Hengli®

Ball screw · grinding type

Internal circulation DWP/S, end plug circulation KRP/S

江苏恒立精密工业有限公司

JIANGSU HENGLI PRECISION INDUSTRY CO.,LTD.

Lead accuracy

Accuracy specifications

Positioning with 300mm variation value V300 and swing value V2π

Unit: μm

Accuracy level	C0	C1	C2	C3	C5	C7
V_{300}	3.5	5	7	8	18	—
$V_{2\pi}$	3	4	5	6	8	—

Note) V300:The maximum variation value of any 300mm sample within the effective thread length;
V2π: The maximum variation value of any one rotation within the effective thread length.

Lead Accuracy Table

Unit: μm

Product type		Precision ball screw										
Accuracy level		C0		C1		C2		C3		C5		C7
Effective length of thread (mm)		e_p	v_u	e_p	v_u	e_p	v_u	e_p	v_u	e_p	v_u	e_p
>	≤											
—	100	3	3	3.5	5	5	7	8	8	18	18	±50/300mm
100	200	3.5	3	4.5	5	7	7	10	8	20	18	
200	315	4	3.5	6	5	8	7	12	8	23	18	
315	400	5	3.5	7	5	9	7	13	10	25	20	
400	500	6	4	8	5	10	7	15	10	27	20	
500	630	6	4	9	6	11	8	16	12	30	23	
630	800	7	5	10	7	13	9	18	13	35	25	
800	1000	8	6	11	8	15	10	21	15	40	27	
1000	1250	9	6	13	9	18	11	24	16	46	30	
1250	1600	11	7	15	10	21	13	29	18	54	35	
1600	2000	—	—	18	11	25	15	35	21	65	40	
2000	2500	—	—	22	13	30	18	41	24	77	46	
2500	3150	—	—	26	15	36	21	50	29	93	54	
3150	4000	—	—	30	18	44	25	60	35	115	65	
4000	5000	—	—	—	—	52	30	72	41	140	77	
5000	6300	—	—	—	—	65	36	90	50	170	93	
6300	8000	—	—	—	—	—	—	110	60	210	115	
8000	10000	—	—	—	—	—	—	—	—	260	140	

Note) EP: The difference obtained by subtracting the target trip from the actual average trip;
Vu :The maximum variation amplitude when sandwiching the actual travel with two straight lines parallel to the actual average travel.

Definition of basic rated load,Rated life

In the process of using the ball screw, the ball and the thread raceway surface are squeezed due to the excessive axial load, resulting in deformation. The deformation is permanent and cannot be completely restored even after unloading. Therefore, it is necessary to analyze how to restrain the deformation within a certain range.

Basic rated load

Basic rated static load C_{0a}

The basic rated static load refers to the axial load with certain size and direction when the sum of the permanent deformation of the rolling element and the rolling surface of the ball screw pair reaches 0.01% of the diameter of the rolling element.

Basic rated dynamic load C_a

It refers to the axial load that 90% of the same set of ball screws can bear without fatigue spalling due to rolling fatigue when they run under the same conditions at 1 million revolutions.

Calculation of Axial Allowable Load with C_{0a}

In general, the basic static load rating, Coa, is equal to the ball screw axial allowable load. However, depending on the service conditions, it is necessary to consider the following static safety factors when calculating the load.

$$Fa_{max} = \frac{C_{0a}}{f_s}$$

Fa_{max} : Axial Allowable Load (kN)
C_{0a} : static rated load (kN)
f_s : Static safety factor (refer to the table on the right)

Static safety factor (f_s)

Machinery used	Load conditions	Lower bound on fs
General industrial machinery	Without vibration or shock	1.0~3.5
	With vibration or shock	2.0~5.0
Machine tool	Without vibration or shock	1.0~4.0
	With vibration or shock	2.5~7.0

Rated life

The rated life of the ball screw is calculated according to the basic rated dynamic load Ca and the axial load. The rated life is calculated from the load on the premise that good lubrication can be ensured and the assembly can be carried out under ideal installation conditions. The accuracy and deformation of the installation components may have a negative impact on the life.

Calculation of rated life

The rated lifespan is generally expressed in total revolutions per minute, but sometimes expressed in total revolution time or total distance traveled, as follows.

$$L = \left(\frac{C_a}{f_w \cdot Fa}\right)^3 \times 10^6$$

L : Rated life (Total number of revolutions)
C_a : Basic dynamic rated load (N)
Fa : Carrying axial load (N)
f_w : Load factor (Refer to the table on the right)

Load factor (f_w)

Vibration,impact	Speed (V)	f_w
Tiny	At micro speed V ⩽ 0.25 m/s	1~1.2
Small	At low speeds 0.25 < V ⩽ 1 m/s	1.2~1.5
Middle	At medium speeds 1 < V ⩽ 2 m/s	1.5~2
Big	At high speeds V > 2 m/s	2~3.5

Working life,dustproof,lubrication

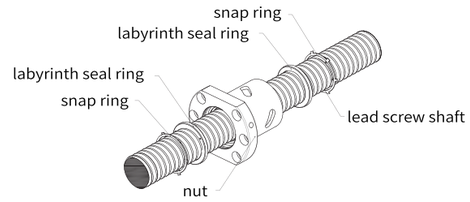
Working life time

$$L_h = \frac{L}{60 \times N} = \frac{L \times P_h}{2 \times 60 \times n \times l_s}$$

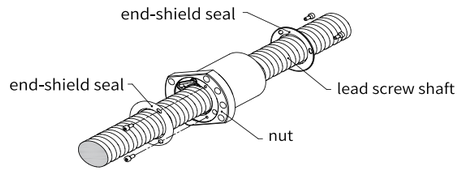
L_h : working life time (h)
N : speed per minute (min^{-1})
n : number of trips per minute (min^{-1})
P_h : lead of ball screw (mm)
l_s : stroke length (mm)

Dustproof

If foreign matter is mixed into the nut of the ball screw, it will cause early wear or operation malfunction caused by damage to the channel and damage to the circulation part. Therefore, it is necessary to prevent foreign matters from entering and select appropriate dust-proof parts.



Labyrinth seal LS



End caps seal KS

Lubrication

When the ball screw is lubricated with grease, it is recommended to use lithium soap-based grease that the base oil viscosity is 30~140mm2/s.When lubricated with oil, it is recommended to use ISOVG32 ~ 100 lubricating oil.

Lubricants efficacy:

(1) Reduce the friction between the moving parts, prevent coking and reduce wear.
(2) An oil film is formed on the rolling surface to reduce the stress acting on the surface and extend the rolling fatigue life.
(3) Cover the oil film on the metal surface to prevent rust.

Selection basis:

(1) When paying attention to the thermal displacement of the lead screw shaft in such as high-speed applications or when used in low temperature environments, it is recommended to use lubricants with lower base oil viscosity.
(2) When used in low speed, high temperature or micro-motion, heavy load and other conditions, it is recommended to use lubricants with higher base oil viscosity.

The following table gives the inspection and refill intervals of lubricants for reference. It should be noted that when adding the new lubricant, the old lubricant on the lead screw shaft must first be wiped and then supplemented.

Lubricants inspection and refill interval

Method of lubrication	Interval between inspection	Inspection item	Refill or replace interval
Lubricating oil	Weekly	Amount of oil,dirt,etc	Supplement at each point check, or depending on the tank capacity
Lubricating grease	The first two to three months of work	Filth, foreign matter mixing, etc	It is usually replenished once a year, but depending on the inspection results, the injection amount is 50% of the nut space, avoiding the use of different brands
Oil immersion	Every day before work	Oil level management	According to consumption

lubrication,Features,Application

Lubricating oil injection amount

Check every week and make appropriate supplement according to the capacity of the oil tank. If the lubricating oil is dirty, Replace the lubricating oil. The formula below shows the calculation method of oil injection quantity.

$$Q = \frac{D}{90}$$

Q: Oil filling quantity every 10 minutes cc
D: outer diameter of lead screw shaft mm

Grease injection amount

Check whether there is any foreign matter in the initial 2 ~ 3 months of work. If the grease is dirty, please replace the grease. It is usually replenished once a year, but it depends on the results of specific examinations. The amount of grease to be injected is 50% of the nut space and the use of different brands should be avoided. The following formula shows the calculation method of the grease injection amount.

$$Q = \left(\sqrt{(\pi \times D_p)^2 + P_h^2} \times \pi D_w^2 \times n \times \frac{1}{1000} + \frac{\pi L \times (2d_1 G + G^2)}{4}\right) \times \frac{1}{1100}$$

Q	: Grease injection amount	(cm^3)	
d_1	: Outer diameter of screw shaft	(mm)	
D_w	: Ball diameter	(mm)	
D_p	: Pitch circle diameter	(mm)	
P_h	: Lead	(mm)	
L	: Length of nut	(mm)	
G	: Ball size factor		
n	: Number of cycles		

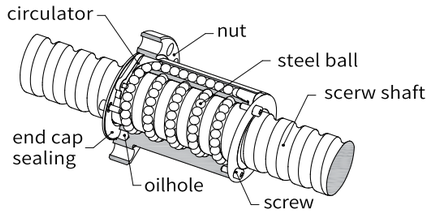
Ball diameter Dw	Φ 2.381	Φ 2.778	Φ 3.175	Φ 3.969	Φ 4.763
G value	1.0	1.5	1.2	1.3	2.0

Ball diameter Dw	Φ 6.350	Φ 7.144	Φ 7.938	Φ 9.525	Φ 12 .7
G value	3.0	3.5	3.9	5.0	6.0

Note: Please consult Hengli personnel for Dp parameters.

End plug circulation KRP, KRS product

- Good steel ball circulation structure
- Low torque variation, smooth movement
- High speed and low noise
- By using the independently developed compact seal ring, the length of the nut is shortened and the compact design is realized.



Shaft side view

Field of application

- Industrial mother machine
- Measuring equipment
- energy
- Semiconductor
- medical
- robot

Circulation mode	Model	Shaft diameter /mm	DN value
End loop	KRP KRS	Φ 10 ∽ Φ 25	≦ 100000
		Φ 28 ∽ Φ 36	≦ 125000
		Φ 40 ∽ Φ 63	≦ 130000

Features,Application,Nominal model

Composition example of nominal model

K R S 40 16 - 5 KS + 800/ 1000 C3 T

- K: End Circular
- R: Standard form
- S: Pre-leading mode ※1
- 40: Lead screw diameter
- 16: lead of srew
- 5: Number of cycles per nut
- KS: End cap seal
- 800/: Ball thread length
- 1000: Total length of screw
- C3: Accuracy level ※2
- T: Surface special treatment

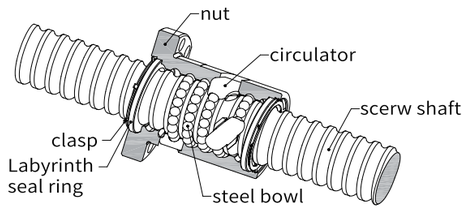
※1) Pre compression method:S is a single nut gap, P is single nut preloading;
※2) The accuracy level can be customized according to customer needs. For specific details, please contact Hengli personnel.

Features of internal circulation DWP and DWS products

- The outer diameter of the nut of the circulation structure is the smallest, and the compact design can be realized most;
- Can realize dislocation pre-tightening, large steel ball pre-tightening, no pre-tightening, double nut gasket pre-tightening

Application areas

- Industrial mother machine
- Measuring equipment
- energy
- Semiconductor
- medical
- robot



Shaft side view

Circulation mode	Model	Shaft diameter /mm	DN value
Internal circulation	DWP DWS	Φ 16 ∽ Φ 28	≦ 70000
		Φ 32 ∽ Φ 100	≦ 100000

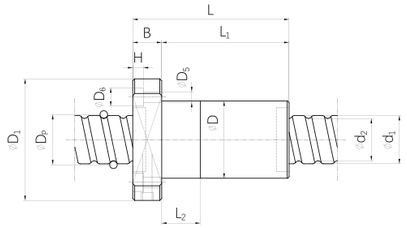
Composition example of nominal model

D W S 40 10 - 5 LS + 800/ 1000 C3

- D: Internal circulation type
- W: D-type-wing
- S: Pre-leading mode ※1
- 40: Lead screw diameter
- 10: lead of srew
- 5: Number of cycles per nut
- LS: Labyrinth seal
- 800/: Ball thread length
- 1000: Total length of screw
- C3: Accuracy level ※2

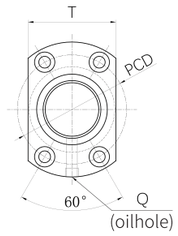
※1) Pre compression method:S is a single nut gap, P is single nut preloading;
※2) The accuracy level can be customized according to customer needs. For specific details, please contact Hengli personnel.

