

SH Series Stainless Bearings with Aligning Ring

Bearing
selection

Products
Series

AISI
440C

AISI
304

AISI
630

Pure
Titanium

Ceramic



Corrosion
resistance



High-load
environment



Transportation



The aligning feature allows for the
misalignment of roller or shaft.

This allows the bearings to require less
maintenance and less downtime.

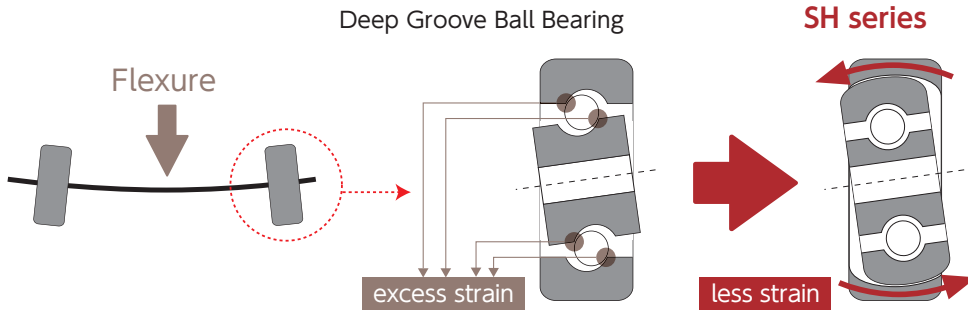
Features

1. Corrosion Resistance

Made of AISI 440C stainless steel, and suitable in a corrosive environment, in clean room and for food machinery.

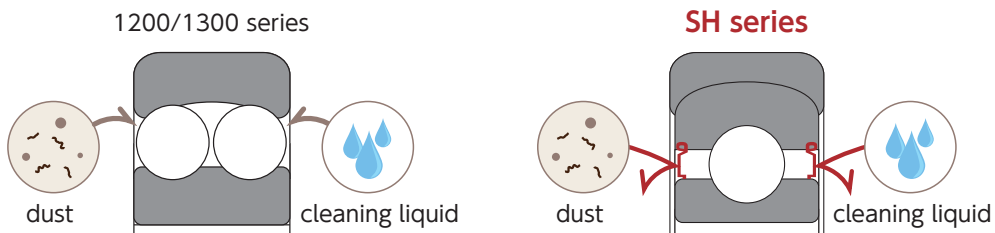
2. Aligning Function

Reducing the excess strain on bearing, by aligning the flexure of the conveyor roller's shaft or the error of shaft center.



3. Dustproof

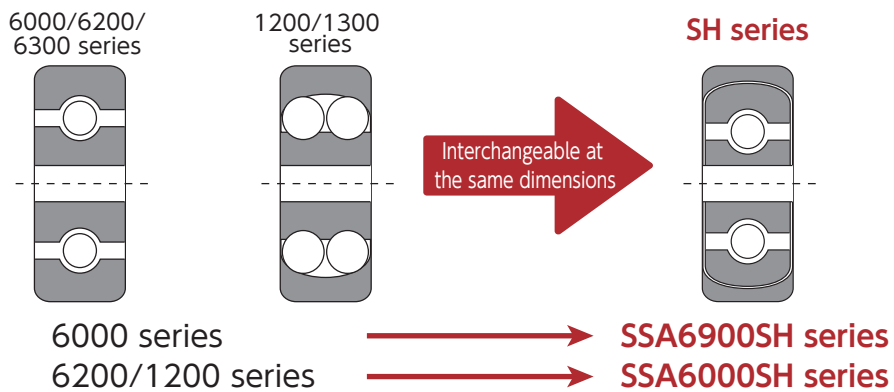
Available with seals and shields, and suitable in a dusty or watery environment.



4. Interchangeability

Interchangeable to 6000, 6200, 6300, 1200 and 1300 series bearings.

The dimensions are the same, except the width of the bearing inside.



