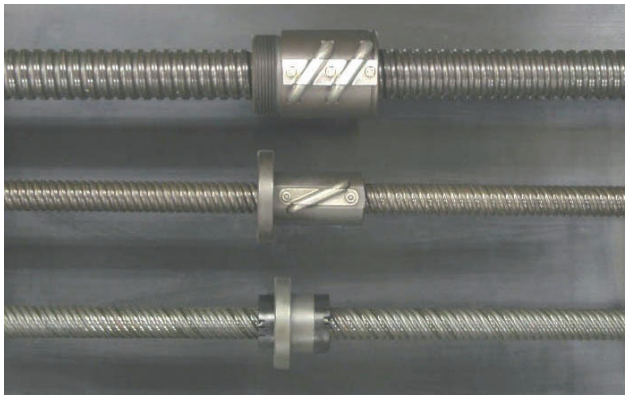
6. TSUBAKI NAKASHIMA Ball screw series for general industry



Features of the series

Short delivery, low price

Short delivery due to mass production by rolled forming and abundant stocks. The prices are greatly lower compared with precision ball screws.

High accuracy

Lead accuracy is equivalent to JIS B1192 C10 class.

Please refer to lead accuracy chart of below C7 class (Page A 21)

High stiffness

RR series have the axial clearance "ZERO" type.

Anti-rust & lubricating effect

R, RS, R2, RR, RZ and RE series nuts are phosphating treated which gives anti-rust and lubricating effect. (RZ series is not treated).

High reliability

You can always use in relief this series based on our rational designing, advanced working technique and consistent controlled management from selected materials to delivery.

Enhanced Parts

Fully variety of the standard parts, such as flange for nut installation, brush wiper and wiper cap for R, RS and RR series, are available.

Abundant standard series and high generalities

R series millimeter size	36 types
R series inch size	4 types
RS series	28 types
RZ series	3 types
RR series	19 types
R2 series	8 types
RE series	7 types
Right and left series	6 types
G series	14 types

Abundant line-up of 166 types in total and wide range shaft dia. 8-315mm.

Dust proof measures (option)

The ball screw is quite precise parts as same as the bearing which works by rolling of the balls. When the foreign substance invades into the ball nut, it may cause the lifetime decrease, noise generation, increase of the rotating torque and destruction of the ball circulating parts etc. In the environment which the invasion of the foreign articles into the ball nut is not avoidable, some dustproof measures for ball screw are definitely necessary. Please take consideration of prevention the foreign articles from adhering on the screw shaft, by attaching bellows or the telescopic type cover. In case dustproof cover cannot be attached, you may have dustproof effect by using the brush wiper installed in both ends of the ball nut. Please consult us.

Combinations of shaft dia. and lead (Mark ◎ has both of right-hand and the left-hand screw).

Unit:mm

Shaft dia. \ Lead	3	4	5	5.08	6	6.35	8	10	12	12.7	16	20	24	25	32	36	40	50
10	◎				○													
12							○		○									
12.7										○								
14		○	○															
15								○				○						
16			○	○				○			○				○			
18							○											
20			◎		○			○				○					○	
22							○											
25			○				○	○						○				○
25.4						○												
28					○													
32							○	○										
36								○	○			○	○			○		
38.1						○												
40								○									○	
45								○	◎									
50								○			○							○
60											○							
63								○			○							
80											○	○						
100												○	○					
125												○		○	○			
140														○	○		○	
160														○	○		○	
200															○		○	
250															○		○	
315																	○	

Specification

Lead accuracy

Lead accuracy is JIS B1192 C10 class equivalent.
Please refer to page A21 about Under C7 Class.

Axial clearance

Please refer to dimension tables of each series.

Nominal No.

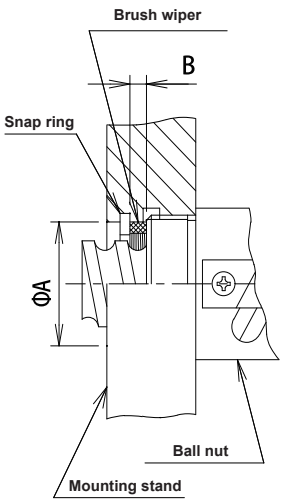
Nut type		Shaft length	Class symbol	Flange symbol	Brush seal symbol
25RC10	———	500	HR	F	W
36RSC10	———	1500	HR		W
16R2U16	———	1000	HR		
45RRD12	———	1000	HR		

Dimension table of Brush wiper

Some types of brush wipers are not furnished in both ends of the nut due to the constructional problem.
Please confirm the applied type, referring to this page and next page.

	Nut type	Wiper	A	B
◎	12RA8	W01201	22	2.8
	12RSA8			
	12R2U12			
◎	14RB4	W01401		
	14RSB4			
◎	14RRB4			
◎	14RB5			
	14RSB5			
◎	14RRB5			
●	15R2A10	W01501	24	2.8
○	15RE2D20			
◎	16RB5	W01601	25	2.8
	16RSB5			
◎	16RRB5			
	16RZ3S5			
◎	16RA10			
	16RSA10			
	16R2U16			
○	16RE1Q32			
◎	18RB8	W01801	30	2.8
	18RSB8			
◎	18RRB8			
◎	20RB5	W02001		
	20RSB5			
◎	20RRB5			
◎	20RB5L			
	20RSB5L			
◎	20RC6			
	20RSC6			
◎	20RRC6			
	20R2U20			
○	20RE1Q40			
◎	20RA10	W02002	33	2.8
	20RSA10			
◎	22RC8	W02201		
	22RSC8			
◎	22RRC8			
◎	25RA5	W02500	36	2.8
	25RSA5			
◎	25RB8	W02501	40	3.6
	25RSB8			
◎	25RRB8			
◎	25RC10			
	25RSC10			
◎	25RRC10			
	25R2U25			
○	25RE1Q50			
◎	28RC6	W02801	43	3.6
	28RSC6			
◎	28RRC6			

	Nut type	Wiper	A	B
◎	32RC8	W03201	49	3.6
	32RSC8			
◎	32RRC8			
◎	32RC10			
	32RSC10			
	32R2U32			
◎	36RC10	W03601	52	3.6
	36RSC10			
◎	36RRC10			
◎	36RC12			
	36RSC12			
◎	36RRC12			
	36R2U36			
○	35RE3D20			
○	36RE3D24			
◎	40RD10	W04001	57	3.6
	40RSD10			
◎	40RRD10			
	40R2U40			
●	40RZ4S10			
◎	45RD10	W04501	62	3.6
	45RSD10			
◎	45RRD10			
◎	45RD12			
	45RSD12			
◎	45RRD12			
◎	45RD12L			
	45RSD12L			
	50RD10	W05000	64.5	3.6
	50RSD10			
○	50RE2D50			
	50RC16	W05001	68	3.6
	50RSC16			
	50RRC16			
	60RD16	W06001	80	3.6
	63RL10	W06301		
	63RRL10			
●	63RZ6S10			
	63RD16			
	80RL16	W08001	100	5.0
	80RL20			
	80RRL20			
	80RD20			
	100RL20	W10001	125	5.0
	100RD24	W10002		
◎	12.7R2B12.7	W10121	21	2.8
◎	16RB5.08	W10161	25	2.8
◎	25.4RB6.35	W10251	36	2.8
◎	38.1RD6.35	W10381	47.5	2.8



Note 1： No mark : With built-in brush wiper at nut installation side and with wiper cap or built-in brush wiper at opposite side.

Mark ◎ : For attaching brush wiper at nut-installation side, you are requested to design the structure to maintain brush wiper, referring to the nut dimension table.

Mark ○ : For attaching brush wipers at both side of nut, please design the structure to maintain brush wiper, referring to the nut dimension table

Mark ● : For attaching brush wiper at anti-nut-installation side, please design the structure to maintain brush wiper, referring to the nut dimension table.

2.For the ball screws not entioned in the column of nut model of the table, we don't have brush wipers to be applied in our standard parts, but we may produce applied wiper as a special specification. Please consult us.

Wiper cap dimension table

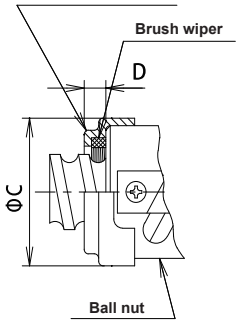
Please note that brush-wiper cap can be attached at anti-nut-installation side only.

