



DEFENSE LOGISTICS AGENCY
WEAPONS SUPPORT
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September 29, 2026

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Initial Drafts of: MIL-DTL-28840 /1F, /2F, /3F, /5D, and /6E
Project Numbers: 5935-2026-058 through 5935-2026-062

These initial drafts for these subject documents, are now available for viewing and downloading from the DLA Weapons Support (Columbus)-VA Web site:

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

Major changes to these documents include removing the withdrawn reference ASTM-B211 and to be replaced with ASTM-B211/B211M.

Concurrence or comments are required at this Center within 30 days from the date of this letter. Late comments will be held for the next coordination of the document. Comments from military departments must be identified as either "Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians of this office, as applicable, in sufficient time to allow for consolidating the department reply. Lack of response to this draft will be construed as concurrence.

If these documents are of interest to you, please provide your comments or suggested changes. The point of contact for this document is Mr. Harrell, phone number 614-693-3456, e-mail Arbion.Harrell@dlamail.

Sincerely,

-/ Signed/-
MUHAMMAD AKBAR
Chief,
Interconnection Branch

NOTE: This draft, dated (day month year), prepared by DLA – CC has not been approved and is subject to modification.
DO NOT USE PRIOR TO APPROVAL. (Project 5935-2026-061)

INCH-POUND

MIL-DTL-28840/5D
w/AMENDMENT 3
DRAFT
SUPERSEDING
MIL-DTL-28840/5D
w/AMENDMENT 2
03 March 2021

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, CIRCULAR, THREADED,
HIGH SHOCK, HIGH DENSITY, SHIPBOARD, BACKSHELL, STRAIGHT,
METAL CONDUIT FOR EMI SHIELDING

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.

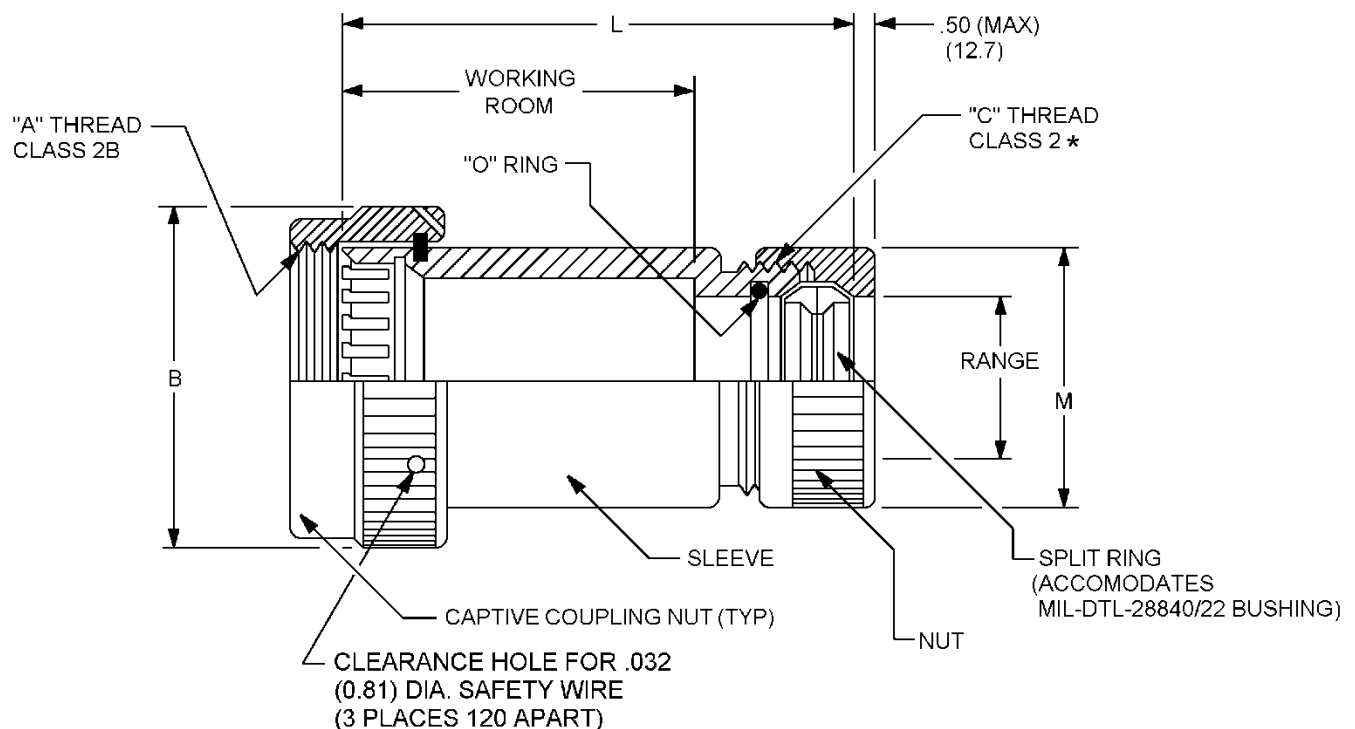


FIGURE 1. Dimensions and configurations.

