

MIL-PRF-64266/3B
w/AMENDMENT 2
17 June 2019
SUPERSEDING
MIL-PRF-64266/3B
w/AMENDMENT 1
25 November 2014

PERFORMANCE SPECIFICATION SHEET

CONNECTOR, RECEPTACLE, FIBER OPTIC, CIRCULAR
MULTIPLE REMOVABLE TERMINI, SCREW THREADS,
JAMNUT MOUNTING, ENVIRONMENT RESISTING

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring fiber optic connectors described herein shall consist of this specification sheet and MIL-PRF-64266.

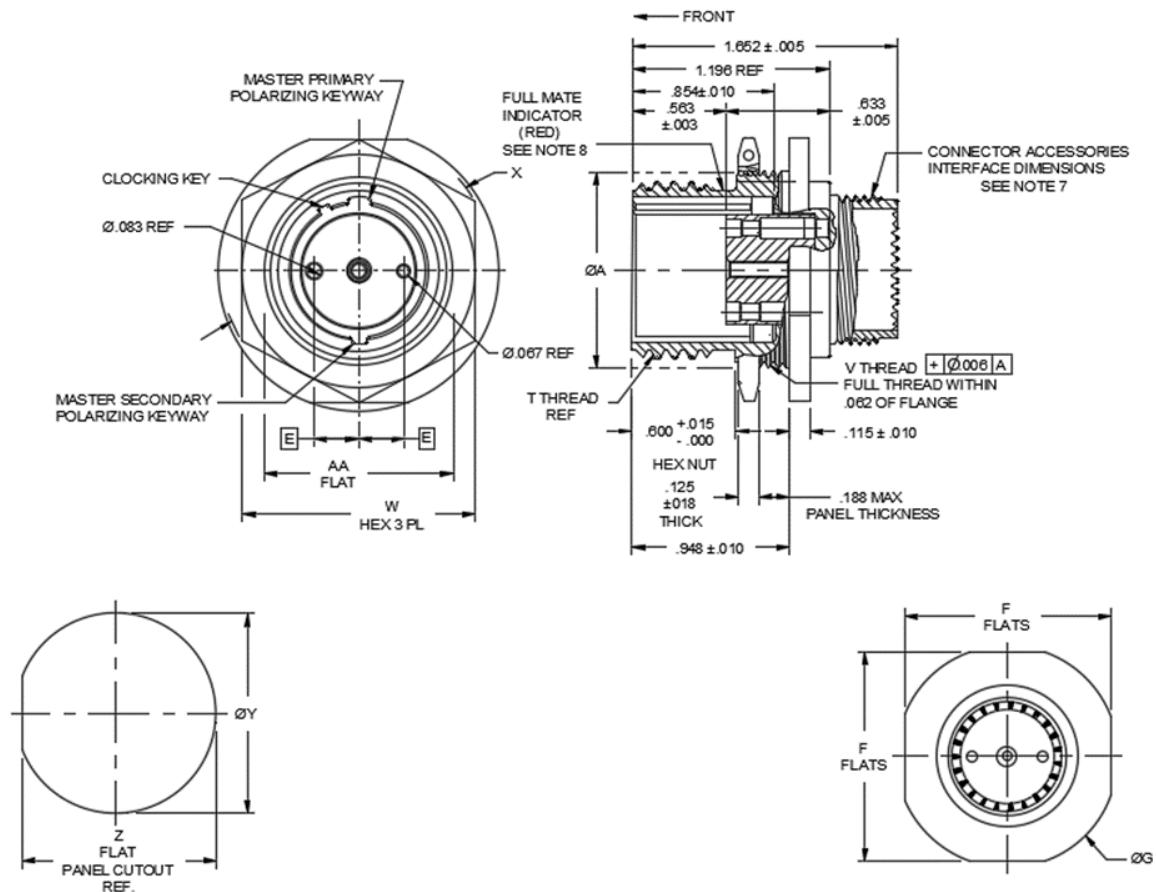


FIGURE 1. Jamnut receptacle connector.



