000	1425	3000	1350	3000
			I_{M400}	8.6	14	12.3	18.5	14.3	19
			P_N	4	6.6	6	9.1	7.2	10
			J_M	65.12	65.04	105.04	105.12	160.12	160.04
7	1000	21.36	M_2			273		348	
			c			3.7		2.9	
			$n_{2 \text{ Eck}}$			204		193	
			$n_{2 \text{ th}}$			204		193	
10	620	18.62	M_2	263	205	390	283	497	312
			c	2.4	3	1.6	2.2	1.3	2
			$n_{2 \text{ Eck}}$	143	300	143	300	135	300
			$n_{2 \text{ th}}$	143	220	143	220	135	220

GPA05-2S				19FN14	19FN30	19JN14	19JN30	19PN14	19PN30
				...500	...500	...500	...500	...500	...500
i	M_{2GN}	J_G	M_1	27	21	40	29	51	32
			n_1	1425	3000	1425	3000	1350	3000
			I_{M400}	8.6	14	12.3	18.5	14.3	19
			P_N	4	6.6	6	9.1	7.2	10
			J_M	65.12	65.04	105.04	105.12	160.12	160.04
16	1000	23.39	M_2	410	319	608	441	775	486
			c	2.4	3.1	1.6	2.3	1.3	2.1
			$n_{2 \text{ Eck}}$	89	188	89	188	84	188
			$n_{2 \text{ th}}$	89	156	89	156	84	156
20	1000	20.08	M_2	513	399	760	551	969	608
			c	2	2.5	1.3	1.8	1	1.6
			$n_{2 \text{ Eck}}$	71	150	71	150	68	150
			$n_{2 \text{ th}}$	71	125	71	125	68	125
28	1000	26.22	M_2	718	559	1000	771		851
			c	1.4	1.8	1	1.3		1.2
			$n_{2 \text{ Eck}}$	51	107	51	107		107
			$n_{2 \text{ th}}$	51	89	51	89		89

$M \dots$ [Nm]
 $n \dots$ [min^{-1}]
 $J \dots$ [kgcm^2]

$P \dots$ [kW]
 $I \dots$ [A]
 $i \dots$ [-]
 $c \dots$ [-]

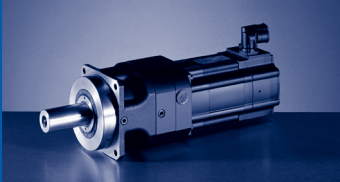


$M_{2GN} \leq 25 \text{ Nm}$

GPA00-1A				10IN40
				...500
i	M_{2GN}	J_G	M_1	2
			n_1	3950
			I_{M400}	2.4
			P_N	0.8
			J_M	2.44
4	25	0.16	M_2	8
			c	3.2
			$n_{2 \text{ Eck}}$	988
			$n_{2 \text{ th}}$	825
5	25	0.13	M_2	10
			c	2.6
			$n_{2 \text{ Eck}}$	790
			$n_{2 \text{ th}}$	660

M ... [Nm]
n ... [min^{-1}]
J ... [kgcm^2]

P ... [kW]
I ... [A]
i [-]
c [-]



GPA [Nm]

GPA□□-□A (MCA)

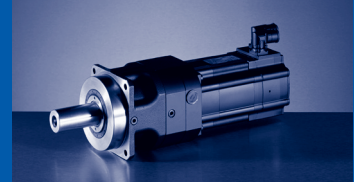
$M_{2GN} \leq 72 \text{ Nm}$

GPA01-1A				10IN40	13IN34	13IN41
				...500	...F10	...500
i	M_{2GN}	J_G	M_1	2	6.3	4
			n_1	3950	3410	4050
			I_{M400}	2.4	6	4.4
			P_N	0.8	2.2	1.7
			J_M	2.44	8.34	8.34
3	56	0.71	M_2		18	11
			c		3	4.8
			$n_{2 \text{ Eck}}$		1137	1350
			$n_{2 \text{ th}}$		767	767
4	70	0.52	M_2		24	15
			c		2.8	4.5
			$n_{2 \text{ Eck}}$		853	1013
			$n_{2 \text{ th}}$		725	725
7	70	0.39	M_2		43	27
			c		1.6	2.6
			$n_{2 \text{ Eck}}$		487	579
			$n_{2 \text{ th}}$		443	443
7	72	0.39	M_2	13		
			c	5.3		
			$n_{2 \text{ Eck}}$	564		
			$n_{2 \text{ th}}$	443		
10	46	0.36	M_2	19		
			c	2.4		
			$n_{2 \text{ Eck}}$	395		
			$n_{2 \text{ th}}$	310		

GPA01-2A				10IN40
				...500
i	M_{2GN}	J_G	M_1	2
			n_1	3950
			I_{M400}	2.4
			P_N	0.8
			J_M	2.44
16	70	0.16	M_2	30
			c	2.3
			$n_{2 \text{ Eck}}$	247
			$n_{2 \text{ th}}$	219

$M \dots$ [Nm]
 $n \dots$ [min^{-1}]
 $J \dots$ [kgcm^2]

$P \dots$ [kW]
 $I \dots$ [A]
 i [-]
 c [-]



