INCH-POUND

MIL-DTL-28840/21G
21 November 2013
SUPERSEDING
MIL-DTL-28840/21F
11 January 2010

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, CIRCULAR, THREADED, HIGH SHOCK, HIGH DENSITY, SHIPBOARD, CRIMP CONTACTS, RECEPTACLE, CABLE CONNECTING ASSEMBLY, STRAIGHT, CLASSES DJ, DJS, PJ, TJ, TJS, ZJ, AND ZJS

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.

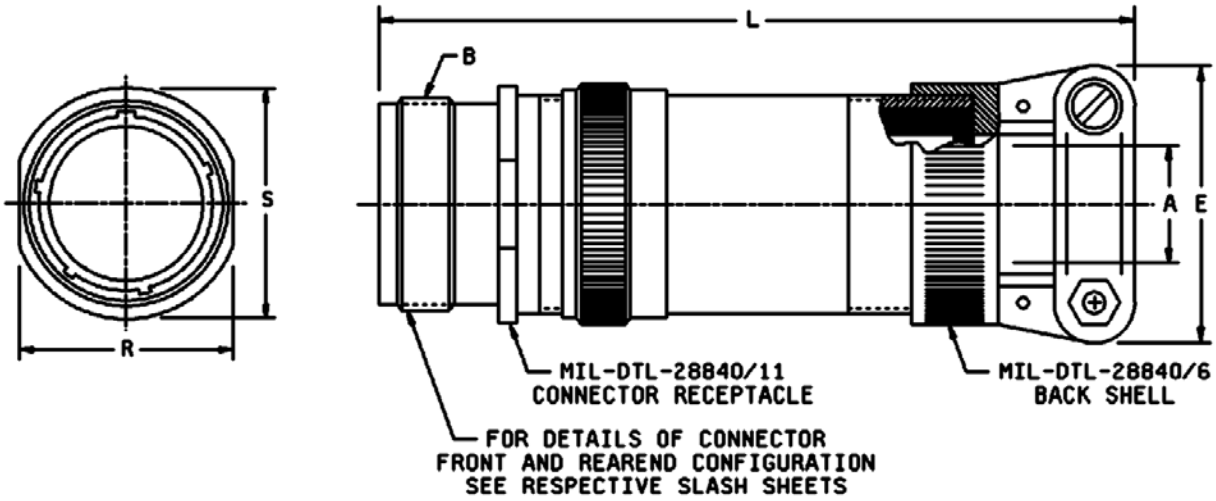

FIGURE 1. Dimensions and configuration.

Designator (see note 3)	Assembly Part or Identifying Number (PIN) (see note 6)	Connector receptacle (PIN) (see note 6)	Backshell assembly (PIN) (see note 6)	A Cable entry	
				max	min
A (11)	M28840/21*A*A***	M28840/11*A***	M28840/601**	.312 (7.92)	.188 (4.78)
A (11)	M28840/21*A*B***	M28840/11*A***	M28840/624**	.438 (11.13)	.281 (7.14)
A (11)	M28840/21*A*C***	M28840/11*A***	M28840/625**	.562 (14.27)	.344 (8.74)
B (13)	M28840/21*B*A***	M28840/11*B***	M28840/602**	.312 (7.92)	.188 (4.78)
B (13)	M28840/21*B*B***	M28840/11*B***	M28840/603**	.438 (11.13)	.281 (7.14)
B (13)	M28840/21*B*C***	M28840/11*B***	M28840/626**	.562 (14.27)	.344 (8.74)
B (13)	M28840/21*B*D***	M28840/11*B***	M28840/627**	.625 (15.88)	.375 (9.53)
C (15)	M28840/21*C*A***	M28840/11*C***	M28840/605**	.438 (11.13)	.281 (7.14)
C (15)	M28840/21*C*B***	M28840/11*C***	M28840/606**	.562 (14.27)	.344 (8.74)
C (15)	M28840/21*C*C***	M28840/11*C***	M28840/628**	.625 (15.88)	.375 (9.53)
C (15)	M28840/21*C*D***	M28840/11*C***	M28840/607**	.750 (19.05)	.438 (11.13)
C (15)	M28840/21*C*E***	M28840/11*C***	M28840/604**	.312 (7.92)	.188 (4.78)
D (17)	M28840/21*D*A***	M28840/11*D***	M28840/608**	.625 (15.88)	.375 (9.53)
D (17)	M28840/21*D*B***	M28840/11*D***	M28840/609**	.750 (19.05)	.438 (11.13)
D (17)	M28840/21*D*C***	M28840/11*D***	M28840/610**	.938 (23.83)	.625 (15.88)
E (19)	M28840/21*E*A***	M28840/11*E***	M28840/611**	.625 (15.88)	.375 (9.53)
E (19)	M28840/21*E*B***	M28840/11*E***	M28840/612**	.938 (23.83)	.625 (15.88)
F (23)	M28840/21*F*A***	M28840/11*F***	M28840/613**	.750 (19.05)	.438 (11.13)
F (23)	M28840/21*F*B***	M28840/11*F***	M28840/614**	.938 (23.83)	.625 (15.88)
F (23)	M28840/21*F*C***	M28840/11*F***	M28840/615**	1.188 (30.18)	.812 (20.62)

FIGURE 1. Dimensions and configuration – Continued.

