

INCH-POUND

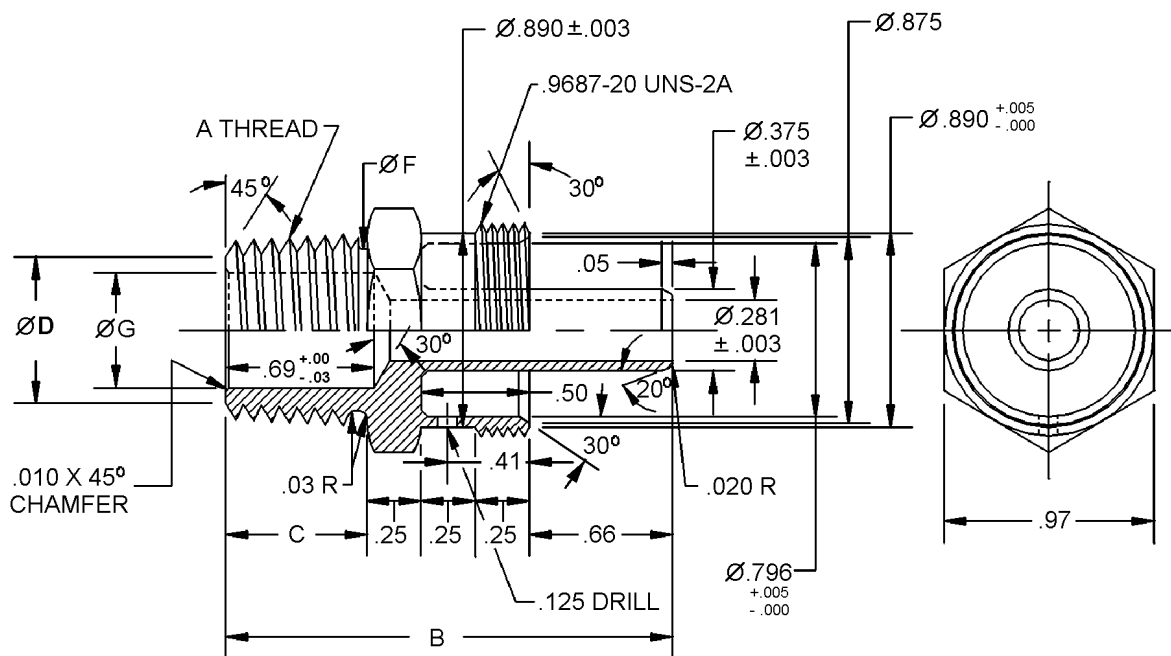
MS39137J
7 October 2019
SUPERSEDING
MS39137H
24 May 2010

DETAIL SPECIFICATION SHEET

ADAPTER BODY, AUTOMOTIVE AIR BRAKE

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.



Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.003	0.08	.020	0.51	.250	6.35	.50	12.7	.875	22.23
.005	0.13	.03	0.8	.281	7.14	.66	16.8	.890	20.32
.006	0.15	.05	1.3	.375	9.53	.69	17.5	.9687	25.062
.010	0.25	.12	3.1	.41	10.4	.796	20.22	.97	24.

MS dash number	A Thread (PTF) (see note 5)	B inches (mm)	C inches (mm)	D inches (mm)	F inches (mm)	G inches (mm) ±.003 (0.08)
-1	1/4	1.906 (48.41)	.500 (12.70)	.406 (10.31)	.484 (12.29)	.281 (7.14)
-2	1/2	2.062 (52.37)	.656 (16.66)	.672 (17.07)	.745 (18.92)	.531 (13.49)

See notes at end of figure.

FIGURE 1. Adapter body.