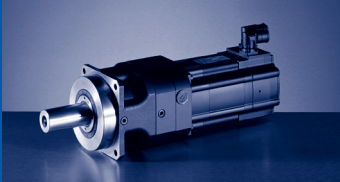
$M_{2GN} \leq 170 \text{ Nm}$

GPA02-1A				10IN40	13IN34	14LN16	14LN20	14LN35	14LN41	17NN17	17NN23	17NN35	17NN41
				...S00	...F10	...F10	...S00	...F10	...S00	...F10	...S00	...F10	...S00
i	M_{2GN}	J_G	M_1	2	6.3	12	6.7	10.8	5.4	21.5	10.8	19	9.5
			n_1	3950	3410	1635	2000	3455	4100	1680	2300	3480	4110
			I_{M400}	2.4	6	4.8	3.3	9.1	5.8	8.5	5.5	15.8	10.2
			P_N	0.8	2.2	2.1	1.4	3.9	2.3	3.8	2.6	6.9	4.1
			J_M	2.44	8.34	19.32	19.24	19.24	19.24	36.04	36.04	36.04	36.04
3	135	3.1	M_2			34		31		62	31	55	27
			c			3.8		4.3		2.1	4.3	2.4	4.8
			$n_{2 \text{ Eck}}$			545		1152		560	767	1160	1370
			$n_{2 \text{ th}}$			545		667		560	667	667	667
4	170	2.25	M_2			46		41		83	41	74	36
			c			3.6		4		2	4	2.3	4.6
			$n_{2 \text{ Eck}}$			409		864		420	575	870	1028
			$n_{2 \text{ th}}$			409		625		420	575	625	625
5	170	1.52	M_2		29	58	31	52		105	52	92	45
			c		5.5	2.9	5.2	3.2	1.6	3.2	1.8	3.7	
			$n_{2 \text{ Eck}}$		682	327	400	691	336	460	696	822	
			$n_{2 \text{ th}}$		500	327	400	500	336	460	500	500	
7	170	1.69	M_2		42	81	45	73	36	147	73	130	64
			c		3.9	2.1	3.7	2.3	4.6	1.2	2.3	1.3	2.6
			$n_{2 \text{ Eck}}$		487	234	286	494	586	240	329	497	587
			$n_{2 \text{ th}}$		400	234	286	400	400	240	329	400	400
10	110	1.18	M_2	19									
			c	5.6									
			$n_{2 \text{ Eck}}$	395									
			$n_{2 \text{ th}}$	280									

GPA02-2A				10IN40	13IN34	13IN41
				...S00	...F10	...S00
i	M_{2GN}	J_G	M_1	2	6.3	4
			n_1	3950	3410	4050
			I_{M400}	2.4	6	4.4
			P_N	0.8	2.2	1.7
			J_M	2.44	8.34	8.34
16	170	0.58	M_2	29	96	60
			c	5.5	1.8	2.8
			$n_{2 \text{ Eck}}$	247	213	253
			$n_{2 \text{ th}}$	194	194	194
20	170	0.48	M_2	37		
			c	4.4		
			$n_{2 \text{ Eck}}$	198		
			$n_{2 \text{ th}}$	155		
28	170	0.41	M_2	53		
			c	3.2		
			$n_{2 \text{ Eck}}$	141		
			$n_{2 \text{ th}}$	125		
35	170	0.4	M_2	66		
			c	2.5		
			$n_{2 \text{ Eck}}$	113		
			$n_{2 \text{ th}}$	100		

$M \dots$ [Nm]
 $n \dots$ [min^{-1}]
 $J \dots$ [kgcm^2]

$P \dots$ [kW]
 $I \dots$ [A]
 i [-]
 c [-]



GPA [Nm]

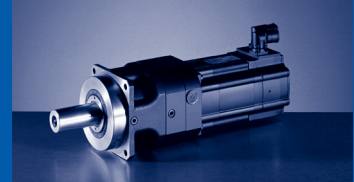
GPA□□-□A (MCA)

$M_{2GN} \leq 360 \text{ Nm}$

GPA03-1A				13IN34	13IN41	14LN16	14LN20	14LN35	14LN41	17NN17	17NN23	17NN35
				...F10	...S00	...F10	...S00	...F10	...S00	...F10	...S00	...F10
i	M_{2GN}	J_G	M_1	6.3	4	12	6.7	10.8	5.4	21.5	10.8	19
			n_1	3410	4050	1635	2000	3455	4100	1680	2300	3480
			I_{M400}	6	4.4	4.8	3.3	9.1	5.8	8.5	5.5	15.8
			P_N	2.2	1.7	2.1	1.4	3.9	2.3	3.8	2.6	6.9
			J_M	8.34	8.34	19.32	19.24	19.24	19.24	36.04	36.04	36.04
3	290	9.31	M_2									
			c									
			$n_{2 \text{ Eck}}$									
			$n_{2 \text{ th}}$									
4	360	6.89	M_2									
			c									
			$n_{2 \text{ Eck}}$									
			$n_{2 \text{ th}}$									
5	360	5.97	M_2									
			c									
			$n_{2 \text{ Eck}}$									
			$n_{2 \text{ th}}$									
7	360	3.9	M_2			79		71		145	71	128
			c			4.4		4.9		2.4	4.9	2.8
			$n_{2 \text{ Eck}}$			234		494		240	329	497
			$n_{2 \text{ th}}$			234		371		240	329	371
10	220	3.53	M_2	60	37	117	64	105	51	211	105	186
			c	3.6	5.6	1.9	3.4	2.1	4.2	1	2.1	1.2
			$n_{2 \text{ Eck}}$	341	405	164	200	346	410	168	230	348
			$n_{2 \text{ th}}$	260	260	164	200	260	260	168	230	260

