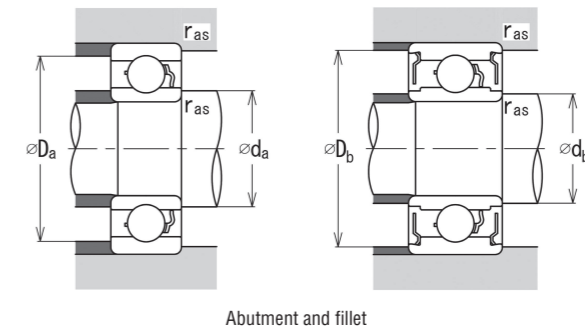
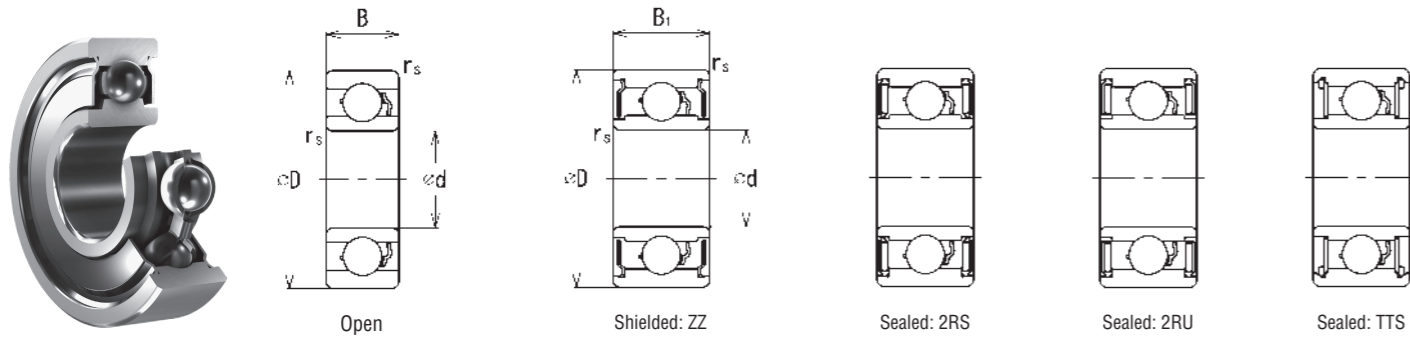


Extra-miniature/miniature/small bearings [SUJ2]



Dimension

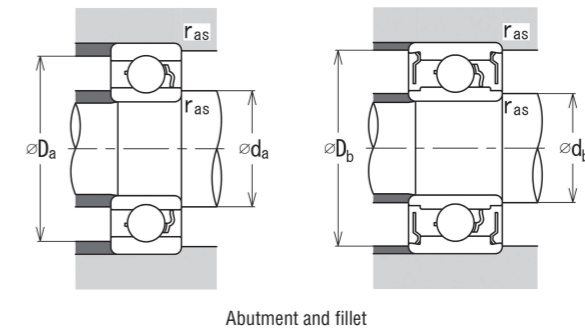
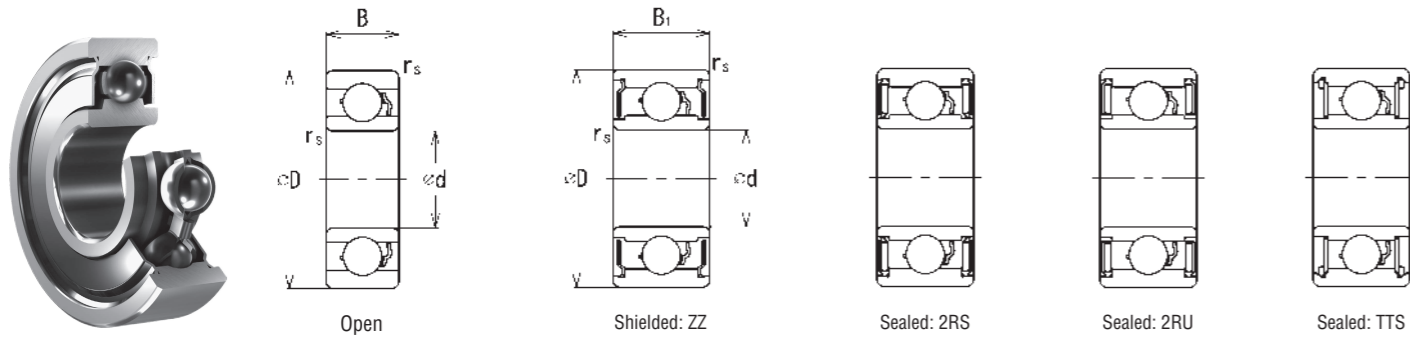
Extra-miniature/miniature/small bearings [SUJ2]

Bore diameter d		Outer diameter D		Width				Chamfer r _s (min)		Bearing number					Load rating		Limiting speed ⁽³⁾				
				Open B		Shielded, Sealed B ₁				Open	2 Shields ⁽²⁾		2 Seals ⁽²⁾		Cr	Cor	Grease	Oil			
				mm	inch	mm	inch				2RS	2RU	TTS	N					min ⁻¹		
1.5	0.0591	4	0.1575	—	—	2	0.0787	0.05	0.002	—	681XZZ	—	—	—	112	33	105 000	124 000			
2	0.0787	5	0.1969	2	0.0787	2.6	0.1024	0.15	0.0059	691X	691XZZ	—	—	—	238	69	94 000	111 000			
		5	0.1969	1.5	0.0591	2.3	0.0906	0.08	0.0031	682	682ZZ	—	—	—	169	50	94 000	111 000			
		5	0.1969	2	0.0787	2.5	0.0984	0.10	0.0039	MR52	MR52ZZ	—	—	—	169	50	94 000	111 000			
		6	0.2362	2.3	0.0906	3	0.1181	0.15	0.0059	692	692ZZ	—	—	—	330	99	86 000	101 000			
		6	0.2362	2.5	0.0984	—	—	—	—	0.15	0.0059	MR62	—	—	—	—	—	330	99	86 000	101 000
2.5	0.0984	7	0.2756	2.5	0.0984	—	—	0.15	0.0059	MR72	—	—	—	—	—	—	386	128	76 000	90 000	
		7	0.2756	—	—	3.5	0.1378	0.15	0.0059	—	602ZZS	—	—	—	386	128	76 000	90 000			
		7	0.2756	—	—	2.6	0.1024	0.08	0.0031	—	682XZZ	—	—	—	209	73	81 000	96 000			
		7	0.2756	2.5	0.0984	3.5	0.1378	0.15	0.0059	692X	692XZZS	—	—	—	386	128	76 000	90 000			
		8	0.3150	2.8	0.1102	4	0.1575	0.15	0.0059	602X	602XZZ	—	—	—	551	175	72 000	85 000			
