

INCH-POUND

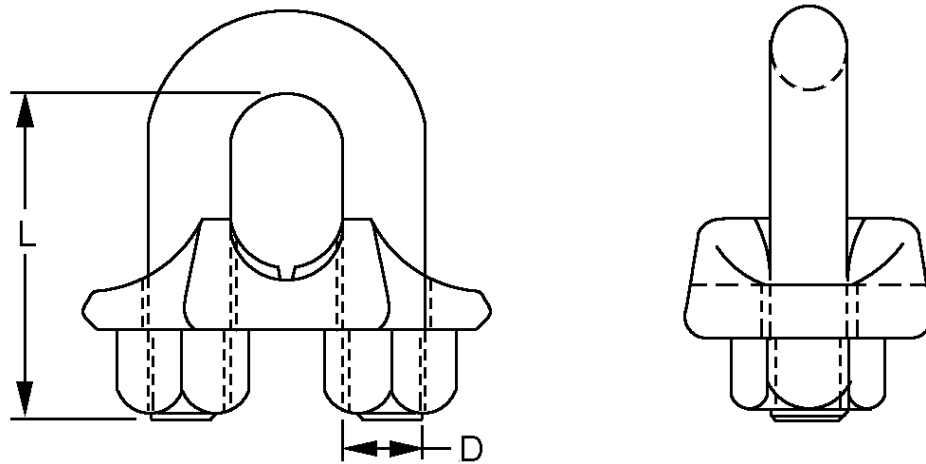
MS16842H
13 July 2017
SUPERSEDING
MS16842G
16 April 2012

DETAIL SPECIFICATION SHEET

CLAMP, WIRE ROPE, SADDLED, SINGLE-GRIP, STEEL, TYPE I (MALLEABLE-IRON AND STEEL SADDLE)

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 FF-C-450.



See notes at end of figure.

FIGURE 1. Clamp, single grip saddled wire rope, carbon steel saddle – type I, class 1.



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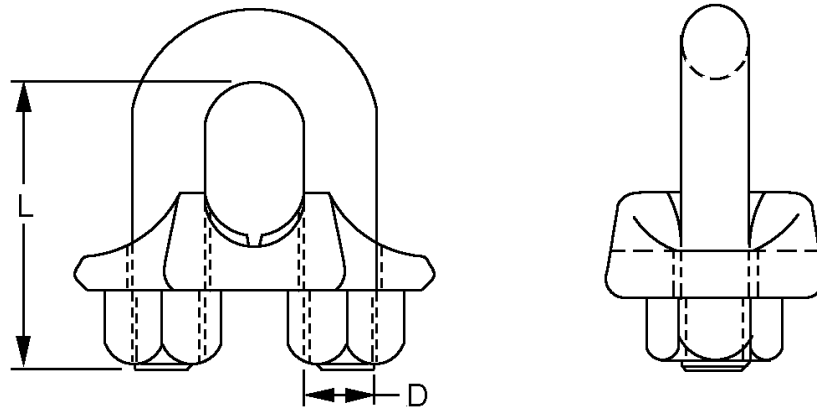
Dash Number	Wire rope diameter		D Thread minimum		U-Bolt Length minimum L	Weight pounds minimum	Recommended number of clamps for each connection
-1	1/8	.125	12-24	.2160 - 24UNC	.72	.05	2
-2	3/16	.188	1/4-20	.2500 - 20UNC	.94	.09	2
-3	1/4	.250	5/16-18	.3125 - 18UNC	1.03	.18	2
-4	5/16	.313	3/8-16	.3750 - 16UNC	1.31	.25	2
-5	3/8	.375	7/16-14	.4375 - 14UNC	1.50	.42	2
-6	7/16	.438	1/2-13	.5000 - 13UNC	1.88	.70	2
-7	1/2	.500	1/2-13	.5000 - 13UNC	1.88	.73	3
-24	9/16	.563	9/16-12	.5625 - 12UNC	2.25	.80	3
-8	5/8	.625	9/16-12	.5625 - 12UNC	2.25	.90	3
-9	3/4	.750	5/8-11	.6250 - 11UNC	2.75	1.50	4
-10	7/8	.875	3/4-10	.7500 - 10UNC	3.12	2.00	4
-11	1	1.00	3/4-10	.7500 - 10UNC	3.50	2.50	5
-12	1-1/8	1.125	3/4-10	.7500 - 10UNC	3.88	3.10	6
-13	1-1/4	1.250	7/8-9	.8750 - 9UNC	4.25	4.00	7
-16	1-3/8	1.375	7/8-9	.8750 - 9UNC	4.44	5.20	7
-14	1-1/2	1.500	7/8-9	.8750 - 9UNC	4.94	5.60	8
-17	1-5/8	1.625	1-8	1.000 - 8UNC	5.31	7.30	8
-15	1-3/4	1.750	1-1/8-7	1.125 - 7UNC	5.75	9.80	8
-18	2	2.000	1-1/4-7	1.250 - 7UNC	6.44	13.40	8
-19	2-1/4	2.250	1-1/4-7	1.250 - 7UNC	7.125	15.70	8
-20	2-1/2	2.500	1-1/4-7	1.250 - 7UNC	7.688	17.90	9
-21	2-3/4	2.750	1-1/4-7	1.250 - 7UNC	8.313	22.00	10
-22	3	3.000	1-1/2-6	1.500 - 6UNC	9.188	32.00	10
-23	3-1/2	3.500	1-1/2-6	1.500 - 6UNC	10.750	40.00	12

Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.125	3.18	.563	14.30	1.030	26.16	1.750	44.45	3.120	79.25	5.75	146.05
.188	4.78	.625	15.88	1.125	28.58	1.880	47.75	3.500	88.90	6.44	163.58
.250	6.35	.720	18.29	1.250	31.75	2.000	50.80	3.88	98.55	7.125	180.98
.313	7.95	.750	19.05	1.310	33.27	2.250	57.15	4.25	107.95	7.688	195.28
.375	9.53	.875	22.23	1.375	34.93	2.380	60.45	4.62	117.35	8.313	211.15
.438	11.13	.940	23.88	1.500	38.10	2.750	69.85	4.94	125.48	9.188	233.38
.500	12.70	1.000	25.40	1.625	41.28	3.000	76.20	5.31	134.87		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. All dimensions are "reference" dimensions.

FIGURE 1. Clamp, single grip saddled wire rope, carbon steel saddle – type I, class 1 – Continued.



Dash number	Wire rope diameter		D Thread minimum		U-Bolt Length minimum L	Weight Pounds minimum	Recommended number of clamps for each connection
-201	3/16	.188	10-24	.1900 - 24UNC	0.875	.06	2
-202	1/4	.250	5/16-18	.3125 -18UNC	1.188	.13	2
-203	5/16	.313	5/16-18	.3125 -18UNC	1.188	.15	2
-204	3/8	.375	3/8-16	.3750 -16UNC	1.563	.21	2
-205	7/16	.438	3/8-16	.3750 -16UNC	1.625	.24	2
-206	1/2	.500	7/16-14	.4375 -14UNC	2.000	.37	3
-207	9/16	.563	1/2-13	.5000 -13UNC	2.125	.54	3
-208	5/8	.625	1/2-13	.5000 -13UNC	2.313	.59	3
-209	3/4	.750	9/16-12	.5625 -12UNC	2.563	.83	4
-210	7/8	.875	5/8-11	.6250 -11UNC	3.063	1.25	4
-211	1	1.00	5/8-11	.6250 -11UNC	3.375	1.50	5
-212	1-1/8	1.125	3/4-10	.7500 -10UNC	3.875	2.42	6
-213	1-1/4	1.250	3/4-10	.7500 -10UNC	3.875	2.60	6
-214	1-1/2	1.500	7/8-9	.8750 -9UNC	4.500	5.00	7

Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.188	4.78	.500	12.70	1.000	25.40	1.563	39.70	2.563	65.10
.250	6.35	.563	14.30	1.125	28.58	1.625	41.28	3.063	77.80
.313	7.95	.625	15.88	1.188	30.18	2.000	50.80	3.375	85.73
.375	9.53	.750	19.05	1.250	31.75	2.125	53.98	3.875	98.55
.438	11.13	.875	22.23	1.500	38.10	2.313	58.75	4.500	114.30

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. All dimensions are "reference" dimensions.

FIGURE 2. Clamp, single grip saddled wire rope, malleable iron saddle - type I, class 2.

REQUIREMENTS:

Clamps shall be in accordance with figures 1, 2, and table I.

Material:

Type I, Class 1: Saddles, bolts, and nuts carbon steel shall be in accordance with FF-C-450, type I, class I.

Type I, Class 2: Bolts, and nuts carbon steel and saddles malleable- iron shall be in accordance with FF-C-450, type I, class 2.

