



BICYCLE BEARINGS

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**RIDE TO THE
NEXT LEVEL**

ISK
BEARINGS

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JOTA BEARING

WELCOME TO ISK BEARINGS

ISK's parent company, JOTA Group, founded in Taiwan in 1991, is a leading bearing supplier dedicated to offering professional bearing solutions. With over 30 years of industry experience, we provide the most suitable bearings for both international corporations and individual businesses, and have become one of the most reliable bearing company, aiming to help our clients reduce trial and error costs and increase production efficiency.

Manufacturing

As bearing manufacturers, we have established an IATF 16949-certified factory to ensure the highest quality of our products, which comply with RoHS, REACH, and SGS standards.

Product Advantages

We offer a comprehensive range of miniature, deep groove, full ceramic, and hybrid ceramic bearings, all expertly designed to deliver superior performance. Whether you are a competitive cyclist or a leisure rider, our bearings are available in various ABEC tolerances, radial plays, retainer styles, and seal/shield configurations to suit different needs.



BEARING MATERIALS

Inner and outer rings/Ball/Cage	Load capacity	Limiting speed	Anti-corrosion	Long-time working temp.	Used costs
ZrO ₂ /ZrO ₂ /PA	★★★★★	★★★★★	★★	90°C	★★★★★
ZrO ₂ /ZrO ₂ /PTFE	★★★★★	★★★★★	★★★★★	180°C	★★★★★
ZrO ₂ /ZrO ₂ /PEEK	★★★★★	★★★★★	★★★★★	260°C	★★★★★
ZrO ₂ /ZrO ₂ /PI	★★★★★	★★★★★	★★★★★	300°C	★★★★★
ZrO ₂ /ZrO ₂ /Full Balls(no cage)	★★★★★	★★★★★	★★★★★	400°C	★★★★★
Si ₃ N ₄ /Si ₃ N ₄ /PTFE	★★★★★	★★★★★	★★★★★	180°C	★★★★★
Si ₃ N ₄ /Si ₃ N ₄ /PEEK	★★★★★	★★★★★	★★★★★	260°C	★★★★★
Si ₃ N ₄ /Si ₃ N ₄ /PA	★★★★★	★★★★★	★★	90°C	★★★★★
Si ₃ N ₄ /Si ₃ N ₄ /Full Balls(no cage)	★★★★★	★★★★★	★★★★★	1100°C	★★★★★
Si ₃ N ₄ /Si ₃ N ₄ /PI	★★★★★	★★★★★	★★★★★	300°C	★★★★★



Inner and outer rings/Ball/Cage	Load capacity	Limiting speed	Anti-corrosion	Long-time working temp.	Used costs
440C/440C/304	★★★★★ ★★	★★★★★ ★★	★	180°C	★
316/316/316	★★★★★	★★★★★	★★★★	180°C	★★
304/304/304	★★★★★	★★★★★	★★	180°C	★★
316L/316L/316L	★★★★★	★★★★★	★★★★	180°C	★★
440C/ZrO2/304	★★★★★ ★	★★★★★ ★★	★	180°C	★★★★
440C/Si3N4/304	★★★★★ ★★	★★★★★ ★★	★	180°C	★★★★★
316/ZrO2/PTFE	★★★★★	★★★★★	★★★★	180°C	★★★★★
316/Si3N4/316	★★★★★	★★★★★	★★★★	180°C	★★★★★ ★
GCr15/GCr15/08F	★★★★★ ★★	★★★★★ ★★	★	120°C	★
GCr15/ZrO2/08F	★★★★★ ★	★★★★★ ★★	★	120°C	★

- (1) The white material is ZrO₂, also known as Zirconia.
- (2) The black material is Si₃N₄, also known as Silicon Nitride.
- (3) In the table, PA, PTFE, PEEK, and PI are all plastic materials.
- (4) In the table, 304, 316, 316L, and 440C are all stainless steel materials.
- (5) The material Chrome steel is also known as GCr15, AISI 52100, and JIS SUJ2.
- (6) 08F is a grade of rimmed steel in the category of stamping steel.
It is also commonly referred to as SPCC or CR1.