5. Heat resistance

Heat-resistant temperature of standard specifications is the same as SS series.

Bearing selection

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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

Bearing selection

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6. Other

The SH series bearings have more advantages than the standard self-aligning bearings made of SAE 52100 steel.

	 Existing Products	 SH series
Radial load	○	○
Axial load	△	○
Combined load	△	○
High speed	△	○
Dustproof	×	○
Low noise/ Low torque	—	○
Corrosion resistance	×	○

■ Applications

Rollers for chemical film conveyor, clean room application, food machinery, glass substrate equipment, cleaning system, printing machine conveyor, transportation conveyor, other places where requiring aligning function.

■ Precautions

- Recommended fit to housing bore is H class of tolerance range. Please consult with us in case of special use conditions.
- Axial load may impair the aligning function, therefore is not recommended.
- Please refer to the chart below for the recommended tightening torque. Adhesive bond is not recommended. It may damage the bearing.

Recommended tightening torque

Set screw size	Tightening torque N·m
M3	0.7
M4	1.8
M5	3.0
M6	4.0

■ Product Specifications (SSA type with aligning function)

Standard Specifications	
Inner and Outer Rings	AISI 440C
Aligning Ring	AISI 440C
Balls*1	AISI 440C
Retainer	AISI 304
Shield	AISI 304
Seal*2	Nitrile rubber
Lubricant*3	Heat-resistant grease

The following special specifications are also available.

*1 Ceramic balls (Silicon Nitride Si₃N₄)

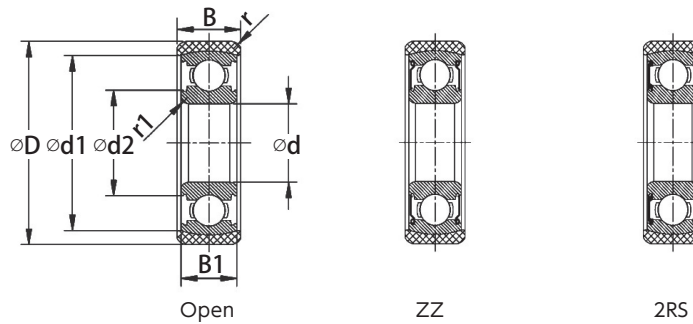
*2 Fluorine rubber seal

*3 Fluorine chemical-resistant grease, food grade grease, and other special greases

Composition of bearing number (SSA type with aligning function)

<div style="font-size: 2em; font-weight: bold; margin-bottom: 10px;">SS A 6000 2RS SH</div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> 1 2 3 4 5 </div>	<p>1 SS : Material AISI 440C</p> <p>2 A : With aligning function</p> <p>3 Basic number</p> <p>4 Blank : Open ZZ : Double steel plate shields 2RS : Double contact rubber seals</p> <p>5 SH : Aligning ring</p>
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Table of Dimensions (SSA type with aligning function)



