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REV.
B

SAE AS5970

FEDERAL SUPPLY CLASS
4730

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. REFORMATTED TABLES. CORRECTED ERRORS IN NOTES.

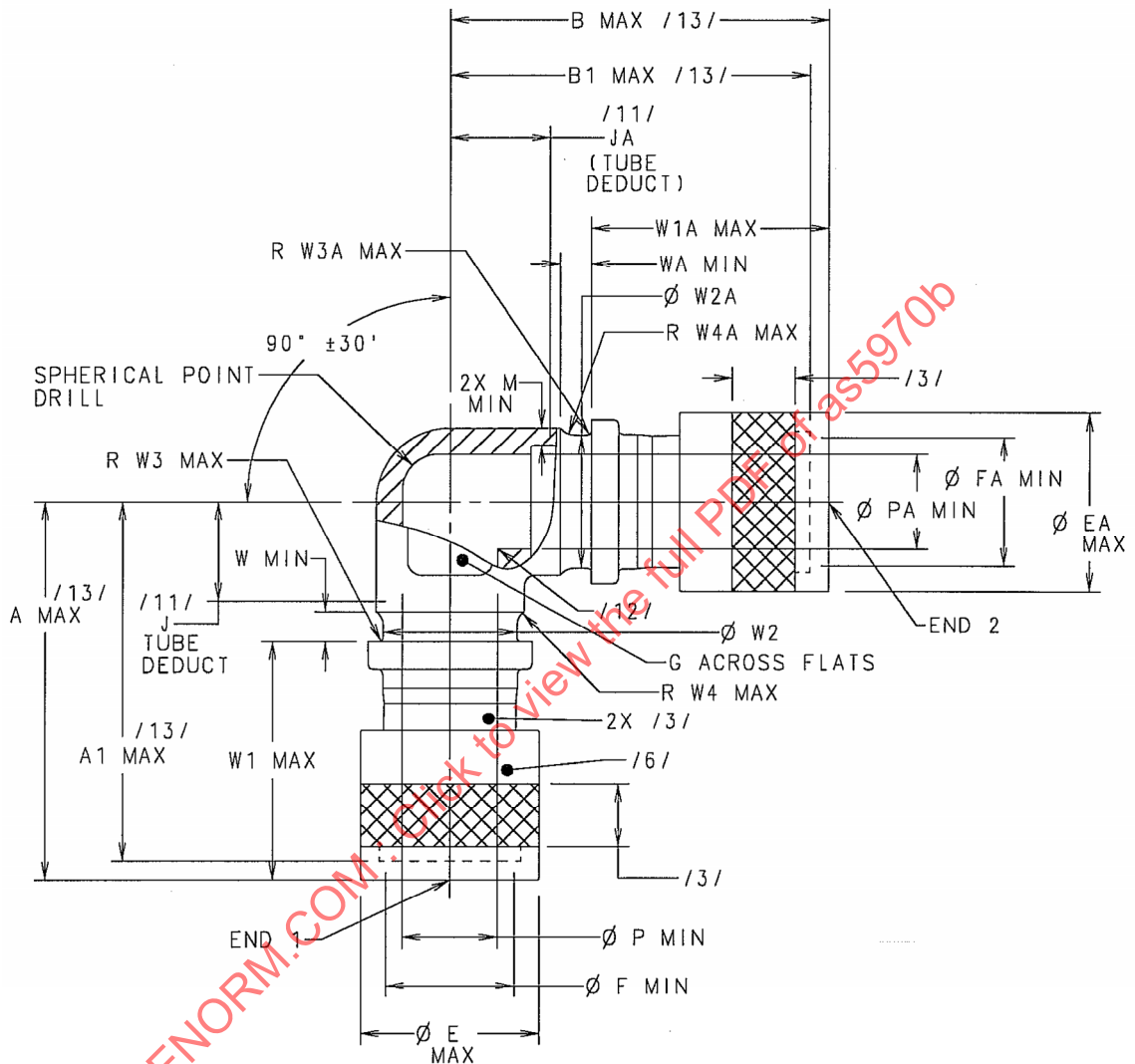
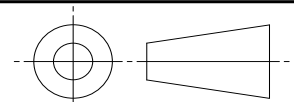


FIGURE 1 – ELBOW, 90 DEGREE, SWAGE
(SEE TABLE 1A, 1B & 1C FOR DIMENSIONAL INFORMATION)

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on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS5970B>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS5958

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

FITTING ASSEMBLY, ELBOW, 90 DEGREE,
AXIALLY SWAGED, HYDRAULIC,
5080 PSI

SAE AS5970
SHEET 1 OF 4

REV.
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ISSUED 2006-01 REVISED 2012-05

