

## 直线运动及导向产品系列

您正浏览“螺杆系统”手册，其他产品信息详见对应产品手册。  
You Are Reading The “Screw System” Manual. For Other Product Information, Please Refer To The Corresponding Product Manual.

■ 螺杆系统  
SCREW SYSTEM

■ 工业机械手  
LINEAR MODULE

■ 直线导轨  
LINEAR GUIDE

■ 联轴器  
COUPLING

WEIYUAN  
LINEAR PRODUCT  
威远直线运动产品系列



## 行星滚柱丝杠 PLANETARY ROLLER

本产品手册表示的技术规格是准确可靠的。用户应仔细地确定选用产品的适宜性。若有不详应与我公司技术部门联系。尽管我们将对有缺陷的产品予以更换，但我们不承担超出此种更换以外的任何责任。

The Technical Specifications Indicated In This Product Manual Are Accurate And Reliable. Users Should Carefully Determine The Suitability Of The Selected Product. If There Is Any Uncertainty, Please Contact Our Technical Department. Although We Will Replace Defective Products, We Do Not Accept Any Responsibility Beyond Such Replacement.



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LEADING LINEAR MOTION PRODUCT MANUFACTURER

## 行星滚柱丝杠与滚珠丝杠区别

THE DIFFERENCE BETWEEN PLANETARY ROLLER SCREW AND BALL SCREW

行星滚柱丝杠与滚珠丝杠的结构相似，区别在于载荷传递元件为螺纹滚柱，而非滚珠。我们主要优势就是有众多的接触点来支撑负载。

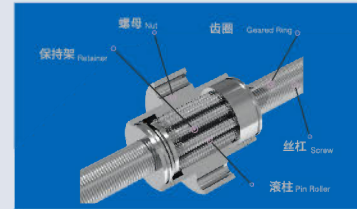
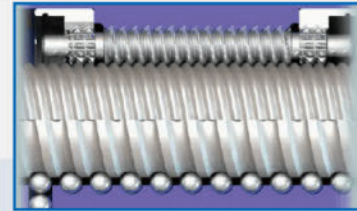
行星滚柱丝杠与滚珠丝杠的优势在于能够提供高于滚珠丝杠的额定动载和静载。螺纹滚柱替代滚珠将使负载通过众多接触点迅速释放，从而能有更高的抗冲击能力。

赫兹压力定律，我们可以得出：行星滚柱丝杠能承受的静载为滚珠丝杠的3倍，寿命为滚珠丝杠的15倍。

The structure of planetary roller screw and ball screw is similar, but the difference is that the load transfer component is a threaded roller, not a ball. Our main advantage is that we have many contact points to support the load.

The advantage of planetary roller screws and ball screws lies in their ability to provide rated dynamic and static loads higher than ball screws. Replacing the ball with threaded rollers will quickly release the load through numerous contact points, resulting in higher impact resistance.

According to Hertz's pressure law, we can conclude that planetary roller screws can withstand three times the static load and have a lifespan 15 times that of ball screws.



行星滚柱丝杠副  
PLANETARY ROLLER SCREW

- **注塑**  
INJECTION MOLDING
- **压力机床**  
PRESSURE MACHINE TOOL
- **钢铁工业**  
STEEL INDUSTRY
- **军用装备**  
MILITARY EQUIPMENT
- **核工业**  
NUCLEAR INDUSTRY

