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MS35494 screw — flat, 80°-82°, slotted

MS35494: wood screw, flat head, steel (cadmium or zinc plated) or brass, sizes 2 to 18.

Specification

Item	Value
Head	flat, 80°-82°, slotted
Drive	slot
Thread series	Wood screw thread; threads per inch by size (maximum variation ±10 percent)
Material	Carbon steel 1010 thru 1022 or 1108 thru 1118 (QQ-S-631, QQ-S-634, QQ-S-637 or QQ-W-405); brass, alloy 260 or 268, quarter-hard (QQ-B-613 or QQ-B-626), or alloy 260 or 270, quarter-hard (QQ-W-321)

Item	Value
Finish	Steel: cadmium plated (QQ-P-416, Type II, Class 3, or MIL-C-81562, Type II, Class 3) or zinc coated (QQ-Z-325, Type II, Class 3, or MIL-C-81562, Type II, Class 3). Brass: plain, uncoated
Procurement	FF-S-111
Status	Check the current issue before design use. Rev. E (15 Aug 1974). Notice 1: cancelled; future acquisitions to refer to (CID) A-A-55605. Notice 2 (1 Feb 1996): reinstated for acquisition. Notice 3 (18 Nov 1999): inactive for new design; used only for replacement purposes. Notices 4 (Sep 2018) and 5 (Dec 2024): remains inactive for new design; valid for use. Sizes 3, 5, 7 and 9 are inactive for new design after 15 Aug 1974.

Dimensions by size

Dimension, in	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	No. 12	No. 14	No. 16	No. 18
D screw dia	.079 - .090; basic .086	.092 - .103; basic .099	.105 - .116; basic .112	.118 - .129; basic .125	.131 - .142; basic .138	.144 - .155; basic .151	.157 - .168; basic .164	.170 - .181; basic .177	.183 - .194; basic .190	.209 - .220; basic .216	.235 - .246; basic .242	.261 - .272; basic .268	.287 - .298; basic .294
A head dia	.156 - .172; abs min with flat .147	.181 - .199; abs min with flat .171	.207 - .225; abs min with flat .195	.232 - .252; abs min with flat .220	.257 - .279; abs min with flat .244	.283 - .305; abs min with flat .268	.308 - .332; abs min with flat .292	.334 - .358; abs min with flat .316	.359 - .385; abs min with flat .340	.410 - .438; abs min with flat .389	.461 - .491; abs min with flat .437	.512 - .544; abs min with flat .485	.563 - .597; abs min with flat .534
H head height ref	.051	.059	.067	.075	.083	.091	.100	.108	.116	.132	.148	.164	.180
J slot width	.023 - .031	.027 - .035	.031 - .039	.035 - .043	.039 - .048	.039 - .048	.045 - .054	.045 - .054	.050 - .060	.056 - .067	.064 - .075	.064 - .075	.072 - .084
T slot depth	.015 - .023	.017 - .027	.020 - .030	.022 - .034	.024 - .038	.027 - .041	.029 - .045	.032 - .049	.034 - .053	.039 - .060	.044 - .068	.049 - .075	.054 - .083
threads per inch	26	24	22	20	18	16	15	14	13	11	10	9	8

Inches, as tabulated in MS35494 Rev. E Table I; letters as on the standard's drawing. D: basic, maximum and minimum screw diameter.

Part numbers and lengths

No. 2 10 part numbers

Part no.	Length, in	Tol.
MS35494-1	.25	+.00/-.03
MS35494-2	.38	+.00/-.03
MS35494-3	.50	+.00/-.03
MS35494-4	.62	+.00/-.03
MS35494-5	.75	+.00/-.05
MS35494-201	.25	+.00/-.03
MS35494-202	.38	+.00/-.03
MS35494-203	.50	+.00/-.03
MS35494-204	.62	+.00/-.03
MS35494-205	.75	+.00/-.05

No. 3 10 part numbers

Part no.	Length, in	Tol.
MS35494-901	.38	+.00/-.03
MS35494-902	.50	+.00/-.03
MS35494-903	.62	+.00/-.03
MS35494-904	.75	+.00/-.05
MS35494-905	.88	+.00/-.05
MS35494-906	1.00	+.00/-.05
MS35494-910	.38	+.00/-.03
MS35494-911	.50	+.00/-.03
MS35494-912	.62	+.00/-.03
MS35494-913	.75	+.00/-.05

No. 4 16 part numbers

Part no.	Length, in	Tol.
MS35494-8	.25	+.00/-.03
MS35494-9	.38	+.00/-.03
MS35494-10	.50	+.00/-.03
MS35494-11	.62	+.00/-.03
MS35494-12	.75	+.00/-.05
MS35494-13	.88	+.00/-.05
MS35494-14	1.00	+.00/-.05
MS35494-15	1.25	+.00/-.05
MS35494-16	1.50	+.00/-.05
MS35494-208	.25	+.00/-.03
MS35494-209	.38	+.00/-.03
MS35494-210	.50	+.00/-.03
MS35494-211	.62	+.00/-.03
MS35494-212	.75	+.00/-.05
MS35494-213	.88	+.00/-.05
MS35494-214	1.00	+.00/-.05