	Nut type	Wiper	C	D
	12RA8	S01201	26.6	3.5
○	12RSA8			
○	12R2U12	S01202		
	14RB4	S01401		
○	14RSB4			
	14RRB4			
	14RB5			
○	14RSB5			
	14RRB5			
	16RB5	S01601	31.6	3.5
○	16RSB5			
	16RRB5			
○	16RZ3S5			
	16RA10			
○	16RSA10			
○	16R2U16	S01602		
	18RB8	S01801	35.6	3.5
○	18RSB8			
	18RRB8			
	20RB5	S02001		
○	20RSB5			
	20RRB5			
	20RB5L			
○	20RSB5L			
	20RC6			
○	20RSC6			
	20RRC6			
○	20R2U20	S02003		
	20RA10	S02002	39.6	3.5
○	20RSA10			
	22RC8	S02201		
○	22RSC8			
	22RRC8			
	25RA5	S02500	41.6	3.5
○	25RSA5			
	25RB8	S02501	49	4.5
○	25RSB8			
	25RRB8			
	25RC10	S02502	46	4.5
○	25RSC10			
	25RRC10			
○	25R2U25	S02503		
	28RC6	S02801	52	4.5
○	28RSC6			
	28RRC6			
	32RC8	S03201	58	4.5
○	32RSC8			
	32RRC8			
	32RC10			
○	32RSC10			

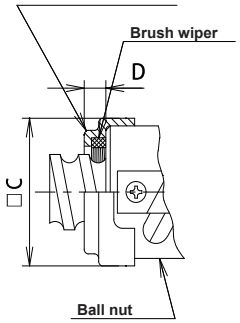
	Nut type	Wiper	C	D
○	32R2U32	S03202	58	4.5
	36RC10	S03601	62	4.5
○	36RSC10			
	36RRC10			
	36RC12			
○	36RSC12			
	36RRC12			
○	36R2U36	S03602		
	40RD10	S04001	67	4.5
○	40RSD10			
	40RRD10			
○	40R2U40	S04002		
	45RD10	S04501	72	4.5
○	45RSD10			
	45RRD10			
	45RD12			
○	45RSD12			
	45RRD12			
	45RD12L			
○	45RSD12L			
	12.7R2B12.7	S10121	28.6	3.5
	16RB5.08	S10161	□27	3.5
	25.4RB6.35	S20251	□39.7	3.5
	38.1RD6.35	S10381	54.8	3.5

○	50RD10	Built-in brush wiper at both ends of nut is available
○	50RSD10	
○	50RC16	
○	50RSC16	
○	50RRC16	
○	60RD16	
○	63RL10	
○	63RRL10	
○	63RD16	
○	80RL16	
○	80RL20	
○	80RRL20	
○	80RD20	
○	100RL20	
○	100RD24	

Seal cap (round type)



Seal cap (square type)

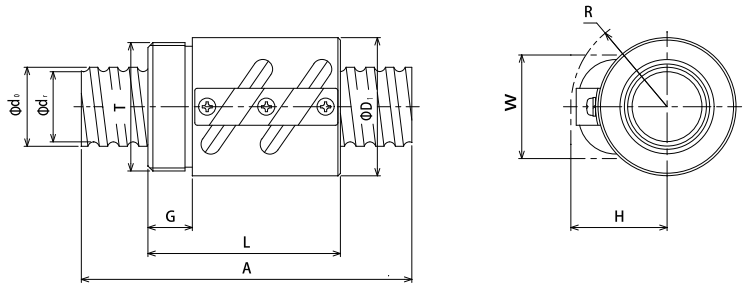


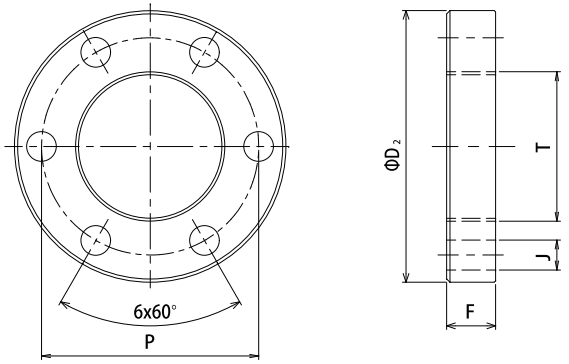
Note 1 . No Mark ： For attaching brush wiper at installation side of the nut, please design at your side the structure to maintain brush wiper, referring to the brush wiper dimension table.

Mark ○ ： Brush wiper is built in at nut-installation side.

2. We don't have any applied optional brush wipers for ball screw not mentioned in the column of nut model of the table

R series (mm size) Lead 3 ~ 8



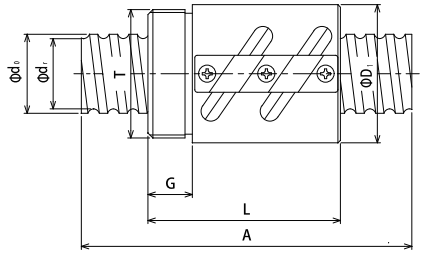


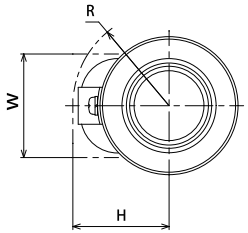
Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
3	10RB3L	10	8.1	2.381	10.6	3.5×1	3700	5700	0.10
	10RB3								
4	14RB4	14	11.7	2.778	14.6	3.5×1	5300	9000	0.10
5	14RB5	14	11.5	3.175	14.8	3.5×1	6300	10200	0.10
	16RB5	16	13.5	3.175	16.8	3.5×1	6800	11800	0.10
	20RB5L	20	17.5	3.175	20.8	3.5×1	7600	15000	0.10
	20RB5								
	25RA5	25	22.5	3.175	25.8	2.5×1	6400	13500	0.10
6	10RA6	10	8.1	2.381	10.6	2.5×1	2700	4000	0.10
	20RC6	20	17.5	3.175	20.8	2.5×2	10400	21400	0.10
	28RC6	28	25.5	3.175	28.8	2.5×2	12200	30500	0.10
8	12RA8	12	9.7	2.778	12.6	2.5×1	3600	5500	0.10
	18RB8	18	14.4	4.763	19.3	3.5×1	11900	19500	0.14
	22RC8	22	18.4	4.763	23.3	2.5×2	18600	35400	0.14
	25RB8	25	21.4	4.763	26.3	3.5×1	14600	28400	0.14
	32RC8	32	28.4	4.763	33.3	2.5×2	22800	53300	0.14

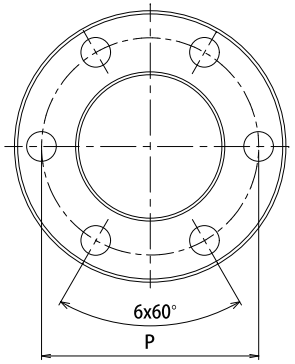
Nut dimension									Shaft max length	Flange			Model No.
D_1	L	T	G	P	J	W	H	R	A	D_2	F	Nominal	
20	32	M18×1	10	32	5.5	17	17	16.5	800	42	10	F01001	10RB3L
													10RB3
25	44	M24×1	10	40	6.6	21	21	20	1500	55	10	F01401	14RB4
25	44	M24×1	10	40	6.6	21	21	20.5	1500	55	10	F01401	14RB5
30	44	M28×1.5	10	45	6.6	23	24	24	1500	58	10	F01601	16RB5
34	42	M32×1.5	12	49	6.6	28	27	25	2000	64	12	F02001	20RB5L
													20RB5
40	41	M38×1.5	12	52	5.5	31	27	25	2500	64	12	F02500	25RA5
20	38	M18×1	10	32	5.5	16	16	16	800	42	10	F01001	10RA6
34	57	M32×1.5	12	49	6.6	28	27	25	2000	64	12	F02001	20RC6
50	75	M45×1.5	15	65	6.6	34	33	32.5	3000	80	15	F02801	28RC6
25	46	M24×1	10	35	4.5	18	20	19.5	1000	45	10	F01201	12RA8
34	56	M32×1.5	12	49	6.6	28	27	27	1500	64	12	F01801	18RB8
38	75	M35×1.5	15	56	9.0	32	30	30	2000	74	15	F02201	22RC8
47	66	M42×1.5	16	65	9.0	35	30	30	2500	83	16	F02501	25RB8
56	78	M52×2	18	75	9.0	42	39	39	3500	92	18	F03201	32RC8

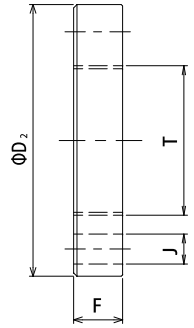
Note 1. Rated dynamic load Ca is specified with life expectancy based on 10^6 revolution.
2. Mark of "L" shown at end of the ball screw type means left hand thread.
3. Upon your request, the oil hole in the flange can be drilled.
4. Please refer to the page A209 for the applied brush wiper.

R series (mm size) Lead 10 ~ 24







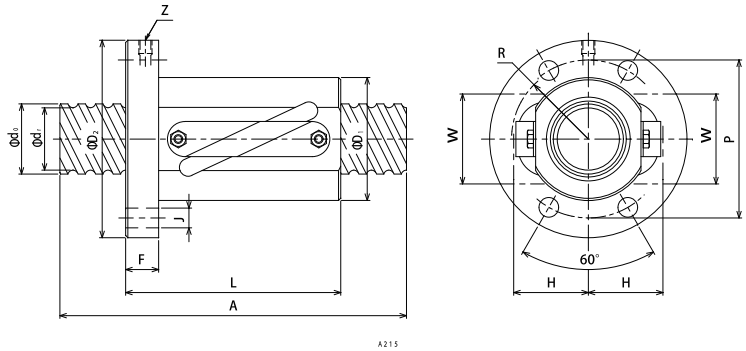


Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
10	16RA10	16	13.5	3.175	16.8	2.5×1	5000	8400	0.10
	20RA10	20	16.4	4.763	21.3	2.5×1	9800	16400	0.14
	25RC10	25	20.2	6.35	26.8	2.5×2	28600	53800	0.19
	32RC10	32	27.2	6.35	33.8	2.5×2	32300	67600	0.19
	36RC10	36	31.2	6.35	37.8	2.5×2	34400	76700	0.19
	40RD10	40	35.2	6.35	41.8	3.5×2	48500	120000	0.19
	45RD10	45	40.2	6.35	46.8	3.5×2	52100	139000	0.19
	50RD10	50	45.2	6.35	51.8	3.5×2	61600	173000	0.19
	63RL10	63	58.2	6.35	64.8	2.5×3	73200	240000	0.19
12	36RC12	36	30.6	7.144	38.0	2.5×2	39900	85600	0.22
	45RD12L	45	39.6	7.144	47.0	3.5×2	60000	152000	0.22
	45RD12								
16	50RC16	50	43.0	9.525	52.8	2.5×2	79300	185000	0.30
	60RD16	60	53.0	9.525	62.8	3.5×2	115000	309000	0.30
	63RD16	63	56.0	9.525	65.8	3.5×2	117000	325000	0.30
	80RL16	80	70.5	12.7	83.6	2.5×3	205000	588000	0.38
20	80RD20	80	70.5	12.7	83.6	3.5×2	193000	549000	0.38
	80RL20	80	73.0	9.525	82.8	2.5×3	140000	453000	0.30
	100RL20	100	90.5	12.7	103.6	2.5×3	228000	744000	0.38
24	100RD24	100	88.2	15.875	104.6	3.5×2	288000	858000	0.50