$M \dots$ [Nm]
 $n \dots$ [min^{-1}]
 $J \dots$ [kgcm^2]

$P \dots$ [kW]
 $I \dots$ [A]
 $i \dots$ [-]
 $c \dots$ [-]

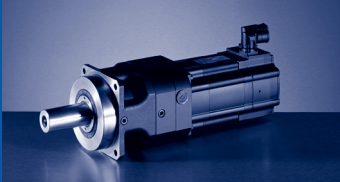


$M_{2GN} \leq 360 \text{ Nm}$

17NN41	19SN17	19SN23	19SN35	19SN42	21XN17	21XN25	21XN35	21XN42	GPA03-1A			
...S00	...F10	...S00	...F10	...S00	...F10	...S00	...F10	...S00	M_1	J_G	M_{2GN}	i
9.5	36.3	16.3	36	12	61.4	24.6	55	17	n_1			
4110	1700	2340	3510	4150	1710	2490	3520	4160	I_{M400}			
10.2	13.9	8.2	28.7	14	22.5	13.5	42.5	19.8	P_N			
4.1	6.4	4	13.2	5.2	11	6.4	20.3	7.4	J_M			
36.04	72.12	72.12	72.04	72.12	180.04	180.04	180.04	180.04	M_2			
	105		104		179	70	160	48	c	9.31	290	3
	2.7		2.7		1.6	4	1.8	5.8	$n_{2 \text{ Eck}}$			
	567		1170		570	830	1173	1387	$n_{2 \text{ th}}$			
	567		567		567	567	567	567				
	140	61	139						M_2	6.89	360	4
	2.5	5.6	2.6						c			
	425	585	878						$n_{2 \text{ Eck}}$			
	425	525	525						$n_{2 \text{ th}}$			
	176	77	175		300	118	269	80	M_2	5.97	360	5
	2	4.5	2		1.2	3	1.3	4.3	c			
	340	468	702		342	498	704	832	$n_{2 \text{ Eck}}$			
	340	420	420		342	420	420	420	$n_{2 \text{ th}}$			
62	248	109	246	79					M_2	3.9	360	7
5.5	1.5	3.2	1.5	4.4					c			
587	243	334	501	593					$n_{2 \text{ Eck}}$			
371	243	334	371	371					$n_{2 \text{ th}}$			
92									M_2	3.53	220	10
2.4									c			
411									$n_{2 \text{ Eck}}$			
260									$n_{2 \text{ th}}$			

M ... [Nm]
n ... [min⁻¹]
J ... [kgcm²]

P ... [kW]
I ... [A]
i [-]
c [-]



GPA [Nm]

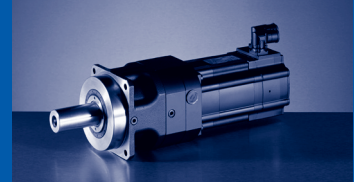
GPA□□-□A (MCA)

$M_{2GN} \leq 360 \text{ Nm}$

GPA03-2A				13IN34	13IN41	14LN16	14LN20	14LN35	14LN41	17NN17	17NN23	17NN35	17NN41	
				...F10	...S00	...F10	...S00	...F10	...S00	...F10	...S00	...F10	...S00	
i	M_{2GN}	J_G	M_1	6.3	4	12	6.7	10.8	5.4	21.5	10.8	19	9.5	
			n_1	3410	4050	1635	2000	3455	4100	1680	2300	3480	4110	
			I_{M400}	6	4.4	4.8	3.3	9.1	5.8	8.5	5.5	15.8	10.2	
			P_N	2.2	1.7	2.1	1.4	3.9	2.3	3.8	2.6	6.9	4.1	
			J_M	8.34	8.34	19.32	19.24	19.24	19.24	36.04	36.04	36.04	36.04	
16	360	2.37	M_2	94	58	183	100	164	80	330	164	291	144	
			c	3.7	5.9	2	3.5	2.2	4.3	1.1	2.2	1.2	2.5	
			$n_{2 \text{ Eck}}$	213	253	102	125	216	256	105	144	218	257	
			$n_{2 \text{ th}}$	181	181	102	125	181	181	105	144	181	181	
20	360	2.02	M_2	119	74	229	126	206	101		206		181	
			c	3	4.7	1.6	2.8	1.7	3.5		1.7		2	
			$n_{2 \text{ Eck}}$	171	203	82	100	173	205		115		206	
			$n_{2 \text{ th}}$	145	145	82	100	145	145		115		145	
28	360	1.74	M_2	167	105									
			c	2.1	3.4									
			$n_{2 \text{ Eck}}$	122	145									
			$n_{2 \text{ th}}$	114	114									

M ... [Nm]
 n ... [min⁻¹]
 J ... [kgcm²]

P ... [kW]
 I ... [A]
 i [-]
 c [-]



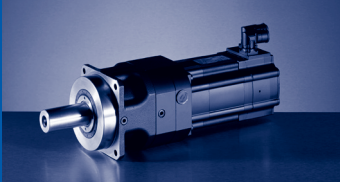
$M_{2GN} \leq 550 \text{ Nm}$

GPA04-1A				19SN17	19SN23	19SN35	19SN42	21XN17	21XN25	21XN35	21XN42
				...F10	...S00	...F10	...S00	...F10	...S00	...F10	...S00
i	M_{2GN}	J_G	M_1	36.3	16.3	36	12	61.4	24.6	55	17
			n_1	1700	2340	3510	4150	1710	2490	3520	4160
			I_{M400}	13.9	8.2	28.7	14	22.5	13.5	42.5	19.8
			P_N	6.4	4	13.2	5.2	11	6.4	20.3	7.4
			J_M	72.12	72.12	72.04	72.12	180.04	180.04	180.04	180.04
3	420	29.42	M_2					178	69	159	
			c					2.3	5.8	2.6	
			$n_{2 \text{ Eck}}$					570	830	1173	
			$n_{2 \text{ th}}$					467	467	467	
4	550	22.06	M_2					238	92	212	
			c					2.3	5.7	2.6	
			$n_{2 \text{ Eck}}$					428	623	880	
			$n_{2 \text{ th}}$					425	425	425	
5	550	19.46	M_2	174		173					
			c	3.1		3.1					
			$n_{2 \text{ Eck}}$	340		702					
			$n_{2 \text{ th}}$	340		340					
7	550	25.9	M_2	246	107	244		420	165	376	112
			c	2.2	4.9	2.2		1.3	3.3	1.5	4.7
			$n_{2 \text{ Eck}}$	243	334	501		244	356	503	594
			$n_{2 \text{ th}}$	243	334	343		244	343	343	343
10	340	24.89	M_2		158		115				
			c		2.1		2.9				
			$n_{2 \text{ Eck}}$		234		415				
			$n_{2 \text{ th}}$		234		240				

GPA04-2A				19SN23	19SN42
				...S00	...S00
i	M_{2GN}	J_G	M_1	16.3	12
			n_1	2340	4150
			I_{M400}	8.2	14
			P_N	4	5.2
			J_M	72.12	72.12
16	550	7.33	M_2	247	181
			c	2.2	3
			$n_{2 \text{ Eck}}$	146	259
			$n_{2 \text{ th}}$	146	169

$M \dots$ [Nm]
 $n \dots$ [min^{-1}]
 $J \dots$ [kgcm^2]

$P \dots$ [kW]
 $I \dots$ [A]
 i [-]
 c [-]



GPA [Nm]

GPA□□-□A (MCA)

$M_{2GN} \leq 1000 \text{ Nm}$

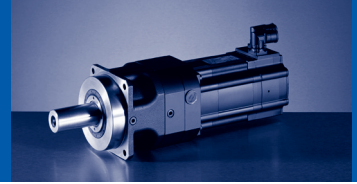
GPA05-1A				21XN17	21XN25	21XN35	21XN42
				...F10	...S00	...F10	...S00
i	M_{2GN}	J_G	M_1	61.4	24.6	55	17
			n_1	1710	2490	3520	4160
			I_{M400}	22.5	13.5	42.5	19.8
			P_N	11	6.4	20.3	7.4
			J_M	180.04	180.04	180.04	180.04
10	620	18.62	M_2	602	237	538	162
			c	1	2.6	1.2	3.7
			$n_{2 \text{ Eck}}$	171	249	352	416
			$n_{2 \text{ th}}$	171	220	220	220

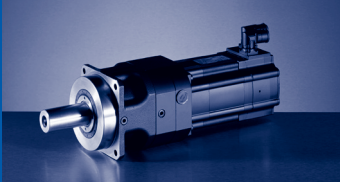
GPA05-2A				21XN17	21XN25	21XN35	21XN42
				...F10	...S00	...F10	...S00
i	M_{2GN}	J_G	M_1	61.4	24.6	55	17
			n_1	1710	2490	3520	4160
			I_{M400}	22.5	13.5	42.5	19.8
			P_N	11	6.4	20.3	7.4
			J_M	180.04	180.04	180.04	180.04
16	1000	23.39	M_2	943	372	844	254
			c	1.1	2.7	1.2	3.8
			$n_{2 \text{ Eck}}$	107	156	220	260
			$n_{2 \text{ th}}$	107	156	156	156

M ... [Nm]
 n ... [min^{-1}]
 J ... [kgcm^2]

P ... [kW]
 I ... [A]
 i [-]
 c [-]

