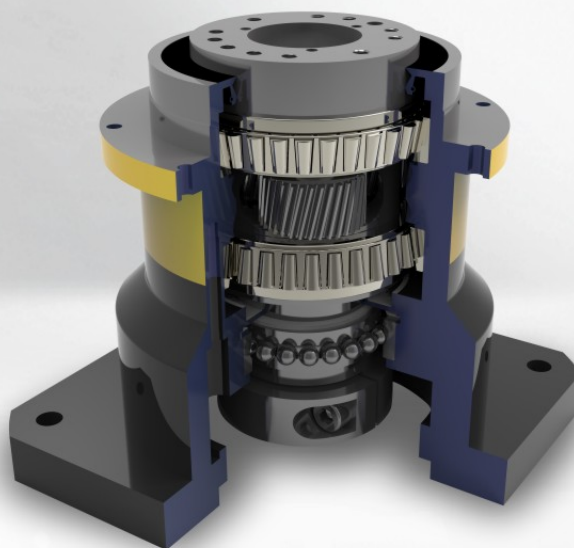


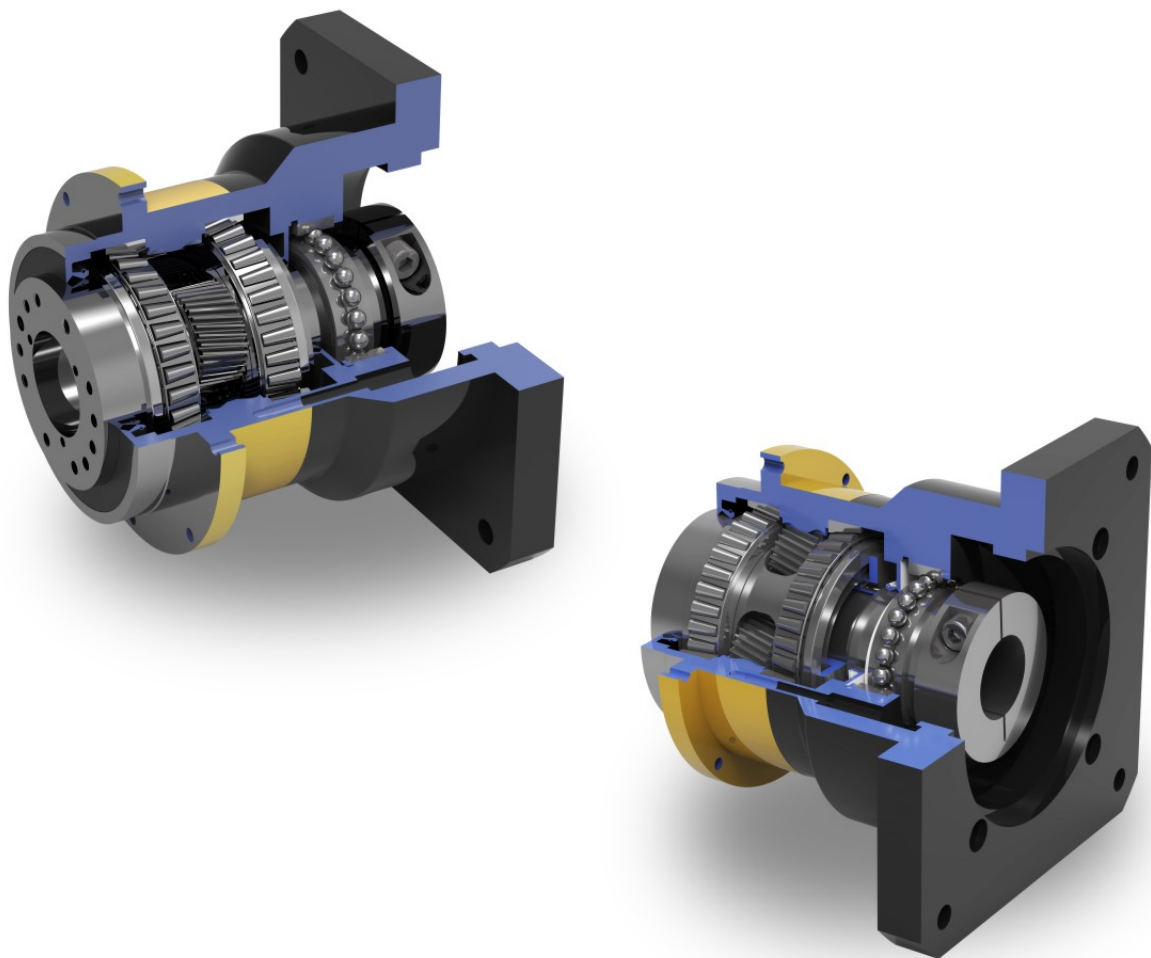
KPH

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

KPH Technical Data

Model		KPH070	KPH090	KPH120	KPH160	KPH205	KPH255	Ratio	Stage
Nominal Output Torque	Nm	46	145	300	550	1250	1800	4	1
		55	155	320	650	1200	2050	5	
		50*	145*	300*	610*	1000*	1850*	6	
		50*	135	290*	540	1000	1750*	7	
		45	115	255	510*	1000*	1550	8	
		42	105*	220*	440	910	1500*	9	
		42	105	220	440	910	1500	10	
		56	125	310	500	650	1800*	12	
		50	125	310	500	850	1200	15	2
		52	145	300	550	1250	2800	16	
		55	145	300	650	1200	3000	20	
		55	155	320	650	1200	3000	24	
		52	145	305	550*	1250*	2800*	32	
		55*	155	320*	650	1200	2850	35	
		55	155	320	550*	1200*	3050*	40	
		55*	155	320*	650	1200	2050	45	
		55	155	320	650	1200	2850	50	3
		45	115	255	510/63	1000/63	1850	64	
		52	155	320	650	1200	3050	80	
		52	155	320	650	1200	3050	100	
		52	155	320	650	1200	3050	125	
		52	155	320	650	1200/140	3050/140	160	
		52	155	320	650	1200/180	3050/180	200	
		52	155	320	650/224	1200/252	3050/252	256	
		52	155	320	650/280	1200/315	3050/315	320	
		45	115	255	510/504	1000/441	2050/504	512	
Emergency Stop Torque	Nm	Triple Rated Output Torque							
Max Radial Force ¹	N	2500	4500	7800	12000	18000	45000		
Max Axial Force ¹	N	2000	3500	6000	10000	15000	225000		
Operating Temperature	°C	-25~90							
Mouting Position		Any Directions							
Lubrication		Synthetic Lubrication Grease							
Protection Class		IP65							
Efficiency at full load	%	97							1
		95							2
		93							3
Service Lifetime	h	20,000 (Continuous Operation)							
Unit Weight	kg	1.4	3.3	5.5	20	31	70		1
		1.6	4.5	8	25	39	80		2
		1.8	5.5	10	30	48	90		3

