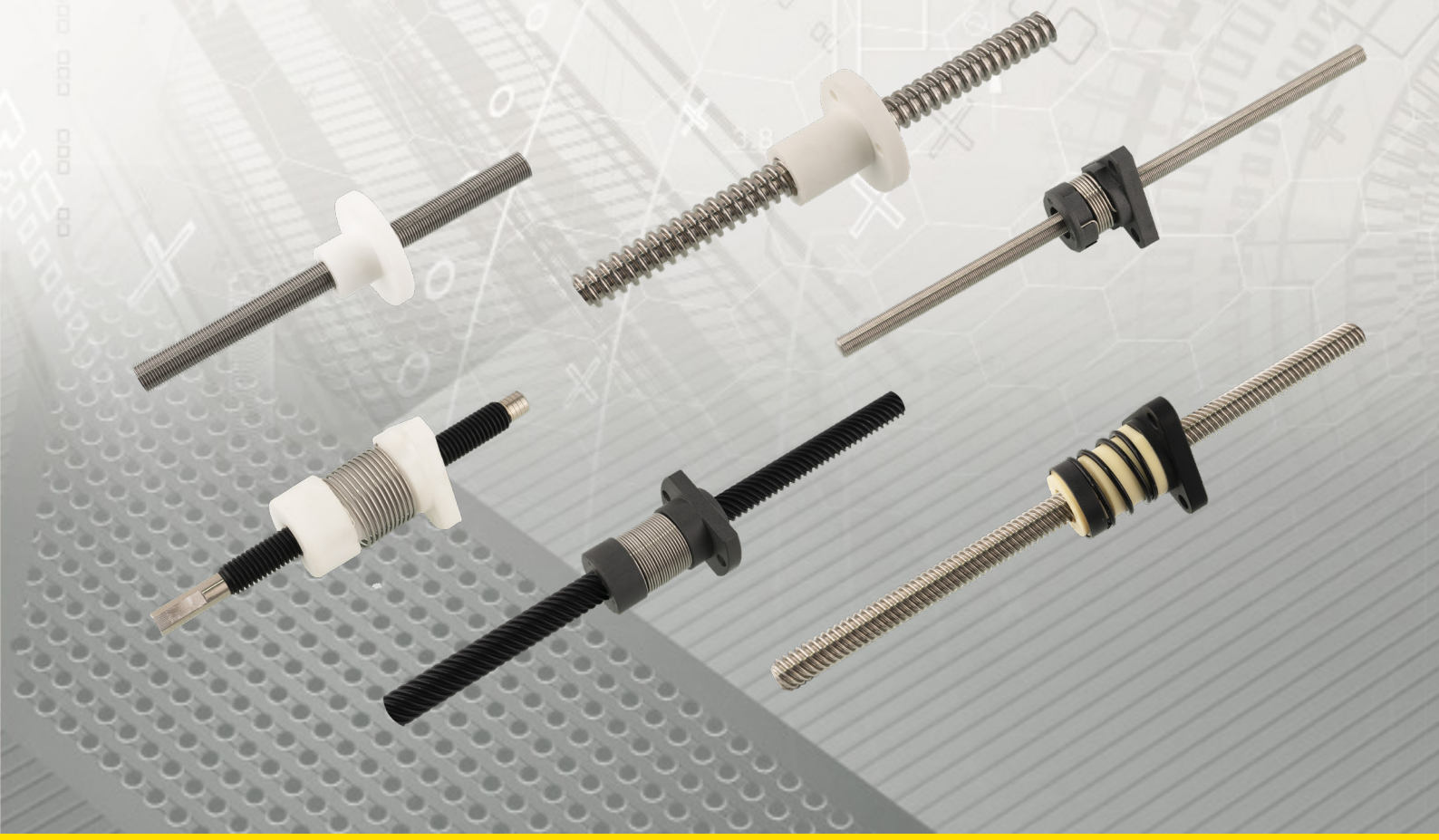
DINGS'

Precision Motion Specialist

SCREW-NUT
PRODUCT CATALOG



Since it's establishment in 2008,
Jiangsu DINGS' Intelligent Control Technology Co., Ltd adheres to the
"Quality comes from Responsibility, Details determine Success or Failure" business concept,
commits to become a Precision Motion Specialist
and world-class motion control solutions provider.DINGS' provides precision stepper motor actuators, brushless DC motors and motion controllers.

Size

DINGS' facility covers an area of 56 acres, with more than 5,000 square meters of processing center, equipped with more than 100 sets of processing equipment such as wire rolling machine, automatic injection molding machine, CNC machine tools, machining centers, automatic screw straightening machine, etc., with a total investment of more than 100 million in equipment; there are more than 20 motor assembly lines in the production workshop, with an annual production capacity of up to 4 million units; and there is a product research and development center, a precision testing and inspection laboratory and an experimental center.

It is equipped with testing and inspection instruments such as positioning torque test, hardness test, precision measurement, dynamic balance, etc. It has an integrated management system of product design, manufacturing and inspection, which provides the necessary conditions to meet the customized demands of users.



Qualifications

DINGS' is a high-tech company listed on the new third board, NEEQ stock market in June, 2021. And listed on the Beijing Stock Exchange 13th Apr, 2023. DINGS has awards of "Jiangsu Private Science and Technology Enterprise", "Jiangsu Science and Technology Small and Medium-sized Enterprise" and "Jiangsu Specialized and New Small Giant Enterprise". In addition, DINGS' products have RoHS, CE, REACH and other certifications as ISO9001 and ISO14001. DINGS' has more than 80 invention patents.


Growth

2008 Established a company and registered DINGS' Brand

2010 Established DINGS' MOTION USA

2016 Established DINGS' Korea

2019 Join in LEILI group

2021 Company moved to Jiangsu Railway Industrial Park
Established Changzhou Intelligent Manufacturing Factory
Listed on the new third board, NEEQ stock market

2022 Application of Jiangsu Engineering Technology Research Center
Application of Changzhou Enterprise Technology Center
Set up R&D Center in Korea

2023 Application for National Specialized New Small Giant
Establishment of DINGS' Europe
Listed on the Beijing Stock Exchange [Stock Code : 873593]

2024 Relocation of Headquarter into new plant

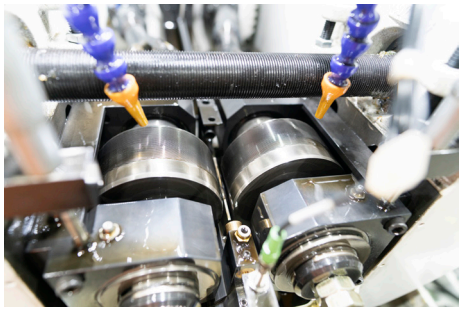
Content

Technical Introduction

DINGS' is continuously exploring and improving its Linear Actuator products with the goal of meeting customers' application requirements. DINGS' products are not ordinary screws and nuts. The design of screw threads takes into account the requirements of high precision, long life and low noise, and some special designs are made to increase the fluidity of the material when the screw is processed, which is very important for the screw. Finally, it is used with special material nuts of DINGS' to get the maximum economic value.

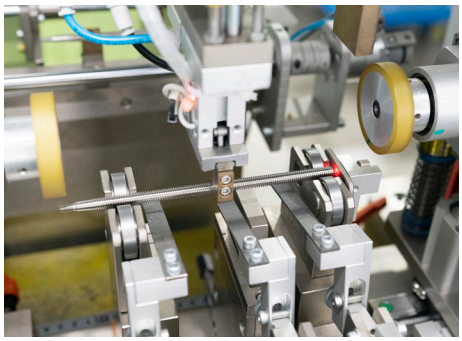
Lead Screw Material

DINGS' standard screw material is SUS303/316, we believe that to get a high quality screw, the material performance is the key. We strictly inspect the size and hardness of the material of each batch; customers can find that DINGS' screws are very stable and have good anti-corrosion properties, which can be applied to a variety of strict environments.
In order to get a more accurate thread, the key lies in the stability of the process such as: speed, vibration, temperature and precise control of the flow of coolant. Precision CNC tumblers ensure that the process is stable and adjustable.