HEADSET BEARINGS

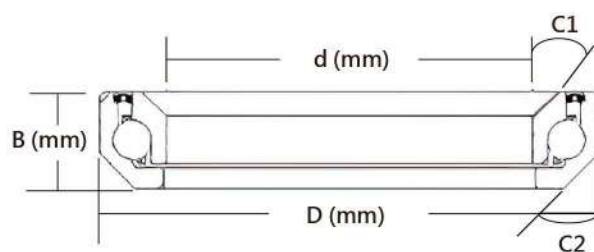
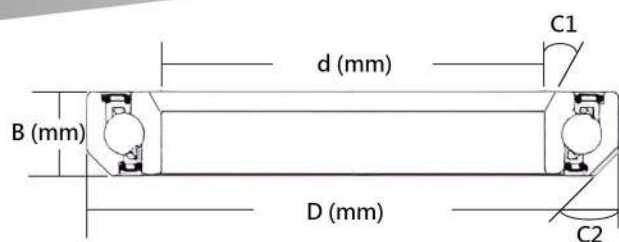


Application of Headset Bearings



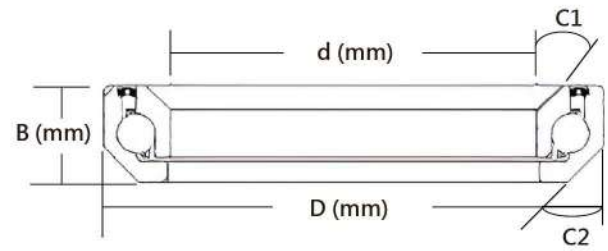
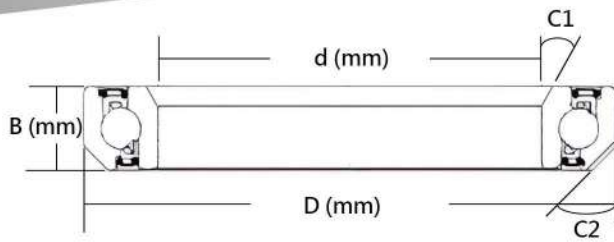
Bike headset bearings are primarily used between the bicycle fork and the head tube. They play a crucial role in supporting and enabling the steering motion of the bicycle. Headset bearings allow the bicycle to have agile steering and maneuverability, providing smooth and reliable steering performance.

HEADSET BEARINGS



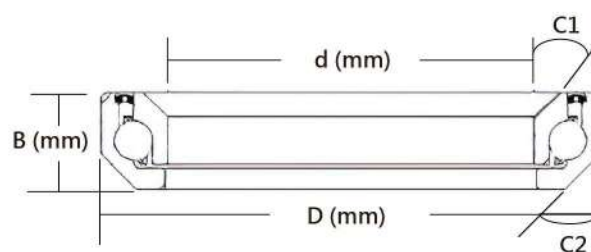
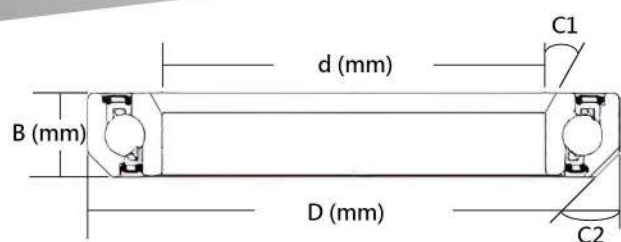
Bearing No.	Bore(d) (mm)	Outer(D) (mm)	Width(B) (mm)	Angle(C1)	Angle(C2)	Weight (g)
ACB2738H6.5-36/45	27.15	38	6.5	36°	45°	18.2
ACB2738H6.3-45/45	27.15	38	6.3	45°	45°	19
ACB3044H8-45/45	30.05	44	8	45°	45°	31.5
ACB3039H6.5-45/45	30.15	39	6.5	45°	45°	15.7
ACB3041H6.3-45/45	30.15	41	6.3	45°	45°	19
ACB3041H6.5-45/45	30.15	41	6.5	45°	45°	19.2
ACB3041H6.5-36/45	30.15	41	6.5	36°	45°	19.6
ACB3041H7-45/45	30.15	41	7	45°	45°	20.2
ACB3041H7.7-36/45	30.15	41	7.7	36°	45°	21.4
ACB30415H6.5-36/36	30.15	41.5	6.5	36°	36°	19.8
ACB30418H8-45/45	30.15	41.8	8	45°	45°	21
ACB30418H6.5-45/45	30.15	41.8	6.5	45°	45°	21.8
ACB30418H7-45/45	30.15	41.8	7	45°	45°	22.6
ACB30418H6.3-45/45	30.15	41.8	6.3	45°	45°	23
ACB30418H7-36/45	30.15	41.8	7	36°	45°	23.5
ACB3042H7-36/36	30.15	42	7	36°	36°	-
ACB3042H7-36/45	30.15	42	7	36°	45°	-
ACB302418H6.3-45/45	30.2	41.8	6.3	45°	45°	21.3
ACB30243H7.2-45/45	30.2	43	7.2	45°	45°	23.2
ACB30244H7-45/45	30.2	44.7	7	45°	45°	32.2
ACB302448H7.9-45/45	30.2	44.8	7.9	45°	45°	33.4
ACB305418H7.7-45/45	30.5	41.8	7.7	45°	45°	22.4
ACB305418H8-45/45	30.5	41.8	8	45°	45°	23

