

INCH-POUND

MS20115B  
 26 July 2012  
 SUPERSEDING  
 MS20115A  
 17 November 1972

DETAIL SPECIFICATION SHEET

SHACKLE - WIRE ROPE

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-5675.

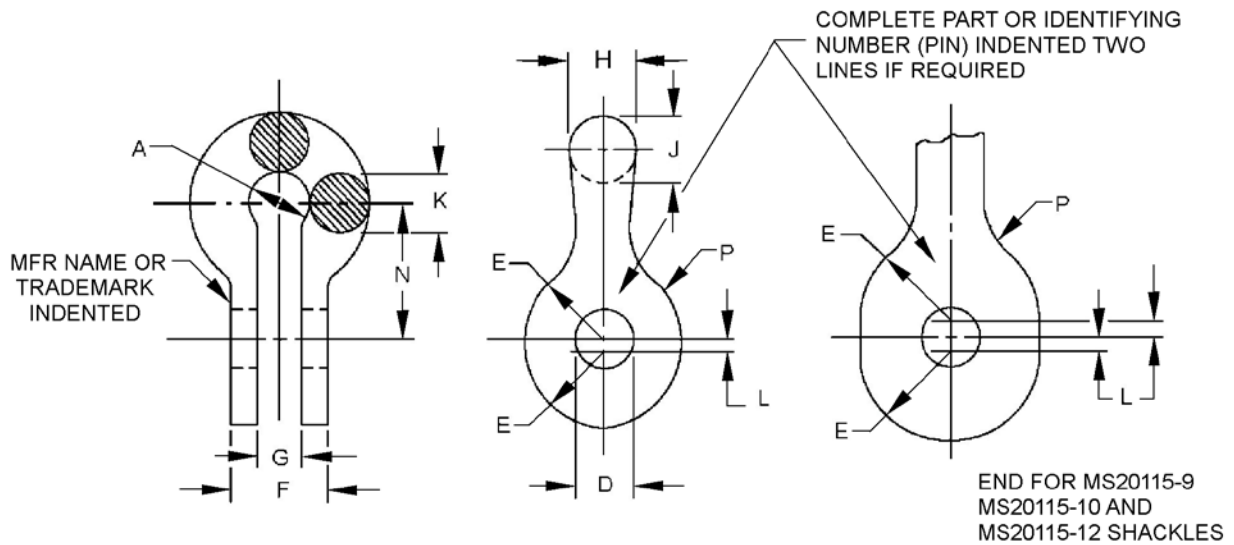


FIGURE 1. Shackle dimensions and configurations.

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| Size designator | Nominal wire rope dia. ref | Minimum breaking strength lb (kg) | A dia.<br>+.016 (0.41)<br>-.000<br>inch (mm) | D dia<br>+.005 (0.13)<br>-.000<br>inch (mm) | E rad<br>inch (mm) | F<br>+.010 (0.25)<br>-.005 (0.13)<br>inch (mm) |
|-----------------|----------------------------|-----------------------------------|--|---|--------------------|--|
| 2               | 1/16                       | 480 (218)                         | .188 (4.78)                                  | .190 (4.83)                                 | .172 (4.37)        | .218 (5.54)                                    |
| 3               | 3/32                       | 920 (417)                         | .219 (5.56)                                  |   | .219 (5.56)        | .254 (6.45)                                    |
| 4               | 1/8                        | 2000 (907)                        | .250 (6.35)                                  |   | .274 (6.96)        | .383 (9.73)                                    |
| 5               | 5/32                       | 2800 (1270)                       | .281 (7.14)                                  | .250 (6.35)                                 | .344 (8.74)        | .406 (10.31)                                   |
| 6               | 3/16                       | 4200 (1905)                       | .375 (9.53)                                  | .313 (7.95)                                 | .391 (9.93)        | .543 (13.79)                                   |
| 7               | 7/32                       | 5600 (2540)                       | .406 (10.31)                                 |   | .453 (11.51)       | .625 (15.88)                                   |
| 8               | 1/4                        | 7000 (3175)                       | .438 (11.13)                                 | .375 (9.53)                                 | .484 (12.29)       | .688 (17.48)                                   |
| 9               | 9/32                       | 8000 (3629)                       | .500 (12.70)                                 | .438 (11.13)                                | .578 (14.68)       | .719 (18.26)                                   |
| 10              | 5/16                       | 9800 (4445)                       | .594 (15.09)                                 |   | .633 (16.08)       | .765 (19.43)                                   |
| 12              | 3/8                        | 14000 (6350)                      | .625 (15.88)                                 |   | .500 (12.70)       | .750 (19.05)                                   |

