

[METRIC]
 A-A-59688/1C
 4 May 2009

 SUPERSEDING
 A-A-59688/1B
 October 28, 2004

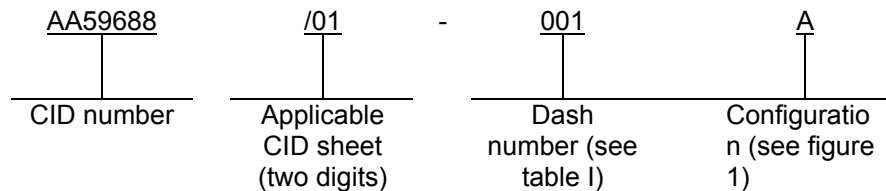
COMMERCIAL ITEM DESCRIPTION
 SPECIFICATION SHEET

FUSE, CARTRIDGE, INSTRUMENT TYPE, 5 MM X 20 MM,
 QUICK-ACTING, HIGH-BREAKING CAPACITY

The General Services Administration has authorized the use of this commercial item description for all federal agencies.

The complete requirements for procuring the fuses described herein shall consist of this document and the issue in effect of [A-A-59688](#).

CLASSIFICATION/PART OR IDENTIFICATION NUMBER (PIN). This commercial item description (CID) specification sheet uses a classification system which is included in the PIN as shown in the following example (see NOTES).



SALIENT CHARACTERISTICS.

Interface and physical dimensions. Fuses supplied to this CID specification sheet shall be as specified herein, and shall meet the requirements of [ANSI/IEC 60127-2](#), part 2 (see figure 1).

Case or body. The case or body shall be an opaque tube.

Ferrules. The materials for the ferrules shall be nickel or silver plated brass.

Mounting. Configuration A (ferrule type) is intended to be used with an applicable fuseholder or fuse clip. Configuration B (axial leads) is intended to be directly soldered onto a printed wiring board.

Current rating. The ampere rating shall be as specified in table I.

Voltage rating. The voltage rating shall be 250 V ac maximum.

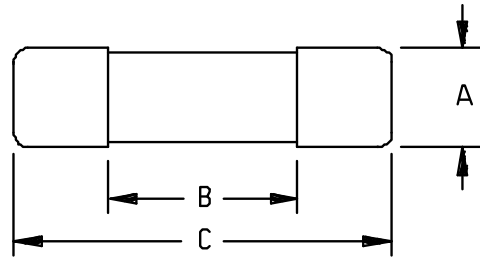
Voltage drop. Voltage drop shall be in accordance with table I.

Pre-arcing time/current characteristic. Pre-arcing time/current characteristic shall be as specified in table II.

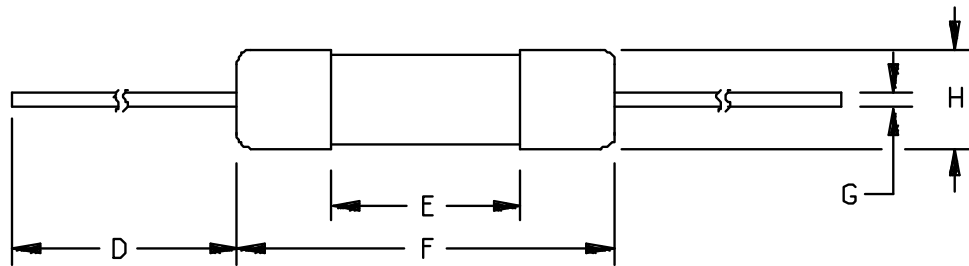
Breaking capacity. The breaking capacity shall be 1,500 amperes maximum at 250 V ac.

Endurance. Endurance shall be 100 cycles at 1.2 times the rated current followed by 1 hour at 1.5 times the rated current.

A-A-59688/1C



CONFIGURATION A



CONFIGURATION B

Ltr	mm		Inches	
	Min	Max	Min	Max
A	5.0	5.3	.20	.21
B	8.0	12.0	.31	.47
C	19.5	20.5	.77	.81
D	36.0	41.00	1.42	1.61
E	8.0	12.0	.31	.47
F	19.7	21.7	.78	.85
G	.62	.82	.02	.03
H	5.0	6.0	.20	.24

NOTES:

1. Dimensions are in millimeters.
2. Tolerance is ± 0.13 mm (.005 inch), unless otherwise specified.

FIGURE 1. Interface and physical dimensions.

A-A-59688/1C

TABLE I. Characteristics.

CID dash number AA59688/01-	Configuration	Current rating (amperes)	Maximum voltage drop (mV)	Power dissipation (W) max.	
001A	A	50 mA	10,000	1.6	
001B	B				
002A	A	63 mA	8,800		
002B	B				
003A	A	80 mA	7,600		
003B	B				
004A	A	100 mA	7,000		
004B	B				
005A	A	125 mA	5,000		
005B	B				
006A	A	160 mA	4,300		
006B	B				
007A	A	200 mA	3,500		
007B	B				
008A	A	250 mA	2,800		2.5
008B	B				
009A	A	315 mA	2,500		
009B	B				
010A	A	400 mA	2,000		
010B	B				
011A	A	500 mA	1,800		
011B	B				
012A	A	630 mA	1,500		
012B	B				
013A	A	800 mA	1,200		
013B	B				
014A	A	1 A	1,000		
014B	B				
015A	A	1.25 A	800	4	
015B	B				
016A	A	1.6 A	600		
016B	B				

A-A-59688/1C

TABLE I. Characteristics - Continued.