HEADSET BEARINGS



Bearing No.	Bore(d) (mm)	Outer(D) (mm)	Width(B) (mm)	Angle(C1)	Angle(C2)	Weight (g)
ACB305418H6.3-45/45	30.5	41.8	6.3	45°	45°	-
ACB307418H7.7-45/45	30.7	41.8	7.7	45°	45°	-
ACB3144H6.3-45/45	31.4	44	6.3	45°	45°	30.2
ACB31448H6.3-45/45	31.4	44.8	6.3	45°	45°	32.6
ACB32438H7-45/45	32.4	43.8	7	45°	45°	23
ACB32418H6-45/45	32.8	41.8	6	45°	45°	16
ACB3344H6-36/45	33	44	6	36°	45°	21
ACB33438H7-30/45	33.05	43.8	7	30°	45°	23.8
ACB3345H7-45/45	33.5	45	7	45°	45°	26.2
ACB3446H7-45/45	34.1	46	7	45°	45°	25
ACB34468H7-45/45	34.1	46.8	7	45°	45°	27.7
ACB34469H7-45/45	34.1	46.9	7	45°	45°	28
ACB3544H5-90/90	35	44	5	90°	90°	16
ACB3544H5.5-36/45	35	44	5.5	36°	45°	32
ACB354535H7.3-45/45	35	45.35	7.3	45°	45°	22.3
ACB3547H8-45/45	35	47	8	45°	45°	29.9
ACB36458H6.5-45/45	36.8	45.8	6.5	45°	45°	18.9
ACB3748H7-45/45	37	48	7	45°	45°	27
ACB37489H6.5-36/45	37	48.9	6.5	36°	45°	25.9
ACB3749H6.5-36/45	37	49	6.5	36°	45°	25.25
ACB3749H7-36/45	37	49	7	36°	45°	28.1
ACB3749H7-45/45	37	49	7	45°	45°	28.8
ACB40508H7-45/90	40	50.8	7	45°	90°	26.8

HEADSET BEARINGS



Bearing No.	Bore(d) (mm)	Outer(D) (mm)	Width(B) (mm)	Angle(C1)	Angle(C2)	Weight (g)
ACB4051H6.5-36/36	40	51	6.5	36°	36°	24.8
ACB4051H8-36/45	40	51	8	36°	45°	29.3
ACB4051H7-45/45	40	51	7	45°	45°	-
ACB40515H7-45/45	40	51.5	7	45°	45°	-
ACB40518H7-45/45	40	51.8	7	45°	45°	30.8
ACB40518H8-36/45	40	51.8	8	36°	45°	32.6
ACB40518H7.5-36/45	40	51.8	7.5	36°	45°	33
ACB40518H8-45/45	40	51.8	8	45°	45°	33.1
ACB40518H8-90/90	40	51.8	8	90°	90°	-
ACB40519H7-45/45	40	51.9	7	45°	45°	29.6
ACB40519H8-45/45	40	51.9	8	45°	45°	32.6
ACB4052H6.5-36/45	40	52	6.5	36°	45°	29.2
ACB4052H7-90/90	40	52	7	90°	90°	30.9
ACB4052H7-45/45	40	52	7	45°	45°	31.5
ACB4052H7-36/45	40	52	7	36°	45°	31.8
ACB4052H7.5-45/45	40	52	7.5	45°	45°	34.2
ACB4052H8-45/45	40	52	8	45°	45°	36
ACB40495H6.5-45/45	40.5	49.5	6.5	45°	45°	21.4
ACB4660H8-45/45	46	60	8	45°	45°	-
ACB50619H8-36/45	50	61.9	8	36°	45°	-

