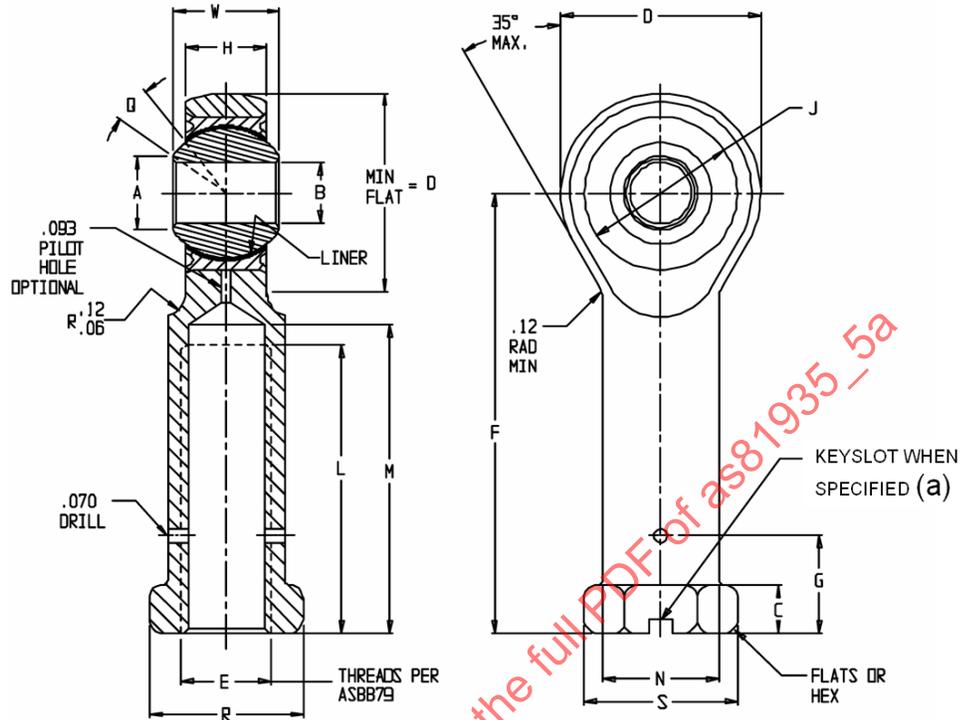


RATIONALE

AS81935/5 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

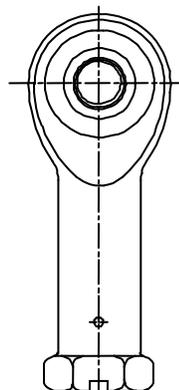
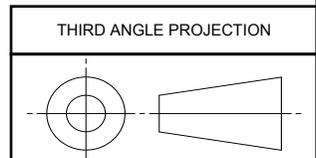