3	0.1181	6	0.2362	2	0.0787	2.5	0.0984	0.10	0.0039	MR63	MR63ZZ	—	—	—	209	73	81 000	96 000			
		7	0.2756	2	0.0787	3	0.1181	0.10	0.0039	683	683ZZ	2RS	—	—	311	112	74 000	88 000			
		8	0.3150	2.5	0.0984	—	—	0.15	0.0059	MR83	—	—	—	—	—	—	395	140	67 000	79 000	
		8	0.3150	—	—	3	0.1181	0.10	0.0039	—	MR83ZZ	—	—	—	—	—	—	395	140	67 000	79 000
		8	0.3150	3	0.1181	4	0.1575	0.15	0.0059	693	693ZZ	2RS	—	—	559	179	70 000	82 000			
4	0.1575	9	0.3543	2.5	0.0984	—	—	0.20	0.0079	MR93	—	—	—	—	—	—	572	188	66 000	78 000	
		9	0.3543	—	—	4	0.1575	0.15	0.0059	—	MR93ZZ	—	—	—	—	—	—	572	188	66 000	78 000
		9	0.3543	3	0.1181	5	0.1969	0.15	0.0059	603	603ZZ	—	—	—	572	188	66 000	78 000			
		10	0.3937	4	0.1575	4	0.1575	0.15	0.0059	623 ⁽¹⁾	623ZZ	2RS	2RU	—	633	218	66 000	78 000			
		13	0.5118	5	0.1969	5	0.1969	0.20	0.0079	633 ⁽¹⁾	633ZZ	2RS	—	—	1 300	485	51 000	60 000			
		7	0.2756	2	0.0787	—	—	0.10	0.0039	MR74	—	—	—	—	312	115	70 000	82 000			
		7	0.2756	—	—	2.5	0.0984	0.10	0.0039	—	MR74ZZ	—	—	—	255	107	71 000	83 000			
		8	0.3150	2	0.0787	—	—	0.15	0.0059	MR84	—	—	—	—	395	140	67 000	79 000			
		8	0.3150	—	—	3	0.1181	0.10	0.0039	—	MR84ZZ	—	—	—	395	140	67 000	79 000			
		9	0.3543	2.5	0.0984	4	0.1575	0.10	0.0039	684	684ZZ	2RS	—	—	641	226	63 000	75 000			
5	0.1969	10	0.3937	3	0.1181	4	0.1575	0.20	0.0079	MR104	MR104ZZ	2RS	2RU	—	711	270	59 000	70 000			
		11	0.4331	4	0.1575	4	0.1575	0.15	0.0059	694 ⁽¹⁾	694ZZ	2RS	—	—	959	347	57 000	67 000			
		12	0.4724	4	0.1575	4	0.1575	0.20	0.0079	604 ⁽¹⁾	604ZZ	2RS	—	—	959	347	57 000	67 000			