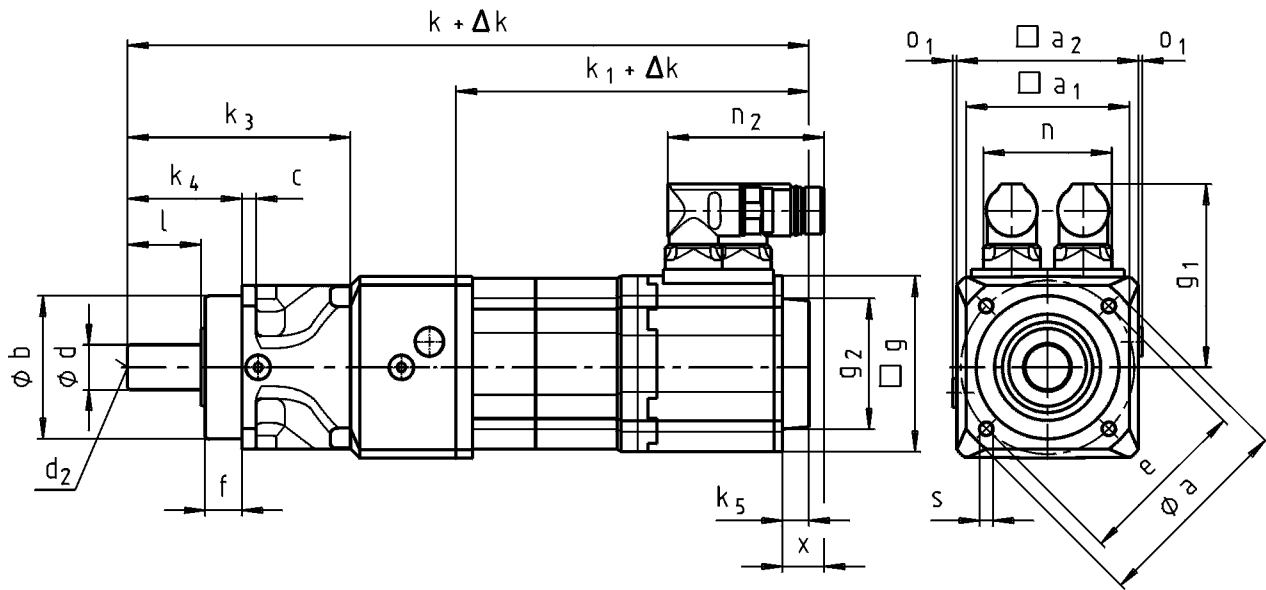
GPA [Nm]
GPA□□-□A (MCA)





GPA [mm]

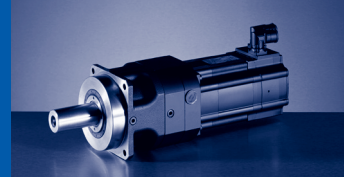
GPA□□-1S (MCS)



GPA□□-1S GCN ... RSO

		06C N41	06F N41	06I N41	09D N41	09F N38	09H N41	09L N41	12D N20	12D N41	12H N15	12H N30	12H N35	12L N20	12L N41	
GPA00...	a_2	65			89											
	k	265	295	325	316	336	356	396								
GPA01...	a_2	80			89								116			
	k		323	353	344	364	384	424	349			389			429	
GPA02...	a_2				102								116			
	k				392	412	432	472	397			437			477	
GPA03...	a_2												142			
	k								455				495			535
...RSO B0 ¹⁾	Δk	0														
...RSO P□ ¹⁾	Δk	19			20											
	k_1	132	162	192	183	203	223	263	188			228			268	
	g	62			89								116			
...RSO	k_5	0			13								14			
	g_2	□ 62			Ø 67								Ø 72			
	g_1	76			90								105			
	n_2	64							78							
	n	58							63							
	x				21								18			

¹⁾ → 801 - SRS / SRM / ECN / EQN / EQI / C20



GPA□□-1S GCN ... RSO

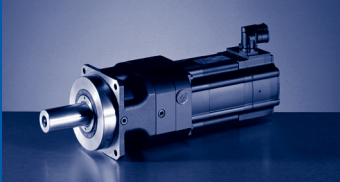
		14D N15	14D N36	14H N15	14H N32	14L N15	14L N32	14P N14	14P N32	19F N14	19F N30	19J N14	19J N30	19P N14	19P N30
GPA02...	a ₂	142													
	k	410		450		490		530							
GPA03...	a ₂	142													
	k	468		508		548		588		487		527		587	
GPA04...	a ₂	192													
	k									528		568		628	
GPA05...	a ₂	212													
	k									579		619		679	
...RSO B0 ¹⁾	Δ k	0													
...RSO P□ ¹⁾	Δ k	28													
	k ₁	201		241		281		321		220		260		320	
	g	143													
...RSO	k ₅	24													
	g ₂	Ø 78													
	g ₁	116			147		116	147	141	172	141	172	141	172	
	n ₂	78			94		78	94	78	94	78	94	78	94	
	n	63			80		63	80	63	80	63	80	63	80	
	x	16			38		16	38	16	36	16	36	16	36	

