



Designation: A 489 – 003

Standard Specification for Carbon Steel Lifting Eyes¹

This standard is issued under the fixed designation A 489; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope*

1.1 This specification covers weldless forged, quenched, and tempered carbon steel threaded lifting eyes (formerly eyebolts) for overhead lifting.

NOTE 1—Lifting eyes carrying this specification number even though they are liquid quenched and tempered may be processed from carbon steel which, in the composition range permitted by this specification, could have a fracture appearance transition temperature (50 % shear) higher than operating temperatures. Therefore, in order to minimize the possibility of a brittle cleavage failure, these lifting eyes should never be loaded above the proof load, and should not be used when surface discontinuities exist on the lifting eyes.

1.2 The specification includes two types denoting shank pattern and one style denoting shank length (both defined in ANSI/ASME B 18.15) as follows:

1.2.1 *Type 1*—Plain pattern (straight shank).

1.2.2 *Type 2*—Shoulder pattern.

1.2.3 *Style B*—Short length.

1.3 The values stated in inch-pound units are to be regarded as the standard. The SI values given in parentheses are for information only.

1.4 Terms used in this specification are defined in Specification F 1789 unless otherwise defined herein.

2. Referenced Documents

2.1 *ASTM Standards:*

¹ This specification is under the jurisdiction of ASTM Committee F16 on Fasteners and is the direct responsibility of Subcommittee F16.02 on Steel Bolts, Nuts, Rivets, and Washers.

Current edition approved May 10, 2000; Oct. 1, 2003. Published July 2000; October 2003. Originally published as A 489 – 64 F, approved in 1964. Last previous edition approved in 2000 as A 489 – 9300.

*A Summary of Changes section appears at the end of this standard.