

INCH-POUND

MIL-DTL-28840/23D
w/AMENDMENT 1
1 July 2019
SUPERSEDING
MIL-DTL-28840/23D
21 November 2013

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, CIRCULAR, THREADED, HIGH SHOCK,
HIGH DENSITY, SHIPBOARD, BACKSHELL, GLAND NUT, WIRING

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-28840.

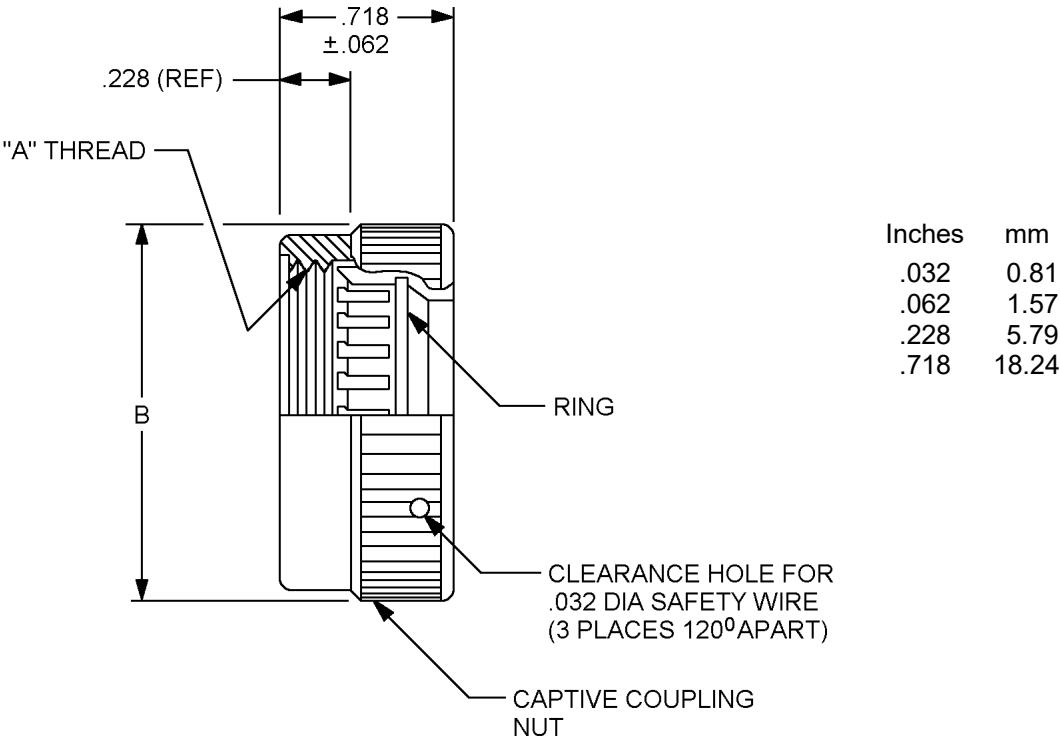


FIGURE 1. Dimensions and configurations.



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Designator (see note 1)	A thread class 2B	B dia max
A (11)	.750-20 UNEF	1.028 (26.11)
B (13)	.875-20 UNEF	1.141 (28.98)
C (15)	1.000-20 UNEF	1.263 (32.08)
D (17)	1.125-18 UNEF	1.387 (35.23)
E (19)	1.250-18 UNEF	1. 513 (38.43)
F (23)	1.438-18 UNEF	1.703 (43.26)
G (25)	1.562-18 UNEF	1.825 (46.35)
H (29)	1.876-16 UN	2.143 (54.43)
J (33)	2.062-16 UNS	2.329 (59.16)

NOTES:

1. Shell sizes are provided within parentheses for information and are not a part of the designator.
2. Dimensions are in inches.
3. Metric equivalents are given for information only.
4. Dimensions apply after plating.
5. These gland nuts are used with MIL-DTL-28840/10, MIL-DTL-28840/11, MIL-DTL-28840/14 and MIL-DTL-28840/16.

FIGURE 1. Dimensions and configurations - Continued.

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REQUIREMENTS:

Dimensions and configurations: See figure 1.

Interface dimensions shall conform to MIL-DTL-28840.

Material and finish: See table I and MIL-DTL-28840.

TABLE I. Material and finish.

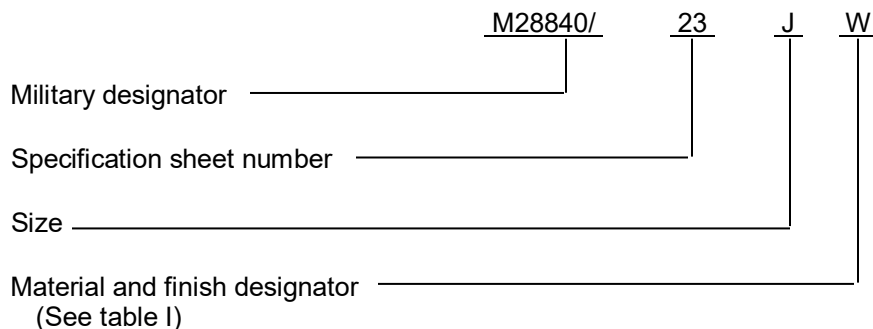
Material and finish designator	Material	Finish
W	Aluminum alloy in accordance with ASTM B85/B85M, ASTM B26/B26M, ASTM B108/B108M, ASTM B209, ASTM B211, or ASTM B221	Cadmium plate, olive drab over electroless nickel <u>1/</u> <u>2/</u>
D	Corrosion resistant steel in accordance with ASTM A276, ASTM A473, or ASTM A580/A580M, type 316	Cadmium plate, black <u>1/</u> <u>2/</u>
F	Aluminum alloy in accordance with ASTM B85/B85M, ASTM B26/B26M, ASTM B108/B108M, ASTM B209, ASTM B211, or ASTM B221	Pure electro-deposited aluminum, non-reflective
L		Tin-zinc, non-reflective
S		Zinc nickel, non-reflective <u>2/</u>

1/ See restrictions.

2/ See application notes.

Marking: Backshell shall be identified with the manufacturer's name or trademark and the Part or Identifying Number (PIN).

PIN example:



RESTRICTIONS:

Material and finish designators W and D are inactive for NAVSEA new design, unless approved by NAVSEA. Designators W and D are inactive for aircraft new design. Designators W and D shall not be used in oxygen or potable water systems. Additional restrictions are listed in the MIL-DTL-28840.

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APPLICATION NOTES:

Material and finish designators W and D have a hexavalent chromium conversion coat and are not recommended for Army ground systems. Finishes are extensively tested for fluid resistance in accordance with MIL-DTL-28840, including a water-glycol fluid in accordance with SAE-AMS1424. Reference ASTM MNL37, Fuels and Lubricants Handbook, for applications in which fluid compatibility with connector surface finish is a concern. Additional application notes are listed in MIL-DTL-28840.

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-28840, this document references the following:

MIL-DTL-28840/10
MIL-DTL-28840/11
MIL-DTL-28840/14
MIL-DTL-28840/16
ASTM A276
ASTM A473
ASTM A580/A580M
ASTM B26/B26M
ASTM B85/B85M
ASTM B108/B108M
ASTM B209
ASTM B211
ASTM B221
ASTM MNL37
SAE-AMS1424

CONCLUDING MATERIAL

Custodians:

Army - AT
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5935-2019-074)

Review activities:

Army – AV, MI

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>.