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AS27642™/1

FEDERAL SUPPLY CLASS
3110

RATIONALE

THIS STANDARD DEFINES A CORROSION RESISTANT NITROGEN STEEL (CREN) VERSION OF THE AS27642 EXTRA LIGHT DUTY AIRFRAME BALL BEARING SERIES.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS7949.

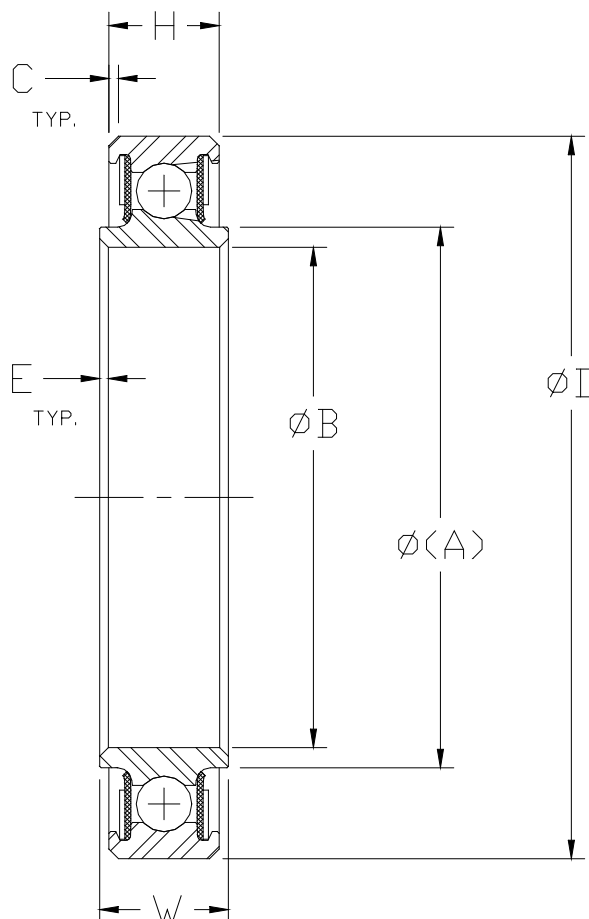
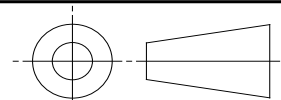


FIGURE 1 - PART CONFIGURATION

SAE values your input. To provide feedback on this Technical Report, please visit
<http://standards.sae.org/AS27642/1>

THIRD ANGLE PROJECTION



CUSTODIAN: ACBG

PROCUREMENT SPECIFICATION: AS7949



AEROSPACE STANDARD

BEARING, BALL, AIRFRAME
ANTI-FRICTION, EXTRA LIGHT DUTY
CORROSION RESISTANT NITROGEN STEEL (CREN)

AS27642™/1
SHEET 1 OF 5

Documents

TABLE 1 - DIMENSIONS

AS DASH NO.	ØB BORE 2/	BORE TOLERANCE		ØD OUTSIDE DIAMETER + .0000 - .0010 1/ 2/	W WIDTH INNER RING + .000 - .005 1/	H WIDTH OUTER RING + .000 - .005 1/	(ØA) SHOULDER DIAMETER INNER RING (APPROX)	E 4/	C 3/	WEIGHT POUNDS (APPROX)
		WITHOUT SUFFIX S	WITH SUFFIX S					CORNER CHAMFER X 45°		
								INNER RING BORE + .015 - .000	OUTER RING OD + .015 - .000	
-16	1.0000	+ .0000 - .0005	+ .0000 - .0005	1.7500	.437	.375	1.141	.024	.024	.14
-21	1.3125	+ .0005 - .0005		2.0625			1.454			.16
-23	1.4375			2.1875			1.575			.17
-25	1.5625			2.3125			1.693			.19
-29	1.8125			2.5625			1.931			.21
-33	2.0625			2.8125			2.231			.23
-37	2.3125			3.0625			2.468			.26
-47	2.9375			3.8750			3.093			.49
-49	3.0625	+ .0000 - .0010	+ .0000 - .0010	4.0000	.531	.469	3.222	.039	.039	.53
-52	3.2500			4.1875			3.479			.65
-56	3.5000			4.4375			3.775			.70
-60	3.7500			4.6875			4.014			.74
-64	4.0000			4.9375			4.253			.78
-68	4.2500			5.3125	.593	.531	4.517			.87
-72	4.5000			5.5625			4.774			.92
-76	4.7500			5.8125			5.046			1.00
-80	5.0000			6.0625			5.246			1.04
-84	5.2500			6.3125			5.506			1.09
-88	5.5000			6.5625			5.770			1.14
-92	5.7500			6.8125			6.033			1.18
-96	6.0000			7.0625			6.303			1.23

1/ ALL DIMENSIONS TO BE MET AFTER SURFACE TREATMENT.

2/ OUT-OF-ROUND TOLERANCES: BORE WITHOUT SUFFIX "S": -16 +.0002, -.0007;
-21 THROUGH -49 +.0008, -.0008;
-52 THROUGH -96 +.0005, -.0015.
BORE WITH SUFFIX "S" -16 THROUGH -49 +.0003, -.0008;
-52 THROUGH -96 +.0003, -.0013.
OUTER DIA: +.0010, -.0020.

3/ A RADIUS GIVING APPROXIMATELY THE SAME GRIP FOR STAKING THE BEARING IN THE HOUSING
WILL BE ACCEPTABLE.

4/ A RADIUS GIVING APPROXIMATELY THE SAME FILLET CLEARANCE WILL BE ACCEPTABLE.

	AEROSPACE STANDARD	AS27642™/1 SHEET 2 OF 5	
	BEARING, BALL, AIRFRAME ANTI-FRICTION, EXTRA LIGHT DUTY CORROSION RESISTANT NITROGEN STEEL (CREN)		