		13	0.5118	5	0.1969	5	0.1969	0.20	0.0079	624 ⁽¹⁾	624ZZ	2RS	2RU	—	1 300	485	51 000	60 000			
		16	0.6299	5	0.1969	5	0.1969	0.30	0.0118	634 ⁽¹⁾	634ZZ	2RS	—	—	1 340	517	46 000	54 000			
		8	0.3150	2	0.0787	—	—	0.10	0.0039	MR85	—	—	—	—	309	121	62 000	74 000			
		8	0.3150	—	—	2.5	0.0984	0.10	0.0039	—	MR85ZZ	—	—	—	218	91	63 000	75 000			
		9	0.3543	2.5	0.0984	3	0.1181	0.15	0.0059	MR95	MR95ZZ	—	—	—	432	168	60 000	71 000			
5	0.1969	9	0.3543	—	—	3	0.1181	0.15	0.0059	—	—	—	—	TTS	432	168	47 000	47 000			
		10	0.3937	3	0.1181	4	0.1575	0.15	0.0059	MR105	MR105ZZ	2RS	—	—	432	168	60 000	71 000			
		11	0.4331	4	0.1575	4	0.1575	0.15	0.0059	MR115 ⁽¹⁾	MR115ZZ	2RS	—	—	716	283	54 000	64 000			
		11	0.4331	3	0.1181	5	0.1969	0.15	0.0059	685	685ZZ	2RS	—	—	716	283	54 000	64 000			
		13	0.5118	4	0.1575	4	0.1575	0.20	0.0079	695 ⁽¹⁾	695ZZ	2RS	—	—	1 080	430	50 000	59 000			
		14	0.5512	5	0.1969	5	0.1969	0.20	0.0079	605 ⁽¹⁾	605ZZ	2RS	—	—	1 330	507	48 000	56 000			

(1) Open bearings have shield/seal grooves.
 (2) Single-shielded/single-sealed bearings are also available; suffix Z, RS, RU or TS.
 (3) Applicable only for open, single Z, ZZ, single RU and 2RU types in inner ring rotating conditions.
 Limiting speeds for the contact rubber seal(s) types can be lower than the above-mentioned values, so please check the detailed values per item on "products" section of our website.
 (4) Some items are also available with the TW cage. Please contact us for details.

Cage type ⁽⁴⁾	Ball		Abutment and fillet dimensions								Mass (Ref.)		
