

PMI Precision Ground BallScrew

13.1 Internal Ball Circulation Nuts

Features:

The advantage of internal ball circulation nut is that the outer diameter is smaller than that of external ball circulation nut. Hence it is suitable for the machine with limit space for Ballscrew installation.

It is strictly required that there is at least one end of screw shaft with complete threads. Reference A47 Also the rest area next to this complete thread must be with smaller diameter than the nominal diameter of the screw shaft. Above are required for easy assembling the ballnut onto the screw shaft.

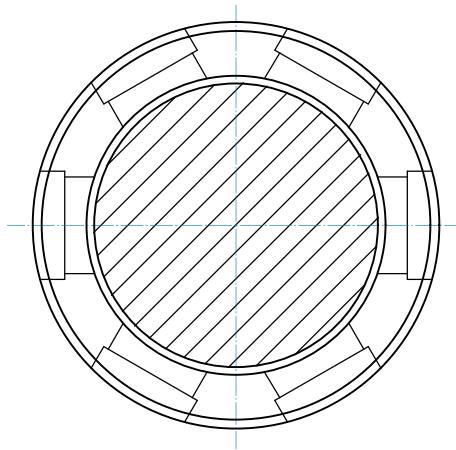
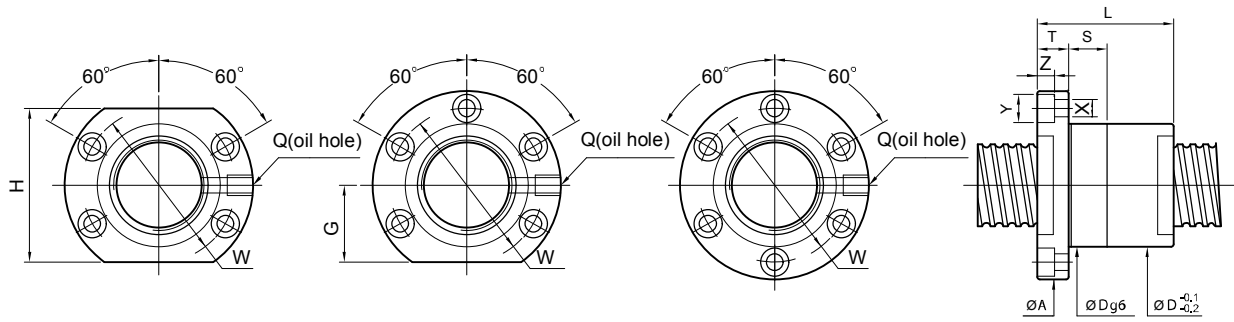
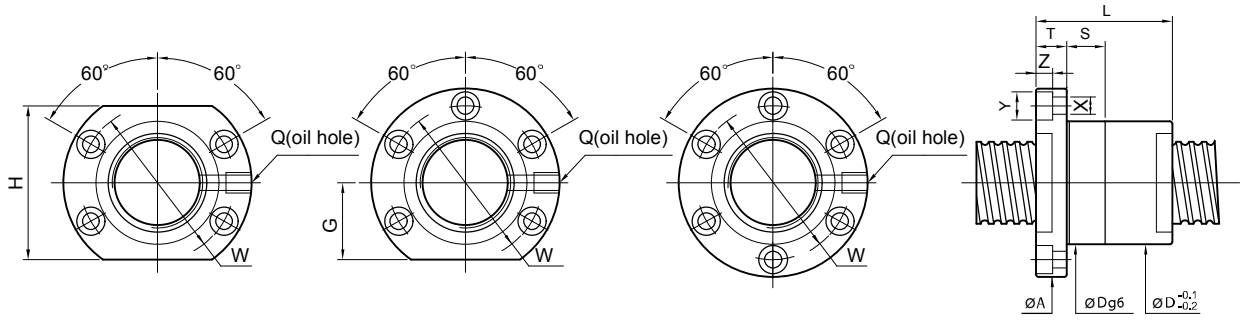