Bearing Numbers	d	D	B	B1	d1	d2	r min.	r1 min.	Basic Load Ratings		Mass	Interchangeable	
	mm	mm	mm	mm	mm	mm	mm	mm	Cr	Cor			N
	mm	mm	mm	mm	mm	mm	mm	mm	mm	N	N	g	
SS A6900 SH	10	26	8	6	20.9	13.2	0.3	0.3	2700	1270	19	6000	
SS A6000 SH	10	30	9	8	24.8	13.3	0.6	0.3	4600	1970	30	6200,1200	
SS A6200 SH	10	35	11	9	28.3	16.0	0.6	0.6	5100	2390	52	6300,1300	
SS A6901 SH	12	28	8	6	23.0	15.3	0.3	0.3	2890	1460	21	6001	
SS A6001 SH	12	32	10	8	26.5	16.0	0.6	0.3	5100	2390	34	6201,1201	
SS A6201 SH	12	37	12	10	30.1	16.7	1.0	0.6	6800	3050	60	6301,1301	
SS A6902 SH	15	32	9	7	26.8	18.5	0.3	0.3	4300	2250	29	6002	
SS A6002 SH	15	35	11	9	30.4	19.0	0.6	0.3	5600	2840	43	6202,1202	
SS A6202 SH	15	42	13	11	32.9	20.2	1.0	0.6	7650	3750	86	6302,1302	
SS A6903 SH	17	35	10	7	28.6	20.5	0.3	0.3	4600	2550	37	6003	
SS A6003 SH	17	40	12	10	33.2	21.5	0.6	0.3	6000	3250	67	6203,1203	
SS A6203 SH	17	47	14	12	37.9	22.2	1.0	0.6	9600	4800	114	6303,1303	
SS A6904 SH	20	42	12	9	35.3	24.0	0.6	0.3	6400	3700	65	6004	
SS A6004 SH	20	47	14	12	40.1	25.1	1.0	0.6	9400	5050	102	6204,1204	
SS A6204 SH	20	52	15	14	45.0	26.9	1.1	1.0	12800	6650	144	6304,1304	
SS A6905 SH	25	47	12	9	40.6	29.7	0.6	0.3	7000	4550	75	6005	
SS A6005 SH	25	52	15	12	45.0	30.1	1.1	0.6	10100	5850	120	6205,1205	
SS A6205 SH	25	62	17	15	49.6	32.8	1.1	1.0	14000	7900	241	6305,1305	
SS A6906 SH	30	55	13	9	45.5	34.0	1.0	0.3	7250	5000	113	6006	
SS A6006 SH	30	62	16	13	53.0	35.8	1.0	1.0	13200	8300	193	6206,1206	
SS A6206 SH	30	72	19	16	59.6	38.5	1.1	1.0	19500	11300	344	6306,1306	
SS A6907 SH	35	62	14	10	53.5	39.7	1.0	0.6	10400	7200	144	6007	
SS A6007 SH	35	72	17	14	60.1	41.9	1.1	1.0	16000	10300	284	6207,1207	
SS A6207 SH	35	80	21	17	69.4	45.2	1.5	1.1	25700	15400	436	6307,1307	
SS A6908 SH	40	68	15	12	60.6	45.0	1.0	0.6	13700	9900	180	6008	
SS A6008 SH	40	80	18	15	66.5	47.1	1.1	1.0	16800	11600	377	6208,1208	
SS A6208 SH	40	90	23	18	77.4	50.3	1.5	1.1	29100	17900	602	6308,1308	
SS A6909 SH	45	75	16	12	66.5	50.5	1.0	0.6	14100	10900	227	6009	
SS A6009 SH	45	85	19	16	73.0	52.1	1.1	1.0	21000	15100	419	6209,1209	
SS A6209 SH	45	100	25	19	82.0	54.3	1.5	1.1	32700	20500	821	6309,1309	
SS A6910 SH	50	80	16	12	70.6	55.0	1.0	0.6	14500	11700	249	6010	
SS A6010 SH	50	90	20	16	78.1	57.6	1.1	1.0	21800	16600	459	6210,1210	
SS A6210 SH	50	110	27	20	86.7	59.8	2.0	1.1	35100	23200	1102	6310,1310	

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Product Specifications (SSXCA type with aligning function and set screw)

Standard Specifications	
Inner and Outer Rings	AISI 440C
Aligning Ring	AISI 440C
Balls*1	AISI 440C
Retainer	AISI 304
Shield	AISI 304
Set screw	AISI 304 equivalent
Lubricant*2	Heat-resistant grease

The following special specifications are also available.