			Open				Shielded, Sealed				r _{as} (max)	Open	2 Shields
	Size	Qty.	d _a (min)	d _a (max)	D _a (min)	D _a (max)	d _b (min)	d _b (max)	D _b (min)	D _b (max)			
	mm	pcs.	mm										
W	0.600	7	—	—	—	—	1.90	2.10	3.60	3.70	0.05	—	0.10
W	1.000	6	2.40	2.40	4.10	4.10	2.40	2.40	4.60	4.60	0.15	0.18	0.23
W	0.800	6	2.50	2.60	4.00	4.40	2.50	2.60	4.50	4.50	0.08	0.13	0.18
W	0.800	6	2.60	2.60	4.00	4.20	2.60	2.60	4.50	4.50	0.10	0.17	0.19
W	1.200	6	2.90	2.90	4.90	5.20	2.90	2.90	5.50	5.50	0.15	0.28	0.34
W	1.200	6	2.90	2.90	4.90	5.20	—	—	—	—	0.15	0.30	—
W	1.200	7	3.20	3.80	5.70	6.20	—	—	—	—	0.15	0.46	—
W	1.200	7	—	—	—	—	3.00	3.10	6.30	6.30	0.15	—	0.60
W	0.800	8	—	—	—	—	3.10	3.60	5.50	5.50	0.08	—	0.31
W	1.200	7	3.70	3.80	5.70	6.20	3.70	3.80	6.30	6.30	0.15	0.42	0.56
W	1.588	6	3.70	4.00	6.50	6.80	3.70	4.00	7.10	7.10	0.15	0.63	0.86
W	0.800	8	3.60	3.60	5.00	5.20	3.60	3.60	5.50	5.50	0.10	0.21	0.26
W	1.000	8	3.80	4.20	5.80	6.20	3.70	3.80	6.40	6.40	0.10	0.33	0.44
J	1.200	7	4.20	4.90	6.90	7.20	—	—	—	—	0.15	0.55	—
J	1.200	7	—	—	—	—	3.80	4.90	7.50	7.50	0.10	—	0.65
J	1.588	6	3.90	4.30	6.70	7.20	3.90	4.30	7.30	7.30	0.15	0.60	0.78
W	1.588	6	4.60	4.80	7.30	7.70	—	—	—	—	0.20	0.71	—
W	1.588	6	—	—	—	—	3.90	4.30	8.00	8.20	0.15	—	1.09
W	1.588	6	4.20	4.80	7.30	7.80	3.90	4.30	8.00	8.20	0.15	0.85	1.35
J	1.588	7	3.90	4.30	8.10	8.80	3.90	4.30	8.10	8.80	0.15	1.49	1.57
J	2.381	7	4.60	5.90	11.40	11.70	4.60	5.90	11.40	11.70	0.20	2.95	3.12
W	1.000	8	4.60	4.70	6.30	6.50	—	—	—	—	0.10	0.22	—
W	0.800	11	—	—	—	—	4.60	4.70	6.60	6.60	0.10	—	0.31
J	1.200	7	4.90	4.90	6.90	7.20	—	—	—	—	0.15	0.36	—
J	1.200	7	—	—	—	—	4.80	4.90	7.50	7.50	0.10	—	0.51
W	1.588	7	4.80	5.10	7.60	8.20	4.80	5.10	8.20	8.50	0.10	0.63	0.95
J	1.588	8	5.60	5.80	8.30	8.70	5.60	5.80	8.90	8.90	0.20	1.00	1.30
J	2.000	7	5.20	5.50	9.90	10.20	5.20	5.50	9.90	10.20	0.15	1.49	1.61
J	2.000	7	5.30	5.50	9.90	10.40	5.30	5.50	9.90	10.40	0.20	2.02	2.14
J	2.381	7	5.60	5.90	11.40	11.70	5.60	5.90	11.40	11.70	0.20	2.71	2.89
J	2.381	7	6.00	6.60	13.10	14.00	6.00	6.60	13.10	14.00	0.30	4.86	5.20
W	1.000	8	5.60	5.70	7.30	7.50	—	—	—	—	0.10	0.26	—
W	0.800	9	—	—	—	—	5.60	5.70	7.60	7.60	0.10	—	0.36
W	1.200	8	5.90	5.90	7.90	8.20	5.90	5.90	8.50	8.50	0.15	0.50	0.58
W	1.200	8	—	—	—	—	5.90	5.90	8.30	8.30	0.15	—	0.60
