



Usable in extremely corrosive environment, by using ceramics for inner and outer rings, balls, and fluorine resin for retainer.

Features

Completely nonmagnetic, by using ceramics; Usable without grease, even in environment where greases can not be used, by using fluorine resin for retainer

Standard Specifications

Inner and Outer Rings	Zirconia Ceramic (ZrO ₂)
Balls	Silicon Nitride Ceramic (Si ₃ N ₄)
Retainer	Fluorine Resin

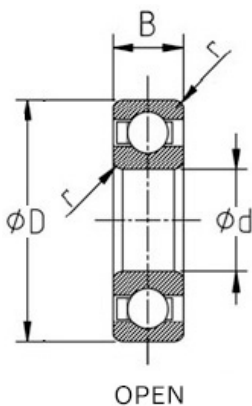
Applications

Seawater-related equipment, metal plating machine, electronic device, equipment used in low temperature, etching equipment,

Reminder:

Ceramics are extremely brittle to impact of dropping and others. Please handle with care.

Fit is class H tolerance range.



Bearing No.	d	D	B	r (min)	Allowable Radial Load	Allowable Rotation
	mm	mm	mm	mm	N	min ⁻¹
2C 6000 CB CN3 2C 6200 CB CN3	10	26	8	0.3	290	3150
	10	30	9	0.6	325	2760
2C 6001 CB CN3 2C 6201 CB CN3	12	28	8	0.3	325	2760
	12	32	10	0.6	430	2570
2C 6002 CB CN3 2C 6202 CB CN3	15	32	9	0.3	355	2410
	15	35	11	0.6	485	2220
2C 6003 CB CN3 2C 6203 CB CN3	17	35	10	0.3	380	2180
	17	40	12	0.6	610	1950
2C 6004 CB CN3 2C 6204 CB CN3	20	42	12	0.6	600	1800
	20	47	14	1.0	815	1640
2C 6005 CB CN3 2C 6205 CB CN3	25	47	12	0.6	640	1570
	25	52	15	1.0	890	1450
2C 6006 CB CN3 2C 6206 CB CN3	30	55	13	1.0	840	1330
	30	62	16	1.0	1240	1210

Heat-resistant bearing, made of AISI 440C stainless steel with heat-resistant fluorine grease

Operating temperature is up to 482° F, except sealed type.

1. AISI 440C stainless steel has lower hardness decrease ratio and smaller dimension changes than SAE 52100 bearing steel in high temperature environment.
2. AISI 440C stainless steel is superior to SAE 52100 bearing steel in oxidation resistance in high temperature environment.
3. Filling heat-resistant fluorine grease enables lubrication in high temperature environment.

Product Specification

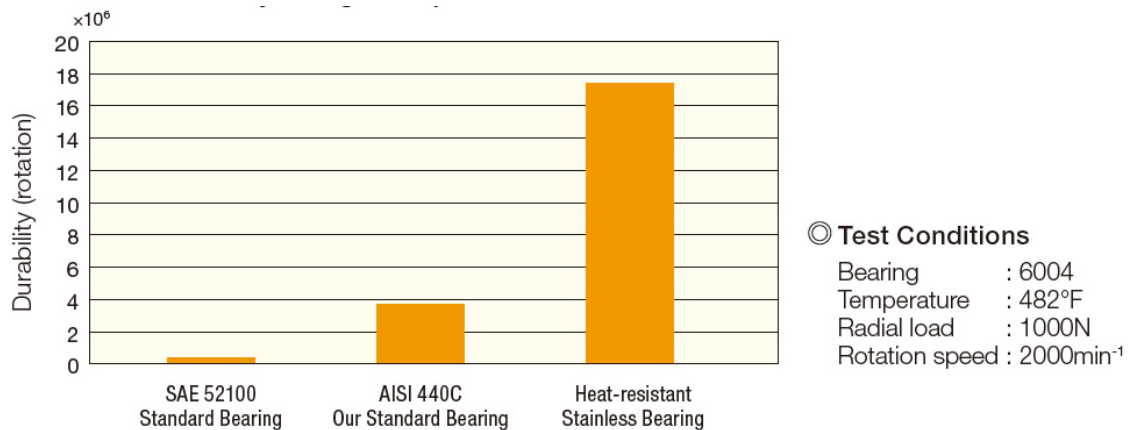
<i>Inner and Outer Rings</i>	<i>AISI 440C</i>
Balls	AISI 440C
Retainer	AISI 304
Shield	AISI 304
Seal	Fluorine rubber*1
Lubricant	Heat-resistant fluorine grease
Radial clearance*2	C4

*1 Sealed type available up to 392° F

Below special specifications are available besides standard specifications.

