



**DEFENSE LOGISTICS AGENCY
WEAPONS SUPPORT
P.O. BOX 3990
COLUMBUS, OHIO 43218-3990**

August 13, 2026

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Initial Draft of: MS51825K(1)
Project Number: 4730-2026-063

The initial draft of this document is now available for viewing and downloading from the DLA Weapons Support (Columbus) -VA website:

<https://weaponssupportapps.dla.mil/programs/milspec/default.aspx>

Major reason for this amendment is to add SAE J514-2 as a reference document in MS51825K. Any other changes will be minor in accordance with MIL-STD-961.

Concurrence or comments are required at this office within 30 days from the date of this letter. Comments received after this period will be retained for consideration during the next coordination cycle of this document. Comments submitted by military departments must be clearly identified as either **“Essential”** or **“Suggested.”** Essential comments must include supporting justification or data. Military review activities should forward their comments through their respective custodians, as applicable, allowing sufficient time for consolidation of the department’s response. A lack of response to this draft will be interpreted as concurrence.

If this document is of interest to you, please provide your comments or suggested changes. The point of contact for this document is Mr. Ahmad, phone number 614-693-0661, e-mail Haseeb.Ahmad@dla.mil, or may be mailed via the US Postal Service to DLA Weapons Support (Columbus), ATTN: VAI (Attention: Haseeb Ahmad), P.O. Box 3990, Columbus, OH 43218-3990.

Sincerely,

-/Signed/-
MUHAMMAD AKBAR
Chief,
Interconnection Branch

NOTE: This draft, dated **August 13, 2026** prepared by **DLA - CC**, has not been approved and is subject to modification. DO NOT USE PRIOR TO APPROVAL. (Project 4730-2026-063)

INCH-POUND

MS51825K
w/AMENDMENT 1
DRAFT
SUPERSEDING
MS51825K
30 March 2022

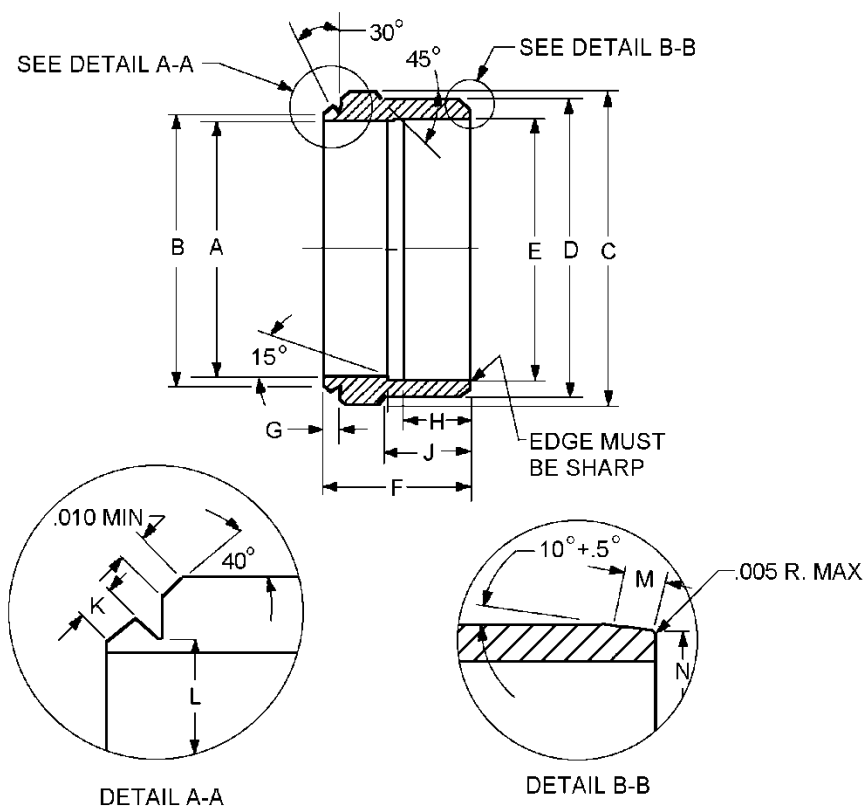
DETAIL SPECIFICATION SHEET

SLEEVES, CLINCHES, TUBE FITTING, FLARELESS TYPE, HYDRAULIC

Reactivated after 24 May 2018 and may be used for new and existing designs and acquisitions.

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-18866.



STYLE - A

See notes at end of figure.

FIGURE 1. Sleeves, style A, clinch, tube fitting.

Inches	mm
.005	0.13
.010	0.25

AMSC N/A
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FSC 4730



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Dash number style A	Tube O.D. NOM	A dia. Inches (mm) +.003 (0.08) -.000	C dia. Inches (mm) +.005 (0.13) -.000	D dia. Inches (mm) +.000 -.003 (0.08)	E dia. Inches (mm) +.003 (0.08) -.000	F Inches (mm) ±.003 (0.08)
-1	1/8	.130 (3.30)	.237 (6.02)	.178 (4.52)	.140 (3.56)	.288 (7.32)
-2	3/16	.193 (4.90)	.307 (7.80)	.249 (6.32)	.205 (5.21)	.329 (8.36)
-3	1/4	.255 (6.48)	.367 (9.32)	.312 (7.92)	.268 (6.81)	.363 (9.22)
-4	5/16	.318 (8.08)	.430 (10.92)	.375 (9.53)	.330 (8.38)	.367 (9.32)
-5	3/8	.380 (9.65)	.492 (12.50)	.440 (11.18)	.393 (9.98)	.393 (9.98)
-6	1/2	.505 (12.83)	.663 (16.84)	.587 (14.91)	.521 (13.23)	.429 (10.90)
-7	5/8	.631 (16.03)	.780 (19.81)	.713 (18.11)	.647 (16.43)	.442 (11.23)
-8	3/4	.756 (19.20)	.925 (23.50)	.838 (21.29)	.772 (19.61)	.475 (12.07)
-9	7/8	.881 (22.38)	1.063 (27.00)	.963 (24.46)	.897 (22.78)	.475 (12.07)
-10	1	1.006 (25.55)	1.187 (30.15)	1.088 (27.64)	1.022 (25.96)	.475 (12.07)
-11	1-1/4	1.260 (32.00)	1.446 (36.73)	1.341 (34.06)	1.275 (32.39)	.475 (12.07)
-12	1-1/2	1.510 (38.35)	1.694 (43.03)	1.590 (40.39)	1.524 (38.71)	.475 (12.07)
-13	2	2.014 (51.16)	2.210 (56.13)	2.094 (53.19)	2.026 (51.46)	.509 (12.93)

Dash number style A	G Inches (mm) +.000 -.006 (0.15)	H Inches (mm) +.016 (0.41) -.000	J Max Inches (mm)	K ref Inches (mm)	L Inches (mm) .000 -.005 (0.13)	M Inches (mm) +.003 (0.08) -.002 (0.05)
-1	.046 (1.17)	.078 (1.98)	.130 (3.30)	.027 (0.69)	.152 (3.86)	.020 (0.51)
-2	.047 (1.19)	.078 (1.98)	.130 (3.30)	.027 (0.69)	.218 (5.54)	.020 (0.51)
-3	.049 (1.24)	.109 (2.77)	.161 (4.09)	.027 (0.69)	.285 (7.24)	.025 (0.64)
-4	.049 (1.24)	.125 (3.18)	.171 (4.34)	.027 (0.69)	.352 (8.94)	.025 (0.64)
-5	.049 (1.24)	.125 (3.18)	.156 (3.96)	.029 (0.74)	.418 (10.62)	.025 (0.64)
-6	.068 (1.73)	.162 (4.11)	.260 (6.60)	.044 (1.12)	.555 (14.10)	.030 (0.76)
-7	.064 (1.63)	.181 (4.60)	.247 (6.27)	.042 (1.07)	.681 (17.30)	.030 (0.76)
-8	.076 (1.93)	.181 (4.60)	.270 (6.86)	.050 (1.27)	.807 (20.50)	.030 (0.76)
-9	.083 (2.11)	.181 (4.60)	.275 (6.99)	.052 (1.32)	.931 (23.65)	.030 (0.76)
-10	.083 (2.11)	.187 (4.75)	.265 (6.73)	.054 (1.37)	1.056 (26.82)	.030 (0.76)
-11	.083 (2.11)	.187 (4.75)	.245 (6.22)	.062 (1.57)	1.309 (33.25)	.030 (0.76)
-12	.086 (2.18)	.187 (4.75)	.245 (6.22)	.062 (1.57)	1.559 (39.60)	.030 (0.76)
-13	.092 (2.34)	.187 (4.75)	.258 (6.55)	.070 (1.78)	2.059 (52.30)	.030 (0.76)

