

Introduction

Ballscrews, also called a ball bearing screws, recirculating ballscrews, etc., consist of a screw spindle and a nut integrated with balls and the balls' return mechanism, return tubes or return caps. Ballscrews are the most common type of screws used in industrial machinery and precision machines. The primary function of a ballscrew is to convert rotary motion to linear motion or torque to thrust, and vice versa, with the features of high accuracy, reversibility and efficiency. Screwtech provides a wide range of ballscrews to satisfy your special requirements.



Features

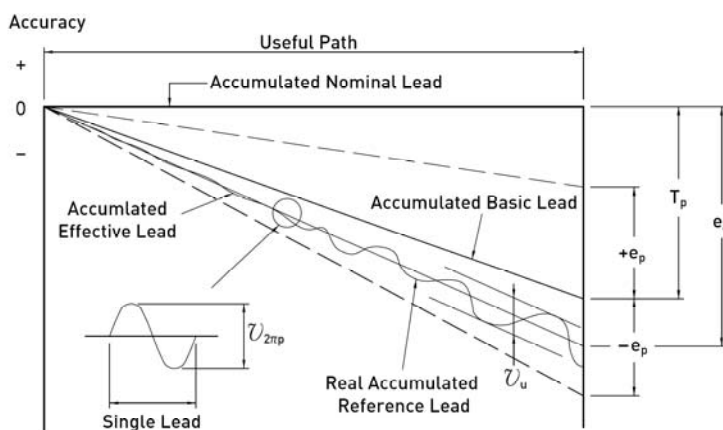
- > High Efficiency >Smooth Operation >High Accuracy
- > High Durability >High Synchronism > High Reliability

Applications

Our Ballscrews are used in the following fields:

1. **CNC machinery:** CNC machine center, CNC lathe, CNC milling machine, CNC EDM, CNC grinder, wire cutting machine, boring machine, etc.
2. **Precision machine tools:** Milling machine, grinder, EDM, tool grinder, gear manufacturing machine, drilling machine, planer, etc.
3. **Industrial machinery:** Printing machine, paper-processing machine, automatic machine, textile machine, drawing machine, special purpose machine, injection molding machine etc.
4. **Electronic machinery:** Robot measuring instrument, XY table, medical equipment, surface mounting device, semi-conductor equipment, factory automation equipment, etc.
5. **Trnasport machinery:** material handling equipment, elevated actuator, etc.
6. **Aerospace industry:** Aircraft flaps, thrust open-close reverser, airport loading equipment, fin actuator, etc.
7. **Miscellaneous:** antenna leg actuator, valve operator, etc.

Lead Accuracy



T_p : Target point of accumulated lead.
This value is determined by customers' different application requirements.

e_p : Total reference lead deviation.
Maximum deviation for accumulated reference lead line over the full length.

$v_{2\pi p}$: Single lead variation.

e_a : Real accumulated reference lead measured by laser system.

v_u : Total relative lead deviation.
Maximum deviation of the real accumulated lead from the real accumulated reference lead in the corresponding range.

v_{300p} : Lead deviation over path of 300mm.
The above deviation in random 300 mm within thread length.

Accuracy grade of Precision Ballscrew

Unit: 0.001mm

Accuracy Grade		C0		C1		C3		C5	
$v_{2\pi p}$		3		4		6		8	
v_{300p}		3.5		5		8		18	
Item Thread length		e_p	v_u	e_p	v_u	e_p	v_u	e_p	v_u
above	below								
-	315	4	3.5	6	5	12	8	23	18
315	400	5	3.5	7	5	13	10	25	20
400	500	6	4	8	5	15	10	27	20
500	630	6	4	9	6	16	12	30	23
630	800	7	5	10	7	18	13	35	25
800	1000	8	6	11	8	21	15	40	27
1000	1250	9	6	13	9	24	16	46	30
1250	1600	11	7	15	10	29	18	54	35
1600	2000	/	/	18	11	35	21	65	40
2000	2500	/	/	22	13	41	24	77	46
2500	3150	/	/	26	15	50	29	93	54
3150	4000	/	/	30	18	60	35	115	65
4000	5000	/	/	/	/	72	41	140	77
5000	6300	/	/	/	/	90	50	170	93
6300	8000	/	/	/	/	110	60	210	115
8000	10000	/	/	/	/	/	/	260	140
10000	12000	/	/	/	/	/	/	320	170

International standard of accuracy grade for ballscrews

Unit: 0.001mm

Grade		Ground					
					Rolled		
		C0	C1	C3	C5	C7	C10
V300p	ISO, DIN	/	6	12	23	52	210
	JIS	3.5	5	8	18	50	210
	Screwtech	3.5	5	12	23	52	210

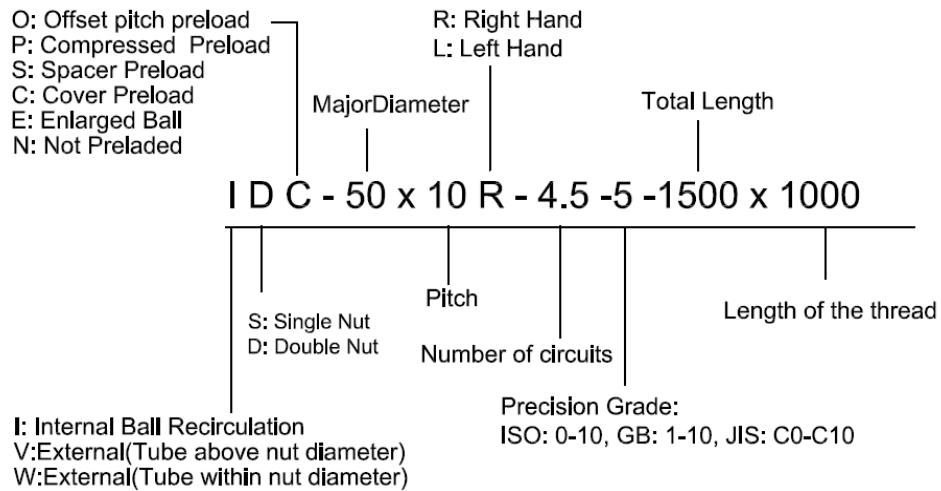
Standard combination of grade and axial play

Unit: 0.001mm

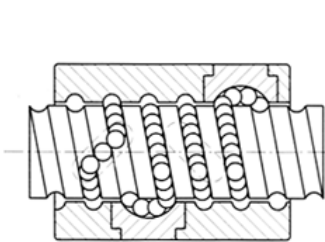
Grade	C0	C1	C3	C5
Axial Play	5	5	10	20

Ball Screw

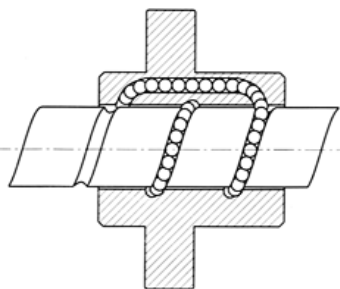
Codes for ordering



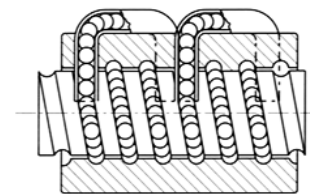
Re-circulation Types of the ball:



I Type



W Type



V Type

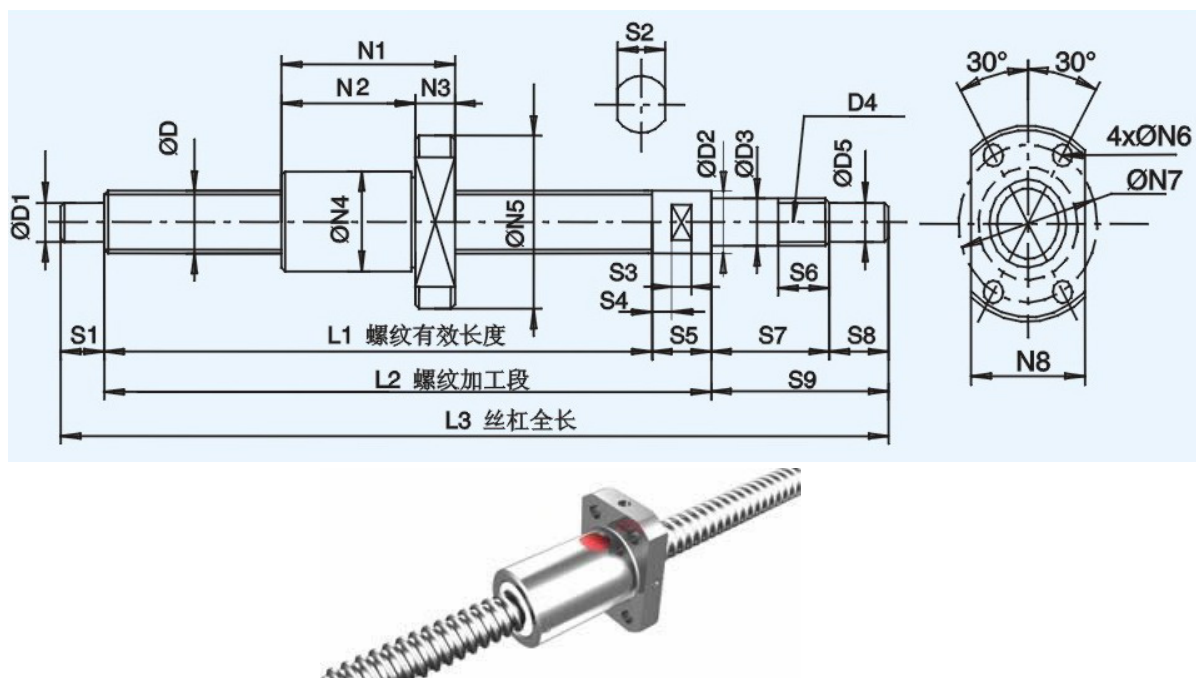


Recommended accuracy grade for machine applications

Application grade		AXIS	Accuracy grade									
			0	1	2	3	4	5	6	7	8	10
CNC Machinery Tools	Lathes	X	.	.	.	.	.	.				
		Z				.	.	.				
	Milling machines Boring machines	X		.	.	.	.	.				
		Y		.	.	.	.	.				
		Z			.	.	.	.				
	Machine Center	X		.	.	.	.	.				
		Y		.	.	.	.	.				
		Z			.	.	.	.				
	Jig borers	X	.	.								
		Y	.	.								
		Z	.	.								
	Drilling machines	X				.	.	.				
		Y				.	.	.				
		Z					.	.	.			
	Grinders	X	.	.	.							
		Y		.	.	.						
	EDM	X		.	.	.						
		Y		.	.	.						
		Z			.	.	.	.				
	Wire cut EDM	X		.	.	.						
		Y		.	.	.						
		U		.	.	.	.					
		V		.	.	.	.					
	Laser Cutting Machine	X			.	.	.					
		Y			.	.	.					
		Z			.	.	.					
General Machinery	Punching Press	X				.	.	.				
		Y				.	.	.				
	Single Purpose Machines			.	.	.	.	.	.			
	Wood working Machines								.	.	.	.
	Industrial Robot (Precision)			.	.	.	.					
	Industrial Robot (General)							.	.	.	.	
	Coordinate Measuring Machine		.	.	.							
	Non-CNC Machine					.	.	.				
	Transport Equipment						.	.	.	.	.	.
	X-Y Table			.	.	.	.	.				
	Linear Actuator							.	.	.	.	
	Aircraft Landing Gear							.	.	.	.	
	Airfoil Control							.	.	.	.	
	Gate Valve								.	.	.	.
	Power steering								.	.	.	
	Glass Grinder				.	.	.	.	.			
	Surface Grinder						.	.				
	Induction Hardening Machine								.	.	.	.
	Electromachine			.	.	.	.	.	.			
	All-electric injection molding							.	.	.	.	.

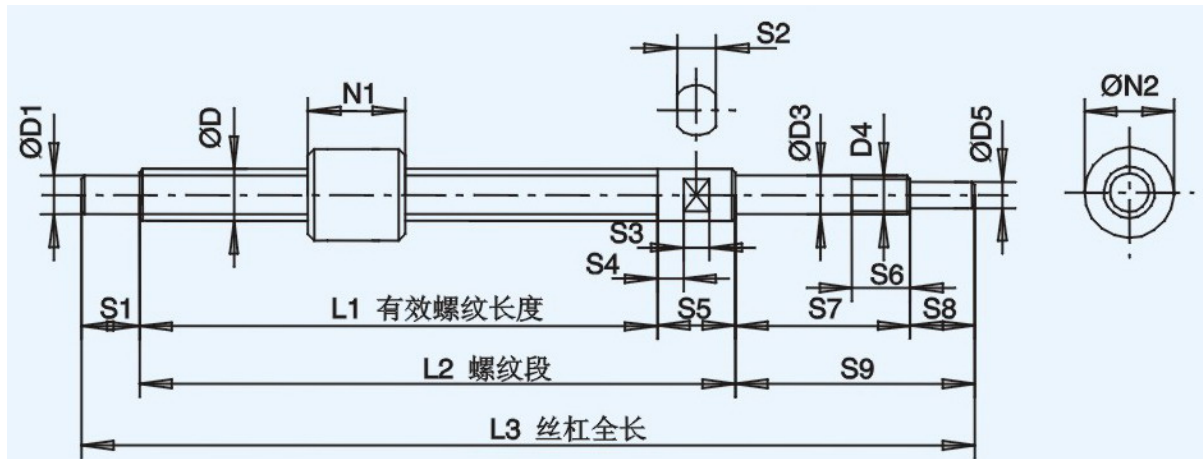
- Nominal diameter 6 to 16 mm
- Lead 2 to 4 mm
- Cylindrical nut with threaded end : easy mounting
- Better nut geometry
- Less sensitive to misalignment
- Excellent repeatability : high positioning quality
- Internal recirculation with inserts: smoother running, good backdriving and improved security
- Higher dynamic load capacities
- Greatly reduced noise
- Corrosion resistant screw shaft available on request

Flanged Nut, Internal Ball Recirculation (M-ISNF)



Code	D	P	Dw	circuits	Basic Load (KN)		Nut Dimension							
					Dynamic	Static	N1	N2	N3	N4	N5	N6	N7	N8
M-ISNF0402	4	2	0.8	2	0.6	0.9	15	11	4	12	24	3.3	18	16
M-ISNF0602	6	2	0.8	2	0.6	0.9	15	11	4	12	24	3.3	18	16
M-ISNF0802	8	2	1.6	2	1.8	2.7	16	12	4	14	27	3.3	21	18
M-ISNF1002	10	2	1.6	3	2.3	3.1	28	23	5	18	37	4.5	27	22
M-ISNF1202	12	2	1.6	3	1.6	3.1	28	23	5	20	37	4.5	29	24
M-ISNF122.5	12	2.5	1.6	3	2.2	3.8	32	27	5	20	37	4.5	29	24
M-ISNF1204	12	4	2.5	3	2.8	4.3	35	30	5	24	40	4.5	31	24
M-ISNF1205	12	5	2.5	3	2.8	4.3	38	30	8	24	40	4.5	31	24
M-ISNF1210	12	10	2.5	3	2.8	4.3	50	40	10	30	50	4.5	40	32
M-ISNF1402	14	2	1.6	3	1.6	3.1	28	23	5	20	37	4.5	29	24
M-ISNF1602	16	2	2.5	3	2.8	4.3	40	30	10	25	44	5.5	35	29
M-ISNF162.5	16	2.5	1.6	3	1.7	3.9	40	30	10	25	44	5.5	35	29
M-ISNF1604	16	4	2.5	3	1.7	4.9	42	32	10	28	48	5.5	35	29