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Inches	mm	Inches	mm
.003	.08	.125	3.18
.005	.13	.188	4.78
.006	.15	.563	14.30
.010	.25	.620	15.75
.015	.38	.633	16.08
.067	1.70	.854	21.69
.083	2.11	.948	22.56
.115	2.92	1.196	30.38
		1.612	40.95

Shell size	A dia max	F flat	G dia $\pm .010$	T class 2A blunt start	V thread class 2A	W 3 PLS
11	.875(22.23)	1.264(32.11)	1.358(34.49)	.7500-.1P -.2L-DS	.875-20 UNEF	1.075 (27.30) 1.045(26.54)
13	1.000(25.40)	1.264(32.11)	1.498(38.05)	.8750-.1P -.2L-DS	1.000-20 UNEF	1.205(30.61) 1.171(29.74)
15	1.1875(30.17)	1.264(32.11)	1.671(42.44)	1.062-.1P -.2L-DS	1.1875- 18 UNEF	1.392(35.36) 1.358(34.49)
23	1.625(41.28)	2.004(50.90)	2.098(53.29)	1.5000-.1P -.2L-DS	1.625-18 UNEF	1.812(46.03) 1.778(45.16)

Shell size	X Hex corner max	Y Dia $\pm .005$	Z Flat $\pm .005$	AA Flat
11	1.290(32.77)	.885(22.48)	.848(21.54)	.841(21.36) .832(21.13)
13	1.435(36.45)	1.010(25.65)	.973(24.71)	.966(24.54) .957(24.31)
15	1.650(41.91)	1.198(30.43)	1.160(29.46)	1.153(29.29) 1.144(29.06)
23	2.093(53.16)	1.630(41.40)	1.593(40.46)	1.587(40.31) 1.578(40.08)

See notes on next page.

FIGURE 1. Jamnut receptacle connector - Continued.

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NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Metric equivalents (mm) are in parentheses.
4. Dimensions apply to plated/finished part.
5. Mating key positions and dimensions are shown on figure A-3 of MIL-PRF-64266.
6. Connector receptacle interface dimensions shall be in accordance with MIL-PRF-64266, figure A-2.
7. Back end connector design for attachment of non-rotatable backshell. Connector backshell accessory interface shall be in accordance with MIL-PRF-64266, figure A-6.
8. Marking, color and coverage requirements for the visual full mate indicator shall conform to 3.5.1.2 of MIL-PRF-64266. Dimension criteria for full mate indicator are shown in appendix A, figure A-2 of MIL-PRF-64266. Marking and color requirements for the yellow band shall be in accordance with 3.10.3.1 of MIL-PRF-64266.
9. Insert retention mechanism not shown.
10. For connector insert arrangements and interface dimensions, see appendix B, figures B-1 through B-6 of see MIL-PRF-64266.

FIGURE 1. Jamnut receptacle connector - Continued.

REQUIREMENTS:

Dimensions and configurations: See figure 1 and MIL-PRF-64266 appendix A, figure A-2, and figure A-4.

Weight (without termini): See table I.

TABLE I. Weight (without termini).

Shell size	Weight, max.	
	ounces	grams
11	2.0	56.7
13	2.5	70.875
15	3.0	85.05
23	4.3	121.905

Protective caps: Each connector shall be supplied with protective caps over the front and rear portions of the connector.

Insert arrangement: See appendix B of MIL-PRF-64266 for desired shell size. Insert shall be marked with the identification numbers of the insert cavity positions on both the front and rear faces.

Termini: Genderless. See MIL-PRF-29504/18. For dummy terminus, see MIL-PRF-29504/19. For keyed terminus, see MIL-PRF-29504/20.

Alignment Sleeve retainer (ASR): A MIL-PRF-64266/9 ASR shall be installed in the receptacle as part of this PIN.

