

REV.
B

SAE AS5971

RATIONALE

ADD CODE LETTER A OPTION FOR FITTINGS WITHOUT BLUE PTFE COATING OR PAINT ON THE RING. FITTINGS WITH UNCOATED/UNPAINTED RINGS ARE NEEDED TO PREVENT COATING/PAINT DEBRIS IN CONTAMINATION SENSITIVE SYSTEMS. ADDED NOTE 14 FOR CLARIFICATION OF UNSWAGED AND SWAGED DIMENSIONS. CORRECTED ERRORS IN NOTES. REFORMATTED TABLES.

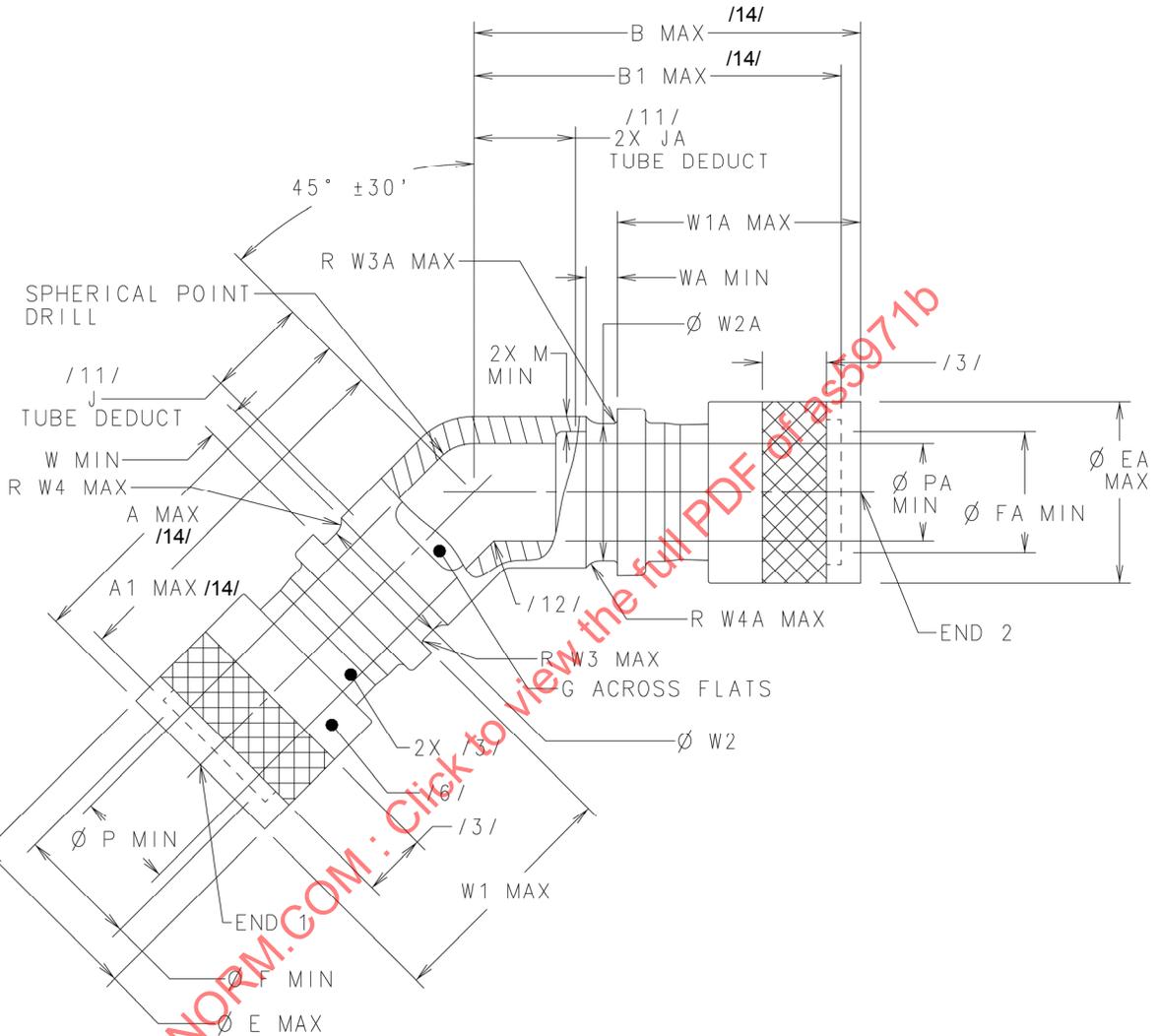
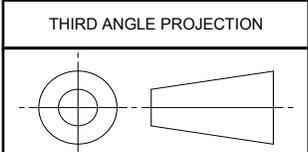