W	1.200	8	5.90	5.90	7.90	8.80	5.90	5.90	8.50	8.80	0.15	0.94	1.23
J	1.588	8	6.20	6.70	10.00	10.20	6.20	6.70	10.00	10.20	0.15	1.44	1.54
J	1.588	8	6.20	6.70	9.30	9.80	5.90	6.10	10.00	10.20	0.15	1.18	1.83
J	2.000	8	6.30	6.50	11.30	11.70	6.30	6.50	11.30	11.70	0.20	2.13	2.28
J	2.381	7	6.60	6.80	12.30	12.70	6.60	6.80	12.30	12.70	0.20	3.09	3.36

Extra-miniature/miniature/small bearings [SUJ2]



Dimension

Extra-miniature/miniature/small bearings [SUJ2]

Bore diameter d		Outer diameter D		Width				Chamfer r _s (min)		Bearing number					Load rating		Limiting speed ⁽³⁾	
				Open B		Shielded, Sealed B ₁				Open	2 Shields ⁽²⁾		2 Seals ⁽²⁾		Cr	Cor	Grease	Oil
				mm	inch	mm	inch				2RS	2RU	TTS	N				
5	0.1969	16	0.6299	5	0.1969	5	0.1969	0.30	0.0118	625 ⁽¹⁾	625ZZ	2RS	2RU	—	1 730	670	44 000	52 000
		19	0.7480	6	0.2362	6	0.2362	0.30	0.0118	635 ⁽¹⁾	635ZZ	2RS	—	—	2 340	889	38 000	45 000
6	0.2362	10	0.3937	2.5	0.0984	—	—	0.15	0.0059	MR106	—	—	—	—	497	219	54 000	64 000
		10	0.3937	—	—	3	0.1181	0.10	0.0039	—	MR106ZZ	—	—	—	497	218	55 000	64 000
		10	0.3937	3	0.1181	3	0.1181	0.10	0.0039	676 ⁽¹⁾	—	—	—	TTS	373	172	55 000	65 000
		12	0.4724	3	0.1181	4	0.1575	0.20	0.0079	MR126	MR126ZZ	2RS	—	—	716	293	50 000	59 000
		13	0.5118	3.5	0.1378	5	0.1969	0.15	0.0059	686	686ZZ	2RS	2RU	—	1 080	438	48 000	56 000
		15	0.5906	5	0.1969	5	0.1969	0.20	0.0079	696 ⁽¹⁾	696ZZ	2RS	2RU	—	1 340	517	46 000	54 000
		15	0.5906	—	—	5	0.1969	0.20	0.0079	—	—	—	—	TTS	1 340	517	38 000	38 000
		16	0.6299	5	0.1969	5	0.1969	0.20	0.0079	696A ⁽¹⁾	696AZZ	2RS	2RU	—	1 340	517	46 000	54 000
		17	0.6693	6	0.2362	6	0.2362	0.30	0.0118	606 ⁽¹⁾	606ZZ	2RS	2RU	—	2 260	838	42 000	49 000
		19	0.7480	6	0.2362	6	0.2362	0.30	0.0118	626 ⁽¹⁾	626ZZ	2RS	2RU	—	2 340	889	38 000	45 000
		22	0.8661	7	0.2756	7	0.2756	0.30	0.0118	636 ⁽¹⁾	636ZZ	2RS	2RU	—	3 300	1 370	33 000	39 000
7	0.2756	11	0.4331	2.5	0.0984	3	0.1181	0.15	0.0059	MR117	MR117ZZS	—	—	—	456	201	50 000	59 000
		13	0.5118	3	0.1181	—	—	0.20	0.0079	MR137	—	—	—	—	541	276	45 000	53 000
		13	0.5118	—	—	4	0.1575	0.15	0.0059	—	MR137ZZ	—	—	—	541	276	45 000	53 000
		14	0.5512	3.5	0.1378	5	0.1969	0.15	0.0059	687	687ZZ	2RS	—	—	1 180	511	44 000	52 000
		17	0.6693	5	0.1969	5	0.1969	0.30	0.0118	697 ⁽¹⁾	697ZZ	2RS	—	—	1 610	716	40 000	47 000
