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REV.
C

AS21429™

FEDERAL SUPPLY CLASS
3110

RATIONALE

CHANGED THE TYPICAL CORNER BREAK IN FIGURE 1 FROM .002 TO .02 TO CORRECT A DECIMAL POINT TYPO. ADDED TESTING REQUIREMENT EXCEPTIONS FOR AMS3666 SEAL MATERIAL. ADDED CAUTIONARY NOTES FOR CADMIUM AND FOR GREASE CODE FOR BEARINGS MANUFACTURED PRIOR TO MAY 2018.

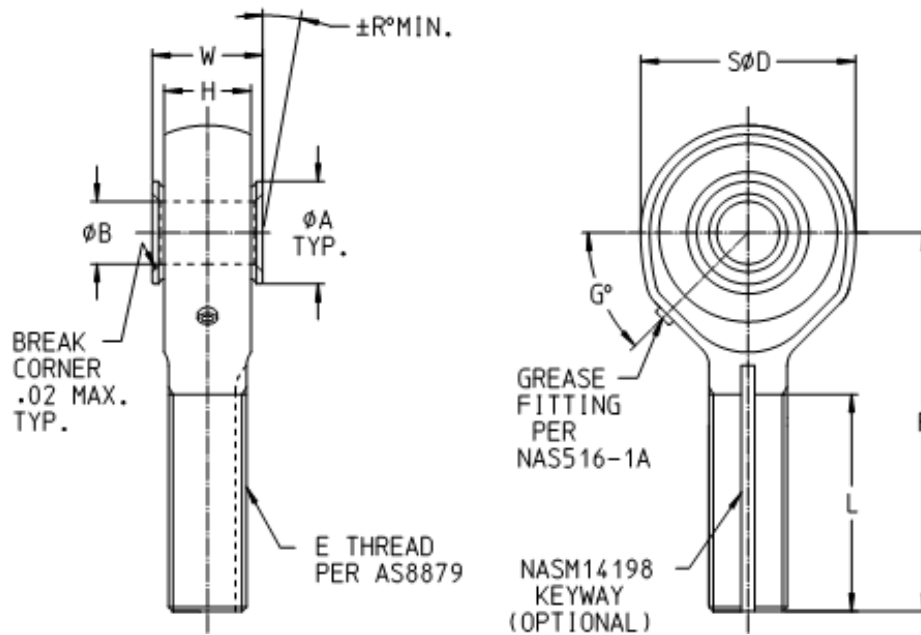


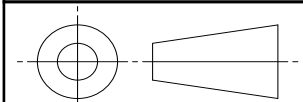
FIGURE 1

TABLE 1

DASH NO.	B +.0000 -.0005	D +.000 -.050	W +.000 -.005	H +.000 -.015	A +.000 -.005	R°	G°	F ±.015	L +.060 -.000	E THREAD UNJF-3A	WT (APPROX) (LB)	LIMIT LOAD (LB)		RADIAL DYNAMIC LOAD (LB)
												RADIAL	THRUST	
-4	.2500	1.073	.625	.479	.450	10	45	2.563	1.670	.375-24	.18	3080	1690	2560
-5	.3125	1.440	.812	.665	.520	10	45	2.810	1.750	.500-20	.37	8010	4550	6650
-6	.3750	1.760	.937	.760	.610	10	45	2.600	1.310	.625-18	.59	10600	6100	8610
-8	.5000	2.186	1.125	.942	.940	10	45	3.400	2.000	.750-16	1.15	18900	9450	15700
-10	.6250	2.630	1.812	1.130	.900	15	50	4.180	2.030	.875-14	2.30	29000	14500	24100
-12	.7500	2.656	1.260	1.200	1.130	2	45	3.500	1.750	1.125-12	2.00	40800	20900	33900
-14	.8750	3.406	1.562	1.328	1.380	5	55	4.500	2.060	1.000-12	4.20	55300	26000	45900

For more information on this standard, visit
<https://www.sae.org/standards/content/AS21429C>

THIRD ANGLE PROJECTION



CUSTODIAN: ACBG

PROCUREMENT SPECIFICATION: AS8952



AEROSPACE STANDARD

BEARING, ROLLER, ANTIFRICTION, ROD END,
EXTERNAL THREAD, SELF-ALIGNING, AIR FRAME,
-67 °F TO 350 °F TYPE 1, HEAVY DUTY, SEALED