FIGURE 1 – ELBOW, 45 DEGREE, SWAGE
(SEE TABLE 1A, 1B & 1C FOR DIMENSIONAL INFORMATION)

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CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS5958

SAE Aerospace
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AEROSPACE STANDARD

FITTING ASSEMBLY, ELBOW, 45 DEGREE,
AXIALLY SWAGED, HYDRAULIC,
5080 PSI

SAE AS5971
SHEET 1 OF 4

REV. B

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TABLE 1A - DIMENSIONS A THROUGH G

BASIC NO. AS5971 /13/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	A	A1	B	B1	E	EA	F	FA	G
0404	.2500	.2500	.934	.847	.934	.847	.466	.466	.253	.253	.380/.348
0604	.3750	.2500	1.230	1.114	1.013	.926	.609	.466	.378	.253	.509/.477
0606	.3750	.3750	1.230	1.114	1.230	1.114	.609	.609	.378	.378	.509/.477
0806	.5000	.3750	1.477	1.331	1.269	1.153	.783	.609	.504	.378	.647/.615
0808	.5000	.5000	1.477	1.331	1.477	1.331	.783	.783	.504	.504	.647/.615
1008	.6250	.5000	1.850	1.646	1.556	1.410	.939	.783	.629	.504	.783/.751
1010	.6250	.6250	1.850	1.646	1.850	1.646	.939	.939	.629	.629	.783/.751
1210	.7500	.6250	2.080	1.875	1.929	1.725	1.122	.939	.754	.629	.925/.893
1212	.7500	.7500	2.080	1.875	2.080	1.875	1.122	1.122	.754	.754	.925/.893
1612	1.0000	.7500	2.496	2.282	2.198	1.993	1.495	1.122	1.004	.754	1.213/1.181
1616	1.0000	1.0000	2.496	2.282	2.496	2.282	1.495	1.495	1.004	1.004	1.213/1.181

TABLE 1B - DIMENSIONS J THROUGH WA

BASIC NO. AS5971 /13/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	/11/ J TUBE DEDUCT	/11/ JA TUBE DEDUCT	M	P	PA	W	WA
0404	.2500	.2500	.352 ± .150	.352 ± .150	.043	.198	.198	.123	.123
0604	.3750	.2500	.431 ± .150	.431 ± .150	.045	.302	.198	.153	.123
0606	.3750	.3750	.431 ± .150	.431 ± .150	.045	.302	.302	.153	.153
0806	.5000	.3750	.478 ± .175	.470 ± .150	.052	.401	.302	.165	.153
0808	.5000	.5000	.478 ± .175	.478 ± .175	.052	.401	.401	.165	.165
1008	.6250	.5000	.557 ± .175	.557 ± .175	.057	.507	.401	.140	.165
1010	.6250	.6250	.557 ± .175	.557 ± .175	.057	.507	.507	.140	.140
1210	.7500	.6250	.643 ± .175	.636 ± .175	.065	.604	.507	.154	.140
1212	.7500	.7500	.643 ± .175	.643 ± .175	.065	.604	.604	.154	.154
1612	1.0000	.7500	.768 ± .200	.761 ± .175	.084	.802	.604	.167	.154
1616	1.0000	1.0000	.768 ± .200	.768 ± .200	.084	.802	.802	.167	.167

TABLE 1C - DIMENSION W1 THROUGH W4A AND WEIGHTS

BASIC NO. AS5971 /13/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	W1	W1A	W2 ±.0015	W2A ±.0015	W3	W3A	W4	W4A	WEIGHT LB/EA APPROX. REF.
0404	.2500	.2500	.488	.488	.3005	.3005	.018	.018	.065	.065	.019
0604	.3750	.2500	.664	.488	.4475	.3005	.033	.018	.065	.065	.036
0606	.3750	.3750	.664	.664	.4475	.4475	.033	.033	.065	.065	.046
0806	.5000	.3750	.871	.664	.5945	.4475	.033	.033	.129	.065	.077
0808	.5000	.5000	.871	.871	.5945	.5945	.033	.033	.129	.129	.091
1008	.6250	.5000	1.190	.871	.7365	.5945	.021	.033	.078	.129	.130
1010	.6250	.6250	1.190	1.190	.7365	.7365	.021	.021	.078	.078	.148
1210	.7500	.6250	1.327	1.190	.8805	.7365	.024	.021	.089	.078	.212
1212	.7500	.7500	1.327	1.327	.8805	.8805	.024	.024	.089	.089	.238
1612	1.0000	.7500	1.612	1.327	1.1725	.8805	.027	.024	.099	.089	.415
1616	1.0000	1.0000	1.612	1.612	1.1725	1.1725	.027	.027	.099	.099	.513