- *1 Ceramic balls (Silicon Nitride Si₃N₄)
- *2 Chemical- and heat-resistant fluorine grease, food-grade grease, and other special greases

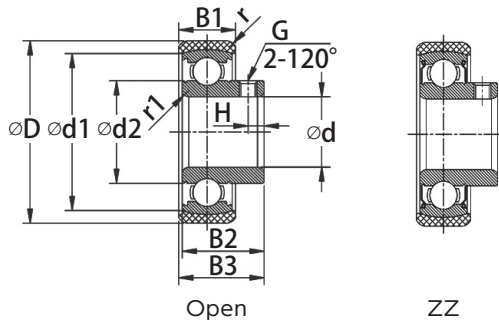
Composition of bearing number (SSXCA type with aligning function and set screw)

SS XCA 6200 ZZ SH

1 2 3 4 5

- 1 SS : Material AISI 440C
- 2 XCA : With aligning function and set screw
- 3 Basic number
- 4 Blank : Open
ZZ : Double steel plate shields
- 5 SH : Aligning ring

Table of Dimensions (SSXCA type with aligning function and set screw)



Bearing Numbers	d		D	B1	B2	B3	G	H	d1	d2	r min.	r1 min.	Basic Load Ratings	
	mm	Tolerance											C _r	C _{or}
SS XCA6900 SH	10	+0.015 0	26	8	13	14	M3	3.0	20.9	13.75	0.3	0.3	2700	1270
SS XCA6000 SH	10		30	9	15	15.5	M3	3.0	24.8	14.86	0.6	0.3	4600	1970
SS XCA6200 SH	10		35	11	17	18	M4	3.5	28.3	17.45	0.6	0.6	5100	2390
SS XCA6901 SH	12		28	8	13	14	M3	3.0	23.0	15.85	0.3	0.3	2890	1460
SS XCA6001 SH	12		32	10	15	16	M3	3.0	26.5	17.45	0.6	0.3	5100	2390
SS XCA6201 SH	12		37	12	19	20	M4	3.5	30.1	18.19	1.0	0.6	6800	3050
SS XCA6902 SH	15		32	9	14	15	M3	3.0	26.8	18.96	0.3	0.3	4300	2250
SS XCA6002 SH	15		35	11	16.5	17.5	M3	3.0	30.4	20.45	0.6	0.3	5600	2840
SS XCA6202 SH	15		42	13	20	21	M4	3.5	32.9	21.69	1.0	0.6	7650	3750
SS XCA6903 SH	17		35	10	14	15.5	M3	3.0	28.6	20.96	0.3	0.3	4600	2550
SS XCA6003 SH	17	40	12	17.5	18.5	M4	3.5	33.2	22.95	0.6	0.3	6000	3250	
SS XCA6203 SH	17	47	14	21	22	M5	4.5	37.9	24.68	1.0	0.6	9600	4800	
SS XCA6904 SH	20	+0.018 0	42	12	18	19.5	M4	3.5	35.3	25.45	0.6	0.3	6400	3700
SS XCA6004 SH	20		47	14	21	22	M5	4.5	40.1	27.44	1.0	0.6	9400	5050
SS XCA6204 SH	20		52	15	23	23.5	M5	4.5	45.0	29.22	1.1	1.0	12800	6650
SS XCA6905 SH	25		47	12	18	19.5	M4	3.5	40.6	31.15	0.6	0.3	7000	4550
SS XCA6005 SH	25		52	15	22	23.5	M5	4.5	45.0	32.04	1.1	0.6	10100	5850
SS XCA6205 SH	25		62	17	26	27	M5	4.5	49.6	33.92	1.1	1.0	14000	7900
SS XCA6906 SH	30		55	13	18	20	M4	3.5	45.5	35.45	1.0	0.3	7250	5000
SS XCA6006 SH	30		62	16	24.5	26	M5	5.0	53.0	37.93	1.0	1.0	13200	8300
SS XCA6206 SH	30		72	19	28.5	30	M6	5.5	59.6	40.60	1.1	1.0	19500	11300
SS XCA6207 SH	35		+0.021 0	80	21	33	35	M6	6.5	69.4	47.39	1.5	1.1	25700

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