Fig. 13.1 Internal ball circulation's side view



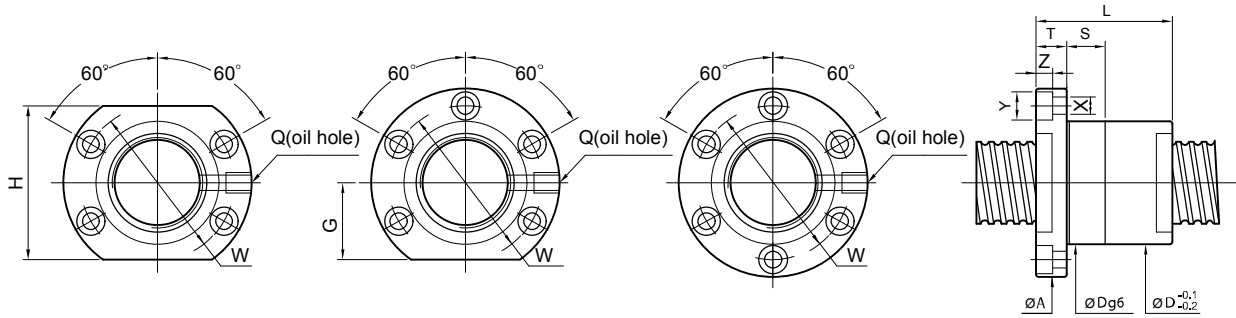
Unit: mm

SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD (kgf)		NUT		FLANGE					FIT S	BOLT			OIL HOLE Q	STIFFNESS kgf/µm	
O.D.	LEAD			Dynamic (10 ⁶ REV.) Ca	Static Co	Dg6	L	A	T	W	G	H		X	Y	Z			
14	3	2	3	260	460	26	37	46	10	36	-	-	10	4.5	8	4.5	M6	1P	13
	4	2.381	3	420	805	26	42	46	10	36	20	40	10	4.5	8	4.5	M6	1P	14
		2.778	4	840	1870	26	47	46	10	36	20	40	10	4.5	8	4.5	M6	1P	21
16	5	3.175	3	720	1010	26	42	46	10	36	20	40	10	4.5	8	4.5	M6	1P	16
	4	2.381	3	435	920	28	42	49	10	39	20	40	10	4.5	8	4.5	M6	1P	16
		5	3.175	3	765	1240	30	42	49	10	39	20	40	10	4.5	8	4.5	M6	1P
20	6	3.175	4	980	1650	30	49	49	10	39	20	40	10	4.5	8	4.5	M6	1P	23
			4	980	1650	30	55	54	12	40	20	40	12	5.5	9.5	5.5	M6	1P	23
	4	2.381	4	600	1530	34	44	60	12	48	22	44	12	5.5	9.5	5.5	M6	1P	25
25	5	3.175	3	860	1710	34	47	57	12	45	20	40	12	5.5	9.5	5.5	M6	1P	21
			4	1100	2280	34	53	57	12	45	20	40	12	5.5	9.5	5.5	M6	1P	28
	6	3.969	3	1080	2050	34	53	57	12	45	20	40	12	5.5	9.5	5.5	M6	1P	42
28	10	3.175	4	1380	2730	34	61	57	12	45	20	40	12	5.5	9.5	5.5	M6	1P	28
			3	860	1710	36	66	57	12	45	20	40	12	5.5	9.5	5.5	M6	1P	21
	4	2.381	3	500	1440	40	40	63	12	51	22	44	15	5.5	9.5	5.5	M8	1P	23
35	5	3.175	3	980	2300	40	47	63.5	12	51	22	44	15	5.5	9.5	5.5	M8	1P	26
			4	1250	3070	40	53	63.5	12	51	22	44	15	5.5	9.5	5.5	M8	1P	33
	5	1520	3830	40	57	63.5	12	51	22	44	15	5.5	9.5	5.5	M8	1P	42		
42	6	3.969	3	1275	2740	40	53	63.5	12	51	22	44	15	5.5	9.5	5.5	M8	1P	26
			4	1630	3650	40	61	63.5	12	51	22	44	15	5.5	9.5	5.5	M8	1P	34
	8	3.969	4	1630	3650	40	69	63.5	12	51	22	44	15	5.5	9.5	5.5	M8	1P	34
50	10	3.175	5	1970	4560	40	77	63.5	12	51	22	44	15	5.5	9.5	5.5	M8	1P	43
			3	980	2300	38	70	68	15	55	26	52	15	6.6	11	6.5	M8	1P	26
	4	1250	3070	38	81	68	15	55	26	52	15	6.6	11	6.5	M8	1P	33		
60	10	4.762	3	1620	3205	42	80	68	15	55	26	52	15	6.6	11	6.5	M8	1P	27
			4	2070	4270	42	85	68.5	15	55	26	52	15	6.6	11	6.5	M8	1P	35
	5	2510	5340	42	91	68.5	15	55	26	52	15	6.6	11	6.5	M8	1P	44		
70	6	3.175	3	1030	2630	43	50	68	12	55	26	52	15	6.6	11	6.5	M8	1P	28
	10	3.175	4	1320	3510	45	77	73	12	60	30	60	15	6.6	11	6.5	M8	1P	37



Unit: mm

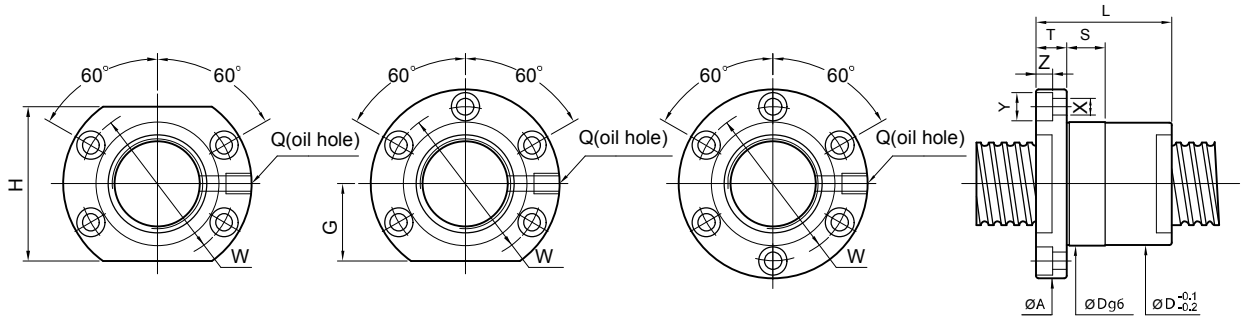
SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD (kgf)		NUT		FLANGE					FIT	BOLT			OIL HOLE	STIFFNESS
O.D.	LEAD			Dynamic (10 ⁶ REV.) Ca	Static Co	Dg6	L	A	T	W	G	H	S	X	Y	Z	Q	kgf/µm
32	4	2.381	3	560	1840	43	40	68	15	55	26	52	15	6.6	11	6.5	M8×1P	28
			5	870	3070		49											45
	5	3.175	3	1095	3060	48	47	73.5	12	60	30	60	15	6.6	11	6.5	M8×1P	31
			4	1400	4080		53											41
	6	3.969	3	1500	3750	48	53	73.5	12	60	30	60	15	6.6	11	6.5	M8×1P	32
			4	1920	5000		61											43
	8	4.762	3	1820	4230	50	68	83	16	66	32	64	15	6.6	11	6.5	M8×1P	32
			4	2330	5640		77											43
	10	6.35	3	2605	5310	54	80	88	16	70	34	68	15	9	14	8.5	M8×1P	33
			4	3340	7080		90											45
	12	6.35	3	2605	5310	50	86	88	16	70	34	68	15	9	14	8.5	M8×1P	33
36	5	3.175	4	1490	4690	52	56	88	16	70	34	68	15	9	14	8.5	M8×1P	46
			8	2530	6630		73											48
	10	6.35	3	2810	6210	58	78	98	18	77	36	72	20	11	17.5	11	M8×1P	37
4			3600	8280	89		49											
40	5	3.175	4	1575	5290	55	56	88.5	16	72	29	58	15	9	14	8.5	M8×1P	49
			6	2230	7940		65											73
	6	3.969	3	1660	4810	55	56	88.5	16	72	34	68	15	9	14	8.5	M8×1P	39
			4	2130	6410		65											51
	8	4.762	3	2120	5720	60	64	93	16	76	36	72	20	9	14	8.5	M8×1P	40
			4	2720	7620		77											52
	6	3.969	3	3850	11430	60	94	106	18	84	43	86	20	11	17.5	11	M8×1P	77
			4	3010	7100		83											41
	10	6.35	3	3010	7100	64	83	106	18	84	43	86	20	11	17.5	11	M8×1P	41
			4	3850	9470		93											53
	5	4.762	3	4670	11830	54	99	110	18	85	45	90	20	11	17.5	11	M8×1P	67
			4	3010	7100		82											41
12	6.35	3	3010	7100	63	100	106	18	84	43	86	20	11	17.5	11	M8×1P	41	
		4	3850	9470		108											53	
7.144	3	3	4010	9250	70	93	110	18	85	45	90	20	11	17.5	11	M8×1P	43	
		4	5130	12330		103											56	



