

# SWIFT PRODUCT CATALOGUE

思维福特产品手册 »



螺母  
Precision Lock Nut



压块  
Powder Metallurgical Product



轴承座  
Support Unit



液压螺母  
Hydraulic Nut





## COMPANY PROFILE

# 公司简介

江苏思维福特机械科技股份有限公司，创立于 2011 年，专注于提供数控机床精密零组件解决方案。公司坐落于江苏省南通市通州区兴仁徐庄科技园，投资总额 7000 万元人民币，占地面积 16000 平方米。思维福特自成立以来先后获得国家高新技术企业、南通市思维福特数控机床精密部件工程技术研究中心、区两化融合试点企业以及民营科技企业等荣誉称号。公司拥有自主专利 26 项，通过 TS16949,ISO9001-2008 管理体系认证，2016 年 12 月已成功登陆新三板。

Established in 2011, Jiangsu Swift Machinery Technology Co., Ltd focuses on providing solutions for precision components for numerical control machine tools. Swift is located in Xuzhuang Technology Park, Tongzhou District, Nantong city, Jiangsu and covers an area of 16,000 square meters. Total investment is RMB70million. Since the establishment, Swift has obtained a number of honorable titles, such as, National New High-Technology Enterprise, Engineering and Technology Research Center for Precision Components for Numerical Control Machine Tools, Pilot Enterprise for Convergence of Informatization and Industrialization and Private Scientific and Technological Enterprise, etc. Swift owns 26 independent patents. The company has passed TS16949 and ISO9001-2008 and listed on National Equities Exchange and Quotations (also known as New Third Board) in December, 2016.



思维福特拥有现代化的恒温精密加工和装配车间，引进顶级瑞士 Studer 数控精密万能磨床、韩国斗山车削中心、加工中心，德国蔡司三坐标、德国马尔轮廓仪和形状测量仪等检测试验设备。公司采用先进的德国 SAP 管理系统，致力于追求产品的零缺陷。

公司自主产品有：高速主轴，精密锁紧螺母，轴承座，倒立车，浮油回收机，粉末冶金制品等。产品远销日本、德国、意大利、澳大利亚、印度等国家。涉及客户有数控机床、机器人、高铁、汽车、自动化等领域。丰富的高精密数控配件产品研发能力、高效的柔性制造能力和良好的客户协作能力，为全球领先的数控机床零配件、汽车零配件、自动化零配件等制造领域提供精密机械零配件最佳的项目解决方案。

Swift has the modernized temperature-controlled machining and assembly workshops and has imported top-level SWISS Studer universal grinding machine, Korean DOOSAN turning center and machining center, German Zeiss CMM, German Mahr contour and form measuring units, etc. The company adopts the advanced SAP system and is committed to provide Zero-defected products.

Swift manufactures: high-speed spindle, precision lock nut, bearing block, inverted vertical CNC lathe, oil skimmer, powder metallurgical products, etc. Products are sold to overseas countries like, Japan, Germany, Italy, Australia, India, etc. The customers are from many industries, such as, numerical control machine tools, robotics, high speed railway, automation, etc. With the strong research and development capability, efficient flexible manufacturing ability and good collaboration with customers, Swift provides the best solution for precision components for manufacturing of global leading Numerical control machine tools, Auto parts, Automation spare parts etc.



# TECHNOLOGICAL INNOVATION

## 科技创新

在整个价值链中，我们运用科学和技术创新来发展和完善产品及服务。每天，数十名思维福特工程师和研究员都在致力于精密零组件技术的研发，为我们的客户、伙伴和零组件行业提供新的知识和更深入的了解。

作为一家以科技为核心的公司，思维福特始终依靠科技来解决发展中的各种问题和挑战。通过与研究机构以及其他领先企业的合作，思维福特不断创造新技术，并将其应用到精密零组件性能开发的解决方案中。

我们会不断寻找研发合作伙伴，以努力协助中国发展具备强大研发能力的精密机械领域。

In the whole value chain, Swift develops and improves our products and service through scientific and technological innovation. Everyday, tens of engineers are devoted to researching and developing technology of precision components and to provide updated knowledge and more in-depth understanding for our customers, partners and precision components industry.

As a company focuses on technology, Swift solves problems and deals with challenges depending on science. Through cooperation with research centers and other leading enterprises, Swift continuously creates new knowledge and apply this knowledge to the solution of developing precision components.

We will constantly looking for researching partners, so as to assist to develop and improve the whole precision machinery industry.



### TECHNOLOGY SPEED UP THE DEVELOPMENT OF SWIFT

| 科技加速 思维腾飞 |

# TECHNICAL TEAM

## 技术团队



思维福特在整个价值链中，运用科学和技术创新来发展和完善我们的产品及服务。

每天，数十名工程师和研究员致力于精密零组件技术的研发，为我们的客户、伙伴和零组件行业提供新的知识和更深入的了解。

在中国，我们的技术专家队伍，是思维福特的全球技术网络的一部分，正在采用新技术，新思路应用于新的精密零组件，优化和改善现有产品，并研究如何能够使我们的产品在使用寿命期间更高产和更有效。

作为一家以科技为核心的公司，思维福特始终依靠科学来解决发展中的各种问题和挑战。通过与研究机构以及其他领先企业的合作，思维福特不断创造新知识，并将其应用到精密零组件性能开发的解决方案中。

我们会不断寻找研发合作伙伴，以努力协助中国发展具备强大研发能力的精密机械领域。

Swift applies scientific and technological innovation throughout the value chain to develop and refine our products and services.

Every day, dozens of engineers and researchers are dedicated to research and development of precision component technologies, providing new knowledge and deeper understanding to our customers, partners and the component industry.

In China, our team of technologists, part of Swift's global technology network, are adopting new technologies, applying new ideas to new precision components, optimising and improving existing products, and investigating ways in which we can make our products more productive and efficient over their lifetime.

As a company with science and technology at its core, Swift has always relied on science to solve problems and challenges in development. Through partnerships with research organisations and other leading companies, Swift is constantly creating new knowledge and applying it to solutions for performance development of precision components.

We are constantly looking for R&D partners in our endeavour to assist China in developing a strong R&D capability in the field of precision machinery.

# DETECTING 检测

思维福特拥有现代化的恒温精密加工和装配车间，德国蔡司三坐标、德国马尔轮廓仪和形状测量仪等检测试验设备。公司采用先进的德国SAP管理系统，致力于追求产品的零缺陷。



① 中国·影像型万能工具显微镜  
CHINA Universal Tool Microscope

② 德国·马尔 MMQ400-2形状测量仪  
GERMANY Mahr Form Tester

③ 德国·马尔 XC20 ST750D轮廓仪  
GERMANY Mahr Contour Measuring Units



Swift has the modernized temperature-controlled machining and assembly workshops with German Zeiss CMM, German Mahr contour and form measuring units, etc. The company adopts the advanced SAP system and is committed to provide Zero-defected products.



德国·蔡司 三坐标 GERMANY Zeiss CMM

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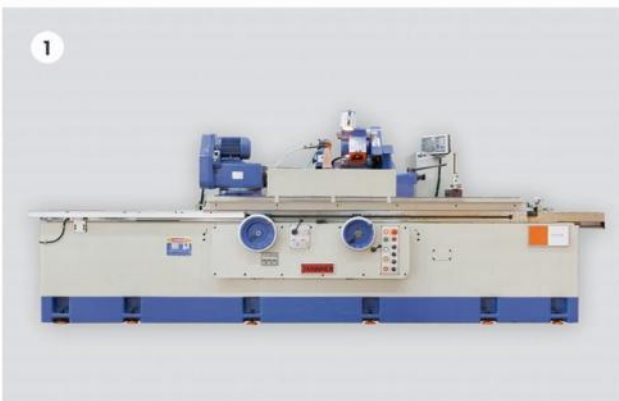


# MACHINERY 制造

▼ 韩国·斗山 数控车  
Korean Doosan CNC Lathe



▲ 瑞士·斯图特超精磨床  
SWITZERLAND Studer Ultra-precision Grinding Machine





引进顶级瑞士 Studer 数控精密万能磨床、  
韩国斗山车削中心、加工中心。

Swift has imported top-levelled SWISS Studer universal grinding machine,  
Korean DOOSAN turning center and machining center.



▼ 韩国·斗山 车削中心  
KOREAN Doosan CNC Turning Center



① 中国(台湾)·外圆磨床  
CHINA External Grinding Machine

② 中国(台湾)·内圆磨床  
CHINA Internal Grinding Machine

③ 中国·立车  
CHINA Vertical Lathe

# MACHINERY 制造

- ▼ 日本·马扎克数控机床  
Japan Mazak CNC Machine Tools



▼ 日本·德玛吉太阳工机立式磨床  
Japan DMG MORI Vertical Grinding Machine



### 多种不同的设计 Multiple Designs

思维福特公司生产多种类型的带锁紧销的精密锁紧螺母。列举其中两种：R型和F型。利用这两种螺母可以将轴承和其他部件简单而可靠地轴向定位在轴上并确保精密。它们的特殊之处在于三个沿圆周均匀分布的磷青铜锁紧销。这些销通过内六角平头螺钉压在轴螺纹上，防止螺母转动。安装和设计都很简单。不需要轴中有额外的锁紧垫圈或槽。锁紧销和平头螺钉与轴线所成角度与螺纹面相同。锁紧销的端部与螺纹在一道工序中加工，因而也具有螺纹牙型，螺母完全通过锁紧销和轴螺纹之间的摩擦以及螺纹面之间的粘连摩擦锁紧到位。因此锁紧销不承受作用于螺母上的轴向负荷。当螺母锁紧时，螺纹面不会解除轴向负荷，螺母不会变形（图1）。F型螺母的另一个优点是它们可以调整。三个等间距锁紧销可以将螺母精确地定位，使螺母与轴垂直，锁紧销还可以用来调整即将装到轴上的其他部件的不精确或偏差。由于锁紧销不会变形，R型和F型螺母无论装拆多次都仍然可以保持精密。（图2显示了一个F型锁紧螺母的应用示例）

Jiangsu Swift Machinery Technology Co.,Ltd manufactures diverse types of precision lock nuts with lock-pin. Here we illustrate two of them: R-type and F-type. With these two nuts, bearings and other parts can be easily and reliably positioned on the shaft axially and precision can be insured. Three phosphor bronze lock pins are uniformly distributed along the circumference. These pins are fixed on the screw thread of the shaft by inner hexagonal flat screws to prevent rotation of the nuts. Both the installation and design are simple, and no extra lock washer or groove is needed on the shaft. The lock pin and flat screw forms an angle with the axis the same as that of the thread surface. The end of lock pin is machined in the same process with that of the thread, so it also features thread form. The nut is locked in place completely by the friction between the lock pin and axial thread as well as the cohesive frictions between thread surfaces. Therefore, the lock pin does not bear the axial load forced on the nut. Once the nut is locked, the thread surface will not release axial load and the nut will not be deformed (Figure1). Another advantage of F-type nut is that it can be adjusted. Three lock pins with equal spaces can precisely position the nut, keep it perpendicular to the shaft. The lock pin can also be used to correct the inaccuracy and deviations of other parts to be installed on the shaft. Due to that the lock pin will not be deformed, R-type and F-type nuts can ensure their precision even after multiple assembly and dis-assembly. (Figure 2 displays an application demonstration of F-type lock nut.)

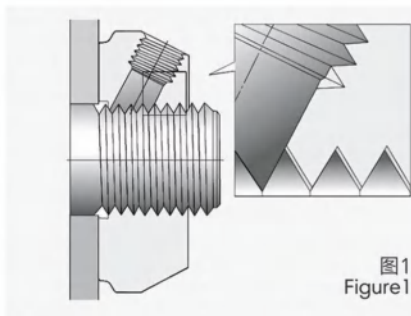


图1  
Figure1

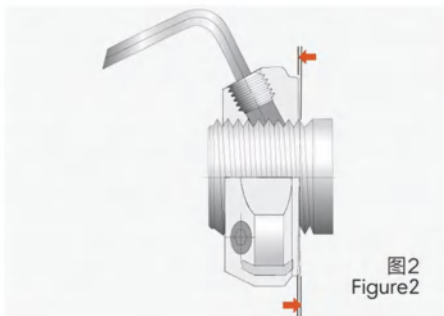


图2  
Figure2

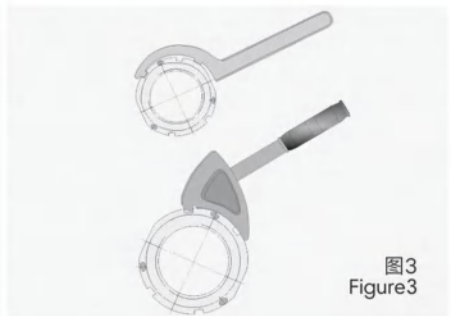


图3  
Figure3

## Major Data 主要数据 >

### > 公差 Tolerance

螺纹按照公差4H精车级生产，垂直精度0.005mm。

Thread accuracy: ISO 4H; Manufacturing method: High precision machining; Run out: 0.005mm.

### > 材料 Material

锁紧螺母由高强度钢制成(42CrMo, 45#, 40Cr),硬度HRC28°-32°；其表面镀磷酸盐层并经过润滑。锁紧销采用了磷青铜。平头螺钉为12.9级高强度螺栓。

Lock nut is made of high-strength steel (42CrMo, 45#, 40Cr), with hardness of HRC28°-32°; its surface is coated with phosphate and lubricated. Lock pin is made of phosphor bronze. Flat screw is 12.9-grade bolt with high-strength.

### > 安装 Installation

R型和F型锁紧螺母非常容易安装。圆周上有槽，根据应用和螺母尺寸可以选用不同类型的扳手，包括钩形扳手和冲击扳手（图3）产品表中给出扳手和键（对于平头螺钉）的相应尺寸。要锁紧R型和F型螺母，应首先轻轻的紧固平头螺钉，直至锁紧销的螺纹与轴螺纹吻合。然后交替并均匀地将平头螺钉牢牢地拧紧，直至达到产品表中列出的拧紧扭矩。

必须矫正螺纹的支撑面和相邻元件之间的不对准，首先应松开位于最大偏差位置处的平头螺钉并将另两个螺钉拧紧至相同程度。然后应拆下松开的螺钉。如果这样矫正仍然不够，应重复该程式直至获得所需的精度。

It is quite easy to install R-type and F-type lock nuts. There are grooves around the circumference. Wrenches are selected according to applications and size of nuts, including hook wrench and impact wrench (Figure 3). Product list shows the corresponding sizes for wrenches and keys (for flat screw).

In order to securely lock the R-type or F-type lock nut, please firstly tighten the flat screw slightly until the thread of lock pin is matched with the thread of the shaft. Then alternately and evenly screw up the flat screws tightly until the tightening torque shown in the product list is reached.

Please correct the misalignment between the supporting surface of the thread with the adjacent components. First, loosen the flat screw with the maximum deviation and tighten the other two screws to the same extent. Then remove the loosened screw. If the required precision has not been reached, repeat the above steps until it is perfectly corrected.

### > 拆卸 Dis-assembly

在拆卸R型和F型锁紧螺母时应记住，即使在平头螺钉已经松开后锁紧销仍然与轴螺纹吻合。在平头螺钉附近用橡皮锤轻击螺母可以使锁紧销松脱，然后就可以轻松地将螺母从轴螺纹上旋下。

In dis-assembling the R-type or F-type lock nut, please ensure that the lock pin is meshed with the thread of the shaft even after the flat screw is loosened. Strike the nut slightly around the flat screw by rubber hammer to loosen the lock pin, and then nut can be easily removed from the shaft.

螺牙 Thread	轴向负载能力 Axial Load static(kN)	平头螺钉扭紧力矩 (Nm) Flat Screw Tightening Torque (Nm)	松脱力矩 Loosening Torque (Nm)				
			SWT/F	SWT/R	SWT/K	SWT/N	SWT/A
M8	30	4.5	-	17	-	-	-
M10	35	4.5	-	18	-	-	-
M12	40	4.5	-	19	-	-	-
M15	60	4.5	-	20	-	-	-
M17	80	8.0	27	21	90	63	25
M20	90	8.0	28	24	99	69	26
M25	130	8.0	30	26	101	70	28
M30	160	8.0	32	28	102	71	29
M35	190	18	39	34	109	76	37
M40	210	18	46	36	110	77	42
M45	240	18	61	56	127	89	59
M50	300	18	70	63	137	96	66
M55	340	18	88	68	166	166	74
M60	380	18	98	96	205	205	81
M65	460	18	127	112	254	254	88
M70	490	18	147	137	313	313	96
M75	520	18	152	145	382	382	103
M80	620	18	156	149	460	460	113
M85	650	18	176	168	549	549	128
M90	680	18	186	178	656	656	137
M95	710	18	201	193	745	745	152
M100	740	18	220	210	833	833	172
M105	770	35	236	215	-	-	186
M110	800	35	252	230	1127	1127	206
M115	830	35	268	250	-	-	221
M120	860	35	279	264	1323	1323	235
M125	890	35	289	274	-	-	250
M130	920	35	313	294	-	-	265
M135	950	35	352	328	-	-	304
M140	980	35	392	372	-	-	324
M145	1010	35	436	402	-	-	353
M150	1040	35	480	421	-	-	392
M155	1070	35	519	460	-	-	422
M160	1100	35	563	509	-	-	461
M165	1130	35	598	529	-	-	495
M170	1160	35	647	558	-	-	520
M180	1220	60	686	558	-	-	559
M190	1280	60	735	627	-	-	598
M200	1340	60	794	666	-	-	637

# PRODUCT CONTENT

## 产品目录

### 01

#### PRECISION LOCK NUT 精密锁紧螺母



P 16	SWT/R 系列	SWT/R Series
P 18	SWT/F 系列	SWT/F Series
P 20	SWT/K 系列	SWT/K Series
P 22	SWT/A 系列	SWT/A Series
P 24	SWT/N 系列	SWT/N Series
P 26	SWT/FA 系列	SWT/FA Series
P 27	SWT/RN 系列	SWT/RN Series
P 28	SWT/AN 系列	SWT/AN Series

### 02

#### ECCENTRIC NUT 偏心螺母 (永不松动的螺母)



P 30	SWT/T 系列	SWT/T Series
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### 03

#### LOCKNUT 防松螺母



P 32	SWT/T 系列	SWT/T Series
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### 04

#### BEARING HYDRAULIC NUT 液压螺母



P 36	SWT/SF 系列	SWT/SF Series
P 37	SWT/YTC 系列	SWT/YTC Series
P 38	SWT/HY 系列	SWT/HY Series

### 05

#### POWDER METALLURGICAL PRODUCT 压块



P 41	桥式压块	Bridge-type powder metallurgical product
P 42	30° 系列	30° Series
P 43	15°/8° 系列	15°/8° Series

### 06

#### SWT SUPPORT UNIT 轴承座



P 45	SWT滚珠丝杆示意图	Schematic diagram of SWT ball screw
P 46	SWT轴承座清单	List of SWT support units
P 48	SWT方形支撑座	SWT square support units

01

# 锁紧螺母

PRECISION LOCK NUT



## PRECISION LOCK NUT 精密锁紧螺母

### SWT/R Series 系列 >

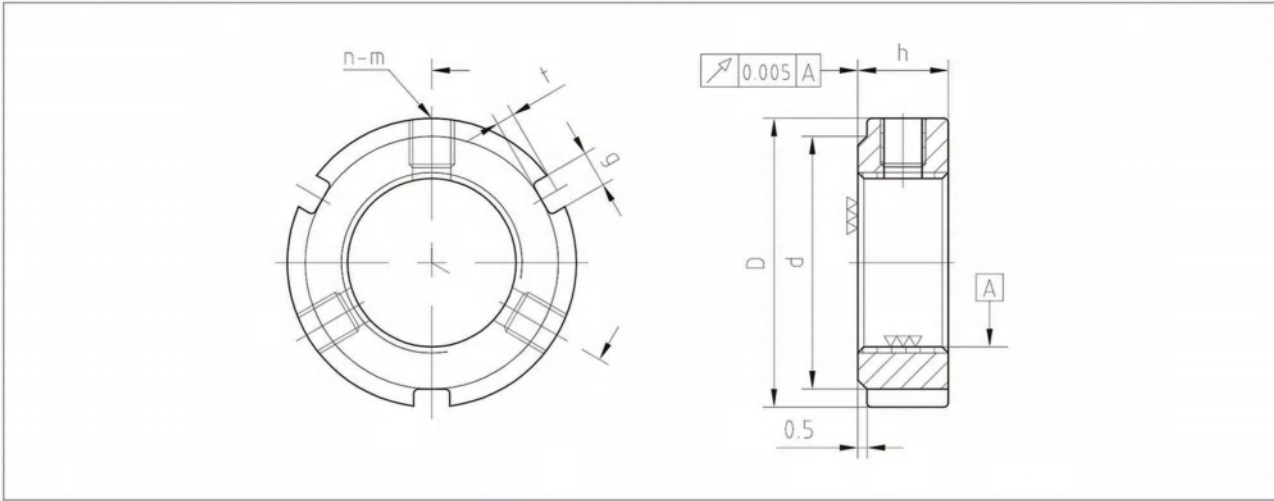
SWT/R型锁紧方式为径向三点式锁定，其厚度较薄，适用于厚度空间受到一定限制的安装环境。径向锁紧时因为锁紧铜垂直于公螺纹，锁紧铜扭紧力矩过大时容易造成螺帽轴向负荷减少。

Locking method of SWT/R series employ 3-way radial locking. It is thinner, so is suitable for the installation that is restricted by thickness. In radial locking, brass locking pin is perpendicular to the male screw thread, axial load will easily be reduced due to excessive tightening torque.