Designator (see note 3)	Assembly (PIN) (see note 6)	Connector receptacle (PIN) (see note 6)	Backshell assembly (PIN) (see note 6)	B thread class 2B	E ref	L max
A (11)	M28840/21*A*A***	M28840/11*A***	M28840/601**	.750-.1P.2L-D.S.	.938 (23.83)	6.625 (168.28)
A (11)	M28840/21*A*B***	M28840/11*A***	M28840/624**	.750-.1P.2L-D.S.	1.125 (28.58)	6.625 (168.28)
A (11)	M28840/21*A*C***	M28840/11*A***	M28840/625**	.750-.1P.2L-D.S.	1.312 (33.32)	6.625 (168.28)
B (13)	M28840/21*B*A***	M28840/11*B***	M28840/602**	.875-.1P.2L-D.S.	.938 (23.83)	6.625 (168.28)
B (13)	M28840/21*B*B***	M28840/11*B***	M28840/603**	.875-.1P.2L-D.S.	1.125 (28.58)	6.625 (168.28)
B (13)	M28840/21*B*C***	M28840/11*B***	M28840/626**	.875-.1P.2L-D.S.	1.312 (33.32)	6.625 (168.28)
B (13)	M28840/21*B*D***	M28840/11*B***	M28840/627**	.875-.1P.2L-D.S.	1.312 (33.32)	7.125 (180.98)
C (15)	M28840/21*C*A***	M28840/11*C***	M28840/605**	1.062-.1P.2L-.S.	1.125 (28.58)	6.625 (168.28)
C (15)	M28840/21*C*B***	M28840/11*C***	M28840/606**	1.062-.1P.2L-D.S.	1.312 (33.32)	6.625 (168.28)
C (15)	M28840/21*C*C***	M28840/11*C***	M28840/628**	1.062-.1P.2L-D.S.	1.312 (33.32)	7.125 (180.98)
C (15)	M28840/21*C*D***	M28840/11*C***	M28840/607**	1.062-.1P.2L-D.S.	1.593 (40.46)	7.188 (182.58)
C (15)	M28840/21*C*E***	M28840/11*C***	M28840/604**	1.062-.1P.2L-D.S.	.938 (23.83)	6.625 (168.28)
D (17)	M28840/21*D*A***	M28840/11*D***	M28840/608**	1.125-.1P.2L-D.S.	1.312 (33.32)	7.125 (180.98)
D (17)	M28840/21*D*B***	M28840/11*D***	M28840/609**	1.125-.1P.2L-D.S.	1.593 (40.46)	7.188 (182.58)
D (17)	M28840/21*D*C***	M28840/11*D***	M28840/610**	1.125-.1P.2L-D.S.	1.750 (44.45)	7.188 (182.58)
E (19)	M28840/21*E*A***	M28840/11*E***	M28840/611**	1.312-.1P.2L-D.S.	1.312 (33.32)	7.125 (180.98)
E (19)	M28840/21*E*B***	M28840/11*E***	M28840/612**	1.312-.1P.2L-D.S.	1.750 (44.45)	7.250 (184.15)
F (23)	M28840/21*F*A***	M28840/11*F***	M28840/613**	1.500-.1P.2L-D.S.	1.593 (40.46)	7.688 (195.28)
F (23)	M28840/21*F*B***	M28840/11*F***	M28840/614**	1.500-.1P.2L-D.S.	1.750 (44.45)	7.812 (198.42)
F (23)	M28840/21*F*C***	M28840/11*F***	M28840/615**	1.500-.1P.2L-D.S.	2.093 (53.16)	7.938 (201.63)

FIGURE 1. Dimensions and configuration – Continued.

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Shell sizes are provided within parentheses for information and are not a part of the designator.
4. Dimensions apply after plating.
5. Normal mating key position shown. Alternate key positions in accordance with MIL-DTL-28840.
6. Assembly shall be made of a connector and backshell of the same material.

FIGURE 1. Dimensions and configuration – Continued.

REQUIREMENTS:

Dimensions and configuration: See figure 1.
Classes: DJ, DJS, PJ, TJ, TJS, ZJ and ZJS.
Insert arrangements: See the figure of MIL-STD-1698 corresponding to the desired shell size.
Contacts: Pin or socket, crimp type, styles P, S, D, E, F or G, in accordance with MIL-DTL-28840.
Shell polarization: 1 thru 6, key position.
Marking: Part or Identifying Number (PIN) on shell.
Mating counterpart: Mating connectors in accordance with MIL-DTL-28840/16, /17, /18, /19, /26, /28 and /29.
Installation and removal tool: In accordance with MIL-I-81969/33 and /34.
PIN's shown indicate aluminum alloy hardware. If corrosion resistant steel parts are required, the connector and accessory PIN's must be changed to designate corrosion resistant hardware.

PIN example:

M28840/21 C G I A A P 1

Specification sheet number

Key position
1, 2, 3, 4, 5, 6 position

Contact designator

Backshell style

Backshell size designator

Insert arrangement

Shell size

Classes	Code letter
D	C
DS	E
PJ	G
TJ	M
TJS	V
ZJ	U
ZJS	X

RESTRICTIONS:

Classes DJ and DJS are inactive for NAVSEA new design, unless approved by NAVSEA.

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. 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 and relationship to the last previous issue.

Referenced documents. In addition to MIL-DTL-28840, this document references the following:

MIL-DTL-28840/6
MIL-DTL-28840/11
MIL-DTL-28840/16
MIL-DTL-28840/17
MIL-DTL-28840/18
MIL-DTL-28840/19
MIL-DTL-28840/26
MIL-DTL-28840/28
MIL-DTL-28840/29
MIL-I-81969/33
MIL-I-81969/34
MIL-STD-1698

CONCLUDING MATERIAL

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

Preparing activity:
DLA - CC

(Project 5935-2013-119)

Review activities:
Army – AV, MI
Air Force – 99

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.