

CONFIRMED
MAY 1986

Specification for

Ventilator heads

UDC 629.12.04:628.83:621.639

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

BSI
Documents

AVA

Document Sharing Hub

Foreword

This British Standard has been prepared under the authority of the Shipbuilding and Marine Industry Standards Committee and is based on a proposal of the British Ship Research Association.

The purpose of this standard is to provide details of a range of sizes for fixed and adjustable mushroom ventilator heads and circular cowl ventilator heads suitable for installation on board ships.

Certification. Attention is drawn to the certification facilities described on the inside back cover of this standard.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

This British Standard, having been approved by the Shipbuilding and Marine Industry Standards Committee, was published under the authority of the Executive Board on 27 February 1976

© BSI 04-2000

The following BSI references relate to the work on this standard:
Committee reference SME/2
Draft for comment 73/35208

ISBN 0 580 08698 4

Amendments issued since publication

Amd. No.	Date of issue	Comments
2297	June 1977	Indicated by a sideline in the margin

Contents

	Page
Foreword	Inside front cover
1 Scope	1
2 References	1
3 Types	1
4 Nominal sizes and dimensions	1
5 Materials	1
6 Quality of manufacture and finish	1
7 Tolerances	2
8 Accessories	2
9 Inspection	3
10 Information to be supplied with an enquiry or order	3
Figure 1 — Fixed mushroom ventilator head, type A	4
Figure 2 — Adjustable mushroom ventilator head, type B	5
Figure 3 — Adjustable mushroom ventilator head, type C	6
Figure 4 — Wire mesh grids for mushroom ventilators, types A, B and C	7
Figure 5 — Circular head cowl ventilator, type D	8
Figure 6 — Accessories for circular, cowl ventilator head	9
Figure 7 — Typical open/closed indicator for mushroom ventilator head, type C	10
Table 1 — Materials	2

NOTE Users of this British Standard: Marine Series should note that while observing the requirements of the standard they should at the same time ensure compliance with such statutory requirements, rules and regulations as may be applicable to the individual ship concerned.

1 Scope

1.1 This British Standard specifies four types of ventilator heads for general use on board ship, as defined in clause 3.

1.2 The standard specifies materials and dimensions of ranges of sizes of ventilator heads and accessories. Details of construction, finish and inspection are also included.

2 References

This standard makes reference to the following British Standards.

BS 4, *Structural steel sections — Part 1: Hot-rolled sections*.

BS 310, *Blackheart malleable iron castings*.

BS 481, *Industrial wire mesh — Part 1: Woven annealed wire cloth with square apertures, plain or twilled weave*.

BS 499, *Welding terms and symbols — Part 2: Symbols for welding*.

BS 729, *Hot dip galvanized coatings on iron and steel articles*.

BS 1387, *Steel tubes and tubulars suitable for screwing to BS 21 pipe threads*.

BS 1449, *Steel plate, sheet and strip — Part 1: Carbon steel plate, sheet and strip*.

BS 1574, *Split cotter pins — metric and inch series*.

BS 2874, *Copper and copper alloys. Rods and sections (other than forging stock)*.

BS 3643, *ISO metric screw threads — Part 2: Limits and tolerances for coarse pitch series threads*.

BS 4190, *ISO metric black hexagon bolts, screws and nuts*.

BS 4278, *Eyebolts for lifting purposes*.

BS 4320, *Metal washers for general engineering purposes*.

BS 4360, *Weldable structural steels*.

BS MA 4, *Valve handwheels: marine pattern*.

3 Types

The four types of ventilator heads manufactured in accordance with this British Standard shall be as shown in Figure 1, Figure 2, Figure 3 and Figure 5 and are defined as follows.

Type A. Fixed mushroom ventilator head.

Type B. Adjustable mushroom ventilator head (screwdown head).

Type C. Adjustable mushroom ventilator head (screwdown cover).

Type D. Circular head ventilator cowl.

4 Nominal sizes and dimensions

4.1 The nominal sizes of the ventilator heads specified by this standard correspond to the internal diameter of the ventilator coaming.

4.2 The nominal sizes and dimensions of types A, B, C and D ventilator heads shall be in accordance with the tables of dimensions included in Figure 1, Figure 2, Figure 3 and Figure 5. Details of accessories are given in Figure 4, Figure 6 and Figure 7.

NOTE The welding symbols used in Figure 1 to Figure 7 are in accordance with BS 499-2, but the associated dimensions are expressed in terms of the weld throat thickness and *not* leg length.

5 Materials

5.1 The materials used for the manufacture of the ventilator heads shall be in accordance with the details given in Table 1.

5.2 The quality of the resilient packing forming the seal for types B and C ventilator heads shall be satisfactory for service under marine conditions and shall provide effective and lasting sealing and resealing properties when the heads are closed in a normal manner.

5.3 Other materials may be used provided they are at least as suitable in all respects for the intended duty and are equally acceptable to the purchaser.

6 Quality of manufacture and finish

6.1 The plates for the mushroom head ventilators shall be assembled by welding. The constituent plates for the cowl head ventilators and accessories shall be assembled by either welding or riveting at the option of the manufacturer.

6.2 In the case of adjustable mushroom ventilator heads (types B and C) care shall be taken to ensure that the assembly of the spindle and bridge support is concentric with the movable head and the coaming and that the screw gear is axially aligned.

6.3 Unless otherwise specified, and after completion of all welding or riveting, the circular cowl ventilator heads and wire mesh grids for mushroom and cowl heads shall be hot dip galvanized in accordance with the requirements of BS 729.