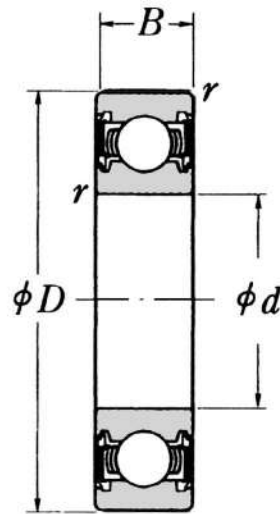
HUB BEARINGS



Application of Hub Bearings



Hub bearings are housed within the bicycle's front and rear hubs, enabling the wheels to spin freely and efficiently. These bearings are essential for reducing rolling resistance, optimizing the bicycle's speed, and overall performance.



Bearing No.	Bore(d) (mm)	Outer(D) (mm)	Width(B) (mm)	Dynamic (kgf)	Static (kgf)	RPM (Grease)	RPM (Oil)	Weight (g)
6800-2RS	10	19	5	175	86	37000	43000	5
6900-2RS	10	22	6	275	130	34000	41000	10
6000-2RS	10	26	8	465	200	18000	36000	19
6801-2RS	12	21	5	195	105	33000	39000	6
6901-2RS	12	24	6	295	150	31000	36000	11
12267-2RS	12	26	7	305	158	26000	31000	15.1
6001-2RS	12	28	8	520	245	16000	32000	22
6802-2RS	15	24	5	210	130	28000	33000	7
15267-2RS	15	26	7	312	169	24000	28000	12.4
6902-2RS	15	28	7	440	230	26000	30000	17
6803-2RS	17	26	5	265	160	26000	30000	8
17287-2RS	17	28	7	273	190	24000	28000	13.1
6903-2RS	17	30	7	470	260	23000	28000	18
6804-2RS	20	32	7	410	250	21000	25000	18
6805-2RS	25	37	7	440	300	18000	21000	22

BOTTOM BRACKET BEARINGS

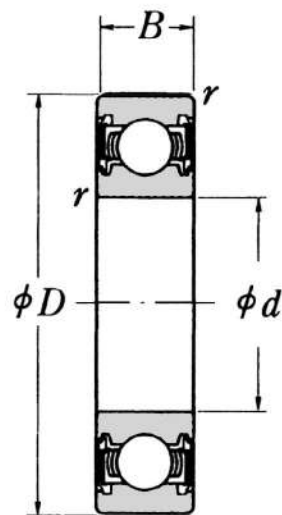


Application of Bottom Bracket Bearings



Located at the bottom bracket shell, the bottom bracket bearings facilitate smooth rotation of the crankset within the frame. These bearings play a pivotal role in the rider's pedaling efficiency, ensuring that energy is effectively transferred from the pedals to the drivetrain.

BOTTOM BRACKET BEARINGS



Bearing No.	Bore(d) (mm)	Outer(D) (mm)	Width(B) (mm)	Dynamic (kgf)	Static (kgf)	RPM (Grease)	RPM (Oil)	Weight (g)
163110-2RS	16	31	10	489	230	16000	19000	25.8
173110-2RS	16	31	10	463	213	16000	19000	25.4
19317-2RS	19	31	7	344	208	15000	18000	22.6
19379-2RS	19	37	9	450	225	15000	18000	36.7
22379-2RS	22	37	9	450	225	15000	18000	32
R12-2RS	19.05	41.275	11.113	480	245	14000	17000	61.2
R12-2RS/22	22	41.275	11.113	480	245	14000	17000	54
215317-2RS	21.5	31	7	266	177	15000	18000	14
24377-2RS	24	37	7	391	284	15000	18000	19
24378-2RS	24	37	8	391	284	15000	18000	23.2
6805-2RS	25	37	7	440	300	18000	21000	22
6806-2RS	30	42	7	355	285	15000	18000	26