CNC Straightening

Maximizing the straightness of the screw results in a smoother surface and longer product life. This process eliminates human error and minimizes vibration, noise and premature wear caused by axial play.



Excellent Lead Accuracy

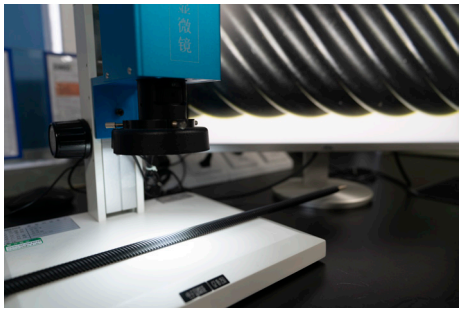
DINGS' has a dynamic lead accuracy measuring instrument, so that the lead accuracy already gets a stable detection in the manufacturing stage. Accuracy can be stably controlled within 0.07mm/300mm, 2 times higher than the industrial standard.

Quality Inspection

Thread surface is inspected using a high magnification optical imager in the manufacturing and coating process.

Teflon Coating Technology

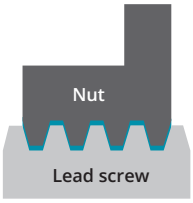
Teflon coating technology, developed and processed in-house, reduces the friction coefficient on the surface of the screw, improving its efficiency and extending its service life. Every coated screw is inspected with an optical imager to ensure that there is no flaking or unevenness in the layers.



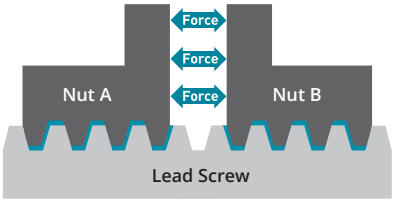
Terminology and Technical Parameters

Backlash

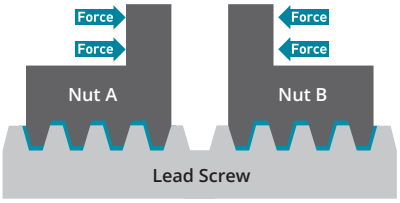
Backlash (clearance) is the relative axial movement between a screw and a nut without rotating the screw or nut. Backlash increases with operating time. DINGS' has developed several unique methods to minimize or eliminate the clearance between a screw and a nut.



Standard nut



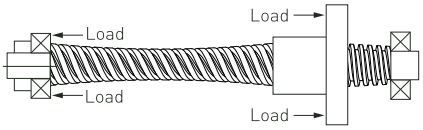
Torsional spring anti-backlash nut



C ompression spring anti-backlash nut

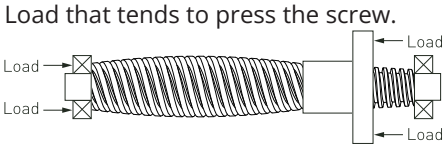
Tension load

Load that tends to stretch the screw.



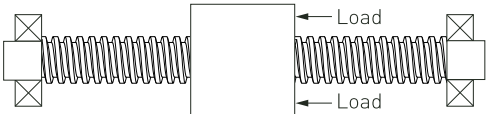
Compression load

Load that tends to press the screw.



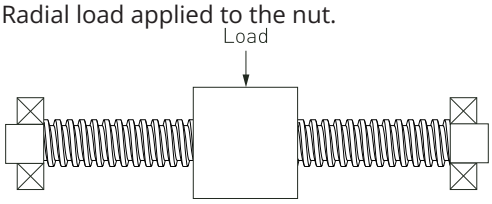
Axial load

A load parallel to and concentric with the axis of the screw.



Radial load

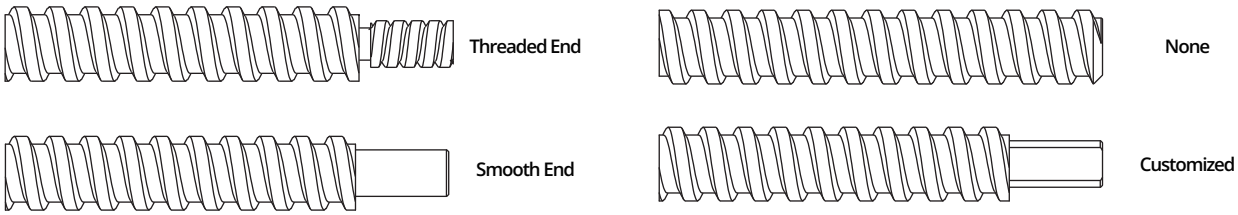
Radial load applied to the nut.



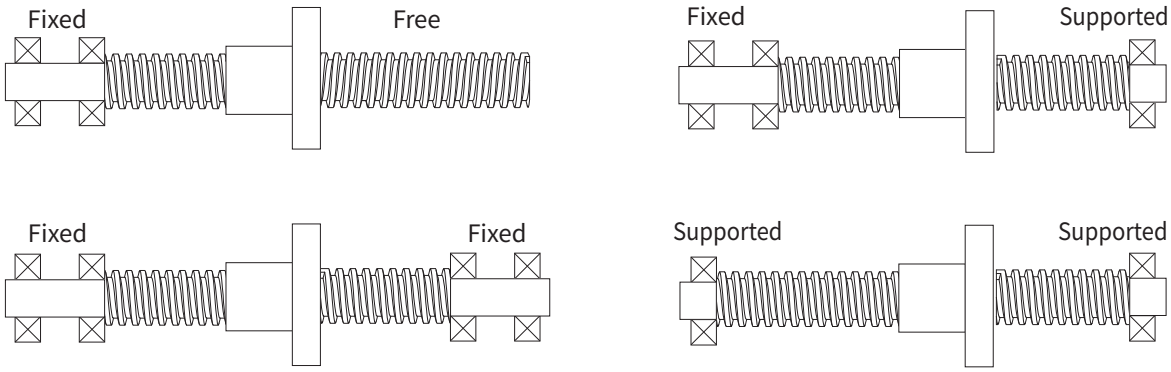
Lead Screw Components

End Machining

Select the end machining specification according to the actual size of the outer diameter of the screw, and contact our technical support engineers for confirmation.