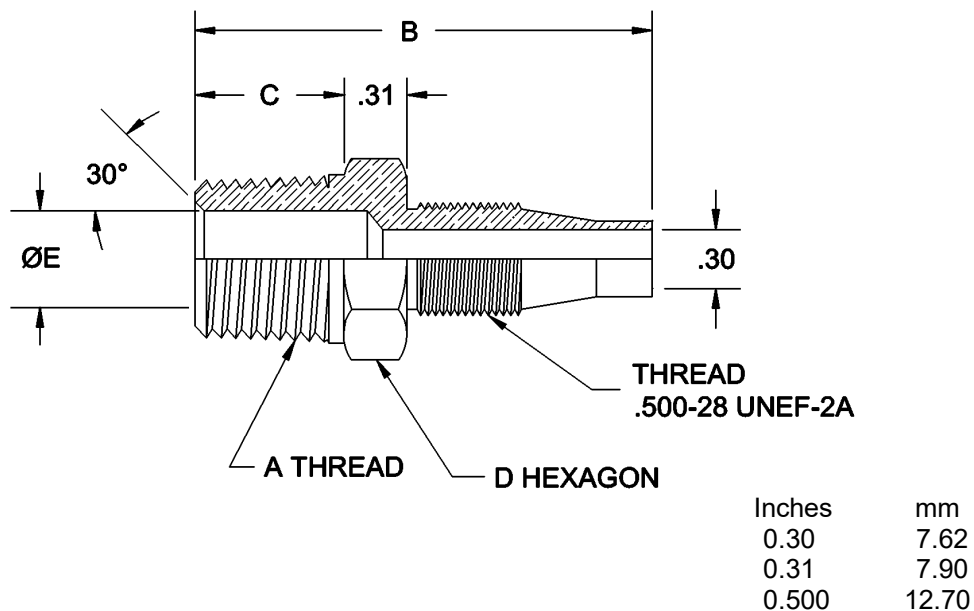
AMSC N/A

FSC 4730



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Remove all burrs and slivers.
4. Tolerances unless otherwise specified for three place $\pm .005$ inch (0.13 mm), two place decimals $\pm .02$ inch (0.5 mm), and angles $\pm 2^\circ$.
5. PTF Dryseal threads shall be in accordance with FED-STD-H28/8 and ANSI-B1.20.3. Note: Male PTF (Short Dryseal) are identical to male NPTF threads except that the thread lengths have been shortened by one full thread from the small end of the taper.
6. UNS threads in accordance with FED-STD-H28/2 and ASME-B1.1.

FIGURE 1. Adapter body - Continued.

MS dash number	A Thread (PTF) (see note 5)	B inches (mm)	C inches (mm)	D inches (mm)	E inches (mm)
-A-1	1/4	2.12 (53.85)	.56 (14.22)	.53 (13.46)	.30 (7.62)
-A-2	1/2	2.31 (58.67)	.75 (19.05)	.88 (22.35)	.49 (12.45)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Remove all burrs and slivers.
4. Tolerances unless otherwise specified for three place $\pm .005$ inch (0.13 mm), two place decimals $\pm .02$ inch (0.5 mm), and angles $\pm 2^\circ$.
5. PTF Dryseal threads shall be in accordance with FED-STD-H28/8 and ANSI-B1.20.3. Note: Male PTF (Short Dryseal) are identical to male NPTF threads except that the thread lengths have been shortened by one full thread from the small end of the taper.
6. UNEF threads in accordance with FED-STD-H28/2 and ASME-B1.1.

FIGURE 2. Alternate design adapter body.

REQUIREMENTS:

Adapters shall be as specified on figures 1 and 2 and in table I.

The adapters specified herein are a component of the adapter, straight pipe to hose, automotive air brake hose MS39133.

Material:

Brass formed rod, tempered, half-hard brass in accordance with ASTM B16/B16M.

Steel bar in accordance with ASTM A108.

Corrosion resistant steel bars alloys UNS S30300, UNS S30400, UNS S30403, UNS S32100, or UNS 35500.

Material/finish shall be in accordance with table I.

TABLE I. Material/finish

Material/finish designator	Material/	Finish
A	Stainless steel	No additional finish. Passivation in accordance with SAE AMS2700, type 6 or 7.
B	Brass	No additional finish.
C	Steel	Cadmium plated in accordance with SAE AMS-QQ-P-416, type II, class 2 or SAE AMS-C-81562, type II, class 2. <u>1/</u> <u>2/</u> <u>3/</u>
R	Steel	Zinc plating with colorless passivate in accordance with ASTM B633, type V, Fe/Zn 5.
S	Steel	Zinc plated in accordance with ASTM B633, type II, Fe/Zn 5. <u>1/</u> <u>3/</u>

1/ These finishes have a chromate conversion coating or chromic acid rinse, which includes hexavalent chromium, and are not recommended.

