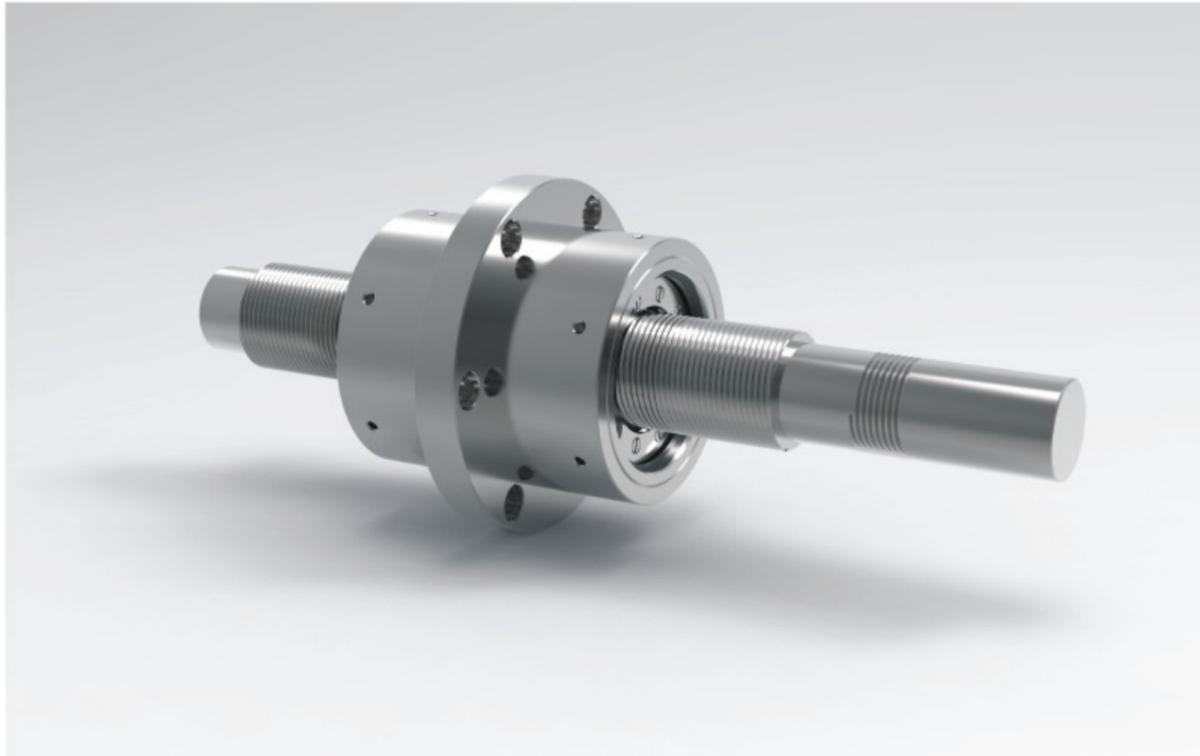


HPL series Planetary Roller Screw

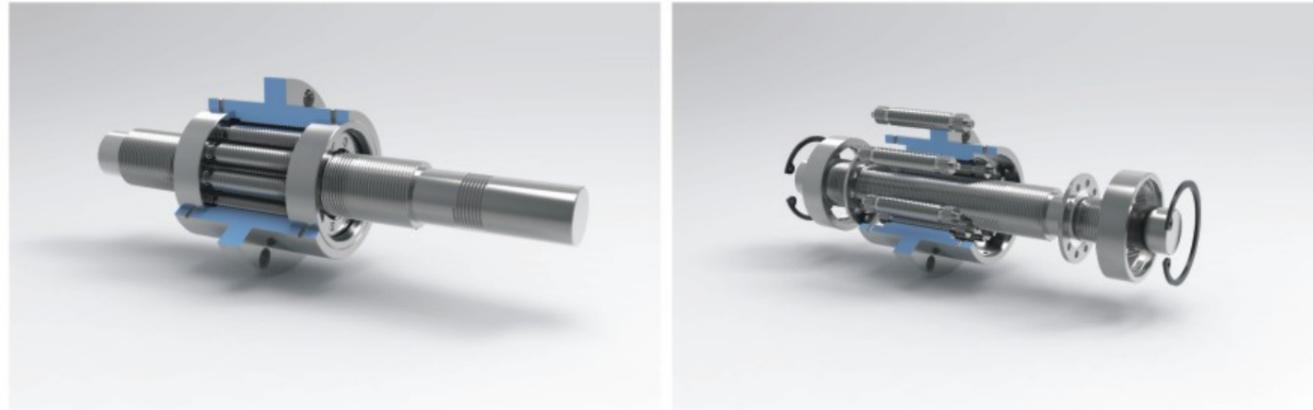


HPL Planetary Roller Screw is a strengthened design of PL series and is used for application with higher requirement in load bearing and service lifetime. Based on the optimal design of PL series, more contact points can be added, the thread design can be better and the nut can be longer than the standard size of PL series. HPL series aims at providing larger diameter and greater load bearing capacity. Therefore, this series doesn't apply to pre-fastened nut or internal pre-fastening (0 interval). It can only provide standard interval or narrowed interval.