Nut dimension									Shaft max length	Flange			Model No.
D_1	L	T	G	P	J	W	H	R	A	D_2	F	Nominal	
30	52	M28×1.5	10	45	6.6	23	24	23	1500	58	10	F01601	16RA10
38	58	M35×1.5	15	53	6.6	30	30	29.5	1500	68	15	F02002	20RA10
44	90	M42×1.5	15	62	9	37	35	34.5	2500	80	15	F02502	25RC10
56	96	M52×2	18	75	9	42	39	36.5	3500	92	18	F03201	32RC10
60	98	M55×2	18	80	11	48	39	39	3500	100	18	F03601	36RC10
65	120	M60×2	25	90	14	52	45	45.5	4000	114	25	F04001	40RD10
70	125	M65×2	30	94	14	57	51	48	5500	118	30	F04501	45RD10
80	143	M75×2	40	110	18	59	52	53	5500	140	40	F05000	50RD10
95	150	M90×2	40	135	22	73	60	62	5500	175	40	F06301	63RL10
60	108	M55×2	18	80	11	48	43	42.5	3500	100	18	F03601	36RC12
70	150	M65×2	30	94	14	57	51	47	5500	118	30	F04501	45RD12L
													45RD12
85	160	M80×2	40	125	22	65	59	60	5500	165	40	F05001	50RC16
96	186	M90×2	30	138	22	74	58	61	5500	178	30	F06001	60RD16
100	195	M95×2	40	140	22	77	67	67	5500	180	40	F06302	63RD16
125	224	M120×2	50	168	22	97	84	87	5500	208	50	F08001	80RL16
125	260	M120×2	50	168	22	97	84	82	5500	208	50	F08001	80RD20
	258							83					80RL20
145	265	M140×2	50	194	26	116	94	98	5500	240	50	F10001	100RL20
158	278	M140×3	50	208	26	122	104	105	5500	254	50	F10002	100RD24

Note 1. Rated dynamic load Ca is specified with life expectancy based on 10^6 revolution.
2. Mark of "L" shown at end of the ball screw type means left hand thread.
3. Upon your request, the oil hole in the flange can be drilled.
4. For ball screw bigger than Φ80mm dia., a notch on the nut for a spanner is available.
5. As the nut of 60RD16, 80RD20 and 100RD24 are semi-standard types, please consult us in advance, when you require.
6. Please refer to the page A209 for the applied brush wiper.

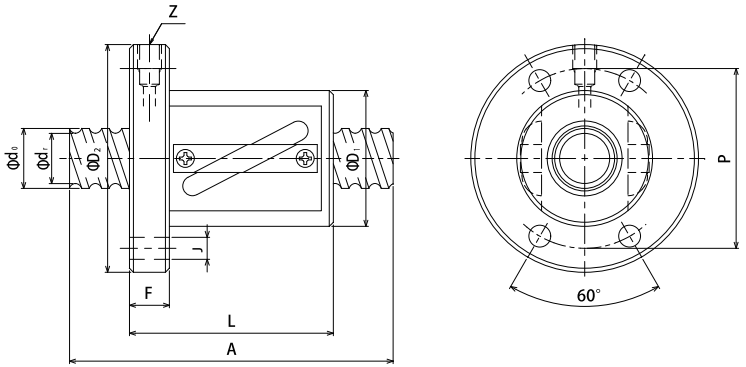
R2 series (mm size) Lead 10 ~ 40



A215

Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
10	15R2A10	15	12.2	3.175	15.8	2.5×2	8300	13500	0.10
12	12R2U12	12	10.1	2.381	12.6	1.5×2	3300	5200	0.10
16	16R2U16	16	13.7	2.778	16.6	1.5×2	4600	8000	0.10
20	20R2U20	20	17.5	3.175	20.8	1.5×2	6200	11600	0.10
25	25R2U25	25	21.9	3.969	26.0	1.5×2	9300	18100	0.12
32	32R2U32	32	28.4	4.763	33.3	1.5×2	13200	27500	0.14
36	36R2U36	36	31.7	5.556	37.5	1.5×2	17500	37300	0.17
40	40R2U40	40	35.2	6.35	41.8	1.5×2	21700	46400	0.19

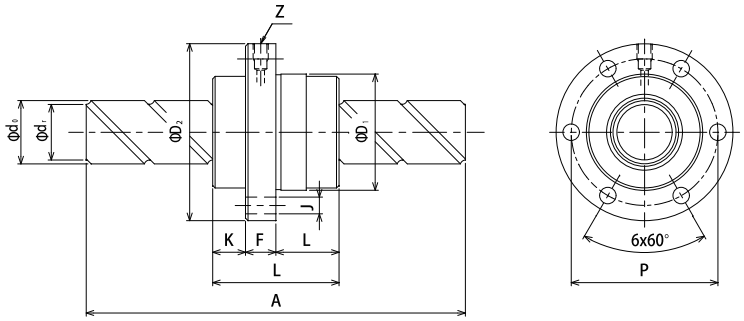
15R2A10 Model



Nut dimension										Shaft max length	Model No.
D_1	D_2	L	F	P	J	W	H	R	Z	A	
34	57	51	10	45	5.5	-	-	-	M6×0.75	1500	15R2A10
25	44	44	10	34	4.5	16	17	18	M6×0.75	1000	12R2U12
30	57	57	10	44	5.5	23	23	23	M6×0.75	1500	16R2U16
34	60	67	10	47	5.5	26	23	24	M6×0.75	2000	20R2U20
44	71	81	12	57	6.6	34	30	31	M6×0.75	2500	25R2U25
56	90	98	15	72	9	41	34	36	M6×0.75	3500	32R2U32
60	100	110	18	80	11	45	38	39	PT1/8	3500	36R2U36
65	107	123	18	85	11	51	41	43	M6×0.75	4000	40R2U40

Note 1. Rated dynamic load Ca is specified with life expectancy based on 10^6 revolution.
2. It is possible to install the wiper, if required.
3. Please refer to the page A209 for the applied brush wiper.

RE series (High lead, high speed type) Lead 20 ~ 50



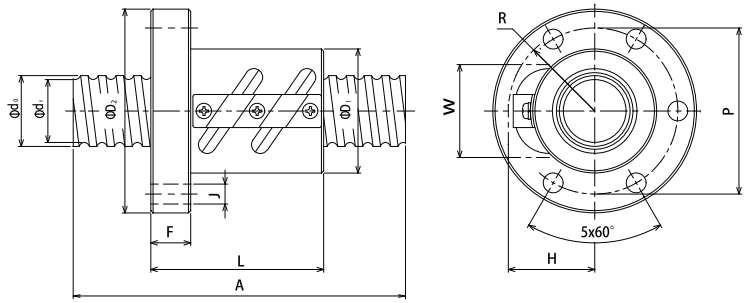
Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
20	15RE2D20	15	12.5	3.175	15.8	1.5×2	5200	8600	0.10
	36RE3D20	36	31.2	6.35	37.8	2.5×2	32100	65900	0.19
24	36RE3D24	36	30.6	7.144	38.0	2.5×2	38600	78300	0.22
32	16RE1Q32	16	13.7	2.778	16.6	0.5×4	2500	4500	0.10
40	20RE1Q40	20	17.5	3.175	20.8	0.5×4	3300	6500	0.10
50	25RE1Q50	25	21.9	3.969	26.0	0.5×4	5000	10200	0.12
	50RE2D50	50	44.0	7.938	52.2	1.5×2	32400	72600	0.24

Nut dimension								Shaft max length	Model No.
D_1	D_2	L	K	F	P	J	Z	A	
34	55	47	10	10	45	5.5	M6×0.75	1500	15RE2D20
70	110	76	20	18	90	11	-	3500	36RE3D20
75	115	90	22	18	94	11	-	3500	36RE3D24
34	55	37	9	10	45	5.5	M6×0.75	1500	16RE1Q32
38	58	45	10	10	48	5.5	M6×0.75	2000	20RE1Q40
46	70	55	12	12	58	6.6	M6×0.75	2500	25RE1Q50
90	135	118	24.5	22	112	14	PT1/8	5500	50RE2D50

Note 1. Rated dynamic load Ca is specified with life expectancy based on 10^6 revolution.