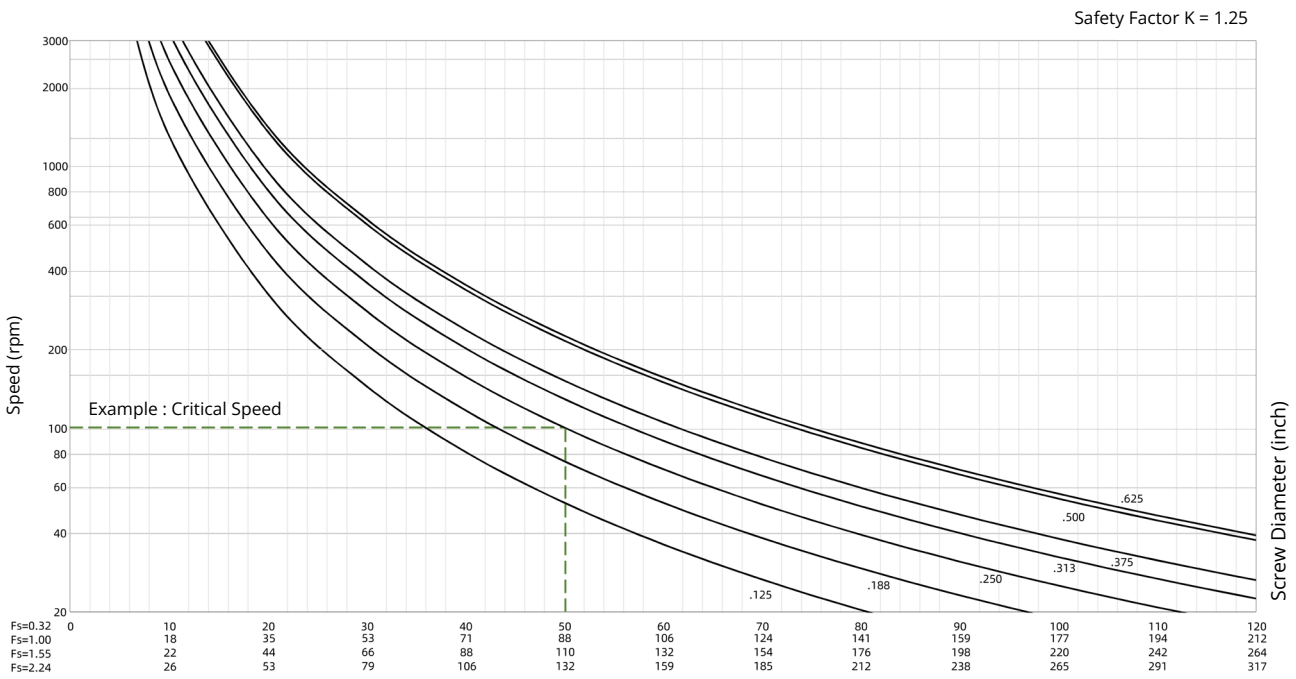
Type of End Fixity



Critical Speed of the Screw

When customers use this chart, they need to determine the fixing method and linear speed of the screw ends, and then calculate the rotational speed based on the lead of the screw.

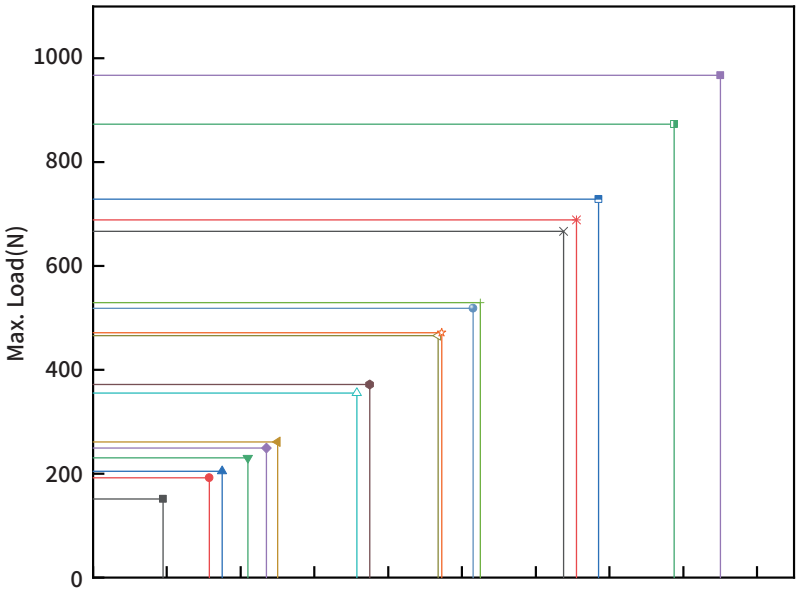
Note: The speed of the screw should be less than 80% of the critical speed.



Lead Screw Components

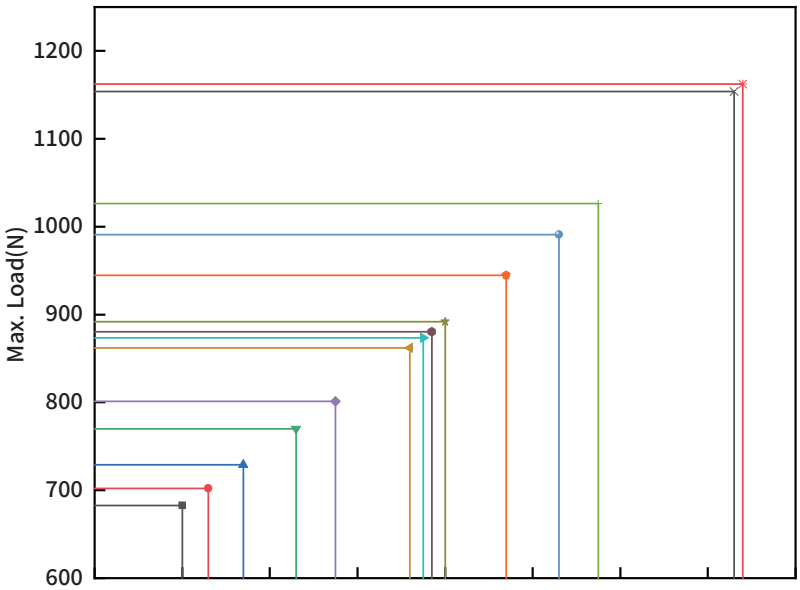
Critical Load of the Screw

To use this chart: first confirm the fixing method by locating the point where the maximum length between the bearing support and the trapezoidal nut intersects the maximum load, and then ensure that the selected screws are located above and to the right of this point.



Fixed-free	40	50	60	70	80	90	100	110	120	130
Supported-supported	80	100	120	140	160	180	200	220	240	260
Fixed-supported	113	141	170	198	226	255	283	311	339	368
Fixed-fixed	160	200	240	280	320	360	400	440	480	520

Max. length between bearings (mm)



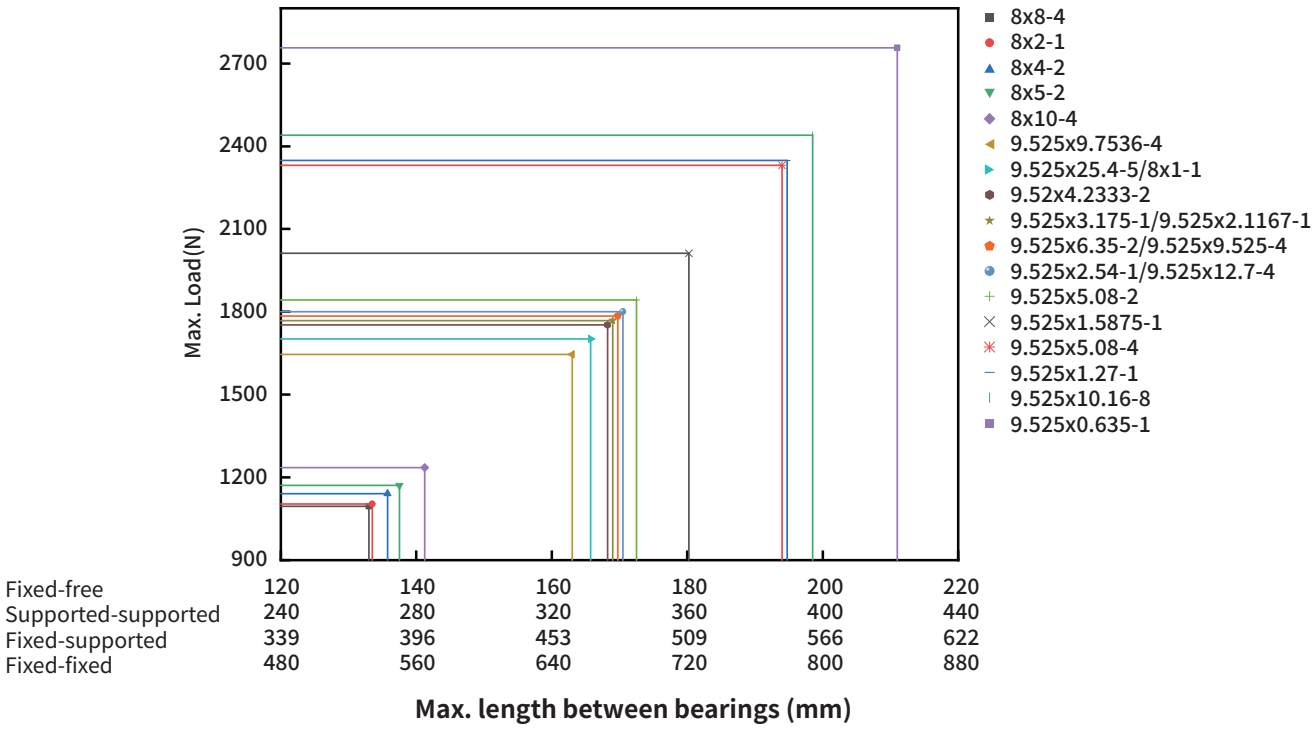
Fixed-free	100	105	110	115	120	125	130	135	140
Supported-supported	200	210	220	230	240	250	260	270	280
Fixed-supported	283	297	311	325	339	354	368	382	396
Fixed-fixed	400	420	440	460	480	500	520	540	560