Cylindrical Nut, Internal Ball Recirculation (M-ISNC)

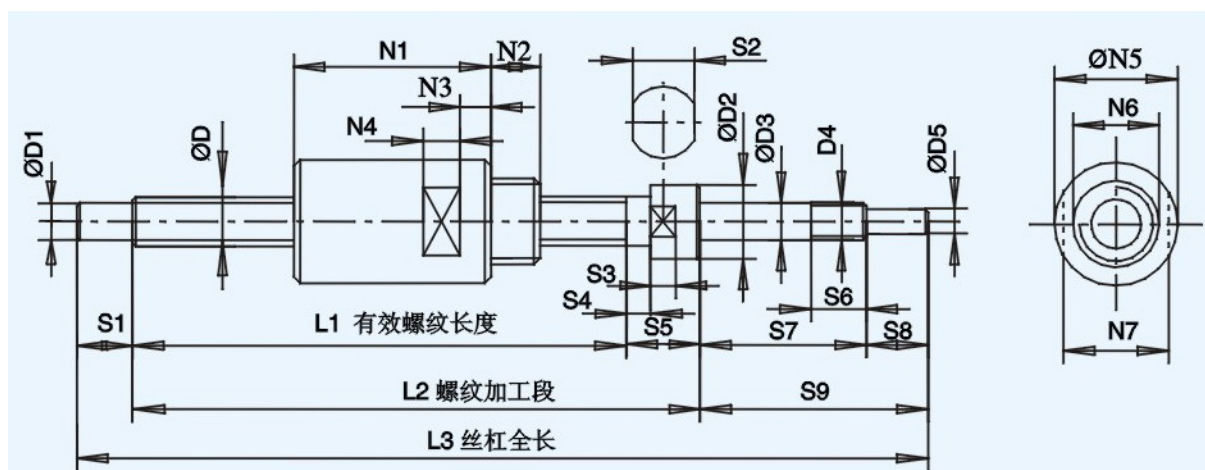


Code	D	P	Dw	Circuits	Basic Load (KN)		Nut Dimension	
					Dynamic	Static	N1	N2
M-ISNC0602	6	2	0.8	2	0.6	0.9	11	12
M-ISNC0802	8	2	1.6	2	1.8	2.7	13	14
M-ISNC1002	10	2	1.6	3	2.3	3.1	19	18
M-ISNC1202	12	2	1.6	3	1.6	3.1	23	20
M-ISNC122.5	12	2.5	1.6	3	2.2	3.8	27	20
M-ISNC1204	12	4	2.5	3	2.8	4.3	30	24
M-ISNC1205	12	5	2.5	3	2.8	4.3	30	24
M-ISNC1602	16	2	2.5	3	2.8	4.3	30	25
M-ISNC162.5	16	2.5	1.6	3	1.7	3.9	30	25
M-ISNC1604	16	4	2.5	3	1.7	4.9	32	28

Anchor Nut, Internal Ball Recirculation (M-ISNA)



Miniature Ball Screw



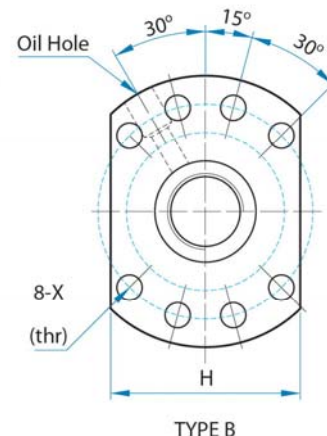
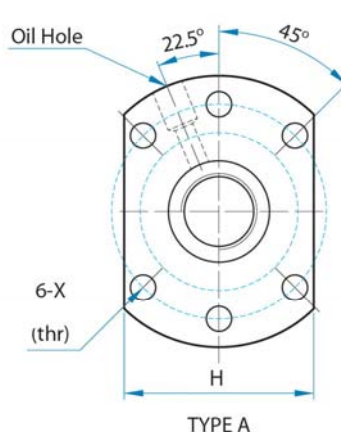
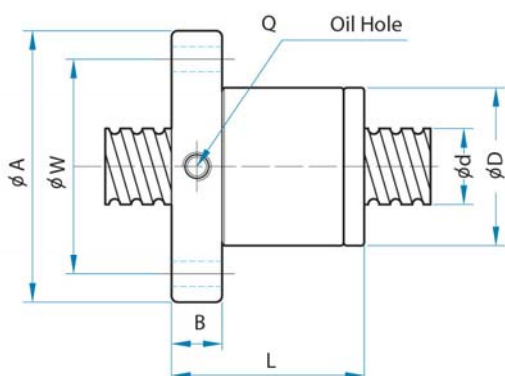
Code	D	P	Dw	circuits	Basic Load (KN)		Nut Dimension						
					Dynamic	Static	N1	N2	N3	N4	N5	N6	N7
M-ISNA0602	6	2	0.8	2	0.6	0.9	30	5	5	6	15	M10	SW14
M-ISNA0802	8	2	1.6	2	1.8	2.7	32	8	5	6	20	M14	SW17
M-ISNA1002	10	2	1.6	3	2.3	3.1	40	10	5	8	25	M18	SW22
M-ISNA1202	12	2	1.6	3	1.6	3.1	40	10	5	8	25	M18	SW22
M-ISNA1602	16	2	1.6	3	2.8	4.3	70	10	8.5	10	33	M22	SW30

Dimension of Typical Mounting End (M-ISNF, M-ISNC, M-ISNA)

OD of Screw Rod	Typical Mounting End													
	S1	S2	S3	S4	S5	S6	S7	S8	S9	D1	D2	D3	D4	D5
6	5	8	3	3	9	9	27	10	37	4	9.5	6	M6x0.5	5
8	9	6	4	4	12	9	27	10	37	6	8	6	M6x0.6	5
10	10	8	4		12	9	27	10	37	6	10	8	M8x1.0	6
12	10	10	5		15	10	30	15	45	8	10	10	M10x1.0	8
16	22	12	5		15	10	30	15	45	10	16	12	M12x1.0	10



SFU (Flange Single Nut, DIN 69051 Form B)