Ball screw

RS series Lead 3 ~ 8

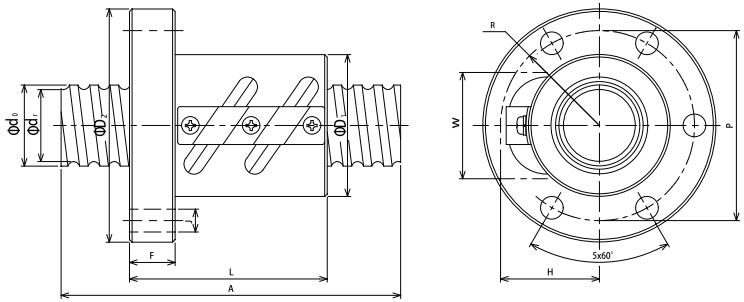


Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
3	10RSB3L	10	8.1	2.381	10.6	3.5×1	3700	5700	0.10
	10RSB3								
4	14RSB4	14	11.7	2.778	14.6	3.5×1	5300	9000	0.10
5	14RSB5	14	11.5	3.175	14.8	3.5×1	6300	10200	0.10
	16RSB5	16	13.5	3.175	16.8	3.5×1	6800	11800	0.10
	20RSB5L	20	17.5	3.175	20.8	3.5×1	7600	15000	0.10
	20RSB5								
	25RSA5	25	22.5	3.175	25.8	2.5×1	6400	13500	0.10
6	10RSA6	10	8.1	2.381	10.6	2.5×1	2700	4000	0.10
	20RSC6	20	17.5	3.175	20.8	2.5×2	10400	21400	0.10
	28RSC6	28	25.5	3.175	28.8	2.5×2	12200	30500	0.10
8	12RSA8	12	9.7	2.778	12.6	2.5×1	3600	5500	0.10
	18RSB8	18	14.4	4.763	19.3	3.5×1	11900	19500	0.14
	22RSC8	22	18.4	4.763	23.3	2.5×2	18600	35400	0.14
	25RSB8	25	21.4	4.763	26.3	3.5×1	14600	28400	0.14
	32RSC8	32	28.4	4.763	33.3	2.5×2	22800	53300	0.14

Nut dimension									Shaft max length	Model No.
D_1	D_2	L	F	P	J	W	H	R	A	
20	42	28	6	32	5.5	17	17	17	800	10RSB3L
										10RSB3
25	55	44	10	40	6.6	21	21	20	1500	14RSB4
25	55	44	10	40	6.6	21	21	21	1500	14RSB5
30	58	44	10	45	6.6	23	24	24	1500	16RSB5
34	64	42	12	49	6.6	28	27	25	2000	20RSB5L
										20RSB5
40	64	36	10	52	5.5	31	27	25	2500	25RSA5
20	42	34	6	32	5.5	16	16	16	800	10RSA6
34	64	57	12	49	6.6	28	27	25	2000	20RSC6
50	80	75	15	65	6.6	34	33	33	3000	28RSC6
25	45	44	8	35	4.5	18	20	20	1000	12RSA8
34	64	56	12	49	6.6	28	27	27	1500	18RSB8
38	74	75	15	56	9	32	30	30	2000	22RSC8
47	83	66	16	65	9	35	30	30	2500	25RSB8
56	92	78	18	75	9	42	39	39	3500	32RSC8

Note 1. Rated dynamic load Ca is specified with life expectancy based on 10^6 revolution.
2. Mark of “L” shown at end of the ball screw type means left hand thread.
3. Upon your request, the oil hole in the flange can be drilled.
4. Please refer to the page A209 for the applied brush wiper.

RS series Lead 10 ~ 16



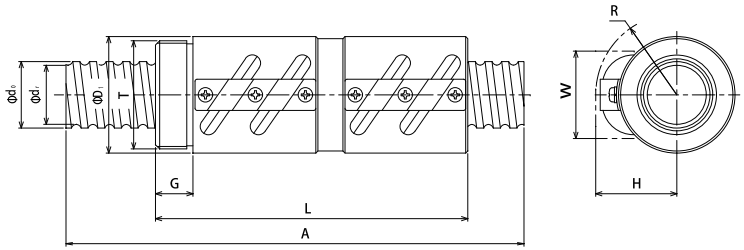
Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
10	16RSA10	16	13.5	3.175	16.8	2.5×1	5000	8400	0.10
	20RSA10	20	16.4	4.763	21.3	2.5×1	9800	16400	0.14
	25RSC10	25	20.2	6.35	26.8	2.5×2	28600	53800	0.19
	32RSC10	32	27.2	6.35	33.8	2.5×2	32300	67600	0.19
	36RSC10	36	31.2	6.35	37.8	2.5×2	34400	76700	0.19
	40RSD10	40	35.2	6.35	41.8	3.5×2	48500	120000	0.19
	45RSD10	45	40.2	6.35	46.8	3.5×2	52100	139000	01.9
	50RSD10	50	45.2	6.35	51.8	3.5×2	61600	173000	0.19
12	36RSC12	36	30.6	7.144	38.0	2.5×2	39900	85600	0.22
	45RSD12L	45	39.6	7.144	47.0	3.5×2	60000	152000	0.22
	45RSD12								
16	50RSC16	50	43.0	9.525	52.8	2.5×2	79300	185000	0.30

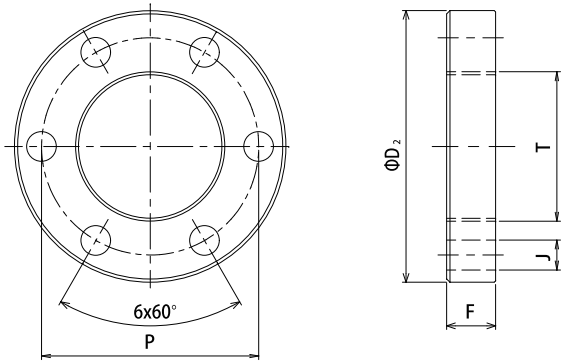
Nut dimension									Shaft max length	Model No.
D_1	D_2	L	F	P	J	W	H	R	A	
30	58	52	10	45	6.6	23	24	23	1500	16RSA10
38	68	55	12	53	6.6	30	30	30	1500	20RSA10
44	80	90	15	62	9	37	35	35	2500	25RSC10
56	92	93	18	75	9	42	39	37	3500	32RSC10
60	100	98	18	80	11	48	39	39	3500	36RSC10
65	114	115	20	90	14	52	45	46	4000	40RSD10
70	118	115	20	94	14	57	51	48	5500	45RSD10
80	140	125	22	110	18	59	52	53	5500	50RSD10
60	100	108	18	80	11	48	43	43	3500	36RSC12
70	118	140	20	94	14	57	51	47	5500	45RSD12L
										45RSD12
85	165	144	24	125	22	65	59	60	5500	50RSC16

Note 1. Rated dynamic load Ca is specified with life expectancy based on 10^6 revolution.
2. Mark of “L” shown at end of the ball screw type means left hand thread.
3. Upon your request, the oil hole in the flange can be drilled.
4. Please refer to the page A209 for the applied brush wiper.

Ball screw

RR series (Constant-pressure preload) Lead 4 ~ 20



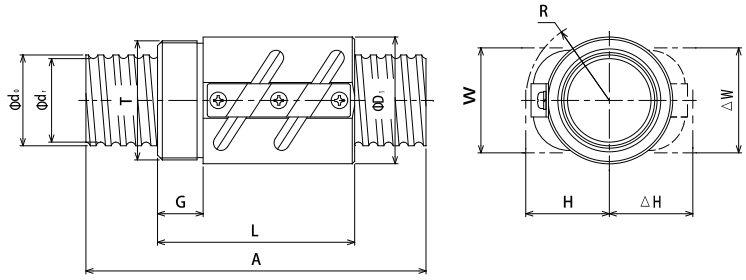


Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o
4	14RRB4	14	11.7	2.778	14.6	3.5×1	5300	9000
5	14RRB5	14	11.5	3.175	14.8	3.5×1	6300	10200
	16RRB5	16	13.5	3.175	16.8	3.5×1	6800	11800
	20RRB5	20	17.5	3.175	20.8	3.5×1	7600	15000
6	20RRC6	20	17.5	3.175	20.8	2.5×2	10400	21400
	28RRC6	28	25.5	3.175	28.8	2.5×2	12200	30500
8	18RRB8	18	14.4	4.763	19.3	3.5×1	11900	19500
	22RRC8	22	18.4	4.763	23.3	2.5×2	18600	35400
	25RRB8	25	21.4	4.763	26.3	3.5×1	14600	28400
	32RRC8	32	28.4	4.763	33.3	2.5×2	22800	53300
10	25RRC10	25	20.2	6.35	26.8	2.5×2	28600	53800
	36RRC10	36	31.2	6.35	37.8	2.5×2	34400	76700
	40RRD10	40	35.2	6.35	41.8	3.5×2	48500	120000
	45RRD10	45	40.2	6.35	46.8	3.5×2	52100	139000
	63RRL10	63	58.2	6.35	64.8	2.5×3	73200	240000
12	36RRC12	36	30.6	7.144	38.0	2.5×2	39900	85600
	45RRD12	45	39.6	7.144	47.0	3.5×2	60000	152000
16	50RRC16	50	43.0	9.525	52.8	2.5×2	79300	185000
20	80RRL20	80	73.0	9.525	82.8	2.5×3	140000	453000

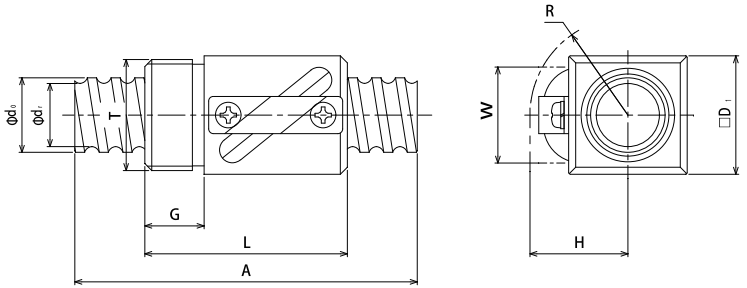
Nut dimension									Flange			Shaft max length	Model No.
D_1	L	T	G	P	J	W	H	R	D_2	F	Nominal	A	
25	88	M24×1	10	40	6.6	21	21	20	55	10	F01401	1500	14RRB4
25	89	M24×1	10	40	6.6	21	21	21	55	10	F01401	1500	14RRB5
30	89	M28×1.5	10	45	6.6	23	24	24	58	10	F01601	1500	16RRB5
34	82	M32×1.5	12	49	6.6	28	27	25	64	12	F02001	2000	20RRB5
34	111	M32×1.5	12	49	6.6	28	27	25	64	12	F02001	2000	20RRC6
50	147	M45×1.5	15	65	6.6	34	33	33	80	15	F02801	3000	28RRC6
34	112	M32×1.5	12	49	6.6	28	27	27	64	12	F01801	1500	18RRB8
38	147	M35×1.5	15	56	9	32	30	30	74	15	F02201	2000	22RRC8
47	122	M42×1.5	16	65	9	35	30	30	83	16	F02501	2500	25RRB8
56	150	M52×2	18	75	9	42	39	39	92	18	F03201	3500	32RRC8
44	180	M42×1.5	15	62	9	37	35	35	80	15	F02502	2500	25RRC10
60	188	M52×2	18	80	11	48	39	39	100	18	F03601	3500	36RRC10
65	230	M60×2	25	90	14	52	45	46	114	25	F04001	4000	40RRD10
70	235	M65×2	30	94	14	57	51	48	118	30	F04501	5500	45RRD10
95	280	M90×2	40	135	22	73	60	62	175	40	F06301	5500	63RRL10
60	216	M52×2	18	80	11	48	43	43	100	18	F03601	3500	36RRC12
70	282	M65×2	30	94	14	57	51	47	118	30	F04501	5500	45RRD12
85	304	M80×2	40	125	22	65	59	60	165	40	F05001	5500	50RRC16
125	498	M120×2	50	168	22	97	84	83	208	50	F08001	5500	80RRL20