AMSC N/A
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FSC 5935



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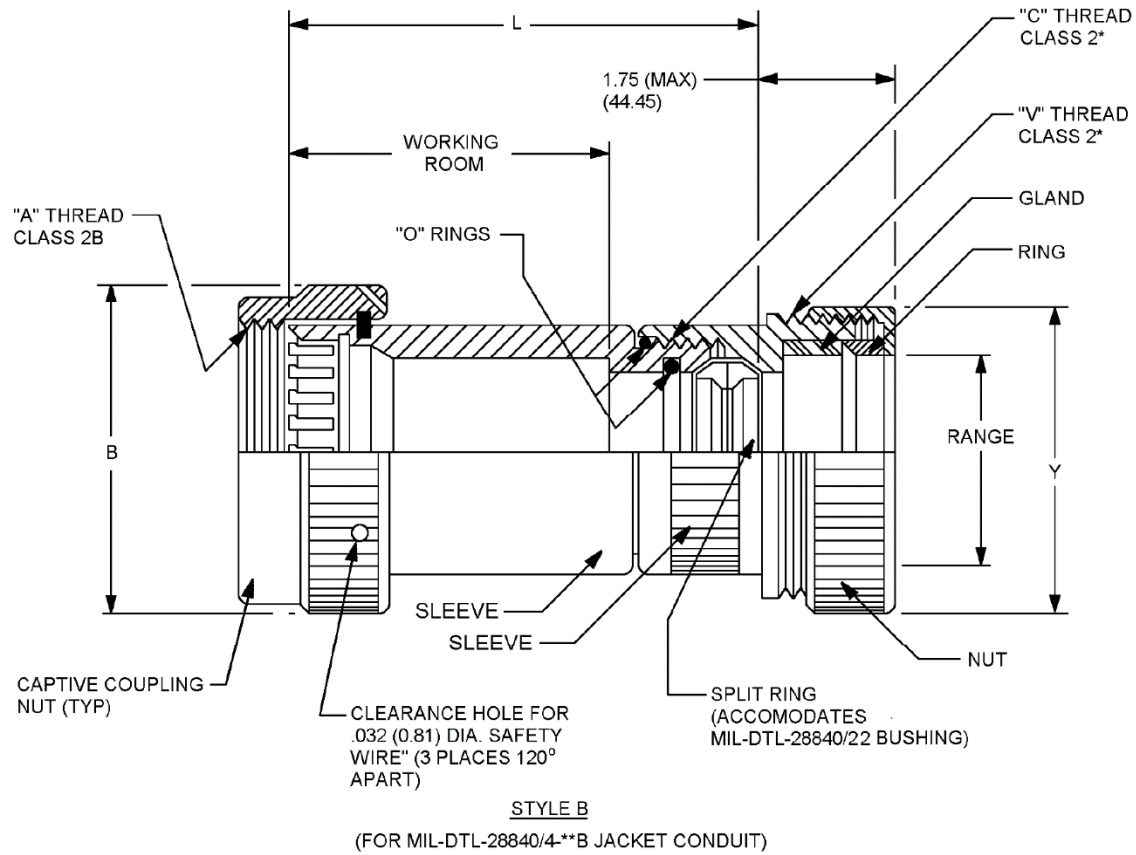


FIGURE 1. Dimensions and configurations - Continued.