Planetary Roller Screws-HPL Series (Enhanced)

Model			HPL														
			60		75			87				99					
Nominal diameter	D	mm	60		75			87				99					
Lead	p	mm	15	20	15	20	25	15	20	25	30	15	20	25	30	35	
Number of starts of thread	N		5		5			5				5					
Lead angle		°	4.55	6.06	3.64	4.85	6.06	3.14	4.19	5.23	6.26	2.76	3.68	4.6	5.51	6.42	
Single nut	Rated dynamic load	Ca	kN	654.8	655.7	842.4	861.9	866.8	1073.9	1086.9	1106.2	1099.6	1300.9	1323.8	1329.4	1354.6	1347.2
	Rated dead load	Coa	kN	1512.3	1497.9	2449.5	2480.2	2461.9	3531.6	3510.2	3545.8	3467.4	4707.9	4716	4658.8	4732	4642.3
	Stiffness coefficient	Fk	N2/3um	88.8	76.3	108.8	94.9	84.3	127.8	110.1	99	89	145	124.8	111.1	102.1	93.3
	Axial clearance	*	mm	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05
Forward efficiency			0.87	0.88	0.86	0.87	0.88	0.85	0.87	0.88	0.88	0.84	0.86	0.87	0.88	0.88	
Inversion efficiency			0.86	0.87	0.84	0.86	0.87	0.83	0.85	0.86	0.87	0.81	0.84	0.86	0.86	0.87	



Planetary Roller Screws-HPL Series (Enhanced)

Model		HPL																	
Nominal diameter	D	mm	112				120				135								
Lead	p	mm	15	20	25	30	15	20	25	30	35	40	15	20	25	30	35	40	
Number of starts of thread	N		5				5				5								
Lead angle		°	2.43	3.24	4.05	4.85	2.28	3.04	3.79	4.55	5.3	6.06	2.03	2.7	3.37	4.05	4.72	5.39	
Single nut	Rated dynamic load	Ca	kN	1440.7	1460.4	1480	1482.9	1598.8	1633.9	1656.1	1648.1	1668.6	1673.7	2061.6	1968	1988.5	2030	2054.7	2049.6
	Rated dead load	Coa	kN	5442.6	5415.5	5424.9	5361.4	6370.2	6419.4	6429.4	6283	6331.9	6302.7	9351.7	8494.8	8461.6	8605.8	8661.1	8539
	Stiffness coefficient	Fk	N2/3um	153.2	131.3	117.2	106.5	164.2	141.5	126.2	114	105.9	98.6	198.2	160.3	142.3	130.7	121.6	112.8
	Axial clearance	*	mm	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.07	0.07	0.07	0.07	0.07	0.07
Forward efficiency			0.83	0.85	0.87	0.87	0.82	0.85	0.86	0.87	0.88	0.88	0.81	0.84	0.85	0.87	0.87	0.88	
Inversion efficiency			0.79	0.83	0.85	0.86	0.78	0.82	0.84	0.86	0.86	0.87	0.76	0.81	0.83	0.85	0.86	0.86	

Planetary Roller Screws-HPL Series (Enhanced)

Model		HPL																
Nominal diameter	D	mm	150					180					210					
Lead	p	mm	15	20	25	30	35	40	50	20	30	40	50	30	40	50		
Number of starts of thread	N		5					5					5					
Lead angle		°	1.82	2.43	3.04	3.64	4.25	4.85	6.06	2.03	3.04	4.05	5.05	2.6	3.47	4.33		
Single nut	Rated dynamic load	Ca	kN	2235.8	2155.3	2164.7	2181.8	2215.6	2218.3	2216.2	3244.2	3101.1	3115.1	3155.2	3893.3	3683.6	3752.9	
	Rated dead load	Coa	kN	10488.4	9675.8	9542.4	9506.4	9616.1	9531.4	9362.3	17553.3	16100.7	16249.8	16278.7	22704.6	20709	20743.3	
	Stiffness coefficient	Fk	N2/3um	206.3	168.7	148.7	135.1	125.8	117.2	103.6	224.9	171.7	148.3	132.9	201.9	163.4	146.2	
	Axial clearance	*	mm	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Forward efficiency			0.79	0.83	0.85	0.86	0.87	0.87	0.88	0.81	0.85	0.87	0.88	0.83	0.86	0.87		
Inversion efficiency			0.74	0.79	0.82	0.84	0.85	0.86	0.87	0.76	0.82	0.85	0.86	0.8	0.84	0.85		