Note 1. Rated dynamic load Ca is specified with life expectancy based on 10^6 revolution.
2. Total nut length may be slightly changed by pre-load adjustment.
3. Upon your request, the oil hole in the flange can be drilled.
4. For 80RRL20, a notch on the nut for a spanner is available.
5. Please refer to the page A209 for the applied brush wiper.

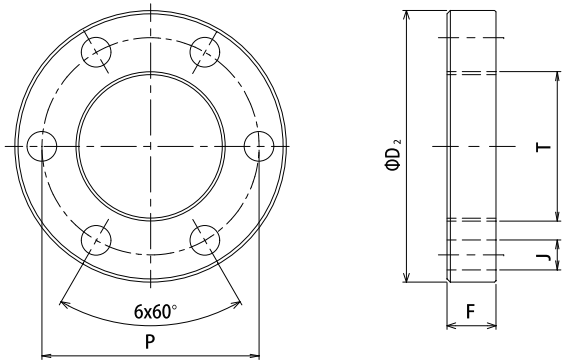
R series (Inch series) Lead 5.08 ～ 12.7 mm



Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
12.7	12.7R2B12.7	12.7	10.2	3.175	13.5	3.5×2	9900	16200	0.10
5.08	16RB5.08	16	13.5	3.175	16.8	3.5×1	6800	11800	0.10
6.35	25.4RB6.35	25.4	22.3	3.969	26.4	3.5×1	11400	23400	0.12
	38.1RB6.35	38.1	35.0	3.969	39.1	3.5×2	25000	71200	0.12

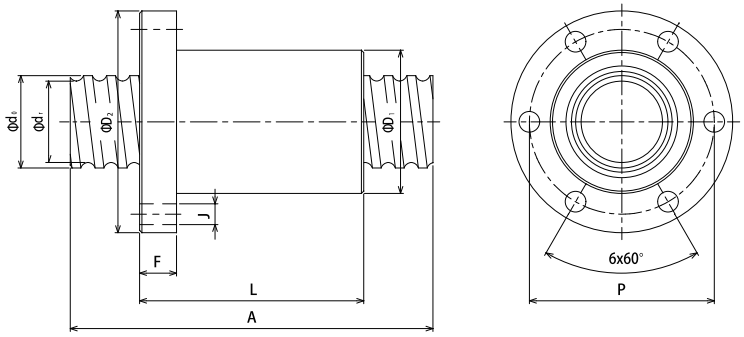


Nut dimension									Flange			Shaft max length	Model No.
D_1	L	T	G	P	J	W	H	R	D_2	F	Nominal	A	
27	70	15/16-16UN	9.5	53.1	6.8	18.5	21	22	66	10.2	F10121	1000	12.7R2B12.7
□25.4	43.6	15/16-16UN	12.7	53.1	6.8	21	21	21	66	13.5	F10161	1500	16RB5.08
□38.1	59.4	1.563-18UNS	15.2	69.9	6.8	32	28	29	82.6	16	F10251	2000	25.4RB6.35
53.2	82.6	1.967-18UNS	19.1	88.9	10	44	35	36	111	20.6	F10381	3000	38.1RB6.35



Note 1. Rated dynamic load Ca is specified with life expectancy based on 10^6 revolution.
2. Upon your request, the oil hole in the flange can be drilled.
3. For 12.7R2B12.7, relief of △ H is requested.
4. Please refer to the page A209 for the applied brush wiper.

RZ series (Return cap type) Lead 5 ~ 10 mm

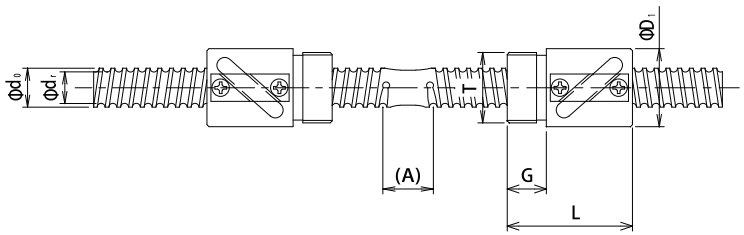


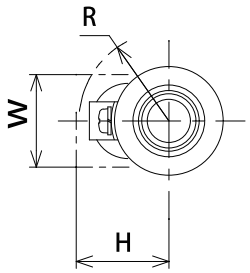
Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
5	16RZ3S5	16	13.5	3.175	16.8	1×3	4600	6900	0.10
10	40RZ4S10	40	35.2	6.35	41.8	1×4	24700	51400	0.19
	63RZ6S10	63	58.2	6.35	64.8	1×6	53900	162200	0.19

Nut dimension						Shaft max length	Model No.
D_1	D_2	L	F	P	J	A	
30	49	40	10	39	4.5	1500	16RZ3S5
62	96	81	16	80	9	4000	40RZ4S10
85	134	106	20	110	14	5500	63RZ6S10

Note 1. Rated dynamic load Ca is specified with life expectancy based on 10^6 revolution.
2. Total nut length may be slightly changed by pre-load adjustment.
3. Upon your request, the oil hole in the flange can be drilled.

Right + left one shaft series (Lead 3 ～ 12)





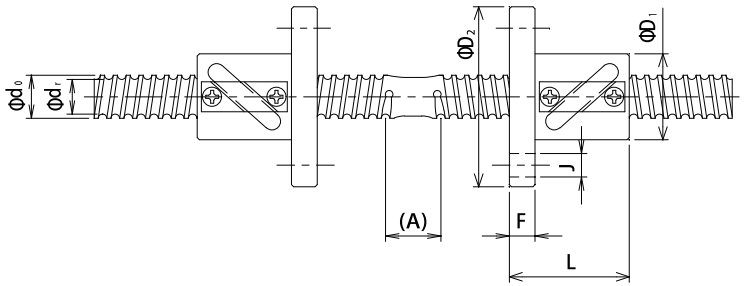
Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
3	10RB3RL	10	8.1	2.381	10.6	3.5×1	3700	5700	0.10
5	20RB5RL	20	17.5	3.175	20.8	3.5×1	7600	15000	0.10
12	45RD12RL	45	39.6	7.144	47.0	3.5×2	60000	152000	0.22

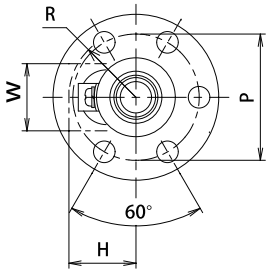
Nut dimension							Incomplete thread	Shaft max length	Model No.
D_1	L	T	G	W	H	R	B	A	
20	32	M18×1	10	17	17	17	30	800	10RB3RL
34	42	M32×1.5	13	28	27	25	45	2000	20RB5RL
70	150	M65×2	30	57	51	47	60	5500	45RD12RL

Note 1. Rated dynamic load Ca is specified with life expectancy based on 10^6 revolution.

Ball screw

Right + left one shaft series





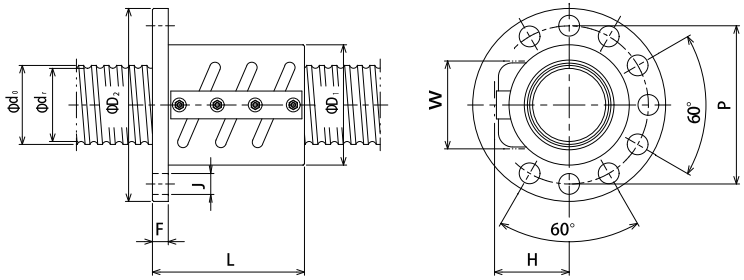
Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
3	10RSB3RL	10	8.1	2.381	10.6	3.5×1	3700	5700	0.10
5	20RSB5RL	20	17.5	3.175	20.8	3.5×1	7600	15000	0.10
12	45RSD12RL	45	39.6	7.144	47.0	3.5×2	60000	152000	0.22

Nut dimension									Incomplete thread	Shaft max length	Model No.
D_1	D_2	L	F	P	J	W	H	R	B	A	
20	42	28	6	32	5.5	17	17	17	30	800	10RSB3RL
34	64	42	12	49	6.6	28	27	25	45	2000	20RSB5RL
70	118	140	20	94	14	57	51	47	60	4500	45RSD12RL

Note 1. Rated dynamic load Ca is specified with life expectancy based on 10^6 revolution.