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Dash no.	Shell size designator (see note 1)	A thread class 2B	B dia max	C thread, class 2* (see note 5)	Sealing range	
					max	min
01	A (11)	.750-20 UNEF	1.028 (26.11)	.875-20 UNEF	.63 (16.0)	.50 (12.7)
02	B (13)	.875-20 UNEF	1.141 (28.98)			
03				1.000-20 UNEF	.75 (19.1)	.63 (16.0)
04	C (15)	1.000-20 UNEF	1.263 (32.08)	.875-20 UNEF	.63 (16.0)	.50 (12.7)
05				1.000-20 UNEF	.75 (19.1)	.63 (16.0)
06				1.125-18 UNEF	.88 (22.4)	.75 (19.1)
07				1.250-18 UNEF	1.00 (25.4)	.88 (22.4)
08	D (17)	1.125-18 UNEF	1.387 (35.23)	1.125-18 UNEF	.88 (22.4)	.75 (19.1)
09				1.250-18 UNEF	1.00 (25.4)	.88 (22.4)
10				1.625-18 UNEF	1.38 (35.1)	1.19 (30.2)
11	E (19)	1.250-18 UNEF	1.513 (38.43)	1.125-18 UNEF	.88 (22.4)	.75 (19.1)
12				1.250-18 UNEF	1.00 (25.4)	.88 (22.4)
13				1.625-18 UNEF	1.38 (35.1)	1.19 (30.2)
14	F (23)	1.438-18 UNEF	1.703 (43.26)	1.250-18 UNEF	1.00 (25.4)	.88 (22.4)
15				1.625-18 UNEF	1.38 (35.1)	1.19 (30.2)
16				1.875-18 UNS	1.63 (41.4)	1.44 (36.6)
17	G (25)	1.562-18 UNEF	1.825 (46.35)	1.250-18 UNEF	1.00 (25.4)	.88 (22.4)
18				1.625-18 UNEF	1.38 (35.1)	1.19 (30.2)
19				1.875-18 UNS	1.63 (41.4)	1.44 (36.6)
20				2.125-16 UN	1.88 (47.8)	1.63 (41.4)
21	H (29)	1.875-16 UN	2.143 (54.43)	1.875-18 UNS	1.63 (41.4)	1.44 (36.6)
22				2.125-16 UN	1.88 (67.8)	1.63 (41.4)
23	J (33)	2.062-16 UNS	2.329 (59.16)	2.125-16 UN	1.88 (47.8)	1.63 (41.4)
24				2.750-16 UN	2.38 (60.5)	2.13 (54.1)
25	A (11)	.750-20 UNEF	1.028 (26.11)	.875-20 UNEF	.75 (19.05)	.63 (16.00)

FIGURE 1. Dimensions and configurations - Continued.

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Dash no.	Shell size designator (see note 1)	Conduit size	L ± .12 (± 3.05)	Working room ref.	V thread class 2* (see note 5)	M dia max	Y dia max
01	A (11)	03	1.75 (44.45)	1.00 (25.4)	1.000-20 UNEF	1.12 (28.45)	1.19 (30.23)
02	B (13)				1.00 (25.4)	1.188-18 UNEF	1.25 (31.8)
03		1.000-20 UNEF				1.12 (28.5)	1.19 (30.23)
04	C (15)	1.188-20 UNEF				1.25 (31.8)	1.38 (35.1)
05		1.438-18 UNEF				1.43 (36.3)	1.63 (41.4)
06		3.00 (76.2)					1.750-18 UNS
07	D (17)	06	2.25 (57.15)	1.50 (38.10)		1.438-18 UNEF	1.43 (36.3)
08		05		2.00 (50.80)	1.750-18 UNS	1.62 (41.2)	1.94 (49.3)
09		06			2.00-18 UNS	1.81 (46.0)	2.19 (55.6)
10	(E19)	1.50 (38.10)			1.438-18 UNEF	1.43 (36.3)	1.63 (41.4)
11		05			1.750-18 UNEF	1.62 (41.2)	1.94 (49.3)
12		06			2.00-18 UNS	1.81 (46.2)	2.19 (55.6)
13	F (23)	08	2.00 (50.80)		1.750-18 UNS	1.62 (41.2)	1.94 (49.3)
14		06		2.00-18 UN	1.81 (46.0)	2.19 (55.6)	
15		08		2.00-16 UN	2.18 (55.4)	2.44 (62.0)	
16	G (25)	10		1.750-18 UNS	1.62 (41.2)	1.94 (49.3)	
17		06		2.00-18 UN	1.81 (46.0)	2.19 (55.6)	
18		08		2.250-16 UN	2.18 (55.4)	2.44 (62.0)	
19	H (29)	10	2.50 (63.50)	2.500-16 UN	2.56 (65.0)	2.69 (68.3)	
20		12		2.250-16 UN	2.18 (55.4)	2.44 (62.0)	
21		J (33)		12	2.500-16 UN	2.56 (65.0)	2.69 (68.3)
22				12	2.56 (65.0)	2.69 (68.3)	
23	A (11)	16		3.00-16 UN	3.06 (77.8)	3.18 (81.0)	
24		04		1.75 (44.45)	1.00 (25.4)	1.188-18 UNEF	1.25 (31.75)

NOTES:

1. Shell sizes are provided within parentheses for information and are not a part of the designator.
2. Dimensions are in inches. Dimensions apply after plating.
3. Metric equivalents are given for information only.
4. Dimensions apply after plating.
5. See MIL-DTL-28840 for C and V thread, class 2*.

FIGURE 1. Dimensions and configurations - Continued.

MIL-DTL-28840/5D
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REQUIREMENTS:

Dimensions and configurations: See figure 1.

Interface dimensions shall be in accordance with MIL-DTL-28840.

Material and finish shall be in accordance with MIL-DTL-28840 and table I herein.

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~~ ASTM B211/B211M, or ASTM-B221	Cadmium plate, olive drab over electroless nickel <u>2/ 3/</u>
D	Corrosion resistant steel in accordance with ASTM-A276, ASTM-A473, or ASTM-A580/A580M, type 316	Cadmium plate, black <u>1/ 2/ 3/</u>
F	Aluminum alloy in accordance with ASTM-B85/B85M, ASTM-B26/B26M, ASTM-B108/B108M, ASTM-B209, ~~ASTM-B211~~ ASTM B211/B211M, or ASTM-B221	Pure electro-deposited aluminum, non-reflective
L		Tin-zinc, non-reflective
S		Zinc nickel, non-reflective <u>3/</u>

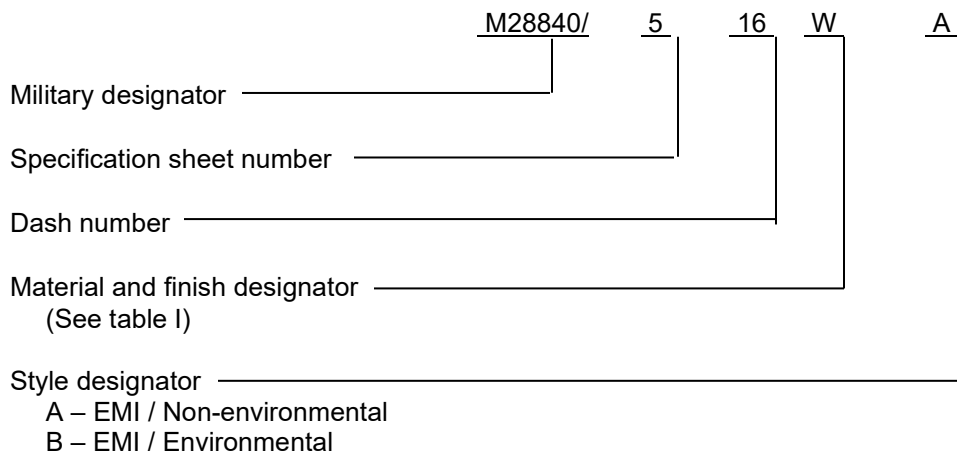
1/ Lock washers and telescoping screws shall be stainless steel and passivated in accordance with SAE-AMS2700.

2/ See restrictions.

3/ See application notes

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

PIN example:



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QUALIFICATION: Two samples in each shell size and finish for which qualification is desired, shall be tested in accordance with MIL-DTL-28840.

Qualification of MIL-DTL-28840/6 will qualify MIL-DTL-28840/5 by similarity for group 5 tests.

RESTRICTIONS:

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

APPLICATION NOTES:

Material and finish designators W and D have a hexavalent chromium conversion coat and are not recommended for Army ground systems. Cadmium type or zinc/ zinc alloy surface finishes are not compatible with hydraulic systems with synthetic fluids (see ASTM-MNL37, Fuels and Lubricants Handbook). 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-28840/4
MIL-DTL-28840/6
MIL-DTL-28840/22
ASTM-A276
ASTM-A473
ASTM-A580/A580M
ASTM-B26/B26M
ASTM-B85/B85M
ASTM-B108/B108M
ASTM-B209
~~ASTM-B211~~ ASTM B211/B211M
ASTM-B221
ASTM-MNL37
SAE-AMS2700

MIL-DTL-28840/5D
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CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-2026-061)

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>.