

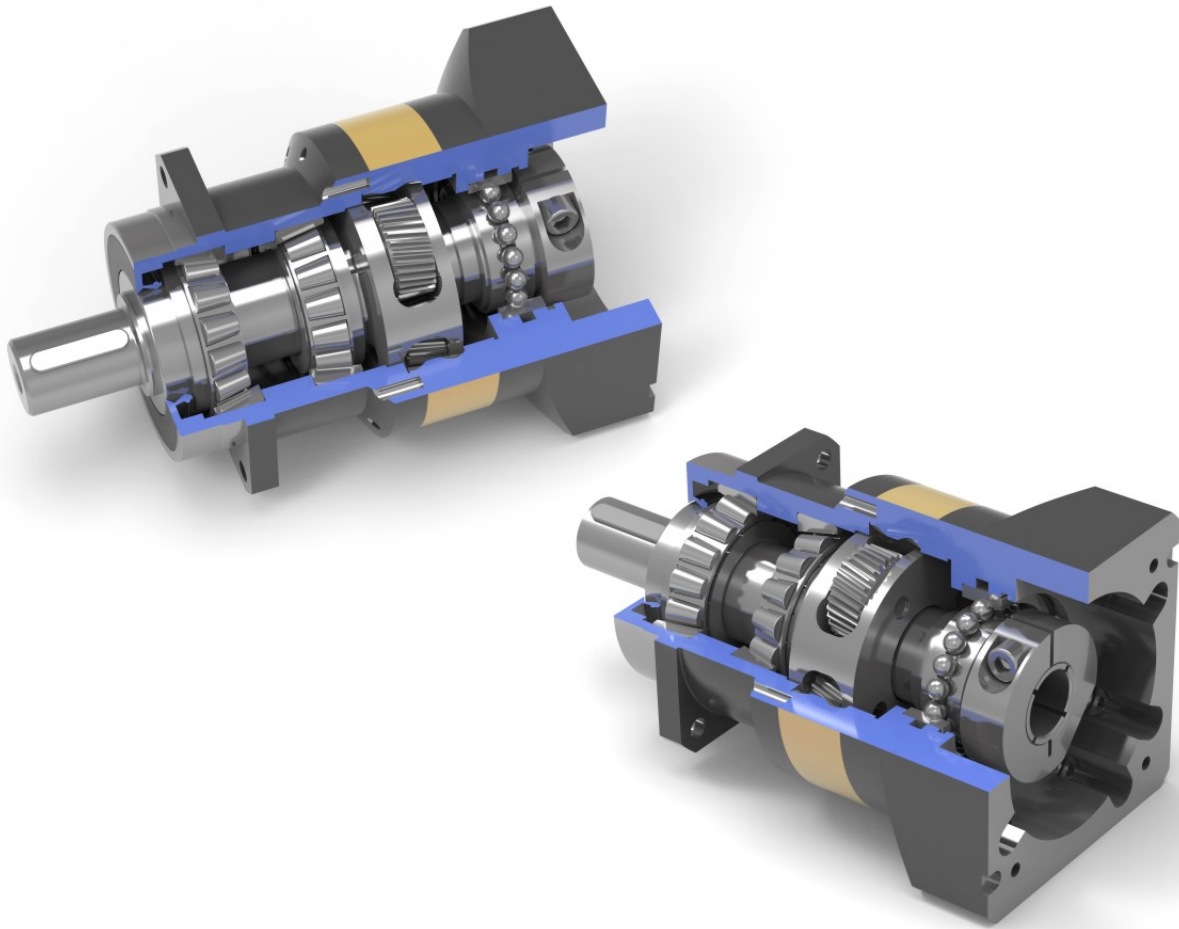
KPG

Powerful. High Precision. Reliable

▶ Servo Planetary Gearbox

Advanced Gearbox Solution





Gearbox Features

- High precision gearbox line
- Helical gear for gearing system
- Full caged planetary carrier
- Super gear grinding technology
- Lifetime grease lubrication
- Maintenance free for service lifetime

KPG Technical Data

Model		KPG070	KPG090	KPG120	KPG160	KPG205	Ratio	Stage
Nominal Output Torque	Nm	46	125	210	350	650	3	1
		52	145	300	550	1250	4	
		55	155	320	650	1200	5	
		50	135	290	540	1000	7	
		45	115	255	510	1000	8	
		42	105	220	440	910	9	
		42	105	220	440	910	10	
		56	125	310	500	650	12	
		56	125	310	500	650	15	
		52	145	300	550	1250	16	
		55	145	300	650	1200	20	
		55	155	320	650	1200	24	
		52	145	305	550	1250	32	
		55	155	320	650	1200	35	2
		55	155	320	550	1200	40	
		55	155	320	650	1200	45	
		55	155	320	650	1200	50	
		45	115	255	510/63	1000/63	64	
		45	115	255	520	1000	80	
		42	110	220	440	910	100	
Emergency Output Torque	Nm	Triple Rated Output Torque						
Max Radial Force ¹	N	3200	5500	6700	10000	12000		
Max Axial Force ¹	N	4400	6400	8000	9000	17000		
Efficiency at full load	%	95						1
		93						2
Service Lifetime	h	20000						
Weight	kg	1.6	3.4	8.1	15.5	39		1
		1.9	3.8	9	28	40		2

The subscript "1" in the output speed of 100RPM, in the center of the output shaft position (L/2) permissible radial force and axial force.