Size specification



Internal circulation DWP type Grinding type ball screw

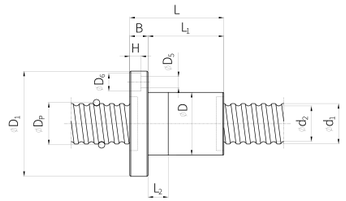
Size specification



Flange type F_1

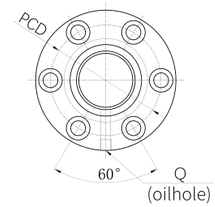
Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw													Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	Large steel ball pressed type		Outer diameter	Flange diameter	Length				Size of installation hole				F_1	Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	D_6	H	T	Q		kg・cm²/mm	min^{-1}
DWP 1605-3	16	5	3.175	13	1.35	3*1	9.3	13.2	338		30	49	45	10	35	10	39	4.5	8	4.5	34	M6*1	0.24	$5.02*10^{-4}$	4400
DWP 1605-4	16	5	3.175	13	1.35	4*1	11.9	17.7	446		30	49	50	10	40	10	39	4.5	8	4.5	34	M6*1	0.25	$5.02*10^{-4}$	4400
DWP 2004-3	20	4	2.381	17.8	2.26	3*1	6.5	11.8	410		32	56	42	11	31	10	44	5.5	9.5	5.5	38	M6*1	0.27	$1.23*10^{-3}$	3500
DWP 2004-4	20	4	2.381	17.8	2.26	4*1	8.3	15.7	540		32	56	46	11	35	10	44	5.5	9.5	5.5	38	M6*1	0.28	$1.23*10^{-3}$	3500
DWP 2005-3	20	5	3.175	17	2.18	3*1	10.8	17.6	426		34	58	46	11	35	10	46	5.5	9.5	5.5	38	M6*1	0.32	$1.23*10^{-3}$	3500
DWP 2005-4	20	5	3.175	17	2.18	4*1	13.8	23.4	560		34	58	51	11	40	10	46	5.5	9.5	5.5	38	M6*1	0.34	$1.23*10^{-3}$	3500
DWP 2006-3	20	6	3.969	16.5	2.1	3*1	13.9	20.7	418		35	58	52	11	41	10	46	5.5	9.5	5.5	38	M6*1	0.35	$1.23*10^{-3}$	3500
DWP 2006-4	20	6	3.969	16.5	2.1	4*1	17.9	27.6	550		35	58	59	11	48	10	46	5.5	9.5	5.5	38	M6*1	0.38	$1.23*10^{-3}$	3500
DWP 2008-4	20	8	3.969	16.5	2.19	4*1	17.8	27.6	550		35	58	68	11	57	15	46	5.5	9.5	5.5	38	M6*1	0.42	$1.23*10^{-3}$	3500
DWP 2010-3	20	10	3.969	16.5	2.24	3*1	13.8	20.7	416		35	58	68	11	57	15	46	5.5	9.5	5.5	38	M6*1	0.42	$1.23*10^{-3}$	3500
DWP 2504-3	25	4	2.381	22.8	3.6	3*1	7.1	14.8	492		38	63	43	11	32	10	51	5.5	9.5	5.5	41	M6*1	0.35	$2.99*10^{-3}$	2800
DWP 2504-4	25	4	2.381	22.8	3.6	4*1	9.2	19.8	648		38	63	47	11	36	10	51	5.5	9.5	5.5	41	M6*1	0.37	$2.99*10^{-3}$	2800
DWP 2505-3	25	5	3.175	22	3.5	3*1	12.3	23.0	528		40	63	47	11	36	10	51	5.5	9.5	5.5	44	M6*1	0.39	$2.99*10^{-3}$	2800
DWP 2505-4	25	5	3.175	22	3.5	4*1	15.7	30.7	696		40	63	52	11	41	10	51	5.5	9.5	5.5	44	M6*1	0.41	$2.99*10^{-3}$	2800
DWP 2506-3	25	6	3.969	21.5	3.4	3*1	16.2	27.5	524		40	63	52	11	41	10	51	5.5	9.5	5.5	44	M6*1	0.40	$2.99*10^{-3}$	2800
DWP 2506-4	25	6	3.969	21.5	3.4	4*1	20.7	36.6	690		40	63	60	11	49	10	51	5.5	9.5	5.5	44	M6*1	0.44	$2.99*10^{-3}$	2800
DWP 2508-3	25	8	3.969	21.5	3.51	3*1	16.1	27.5	524		40	63	61	12	49	10	51	5.5	9.5	5.5	44	M6*1	0.47	$2.99*10^{-3}$	2800
DWP 2508-4	25	8	3.969	21.5	3.51	4*1	20.6	36.6	690		40	63	69	12	57	15	51	5.5	9.5	5.5	44	M6*1	0.51	$2.99*10^{-3}$	2800
DWP 2510-3	25	10	3.969	21.5	3.58	3*1	16.0	27.5	524		40	63	80	15	65	15	51	5.5	9.5	5.5	44	M6*1	0.56	$2.99*10^{-3}$	2800
DWP 2510-4	25	10	3.969	21.5	3.58	4*1	20.6	36.6	690		40	63	85	15	70	20	51	5.5	9.5	5.5	44	M6*1	0.61	$2.99*10^{-3}$	2800

Size specification



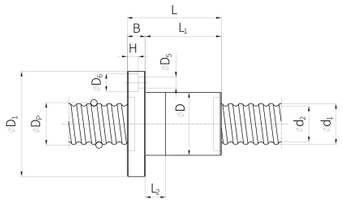
Internal circulation DWP type Grinding type ball screw

Size specification



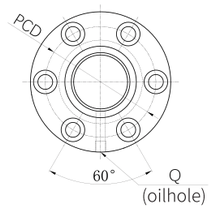
Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw												Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	Large steel ball pressed type		Outer diameter	Flange diameter	Length				Size of installation hole				Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	D_6	H	Q		kg・cm^2/mm	min^{-1}
DWP 2805-3	28	5	3.175	25	4.44	3*1	13.1	26.3	588		43	71	49	12	37	10	57	6.6	11	6.5	M6*1	0.47	$4.71*10^{-3}$	2500
DWP 2805-4	28	5	3.175	25	4.44	4*1	16.7	35.0	772		43	71	54	12	42	10	57	6.6	11	6.5	M6*1	0.5	$4.71*10^{-3}$	2500
DWP 2806-3	28	6	3.969	24.5	4.33	3*1	17.6	32.5	602		43	71	55	12	43	10	57	6.6	11	6.5	M6*1	0.49	$4.71*10^{-3}$	2500
DWP 2806-4	28	6	3.969	24.5	4.33	4*1	22.6	43.4	792		43	71	61	12	49	10	57	6.6	11	6.5	M6*1	0.52	$4.71*10^{-3}$	2500
DWP 2810-4	28	10	4.763	23.7	4.4	4*1	27.8	49.4	778		45	71	83	15	68	20	57	6.6	11	6.5	M6*1	0.76	$4.71*10^{-3}$	2500
DWP 3204-3	32	4	2.381	29.8	5.99	3*1	8.0	19.4	610		45	76	44	11	33	10	63	6.6	11	6.5	M6*1	0.46	$8.03*10^{-3}$	2500
DWP 3204-4	32	4	2.381	29.8	5.99	4*1	10.2	25.9	802		45	76	48	11	37	10	63	6.6	11	6.5	M6*1	0.48	$8.03*10^{-3}$	2500
DWP 3205-3	32	5	3.175	29	5.86	3*1	14.0	30.6	664		46	76	49	12	37	10	63	6.6	11	6.5	M6*1	0.51	$8.03*10^{-3}$	2500
DWP 3205-4	32	5	3.175	29	5.86	4*1	17.9	40.9	872		46	76	54	12	42	10	63	6.6	11	6.5	M6*1	0.54	$8.03*10^{-3}$	2500
DWP 3205-6	32	5	3.175	29	5.86	6*1	25.4	61.3	1286		46	76	65	12	53	15	63	6.6	11	6.5	M6*1	0.6	$8.03*10^{-3}$	2500
DWP 3206-3	32	6	3.969	28.5	5.74	3*1	18.8	37.6	676		48	76	54	12	42	10	63	6.6	11	6.5	M6*1	0.57	$8.03*10^{-3}$	2500
DWP 3206-4	32	6	3.969	28.5	5.74	4*1	24.1	50.2	890		48	76	61	12	49	10	63	6.6	11	6.5	M6*1	0.62	$8.03*10^{-3}$	2500
DWP 3208-3	32	8	4.763	27.7	5.7	3*1	23.0	42.0	652		50	84	67	15	52	15	66	9	14	8.5	M6*1	0.84	$8.03*10^{-3}$	2500
DWP 3208-4	32	8	4.763	27.7	5.7	4*1	29.5	56.1	858		50	84	76	15	61	20	66	9	14	8.5	M6*1	0.91	$8.03*10^{-3}$	2500
DWP 3210-3	32	10	6.35	26.6	5.45	3*1	32.4	53.0	648		54	87	76	15	61	20	69	9	14	8.5	M6*1	1.06	$8.03*10^{-3}$	2500
DWP 3210-4	32	10	6.35	26.6	5.45	4*1	41.6	70.7	852		54	87	86	15	71	20	69	9	14	8.5	M6*1	1.15	$8.03*10^{-3}$	2500
DWP 3212-4	32	12	6.35	26.6	5.59	4*1	41.4	70.7	852		54	87	96	15	81	25	69	9	14	8.5	M6*1	1.26	$8.03*10^{-3}$	2500
DWP 3610-3	36	10	6.35	30.6	7.02	3*1	35.2	61.7	732		58	98	79	18	61	20	77	11	17.5	11	M6*1	1.34	$1.29*10^{-2}$	2500
DWP 3610-4	36	10	6.35	30.6	7.02	4*1	45.0	82.2	964		58	98	90	18	72	20	77	11	17.5	11	M6*1	1.45	$1.29*10^{-2}$	2500
DWP 4005-4	40	5	3.175	37	9.31	4*1	19.9	52.5	1064		56	90	58	15	43	10	72	9	14	8.5	Rc1/8	0.85	$1.96*10^{-2}$	2500
DWP 4005-6	40	5	3.175	37	9.31	6*1	28.2	78.8	1566		56	90	68	15	53	15	72	9	14	8.5	Rc1/8	0.93	$1.96*10^{-2}$	2500

Size specification



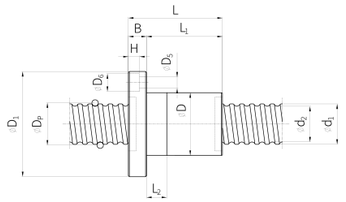
Internal circulation DWP type Grinding type ball screw

