

# Genuine Aircraft Hardware Co.

## MS20001

### Hinge, Butt, Structural, Extruded

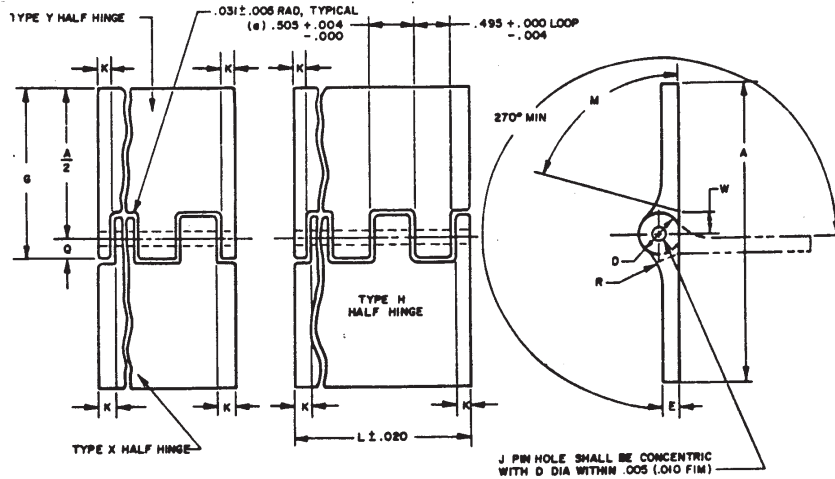


TABLE I

DASH NO.	A REF WIDTH	E		G		Q +/- .005	J DIA +.005 / -.000	(b) K MIN	D DIA		R +/- .031 RAD	W +/- .016	PIN DIA REF	M +/- 2 DEG.				
		MAX	MIN	MAX	MIN				MAX	MIN								
-2	1.062	.056	.044	.630	.612	.090	.093	.188	.187	.173	.174	.135	.090	75 DEG				
-3	1.250			.724	.706													
-4	1.500			.850	.830													
-5	1.750			.975	.955													
-6	2.000			1.102	1.078													
-8		.076	.064	1.167	1.143	.155	.183		.318	.302	.297	.200	.180					
-9	2.500	.056	.044	1.352	1.328	.090	.093		.187	.173	.174	.135	.090					
-10	2.750			1.477	1.453				.320	.304	.375	.188						60 DEG
-12	3.375			.115	.103				1.860	1.828	.156	.320	.304		.375	.188		
-14	3.719	.163	.149	2.086	2.038	.203	.133		.414	.398	.625	.240	.1320			45 DEG		
-16	3.938	.210	.196	2.243	2.195	.250	.183	.509	.491	.750	.287	.180						
*-17	4.820	.066	.044	4.102	4.070	.090	.090	.107	.173	.174	.135	.090		75 DEG				

\* CANCELLED - NO SUPERSEDING PART NUMBER

(a) TOLERANCES FOR DIMENSIONS ON PITCH SHALL NOT BE CUMULATIVE.

(b) DIMENSIONS K MUST NEVER EXCEED A FULL LOOP OR TANG, AND BOTH ENDS MUST BE EQUAL WITHIN .020 INCH.

INTERCHANGEABILITY RELATIONSHIP: MS20001 HINGES ARE NOT UNIVERSALLY INTERCHANGEABLE WITH AN252 HINGES. FOR INTERCHANGEABILITY RELATIONSHIP SEE TABLE II.

- PROCUREMENT SPECIFICATION: NONE
- **SUPERSEDES: AN252**
- THIS INFORMATION FROM MILITARY STANDARD MS20001L PAGE 1 OF 1, REVISED OCTOBER 30, 1989, SOME DETAILS MAY HAVE BEEN OMITTED FOR CLARITY.

TABLE II

INTERCHANGEABILITY TABLE		
INACTIVE AND CANCELLED	UNIVERSALLY INTERCHANGEABLE	REPLACEABLE WITH
AN252-1	-----	-----
AN252-2	MS20001-2	-----
AN252-4	MS20001-4	-----
AN252-6	MS20001-6	-----
AN252-8	MS20001-8	-----
AN252-10	MS20001-10	-----

Continued...