Note: in the form of 2 groups of digital representation of the torque corresponding to the actual ratio,

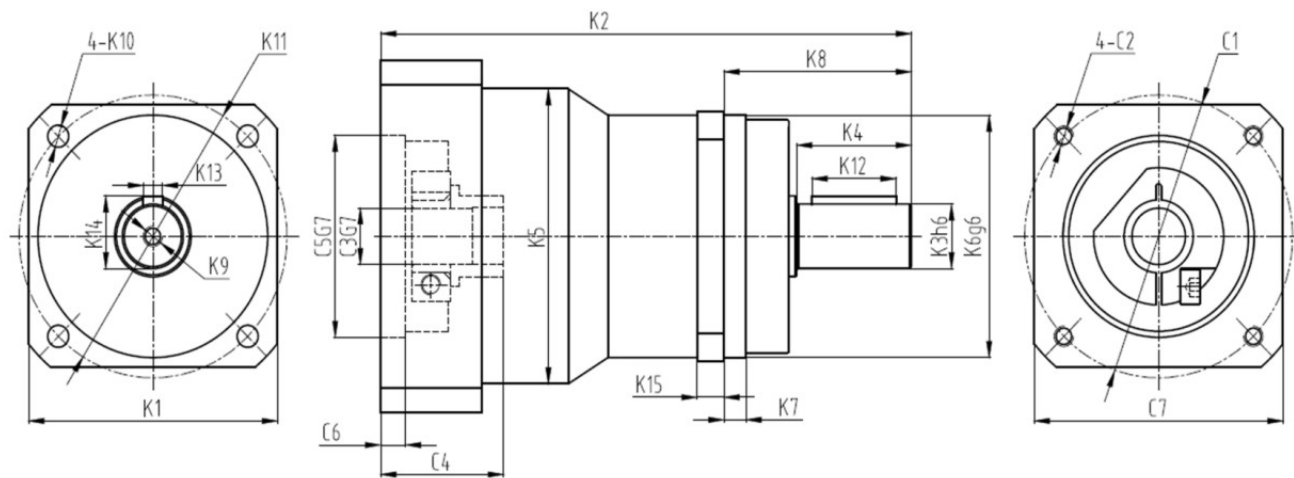
The maximum acceleration torque is equal to 150% of the rated T_c torque.

KPG Technical Data

Model		KPG070	KPG090	KPG120	KPG160	KPG205	Ratio	Stage
Mass Moment of Inertia	kgcm ²	0.16	0.61	3.25	12.31	28.98	3	1
		0.14	0.48	2.74	7.54	23.67	4	
		0.13	0.47	2.71	7.42	22.75	5	
		0.13	0.47	2.62	7.25	22.48	7	
		0.13	0.45	2.62	7.14	22.59	8	
		0.13	0.44	2.62	7.14	22.59	9	
		0.13	0.44	2.57	7.14	22.55	10	
		0.127	0.44	2.56	12.35	12.35	12	
		0.127	0.44	2.58	12.35	12.35	15	
		0.12	0.43	1.75	7.47	7.54	16	
		0.075	0.44	1.5	6.65	7.42	20	2
		0.075	0.44	1.49	5.81	7.54	24	
		0.064	0.39	1.3	6.34	7.14	32	
		0.064	0.39	1.3	5.36	7.14	35	
		0.064	0.39	1.3	4.08	7.14	40	
		0.064	0.39	1.3	5.36	7.14	45	
		0.064	0.39	1.3	4.08	7.14	50	
		0.075	0.39	1.5	7.5	7.54	64	
		0.075	0.44	1.49	7.4	7.54	80	
		0.064	0.44	1.45	7.3	7.42	100	
Backlash	arcmin	≤3	≤3	≤3	≤3	≤3	High Precision	1
		≤6	≤6	≤6	≤6	≤6	standard Precision	
		≤4	≤4	≤4	≤4	≤4	High Precision	2
		≤6	≤6	≤6	≤6	≤6	standard Precision	
Torsional Rigidity	Nm/arcmin	7	14	25	50	140		
Running Noise ¹	dB(A)	<58	<60	<63	<65	67		
Max Input Speed ²	min ⁻¹	6000	6000	6000	4000	4000		
Rated Input Speed ²	min ⁻¹	3000	3000	3000	2500	2500		

The subscript "1" sound in n1 < 3000min-1, measured at 1 m.
 The subscript "2" the environment temperature is 20°C.