Size specification



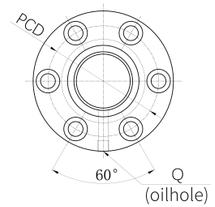
Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw												Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	Large steel ball pressed type		Outer diameter	Flange diameter	Length				Size of installation hole				Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	D_6	H	Q		kg・cm²/mm	min⁻¹
DWP 4006-4	40	6	3.969	36.5	9.15	4*1	26.7	63.9	1076		56	90	64	15	49	10	72	9	14	8.5	Rc1/8	0.87	$1.96*10^{-2}$	2500
DWP 4006-6	40	6	3.969	36.5	9.15	6*1	37.9	95.8	1584		56	90	77	15	62	20	72	9	14	8.5	Rc1/8	0.97	$1.96*10^{-2}$	2500
DWP 4008-4	40	8	4.763	35.7	9.1	4*1	34.1	75.6	1092		60	94	76	15	61	20	76	9	14	8.5	Rc1/8	1.19	$1.96*10^{-2}$	2500
DWP 4008-6	40	8	4.763	35.7	9.1	6*1	48.4	113.3	1608		60	94	92	15	77	25	76	9	14	8.5	Rc1/8	1.35	$1.96*10^{-2}$	2500
DWP 4010-3	40	10	6.35	34.6	8.8	3*1	37.6	70.3	814		62	104	79	18	61	20	82	11	17.5	11	Rc1/8	1.48	$1.96*10^{-2}$	2500
DWP 4010-4	40	10	6.35	34.6	8.8	4*1	48.1	93.8	1072		62	104	90	18	72	20	82	11	17.5	11	Rc1/8	1.6	$1.96*10^{-2}$	2500
DWP 4012-3	40	12	6.35	34.6	8.97	3*1	37.5	70.3	814		62	104	87	18	69	20	82	11	17.5	11	Rc1/8	1.59	$1.96*10^{-2}$	2500
DWP 4012-4	40	12	6.35	34.6	8.97	4*1	48.1	93.8	1070		62	104	100	18	82	25	82	11	17.5	11	Rc1/8	1.73	$1.96*10^{-2}$	2500
DWP 4016-4	40	16	6.35	34.6	9.19	4*1	47.9	93.8	1070		62	104	118	18	100	30	82	11	17.5	11	Rc1/8	1.96	$1.96*10^{-2}$	2500
DWP 4020-3	40	20	6.35	34.6	9.33	3*1	37.2	70.3	812		62	104	115	18	97	30	82	11	17.5	11	Rc1/8	1.94	$1.96*10^{-2}$	2500
DWP 5005-4	50	5	3.175	47	14.72	4*1	22.0	67.1	1290		66	100	58	15	43	10	82	9	14	8.5	Rc1/8	1.01	$4.79*10^{-2}$	2000
DWP 5005-6	50	5	3.175	47	14.72	6*1	31.2	100.6	1900		66	100	68	15	53	15	82	9	14	8.5	Rc1/8	1.11	$4.79*10^{-2}$	2000
DWP 5006-4	50	6	3.969	46.5	14.53	4*1	29.7	82.1	1310		66	100	64	15	49	10	82	9	14	8.5	Rc1/8	1.04	$4.79*10^{-2}$	2000
DWP 5006-6	50	6	3.969	46.5	14.53	6*1	42.1	123.1	1930		66	100	77	15	62	20	82	9	14	8.5	Rc1/8	1.16	$4.79*10^{-2}$	2000
DWP 5008-4	50	8	4.763	45.7	14.47	4*1	37.6	95.3	1310		70	112	79	18	61	20	90	11	17.5	11	Rc1/8	1.66	$4.79*10^{-2}$	2000
DWP 5008-6	50	8	4.763	45.7	14.47	6*1	53.3	142.9	1928		70	112	95	18	77	25	90	11	17.5	11	Rc1/8	1.86	$4.79*10^{-2}$	2000
DWP 5010-3	50	10	6.35	44.6	14.09	3*1	42.8	92.1	1010		72	114	79	18	61	20	92	11	17.5	11	Rc1/8	1.74	$4.79*10^{-2}$	2000
DWP 5010-4	50	10	6.35	44.6	14.09	4*1	54.8	122.8	1328		72	114	90	18	72	20	92	11	17.5	11	Rc1/8	1.88	$4.79*10^{-2}$	2000
DWP 5010-6	50	10	6.35	44.6	14.09	6*1	77.6	184.2	1956		72	114	110	18	92	30	92	11	17.5	11	Rc1/8	2.14	$4.79*10^{-2}$	2000
DWP 5012-3	50	12	7.938	43.4	13.7	3*1	56.2	109.9	1004		75	121	94	22	72	20	97	14	20	13	Rc1/8	2.34	$4.79*10^{-2}$	2000
DWP 5012-4	50	12	7.938	43.4	13.7	4*1	71.9	146.6	1320		75	121	107	22	85	25	97	14	20	13	Rc1/8	2.53	$4.79*10^{-2}$	2000
DWP 5016-3	50	16	7.938	43.4	14.12	3*1	56.0	109.9	1002		75	121	108	22	86	25	97	14	20	13	Rc1/8	2.59	$4.79*10^{-2}$	2000
DWP 5016-4	50	16	7.938	43.4	14.12	4*1	71.7	146.6	1318		75	121	126	22	104	30	97	14	20	13	Rc1/8	2.87	$4.79*10^{-2}$	2000

Size specification



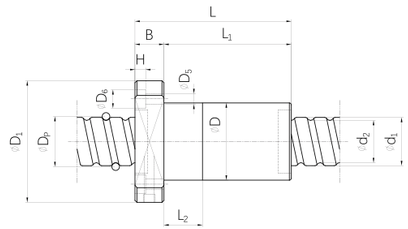
Internal circulation DWP type Grinding type ball screw

Size specification



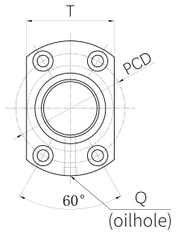
Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw												Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	Large steel ball pressed type		Outer diameter	Flange diameter	Length				Size of installation hole				Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	D_6	H	Q		kg・cm^2/mm	min^{-1}
DWP 5020-3	50	20	7.938	43.4	14.38	3*1	55.8	109.9	1000		75	121	136	28	108	30	97	14	20	13	Rc1/8	3.23	$4.79*10^{-2}$	2000
DWP 6306-4	63	6	3.969	59.5	23.36	4*1	32.8	104.9	1588		80	122	67	18	49	10	100	11	17.5	11	Rc1/8	1.61	$1.21*10^{-1}$	1600
DWP 6306-6	63	6	3.969	59.5	23.36	6*1	46.5	157.3	2338		80	122	79	18	61	20	100	11	17.5	11	Rc1/8	1.77	$1.21*10^{-1}$	1600
DWP 6308-4	63	8	4.763	58.7	23.29	4*1	42.2	124.7	1622		82	124	79	18	61	20	102	11	17.5	11	Rc1/8	1.91	$1.21*10^{-1}$	1600
DWP 6308-6	63	8	4.763	58.7	23.29	6*1	59.8	187.1	2386		82	124	96	18	78	25	102	11	17.5	11	Rc1/8	2.13	$1.21*10^{-1}$	1600
DWP 6310-4	63	10	6.35	57.6	22.82	4*1	62.5	163.4	1670		85	131	94	22	72	20	107	14	20	13	Rc1/8	2.56	$1.21*10^{-1}$	1600
DWP 6310-6	63	10	6.35	57.6	22.82	6*1	88.6	245.1	2458		85	131	115	22	93	30	107	14	20	13	Rc1/8	2.89	$1.21*10^{-1}$	1600
DWP 6312-3	63	12	7.938	56.4	22.33	3*1	63.8	144.0	1244		90	136	95	22	73	20	112	14	20	13	Rc1/8	3.02	$1.21*10^{-1}$	1600
DWP 6312-4	63	12	7.938	56.4	22.33	4*1	81.7	191.9	1636		90	136	108	22	86	25	112	14	20	13	Rc1/8	3.28	$1.21*10^{-1}$	1600
DWP 6312-6	63	12	7.938	56.4	22.33	6*1	115.8	287.9	2408		90	136	133	22	111	30	112	14	20	13	Rc1/8	3.77	$1.21*10^{-1}$	1600
DWP 6320-3	63	20	9.525	55.3	22.6	3*1	80.1	168.0	1448		95	153	136	28	108	30	123	18	26	17.5	Rc1/8	5.16	$1.21*10^{-1}$	1600
DWP 8010-4	80	10	6.35	74.6	37.37	4*1	69.3	210.1	2032		105	151	97	22	75	20	127	14	20	13	Rc1/8	3.56	$3.14*10^{-1}$	1250
DWP 8010-6	80	10	6.35	74.6	37.37	6*1	98.2	315.1	2992		105	151	118	22	96	30	127	14	20	13	Rc1/8	4.04	$3.14*10^{-1}$	1250
DWP 8012-4	80	12	7.938	73.4	36.76	4*1	93.1	255.5	2054		110	156	107	22	85	25	132	14	20	13	Rc1/8	4.39	$3.14*10^{-1}$	1250
DWP 8012-6	80	12	7.938	73.4	36.76	6*1	131.9	383.2	3024		110	156	132	22	110	30	132	14	20	13	Rc1/8	5.08	$3.14*10^{-1}$	1250
DWP 8016-4	80	16	9.525	72.3	36.53	4*1	156.3	419.4	2656		115	173	134	28	106	30	143	18	26	17.5	Rc1/8	6.83	$3.14*10^{-1}$	1250
DWP 8020-3	80	20	9.525	72.3	37.11	3*1	121.9	314.6	2018		115	173	146	28	118	30	143	18	26	17.5	Rc1/8	6.84	$3.14*10^{-1}$	1250
DWP 8020-4	80	20	9.525	72.3	37.11	4*1	156.1	419.4	2654		115	173	168	28	140	30	143	18	26	17.5	Rc1/8	7.59	$3.14*10^{-1}$	1250
DWP 10010-6	100	10	6.35	94.6	59.06	6*1	108.5	402.5	3628		125	171	117	22	95	30	147	14	20	13	Rc1/8	4.83	$7.66*10^{-1}$	1000
DWP 10012-6	100	12	7.938	93.4	58.3	6*1	146.7	492.4	3684		130	188	140	28	112	35	158	18	26	17.5	Rc1/8	7.31	$7.66*10^{-1}$	1000
DWP 10020-4	100	20	9.525	92.3	58.74	4*1	172.0	528.8	3182		135	205	168	32	136	30	169	22	32	21.5	Rc1/8	10.57	$7.66*10^{-1}$	1000

Size specification



Internal circulation DWS type Grinding type ball screw

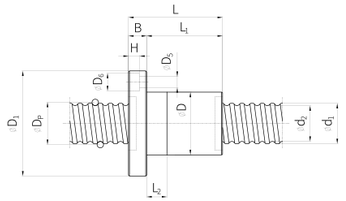
Size specification



Flange type F_1

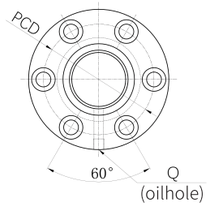
Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw												Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	No preloading type		Outer diameter	Flange diameter	Length				Size of installation hole				F_1	Oilhole	Quality kg	
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	D_6	H	T	Q		kg・cm²/mm
DWS 1605-3	16	5	3.175	13	1.35	3*1	9.3	13.2	169		30	49	45	10	35	10	39	4.5	8	4.5	34	M6*1	0.24	$5.02*10^{-4}$
DWS 1605-4	16	5	3.175	13	1.35	4*1	11.9	17.7	223		30	49	50	10	40	10	39	4.5	8	4.5	34	M6*1	0.25	$5.02*10^{-4}$
DWS 2004-3	20	4	2.381	17.8	2.26	3*1	6.5	11.8	205		32	56	42	11	31	10	44	5.5	9.5	5.5	38	M6*1	0.27	$1.23*10^{-3}$
DWS 2004-4	20	4	2.381	17.8	2.26	4*1	8.3	15.7	270		32	56	46	11	35	10	44	5.5	9.5	5.5	38	M6*1	0.28	$1.23*10^{-3}$
DWS 2005-3	20	5	3.175	17	2.18	3*1	10.8	17.6	213		34	58	46	11	35	10	46	5.5	9.5	5.5	38	M6*1	0.32	$1.23*10^{-3}$
DWS 2005-4	20	5	3.175	17	2.18	4*1	13.8	23.4	280		34	58	51	11	40	10	46	5.5	9.5	5.5	38	M6*1	0.34	$1.23*10^{-3}$
DWS 2006-3	20	6	3.969	16.5	2.1	3*1	13.9	20.7	209		35	58	52	11	41	10	46	5.5	9.5	5.5	38	M6*1	0.35	$1.23*10^{-3}$
DWS 2006-4	20	6	3.969	16.5	2.1	4*1	17.9	27.6	275		35	58	59	11	48	10	46	5.5	9.5	5.5	38	M6*1	0.38	$1.23*10^{-3}$
DWS 2008-4	20	8	3.969	16.5	2.19	4*1	17.8	27.6	275		35	58	68	11	57	15	46	5.5	9.5	5.5	38	M6*1	0.42	$1.23*10^{-3}$
DWS 2010-3	20	10	3.969	16.5	2.24	3*1	13.8	20.7	208		35	58	68	11	57	15	46	5.5	9.5	5.5	38	M6*1	0.42	$1.23*10^{-3}$
DWS 2504-3	25	4	2.381	22.8	3.6	3*1	7.1	14.8	246		38	63	43	11	32	10	51	5.5	9.5	5.5	41	M6*1	0.35	$2.99*10^{-3}$
DWS 2504-4	25	4	2.381	22.8	3.6	4*1	9.2	19.8	324		38	63	47	11	36	10	51	5.5	9.5	5.5	41	M6*1	0.37	$2.99*10^{-3}$
DWS 2505-3	25	5	3.175	22	3.5	3*1	12.3	23.0	264		40	63	47	11	36	10	51	5.5	9.5	5.5	44	M6*1	0.39	$2.99*10^{-3}$
DWS 2505-4	25	5	3.175	22	3.5	4*1	15.7	30.7	348		40	63	52	11	41	10	51	5.5	9.5	5.5	44	M6*1	0.41	$2.99*10^{-3}$
DWS 2506-3	25	6	3.969	21.5	3.4	3*1	16.2	27.5	262		40	63	52	11	41	10	51	5.5	9.5	5.5	44	M6*1	0.40	$2.99*10^{-3}$
DWS 2506-4	25	6	3.969	21.5	3.4	4*1	20.7	36.6	345		40	63	60	11	49	10	51	5.5	9.5	5.5	44	M6*1	0.44	$2.99*10^{-3}$
DWS 2508-3	25	8	3.969	21.5	3.51	3*1	16.1	27.5	262		40	63	61	12	49	10	51	5.5	9.5	5.5	44	M6*1	0.47	$2.99*10^{-3}$
DWS 2508-4	25	8	3.969	21.5	3.51	4*1	20.6	36.6	345		40	63	69	12	57	15	51	5.5	9.5	5.5	44	M6*1	0.51	$2.99*10^{-3}$
DWS 2510-3	25	10	3.969	21.5	3.58	3*1	16.0	27.5	262		40	63	80	15	65	15	51	5.5	9.5	5.5	44	M6*1	0.56	$2.99*10^{-3}$
DWS 2510-4	25	10	3.969	21.5	3.58	4*1	20.6	36.6	345		40	63	85	15	70	20	51	5.5	9.5	5.5	44	M6*1	0.61	$2.99*10^{-3}$