TABLE 1A - DIMENSIONS A THROUGH G

BASIC NO. AS5970 /15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	A	A1	B	B1	E	EA	F	FA	G
0404	.2500	.2500	.935	.848	.935	.848	.466	.466	.253	.253	.380/.348
0604	.3750	.2500	1.215	1.099	.998	.911	.609	.466	.378	.253	.509/.477
0606	.3750	.3750	1.215	1.099	1.215	1.099	.609	.609	.378	.378	.509/.477
0806	.5000	.3750	1.516	1.370	1.308	1.192	.783	.609	.504	.378	.647/.615
0808	.5000	.5000	1.516	1.370	1.516	1.370	.783	.783	.504	.504	.647/.615
1008	.6250	.5000	1.873	1.669	1.579	1.433	.939	.783	.629	.504	.783/.751
1010	.6250	.6250	1.873	1.669	1.873	1.669	.939	.939	.629	.629	.783/.751
1210	.7500	.6250	2.149	1.944	1.998	1.794	1.122	.939	.754	.629	.925/.893
1212	.7500	.7500	2.149	1.944	2.149	1.944	1.122	1.122	.754	.754	.925/.893
1612	1.0000	.7500	2.606	2.392	2.308	2.103	1.495	1.122	1.004	.754	1.213/1.181
1616	1.0000	1.0000	2.606	2.392	2.606	2.392	1.495	1.495	1.004	1.004	1.213/1.181
2016	1.2500	1.0000	3.020	2.796	2.728	2.514	1.758	1.495	1.255	1.004	1.641/1.609
2020	1.2500	1.2500	3.020	2.796	3.020	2.796	1.758	1.758	1.255	1.255	1.641/1.609

TABLE 1B - DIMENSIONS J THROUGH WA

BASIC NO. AS5970 /15/ 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	.353 ± .150	.353 ± .150	.043	.198	.198	.123	.123
0604	.3750	.2500	.416 ± .150	.416 ± .150	.045	.302	.198	.153	.123
0606	.3750	.3750	.416 ± .150	.416 ± .150	.045	.302	.302	.153	.153
0806	.5000	.3750	.517 ± .175	.509 ± .150	.052	.401	.302	.165	.153
0808	.5000	.5000	.517 ± .175	.517 ± .175	.052	.401	.401	.165	.165
1008	.6250	.5000	.580 ± .175	.580 ± .175	.057	.507	.401	.140	.165
1010	.6250	.6250	.580 ± .175	.580 ± .175	.057	.507	.507	.140	.140
1210	.7500	.6250	.712 ± .175	.705 ± .175	.065	.604	.507	.154	.140
1212	.7500	.7500	.712 ± .175	.712 ± .175	.065	.604	.604	.154	.154
1612	1.0000	.7500	.878 ± .200	.878 ± .175	.084	.802	.604	.167	.154
1616	1.0000	1.0000	.878 ± .200	.878 ± .200	.084	.802	.802	.167	.167
2016	1.2500	1.0000	1.009 ± .200	1.000 ± .200	.174	1.011	.802	.185	.167
2020	1.2500	1.2500	1.009 ± .200	1.009 ± .200	.174	1.011	1.011	.185	.185

TABLE 1C – DIMENSION W1 THROUGH W4A AND WEIGHTS

BASIC NO. AS5970 /15/ 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	.675	.488	.4475	.3005	.033	.018	.065	.065	.037
0606	.3750	.3750	.675	.675	.4475	.4475	.033	.033	.065	.065	.044
0806	.5000	.3750	.871	.675	.5945	.4475	.033	.033	.129	.065	.079
0808	.5000	.5000	.871	.871	.5945	.5945	.033	.033	.129	.129	.091
1008	.6250	.5000	1.190	.871	.7365	.5945	.021	.033	.078	.129	.132
1010	.6250	.6250	1.190	1.190	.7365	.7365	.021	.021	.078	.078	.146
1210	.7500	.6250	1.327	1.190	.8805	.7365	.024	.021	.089	.078	.216
1212	.7500	.7500	1.327	1.327	.8805	.8805	.024	.024	.089	.089	.240
1612	1.0000	.7500	1.612	1.327	1.1725	.8805	.027	.024	.099	.089	.450
1616	1.0000	1.0000	1.612	1.612	1.1725	1.1725	.027	.027	.099	.099	.522
2016	1.2500	1.0000	1.886	1.612	1.4345	1.1725	.030	.027	.113	.099	.812
2020	1.2500	1.2500	1.886	1.886	1.4345	1.4345	.030	.030	.113	.113	.837

/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.

 An SAE International Group	AEROSPACE STANDARD		SAE AS5970 SHEET 3 OF 4	REV. B
	FITTING ASSEMBLY, ELBOW, 90 DEGREE, AXIALLY SWAGED, HYDRAULIC, 5080 PSI			