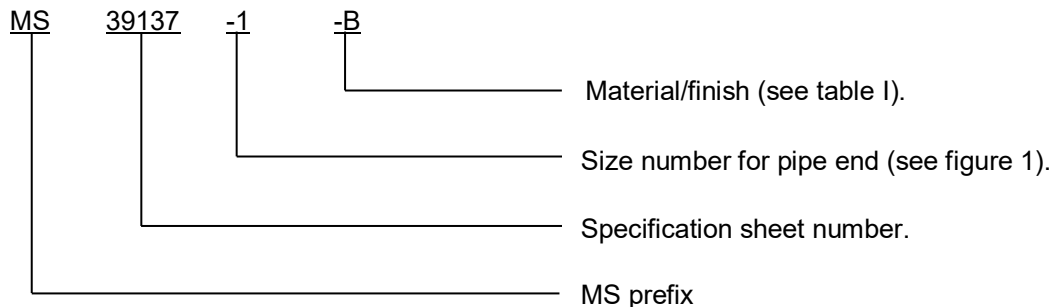
2/ Cadmium is prohibited from use in NAVSEA-owned shipboard systems in accordance with the requirements of T9070-AL-DPC-020/077-2, unless otherwise approved by NAVSEA.

3/ The use of cadmium plating or coatings depositing hexavalent chromium for Army vehicles is prohibited unless otherwise explicated stated in the contract as a requirement.

All plating's shall be capable of meeting 96-hour salt spray test in accordance with ASTM B117. The fittings shall show no evidence of red corrosion after 96 hours of salt spray. Air passages, other openings, and internal threads shall not be subject to the plating thickness requirement and may have bare areas provided they are protected with a light film of oil.

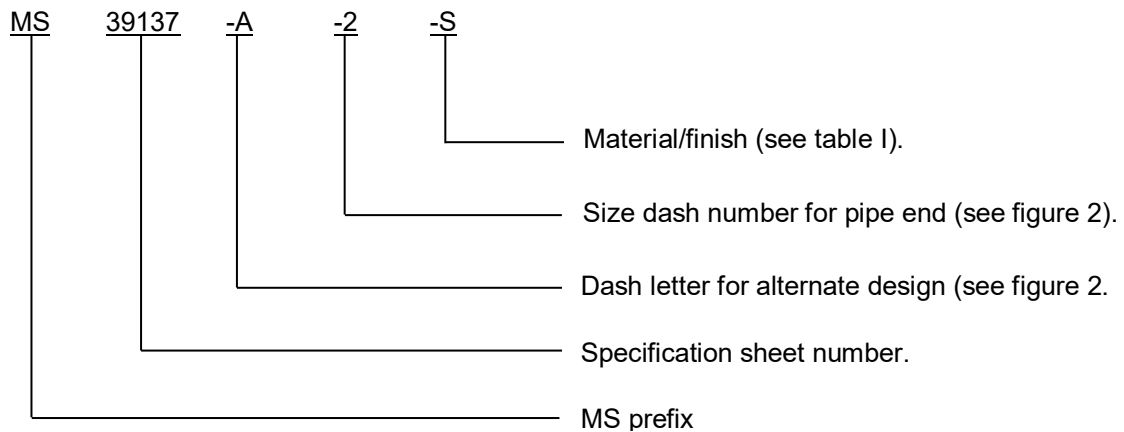
MS39137J

Part or Identifying Number (PIN): Standard adapter body, the PIN consists of, the specification “MS” sheet number, a dash, number for pipe end size, and dash and a letter for material/finish designator.



PIN example: MS39137-1-B indicates an adapter body 1/4 PTF threads to .9687 - 20 UNS-2A threads, brass body.

PIN: Alternate adapter body, the PIN consists of the letters “MS”, the specification sheet number, a dash, the letter A for alternate body design, a dash, a number for pipe end size, a dash and a letter for material/finish designator.



PIN example: MS39137-A-1-S indicates an adapter body with alternate design 1/4 NPTF short threads to .9687-20 UNS-2A threads steel body, zinc plated.

Class I and II ozone depleting substances (ODS) shall not be used in MS39137 or any referenced procedures.

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

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.

The use of cadmium plating or coatings depositing hexavalent chromium for Army vehicles is prohibited unless otherwise explicated stated in the contract as a requirement.

In the event of a conflict between the text of this specification sheet and the references cited herein, the text of this specification sheet shall take precedence.

MS39137J

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. This document references the following:

FED-STD-H28/2	ASTM B117
FED-STD-H28/8	ASTM B633
MS39133	SAE AMS-C-81562
ANSI-B1.20.3	SAE AMS-QQ-P-416
ASME-B1.1	SAE AMS2700
ASTM A108	T9070-AL-DPC-020/077-2
ASTM B16/B16M	

CONCLUDING MATERIAL

Custodians:

Army - AT
Navy - SH
Air Force - 71
DLA - CC

Preparing activity:

DLA - CC

(Project 4730-2019-074

Review activities:

Army - AR, EA
Navy - 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>.