

End Deflector Series

Features

It is important for a high-lead ballscrew to be with characteristics of high rigidity, low noise and thermal control.

Its characteristics are as follow:

High DN Value

Max. DN Value: 220,000

Low Noise

The average and accurate ball circle diameter (BCD) through whole threads make the ballscrews to obtain the stable and consistent drag torque as well as to reduce the noise.

The audio frequency is low and downy due to the designed of plastic circulation system.

Space Saving

The ballnut diameter reduces 20%~25% substantially and the length of nut is shorter.

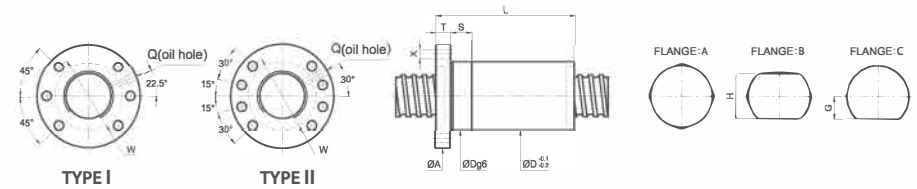
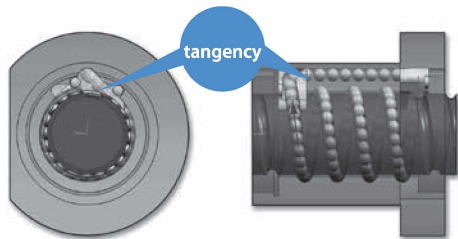
The total space shall be reduced to approximately 50% consequently.

Circulation

The specially designed pathway of the Recirculation System makes a contact with lead angle and also with BCD in the same tangency, improving its smoothness effectively.

Applications

CNC Machinery / Precision Machinery / High Speed Machinery /
Semi-Conductor Equipment / Medical equipment

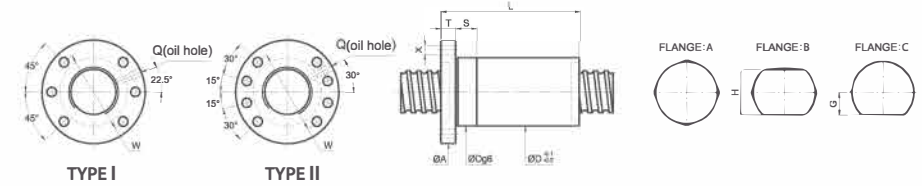
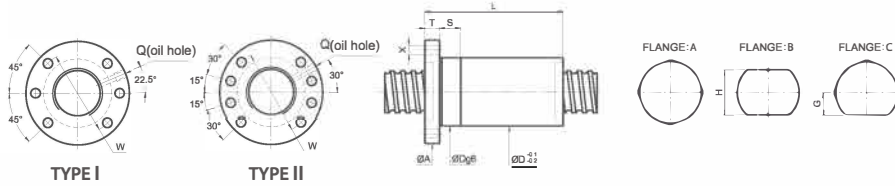


Unit: mm

SCREW SIZE	O.D.	LEAD	BALL DIA.	EFFECTIVE TURNS	MODIFIED LOAD CAPACITY (kgf)		NUT		FLANGE					FIT	OIL HOLE	BOLT	STIFFNESS	
					Dynamic (1×10 ⁶ REV.) Cam	Static Coam	Dg6	L	A	T	W	G	H					TYPE
12	4			3	610	1190	28											20
	5		2.381	3	610	1190	24	32	44	10	34	16	32	I	10	M6×1P	4.5	20
	10			3	590	1160	45											20
	20			2	390	770	54											14
14	4		2.381	3	680	1430	26	28	46	10	36	16	32	I	10	M6×1P	4.5	23
	5		3.175	3	820	1520	28	32	49	10	36	16	32	I	10	M6×1P	4.5	25
15	5			3	850	1640	35											26
	10		3.175	3	840	1610	29	47	51	10	39	19	38	I	10	M6×1P	5.5	26
	20			2	560	1050	58											18
16	5			3	890	1760	29	35										27
	10		3.175	3	870	1740	29	50	51	10	39	19	38	I	10	M6×1P	5.5	27
	16			2	600	1150	29	51										19
20	4		2.381	3	780	2000	32	28	54	12	42	19	38	I	12	M6×1P	5.5	29
	5			4	1300	3030	40											43
	10		3.175	3	990	2220	36	47	62	12	49	24	48	I	12	M6×1P	6.6	33
	20			2	670	1450	56											23
	6			3	1540	3310	37	38	62	12	49	23	46	I	12	M6×1P	6.6	34
25	8		3.969	3	1540	3300	45	45	62	12	49	23	46	I	12	M6×1P	6.6	34
	10		4.762	4	2560	5530	40	62	62	12	51	24	48	I	15	M6×1P	6.6	47
	4		2.381	3	870	2560	36	28	62	12	49	22	44	I	12	M6×1P	6.6	34
	5			4	1440	3840	41											50
	10			3	1100	2810	50											38
	15		3.175	4	1410	3780	40	81	62	12	51	24	48	I	15	M6×1P	6.6	50
	20			2	750	1840	60											26
	25			2	730	1810	71											26
	6			4	2250	5710	45											53
	12		3.969	4	2240	5660	43	70	64	12	51	24	48	I	15	M6×1P	6.6	53
25			2	1160	2720	70											28	
25	8			4	2880	6890	55											55
	10		4.762	4	2880	6870	45	63	65	15	54	25.5	51	I	15	M6×1P	6.6	55
	16			4	2830	6790	85											55
	20			2	1470	3180	61											29
	10		6.35	5	5050	11500	51	78	84	16	67	32	64	I	15	M6×1P	9	72