Ball screw

G series Lead 20 ~ 40 mm



Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
20	125GFL20	125	115.5	12.7	128.6	2.5×3	250000	931000	0.20
25	125GFL25	125	115.5	12.7	128.6	2.5×3	249000	931000	0.20
	140GFL25	140	128.2	15.875	144.6	2.5×3	358000	1308000	0.25
	160GFO25	160	148.2	15.875	164.6	2.5×4	486000	2004000	0.25
32	125GFL32	125	113.2	15.875	129.6	2.5×3	340000	1163000	0.25
	140GFL32	140	123.7	22.225	146.6	2.5×3	561000	1802000	0.35
	160GFL32	160	143.7	22.225	166.6	2.5×3	601000	2087000	0.35
	200GFO32	200	183.7	22.225	206.6	2.5×4	856000	3545000	0.35
	250GFO32	250	233.7	22.225	256.6	2.5×4	938000	4435000	0.35
40	140GFL40	140	123.7	22.225	146.6	2.5×3	560000	1802000	0.35
	160GFL40	160	143.7	22.225	166.6	2.5×3	600000	2087000	0.35
	200GFL40	200	183.7	22.225	206.6	2.5×3	668000	2658000	0.35
	250GFL40	250	233.7	22.225	256.6	2.5×3	732000	3326000	0.35
	315GFO40	315	296.3	25.4	322.4	2.5×4	1227000	6295000	0.40

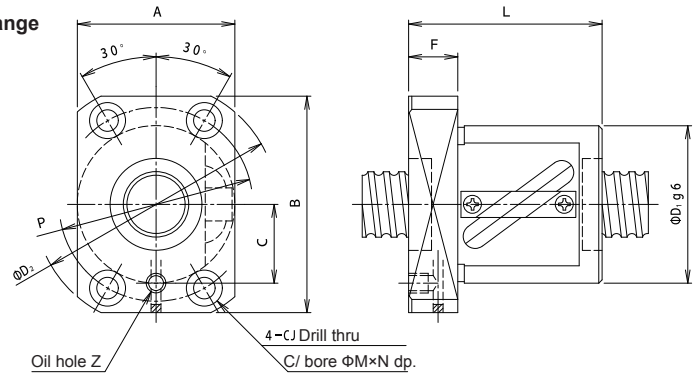
Nut dimension								Shaft max length	Model No.
D_1	D_2	L	F	P	J	W	H	A	
190	305	240	25	250	33	139	118	10000	125GFL20
190	305	285	25	250	33	139	118	10000	125GFL25
215	337	292	32	283	33	160	136	12000	140GFL25
236	358	367	32	304	33	177	146	14000	160GFO25
195	337	355	32	263	33	146	126	10000	125GFL32
230	352	368	40	298	33	174	153	12000	140GFL32
250	372	368	40	318	33	193	163	14000	160GFL32
300	422	464	40	368	33	229	188	16000	200GFO32
355	510	464	40	440	42	276	216	17000	250GFO32
230	352	440	40	298	33	147	153	12000	140GFL40
250	372	440	40	318	33	193	163	14000	160GFL40
300	422	440	40	368	33	229	188	16000	200GFL40
355	510	440	40	440	42	276	216	17000	250GFL40
450	604	574	50	534	42	335	268	17000	315GFO40

Note 1. Rated dynamic load Ca is specified with life expectancy based on 10^6 revolution.
2. Upon your request, the oil hole in the flange can be drilled.

Ball screw

TF series

4 faces notched flange



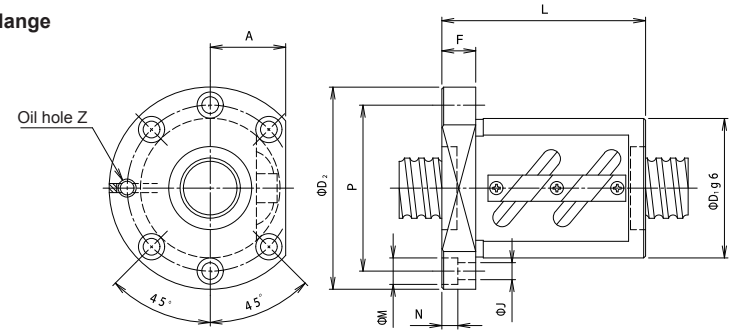
Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
5	12TFA5	12	9.5	3.175	12.8	2.5×1	4920	7070	0.10
	15TFA5	15	12.5	3.175	15.8	2.5×1	5640	9020	0.10
	20TFA5	20	17.5	3.175	20.8	2.5×1	6580	12200	0.10
10	12TFA10	12	10.1	2.381	12.6	2.5×1	3500	5770	0.10
	15TFA10	15	12.5	3.175	15.8	2.5×1	5530	9020	0.10
	20TFA10	20	16.4	4.763	21.3	2.5×1	11200	18700	0.10
15	15TFU15	15	12.5	3.175	15.8	1.5×1	3600	5770	0.10
20	15TFU20	15	12.5	3.175	15.8	1.5×1	3460	5770	0.10
	20TFUS20	20	17.5	3.175	20.8	1.5×2	7140	14600	0.10

Nut dimension												Model No.
D_1	D_2	L	F	P	J	M	N	A	B	C	Z	
32	52	42	12	42	4.5	8.0	4.5	32	43	15	M6×1	12TFA5
34	58	46	11	45	6.0	9.5	5.5	34	49	17	M6×1	15TFA5
46	74	51	15	59	6.6	11	6.5	46	66	24	M6×1	20TFA5
30	50	49	12	40	4.5	8.0	5.5	30	42	15	M6×1	12TFA10
34	58	51	11	45	6.0	9.5	5.5	34	49	17	M6×1	15TFA10
48	74	59	15	59	6.6	11	6.5	48	66	24	M6×1	20TFA10
34	58	53	11	45	6.0	9.5	5.5	34	49	17	M6×1	15TFU15
34	58	66	11	45	6.0	9.5	5.5	34	49	17	M6×1	15TFU20
46	74	70	15	59	6.6	11	6.5	46	66	24	M6×1	20TFUS20

Ball screw

TF series

1 face notched flange

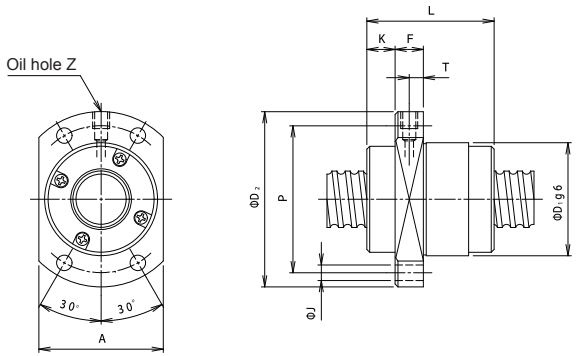


Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
5	25TFC5	25	22.5	3.175	25.8	2.5×2	13200	31000	0.10
6	32TFC6	32	28.9	3.969	33.0	2.5×2	20200	50400	0.12
8	32TFC8	32	28.4	4.763	33.3	2.5×2	26000	60900	0.14
10	25TFJ10	25	21.4	4.763	26.3	1.5×2	14600	27800	0.14
	28TFC10	28	24.4	4.763	29.3	2.5×2	24100	52200	0.14
	32TFC10	32	27.1	6.35	33.8	2.5×2	36900	77400	0.19
	40TFC10	40	35.1	6.35	41.8	2.5×2	41500	98100	0.19
12	28TFJ12	28	24.4	3.969	29.0	1.5×2	12200	26600	0.12
	32TFC12	32	27.1	6.35	33.8	2.5×2	36800	77400	0.19
	40TFC12	40	35.1	6.35	41.8	2.5×2	41400	98100	0.19
16	32TFJ16	32	27.1	6.35	33.8	1.5×2	23600	46400	0.19
20	36TFJ20	36	31.1	6.35	37.8	1.5×2	25000	52600	0.19
	40TFC20	40	35.1	6.35	41.8	2.5×2	41100	98100	0.19

Nut dimension										Model No.
D_1	D_2	L	F	P	J	M	N	A	Z	
50	73	55	11	61	5.5	9.5	5.5	28	M6×1	25TFC5
62	89	63	12	75	6.6	11	6.5	34	M6×1	32TFC6
66	100	82	15	82	9	14	8.5	38	M6×1	32TFC8
58	85	79	15	71	6.6	11	6.5	32	M6×1	25TFJ10
60	94	97	15	76	9	14	8.5	36	M6×1	28TFC10
74	108	100	15	90	9	14	8.5	41	M6×1	32TFC10
82	124	103	18	102	11	17.5	11	47	PT1/8	40TFC10
58	92	83	15	74	9	14	8.5	36	M6×1	28TFJ12
74	108	117	18	90	9	14	8.5	41	M6×1	32TFC12
82	124	117	18	102	11	17.5	11	47	PT1/8	40TFC12
74	108	108	18	90	9	14	8.5	41	M6×1	32TFJ16
78	123	121	18	101	11	17.5	11	47	M6×1	36TFJ20
82	124	161	18	102	11	17.5	11	47	PT1/8	40TFC20

Ball screw

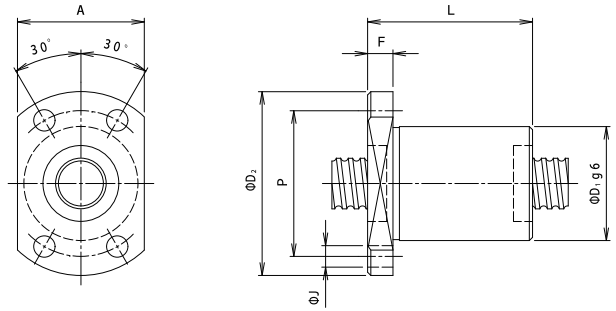
EF series



Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
6	8EF3D6	8	6.6	1.588	8.3	2.7×2	2390	3690	0.07
12	8EF2D12	8	6.6	1.588	8.3	1.7×2	1670	2280	0.07
25	25EF2D25	25	21.9	3.969	26.0	1.7×2	11600	26300	0.12
30	15EF1D30	15	12.5	3.175	15.8	0.7×2	3100	4590	0.10
32	16EF1Q32	16	13.7	2.778	16.6	0.7×4	5030	8710	0.10
32	32EF2D32	32	28.4	4.763	33.3	1.7×2	16400	36000	0.14
40	20EF1Q40	20	17.5	3.175	20.8	0.7×4	6680	12400	0.10
50	50EF2D50	50	44.0	7.938	52.2	1.7×2	40400	95300	0.24
60	20EF1Q60	20	17.5	3.175	20.8	0.7×4	5970	14000	0.10

