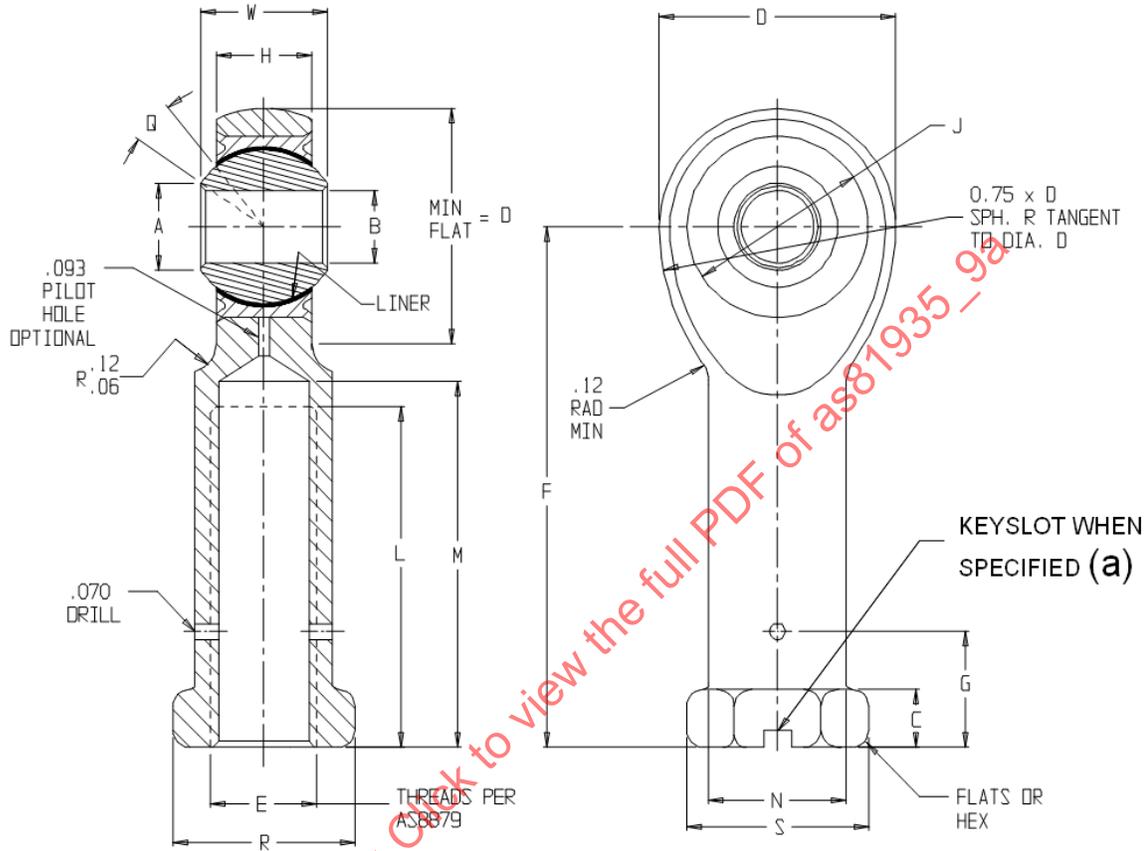


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SAE AS81935/9

RATIONALE

AS81935/9 IS BEING REVISED TO CORRECT TABLE 1 TOLERANCE ERROR (WRENCH FLATS -R- DIMENSION), REVISED THREADS TO DECIMAL CALLOUT NOT FRACTIONAL, REVISED GENERAL FORMATTING, ADDED PH13-8MO BALL OPTION AND TYPE "A" LINER OPTION TO PART NUMBER SUFFIX.

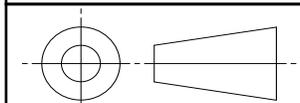


(a) FOR -03 THROUGH -06, THE KEYSLOT SHALL BE ORIENTED PERPENDICULAR TO THE PLANE MADE BY THE FACE OF THE ROD END HOOP (SEE PAGES 2 AND 3 FOR ADDITIONAL DETAILS).

