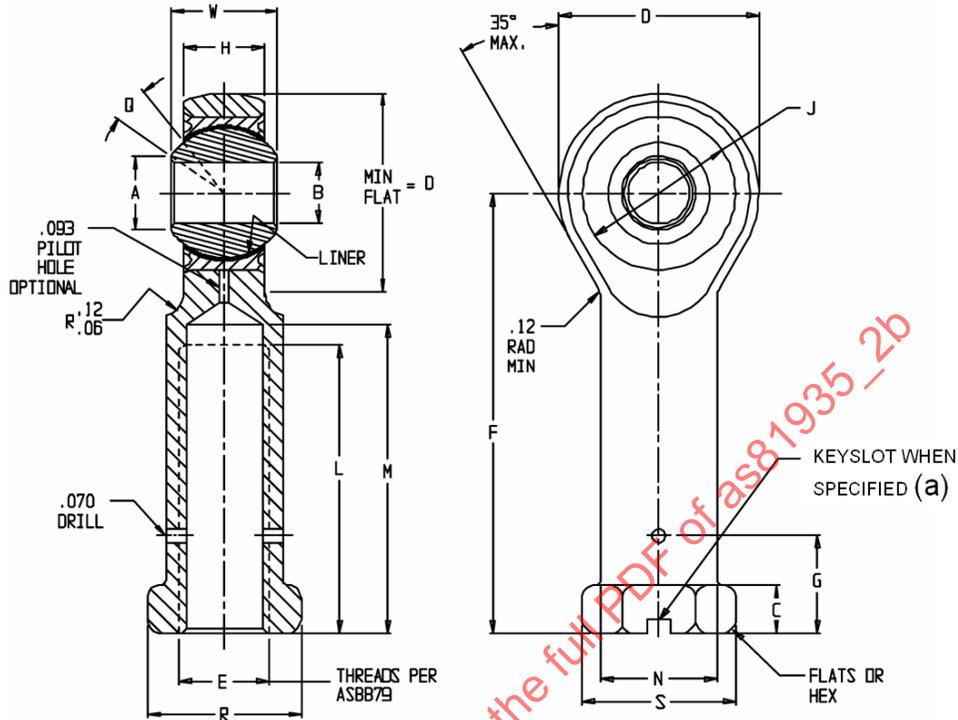


REV.
B

SAE AS81935/2

RATIONALE

AS81935/2 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 PAGE 3 FOR ADDITIONAL DETAILS).

FIGURE 1 – ROD END ASSEMBLY

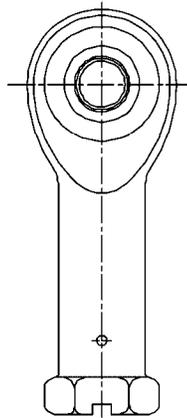
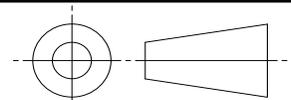


FIGURE 2 – OPTIONAL ELLIPTICAL HEAD DESIGN

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS81935/2>

THIRD ANGLE PROJECTION



CUSTODIAN: ACBG – PLAIN BEARING

PROCUREMENT SPECIFICATION: AS81935

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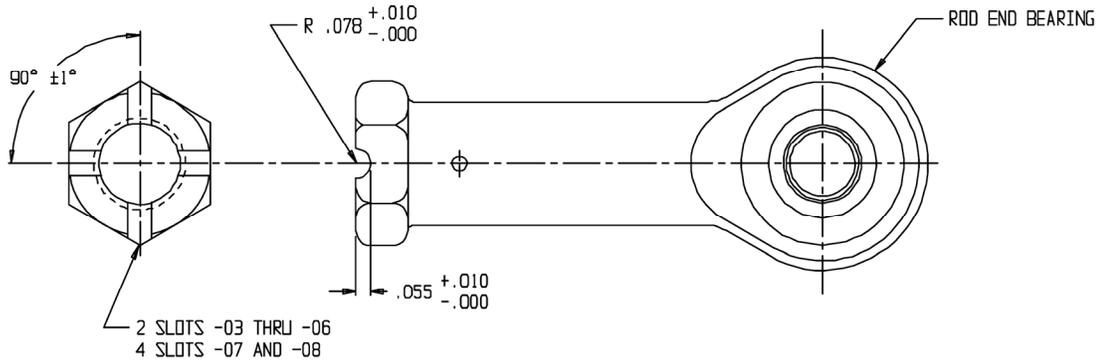
AEROSPACE STANDARD