		19	0.7480	6	0.2362	6	0.2362	0.30	0.0118	607 ⁽¹⁾	607ZZ	2RS	2RU	—	2 340	889	38 000	45 000
		22	0.8661	7	0.2756	7	0.2756	0.30	0.0118	627 ⁽¹⁾	627ZZ	2RS	2RU	—	3 300	1 370	33 000	39 000
		26	1.0236	9	0.3543	9	0.3543	0.30	0.0118	637 ⁽¹⁾	637ZZ	2RS	—	—	4 580	1 970	28 000	33 000
8	0.3150	12	0.4724	2.5	0.0984	—	—	0.15	0.0059	MR128	—	—	—	—	544	275	46 000	54 000
		12	0.4724	—	—	3.5	0.1378	0.10	0.0039	—	MR128ZZ	2RS	—	—	545	274	46 000	54 000
		12	0.4724	—	—	3.5	0.1378	0.10	0.0039	—	—	—	—	TTS	544	275	31 000	31 000
		14	0.5512	3.5	0.1378	—	—	0.20	0.0079	MR148	—	—	—	—	818	386	42 000	50 000
		14	0.5512	—	—	4	0.1575	0.15	0.0059	—	MR148ZZ	2RS	—	—	818	386	42 000	50 000
		16	0.6299	4	0.1575	5	0.1969	0.20	0.0079	688	688ZZ	2RS	2RU	—	1 260	590	40 000	47 000
		19	0.7480	6	0.2362	6	0.2362	0.30	0.0118	698 ⁽¹⁾	698ZZ	2RS	2RU	—	2 240	912	37 000	44 000
		22	0.8661	7	0.2756	7	0.2756	0.30	0.0118	608 ⁽¹⁾	608ZZ	2RS	2RU	—	3 300	1 370	33 000	39 000
		24	0.9449	8	0.315	8	0.315	0.30	0.0118	628 ⁽¹⁾	628ZZ	2RS	2RU	—	3 330	1 410	31 000	37 000
		28	1.1024	9	0.3543	9	0.3543	0.30	0.0118	638 ⁽¹⁾	638ZZ	2RS	2RU	—	4 580	1 970	28 000	33 000
9	0.3543	14	0.5512	3	0.1181	—	—	0.10	0.0039	679	—	—	—	—	919	467	41 000	48 000
		14	0.5512	—	—	4.5	0.1772	0.10	0.0039	—	679ZZS	—	—	—	919	467	41 000	48 000
		17	0.6693	4	0.1575	5	0.1969	0.20	0.0079	689	689ZZ	2RS	—	—	1 330	664	37 000	44 000
		20	0.7874	6	0.2362	6	0.2362	0.30	0.0118	699 ⁽¹⁾	699ZZ	2RS	2RU	—	2 470	1 070	35 000	42 000
		24	0.9449	7	0.2756	7	0.2756	0.30	0.0118	609 ⁽¹⁾	609ZZ	2RS	2RU	—	3 350	1 430	30 000	36 000
		26	1.0236	8	0.315	8	0.315	0.60	0.0236	629 ⁽¹⁾	629ZZ	2RS	2RU	—	4 580	1 970	28 000	33 000
		30	1.1811	10	0.3937	10	0.3937	0.60	0.0236	639 ⁽¹⁾	639ZZ	2RS	—	—	5 110	2 390	25 000	30 000

(1) Open bearings have shield/seal grooves.
 (2) Single-shielded/single-sealed bearings are also available; suffix Z, RS, RU or TS.
 (3) Applicable only for open, single Z, ZZ, single RU and 2RU types in inner ring rotating conditions.
 Limiting speeds for the contact rubber seal(s) types can be lower than the above-mentioned values, so please check the detailed values per item on "products" section of our website.
 (4) Some items are also available with the TW cage. Please contact us for details.

Cage type ⁽⁴⁾	Ball		Abutment and fillet dimensions								Mass (Ref.)		
