

Steel Specification Tables

(a) Chemical composition of bearing steel

Steel Type	Spec	C%	Si%	Mn%	P%	S%	Cr%	Mo%	Ni	N	Hardness
Chrome	SAE52100 SUJ2	0.95 - 1.10	0.15 -0.35	0.50 max	0.025 max	0.025 max	1.30 -1.60	-	-	-	60-64 HRC
Stainless Steel	AISI440C SUS440C X105CrMo17	0.95 -1.20	1.00 max	1.00 max	0.04 max	0.03 max	16.0 -18.0	0.75 max	-	-	58-62 HRC
	KS440 ACD34 X65Cr13	0.60 -0.75	1.00 max	1.00 max	0.04 max	0.03 max	11.50 -13.50	0.75 max	-	-	58-62 HRC
	AISI420B SUS420J2 X30Cr13	0.26 -0.35	1.00 max	1.50 max	0.04 max	0.03 max	12.0 -14.0	-	-	-	53-57 HRC
	AISI304 SUS304 X5CrNi1810	0.08 max	0.75 max	2.00 max	0.045 max	0.03 max	18.0 - 20.0	-	10.5	0.1 max	92 HRB
	AISI316 SUS316 X5CrNiMo17-12-2	0.08 max	0.75 max	2.00 max	0.045 max	0.03 max	16.0 - 18.0	2.0 - 3.0	10.0 - 14.0	0.1 max	95 HRB

(b) Stainless steel grades for EZO Japan bearings

Component	Stainless Steel Grade	Bearing Types	Comments
Inner and outer rings	AISI440C SUS440C X105CrMo17	S6709 upwards S6809 upwards S6907 upwards S6006 upwards S6206 upwards S6305 upwards	
	KS440 ACD34 X65Cr13	0.6mm - 9mm bore 0.04" - 0.75" bore S6700 - S6708 S6800 - S6808 S6900 - S6906 S6000 - S6005 S6200 - S6205 S6300 - S6304	
Balls	AISI440C SUS440C X105CrMo17	All	

**(b) Stainless steel grades for EZO Japan bearings cont...**

Component	Stainless Steel Grade	Bearing Types	Comments
Shield	AISI304 SUS304 X5CrNi1810	All	
Cage	AISI304 SUS304 X5CrNi1810	0.6mm - 9mm bore 0.04" - 0.75" bore S6701 upwards S6800 upwards S6900 upwards S6000 upwards S6200 upwards S6300 upwards	ribbon cage only +SMR128/SMR137 crown cage ribbon cage only  S6000-2RS - S6006-2RS have nylon crown cage S6200-2RS - S6206-2RS have nylon crown cage
	SUS420J2 X30Cr13	0.6mm - 9mm bore 0.04" - 0.75" bore S6700	crown cage only + SMR137/ SMR128 ribbon cage crown cage only

**(c) Stainless steel grades for SMB China bearings**

Component	Stainless Steel Grade	Bearing Types	Comments
Inner and outer rings	AISI440C SUS440C X105CrMo17	All	
Balls	AISI440C SUS440C X105CrMo17	All	
Shield	AISI304 SUS304 X5CrNi1810	All	
Cage	AISI304 SUS304 X5CrNi1810	All	