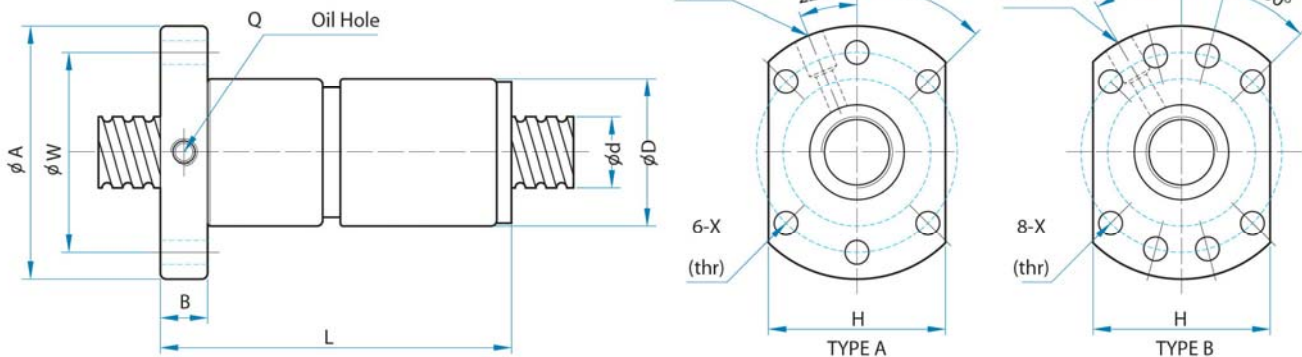


Unit : mm

Model No.	Dimensions															
	d	l	Da	D	A	B	L	W	Type	H	X	Q	n	Ca	Coa	K
1605-3	16	5	3.175	28	48	10	42	38	A	40	5.5	M6	3	765	1240	17
1610-4	16	5	3.175	28	48	10	50	38	A	40	5.5	M6	4	780	1790	17
1616-3	16	10	3.175	28	48	12	43.3	38	A	40	5.5	M6	3	716	1232	15
2005-4	20	5	3.175	36	58	10	53	47	A	44	6.6	M6	4	1100	2280	21
2505-4	25	5	3.175	40	62	10	53	51	A	48	6.6	M6	4	1250	3070	26
2510-4	25	10	4.762	40	62	12	85	51	A	48	6.6	M6	4	1944	3877	27
3205-4	32	5	3.175	50	80	12	53	65	A	62	9.0	M6	4	1400	4080	32
3210-3	32	10	6.35	50	80	16	74	65	A	62	9.0	M6	3	2605	5310	34
3210-4	32	10	6.35	50	80	16	90	65	A	62	9.0	M6	4	3390	7170	34
4005-4	40	5	3.175	63	93	16	56	78	B	70	9.0	M8	4	1575	5290	38
4010-4	40	10	6.35	63	93	18	93	78	B	70	9.0	M8	4	3850	9470	41
5010-4	50	10	6.35	75	110	18	93	93	B	85	11	M8	4	4390	12400	50
6310-4	63	10	6.35	90	125	18	98	108	B	95	11	M8	4	5070	16600	80
8010-4	80	10	6.35	105	145	20	98	125	B	110	13.5	M8	4	5620	21300	90

Note: l: Lead; Da: Ball Dia.; K: Stiffness (Kgf/ μ m); n: Num of Circuits; Ca: Basic Dynamic Rating Load (Kgf); Coa: Basic Static Rating Load (Kgf).

DFU (Flange Double Nut, DIN 69051 Form B)

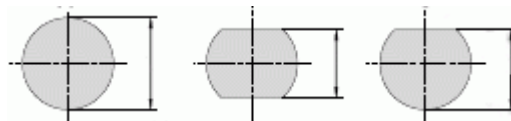
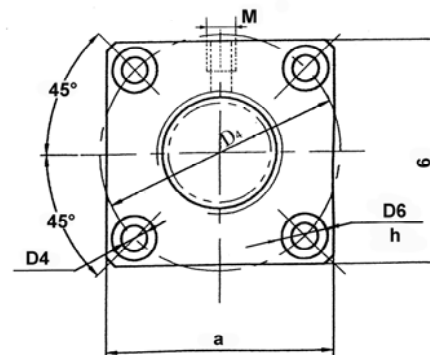
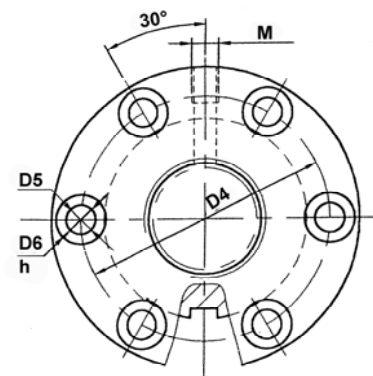
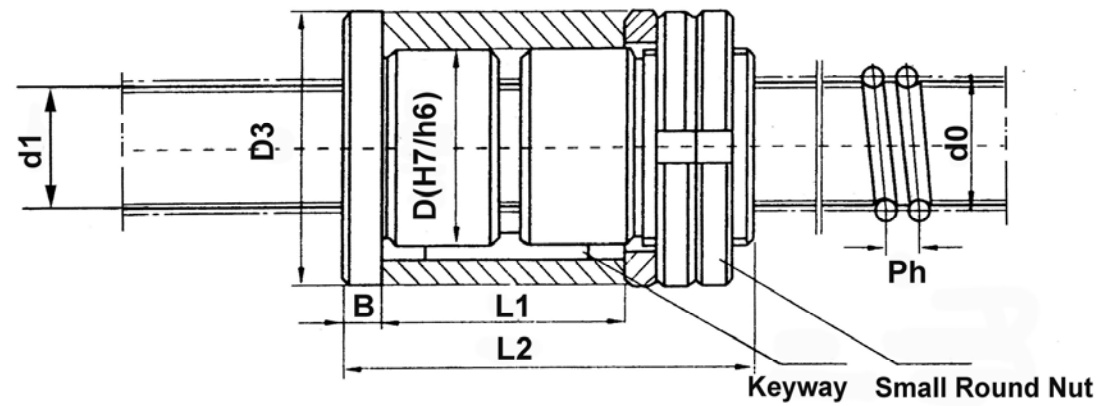


Unit : mm

Model No.	Dimensions															
	d	l	Da	D	A	B	L	W	Type	H	X	Q	n	Ca	Coa	K
1605-3	15	5	3.18	28	48	10	80	38	A	40	5.5	M6	3	780	1790	37
2005-4	20	5	3.18	36	58	12	92	47	A	44	6.6	M6	4	1100	2280	49
2505-4	25	5	3.18	40	62	12	92	51	A	48	6.6	M6	4	1250	3070	58
2510-4	25	10	4.76	40	62	12	153	51	A	48	6.6	M6	4	1944	3877	49
3205-4	32	5	3.18	50	80	12	92	65	A	62	9.0	M6	4	1400	4080	70
3210-4	32	10	6.35	50	80	16	160	65	A	62	9.0	M6	4	3390	7170	79
4005-4	40	5	3.18	63	93	15	96	78	B	70	9.0	M8	4	1575	5290	84
4010-4	40	10	6.35	63	93	18	162	78	B	70	9.0	M8	4	3850	9470	97
5010-4	50	10	6.35	75	110	16	162	93	B	85	11.0	M8	4	4390	12400	115
6310-4	63	10	6.35	90	125	18	182	108	B	95	11.0	M8	4	5070	16600	80
8010-4	80	10	6.35	105	145	20	182	125	B	110	13.5	M8	4	5620	21300	90

Note: l: Lead; Da: Ball Dia.; K: Stiffness (Kgf/ μ m); n: Num of Circuits; Ca: Basic Dynamic Rating Load (Kgf); Coa: Basic Static Rating Load(Kgf).

IDC (Internal Ball Recirculation, with Double nut, Cover Preload)