FIGURE 1 - ROD END ASSEMBLY

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS81935/9A>

THIRD ANGLE PROJECTION



CUSTODIAN: ACBG - PLAIN BEARING

PROCUREMENT SPECIFICATION: AS81935

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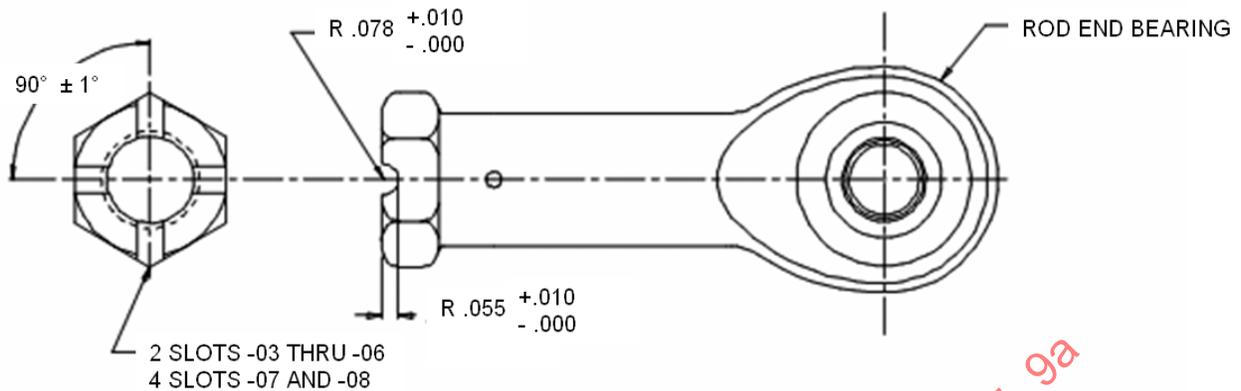
AEROSPACE STANDARD

BEARING, PLAIN, ROD END, SELF-ALIGNING, SELF-LUBRICATING, NARROW, INTERNALLY THREADED, STEEL, CORROSION RESISTANT (CRES)-65 TO +325 °F

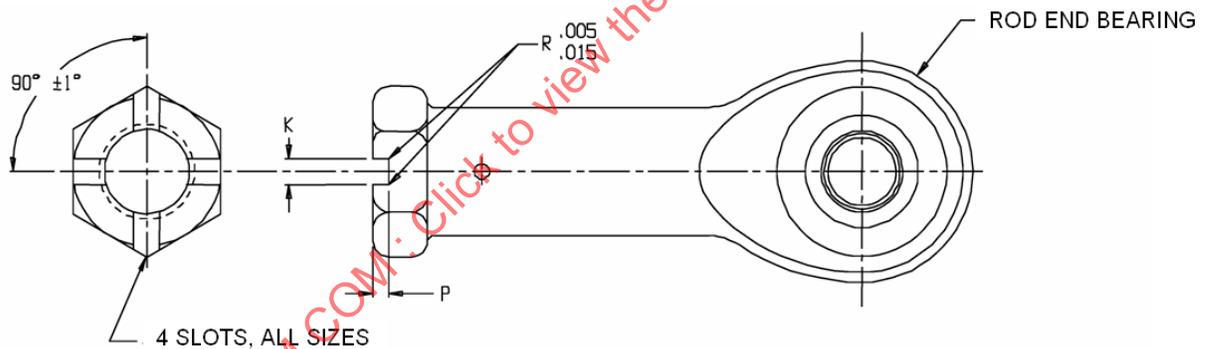
SAE AS81935/9
SHEET 1 OF 5

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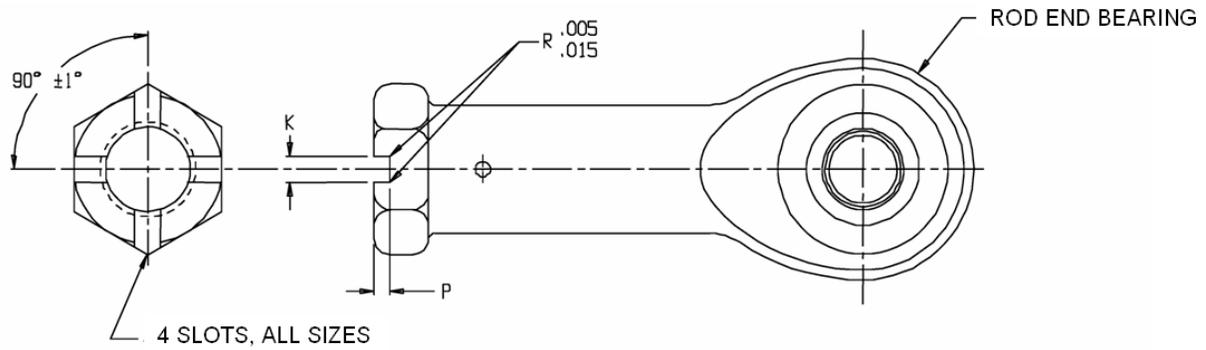


KEYSLOT DESIGNATION "K"
 SIZES -03 THROUGH -08 (ROUNDED SLOT).
 KEYSLOT, WHEN SPECIFIED, IS COMPATIBLE WITH AS81935/3 LOCKING DEVICE. 2 SLOTS SHALL BE ORIENTED PERPENDICULAR TO ROD END HOOP FACE.



KEYSLOT DESIGNATION "K"
 SIZES -10 THROUGH -16 (SQUARE SLOT).
 KEYSLOT, WHEN SPECIFIED, IS COMPATIBLE WITH AS14227, NAS 513 AND NAS 1193. 2 SLOTS SHALL BE ORIENTED PERPENDICULAR TO ROD END HOOP FACE.