## 行星滚柱丝杠副(WPFV)订货编码

PLANETARY ROLLER SCREW ORDERING CODE

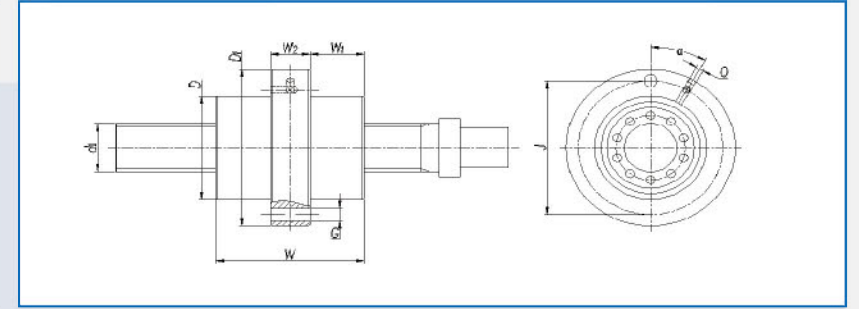
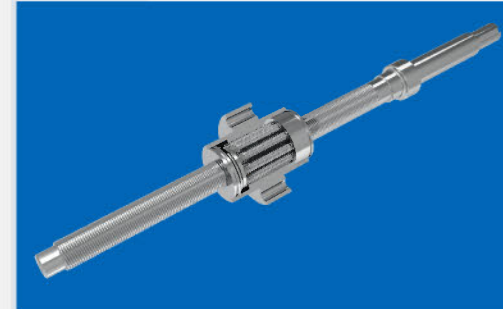
标准式行星滚柱丝杠副 Standard Planetary Roller Screw Pair	W	P	F	V	39X10	T	R	P3	526X432
行星滚柱丝杠副代号 Code For Planetary Roller Screw Pair									
螺母类型 Nut Type	C: 圆柱型螺母 Cylindrical Nut								
	F: 中间法兰螺母 Middle Flange Nut								
	P: 偏离中间法兰螺母 Deviation From Middle Flange Nut								
螺母预紧方式 Nut Pretightening Method									
公称直径X导程 Nominal Diameter X Leads (mm)									
特性 Characteristic	T: 来图定制 Customized By Drawing								
旋向 Direction Of Rotation	R: 右旋 R: Right		L: 左旋 L: Left						
导程精度 Lead Accuracy	P1~P7; T1~T7;		参照标准 Reference Standard	GB/T 17587.3 第三部分 GB/T 17587.3-Part 3					
丝杠长度X螺纹长度 Length Of Lead Screw X Length Of Thread									

## 行星滚柱丝杠副(WPFV)产品系列

PLANETARY ROLLER SCREW PAIR (WPFV) PRODUCT SERIES

特点: 螺母法兰位于中心、无轴向预紧

Features: The nut flange is located in the center, no axial preload



Ca ▶ 额定动载荷 Dynamic Load Rating

Coa ▶ 额定静载荷 Static Load Rating

N ▶ 螺纹头数 Number of threads

单位(Unit):mm

型号 Model No.	N	d1	D	W	W1	W2	D1	J	G	Q	$\alpha$ (°)	Ca (kN)	Coa (kN)
WPFV1805	5	18.3	40	58	20	18	62	51	6X $\phi$ 5.8	M6	30	35.3	65.9
WPFV2005	5	19.8	44	64	23	18	64	53	6X $\phi$ 5.8	M6	30	46.4	97.5
WPFV2010	5	20.2	44	64	23	18	64	53	6X $\phi$ 5.8	M6	30	50.1	87.6
WPFV2505	5	24.3	53	78	29	20	84	70	6X $\phi$ 5.8	M6	30	72.8	133.7
WPFV2510	5	24.7	53	78	29	20	84	70	6X $\phi$ 5.8	M6	30	84.2	129.2
WPFV3005	5	30.3	64	85	29	27	97	81	6X $\phi$ 9	M6	30	88.4	168.1
WPFV3010	5	30.7	64	85	29	27	97	81	6X $\phi$ 9	M6	30	106.3	174.4
WPFV3020	5	31.4	64	85	29	27	97	81	6X $\phi$ 9	M6	30	123.3	177.3
WPFV3905	5	39.3	82	100	33.5	33	124	102	6X $\phi$ 11	M6	30	129.2	268.9
WPFV3910	5	39.7	82	100	33.5	33	124	102	6X $\phi$ 11	M6	30	152.6	270.9
WPFV3920	5	40.4	82	100	33.5	33	124	102	6X $\phi$ 11	M6	30	172.8	260.9
WPFV4210	5	42.7	87	118	41.5	35	130	109	6X $\phi$ 11	M6	30	185.3	341.2
WPFV4805	5	48.3	105	127	45	37	150	127	6X $\phi$ 13.5	M8X1	30	195.6	482.3
WPFV4810	5	48.7	105	127	45	37	150	127	6X $\phi$ 13.5	M8X1	30	231.5	475.1
WPFV4820	5	49.4	105	127	45	37	150	127	6X $\phi$ 13.5	M8X1	30	265.7	462.3
WPFV6010	5	60.7	122	152	53.5	45	180	150	6X $\phi$ 17.5	M8X1	30	338.6	779.7
WPFV6020	5	61.4	122	152	53.5	45	180	150	6X $\phi$ 17.5	M8X1	30	395	785.7

注: 可非标定制 Note: Can be customized