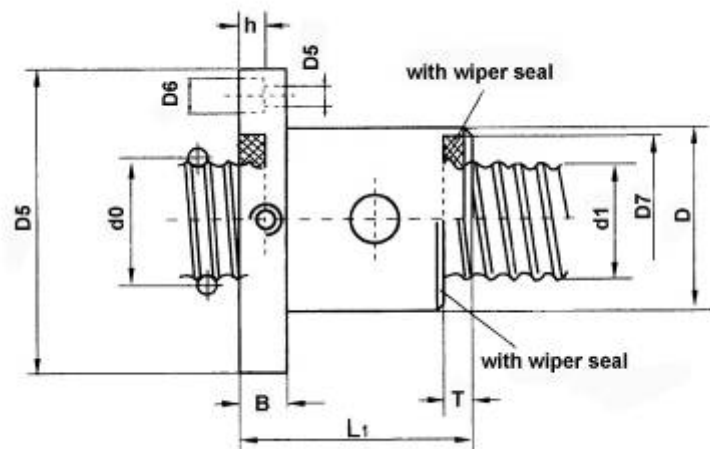


Item	Code	d0	P	Dw	d1	Mounting Dimension										Keyway	Small round nut	Load (KN)		Recir- culation	Stiffness (KN/μm)
						D	D3 or axb	D4	D5	D6	h	M	B	L1	L2			Ca	Coa		
1	1202	12.5	2	1.50	12.1	22	45	32	5.8	10.0	6	Φ3	10	35	51	4x4x20	M20x1	2.4	5.6	3	398
2	1604	16.0	4	2.38	15.3	26	38x38	36	5.8	10.0	6	/	10	45	73	4x4x30	M26x1.5	5.0	10.9	3	448
3	2004	20.0	4	2.38	19.3	30	45x45	46	5.8	10.0	6	Φ4	10	45	73	4x4x30	M30x1.5	5.7	13.4	3	519
4	2504	25.0	4	2.38	24.3	40	50x50	53	5.8	10.0	6	M6	10	46	77	4x4x30	M40x1.5	6.1	16.4	3	654
5	3204	32.0	4	2.38	31.3	50	76	62	6.5	11.0	6	M6	12	46	82	6x6x30	M50x2	7.0	10.9	3	823
6	1605	16.5	5	3.50	15.5	30	45x45	46	5.8	10.0	6	/	10	65	97	4x4x30	M30x1.5	6.9	14.5	3	400
7	2005	20.0	5	3.50	19.0	36	45x45	46	5.8	10.0	6	M6	10	55	87	4x4x30	M30x1.5	7.4	15.6	3	536
8	2505	25.0	5	3.50	24.0	40	63	50	6.5	11.0	6	M6	11	64	94	6x6x40	M40x1.5	8.4	17.1	3	657
9	3205	32.0	5	3.50	31.0	50	82	67	7.0	12.0	7	M6	12	77	117	6x6x50	M50x2	9.5	24.6	3	826
10	4005	40.0	5	3.50	39.0	60	87	72	7.0	12.0	7	M6	12	84	124	6x6x50	M60x2	10.4	32.8	3	1025
11	2506	25.0	6	3.50	24.0	45	68	55	6.5	11.0	6	M6	11	66	98	6x6x50	M45x1.5	12.2	26.7	3	636
12	3206	32.0	6	3.97	30.8	50	82	67	7.0	12.0	7	M6	12	92	125	6x6x55	M50x2	14.4	32.8	3	840
13	4006	40.0	6	3.97	38.8	60	87	72	7.0	12.0	7	M6	12	82	124	6x6x55	M60x2	15.4	44.8	3	1020
14	3208	32.0	8	4.76	30.6	53	82	67	7.0	12.0	7	M6	12	125	164	6x6x55	M52x1.5	27.8	71.0	3	820
15	4008	40.0	8	4.76	38.6	60	87	72	7.0	12.0	7	M6	12	125	164	6x6x55	M60x1.5	30.7	89.0	5	1002
16	3210	32.0	10	6.35	32.2	53	90	71	9.0	15.0	9	M6	15	115	157	6x6x63	M52x2	24.9	56.6	5	820
17	4010	34.0	10	7.14	39.4	63	108	85	11.0	18.0	11	M6	15	115	157	6x6x63	M62x2	31.5	68.0	3	1002
18	4012	40.0	12	7.14	38.0	65	108	85	11.0	18.0	11	M6	15	135	176	6x6x63	M64x2	33.1	51.4	3	772

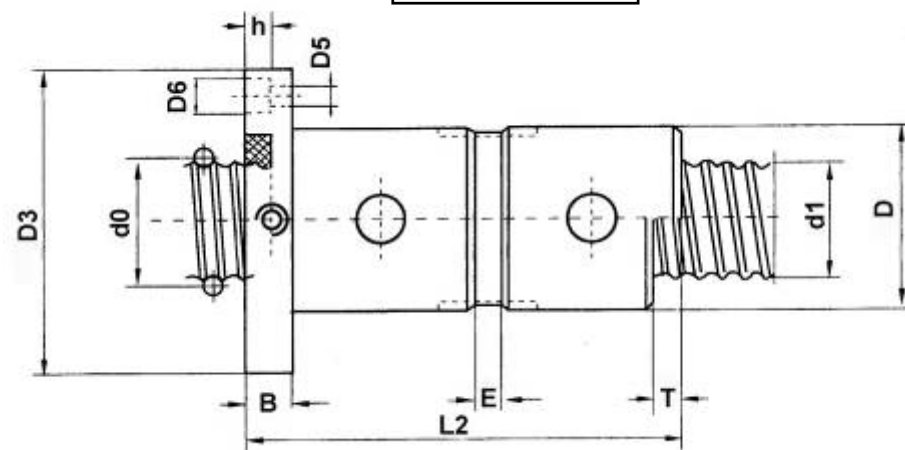
"d0" nominal diameter; "P" pitch; "Dw" diameter of the steel ball; "d1" major diameter of the screw shaft.

I Series (Internal Ball Recirculation)

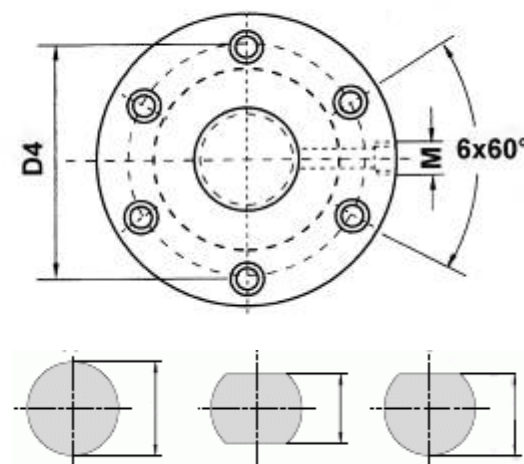
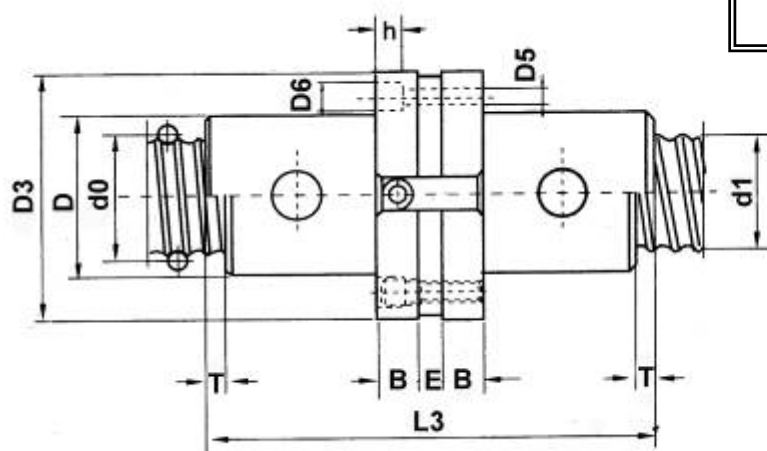
1. ISO, ISE, ISN