	Size	Qty.	Open				Shielded, Sealed				r _{as} (max)	Open	2 Shields
			d _a (min)	d _a (max)	D _a (min)	D _a (max)	d _b (min)	d _b (max)	D _b (min)	D _b (max)			
	mm	pcs.	mm								mm	g	
J	2.778	7	7.00	7.40	13.90	14.40	7.00	7.40	13.90	14.40	0.30	4.30	4.53
J	3.500	6	7.00	8.40	16.60	17.00	7.00	8.40	16.60	17.00	0.30	7.57	8.11
W	1.200	10	6.90	6.90	9.00	9.20	—	—	—	—	0.15	0.58	—
W	1.200	10	—	—	—	—	6.80	6.90	9.40	9.40	0.10	—	0.71
W	1.000	11	6.80	7.00	8.90	9.20	6.80	7.00	8.90	9.20	0.10	0.73	0.76
J	1.588	8	7.30	7.60	10.30	10.70	7.10	7.10	11.00	11.00	0.20	1.23	1.57
J	2.000	8	7.20	7.90	11.10	11.80	7.20	7.30	11.80	12.20	0.15	1.85	2.50
J	2.381	7	7.30	7.40	13.10	13.40	7.30	7.40	13.10	13.40	0.20	3.52	3.82
J	2.381	7	—	—	—	—	7.30	7.40	12.90	13.40	0.20	—	3.76
J	2.381	7	7.30	7.40	13.10	14.40	7.30	7.40	13.10	14.40	0.20	4.46	4.76
J	3.500	6	7.70	8.10	14.90	15.40	7.70	8.10	14.90	15.40	0.30	5.43	5.94
J	3.500	6	8.00	8.40	16.60	17.00	8.00	8.40	16.60	17.00	0.30	7.18	7.70
J	3.969	7	8.00	10.40	19.10	20.00	8.00	10.40	19.10	20.00	0.30	12.2	12.8
W	1.200	9	7.90	7.90	10.10	10.10	7.90	7.90	10.40	10.40	0.15	0.61	0.75
W	1.200	12	8.60	9.30	11.20	11.40	—	—	—	—	0.20	1.55	—
W	1.200	12	—	—	—	—	8.20	8.90	11.80	12.20	0.15	—	2.00
J	2.000	9	8.20	8.90	12.10	12.80	8.20	8.40	12.80	13.20	0.15	2.04	2.77
J	2.381	9	8.70	9.10	14.40	15.00	8.70	9.10	14.40	15.00	0.30	4.81	5.03
J	3.500	6	8.70	8.90	16.60	17.00	8.70	8.90	16.60	17.00	0.30	6.76	7.26
J	3.969	7	9.00	10.40	19.10	20.00	9.00	10.40	19.10	20.00	0.30	11.6	12.2
J	4.762	7	9.00	13.80	22.50	24.00	9.00	13.80	22.50	24.00	0.30	22.1	23.2
W	1.200	12	9.00	9.00	11.00	11.20	—	—	—	—	0.15	0.71	—
W	1.200	12	—	—	—	—	8.60	8.90	11.40	11.40	0.10	—	1.01
W	1.200	12	—	—	—	—	8.80	9.00	11.40	11.40	0.10	—	0.95
J	1.588	10	9.60	9.80	12.30	12.70	—	—	—	—	0.20	1.80	—
J	1.588	10	—	—	—	—	8.90	9.20	12.90	13.20	0.15	—	2.00
J	2.000	10	9.60	10.40	13.60	14.40	9.50	9.60	14.30	14.70	0.20	3.16	3.79
J	3.175	7	9.70	9.70	16.80	17.00	9.70	9.70	16.80	17.00	0.30	6.21	6.72
J	3.969	7	10.00	10.40	19.10	20.00	10.00	10.40	19.10	20.00	0.30	11.0	11.6
J	3.969	7	10.00	11.80	20.00	22.00	10.00	11.80	20.00	22.00	0.30	16.5	17.2
J	4.762	7	10.00	13.80	22.50	26.00	10.00	13.80	22.50	26.00	0.30	27.2	28.3
J	1.588	12	9.80	10.30	12.70	13.20	—	—	—	—	0.10	1.29	—
W	1.588	12	—	—	—	—	9.80	10.20	13.30	13.50	0.10	—	1.84
J	2.000	11	10.60	11.40	14.60	15.40	10.30	10.60	15.30	15.70	0.20	3.43	4.12
J	3.175	8	11.00	11.50	17.50	18.00	11.00	11.50	17.50	18.00	0.30	7.09	7.59
J	3.969	7	11.00	12.00	20.60	22.00	11.00	12.00	20.60	22.00	0.30	13.3	14.0
J	4.762	7	13.00	13.80	22.50	22.60	13.00	13.80	22.50	22.60	0.60	17.8	18.9
RJ	4.762	8	13.00	15.20	25.40	26.00	13.00	15.20	25.40	26.00	0.60	33.3	34.8