

REV.  
B

AS27647

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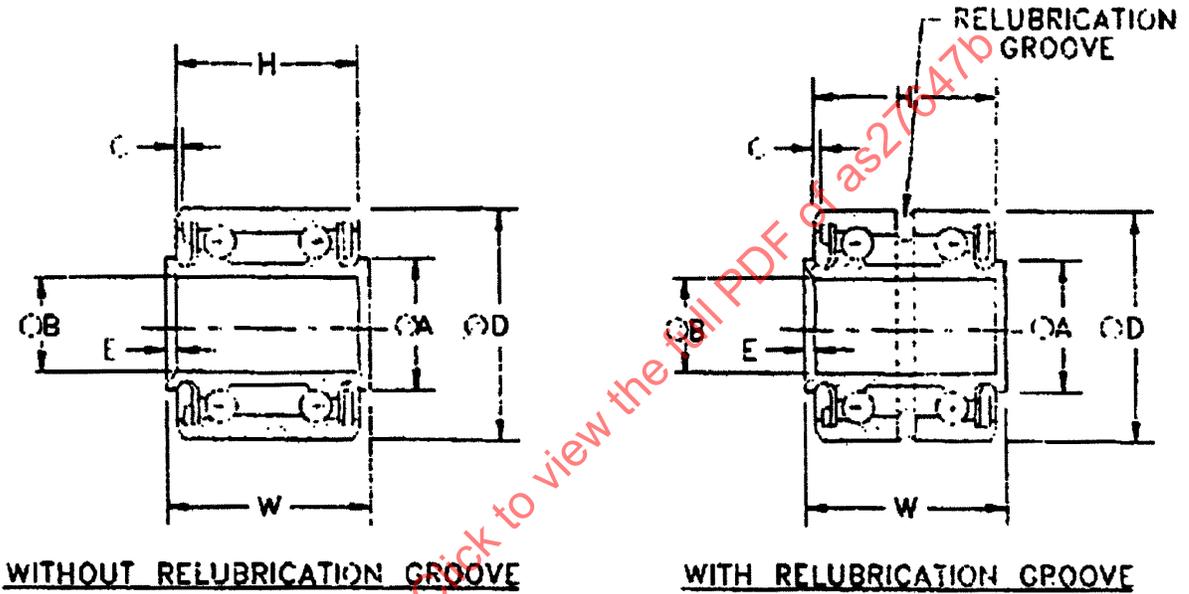


FIGURE 1

ISSUED 1998-04 REVISED 2002-06

PREPARED BY AIRFRAME CONTROL BEARINGS GROUP (ACBG)

**SAE** The Engineering Society  
For Advancing Mobility  
Land Sea Air and Space  
**INTERNATIONAL**  
400 Commonwealth Drive, Warrendale, PA 15096-0001

**AEROSPACE STANDARD**

(R) BEARING, BALL, AIRFRAME,  
ANTI-FRICTION, EXTRA WIDE,  
DOUBLE ROW, INTERMEDIATE DUTY

**AS27647**  
SHEET 1 OF 3

**REV. B**

TABLE 1 - DIMENSIONS AND LOADS

MS DASH NO.	BEARING PART NO. REF. ONLY Relubrication Groove	BEARING PART NO. REF. ONLY Relubrication Groove	-B 2/ BORE	-D OUTSIDE DIAMETER 2/ 1/	W INNER RING 1/	E OUTER RING 1/	-A SHOULDER INNER RING (APPROX)	E INNER RING CORNER CHAMFER	C 3/ OUTER RING CORNER CHAMFER	RADIAL LIMIT LOAD RATING LBS
-1A	DW4K2	DW4K2	+ .0000 - .0005	+ .0000 - .0005	+ .000 - .005	+ .000 - .005	.338 .372	+ .015 - .000	+ .015 - .000	1400 2700
-4	DW4K	DW4K	.2500 .2500	.6250 .7500	.500 .750	.500 .750	.466			5140
-5	DW5	DW5	.3125	.8750	.938	.813		.005		8440
-6	DW6	DW6	.3750	1.0625	1.188	1.043	.570			
-8	DW8	DW8	.5000	1.4375	1.500	1.3750	.709		.032	15320

TABLE 1 - (CONTINUED)

MS DASH NO.	THRUST LIMIT LOAD RATING LBS	6/ RADIAL LOAD RATING (LBS) FOR AVERAGE LIFE OF 10,000 COMPLETE 90° CYCLES		APPROXIMATE WEIGHT (LBS)	7/ MAXIMUM STARTING TORQUE (INCH-OZ)
		CASE I	CASE II		
-1A	500	1050	960	.025	1
-4	900	2070	1850	.04	1
-5	1600	2600	2320	.07	1.5
-6	2600	4220	3740	.12	2.5
-8	4700	7610	6520	.29	2.5

1/ DIMENSIONS TO BE MET AFTER PLATING

2/ OUT-OF-ROUND TOLERANCES: BORE: -.0002, -.0007; OUTER DIAMETER: +.0005, -.0010.

3/ A RADIUS GIVING APPROXIMATELY THE SAME GRIP FOR STAKING THE BEARING IN THE HOUSING IS ACCEPTABLE IN LIEU OF A 45° FLAT SURFACE CHAMFER.

4/ A RADIUS GIVING APPROXIMATELY THE SAME FILLET CLEARANCE IS ACCEPTABLE IN LIEU OF A 45° FLAT SURFACE CHAMFER.

5/ CASE I = LOAD IS FIXED WITH RESPECT TO THE OUTER RING.

CASE II = LOAD IS FIXED WITH RESPECT TO THE INNER RING.

6/ THESE RATINGS ARE FOR OPERATION UP TO 250 °F. FOR OPERATION UP TO 350 °F THE RATINGS SHALL BE REDUCED BY 20%.

7/ SPECIFIED LIMITS ARE FOR BEARINGS LUBRICATED WITH MIL-PRF-81322 GREASE. FOR BEARINGS LUBRICATED WITH MIL-PRF-23827 GREASE, THE TORQUE LIMIT SHALL BE THE SPECIFIED VALUE IN THE TABLE MULTIPLIED BY 1.2.