Note: The ball diameter above(include) 7.983mm of End Deflector is made from metal.

Note: Coam and Cam are the modified static and dynamic load capacities,calculated according to ISO-3408-5



Unit: mm

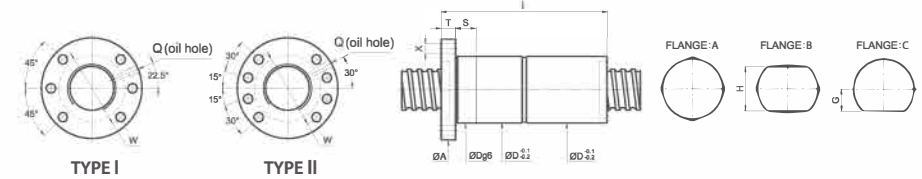
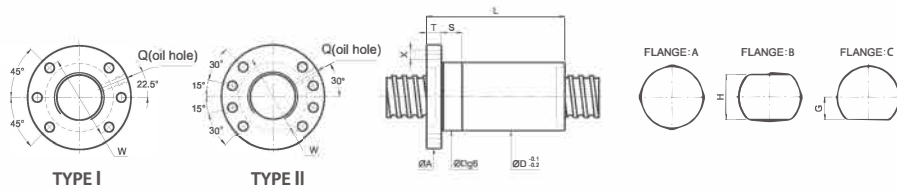
SCREW SIZE	O.D.	LEAD	BALL DIA.	EFFECTIVE TURNS	MODIFIED LOAD CAPACITY (kgf)		NUT		FLANGE					FIT	OIL HOLE	BOLT	STIFFNESS	
					Dynamic (1x10 ⁶ REV.) Cam	Static Coam	Dg6	L	A	T	W	G	H					TYPE
28	5	3.175	5	1850	5460	43	48	65	12	51	24	48	I	15	M8x1P	6.6	67	
	6	3.969	5	2880	7980	46	52	66	12	54	26	52	I	15	M8x1P	6.6	70	
	8		3	2350	5720	46											46	
	10	4.762	3	2340	5710	48	52	74	12	60	30	60	I	15	M8x1P	6.6	46	
	16		5	3680	9690	102												73
	10	6.35	5	5280	12530	78								I	15	M8x1P	9	77
12		5	5270	12500	88	54	87	16	72	34.5	69	I	15	M8x1P	9	77		
32	5	3.175	4	1610	4970	50	41	87	16	72	34.5	69	I	15	M8x1P	9	61	
	6		5	3050	9140	52											77	
	10	3.969	4	2550	7500	53	62	87	16	72	34.5	69	I	15	M8x1P	9	63	
	32		2	1300	3540	90											40	
	8		5	3900	10930	67											80	
	10		5	3890	10910	77											80	
	12	4.762	5	3890	10890	87								I	15	M8x1P	9	80
	15		5	3860	10850	116	53	87	16	72	34.5	69	I	15	M8x1P	9	80	
	20		2	1700	4230	70											34	
	32		2	1640	4120	90											34	
	10		5	4900	13360	78											84	
	12		5	4890	13340	88											84	
	16	5.556	5	4860	13280	107	55	87	16	72	34.5	69	I	15	M8x1P	9	79	
	20		3	3140	8110	87											53	
10		5	5720	14490	78											85		
12		5	5710	14470	88											85		
16	6.35	4	4520	11100	92	57	87	16	72	34.5	69	I	15	M8x1P	9	69		
20		3	3530	8340	88											54		

