

MILITARY SPECIFICATION

CONNECTORS, RECEPTACLE, ELECTRICAL
WATERPROOF
(SHELL SIZE 20, MALE INSERTS)

1. SCOPE

1.1 Scope.- This specification covers the detail requirements for the following types of shell-size 20, waterproof, electrical-receptacle connectors with male inserts:

UW2020MA00

UW2020MB00

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 |
| UW2020MA00 | 900 | 1,250 | 41 |
| UW2020MB00 | 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

FEDERAL

QQ-B-613 Brass, Leaded and Non-Leaded; Plate, Rolled Bar,
Sheet and Strip.
QQ-P-416 Plating, Cadmium (Electrodeposited).

MILITARY

MIL-C-12520 Connectors, Plug and Receptacle (Electrical,
Waterproof); and Accessories; General
Specification for.
MIL-C-12520/16 Connectors, Plug, Electrical, Waterproof
(Cathedral Shape, Shell Size 20, Female Inserts).
MIL-C-12520/5A Connectors, Plug, Electrical, Waterproof (Round
Shape, Shell Size 20, Female 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.

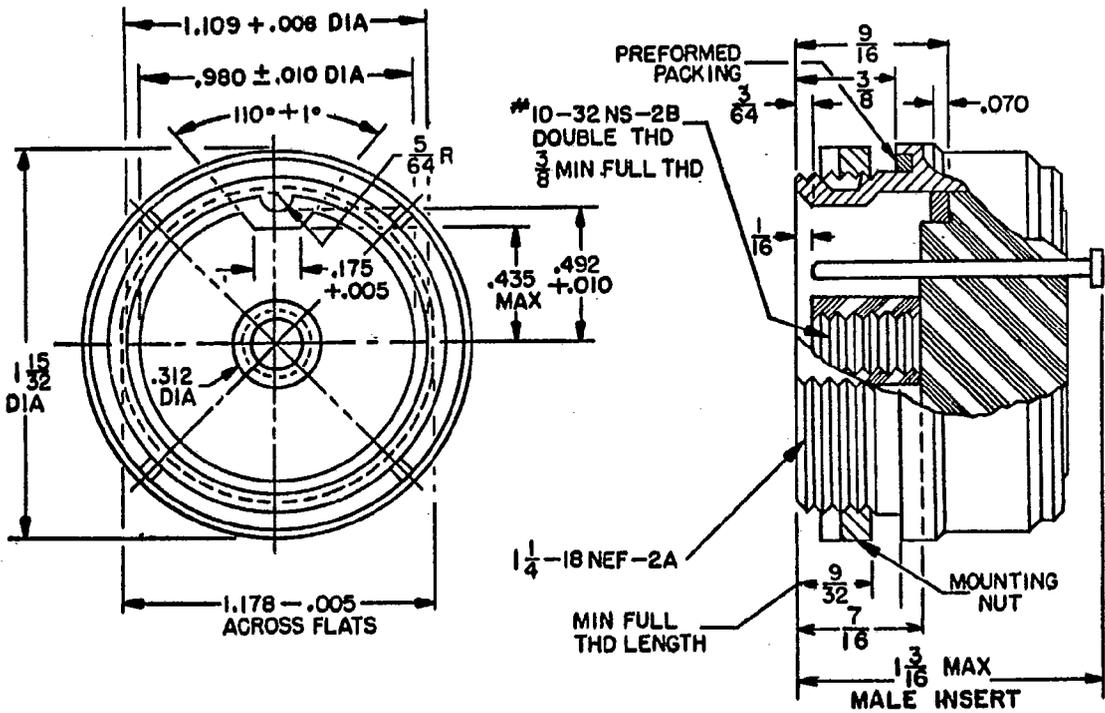
3.2.1 Mounting nut.- The mounting nut shall be of the dimensions specified on figure 2. Material shall be brass conforming to Specification QQ-B-613, and shall be cadmium plated conforming to class 1, type II, of Specification QQ-P-416. The resulting finish shall be olive drab in color.

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.

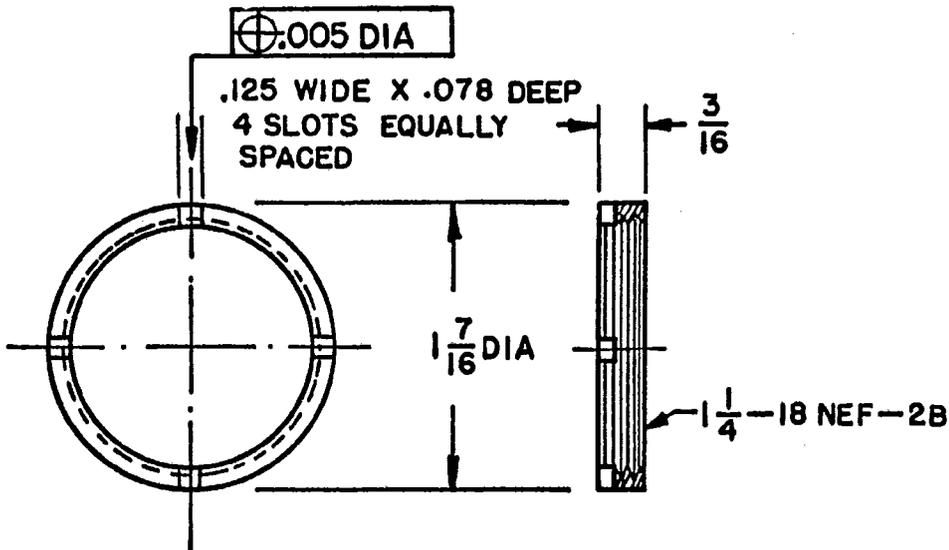
4.2 Test and mating plugs.- The test and mating plugs shall be in accordance with the applicable types covered by Specification MIL-C-12520/16 or MIL-C-12520/5A.

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



1. All dimensions in inches.
2. Unless otherwise specified, tolerances are $\pm \frac{1}{64}$ on fractions and $\pm .005$ on decimals.

FIGURE 1. Receptacle shell and insert dimensions



1. All dimensions in inches.
2. Unless otherwise specified, tolerances are $\pm \frac{1}{64}$ on fractions and $\pm .005$ on decimals.

FIGURE 2. Mounting nut dimensions

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 Mating plug connectors.- Mating plug connectors are in accordance with Specifications MIL-C-12520/16 and MIL-C-12520/5A.

6.2.1 Cover and chain assemblies.- Cover and chain assemblies are in accordance with style 2X of Specification MIL-C-12520/12A "Cover and Chain Assemblies (External Threads, for Use on Waterproof Connectors)".

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CUSTODIAN

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Preparing activity

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Project Nr. 5935-A140