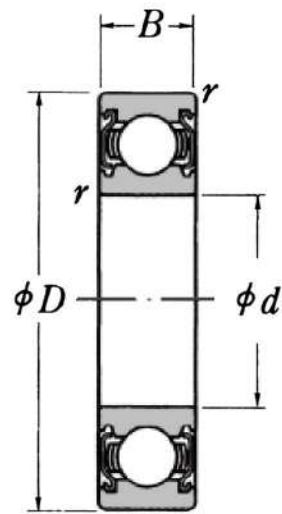
PEDAL BEARINGS



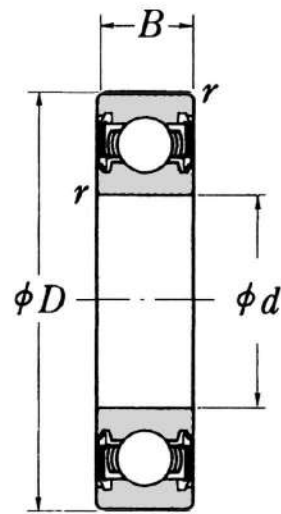
Application of Pedal Bearings



Pedal bearings are integral to the smooth rotation of the pedals around the crank spindle. As the rider's feet exert force on the pedals, these bearings ensure efficient power transfer to the drivetrain.



ZZ



2RS

Bearing No.	Bore(d) (mm)	Outer(D) (mm)	Width(B) (mm)	Dynamic (kgf)	Static (kgf)	RPM (Grease)	RPM (Oil)	Weight (g)
685ZZ	5	11	5	73	28	45000	53000	1.96
695ZZ	5	13	4	109	44	43000	50000	2.39
MR106-2RS	6	10	2.5	50	22	45000	53000	0.68
MR126ZZ	6	12	3	73	30	43000	50000	0.87
686ZZ	6	13	3.5	110	45	40000	50000	2.53
696ZZ	6	15	5	136	53	40000	45000	2.86

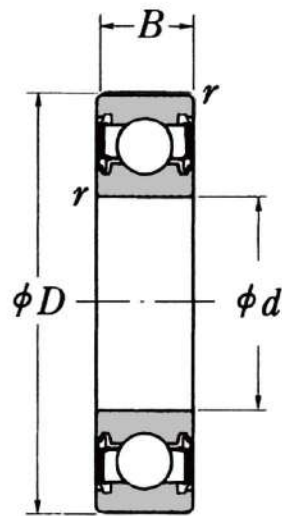
FRAMES BEARINGS



Application of Frames Bearings



Some bicycles, particularly full-suspension mountain bikes and high-end road bikes, employ frame bearings at pivot points. These bearings allow the suspension linkages or rear triangles to move smoothly, providing enhanced comfort and traction over rough terrains.



Bearing No.	Bore(d) (mm)	Outer(D) (mm)	Width(B) (mm)	Dynamic (kgf)	Static (kgf)	Weight (g)
688-2RS	8	16	5	1630	1130	3.8
698-2RS	8	19	6	2880	1720	7.1
608-2RS	8	22	7	4010	2140	10.3
689-2RS	9	17	5	2080	1380	4.6
699-2RS	9	20	6	3050	1910	7.7
6800-2RS	10	19	5	2150	1510	5
6900-2RS	10	22	6	3210	2120	9.2
6801-2RS	12	21	5	2350	1830	6.1
6901-2RS	12	24	6	3480	2490	6
6001-2RS	12	28	8	6370	3620	19.6
6802-2RS	15	24	5	2580	2240	6.8
6902-2RS	15	28	7	5010	3600	15.8
6803-2RS	17	26	5	2740	2550	8.2
6903-2RS	17	30	7	5400	4170	17.2
6804-2RS	20	32	7	4340	3990	17.9
6904-2RS	20	37	9	7490	6030	37.5
6805-2RS	25	37	7	4730	4780	21.7
6905-2RS	25	42	9	8180	7310	43.8
6806-2RS	30	42	7	5080	5810	25.8
6807-2RS	35	47	7	5380	6550	29.3
6808-2RS	40	52	7	5670	7290	32.4