- > 材质 Material: 42CrMo,45#, 40Cr
- > 硬度 Hardness: HRC28°—32°
- > 螺纹精度 Thread Precision: ISO4H
- > 平面偏摆 Run Out: 0.005mm







Thread	D	h	n-g	t	d	n-m	MAX.Nm
SWT/R M8x0.75	16	8	3-3	1.6	13	2-M4	3.5
SWT/R M10x0.75	18	8	3-3	1.6	15	2-M4	3.5
SWT/R M10x1.0	18	8	3-3	1.6	15	2-M4	3.5
SWT/R M12x1.0	20	8	3-3	1.6	17	2-M4	3.5
SWT/R M12x1.25	20	8	3-3	1.6	17	2-M4	3.5
SWT/R M14x1.5	25	8	3-3	2	21	2-M4	3.5
SWT/R M15x1.0	25	8	3-3	1.8	21.5	2-M4	3.5
SWT/R M16x1.5	28	10	3-4	2	24	2-M5	4.5
SWT/R M17x1.0	28	10	3-4	2	24	2-M5	4.5
SWT/R M18x1.5	30	10	3-4	2	26	2-M5	4.5
SWT/R M20x1.0	32	10	3-4	2	28	3-M5	4.5
SWT/R M20x1.5	32	10	3-4	2	28	3-M5	4.5
SWT/R M22x1.5	35	10	3-4	2	31	3-M5	4.5
SWT/R M24x1.5	38	12	3-5	2	34	3-M6	8
SWT/R M25x1.5	38	12	3-5	2	34	3-M6	8
SWT/R M27x1.5	42	12	3-5	2	38	3-M6	8
SWT/R M30x1.0	45	12	3-5	2	41	3-M6	8
SWT/R M30x1.5	45	12	3-5	2	41	3-M6	8
SWT/R M33x1.5	52	12	3-5	2	48	3-M6	8
SWT/R M35x1.5	52	12	3-5	2	48	3-M6	8
SWT/R M36x1.5	55	14	3-6	2.5	50	3-M6	8
SWT/R M38x1.5	56	14	3-6	2.5	51	3-M6	8
SWT/R M39x1.5	58	14	3-6	2.5	53	3-M6	8
SWT/R M40x1.5	58	14	3-6	2.5	53	3-M6	8
SWT/R M42x1.5	62	14	3-6	2.5	57	3-M6	8
SWT/R M45x1.5	65	14	3-6	2.5	60	3-M6	8
SWT/R M48x1.5	68	14	3-6	2.5	63	3-M6	8
SWT/R M50x1.5	70	14	3-6	2.5	65	3-M8	18
SWT/R M52x1.5	73	16	3-7	3	67	3-M8	18
SWT/R M55x2.0	75	16	3-7	3	69	3-M8	18
SWT/R M56x2.0	77	16	3-7	3	71	3-M8	18
SWT/R M60x2.0	80	16	3-7	3	74	3-M8	18
SWT/R M64x2.0	85	16	3-7	3	79	3-M8	18
SWT/R M65x2.0	85	16	3-7	3	79	3-M8	18
SWT/R M68x2.0	92	18	3-8	3.5	85	3-M8	18
SWT/R M70x2.0	92	18	3-8	3.5	85	3-M8	18
SWT/R M72x2.0	95	18	3-8	3.5	88	3-M8	18

Thread	D	h	n-g	t	d	n-m	MAX.Nm
SWT/R M75x2.0	98	18	3-8	3.5	91	3-M8	18
SWT/R M76x2.0	100	18	3-8	3.5	93	3-M8	18
SWT/R M80x2.0	105	18	6-8	3.5	98	3-M8	18
SWT/R M85x2.0	110	18	6-8	3.5	103	3-M8	18
SWT/R M90x2.0	120	20	6-10	4	112	3-M8	18
SWT/R M95x2.0	125	20	6-10	4	117	3-M8	18
SWT/R M100x2.0	130	20	6-10	4	122	3-M8	18
SWT/R M105x2.0	140	22	6-12	5	130	3-M8	18
SWT/R M110x2.0	145	22	6-12	5	135	3-M8	18
SWT/R M115x2.0	150	22	6-12	5	140	3-M8	18
SWT/R M120x2.0	155	24	6-12	5	145	3-M8	18
SWT/R M125x2.0	160	24	6-12	5	150	3-M8	18
SWT/R M130x2.0	165	24	6-12	5	155	3-M8	18
SWT/R M135x2.0	175	26	6-14	6	163	3-M10	35
SWT/R M140x2.0	180	26	6-14	6	168	3-M10	35
SWT/R M145x2.0	190	26	6-14	6	178	3-M10	35
SWT/R M150x2.0	195	26	6-14	6	183	3-M10	35
SWT/R M155x3.0	200	28	6-16	7	186	3-M10	35
SWT/R M160x3.0	210	28	6-16	7	196	3-M10	35
SWT/R M165x3.0	210	28	6-16	7	196	3-M10	35
SWT/R M170x3.0	220	28	6-16	7	206	3-M10	35
SWT/R M180x3.0	230	30	6-18	8	214	3-M12	60
SWT/R M190x3.0	240	30	6-18	8	224	3-M12	60
SWT/R M200x3.0	250	32	6-18	8	234	3-M12	60
SWT/R M210x4.0	260	32	6-18	8	242	3-M12	85
SWT/R M220x3.0	270	34	6-18	8	245	3-M12	85
SWT/R M220x4.0	270	34	6-18	8	254	3-M12	85
SWT/R M230x3.0	280	34	6-18	8	264	3-M12	85
SWT/R M240x3.0	290	34	6-18	8	265	3-M12	85
SWT/R M240x4.0	290	34	6-18	8	274	3-M12	85
SWT/R M245x3.0	295	34	6-18	8	279	3-M12	85
SWT/R M260x3.0	310	36	6-18	8	294	3-M12	85
SWT/R M260x4.0	310	36	6-18	8	294	3-M12	85
SWT/R M275x4.0	325	36	6-18	8	309	3-M12	85
SWT/R M280x4.0	330	36	6-18	8	314	3-M12	85
SWT/R M300x4.0	350	36	6-18	8	334	3-M12	85
SWT/R M440x4.0	520	46	6-20	10	500	6-M20	85
SWT/R M460x4.0	540	46	6-20	10	520	6-M20	85

精密锁紧螺母  
PRECISION LOCK NUT

液压螺母  
HYDRAULIC NUT

粉末冶金产品  
POWDER METALLURGICAL PRODUCT

轴承座  
SUPPORT UNIT

备注: ①以上数据仅供参考, 思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母  
Remark: ①The above data is just provided for reference, Jiangsu Swift Machinery Technology Co, Ltd reserves the right to revise it. ②1NM=10.2kgfcm=0.73lbft ③Non-standard nut can be customized.

## PRECISION LOCK NUT 精密锁紧螺母

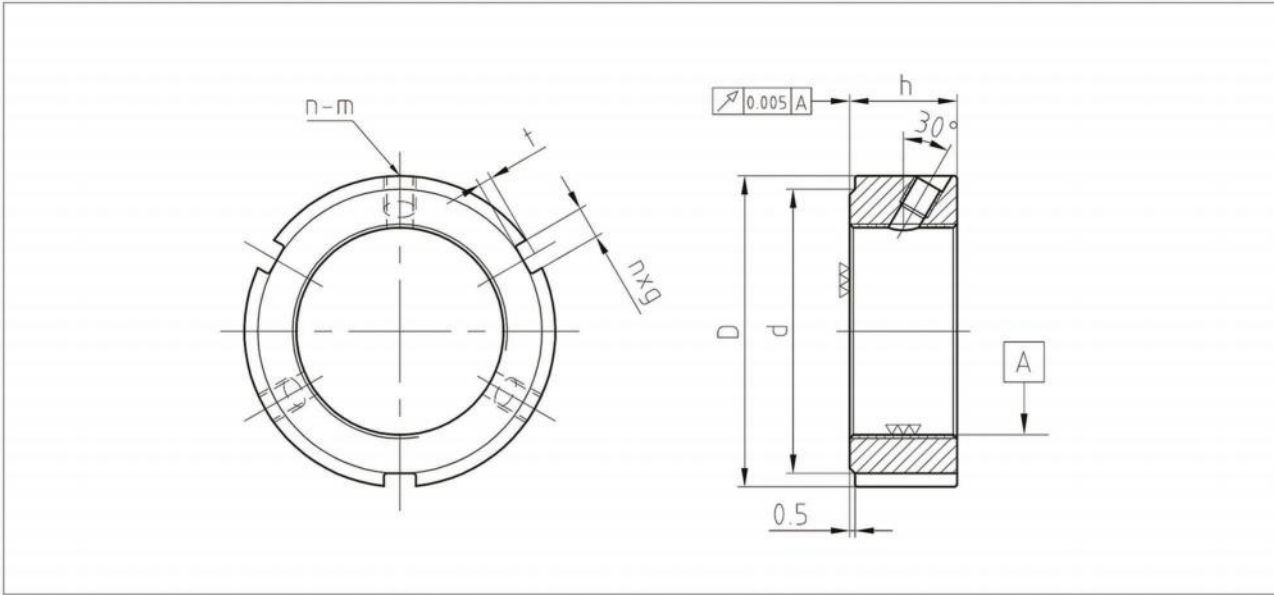
### SWT/F Series 系列 >

SWT/F型锁紧螺帽，其锁紧铜与螺纹呈30°角设计，不承受作用于螺纹上的轴向负荷。当螺帽锁紧时，螺纹面不会解除轴向负荷，螺帽不会变形。三个等间距锁紧铜可以用来调整即将装到轴上的其它部件的偏差。由于锁紧铜不会变形，F型螺帽经多次拆装仍然可以保持精密度。

For SWT/F series locking nut, its brass locking pin forms a angle of 30 degree with the thread. It does not bear the axial load forced on the thread. Once the nut is locked, the thread surface will not release axial load and the nut will not be deformed. Three lock nuts with equal spaces can precisely position the nut, keep it perpendicular to the shaft. F-type nuts can ensure their precision even after multiple assembly and dis-assembly.

- > 材质 Material: 42CrMo,45#, 40Cr
- > 硬度 Hardness: HRC28°—32°
- > 螺纹精度 Thread Precision: ISO4H
- > 平面偏摆 Run Out: 0.005mm





精密锁紧螺母  
PRECISION LOCK NUT

液压螺母  
HYDRAULIC NUT

粉末冶金产品  
POWDER METALLURGICAL PRODUCT

轴承座  
SUPPORT UNIT

Thread	D	h	d	n-g	t	n-m	MAX.Nm
SWT/F M12x1.5P	30	14	26	3-4	2	3-M5	4.5
SWT/F M14x1.5P	30	14	26	3-4	2	3-M5	4.5
SWT/F M15x1.0P	30	14	26	3-4	2	3-M5	4.5
SWT/F M16x1.5P	30	14	26	3-4	2	3-M5	4.5
SWT/F M17x1.0P	32	16	28	3-4	2	3-M5	4.5
SWT/F M18x1.5P	32	16	28	3-4	2	3-M5	4.5
SWT/F M20x1.0P	38	16	34	3-4	2	3-M5	4.5
SWT/F M20x1.5P	38	16	34	3-4	2	3-M6	8
SWT/F M22x1.5P	38	16	34	3-4	2	3-M6	8
SWT/F M24x1.5P	38	18	34	3-5	2	3-M6	8
SWT/F M25x1.5P	38	18	34	3-5	2	3-M6	8
SWT/F M27x1.5P	40	18	36	3-5	2	3-M6	8
SWT/F M30x1.5P	45	18	41	3-5	2	3-M6	8
SWT/F M33x1.5P	50	18	46	3-5	2	3-M6	8
SWT/F M35x1.5P	52	18	48	3-5	2	3-M8	18
SWT/F M36x1.5P	52	18	48	3-5	2	3-M8	18
SWT/F M39x1.5P	58	20	53	3-6	2.5	3-M8	18
SWT/F M40x1.5P	58	20	53	3-6	2.5	3-M8	18
SWT/F M42x1.5P	62	20	57	3-6	2.5	3-M8	18
SWT/F M45x1.5P	65	20	60	3-6	2.5	3-M8	18
SWT/F M48x1.5P	70	20	65	3-6	2.5	3-M8	18
SWT/F M50x1.5P	70	20	65	3-6	2.5	3-M8	18
SWT/F M52x1.5P	73	22	67	3-7	3	3-M8	18
SWT/F M55x1.5P	75	22	69	3-7	3	3-M8	18
SWT/F M55x2.0P	75	22	69	3-7	3	3-M8	18
SWT/F M56x1.5P	75	22	69	3-7	3	3-M8	18
SWT/F M56x2.0P	75	22	69	3-7	3	3-M8	18
SWT/F M60x2.0P	80	22	74	3-7	3	3-M8	18
SWT/F M64x1.5P	85	22	79	3-7	3	3-M8	18
SWT/F M64x2.0P	85	22	79	3-7	3	3-M8	18
SWT/F M65x2.0P	85	22	79	3-7	3	3-M8	18
SWT/F M68x2.0P	92	24	85	3-8	3.5	3-M8	18
SWT/F M70x2.0P	92	24	85	3-8	3.5	3-M8	18
SWT/F M72x2.0P	94	24	87	3-8	3.5	3-M8	18

Thread	D	h	d	n-g	t	n-m	MAX.Nm
SWT/F M75x2.0P	98	24	91	3-8	3.5	3-M8	18
SWT/F M76x2.0P	98	24	91	3-8	3.5	3-M8	18
SWT/F M80x2.0P	105	24	98	3-8	3.5	3-M8	18
SWT/F M85x2.0P	110	24	103	3-8	3.5	3-M8	18
SWT/F M90x2.0P	120	26	112	6-10	4	3-M8	18
SWT/F M95x2.0P	125	26	117	6-10	4	3-M8	18
SWT/F M100x2.0P	130	26	122	6-10	4	3-M8	18
SWT/F M105x2.0P	140	28	132	6-10	4	3-M10	35
SWT/F M110x2.0P	145	28	137	6-10	4	3-M10	35
SWT/F M115x2.0P	150	28	142	6-10	4	3-M10	35
SWT/F M120x2.0P	155	30	145	6-12	5	3-M10	35
SWT/F M125x2.0P	160	30	150	6-12	5	3-M10	35
SWT/F M130x2.0P	165	30	155	6-12	5	3-M10	35
SWT/F M135x2.0P	175	32	165	6-12	5	3-M10	35
SWT/F M140x2.0P	180	32	170	6-12	5	3-M10	35
SWT/F M145x2.0P	190	32	180	6-12	5	3-M10	35
SWT/F M150x2.0P	195	32	185	6-12	5	3-M10	35
SWT/F M155x3.0P	200	34	188	6-14	6	3-M10	35
SWT/F M160x3.0P	210	34	198	6-14	6	3-M10	35
SWT/F M165x3.0P	210	34	198	6-14	6	3-M10	35
SWT/F M170x3.0P	220	34	208	6-14	6	3-M10	35
SWT/F M180x3.0P	230	36	216	6-16	7	3-M12	60
SWT/F M190x3.0P	240	36	226	6-16	7	3-M12	60
SWT/F M200x3.0P	250	38	236	6-16	7	3-M12	60
SWT/F M210x4.0P	270	38	250	6-16	8	3-M12	85
SWT/F M220x3.0P	270	38	250	6-20	10	3-M12	85
SWT/F M220x4.0P	270	38	250	6-20	10	3-M12	85
SWT/F M240x3.0P	290	38	270	6-20	10	3-M12	85
SWT/F M240x4.0P	290	38	270	6-20	10	3-M12	85
SWT/F M260x4.0P	310	38	290	6-20	10	3-M12	85
SWT/F M260x3.0P	310	38	290	6-20	10	3-M12	85
SWT/F M270x4.0P	320	38	300	6-20	10	3-M12	85
SWT/F M280x4.0P	330	38	310	6-20	10	3-M12	85
SWT/F M300x4.0P	360	42	336	6-24	12	3-M12	85

备注：①以上数据仅供参考，思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母  
Remark: ①The above data is just provided for reference, Jiangsu Swift Machinery Technology Co, Ltd reserves the right to revise it. ②1NM=10.2kgfcm=0.73lbft ③Non-standard nut can be customized.

## PRECISION LOCK NUT 精密锁紧螺母

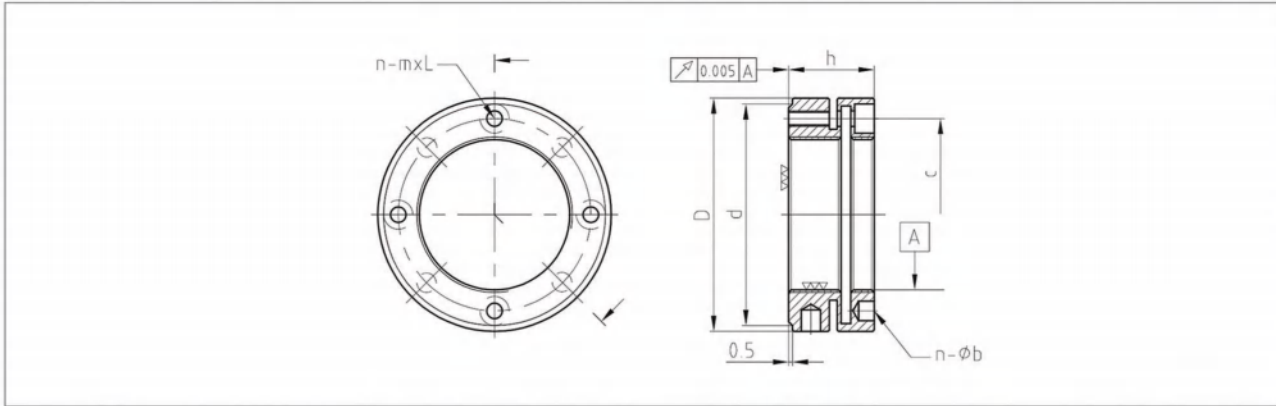
### SWT/K Series 系列 >

SWT/K型锁紧螺母采用4—6颗高强度螺栓，使其螺牙通过轴向变形锁紧。适用于工作环境恶劣，易松脱，需要高扭矩的环境，可通过调整轴向螺钉的扭紧力来调整螺母偏摆精度。

4 to 6 high-strength bolts are applied by a SWT/K series lock nut. It is locked by the axial deformation of its thread. It is suitable for severe working environment where nuts may easily be loosened and high torque is required. Run out can be adjusted by adjusting the tightening force of the axial screw.