Size specification



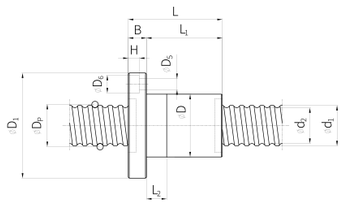
Internal circulation DWS type Grinding type ball screw

Size specification

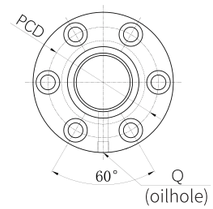


Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw												Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	No preloading type		Outer diameter	Flange diameter	Length				Size of installation hole				Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	D_6	H	Q		kg・cm^2/mm	min^{-1}
DWS 2805-3	28	5	3.175	25	4.44	3*1	13.1	26.3	294		43	71	49	12	37	10	57	6.6	11	6.5	M6*1	0.47	$4.71*10^{-3}$	2500
DWS 2805-4	28	5	3.175	25	4.44	4*1	16.7	35.0	386		43	71	54	12	42	10	57	6.6	11	6.5	M6*1	0.5	$4.71*10^{-3}$	2500
DWS 2806-3	28	6	3.969	24.5	4.33	3*1	17.6	32.5	301		43	71	55	12	43	10	57	6.6	11	6.5	M6*1	0.49	$4.71*10^{-3}$	2500
DWS 2806-4	28	6	3.969	24.5	4.33	4*1	22.6	43.4	396		43	71	61	12	49	10	57	6.6	11	6.5	M6*1	0.52	$4.71*10^{-3}$	2500
DWS 2810-4	28	10	4.763	23.7	4.4	4*1	27.8	49.4	389		45	71	83	15	68	20	57	6.6	11	6.5	M6*1	0.76	$4.71*10^{-3}$	2500
DWS 3204-3	32	4	2.381	29.8	5.99	3*1	8.0	19.4	305		45	76	44	11	33	10	63	6.6	11	6.5	M6*1	0.46	$8.03*10^{-3}$	2500
DWS 3204-4	32	4	2.381	29.8	5.99	4*1	10.2	25.9	401		45	76	48	11	37	10	63	6.6	11	6.5	M6*1	0.48	$8.03*10^{-3}$	2500
DWS 3205-3	32	5	3.175	29	5.86	3*1	14.0	30.6	332		46	76	49	12	37	10	63	6.6	11	6.5	M6*1	0.51	$8.03*10^{-3}$	2500
DWS 3205-4	32	5	3.175	29	5.86	4*1	17.9	40.9	436		46	76	54	12	42	10	63	6.6	11	6.5	M6*1	0.54	$8.03*10^{-3}$	2500
DWS 3205-6	32	5	3.175	29	5.86	6*1	25.4	61.3	643		46	76	65	12	53	15	63	6.6	11	6.5	M6*1	0.6	$8.03*10^{-3}$	2500
DWS 3206-3	32	6	3.969	28.5	5.74	3*1	18.8	37.6	338		48	76	54	12	42	10	63	6.6	11	6.5	M6*1	0.57	$8.03*10^{-3}$	2500
DWS 3206-4	32	6	3.969	28.5	5.74	4*1	24.1	50.2	445		48	76	61	12	49	10	63	6.6	11	6.5	M6*1	0.62	$8.03*10^{-3}$	2500
DWS 3208-3	32	8	4.763	27.7	5.7	3*1	23.0	42.0	326		50	84	67	15	52	15	66	9	14	8.5	M6*1	0.84	$8.03*10^{-3}$	2500
DWS 3208-4	32	8	4.763	27.7	5.7	4*1	29.5	56.1	429		50	84	76	15	61	20	66	9	14	8.5	M6*1	0.91	$8.03*10^{-3}$	2500
DWS 3210-3	32	10	6.35	26.6	5.45	3*1	32.4	53.0	324		54	87	76	15	61	20	69	9	14	8.5	M6*1	1.06	$8.03*10^{-3}$	2500
DWS 3210-4	32	10	6.35	26.6	5.45	4*1	41.6	70.7	426		54	87	86	15	71	20	69	9	14	8.5	M6*1	1.15	$8.03*10^{-3}$	2500
DWS 3212-4	32	12	6.35	26.6	5.59	4*1	41.4	70.7	426		54	87	96	15	81	25	69	9	14	8.5	M6*1	1.26	$8.03*10^{-3}$	2500
DWS 3610-3	36	10	6.35	30.6	7.02	3*1	35.2	61.7	366		58	98	79	18	61	20	77	11	17.5	11	M6*1	1.34	$1.29*10^{-2}$	2500
DWS 3610-4	36	10	6.35	30.6	7.02	4*1	45.0	82.2	482		58	98	90	18	72	20	77	11	17.5	11	M6*1	1.45	$1.29*10^{-2}$	2500
DWS 4005-4	40	5	3.175	37	9.31	4*1	19.9	52.5	658		56	90	58	15	43	10	72	9	14	8.5	Rc1/8	0.85	$1.96*10^{-2}$	2500
DWS 4005-6	40	5	3.175	37	9.31	6*1	28.2	78.8	783		56	90	68	15	53	15	72	9	14	8.5	Rc1/8	0.93	$1.96*10^{-2}$	2500

Size specification

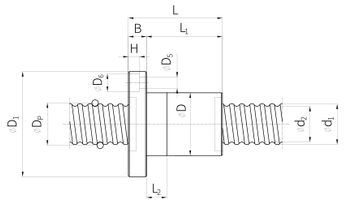


Internal circulation DWS type Grinding type ball screw
Hengli®
Size specification



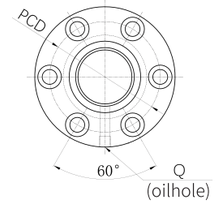
Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw												Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	No preloading type		Outer diameter	Flange diameter	Length				Size of installation hole				Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	D_6	H	Q		kg・cm^2/mm	min^{-1}
DWS 4006-4	40	6	3.969	36.5	9.15	4*1	26.7	63.9	538		56	90	64	15	49	10	72	9	14	8.5	Rc1/8	0.87	$1.96*10^{-2}$	2500
DWS 4006-6	40	6	3.969	36.5	9.15	6*1	37.9	95.8	792		56	90	77	15	62	20	72	9	14	8.5	Rc1/8	0.97	$1.96*10^{-2}$	2500
DWS 4008-4	40	8	4.763	35.7	9.1	4*1	34.1	75.6	546		60	94	76	15	61	20	76	9	14	8.5	Rc1/8	1.19	$1.96*10^{-2}$	2500
DWS 4008-6	40	8	4.763	35.7	9.1	6*1	48.4	113.3	804		60	94	92	15	77	25	76	9	14	8.5	Rc1/8	1.35	$1.96*10^{-2}$	2500
DWS 4010-3	40	10	6.35	34.6	8.8	3*1	37.6	70.3	407		62	104	79	18	61	20	82	11	17.5	11	Rc1/8	1.48	$1.96*10^{-2}$	2500
DWS 4010-4	40	10	6.35	34.6	8.8	4*1	48.1	93.8	536		62	104	90	18	72	20	82	11	17.5	11	Rc1/8	1.6	$1.96*10^{-2}$	2500
DWS 4012-3	40	12	6.35	34.6	8.97	3*1	37.5	70.3	407		62	104	87	18	69	20	82	11	17.5	11	Rc1/8	1.59	$1.96*10^{-2}$	2500
DWS 4012-4	40	12	6.35	34.6	8.97	4*1	48.1	93.8	535		62	104	100	18	82	25	82	11	17.5	11	Rc1/8	1.73	$1.96*10^{-2}$	2500
DWS 4016-4	40	16	6.35	34.6	9.19	4*1	47.9	93.8	535		62	104	118	18	100	30	82	11	17.5	11	Rc1/8	1.96	$1.96*10^{-2}$	2500
DWS 4020-3	40	20	6.35	34.6	9.33	3*1	37.2	70.3	406		62	104	115	18	97	30	82	11	17.5	11	Rc1/8	1.94	$1.96*10^{-2}$	2500
DWS 5005-4	50	5	3.175	47	14.72	4*1	22.0	67.1	645		66	100	58	15	43	10	82	9	14	8.5	Rc1/8	1.01	$4.79*10^{-2}$	2000
DWS 5005-6	50	5	3.175	47	14.72	6*1	31.2	100.6	950		66	100	68	15	53	15	82	9	14	8.5	Rc1/8	1.11	$4.79*10^{-2}$	2000
DWS 5006-4	50	6	3.969	46.5	14.53	4*1	29.7	82.1	655		66	100	64	15	49	10	82	9	14	8.5	Rc1/8	1.04	$4.79*10^{-2}$	2000
DWS 5006-6	50	6	3.969	46.5	14.53	6*1	42.1	123.1	965		66	100	77	15	62	20	82	9	14	8.5	Rc1/8	1.16	$4.79*10^{-2}$	2000
DWS 5008-4	50	8	4.763	45.7	14.47	4*1	37.6	95.3	655		70	112	79	18	61	20	90	11	17.5	11	Rc1/8	1.66	$4.79*10^{-2}$	2000
DWS 5008-6	50	8	4.763	45.7	14.47	6*1	53.3	142.9	964		70	112	95	18	77	25	90	11	17.5	11	Rc1/8	1.86	$4.79*10^{-2}$	2000
DWS 5010-3	50	10	6.35	44.6	14.09	3*1	42.8	92.1	505		72	114	79	18	61	20	92	11	17.5	11	Rc1/8	1.74	$4.79*10^{-2}$	2000
DWS 5010-4	50	10	6.35	44.6	14.09	4*1	54.8	122.8	664		72	114	90	18	72	20	92	11	17.5	11	Rc1/8	1.88	$4.79*10^{-2}$	2000
DWS 5010-6	50	10	6.35	44.6	14.09	6*1	77.6	184.2	978		72	114	110	18	92	30	92	11	17.5	11	Rc1/8	2.14	$4.79*10^{-2}$	2000
DWS 5012-3	50	12	7.938	43.4	13.7	3*1	56.2	109.9	502		75	121	94	22	72	20	97	14	20	13	Rc1/8	2.34	$4.79*10^{-2}$	2000
DWS 5012-4	50	12	7.938	43.4	13.7	4*1	71.9	146.6	660		75	121	107	22	85	25	97	14	20	13	Rc1/8	2.53	$4.79*10^{-2}$	2000
DWS 5016-3	50	16	7.938	43.4	14.12	3*1	56.0	109.9	501		75	121	108	22	86	25	97	14	20	13	Rc1/8	2.59	$4.79*10^{-2}$	2000
DWS 5016-4	50	16	7.938	43.4	14.12	4*1	71.7	146.6	659		75	121	126	22	104	30	97	14	20	13	Rc1/8	2.87	$4.79*10^{-2}$	2000