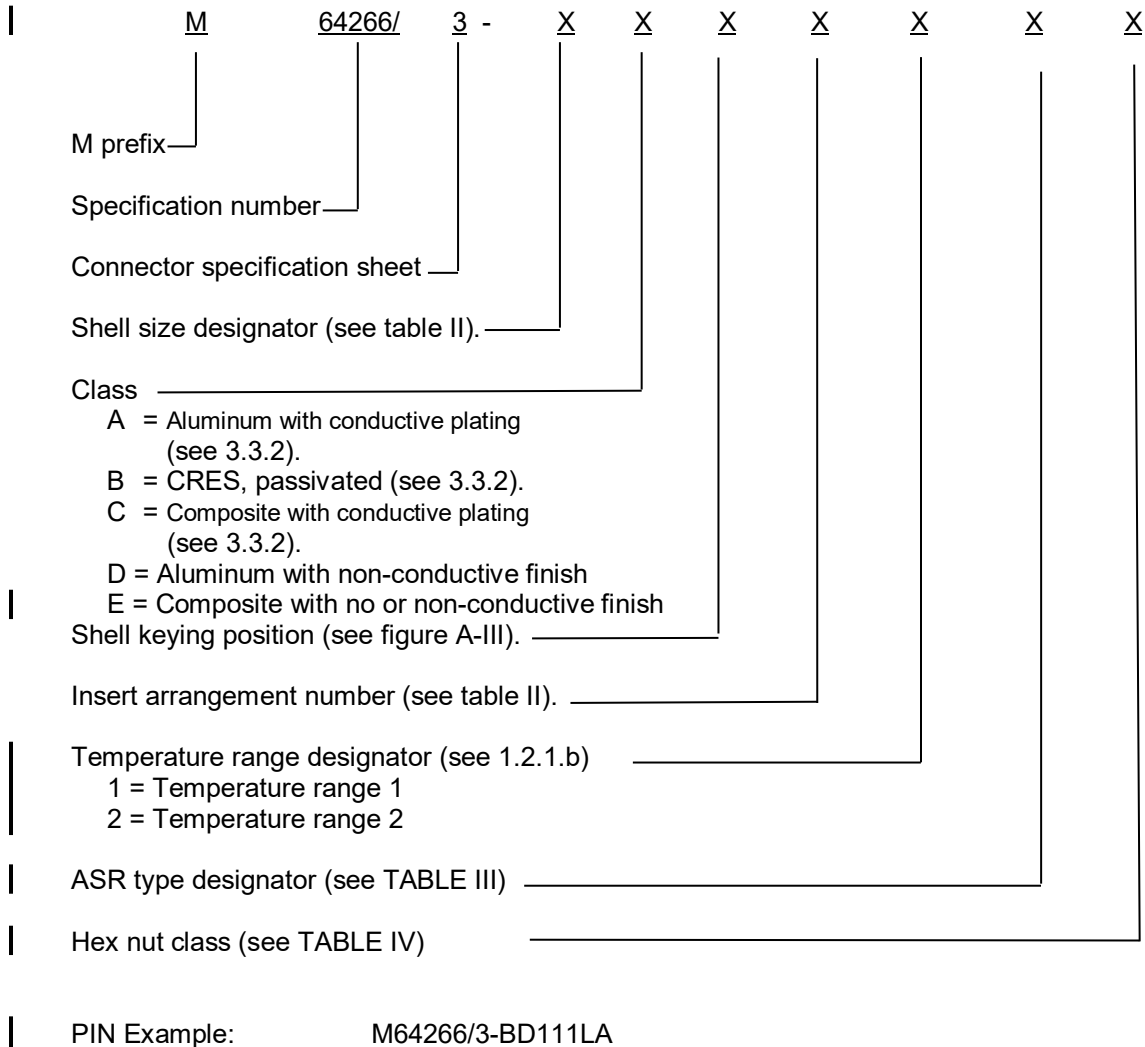
Cleaning procedures: Each shipment of connectors shall include recommended cleaning procedures. The following wording or equivalent is recommended: "To clean, use lint free wipe dampened with alcohol and blow dry with air".

Shell polarization: 1 through 12 keyway positions. See MIL-PRF-64266 appendix A, figure A-3.

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Marking:

Part or Identifying Number (PIN): Mark on flange of connector receptacle (see table II).



NOTE: Shell size designators in MIL-PRF-64266 conform to those in MIL-DTL-38999 connector (Shell size 11 =B, shell size 13 = C, shell size 15 = D, shell size 23 = H). The shell size designators are not consistent with those in MIL-DTL-28840 or in MIL-PRF-28876 connectors (Shell size 11 =A, shell size 13 = B, shell size 15 = C, shell size 23 = F). Care should be taken when specifying the PIN for those use to specifying the PIN for MIL-DTL-28840 and MIL-PRF-28876 connectors.

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TABLE II. PIN designators.

Shell size	Shell size designator	Number of insert cavities	Insert arrangement number <u>1/</u>
11	B	2	1
		4	2
13	C	6	1
		4 <u>2/</u>	2
15	D	8	1
		10	2
23	H	36	1
		18	2

Notes:

1/ Insert arrangements are found in appendix B of MIL-PRF-64266.

2/ Shell size 13 connector with four cavity insert use insert may be used for MIL-PRF-28876 retrofit applications for temperature range 1 shipboard applications.

TABLE III. ASR determined by terminus type.

ASR type designator	Applicable termini	ASR color (Class D)
F	MIL-PRF-29504/18 MIL-PRF-29504/20	Blue
L	Lens termini	Red

Sealing gasket or o-ring: The receptacle shall include a sealing gasket or o-ring to seal between the receptacle flange and the mounting panel.