*2 Special clearance, such as C3 or C5.

Durability in high temperature environment



*The above performance values are our test results and are not guaranteed values.

Application

Device around furnace, oven, heater, drying equipment, vacuum apparatus and other high temperature area.

Heat-resistant Hybrid Bearings

Longer lifetime, by incorporating ceramic ball + Heat-resistant Stainless Bearings

Features

1. Operating temperature is up to 482° F, except sealed type
2. Hybrid type incorporating ceramic balls into outer and inner rings of AISI 440C stainless steel
3. Longer grease life, by lower heat generation with ceramic balls
4. Less running cost by longer lifetime

Items	Unit	Silicon nitride Si3N4	Stainless steel AISI 440C	Bearing steel SAE 52100	Superiority of ceramic ball
Density	g/cm3	3.2	7.8	7.8	Lowering centrifugal force of balls
Heat expansion coefficient	X10-6/°C	3.2	10.5	12.5	Small variation of internal clearance by temperature rise
	HV	1400	700	740	High rigidity against deformation
Hardness					
Young's modulus	GPa	320	200	210	Reducing friction by high rigidity
Heat resistance	°F	1472	752	356	Maintaining rigidity capacity in high temperature
Conductivity	—	No	Yes	Yes	Preventing electric corrosion

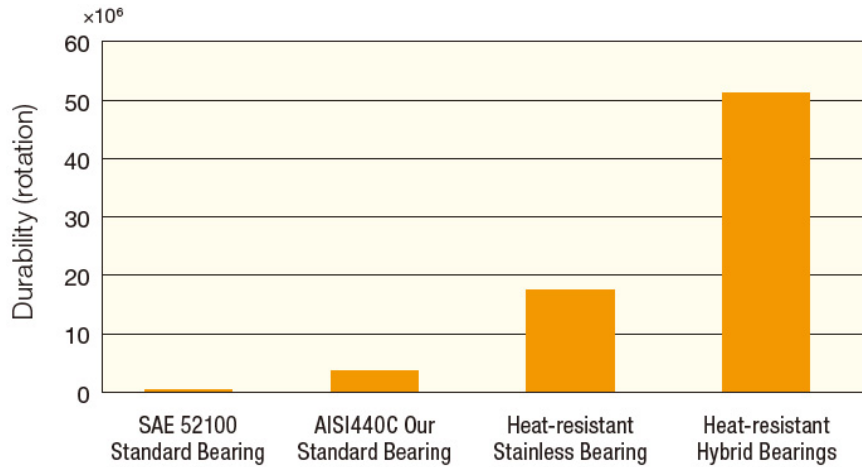
Product Specifications

Inner and Outer Rings	AISI 440C
Balls	Silicon nitride (Si3N4)
Retainer	AISI 304
Shield	AISI 304
Seal	Fluorine rubber*1
Lubricant	Heat-resistant fluorine grease
Radial clearance	C4

*1 Sealed type available up to 392° F

Performance

Durability in high temperature environment



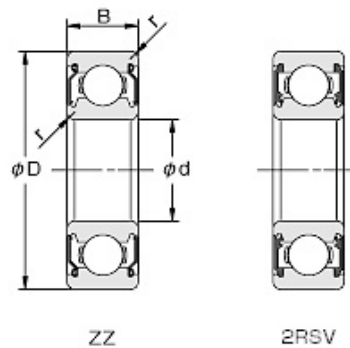
◎ Test Conditions

Bearing : 6004
 Temperature : 482°F
 Radial load : 1000N
 Rotation speed : 2000min⁻¹

* The above performance values are our test results and are not guaranteed values.

Reminder:

Under high temperature environment, radial internal clearance decreases due to difference of materials used for shaft, i.e. linear expansion coefficient, which may interfere with the rotation of the bearing. Please consider the thermal expansion sufficiently and select fitting and material of the shaft. Please contact us for further information.