Size specification



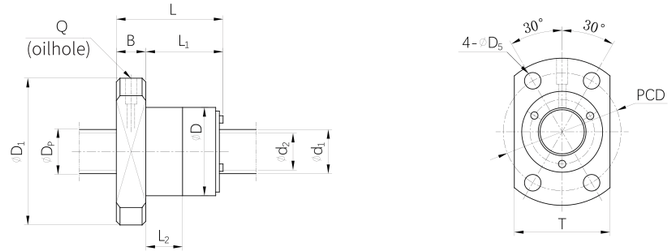
Internal circulation DWS type Grinding type ball screw

Size specification



Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw												Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	No preloading type		Outer diameter	Flange diameter	Length				Size of installation hole				Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	D_6	H	Q		kg・cm^2/mm	min^{-1}
DWS 5020-3	50	20	7.938	43.4	14.38	3*1	55.8	109.9	500		75	121	136	28	108	30	97	14	20	13	Rc1/8	3.23	$4.79*10^{-2}$	2000
DWS 6306-4	63	6	3.969	59.5	23.36	4*1	32.8	104.9	794		80	122	67	18	49	10	100	11	17.5	11	Rc1/8	1.61	$1.21*10^{-1}$	1600
DWS 6306-6	63	6	3.969	59.5	23.36	6*1	46.5	157.3	1169		80	122	79	18	61	20	100	11	17.5	11	Rc1/8	1.77	$1.21*10^{-1}$	1600
DWS 6308-4	63	8	4.763	58.7	23.29	4*1	42.2	124.7	811		82	124	79	18	61	20	102	11	17.5	11	Rc1/8	1.91	$1.21*10^{-1}$	1600
DWS 6308-6	63	8	4.763	58.7	23.29	6*1	59.8	187.1	1193		82	124	96	18	78	25	102	11	17.5	11	Rc1/8	2.13	$1.21*10^{-1}$	1600
DWS 6310-4	63	10	6.35	57.6	22.82	4*1	62.5	163.4	835		85	131	94	22	72	20	107	14	20	13	Rc1/8	2.56	$1.21*10^{-1}$	1600
DWS 6310-6	63	10	6.35	57.6	22.82	6*1	88.6	245.1	1229		85	131	115	22	93	30	107	14	20	13	Rc1/8	2.89	$1.21*10^{-1}$	1600
DWS 6312-3	63	12	7.938	56.4	22.33	3*1	63.8	144.0	622		90	136	95	22	73	20	112	14	20	13	Rc1/8	3.02	$1.21*10^{-1}$	1600
DWS 6312-4	63	12	7.938	56.4	22.33	4*1	81.7	191.9	818		90	136	108	22	86	25	112	14	20	13	Rc1/8	3.28	$1.21*10^{-1}$	1600
DWS 6312-6	63	12	7.938	56.4	22.33	6*1	115.8	287.9	1204		90	136	133	22	111	30	112	14	20	13	Rc1/8	3.77	$1.21*10^{-1}$	1600
DWS 6320-3	63	20	9.525	55.3	22.6	3*1	80.1	168.0	724		95	153	136	28	108	30	123	18	26	17.5	Rc1/8	5.16	$1.21*10^{-1}$	1600
DWS 8010-4	80	10	6.35	74.6	37.37	4*1	69.3	210.1	1016		105	151	97	22	75	20	127	14	20	13	Rc1/8	3.56	$3.14*10^{-1}$	1250
DWS 8010-6	80	10	6.35	74.6	37.37	6*1	98.2	315.1	1496		105	151	118	22	96	30	127	14	20	13	Rc1/8	4.04	$3.14*10^{-1}$	1250
DWS 8012-4	80	12	7.938	73.4	36.76	4*1	93.1	255.5	1027		110	156	107	22	85	25	132	14	20	13	Rc1/8	4.39	$3.14*10^{-1}$	1250
DWS 8012-6	80	12	7.938	73.4	36.76	6*1	131.9	383.2	1512		110	156	132	22	110	30	132	14	20	13	Rc1/8	5.08	$3.14*10^{-1}$	1250
DWS 8016-4	80	16	9.525	72.3	36.53	4*1	156.3	419.4	1328		115	173	134	28	106	30	143	18	26	17.5	Rc1/8	6.83	$3.14*10^{-1}$	1250
DWS 8020-3	80	20	9.525	72.3	37.11	3*1	121.9	314.6	1009		115	173	146	28	118	30	143	18	26	17.5	Rc1/8	6.84	$3.14*10^{-1}$	1250
DWS 8020-4	80	20	9.525	72.3	37.11	4*1	156.1	419.4	1327		115	173	168	28	140	30	143	18	26	17.5	Rc1/8	7.59	$3.14*10^{-1}$	1250
DWS 10010-6	100	10	6.35	94.6	59.06	6*1	108.5	402.5	1814		125	171	117	22	95	30	147	14	20	13	Rc1/8	4.83	$7.66*10^{-1}$	1000
DWS 10012-6	100	12	7.938	93.4	58.3	6*1	146.7	492.4	1842		130	188	140	28	112	35	158	18	26	17.5	Rc1/8	7.31	$7.66*10^{-1}$	1000
DWS 10020-4	100	20	9.525	92.3	58.74	4*1	172.0	528.8	1591		135	205	168	32	136	30	169	22	32	21.5	Rc1/8	10.57	$7.66*10^{-1}$	1000

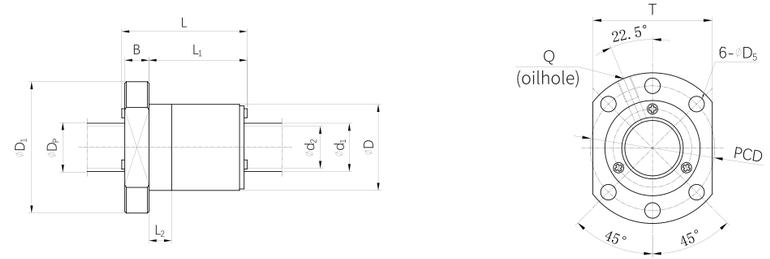
Size specification



$d_1 \leqslant 12$

End plug cycle KRP type Grinding type ball screw

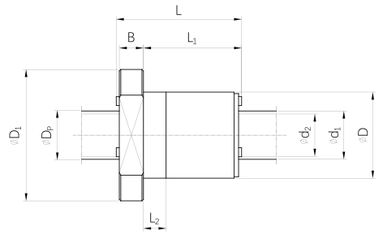
Size specification



$12 < d_1 \leqslant 36$

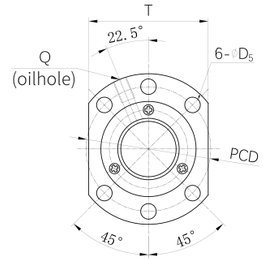
Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw											Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	Large steel ball pressed type		Outer diameter	Flange diameter	Length				Size of installation hole			Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	T	Q		kg・cm²/mm	min^{-1}
KRP 1004-4	10	4	1.588	8.765	0.57	1*4	3.6	5.5	306		19	36	30	6	22.5	—	28	4.5	23	Φ3	0.06	$7.66*10^{-5}$	5000
KRP 1005-4	10	5	1.588	8.765	0.58	1*4	3.6	5.5	308		19	36	34	6	26	—	28	4.5	23	Φ3	0.07	$7.66*10^{-5}$	5000
KRP 1010-3	10	10	1.588	8.765	0.6	1*3	2.7	3.9	230		19	36	43	6	35	—	28	4.5	23	Φ3	0.08	$7.66*10^{-5}$	5000
KRP 1204-3	12	4	2.381	9.8	0.76	1*3	5.0	7.0	276		24	40	27	8	17	—	32	4.5	26	Φ3	0.09	$1.59*10^{-4}$	5000
KRP 1205-3	12	5	2.381	9.8	0.79	1*3	5.1	7.1	276		24	40	29	8	19	—	32	4.5	26	Φ3	0.1	$1.59*10^{-4}$	5000
KRP 1210-2	12	10	2.381	9.8	0.84	1*2	3.3	4.3	178		24	40	33	8	23	—	32	4.5	26	Φ3	0.11	$1.59*10^{-4}$	5000
KRP 1505-3	15	5	2.381	12.8	1.26	1*3	6.7	10.8	348		28	48	30	10	18	—	38	5.5	40	M6	0.17	$3.88*10^{-4}$	5000
KRP 1510-3	15	10	2.381	12.8	1.32	1*3	6.6	10.3	350		28	48	44	10	32	—	38	5.5	40	M6	0.22	$3.88*10^{-4}$	5000
KRP 1605-3	16	5	2.381	13.8	1.44	1*3	6.9	11.5	366		28	48	30	10	18	—	38	5.5	40	M6	0.16	$5.02*10^{-4}$	5000
KRP 1610-3	16	10	2.381	13.8	1.51	1*3	6.8	10.9	370		28	48	44	10	32	—	38	5.5	40	M6	0.21	$5.02*10^{-4}$	5000
KRP 2004-3	20	4	2.381	17.8	2.26	1*3	6.4	12.0	414		32	54	27	12	13	—	42	5.5	40	M6	0.18	$1.23*10^{-3}$	4880
KRP 2005-3	20	5	3.175	17	2.18	1*3	11.2	19.2	456		36	58	30	10	18	—	47	6.6	44	M6	0.23	$1.23*10^{-3}$	4820
KRP 2006-3	20	6	3.969	16.5	2.1	1*3	14.9	23.6	472		38	62	35	12	21	10	49	6.6	46	M6	0.31	$1.23*10^{-3}$	4760
KRP 2008-3	20	8	3.969	16.5	2.19	1*3	14.9	23.6	472		38	62	40	12	26	10	49	6.6	46	M6	0.34	$1.23*10^{-3}$	4760
KRP 2010-3	20	10	3.175	17	2.32	1*3	11.1	19.3	458		36	58	44	10	32	15	47	6.6	44	M6	0.3	$1.23*10^{-3}$	4820
KRP 2505-3	25	5	3.175	22	3.5	1*3	12.4	24.0	546		40	62	30	10	18	10	51	6.6	48	M6	0.25	$2.99*10^{-3}$	3880
KRP 2506-3	25	6	3.969	21.5	3.4	1*3	16.8	30.0	564		45	65	35	10	23	10	54	6.6	51	M6	0.36	$2.99*10^{-3}$	3850
KRP 2508-4	25	8	3.969	21.5	3.42	1*4	22.0	41.2	762		45	65	49	15	32	15	54	6.6	51	M6	0.5	$2.99*10^{-3}$	3850
KRP 2510-3	25	10	3.175	22	3.68	1*3	12.4	24.2	546		40	62	44	10	32	15	51	6.6	48	M6	0.33	$2.99*10^{-3}$	3880
KRP 2512-3	25	12	3.969	21.5	3.63	1*3	16.7	30.3	566		45	65	51	10	39	15	54	6.6	51	M6	0.5	$2.99*10^{-3}$	3850

Size specification



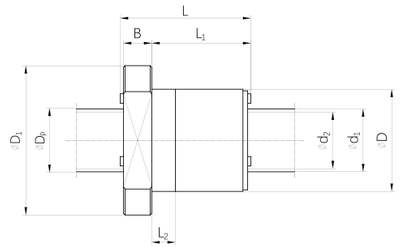
End plug cycle KRP type Grinding type ball screw

