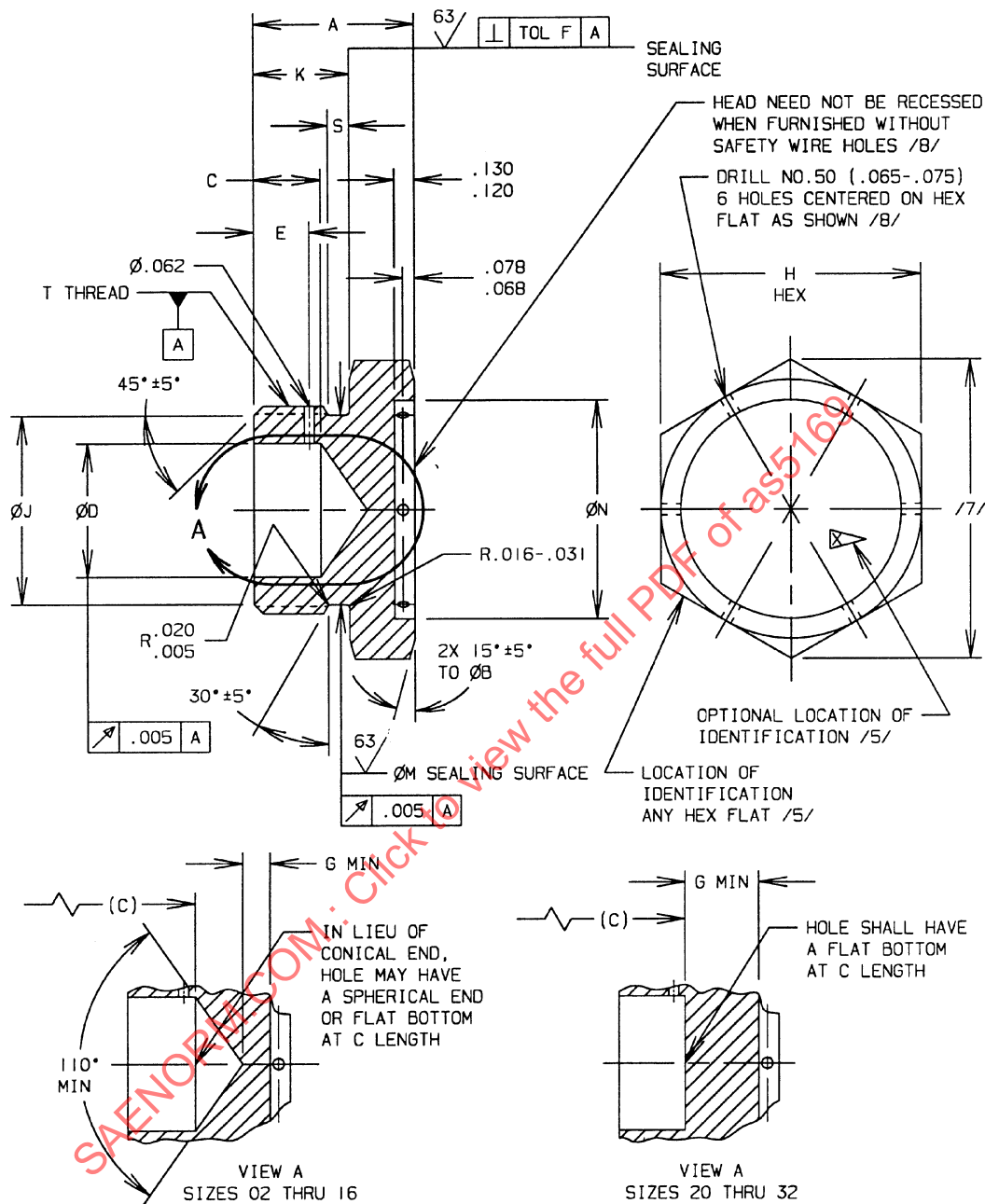


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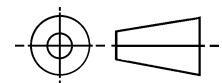
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- FITTING, PORT PLUG



THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: AS4891 /4/

SAE Aerospace
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AEROSPACE STANDARD

FITTING, PORT PLUG AND BLEEDER

AS5169
SHEET 1 OF 5

TABLE 1A - DIMENSIONS

BASIC NO. AS5169 /14/ SIZE CODE	(NOMINAL TUBE SIZE)	T THREAD PER MIL-S-8879 CLASS 3A	A	B ±.010	C +.000/- .016	D ±.005	E ±.031	F
02	.125	.3125-24 UNJF	.547	.542	.266	.062	.156	.005
03	.188	.3750-24 UNJF	.562	.605	.266	.125	.156	.005
04	.250	.4375-20 UNJF	.625	.668	.312	.171	.188	.005
05	.312	.5000-20 UNJF	.625	.730	.281	.234	.188	.005
06	.375	.5625-18 UNJF	.719	.792	.359	.296	.219	.005
08	.500	.7500-16 UNJF	.781	.980	.359	.390	.250	.005
10	.625	.8750-14 UNJ	.781	1.103	.328	.484	.312	.005
12	.750	1.0625-12 UNJ	1.000	1.353	.484	.609	.344	.008
16	1.000	1.3125-12 UNJ	1.000	1.603	.422	.843	.344	.008
20	1.250	1.6250-12 UNJ	1.000	1.853	.609	1.078	.344	.008
24	1.500	1.8750-12 UNJ	1.000	2.099	.609	1.312	.344	.008
28	1.750	2.2500-12 UNJ	1.000	2.474	.531	1.546	.344	.008
32	2.000	2.5000-12 UNJ	1.000	2.724	.516	1.781	.344	.008