Hex nut: Hex nut shown in figure 1 shall be provided with the jamnut mounted connector receptacle. Hex nut material and finish shall conform to the class designator specified in [table IV](#). Hex nut sources in MS specification sheets shall be allowed if meet the exceptions as specified in [table IV](#) foot notes. Hex nut shall include at least three equally spaced, drilled (non-crimped) holes for safety wiring. Hole diameter shall be sufficient to accommodate diameter wire specified in C.3.5 of [MIL-PRF-64266](#) appendix C and meet safety wiring hole pullout specified in 4.9.4.11 of [MIL-PRF-64266](#).

TABLE IV. Hex Nut Requirements.

Connector Shell Class <u>1/</u>	Allowed Hex Nut Class <u>1/</u>	Allowed Hex Nut Sources if Comply with Exceptions <u>6/</u>
A = Aluminum with conductive plating	A = Aluminum with conductive plating	
B = CRES, passivated	B = CRES, passivated	<u>7/</u> , <u>8/</u>
C = Composite with conductive plating	A = Aluminum with conductive plating <u>2/</u>	
D = Aluminum with non- conductive plating	D = Aluminum with non- conductive plating	
	B = CRES, passivated <u>3/</u>	<u>7/</u> , <u>8/</u>
E = Composite with no or non- conductive plating	B = CRES, passivated <u>4/</u>	<u>7/</u> , <u>8/</u>
	D = Aluminum with non- conductive plating <u>5/</u>	

1/ Class (material class) as specified in 3.3.2 of [MIL-PRF-64266](#).

2/ An aluminum hex nut with a conductive plating (meeting [MIL-PRF-64266](#) material class A) shall be provided with the composite connector receptacle with a conductive plating ([MIL-PRF-64266](#) material class C).

3/ A stainless steel hex nut (meeting [MIL-PRF-64266](#) material class B) shall be provided with an aluminum connector receptacle with a non-conductive finish ([MIL-PRF-64266](#) material class D)

4/ A stainless steel hex nut (meeting [MIL-PRF-64266](#) material class B) shall be provided with the composite connector receptacle with no or a non-conductive plating ([MIL-PRF-64266](#) material class E).

5/ An aluminum hex nut with a non-conductive plating (meeting [MIL-PRF-64266](#) material class D) is allowed for the composite connector receptacle with no or a non-conductive plating ([MIL-PRF-64266](#) material class E).

6/ Applicable for new and replacement hex nuts. Other sources that meet above hex nut requirements are allowed also.

7/ [MS3186](#) hex nut. Exceptions are that the hex nut material and finish shall conform to the [MIL-PRF-64266](#) class designator specified in [TABLE IV](#), include at least three equally spaced, drilled (non-crimped) holes for safety wiring, hole diameter for safety wiring shall be sufficient to accommodate diameter wire specified in C.3.5 of [MIL-PRF-64266](#) appendix C and meet safety wiring hole pullout specified in 4.9.4.11 of [MIL-PRF-64266](#), no slots required, and thread to conform with that listed for the [MIL-DTL-28840](#) connector.

8/ [MS27512](#) hex nut. Exceptions are that the hex nut material and finish shall conform to the [MIL-PRF-64266](#) class designator specified in [TABLE IV](#), include at least three equally spaced, drilled (non-crimped) holes for safety wiring, hole diameter for safety wiring shall be sufficient to accommodate diameter wire specified in C.3.5 of [MIL-PRF-64266](#) appendix C and meet safety wiring hole pullout specified in 4.9.4.11 of [MIL-PRF-64266](#), no slots required, and thread to conform with that listed for the shell sizes -8 ([MIL-PRF-64266](#) shell size 11), -10 ([MIL-PRF-64266](#) shell size 13), and -20 ([MIL-PRF-64266](#) shell size 23). This hex nut is not applicable for [MIL-PRF-64266](#) shell size 15.

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Mating counterpart: Plug connectors specified in MIL-PRF-64266/2.

Installation and removal tools: Tools shall be as specified in 3.5.4.2.

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-PRF-64266, this specification sheet references the following documents:

MIL-DTL-28840	MIL-PRF-29504/20	MS3186
MIL-PRF-28876	MIL-DTL-38999	MS27512
MIL-PRF-29504/18	MIL-PRF-64266/2	
MIL-PRF-29504/19	MIL-PRF-64266/9	

CONCLUDING MATERIAL

Custodians:
Army - CR
Navy - SH
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 6060-2018-009)

Review activities:
Army - MI
Navy - AS
Air Force - 13, 19, 93
NASA - NA

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