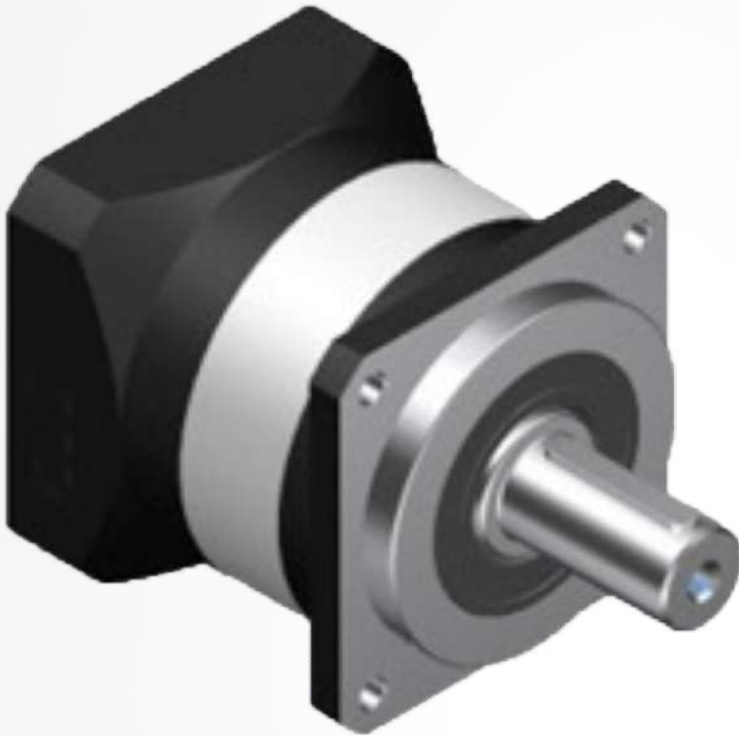


PSPLF Series ---

Servo Planetary Gearbox



Processed and manufactured by the high precision German engineered gear grinding craft, the PSPH is one of the best servo planetary gearbox in the world.

Product Key Features

- ▶ Economic Type: High Quality with competitive price.
- ▶ Choosing low-carbon alloy forged steel as the raw material of the gear, the hardness can reach HRC60 by deepen harden of carburizing heat treatment to ensure gear strength and lifetime.
- ▶ Can be connected with any servo motor around the world.

PSPLF Series

Servo Planetary Gearbox Technical Data

Model		PSPLF40	PSPLF70	PSPLF90	PSPLF120	PSPLF160	PSPLF205	PSPLF235	Ratio	Stage
Rated Output Torque	Nm	13	35	100	190	440	600	1000	3	1
		17	42	110	240	544	1050	1600	4	
		17	44	115	245	585	1000	1850	5	
		--	40*	105*	240*	500*	800*	1650*	6	
		--	40*	100	235*	480	800	1550*	7	
		12	38	95	210	450	800	1350	8	
		--	36	90	200	415	710	1300*	9	
		--	32	81	196	400	710	1300	10	
		16	37	100	210	450	650	1000	12	2
		16	44	110	230	450	1050	1600	16	
		17	44	110	230	564	1000	1850	20	
		17	44	110	255	608	1000	1850	25	
		17	44	110	255	608/35	1050/35	1800	32	
		17	44	110	250	608	1000	1850	40	
		13	38	95	210	450/63	800/63	1350	64	3
		17	45	120	255	580	1000	1850	80	
		17	45	120	255	580	1000	1850	100	
		17	45	120	255	580	1000	1850	125	
		17	45	120	255	580	1000/140	1850/140	160	
		17	45	120	255	608	1000/180	1850/180	200	
17	45	120	255	608/224	1000/252	1850/252	256			
17	45	120	255	580/280	1000/315	1850/315	320			
13	38	95	210	450/504	800/441	1350/504	512			
Emergency Stop Torque	Nm	Two and a half rated output torque								
Max Radial Force ¹	N	385	550	1020	2070	7300	12000	14000		
Max Axial Force ¹	N	250	375	570	970	6400	6800	7800		
Full Loading Efficiency	%	97								1
		95								2
		93								3
Average lifetime	h	20000								
Weight	kg	0.4	1	2.4	6	20	31	53		1
		0.5	1.2	3.7	8	25	39	66		2
		0.6	1.4	5	10	30	48	75		3

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: with "*" is not commonly used speed ratio, 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 torque.