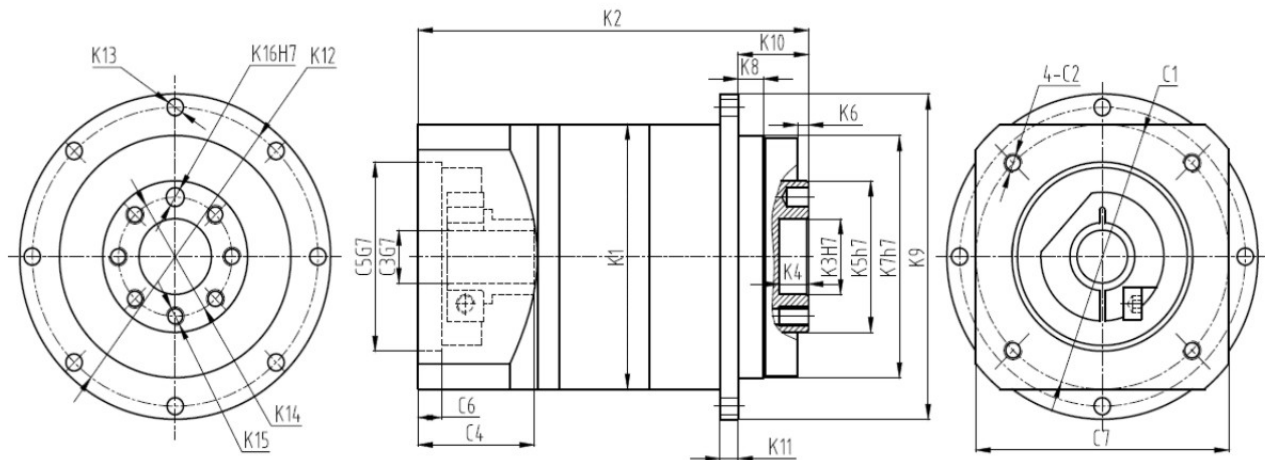
1. Values based on the output shaft speed n₂=100 RPM

KPH Technical Data

Model		KPH070	KPH090	KPH120	KPH160	KPH205	KPH255	Ratio	Stage
Mass Moment of Inertia	kgcm ²	0.14	0.48	2.74	7.54	23.67	37.37	4	1
		0.13	0.47	2.71	7.42	22.75	33.27	5	
		0.13	0.47	2.71	7.42	22.75	30.27	6	
		0.13	0.47	2.62	7.25	22.48	27.84	7	
		0.13	0.45	2.62	7.14	22.59	25.84	8	
		0.13	0.44	2.62	7.14	22.59	24.84	9	
		0.13	0.44	2.57	7.14	22.55	23.56	10	
		0.127	0.44	2.56	12.35	12.35	15.98	12	2
		0.124	0.44	2.58	12.35	12.30	28.92	15	
		0.12	0.43	1.75	7.47	7.54	14.67	16	
		0.075	0.44	1.5	6.65	7.42	13.75	20	
		0.075	0.44	1.49	5.81	7.54	7.54	24	
		0.064	0.39	1.3	6.34	7.14	6.59	32	
		0.064	0.39	1.3	5.36	7.14	6.59	35	3
		0.064	0.39	1.3	4.08	7.14	6.59	40	
		0.064	0.39	1.3	5.36	7.14	6.59	45	
		0.064	0.39	1.3	4.08	7.14	6.59	50	
		0.075	0.39	1.5	7.5	7.54	6.59	64	
		0.075	0.44	1.49	7.4	7.54	6.59	80	
		0.064	0.44	1.45	7.3	7.42	6.59	100	
		0.064	0.44	1.3	7.3	7.42	6.59	125	
		0.064	0.39	1.3	6.5	7.14	6.59	160	
		0.064	0.39	1.3	6.2	7.14	6.59	200	
		0.064	0.39	1.3	5.7	7.14	6.59	256	
		0.064	0.39	1.3	5.4	7.14	6.59	320	
		0.064	0.39	1.3	5.4	7.14	6.59	512	
Backlash	arcmin	<3	<3	<3	<3	<3	<3	P0	1
		<6	<6	<6	<6	<6	<6	P1	
		<5	<5	<5	<5	<5	<5	P0	2
		<8	<8	<8	<8	<8	<8	P1	
		<7	<7	<7	<7	<7	<7	P0	3
		<10	<10	<10	<10	<10	<10	P1	
Torsional Rigidity	Nm/arcmin	7	14	25	50	140	200		
Running Noise ¹	dB(A)	<58	<60	<63	<65	<67	<70		
Max Input Speed ²	min ⁻¹	6000	6000	6000	6000	4000	4000		
Rated Input Speed ²	min ⁻¹	3000	3000	3000	3000	2000	2000		

