

6800 and 6900 Thin-Wall Bearings (SAE 52100)



High speed
rotation



Transportation



General



Thin-wall bearings, suitable for compact design and reduction of weight in machinery and equipment.

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

Product Specifications

Standard Specifications	
Inner and Outer Rings	SAE 52100
Balls*1	SAE 52100
Retainer	SPCC (Some are AISI 304)
Shield	SECC
Seal*2	Nitrile rubber
Snap Ring	SWRH77A
Lubricant*3	Lithium grease
ISO Tolerance Class	Normal

The following special specifications are also available.

- *1 Ceramic balls (Silicon Nitride Si₃N₄)
- *2 Fluorine rubber seals
- *3 Food-grade grease and other special greases

Composition of bearing number

6900 ZZ NR

1 2 3

- 1 Basic number
- 2 GG* : Open with seal groove
ZZ : Double steel plate shields
2RS : Double contact rubber seals
- 3 Blank : No snap ring
NR : With snap ring

*Open type with SAE 52100 has a code "GG" after bearing number.

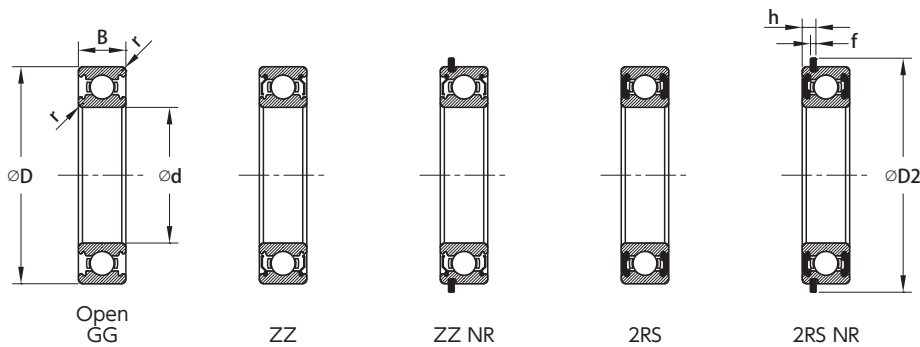


Table of Dimensions

Bearing Numbers	d mm	D mm	B mm	r min. mm	Basic Load Ratings		Limiting Speed (min ⁻¹)			Size of Snap Ring			Mass g
					C _r N	C _{0r} N	Grease		Oil	D2 max. mm	f max. mm	h max. mm	
							Open-ZZ	2RS					
6800	10	19	5	0.3	2120	985	34000	24000	41000	—	—	—	5
6900	10	22	6	0.3	2700	1270	31000	22000	38000	24.8	0.70	1.75	10
6801	12	21	5	0.3	1920	1040	30000	20000	36000	—	—	—	6
6901	12	24	6	0.3	2890	1460	28000	19000	33000	26.8	0.70	1.75	11
6802	15	24	5	0.3	2080	1260	26000	17000	31000	—	—	—	7
6902	15	28	7	0.3	4300	2250	23000	16000	28000	30.8	0.85	2.15	16
6803	17	26	5	0.3	2630	1570	23000	15000	28000	—	—	—	8
6903	17	30	7	0.3	4600	2550	21000	14000	26000	32.8	0.85	2.15	17
6804	20	32	7	0.3	4000	2460	20000	13000	24000	34.8	0.85	2.15	18
6904	20	37	9	0.3	6400	3700	18000	12000	21000	39.8	0.85	2.55	36
6805	25	37	7	0.3	4300	2940	16000	10000	20000	—	—	—	21
6905	25	42	9	0.3	7000	4550	15000	9700	18000	44.8	0.85	2.55	43
6806	30	42	7	0.3	4550	3400	14000	8800	17000	—	—	—	25
6906	30	47	9	0.3	7250	5000	13000	8500	16000	—	—	—	50
6807	35	47	7	0.3	4750	3800	12000	7600	15000	—	—	—	28
6907	35	55	10	0.6	10400	7200	11000	7200	13000	—	—	—	75
6808	40	52	7	0.3	4950	4200	11000	6700	13000	—	—	—	31
6908	40	62	12	0.6	13700	9950	9600	6400	12000	—	—	—	110
6809	45	58	7	0.3	5400	4900	9700	6000	12000	—	—	—	39
6810	50	65	7	0.3	6400	5850	8700	5300	10000	—	—	—	50

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