Note: Coam and Cam are the modified static and dynamic load capacities,calculated according to ISO-3408-5

Unit: mm

SCREW SIZE	O.D.	LEAD	BALL DIA.	EFFECTIVE TURNS	MODIFIED LOAD CAPACITY (kgf)		NUT		FLANGE					FIT	OIL HOLE	BOLT	STIFFNESS		
					Dynamic (1x10 ⁶ REV.) Cam	Static Coam	Dg6	L	A	T	W	G	H					TYPE	S
36	8	4.762	5	4170	12580	56	63	84	11	68	34	68	I	15	M8x1P	9	86		
	10		5	6050	16460	78											93		
	12		5	6080	16430	88											93		
	16	6.35	5	6050	16360	61	109	91	18	76	34	68	II	15	M8x1P	9	93		
	20		4	4910	12890	109											76		
	36		2	2570	6250	95											41		
38	10		5	6260	17740	80											97		
	12	6.35	5	6260	17410	88								II	20	M8x1P	9	97	
	16		5	6220	17350	109	63	109	93	18	78	35	70	II	20	M8x1P	9	97	
40		3	3830	10220	142											71			
40	5	3.175	4	1760	6260	58	42	91	18	76	34	68	II	15	M8x1P	9	71		
	6	3.969	5	3420	11810	58	52	91	18	76	34	68	II	15	M8x1P	9	92		
	8	4.762	4	3610	11260	60	56	91	18	76	34	68	II	15	M8x1P	9	77		
	10		5	6430	18440	78											101		
	12		5	6420	18410	88											101		
	15	6.35	5	6380	18350	103			95	18	80	36	72	II	20	M8x1P	9	101	
	16		5	6390	18330	108	65	108									101		
	20		4	5190	14450												82		
	40		2	2700	6950				110	98	18	83	37	74	II	20	M8x1P	11	43
	12	7.144	5	7530	20800												103		
16		5	7500	20730				70	110	98	18	83	37	74	II	20	M8x1P	11	103

Note: Coam and Cam are the modified static and dynamic load capacities,calculated according to ISO-3408-5



Unit: mm

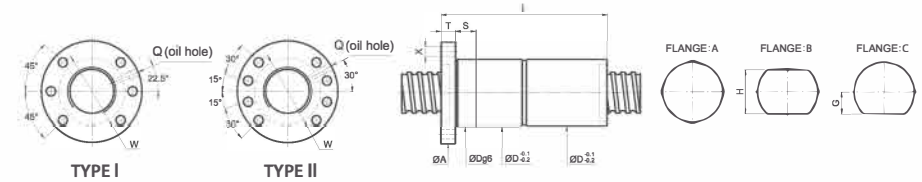
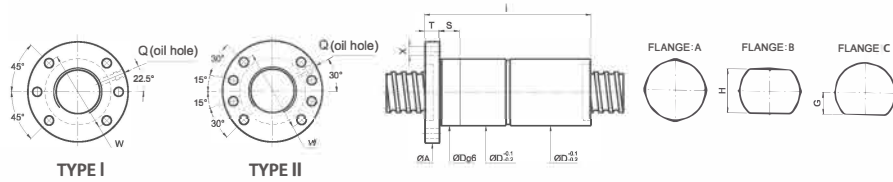
SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	MODIFIED LOAD CAPACITY (kgf)		NUT		FLANGE					FIT	OIL HOLE	BOLT	STIFFNESS	
O.D.	LEAD			Dynamic (1x10 ⁶ REV.) Cam	Static Coam	Dg6	L	A	T	W	G	H					TYPE
45	8	4.762	4	3770	12580	66	55	98	18	83	37	74	II	20	M8x1P	11	84
	10		5	6910	21330		78										110
	12	6.35	5	6910	21310	70	89	105	18	88	40	80	II	20	M8x1P	11	110
	16		5	6880	21250		111										110
	12	7.144	5	7930	23300	73	88	105	18	88	40	80	II	20	M8x1P	11	113
	20		4	6440	18340		110										
50	5	3.175	5	2360	9950	70	48	105	18	88	40	80	II	20	M8x1P	11	105
	8	4.762	5	4780	17550	70	64	105	18	88	40	80	II	20	M8x1P	11	109
	10		5	7160	23320		78										119
	12	6.35	5	7150	23300	75	90	118	18	100	46	92	II	20	M8x1P	11	119
	16		5	7120	23250		109										119
	20		3	4460	13520		95										
20	7.938	4	7810	22680	80	114	121	18	104	50	100	II	25	M8x1P	11	101	
55	12	6.35	5	7340	25280	80	96	118	18	100	46	92	II	20	M8x1P	11	128
63	10	6.35	5	7800	29210	88	84	135	22	115	50	110	II	20	M8x1P	11	141
	16	9.525	5	13640	43620	102	116	147	20	127	56	112	II	25	M8x1P	14	167
80	20		5	15350	56760		143										196
	25	9.525	4	12530	44860	118	146	165	25	145	65	130	II	25	M8x1P	14	159
	30		3	9610	32980		134										121