| Size designator | G<br>+.007 (0.18)<br>-.003 (0.08)<br>inch (mm) | H<br>±.016 (0.41)<br>inch (mm) | J ±.016<br>(0.41)<br>inch (mm) | K ±.016<br>(0.41)<br>inch (mm) | L<br>inch (mm) |
|-----------------|--|--------------------------------|--------------------------------|--------------------------------|----------------|
| 2               | .093 (2.36)                                    | .156 (3.96)                    | .156 (3.96)                    | .156 (3.96)                    | .031 (0.79)    |
| 3               | .108 (2.74)                                    |                                |                                |                                |                |
| 4               | .195 (4.95)                                    |                                |                                |                                |                |
| 5               | .202 (5.13)                                    | .250 (6.35)                    | .250 (6.35)                    | .219 (5.56)                    |                |
| 6               | .260 (6.60)                                    | .312 (7.92)                    | .312 (7.92)                    | .281 (7.14)                    |                |
| 7               | .296 (7.52)                                    | .344 (8.74)                    | .344 (8.74)                    | .312 (7.92)                    | .062 (1.58)    |
| 8               | .313 (7.95)                                    | .406 (10.31)                   | .359 (9.12)                    | .359 (9.12)                    |                |
| 9               | .327 (8.31)                                    | .438 (11.13)                   | .391 (9.93)                    | .391 (9.93)                    |                |
| 10              | .348 (8.84)                                    | .469 (11.91)                   | .422 (10.72)                   | .422 (11.23)                   | .094 (2.39)    |
| 12              | .380 (9.65)                                    | .562 (14.27)                   | .500 (12.70)                   | .500 (12.70)                   | .125 (3.18)    |

| Size designator | N<br>±.016 (0.41)<br>inch (mm) | P rad.<br>±.016 (0.41)<br>inch (mm) |
|-----------------|--------------------------------|-------------------------------------|
| 2               | .562 (14.27)                   | .375 (9.53)                         |
| 3               |                                |                                     |
| 4               |                                |                                     |
| 5               | .750 (19.05)                   | .438 (11.13)                        |
| 6               | .812 (20.62)                   | .500 (12.70)                        |
| 7               | .875 (22.23)                   |                                     |
| 8               | 1.000 (25.40)                  | .406 (10.31)                        |
| 9               |                                |                                     |
| 10              | 1.125 (28.58)                  | .500 (12.70)                        |
| 12              | 1.250 (31.75)                  |                                     |

FIGURE 1. Shackle dimensions and configurations - Continued.

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## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Break sharp edges, and remove all hanging burrs and slivers.
4. Unless otherwise specified tolerances: decimals  $\pm 0.010$  (0.25 mm).
5. Holes to be co-axial within  $\pm 0.005$  (0.13 mm).

FIGURE 1. Shackle dimensions and configurations - Continued.

## REQUIREMENTS:

Dimensions and configuration shall be in accordance with figure 1.

For design features purposes, this standard takes precedence over documents referenced herein.

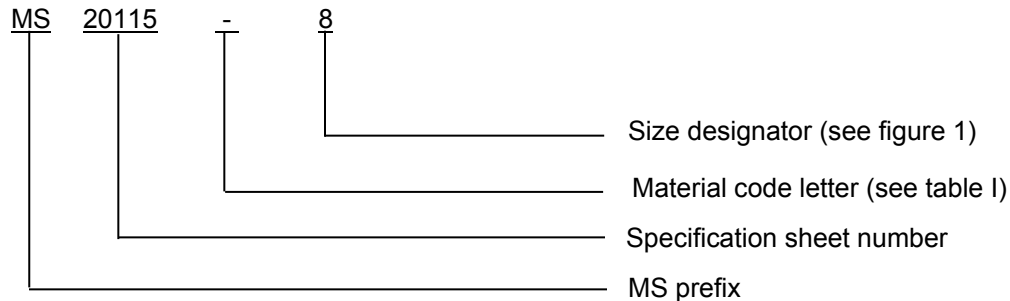
Referenced documents shall be of the issue in effect on date of invitation for bid.

Materials and finishes shall be in accordance with MIL-DTL-5675, see table I for material code.

TABLE I. Material and code letters.

| Code letter | Material                         |
|-------------|----------------------------------|
| -           | Corrosion resistant steel (CRES) |
| F           | Steel                            |
| K           | Nickel-copper-aluminum alloy     |

PIN: The PIN consists of prefix "MS" the specification sheet number, a letter or dash number for material code, and size number. Unassigned PIN's shall not be used.



PIN example: MS20115-8 indicates a CRES shackle for 1/4 inch (6.35 mm) wire rope.

Marking: Part shall be permanently marked with the MS PIN, and include the manufacturers CAGE, name, or trademark.

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

Referenced documents. This document references MIL-DTL-5675.

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CONCLUDING MATERIAL

Custodians:

Army - AV  
Navy - AS  
Air Force - 99  
DLA - CC

Preparing activity:  
DLA - CC

(Project 4030-2012-011)

Review activities:

Army - MI  
Navy - MC, SA  
Air Force - 71

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 <https://assist.dla.mil>.