Size specification



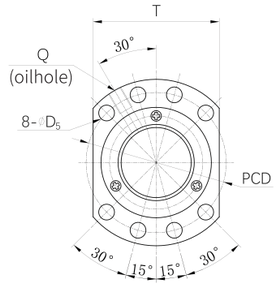
Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw											Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	Large steel ball pressed type		Outer diameter	Flange diameter	Length				Size of installation hole			Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	T	Q		kg・cm^2/mm	min^{-1}
KRP 2516-3	25	16	3.969	21.5	3.68	1*3	16.6	28.7	568		45	65	62	10	50	20	54	6.6	51	M6	0.58	$2.99*10^{-3}$	3850
KRP 2516-4	25	16	4.763	20.7	3.61	1*4	27.7	47.0	788		45	65	79	10	67	20	54	6.6	51	M6	0.73	$2.99*10^{-3}$	3800
KRP 2520-3	25	20	3.175	22	3.76	1*3	12.2	23.2	552		40	62	71	10	59	20	51	6.6	48	M6	0.47	$2.99*10^{-3}$	3880
KRP 2806-5	28	6	3.969	24.5	4.33	1*5	28.5	58.6	1048		46	66	47	12	33	15	54	6.6	51	M6	0.45	$4.71*10^{-3}$	4480
KRP 2810-5	28	10	4.763	23.7	4.4	1*5	36.3	70.5	1078		48	74	67	12	53	20	60	6.6	56	M6	0.71	$4.71*10^{-3}$	4440
KRP 2810-5	28	10	6.35	22.6	4.07	1*5	52.7	93.6	1122		54	87	70	14	53	20	72	9	66	M6	1.09	$4.71*10^{-3}$	4370
KRP 2812-5	28	12	6.35	22.6	4.2	1*5	52.6	93.8	1122		54	87	79	14	62	20	72	9	66	M6	1.19	$4.71*10^{-3}$	4370
KRP 2816-4	28	16	4.763	23.7	4.56	1*4	29.4	52.6	862		48	74	79	12	65	20	60	6.6	56	M6	0.82	$4.71*10^{-3}$	4440
KRP 3205-4	32	5	3.175	29	5.86	1*4	18.0	42.3	896		48	70	35	12	21	10	59	6.6	54	M6	0.36	$8.03*10^{-3}$	3970
KRP 3206-5	32	6	3.969	28.5	5.74	1*5	29.9	66.1	1164		50	80	47	12	33	15	72	9	66	M6	0.79	$8.03*10^{-3}$	3940
KRP 3208-5	32	8	3.969	28.5	5.88	1*5	30.2	67.2	1164		50	80	56	12	42	15	65	9	62	M6	0.88	$8.03*10^{-3}$	3940
KRP 3210-5	32	10	3.969	28.5	5.97	1*5	30.1	67.3	1166		50	80	66	12	52	20	65	9	62	M6	0.73	$8.03*10^{-3}$	3940
KRP 3210-5	32	10	6.35	25.85	5.28	1*5	55.9	104.6	1224		57	87	70	14	53	20	72	9	66	M6	1.11	$8.03*10^{-3}$	3940
KRP 3212-5	32	12	6.35	25.85	5.45	1*5	55.8	104.8	1226		57	87	79	14	62	20	72	9	66	M6	1.23	$8.03*10^{-3}$	3940
KRP 3216-5	32	16	6.35	25.85	5.66	1*5	55.6	105.4	1228		57	87	98	14	81	25	72	9	66	M6	1.47	$8.03*10^{-3}$	3940
KRP 3220-5	32	20	6.35	25.85	5.79	1*5	55.4	99.7	1232		57	87	117	14	100	20	72	9	66	M6	1.71	$8.03*10^{-3}$	3940
KRP 3606-4	36	6	3.969	32.5	7.35	1*4	25.8	59.5	1016		56	86	41	14	25	10	71	9	65	M8*1	0.64	$1.29*10^{-2}$	3500
KRP 3608-5	36	8	4.763	31.7	7.3	1*5	40.4	89.3	1314		56	84	57	14	41	15	68	9	68	M8*1	0.73	$1.29*10^{-2}$	3490
KRP 3610-5	36	10	6.35	29.85	7.02	1*5	60.0	120.7	1370		61	91	70	14	53	20	76	9	68	M8*1	1.08	$1.29*10^{-2}$	3500
KRP 3612-5	36	12	6.35	29.85	7.18	1*5	59.9	120.9	1372		61	91	79	14	62	20	76	9	68	M8*1	1.2	$1.29*10^{-2}$	3500

Size specification



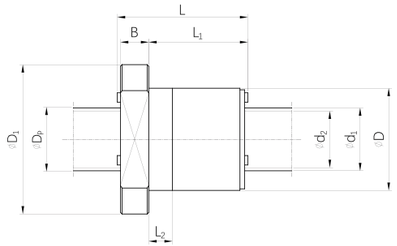
End plug cycle KRP type Grinding type ball screw

Size specification



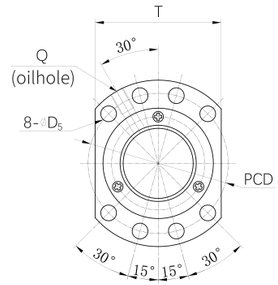
Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw											Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	Large steel ball pressed type		Outer diameter	Flange diameter	Length				Size of installation hole			Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	T	Q		kg・cm^2/mm	min^{-1}
KRP 3616-5	36	16	6.35	29.85	7.38	1*5	59.8	121.4	1374		61	91	98	14	81	20	76	9	68	M8*1	1.45	$1.29*10^{-2}$	3500
KRP 3620-5	36	20	6.35	29.85	7.5	1*5	59.6	114.7	1378		61	91	117	14	100	20	76	9	68	M8*1	1.7	$1.29*10^{-2}$	3500
KRP 4005-4	40	5	3.175	37	9.31	1*4	19.5	52.2	1066		58	91	35	14	19	10	76	9	68	M8*1	0.67	$1.96*10^{-2}$	3200
KRP 4006-5	40	6	3.969	36.5	9.15	1*5	32.8	82.8	1388		58	91	47	14	31	15	76	9	68	M8*1	0.78	$1.96*10^{-2}$	3170
KRP 4008-4	40	8	4.763	35.7	9.1	1*4	34.4	78.2	1136		60	91	49	14	33	15	76	9	68	M8*1	0.83	$1.96*10^{-2}$	3150
KRP 4010-5	40	10	6.35	33.85	8.58	1*5	62.5	131.7	1468		65	95	70	14	53	20	80	9	72	M8*1	1.28	$1.96*10^{-2}$	3170
KRP 4010-5	40	10	7.144	34	8.51	1*5	73.8	150.9	1516		70	98	71	14	54	20	83	11	76	M8*1	1.46	$1.96*10^{-2}$	3100
KRP 4012-5	40	12	6.35	33.85	8.79	1*5	62.5	132.0	1468		65	95	79	14	62	20	80	9	72	M8*1	1.42	$1.96*10^{-2}$	3170
KRP 4016-5	40	16	6.35	33.85	9.06	1*5	62.3	132.4	1470		65	95	98	14	81	20	80	9	72	M8*1	1.7	$1.96*10^{-2}$	3170
KRP 4020-5	40	20	6.35	33.85	9.22	1*5	62.2	133.0	1474		65	95	117	14	100	20	80	9	72	M8*1	1.99	$1.96*10^{-2}$	3170
KRP 4025-4	40	25	6.35	33.85	9.34	1*4	50.4	99.0	1176		65	95	115	14	98	20	80	9	72	M8*1	1.99	$1.96*10^{-2}$	3170
KRP 4030-3	40	30	6.35	33.85	9.43	1*3	38.2	72.8	874		65	95	104	14	87	20	80	9	72	M8*1	1.83	$1.96*10^{-2}$	3170
KRP 4510-5	45	10	6.35	38.85	11.29	1*5	66.6	151.2	1636		70	105	70	16	51	20	88	11	80	M8*1	1.36	$3.14*10^{-2}$	2830
KRP 4512-5	45	12	6.35	38.85	11.49	1*5	66.5	151.4	1636		70	105	79	16	60	20	88	11	80	M8*1	1.5	$3.14*10^{-2}$	2830
KRP 4516-5	45	16	6.35	38.85	11.73	1*5	66.4	151.8	1638		70	105	98	16	79	20	88	11	80	M8*1	1.8	$3.14*10^{-2}$	2830
KRP 4520-5	45	20	6.35	38.85	11.88	1*5	66.3	152.3	1640		70	105	117	16	98	20	88	11	80	M8*1	2.1	$3.14*10^{-2}$	2830
KRP 4525-4	45	25	6.35	38.85	12	1*4	53.8	113.3	1308		70	105	115	16	96	20	88	11	80	M8*1	2.1	$3.14*10^{-2}$	2830
KRP 4530-4	45	30	6.35	38.85	12.08	1*4	53.5	114.0	1312		70	105	134	16	115	25	88	11	80	M8*1	2.38	$3.14*10^{-2}$	2830
KRP 5005-5	50	5	3.175	47	14.72	1*5	26.2	83.0	1598		70	105	40	16	22	10	88	11	80	M8*1	0.93	$4.79*10^{-2}$	2560
KRP 5008-5	50	8	4.763	45.7	14.47	1*5	46.3	124.4	1700		70	105	57	16	39	15	88	11	80	M8*1	1.12	$4.79*10^{-2}$	2540

Size specification



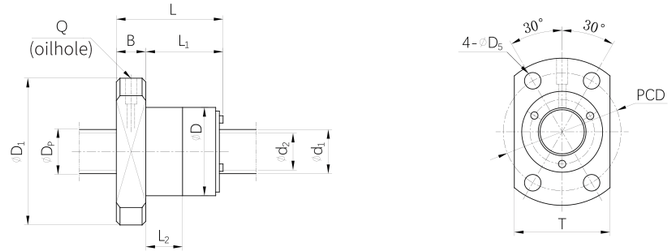
End plug cycle KRP type Grinding type ball screw

Size specification



Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw											Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	Large steel ball pressed type		Outer diameter	Flange diameter	Length				Size of installation hole			Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	T	Q		kg・cm^2/mm	min^{-1}
KRP 5010-5	50	10	6.35	43.85	13.82	1*5	69.3	165.7	1756		75	110	70	16	51	20	93	11	85	M8*1	1.52	$4.79*10^{-2}$	2550
KRP 5010-5	50	10	7.144	44	13.74	1*5	81.9	189.1	1808		82	118	71	16	52	20	100	11	92	M8*1	2	$4.79*10^{-2}$	2500
KRP 5012-5	50	12	6.35	43.85	14.08	1*5	69.2	165.8	1756		75	110	79	16	60	20	93	11	85	M8*1	1.69	$4.79*10^{-2}$	2550
KRP 5016-5	50	16	6.35	43.85	14.41	1*5	69.1	166.2	1758		75	110	98	16	79	20	93	11	85	M8*1	2.03	$4.79*10^{-2}$	2550
KRP 5020-5	50	20	6.35	43.85	14.61	1*5	69.0	166.6	1760		75	110	117	16	98	20	93	11	85	M8*1	2.37	$4.79*10^{-2}$	2550
KRP 5020-5	50	20	9.525	42.3	13.91	1*5	156.0	345.2	2068		90	125	123	18	102	25	108	11	95	M8*1	2.08	$4.79*10^{-2}$	2470
KRP 5025-4	50	25	6.35	43.85	14.77	1*4	56.0	131.7	1404		75	110	115	16	96	20	93	11	85	M8*1	2.38	$4.79*10^{-2}$	2550
KRP 5030-4	50	30	6.35	43.85	14.87	1*4	55.8	124.5	1406		75	110	134	16	115	25	93	11	85	M8*1	2.7	$4.79*10^{-2}$	2550
KRP 5510-5	55	10	6.35	48.85	17.2	1*5	72.6	185.2	1914		80	118	70	18	49	20	100	11	92	M8*1	1.54	$7.01*10^{-2}$	2320
KRP 5512-5	55	12	6.35	48.85	17.44	1*5	85.7	224.7	2302		80	118	79	18	58	20	100	11	92	M8*1	1.67	$7.01*10^{-2}$	2320
KRP 5516-5	55	16	6.35	48.85	17.74	1*5	72.5	185.6	1916		80	118	98	18	77	20	100	11	92	M8*1	1.95	$7.01*10^{-2}$	2320
KRP 5520-5	55	20	6.35	48.85	17.92	1*5	72.4	186.0	1918		80	118	117	18	96	20	100	11	92	M8*1	2.23	$7.01*10^{-2}$	2320
KRP 6310-5	63	10	6.35	57.6	22.82	1*5	76.8	212.3	2130		90	125	70	18	49	20	108	11	95	M8*1	2.17	$1.21*10^{-1}$	2000
KRP 6312-5	63	12	6.35	57.6	23.09	1*5	76.8	212.4	2130		90	125	79	18	58	20	108	11	95	M8*1	2.32	$1.21*10^{-1}$	2000
KRP 6316-5	63	16	9.525	55.3	22.14	1*5	176.3	441.2	2882		102	147	105	20	81	25	127	14	110	M8*1	3.74	$1.21*10^{-1}$	2000
KRP 6320-5	63	20	9.525	55.3	22.6	1*5	176.1	441.9	2884		102	147	123	20	100	25	127	14	110	M8*1	4.28	$1.21*10^{-1}$	2000
KRP 6325-4	63	25	9.525	55.3	22.97	1*4	143.1	348.8	2298		102	147	122	20	98	25	127	14	110	M8*1	4.91	$1.21*10^{-1}$	2000
KRP 6330-4	63	30	9.525	55.3	23.22	1*4	142.8	349.9	2302		102	147	140	20	117	25	127	14	110	M8*1	5.58	$1.21*10^{-1}$	2000
KRP 6340-3	63	40	9.525	55.3	23.52	1*3	108.4	241.9	1710		102	147	137	20	114	25	127	14	110	M8*1	5.52	$1.21*10^{-1}$	2000