Note: Coam and Cam are the modified static and dynamic load capacities,calculated according to ISO-3408-5

Unit: mm

SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	MODIFIED LOAD CAPACITY (kgf)		NUT		FLANGE					FIT	OIL HOLE	BOLT	STIFFNESS		
O.D.	LEAD			Dynamic (1x10 ⁶ REV.) Cam	Static Coam	Dg6	L	A	T	W	G	H					TYPE	S
20	4	2.381	3	780	2000	32	61	54	12	42	19	38	I	12	M6x1P	5.5	44	
	5		4	1300	3030		80										65	
	10	3.175	3	990	2220	36	97	62	12	49	24	48	I	12	M6x1P	6.6	50	
	20		2	670	1450		116										33	
	6	3.969	3	1540	3310	37	81	62	12	49	19	38	I	12	M6x1P	6.6	51	
	8		3	1540	3300		93											51
25	10	4.762	4	2560	5530	40	107	62	12	51	24	48	I	15	M6x1P	6.6	70	
	4	2.381	3	870	2560	36	60	62	12	49	19	38	I	12	M6x1P	6.6	53	
	5		4	1440	3840		81										77	
	10		3	1100	2810		100										58	
	15	3.175	4	1410	3780	40	166	62	12	51	24	48	I	15	M6x1P	6.6	77	
	20		2	750	1840		120										39	
	25		2	730	1810		146										39	
	6		4	2250	5710		87											80
	12	3.969	4	2240	5660	43	142	64	12	51	22	44	I	15	M6x1P	6.6	80	
	25		2	1160	2720		145											41
	8		4	2880	6890		111											83
	10		4	2880	6870		128											83
16	4.762	4	2830	6790	45	173	65	15	54	25.5	51	I	15	M6x1P	6.6	83		
20		2	1470	3180		122											42	
10	6.35	5	5050	11500	51	153	84	16	67	32	64	I	15	M6x1P	9	108		

Note: Coam and Cam are the modified static and dynamic load capacities,calculated according to ISO-3408-5



Unit: mm

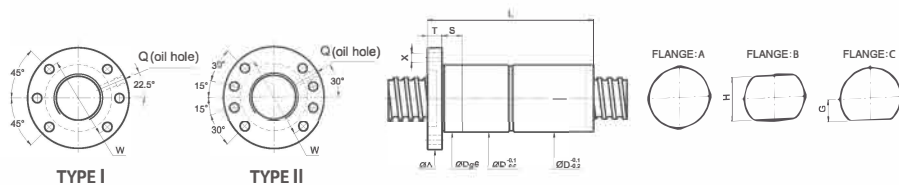
SCREW SIZE	BALL DIA.	EFFECTIVE TURNS	MODIFIED LOAD CAPACITY (kgf)		NUT		FLANGE						FIT	OIL HOLE	BOLT	STIFFNESS
			Dynamic (1x10 ⁶ REV.)	Static Coam	Dg6	L	A	T	W	G	H	TYPE				
28	5	3.175	5	1850	5460	43	93	65	12	51	24	48	I	M8x1P	6.6	104
	6	3.969	5	2880	7980	46	106	66	12	50	26	52	I	M8x1P	6.6	108
	8		3	2350	5720	94										69
	10	4.762	3	2340	5710	48	102	74	12	60	30	60	I	15 M8x1P	6.6	69
	16		5	3680	9690	206										112
	10		5	5280	12530	158										118
	12	6.35	5	5270	12500	54	172	87	16	72	34.5	69	I	M8x1P	9	118
	12		5	5270	12500	172										118
32	5	3.175	4	1610	4970	50	81	87	16	72	34.5	69	I	15 M8x1P	9	93
	6		5	3050	9140	106										120
	10	3.969	4	2550	7500	53	126	87	16	72	34.5	69	I	15 M8x1P	9	96
	32		2	1300	3540	172										60
	8		5	3900	10930	132										124
	10		5	3890	10910	147										124
	12		5	3890	10890	171										124
	15	4.762	5	3860	10850	53	221	87	16	72	34.5	69	I	15 M8x1P	9	124
	20		2	1700	4230	140										51
	32		2	1640	4120	186										51
	10		5	4900	13360	153										129
	12		5	4890	13340	172										129
	16	5.556	5	4860	13280	55	211	87	16	72	34.5	69	I	15 M8x1P	9	121
	20		3	3140	8110	177										79
	10		5	5720	14490	153										131
	12		5	5710	14470	172										131
16	6.35	4	4520	11100	180										105	
20		3	3530	8340	178										80	