Max. length between bearings (mm)

Lead Screw Components

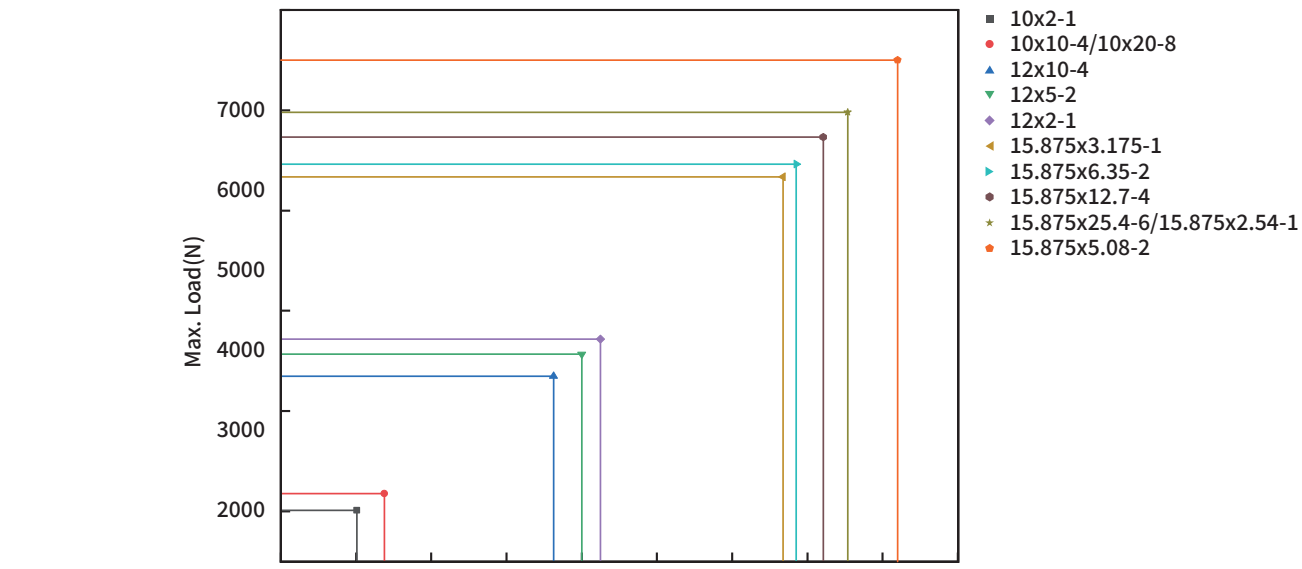
Critical Load of the Screw

To use this chart, first confirm the fixing method by locating the point where the maximum length between the bearing support and the trapezoidal nut intersects the maximum load, and then ensure that the selected screws are located above and to the right of this point.



Fixed-free	120	140	160	180	200	220
Supported-supported	240	280	320	360	400	440
Fixed-supported	339	396	453	509	566	622
Fixed-fixed	480	560	640	720	800	880

Max. length between bearings (mm)



Fixed-free	160	180	200	220	240	260	280	300	320	340
Supported-supported	320	360	400	440	480	520	560	600	640	680
Fixed-supported	453	509	566	622	679	735	792	849	905	962
Fixed-fixed	640	720	800	880	960	1040	1120	1200	1280	1360

Max. length between bearings (mm)

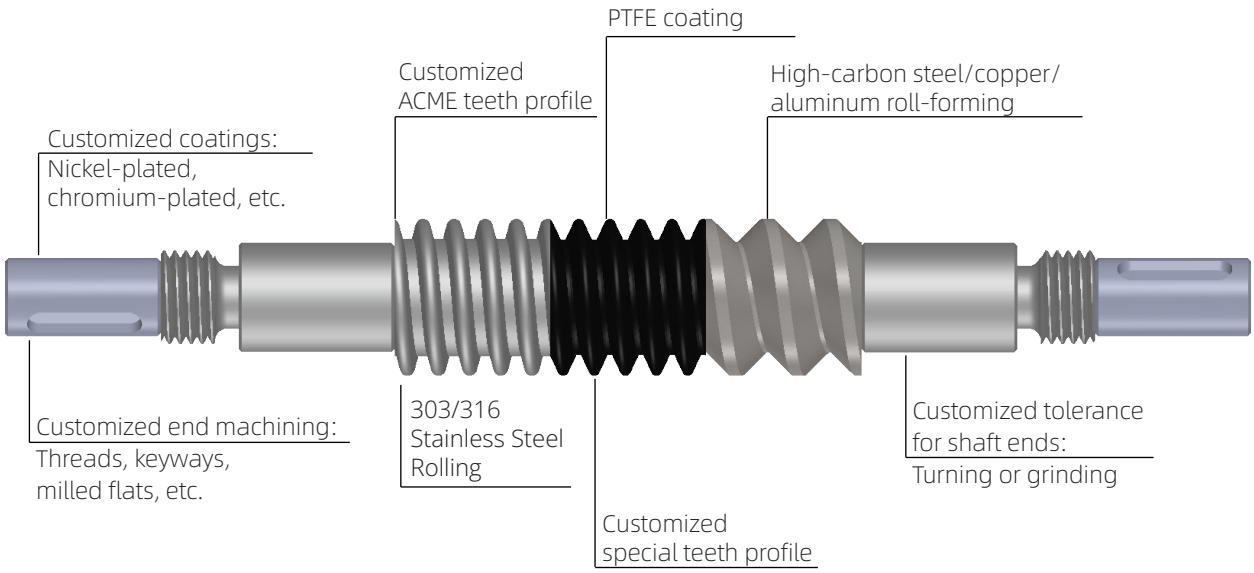
Customized Screw Components

Customized Nuts

DINGS' can machine nuts from a wide range of high performance engineered materials such as polyacetal, polyamide, polyphenylene sulfide, polyester or custom engineered polymers including fillers, PTFE, carbon fibers, aramid fibers, glass fibers, etc. In your R&D phase we can provide you with rapid prototyping through machining or 3D printing. In the mass production phase, if you have significant cost and design constraints, then our engineers can help you to reduce costs and optimize your design by opening molds.