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**Continued...**

**REQUIREMENTS:**

1. MATERIAL: ALUMINUM ALLOY 2024-T3511, PER QQ-A-200/3, OR ALUMINUM ALLOY 7075-T3511, PER QQ-A-200/11 (SEE PART NUMBERING).
2. FINISH: ANODIZED IN ACCORDANCE WITH MIL-A-8625, TYPE II; CHEMICAL SURFACE TREAT IN ACCORDANCE WITH MIL-C-5541; (ENDS OF ALL HINGES SHALL BE FINISHED).
3. MARKING: INK STAMP MS20001 (DASH NUMBER) REGULAR INTERVALS ALONG LENGTH OF HINGE SO THAT ANY THREE INCH LENGTH WILL HAVE AT LEAST ONE COMPLETE IDENTIFICATION IN FIGURES NOT LESS THAN .060 INCHES HIGH. SEE NOTE 5.
4. COMPLETE HINGES SHALL BE FURNISHED AS AN ASSEMBLY WITH CAD PLATED CRES HINGE PINS OF THE SAME LENGTH IN ACCORDANCE WITH MS20253. ~~UNLESS TITANIUM HINGE PINS IN ACCORDANCE WITH MS20253 ARE SPECIFIED (SEE PART NUMBERING).~~
5. DESIGNATION FOR ANODIZING, CHEMICAL SURFACE TREATMENT, HINGE STYLE, AND LENGTH SHALL NOT BE INCLUDED IN MARKING.
6. ONLY COMPLETE HINGES TO BE STOCKED BY SERVICES.
7. USE MS 20257 HINGE WHEREVER LOAD REQUIREMENTS PERMIT.

**NOTES:**

1. DIMENSIONS ARE IN INCHES.
2. REMOVE ALL BURRS AND SHARP EDGES.
3. TYPE X HALF HINGE MATES WITH TYPE Y HALF HINGE, AS SHOWN.
4. TYPE H HALF HINGE MATES WITH TYPE H HALF HINGE.
5. FOR SERVICE PROCUREMENT, THE PREFERRED STOCK LENGTH OF COMPLETE HINGES IS 72 INCHES.
6. PART NUMBERING: (NOMENCLATURE TO BE INCLUDED ON SHIPPING DOCUMENTS ONLY).
  - a. MS2001
  - b. "P" FOR ANODIZED FINISH; "C" FOR CHEMICAL SURFACE TREATMENT; OMISSION OF CODE LETTER WILL INDICATE BARE FINISH.
  - c. "H", "X", OR "Y" TO DESIGNATE HALF HINGE STYLE; OMISSION OF CODE LETTER WILL INDICATE COMPLETE HINGE.
  - d. "A" FOR 7075-T73511 ALUMINUM ALLOY HINGE; OMISSION OF "A" WILL INDICATE 2024-T3511 ALUMINUM ALLOY.
  - e. ~~"T" FOR TITANIUM HINGE PIN (FOR COMPLETE HINGE ONLY); OMISSION OF "T" WILL INDICATE CADMIUM PLATED CRES HINGE PIN~~
  - f. DASH NUMBER (TABLE I); OMIT DASH IF PRECEDED BY CODE LETTER.
  - g. A DASH FOLLOWED BY LENGTH "L" EXPRESSED IN INCHES AND HUNDREDTH'S.
7. EXAMPLES OF PART NUMBERS:
  - MS20001-4-1200 = COMPLETE HINGE, BARE FINISH, ALUMINUM 2024-T3511, CAD PLATED CRES HINGE PIN, 1.500 INCHES WIDE, 12.00 INCHES LONG.
  - MS20001CHA4-900 = TYPE H HALF HINGE, CHEMICAL SURFACE TREATMENT, ALUMINUM 7075-T73511, 1.500 INCHES WIDE, 9.00 INCHES LONG.
8. DO NOT SPECIFY "P" FOR ANODIZE IF HINGE IS TO BE SPOTWELDED.
9. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BIDS, OR REQUEST FOR PROPOSAL EXCEPT THAT REFERENCED ADOPTED INDUSTRY DOCUMENTS SHALL GIVE THE DATE OF THE ISSUE ADOPTED.
10. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED.

**ADDITIONAL NOTES:**

- PROCUREMENT SPECIFICATION: NONE
- SUPERSEDES: **AN252** all revisions and MS20001K and previous revisions.
- THIS INFORMATION FROM MILITARY STANDARD MS20001L PAGE 2 OF 2, REVISED OCTOBER 30, 1989, SOME DETAILS MAY HAVE BEEN OMITTED FOR CLARITY.