Unit: mm

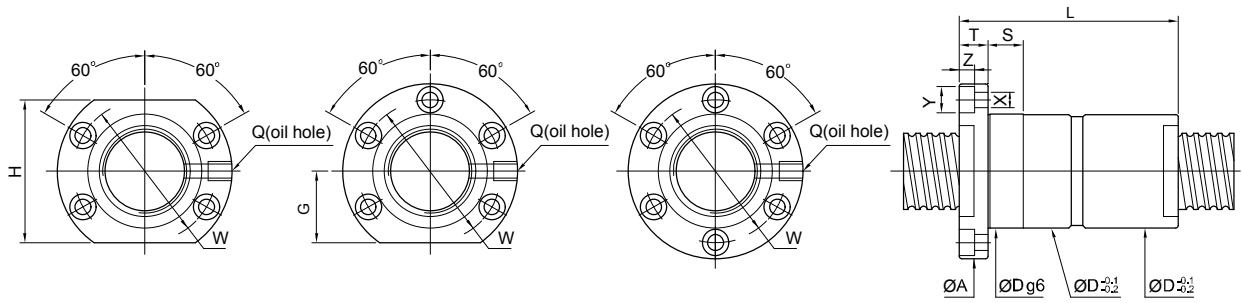
SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD (kgf)		NUT		FLANGE					FIT S	BOLT			OIL HOLE Q	STIFFNESS kgf/µm		
O.D.	LEAD			Dynamic (10 ⁶ REV.) Ca	Static Co	Dg6	L	A	T	W	G	H		X	Y	Z				
45	8	4.762	4	2870	8620	64	72	92	16	75	36	72	15	9	14.5	9	M6	1P	54	
	12	7.144	3	4160	10750	70	86	110	16	90	42	84	20	11	17.5	11	PT1/8	8	48	
			4	5330	14330														99	62
	16	6.35	3	3220	8200	70	102	110	16	90	42	84	20	11	17.5	11	PT1/8	8	45	
50	5	3.175	4	1730	6760	66	61	98	16	82	36	72	20	9	14	8.5	PT1/8	8	60	
			5	2100	8450														65	74
			6	2450	10140														77	86
	6	3.969	4	2380	8250	66	64	98	16	82	36	72	20	9	14	8.5	PT1/8	8	61	
			5	2880	10310														77	76
			6	3370	12380														99	90
	8	4.762	4	3010	9610	70	84	113	18	90	42	84	20	11	17.5	11	PT1/8	8	63	
			5	3650	12010														96	77
			6	4260	14420														114	92
	10	6.35	3	3430	9300	74	93	116	18	94	42	84	20	11	17.5	11	M8	1P	49	
			4	4390	12400														99	65
			5	5320	15500														114	80
			6	6220	18600														117	95
	12	7.144	4	5520	16330	75	104	121	22	97	47	94	20	14	20	13	PT1/8	8	67	
			5	6690	20410														117	84
	7.938	3	4510	11150	75	99	121	22	97	47	94	20	14	20	13	PT1/8	8	50		
		4	5770	14870														111	60	
	16	6.35	3	3430	9300	74	104	116	18	94	42	84	20	11	17.5	11	PT1/8	8	49	
	20	7.938	3	4510	11150	78	146	121	28	97	47	94	20	14	20	13	PT1/8	8	50	

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Unit: mm

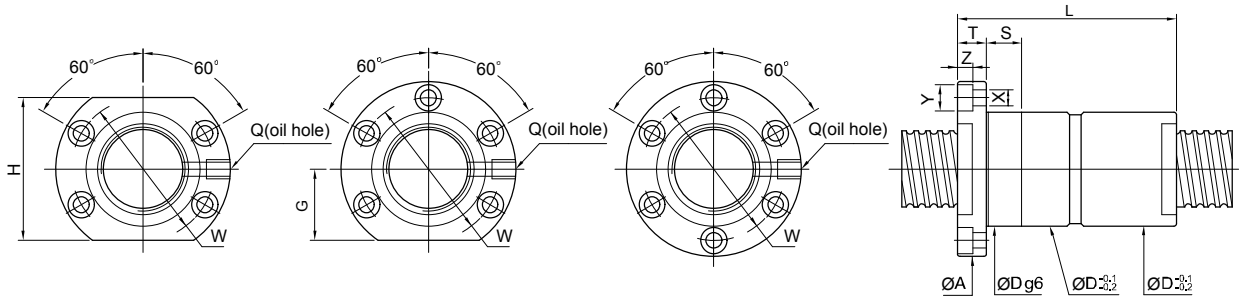
SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD (kgf)		NUT		FLANGE					FIT	BOLT			OIL HOLE	STIFFNESS	
O.D.	LEAD			Dynamic (10° REV.) Ca	Static Co	Dg6	L	A	T	W	G	H	S	X	Y	Z	Q	kgf/μm	
63	6	3.969	4	2610	10550	80	67	122	18	100	45	90	20	11	17.5	11	PT1/8	73	
			6	3700	15830		80											107	
	8	4.762	4	3375	12200	82	80	124	18	102	46	92	20	11	17.5	11	PT1/8	76	
			6	4780	18300		96											111	
	10	6.35	4	5020	16450	85	98	132	22	107	48	96	20	14	20	13	PT1/8	79	
			6	7110	24680		118											116	
12	7.938	4	6580	19430	90	111	136	22	112	52	104	20	14	20	13	PT1/8	80		
		6	9320	29150		136											111		
20	9.525	3	8490	23610	95	146	153	28	123	59	118	20	18	26	17.5	PT1/8	79		
		4	10870	31480		156											89		
80	10	6.35	4	5510	21200	105	98	151	22	127	57	114	20	14	20	13	PT1/8	95	
			5	6670	26500		105											118	118
			6	7810	31800		118											118	140
	12	7.938	4	7500	25700	110	111	156	22	132	59	118	20	14	20	13	PT1/8	98	
			6	10620	38550		136											143	143
	20	9.525	3	9770	31700	115	146	173	28	143	66	132	20	18	26	17.5	PT1/8	97	
4			12510	42270	168		127											127	
100	10	6.35	3	4760	20090	125	84	171	22	147	67	134	25	14	20	13	PT1/8	91	
			4	6090	26790		95											120	
			5	7380	33490		104											148	
			6	8630	40190		115											176	
	16	9.525	4	14440	54960	135	140	205	28	169	73	146	30	18	26	17.5	PT1/8	140	
			5	17490	68700		157											173	
20	9.525	4	14440	54960	135	159	205	28	169	73	146	30	18	26	17.5	PT1/8	140		
		5	17490	68700		180											173		
			6	20460	82440		200											205	