¹⁾ →  801 - SRS / SRM / ECN / EQN / EQI / C20

GPA□□-1S GCN

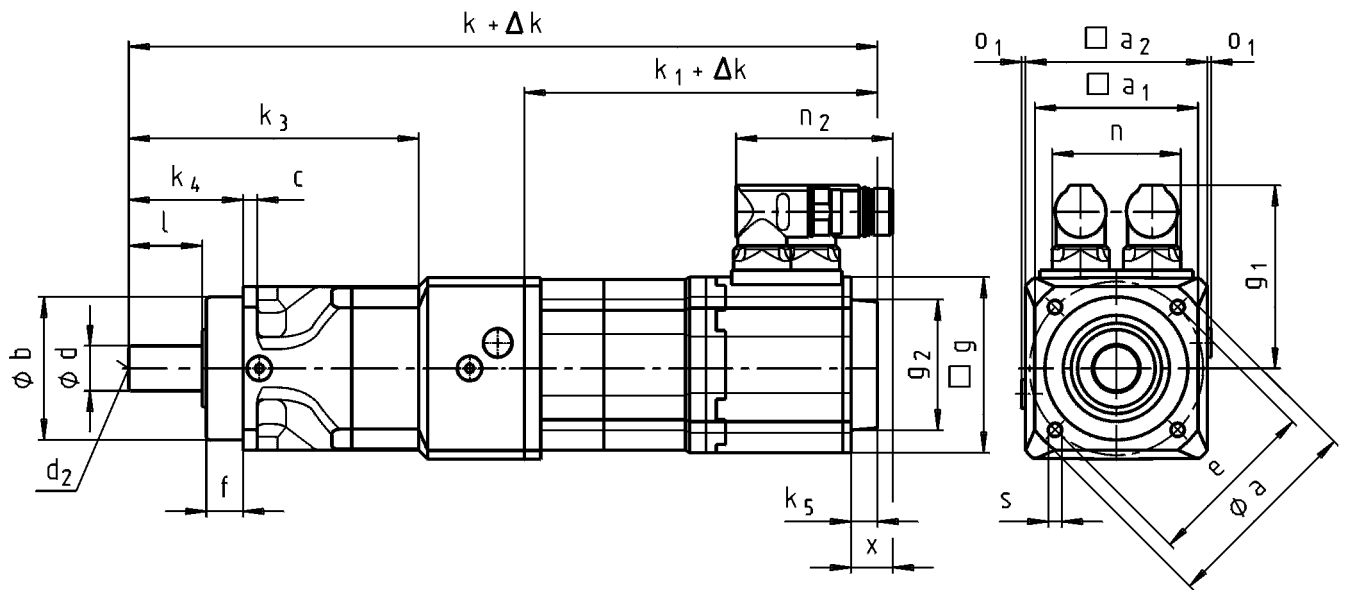
	k ₃			k ₄			o ₁			
GPA00...	94			48			2			
GPA01...	109			56						
GPA02...	146			88						
GPA03...	189			112			3			
GPA04...	213									
GPA05...	255			143						

	d	l	d ₂	a	a ₁	b	c	e	f	s
	k6					g6				4x90°
GPA00...	16	28	M5	80	65	60	6	68	18	5.5
GPA01...	22	36	M8	100	80	70	7	85		6.6
GPA02...	32	58	M12	140	102	90	10	120	28	9
GPA03...	40	82	M16	188	142	130	12	165		11
GPA04...	55		M20	250	182	160	15	215	27	13
GPA05...	75	105		290	212	180	17	250	35	17



GPA [mm]

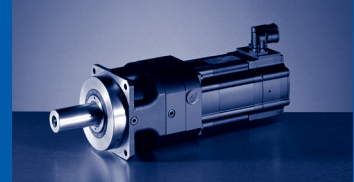
GPA□□-2S (MCS)



GPA□□-2S GCN ... RSO

		06C N41	06F N41	06I N41	09D N41	09F N38	09H N41	09L N41	12D N20	12D N41	12H N15	12H N30	12H N35	12L N20	12L N41	
GPA00...	a_2	65														
	k	296	326	356												
GPA01...	a_2	80			89											
	k	313	343	373	364	384	404	444								
GPA02...	a_2	102							116							
	k				419	439	459	499	424	464		504				
GPA03...	a_2								142							
	k								488	528		568				
...RSO B0 ¹⁾	Δk	0														
...RSO P□ ¹⁾	Δk	19			20											
...RSO	k_1	132	162	192	183	203	223	263	188		228		268			
	g	62			89				116							
...RSO	k_5	0			13				14							
	g_2	□ 62			Ø 67				Ø 72							
...RSO	g_1	76			90				105							
	n_2	64			78											
...RSO	n	58			63											
	x	21							18							

¹⁾ → 801 - SRS / SRM / ECN/ EQN / EQI / C20



GPA□□-2S GCN ... RSO

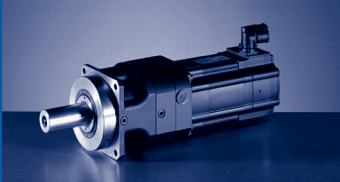
		14D N15	14D N36	14H N15	14H N32	14L N15	14L N32	14P N32	19F N14	19F N30	19J N14	19J N30	19P N14	19P N30	
GPA03...	a ₂	142													
	k	501		541		581	621								
GPA04...	a ₂									192					
	k									558		598		658	
GPA05...	a ₂									212					
	k									648		688		748	
...RSO B0 ¹⁾	Δ k	0													
...RSO P□ ¹⁾	Δ k	28						34			44				
	k ₁	201		241		281	321	220		260		320			
	g	143						192							
...RSO	k ₅	24						15							
	g ₂	Ø 78													
	g ₁	116			147			141	172	141	172	141	172		
	n ₂	78			94			78	94	78	94	78	94		
	n	63			80			63	80	63	80	63	80		
	x	16			38			16	36	16	36	16	36		

