

Patented Design,
Easy Manufacturing,
Low Noise,
Improved NVH

Self-developed Heat Treatment,
Low Distortion,
Oxidation-Free

Precision Thread Rolling,
High Efficiency

Assembly Accuracy Grade C3

Self-developed Internal Thread Forming,
High Efficiency,
L/D up to 10:1



Miniaturized



High Capacity



Anti-Corrosion



Hardness



Custom Design

Why Choose Us?

Note: XZB PRECISION DRIVE is a subsidiary of HANGZHOU XZB TECH CO.,LTD

30 Year

Cold Forming



Mature & Stable
Manufacturing

20 Year

Automotive Supply



Trusted by Leading
OEMs

3 Year

Roller Screw R&D



Fast Iteration,
Continuous Innovation

30⁺

Invention Patent



Self-Owned Core
Technologies

<4 min

In-Thread Forming



Fast Forming,
High Consistency

<2 μ m

HT Distortion



Oxidation-Free,
Controlled Distortion

Applications



Humanoid
Robots



Precision
Actuators



Semiconductor
Equipment



Medical
Devices

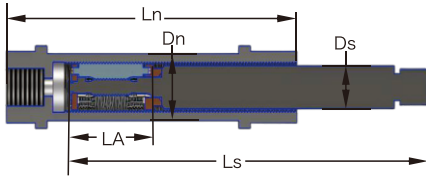


Industrial
Robots

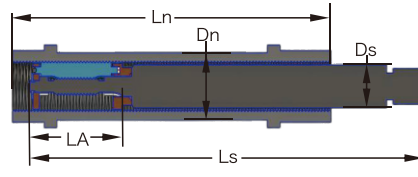


Structural Configuration

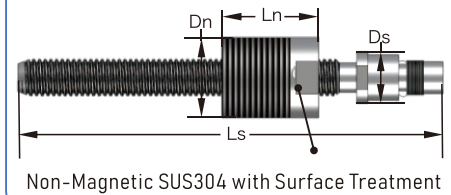
Inverted Planetary Roller Screw (Blind-hole)



Inverted Planetary Roller Screw (Blind-hole)



High-Efficiency Trapezoidal Screw



Specifications & Performance Parameters

Model			Micro-Inverted Planetary Roller Screw						Inverted Planetary Roller Screw			High-Efficiency Trapezoidal Screw		
			02005			0301								
			Min.	Max.	Reco.Spec	Min.	Max.	Reco.Spec	Min.	Max.	Reco.Spec	Min.	Max.	Reco.Spec
Dimensional Parameters	Nom. Dia.	D(mm)	1.5	2	1.8 2	2.6	3	2.7 3	4.5	15	6 8 12	2	12	2 3 6 8 12
	Lead	L(mm)	0.5		0.5	1		1	1.5	7.5	3 4.5 7.5	0.5	7.5	0.5 1 3 4.5 7.5
	Starts	S	1		—	2		—	3	5	—	1	5	—
	No. of Rollers	N	5	5	—	6	8	—	6	12	—	—	—	—
	Nut Length	Ln(mm)	30	60	—	30	60	—	30	60	—	8	30	—
	Screw Length	Ls(mm)	40	70	—	40	70	—	40	70	—	20	60	—
	Nut O.D.	Dn(mm)	6.5	8	—	7.2	8	—	9.5	27	—	5	15	—
	Screw O.D.	Ds(mm)	4.3	5.8	—	5	5.8	—	7.3	24.8	—	2	20	—
	Head Length	LA(mm)	12	20	15	12	20	15	18	52	22	—	—	—
Performance Parameters	Dyn. Load	Ca(N)	150	640	—	230	930	—	1910	36300	—	150	3720	—
	Stat. Load	C0a(N)	270	1100	—	400	1580	—	3190	56430	—	400	9240	—
	Backdrive	Fr(N)	≤ 7		—	≤ 5		—	Helix-Angle Dep.		—	Helix-Angle Dep.		—
	Driving Eff	η(%)	75±3		—	75±3		—	80±3		—	45±3		—
	Max. Speed	Rs(rpm)	12,000		—	12,000		—	10,000		—	3,000		—
	Life	L.E.	1,000,000		—	1,000,000		—	5,000,000		—	500,000		—
	Clearance	Lg	≤ 0.02		—	≤ 0.02		—	≤ 0.02		—	≤ 0.01		—
	Accuracy	Pre	C3	C5	—	C3	C5	—	C3	C5	—	C3	C5	—
 Notes 1.Non-recommended specifications require dedicated tooling. 2.Data for reference only; actual product prevails.														



Current Product Introduction

现有产品介绍



T-03005

High-Efficiency Trapezoidal Screw

- Nom. Dia.: 3 mm
- Lead: 0.5 mm
- Stroke: 20 mm
- Nut O.D.: 7 mm
- Dyn. Load: 200 N
- Stat. Load: 400 N
- Life: 500,000 cycles



I-015005

Inverted Planetary Roller Screw

- Nom. Dia.: 1.5 mm
- Lead: 0.5 mm
- Starts: 1
- Stroke: 35 mm
- Nut Length: 50 mm
- Nut O.D.: 6 mm
- Nut I.D.: 4.5 mm
- Dyn. Load: 120 N
- Stat. Load: 200 N
- Backdrive: 6 N



I-02005

Inverted Planetary Roller Screw

- Nom. Dia.: 2 mm
- Lead: 0.5 mm
- Starts: 1
- Stroke: 40 mm
- Nut Length: 55 mm
- Nut O.D.: 7.5 mm
- Nut I.D.: 5.5 mm
- Dyn. Load: 220 N
- Stat. Load: 450 N
- Backdrive: 7 N



I-0301

Inverted Planetary Roller Screw

- Nom. Dia.: 3 mm
- Lead: 1 mm
- Starts: 2
- Stroke: 30 mm
- Nut Length: 45 mm
- Nut O.D.: 8 mm
- Nut I.D.: 6 mm
- Dyn. Load: 280 N
- Stat. Load: 550 N
- Backdrive: 5 N



I-0603

Inverted Planetary Roller Screw

- Nom. Dia.: 6 mm
- Lead: 3 mm
- Starts: 3
- Stroke: 40 mm
- Nut Length: 60 mm
- Nut O.D.: 17 mm
- Nut I.D.: 10 mm
- Dyn. Load: 3.6 kN
- Stat. Load: 7.2 kN



I-0803

Inverted Planetary Roller Screw

- Nom. Dia.: 8 mm
- Lead: 3 mm
- Starts: 3
- Stroke: 40 mm
- Nut Length: 65 mm
- Nut O.D.: 22 mm
- Nut I.D.: 14 mm
- Dyn. Load: 5 kN
- Stat. Load: 10 kN