No. 5 13 part numbers

Part no.	Length, in	Tol.
MS35494-20	.38	+.00/-.03
MS35494-21	.50	+.00/-.03
MS35494-22	.62	+.00/-.03
MS35494-23	.75	+.00/-.05
MS35494-24	.88	+.00/-.05
MS35494-25	1.00	+.00/-.05
MS35494-26	1.25	+.00/-.05
MS35494-220	.38	+.00/-.03
MS35494-221	.50	+.00/-.03
MS35494-222	.62	+.00/-.03
MS35494-223	.75	+.00/-.05
MS35494-224	.88	+.00/-.05
MS35494-225	1.00	+.00/-.05

No. 6 20 part numbers

Part no.	Length, in	Tol.
MS35494-31	.38	+.00/-.03
MS35494-32	.50	+.00/-.03
MS35494-33	.62	+.00/-.03
MS35494-34	.75	+.00/-.05
MS35494-35	.88	+.00/-.05
MS35494-36	1.00	+.00/-.05
MS35494-37	1.25	+.00/-.05
MS35494-38	1.50	+.00/-.05
MS35494-39	1.75	+.00/-.06
MS35494-40	2.00	+.00/-.06
MS35494-41	2.25	+.00/-.06
MS35494-42	2.50	+.00/-.06
MS35494-230	.38	+.00/-.03
MS35494-231	.50	+.00/-.03
MS35494-232	.62	+.00/-.03
MS35494-233	.75	+.00/-.05
MS35494-234	.88	+.00/-.05
MS35494-235	1.00	+.00/-.05
MS35494-236	1.25	+.00/-.05
MS35494-237	1.50	+.00/-.05

No. 7 14 part numbers

Part no.	Length, in	Tol.
MS35494-44	.50	+.00/-.03
MS35494-45	.62	+.00/-.03
MS35494-46	.75	+.00/-.05
MS35494-47	.88	+.00/-.05
MS35494-48	1.00	+.00/-.05
MS35494-49	1.25	+.00/-.05
MS35494-50	1.50	+.00/-.05
MS35494-242	.50	+.00/-.03
MS35494-243	.62	+.00/-.03
MS35494-244	.75	+.00/-.05
MS35494-245	.88	+.00/-.05
MS35494-246	1.00	+.00/-.05
MS35494-247	1.25	+.00/-.05
MS35494-248	1.50	+.00/-.05

No. 8 22 part numbers

Part no.	Length, in	Tol.
MS35494-56	.50	+.00/-.03
MS35494-57	.62	+.00/-.03
MS35494-58	.75	+.00/-.05
MS35494-59	.88	+.00/-.05
MS35494-60	1.00	+.00/-.05
MS35494-61	1.25	+.00/-.05
MS35494-62	1.50	+.00/-.05
MS35494-63	1.75	+.00/-.06
MS35494-64	2.00	+.00/-.06
MS35494-65	2.25	+.00/-.06
MS35494-66	2.50	+.00/-.06
MS35494-67	2.75	+.00/-.06
MS35494-68	3.00	+.00/-.09
MS35494-253	.50	+.00/-.03
MS35494-254	.62	+.00/-.03
MS35494-255	.75	+.00/-.05
MS35494-256	.88	+.00/-.05
MS35494-257	1.00	+.00/-.05
MS35494-258	1.25	+.00/-.05
MS35494-259	1.50	+.00/-.05
MS35494-260	1.75	+.00/-.06
MS35494-261	2.00	+.00/-.06

Reference data. The aircraft manufacturer's documentation (SRM / IPC) takes precedence.

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No. 9 14 part numbers

Part no.	Length, in	Tol.
MS35494-69	.75	+.00/-.05
MS35494-70	.88	+.00/-.05
MS35494-71	1.00	+.00/-.05
MS35494-72	1.25	+.00/-.05
MS35494-73	1.50	+.00/-.05
MS35494-74	1.75	+.00/-.06
MS35494-75	2.00	+.00/-.06
MS35494-77	2.50	+.00/-.06
MS35494-265	.62	+.00/-.03
MS35494-266	.75	+.00/-.05
MS35494-267	.88	+.00/-.05
MS35494-268	1.00	+.00/-.05
MS35494-269	1.25	+.00/-.05
MS35494-270	1.50	+.00/-.05

No. 10 22 part numbers

Part no.	Length, in	Tol.
MS35494-83	.75	+.00/-.05
MS35494-84	.88	+.00/-.05
MS35494-85	1.00	+.00/-.05
MS35494-86	1.25	+.00/-.05
MS35494-87	1.50	+.00/-.05
MS35494-88	1.75	+.00/-.06
MS35494-89	2.00	+.00/-.06
MS35494-90	2.25	+.00/-.06
MS35494-91	2.50	+.00/-.06
MS35494-92	2.75	+.00/-.06
MS35494-93	3.00	+.00/-.09
MS35494-94	3.50	+.00/-.09
MS35494-275	.62	+.00/-.03
MS35494-276	.75	+.00/-.05
MS35494-277	.88	+.00/-.05
MS35494-278	1.00	+.00/-.05
MS35494-279	1.25	+.00/-.05
MS35494-280	1.50	+.00/-.05
MS35494-281	1.75	+.00/-.06
MS35494-282	2.00	+.00/-.06
MS35494-283	2.25	+.00/-.06
MS35494-284	2.50	+.00/-.06