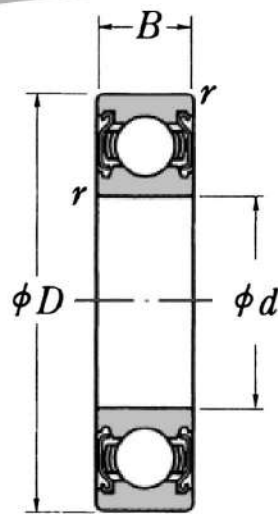
DERAILLEUR BEARINGS



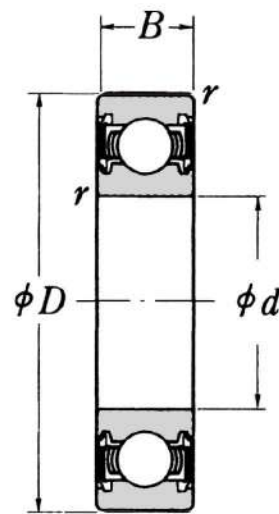
Application of Derailleur Bearings



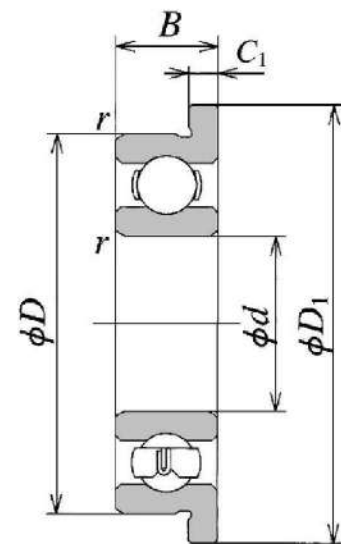
Derailleur bearings are found in the pulleys of the bike's derailleur system. They facilitate smooth movement of the chain during gear shifts, reducing friction and ensuring precise and quick gear changes.



ZZ



2RS



OPEN

Bearing No.	Bore(d) (mm)	Outer(D) (mm)	Width(B) (mm)	Dynamic (kgf)	Static (kgf)	RPM (Grease)	RPM (Oil)	Weight (g)
613ZZ	3	6	2	25	9.5	60000	71000	0.26
615ZZ	5	8	2	22	9.5	49000	57000	0.4
696ZZ	6	15	5	136	53	40000	45000	2.86
606ZZ	6	6	6	230	85	38000	45000	5.84
F1060 OPEN	6	10	2.5	47	20	43000	51000	0.74
MR137ZZ	7	13	4	541	276	40000	48000	1.23
MR147ZZ	7	14	5	1173	513	40000	50000	2.33
687ZZ	7	15	5	1605	719	36000	43000	2.78
697ZZ	7	17	5	1605	719	36000	43000	5.05
607-2RS	7	19	6	228	93	36000	43000	7.51
MR128ZZ	8	12	3.5	543	274	40000	48000	1.12
MR148ZZ	8	14	4	817	386	38000	45000	2.03
688ZZ	8	16	5	164	72	36000	43000	3.32
608-2RS	8	22	7	336	142	32000	37000	11.8

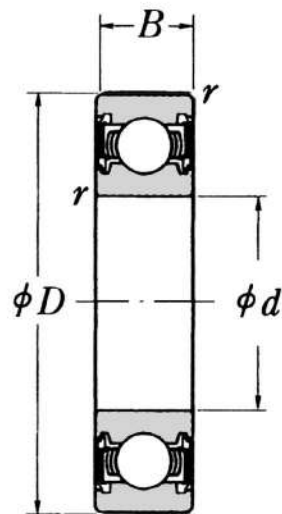
MOTOR BEARINGS



Application of Motor Bearings



In electric bicycles, the motor bearings are central to the motor's internal components' smooth rotation. These bearings ensure the electric motor operates efficiently, delivering seamless power assistance to the rider's pedaling efforts.



Bearing No.	Bore(d) (mm)	Outer(D) (mm)	Width(B) (mm)	Dynamic (kgf)	Static (kgf)	RPM (Grease)	RPM (Oil)	Weight (g)
608-2RS	8	22	7	336	142	32000	37000	11.8
6802-2RS	15	24	5	163	107	28000	33000	7
6804-2RS	20	32	7	273	191	21000	25000	18
6806-2RS	30	42	7	355	285	15000	18000	26
6708-2RS	40	50	6	257	228	8500	15000	23
6810-2RS	50	65	7	515	525	9500	11000	52
6816-2RS	80	100	10	990	1160	6000	7100	150

ISK

BEARINGS

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Bottom Bracket Bearings / Hub Bearings
Pedal Bearings / Headset Bearings
Derailleur Bearings / Frames Bearings
Motor Bearings