AS21429™
SHEET 1 OF 3

REV.
C

Documents

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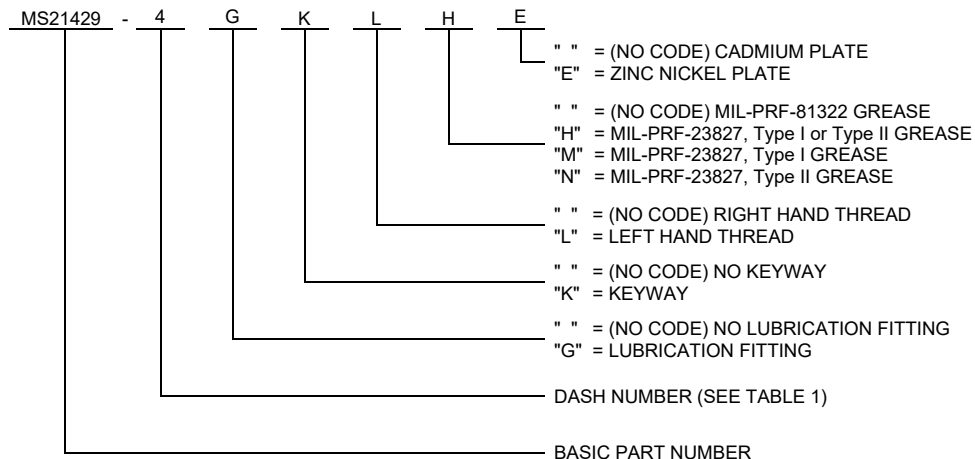
REQUIREMENTS:

1. MATERIAL: INNER RACE AND ROLLERS: 52100 PER AMS6440.
ROD END: ALLOY STEEL 8620 PER AMS6274, ALLOY STEEL 4620 PER AMS6294 OR ALLOY STEEL 9310 PER AMS6260.
2. SEALS: POLYTETRAFLUOROETHYLENE PER AMS3652, AMS3666 TYPE 1 OR TYPE 2 (TESTING FOR VOLUME RESISTIVITY AND ELECTRICAL FLAWS IS NOT REQUIRED), POLYETHERESTER PER ASTM D4550, GROUP 4, CLASS 1, GRADE 1, OR AN APPROVED EQUIVALENT.
3. LUBRICANT: MIL-PRF-81322 OR MIL-PRF-23827 (TYPE I OR TYPE II). ALL BEARINGS SHALL BE PACKED WITH GREASE CONFORMING TO MIL-PRF-81322 UNLESS OTHERWISE SPECIFIED. ALL BEARINGS SHALL BE FILLED 80% MINIMUM WITH GREASE. MIL-PRF-23827 SHALL NOT BE USED FOR OPERATION WHERE TEMPERATURES EXCEED 250 °F. SEE NOTE 5.

IF NO TYPE IS SPECIFIED FOR MIL-PRF-23827, ADD THE LETTER "H" AFTER THE MS21429 DASH NUMBER.
IF NO SPECIFIC TYPE IS REQUIRED FOR MIL-PRF-23827, ADD THE LETTER "H" AFTER THE MS21429 DASH NUMBER.
IF MIL-PRF-23827 TYPE I IS REQUIRED, ADD THE LETTER "M" AFTER THE MS21429 DASH NUMBER.
IF MIL-PRF-23827 TYPE II IS REQUIRED, ADD THE LETTER "N" AFTER THE MS21429 DASH NUMBER.
IF A LUBRICATION FITTING IS DESIRED, ADD THE LETTER "G" AFTER THE MS21429 DASH NUMBER.
4. INTERNAL CLEARANCE: RADIAL .0002 TO .0010 INCHES, AXIAL .0005 TO .0300 INCHES.
5. PLATING: ALL EXTERNAL SURFACES EXCEPT BORE, SEALS AND RETAINERS SHALL BE ZINC-NICKEL PLATED PER AMS2417, TYPE 2 GRADE B OR CADMIUM PLATED IN ACCORDANCE WITH AMS-QQ-P-416, TYPE I, CLASS 2, WITH THICKNESS OF .0003 TO .0006 INCHES. EXTERNAL THREADED AREAS SHALL BE .0002 TO .0005 INCHES THICK.

IF ZINC-NICKEL PLATING IS REQUIRED, ADD THE LETTER "E" TO THE END OF THE PART NUMBER.
IF CADMIUM PLATING IS REQUIRED, NO CODE IS TO BE ADDED.
6. SURFACE ROUGHNESS: RACEWAYS 8 MICROINCHES Ra MAXIMUM, ROLLERS 6 MICROINCHES Ra MAXIMUM, IN ACCORDANCE WITH ASME B46.1.
7. ADD SUFFIX LETTER "K" WHEN NASM14198 KEYWAY IS REQUIRED.
ADD SUFFIX LETTER "L" WHEN LEFT HAND THREAD IS REQUIRED.
8. EXAMPLE OF PART NUMBER:

THE PART NUMBER SHALL BE SEQUENCED LEFT TO RIGHT, WITHOUT SPACES, WITH DESIGNATIONS IN THE FOLLOWING SEQUENCE:



9. BEARINGS RATINGS ARE FOR OPERATION UP TO 250 °F MAX. FOR OPERATION UP TO 350 °F, THE RATINGS SHALL BE REDUCED BY 20%.

	AEROSPACE STANDARD		AS21429™ SHEET 2 OF 3	REV. C
	BEARING, ROLLER, ANTIFRICTION, ROD END, EXTERNAL THREAD, SELF-ALIGNING, AIR FRAME, -67 °F TO 350 °F TYPE 1, HEAVY DUTY, SEALED			

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