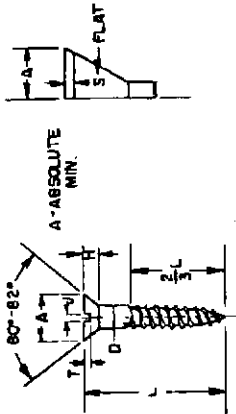


NOTICE: When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government hereby gives no warranty, expressed or implied, and no acceptance or endorsement is made by the Government. The Government assumes no liability in any way for any copies or reproductions of any drawings, specifications, or other data, not to be regarded as an endorsement or otherwise in any manner by the holder in any other form or for any purpose other than that for which they were prepared. The Government makes no claim to the copyright in any drawing, specification, or other data, or to any patent or other right in any process or invention that may in any way be related thereto.

PROJECT 5305-N002Sh

P. A. SHIPS Other Cost	TITLE SCREWS, WOOD, SLOTTED, FLAT COUNTERSUNK (82°) HEAD, COPPER-SILICON ALLOY, NONMAGNETIC	MILITARY STANDARD
		MS16199(SHIPS)
PROCUREMENT SPECIFICATION MIL-F-19700	SUPERSEDES:	SHEET 1 OF 2



NOMINAL SIZE	2	3	4	5	6	7	8	9	10	12	14	16	16	20	24	30
THREADS PER INCH	26	24	22	20	18	16	15	14	13	11	10	9	8	8	7	6
(D) BASIC DIAMETER	0.086	0.099	0.112	0.125	0.138	0.151	0.164	0.177	0.190	0.216	0.242	0.268	0.294	0.320	0.372	0.450
(A) HEAD DIAMETER	.172	.199	.225	.252	.279	.305	.332	.358	.385	.438	.491	.544	.597	.650	.756	.915
MIN. SHARP	.156	.181	.207	.232	.257	.283	.308	.334	.359	.410	.461	.512	.563	.614	.716	.882
ABSOLUTE																
MIN. WITH	.147	.171	.195	.220	.244	.268	.292	.316	.340	.389	.437	.485	.534	.582	.678	.809
FLAT																
(H) HEIGHT OF HEAD	.051	.059	.067	.075	.083	.091	.100	.108	.116	.132	.148	.164	.180	.196	.228	.276
MIN.	.040	.048	.055	.062	.069	.076	.084	.091	.098	.112	.127	.141	.155	.170	.198	.229
(J) WIDTH OF SLOT	.031	.035	.039	.043	.048	.048	.054	.054	.060	.067	.075	.075	.084	.084	.102	.128
MIN.	.023	.027	.031	.035	.039	.039	.045	.045	.050	.056	.064	.064	.072	.072	.081	.084
(T) DEPTH OF SLOT	.023	.027	.030	.034	.038	.041	.045	.049	.053	.060	.068	.075	.083	.090	.105	.128
MIN.	.015	.017	.020	.022	.024	.027	.029	.032	.034	.039	.044	.049	.054	.059	.069	.084
(S) FLAT ON MIN. SCREW	.003	.004	.004	.005	.005	.005	.006	.006	.007	.008	.009	.010	.011	.012	.013	.015

NOTES

1. MATERIAL: MATERIAL SHALL BE COPPER-SILICON ALLOY IN ACCORDANCE WITH QQ-C-581, COPPER ALLOY NO. 651.
2. TENSILE STRENGTH: MINIMUM TENSILE STRENGTH SHALL BE 50,000 P. S. I.
3. DIMENSIONS: ALL DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE SPECIFIED.
4. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BIDS.
5. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.

FED. SUP. CLASS
5305

This standard has been approved by the Bureau of Ships Department of the Navy and is mandatory for use by their activity. All other military activities are required to employ this standard when verifiable.

NOTICE—When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government there by means, its responsibility, nor any obligation whatsoever; and the fact that the Government may have furnished, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner affecting the liability of any other person or corporation, or conveying any right or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

P.A. SHIPS
Other Code
TITLE
SCREWS, WOOD SLOTTED, FLAT COUNTERSUNK (RZ) HEAD, COPPER-SILICON ALLOY, NONMAGNETIC
MIL-F-19700
SUPERSEDES

PROJECT 5305-N0025H
SHEET 2 OF 2
MILITARY STANDARD
MS16199(SHIPS)

SIZE NO.	2	3	4	5	6	7
LENGTH	1/4	3/8	1/2	5/8	3/4	7/8
LENGTH TOLERANCE	+0	-1/32				
DASH NO.	1	2	3	4	5	6
DASH NO.	6	7	8	9	10	11
DASH NO.	12	13	14	15	16	17
DASH NO.	18	19	20	21	22	23
DASH NO.	24	25	26	27	28	29
DASH NO.	30	31				
DASH NO.	32	33	34	35	36	37
DASH NO.	38					

SIZE NO.	8	9	10	12	14	16
LENGTH	1/2	5/8	3/4	7/8	1	1-1/4
LENGTH TOLERANCE	+0	-1/32				
DASH NO.	39	40	41	42	43	44
DASH NO.	45	46	47	48	49	50
DASH NO.	51	52	53	54	55	56
DASH NO.	57	58	59	60	61	62
DASH NO.	63	64	65	66	67	68
DASH NO.	69	70	71	72	73	74
DASH NO.	75	76	77	78	79	80
DASH NO.	81	82	83	84	85	86
DASH NO.	87	88				
DASH NO.	89	90	91	92	93	94
DASH NO.	95	96	97			

SIZE NO.	18	20	24	30
LENGTH	1-1/2	2	2-1/4	2-1/2
LENGTH TOLERANCE	+0	-3/64	+0	-1/16
DASH NO.	98	99	100	101
DASH NO.	102	103	104	105
DASH NO.	106	107	108	109
DASH NO.	110	111	112	113
DASH NO.	114	115	116	117
DASH NO.	118	119	120	121
DASH NO.	122	123	124	125

APPROVED 8 MAY 1957 REVISED FOR CHANGES SEE SHEETS 1 AND 2.

1/ THESE ARE EXTRA LARGE SCREWS USED IN NONMAGNETIC MINESWEEPER APPLICATIONS.

5305
FED SUP CLASS