/1/ MATERIALS:

CODE LETTER "T"

RINGS - AMS4965 TITANIUM ALLOY, 6.0AL 4.0V SOLUTION HEAT TREATED AND AGED OR AMS4928 TITANIUM ALLOY 6.0AL 4.0V ANNEALED WITH HIGH STRENGTH CARBON FIBER/EPOXY RESIN COMPOSITE REINFORCEMENT.

BODY - AMS4928 TITANIUM ALLOY, 6.0AL 4.0V ANNEALED

2. FINISH:

TITANIUM - NONE

/3/ COATINGS/LUBRICANTS:

a. NO SUFFIX CODE LETTER

(1) RINGS - THE OUTER SURFACE SHALL HAVE A .125 INCH MINIMUM WIDTH BLUE COLORED RING OR COMPLETELY COLORED BLUE TO INDICATE 5080 PSI MAXIMUM OPERATION PRESSURE. AN AS1241 FLUID RESISTANT PTFE COATING OR PAINT MUST BE USED.

(2) BODY - SOLID FILM LUBRICANT PER AS5272, TYPE I OR II, PTFE OR PETROLEUM-BASED LUBRICANT MAY BE APPLIED TO PORTIONS OF THE ID AND OD. THE PETROLEUM-BASED LUBRICANT SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

b. SUFFIX CODE LETTER "A"

(1) RINGS - NO BLUE PTFE COATING OR PAINT. THE WORD "BLUE" SHALL BE MARKED ON THE RING TO INDICATE 5080 PSI MAXIMUM OPERATING PRESSURE. MARKING METHODS SHALL BE IN ACCORDANCE WITH AS5958.

(2) BODY - SOLID FILM LUBRICANT PER AS5272, TYPE I OR II, PTFE OR PETROLEUM-BASED LUBRICANT MAY BE APPLIED TO PORTIONS OF THE ID AND OD. THE PETROLEUM-BASED LUBRICANT SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

/4/ PROCUREMENT SPECIFICATION: AS5958 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LISTING FOR PRI-QPL-AS5958 FOR THIS STANDARD. SEE www.eAuditNet.com FOR CURRENT QPL ON-LINE.

5. DIMENSIONS AND TOLERANCES NOT DEFINED ON THIS STANDARD SHALL BE SPECIFIED AND CONTROLLED BY THE MANUFACTURER. THE MANUFACTURER IS RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PROCUREMENT SPECIFICATION.

/6/ IDENTIFICATION SHALL BE IN ACCORDANCE WITH AS5958 AND SHALL BE IDENTIFIED ON EITHER RING IN THE AREA SHOWN.

7. FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH AS5959.

8. SURFACE TEXTURE: SHALL BE IN ACCORDANCE WITH ASME B46.1 AND THE SYMBOLS IN ACCORDANCE WITH ASME Y14.36M. UNLESS OTHERWISE SPECIFIED THE MAXIMUM MACHINED SURFACES SHALL BE 125 μ in Ra AND THE MAXIMUM FORGED SURFACES SHALL BE 250 μ in Ra.

9. DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ASME Y14.5M-1994.

a. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

b. DIMENSIONAL TOLERANCES SHALL BE \pm .005 INCHES UNLESS OTHERWISE SPECIFIED

c. ANGULAR TOLERANCES SHALL BE \pm .50 DEGREES UNLESS OTHERWISE SPECIFIED

d. BREAK ALL EDGES .003 TO .010 INCHES UNLESS OTHERWISE SPECIFIED

10. INTERPRETATION OF DRAWING PER ARP4296.

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	FITTING ASSEMBLY, ELBOW, 45 DEGREE, AXIALLY SWAGED, HYDRAULIC, 5080 PSI		