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HARDEST MATERIAL TAPPED (AN AERO. OR FEDERAL SPEC; STEEL OR ALLOY NUMBER)		SCREW SIZE NO.	THICKNESS OF HARDEST MATERIAL TAPPED (INCHES)									
			.015 to .018 incl	.018 to .040 incl	.041 to .056 incl	.057 to .071 incl	.072 to .089 incl	.091 to .110 incl	.103 to .115 incl	.113 to .137 incl	.132 to .148 incl	Over .148
			DRILL HOLES FOR SCREWS TO DIAMETERS SPECIFIED BELOW (INCHES)									
STEEL	CARBON MILD QUARTER-HARD (55,000 PSI MIN TEN STR) SPEC AN-S-11 (1)	4-24	.086	.091	.096	.099	.101					
		6-20	.104	.106	.111	.116	.120		.128			
		8-18	.116	.116	.128	.136	.140		.149	.149	.152	
		10-16	.144	.144	.144	.152	.157		.161	.169	.169	.173
		14-14	.185	.185	.191	.199	.204		.209	.228	.228	.234
	CHROME-MOLYBDENUM NORMALIZED (1) (90,000 PSI MIN TEN STR) SPEC AN-QQ-S-685	4-24	.089	.091	.096	.099	.101					
		6-20	.110	.110	.116	.120	.120	.128				
		8-18	.128	.128	.136	.136	.140	.144		.149		
		10-16	.154	.154	.154	.157	.161	.169		.169	.169	.173
		14-14	.191	.191	.191	.199	.204	.209		.228	.228	.234
	CORROSION (1) RESISTING HALF HARD (150,000 PSI MIN TEN STR)	4-24	.091	.093	.099							
		6-20	.110	.110	.116	.116						
		8-18	.128	.128	.136	.140	.144					
		10-16			.157	.161	.166	.169				
		14-14			.191	.199	.204	.209	.213	.228		
ALUMINUM ALLOY	AL-MAGNESIUM CHROM. HALF-HARD (34,000 PSI MIN TEN STR) SPEC QQ-A-318	4-24	.086	.086	.091	.096	.099					
		6-20	.104	.104	.106	.111	.116					
		8-18	.116	.116	.116	.128	.136			.149		
		10-16	.144	.144	.144	.144	.152			.161	.169	
		14-14	.180	.185	.185	.191	.199			.209	.218	
	AL-COPPER-MAGNESIUM-MANGANESE HEAT TREATED (52,000 PSI MIN TEN STR) SPEC QQ-A-362 (1)	4-24	.086	.086	.091	.096	.096	.099				
		6-20	.104	.104	.106	.106	.111	.113		.116		
		8-18	.116	.116	.116	.128	.128	.136		.140		
		10-16	.144	.144	.144	.144	.152	.152		.157	.161	
		14-14	.185	.185	.185	.191	.199	.204		.209	.228	
	AL-COPPER-MAGNESIUM (1.5% MANGANESE) HEAT TREATED (62,000 PSI MIN TEN STR) SPEC QQ-A-355	4-24	.086	.086	.086	.091	.096					
		6-20	.104	.104	.106	.106	.111					
		8-18	.116	.116	.116	.128	.128					
		10-16	.144	.144	.144	.149	.152					
		14-14	.185	.185	.185	.191	.199					
	CASTINGS ALUMINUM ALLOY OR ALUMINUM	4-24				.099	.101	.101				
		6-20				.116	.120	.120	.128			
		8-18				.144	.144	.144	.149	.149	.149	.152
		10-16				.157	.157	.157	.161	.169	.169	.173
		14-14				.191	.199	.204	.209	.221	.228	.234

(1) LUBRICATE WITH HEAVY CUTTING OIL.

(1) ABOVE HOLE SIZES SHALL APPLY TO SHEET METAL SCREWS CONFORMING TO DRAWINGS AN530 AND AN531.

DRILL EACH PLY OR PLATE OF THE ASSEMBLY TO THE SIZE STATED FOR ITS HARDNESS AND THICKNESS. FOR ASSEMBLIES ALREADY RIVETED TOGETHER, THE SIZE OF THE HOLE SHALL DEPEND ON THE HARDEST PLY OR PLATE EMPLOYED AS A NUT PLATE OR A TAPPED INTERMEDIATE PLATE.

WHENEVER PRACTICABLE, THE DIAMETER OF THE SCREW SHALL BE SUCH THAT THE DRILL HOLE SIZE WILL FALL BETWEEN THE VERTICAL HEAVY LINES IN THE TABLE.

APPROVED 3 Oct 42 REVISED (1) 29 Apr 49

AIR FORCE-NAVY AERONAUTICAL DESIGN STANDARD

SELF TAPPING SCREWS - COARSE THREAD (HOLE SIZES FOR)

AND10325

NOT A PART NUMBER

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GPO 884998