Nut dimension									Model No.
D_1	D_2	L	K	F	P	J	A	Z	
18	31	23.5	5	9	25	3.4	18	-	8EF3D6
18	31	27	5	9	25	3.4	18	-	8EF2D12
47	74	81	11	12	60	6.6	49	M6×1	25EF2D25
32	53	34	6	10	43	5.5	33	M6×1	15EF1D30
35	56	37	9	10	44	4.5	38	M6×1	16EF1Q32
58	92	76	16	15	74	9	68	M6×1	32EF2D32
40	62	45	10	10	50	5.5	44	M6×1	20EF1Q40
90	135	118	22	22	112	14	100	PT1/8	50EF2D50
37	57	54	10	10	47	5.5	38	M6×1	20EF1Q60

MF series

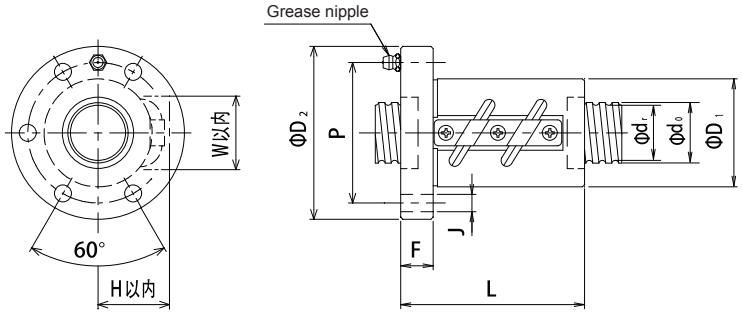


Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o	Axial clearance (mm)
2	8MF3S2	8	6.6	1.588	8.3	1×3	1300	1900	0.07
	10MF3S2	10	8.6	1.588	10.3	1×3	1600	2500	0.07

Nut dimension							Model No.
D_1	D_2	L	F	P	J	A	
18	29	26	4	23	3.4	20	8MF3S2
20	36	28	5	28	2.5	22	10MF3S2

TM series Lead 6 ～ 20

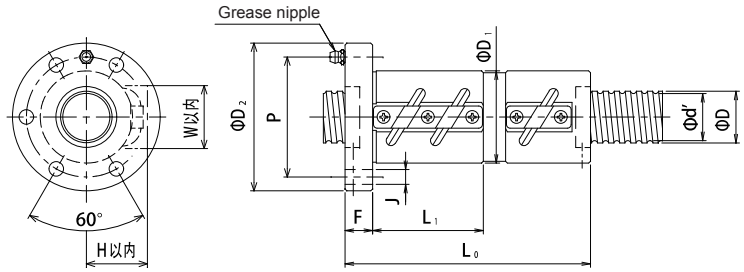
TM series ball screws are specially developed for the direct mecha-feeding such as transfer machines. TM series ball screws have many features which arose from combination of our rich experiences in manufacturing precision ball screws and long time research on thread shaft rolling.



Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o
6	28PFC6	28	25.0	3.175	28.8	2.5×2	15700	39200
8	32PFC8	32	27.9	4.763	33.3	2.5×2	28500	65400
10	36PFC10	36	30.5	6.35	37.8	2.5×2	44200	89600
	45PFD10	45	39.5	6.35	46.8	2.5×2	65200	170000
	63PFL10	63	57.0	6.35	64.8	2.5×3	80800	261000
20	80PFL20	80	72.0	9.525	82.8	2.5×3	158000	510000

Nut dimension									Shaft max length	Model No.
D_1	D_2	L	F	P	J	W	H	Z	A	
50	80	85	15	65	6.6	34	33	A-M6F	1200	28PFC6
56	92	90	18	75	9	42	39	A-M6F	1200	32PFC8
62	100	107	18	80	11	47	40	A-PT1/8	1500	36PFC10
72	118	139	30	94	13	55	46	A-PT1/8	1500	45PFD10
95	143	149	30	119	13	76	62	A-PT1/8	2500	63PFL10
124	186	249	30	155	18	96	77	A-PT1/8	2500	80PFL20

TM series Lead 6 ～ 20



Lead ℓ	Model No.	Screw dia. d_0	Root dia. d_r	Ball dia. D_w	Ball circle dia. D_{pw}	Effective tums m	Basic rated dynamic load C_a	Basic rated static load C_o
6	28PPFAC6	28	25.0	3.175	28.8	2.5×2	15700	39200
8	32PPFAC8	32	27.9	4.763	33.3	2.5×2	28500	65400
10	36PPFAC10	36	30.5	6.35	37.8	2.5×2	44200	89600
	45PPFBD10	45	39.5	6.35	46.8	3.5×2	65200	170000
	63PPFAL10	63	57.0	6.35	64.8	2.5×3	80800	261000
20	80PPFAL20	80	72.0	9.525	82.8	2.5×3	158000	510000

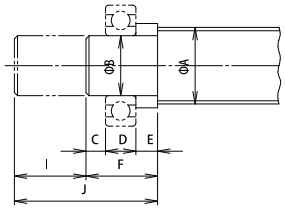
Nut dimension									Shaft max length	Model No.
D_1	D_2	L	F	P	J	W	H	Z	A	
50	80	133	15	65	6.6	34	33	A-M6F	1200	28PPFAC6
56	92	138	18	75	9	42	39	A-M6F	1200	32PPFAC8
62	100	167	18	80	11	47	40	A-PT1/8	1500	36PPFAC10
72	118	209	30	94	13	55	46	A-PT1/8	1500	45PPFBD10
95	143	209	30	119	13	76	62	A-PT1/8	2500	63PPFAL10
124	186	349	30	155	18	96	77	A-PT1/8	2500	80PPFAL20

Ball screw

7. Shaft ends shapes of general industrial purpose ball screw

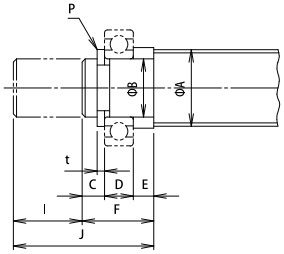
Please refer to our standardized examples of shaft end shapes and dimension which we have arranged as per each supporting way for TSUBAKI NAKASHIMA industrial ball screw series.

Type 1



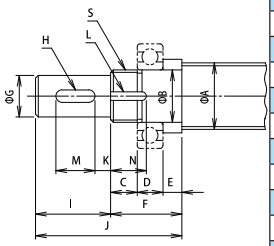
Shaft Nominal dia. A	B	C	D	E	F	I	J	Applied bearing
10	8	3	8	6	17	16	33	628
14	10	3	9	7	19	–	19	6200
16	12	3	10	8	21	–	21	6201
18	12	3	10	8	21	–	21	6201
20	15	3	11	–	14	–	14	6202
22	17	3	12	–	15	–	15	6203
25	17	3	12	–	15	–	15	6203
28	20	4	14	–	18	–	18	6204
32	20	4	14	–	18	–	18	6204
36	25	4	15	–	19	–	19	6205
40	30	5	16	–	21	–	21	6206
45	35	5	21	–	26	–	26	6307
50	35	5	21	–	26	–	26	6307
63	45	5	25	–	30	–	30	6309
80	60	5	31	–	36	–	36	6312
100	75	6	37	–	43	–	43	6315

Type 2



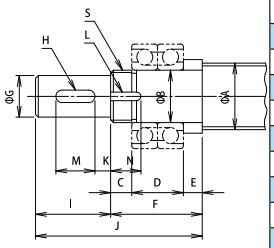
Shaft Nominal dia. A	B	C	D	E	F	Stop ring P		Groove for stop ring		I	J	Applied bearing
						Type	t	Dia.	Width			
10	8	3	8	6	17	8	-	-	-	16	33	628
14	10	3	9	7	19	10	-	-	-	-	19	6200
16	12	3	10	8	21	12	-	-	-	-	21	6201
18	12	3	10	8	21	12	-	-	-	-	21	6201
20	15	3	11	-	14	15	-	-	-	-	14	6202
22	17	3	12	-	15	17	-	-	-	-	15	6203
25	17	3	12	-	15	17	-	-	-	-	15	6203
28	20	4	14	-	18	20	1.2	19	1.35	-	18	6204
32	20	4	14	-	18	20	1.2	19	1.35	-	18	6204
36	25	4	15	-	19	25	1.2	23.9	1.35	-	19	6205
40	30	5	16	-	21	30	1.6	28.6	1.75	-	21	6206
45	35	5	21	-	26	35	1.6	33	1.75	-	26	6307
50	35	5	21	-	26	35	1.6	33	1.75	-	26	6307
63	45	5	25	-	30	45	1.75	42.5	1.9	-	30	6309
80	60	5	31	-	36	60	2.0	57	2.2	-	36	6312
100	75	6	37	-	43	75	2.5	72	2.7	-	43	6315

