

TC Series Grease-Free Bearings

Bearing selection

Products Series

AISI 440C

AISI 304

AISI 630

Pure Titanium

Ceramic

Heat Resistance

Grease Free

Low Torque

Solid Grease

Set Screw

Alignment Function

Flange Unit

Guide Wheel

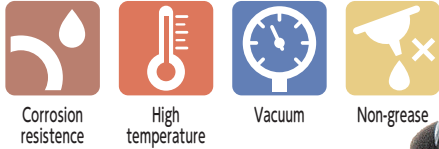
6800
6900

SS5200
5200

5800

Customization

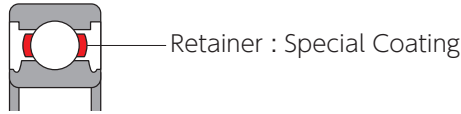
Examples of Use



The TC series is suitable for environments where the grease can not be used, such as a vacuum or high temperature application.

Features

1. Operating temperature is up to 300°C/572°F, except sealed type.
2. Smooth rotation by low torque, except 2RS type.
3. Usable in environments where grease can not be used, by special coating on retainer.



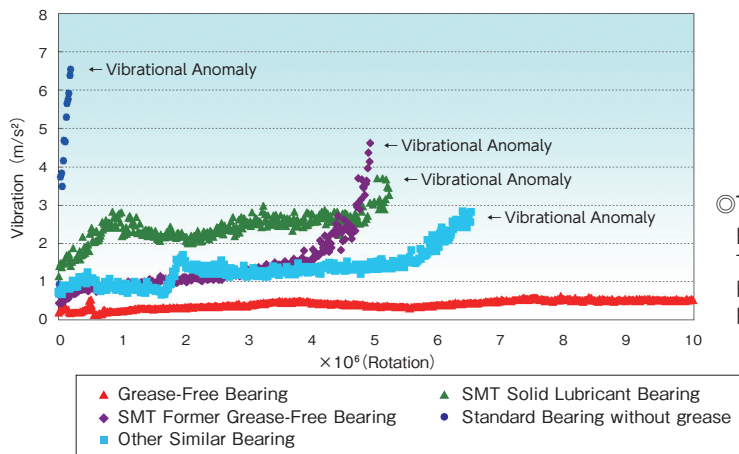
Product Specifications

Standard Specifications	
Inner and Outer Rings	AISI 440C
Balls*1	AISI 440C
Retainer	AISI 304 + Special coating
Shield	AISI 304
Seal*2	Nitrile rubber
Radial clearance	C4

The following special specifications are also available.

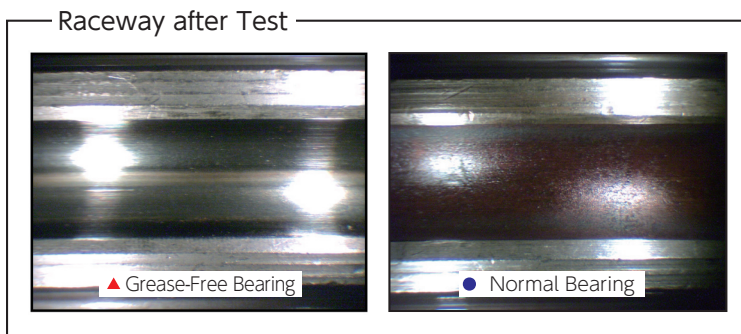
- *1 Ceramic balls (Silicon Nitride Si₃N₄)
- *2 Fluorine rubber seal

Performance



©Test Conditions

Bearing : 6004
 Temperature : 300°C/572°F
 Radial load : 400N
 Rotation : 500min⁻¹



Applications

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

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Composition of bearing number