TABLE 1B - DIMENSIONS

BASIC NO. AS5169 /14/ SIZE CODE	G	H	J	K	M +.002/- .003	N	S +.015/- .000
02	.109	.552-.565	.219	.312	.250	.312	.063
03	.109	.615-.628	.281	.328	.313	.375	.063
04	.109	.678-.691	.344	.375	.364	.438	.075
05	.125	.740-.753	.406	.375	.427	.500	.075
06	.125	.802-.815	.469	.422	.482	.562	.083
08	.156	.990-1.003	.625	.469	.660	.750	.094
10	.156	1.113-1.128	.750	.531	.773	.875	.107
12	.188	1.363-1.380	.938	.594	.945	1.125	.125
16	.188	1.613-1.630	1.188	.594	1.195	1.375	.125
20	.234	1.863-1.880	1.500	.594	1.507	1.625	.125
24	.234	2.109-2.135	1.719	.594	1.756	1.875	.125
28	.312	2.484-2.510	2.094	.594	2.131	2.250	.125
32	.328	2.734-2.760	2.344	.594	2.381	2.500	.125

TABLE 1C - WEIGHTS

BASIC NO. AS5169 /14/ SIZE CODE	LB/100 MAX AL	LB/100 MAX STEEL	LB/100 MAX TI
02	.00915	.0263	.0145
03	.0117	.0337	.0186
04	.0157	.0452	.0249
05	.0191	.0548	.0302
06	.0260	.0746	.0411
08	.0453	.130	.0718
10	.0548	.157	.0868
12	.110	.315	.174
16	.158	.453	.250
20	.202	.580	.320
24	.255	.732	.404
28	.382	1.10	.605
32	.461	1.32	.731

NOTES:

/1/ MATERIAL:

- a. DASH AS CODE LETTER - TYPE 1137 CARBON STEEL PER ASTM A 108 OR TYPE 4130 PER MIL-S-6758 OR AMS 6370 OR TYPE 4140 PER MIL-S-5626 OR AMS 6382. /2/
- b. CODE LETTER D - TYPE 2024-T6 ALUMINUM ALLOY BAR PER QQ-A-225/6 OR AMS 4112 OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER QQ-A-225/6.
- c. CODE LETTER J - TYPE 304 CORROSION RESISTANT STEEL BAR PER QQ-S-763 OR AMS 5639.
- d. CODE LETTER K - TYPE 316 CORROSION RESISTANT STEEL BAR PER QQ-S-763 OR AMS 5648.
- e. CODE LETTER R - TYPE 321 CORROSION RESISTANT STEEL BAR PER QQ-S-763 OR AMS 5645.
- f. CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS 4928.
- g. CODE LETTER W - TYPE 7075-T73 ALUMINUM ALLOY BAR PER QQ-A-225/9 OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS 4124.

/2/ HEAT TREATMENT:

- a. DASH AS CODE LETTER - SEE HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
- b. OTHER CODE LETTERS - NONE.

	NOTES (CONTINUED): 3. FINISH: a. DASH AS CODE LETTER - CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2, DYE BLACK AND COAT WITH A LIGHT FILM OF OIL PER PROCUREMENT SPECIFICATION. b. CODE LETTER D - ANODIZE PER MIL-A-8625, TYPE II, CLASS 2, DYE BLUE, DUPLEX SEAL PER PROCUREMENT SPECIFICATION. c. CODE LETTERS J, K, AND R - PASSIVATE PER QQ-P-35, TYPE VI OR VII. d. CODE LETTER T - ANODIZE PER AMS 2488 OR FLUORIDE PHOSPHATE CONVERSION COAT PER AMS 2486 WITH COLOR PER PROCUREMENT SPECIFICATION. e. CODE LETTER W - ANODIZE PER MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION. /4/ PROCUREMENT SPECIFICATION: AS4841 EXCEPT AS SPECIFIED ON THIS STANDARD. THIS PART SHALL BE QUALIFIED TO THE PROCUREMENT SPECIFICATION IN A COMPLETE ASSEMBLY AS APPLICABLE. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS. /5/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D OR METHOD 7A3, 15A3, OR 15B. a. FOR SIZE 06 AND SMALLER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, LETTER "AS" AND MATERIAL CODE LETTER. b. FOR SIZE 08 AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER AND MATERIAL CODE LETTER. 6. INTENDED USE: THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH MAXIMUM OPERATING PRESSURES AS FOLLOWS: a. SIZES 02 THROUGH 16 IN CARBON STEEL, CORROSION RESISTANT STEEL AND TITANIUM ALLOY AT 3000 psi. b. SIZES 02 THROUGH 12 IN ALUMINUM ALLOY AT 3000 psi. c. SIZE 16 IN ALUMINUM ALLOY AND SIZES 20 THROUGH 32 IN CARBON STEEL, CORROSION RESISTANT STEEL AND TITANIUM ALLOY AT 1500 psi. THIS STANDARD IS THE FUNCTIONAL EQUIVALENT OF AN814 AND MS24391 AND IS INTENDED TO BE SUITABLE AS A REPLACEMENT STANDARD. /7/ THE HEX CORNERS MAY BE ROUNDED PER ARP1942. /8/ SUFFIX LETTER L - CODE L PARTS SHALL HAVE SAFETY WIRE HOLES AS SHOWN. 9. INTERPRETATION OF DRAWING PER ARP4296. 10. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 μin Ra. SURFACES OF HEX FLATS MAY BE 250 μin Ra. 11. BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED. 12. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994. 13. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS $\pm$.015, ANGULAR DIMENSIONS $\pm$0°30'.
AS5169	

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