KPG Dimensions



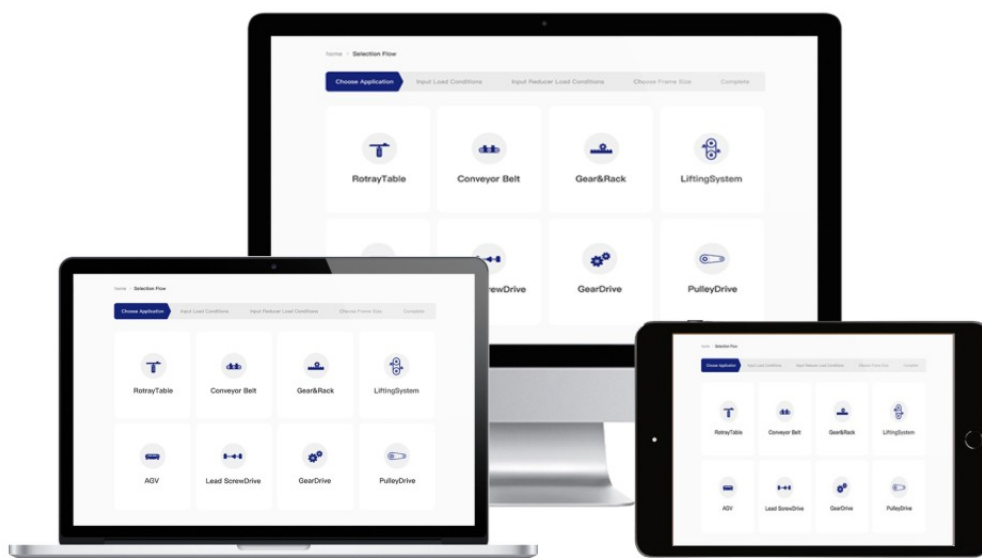
Model	KPG070		KPG090		KPG120		KPG160		KPG205	
Stage	1	2	1	2	1	2	1	2	1	2
K1	62		75		100		140		180	
K2	155	161	195	229	240	261	295	310	315.5	360
K3	Φ 16		Φ 22		Φ 32		Φ 40		Φ 55	
K4	28		36		58		82		82	
K5	Φ 70		Φ 90		Φ 120		Φ 160		Φ 205	
K6	60		Φ 70		Φ 90		Φ 130		Φ 160	
K7	5		6		8		10		12	
K8	48		56		88		112		112	
K9	M5X12		M6X16		M10X22		M12X25		M20X40	
K10	Φ 5.5		Φ 6.5		Φ 9		Φ 11		Φ 13	
K11	68		Φ 85		Φ 120		Φ 165		Φ 215	
K12	25		32		50		65		65	
K13	5		6		10		12		16	
K14	18		24.5		35		43		59	
K15	6		7		10		12		15	
C1	Φ 90	Φ 70	Φ 145	Φ 90	Φ 145	Φ 90	Φ 200	Φ 145	Φ 215	Φ 200
C2	M6X15	M5X12	M8X20	M6X15	M8X20	M6X15	M12X25	M8X20	M12X25	M12X25
C3	Φ 19	Φ 14	Φ 24	Φ 19	Φ 24	Φ 19	Φ 35	Φ 24	Φ 42	Φ 35
C4	41.6	32.1	61.3	41.6	61.3	41.6	82	61.3	82	82
C5	Φ 70	Φ 50	Φ 110	Φ 70	Φ 110	Φ 70	Φ 114.3	Φ 110	Φ 180	Φ 114.3
C6	6.5	6.5	8	6.5	8	6.5	8	8	8	8
C7	80	70	120	89	120	89	175	120	190	175

The dimensions modified as per the applied motor flange.

You can get the specific gearbox drawing solution by our KDP (Kofon Design Programme) online from our website: www.kofon-motion.com

Benefit with Powerful Gearbox Design Programme (KDP)

- The Kofon Design Programme (KDP) support you to realize the optimal portfolio of servo motor and gearbox by few steps.
- The KDP makes it available to get access to almost servo motors in the global market, and huge numbers of applications like pinions, spindles, belts, conveyors, rotary tables.
- You can also find the solutions by different industrial application sections from KDP online.
- The drawings could be download free from KDP online and the available drawing in format pdf, dwg and step.



The Company

The **KOFON**® possesses expertise for the mastery of high precision motion control technologies. The company group established in 1998.

Now it employs over 650 staffs worldwide. We focus on the development, manufacturing and sales of the high precision planetary gearbox, spiral bevel gearbox and industrial automation integration solutions. Our reliable competence industry including high precision machine tools, intelligent logistic systems, robotics and new energy.

Kofon Motion aim to be dedicated to serve global customer with the reliable precision motion solution.