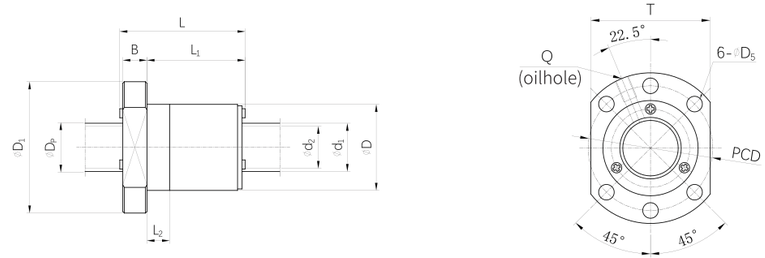
Size specification



$d_1 \leqslant 12$

End plug cycle KRS type Grinding type ball screw

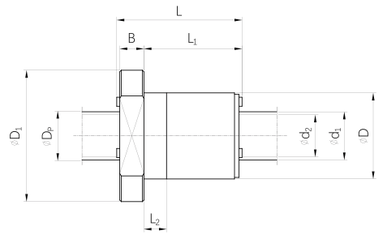
Size specification



$12 < d_1 \leqslant 36$

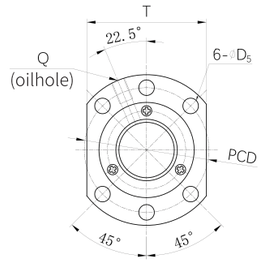
Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw											Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	No preloading type		Outer diameter	Flange diameter	Length				Size of installation hole			Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	T	Q		kg・cm²/mm	min^{-1}
KRS 1004-4	10	4	1.588	8.765	0.57	1*4	3.6	5.5	153		19	36	30	6	22.5	—	28	4.5	23	Φ3	0.06	$7.66*10^{-5}$	5000
KRS 1005-4	10	5	1.588	8.765	0.58	1*4	3.6	5.5	154		19	36	34	6	26	—	28	4.5	23	Φ3	0.07	$7.66*10^{-5}$	5000
KRS 1010-3	10	10	1.588	8.765	0.6	1*3	2.7	3.9	115		19	36	43	6	35	—	28	4.5	23	Φ3	0.08	$7.66*10^{-5}$	5000
KRS 1204-3	12	4	2.381	9.8	0.76	1*3	5.0	7.0	138		24	40	27	8	17	—	32	4.5	26	Φ3	0.09	$1.59*10^{-4}$	5000
KRS 1205-3	12	5	2.381	9.8	0.79	1*3	5.1	7.1	138		24	40	29	8	19	—	32	4.5	26	Φ3	0.1	$1.59*10^{-4}$	5000
KRS 1210-2	12	10	2.381	9.8	0.84	1*2	3.3	4.3	89		24	40	33	8	23	—	32	4.5	26	Φ3	0.11	$1.59*10^{-4}$	5000
KRS 1505-3	15	5	2.381	12.8	1.26	1*3	6.7	10.8	174		28	48	30	10	18	—	38	5.5	40	M6	0.17	$3.88*10^{-4}$	5000
KRS 1510-3	15	10	2.381	12.8	1.32	1*3	6.6	10.3	175		28	48	44	10	32	—	38	5.5	40	M6	0.22	$3.88*10^{-4}$	5000
KRS 1605-3	16	5	2.381	13.8	1.44	1*3	6.9	11.5	183		28	48	30	10	18	—	38	5.5	40	M6	0.16	$5.02*10^{-4}$	5000
KRS 1610-3	16	10	2.381	13.8	1.51	1*3	6.8	10.9	185		28	48	44	10	32	—	38	5.5	40	M6	0.21	$5.02*10^{-4}$	5000
KRS 2004-3	20	4	2.381	17.8	2.26	1*3	6.4	12.0	207		32	54	27	12	13	—	42	5.5	40	M6	0.18	$1.23*10^{-3}$	4880
KRS 2005-3	20	5	3.175	17	2.18	1*3	11.2	19.2	228		36	58	30	10	18	—	47	6.6	44	M6	0.23	$1.23*10^{-3}$	4820
KRS 2006-3	20	6	3.969	16.5	2.1	1*3	14.9	23.6	236		38	62	35	12	21	10	49	6.6	46	M6	0.31	$1.23*10^{-3}$	4760
KRS 2008-3	20	8	3.969	16.5	2.19	1*3	14.9	23.6	236		38	62	40	12	26	10	49	6.6	46	M6	0.34	$1.23*10^{-3}$	4760
KRS 2010-3	20	10	3.175	17	2.32	1*3	11.1	19.3	229		36	58	44	10	32	15	47	6.6	44	M6	0.3	$1.23*10^{-3}$	4820
KRS 2505-3	25	5	3.175	22	3.5	1*3	12.4	24.0	273		40	62	30	10	18	10	51	6.6	48	M6	0.25	$2.99*10^{-3}$	3880
KRS 2506-3	25	6	3.969	21.5	3.4	1*3	16.8	30.0	282		45	65	35	10	23	10	54	6.6	51	M6	0.36	$2.99*10^{-3}$	3850
KRS 2508-4	25	8	3.969	21.5	3.42	1*4	22.0	41.2	381		45	65	49	15	32	15	54	6.6	51	M6	0.5	$2.99*10^{-3}$	3850
KRS 2510-3	25	10	3.175	22	3.68	1*3	12.4	24.2	273		40	62	44	10	32	15	51	6.6	48	M6	0.33	$2.99*10^{-3}$	3880
KRS 2512-3	25	12	3.969	21.5	3.63	1*3	16.7	30.3	283		45	65	51	10	39	15	54	6.6	51	M6	0.5	$2.99*10^{-3}$	3850

Size specification



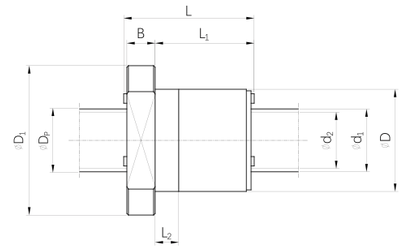
End plug cycle KRS type Grinding type ball screw

Size specification



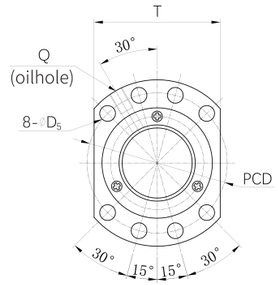
Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw										Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	No preloading type		Outer diameter	Flange diameter	Length				Size of installation hole			Oilhole	Quality kg	
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	T	Q		kg・cm²/mm	min^{-1}
KRS 2516-3	25	16	3.969	21.5	3.68	1*3	16.6	28.7	284		45	65	62	10	50	20	54	6.6	51	M6	0.58	$2.99*10^{-3}$	3850
KRS 2516-4	25	16	4.763	20.7	3.61	1*4	27.7	47.0	394		45	65	79	10	67	20	54	6.6	51	M6	0.73	$2.99*10^{-3}$	3800
KRS 2520-3	25	20	3.175	22	3.76	1*3	12.2	23.2	276		40	62	71	10	59	20	51	6.6	48	M6	0.47	$2.99*10^{-3}$	3880
KRS 2806-5	28	6	3.969	24.5	4.33	1*5	28.5	58.6	524		46	66	47	12	33	15	54	6.6	51	M6	0.45	$4.71*10^{-3}$	4480
KRS 2810-5	28	10	4.763	23.7	4.4	1*5	36.3	70.5	539		48	74	67	12	53	20	60	6.6	56	M6	0.71	$4.71*10^{-3}$	4440
KRS 2810-5	28	10	6.35	22.6	4.07	1*5	52.7	93.6	561		54	87	70	14	53	20	72	9	66	M6	1.09	$4.71*10^{-3}$	4370
KRS 2812-5	28	12	6.35	22.6	4.2	1*5	52.6	93.8	561		54	87	79	14	62	20	72	9	66	M6	1.19	$4.71*10^{-3}$	4370
KRS 2816-4	28	16	4.763	23.7	4.56	1*4	29.4	52.6	431		48	74	79	12	65	20	60	6.6	56	M6	0.82	$4.71*10^{-3}$	4440
KRS 3205-4	32	5	3.175	29	5.86	1*4	18.0	42.3	448		48	70	35	12	21	10	59	6.6	54	M6	0.36	$8.03*10^{-3}$	3970
KRS 3206-5	32	6	3.969	28.5	5.74	1*5	29.9	66.1	582		50	80	47	12	33	15	72	9	66	M6	0.79	$8.03*10^{-3}$	3940
KRS 3208-5	32	8	3.969	28.5	5.88	1*5	30.2	67.2	582		50	80	56	12	42	15	65	9	62	M6	0.88	$8.03*10^{-3}$	3940
KRS 3210-5	32	10	3.969	28.5	5.97	1*5	30.1	67.3	583		50	80	66	12	52	20	65	9	62	M6	0.73	$8.03*10^{-3}$	3940
KRS 3210-5	32	10	6.35	25.85	5.28	1*5	55.9	104.6	612		57	87	70	14	53	20	72	9	66	M6	1.11	$8.03*10^{-3}$	3940
KRS 3212-5	32	12	6.35	25.85	5.45	1*5	55.8	104.8	613		57	87	79	14	62	20	72	9	66	M6	1.23	$8.03*10^{-3}$	3940
KRS 3216-5	32	16	6.35	25.85	5.66	1*5	55.6	105.4	614		57	87	98	14	81	25	72	9	66	M6	1.47	$8.03*10^{-3}$	3940
KRS 3220-5	32	20	6.35	25.85	5.79	1*5	55.4	99.7	616		57	87	117	14	100	20	72	9	66	M6	1.71	$8.03*10^{-3}$	3940
KRS 3606-4	36	6	3.969	32.5	7.35	1*4	25.8	59.5	508		56	86	41	14	25	10	71	9	65	M8*1	0.64	$1.29*10^{-2}$	3500
KRS 3608-5	36	8	4.763	31.7	7.3	1*5	40.4	89.3	657		56	84	57	14	41	15	68	9	68	M8*1	0.73	$1.29*10^{-2}$	3490
KRS 3610-5	36	10	6.35	29.85	7.02	1*5	60.0	120.7	685		61	91	70	14	53	20	76	9	68	M8*1	1.08	$1.29*10^{-2}$	3500
KRS 3612-5	36	12	6.35	29.85	7.18	1*5	59.9	120.9	686		61	91	79	14	62	20	76	9	68	M8*1	1.2	$1.29*10^{-2}$	3500

Size specification



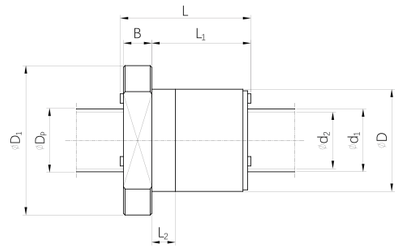
End plug cycle KRS type Grinding type ball screw