Unit: mm

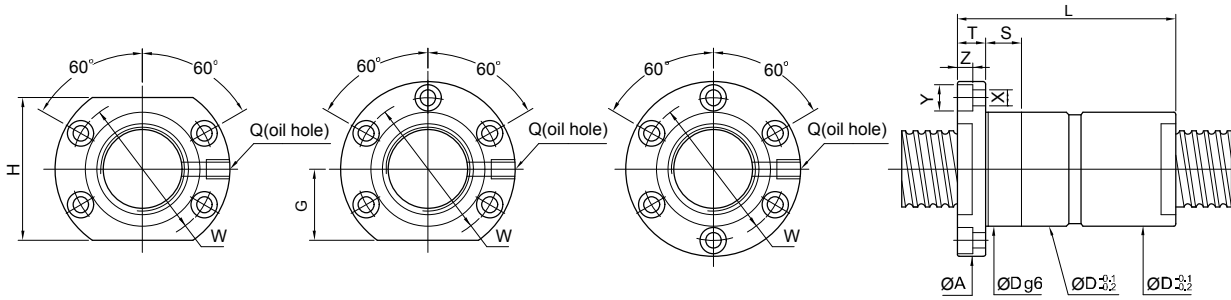
SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD(kgf)		NUT		FLANGE					FIT S	BOLT			OIL HOLE Q	STIFFNESS kgf/µm
O.D.	LEAD			Dynamic (10 ⁶ REV.) Ca	Static Co	Dg6	L	A	T	W	G	H		X	Y	Z		
16	4	2.381	3	435	920	30	66	46.5	10	39	20	40	10	4.5	8	4.5	M6×1P	31
	5	3.175	3	765	1240	30	80	49	10	39	20	40	10	4.5	8	4.5	M6×1P	35
20	5	3.175	4	980	1650	30	89	49	10	39	20	40	10	4.5	8	4.5	M6×1P	47
			3	860	1710	34	82	57	12	45	20	40	12	5.5	9.5	5.5	M6×1P	43
20	6	3.969	4	1100	2280	34	92	57	12	45	20	40	12	5.5	9.5	5.5	M6×1P	56
			3	1080	2050	34	93	57	12	45	20	40	12	5.5	9.5	5.5	M6×1P	43
25	5	3.175	4	1250	3070	40	92	63.5	12	51	22	44	15	5.5	9.5	5.5	M8×1P	67
			3	980	2300	40	82	63.5	12	51	22	44	15	5.5	9.5	5.5	M8×1P	51
25	6	3.969	4	1630	3650	40	107	63.5	12	51	22	44	15	5.5	9.5	5.5	M8×1P	68
			3	1275	2740	40	93	63.5	12	51	22	44	15	5.5	9.5	5.5	M8×1P	52
10	3.175	3	4	2070	4270	42	155	68.5	15	55	26	52	15	6.6	11	6.5	M8×1P	70
			3	1620	3205	42	140	68.5	15	55	26	52	15	6.6	11	6.5	M8×1P	53
32	5	3.175	6	1980	6120	48	118	73.5	12	60	30	60	15	6.6	11	6.5	M8×1P	122
			3	1095	3060	48	92	73.5	12	60	30	60	15	6.6	11	6.5	M8×1P	82
32	6	3.969	6	2720	7500	48	133	73.5	12	60	30	60	15	6.6	11	6.5	M8×1P	125
			3	1500	3750	48	109	73.5	12	60	30	60	15	6.6	11	6.5	M8×1P	86
32	8	4.762	4	2330	5640	50	135	83	16	66	32	64	15	6.6	11	6.5	M8×1P	86
			3	1820	4230	50	117	83	16	66	32	64	15	6.6	11	6.5	M8×1P	66
32	10	6.35	4	3340	7080	50	160	88.5	16	70	34	68	15	9	14	8.5	M8×1P	89
			3	2605	5310	50	139	88.5	16	70	34	68	15	9	14	8.5	M8×1P	67
32	12	6.35	5	4040	8850	50	203	88	16	70	34	68	15	9	14	8.5	M8×1P	110
			3	2605	5310	50	153	88	16	70	34	68	15	9	14	8.5	M8×1P	67
36	5	3.175	4	4690	9690	52	96	88	16	70	34	68	15	9	14	8.5	M8×1P	91
			3	1490	4690	52	96	88	16	70	34	68	15	9	14	8.5	M8×1P	91
36	8	4.762	4	6630	13260	55	138	88	16	72	34	68	15	9	14	8.5	M8×1P	95
			3	2530	6630	55	138	88	16	72	34	68	15	9	14	8.5	M8×1P	95
36	10	6.35	4	8280	16560	58	159	98	18	77	36	72	20	11	17.5	11	M8×1P	98
			3	2810	6210	58	138	98	18	77	36	72	20	11	17.5	11	M8×1P	75