FIGURE 2 - OPTIONAL ELLIPTICAL HEAD DESIGN

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS81935/5A>



CUSTODIAN: ACBG – PLAIN BEARING

PROCUREMENT SPECIFICATION: AS81935



**AEROSPACE STANDARD**

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

**SAE AS81935/5**  
SHEET 1 OF 5

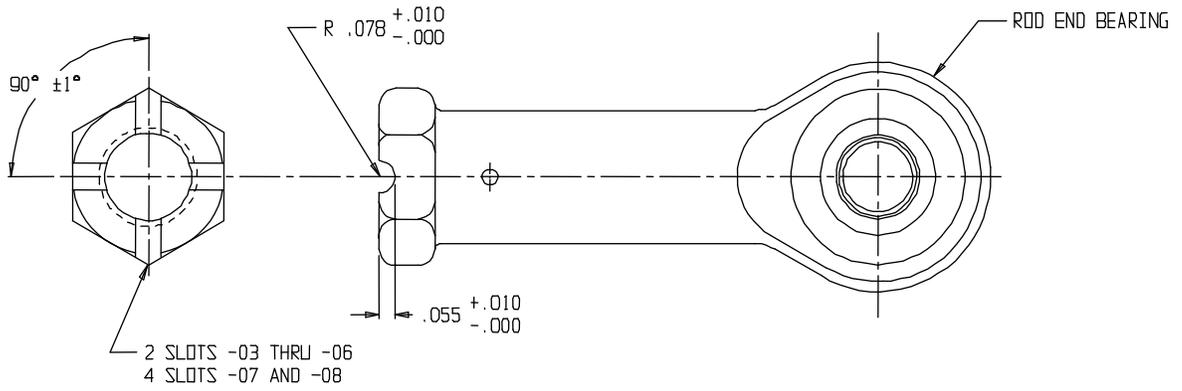
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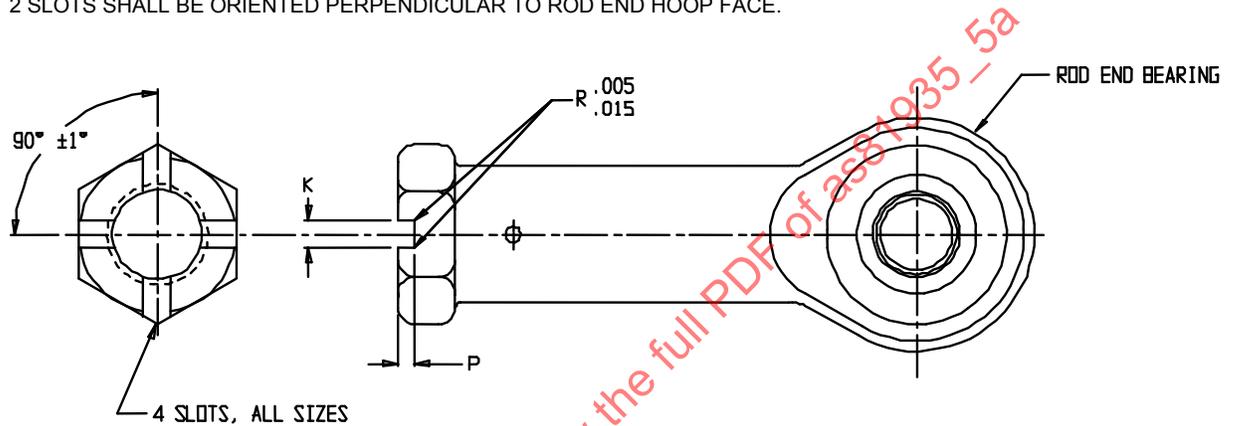
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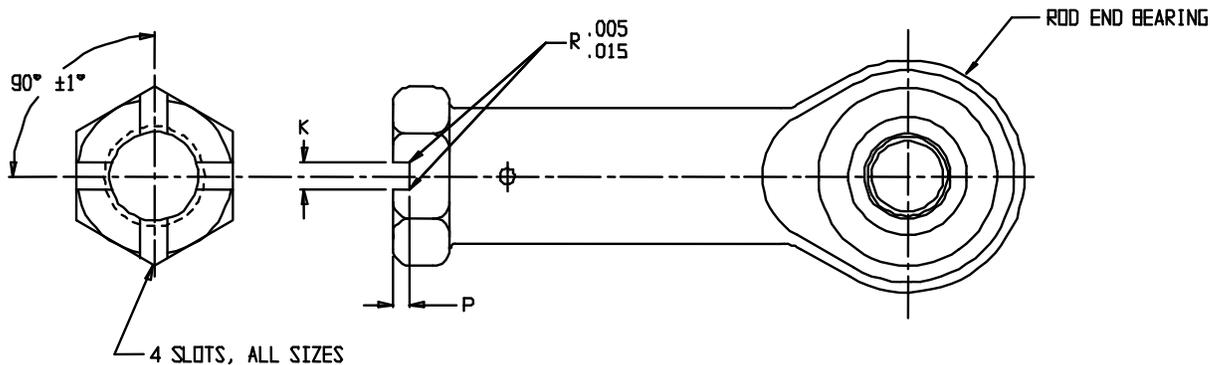


KEYSLOT DESIGNATION "K"  
SIZES -03 THROUGH -08 (ROUNDED SLOT).  
KEYSLOT, WHEN SPECIFIED, IS COMPATIBLE WITH AS81935/3 LOCKING DEVICE.  
2 SLOTS SHALL BE ORIENTED PERPENDICULAR TO ROD END HOOP FACE.



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, 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
		+0.005 -0.000	+0.005 -0.000
-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	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	.680	.625	.2500-28	1.210	.312	.329	.281
-04	.2500	.827	.625	.2500-28	1.338	.312	.329	.343
-05	.3125	.984	.750	.3125-24	1.566	.375	.413	.375
-06	.3750	1.131	1.000	.3750-24	1.908	.437	.501	.406
-07	.4375	1.294	1.125	.4375-20	2.125	.500	.584	.437
-08	.5000	1.459	1.250	.5000-20	2.356	.562	.672	.500
-10	.6250	1.763	1.375	.6250-18	2.707	.687	.845	.625
-12	.7500	2.140	1.625	.7500-16	3.193	.812	1.017	.750
-14	.8750	2.372	1.875	.8750-14	3.677	.937	1.187	.875
-16	1.0000	2.681	2.125	1.0000-12	4.101	1.062	1.356	1.000

DASH NUMBER	H	A	J	M	C	R	Q°	S
	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	.228	.293	.5625	.750	.188	.375	10	.430
-04	.260	.364	.6562	.750	.188	.375	10	.430
-05	.291	.419	.7500	.875	.188	.437	10	.500
-06	.322	.475	.8125	1.125	.250	.625	9	.720
-07	.353	.530	.9062	1.250	.250	.625	8	.720
-08	.400	.600	1.0000	1.375	.375	.875	8	1.020
-10	.510	.739	1.1875	1.500	.375	.875	8	1.020
-12	.603	.920	1.4375	1.750	.500	1.125	8	1.300
-14	.713	.980	1.5625	2.062	.500	1.250	8	1.375
-16	.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.

 An SAE International Group	<b>AEROSPACE STANDARD</b>	<b>SAE AS81935/5</b> SHEET 4 OF 5	<b>REV.</b> <b>A</b>
	BEARING, PLAIN, ROD END, SELF-ALIGNING, SELF-LUBRICATING, NARROW, INTERNALLY THREADED, -65 TO +325 °F		