- > 材质 Material: 42CrMo, 45#, 40Cr
- > 硬度 Hardness: HRC28°—32°
- > 螺纹精度 Thread Precision: ISO4H
- > 平面偏摆 Run Out: 0.007mm





Thread	D	h	d	n-MxL	C	n	b	MAX.Nm
SWT/K M18x1.5P	38	18	34	4-M4x12	28	4	4	3.5
SWT/K M20x1.0P	40	18	36	4-M4x12	30	4	4	3.5
SWT/K M20x1.5P	40	18	36	4-M4x12	30	4	4	3.5
SWT/K M22x1.5P	42	18	38	4-M4x12	32	4	4	3.5
SWT/K M24x1.5P	44	18	41	4-M4x12	34	4	4	3.5
SWT/K M25x1.5P	45	20	41	4-M4x14	35	4	5	3.5
SWT/K M26x1.5P	45	20	41	4-M4x14	35	4	5	3.5
SWT/K M27x1.5P	46	20	43	4-M4x14	37	4	5	3.5
SWT/K M28x1.5P	46	20	43	4-M4x14	37	4	5	3.5
SWT/K M30x1.5P	48	20	45	4-M4x14	39	4	5	3.5
SWT/K M32x1.5P	50	20	47	4-M4x14	41	4	5	3.5
SWT/K M33x1.5P	50	22	47	4-M4x16	41	4	5	3.5
SWT/K M35x1.5P	53	22	50	4-M4x16	44	4	5	3.5
SWT/K M36x1.5P	53	22	50	4-M4x16	44	4	5	3.5
SWT/K M38x1.5P	56	22	53	4-M4x16	47	4	5	3.5
SWT/K M39x1.5P	56	22	53	4-M4x16	47	4	5	3.5
SWT/K M40x1.5P	58	22	55	4-M4x16	49	4	5	3.5
SWT/K M42x1.5P	60	22	57	4-M4x16	51	4	5	3.5
SWT/K M45x1.5P	68	22	63	6-M4x16	57	6	6	3.5
SWT/K M48x1.5P	69	25	65	6-M4x18	58	6	6	3.5
SWT/K M50x2.0P	70	25	66	6-M4x18	60	6	6	3.5
SWT/K M52x2.0P	72	25	68	6-M4x18	62	6	6	3.5
SWT/K M55x1.5P	75	25	71	6-M4x18	65	6	6	3.5
SWT/K M55x2.0P	75	25	71	6-M4x18	65	6	6	4.5
SWT/K M56x1.5P	82	26	77	6-M5x18	70	6	6	4.5
SWT/K M56x2.0P	82	26	77	6-M5x18	70	6	6	4.5
SWT/K M58x1.5P	82	26	77	6-M5x18	70	6	6	4.5
SWT/K M60x1.5P	84	26	79	6-M5x18	72	6	6	4.5
SWT/K M60x2.0P	84	26	79	6-M5x18	72	6	6	4.5
SWT/K M62x1.5P	86	28	82	6-M5x20	75	6	6	4.5
SWT/K M64x1.5P	86	28	82	6-M5x20	75	6	6	4.5
SWT/K M64x2.0P	86	28	82	6-M5x20	75	6	6	4.5
SWT/K M65x1.5P	88	28	84	6-M5x20	77	6	6	4.5
SWT/K M65x2.0P	88	28	84	6-M5x20	77	6	6	4.5
SWT/K M68x1.5P	93	28	89	6-M5x20	80	6	7	4.5
SWT/K M68x2.0P	93	28	89	6-M5x20	80	6	7	4.5
SWT/K M70x1.5P	95	28	89	6-M5x20	82	6	7	4.5
SWT/K M70x2.0P	95	28	89	6-M5x20	82	6	7	4.5
SWT/K M72x1.5P	97	28	91	6-M5x20	84	6	7	4.5
SWT/K M72x2.0P	97	28	91	6-M5x20	84	6	7	4.5

Thread	D	h	d	n-MxL	C	n	b	MAX.Nm
SWT/K M75x1.5P	100	28	94	6-M5x20	87	6	7	4.5
SWT/K M75x2.0P	100	28	94	6-M5x20	87	6	7	4.5
SWT/K M78x1.5P	110	32	102	6-M6x22	94	6	8	4.5
SWT/K M80x2.0P	110	32	103	6-M6x22	95	6	8	8
SWT/K M85x2.0P	115	32	108	6-M6x22	100	6	8	8
SWT/K M88x1.5P	120	32	112	6-M6x22	104	6	8	8
SWT/K M90x2.0P	120	32	113	6-M6x22	105	6	8	8
SWT/K M95x2.0P	125	32	118	6-M6x22	110	6	8	8
SWT/K M100x2.0P	130	32	123	6-M6x22	115	6	8	8
SWT/K M105x2.0P	135	32	128	6-M6x22	120	6	8	8
SWT/K M110x2.0P	140	32	133	6-M6x22	125	6	8	8
SWT/K M115x2.0P	145	34	138	6-M6x22	130	6	8	8
SWT/K M116x2.0P	145	34	138	6-M6x22	130	6	8	8
SWT/K M120x2.0P	155	36	146	6-M6x25	136	6	8	8
SWT/K M125x2.0P	160	36	150	6-M6x25	140	6	8	8
SWT/K M130x2.0P	165	36	156	6-M6x25	148	6	8	8
SWT/K M130x3.0P	165	36	156	6-M6x25	148	6	8	8
SWT/K M140x2.0P	180	38	168	6-M6x25	160	8	10	8
SWT/K M140x3.0P	180	38	168	8-M6x25	160	8	10	8
SWT/K M150x2.0P	190	38	178	8-M6x25	170	8	10	8
SWT/K M150x3.0P	190	38	178	8-M6x25	170	8	10	8
SWT/K M160x3.0P	205	40	193	8-M8x30	182	8	10	18
SWT/K M170x3.0P	215	40	204	8-M8x30	193	8	10	18
SWT/K M180x3.0P	230	40	220	8-M8x30	205	8	10	18
SWT/K M190x3.0P	240	40	226	8-M8x30	215	8	10	18
SWT/K M200x3.0P	245	40	234	8-M8x30	223	8	10	18
SWT/K M210x4.0P	265	40	253	8-M8x25	243	8	10	18
SWT/K M220x3.0P	265	40	255	8-M8x30	243	8	10	18
SWT/K M220x4.0P	265	40	253	8-M8x30	243	8	10	18
SWT/K M225x3.0P	275	42	260	8-M10x30	247	8	10	18
SWT/K M230x3.0P	275	42	265	8-M10x30	251	8	10	18
SWT/K M235x3.0P	285	42	270	8-M10x30	257	8	10	18
SWT/K M240x3.0P	285	42	275	8-M10x30	261	8	10	35
SWT/K M250x3.0P	295	42	285	8-M10x30	271	8	12	35
SWT/K M260x3.0P	305	42	295	8-M10x30	283	8	12	35
SWT/K M270x4.0P	315	42	305	8-M10x30	293	8	12	35
SWT/K M280x4.0P	325	42	315	8-M10x30	303	8	12	35
SWT/K M295x4.0P	340	42	331	8-M10x30	318	8	12	35
SWT/K M300x4.0P	345	42	335	8-M10x30	323	8	12	35

备注：①以上数据仅供参考，思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lbf.ft ③可定制非标螺母  
Remark: ①The above data is just provided for reference, Jiangsu Swift Machinery Technology Co, Ltd reserves the right to revise it. ②1NM=10.2kgf.cm=0.73lbf.ft ③Non-standard nut can be customized.

精密锁紧螺母  
PRECISION LOCK NUT

液压螺母  
HYDRAULIC NUT

粉末冶金产品  
POWDER METALLURGICAL PRODUCT

轴承座  
SUPPORT UNIT

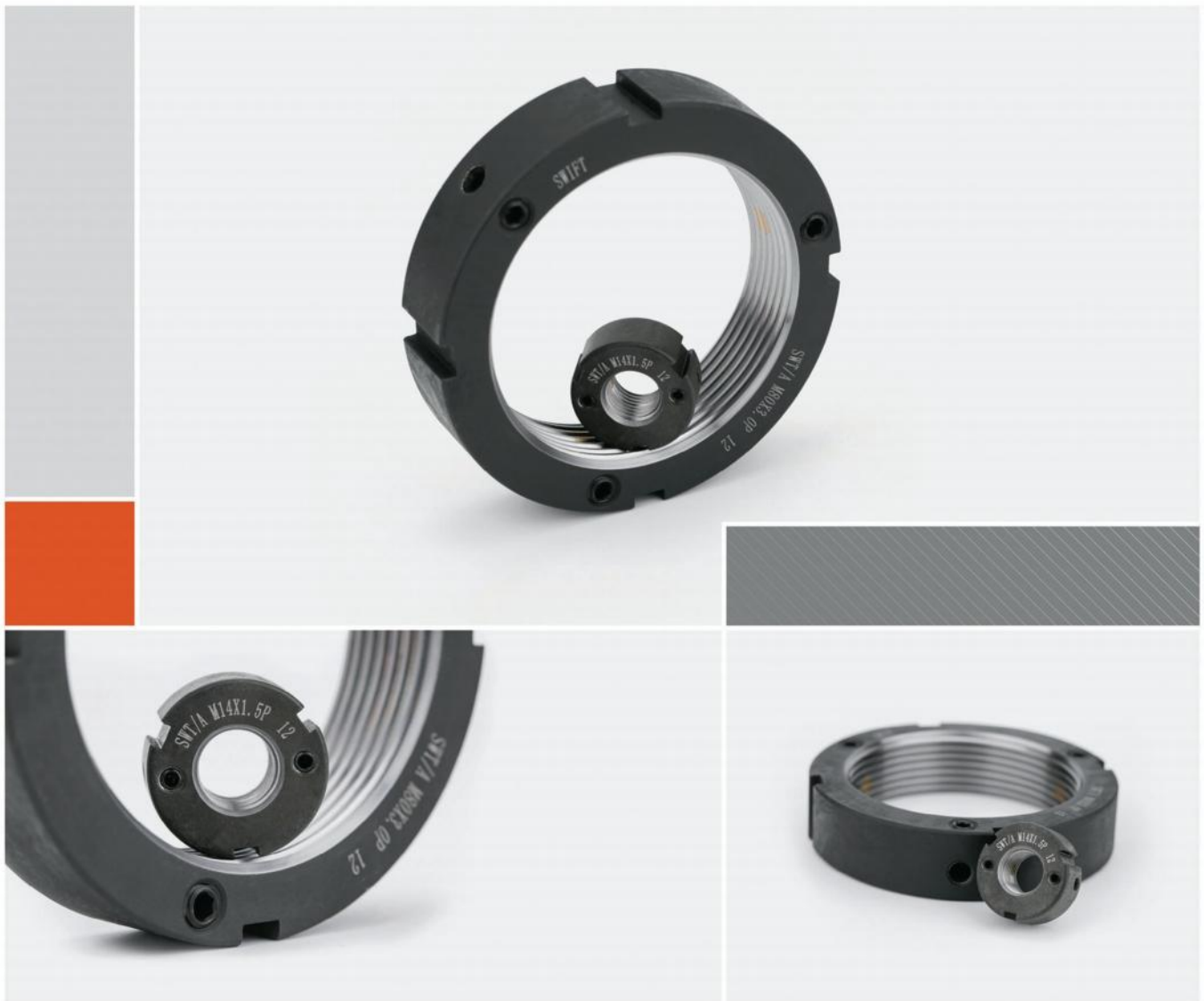
## PRECISION LOCK NUT 精密锁紧螺母

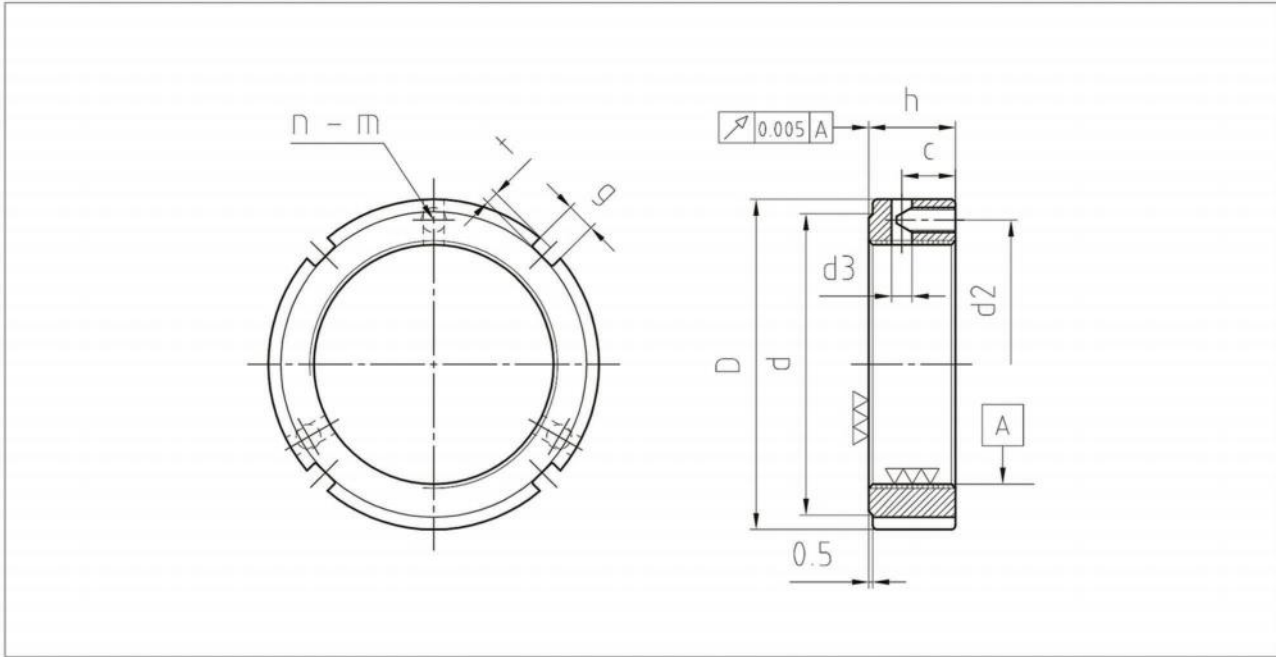
### SWT/A Series 系列 >

SWT/A型锁紧方式为轴向三点式锁定，其厚度与F系列相同。轴向三点式锁定为其特点，适用于装配工作的特殊环境限制。

The locking method of SWT/A series is three-point locking, with thickness the same with that of the F-type nut. Its feature is axial three-point locking and is applicable for special environment.

- > 材质 Material: 42CrMo, 45#, 40Cr
- > 硬度 Hardness: HRC28°—32°
- > 螺纹精度 Thread Precision: ISO4H
- > 平面偏摆 Run Out: 0.005mm





Thread	D	h	n-g	t	d	n-m	MAX.Nm
SWT/A M12x1.25P	26	14	3-3	2	22	2-M4	3.5
SWT/A M14x1.5P	30	14	3-4	2	26	2-M4	3.5
SWT/A M15x1.0P	30	14	3-4	2	26	2-M4	3.5
SWT/A M16x1.5P	30	14	3-4	2	26	2-M4	3.5
SWT/A M17x1.0P	32	16	3-4	2	28	2-M4	3.5
SWT/A M18x1.5P	32	16	3-4	2	28	3-M4	3.5
SWT/A M20x1.0P	38	16	3-4	2	34	3-M4	3.5
SWT/A M20x1.5P	38	16	3-4	2	34	3-M4	3.5
SWT/A M22x1.5P	38	16	3-4	2	34	3-M4	3.5
SWT/A M24x1.5P	38	18	3-5	2	34	3-M4	3.5
SWT/A M25x1.5P	38	18	3-5	2	34	3-M4	3.5
SWT/A M27x1.5P	40	18	3-5	2	36	3-M4	3.5
SWT/A M30x1.5P	45	18	3-5	2	41	3-M4	3.5
SWT/A M33x1.5P	50	18	3-5	2	46	3-M4	3.5
SWT/A M35x1.5P	52	18	3-5	2	48	3-M6	8
SWT/A M36x1.5P	52	18	3-5	2	48	3-M6	8
SWT/A M39x1.5P	58	20	3-6	2.5	53	3-M6	8
SWT/A M40x1.5P	58	20	3-6	2.5	53	3-M6	8
SWT/A M42x1.5P	62	20	3-6	2.5	57	3-M6	8
SWT/A M45x1.5P	65	20	3-6	2.5	60	3-M6	8
SWT/A M48x1.5P	70	20	3-6	2.5	65	3-M6	8
SWT/A M50x1.5P	70	20	3-6	2.5	65	3-M6	8
SWT/A M50x2.0P	70	20	3-6	2.5	65	3-M6	8
SWT/A M52x1.5P	73	22	3-7	3	67	3-M6	8
SWT/A M55x2.0P	75	22	3-7	3	69	3-M6	8
SWT/A M56x2.0P	75	22	3-7	3	69	3-M6	8
SWT/A M60x2.0P	80	22	3-7	3	74	3-M6	8
SWT/A M64x2.0P	85	22	3-7	3	79	3-M6	8
SWT/A M65x2.0P	85	22	3-7	3	79	3-M6	8
SWT/A M68x2.0P	92	24	3-8	3.5	85	3-M8	18
SWT/A M70x2.0P	92	24	3-8	3.5	85	3-M8	18
SWT/A M72x2.0P	94	24	3-8	3.5	87	3-M8	18

Thread	D	h	n-g	t	d	n-m	MAX.Nm
SWT/A M75x2.0P	98	24	3-8	3.5	91	3-M8	18
SWT/A M76x2.0P	98	24	3-8	3.5	91	3-M8	18
SWT/A M80x2.0P	105	24	4-8	3.5	98	3-M8	18
SWT/A M85x2.0P	110	24	4-8	3.5	103	3-M8	18
SWT/A M90x2.0P	120	26	4-10	4	112	3-M8	18
SWT/A M95x2.0P	125	26	4-10	4	117	3-M8	18
SWT/A M100x2.0P	130	26	4-10	4	122	3-M8	18
SWT/A M105x2.0P	140	28	4-12	5	130	3-M8	18
SWT/A M110x2.0P	145	28	4-12	5	135	3-M8	18
SWT/A M115x2.0P	150	28	4-12	5	140	3-M8	18
SWT/A M120x2.0P	155	30	4-12	5	145	3-M8	18
SWT/A M125x2.0P	160	30	4-12	5	150	3-M8	18
SWT/A M130x2.0P	165	30	4-12	5	155	3-M8	18
SWT/A M135x2.0P	175	32	4-14	6	163	3-M10	35
SWT/A M140x2.0P	180	32	4-14	6	168	3-M10	35
SWT/A M145x2.0P	190	32	4-14	6	178	3-M10	35
SWT/A M150x2.0P	195	32	4-14	6	183	3-M10	35
SWT/A M155x3.0P	200	34	4-16	7	186	3-M10	35
SWT/A M160x3.0P	210	34	4-16	7	196	3-M10	35
SWT/A M165x3.0P	210	34	4-16	7	196	3-M10	35
SWT/A M170x3.0P	220	34	4-16	7	206	3-M10	35
SWT/A M180x3.0P	230	36	4-18	8	214	3-M12	60
SWT/A M190x3.0P	240	36	4-18	8	224	3-M12	60
SWT/A M200x3.0P	250	38	4-18	8	234	3-M12	60
SWT/A M210x4.0P	270	38	4-18	8	250	3-M12	60
SWT/A M220x3.0P	270	38	4-18	8	254	3-M12	85
SWT/A M220x4.0P	270	38	4-18	8	254	3-M12	85
SWT/A M240x4.0P	290	38	4-18	8	270	3-M12	85
SWT/A M260x3.0P	310	38	4-18	8	290	3-M12	85
SWT/A M260x4.0P	310	38	4-18	8	290	3-M12	85
SWT/A M280x4.0P	330	40	4-18	8	310	3-M12	85
SWT/A M300x4.0P	350	40	4-18	8	330	3-M12	85

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备注：①以上数据仅供参考，思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母  
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## PRECISION LOCK NUT 精密锁紧螺母

### SWT/N Series 系列 >

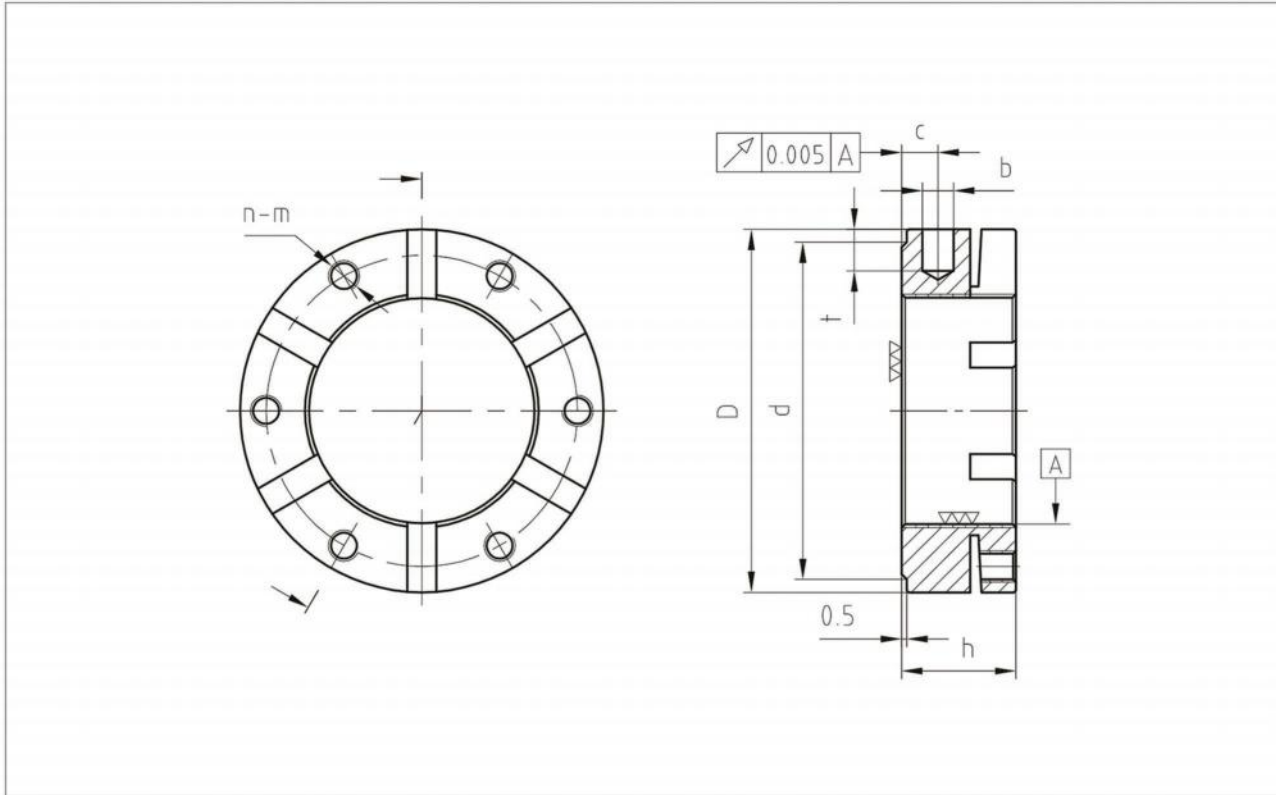
SWT/N型锁紧方式为通过4—6颗高强度平头螺钉支撑端面。利用钢材自身弹性，使螺纹变形锁定。其外部尺寸与K型接近，可互换。N型螺帽适用于易松脱或安装空装受限制的环境。

SWT/N series is locked by applying 4 to 6 high-strength flat screw to support the end surface, with the steel's elasticity, the thread is deformed to be locked. The external dimension is close to and can be interchanged with K-type nut. N-type nut is applicable for installation where the nut is easily loosened and the space is limited.

