

METRIC

A-A-50630

9 February 1995

## COMMERCIAL ITEM DESCRIPTION

## HORN, ELECTRICAL, SHIPBOARD

The General Services Administration has authorized the use of this commercial item description for all Federal Agencies.

1. Abstract. This commercial item description covers various types of horns for alarm and signalling purposes on naval ships.

2. Salient characteristics.

2.1 Mounting. Horns shall be three-point vertically mounted as specified on figure 1. Mounting shall be as specified (see 6.1).

2.2 Enclosure. Horns shall be watertight. Enclosure shall be tapped at the bottom for conduit or cable entrance.

2.2.1 Watertight enclosure. An enclosure constructed so that a stream of water from a hose not less than 25.4 millimeters (mm) in diameter under a head of 11 meters (m) from a distance of 3 m can be played on the enclosure from any direction for a period of 15 minutes without leakage. The hose nozzle shall have a uniform diameter of 25.4 mm (see IEEE 45).

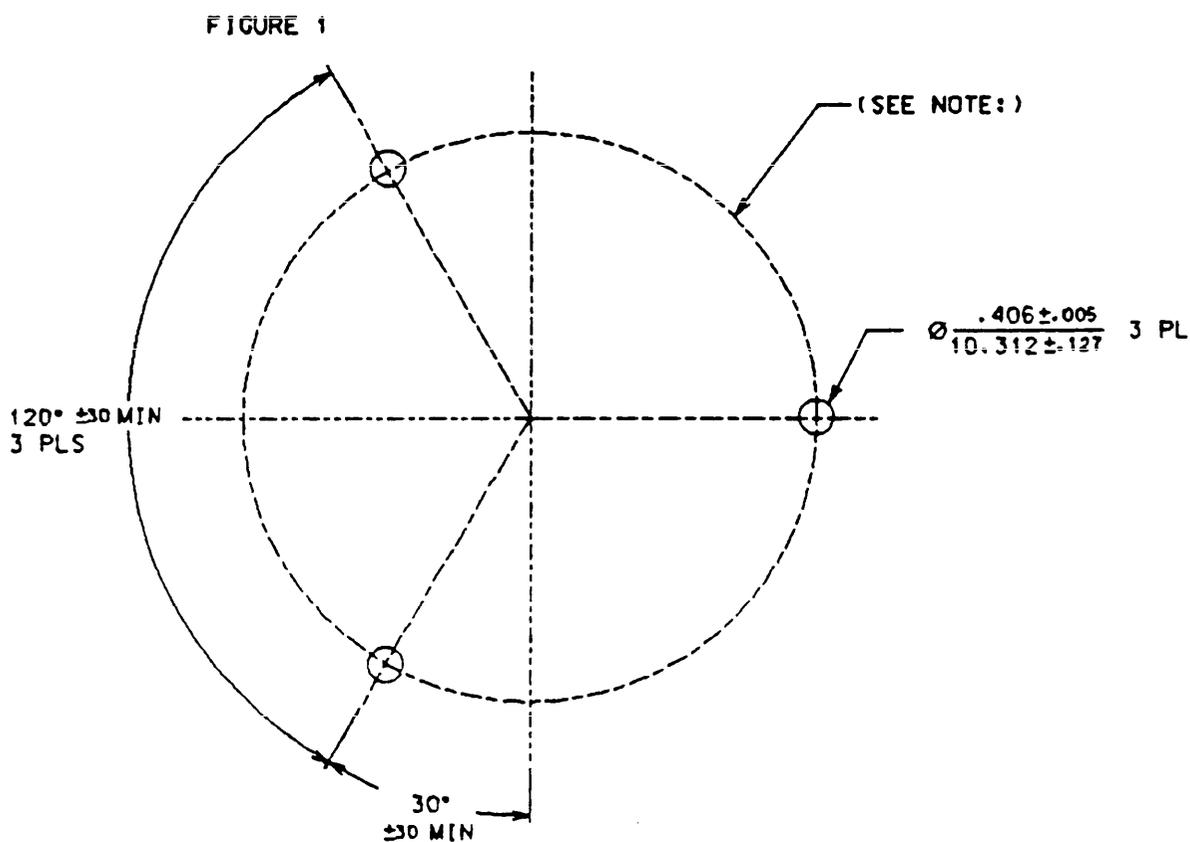
2.2.2 Grounding and bonding. Metallic enclosures shall be provided with a stud for grounding and bonding. Resistance between the stud tip and any point of the enclosure or any exposed metallic components shall be zero ohms when measured with a high quality ohmmeter. The stud shall be placed on the side of the enclosure.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, SEA 03R42, Naval Sea Systems Command, 2531 Jefferson Davis Hwy, Arlington, VA 22242-5160 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 6350

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MOUNTING DIMENSION

NOTE:

MOUNTING DIMENSIONS, in

- |    |        |                             |
|----|--------|-----------------------------|
| 1. | R3.000 | $\frac{\pm .005}{\pm .127}$ |
| 2. | R3.062 | $\frac{\pm .005}{\pm .127}$ |
| 3. | R3.690 | $\frac{\pm .005}{\pm .127}$ |

FIGURE 1. Mounting dimensions.