1) → 801 - SRS / SRM / ECN / EQN / EQI / C20

GPA□□-2S GCN

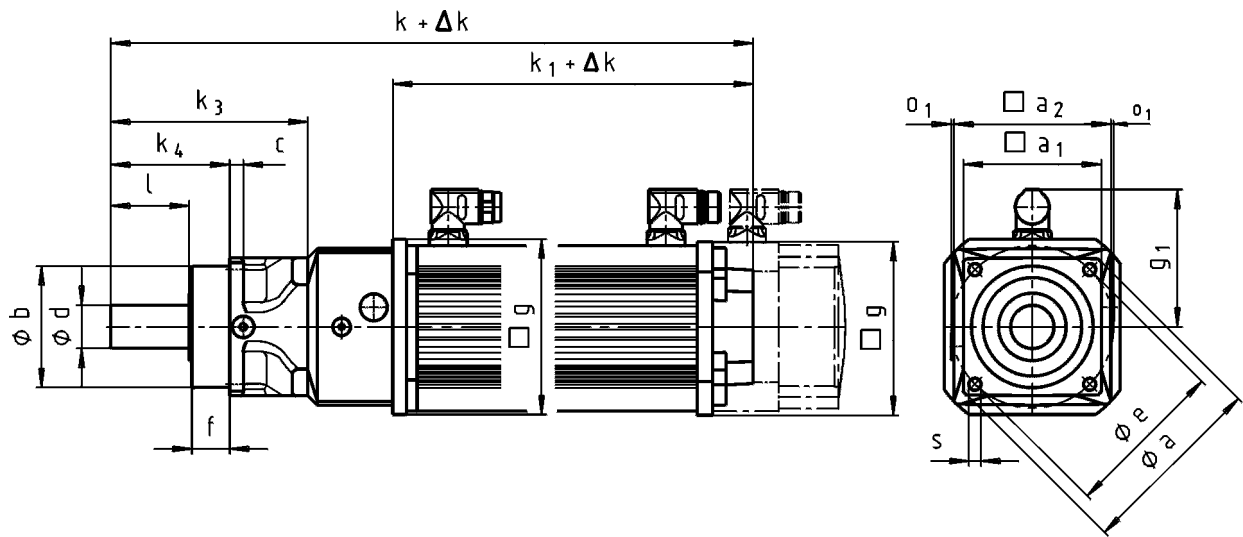
	k ₃			k ₄			o ₁			
GPA00...	125			48			2			
GPA01...	142			56						
GPA02...	184			88						
GPA03...	237			112			3			
GPA04...	261			143						
GPA05...	334									

	d	l	d ₂	a	a ₁	b	c	e	f	s
	k6					g6				4x90°
GPA00...	16	28	M5	80	65	60	6	68	18	5.5
GPA01...	22	36	M8	100	80	70	7	85		6.6
GPA02...	32	58	M12	140	102	90	10	120	28	9
GPA03...	40	82	M16	188	142	130	12	165		11
GPA04...	55		M20	250	182	160	15	215	27	13
GPA05...	75	105		290	212	180	17	250	35	17



GPA [mm]

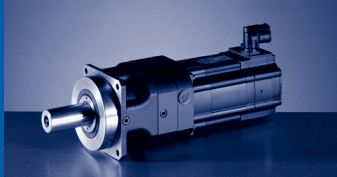
GPA□□-1A (MCA)



GPA□□-1A GCN ... RSO

		10I N40 ...S00	13I N41 ...S00	13I N34 ...F10	14L N20 ...S00	14L N41 ...S00	14L N16 ...F10	14L N35 ...F10	17N N23 ...S00	17N N41 ...S00
GPA00...	a_2	89								
	k	395								
GPA01...	a_2	89	116							
	k	423	432	500						
GPA02...	a_2	102	116				142			
	k	471	479	547	510		572		548	
GPA03...	a_2					142				
	k		537	605	568		630		606	
...RSO B0 ¹⁾	Δk					0				
...RSO P□ ¹⁾	Δk	25	35			33			35	
	k_1	262	271	339	302		364		340	
	g	102	131			142			165	
	g_1	90	102			109			118	

¹⁾ → 803 - SRS / SRM / ECN / EQN / EQI / S20 / T20 / CDD



GPA□□-1A GCN ... RSO

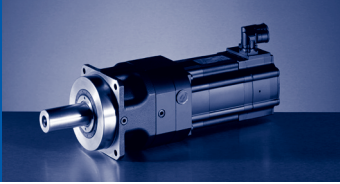
		17N N17 ...F10	17N N35 ...F10	19S N23 ...S00	19S N42 ...S00	19S N17 ...F10	19S N35 ...F10	21X N25 ...S00	21X N42 ...S00	21X N17 ...F10	21X N35 ...F10
GPA02...	a ₂	142									
	k	637									
GPA03...	a ₂	142		192				214			
	k	695		668		765		756		852	
GPA04...	a ₂			192							
	k			709		806		777		873	
GPA05...	a ₂			212							
	k			760		857		829		925	
...RSO B0 ¹⁾	Δ k	0									
...RSO P□ ¹⁾	Δ k	35		38				42			
	k ₁	429		401		498		470		566	
	g	165		192				214			
	g ₁	118		161				172			