- > 材质 Material: 42CrMo, 45#, 40Cr
- > 硬度 Hardness: HRC28°—32°
- > 螺纹精度 Thread Precision: ISO4H
- > 平面偏摆 Run Out: 0.005mm







Thread	D	h	d	n-m	t	c	b	MAX.Nm
SWT/N M16x1.5	30	18	26	4-M5	5	5.5	4	4.5
SWT/N M17x1.0	32	18	28	4-M5	5	5.5	4	4.5
SWT/N M17x1.5	32	18	28	4-M5	5	5.5	4	4.5
SWT/N M18x1.5	36	18	32	4-M5	6	5.5	4	4.8
SWT/N M20x1.5	38	18	34	4-M6	6	5.5	4	8
SWT/N M22x1.5	40	18	36	4-M6	6	5.5	4	8
SWT/N M24x1.5	45	18	41	4-M6	7	5.5	5	8
SWT/N M25x1.5	45	20	41	4-M6	7	6	5	8
SWT/N M27x1.5	46	20	42	4-M6	7	6	5	8
SWT/N M28x1.5	46	20	42	4-M6	7	6	5	8
SWT/N M30x1.5	52	20	48	4-M6	7	6	5	8
SWT/N M32x1.5	54	22	49	4-M6	7	7	6	8
SWT/N M33x1.5	54	22	49	4-M6	7	7	6	8
SWT/N M35x1.5	58	22	53	4-M6	7	7	6	8
SWT/N M36x1.5	58	22	53	4-M6	7	7	6	8
SWT/N M38x1.5	60	22	55	4-M6	8	7	6	8
SWT/N M39x1.5	60	22	55	4-M6	8	7	6	8
SWT/N M40x1.5	65	22	60	4-M6	8	7	6	8
SWT/N M42x1.5	65	22	60	4-M6	8	7	6	8
SWT/N M45x1.5	70	22	65	6-M6	8	7	6	8
SWT/N M48x1.5	75	25	70	6-M6	8	8	6	8
SWT/N M50x1.5	75	25	70	6-M6	8	8	6	8
SWT/N M52x1.5	80	25	74	6-M8	8	8	6	8
SWT/N M55x1.5	85	25	79	6-M8	8	8	6	18
SWT/N M55x2.0	85	25	79	6-M8	8	8	6	18
SWT/N M56x2.0	85	26	79	6-M8	8	8	6	18

Thread	D	h	d	n-m	t	c	b	MAX.Nm
SWT/N M60x2.0	90	26	84	6-M8	10	8	6	18
SWT/N M64x2.0	95	28	89	6-M8	10	8.5	8	18
SWT/N M65x2.0	95	28	89	6-M8	10	8.5	8	18
SWT/N M68x2.0	98	28	91	6-M8	10	8.5	8	18
SWT/N M70x2.0	100	28	93	6-M8	10	9	8	18
SWT/N M75x2.0	106	28	99	6-M10	10	9	8	35
SWT/N M80x2.0	110	30	103	6-M10	10	9.5	8	35
SWT/N M85x2.0	115	32	108	6-M10	10	10	8	35
SWT/N M90x2.0	120	32	112	6-M10	10	10	8	35
SWT/N M95x2.0	125	32	117	6-M10	10	10	8	35
SWT/N M100x2.0	130	32	122	8-M10	10	10	8	35
SWT/N M105x2.0	135	32	125	8-M10	10	10	8	35
SWT/N M110x2.0	140	32	130	8-M10	10	10.5	8	35
SWT/N M115x2.0	145	34	135	8-M10	10	10.5	8	35
SWT/N M120x2.0	150	36	140	8-M10	10	11	10	35
SWT/N M125x2.0	160	36	150	8-M10	10	11	10	35
SWT/N M130x2.0	165	36	155	8-M10	10	11	10	35
SWT/N M135x2.0	175	38	163	8-M12	10	12	10	60
SWT/N M140x2.0	180	38	168	8-M12	10	12	10	60
SWT/N M145x2.0	190	38	178	8-M12	10	11.5	10	60
SWT/N M150x2.0	195	38	183	8-M12	10	12	10	60
SWT/N M155x2.0	200	38	186	8-M12	12	11	10	60
SWT/N M160x3.0	210	40	196	8-M12	12	12.5	12	60
SWT/N M170x3.0	220	40	206	8-M12	12	12.5	12	60
SWT/N M180x3.0	230	40	214	8-M12	12	12.5	12	60
SWT/N M190x3.0	240	40	224	8-M12	12	12.5	12	60
SWT/N M200x3.0	250	40	234	8-M12	12	12.5	12	60

备注: ①以上数据仅供参考, 思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母

Remark: ①The above data is just provided for reference, Jiangsu Swift Machinery Technology Co., Ltd reserves the right to revise it. ②1NM=10.2kgf.cm=0.73lb.ft ③Non-standard nut can be customized.

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## PRECISION LOCK NUT 精密锁紧螺母

### SWT/FA Series 系列 >

SWT/FA型锁紧螺母沿着圆周加工有四个凹槽；尺码在15或以下的螺母，加工有两个位置正对的平面，可以使用一般的扳手来将其夹紧。这种设计主要为满足高精度、安装简单和稳固的锁定等要求。

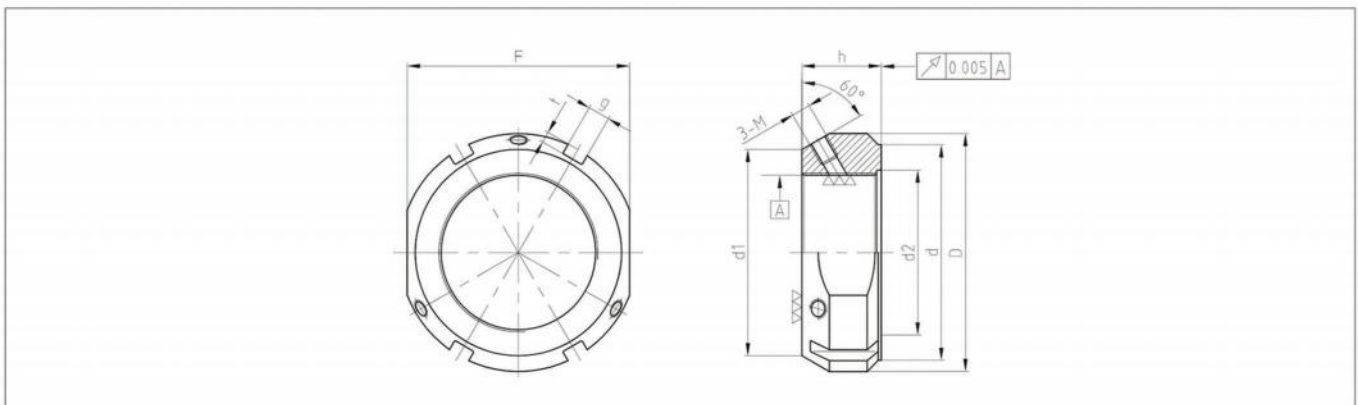
SWT/FA series lock nut has four grooves along the circumference. Nuts with size of 15 and below have two planes directly opposite each other, and can be clamped by general wrench. This design can meet requirements of high precision, easy installation and steady locking etc.

- > 材质 Material: 42CrMo,45#, 40Cr
- > 硬度 Hardness: HRC28°—32°
- > 螺纹精度 Thread Precision: ISO4H
- > 平面偏摆 Run Out: 0.005mm



Thread	d1	D	d	d2	h	g	t	F	MAX.Nm
SWT/FA M12x1.0P	23	30	25	13	14	4	2.5	27	4.5
SWT/FA M15x1.0P	26	33	28	16	16	4	2.5	30	4.5
SWT/FA M17x1.0P	29	37	33	18	18	5	2.5	34	8.0
SWT/FA M20x1.0P	32	40	35	21	18	5	2.5	36	8.0
SWT/FA M25x1.5P	36	44	39	26	20	5	2.5	41	8.0
SWT/FA M30x1.5P	41	49	44	32	20	5	2.5	46	8.0
SWT/FA M35x1.5P	46	54	49	38	22	5	2.5	50	8.0
SWT/FA M40x1.5P	56	65	59	42	22	6	3	60	8.0
SWT/FA M45x1.5P	61	70	64	48	22	6	3	65	8.0
SWT/FA M50x1.5P	65	75	68	52	25	7	3.5	70	8.0
SWT/FA M55x2.0P	74	85	78	58	25	7	3.5	80	18.0
SWT/FA M60x2.0P	78	90	82	62	26	8	4	85	18.0
SWT/FA M65x2.0P	83	95	87	68	28	8	4	90	18.0
SWT/FA M70x2.0P	88	100	92	72	28	8	4	95	18.0
SWT/FA M75x2.0P	93	105	97	77	28	8	4	100	18.0

Thread	d1	D	d	d2	h	g	t	F	MAX.Nm
SWT/FA M80x2.0P	98	110	100	83	32	8	3.5	100	18.0
SWT/FA M85x2.0P	107	120	110	88	32	10	4	110	35.0
SWT/FA M90x2.0P	112	125	115	93	32	10	4	115	35.0
SWT/FA M95x2.0P	117	130	120	98	32	10	4	120	35.0
SWT/FA M100x2.0P	122	135	125	103	32	10	4	130	35.0
SWT/FA M110x2.0P	132	145	134	112	32	10	4	140	35.0
SWT/FA M120x2.0P	142	155	144	122	32	10	4	150	35.0
SWT/FA M130x2.0P	152	165	154	132	32	12	5	160	35.0
SWT/FA M140x2.0P	162	175	164	142	32	14	6	170	35.0
SWT/FA M150x2.0P	172	185	174	152	32	14	6	180	35.0
SWT/FA M160x2.0P	182	195	184	162	32	14	6	190	35.0
SWT/FA M170x2.0P	192	205	194	172	32	14	6	200	35.0
SWT/FA M180x2.0P	202	215	204	182	32	16	7	210	35.0
SWT/FA M190x2.0P	212	225	214	192	32	16	7	220	35.0
SWT/FA M200x2.0P	222	235	224	202	32	18	8	230	35.0



## PRECISION LOCK NUT 精密锁紧螺母

### SWT/RN Series 系列 >

SWT/RN型锁紧螺母为方形，适用于轴承支撑座，内螺纹和端面同时加工完成，可确保组装的精度。

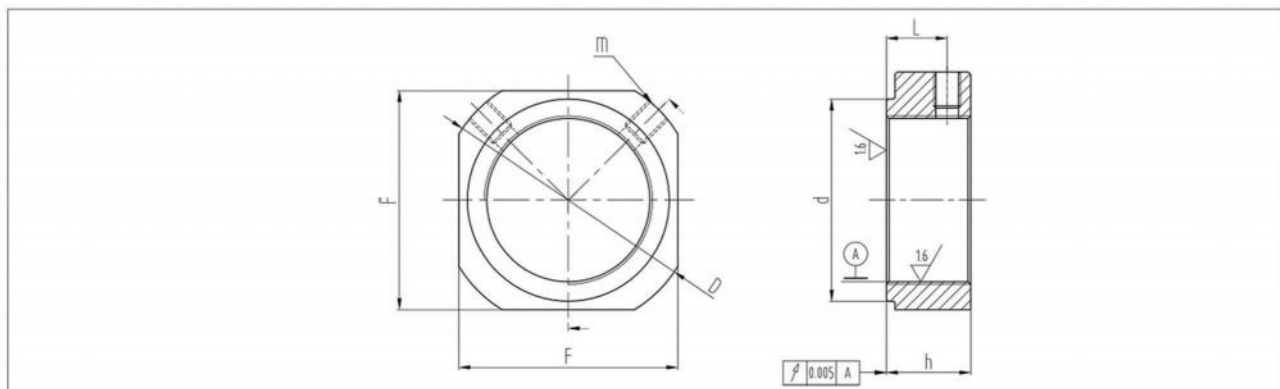
SWT/RN series lock nut is square, which is applicable for the bearing supporting seat. Inner thread and end surface are manufacture at the same time to ensure the precision of the composition.

- > 材质 Material: 42CrMo,45#, 40Cr
- > 硬度 Hardness: HRC28°—32°
- > 螺纹精度 Thread Precision: ISO4H
- > 平面偏摆 Run Out: 0.005mm



Thread	D	h	d	m	L	F	MAX.Nm
SWT/RN M8x1.0P	16	6.5	12	M4	3.5	14	0.9
SWT/RN M10x1.0P	19	8	14	M4	5	16	0.9
SWT/RN M12x1.0P	22	8	17	M4	5	19	3.5
SWT/RN M15x1.0P	25	8	20	M4	5.75	22	3.5
SWT/RN M17x1.0P	29	11	22	M5	7	24	3.5

Thread	D	h	d	m	L	F	MAX.Nm
SWT/RN M20x1.0P	35	13	28	M5	7	30	8
SWT/RN M25x1.5P	43	15	33	M6	10	35	8
SWT/RN M30x1.5P	48	20	38	M8	12	40	8
SWT/RN M35x1.5P	60	21	48	M8	13	50	8
SWT/RN M40x1.5P	62	25	48	M8	18	50	8



备注：①以上数据仅供参考，思维福特公司拥有修改权利 ②1Nm=10.2kgf.cm=0.73lb.ft ③可定制非标螺母  
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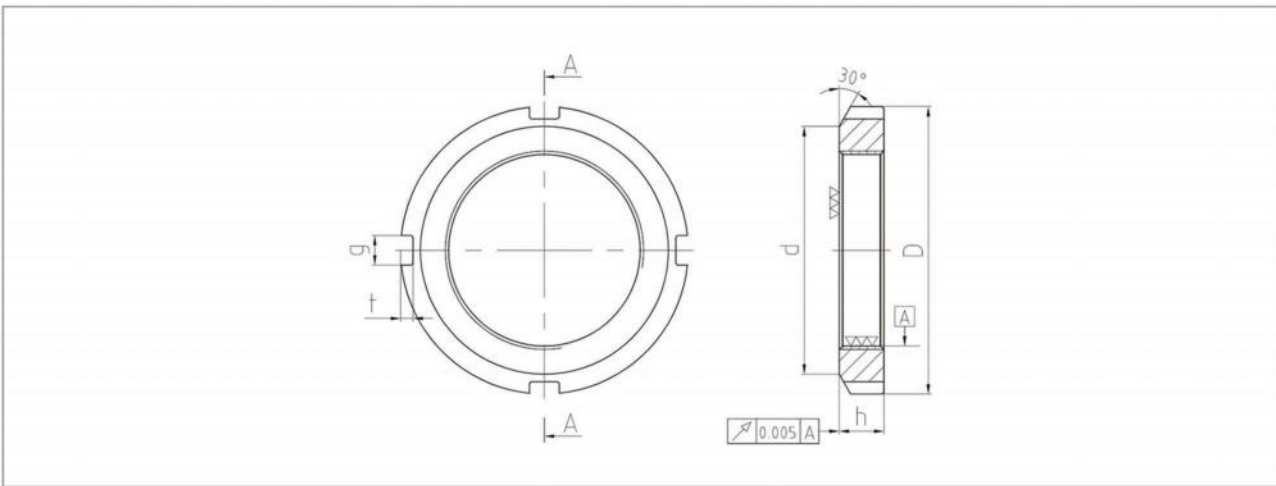
### SWT/AN Series 系列 >

SWT/AN型螺母结构简单，内螺纹和端面同时加工，可确保偏摆精度要求。

The structure is simple. Inner thread and end surface are manufactured at the same time so that the Run out can be ensured.

- > 材质 Material: 42CrMo, 45#, 40Cr
- > 硬度 Hardness: HRC28°—32°
- > 螺纹精度 Thread Precision: ISO4H
- > 平面偏摆 Run Out: 0.005mm





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Thread	D	h	g	t	d
AN 0 M10x0.75P	18	4	3	2	13.5
AN 1 M12x1.0P	22	4	3	2	17
AN 2 M15x1.0P	25	5	4	2	21
AN 3 M17x1.0P	28	5	4	2	22
AN 4 M20x1.0P	32	6	4	2	26
AN 5 M25x1.5P	38	7	5	2	32
AN 6 M30x1.5P	45	7	5	2	38
AN 7 M35x1.5P	52	8	5	2	44
AN 8 M40x1.5P	58	9	6	2.5	50
AN 9 M45x1.5P	65	10	6	2.5	56
AN 10 M50x1.5P	70	11	6	2.5	61
AN 11 M55x2.0P	75	11	7	3	67
AN 12 M60x2.0P	80	11	7	3	73
AN 13 M65x2.0P	85	12	7	3	79
AN 14 M70x2.0P	92	12	8	3.5	84
AN 15 M75x2.0P	98	13	8	3.5	90
AN 16 M80x2.0P	105	15	8	3.5	95
AN 17 M85x2.0P	110	16	8	3.5	102
AN 18 M90x2.0P	120	16	10	4	108

Thread	D	h	g	t	d
AN 19 M95x2.0P	125	17	10	4	113
AN 20 M100x2.0P	130	18	10	4	120
AN 21 M105x2.0P	140	18	12	5	126
AN 22 M110x2.0P	145	19	12	5	133
AN 23 M115x2.0P	150	19	12	5	137
AN 24 M120x2.0P	155	20	12	5	138
AN 25 M125x2.0P	160	21	12	5	148
AN 26 M130x2.0P	165	21	12	5	149
AN 27 M135x2.0P	175	22	14	6	160
AN 28 M140x2.0P	180	22	14	6	160
AN 29 M145x2.0P	190	24	14	6	172
AN 30 M150x2.0P	195	24	14	6	171
AN 31 M155x2.0P	200	25	16	7	182
AN 32 M160x3.0P	210	25	16	7	182
AN 33 M165x3.0P	210	26	16	7	193
AN 34 M170x3.0P	220	26	16	7	193
AN 36 M180x3.0P	230	27	18	8	203
AN 38 M190x3.0P	240	28	18	8	214
AN 40 M200x3.0P	250	29	18	8	226

备注：①以上数据仅供参考，思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母

Remark: ①The above data is just provided for reference, Jiangsu Swift Machinery Technology Co, Ltd reserves the right to revise it. ②1NM=10.2kgf.cm=0.73lb.ft ③Non-standard nut can be customized.