Customized Screws

DINGS' manufactures world-class precision screws. Over the years, we have continuously optimized our screw design and rolling process, and we also have the ability to grind and turn screws, all in order to satisfy our customers' requirements. We have customized hundreds of non-standard screws in sizes that are not in our catalog, and we are experts in rolled screws in non-standard materials such as aluminum, copper, high carbon steel, 300 and 400 series stainless steel, etc.



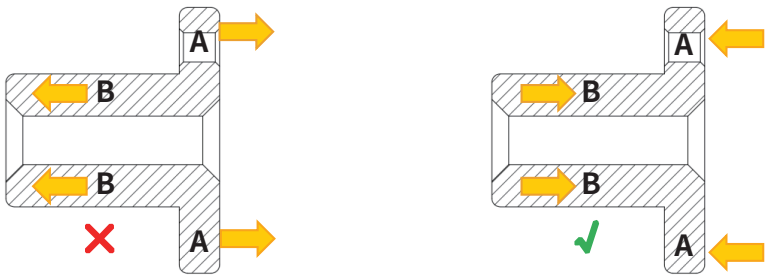
Installation and Maintenance of Trapezoidal Screw

Mounting Screws

The screw must be carefully aligned with the aid of a measuring tool to ensure that the axis is horizontal or vertical. If no measuring tool is available, rotate the screw manually over its entire length before installing the drive unit. Unevenness of force or traces of movement on the outer diameter of the screw may result in axial deviation between the screw shaft and the guide element. In this case the corresponding fixing bolts should be loosened and the screw manually rotated again until the strength is even.

Mounting Nuts

The installation of the nut usually requires attention to coincide with the axis of the screw and is usually commissioned using the same method as for the installation of the screw. It should also be noted that the direction of the load should not attempt to separate flange A from cylinder B, as this is detrimental to the strength of the mechanism.



Lubrication

1. Lubricating oil: Not commonly used, special cases only (e.g. strict costs, short-term use, inability to get the right grease fast enough)
2. Grease: The lubrication method in common cases, will generally give a long service life. It is recommended to clean the screws before lubrication.
3. Type of grease: Bearing grease without solid lubricant or with very fine solid lubricant.

Operating Temperature

Depends on the nut material used, lubrication conditions and operating conditions. For temperatures above 100°C, please consult our engineers.

Wear and Maintenance

The lubricating frequency of the screws depend on the operating conditions :

1. Smaller loads and speeds and proper installation are generally associated with a longer service life, which is usually maintenance-free, as we simply wait for the nut to reach the end of its service life and then replace it.
2. Moderate loads and speeds usually require periodic inspection of the condition of the screw and nut. We recommend annual maintenance to remove dust from the surface of the screw and then re-grease the screw, which will prolong its service life.
3. For higher loads and speeds, we recommend that the screws be maintained every three months by cleaning the surface of the screws of dust and replenishing the grease.
4. During maintenance, the screw needs to be rotated manually, if the backlash exceeds the customer's ideal value, then the nut needs to be replaced. If the customer has no requirements for backlash, then according to DINGS' standard, the nut must be replaced when the backlash exceeds 1/3 of the pitch.

Service

We can carry out professional repair work on screws within a short period of time, either at DINGS' or at the customer's premises. This service is also available for third party products. If DINGS' has the standardized product, it can be obtained within a very short period of time.

List of Screw Specifications

Standard Dia.		Dia. Code	Lead		Lead Code	Outer Dia. (Reference)		Bottom Dia. (Reference)		Corresponding to Left-Handed Thread	Efficiency %*
Imperial (inch)	Metric (mm)		Imperial (inch)	Metric (mm)		Imperial (inch)	Metric (mm)	Imperial (inch)	Metric (mm)		
0.098	2.50	009	0.0394	1.0000	AB	0.0976	2.48	0.0780	1.98		55
9/64	3.50	014	0.0118	0.3000	AF	0.1370	3.48	0.1213	3.08	**	24
			0.0240	0.6096	AA	0.1358	3.45	0.1020	2.59	**	40
			0.0394	1.0000	AB	0.1283	3.26	0.0780	1.98	**	58
			0.0480	1.2192	B	0.1366	3.47	0.0878	2.23	**	61
			0.0787	2.0000	G	0.1370	3.48	0.0874	2.22	yes	72
			0.1575	4.0000	M	0.1366	3.47	0.0961	2.44	**	79
			0.3150	8.0000	T	0.1366	3.47	0.1000	2.54	**	81
3/16	4.77	018	0.0125	0.3175	AL	0.1882	4.78	0.1661	4.22	**	21
			0.0250	0.6350	A	0.1874	4.76	0.1457	3.70	**	33
			0.0500	1.2700	D	0.1882	4.78	0.1374	3.49	yes	58
			0.0625	1.5875	F	0.1878	4.77	0.1563	3.97	**	60
			0.1000	2.5400	K	0.1882	4.78	0.1193	3.03	**	69
			0.1920	4.8768	Q	0.1878	4.77	0.1378	3.50	**	79
			0.2000	5.0800	R	0.1874	4.76	0.1366	3.47	**	80
			0.4000	10.1600	X	0.1874	4.76	0.1441	3.66	**	82
0.24	6.00	024	0.0394	1.0000	AB	0.2354	5.9800	0.1961	4.9800	**	40
			0.0787	2.0000	G	0.2303	5.8500	0.1752	4.4500	**	59
			0.1969	5.0000	E	0.2354	5.9800	0.1862	4.7300	**	76
1/4	6.35	025	0.0240	0.6096	AA	0.2492	6.33	0.2157	5.48	**	26
			0.0250	0.6350	A	0.2500	6.35	0.2150	5.46	**	27
			0.0313	0.7940	N	0.2492	6.33	0.2106	5.35	**	32
			0.0394	1.0000	AB	0.2500	6.35	0.1945	4.94	**	37
			0.0480	1.2192	B	0.2492	6.33	0.1878	4.77	**	45
			0.0500	1.2700	D	0.2492	6.33	0.1894	4.81	**	46
			0.0625	1.5875	F	0.2469	6.27	0.1894	4.81	yes	46
			0.0960	2.4384	J	0.2496	6.34	0.1886	4.79	**	61
			0.1000	2.5400	K	0.2488	6.32	0.1886	4.79	yes	62
			0.1250	3.1750	L	0.2488	6.32	0.1669	4.24	**	67
			0.1920	4.8768	Q	0.2492	6.33	0.1791	4.55	**	76
			0.2000	5.0800	R	0.2496	6.34	0.1870	4.75	**	76
			0.2500	6.3500	S	0.2488	6.32	0.1890	4.80	**	76
			0.2500	6.3500	S	0.2488	6.32	0.1756	4.4600	**	78
			0.3333	8.4667	U	0.2492	6.33	0.1886	4.79	**	78
			0.3840	9.7536	W	0.2492	6.33	0.1992	5.06	**	78
			0.5000	12.7000	Y	0.2480	6.30	0.1677	4.26	**	82
			1.0000	25.4000	Z	0.2496	6.34	0.1870	4.75	**	84