Type I, Class 2 clamps shall be Malleable-iron tested in accordance with FF-C-450. The contractor shall furnish, prior to production, a test report by a laboratory acceptable to the Government that the malleable-iron employed for saddles meets the requirements of FF-C-450. In lieu of such report, the contractor shall carry out necessary tests of the iron under Government surveillance to show conformance with FF-C-450.

Plating and plating designators see table I.

TABLE I. Plating and plating designator.

Finish designator	Finish
A	Protective coating shall be any of the following; mechanically deposited zinc coating in accordance with ASTM-B695, class 50, type II (colored chromate), or zinc coated (hot dip galvanized) in accordance with ASTM-A153/A153M or zinc coated (electrodeposited) in accordance with ASTM-B633, Fe/Zn 5, type VI.
C	Cadmium plated, in accordance with SAE AMS-QQ-P-416, type II, class 3 (protects to 96 hours in salt spray when tested in accordance with ASTM-B117).
Z1	Zinc coating, hot-dip, in accordance with ASTM-A153/A153M.
Z2	Zinc coating (electrodeposited) in accordance with ASTM-B633, Fe/Zn 5, type VI. (protects to 120 hours in salt spray when tested in accordance with ASTM-B117).
Z3	Zinc coating, mechanically deposited, in accordance with ASTM-B695, class 50, type II (hexavalent chromium).
Z4	Zinc coating, mechanically deposited, in accordance with ASTM-B695, class 50, type I (protects to 300 hours (red rust) in salt spray when tested in accordance with ASTM-B117).
Z5	Zinc flake coating flZn/nc/TL/960h/x in accordance with ISO 10683 (protects to 960 hours in salt spray when tested in accordance with ASTM-B117).

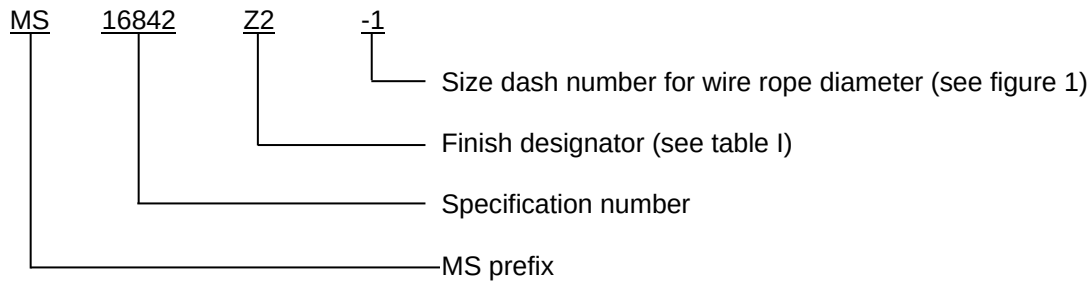
Threads shall be in accordance with FF-C-450.

Marking shall be in accordance with FF-C-450.

For design feature purposes, this specification takes precedence over acquisition documents referenced herein.

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Part or Identifying Number (PIN), example:



Cadmium and chromate type II, which uses a hexavalent chromium, is not recommended. To the users of this document, it is recommended that the use of carbon steel material with cadmium or chromate type II plating be used only when other materials and finishes specified in this document cannot meet performance requirements.

Class I and II ozone depleting substances (ODS) shall not be used in MS16842 or any referenced procedures.

Order of precedence. Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

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

For interchangeable PIN's see table II.

TABLE II. Interchangeability PIN's.

Use	Cancelled	Use	Cancelled	Use	Cancelled
MS16842-1A	MS16842-101	MS16842-6A	MS16842-106	MS16842-11A	MS16842-111
MS16842-2A	MS16842-102	MS16842-7A	MS16842-107	MS16842-12A	MS16842-112
MS16842-3A	MS16842-103	MS16842-8A	MS16842-108	MS16842-13A	MS16842-113
MS16842-4A	MS16842-104	MS16842-9A	MS16842-109	MS16842-14A	MS16842-114
MS16842-5A	MS16842-105	MS16842-10A	MS16842-110	MS16842-15A	MS16842-115

Changes from previous issue. 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. In addition to FF-C-450, this document references the following:

ASTM-A153/A153M
 ASTM-B117
 ASTM-B633
 ASTM-B695
 ISO 10683
 SAE-AMS-QQ-P-416

CONCLUDING MATERIAL

Custodians:

Army - AR
Navy - SH
Air Force - 99
DLA-CC

Preparing activity:

DLA - CC

(Project 4030-2017-004)

Review activities:

Army - AT, AV, CR4, GL
Navy - MC, SA, YD
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>.