02

# 偏心螺母 (永不松动的螺母)

ECCENTRIC NUT

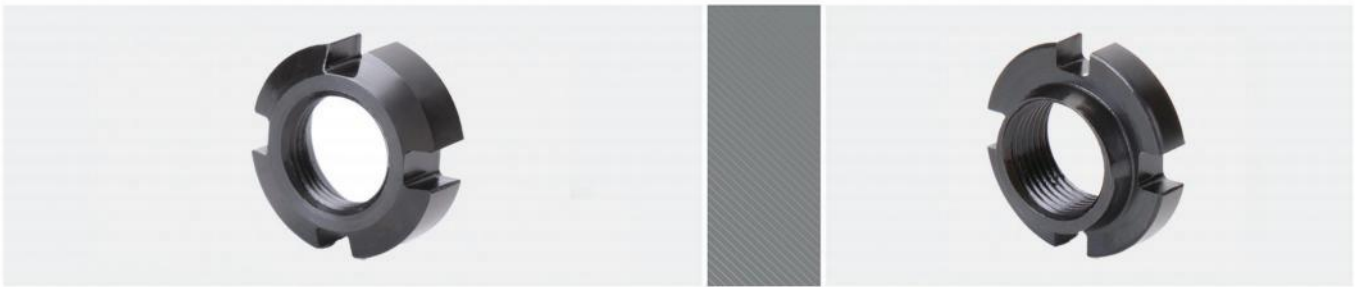


## ECCENTRIC NUT 偏心螺母 (永不松动的螺母)

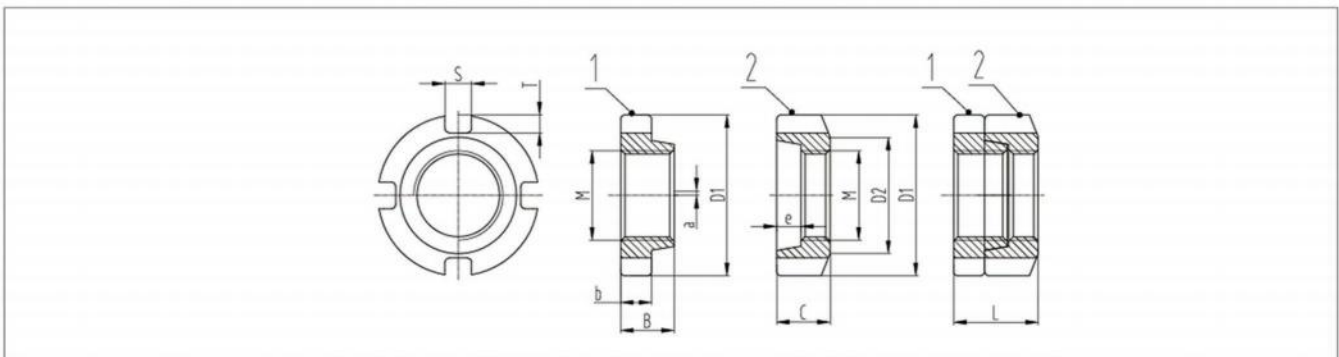
- > 材质 Material: 45#
- > 螺纹精度 Thread Precision: ISO4H
- > 平面偏摆 Run Out: 0.01mm

偏心锁紧螺母又称为重载锁紧螺母,这种锁紧螺母的特点是由两个螺母组成,下螺母在偏心的内外锥面处局部接触。因此,工作时除了具有一对螺母的螺纹拉紧力之外,还有偏心的楔紧力,施加的扭矩使两个螺母的锥面相互接触愈紧,产生的楔紧力就愈大。只要锁紧力足够,即可实现一次性锁紧,永不松动(即所谓的“咬死”现象);两偏心螺母之间的摩擦角远远小于标准自锁角,使自锁可靠。

Eccentric lock nut is also known as heavy load lock nut, this kind of lock nut is characterized by the composition of two nuts, nuts in eccentric inner and outer cone local contact. Therefore, in addition to the threading tension of a pair of nuts, there is an eccentric wedge tension. The applied torque makes the conical surface of the two nuts contact each other more tightly, and the wedge tension will be greater. As long as the locking force is sufficient, one-time locking can be realized and never loose (the so-called "bite death" phenomenon); The friction Angle between the two eccentric nuts is much smaller than the standard self-locking Angle, which makes the self-locking reliable.



螺纹公称 Nominal thread	一号螺母 Nut number one			二号螺母 Nut number two				一、二号螺母 One and two are common		组件厚度 Component thickness
MX 螺距 MX pitch	D1	B	b	D1	D2	C	e	S	T	L
M10X0.75	18	6	3.5	18	13	6	2.7	3	2	9.5
M12X1.0	22			22	17					
M15X1.0	25	7	4.5	25	21	7				
M17X1.0	28			28	24			8		
M20X1.0	32	8	5.5	32	26	8	4.2	5	2.5	13.5
M25X1.5	38	10	6	38	32	10				
M30X1.5	45			45	38		11			
M35X1.5	52	11	7	52	44	11	6	2.5	17	
M40X1.5	58	9	5	58	50	12				
M45X1.5	65	10	6	65	56	13				
M50X1.5	70	11	7	70	61	14				21



03

# 防松螺母

LOCKNUT



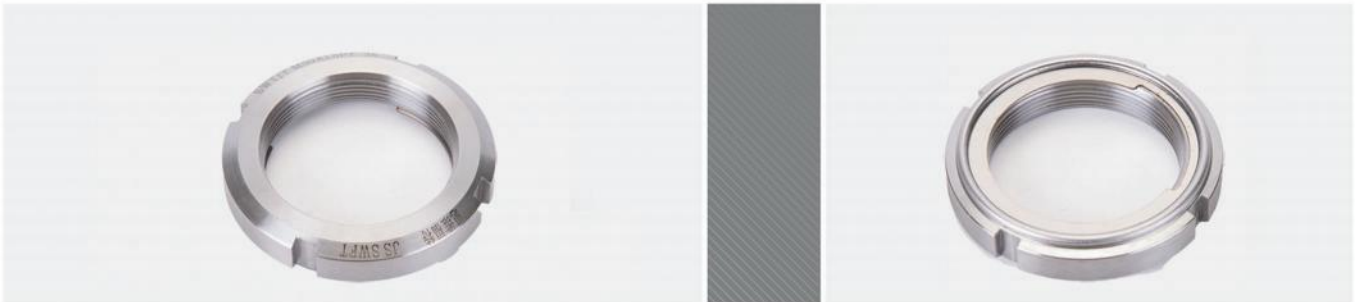


## LOCKNUT 防松螺母

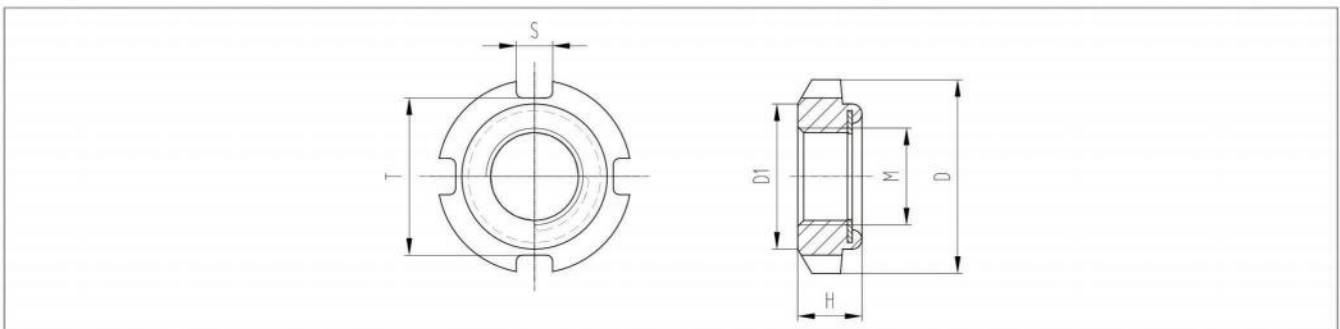
- > 材质 Material: 45#
- > 螺纹精度 Thread Precision: ISO4H
- > 平面偏摆 Run Out: 0.01mm

不受弹性垫圈的限制, 可进行任意位置锁紧, 不需要在轴上加工键槽、不需要另外的弹性垫圈、是划时代轴承用锁紧螺母, 不需要熟练地组装技术。

It is not limited by the elastic gasket country, and can be locked at any position. It does not need machining keyway on the shaft, does not need additional elastic washer, is the lock nut for epoch-making bearing, and does not need skilled assembly technology.



螺纹公称 Nominal thread MX 螺距 MX pitch	D	D1	H	S	T
M8X0.75	16	12	5.3	3	13
M10X0.75	18	13.5			14.5
M12X1.0	22	17			18.5
M15X1.0	25	21	6.5	4	21.5
M17X1.0	28	23			24.5
M20X1.0	32	25			28.5
M25X1.5	38	32	9	5	34
M30X1.5	45	38			41
M35X1.5	52	44			48
M40X1.5	58	50	11	6	53
M45X1.5	65	56			60
M50X1.5	70	61			65



备注: ①以上数据仅供参考, 思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母  
Remark: ①The above data is just provided for reference, Jiangsu Swift Machinery Technology Co, Ltd reserves the right to revise it. ②1NM=10.2kgf.cm=0.73lb.ft ③Non-standard nut can be customized.

## Solutions to the Failures of SWIFT Nuts

### 使用SWIFT螺母常发生问题解决方法 >

产生现象 Failures	查看原因 Reasons
<p>SWIFT螺母与外螺纹无法配合锁入。</p> <p>SWIFT nuts can not match with and locked into the external thread.</p> <p>解决方案 Solutions  &gt;</p>	<ul style="list-style-type: none"> <li>① 内、外螺纹螺距是否相符：检测内、外螺纹的螺距是否一样。</li> <li>② 螺纹有效径是否符合公差：外螺纹使用千分尺检测是否符合公差。</li> <li>③ 内、外螺纹牙型外观是否损伤产生毛刺：外螺纹是否有损伤或毛刺，如果有毛刺，用三角钻石锉刀清除即可。</li> <li>④ 内、外螺纹的左、右旋是否相符：内、外螺纹左、右旋是否一样。</li> <li>⑤ 内、外螺纹公称外径的是否相符：使用游标卡尺检测其内、外径是否同一规格尺寸。</li> <li>⑥ 外螺纹的外径是否过大：使用分厘卡键槽齐外径尺寸。</li> <li>⑦ 外螺纹的牙型是否标准：利用光学投影机检查其牙型是否为60度。</li> </ul> <ul style="list-style-type: none"> <li>① <b>Whether the inner thread pitch is conforming to that of the external thread pitch:</b> Check whether the inner thread and external thread are the same.</li> <li>② <b>Whether the effective diameter of the thread complies with the tolerance:</b> Check the external thread by the micrometer to ensure that it is accordance with the tolerance.</li> <li>③ <b>Whether there are damages and burrs on the inner and external thread form:</b> Check if there is any damage or burr on the external thread. If yes, use the triangle diamond file to remove it.</li> <li>④ <b>Whether the left and right rotations of inner and external thread are matched:</b> Check whether the left and right rotations of inner and external thread are matched.</li> <li>⑤ <b>Whether the nominal outside diameter of inner and external thread are matched:</b> Check whether the inner and external diameter are the same in size by vernier caliper.</li> <li>⑥ <b>Whether the outer diameter of external thread is too large:</b> Use micrometer key groove to check the outer diameter.</li> <li>⑦ <b>Whether the thread form of external thread is standard:</b> Use optical projector to check whether the thread form is kept as 60 degree.</li> </ul>
<p>SWIFT螺母与外螺纹无法配合锁入后无法拆卸。</p> <p>SWIFT nuts can not match with the external thread. After locking into the nuts can not be removed.</p> <p>解决方案 Solutions  &gt;</p>	<ul style="list-style-type: none"> <li>① 螺母锁定螺距是否放松：拆卸SWIFT螺母应切记，即使松开螺丝后，锁紧铜仍未放松，用铜棒在靠近螺丝处轻轻敲打螺母，即可将锁紧铜松开，就可以不费力地将螺母卸下。</li> <li>② 内、外螺纹牙型是否清洗干净：使用前将内、外螺纹清洗干净并加上润滑油，拆卸前将外螺纹表面清洗干净，并加入润滑油。</li> <li>③ 外螺纹外观是否有损伤：目测牙型外观是否遭受撞击，如果有请用三角锉刀将其清除干净后，再用细砂纸抛光处理。</li> </ul> <ul style="list-style-type: none"> <li>① <b>Whether the lock screw of the nut is loosened:</b> Please remember that when you remove SWIFT nuts, the lock copper is not loosened even if the screw is loosened. Slightly hit the nut close to the screw with copper rod, which can help to loosen the lock copper and remove the nut without any efforts.</li> <li>② <b>Whether the thread form of inner and external thread is clean:</b> Clean the inner and external thread and apply some lubrication before you use it. Before the dis-assembly, clean the surface of the external thread and apply some lubrication.</li> <li>③ <b>Whether the appearance of external thread is damaged:</b> Check whether the thread form is struck by eyes. If yes, use the triangle file to remove the burr and polish it with finely abrasive paper.</li> </ul>
<p>SWIFT螺母与外螺纹配合锁入后仍容易松脱。</p> <p>SWIFT nuts are easily loose after locking into the external thread.</p> <p>解决方案 Solutions  &gt;</p>	<ul style="list-style-type: none"> <li>① 内、外螺纹有效径配合公差大：检查外螺纹有效径是否过小（建议主轴PD值约<math>\leq 0.01</math>至<math>0.07</math>mm及滚珠螺杆PD值约<math>\leq 0.04</math>至<math>0.09</math>mm）。</li> <li>② 选用不当型号之螺母：依据不同机型，使用不同型号之螺母。</li> <li>③ 螺丝是否固定：螺母锁入后，须将螺丝固定确认。</li> </ul> <ul style="list-style-type: none"> <li>① <b>Large tolerance of fit for the effective diameter of the inner and external thread:</b> Check if the effective diameter of the external thread is too small (It is recommended that the PD value of main shaft is within 0.01 to 0.07mm and the PD value of ball screw is within 0.04 to 0.09mm.)</li> <li>② <b>The model of the nut is not correctly selected:</b> Select different models of nut according to the model of the equipment.</li> <li>③ <b>Whether the screw is fixed:</b> After the nut is locked, confirm the screw is fixed.</li> </ul>
<p>SWIFT螺母与外螺纹锁入后精度不良。</p> <p>Inappropriate precision after SWIFT nuts are locking into the external thread.</p> <p>解决方案 Solutions  &gt;</p>	<ul style="list-style-type: none"> <li>① 外螺纹与轴心中心线是否垂直：外螺纹在车削或研磨时，是否注意其精度及制造过程。</li> <li>② 螺母三点螺丝铜锁定不正确：首先应分别轻轻锁入螺丝，直到锁紧铜与螺纹契合，然后再依序均衡地锁入各螺丝。</li> <li>③ 螺母锁定工具选用是否正确：不可使用不正当工具敲击，须用扭力扳手锁紧。</li> <li>④ 内、外螺纹是否清洁：使用前须将内、外螺纹清洗干净并加入少许润滑油。</li> </ul> <ul style="list-style-type: none"> <li>① <b>Whether the external thread is perpendicular to the central line of the shaft:</b> Pay attention to the precision and manufacturing process during the turning or grinding of the external thread.</li> <li>② <b>The three-point screw copper of the nut is not correctly locked:</b> Firstly, lock the screw slightly until the screw copper is matched with the thread. Then evenly lock each screw in sequence.</li> <li>③ <b>Whether the tool is correctly selected for locking the nut:</b> Don't strike by using wrong tools. Please fasten it with torque wrench.</li> <li>④ <b>Whether the inner and external thread are clean:</b> Clean the inner and external thread and apply a little of lubrication oil.</li> </ul>

04

# 液压螺母

HYDRAULIC NUT



## BEARING HYDRAULIC NUT 轴承液压螺母

### SWT/SF Series系列 >

在锥形轴或锥套上安装轴承是一项艰巨而耗时的的工作。使用SWIFT液压螺母，可方便、快捷地获得安装轴承所需的高压驱动力。拆卸安装在紧定套或退卸套上的轴承往往也是一件困难和耗时的的工作。使用SWIFT液压螺母可以减少这些问题的出现。在力的作用下，油被泵入螺母，活塞被推出，而这足以松开轴套。

Mounting bearings on tapered seatings can be a difficult and time-consuming job. Using a SWIFT Hydraulic Nut facilitates easy and quick application of the high drive-up forces required for mounting bearings.

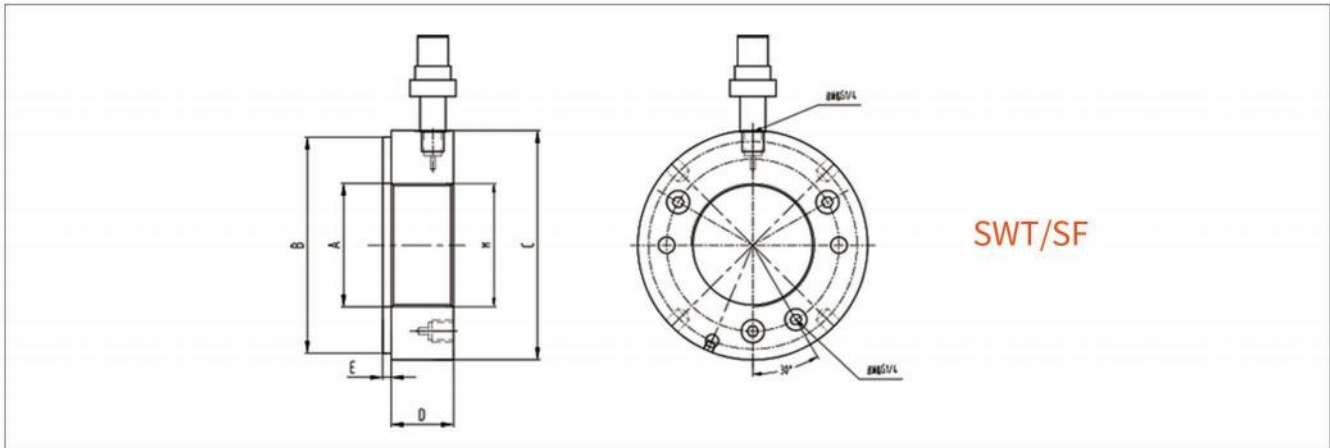
Dismounting bearings mounted on either adapter or withdrawal sleeves is also often a difficult and time-consuming job. These problems can be reduced with the use of a SWIFT Hydraulic Nut. Oil is pumped into the nut and the piston is pushed out with a force, which is sufficient to free the sleeve.

#### 使用范围 Application Scope

- > 安装及拆卸轴承 Install and remove the bearing
- > 安装及拆卸螺旋桨，舵瓦等 Install and remove the propeller, rudder tile, etc.
- > 拆卸高压的接全面，如火车轮、联轴器、飞轮及齿轮等 Remove high-pressure connection surfaces, such as train wheel, coupling, flywheel and gear, etc.