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Standard Dia.		Dia. Code	Lead		Lead Code	Outer Dia. (Reference)		Bottom Dia. (Reference)		Corresponding to Left-Handed Thread	Efficiency %*
Imperial (inch)	Metric (mm)		Imperial (inch)	Metric (mm)		Imperial (inch)	Metric (mm)	Imperial (inch)	Metric (mm)		
0.315	8.000	032	0.0394	1.0000	AB	0.3118	7.92	0.2638	6.70	**	34
			0.0787	2.0000	G	0.3122	7.93	0.2102	5.34	**	53
			0.1575	4.0000	M	0.3146	7.99	0.2138	5.43	**	68
			0.1969	5.0000	E	0.3142	7.98	0.2165	5.50	**	73
			0.3150	8.0000	T	0.3209	8.15	0.2087	5.30	**	80
			0.3937	10.0000	C	0.3142	7.98	0.2165	5.50	**	82
3/8	9.525	0.37	0.0250	0.6350	A	0.3740	9.50	0.3323	8.44	**	19
			0.0500	1.2700	D	0.3740	9.50	0.3067	7.79	**	36
			0.0625	1.5875	F	0.3732	9.48	0.2839	7.21	**	41
			0.0833	2.1167	H	0.3728	9.47	0.2673	6.79	**	48
			0.1000	2.5400	K	0.3732	9.48	0.2677	6.80	yes	53
			0.1250	3.1750	L	0.3728	9.47	0.2657	6.75	**	59
			0.1667	4.2333	P	0.3728	9.47	0.2650	6.73	**	61
			0.2000	5.0800	R	0.3736	9.49	0.2398	6.9	**	68
			0.2500	6.3500	S	0.3728	9.47	0.2665	6.77	**	71
			0.3750	9.5250	V	0.3736	9.49	0.2673	6.79	**	77
			0.3840	9.7536	W	0.3732	9.48	0.2567	6.52	**	77
			0.4000	10.1600	X	0.3720	9.45	0.3126	7.94	**	78
			0.5000	12.7000	Y	0.3740	9.50	0.2685	6.82	**	80
			1.0000	25.4000	Z	0.3732	9.48	0.2610	6.63	**	84
0.394	10.000	039	0.0787	2.0000	G	0.3902	9.91	0.2839	7.21	**	47
			0.3937	10.0000	C	0.3929	9.98	0.2953	7.50	**	79
			0.7874	20.0000	I	0.3929	9.98	0.2953	7.50	**	82
0.470	12.000	047	0.0787	2.0000	G	0.4717	11.98	0.3858	9.80	**	39
			0.1965	5.0000	E	0.4717	11.98	0.3780	9.60	**	60
			0.3937	10.0000	C	0.4717	11.98	0.3661	9.30	**	73
			0.5906	15.0000	CE	0.4717	11.98	0.3591	9.12	**	78
			0.9843	25.0000	IE	0.4717	11.98	0.3543	9.00	**	80
0.625	15.875	062	0.1000	2.5400	K	0.6228	15.82	0.4886	12.41	**	40
			0.1250	3.1750	L	0.6236	15.84	0.4622	11.74	**	47
			0.2000	5.0800	R	0.6205	15.76	0.5102	12.96	**	58
			0.2500	6.3500	S	0.6220	15.80	0.4677	11.88	**	63
			0.5000	12.7000	Y	0.6217	15.79	0.4791	12.17	**	74
			1.0000	25.4000	Z	0.6228	15.82	0.4894	12.43	**	80

CS Circular Flange Standard Nut

Part Number Construction

Example : L CS M1 G R - 014AB - 0150.00 - N - 001

L
Screw Type
L = Sliding Screw

CS
Nut Model
S = No Nut
CS = Circular flange standard nut
CTS = Circular flange trimming standard nut
CTC = Circular flange trimming compression spring anti-backlash nut
TTA = Triangle flange torsion spring anti-backlash nut A
TTB = Triangle flange torsion spring anti-backlash nut B
TC = Triangle flange compression spring anti-backlash nut
NS = Non-standard customization nut

M1
Nut Material
M1 = POM Option
M2 = PBT Option
M3 = PPS Option
M4 = Bronze

G
Screw Surface Treatment
G = Standard lubrication grease
T = PTFE Coating
S = No oil, No coating
D = Non-standard customization

R
Thread Direction
R = Right hand thread
L = Left hand thread
C = Non-standard customization

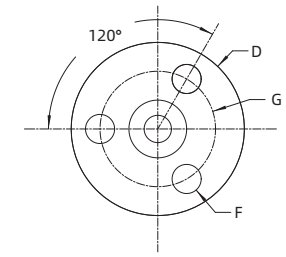
014AB
Screw Standard
014 = Diameter code
AB = Lead code
For details p8-9

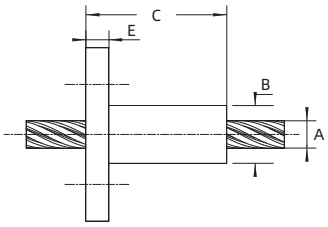
0150.00
Screw Length
Imperial : 0000.00
Metric : 0000

N
Screw End Type
M = Metric thread (P8-9)
S = Smooth end
B = Non-standard customization
N = No processing

001
Customization Serial Number

Mechanical Dimension





Material	Operation Temperature
POM	5℃-80℃ (41℉-176℉)
PBT	-40℃-120℃ (-40℉-248℉)
PPS	-40℃-220℃ (-40℉-428℉)

Screw diameter A mm (inch)	3.5 (9/64)	4.77 (3/16)	6 (0.24)	6.35 (1/4)	8 (0.315)	9.5 (3/8)	10 (0.394)	12 (0.47)	15.8 (0.625)
Nut diameter B mm (inch)	6.35 (0.25)	8 (0.31)	12 (0.47)	12 (0.47)	12 (0.47)	15.88 (0.63)	15.88 (0.63)	22 (0.866)	28.6 (1.13)
Nut length C mm (inch)	15.5 (0.61)	9.5 (0.37)	13.4 (0.52)	13.4 (0.52)	13.4 (0.52)	25.4 (1)	25.4 (1)	30 (1.181)	31.7 (1.25)
Flange diameter D mm (inch)	19.05 (0.75)	19.05 (0.75)	25.4 (1)	25.4 (1)	25.4 (1)	31.75 (1.25)	31.75 (1.25)	44 (1.732)	57.15 (2.25)
Flange thickness E mm (inch)	2.54 (0.1)	3.2 (0.126)	3.8 (0.15)	3.8 (0.15)	3.8 (0.15)	4.76 (0.19)	4.76 (0.19)	5 (0.197)	12.7 (0.5)
Installation hole diameter F mm (inch)	3.2 (0.126)	3.2 (0.126)	3.2 (0.126)	3.2 (0.126)	3.2 (0.126)	3.5 (0.14)	3.5 (0.14)	5.4 (0.213)	7 (0.28)
Screw hole center diameter G mm (inch)	12.7 (0.5)	12.7 (0.5)	19.05 (0.75)	19.05 (0.75)	19.05 (0.75)	22.22 (0.87)	22.22 (0.87)	31 (1.220)	44.45 (1.75)
Dynamic allowable load max Kg (lbs)	11 (24)	15 (33)	20 (44)	20 (44)	20 (44)	35 (75)	35 (75)	68 (149)	100 (220)
Torque max N-m (oz-in)	No torque	No torque	No torque	No torque	No torque	No torque	No torque	No torque	No torque

CTS Circular Flange Trimming Standard Nut

Part Number Construction

Example : L CTS M1 G R - 014AB - 0150.00 - N - 001

L
Screw Type
L = Sliding Screw

CTS
Nut Model
S = No Nut
CS = Circular flange standard nut
CTS = Circular flange trimming standard nut
CTC = Circular flange trimming compression spring anti-backlash nut
TTA = Triangle flange torsion spring anti-backlash nut A
TTB = Triangle flange torsion spring anti-backlash nut B
TC = Triangle flange compression spring anti-backlash nut
NS = Non-standard customization nut

M1
Nut Material
M1 = POM Option
M2 = PBT Option
M3 = PPS Option
M4 = Bronze

G
Screw Surface Treatment
G = Standard lubrication grease
T = PTFE Coating
S = No oil, No coating
D = Non-standard customization

