

TABLE 1 DIMENSION "G" REVISED TO ACCOMMODATE ALL BEAM SEAL MANUFACTURER'S QUALIFIED DESIGN DIMENSIONS.

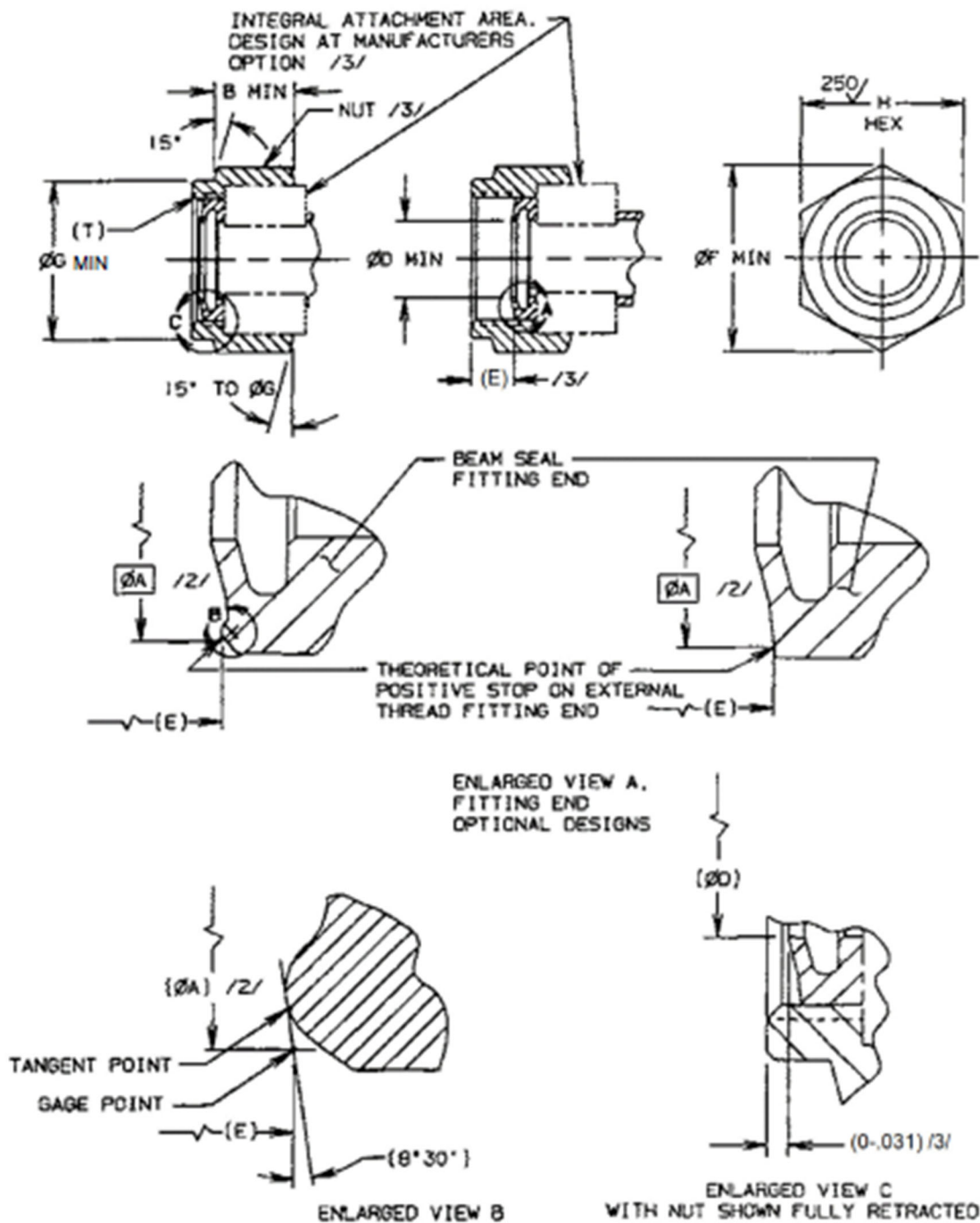
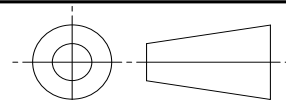


FIGURE 1 - FITTING END DESIGN WITH LIMITS OF NUT TRAVEL

For more information on this standard, visit
<https://www.sae.org/standards/content/AS4209D/>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: NONE /1/



AEROSPACE STANDARD

FITTING END ASSEMBLY, INTERNAL THREAD,
RETAINED NUT, BEAM SEAL,
DESIGN STANDARD

AS4209™
SHEET 1 OF 2

REV.
D



TABLE 1 - DIMENSIONS

BASIC NO. AS4209 /11/ SIZE CODE	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3B	A BASIC	B MIN	D MIN	(E)	F MIN	G MIN	H
03	.188	.3750-28 UNJS	.3260	.134	.164	.171	.568	.470	.490-.502
04	.250	.4375-24 UNJS	.3800	.143	.194	.206	.638	.532	.552-.565
05	.312	.5000-24 UNJS	.4430	.152	.242	.210	.709	.595	.615-.628
06	.375	.5625-20 UNJS	.4935	.161	.307	.233	.780	.658	.678-.691
08	.500	.7188-20 UNJS	.6500	.179	.408	.249	.993	.845	.865-.878
10	.625	.8438-18 UNJS	.7675	.197	.523	.307	1.120	.970	.990-1.003
12	.750	1.0000-16 UNJ	.9145	.215	.660	.343	1.260	1.093	1.113-1.128
14	.875	1.1250-16 UNJ	1.0390	.233	.780	.348	1.540	1.343	1.363-1.380
16	1.000	1.2500-14 UNJS	1.1530	.251	.874	.366	1.650	1.468	1.488-1.505
20	1.250	1.5781-14 UNJS	1.4810	.287	1.128	.369	2.063	1.843	1.863-1.880
24	1.500	1.8438-14 UNJS	1.7460	.323	1.337	.449	2.338	2.089	2.109-2.135

NOTES:

- /1/ THIS FITTING END IS DESIGNED FOR USE WITH BEAM SEAL FITTINGS PER AS85421 OR AS85720. THE DESIGN AND FORM OF THE BEAM IS AT THE MAUFACTURER'S OPTION, BUT MUST MEET THE PERFORMANCE REQUIREMENTS OF AS85421 OR AS85720 WHEN MATED WITH AS4207 FITTING END OR EQUIVALENT FITTING END.
- /2/ THE "A" GAGE DIAMETER CORRESPONDS TO THE NOMINAL "D" DIAMETER OF THE AS4207 EXTERNAL THREAD FITTING END. DIAMETER "A" DEFINES THE POINT AT WHICH "E" LENGTH DIMENSIONS, SUCH AS FITTING END LEG LENGTHS AND HOSE ASSEMBLY LENGTHS, SHALL BE MEASURED. FOR A FITTING END WITH A CURVED SEALING SURFACE, SHOWN IN FIGURE 1 VIEW B, THE GAGE POINT AT "ØA" REFLECTS THE POINT TO WHICH THE (8°30') BASIC ANGLE IS PROJECTED AND INTERSECTS "ØA" TO ESTABLISH A GAGE POINT FOR MEASURING "E."
- /3/ THE FITTING END SHALL INCLUDE A NUT THAT SHALL BE INTEGRALLY ATTACHED TO THE FITTING END BY ANY SUITABLE MEANS SO THAT IT IS RETAINED ON THE COMPONENT PART. WHEN THE NUT IS AT THE EXTREME LIMITS OF TRAVEL AS SHOWN, THE NUT RETRACTION DIMENSION IS APPROXIMATELY (0-.031) AND THE NUT EXTENSION IS APPROXIMATELY "E" DIMENSION. THE (0-.031) NUT RETRACTION AND "E" NUT EXTENSION DIMENSION ARE FOR DESIGN USE AND SHALL NOT BE CAUSE FOR PART REJECTION.
4. INTERPRETATION OF DRAWING PER AS4296.
5. REVISION INDICATOR: A CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS, NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.
6. INVENTORIED PARTS WITH FITTING ENDS CONFORMING TO THE PREVIOUS "LETTER CHANGE" MAY BE USED TO DEPLETION.
7. SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36. REQUIREMENTS PER ANSI/ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 MICROINCHES Ra.
8. BREAK EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.
9. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994.
10. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS $\pm .030$, ANGULAR DIMENSIONS $\pm 5^\circ$.

/11/ EXAMPLE OF DRAWING CALLOUT:

a. TABULATED PART DRAWING: FITTING END PER AS4209.

b. INDIVIDUAL PART DRAWING: AS4209 - 08

BASIC NUMBER

SIZE CODE, TUBE SIZE
IN .062 INCREMENTS

AEROSPACE STANDARD

FITTING END ASSEMBLY, INTERNAL THREAD,
RETAINED NUT, BEAM SEAL,
DESIGN STANDARDAS4209™
SHEET 2 OF 2REV.
D

Documents

Document Sharing Hub