

MILITARY SPECIFICATION
CONNECTORS, PLUG, ELECTRICAL, WATERPROOF
(CATHEDRAL SHAPE, SHELL SIZE 20,
FEMALE INSERTS)

1. SCOPE

1.1 Scope.- This specification covers the detail requirements for the following types of field-serviceable, shell-size 20, cathedral-shape, waterproof, electrical-plug connectors with female inserts:

UW1320FA11
UW1320FA13
UW1320FA15
UW1320FA17
UW1320FB17
UW1320FB19
UW1320FB21
UW1320FB23

1.2 Ratings.- Connectors covered by this specification shall have the electrical ratings specified in table 1.

Table 1 - Electrical ratings

Connector type	Limiting operating voltage (sea level)		Nominal current
	AC	DC	Amperes
UW1320FA11 to UW1320FA17, incl	900	1,250	41
UW1320FB17 to UW1320FB23, incl	900	1,250	22

2. APPLICABLE DOCUMENTS

2.1 The following specifications, of the issue in effect on date of invitation for bids, form a part of this specification:

SPECIFICATIONS

MILITARY

MIL-C-12520	Connectors, Plug and Receptacle (Electrical, Waterproof); and Accessories; General Specification for.
MIL-C-12520/8A	Connectors, Receptacle, Electrical, Waterproof (Shell Size 20, Male Inserts).

(Copies of specifications required by contractors in connection with specific procurement functions should be obtained from the procuring agency or as directed by the contracting officer.)

3. REQUIREMENTS

3.1 Requirements.- Requirements shall be in accordance with Specification MIL-C-12520, and as specified herein.

3.2 Design and construction.- Connectors shall be of the design, construction, and physical dimensions specified on figure 1.

3.2.1 Assembly.- Connectors shall be capable of being disassembled to allow access to the contact terminals without the use of special tools.

3.3 Voltage drop.- The voltage drop shall not exceed 20 millivolts for insert-arrangement A or 21 millivolts for insert-arrangement B. (See 4.4).

4. QUALITY ASSURANCE PROVISIONS

4.1 Sampling and inspection.- Sampling and inspection shall be in accordance with Specification MIL-C-12520, and as specified herein.

4.2 Test and mating receptacles.- The test and mating receptacles shall be in accordance with the applicable type covered by Specification MIL-C-12520/8A.

4.3 Dielectric withstanding voltage.- Connectors shall be subjected to a test potential of 2,800 volts root mean square (rms).

4.4 Voltage drop (see 3.3).- The test current for connectors shall be 35 amperes dc for insert-arrangement A, and 20 amperes dc for insert-arrangement B.

5. PREPARATION FOR DELIVERY

5.1 Preparation for delivery shall be in accordance with Specification MIL-C-12520.

6. NOTES

6.1 Notes.- In addition to the notes specified herein, the notes specified in Specification MIL-C-12520 are applicable to this specification.

6.2 Intended use.- Connectors covered by this specification are intended for use where field-serviceable, waterproof, electrical connectors are required.

6.2.1 Mating receptacle connectors.- Mating receptacle connectors are in accordance with Specification MIL-C-12520/8 A.

6.2.2 Cover and chain assemblies.- Cover and chain assemblies are in accordance with style 3N of Specification MIL-C-12520/13A "Cover and Chain Assemblies (Internal Threads, for Use on Waterproof Connectors)".

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Preparing activity

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