FDIC



Unit: mm

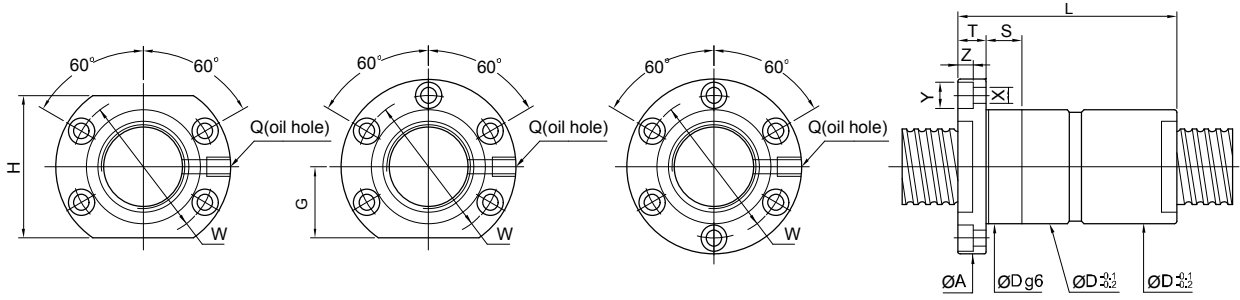
SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD (kgf)		NUT		FLANGE					FIT	BOLT			OIL HOLE	STIFFNESS		
O.D.	LEAD			Dynamic (10 ⁶ REV.) Ca	Static Co	Dg6	L	A	T	W	G	H	S	X	Y	Z	Q	kgf/μm		
40	5	3.175	4	1575	5290	96													100	
			5	1910	6610	55	111	88.5	16	72	29	58	15	9	14	8.5	M8x1P	124		
			6	2230	7940		122												147	
	6	3.969		3	1660	4810	97													77
				4	2130	6410	55	113	88.5	16	72	34	68	15	9	14	8.5	M8x1P	103	
				6	3020	9620		137												149
	8	4.762		3	2120	5720	121													80
				4	2720	7620	60	134	93	16	76	36	72	20	9	14	8.5	M8x1P	105	
				6	3850	11430		172												154
	10	6.35		3	3010	7100	142													82
				4	3850	9470	65	162	106	18	84	43	86	20	11	17.5	11	M8x1P	107	
				5	4670	11830		189												133
12	6.35		3	3010	7100	154													82	
			5	4670	11830	63	204	106	18	84	43	86	20	11	17.5	11	M8x1P	133		
			7.144	3	4010	9250	70	160	110	18	85	45	90	20	11	17.5	11	M8x1P	86	
45	8	4.762	4	2870	8620	64	136	92	16	75	36	72	15	9	14.5	9	M6x1P	109		
			12	7.144	3	4160	10750	70	158	110	16	90	45	90	20	11	17.5	11	PT1/8x	94
			4	5330	14330		183												124	
	16	6.35	3	3220	8200	70	198	110	16	90	45	90	20	11	17.5	11	PT1/8x	90		



Unit: mm

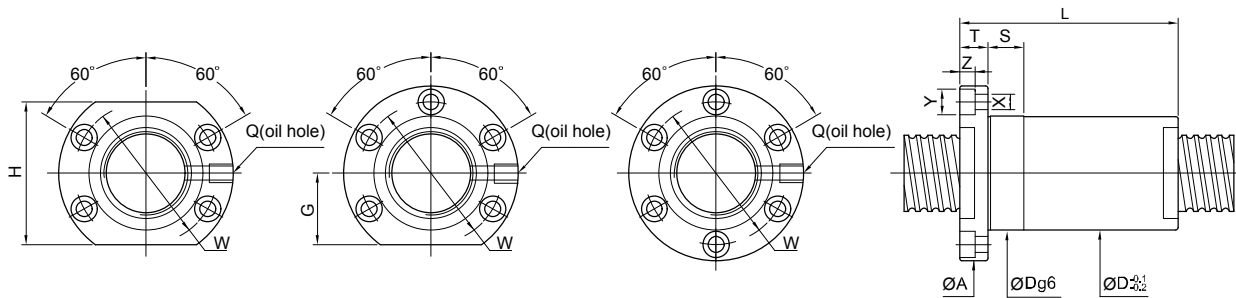
SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD (kgf)		NUT		FLANGE					FIT	BOLT			OIL HOLE	STIFFNESS kgf/μm
O.D.	LEAD			Dynamic (1×10 ⁶ REV.) Ca	Static Co	Dg6	L	A	T	W	G	H	S	X	Y	Z	Q	
50	5	3.175	4	1730	6760	96												119
			5	2100	8450	66	111	98	16	82	36	72	20	9	14	8.5	PT1/8	148
			6	2450	10140	122												
	6	3.969	4	2380	8250	111												123
			5	2880	10310	66	122	98	16	82	36	72	20	9	14	8.5	PT1/8	151
			6	3370	12380	142												
	8	4.762	4	3010	9610	136												125
			5	3650	12010	70	157	113	18	90	42	84	20	11	17.5	11.0	PT1/8	155
			6	4260	14420	174												
	10	6.35	3	3430	9300	143												99
			4	4390	12400	74	162											129
			5	5320	15500	189		114	18	92	42	84	20	11	17.5	11	PT1/8	161
			6	6220	18600	205												
	12	7.144	5	6680	20420	75	213	121	22	97	47	94	20	14	20	13	PT1/8	166
			3	4510	11150	75	171											
	12	7.938	4	5770	14870	195		121	22	97	47	94	20	14	20	13	PT1/8	132
			3	3430	9300	74	201	114	18	92	42	84	20	11	17.5	11	PT1/8	99
	16	6.35	3	3430	9300	74	201	114	18	92	42	84	20	11	17.5	11	PT1/8	99
20	7.938	3	4510	11150	78	253	121	28	97	47	94	20	14	20	13	PT1/8	101	

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Unit: mm

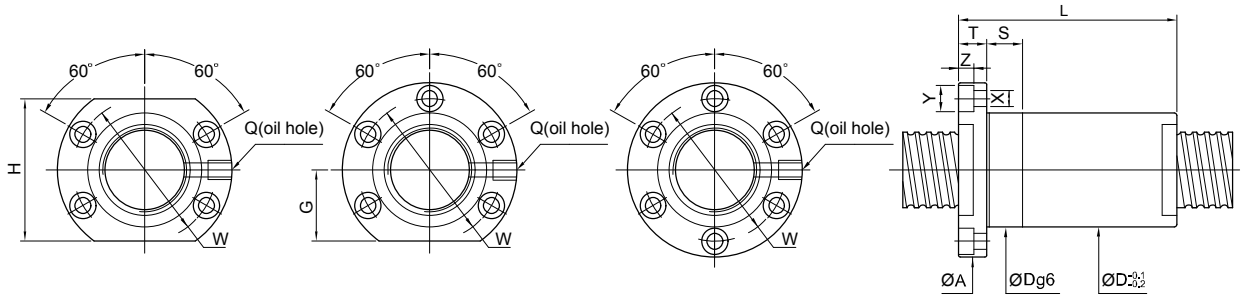
SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD(kgf)		NUT		FLANGE					FIT	BOLT			OIL HOLE	STIFFNESS	
O.D.	LEAD			Dynamic (1x10 ⁶ REV.) Ca	Static Co	Dg6	L	A	T	W	G	H	S	X	Y	Z	Q	kgf/µm	
63	6	3.969	4	2610	10550	80	120	122	18	100	45	90	20	11	17.5	11	PT1/8	146	
			6	3700	15830		144												217
	8	4.762	4	3375	12200	82	141	124	18	102	46	92	20	11	17.5	11	PT1/8	151	
			6	4780	18300		178												222
	10	6.35	4	5020	16450	85	166	132	22	107	48	96	20	14	20	13	PT1/8	158	
		6	7110	24680		209												232	
	12	7.938	4	6580	19430	90	195	136	22	112	52	104	20	14	20	13	PT1/8	161	
			6	9320	29150		248												236
	20	9.525	3	8490	23610	95	255	153	28	123	59	118	20	18	26	17.5	PT1/8	157	
			4	10870	31480		296												207
80	10	6.35	4	5510	21200		166											190	
			5	6670	26500	105	185	151	22	127	57	114	20	14	20	13	PT1/8	235	
			6	7810	31800		209											280	
	12	7.938	4	7500	25700	110	195	156	22	132	59	118	20	14	20	13	PT1/8	196	
			6	10620	38550		248												288
	20	9.525	3	9770	31700		254											193	
			4	12510	42270	115	297	173	28	143	66	132	20	18	26	17.5	PT1/8	254	
			6	17720	63410		376											373	
100	10	6.35	3	4760	20090		143											173	
			4	6090	26790		164												228
			5	7380	33490	125	184	171	22	147	67	134	25	14	20	13	PT1/8	281	
			6	8630	40190		210												
	16	9.525	4	14440	54960		252												266
			5	17490	68700	135	285	205	28	169	73	146	30	18	26	17.5	PT1/8	329	
			6	20460	82440		318												391
20	9.525	4	14440	54960		299												266	
		5	17490	68700	135	340	205	28	169	73	146	30	18	26	17.5	PT1/8	329		
			6	20460	82440		381											391	