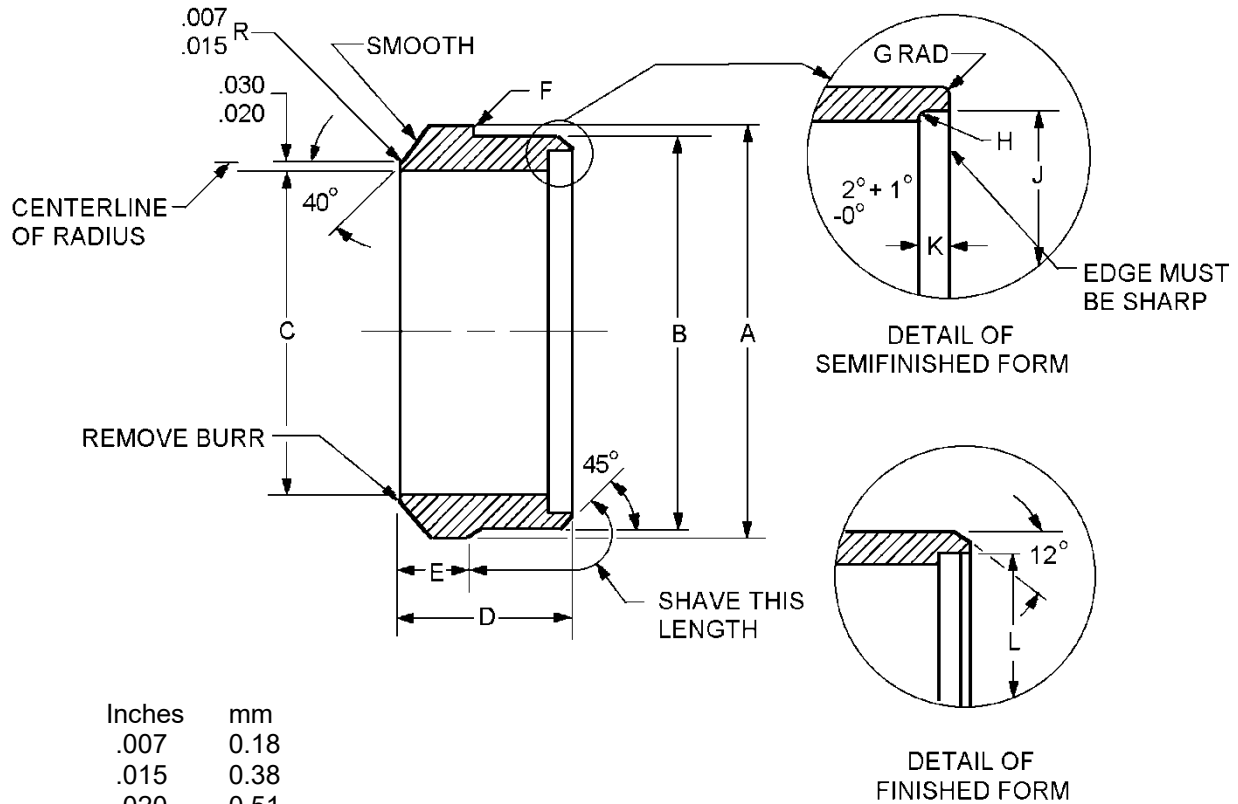
Dash number style A	N Inches (mm)
-1	.171 (4.34)
-2	.242 (6.15)
-3	.303 (7.70)
-4	.366 (9.30)
-5	.431 (10.95)
-6	.577 (14.66)
-7	.703 (17.86)
-8	.828 (21.03)
-9	.953 (24.21)
-10	1.078 (27.38)
-11	1.331 (33.81)
-12	1.580 (40.13)
-13	2.084 (52.93)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. This illustration is for identification and is not intended to restrict designs or shapes not dimensioned.
4. Dimensions and tolerances not shown shall be in accordance with SAE-J514-2 for flareless fittings.

FIGURE 1. Sleeves, style A, clinch, tube fitting - Continued.