No. 12 24 part numbers

Part no.	Length, in	Tol.
MS35494-98	.75	+.00/-.05
MS35494-99	.88	+.00/-.05
MS35494-100	1.00	+.00/-.05
MS35494-101	1.25	+.00/-.05
MS35494-102	1.50	+.00/-.05
MS35494-103	1.75	+.00/-.06
MS35494-104	2.00	+.00/-.06
MS35494-105	2.25	+.00/-.06
MS35494-106	2.50	+.00/-.06
MS35494-107	2.75	+.00/-.06
MS35494-108	3.00	+.00/-.09
MS35494-109	3.50	+.00/-.09
MS35494-110	4.00	+.00/-.09
MS35494-289	.75	+.00/-.05
MS35494-290	.88	+.00/-.05
MS35494-291	1.00	+.00/-.05
MS35494-292	1.25	+.00/-.05
MS35494-293	1.50	+.00/-.05
MS35494-294	1.75	+.00/-.06
MS35494-295	2.00	+.00/-.06
MS35494-296	2.25	+.00/-.06
MS35494-297	2.50	+.00/-.06
MS35494-299	3.00	+.00/-.09
MS35494-300	3.50	+.00/-.09

No. 14 20 part numbers

Part no.	Length, in	Tol.
MS35494-113	1.00	+.00/-.05
MS35494-114	1.25	+.00/-.05
MS35494-115	1.50	+.00/-.05
MS35494-116	1.75	+.00/-.06
MS35494-117	2.00	+.00/-.06
MS35494-118	2.25	+.00/-.06
MS35494-119	2.50	+.00/-.06
MS35494-120	2.75	+.00/-.06
MS35494-121	3.00	+.00/-.09
MS35494-122	3.50	+.00/-.09
MS35494-123	4.00	+.00/-.09
MS35494-124	4.50	+.00/-.09
MS35494-125	5.00	+.00/-.09
MS35494-305	1.00	+.00/-.05
MS35494-306	1.25	+.00/-.05
MS35494-307	1.50	+.00/-.05
MS35494-308	1.75	+.00/-.06
MS35494-309	2.00	+.00/-.06
MS35494-311	2.50	+.00/-.06
MS35494-313	3.00	+.00/-.09

No. 16 14 part numbers

Part no.	Length, in	Tol.
MS35494-129	1.25	+.00/-.05
MS35494-130	1.50	+.00/-.05
MS35494-131	1.75	+.00/-.06
MS35494-132	2.00	+.00/-.06
MS35494-134	2.50	+.00/-.06
MS35494-135	2.75	+.00/-.06
MS35494-136	3.00	+.00/-.09
MS35494-137	3.50	+.00/-.09
MS35494-138	4.00	+.00/-.09
MS35494-139	4.50	+.00/-.09
MS35494-140	5.00	+.00/-.09
MS35494-318	2.00	+.00/-.06
MS35494-320	2.50	+.00/-.06
MS35494-322	3.00	+.00/-.09

No. 18 6 part numbers

Part no.	Length, in	Tol.
MS35494-142	1.50	+.00/-.05
MS35494-144	2.00	+.00/-.06
MS35494-146	2.50	+.00/-.06
MS35494-148	3.00	+.00/-.09
MS35494-149	3.50	+.00/-.09
MS35494-150	4.00	+.00/-.09

How to read the part number

Part	Meaning
Format	MS35494-<dash number>
Example	MS35494-1
Length tolerance, .25 to .62	+.00/-.03
Length tolerance, .75 to 1.50	+.00/-.05
Length tolerance, 1.75 to 2.75	+.00/-.06
Length tolerance, 3.00 to 5.00	+.00/-.09
Dash	Dash number from Table II (steel, cadmium or zinc plated) or Table III (brass, plain) selects size, length and material

Notes

- Threaded length approximately 2/3 L. Head angle 80° - 82°; the head edge may be rounded (A abs min with flat).
- Slotted head: J slot width and T slot depth by size.
- Dash numbers of sizes 3, 5, 7 and 9 are inactive for new design after 15 August 1974 (crossed out in Tables II and III).
- Supersedes AN550 in part. Steel cadmium plated screws of revision A and brass black oxide coated screws of revision B were cancelled in 1967 and 1968; Table IV of the standard gives their replacements.
- Part number: the MS number plus the dash number, for example MS35494-1.

SOURCES · MS35494 Rev. E, 15 Aug 1974 — Screw, Wood, Flat Head, Slotted, Steel and Brass

SCAN · OPEN THIS DATA SHEET
theaviationpoint.com/parts/screws/ms35494/

Reference data. The aircraft manufacturer's documentation (SRM / IPC) takes precedence.

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