螺纹 Thread	A	B	C	D	E	允许活塞位移 Piston displacement	最大压力 MAX.Mpa
M50x1.5	50.5	104	114	38	4	5	80Mpa
M55x2	55.5	109	120	38	4	5	80Mpa
M60x2	60.5	115	125	38	5	5	80Mpa
M65x2	65.5	121	130	38	5	5	80Mpa
M70x2	70.5	127	135	38	5	5	80Mpa
M75x2	75.5	132	140	38	5	5	80Mpa
M80x2	80.5	137	146	38	5	5	80Mpa
M85x2	85.5	142	150	38	5	5	80Mpa
M90x2	90.5	147	156	38	5	5	80Mpa
M95x2	95.5	153	162	38	5	5	80Mpa
M100x2	100.5	158	166	38	6	5	80Mpa
M105x2	105.5	163	172	38	6	5	80Mpa
M110x2	110.5	169	178	38	6	5	80Mpa
M115x2	115.5	174	182	38	6	5	80Mpa
M120x2	120.5	179	188	38	6	5	80Mpa
M125x2	125.5	184	192	38	6	5	80Mpa
M130x2	130.5	190	198	38	6	5	80Mpa
M135x2	135.5	195	204	38	6	5	80Mpa
M140x2	140.5	200	208	38	7	5	80Mpa
M145x2	145.5	206	214	39	7	5	80Mpa
M150x2	150.5	211	220	39	7	5	80Mpa
M155x3	155.5	218	226	39	7	5	80Mpa
M160x3	160.5	224	232	40	7	6	80Mpa
M165x3	165.5	229	238	40	7	6	80Mpa
M170x3	170.5	235	244	41	7	6	80Mpa
M180x3	180.5	247	256	41	7	6	80Mpa
M190x3	191	259	270	42	8	7	80Mpa
M200x3	201	271	282	43	8	8	80Mpa
Tr205x4	207	276	288	43	8	8	80Mpa
Tr210x4	212	282	294	44	8	9	80Mpa
Tr215x4	217	287	300	44	8	9	80Mpa
Tr220x4	222	293	306	44	8	9	80Mpa

螺纹 Thread	A	B	C	D	E	允许活塞位移 Piston displacement	最大压力 MAX.Mpa
Tr225x4	227	300	312	45	8	9	80Mpa
Tr230x4	232	305	318	45	8	9	80Mpa
Tr235x4	237	311	326	46	8	10	80Mpa
Tr240x4	242	316	330	46	9	10	80Mpa
Tr250x4	252	329	342	46	9	10	80Mpa
Tr260x4	262	341	356	47	9	11	80Mpa
Tr270x4	272	352	368	48	9	12	80Mpa
Tr280x4	282	363	380	49	9	12	80Mpa
Tr290x4	292	375	390	49	9	13	80Mpa
Tr300x4	302	386	404	51	10	14	40Mpa
Tr310x5	312	397	416	52	10	14	40Mpa
Tr320x5	322	409	428	53	10	14	40Mpa
Tr330x5	332	419	438	53	10	14	40Mpa
Tr340x5	342	430	450	54	10	14	40Mpa
Tr345x5	347	436	456	54	10	14	40Mpa
Tr350x5	352	442	464	56	10	14	40Mpa
Tr360x5	362	455	472	56	10	15	40Mpa
Tr365x5	367	460	482	57	11	15	40Mpa
Tr370x5	372	466	486	57	11	16	40Mpa
Tr380x5	382	476	498	58	11	16	40Mpa
Tr385x5	387	483	504	58	11	16	40Mpa
Tr400x5	402	499	522	60	11	17	40Mpa
Tr410x5	412	510	534	61	11	17	40Mpa
Tr420x5	422	522	546	61	11	17	40Mpa
Tr430x5	432	532	556	62	11	17	40Mpa
Tr440x5	442	543	566	62	12	17	40Mpa
Tr450x5	452	554	580	64	12	17	40Mpa
Tr460x5	462	565	590	64	12	17	40Mpa
Tr470x5	472	576	602	65	12	18	40Mpa
Tr480x5	482	587	612	65	12	19	40Mpa
Tr490x5	492	597	624	66	12	19	40Mpa
Tr500x5	502	609	636	67	12	19	40Mpa



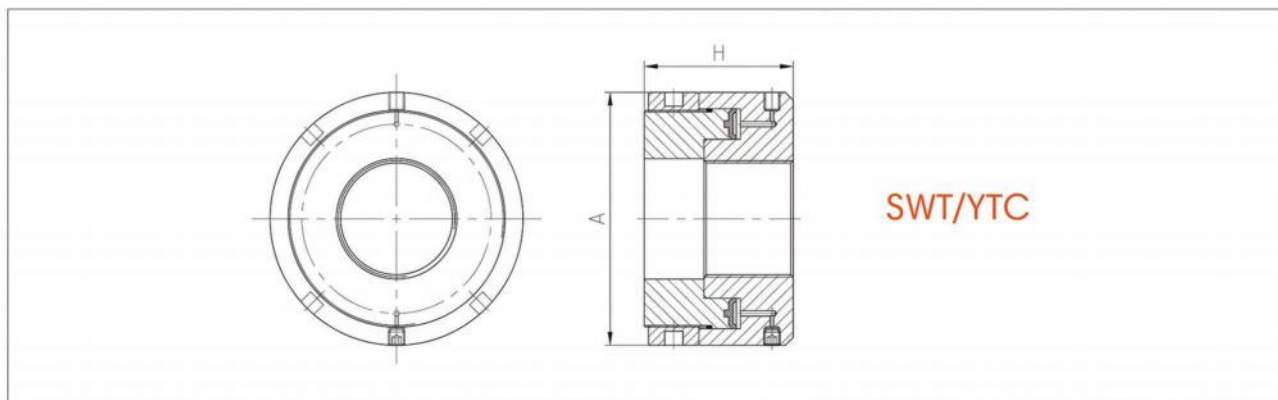
## SWT/YTC Series 系列 >

- > 由于采用超高压液压系统，尺寸与原有传统螺母匹配，无需修改原有螺栓副设计  
With extra high hydraulic system, the dimension can be matched with original nut, and there is no need to change the original design.
- > 无需扳手及套筒的空间，螺栓副的尺寸更紧凑  
No need to consider space for wrench and socket, and the design of bolt is more compact.
- > 通过淬压拉伸螺栓，预定载荷更精确，紧固更可靠  
Stretch the bolt through quenching pressure to ensure more precise preload and more reliable tightening.
- > 适用于油田/矿山/电厂/石化/船舶/钢铁/电力  
Applicable to oil field/mine/power plant/petrochemical/ship/steel/electric power.



螺纹 Thread	Inch	A	H	行程 Stroke	面积 Oil Area	MAX.Mpa
SWT/YTC M22	7/8"	57	57/45	4	1280	192
SWT/YTC M39	1-1/2"	87	87/58	5	1995	300
SWT/YTC M52	2-1/8"	117	117/67	8	3665	550
SWT/YTC M56	2-1/4"	128	128/67	8	4371	656
SWT/YTC M105	4-1/8"	243	243/125	15	16061	2410
SWT/YTC M115	4-1/2"	267	267/145	15	19324	2899

螺纹 Thread	Inch	A	H	行程 Stroke	面积 Oil Area	MAX.Mpa
SWT/YTC M125	5"	295	295/152	15	24247	3637
SWT/YTC M130	5-1/8"	303	303/155	15	25104	3766
SWT/YTC M140	5-1/2"	328	328/170	15	29145	4372
SWT/YTC M150	6"	356	356/185	15	35124	5269
SWT/YTC M170	6-3/4"	400	400/208	15	43922	6588



精密锁紧螺母  
PRECISION LOCK NUT

液压螺母  
HYDRAULIC NUT

压块  
POWDER METALLURGICAL PRODUCT

轴承座  
SUPPORT UNIT

## BEARING HYDRAULIC NUT 黄油液压螺母

### SWT/HY Series系列 >

用途极为广泛的液压夹紧装置，可用作螺母、螺钉或间隔环。对于特殊应用，环形夹紧面可以向内或向外调整。

压紧螺钉固定在底座上，因此设计高度极低，独立的液压系统由压力螺钉驱动。这样产生的轴向夹紧力是机械方法的数倍，与机械预应力无关。

有效夹紧压力通常由一个两级等距夹紧压力指示器根据内部液压进行调节和监控。

液压不会产生任何径向力，从而使部件保持在对齐位置。液压缓冲夹紧表面可提供安全、明确的轴向夹紧压力，即使是在零件不平行的情况下也是如此。

在这种情况下，不需要扳手、加长杆和锤子等机械夹紧所需的辅助工具，这意味着可以进一步节省劳动力、防止事故和缩短安装时间。



Extremely versatile hydraulic clamping device. It can be used as a nut, screw or spacer ring. For special applications the annular clamping surface can be inwardly or outwardly adapted.

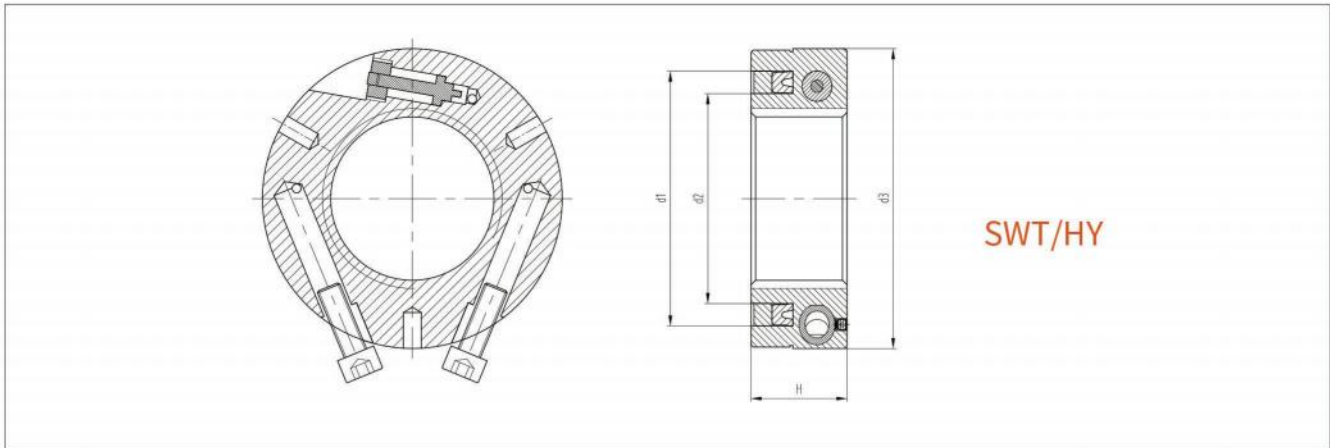
The pressure screws, positioned secantally in the base frame, allow an extremely low design. The self-contained hydraulic system is actuated by the pressure screws. The axial clamping power thus generates amounts to many times being obtainable by mechanical means, regardless of the mechanical prestressing.

The effective clamping pressure is adjusted and monitored by what is usually a 2-stage secantal clamping pressure indicator, according to the internal hydraulic pressure.

The hydraulic pressure does not generate any radial force, so that the parts remain in the aligned position. The hydraulically cushioned clamping surface allows a secure, defined axial clamping pressure, even in the case of non-parallel parts.

The aids required for mechanical clamping, such as wrench, extensions and hammers are not required in the case which means a further contribution to labour saving, accident prevention and reduced setup times.





螺纹 (可定制)	d1	d2	d3	H	最大压力 MAX.KN
18	34	24	57	30	4
24	52	42	60	33	5
27	52	42	65	33	5
32	56	40	70	33	3-6
40	62	50	75	33	3-7
50	74	60	85	33	4-8
60	85	70	100	32	6-10
70	100	85	119	33	6-12
80	120	105	130	33	8-15
100	132	120	150	47	10-20
120	160	138	173	47	10-20
140	175	155	198	47	12-25
160	200	180	220	47	12-25

精密锁紧螺母  
PRECISION LOCK NUT

液压螺母  
HYDRAULIC NUT

压块  
POWDER METALLURGICAL PRODUCT

轴承座  
SUPPORT UNIT

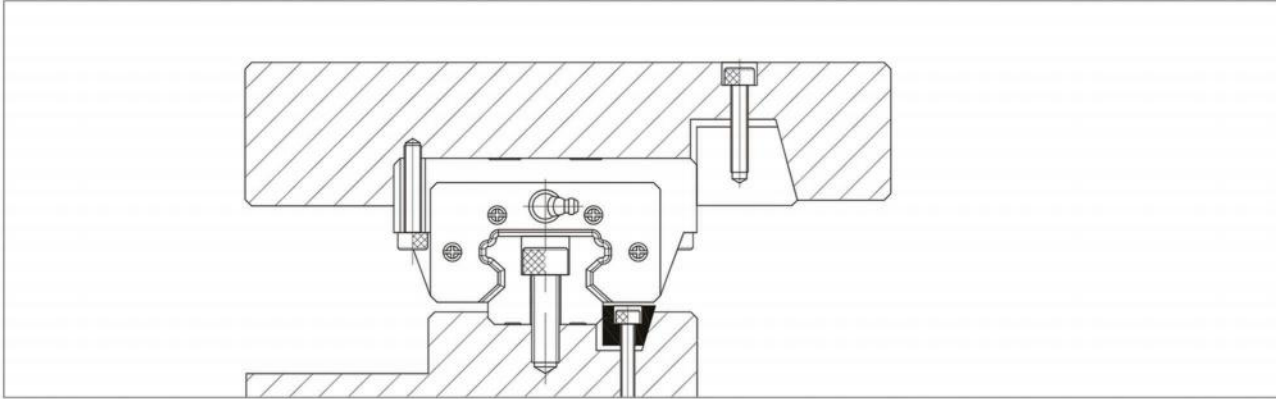
05

# 压块

POWDER METALLURGICAL PRODUCT







### 楔块主要用于调整精密线轨的平行度

现在机械制造厂家使用的经过铣削钻孔等工序完成的线轨楔块，因加工工序非一次装夹完成而导致楔块的尺寸不一致，同样因使用数量少而分散使楔块的成本相对较高。江苏思维福特机械科技股份有限公司生产的楔块使用粉末冶金和高精度磨具一次冲压完成，批量生产有效地降低了成本，其加工工艺保证了所有同规格线轨楔块的尺寸百分之百一致，因使用粉末冶金材料，楔块不易变形断裂，当床台受到振动、冲击力的作用时，滑轨很可能偏离原来的固定位置，而影响精度。为避免发生类似的情况，建议使用上图所示的固定方式固定滑轨，以确保机台的运行精度。

Nowadays, linear guide rail block manufactured through procedures such as milling and drilling etc, are different in sizes due to that single clamping cannot be realized. Likewise, due to small and dispersed demands, the manufacturing cost of the wedge block remains at a relatively high level. Jiangsu Swift Machinery Technology Co, Ltd produces wedge block by powder metallurgy and high-precision mold and with only single punching. The mass production has effectively reduce the cost and the machining process has guaranteed that all the wedge blocks with the same specification are 100% the same in the size. Thanks to the powder metallurgy material, the wedge block will not easily be deformed and cracked. When the machine platform is vibrated and affected by the impact force, the slide rail is likely to deviate from the original position, which will affect the original precision. To avoid such case, it is recommended to use the method shown in the above photo to fix the slide rail so that the operation precision can be ensured for the tool machine.

精密锁紧螺母  
PRECISION LOCK NUT

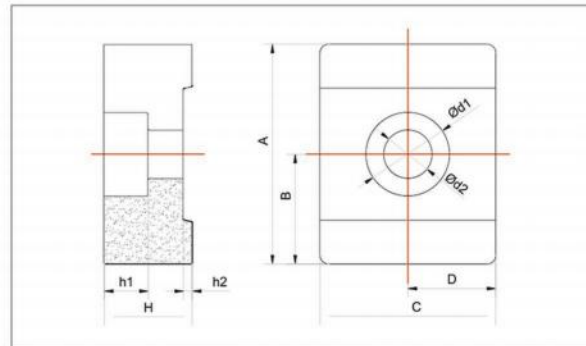
液压螺母  
HYDRAULIC NUT

粉末冶金产品  
POWDER METALLURGICAL PRODUCT

轴承座  
SUPPORT UNIT

## POWDER METALLURGICAL PRODUCT 压块

### Bridge-type Powder Metallurgical Product 桥式压块 >

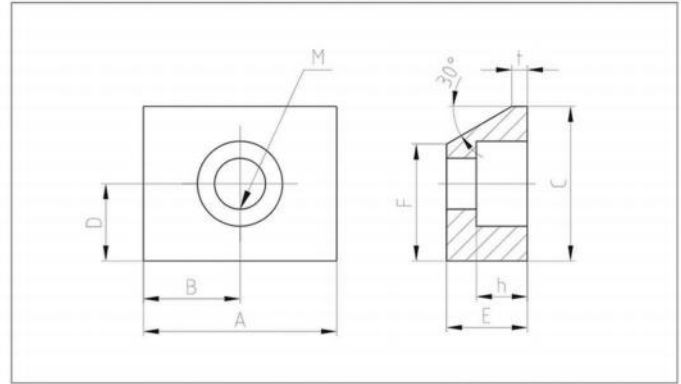


Model	A	B	C	D	H	h1	h2	$\phi d1$	$\phi d2$
TS3	25	12.5	20	10	10	5	1	9.5	5.5
TS30	20	7	15	7.5	10	8.5	1.5	6.9	—

备注：①以上数据仅供参考，思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母  
Remark: ①The above data is just provided for reference, Jiangsu Swift Machinery Technology Co, Ltd reserves the right to revise it. ②1NM=10.2kgf.cm=0.73lb.ft ③Non-standard nut can be customized.

## POWDER METALLURGICAL PRODUCT 压块

### 30° Series Powder Metallurgical Product 系列 >



Model	A	B	C	D	E	F	M	h	t
T1	20	10	16	7	9.4	11.73	Φ5.5×Φ9.5	5.4	2
T2	25	12.5	20	8	10.4	15.09	Φ6.6×Φ11	6	2
T3	30	15	24	9	13.6	17.22	Φ9×Φ14	8.3	2
T4	30	15	28	11	14	21.07	Φ11×Φ18	10	2
T5	40	20	35	11.5	20	24.61	Φ11×Φ18	11	2
K1	20	10	17.5	7	7.5	14	Φ5.5×Φ9.5	5	1.44
K2	20	10	18.5	8	9.5	15	Φ6.5×Φ11	6	3.45
A1	20	10	16	8	9.4	11.68	Φ5.5×Φ9.5	5.45	2
A2	25	12.5	20	10	10.45	15.07	Φ6.6×Φ11	6.6	2
A3	30	15	24	12	13.65	17.27	Φ9×Φ14	8.5	2
ZJ3	35	17.5	34.4	13.5	20	23.43	Φ11×Φ18	11	1

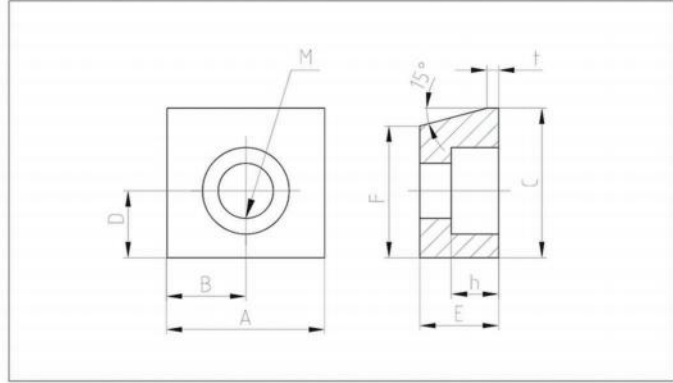
#### ▶ 8° 系列压块 8° Series Powder Metallurgical Product



▲ 30° 系列压块  
30° Series Powder Metallurgical Product

▲ 15° 系列压块  
15° Series Powder Metallurgical Product

## 15° Series Powder Metallurgical Product 系列 >



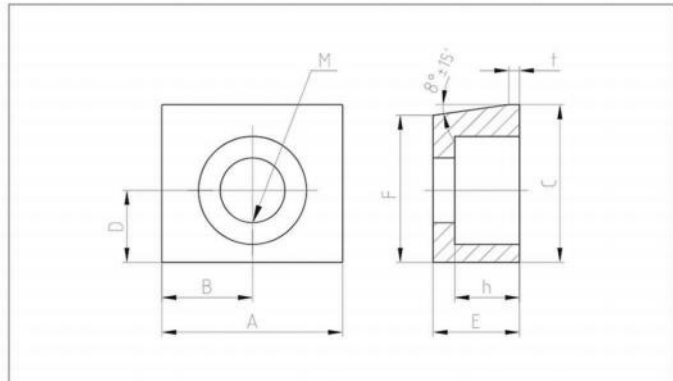
Model	A	B	C	D	E	F	M	h	t
Y1	30	15	39.7	18	12	36.89	Φ9×Φ15	8	1.5
Y2	30	15	36.2	15	20	31.24	Φ9×Φ15	8	1.5
Y3	30	15	19.05	8.5	11	16.5	Φ7×Φ12	6	1.5
Y4	20	10	19	8.5	10	16.43	Φ7×Φ11	6	1
ZJ1	35	17.5	29.5	13.5	18	24.94	Φ11×Φ18	10	1
ZJ2	35	17.5	29.7	13.5	20	24.66	Φ11×Φ18	11	1
ZJ4	30	15	22.75	10	13	19.55	Φ9×Φ15	9	1.06
SY1	35	17.5	34.73	15	25	28.3	Φ11×Φ18	11	1
SY2	20	10	21.46	10	18	17.16	Φ9×Φ15	9	2
K3	25	12.5	22	10.5	12	19.32	Φ9×Φ14	8	2

PRECISION LOCK NUT  
精密锁紧螺母

HYDRAULIC NUT  
液压螺母

POWDER METALLURGICAL PRODUCT  
压块

## 8° Series Powder Metallurgical Product 系列 >



Model	A	B	C	D	E	F	M	h	t
ZX10	22	11	17.95	8.5	10	16.69	Φ6.6×Φ11	6.8	1
ZX12	25	12.5	21.90	10	12	20.18	Φ9×Φ15	8	1
ZX14	25	12.5	21.86	10	14	20.03	Φ9×Φ15	9	1
ZX16	30	15	24.96	12	16	22.85	Φ11×Φ18	11	1

SUPPORT UNIT  
轴承座

备注：①以上数据仅供参考，思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母  
Remark: ①The above data is just provided for reference, Jiangsu Swift Machinery Technology Co, Ltd reserves the right to revise it. ②1NM=10.2kgf.cm=0.73lb.ft ③Non-standard nut can be customized.