BEARING, PLAIN, ROD END, SELF-ALIGNING, SELF-LUBRICATING, WIDE, INTERNALLY THREADED, -65 TO +325 °F

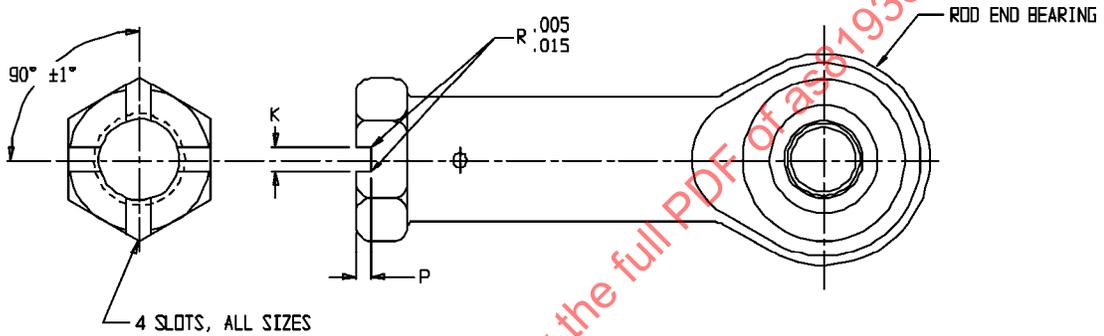
SAE AS81935/2
SHEET 1 OF 5

REV. B

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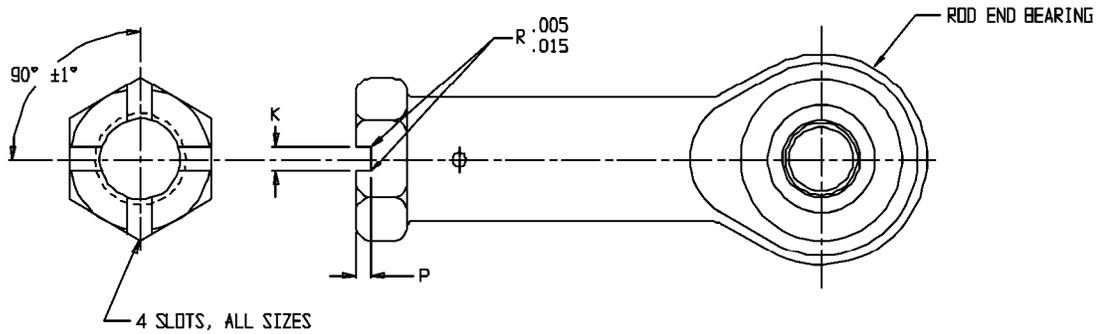


KEYSLOT DESIGNATION "K"
 SIZES -03 THROUGH -08 (ROUNDED SLOT).
 KEYSLOT, WHEN SPECIFIED, IS COMPATIBLE WITH AS81935/3 LOCKING DEVICE.
 2 SLOTS SHALL BE ORIENTED PERPENDICULAR TO ROD END HOOP FACE.



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	.187	.116



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	P
		+ .005 - .000	+ .005 - .000
-03 & -04	.3125-24UNJF-3B	.062	.110
-05 & -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	1.2500-12UNJF-3B	.187	.116

SAENORM.COM : Click to view the full PDF of AS81935_2b

TABLE 1 - DIMENSIONS

DASH NUMBER	B	D	L	E	F	G	N	W
	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	BALL WIDTH +.000 -.002
-03	.1900	.806	.750	.3125-24	1.375	.375	.422	.437
-04	.2500	.806	.750	.3125-24	1.469	.375	.422	.437
-05	.3125	.900	.875	.3750-24	1.625	.437	.485	.437
-06	.3750	1.025	1.000	.3750-24	1.812	.437	.547	.500
-07	.4375	1.150	1.125	.4375-20	2.000	.500	.610	.562
-08	.5000	1.337	1.250	.5000-20	2.250	.562	.735	.625
-10	.6250	1.525	1.375	.6250-18	2.500	.687	.860	.750
-12	.7500	1.775	1.625	.7500-16	2.875	.812	.985	.875
-14	.8750	2.025	1.875	.8750-14	3.375	.937	1.110	.875
-16	1.0000	2.775	2.125	1.2500-12	4.125	1.312	1.688	1.375

DASH NUMBER	H	A	J	M	C	R	Q°	S
	BODY WIDTH ±.005	MIN	MAX HOUSING ID	MAX	HT OF WRENCHING SURFACES +.010 -.062	WIDTH ACROSS FLATS ±.010	MIN	REF ACROSS CORNERS OR DIA
-03	.337	.30	.6250	.875	.188	.437	15	.500
-04	.337	.30	.6250	.875	.188	.437	15	.500
-05	.327	.36	.6875	1.000	.250	.500	14	.580
-06	.416	.47	.8125	1.125	.250	.562	8	.660
-07	.452	.54	.9062	1.250	.250	.625	10	.720
-08	.515	.61	1.0000	1.375	.250	.750	9	.880
-10	.577	.75	1.1875	1.500	.375	.875	12	1.020
-12	.640	.85	1.3750	1.750	.375	1.000	13	1.160
-14	.765	1.00	1.6250	2.062	.500	1.125	6	1.300
-16	1.015	1.27	2.1250	2.312	.563	1.750	12	2.020

TABLE 2 - LOAD VALUES

DASH NUMBER	ULTIMATE STATIC LOAD (LB)	FATIGUE LOAD (LB)	AXIAL PROOF LOAD (LB)	WEIGHT (LB) (REF)	NO LOAD ROTATIONAL BREAKAWAY TORQUE (IN-LB)	
					MIN	MAX
-03	2360	1470 (b)	1000	.080	.5	6
-04	4860	2380	1000	.084	.5	6
-05	7180	3020	1100	.102	1	15
-06	8550	3570	1660	.161	1	15
-07	12 000	4800	1850	.212	1	15
-08	19 500	8260	2040	.325	1	15
-10	21 900	9180	2430	.481	1	15
-12	29 300	11 600	2810	.673	1	15
-14	34 500	13 100	3320	.959	1	24
-16	80 300	30 400	4340	2.717	1	24

(b) BASED ON BOLT BENDING FATIGUE STRENGTH 180 000 PSI.