Unit: mm

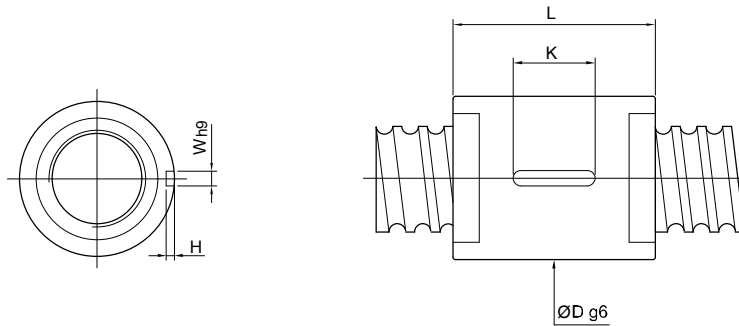
SCREW SIZE		BALL	EFFECTIVE	BASIC RATE LOAD(kgf)		NUT		FLANGE					FIT	BOLT			OIL HOLE	STIFFNESS		
O.D.	LEAD	DIA.	URNS	Dynamic (1×10 ⁶ REV.) Ca	Static Co	Dg6	L	A	T	W	G	H	S	X	Y	Z	Q	kgf/μm		
20	5	3.175	2×(2)	610	1140	34	53	57	12	45	20	40	12	5.5	9.5	5.5	M6×1P	29		
			3×(2)	860	1710													67	43	
	6	3.969	2×(2)	760	1370	34	61	57	12	45	20	40	12	5.5	9.5	5.5	M6×1P	29		
			3×(2)	1080	2050													77	50	
25	4	2.381	2×(2)	350	960	40	44	63	12	51	22	44	15	5.5	9.5	5.5	M8×1P	30		
			3×(2)	500	1440													56	46	
			4×(2)	640	1920													64	59	
	5	3.175	2.381	2×(2)	690	1530	40	53	63.5	12	51	22	44	15	5.5	9.5	5.5	M8×1P	35	
				3×(2)	980	2300													67	51
				4×(2)	1250	3070													76	67
				6	3.969	3×(2)													1275	2740
8	3.969	3×(2)	1275	2740	40	85	63.5	12	51	22	44	15	5.5	9.5	5.5	M8×1P	52			
10	4.762	2.381	2×(2)	1140	2140	42	88	69	15	55	26	52	15	6.6	11	6.5	M8×1P	36		
			3×(2)	1610	3210													102	53	
28	6	3.175	3×(2)	1030	2630	43	69	68	12	55	26	52	15	6.6	11	6.5	M8×1P	56		
	10	3.175	2×(2)	730	1750	45	77	73	12	60	30	60	15	6.6	11	6.5	M8×1P	38		
32	4	2.381	3×(2)	560	1840	43	56	68	12	55	26	52	15	6.6	11	6.5	M8×1P	55		
			5×(2)	870	3070													73	89	
	5	3.175	2.381	3×(2)	1095	3060	48	67	73.5	12	60	30	60	15	6.6	11	6.5	M8×1P	63	
				4×(2)	1400	4080													77	82
	6	3.969	2.381	3×(2)	1500	3750	48	77	73.5	12	60	30	60	15	6.6	11	6.5	M8×1P	65	
				4×(2)	1920	5000													90	86
8	4.762	2.381	3×(2)	1820	4230	50	95	83	16	66	32	64	15	6.6	11	6.5	M8×1P	66		
			4×(2)	2330	5640													112	86	
10	6.35	3×(2)	2605	5310	50	120	88	16	70	34	68	15	9	14	8.5	M8×1P	67			
12	6.35	3×(2)	2605	5310	50	124	88	16	70	34	68	15	9	14	8.5	M8×1P	67			

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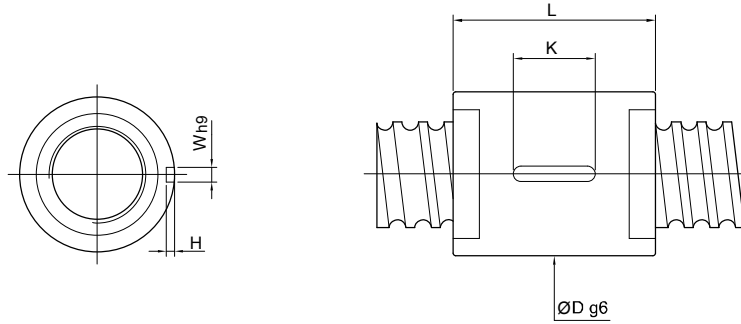
Unit: mm

SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD(kgf)		NUT		FLANGE					FIT S	BOLT			OIL HOLE Q	STIFFNESS kgf/µm	
O.D.	LEAD			Dynamic (10 ⁶ REV.) Ca	Static Co	Dg6	L	A	T	W	G	H		X	Y	Z			
40	5	3.175	3 (2)	1230	3970	65												75	
			4 (2)	1575	5290	55	80	88.5	16	72	29	58	15	9	14	8.5	M8 (1P)	100	
			6 (2)	2230	7940	101													147
	6	3.969	4 (2)	2130	6410	55	93												103
			6 (2)	3020	9620	118	88.5	16	72	34	68	15	9	14	8.5	M8 (1P)	149		
8	4.762	4 (2)	2720	7620	60	116	93	16	76	36	72	20	9	14	8.5	M8 (1P)	105		
10	6.35	3 (2)	3010	7100	64	123												82	
		4 (2)	3850	9470	143	106	18	84	43	86	20	11	17.5	11	PT1/8 (8)	107			
12	6.35	4 (2)	3850	9470	63	160	106	18	84	43	86	20	11	17.5	11	PT1/8 (8)	107		
50	5	3.175	3 (2)	1350	5070	65												89	
			4 (2)	1730	6760	66	80	98	16	82	36	72	20	9	14	8.5	PT1/8 (8)	119	
			6 (2)	2450	10140	101													174
	6	3.969	4 (2)	2380	8250	66	93												123
			6 (2)	3370	12380	118	98	16	82	36	72	20	9	14	8.5	PT1/8 (8)	181		
8	4.762	4 (2)	3010	9610	70	119	113	18	90	42	84	20	11	17.5	11	PT1/8 (8)	125		
10	6.35	3 (2)	3430	9300	74	123												99	
		4 (2)	4390	12400	143	116	18	92	42	84	20	11	17.5	11	M8 (1P)	129			
12	7.144	4 (2)	5530	16330	75	164	121	22	97	47	97	20	14	20	13	PT1/8 (8)	135		
		3 (2)	4510	11150	147													101	
		4 (2)	5770	14870	164	121	22	97	47	97	20	14	20	13	PT1/8 (8)	132			
63	6	3.969	4 (2)	2610	10550	80	96											146	
			6 (2)	3700	15830	121	122	18	100	45	90	20	11	17.5	11	PT1/8 (8)	217		
	8	4.762	4 (2)	3375	12200	82	119	124	18	102	46	92	20	11	17.5	11	PT1/8 (8)	151	
	10	6.35	4 (2)	5020	16450	85	147	132	22	107	48	96	20	14	20	13	PT1/8 (8)	158	
12	7.938	3 (2)	5140	14570	90	147												122	
		4 (2)	6580	19430	171	136	22	112	52	104	20	14	20	13	PT1/8 (8)	161			
20	9.525	2 (2)	5990	15740	95	156	153	28	123	59	118	20	18	26	17.5	PT1/8 (8)	107		
80	10	6.35	2 (2)	3360	13390	105	95											118	
			3 (2)	4760	20090	115	171	22	147	67	134	25	14	20	13	PT1/8 (8)	173		
	16	9.525	2 (2)	11280	41220	115	175	205	28	169	73	146	30	18	26	17.5	PT1/8 (8)	201	
			3 (2)	7960	27480	115	159	205	28	169	73	146	30	18	26	17.5	PT1/8 (8)	137	



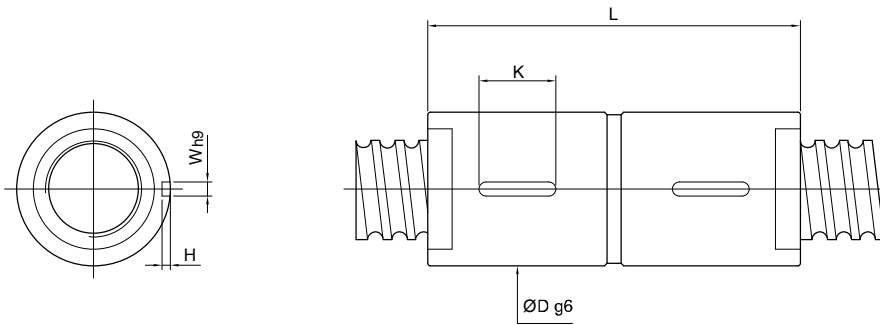
Unit: mm

SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD(kgf)		NUT		KEYWAY			STIFFNESS
O.D.	LEAD			Dynamic (1×10 ⁶ REV.) Ca	Static Co	Dg6	L	K	W	H	kgf/μm
16	5	3.175	3	765	1240	30	40	20	3	1.8	18
			4	860	1710	34	41	20	3	1.8	21
20	5	3.175	3	1100	2280	34	48	20	3	1.8	28
			4	1080	2050	34	46	20	4	2.5	22
25	6	3.969	3	1380	2730	40	56	25	4	2.5	28
			4	980	2300	40	41	20	4	2.5	26
25	5	3.175	3	1250	3070	40	48	20	4	2.5	33
			4	1275	2740	40	46	20	4	2.5	26
32	6	3.969	3	1630	3650	40	56	25	4	2.5	34
			4	1095	3060	48	41	20	4	2.5	31
32	5	3.175	3	1400	4080	48	48	20	4	2.5	41
			4	1980	6120	50	61	25	5	3.0	60
32	6	3.969	3	1500	3750	50	46	20	5	3.0	32
			4	1920	5000	50	56	25	5	3.0	43
32	8	4.762	3	2720	7500	50	70	32	6	3.5	63
			4	1820	4230	50	59	25	5	3.0	32
40	10	6.35	3	2330	5640	50	70	25	5	3.0	43
			4	2605	5310	50	68	25	6	3.5	33
40	5	3.175	3	3340	7080	55	79	32	6	3.5	45
			4	1575	5290	55	48	20	4	2.5	49
40	6	3.969	3	2230	7940	55	61	25	4	2.5	73
			4	2130	6410	55	56	25	5	3.0	51
40	8	4.762	3	3020	9620	60	70	32	5	3.0	75
			4	2720	7620	60	70	25	5	3.0	52
40	10	6.35	3	3850	11430	65	91	40	5	3.0	77
			4	3010	7100	65	68	25	6	3.5	41
40	10	6.35	3	3850	9470	65	79	32	6	3.5	53
			4	3850	9470	65	79	32	6	3.5	53