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# 轴承座

SUPPORT UNIT



## Schematic Diagram of Installation and Combination for the Supporting Bearing of SWT Ball Screw

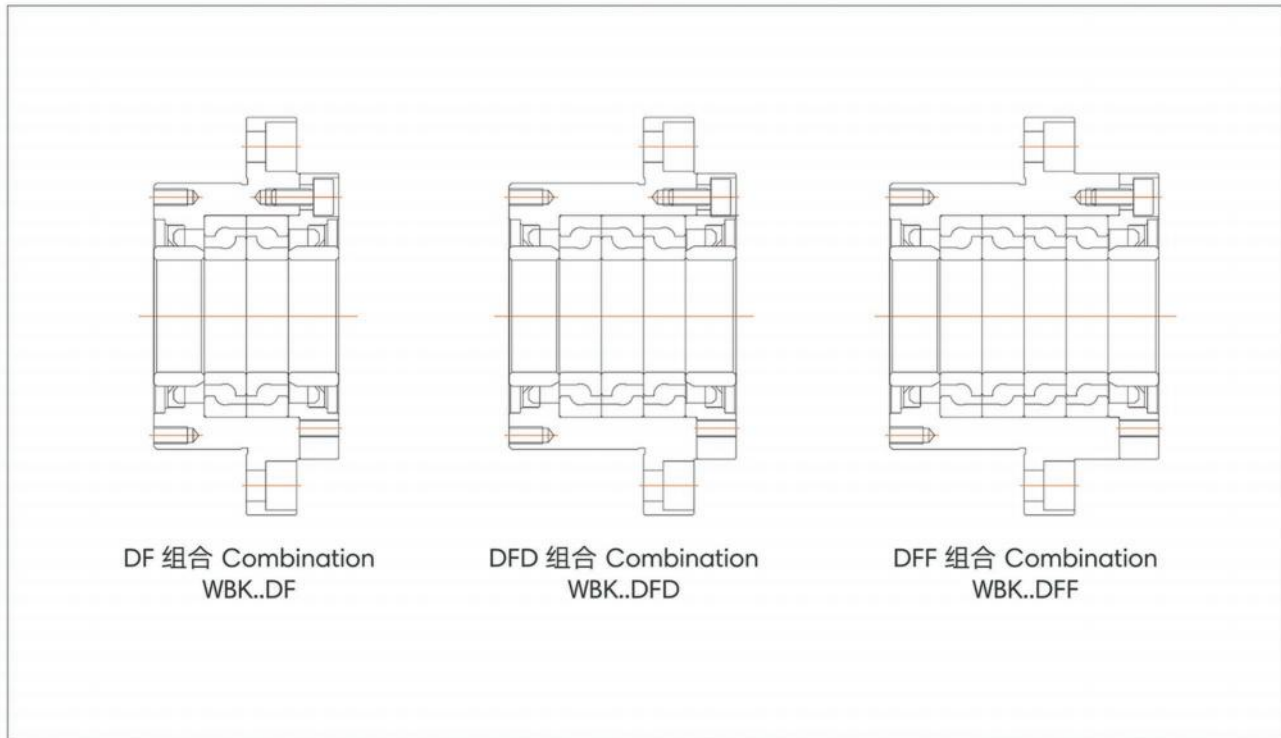
### SWT滚珠丝杆支撑单元轴承安装组合方式示意图 >

高负荷机床用支撑单元采用的支撑轴承,是具有最佳性能与构造的高精度,高刚度滚珠丝杆支撑用推力角接触球轴承(TAC系列)。组合方式有下图所示的3种。

Supporting bearing applied in the high-load machine tool is angular contact thrust ball bearing (TAC series). TAC series are used for the supporting of the ball screw with high precision and rigidity, and can ensure the best performance and structure. There are three combinations shown as below.

#### 特点 Features

- > 因为具有防尘盖设计,所以可以简化用户的滚珠丝杆支撑部设计。  
With dust-proof design, design for the supporting part of the ball screw can be simplified.
- > 由于对轴承的预紧进行预先管理并安装完成,故可以省掉轴承安装的工序。  
Bearing preload is managed and installed in advance, some steps can be omitted for installation.



精密锁紧螺母  
PRECISION LOCK NUT

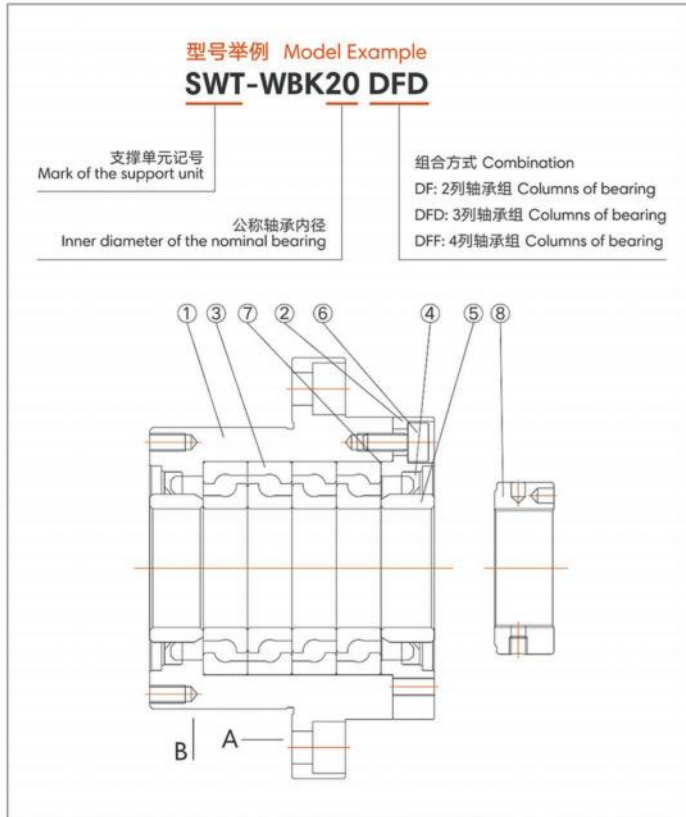
液压螺母  
HYDRAULIC NUT

粉末冶金产品  
POWDER METALLURGICAL PRODUCT

支撑座  
SUPPORT UNIT

## Support Unit 轴承座

### SWT-WBK Series 系列 >



### 支撑单元的型号构成

#### Model Composition of the Support Unit

1. 在机械安装时，以 A、B 为基准。
  2. SWT 的支撑单元采用了高精度预紧调节，零件①②③④⑤⑥⑦⑧为一体设计，故请不要分解。
  3. 轴承内已填润滑脂。
  4. 锁紧螺母为严格控制了对三角螺纹的端面垂直度的滚珠丝杆专用锁紧螺母。为避免松动，请拧紧防滑小螺丝滚珠丝杆。支撑用推力角接触球轴承为TAC系列。
1. Install based on A and B.
  2. High-precision preload adjustment is used in SWT support unit. The components ① to ⑧ constitute an integrated design. Do not disassemble them.
  3. Lubricating grease is filled in the bearing.
  4. The lock nut is specially designed for the ball screw, which can strictly control the perpendicularity to the end surfaces of the triangle thread. To avoid any loose, please securely tighten the ball screw of the anti-skid screw. TAC series of the thrust angular contact ball bearing is applied for support.

序号 (Ref)	零件名称 (Name of the Component)	数量 (Qty)
①	轴承座 Support Unit	1
②	压盖 Press Cover	1
③	滚珠丝杆支撑用推力角接触球轴承 Thrust Angular Contact Ball Bearing for the Support The Ball Screw	1套 Set
④	防尘密封盖 Dust-proof Sealing Cover	2
⑤	轴环 Shaft Collar	2
⑥	预压固定螺栓 Pre-pressed Fixed Bolt	8
⑦	垫圈 Washer	1套 Set
⑧	锁紧螺母 Lock Nut	1



**LIST OF SWT SUPPORT UNIT**  
SWT 轴承座清单

支撑单元型号 Model of the Support Unit	支撑单元参数 Parameters of the Support Unit																			
	d	D	D <sub>1</sub>	D <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	H*	A	W	X	Y	Z	d1*	I*	V*	P*	Q*	R*	S*
SWT-WBK17DF	17	70	106	72	60	32	15	1	80	88	9	14	8.5	45	3	58	M5	10	M5	10
SWT-WBK20DF	20	70	106	72	60	32	15	1	80	88	9	14	8.5	45	3	58	M5	10	M5	10
SWT-WBK25DF	25	85	130	90	66	33	18	1	100	110	11	17.5	11	57	4	75	M6	12	M6	12
SWT-WBK25DFD	25	85	130	90	81	48	18	1	100	110	11	17.5	11	57	4	75	M6	12	M6	12
SWT-WBK30DF	30	85	130	90	66	33	18	1	100	110	11	17.5	11	57	4	75	M6	12	M6	12
SWT-WBK30DFD	30	85	130	90	81	48	18	1	100	110	11	17.5	11	57	4	75	M6	12	M6	12
SWT-WBK35DF	35	95	142	102	66	33	18	1	106	121	11	17.5	11	69	4	85	M8	12	M6	12
SWT-WBK35DFD	35	95	142	102	81	48	18	1	106	121	11	17.5	11	69	4	85	M8	12	M6	12
SWT-WBK35DFF	35	95	142	102	96	48	18	16	106	121	11	17.5	11	69	4	85	M8	12	M6	12
SWT-WBK40DF	40	95	142	102	66	33	18	1	106	121	11	17.5	11	69	4	85	M8	12	M6	12
SWT-WBK40DFD	40	95	142	102	81	48	18	1	106	121	11	17.5	11	69	4	85	M8	12	M6	12
SWT-WBK40DFD	40	95	142	102	81	48	18	1	106	121	11	17.5	11	69	4	85	M8	12	M6	12
SWT-WBK40DFF	40	95	142	102	96	48	18	16	106	121	11	17.5	11	69	4	85	M8	12	M6	12

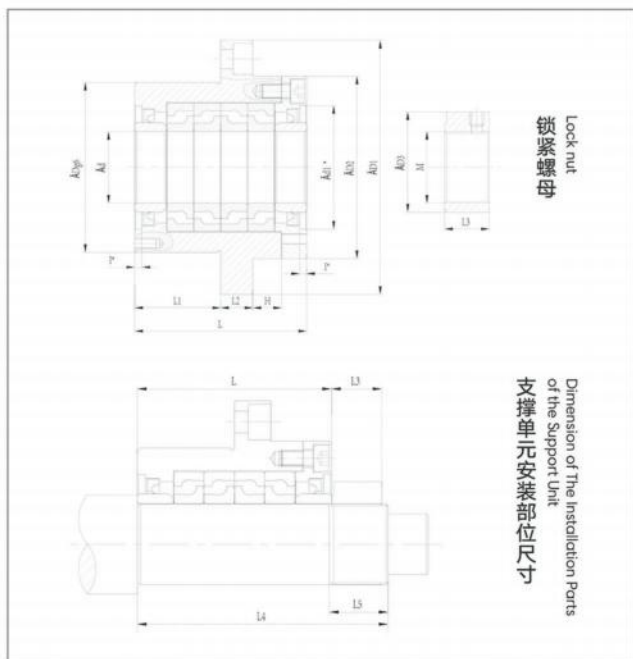
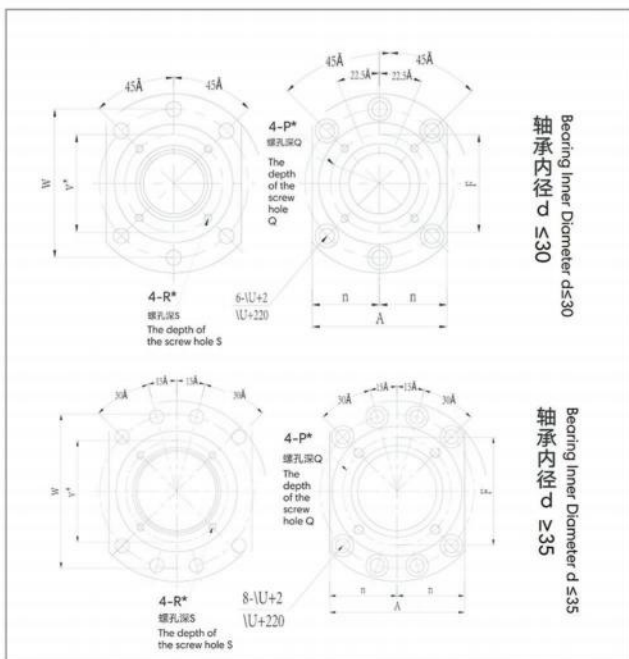
基本额定动负荷 Ca(N) Basic Dynamic Load Ca	极限轴向负荷 (N) Permissible Axial Load	预负荷 (N) Pre-Load	轴向刚度 (N/μm) Axial Rigidity	起动力矩 (N.cm) Starting Torque	锁紧螺母 Lock Nut		支撑单元安装部位 Support Unit Position			
					D3	L3	d	L4	L5	
21900	26600	2150	750	14.0	M17×1	37	18	17	81	23
21900	26600	2150	750	14.0	M20×1	40	18	20	81	23
28500	40500	3150	1000	23.0	M25×1.5	45	20	25	89	26
46500	81500	4300	1470	31.0	M25×1.5	45	20	25	104	26
29200	43000	3350	1030	24.0	M30×1.5	50	20	30	89	26
47500	86000	4500	1520	33.0	M30×1.5	50	20	30	104	26
31000	50000	3800	1180	28.0	M35×1.5	55	22	35	92	30
50500	100000	5200	1710	37.0	M35×1.5	55	22	35	107	30
50500	100000	7650	2350	55.0	M35×1.5	55	22	35	122	30
31500	52000	3900	1230	28.0	M40×1.5	60	22	40	92	30
51500	104000	5300	1810	38.0	M40×1.5	60	22	40	107	30
51500	104000	7800	2400	57.0	M40×1.5	60	22	40	122	30

PRECISION LOCK NUT  
精密锁紧螺母

HYDRAULIC NUT  
液压螺母

POWDER METALLURGICAL PRODUCT  
压块

SUPPORT UNIT  
轴承座



备注: ①以上数据仅供参考, 思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母  
Remark: ①The above data is just provided for reference, Jiangsu Swift Machinery Technology Co, Ltd reserves the right to revise it. ②1NM=10.2kgf.cm=0.73lb.ft ③Non-standard nut can be customized.

## Support Unit 轴承座

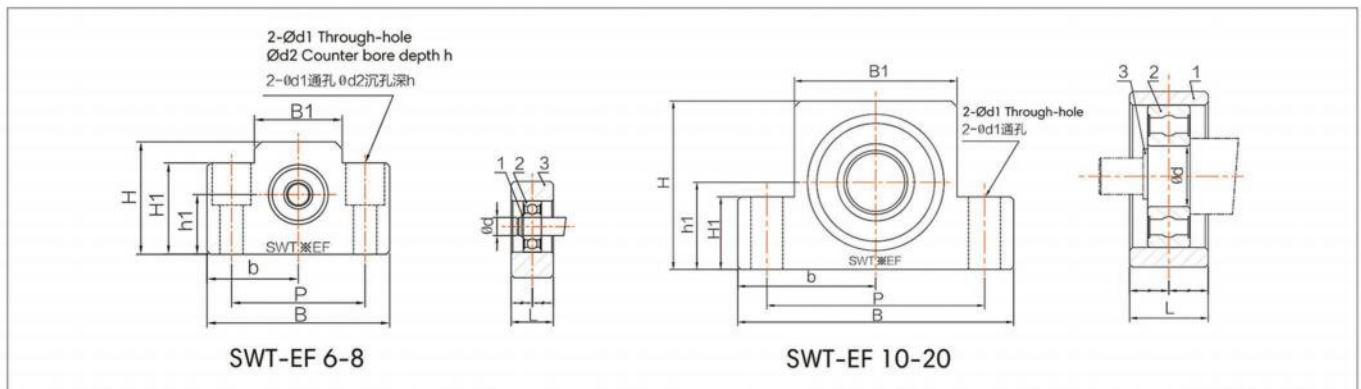
### SWT-EF Series 系列 >



#### PARAMETERS OF THE SWT SQUARE SUPPORT UNIT 方形支撑单元参数

部件编号 No.	部件名 Name of the Component	个数 Qty
1	支撑座 Supporting Seat	1
2	轴承 Bearing	1
3	止动环 Snap Ring	1

支撑侧角型支撑单元(方形) Supported Side Support Unit (Square)	SWT-EF 型支撑单元参数 Parameters of the SWT-EF Support Unit														单位(mm)
	公称型号 Nominal Model	轴径d Diameter of the Shaft d	L	B	H	b±0.02	hi±0.02	B1	H1	P	d1	d2	h	使用轴承 Applied Bearing	使用止动环 Applied Snap Ring
SWT-EF 10	8	20	70	43	35	25	36	24	52	9	-	-	608ZZ	C8	0.33
SWT-EF 12	10	20	70	43	35	25	36	24	52	9	-	-	6000ZZ	C10	0.32
SWT-EF 15	15	20	80	49	40	30	41	25	60	9	-	-	6002ZZ	C15	0.38
SWT-EF 20	20	26	95	58	47.5	30	56	25	75	11	-	-	6204ZZ	C20	0.63





## SWT-AF Series 系列 >

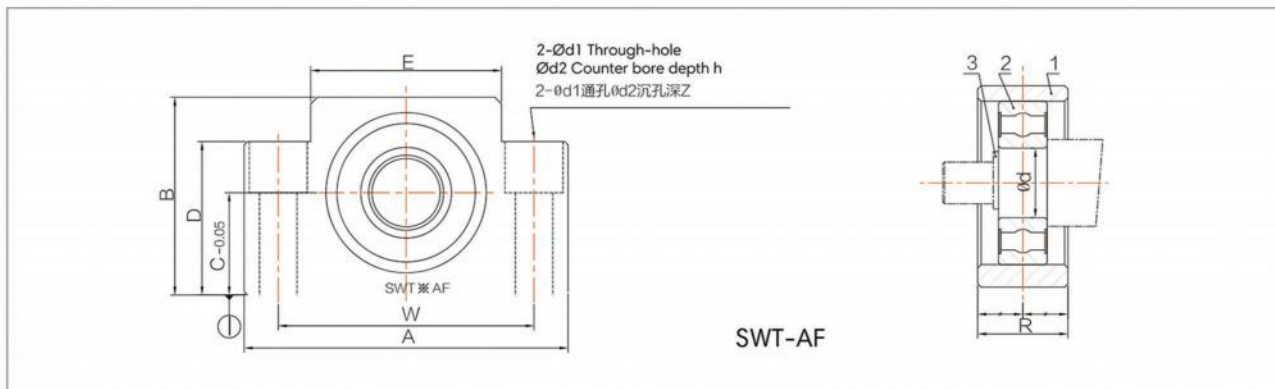


### PARAMETERS OF THE SWT SQUARE SUPPORT UNIT 方形支撑单元参数

部件编号 No.	部件名 Name of the Component	个数 Qty
1	支撑座 Supporting Seat	1
2	轴承 Bearing	1
3	止动环 Snap Ring	1

注意：请以面为基准安装在底座 Note: Installation based on datum I

支撑侧角型支撑单元(方形) Supported Side Support Unit (Square)	SWT-AF 型支撑单元参数 Parameters of the SWT-EF Support Unit											单位(mm)		
	公称型号 Nominal Model	轴径 $\phi d$ Diameter of the Shaft $\phi d$	A	B	C	D	E	R	W	$\phi d1$	$\phi d2$	Z	重量 Weight (kg)	用途 Application
SWT-AF 10	8	70	43	25	35	36	20	52	9	14	11	0.4	一般 General	608ZZ
SWT-AF 12	10	70	43	25	35	36	20	52	9	14	11	0.35	一般 General	6000ZZ
SWT-AF 15	15	80	50	30	40	41	20	60	9	14	11	0.45	一般 General	6002ZZ
SWT-AF 20	20	95	58	30	45	56	26	75	11	17	15	0.8	一般 General	6204ZZ
SWT-AF 25	25	105	68	35	25	66	30	85	11	-	-	0.9	一般 General	6205ZZ



备注：①以上数据仅供参考，思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母  
Remark: ①The above data is just provided for reference, Jiangsu Swift Machinery Technology Co, Ltd reserves the right to revise it. ②1NM=10.2kgfcm=0.73lbft ③Non-standard nut can be customized.