Bearing No.	d	D	B	r(min)	Allowable radial load	Allowable rotation
	mm	mm	mm	mm	N	min ⁻¹
SS 6800	10	19	5	0.3	170	2000
SS 6900	10	22	6	0.3	215	2000
SS 6000	10	26	8	0.3	370	2000
SS 6200	10	30	9	0.6	410	2000
SS 6300	10	35	11	0.6	650	2000
SS 6801	12	21	5	0.3	155	2000
SS 6901	12	24	6	0.3	230	2000
SS 6001	12	28	8	0.3	410	2000
SS 6201	12	32	10	0.6	545	2000
SS 6301	12	37	12	1.0	775	2000

Bearing No.	d	D	B	r(min)	Allowable radial load	Allowable rotation
	mm	mm	mm	mm	N	min ⁻¹
SS 6802	15	24	5	0.3	165	2000
SS 6902	15	28	7	0.3	345	2000
SS 6002	15	32	9	0.3	450	2000
SS 6202	15	35	11	0.6	610	2000
SS 6302	15	42	13	1.0	910	2000
SS 6803	17	26	5	0.3	210	2000
SS 6903	17	30	7	0.3	370	2000
SS 6003	17	35	10	0.3	480	2000
SS 6203	17	40	12	0.6	770	2000
SS 6303	17	47	14	1.0	1090	1880
SS 6804	20	32	7	0.3	320	2000
SS 6904	20	37	9	0.3	510	2000
SS 6004	20	42	12	0.6	750	2000
SS 6204	20	47	14	1.0	1020	1750
SS 6304	20	52	15	1.1	1270	1750
SS 6805	25	37	7	0.3	345	2000
SS 6905	25	42	9	0.3	560	1880
SS 6005	25	47	12	0.6	810	1750
SS 6205	25	52	15	1.0	1120	1630
SS 6305	25	62	17	1.1	1650	1380
SS 6806	30	42	7	0.3	365	1750
SS 6906	30	47	9	0.3	580	1630
SS 6006	30	55	13	1.0	1060	1500
SS 6206	30	62	16	1.0	1560	1380
SS 6306	30	72	19	1.1	2140	1200
SS 6807	35	47	7	0.3	380	1500
SS 6907	35	55	10	0.6	830	1380
SS 6007	35	62	14	1.0	1280	1250
SS 6207	35	72	17	1.1	2060	1150
SS 6307	35	80	21	1.5	2660	1080
SS 6808	40	52	7	0.3	395	1380
SS 6908	40	62	12	0.6	1100	1230
SS 6008	40	68	15	1.0	1340	1150
SS 6208	40	80	18	1.1	2330	1040
SS 6308	40	90	23	1.5	3250	960
SS 6909	45	68	12	0.6	1130	1110
SS 6009	45	75	16	1.0	1680	1040
SS 6209	45	85	19	1.1	2620	960
SS 6309	45	100	25	1.5	4250	850
SS 6910	50	72	12	0.6	1160	1030
SS 6010	50	80	16	1.0	1740	950
SS 6210	50	90	20	1.1	2810	890
SS 6310	50	110	27	2.0	4950	760
SS 6911	55	80	13	1.0	1330	930
SS 6011	55	90	18	1.1	2260	860
SS 6211	55	100	21	1.5	3470	790
SS 6311	55	120	29	2.0	5750	500
SS 6912	60	85	13	1.0	1620	850
SS 6012	60	95	18	1.1	2350	810
SS 6212	60	110	22	1.5	4200	730

Ningbo Amol Machinery Co., Ltd.
Jiangsu Amol Bearing Co., Ltd.
Ningbo Amol Intl. Trade Co., Ltd.

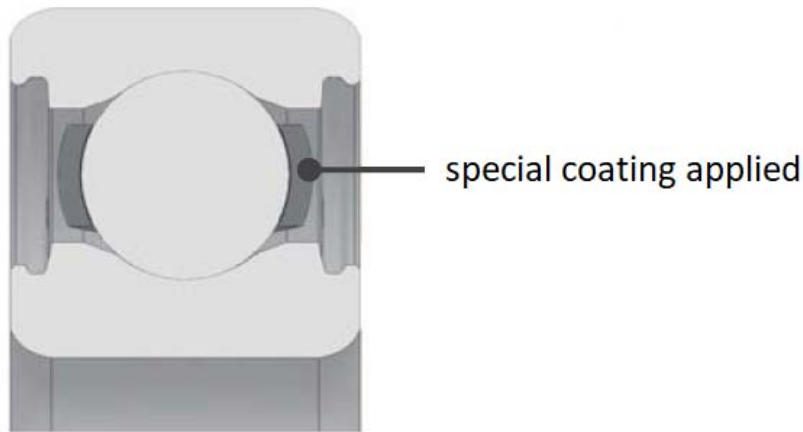


Suitable for environments in high temperature and a vacuum where the grease can not be used

Features

1. Operating temperature is up to 572° F, except sealed type
2. Smooth rotation by low torque, except 2RS type
3. Usable in environments where grease cannot be used, by special coating on retainer

Product Specifications



Standard Specifications

Inner and Outer Rings	AISI440C
Balls*1	AISI440C
Retainer	AISI304+Special Coating
Shield	AISI304
Seal*2	Nitrile rubber
Radial clearance	C4

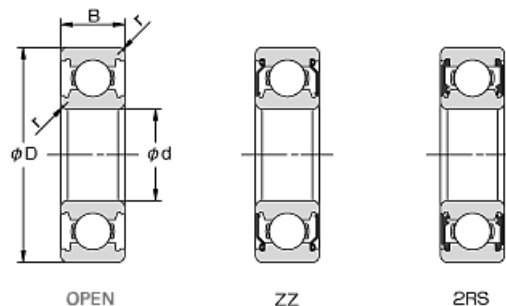
Below special specifications are available besides standard specifications.

