

Motors and gearboxes

Servo gearboxes

GTE – for standard applications



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Documentation



Economical and compact

- Ideal for standard applications
- Low backlash
- Open choice of mounting positions
- Silent operation
- Lifetime lubrication

Together with our dynamic MSK motors, the compact GTE range of planetary gearboxes guarantees high torques in all standard applications. Typical areas of application include simple handling and automation systems with rack-and-pinion drives or synchronous belt drives. Virtually all performance requirements can be met in these applications thanks to the subtle staggering of sizes and the high power density of the GTE gearboxes. The single-stage or two-stage gearboxes can be supplied with a plain shaft or keyway.

Technical data

Gearbox	Transmission ratio	i	Nominal input speed		Max. input speed	Max. output speed	Nominal input torque		Max. input torque	Max. output torque	Backlash	Torsional stiffness	Efficiency	Moment of inertia	
			at 50% M												
			n IN N	n IN N											
			[1/min]	[1/min]							[1/min]	[1/min]	[Nm]		[Nm]
GTE040-NN1-003	Single-stage	3	5000	5000	18000	6000	3.67	11	5.9	17.6	< 24	1	96	0.031	
GTE040-NN1-004		4				4500	3.75	15	6	24				0.022	
GTE040-NN1-005		5				3600	2.8	14	4.4	22				0.019	
GTE040-NN1-008		8				2250	0.75	6	1.25	10	< 28	1.1	94	0.029	
GTE040-NN2-012	Two-stage	12	4500	4500	13000	1500	1.67	20	2.7	32				0.019	
GTE040-NN2-020		20				900	1		1.6						
GTE040-NN2-040		40				450	0.45	18	0.73	29				0.016	
GTE060-NN1-003	Single-stage	3		4500	4450	13000	4333	9.3	28	15	45	< 16	2.3	96	0.135
GTE060-NN1-004		4			4400		3250	9.5	38	15.25	61				0.093
GTE060-NN1-005		5			4500		2600	8	40	12.8	64				0.078
GTE060-NN1-008		8					1625	2.25	18	3.63	29				0.065
GTE060-NN2-012	Two-stage	12	4500	4500	13000	1083	3.7	44	5.83	70	< 25	2.5	94	0.127	
GTE060-NN2-020		20				650	2.2		3.5					0.075	
GTE060-NN2-040		40				325	1	40	1.6	64				0.064	

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			at 50% M											
			n	n							Standard	D	η	J
			[1/min]	[1/min]										
GTE080-NN1-003	Single-stage	3	3900	2400	7000	2333	28.3	85	45.3	136	< 9	6	96	0.77
GTE080-NN1-004		4	3650	2150		1750	28.7		46	184				0.52
GTE080-NN1-005		5		2650		1400	22		35.2	176				0.45
GTE080-NN1-008		8		4000		875	6.2	50	10	80				0.39
GTE080-NN2-012	Two-stage	12	4000	3450		583	10	12	16	192	< 14	6.5	94	0.72
GTE080-NN2-020		20		4000		350	6		9.6					0.44
GTE080-NN2-040		40				175	2.75		4.4	176				0.39
GTE120-NN1-003	Single-stage	3	3500	2500	6500	2167	38.2		61.3	184	< 8	12	96	2.63
GTE120-NN1-004		4		2250		1625	38.75		62	248				1.79
GTE120-NN1-005		5				1300	39		62.4	312				1.53
GTE120-NN1-008		8		3500		813	15		24	192				1.32
GTE120-NN2-012	Two-stage	12		2500		542	21.7		34.7	416	< 12	13	94	2.56
GTE120-NN2-020		20		3500		325	13		20.8					1.5
GTE120-NN2-040		40				163	5.75		9.2	368				1.3
GTE160-NN1-003	Single-stage	3	1700	1000		2167	133.3		213.3	640	< 6	38	96	12.14
GTE160-NN1-004		4				1625	112.5		180					7.78
GTE160-NN1-005		5		2000		1300	90		144	720				6.07
GTE160-NN1-008		8		2950		813	56.25		90					4.63
GTE160-NN2-012	Two-stage	12	1950	1050		542	66.7		106.7	1280	< 10	41	94	12.37
GTE160-NN2-020		20	2700	1500		325	40		64					6.65
GTE160-NN2-040		40	3000	2950		163	17.5		28	1120				5.28

Output torque data are based on an output shaft speed of 100 rpm and an application factor KA=1, as well as S1 operating mode for electrical equipment and T = 30°C

Maximum input speed – permissible operating temperatures must not be exceeded

Output torque – with feather key: for dynamic loads

Maximum output torque – permissible for 30,000 output shaft rotations

Maximum input speed – permissible operating temperatures must not be exceeded

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As our products are constantly being further developed, no
statements concerning a certain condition or suitability for a certain
application can be derived from our information. The information
given does not release the user from the obligation of own judgment
and verification.
It must be remembered that our products are subject to a natural
process of wear and aging.