## Support Unit 轴承座

### SWT-EK Series 系列 >

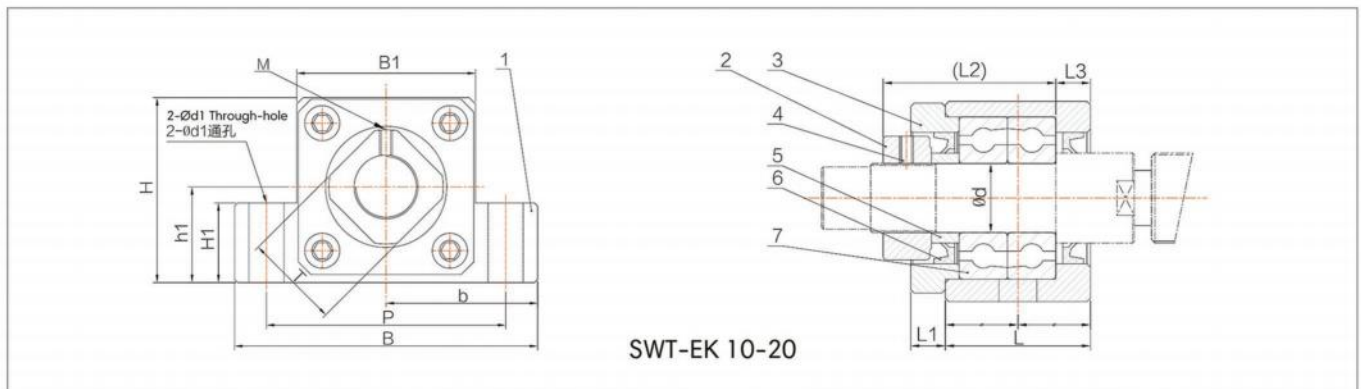


#### PARAMETERS OF THE SWT SQUARE SUPPORT UNIT 方形支撑单元参数

部件编号 No.	部件名 Name of the Component	个数 Qty
1	支撑座 Supporting Seat	1
2	锁紧螺母 Lock Nut	1
3	固定盖 Fixed Cover	1
4	内六角固定螺丝 (配有压块) Hexagonal Socket-head Set Screw (With Cushion Block)	1

部件编号 No.	部件名 Name of the Component	个数 Qty
5	套环 Shrink-ring	2
6	密封圈 Seal Ring	2
7	轴承 Bearing	1套 Set

固定端支撑单元(方形) Fixed Side Support Unit (Square)	SWT-EK 型支撑单元参数 Parameters of the SWT-EK Support Unit																			单位(mm)
	公称型号 Nominal Model	轴径d Diameter of the Shaft d	L	L1	L2	L3	B	H	b±0.02	h1±0.02	B1	H1	P	d1	d2	h	M	T	使用轴承 Applied Bearing	质量 Weight (kg)
SWT-EK 10	10	24	6	29.5	6	70	43	35	25	36	24	52	9	-	-	M3	16	相当于 Equivalent to 7000(DF P5)	0.46	
SWT-EK 12	12	24	6	29.5	6	70	43	35	25	36	24	52	9	-	-	M3	19	相当于 Equivalent to 7001(DF P5)	0.44	
SWT-EK 15	15	25	6	36	5	80	49	40	30	41	25	60	11	-	-	M3	22	相当于 Equivalent to 7002(DF P5)	0.55	
SWT-EK 20	20	42	10	50	10	95	58	47.5	30	56	25	75	11	-	-	M4	30	相当于 Equivalent to 7204(DF P5)	1.35	



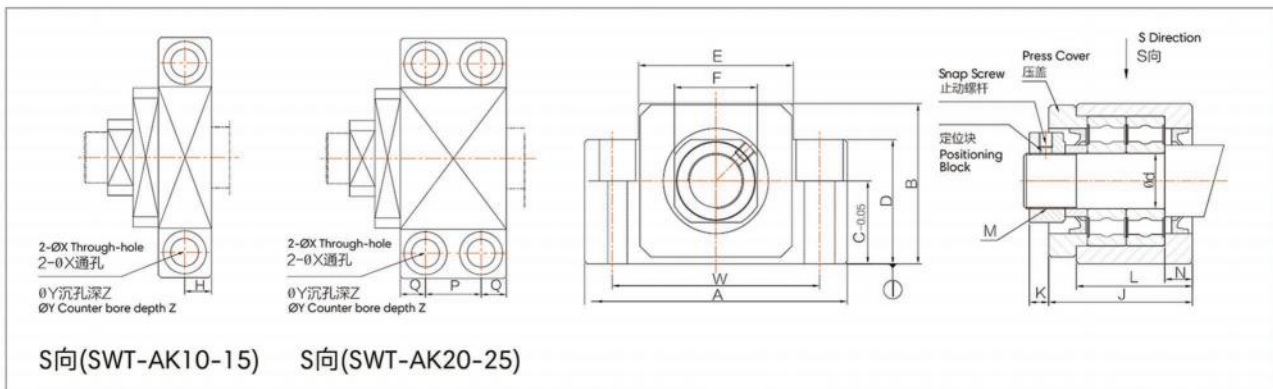
## SWT-AK Series 系列 >



### PARAMETERS OF THE SWT SQUARE SUPPORT UNIT 方形支撑单元参数

公称型号 Nominal Model	参考招紧扭矩(NxCm) Tightening Torque for Reference	
	锁定螺母 Lock Nut	定位止动螺丝 Positioning and Snap Screw
SWT-AK 10	280	147 (M4)
SWT-AK 12	630	147(M4)
SWT-AK 15	790	147(M4)
SWT-AK 20	1670	147 (M4)
SWT-AK 25	2060	490 (M6)

公称型号 Nominal Model	用途 Application	SWT-AK 型支撑单元参数 Parameters of the SWT-AK Support Unit														重量 Weight (kg)	锁定螺母 螺纹段M Thread Section of Lock Nut M	附属支撑 端轴承 Bearing of the Auxiliary Supporting End				
		φd	A	B	C	D	E	F	L	J	K	N	沉孔尺寸 Size of the Counter Bore									
													H	P	Q				W	X	Y	Z
SWT-AK10	一般 General	10	70	43	25	35	36	16	24	30	6	6	12	-	-	52	9	14	11	0.5	M10 × 1	7000
SWT-AK12	一般 General	12	70	43	25	35	36	19	24	30	6	6	12	-	-	52	9	14	11	0.5	M12 × 1	7001
SWT-AK15	一般 General	15	80	50	30	40	41	22	25	31	8	5	12.5	-	-	60	11	17	15	0.7	M15 × 1	7002
SWT-AK20	一般 General	20	95	58	30	45	55	30	42	52	10	10	-	22	10	75	11	17	15	1.4	M20 × 1	7204
SWT-AK25	一般 General	25	105	68	35	25	66	35	48	61	13	14	-	30	9	85	11	-	-	1.9	M25 × 1.5	7205



备注：①以上数据仅供参考，思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母

Remark: ①The above data is just provided for reference, Jiangsu Swift Machinery Technology Co, Ltd reserves the right to revise it. ②1NM=10.2kgf.cm=0.73lb.ft ③Non-standard nut can be customized.

精密锁紧螺母  
PRECISION LOCK NUT

液压螺母  
HYDRAULIC NUT

粉末冶金产品  
POWDER METALLURGICAL PRODUCT

轴承座  
SUPPORT UNIT

## Support Unit 轴承座

### SWT-BF Series 系列 >



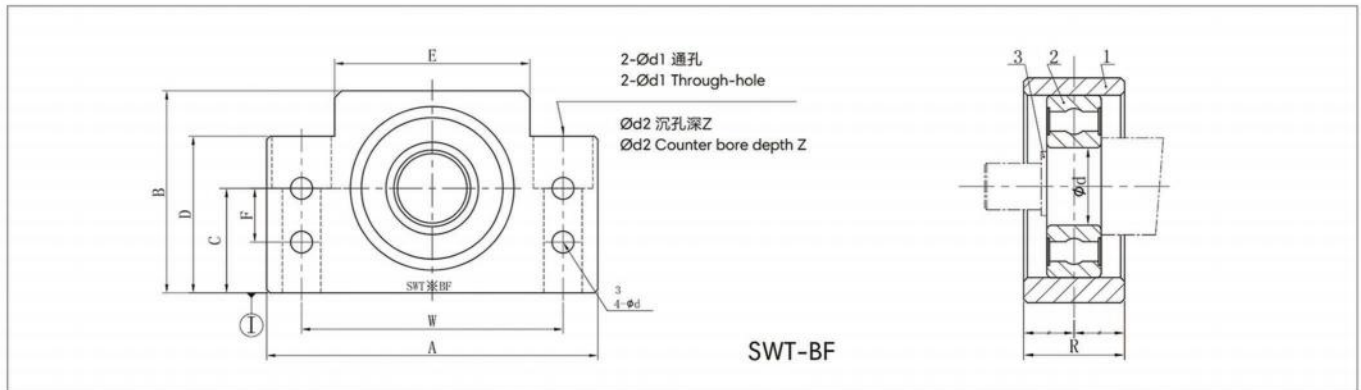
#### PARAMETERS OF THE SWT SQUARE SUPPORT UNIT

##### 方形支撑单元参数

部件编号 No.	部件名 Name of the Component	个数 Qty
1	支撑座 Supporting Seat	1
2	轴承 Bearing	1
3	止动环 Snap Ring	1

注意：请以面为基准安装在底座 Note: Installation based on datum I

支撑侧角型支撑单元(方形) Supported Side Support Unit (Square)	SWT-BF 型支撑单元参数 Parameters of the SWT-BF Support Unit														单位(mm)	
	公称型号 Nominal Model	轴径 $\phi d$ Diameter of the Shaft $\phi d$	A	B	C	D	F	E	R	W	$\phi d1$	$\phi d2$	$\phi d3$	z	质量 Weight (kg)	使用止动环 Applied Snap Ring
SWT-BF 10	8	60	39	22	32.5	15	34	20	46	6.6	10.8	5.5	5	0.29	CB	608 ZZ
SWT-BF 12	10	60	43	25	32.5	18	35	20	46	6.6	10.8	5.5	1.5	0.3	C10	6000 ZZ
SWT-BF 15	15	70	48	28	38	18	40	20	54	6.6	11	5.5	6.5	0.38	C15	6002 ZZ
SWT-BF 17	17	86	64	39	55	28	50	23	68	9	14	6.6	8.5	0.74	C17	6203 ZZ
SWT-BF 20	20	88	60	34	50	22	52	26	70	9	14	6.6	8.5	0.76	C20	6004 ZZ
SWT-BF 25	25	106	80	48	70	33	64	30	85	11	17.5	9	11	1.42	C25	6205 ZZ
SWT-BF 30	30	128	89	51	78	33	76	32	102	14	20	11	13	1.97	C30	6206 ZZ
SWT-BF 35	35	140	96	52	79	35	88	32	114	14	20	11	13	2.22	C35	6207 ZZ
SWT-BF 40	40	160	110	60	90	37	100	37	130	18	26	14	17.5	3.27	C40	6208 ZZ



# SWT-BK Series 系列 >

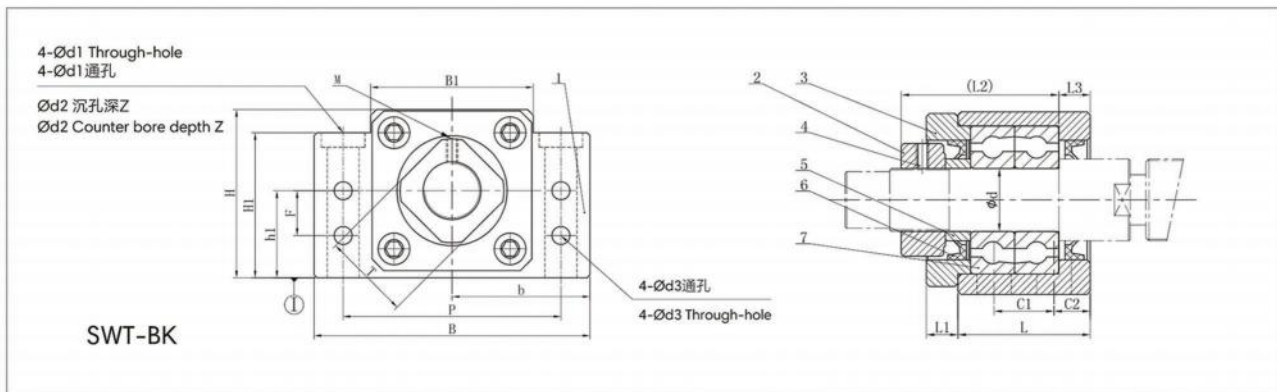


## PARAMETERS OF THE SWT SQUARE SUPPORT UNIT 方形支撑单元参数

部件编号 No.	部件名 Name of the Component	个数 Qty
1	支撑座 Supporting Seat	1
2	锁紧螺母 Lock Nut	1
3	固定盖 Fixed Cover	1
4	内六角固定螺丝 (配有压块) Inner Hexagonal Socket-head Set Screw (With Cushion Block)	1

部件编号 No.	部件名 Name of the Component	个数 Qty
5	套环 Shrink-ring	2
6	密封圈 Seal Ring	2
7	轴承 Bearing	1套 Set

固定侧角型支撑单元(方形) Fixed Side Support Unit (Square)	SWT-BK 型支撑单元参数 Parameters of the SWT-BK Support Unit																			单位(mm)	
	轴径 $\phi d$ Diameter of the Shaft $\phi d$	H	H1	$h1 \pm 0.02$	B	P	$b \pm 0.02$	B1	M	$\phi d1$	$\phi d2$	$\phi d3$	Z	L	L1	L2	L3	C1	C2	使用轴承 Applied Bearing	重量 Weight (kg)
SWT-BK 10	10	39	32.5	22	60	46	30	34	M3	6.6	10.8	5.5	5	25	5	29	5	13	6	7000	0.39
SWT-BK 12	12	43	32.5	25	60	46	30	35	M3	6.6	10.8	5.5	1.5	25	5	29	5	13	6	7001	0.41
SWT-BK 15	15	48	38	28	70	54	35	40	M3	6.6	11	5.5	6.5	27	6	32	6	15	6	7002	0.57
SWT-BK 17	17	64	55	39	86	68	43	50	M4	9	14	6.6	8.5	35	9	44	7	19	8	7203	1.27
SWT-BK 20	20	60	50	34	88	70	44	52	M4	9	14	6.6	8.5	35	8	43	8	19	8	7004	1.19
SWT-BK 25	25	80	70	48	106	85	53	64	M5	11	17.5	9	11	42	12	54	9	22	10	7205	2.3
SWT-BK 30	30	89	78	51	128	102	64	76	M6	14	20	11	13	45	14	61	9	23	11	7206	3.32
SWT-BK 35	35	96	79	52	140	114	70	88	M8	14	20	11	13	50	14	67	12	26	12	7207	4.33
SWT-BK 40	40	110	90	60	160	130	80	100	M8	18	26	14	17.5	61	18	76	15	33	14	7208	6.5



精密锁紧螺母  
PRECISION LOCK NUT

液压螺母  
HYDRAULIC NUT

压块  
POWDER METALLURGICAL PRODUCT

轴承座  
SUPPORT UNIT

备注: ①以上数据仅供参考, 思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母  
Remark: ①The above data is just provided for reference, Jiangsu Swift Machinery Technology Co. Ltd reserves the right to revise it. ②1NM=10.2kgfcm=0.73lbft ③Non-standard nut can be customized.

## Support Unit 轴承座

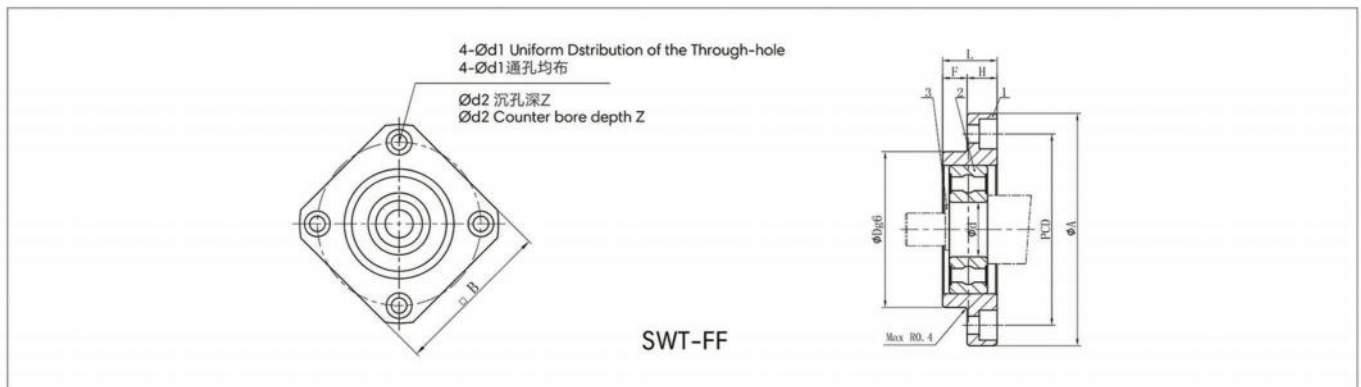
### SWT-FF Series 系列 >



#### PARAMETERS OF THE SWT SQUARE SUPPORT UNIT 方形支撑单元参数

部件编号 No.	部件名 Name of the Component	个数 Qty
1	支撑座 Supporting Seat	1
2	轴承 Bearing	1
3	止动环 Snap Ring	1

支撑侧角型支撑单元(方形) Supported Side Support Unit (Square)	SWT-FF 型支撑单元参数 Parameters of the SWT-FF Support Unit												单位(mm)
	公称型号 Nominal Model	轴径 $\phi d$ Diameter of the Shaft $\phi d$	$\phi A$	$\phi D$	F	H	L	$\phi d1$	$\phi d2$	Z	B	重量 Weight (kg)	使用止动环 Applied Snap Ring
SWT-FF 10	8	43	28	5	7	12	3.4	6.5	4	35	0.07	C8	608ZZ
SWT-FF 12	10	52	34	8	7	15	4.5	8	4	42	0.11	C10	6000ZZ
SWT-FF 15	15	63	40	8	9	17	5.5	9.5	5.5	52	0.2	C15	6002ZZ
SWT-FF 20	20	85	57	9	11	20	6.6	11	6.5	68	0.27	C20	6204ZZ
SWT-FF 25	25	98	63	10	14	24	9	14	8.5	79	0.67	C25	6205ZZ
SWT-FF 30	30	117	75	9	18	27	11	17.5	11	93	1.07	C30	6206ZZ



## SWT-FK Series 系列 >

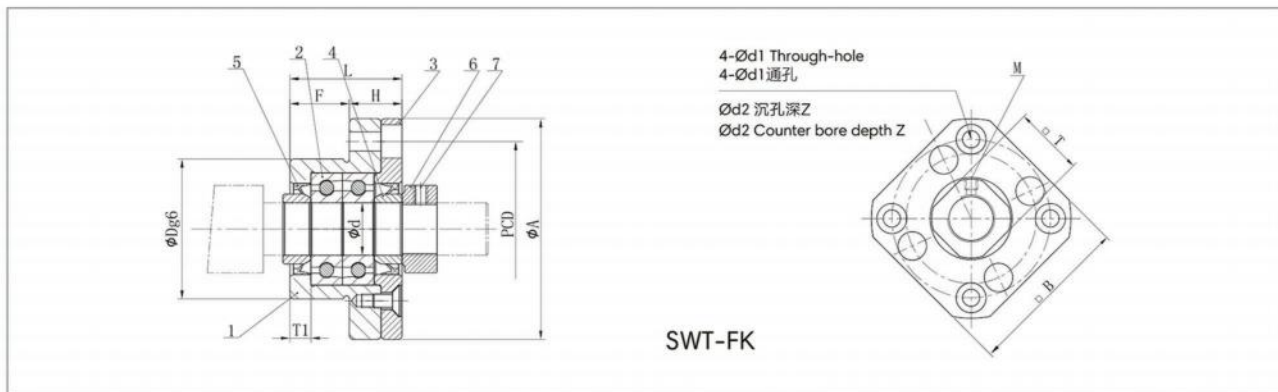


### PARAMETERS OF THE SWT SQUARE SUPPORT UNIT 方形支撑单元参数

部件编号 No.	部件名 Name of the Component	个数 Qty
1	支撑座 Supporting Seat	1
2	轴承 Bearing	1套 Set
3	固定盖 Fixed Cover	1
4	套环 Shrink-ring	2

部件编号 No.	部分名 Name of the Component	个数 Qty
5	密封圈 Seal Ring	2
6	锁紧螺母 Lock Nut	1
7	内六角固定螺丝 (塞铜) Supporting Seat Hexagonal Socket-head Setscrew ( With Plug Copper)	1

固定侧角型支撑单元(方形) Fixed Side Support Unit (Square)	SWT-FK 型支撑单元参数 Parameters of the SWT-FK Support Unit												单位(mm)
	公称型号 Nominal Model	轴径 $\phi d$ Diameter of the Shaft $\phi d$	$\phi A$	$\phi D$	F	H	L	$\phi d1$	$\phi d2$	Z	B	T1	使用轴承 Applied Bearing
SWT-FK 10	10	52	34	17	10	27	4.5	8	4	42	5	7000	0.21
SWT-FK 12	12	54	36	17	10	27	4.5	8	4	44	5	7001	0.22
SWT-FK 15	15	63	40	17	15	32	5.5	9.5	6	52	6	7002	0.39
SWT-FK 20	20	85	57	30	22	52	6.6	11	10	68	10	7204	1.09
SWT-FK 25	25	98	63	30	27	57	9	15	13	79	10	7205	1.49
SWT-FK 30	30	117	75	32	30	62	11	17.5	15	93	12	7206	2.32



备注: ①以上数据仅供参考, 思维福特公司拥有修改权利 ②1NM=10.2kgf.cm=0.73lb.ft ③可定制非标螺母  
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# 思维转动 引领未来

Be INNOVATIVE, Lead The FUTURE

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