Size specification



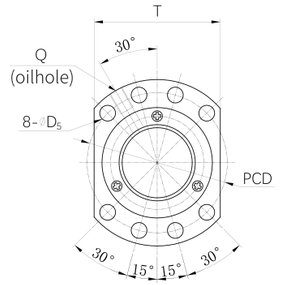
Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw											Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	No preloading type		Outer diameter	Flange diameter	Length				Size of installation hole			Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	T	Q		kg・cm²/mm	min^{-1}
KRS 3616-5	36	16	6.35	29.85	7.38	1*5	59.8	121.4	687		61	91	98	14	81	20	76	9	68	M8*1	1.45	$1.29*10^{-2}$	3500
KRS 3620-5	36	20	6.35	29.85	7.5	1*5	59.6	114.7	689		61	91	117	14	100	20	76	9	68	M8*1	1.7	$1.29*10^{-2}$	3500
KRS 4005-4	40	5	3.175	37	9.31	1*4	19.5	52.2	533		58	91	35	14	19	10	76	9	68	M8*1	0.67	$1.96*10^{-2}$	3200
KRS 4006-5	40	6	3.969	36.5	9.15	1*5	32.8	82.8	694		58	91	47	14	31	15	76	9	68	M8*1	0.78	$1.96*10^{-2}$	3170
KRS 4008-4	40	8	4.763	35.7	9.1	1*4	34.4	78.2	568		60	91	49	14	33	15	76	9	68	M8*1	0.83	$1.96*10^{-2}$	3150
KRS 4010-5	40	10	6.35	33.85	8.58	1*5	62.5	131.7	734		65	95	70	14	53	20	80	9	72	M8*1	1.28	$1.96*10^{-2}$	3170
KRS 4010-5	40	10	7.144	34	8.51	1*5	73.8	150.9	758		70	98	71	14	54	20	83	11	76	M8*1	1.46	$1.96*10^{-2}$	3100
KRS 4012-5	40	12	6.35	33.85	8.79	1*5	62.5	132.0	734		65	95	79	14	62	20	80	9	72	M8*1	1.42	$1.96*10^{-2}$	3170
KRS 4016-5	40	16	6.35	33.85	9.06	1*5	62.3	132.4	735		65	95	98	14	81	20	80	9	72	M8*1	1.7	$1.96*10^{-2}$	3170
KRS 4020-5	40	20	6.35	33.85	9.22	1*5	62.2	133.0	737		65	95	117	14	100	20	80	9	72	M8*1	1.99	$1.96*10^{-2}$	3170
KRS 4025-4	40	25	6.35	33.85	9.34	1*4	50.4	99.0	588		65	95	115	14	98	20	80	9	72	M8*1	1.99	$1.96*10^{-2}$	3170
KRS 4030-3	40	30	6.35	33.85	9.43	1*3	38.2	72.8	437		65	95	104	14	87	20	80	9	72	M8*1	1.83	$1.96*10^{-2}$	3170
KRS 4510-5	45	10	6.35	38.85	11.29	1*5	66.6	151.2	818		70	105	70	16	51	20	88	11	80	M8*1	1.36	$3.14*10^{-2}$	2830
KRS 4512-5	45	12	6.35	38.85	11.49	1*5	66.5	151.4	818		70	105	79	16	60	20	88	11	80	M8*1	1.5	$3.14*10^{-2}$	2830
KRS 4516-5	45	16	6.35	38.85	11.73	1*5	66.4	151.8	819		70	105	98	16	79	20	88	11	80	M8*1	1.8	$3.14*10^{-2}$	2830
KRS 4520-5	45	20	6.35	38.85	11.88	1*5	66.3	152.3	820		70	105	117	16	98	20	88	11	80	M8*1	2.1	$3.14*10^{-2}$	2830
KRS 4525-4	45	25	6.35	38.85	12	1*4	53.8	113.3	654		70	105	115	16	96	20	88	11	80	M8*1	2.1	$3.14*10^{-2}$	2830
KRS 4530-4	45	30	6.35	38.85	12.08	1*4	53.5	114.0	656		70	105	134	16	115	25	88	11	80	M8*1	2.38	$3.14*10^{-2}$	2830
KRS 5005-5	50	5	3.175	47	14.72	1*5	26.2	83.0	799		70	105	40	16	22	10	88	11	80	M8*1	0.93	$4.79*10^{-2}$	2560
KRS 5008-5	50	8	4.763	45.7	14.47	1*5	46.3	124.4	850		70	105	57	16	39	15	88	11	80	M8*1	1.12	$4.79*10^{-2}$	2540

Size specification



End plug cycle KRS type Grinding type ball screw

Size specification



Ball screw model	Screw size of ball screw					Number of load cycles	Basic rated load (kN)		Rigidity (N/μm)		Nut size of ball screw											Inertia moment of screw shaft /mm	Maximum allowable speed (Speed of DN value)
	Outer diameter	Lead	Ball diameter	Root diameter	Quality kg/m	column * circle	Dynamic load	Static load	No preloading type		Outer diameter	Flange diameter	Length				Size of installation hole			Oilhole	Quality kg		
	d_1	P_h	D_w	d_2			C_a	C_{oa}	K		D	D_1	L	B	L_1	L_2	PCD	D_5	T	Q		kg・cm^2/mm	min^{-1}
KRS 5010-5	50	10	6.35	43.85	13.82	1*5	69.3	165.7	878		75	110	70	16	51	20	93	11	85	M8*1	1.52	$4.79*10^{-2}$	2550
KRS 5010-5	50	10	7.144	44	13.74	1*5	81.9	189.1	904		82	118	71	16	52	20	100	11	92	M8*1	2	$4.79*10^{-2}$	2500
KRS 5012-5	50	12	6.35	43.85	14.08	1*5	69.2	165.8	878		75	110	79	16	60	20	93	11	85	M8*1	1.69	$4.79*10^{-2}$	2550
KRS 5016-5	50	16	6.35	43.85	14.41	1*5	69.1	166.2	879		75	110	98	16	79	20	93	11	85	M8*1	2.03	$4.79*10^{-2}$	2550
KRS 5020-5	50	20	6.35	43.85	14.61	1*5	69.0	166.6	880		75	110	117	16	98	20	93	11	85	M8*1	2.37	$4.79*10^{-2}$	2550
KRS 5020-5	50	20	9.525	42.3	13.91	1*5	156.0	345.2	1034		90	125	123	18	102	25	108	11	95	M8*1	2.08	$4.79*10^{-2}$	2470
KRS 5025-4	50	25	6.35	43.85	14.77	1*4	56.0	131.7	702		75	110	115	16	96	20	93	11	85	M8*1	2.38	$4.79*10^{-2}$	2550
KRS 5030-4	50	30	6.35	43.85	14.87	1*4	55.8	124.5	703		75	110	134	16	115	25	93	11	85	M8*1	2.7	$4.79*10^{-2}$	2550
KRS 5510-5	55	10	6.35	48.85	17.2	1*5	72.6	185.2	957		80	118	70	18	49	20	100	11	92	M8*1	1.54	$7.01*10^{-2}$	2320
KRS 5512-5	55	12	6.35	48.85	17.44	1*5	85.7	224.7	1151		80	118	79	18	58	20	100	11	92	M8*1	1.67	$7.01*10^{-2}$	2320
KRS 5516-5	55	16	6.35	48.85	17.74	1*5	72.5	185.6	958		80	118	98	18	77	20	100	11	92	M8*1	1.95	$7.01*10^{-2}$	2320
KRS 5520-5	55	20	6.35	48.85	17.92	1*5	72.4	186.0	959		80	118	117	18	96	20	100	11	92	M8*1	2.23	$7.01*10^{-2}$	2320
KRS 6310-5	63	10	6.35	57.6	22.82	1*5	76.8	212.3	1065		90	125	70	18	49	20	108	11	95	M8*1	2.17	$1.21*10^{-1}$	2000
KRS 6312-5	63	12	6.35	57.6	23.09	1*5	76.8	212.4	1065		90	125	79	18	58	20	108	11	95	M8*1	2.32	$1.21*10^{-1}$	2000
KRS 6316-5	63	16	9.525	55.3	22.14	1*5	176.3	441.2	1441		102	147	105	20	81	25	127	14	110	M8*1	3.74	$1.21*10^{-1}$	2000
KRS 6320-5	63	20	9.525	55.3	22.6	1*5	176.1	441.9	1442		102	147	123	20	100	25	127	14	110	M8*1	4.28	$1.21*10^{-1}$	2000
KRS 6325-4	63	25	9.525	55.3	22.97	1*4	143.1	348.8	1149		102	147	122	20	98	25	127	14	110	M8*1	4.91	$1.21*10^{-1}$	2000
KRS 6330-4	63	30	9.525	55.3	23.22	1*4	142.8	349.9	1151		102	147	140	20	117	25	127	14	110	M8*1	5.58	$1.21*10^{-1}$	2000
KRS 6340-3	63	40	9.525	55.3	23.52	1*3	108.4	241.9	855		102	147	137	20	114	25	127	14	110	M8*1	5.52	$1.21*10^{-1}$	2000

Precautions for using ball screws

In order to ensure that the accuracy of the ball screw meets the requirements, please pay full attention to the following items during daily use.

Lubrication

(1) Please ensure good lubrication before use. Otherwise, it will accelerate the wear of the ball screw and shorten its service life.
(2) Since different lubricants may have adverse effects on each other, please avoid mixing different lubricants.
(3) Grease performance degrades with age. It is recommended to check 2-3 months after use. After that, the inspection period is generally one year, but please determine the appropriate interval according to the actual use. To avoid splashing of excess grease after greasing, wipe the screw surface.
(4) When selecting and designing, please fully consider the adverse effects of installation methods and lubrication holes on lubrication.
(5) When lubricating products without grease nipples and lubrication holes, apply the lubricant directly to the rolling surface and make several run-ins within the stroke range so that the lubricant can fully soak the inside of the product.
(6) After greasing, the viscous resistance of the grease will cause an increase in the rotational torque required for the operation of the ball screw. Run the machine after the grease has been fully run-in.
(7) Please pay attention to the possible adverse consequences of the influence of temperature on the viscosity of lubricating grease.

Precautions for use

(1) Please avoid disassembling the screw as a whole, which will easily lead to the loss of the proper function.
(2) When the ball screw is placed obliquely, the screw shaft and nut may fall off due to their own weight. Please pay attention to this.
(3) When the ball screw is subjected to impact such as dropping or knocking, it may cause damage to the appearance or components or loss of function that cannot be observed.
(4) In order to ensure safety, it is recommended to wear protective gloves, safety shoes and other safety protective equipment when contacting products.
(5) In order to ensure the safety of personnel and products, please try to avoid carrying heavy objects by one person. It is recommended that more than one person work together or use handling equipment to carry the work.
(6) Please use it in a clean environment. If it is necessary to use it in an environment where chips, coolant or corrosive solvents can easily enter the product, please use a dust cover for protection. If foreign matters such as chips are attached, please re-seal the lubricant after cleaning.
(7) Except for products with high temperature resistance, other products should not be used in an environment exceeding 80 ° C. Otherwise, it is easy to cause deformation or damage of circulating parts and sealing parts.
(8) Avoid overtravel of the ball screw. Otherwise, it is easy to cause quality problems such as the falling off of balls, the damage of circulating parts and the indentation of threaded raceways. If it continues to be used in this state, early wear and damage of circulating parts may occur.
(9) In order to avoid the damage of circulating parts, please use the ball screw within the specification range to avoid exceeding the allowable speed limit.
(10) When the nut is used in the vertical axis, in order to prevent the nut from falling due to its own gravity, please set a safety device to prevent the nut from falling.
(11) The eccentricity of the supporting part of the screw shaft and the nut will have a bad impact on the service life. Please pay attention to it during installation and use.
(12) Please avoid forcing the positioning parts into the ball screw. May cause indentation of the thread raceway surface, resulting in loss of function.

Custody

(1) Please keep it in the state of factory packaging of our company. Avoid opening the internal package at will to prevent the entry of foreign matters, etc., which will reduce the performance.
(2) It is recommended to place the ball screw horizontally on the sleepers for storage in a clean environment.
(3) The lubricant may deteriorate with time. When using a ball screw that has been stored for a long time, it is recommended to add new lubricant.
(4) Please pay attention to the environment and temperature of the storage place, and avoid storing the ball screw in the environment with low temperature, high temperature and high humidity.

Discard

Properly dispose of the product as industrial waste.

Stock code:601100

Contact us,looking forward to working with you!

HENGLI（HEADQUARTERS）

Address: No.99, Longqian Road, Wujin High-tech Development Zone, Changzhou, China
TEL: 86 400 101 8889
E-mail: hengli@henglihydraulics.com

Jiangsu Hengli Precision Indudtry Co.,Ltd.

Address: No.666 Jingye Road, Wujin National New Technology Industrial Development Zone, Changzhou, China
TEL: 0519 85660909
E-mail: henglijm_sales@hengli.net

HENGLI（USA）

Address: 580 Cross roads Parkway, Bolingbrook, Illinois 60440
TEL: +01 630 995 3674
E-mail: sales@hengliamerica.com

HENGLI（JAPAN）

Address: 〒105-0012東京都港区芝大門2-1-19協栄ビル7F
TEL: +8615261101520/+817031757584
E-mail: daizheng@henglihydraulics.com

HENGLI（GERMANY）

Address: Sperenberger Straße 13D-12277, Berlin
TEL: +49(30)72088-0
E-mail: info@inlinehydraulik.com

HENGLI（INDIA）

Address: PAP-B-67/1, Bhamboli-Varale Chakan MIDC Phase2, Pune 410505
TEL: +0091 98456 73856
E-mail: sudhindra.sabnis@henglihydraulics.com

HENGLI（MEXICO）

Address: Parquelndustrial FINSA. Lote 2B1,Santa Catarina. Nuevo Leon.Mexico
TEL: +52 818 680 4103
E-mail: lauro.garza@henglihydraulics.com

Official website

Official WeChat official account