CID dash number AA59688/01-	Configuration	Current rating (amperes)	Maximum voltage drop (mV)	Power dissipation (W) max.
017A	A	2 A	500	4
017B	B			
018A	A	2.5 A	400	
018B	B			
019A	A	3.15 A	350	
019B	B			
020A	A	4 A	300	
020B	B			
021A	A	5 A	250	
021B	B			
022A	A	6.3 A	200	
022B	B			

TABLE II. Pre-arcing time/current characteristic (+25°C ±10°C).

Percent of current rating					
210%	275%		400%		1000%
Max.	Min.	Max.	Min.	Max.	Max.
30 min.	10 ms	3 s	3 ms	300 ms	20 ms

NOTES.

PIN. The PIN should be used for Government purposes to buy commercial products to this CID specification sheet. See the classification section for PIN format example.

Source of document.

Other Publications

AMERICAN NATIONAL STANDARDS INSTITUTE/INTERNATIONAL ELECTROTECHNICAL COMMISSION (ANSI/IEC)

[ANSI/IEC 60127-2](#) - Miniature Fuses, Part 2: Cartridge Fuse-Links.

(Copies of this document are available online at <http://www.ansi.org/> or from the American National Standards Institute, 25 West 43rd Street, 4th Floor, New York, NY, 10036-7406.)

(Industry association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

A-A-59688/1C

Commercial products. As part of the market analysis and research effort, this CID specification sheet was coordinated with the following manufacturers of commercial products. At the time of CID specification sheet preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID specification sheet. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

<u>MFR's CAGE</u>	<u>MFR's name and address</u>
75915	Littelfuse Incorporated 800 E. Northwest Highway Des Plaines, IL 60016-3096 Phone number (847) 824-1188 Facsimile number (847) 391-0894 E-mail: electronics@littelfuse.com URL: www.littelfuse.com
92912	Bel Fuse Incorporated 206 Van Vorst Street Jersey City, NJ 07302-3096 Phone number (201) 432-0463 Facsimile number (201) 432-9542 E-mail: belfuse@belfuse.com URL: www.belfuse.com

A-A-59688/1C

Part number (P/N) supersession data. These CID specification sheet PINs supersede the following MFR's P/N's as shown. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE III. P/N supersession data.

CID dash number AA59688/01- (see table I)	MFR's P/N <u>1/</u>		CID dash number AA59688/01- (see table I)	MFR's P/N <u>1/</u>	
	MFR CAGE 75915	MFR CAGE 92912		MFR CAGE 75915	MFR CAGE 92912
001A	216.050	N/A	012A	216.630	5HF630-R
001B	226.050	N/A	012B	226.630	5HFP630-R
002A	216.063	N/A	013A	216.800	5HF800-R
002B	226.063	N/A	013B	226.800	5HFP800-R
003A	216.080	N/A	014A	216001	5HF001-R
003B	226.080	N/A	014B	226001	5HFP1-R
004A	216.100	5HF100-R	015A	2161.25	5HF1.25-R
004B	226.100	5HFP100-R	015B	2261.25	5HFP1.25-R
005A	216.125	5HF125-R	016A	21601.6	5HF1.6-R
005B	226.125	5HFP125-R	016B	22601.6	5HFP1.6-R
006A	216.160	5HF160-R	017A	216002	5HF2-R
006B	226.160	5HFP160-R	017B	226002	5HFP2-R
007A	216.200	5HF200-R	018A	21602.5	5HF2.5-R
007B	226.200	5HFP200-R	018B	22602.5	5HFP2.5-R
008A	216.250	5HF250-R	019A	2163.15	5HF3.15-R
008B	226.250	5HFP250-R	019B	2263.15	5HFP3.15-R
009A	216.315	5HF315-R	020A	216004	5HF4-R
009B	226.315	5HFP315-R	020B	226004	5HFP4-R
010A	216.400	5HF400-R	021A	216005	5HF5-R
010B	226.400	5HFP400-R	021B	226005	5HFP5-R
011A	216.500	5HF500-R	022A	21606.3	5HF6.3-R
011B	226.500	5HFP500-R	022B	21606.3	5HFP6.3-R

1/ The manufacturer's P/N shall not be used for procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown. For actual part marking requirements, see the marking paragraph of [A-A-59688](#).

A-A-59688/1C

CID number supersession data. This CID supersedes Defense Supply Center, Columbus (DSCC) drawing [90030](#) and its dash numbers as shown.

TABLE IV. CID number supersession data.

CID dash number (see table I) AA59688/01-	Superseded DSCC drawing number 90030-	CID dash number (see table I) AA59688/01-	Superseded DSCC drawing number 90030-
001A	001A	012A	012A
001B	001B	012A	012B
002A	002A	013A	013A
002B	002B	013B	013B
003A	003A	014A	014A
003B	003B	014B	014B
004A	004A	015A	015A
004B	004B	015B	015B
005A	005A	016A	016A
005B	005B	016B	016B
006A	006A	017A	017A
006B	006B	017B	017B
007A	007A	018A	018A
007B	007B	018B	018B
008A	008A	019A	019A
008B	008B	019B	019B
009A	009A	020A	020A
009B	009B	020B	020B
010A	010A	021A	021A
010B	010B	021B	021B
011A	011A	022A	022A
011B	011B	022B	022B

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

A-A-59688/1C

MILITARY INTERESTS:

Custodians:
Navy - EC
DLA - CC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - FSS

Preparing activity:

DLA-CC

Project 5920-2009-044

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://assist.daps.dla.mil>.