

ANSI/BHMA A156.4 - 2013
Revision of ANSI/BHMA A156.4 - 2008



AMERICAN NATIONAL STANDARD

FOR

DOOR CONTROLS - CLOSERS



SPONSOR

BUILDERS HARDWARE MANUFACTURERS ASSOCIATION, INC.

AMERICAN NATIONAL STANDARDS INSTITUTE

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AMERICAN NATIONAL STANDARD

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FORWARD

(This Forward is not a part of ANSI/BHMA A156.4-2013)

The general classification of builders hardware includes a wide variety of items which are divided into several categories. To recognize this diversity, a sectional classification systems has been established. Door Controls is one such section and this Standard is the result of the collective efforts of members of the Builders Hardware Manufacturers Association, Inc., who manufacture this product. The total Product Standards effort is, therefore, a collection of sections, each covering a specific category of items.

Performance tests and, where it has been necessary, dimensional requirements have been established to insure safety, security and stability to which the public is entitled. There are no restrictions on design, except for those dimensional requirements imposed for the reasons given above. It is also required that some hardware items fit certain specified cutout dimensions.

The BHMA recognizes that errors will be found, items will become obsolete, and new products, methods and materials will be developed. With this in mind, the Association plans to update, correct and revise these Standards on a regular basis.

In most cases, products have been described in grade levels related to performance. Grade classifications indicate levels only with their own category. Choice of grade and specific product are made on the basis of utility, aesthetics, security objectives and end use desired.

The BHMA numbers and pictorials which indicate types of hardware do not identify size, finish, material or options and are not intended to be used without necessary supplementary information. Consult individual manufacturer's catalog.

Table of Contents

1. SCOPE	5
2. GENERAL	5
3. PREPARATION FOR PERFORMANCE TEST	6
4. TEST PROCEDURES Part 1: INITIAL STATIC TESTS	8
5. TEST PROCEDURES PART 2: INTERMEDIATE CYCLE TEST	15
6. TEST PROCEDURES PART 3: INTERIM STATIC TESTS	16
7. TEST PROCEDURES PART 4: FINAL CYCLE TEST	16
8. TEST PROCEDURE PART 5: FINAL STATIC TESTS.....	18
9. PIVOT PERFORMANCE TESTS.....	19
10. FINISH TESTS	20
11. TYPICAL ILLUSTRATION AND IDENTIFYING TYPE NUMBERS	21
APPENDIX A: Users Guide (not a part of ANSI/BHMA A156.4).....	33

1. SCOPE

1.1 This Standard contains requirements for door closers surface mounted, concealed in the door, overhead concealed and concealed in the floor. Also included are pivots for floor closers. Criteria for conformance include cycle, operational, closing force and finish tests. Optional tests which shall be specified separately are also included.

1.2 Tests in this Standard are performed under neutral air pressure laboratory conditions and between 60 and 85 degrees F. In actual usage results vary because of installation, maintenance, and environmental conditions. Actual closer performance is affected by fluctuating ambient conditions such as wind and pressure differentials, consult factory for recommendations.

1.3 **Use on Fire Doors** A door closer used on labeled fire door assemblies shall be listed or labeled by a nationally recognized independent testing laboratory, and be subject to a periodic in-plant follow-up service. Consult the authority having jurisdiction for the appropriate fire test requirements.

2. GENERAL

2.1 **Reference to other Standards.** ANSI Standards referenced in this Standard are available from the American National Standards Institute, www.ansi.org, and www.buildershardware.com.

2.2 **Type Numbers** This Standard has been prepared to standardize door closers and controls by type requirements and performance levels. Only those type numbers shown in this Standard shall be used. For explanation of identifying numbers, see 11.14.

2.3 **Manufacturer's Catalogs** Consult manufacturer's catalogs for construction details and special conditions relating to accessories.

2.4 **Tolerances** All values which do not carry specific tolerances or are not marked maximum or minimum shall have the following tolerances: Number of cycles shall be minimum. Linear dimensions shall be $\pm 1/16$ in. (1.6 mm). Pounds or pound force shall be $\pm 2\%$. The scribed lines for degree of opening shall be within ± 2 degrees. A tolerance of ± 2 degrees F shall be applied to temperature call outs.

2.5 **SI Units** All dimensions are expressed first in US units with SI unit (metric) equivalents given in parentheses. SI units are approximate.

2.6 **All Closers** Door closers shall be categorized as listed in the following groupings by their performance requirements.

Closer Description	PT Number
Surface or Concealed in Door closers, Grade 1	PT 1
Surface or Concealed in Door closers, Grade 2	PT 2
Surface or Concealed in Door closers, Grade 3	PT 3
Surface or Concealed in Door closers, Options	PT 4-A,C,D,E,F,G,H,J
Concealed Overhead and Floor Closers, Grade 1	PT 5
Concealed Overhead and Floor Closers, Grade 2	PT 6
Concealed Overhead and Floor Closers, Grade 3	PT 7
Concealed Overhead and Floor Closers, Options	PT 8-A,B,C,D,E,F,G,J,K,L,M

2.7 **Field Application Guidelines** for closer sizing and door sizes are provided in the Appendix in Table A1.