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STYLE - B

Dash number style B	Tube O.D. NOM	A dia. $\pm .005$ (0.13) Inches (mm)	B dia. Min Inches (mm)	B dia. Max Inches (mm)	C dia. $+.003$ (0.08) $-.000$ Inches (mm)
-1	1/8	.203 (5.16)	.175 (4.45)	.178 (4.52)	.129 (3.28)
-2	3/16	.312 (7.92)	.252 (6.40)	.256 (6.50)	.190 (4.83)
-3	1/4	.359 (9.12)	.309 (7.85)	.313 (7.95)	.255 (6.48)
-4	5/16	.422 (10.72)	.373 (9.47)	.377 (9.58)	.318 (8.08)
-5	3/8	.484 (12.29)	.431 (10.95)	.435 (11.05)	.380 (9.65)
-6	1/2	.625 (15.88)	.585 (14.86)	.589 (14.96)	.506 (12.85)
-7	5/8	.750 (19.05)	.698 (17.73)	.702 (17.83)	.633 (16.08)
-8	3/4	.875 (22.23)	.836 (21.23)	.840 (21.34)	.758 (19.25)
-9	7/8	1.000 (25.40)	.961 (24.41)	.965 (24.51)	.883 (22.43)
-10	1	1.125 (28.58)	1.086 (27.58)	1.090 (27.69)	1.008 (25.60)
-11	1-1/4	1.406 (35.71)	1.339 (34.01)	1.343 (34.11)	1.260 (32.00)
-12	1-1/2	1.656 (42.06)	1.589 (40.36)	1.593 (40.46)	1.511 (38.38)
-13	2	2.188 (55.58)	2.092 (53.14)	2.096 (53.24)	2.014 (51.16)

See notes at end of figure.

FIGURE 2. Sleeves, style B, clinch, tube fitting - Continued.

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Dash number style B	D ±.003 (0.08) Inches (mm)	E Max Inches (mm)	F radius Inches (mm)	G radius Inches (mm)	H radius max Inches (mm)
-1	.278 (7.06)	.281 (7.14)	.010 (0.25)	.007 (0.18)	.007 (0.18)
-2	.278 (7.06)	.281 (7.14)	.020 (0.51)	.007 (0.18)	.007 (0.18)
-3	.336 (8.53)	.339 (8.61)	.020 (0.51)	.007 (0.18)	.007 (0.18)
-4	.336 (8.53)	.378 (9.60)	.020 (0.51)	.007 (0.18)	.007 (0.18)
-5	.375 (9.53)	.418 (10.62)	.020 (0.51)	.007 (0.18)	.007 (0.18)
-6	.375 (9.53)	.418 (10.62)	.020 (0.51)	.010 (0.25)	.010 (0.25)
-7	.415 (10.54)	.418 (10.62)	.020 (0.51)	.010 (0.25)	.010 (0.25)
-8	.415 (10.54)	.418 (10.62)	.020 (0.51)	.010 (0.25)	.010 (0.25)
-9	.415 (10.54)	.418 (10.62)	.020 (0.51)	.010 (0.25)	.010 (0.25)
-10	.415 (10.54)	.418 (10.62)	.020 (0.51)	.010 (0.25)	.010 (0.25)
-11	.415 (10.54)	.418 (10.62)	.020 (0.51)	.010 (0.25)	.010 (0.25)
-12	.415 (10.54)	.418 (10.62)	.020 (0.51)	.010 (0.25)	.010 (0.25)
-13	.453 (11.51)	.456 (11.58)	.020 (0.51)	.010 (0.25)	.010 (0.25)

Dash number style B	J dia. Min Inches (mm)	K Min	Inches (mm) Max	L Diameter Min	Inches (mm) Max
-1	.154 (3.91)	.015 (0.38)	.023 (0.58)	.148 (3.76)	.156 (3.96)
-2	.227 (5.77)	.020 (0.51)	.028 (0.71)	.221 (5.61)	.229 (5.82)
-3	.286 (7.26)	.024 (0.61)	.032 (0.81)	.280 (7.11)	.288 (7.32)
-4	.350 (8.89)	.024 (0.61)	.032 (0.81)	.344 (8.74)	.352 (8.94)
-5	.408 (10.36)	.024 (0.61)	.032 (0.81)	.402 (10.21)	.410 (10.41)
-6	.556 (14.12)	.024 (0.61)	.032 (0.81)	.550 (13.97)	.558 (14.17)
-7	.669 (16.99)	.024 (0.61)	.032 (0.81)	.663 (16.84)	.671 (17.04)
-8	.807 (20.50)	.024 (0.61)	.032 (0.81)	.801 (20.35)	.809 (20.55)
-9	.932 (23.67)	.024 (0.61)	.032 (0.81)	.926 (23.52)	.934 (23.72)
-10	1.057 (26.85)	.024 (0.61)	.032 (0.81)	1.051 (26.70)	1.059 (26.90)
-11	1.310 (33.27)	.024 (0.61)	.032 (0.81)	1.304 (33.12)	1.312 (33.32)
-12	1.560 (39.62)	.024 (0.61)	.032 (0.81)	1.554 (39.47)	1.562 (39.67)
-13	2.063 (52.40)	.024 (0.61)	.032 (0.81)	2.057 (52.25)	2.065 (52.45)

NOTES:

1. Dimensions are in inches, unless otherwise specified.
2. Metric equivalents are given for information only.
3. This illustration is for identification and is not intended to restrict designs or shapes not dimensioned.
4. Dimensions and tolerances not shown shall be in accordance with SAE-J514-2 for flareless fittings.