Unit: mm

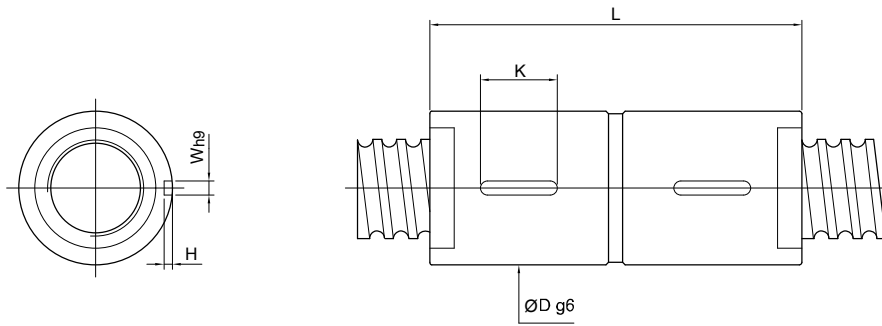
SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD(kgf)		NUT		KEYWAY			STIFFNESS
O.D.	LEAD			Dynamic (1×10 ⁶ REV.) Ca	Static Co	Dg6	L	K	W	H	kgf/μm
50	5	3.175	4	1730	6750	66	48	20	4	2.5	60
			6	2450	10130		61	25			86
	6	3.969	4	2380	8250	66	56	25	5	3.0	61
			6	3370	12380		70	32			90
	8	4.762	4	3010	9610	70	70	32	5	3.0	63
			6	4260	14420		91	32			92
10	6.35	3	3430	9300	74	68	32	6	3.5	49	
		4	4390	12400		79				32	65
12	7.938	3	4510	11150	75	82	40	6	3.5	50	
		4	5770	14870		92				40	66
63	6	3.969	4	2610	10550	80	56	25	6	3.5	73
			6	3700	15830		70	32			107
	8	4.762	4	3375	12200	82	70	32	6	3.5	76
			6	4780	18300		91	40			111
10	6.35	4	5020	16450	85	79	32	8	4.0	79	
		6	7110	24680		85	40			116	
12	7.938	4	6580	19430	90	95	40	8	4.0	80	
		6	9320	29150		123	50			118	
80	10	6.35	4	5510	21200	105	79	32	8	4.0	95
			6	7810	31800		102	40			140
	12	7.938	4	7500	25700	110	95	40	8	4.0	98
6			10620	38550	123		50	143			
20	9.525	3	9770	31700	115	126	50	10	5.0	97	
		4	12510	42270		149	63			127	
100	10	6.35	3	4760	20090	125	72	50	10	5	91
			4	6090	26790		82				120
			5	7380	33490		94				148
			6	8630	40190		104				176
	16	9.525	4	14440	54960	135	128	63	10	5	140
			5	17490	68700		77				173
			6	20460	82440		162				205
			4	14440	54960		144				140
20	9.525	5	17490	68700	135	164	63	10	5	173	
		6	20460	82440		187	205				



Unit: mm

SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD(kgf)		NUT		KEYWAY			STIFFNESS
O.D.	LEAD			Dynamic (1×10 ⁶ REV.) Ca	Static Co	Dg6	L	K	W	H	kgf/µm
16	5	3.175	3	765	1240	28	75	20	3	1.8	35
			4	980	1650		85				47
20	5	3.175	3	860	1710	34	75	20	3	1.8	43
			4	1100	2280		85				56
	6	3.969	3	1080	2050	34	87	20	4	2.5	43
			4	1380	2730		103				56
25	5	3.175	3	980	2300	40	75	20	4	2.5	51
			4	1250	3070		85				67
	6	3.969	3	1275	2740	40	87	20	4	2.5	52
			4	1630	3650		103				68
32	5	3.175	3	1095	3060	48	75	20	4	2.5	63
			4	1400	4080		85				82
			6	1980	6120		105				122
	6	3.969	3	1500	3750	50	87	25	5	3.0	65
			4	1920	5000		103				86
			6	2720	7500		127				125
	8	4.762	3	1820	4230	50	109	25	5	3.0	66
			4	2330	5640		127				86
10	6.35	3	2605	5310	50	135	25	6	3.5	67	
		4	3340	7080		155				89	
40	5	3.175	4	1575	5290	55	85	20	4	2.5	100
			6	2230	7940		105				147
	6	3.969	4	2130	6410	55	103	25	5	3.0	103
			6	3020	9620		127				149
	8	4.762	4	2720	7620	60	127	25	5	3.0	105
			6	3850	11430		161				154
	10	6.35	3	3010	7100	65	135	25	6	3.5	82
			4	3850	9470		155				107

RDIC



Unit: mm

SCREW SIZE		BALL DIA.	EFFECTIVE TURNS	BASIC RATE LOAD (kgf)		NUT		KEYWAY			STIFFNESS
O.D.	LEAD			Dynamic (1×10 ⁶ REV.) Ca	Static Co	Dg6	L	K	W	H	kgf/μm
50	5	3.175	4	1730	6750	66	85	20	4	2.5	119
			6	2450	10130		105	25			174
	6	3.969	4	2380	8250	66	103	25	5	3.0	123
			6	3370	12380		127	32			181
	8	4.762	4	3010	9610	70	127	32	5	3.0	125
			6	4260	14420		161	40			185
10	6.35	3	3430	9300	74	135	32	6	3.5	99	
		4	4390	12400		155	32			129	
12	7.938	4	4510	11150	75	161	40	6	3.5	101	
		6	5770	14870		185	40			132	
63	6	3.969	4	2610	10550	80	106	25	6	3.5	146
			6	3700	15830		130	32			217
	8	4.762	4	3375	12200	82	131	32	6	3.5	151
			6	4780	18300		165	40			222
10	6.35	4	5020	16450	85	160	32	8	4.0	158	
		6	7110	24680		202	40			232	
12	7.938	4	6580	19430	90	185	40	8	4.0	161	
		6	9320	29150		238	50			236	
80	10	6.35	4	5510	21200	105	160	32	8	4.0	190
			6	7810	31800		202	40			280
	12	7.938	4	7500	25700	110	185	40	8	4.0	196
6			10620	38550	238		50	288			
20	9.525	3	9770	31700	115	245	50	10	5.0	193	
		4	12510	42270		289	63			254	
100	10	6.35	3	4760	20090	125	132	50	10	5	173
			4	6090	26790		164				228
			5	7380	33490		174				281
			6	8630	40190		204				334
	16	9.525	4	14440	54960	135	240	63	10	5	266
			5	17490	68700		274				329
			6	20460	82440		306				391
			4	14440	54960		284				266
20	9.525	5	17490	68700	135	324	63	10	5	329	
		6	20460	82440		366				391	