2. IDS



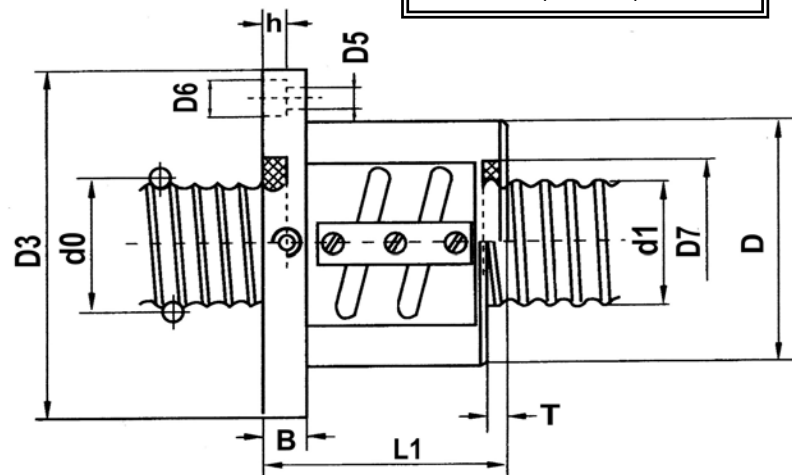
3. IDP



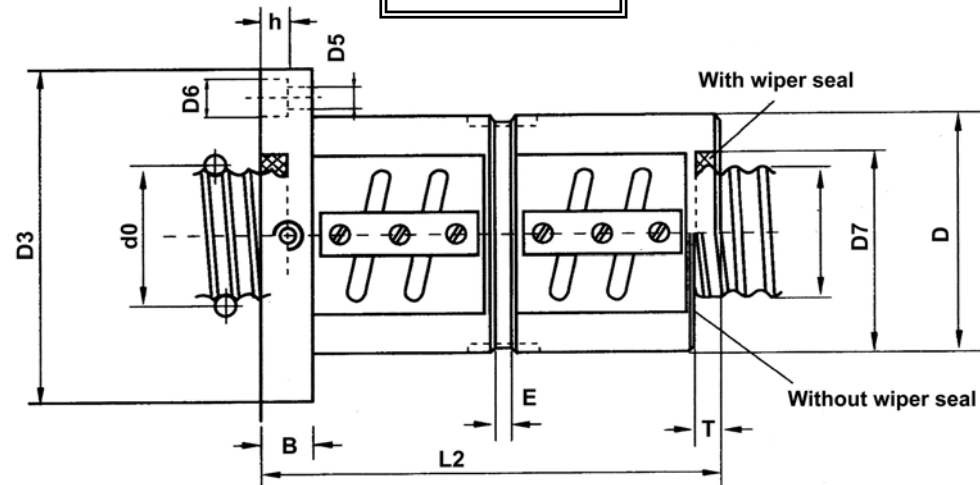
No.	Code	d0	P	Dw	d1	Mounting Dimension													Load (KN)		Stiffness (KN/μm)
						D	D3	D4	D5	D6	D7	h	M	B	T	E	L1	L2	Ca	Coa	
1	1202	12.5	2	1.50	12.1	26	48	36	4.8	8.5	15	4	Φ2	6	2	3	24	47	2.45	5.90	398
2	1402.5	14.5	2.5	1.50	14.1	28	54	42	5.8	10.0	22	6	Φ2	8	3	3	29	55	2.70	6.90	410
3	3202.5	32			31.5	45	84	71	5.8	10.0	39	6	M6	12	3	3	32	56	4.95	11.20	815
4	1203	12.5	3	2.38	11.9	26	48	36	4.8	8.5	17	4	Φ2	6	3	3	26	50	3.43	5.59	408
5	1603	16			15.3	30	53	40	4.8	8.5	21	4	Φ2	8	3	3	32	58	4.90	10.70	440
6	2003	20			19.3	36	60	48	5.8	10.0	24	6	M6	10	3	4	34	60	5.20	12.85	509
7	1204	12	4	2.38	11.3	26	48	36	4.8	8.5	17	4	Φ2	6	3	4	36	68	4.30	7.40	418
8	1404	14.5			13.8	28	50	38	4.8	8.5	17	4	Φ2	8	3	4	38	70	4.88	10.62	430
9	1604	16			15.3	30	53	40	4.8	8.5	22	4	Φ2	8	3	4	37	73	4.98	10.92	448
10	2004	20			19.3	36	60	48	5.8	10.0	25	6	M6	10	3	4	39	75	5.70	13.35	519
11	2504	25			24.3	40	66	53	5.8	10.0	34	6	M6	10	3	4	39	75	6.10	16.37	654
12	3204	32			31.3	50	76	63	5.8	10.0	38	6	M6	10	3	4	39	75	7.00	22.00	823
13	1605	16.5	5	3.50	15.5	30	53	40	4.8	8.5	23	6	M6	10	3	4	42	80	7.40	16.50	400
14	2005	20	5	3.50	19.0	36	60	48	5.8	10.0	25	6	M6	10	3	4	42	80	8.10	17.08	536
15	2505	25			24.0	40	66	53	5.8	10.0	30	6	M6	10	3	4	44	86	9.10	21.85	657
16	3205	32			31.0	50	82	67	7.0	12.0	38	7	M6	12	3	4	46	88	10.3	28.60	826
17	4005	40			39.0	60	94	75	9.0	15.0	48	9	M6	15	3	4	48	88	11.4	36.27	1025
18	2506	25	6	3.50	24.0	40	66	53	5.8	10.0	30	6	M6	10	3	4	48	96	12.2	26.69	636
19	3206	32	6	3.97	31.8	50	82	67	7.0	12.0	38	7	M6	12	3	4	50	98	14.0	32.84	840
20	4006	40			38.8	60	94	75	9.0	15.0	48	9	M6	15	3	4	53	101	15.4	44.82	1020
21	5006	50	6	3.97	48.8	71	110	90	9.0	15.0	60	9	M8	15	3	6	53	101	17	56.85	1226
22	3208	32	8	4.76	30.6	53	90	71	9.0	15.0	40	9	M6	15	5	4	68	124	17.9	42.53	820
23	4008	40			38.6	63	100	80	9.0	15.0	48	9	M6	15	5	4	68	124	19.8	53.41	1002
24	5008	50			48.6	75	118	95	11.0	18.0	60	11	M8	18	5	7	71	131	22.1	68.52	1270
25	6308	63			61.6	90	132	110	11.0	18.0	75	11	M8	18	5	7	79	147	30.86	114.5	2010
26	1610	16	10	2.38	15.3	30	48	38	4.5	7.5	21	2	Φ2	6			34	/	/	11.4	398
27	3210	32	10	6.35	30.0	53	90	71	9.0	15.0	42	9	M6	15	6	7	72	139	24.9	56.6	772
28	4010	40	10	7.14	38.0	63	108	85	11.0	18.0	50	11	M6	18	6	7	75	142	31.5	68.0	973
29	5010	50			48.0	75	118	95	11.0	18.0	60	11	M8	18	6	7	75	142	34.8	87.0	1273
30	6310	63			61.0	90	138	112	13.5	22.0	75	13	M8	20	6	7	77	144	39.1	117.0	2010
31	8010	80			78.0	105	156	130	13.5	22.0	90	13	M8	20	6	7	77	144	46.2	148.0	2200
32	4012	40	12	7.14	38.0	67	108	85	11.0	18.0	50	11	M6	15	7	8	84	164	33.1	76.2	909
33	5012	50			48.0	80	132	105	13.5	22.0	63	13	M8	18	7	8	87	167	38.1	100.4	1050
34	6312	63			61.0	90	138	112	13.5	22.0	75	13	M8	20	7	8	89	169	41.7	124.0	1950
35	8012	80			78.0	110	158	132	13.5	22.0	95	13	M8	20	7	8	89	169	47.0	163.0	2500

W Series (Tube within nut diameter)

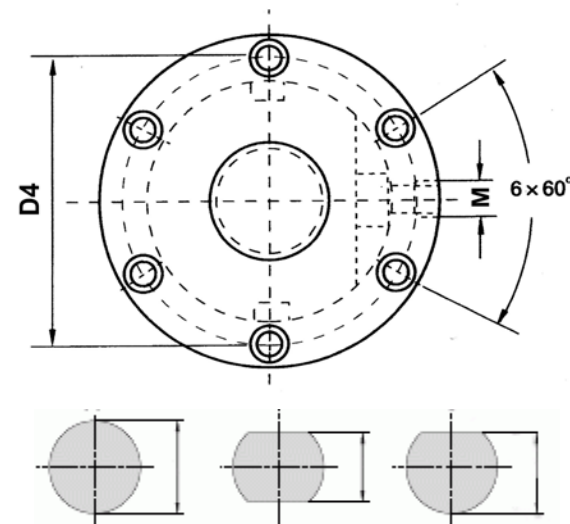
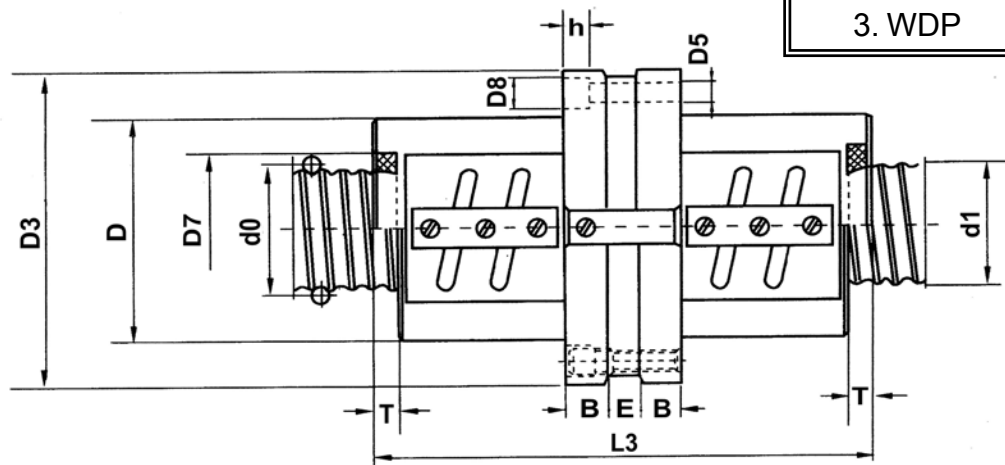
1. WSO, WSE, WSN