R
Thread Direction
R = Right hand thread
L = Left hand thread
C = Non-standard customization

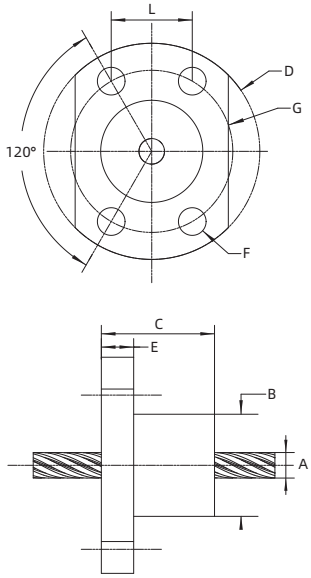
014AB
Screw Standard
014 = Diameter code
AB = Lead code
For details p8-9

0150.00
Screw Length
Imperial : 0000.00
Metric : 0000

N
Screw End Type
M = Metric thread (P8-9)
S = Smooth end
B = Non-standard customization
N = No processing

001
Customization Serial Number

Mechanical Dimension



Material	Operation Temperature
POM	5°C-80°C (41°F-176°F)
PBT	-40°C-120°C (-40°F-248°F)
PPS	-40°C-220°C (-40°F-428°F)

Screw diameter A mm (inch)	6 (0.24)	6.35 (1/4)	8 (0.315)	9.5 (3/8)	10 (0.394)
Nut diameter B mm (inch)	12 (0.47)	12 (0.47)	12 (0.47)	15.8 (0.62)	15.8 (0.62)
Nut length C mm (inch)	13.3 (0.52)	13.3 (0.52)	13.3 (0.52)	25.25 (0.99)	25.25 (0.99)
Flange diameter D mm (inch)	24.4 (0.96)	25.4 (1)	24.4 (0.96)	31.8 (1.25)	31.8 (1.25)
Flange thickness E mm (inch)	3.8 (0.15)	3.8 (0.15)	3.8 (0.15)	4.7 (0.185)	4.7 (0.185)
Installation hole diameter F mm (inch)	3.25 (0.13)	3.25 (0.13)	3.25 (0.13)	4.2 (0.165)	4.2 (0.165)
Screw hole center diameter G mm (inch)	19.05 (0.75)	19.05 (0.75)	19.05 (0.75)	22.22 (0.87)	22.22 (0.87)
Mounting hole distance L mm (inch)	9.45 (0.37)	9.45 (0.37)	9.45 (0.37)	11.05 (0.435)	11.05 (0.435)
Dynamic allowable load max Kg (lbs)	20 (44)	20 (44)	20 (44)	35 (75)	35 (75)
Torque max N-m (oz-in)	No torque	No torque	No torque	No torque	No torque

CTC Circular Flange Trimming Compression Spring Anti-backlash Nut

Part Number Construction

Example : L CTC M1 G R - 014AB - 0150.00 - N - 001

L
Screw Type
L = Sliding Screw

CTC
Nut Model
S = No Nut
CS = Circular flange standard nut
CTS = Circular flange trimming standard nut
CTC = Circular flange trimming compression spring anti-backlash nut
TTA = Triangle flange torsion spring anti-backlash nut A
TTB = Triangle flange torsion spring anti-backlash nut B
TC = Triangle flange compression spring anti-backlash nut
NS = Non-standard customization nut

M1
Nut Material
M1 = POM Option
M5 = PA66 Option

G
Screw Surface Treatment
G = Standard lubrication grease
T = PTFE Coating
S = No oil, No coating
D = Non-standard customization

R
Thread Direction
R = Right hand thread
L = Left hand thread
C = Non-standard customization

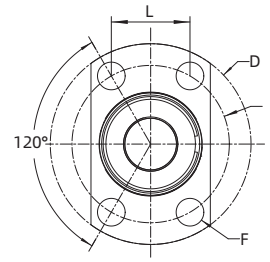
014AB
Screw Standard
014 = Diameter code
AB = Lead code
For details p8-9

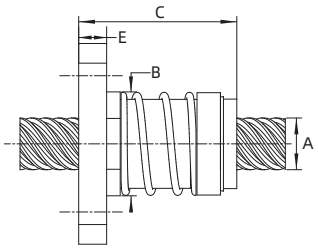
0150.00
Screw Length
Imperial : 0000.00
Metric : 0000

N
Screw End Type
M = Metric thread (P8-9)
S = Smooth end
B = Non-standard customization
N = No processing

001
Customization Serial Number

Mechanical Dimension





Material	Operation Temperature
POM	5℃-80℃ (41℉-176℉)
PA66	-5℃-100℃ (-23℉-212℉)

Screw diameter A mm (inch)	6 (0.24)	6.35 (1/4)	8 (0.315)	9.5 (3/8)	10 (0.394)
Nut diameter B mm (inch)	15.9 (0.625)	15.9 (0.625)	15.9 (0.625)	19.15 (0.75)	19.15 (0.75)
Nut length C mm (inch)	25 (0.98)	25 (0.98)	25 (0.98)	30 (1.18)	30 (1.18)
Flange diameter D mm (inch)	31 (1.22)	31 (1.22)	31 (1.22)	37 (1.46)	37 (1.46)
Flange thickness E mm (inch)	4.1 (0.16)	4.1 (0.16)	4.1 (0.16)	5.15 (0.20)	5.15 (0.20)
Installation hole diameter F mm (inch)	3.2 (0.126)	3.2 (0.126)	3.2 (0.126)	5.1 (0.2)	5.1 (0.2)
Screw hole center diameter G mm (inch)	25 (0.98)	25 (0.98)	25 (0.98)	29 (1.14)	29 (1.14)
Mounting hole distance L mm (inch)	12.5 (0.49)	12.5 (0.49)	12.5 (0.49)	14.5 (0.57)	14.5 (0.57)
Dynamic allowable load max Kg (lbs)	2.3 (5)	2.3 (5)	3.6 (8)	3.6 (8)	3.6 (8)
Torque max N-m (oz-in)	0.03 (4)	0.03 (4)	0.04 (5)	0.04 (5)	0.04 (5)

TTA Triangle Flange Torsion Spring Anti-backlash Nut A

Part Number Construction

Example : L TTA M1 G R - 014AB - 0150.00 - N - 001

L
Screw Type
L = Sliding Screw

TTA
Nut Model
S = No Nut
CS = Circular flange standard nut
CTS = Circular flange trimming standard nut
CTC = Circular flange trimming compression spring anti-backlash nut
TTA = Triangle flange torsion spring anti-backlash nut A
TTB = Triangle flange torsion spring anti-backlash nut B
TC = Triangle flange compression spring anti-backlash nut
NS = Non-standard customization nut

M1
Nut Material
M1 = POM Option
M5 = PA66 Option

G
Screw Surface Treatment
G = Standard lubrication grease
T = PTFE Coating
S = No oil, No coating
D = Non-standard customization

R
Thread Direction
R = Right hand thread
L = Left hand thread
C = Non-standard customization

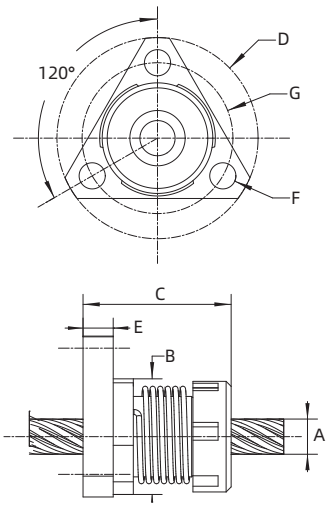
014AB
Screw Standard
014 = Diameter code
AB = Lead code
For details p8-9

