FEDERAL SUPPLY CLASS
3110

RATIONALE

AS17107 REV A IS A FIVE YEAR REVIEW AND UPDATE OF THIS SPECIFICATION, TABLES AND FIGURES HAVE BEEN REDONE, BEARING CONFIGURATION & IDENT ADDED, %LUBRICATION REVISED, GREASE OPTIONS ADDED, MATERIALS FOR CLOSURES AND RETAINERS ADDED, ABEC 5 TOLERANCE REQUIREMENTS ADDED, TITLE CLARIFIED.

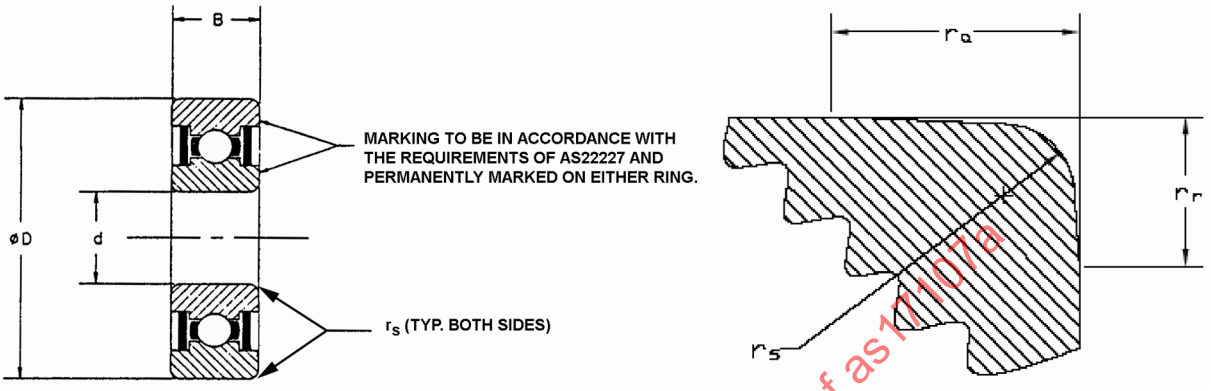


FIGURE 1

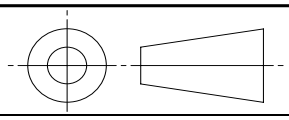
TABLE 1

DASH NO.	BORE d		D OUTSIDE DIA		WIDTH B		CORNER BREAK						CAPACITY		LIMIT CONTINUOUS RPM @ 325 °F MAX	
							r_s (4)		r_a MAX		r_r MAX		(1) C_o	(2) C		
	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	(LB)	(LB)	GREASE	OIL
1	10	.3937	30	1.1811	9	.3543	0.6	0.024	2.0	0.079	1.0	0.039	480	805	16,000	30,000
2	12	.4724	32	1.2598	10	.3937	0.6	0.024	2.0	0.079	1.0	0.039	595	1050	15,100	25,000
3	15	.5906	35	1.3780	11	.4331	0.6	0.024	2.0	0.079	1.0	0.039	680	1180	13,700	20,000
4	17	.6693	40	1.5748	12	.4724	1.0	0.039	3.0	0.118	1.5	0.059	765	1280	11,400	17,600
5	20	.7874	47	1.8504	14	.5512	1.0	0.039	3.0	0.118	1.5	0.059	1370	2210	10,000	15,000
6	25	.9843	52	2.0472	15	.5906	1.0	0.039	3.0	0.118	1.5	0.059	1560	2420	8,200	12,000
7	30	1.1811	62	2.4409	16	.6299	1.1	0.043	3.5	0.138	2.0	0.079	2230	3350	7,700	10,000
8	35	1.3780	72	2.8346	17	.6693	1.1	0.043	3.5	0.138	2.0	0.079	3050	4450	6,700	8,600

TABLE 2

RADIAL INTERNAL CLEARANCE (MFG. LIMITS)		
BORE (d) MM		RADIAL PLAY (.0001 INCH)
OVER	INCL.	
10	18	5 - 9
18	30	6 - 10
30	50	7 - 12

THIRD ANGLE PROJECTION



ISSUED 1997-08 REVISED 2007-09

CUSTODIAN: SAE AIRFRAME CONTROL BEARINGS GROUP

PROCUREMENT SPECIFICATION: AS22227

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) BEARING, BALL, ANNULAR, PRIMARILY FOR AIRCRAFT GENERATORS AND MOTOR-GENERATORS, STANDARD LIGHT, TYPE I

NOTES:

1. STATIC LOAD RATING IN POUNDS = THAT STATIC LOAD WHICH CORRESPONDS TO A TOTAL PERMANENT DEFORMATION OF BALL AND RACE AT THE MOST HEAVILY LOADED CONTACT OF .0001 INCH OF THE BALL DIAMETER.

2. BASIC LOAD RATING IN POUNDS AT 33-1/3 RPM USING 10^6 REVOLUTIONS L_{10} LIFE; AT OTHER SPEEDS INVERSE CUBE ROOT OF SPEED RATIO.

3. RATED LOADS ARE BASED UPON GREASE LUBRICATION AND UPON BEARING OPERATING TEMPERATURE NOT EXCEEDING 325 °F.

4. CORNER BREAKS: r_s = MAXIMUM HOUSING OR FILLET RADIUS THAT BEARING CORNERS WILL CLEAR.

5. EDGE BREAK: UNLESS OTHERWISE SPECIFIED .003 INCH/.015 INCH.

6. PART NUMBERS -1 THROUGH -4 SHALL HAVE PRESSED STEEL RETAINERS, PART NUMBERS -5 THROUGH -8 SHALL HAVE PHENOLIC RETAINERS.

7. MATERIALS: RINGS AND BALLS: 52100 PER AMS 6440 OR AMS 6444; OR 440C PER AMS 5618 OR AMS 5880.

   CLOSURES: NITRILE BUTADIENE RUBBER (NBR) PER ASTM D 2000, HARDNESS 60 - 70 DUROMETER A OR FLUOROELASTOMER.

   RETAINERS: PART NUMBERS -1 THROUGH -4, PRESSED STEEL; PART NUMBERS -5 THROUGH -8 PHENOLIC.

8. LUBRICATION/PRESERVATION: PACK 30 TO 50% FULL WITH MIL-PRF-27617D, TYPE III, MIL-PRF-81322, OR PRESERVE WITH MIL-C-11796, CLASS 3.

9. TOLERANCES: ABEC 5 PER ABMA STANDARD 20 EXCEPT BORE AND OUTER DIAMETER TOLERANCES SHALL BE +.0000/-.0002 INCH.

10. BEARING CONFIGURATION AND IDENTIFICATION: