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MA2271

RATIONALE

MA2271 HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

FEDERAL SUPPLY CLASS
4730

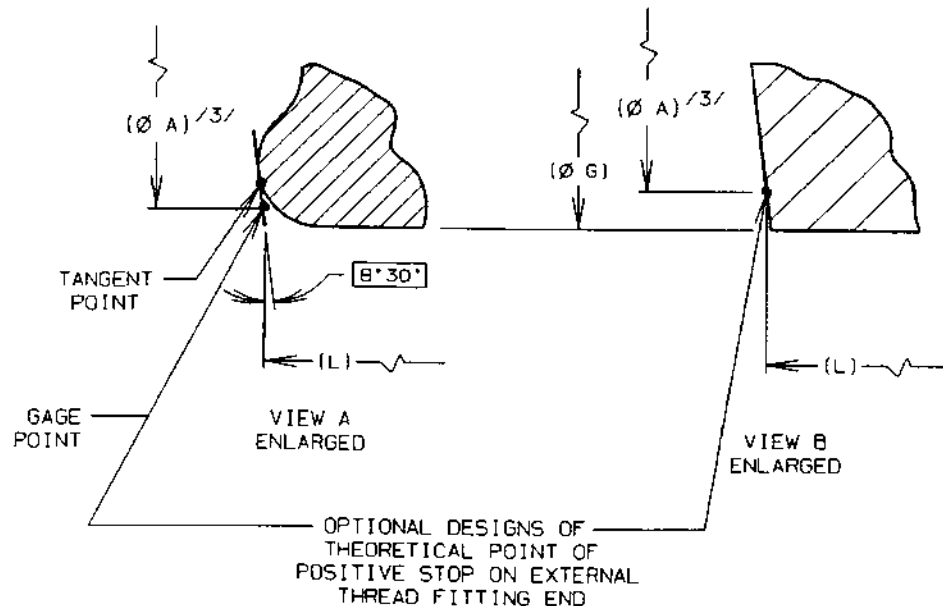
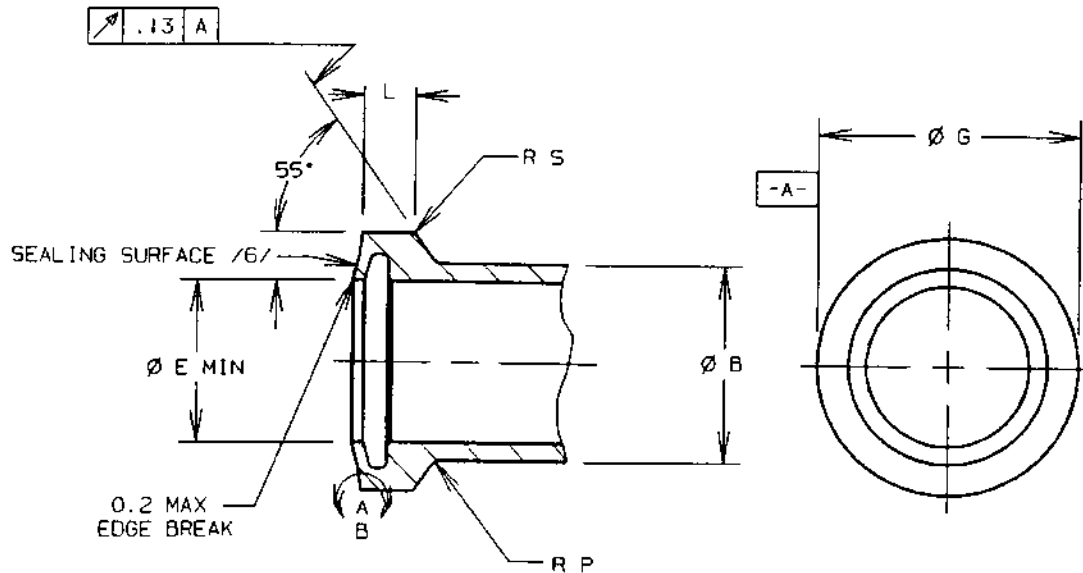
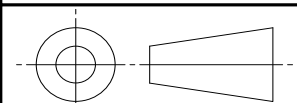


FIGURE 1 - FITTING END, BEAM SEAL, SLIP-ON NUT

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THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B /4/

PROCUREMENT SPECIFICATION: NONE /2/



AEROSPACE STANDARD

FITTING END, BEAM SEAL, SLIP-ON NUT,
DESIGN STANDARD, METRIC

MA2271
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Documents

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TABLE 1 - DIMENSIONS

BASIC NO. MA2271 /10/ SIZE CODE	(NOMINAL TUBE SIZE DN) /1/	A	B ± 0.1	E	G 0/-0.1	L ± 0.1	P	S ± 0.1
04	4	6.50	5.0	3.6	6.6	3.4	1.3	0.25
05	5	8.50	6.0	4.6	8.6	3.5	1.3	0.25
06	6	10.15	7.0	5.4	10.3	3.6	1.3	0.25
08	8	11.85	9.0	7.1	12.0	3.7	1.3	0.25
10	10	13.85	11.3	9.2	14.0	3.8	1.3	0.25
12	12	15.85	11.3	11.1	16.0	3.9	1.5	0.50
14	14	17.85	15.1	11.9	18.0	4.0	1.5	0.50
16	16	19.85	17.3	13.8	20.0	4.2	1.5	0.50
18	18	21.85	19.4	15.8	22.0	4.3	2.2	0.75
20	20	24.85	21.5	18.5	25.0	4.3	2.2	0.75
22	22	27.85	23.5	21.3	28.0	4.3	2.2	0.75
25	25	30.85	26.6	22.9	31.0	4.3	2.2	0.75
28	28	33.85	29.5	26.1	34.0	4.3	2.2	0.75
32	32	36.85	33.6	28.8	37.0	4.5	2.2	0.75

NOTES:

- /1/ DN = NOMINAL TUBE OUTSIDE DIAMETER.
- /2/ THIS FITTING END IS DESIGNED FOR USE IN SYSTEMS WITH OPERATING PRESSURES OF 28 000 kPa MAXIMUM. THIS DESIGN STANDARD IS FOR USE WITH BEAM SEAL FITTINGS PER MA2005 (ISO 7169). THE DESIGN AND FORM OF THE BEAM IS AT THE MANUFACTURER'S OPTION, BUT MUST MEET THE PERFORMANCE REQUIREMENTS OF MA2005 (ISO 7169) WHEN MATED WITH MA2273 AND MA2274 EXTERNAL THREAD FITTING ENDS.
- /3/ THE "A" GAGE DIAMETER IS THE NOMINAL OF THE "L" DIAMETER ON THE MA2273 EXTERNAL THREAD BEAM SEAL FITTING END AND "L" DEFINES THE POSITION OF THE SURFACE OF THE FEMALE BEAM SEAL TO WHICH LENGTHS, SUCH AS FITTING LEG LENGTH OR HOSE ASSEMBLY LENGTHS ARE MEASURED. FOR A FITTING END WITH A CURVED SEALING SURFACE, SHOWN IN FIGURE 1, VIEW B, THE GAGE POINT AT "φA" REFLECTS THE POINT TO WHICH THE 8° 30' REFERENCED ANGLE IS PROJECTED TO ESTABLISH A GAGE POINT FOR MEASURING "L".
- /4/ REVISIONS OF THIS STANDARD SHALL BE COORDINATED WITH SAE COMMITTEE E-25 AND AECMA COMMITTEE C-4.
5. INTERPRETATION OF DRAWING PER MAP4296.
- /6/ SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36; REQUIREMENTS PER ANSI/ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 3.2 μm Ra. SEALING SURFACE BETWEEN φG AND φE SHALL BE 0.8 μm Ra.
7. BREAK EDGES 0.1 TO 0.4 UNLESS OTHERWISE SPECIFIED.
8. DIMENSIONING AND TOLERANCING: ANSI Y14.5M
9. DIMENSIONS IN MILLIMETERS. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ± 0.2 AND ANGULAR DIMENSIONS $\pm 0^\circ 15'$.
- /10/ EXAMPLE OF DRAWING CALLOUT:
- a. TABULATED PART DRAWING: FITTING END PER MA2271
- b. INDIVIDUAL PART DRAWING: MA2271-08

BASIC NUMBER _____ SIZE CODE, TUBE SIZE IN MILLIMETERS



AEROSPACE STANDARD

FITTING END, BEAM SEAL, SLIP-ON NUT,
DESIGN STANDARD, METRIC

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