PSPPLF Series

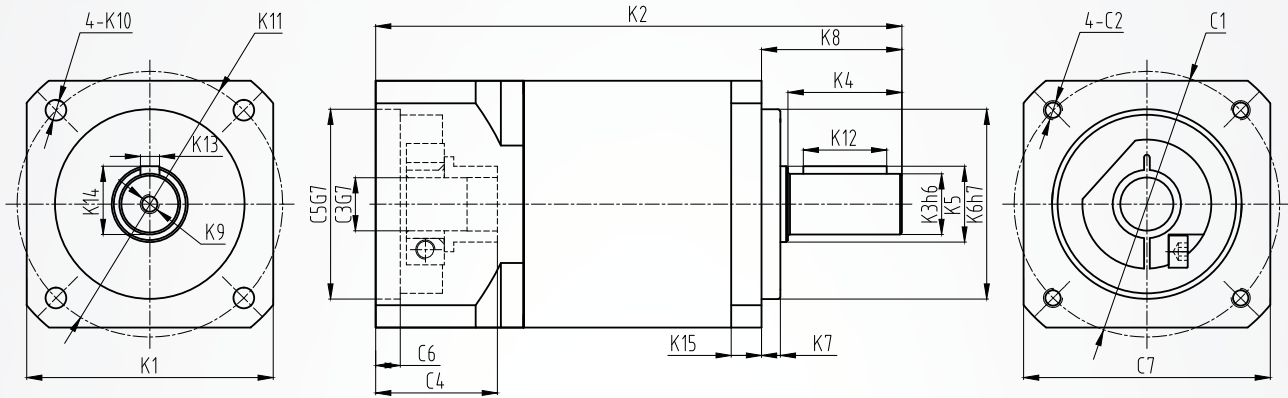
Servo Planetary Gearbox Technical Data

Model		PSPLF40	PSPLF70	PSPLF90	PSPLF120	PSPLF160	PSPLF205	PSPLF235	Ratio	Stage
Rotational Inertia	kgcm ²	0.031	0.135	0.77	2.63	12.1	28.98	69.61	3	1
		0.22	0.093	0.52	1.79	7.75	23.67	54.37	4	
		0.019	0.078	0.45	1.53	6	22.75	53.27	5	
		--	0.07	0.42	1.5	5.52	22.48	50.84	6	
		--	0.069	0.4	1.4	5.1	22.48	50.84	7	
		0.017	0.065	0.39	1.32	3.74	22.59	50.84	8	
		--	0.065	0.39	1.32	3.62	22.59	50.84	9	
		--	0.065	0.39	1.32	3.62	22.55	50.56	10	
		0.031	0.105	0.67	1.63	10.1	18.98	59.61	12	2
		0.023	0.088	0.5	1.75	7.47	7.54	23.67	16	
		0.022	0.075	0.44	1.53	6.65	7.42	22.75	20	
		0.019	0.075	0.44	1.49	5.81	7.54	22.75	25	
		0.019	0.064	0.39	1.32	6.34	7.14	22.59	32	
		0.017	0.064	0.39	1.32	5.36	7.14	22.59	40	
		0.016	0.064	0.39	1.32	4.08	7.54	22.59	64	
		0.029	0.075	0.5	1.53	7.4	7.54	22.75	80	
		0.019	0.064	0.44	1.49	7.3	7.42	22.59	100	3
		0.019	0.064	0.7	2.57	7.3	7.42	22.75	125	
		0.029	0.064	0.39	1.3	6.5	7.14	22.75	160	
		0.016	0.064	0.39	1.3	6.5	7.14	22.75	200	
0.016	0.064	0.39	1.3	6.5	7.14	22.75	256			
0.016	0.064	0.39	1.3	6.5	7.14	22.75	320			
0.016	0.064	0.39	1.3	6.5	7.14	22.59	512			
Backlash	arcmin	≤12	≤8	≤8	≤8	≤8	≤8	≤8		1
		≤15	≤10	≤10	≤10	≤10	≤10	≤10		2
		≤17	≤12	≤12	≤12	≤12	≤12	≤12		3
Torsional Rigidity	Nm/arcmin	0.7	3	4.8	10	28.7	120	200		
Noise ²	dB(A)	55	58	60	62	68	70	72		
Max Input Speed ¹	min ⁻¹	8000	6000	6000	6000	6000	4000	3000		
Rated Input Speed ¹	min ⁻¹	4000	4000	3000	3000	3000	2000	1500		

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

PSPLF Series

Servo Planetary Gearbox Standard Size



Model	PSPLF40			PSPLF70			PSPLF90			PSPLF120			PSPLF160			PSPLF205			PSPLF235			
Stage	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
K1	45			70			89			120			175			210			240			
K2	88.8	101.8	113.8	122	145.7	169.4	149	180.3	211.6	198.5	233.5	268.5	275.5	336.5	356	288	348	409	358	402	462	
K3	φ10			φ14			φ20			φ25			φ40			φ55			φ75			
K4	23			30			36			50			80			82			105			
K5	φ12			φ17			φ25			φ35			φ50			φ60			φ85			
K6	φ26			φ50			φ80			φ110			φ130			φ180			φ235			
K7	2			3			3			4			5			15			18			
K8	26			35			40			55			87			100			126			
K9	M3X9			M5X12			M6X15			M10X26			M12X25			M20X40			M20X40			
K10	φ3.5			φ5.5			φ6.5			φ8.5			φ11			φ13			φ17			
K11	φ50			φ85			φ100			φ130			φ185			φ230			φ275			
K12	16			22			28			40			70			70			90			
K13	3			5			6			8			12			16			20			
K14	11.2			16			22.5			28			43			59			79.5			
K15	6			8			10			14			15			18			18			
C1	φ46			φ70			φ90			φ145			φ200	φ145	φ215	φ200		φ235	φ215	φ200		
C2	M4X10			M5X12			M6X15			M8X20			M12X25	M8X20	M12X25	M12X25		M12X25	M12X25	M12X25		
C3	φ8			φ14			φ19			φ24			φ35	φ24	φ42	φ35		φ55	φ42	φ35		
C4	26.1			32.1			41.6			56.3			82	61.3	82.5	82		116	82.5	82		
C5	φ30			φ50			φ70			φ110			φ114.3	φ110	φ180	φ114.3		φ200	φ180	φ114.3		
C6	6			6.5			6.5			8			8	6.5	8	8		8	8	8		
C7	45			70			89			120			175			120	190	175		220	190	175