*1 Silicon nitride (Si3N4)

*2 Fluorine rubber seal

Applications

Vacuum apparatus, LCD and semiconductor manufacturing equipment, film manufacturing equipment, other equipment used in high temperature



Bearing No.	d	D	B	r (min)	Allowable Radial Load	Allowable Rotation
	mm	mm	mm	mm	N	min ⁻¹
SS 6800 TC2	10	19	5	0.3	90	1090
SS 6900 TC2	10	22	6	0.3	115	980
SS 6000 TC2	10	26	8	0.3	195	880
SS 6200 TC2	10	30	9	0.6	215	770
SS 6300 TC2	10	35	11	0.6	345	700
SS 6801 TC2	12	21	5	0.3	80	950
SS 6901 TC2	12	24	6	0.3	125	880
SS 6001 TC2	12	28	8	0.3	215	770
SS 6201 TC2	12	32	10	0.6	290	720
SS 6301 TC2	12	37	12	1.0	415	640
SS 6802 TC2	15	24	5	0.3	90	810
SS 6902 TC2	15	28	7	0.3	185	730
SS 6002 TC2	15	32	9	0.3	240	670
SS 6202 TC2	15	35	11	0.6	325	620
SS 6302 TC2	15	42	13	1.0	485	530
SS 6803 TC2	17	26	5	0.3	110	730
SS 6903 TC2	17	30	7	0.3	195	670
SS 6003 TC2	17	35	10	0.3	255	610
SS 6203 TC2	17	40	12	0.6	410	540
SS 6303 TC2	17	47	14	1.0	580	480
SS 6804 TC2	20	32	7	0.3	170	620
SS 6904 TC2	20	37	9	0.3	275	550
SS 6004 TC2	20	42	12	0.6	400	500
SS 6204 TC2	20	47	14	1.0	545	460
SS 6304 TC2	20	52	15	1.1	675	440
SS 6805 TC2	25	37	7	0.3	185	520
SS 6905 TC2	25	42	9	0.3	300	460
SS 6005 TC2	25	47	12	0.6	430	440
SS 6205 TC2	25	52	15	1.0	595	400
SS 6305 TC2	25	62	17	1.1	880	350
SS 6806 TC2	30	42	7	0.3	195	440
SS 6906 TC2	30	47	9	0.3	310	410
SS 6006 TC2	30	55	13	1.0	560	370
SS 6206 TC2	30	62	16	1.0	830	340
SS 6306 TC2	30	72	19	1.1	1140	300
SS 6807 TC2	35	47	7	0.3	200	390
SS 6907 TC2	35	55	10	0.6	445	350
SS 6007 TC2	35	62	14	1.0	680	320
SS 6207 TC2	35	72	17	1.1	1090	290
SS 6307 TC2	35	80	21	1.5	1420	270
SS 6808 TC2	40	52	7	0.3	210	350
SS 6908 TC2	40	62	12	0.6	585	310
SS 6008 TC2	40	68	15	1.0	715	290
SS 6208 TC2	40	80	18	1.1	1240	260
SS 6308 TC2	40	90	23	1.5	1730	240
SS 6909 TC2	45	68	12	0.6	600	280
SS 6009 TC2	45	75	16	1.0	895	260
SS 6209 TC2	45	85	19	1.1	1390	240
SS 6309 TC2	45	100	25	1.5	2260	210
SS 6910 TC2	50	72	12	0.6	620	260
SS 6010 TC2	50	80	16	1.0	930	240
SS 6210 TC2	50	90	20	1.1	1500	220
SS 6310 TC2	50	110	27	2.0	2640	190
SS 6911 TC2	55	80	13	1.0	705	230
SS 6011 TC2	55	90	18	1.1	1210	220
SS 6211 TC2	55	100	21	1.5	1850	200
SS 6912 TC2	60	85	13	1.0	860	220
SS 6012 TC2	60	95	18	1.1	1250	200
SS 6212 TC2	60	110	22	1.5	2230	180