Note: Coam and Cam are the modified static and dynamic load capacities,calculated according to ISO-3408-5

Unit: mm

SCREW SIZE	BALL DIA.	EFFECTIVE TURNS	MODIFIED LOAD CAPACITY (kgf)		NUT		FLANGE						FIT	OIL HOLE	BOLT	STIFFNESS
			Dynamic (1x10 ⁶ REV.)	Static Coam	Dg6	L	A	T	W	G	H	TYPE				
36	8	4.762	5	4170	12580	56	127	84	11	68	34	68	II	15 M8x1P	9	133
	10		5	6050	16460	153										142
	12		5	6080	16430	172										142
	16	6.35	5	6050	16360	61	213	91	18	76	34	68	II	15 M8x1P	9	142
	20		4	4910	12890	217										115
	36		2	2570	6250	194										59
	36		2	2570	6250	194										59
38	10		5	6260	17740	155										149
	12		5	6260	17410	172										149
	16	6.35	5	6220	17350	213	63	93	18	78	35	70	II	20 M8x1P	9	149
	40		3	3830	10220	282										106
40	5	3.175	4	1760	6260	60	87	91	18	76	34	68	II	15 M8x1P	9	111
	6	3.969	5	3420	11810	60	108	91	18	76	34	68	II	15 M8x1P	9	142
	8	4.762	4	3610	11260	62	118	91	18	76	34	68	II	15 M8x1P	9	118
	10		5	6430	18440	158										155
	12		5	6420	18410	172										155
	15		5	6380	18350	226										155
	16	6.35	5	6390	18330	68	212	95	18	80	36	72	II	20 M8x1P	9	155
	20		4	5190	14450	220										125
	40		2	2700	6950	210										64
	12		5	7530	20800	174										158
	16	7.144	5	7500	20730	70	212	98	18	83	37	74	II	20 M8x1P	11	158

Note: Coam and Cam are the modified static and dynamic load capacities,calculated according to ISO-3408-5



Unit: mm

SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	MODIFIED LOAD CAPACITY (kgf)		NUT		FLANGE					FIT	OIL HOLE	BOLT	STIFFNESS	
O.D.	LEAD			Dynamic (1×10 ⁶ REV.)	Static Coam	Dg6	L	A	T	W	G	H	TYPE	S	Q	X	kgf/tm
45	8	4.762	4	3770	12580	66	114	98	18	83	37	74	II	20	M8×1P	11	130
	10		5	6910	21330		158										170
	12	6.35	5	6910	21310	70	171	105	18	88	40	80	II	20	M8×1P	11	170
	16		5	6880	21250		215										170
	12	7.144	5	7930	23300		178										173
50	20		4	6440	18340	73	220	105	18	88	40	80	II	20	M8×1P	11	139
	5	3.175	5	2360	9950	75	98	105	18	88	40	80	II	20	M8×1P	11	164
	8	4.762	5	4780	17550	75	128	105	18	88	40	80	II	20	M8×1P	11	169
	10		5	7160	23320		158										185
	12	6.35	5	7150	23300	75	174	118	18	100							185
	16		5	7120	23250		215			46	92		II	20	M8×1P	11	185
55	20	7.938	4	4460	13520	75	185	118	18	100							112
	12	6.35	5	7340	25280	80	180	118	18	100	46	92	II	20	M8×1P	11	198
63	10	6.35	5	7800	29210	88	164	135	22	115	50	100		20			220
	16	9.525	5	13640	43620	102	228	147	20	127	56	112		25	M8×1P	14	257
80	20		5	15350	56760		283										305
	25	9.525	4	12530	44860	118	296	165	25	145	65	130	II	25	M8×1P	14	245
	30		3	9610	32980		254										185

Note: Coam and Cam are the modified static and dynamic load capacities,calculated according to ISO-3408-5