SS 6300 ZZ C4 TC2

1

2

3

4

5

1 SS : Material AISI 440C

2 Basic number

3 Blank : Open

ZZ : Double steel plate shields

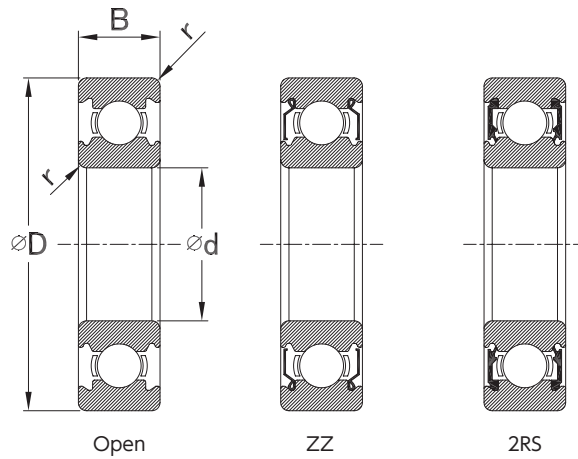
2RS : Double contact rubber seals

4 C4 : C4 clearance

5 TC2 : Special coating retainer

Table of Dimensions

Bearing Numbers	d	D	B	r min.	Limiting Radial Load	Limiting Speed	Mass
	mm	mm	mm	mm	N	min ⁻¹	g
SS 6800 TC2	10	19	5	0.3	90	1090	5
SS 6900 TC2	10	22	6	0.3	115	980	9
SS 6000 TC2	10	26	8	0.3	195	880	18
SS 6200 TC2	10	30	9	0.6	215	770	31
SS 6300 TC2	10	35	11	0.6	345	700	52
SS 6801 TC2	12	21	5	0.3	80	950	6
SS 6901 TC2	12	24	6	0.3	125	880	10
SS 6001 TC2	12	28	8	0.3	215	770	20
SS 6201 TC2	12	32	10	0.6	290	720	36
SS 6301 TC2	12	37	12	1.0	415	640	59
SS 6802 TC2	15	24	5	0.3	90	810	7
SS 6902 TC2	15	28	7	0.3	185	730	16
SS 6002 TC2	15	32	9	0.3	240	670	30
SS 6202 TC2	15	35	11	0.6	325	620	45
SS 6302 TC2	15	42	13	1.0	485	530	81
SS 6803 TC2	17	26	5	0.3	110	730	7
SS 6903 TC2	17	30	7	0.3	195	670	17
SS 6003 TC2	17	35	10	0.3	255	610	39
SS 6203 TC2	17	40	12	0.6	410	540	63
SS 6303 TC2	17	47	14	1.0	580	480	110
SS 6804 TC2	20	32	7	0.3	170	620	17
SS 6904 TC2	20	37	9	0.3	275	550	36
SS 6004 TC2	20	42	12	0.6	400	500	65
SS 6204 TC2	20	47	14	1.0	545	460	101
SS 6304 TC2	20	52	15	1.1	675	440	142
SS 6805 TC2	25	37	7	0.3	185	520	21
SS 6905 TC2	25	42	9	0.3	300	460	42
SS 6005 TC2	25	47	12	0.6	430	440	77
SS 6205 TC2	25	52	15	1.0	595	400	127
SS 6305 TC2	25	62	17	1.1	880	350	225
SS 6806 TC2	30	42	7	0.3	195	440	24
SS 6906 TC2	30	47	9	0.3	310	410	49
SS 6006 TC2	30	55	13	1.0	560	370	114
SS 6206 TC2	30	62	16	1.0	830	340	192
SS 6306 TC2	30	72	19	1.1	1140	300	342
SS 6807 TC2	35	47	7	0.3	200	390	27
SS 6907 TC2	35	55	10	0.6	445	350	74
SS 6007 TC2	35	62	14	1.0	680	320	148
SS 6207 TC2	35	72	17	1.1	1090	290	276
SS 6307 TC2	35	80	21	1.5	1420	270	446



Bearing Numbers	d	D	B	r min.	Limiting Radial Load	Limiting Speed	Mass
	mm	mm	mm	mm	N	min ⁻¹	g
SS 6808 TC2	40	52	7	0.3	210	350	30
SS 6908 TC2	40	62	12	0.6	585	310	109
SS 6008 TC2	40	68	15	1.0	715	290	186
SS 6208 TC2	40	80	18	1.1	1240	260	364
SS 6308 TC2	40	90	23	1.5	1730	240	616
SS 6909 TC2	45	68	12	0.6	600	280	128
SS 6009 TC2	45	75	16	1.0	895	260	237
SS 6209 TC2	45	85	19	1.1	1390	240	401
SS 6309 TC2	45	100	25	1.5	2260	210	811
SS 6910 TC2	50	72	12	0.6	620	260	130
SS 6010 TC2	50	80	16	1.0	930	240	254
SS 6210 TC2	50	90	20	1.1	1500	220	452
SS 6310 TC2	50	110	27	2.0	2640	190	1044
SS 6911 TC2	55	80	13	1.0	705	230	184
SS 6011 TC2	55	90	18	1.1	1210	220	376
SS 6211 TC2	55	100	21	1.5	1850	200	584
SS 6311 TC2	55	120	29	2.0	3050	180	1336
SS 6912 TC2	60	85	13	1.0	860	220	192
SS 6012 TC2	60	95	18	1.1	1250	200	405
SS 6212 TC2	60	110	22	1.5	2230	180	764
SS 6312 TC2	60	130	31	2.1	3480	160	1676
SS 6913 TC2	65	90	13	1.0	740	200	209
SS 6013 TC2	65	100	18	1.1	1290	190	428
SS 6213 TC2	65	120	23	1.5	2430	170	975
SS 6914 TC2	70	100	16	1.0	1000	180	334
SS 6014 TC2	70	110	20	1.1	1610	170	596
SS 6214 TC2	70	125	24	1.5	2640	160	1049
SS 6915 TC2	75	105	16	1.0	1030	170	351
SS 6015 TC2	75	115	20	1.1	1680	160	622
SS 6916 TC2	80	110	16	1.0	1060	160	369
SS 6016 TC2	80	125	22	1.1	2030	150	833

* Limiting radial load is estimated to have a total rotation speed of 1 million revolutions.

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