0150.00
Screw Length
Imperial : 0000.00
Metric : 0000

N
Screw End Type
M = Metric thread (P8-9)
S = Smooth end
B = Non-standard customization
N = No processing

001
Customization Serial Number

Mechanical Dimension



Material	Operation Temperature
POM	5℃-80℃ (41℉-176℉)
PA66	-5℃-100℃ (-23℉-212℉)

Screw diameter A mm (inch)	3.5 (9/64)	4.77(3/16)
Nut diameter B mm (inch)	11.5 (0.45)	11.5 (0.45)
Nut length C mm (inch)	14.5 (0.57)	14.5 (0.58)
Flange diameter D mm (inch)	20 (0.79)	20 (0.79)
Flange thickness E mm (inch)	3 (0.12)	3 (0.12)
Installation hole diameter F mm (inch)	2.6 (0.1)	2.6 (0.1)
Screw hole center diameter G mm (inch)	15 (0.59)	15 (0.59)
Dynamic allowable load max Kg (lbs)	2.3 (5)	2.3 (5)
Torque max N-m (oz-in)	0.004 (0.5)	0.004 (0.5)

TTB Triangle Flange Torsion Spring Anti-backlash Nut B

Part Number Construction

Example : L TTB M1 G R - 014AB - 0150.00 - N - 001

L
Screw Type
L = Sliding Screw

CS
Nut Model
S = No Nut
CS = Circular flange standard nut
CTS = Circular flange trimming standard nut
CTC = Circular flange trimming compression spring anti-backlash nut
TTA = Triangle flange torsion spring anti-backlash nut A
TTB = Triangle flange torsion spring anti-backlash nut B
TC = Triangle flange compression spring anti-backlash nut
NS = Non-standard customization nut

M1
Nut Material
M1 = POM Option
M2 = PBT Option
M3 = PPS Option

G
Screw Surface Treatment
G = Standard lubrication grease
T = PTFE Coating
S = No oil, No coating
D = Non-standard customization

R
Thread Direction
R = Right hand thread
L = Left hand thread
C = Non-standard customization

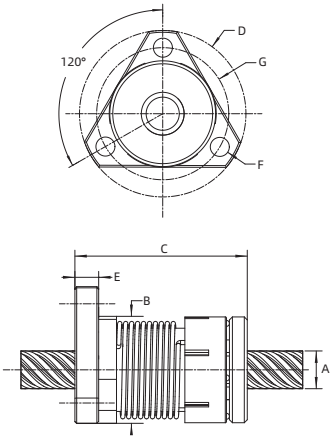
014AB
Screw Standard
014 = Diameter code
AB = Lead code
For details p8-9

0150.00
Screw Length
Imperial : 0000.00
Metric : 0000

N
Screw End Type
M = Metric thread (P8-9)
S = Smooth end
B = Non-standard customization
N = No processing

001
Customization Serial Number

Mechanical Dimension



Material	Operation Temperature
POM	5℃-80℃ (41℉-176℉)
PBT	-40℃-120℃ (-40℉-248℉)
PPS	-40℃-220℃ (-40℉-428℉)

Screw diameter A mm (inch)	6 (0.24)"	6.35 (1/4)"	8 (0.315)	9.5 (3/8)	10 (0.394)
Nut diameter B mm (inch)	18 (0.7)	18 (0.7)	18 (0.7)	20 (0.79)	20 (0.79)
Nut length C mm (inch)	30 (1.18)	30 (1.18)	30 (1.18)	40 (1.57)	40 (1.57)
Flange diameter D mm (inch)	28 (1.1)	28 (1.1)	28 (1.1)	38.1 (1.5)	38.1 (1.5)
Flange thickness E mm (inch)	4 (0.157)	4 (0.157)	4 (0.157)	7 (0.276)	7 (0.276)
Installation hole diameter F mm (inch)	3.2 (0.126)	3.2 (0.126)	3.2 (0.126)	5.1 (0.2)	5.1 (0.2)
Screw hole center diameter G mm (inch)	22.22 (0.87)	22.22 (0.87)	22.22 (0.87)	28.6 (1.125)	28.6 (1.125)
Dynamic allowable load max Kg (lbs)	5 (11)	5 (11)	10 (20)	10 (20)	10 (20)
Torque max N-m (oz-in)	0.004-0.014 (0.5-2)	0.004-0.014 (0.5-2)	0.007-0.020 (1-3)	0.007-0.020 (1-3)	0.007-0.020 (1-3)

TC Triangle Flange Compression Spring Anti-backlash Nut

Part Number Construction

Example : L TC M1 G R - 014AB - 0150.00 - N - 001

L
Screw Type
L = Sliding Screw

TC
Nut Model
S = No Nut
CS = Circular flange standard nut
CTS = Circular flange trimming standard nut
CTC = Circular flange trimming compression spring anti-backlash nut
TTA = Triangle flange torsion spring anti-backlash nut A
TTB = Triangle flange torsion spring anti-backlash nut B
TC = Triangle flange compression spring anti-backlash nut
NS = Non-standard customization nut

M1
Nut Material
M1 = POM Option
M5 = PA66 Option

G
Screw Surface Treatment
G = Standard lubrication grease
T = PTFE Coating
S = No oil, No coating
D = Non-standard customization

R
Thread Direction
R = Right hand thread
L = Left hand thread
C = Non-standard customization

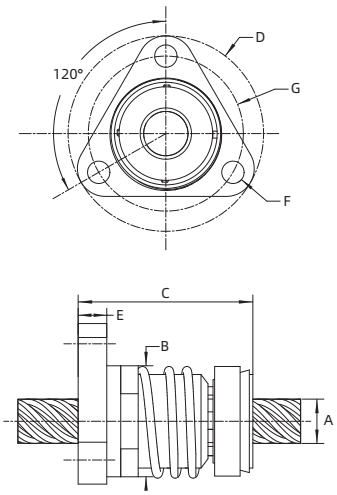
014AB
Screw Standard
014 = Diameter code
AB = Lead code
For details p8-9

0150.00
Screw Length
Imperial : 0000.00
Metric : 0000

N
Screw End Type
M = Metric thread (P8-9)
S = Smooth end
B = Non-standard customization
N = No processing

001
Customization Serial Number

Mechanical Dimension



Material	Operation Temperature
POM	5℃-80℃ (41℉-176℉)
PA66	-5℃-100℃ (-23℉-212℉)

Screw diameter A mm (inch)	6 (0.24)	6.35 (1/4)	8 (0.315)	9.5 (3/8)	10 (0.394)
Nut diameter B mm (inch)	15.9 (0.625)	15.9 (0.625)	15.9 (0.625)	19.15 (0.75)	19.15 (0.75)
Nut length C mm (inch)	25 (0.98)	25 (0.98)	25 (0.98)	30 (1.18)	30 (1.18)
Flange diameter D mm (inch)	28 (1.1)	28 (1.1)	28 (1.1)	38.3 (1.5)	38.3 (1.5)
Flange thickness E mm (inch)	4.1 (0.16)	4.1 (0.16)	4.1 (0.16)	5.15 (0.2)	5.15 (0.2)
Installation hole diameter F mm (inch)	3.2 (0.126)	3.2 (0.126)	3.2 (0.126)	5.1 (0.2)	5.1 (0.2)
Screw hole center diameter G mm (inch)	22.22 (0.87)	22.22 (0.87)	22.22 (0.87)	28.4 (1.12)	28.4 (1.12)
Dynamic allowable load max Kg (lbs)	2.3 (5)	2.3 (5)	3.6 (8)	3.6 (8)	3.6 (8)
Torque max N-m (oz-in)	0.03 (4)	0.03 (4)	0.04 (5)	0.04 (5)	0.04 (5)

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