DASH NUMBER (REF)	K	P
	+ .005 - .000	+ .005 - .000
-10	.125	.077
-12	.125	.077
-14	.156	.086
-16	.156	.094



KEYSLOT DESIGNATION "W"

SIZES -03 THROUGH -16 (DEEP SQUARE SLOT).

KEYSLOT, WHEN SPECIFIED, IS COMPATIBLE WITH MS14198, AS14227, NAS 1193, NAS 513, NAS 559.

NOTE: DESIGN USAGE RESTRICTIONS APPLY AGAINST NAS 513 AND NAS 559.

2 SLOTS SHALL BE ORIENTED PERPENDICULAR TO ROD END HOOP FACE.

DASH NUMBER	INTERNAL THREAD	K	
		+ .005 - .000	+ .005 - .000
-03 & -04	.2500 – 28UNJF-3B	.062	.110
-05	.3125 – 24UNJF-3B	.062	.110
-06	.3750 – 24UNJF-3B	.093	.110
-07	.4375 – 20UNJF-3B	.093	.110
-08	.5000 – 20UNJF-3B	.093	.110
-10	.6250 – 18UNJF-3B	.125	.110
-12	.7500 – 16UNJF-3B	.125	.110
-14	.8750 – 14UNJF-3B	.156	.110
-16	1.0000 – 12UNJF-3B	.156	.110

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TABLE 1 – DIMENSIONS

DASH NUMBER	B	D	L	E	F	G	N
	BORE +.0000 -.0005	SPH. DIA ± .010	COMPLETE THREAD MIN	THREAD SIZE UNJF-3B	CTR LINE BALL TO END ±.010	CTR LINE DRILL TO END ± .020	SHANK DIA ± .010
-03	.1900	.680	.625	.2500-28	1.210	.312	.329
-04	.2500	.827	.625	.2500-28	1.338	.312	.329
-05	.3125	.984	.750	.3125-24	1.566	.375	.413
-06	.3750	1.131	1.000	.3750-24	1.908	.437	.501
-07	.4375	1.294	1.125	.4375-20	2.125	.500	.584
-08	.5000	1.459	1.250	.5000-20	2.356	.562	.672
-10	.6250	1.763	1.375	.6250-18	2.707	.687	.845
-12	.7500	2.140	1.625	.7500-16	3.193	.812	1.017
-14	.8750	2.372	1.875	.8750-14	3.677	.937	1.187
-16	1.0000	2.681	2.125	1.0000-12	4.101	1.062	1.356

DASH NUMBER	W	H	A	J	M	C	R	Q°	S
	BALL WIDTH +.000 -.002	BODY WIDTH ± .005	MIN	MAX HOUSING I.D.	MAX	HT OF WRENCHING SURFACES +.010 -.062	WIDTH ACROSS FLATS ±.010	MIN	REF. ACROSS CORNERS OR DIA.
-03	.281	.228	.293	.5625	.750	.188	.375	10	.430
-04	.343	.260	.364	.6562	.750	.188	.375	10	.430
-05	.375	.291	.419	.7500	.875	.188	.437	10	.500
-06	.406	.322	.475	.8125	1.125	.250	.625	9	.720
-07	.437	.353	.530	.9062	1.250	.250	.625	8	.720
-08	.500	.400	.600	1.0000	1.375	.375	.875	8	1.020
-10	.625	.510	.739	1.1875	1.500	.375	.875	8	1.020
-12	.750	.603	.920	1.4375	1.750	.500	1.125	8	1.300
-14	.875	.713	.980	1.5625	2.062	.500	1.250	8	1.375
-16	1.000	.807	1.118	1.7500	2.312	.500	1.375	9	1.590

TABLE 2 – LOAD VALUES

DASH NUMBER	(b) ULTIMATE STATIC LOAD (LBS)	(c) FATIGUE LOAD (LBS)	AXIAL PROOF LOAD (LBS)	WEIGHT REF (LBS)	NO LOAD ROTATIONAL BREAKAWAY TORQUE (IN-LBS)	
					MIN	MAX
-03	3000	1100	150	.045	.5	6
-04	5500	1300	430	.060	.5	6
-05	8900	2000	700	.100	1	15
-06	13 400	3100	1100	.145	1	15
-07	18 200	4200	1400	.215	1	15
-08	24 600	5700	2040	.305	1	15
-10	39 500	9200	2430	.550	1	15
-12	57 200	13 500	2940	.930	1	15
-14	77 800	18 400	3100	1.390	1	24
-16	101 000	24 000	3570	1.975	1	24

(b) ULTIMATE LOADS ARE ANALYTICAL VALUES BASED ON ROD END BANJO.

(c) FATIGUE LOADS ARE ANALYTICAL VALUES BASED ON 50 000 CYCLE LIFE. FATIGUE LOADS ARE DEFINED PER PROCUREMENT DOCUMENT AS81935.