2.3 Electrical isolation. Electrical components shall be electrically isolated from the enclosure or any exposed metallic components. Electrical isolation shall be 100 megohm or greater when measured with a high quality, 500-volt megger.

2.4 Type. Horns shall be of the following types, as specified (see 6.1):

<u>Type</u>	<u>Frequency</u>	<u>Output</u>
Resonate	250 to 350 Hz	93 decibel (dB)
Resonate	300 to 350 Hz	110 dB
Nonresonate	100 to 600 Hz	93 dB
Motor-operated	100 to 600 Hz	101 dB

Sound pressure output shall be based on a reference of 20 micropascal ( $\mu\text{Pa}$ ), and shall be measured at a distance of 3 m from the horn in accordance with ANSI S1.13.

2.4.1 Motor-operated. The acoustical output of the motor-operated horn shall include a mixture of as many frequencies as possible.

2.5 Construction. Construction shall be such that no special tools are required for installation.

2.6 Power. Operating voltages and frequencies shall be as specified (see 6.1). Operating voltages shall be 6, 12, 24, 115, or 440 volts direct current or root mean square (rms) plus or minus 15 percent and operating frequency shall be 60 or 400 hertz (Hz) plus or minus 5 percent.

2.7 Preservation. Parts shall be of suitable corrosion resistant material or materials treated in a satisfactory manner to render them adequately resistant to corrosion.

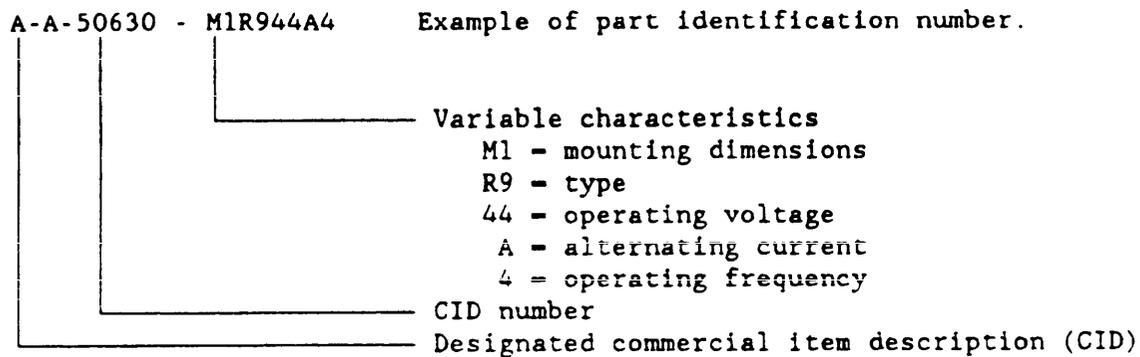
### 3. Quality assurance provisions.

3.1 Contractor certification. The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this commercial item description and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices. The Government reserves the right to require proof of such conformance prior to the first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

3.2 Regulatory requirements. The offerer/contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum extent practical.

4. Preservation, packaging, packing, labeling, and marking. The preservation, packaging, packing, labeling, and marking shall be as specified in the contract or order.

5. CID based part identification number. The following part identification numbering procedure is for Government purposes and does not constitute a requirement for the contractor.



## 6. Notes.

6.1 Acquisition requirements. Acquisition documents must specify the following:

- (a) Mounting.
  - M1 -  $R3.000 \pm 0.15$
  - M2 -  $R3.062 \pm 0.15$
  - M3 -  $R3.690 \pm 0.15$
  - M4 -  $R3.312 \pm 0.15$
- (b) Type.
  - R2 - Resonate 250 to 350 Hz @ 93 dB
  - R3 - Resonate 300 to 350 Hz @ 110 dB
  - N1 - Nonresonate 100 to 600 Hz @ 93 dB
  - M1 - Motor-operated 100 to 600 Hz @ 101 dB
- (c) Power.
  - 06 - 6
  - 12 - 12
  - 24 - 24
  - 11 - 115
  - 44 - 440
  - D - Direct current
  - A - Alternating current (rms)
  - C - Alternating or Direct current
  - 6 - 60 Hz
  - 4 - 400 Hz

## 6.2 Documents.

- (a) NFPA-70, National Electrical Code, is available from National Fire Protection Association, One Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.
- (b) ANSI S1.13, Methods for Measurement of Sound Pressure Levels, is available from American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036.
- (c) IEEE 45, Recommended Practice for Electric Installations on Shipboard, is available from Institute of Electrical and Electronic Engineers, Inc., 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331.

CIVIL AGENCY COORDINATING ACTIVITY:  
GSA - FSS

Preparing activity:  
Navy - SH  
(Project 6350-0140)