FIGURE 2. Sleeves, style B, clinch, tube fitting - Continued.

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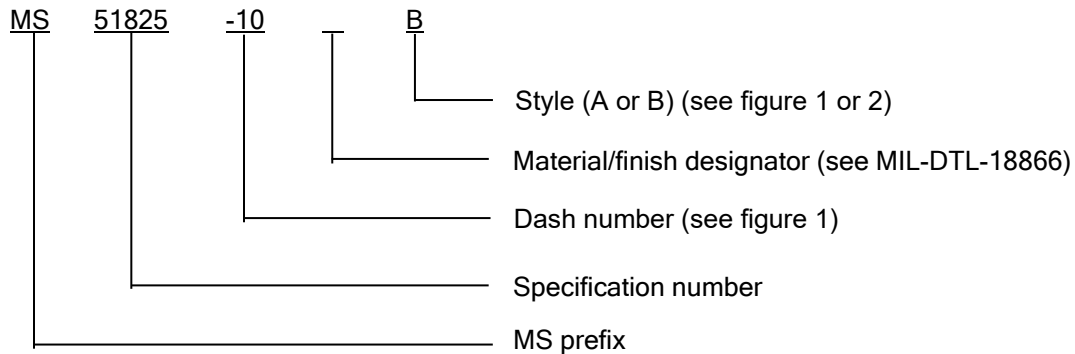
REQUIREMENTS:

Dimensions and configurations: See figures 1 and 2.

Materials and finish designators shall be in accordance with MIL-DTL-18866.

Unless otherwise specified in MIL-DTL-18866, all platings shall be capable of meeting a minimum of 96 hours salt spray test in accordance with ASTM B117. The sleeves shall show no evidence of red corrosion after 96 hours of salt spray.

Part or Identifying Number (PIN) example:



PIN example: MS51825-10B indicates a sleeve, style B, 1.008 (25.60) ID, steel, cadmium plated.

Marking shall be in accordance with MIL-DTL-18866.

Class I and II ozone depleting substances (ODS) shall not be used in MS51825 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.

NOTE: The following restrictions do not apply to manufacturers of the fittings and is applicable only to OEM's and users.

Cadmium is not recommended. To the users of this document, it is recommended that the use of carbon steel material with cadmium plating be used only when other materials and finishes specified in this document cannot meet performance requirements.

Army and Marine ground vehicle applications using zinc plating. PIN codes FC, FD, Z, and ZC finishes have a chromate conversion coating which includes hexavalent chromium and are not recommended for Army and Marine ground systems. The use of coatings depositing hexavalent chromium for Army vehicles is prohibited unless otherwise explicitly stated in the contract as a requirement. For new designs PIN codes FC, FD, Z, and ZC are not to be supplied to Army and Marine ground forces. PIN code KA (MIL- PRF- 32647 Type K20) is intended as a hazardous free

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plating material and is a direct replacement for zinc plating with a hexavalent chromium conversion coating. PIN code KA has equivalent torque/tension behavior as the zinc plating it replaces.

Army and Marine ground vehicles. The use of cadmium plating for Army and Marine ground vehicles is prohibited unless otherwise explicitly stated in the contract as a requirement.

Army and Marine ground vehicle applications using cadmium plating. Pin code J or KB may be substituted for cadmium ("Blank" PIN code) for Army ground vehicle applications. PIN code KB (MIL-PRF-32647 Type K16) is intended as a hazardous free plating material and is a direct replacement for cadmium plating ("Blank" PIN code). PIN code KB has an equivalent torque/tension behavior as the cadmium plating it replaces.

NAVSEA shipboard owned equipment. Cadmium is prohibited from use in NAVSEA-owned shipboard systems in accordance with the requirements of T9070-AL-DPC-020/077-2, unless otherwise approved by NAVSEA.

~~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~~

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Referenced documents. In addition to MIL-DTL-18866, this document references the following:

MIL-PRF-32647
aASTM B117

T9070-AL-DPC-020/077-2
SAE-J514-2

CONCLUDING MATERIAL

Custodians:
Army - AR
Navy - SH
Air Force - 71
DLA - CC

Preparing activity:
DLA - CC
(Project 4730-2026-063)

Review activities:
Army - AT, AV, GL, MI
Navy - AS, SA

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>.