1. Measured on input running speed at n1=3000 RPM without loading, 1m distance.

KPH Dimensions



Model	KPH070			KPH090			KPH120			KPH160			KPH205		
Stage	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
K1	Φ 70			Φ 97			Φ 120			Φ 160			Φ 210		
K2	108	131.7	155.4	137.2	168.5	199.8	177	218.8	227	232.7	293.7	380.2	235	297	358
K3	Φ 20			31.5			40			50			80		
K4	8			12			12			12			22.5		
K5	Φ 40			Φ 63			Φ 80			Φ 100			Φ 160		
K6	3			6			6			6			6		
K7	Φ 64			Φ 90			Φ 110			Φ 140			Φ 200		
K8	7			10			10			14.6			15		
K9	Φ 86			Φ 118			Φ 145			Φ 179			Φ 247		
K10	19.5			30			29			38			56		
K11	5			8			10			10			12		
K12	Φ 79			Φ 109			Φ 135			Φ 168			Φ 233		
K13	8-Φ 4.5			8-Φ 5.5			8-Φ 5.5			12-Φ 6.6			12-Φ 9		
K14	Φ 31.5			Φ 50			Φ 63			Φ 80			Φ 125		
K15 ¹	7-M5X8			7-M6X12			11-M6X15			11-M8X18			11-M10X17		
K16	Φ 5X6			Φ 6X7			Φ 6X7			Φ 8X8			Φ 10X10		
C1	Φ 70			Φ 90			Φ 145		Φ 90	Φ 200	Φ 145	Φ 215	Φ 200		
C2	M5X12			M6X15			M8X20	M6X15		M12X25	M8X20	M12X25	M12X25		
C3	Φ 14			Φ 19			Φ 24	Φ 19		Φ 35	Φ 24	Φ 42	Φ 35		
C4	32.1			41.6			61.3	41.6		82	61.3	82.5	82		
C5	Φ 50			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	8	8	8		
C7	70			97			120	89		175	120	190	175		

The dimensions modified as per the applied motor flange.

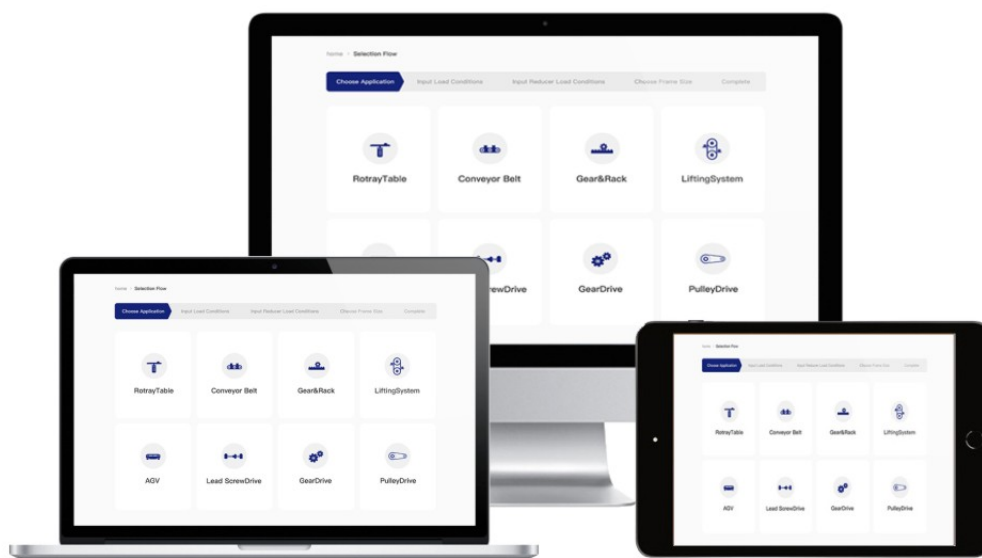
You can get the specific gearbox drawing solution by our KDP (Kofon Design Programme) online from our website: www.kofon-motion.com

Technical Memo

This image shows a full page of blank graph paper. The grid consists of small, equal-sized squares formed by thin, light gray lines. The grid covers the entire area of the page, leaving no margins or other markings.

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.