¹⁾ → 803 - SRS / SRM / ECN / EQN / EQI / S20 / T20 / CDD

GPA□□-1A GCN

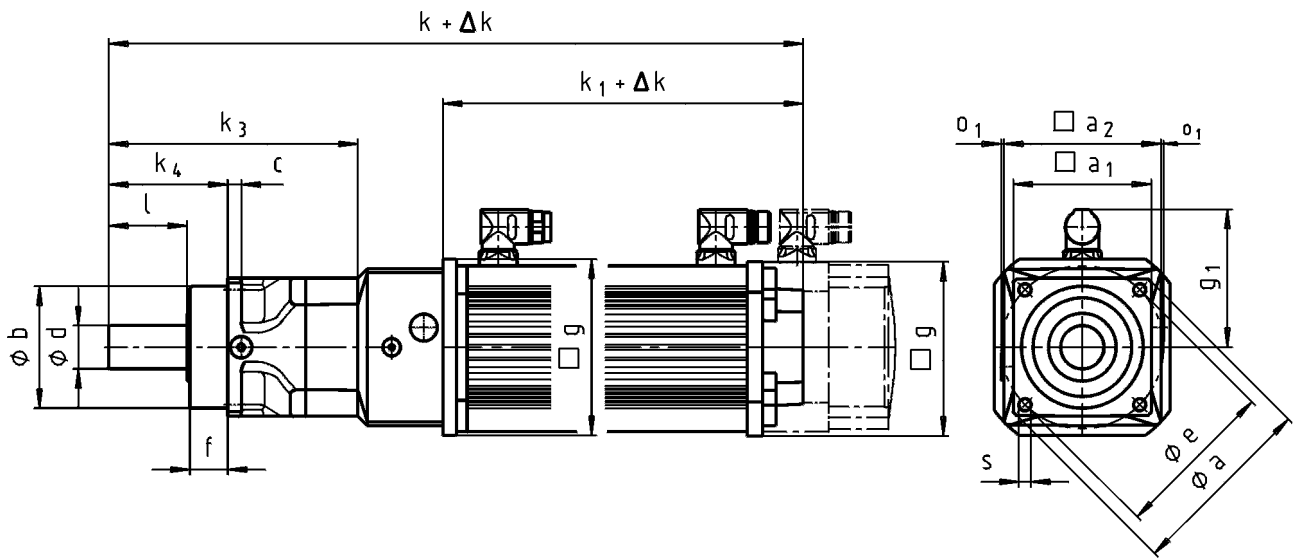
	k ₃			k ₄			o ₁			
GPA00...	94			48			2			
GPA01...	109			56						
GPA02...	146			88						
GPA03...	189			112			3			
GPA04...	213									
GPA05...	255			143						

	d	l	d ₂	a	a ₁	b	c	e	f	s
	k6					g6				4x90°
GPA00...	16	28	M5	80	65	60	6	68	18	5.5
GPA01...	22	36	M8	100	80	70	7	85		6.6
GPA02...	32	58	M12	140	102	90	10	120	28	9
GPA03...	40	82	M16	188	142	130	12	165		11
GPA04...	55		M20	250	182	160	15	215	27	13
GPA05...	75	105	M20	290	212	180	17	250	35	17



GPA [mm]

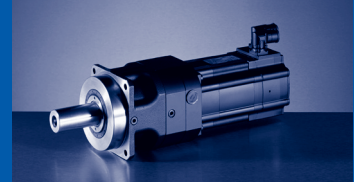
GPA□□-2A (MCA)



GPA□□-2A GCN ... RSO

		10I N40 ...S00	13I N41 ...S00	13I N34 ...F10	14L N20 ...S00	14L N41 ...S00	14L N16 ...F10	14L N35 ...F10	17N N23 ...S00	17N N41 ...S00
GPA01...	a_2	89								
	k	443								
GPA02...	a_2	102	116							
	k	498	507	575						
GPA03...	a_2					142				
	k		571	639	602		664		640	
...RSO B0 ¹⁾	Δk	0								
...RSO P□ ¹⁾	Δk	25	35		33				35	
	k_1	262	271	339	302		364		340	
	g	102	131		142				165	
	g_1	90	102		109				118	

¹⁾ → 803 - SRS / SRM / ECN / EQN / EQI / S20 / T20 / CDD



GPA□□-2A GCN ... RSO

		17N N17 ...F10	17N N35 ...F10	19S N23 ...S00	19S N42 ...S00	19S N17 ...F10	19S N35 ...F10	21X N25 ...S00	21X N42 ...S00	21X N17 ...F10	21X N35 ...F10
GPA03...	a ₂	142									
	k	729									
GPA04...	a ₂			192							
	k			739	836						
GPA05...	a ₂					212					
	k			829	926		898		994		
...RSO B0 ¹⁾	Δ k			0							
...RSO P□ ¹⁾	Δ k	35		38				42			
	k ₁	429		401		498		470		566	
	g	165				192				214	
	g ₁	118				161				172	

¹⁾ →  803 - SRS / SRM / ECN / EQN / EQI / S20 / T20 / CDD

GPA□□-2A GCN

	k ₃			k ₄			o ₁			
GPA01...	142			56			2			
GPA02...	184			88						
GPA03...	237			112						
GPA04...	261			143			3			
GPA05...	334									

	d	l	d ₂	a	a ₁	b	c	e	f	s
	k6					g6				4x90°
GPA01...	22	36	M8	100	80	70	7	85	18	6.6
GPA02...	32	58	M12	140	102	90	10	120	28	9
GPA03...	40	82	M16	188	142	130	12	165		11
GPA04...	55		M20	250	182	160	15	215	27	13
GPA05...	75	105		290	212	180	17	250	35	17