2. WDS



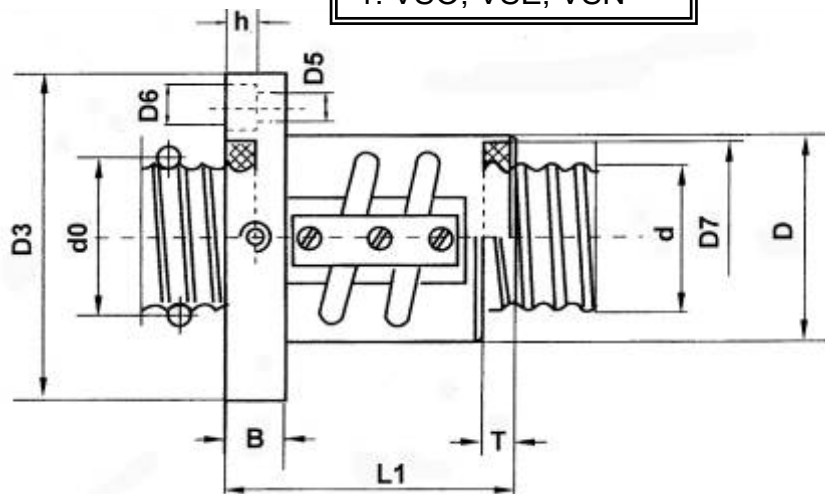
3. WDP



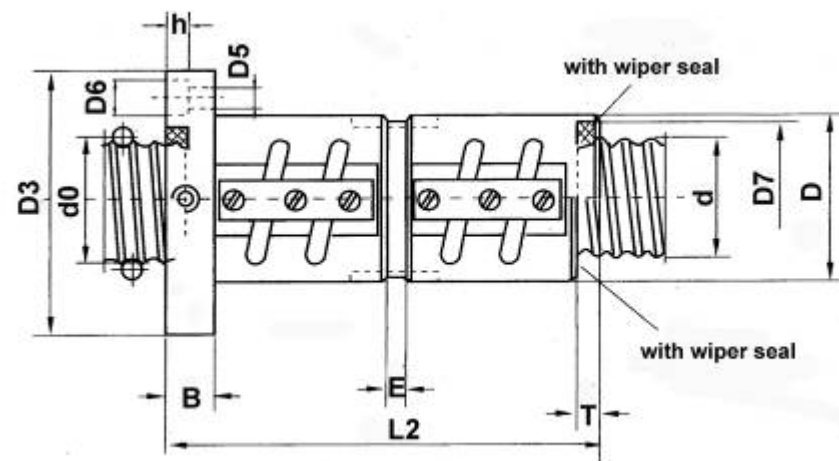
No.	Code	d0	P	Dw	d1	Mounting Dimension													Load (KN)		Stiffness (KN/μm)
						D	D3	D4	D5	D6	D7	h	M	B	T	E	L1	L2	Ca	Coa	
1	1203	12	3	2.38	11.3	32	53	42	4.8	8.5	17	4	Φ2	6	2	3	31	61	3.6	6.2	408
2	1603	16			15.3	36	56	45	4.8	8.5	21	4	Φ2	8	2	3	33	63	4.2	8.9	440
3	1204	12	4	2.38	11.3	32	53	42	4.8	8.5	17	4	Φ2	6	3	4	34	64	3.6	6.2	418
4	1604	16			15.3	36	56	45	4.8	8.5	21	4	Φ2	8	3	4	36	66	4.2	8.9	430
5	2004	20			19.3	40	66	53	5.8	10.0	25	6	M6	10	3	4	38	70	4.9	11.1	448
6	3204	32			31.3	56	84	71	5.8	10.0	38	6	M6	10	3	4	38	70	6.0	18.3	823
7	2005	20	5	3.18	19.1	45	70	56	5.8	10.0	25	6	M6	10	3	4	41	76	7.0	14.2	536
8	2505	25			24.1	50	76	63	5.8	10.0	30	6	M6	10	3	4	41	76	7.9	18.2	657
9	3205	32			31.1	60	90	75	7.0	12.0	38	7	M6	12	3	4	43	78	8.8	23.8	826
10	4005	40			39.1	67	104	85	9.0	15.0	48	9	M6	15	3	4	46	81	9.7	30.2	1025
11	2506	25	6	3.18	24.1	50	76	63	5.8	10.0	30	6	M6	10	4	4	48	90	10.4	22.2	636
12	3206	32			31.1	60	90	75	7.0	12.0	38	7	M6	12	4	4	50	92	12.0	27.4	840
13	4006	40	6	3.97	38.8	71	110	90	9.0	15.0	48	9	M6	15	4	6	53	97	13.2	37.4	1020
14	5006	50			48.8	85	120	100	9.0	15.0	60	9	M8	15	4	6	53	97	14.6	47.4	1226
15	3208	32	8	4.76	30.6	67	104	85	9.0	15.0	40	9	M6	15	5	4	60	108	15.3	35.5	820
16	4008	40			38.6	75	110	90	9.0	15.0	48	9	M6	15	5	4	60	108	16.9	44.5	1002
17	5008	50			48.6	85	128	105	11.0	18.0	60	11	M8	18	5	8	63	115	18.9	57.1	1270
18	6308	63			61.6	105	148	125	11.0	18.0	75	11	M8	18	5	8	71	131	27.5	100.0	2010
19	3210	32	10	6.35	30.1	71	110	90	9	15.0	42.0	9	M6	15	6	6	70	130	21.3	43.9	772
20	4010	40			38.1	85	128	105	11	18.0	50.0	11	M6	18	6	6	73	133	24.3	56.7	973
21	5010	50			48.1	95	140	118	11	18.0	60.0	11	M8	18	6	6	73	133	27.3	72.7	1273
22	6310	63			61.1	110	158	132	13.5	22.0	75.0	13	M8	20	6	10	85	159	41.2	133.0	2010
23	8010	80			78.1	130	186	160	13.5	22.0	90.0	13	M8	20	6	10	85	159	45.3	169.0	2200
24	4012	40	12	7.14	38.0	90	132	110	11	18.0	50.0	11	M6	15	7	6	81	153	28.3	63.5	909
25	5012	50			48.0	100	152	125	13.5	22.0	63.0	13	M8	18	7	6	84	156	32.6	83.6	1050
26	6312	63			61.0	118	166	140	13.5	22.0	75.0	13	M8	20	7	12	98	188	47.7	146.0	1950
27	8012	80			78.0	140	196	170	13.5	22.0	95.0	13	M8	20	7	12	98	188	53.6	191.0	2500
28	8016	80	16	9.53	77.2	150	206	180	13.5	22.0	95.0	13	M8	22	10	12	123	235	78.8	248.0	2530
29	10016	100			97.2	170	234	200	17.5	28.0	115.0	17	M10	25	10	12	126	238	87.9	319.0	3380
30	8020	80	20	12.70	76.2	150	206	180	13.5	22.0	95.0	13	M8	25	12	12	153	293	113.0	317.0	2300
31	10020	100			96.2	170	234	200	17.5	28.0	115.0	17	M10	28	12	12	156	296	127.0	407.0	3010
32	12520	125			121.2	200	282	240	22	35.0	140.0	21	M10	30	12	12	158	298	141.0	514.0	3210
33	2525	25	25	3.97	24.0	58	92	73	9	15.0	31.0	9	M6	15	/	6	77	153	/	/	536
34	3232	32	32	4.76	30.8	68	108	84	11	17.0	38.0	5	M10	15	/	8	97	200	/	/	746