Type 3



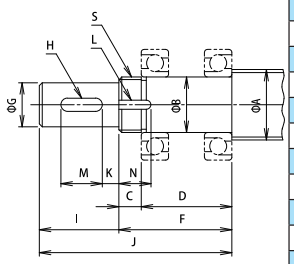
Shaft Nominal dia. A	B	Acme screw S	C	D	E	F	G	I	J	H			K	L			Applied bearing
										Wid.	Dep.	M		Wid.	Dep.	N	
14	10	M10×0.75	9	9	7	25	8	16	41	-	-	-	-	3	1.5	11	6200
16	12	M12×1	9	10	8	27	10	20	47	3	1.8	14	3	3	1.5	11	6201
18	12	M12×1	9	10	8	27	10	20	47	3	1.8	14	3	3	1.5	11	6201
20	15	M15×1	11	11	-	22	12	25	47	4	2.5	16	4	4	1.5	14	6202
22	17	M17×1	11	12	-	23	14	25	48	5	3.0	18	4	4	1.5	14	6203
25	17	M17×1	11	12	-	23	14	25	48	5	3.0	18	4	4	1.5	14	6203
28	20	M20×1	13	14	-	27	16	28	55	5	3.0	20	4	4	1.5	16	6204
32	20	M20×1	13	14	-	27	16	28	55	5	3.0	20	4	4	1.5	16	6204
36	25	M25×1.5	18	15	-	33	20	36	69	6	3.5	28	4	5	2.0	22	6205
40	30	M30×1.5	18	16	-	34	25	42	76	8	4.0	32	5	5	2.5	22	6206
45	35	M35×1.5	21	21	-	42	30	58	100	8	4.0	40	5	6	2.5	25	6307
50	35	M35×1.5	21	21	-	42	30	58	100	8	4.0	40	5	6	2.5	25	6307
63	45	M45×1.5	27	25	-	52	40	82	134	12	5.0	56	6	6	2.5	32	6309
80	60	M60×2	36	31	-	67	55	82	149	16	6.0	71	6	8	2.5	42	6312
100	75	M75×2	45	37	-	82	70	105	187	20	7.5	90	8	8	3.5	50	6315

Type 4



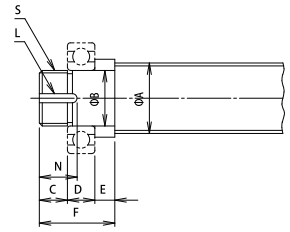
Shaft Nominal dia. A	B	Acme screw S	C	D	E	F	G	I	J	H			K	L			Applied bearing
										Wid.	Dep.	M		Wid.	Dep.	N	
14	10	M10×0.75	9	18	7	34	8	16	50	-	-	-	-	3	1.5	11	7200
16	12	M12×1	9	20	8	37	10	20	57	3	1.8	14	3	3	1.5	11	7201
18	12	M12×1	9	20	8	37	10	20	57	3	1.8	14	3	3	1.5	11	7201
20	15	M15×1	11	22	-	33	12	25	58	4	2.5	16	4	4	1.5	14	7202
22	17	M17×1	11	24	-	35	14	25	60	5	3.0	18	4	4	1.5	14	7203
25	17	M17×1	11	24	-	35	14	25	60	5	3.0	18	4	4	1.5	14	7203
28	20	M20×1	13	28	-	41	16	28	69	5	3.0	20	4	4	1.5	16	7204
32	20	M20×1	13	28	-	41	16	28	69	5	3.0	20	4	4	1.5	16	7204
36	25	M25×1.5	18	30	-	48	20	36	84	6	3.5	28	4	5	2.0	22	7205
40	30	M30×1.5	18	32	-	50	25	42	92	8	4.0	32	5	5	2.5	22	7206
45	35	M35×1.5	21	42	-	63	30	58	121	8	4.0	40	5	6	2.5	25	7307
50	35	M35×1.5	21	42	-	63	30	58	121	8	4.0	40	5	6	2.5	25	7307
63	45	M45×1.5	27	50	-	77	40	82	159	12	5.0	56	6	6	2.5	32	7309
80	60	M60×2	36	62	-	98	55	82	180	16	6.0	71	6	8	2.5	42	7312
100	75	M75×2	45	74	-	119	70	105	224	20	7.5	90	8	8	3.5	50	7315

Type 5



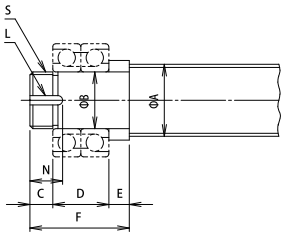
Shaft Nominal dia. A	B	Acme screw S	C	D	F	G	I	J	H			K	L			Applied bearing
									Wid.	Dep.	M		Wid.	Dep.	N	
14	10	M10×0.75	9	38	47	8	16	63	-	-	-	-	3	1.5	11	7200
16	12	M12×1	9	42	51	10	20	71	3	1.8	14	3	3	1.5	11	7201
18	12	M12×1	9	42	51	10	20	71	3	1.8	14	3	3	1.5	11	7201
20	15	M15×1	11	44	55	12	25	80	4	2.5	16	4	4	1.5	14	7202
22	17	M17×1	11	48	59	14	25	84	5	3.0	18	4	4	1.5	14	7203
25	17	M17×1	11	48	59	14	25	84	5	3.0	18	4	4	1.5	14	7203
28	20	M20×1	13	56	69	16	28	97	5	3.0	20	4	4	1.5	16	7204
32	20	M20×1	13	56	69	16	28	97	5	3.0	20	4	4	1.5	16	7204
36	25	M25×1.5	18	63	81	20	36	117	6	3.5	28	4	5	2.0	22	7205
40	30	M30×1.5	18	70	88	25	42	130	8	4.0	32	5	5	2.5	22	7206
45	35	M35×1.5	21	84	105	30	58	163	8	4.0	40	5	6	2.5	25	7307
50	35	M35×1.5	21	84	105	30	58	163	8	4.0	40	5	6	2.5	25	7307
63	45	M45×1.5	27	106	133	40	82	215	12	5.0	56	6	6	2.5	32	7309
80	60	M60×2	36	127	163	55	82	245	16	6.0	71	6	8	2.5	42	7312
100	75	M75×2	45	157	202	70	105	307	20	7.5	90	8	8	3.5	50	7315

Type 6



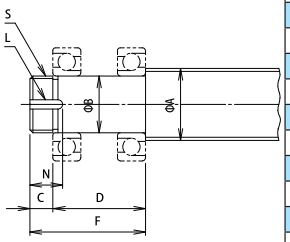
Shaft Nominal dia. A	B	Acme screw S	C	D	E	F	L			Applied bearing
							Wid.	Dep.	N	
14	10	M10×0.75	9	9	7	25	3	1.5	11	6200
16	12	M12×1	9	10	8	27	3	1.5	11	6201
18	12	M12×1	9	10	8	27	3	1.5	11	6201
20	15	M15×1	11	11	-	22	4	1.5	14	6202
22	17	M17×1	11	12	-	23	4	1.5	14	6203
25	17	M17×1	11	12	-	23	4	1.5	14	6203
28	20	M20×1	13	14	-	27	4	1.5	16	6204
32	20	M20×1	13	14	-	27	4	1.5	16	6204
36	25	M25×1.5	18	15	-	33	5	2.0	22	6205
40	30	M30×1.5	18	16	-	34	5	2.5	22	6206
45	35	M35×1.5	21	21	-	42	6	2.5	25	6307
50	35	M35×1.5	21	21	-	42	6	2.5	25	6307
63	45	M45×1.5	27	25	-	52	6	2.5	32	6309
80	60	M60×2	36	31	-	67	8	2.5	42	6312
100	75	M75×2	45	37	-	82	8	3.5	50	6315

Type 7



Shaft Nominal dia. A	B	Acme screw S	C	D	E	F	L			Applied bearing
							Wid.	Dep.	N	
14	10	M10×0.75	9	18	7	34	3	1.5	11	7200
16	12	M12×1	9	20	8	37	3	1.5	11	7201
18	12	M12×1	9	20	8	37	3	1.5	11	7201
20	15	M15×1	11	22	-	33	4	1.5	14	7202
22	17	M17×1	11	24	-	35	4	1.5	14	7203
25	17	M17×1	11	24	-	35	4	1.5	14	7203
28	20	M20×1	13	28	-	41	4	1.5	16	7204
32	20	M20×1	13	28	-	41	4	1.5	16	7204
36	25	M25×1.5	18	30	-	48	5	2.0	22	7205
40	30	M30×1.5	18	32	-	50	5	2.5	22	7206
45	35	M35×1.5	21	42	-	63	6	2.5	25	7307
50	35	M35×1.5	21	42	-	63	6	2.5	25	7307
63	45	M45×1.5	27	50	-	77	6	2.5	32	7309
80	60	M60×2	36	62	-	98	8	2.5	42	7312
100	75	M75×2	45	74	-	119	8	3.5	50	7315

Type 8



Shaft Nominal dia. A	B	Acme screw S	C	D	F	L			Applied bearing
						Wid.	Dep.	N	
14	10	M10×0.75	9	38	47	3	1.5	11	7200
16	12	M12×1	9	42	51	3	1.5	11	7201
18	12	M12×1	9	42	51	3	1.5	11	7201
20	15	M15×1	11	44	55	4	1.5	14	7202
22	17	M17×1	11	48	59	4	1.5	14	7203
25	17	M17×1	11	48	59	4	1.5	14	7203
28	20	M20×1	13	56	69	4	1.5	16	7204
32	20	M20×1	13	56	69	4	1.5	16	7204
36	25	M25×1.5	18	63	81	5	2.0	22	7205
40	30	M30×1.5	18	70	88	5	2.5	22	7206
45	35	M35×1.5	21	84	105	6	2.5	25	7307
50	35	M35×1.5	21	84	105	6	2.5	25	7307
63	45	M45×1.5	27	106	133	6	2.5	32	7309
80	60	M60×2	36	127	163	8	2.5	42	7312
100	75	M75×2	45	157	202	8	3.5	50	7315