V Series (Tube within nut diameter)

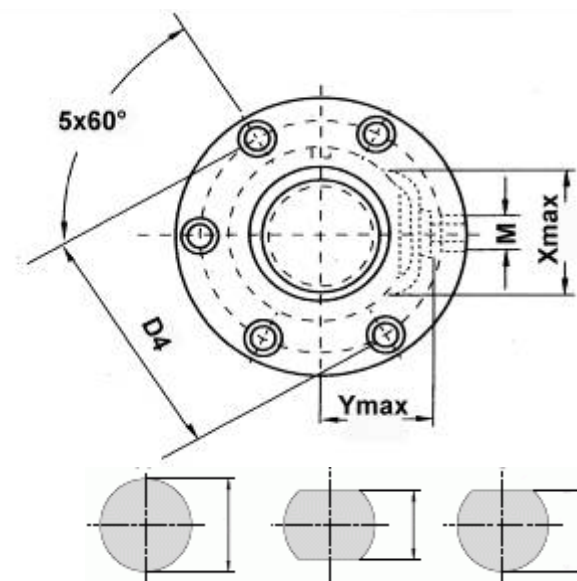
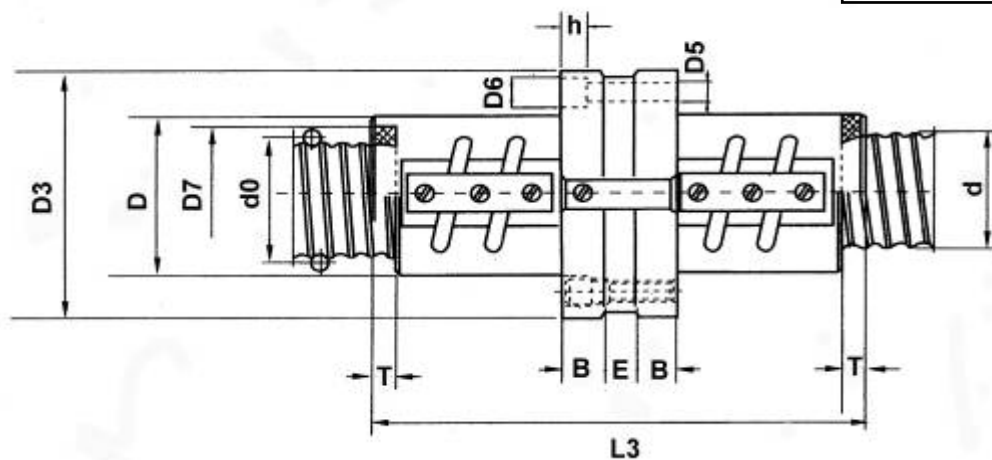
1. VSO, VSE, VSN



2. VDS



3. VDP



No.	Code	d0	P	Dw	d1	Mounting Dimension													Load (KN)		Stiffness (KN/μm)
						D	D3	D4	D5	D6	D7	h	M	B	T	E	L1	L2	Ca	Coa	
1	1203	12	3	2.38	11.3	32	53	42	4.8	8.5	17	4	Φ2	6	2	3	31	61	3.6	6.2	408
2	1603	16			15.3	36	56	45	4.8	8.5	21	4	Φ2	8	2	3	33	63	4.2	8.9	440
3	1204	12	4	2.38	11.3	32	53	42	4.8	8.5	17	4	Φ2	6	3	4	34	64	3.6	6.2	418
4	1604	16			15.3	36	56	45	4.8	8.5	21	4	Φ2	8	3	4	36	66	4.2	8.9	430
5	2004	20			19.3	40	66	53	5.8	10.0	25	6	M6	10	3	4	38	70	4.9	11.1	448
6	3204	32			31.3	56	84	71	5.8	10.0	38	6	M6	10	3	4	38	70	6.0	18.3	823
7	2005	20	5	3.18	19.1	45	70	56	5.8	10.0	25	6	M6	10	3	4	41	76	7.0	14.2	536
8	2505	25			24.1	50	76	63	5.8	10.0	30	6	M6	10	3	4	41	76	7.9	18.2	657
9	3205	32			31.1	60	90	75	7.0	12.0	38	7	M6	12	3	4	43	78	8.8	23.8	826
10	4005	40			39.1	67	104	85	9.0	15.0	48	9	M6	15	3	4	46	81	9.7	30.2	1025
11	2506	25	6	3.18	24.1	50	76	63	5.8	10.0	30	6	M6	10	4	4	48	90	10.4	22.2	636
12	3206	32			31.1	60	90	75	7.0	12.0	38	7	M6	12	4	4	50	92	12.0	27.4	840
13	4006	40	6	3.97	38.8	71	110	90	9.0	15.0	48	9	M6	15	4	6	53	97	13.2	37.4	1020
14	5006	50			48.8	85	120	100	9.0	15.0	60	9	M8	15	4	6	53	97	14.6	47.4	1226
15	3208	32	8	4.76	30.6	67	104	85	9.0	15.0	40	9	M6	15	5	4	60	108	15.3	35.5	820
16	4008	40			38.6	75	110	90	9.0	15.0	48	9	M6	15	5	4	60	108	16.9	44.5	1002
17	5008	50			48.6	85	128	105	11.0	18.0	60	11	M8	18	5	8	63	115	18.9	57.1	1270
18	6308	63			61.6	105	148	125	11.0	18.0	75	11	M8	18	5	8	71	131	27.5	100.0	2010
19	3210	32	10	6.35	30.1	71	110	90	9	15.0	42.0	9	M6	15	6	6	70	130	21.3	43.9	772
20	4010	40			38.1	85	128	105	11	18.0	50.0	11	M6	18	6	6	73	133	24.3	56.7	973
21	5010	50			48.1	95	140	118	11	18.0	60.0	11	M8	18	6	6	73	133	27.3	72.7	1273
22	6310	63			61.1	110	158	132	13.5	22.0	75.0	13	M8	20	6	10	85	159	41.2	133.0	2010
23	8010	80			78.1	130	186	160	13.5	22.0	90.0	13	M8	20	6	10	85	159	45.3	169.0	2200
24	4012	40	12	7.14	38.0	90	132	110	11	18.0	50.0	11	M6	15	7	6	81	153	28.3	63.5	909
25	5012	50			48.0	100	152	125	13.5	22.0	63.0	13	M8	18	7	6	84	156	32.6	83.6	1050
26	6312	63			61.0	118	166	140	13.5	22.0	75.0	13	M8	20	7	12	98	188	47.7	146.0	1950
27	8012	80			78.0	140	196	170	13.5	22.0	95.0	13	M8	20	7	12	98	188	53.6	191.0	2500
28	8016	80	16	9.53	77.2	150	206	180	13.5	22.0	95.0	13	M8	22	10	12	123	235	78.8	248.0	2530
29	10016	100			97.2	170	234	200	17.5	28.0	115.0	17	M10	25	10	12	126	238	87.9	319.0	3380
30	8020	80	20	12.70	76.2	150	206	180	13.5	22.0	95.0	13	M8	25	12	12	153	293	113.0	317.0	2300
31	10020	100			96.2	170	234	200	17.5	28.0	115.0	17	M10	28	12	12	156	296	127.0	407.0	3010
32	12520	125			121.2	200	282	240	22	35.0	140.0	21	M10	30	12	12	158	298	141.0	514.0	3210
33	2525	25	25	3.97	24.0	58	92	73	9	15.0	31.0	9	M6	15	/	6	77	153	/	/	536
34	3232	32	32	4.76	30.8	68	108	84	11	17.0	38.0	5	M10	15	/	8	97	200	/	/	746