

AEROSPACE STANDARD Issued 1988-02 Revised 1999-01 Reaffirmed 2021-08 Superseding AS8025 Passenger Oxygen Mask

RATIONALE

AS8025A has been reaffirmed to comply with the SAE five-year review policy.

FOREWORD

Changes in this revision are format/editorial only.

1. SCOPE:

This standard covers oronasal type masks which use a continuous flow oxygen supply. Each such mask comprises a facepiece with valves as required, a mask suspension device, a reservoir, or rebreather bag (when used), a length of tubing for connection to the oxygen supply source, and a means for allowing the crew to determine if oxygen is being delivered to the mask. The assembly shall be capable of being stowed suitably to meet the requirements of its intended use.

1.1 Purpose:

This standard establishes the minimum requirements for the design, construction and performance of continuous flow oxygen masks for passenger cabin occupants in civil commercial aircraft.

1.2 Presentation:

When presented, the mask assembly's application shall be obvious. The mask shall be capable of quick and easy donning regardless of any special orientation requirements.

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1.3 Coding of Performance Classification:

An eight-digit performance classification number shall be assigned to each class of masks. This number shall correspond to the number assigned to the minimum performance curve established in 6.1.7.2.2 and shall represent the required minimum oxygen flow rates (NTPD) to the mask shown on curve "C" of Figure 1 at cabin pressure altitudes of 15 000, 25 000, 30 000 ft and the maximum approved altitude, respectively. Flow rates shall be to one decimal.

Typical Example - AS 8025-08233248-YY*-XX*

- 0.8 required minimum oxygen flow, L/min, NTPD, at 15 000 ft
- 2.3 required minimum oxygen flow, L/min, NTPD, at 25 000 ft
- 3.2 required minimum oxygen flow, L/min, NTPD, at 30 000 ft
- 4.8 required minimum oxygen flow, L/min, NTPD, at maximum approved altitude
- *YY Maximum approved altitude in thousands of feet
- *XX Additional coding which the mask manufacturer may desire to add
- 1.4 Interchangeability of Mask Assemblies:
- 1.4.1 Same Coding: Masks with the same coding shall be interchangeable.
- 1.4.2 Different Performance Classification Numbers (remainder of coding the same): Only those masks whose performance classification number shows that at all certified cabin altitudes, the required oxygen flow rates are equal to or less than the flow rates supplied to the mask from the airplane system shall be used on that airplane.

2. APPLICABLE DOCUMENTS:

2.1 Completely Applicable:

MIL D 7405

The following specifications, drawings, and publications of the issue in effect on the date of initiation of qualification tests, shall form a part of this specification:

MIL-P-7105	Pipe Inreads, Taper, Aeronautical National Form, Symbol ANP I
MIL-S-8879	Screw Threads, Controlled Radius Root with Increased Minor Diameter
MIL-O-27210 or AS8010	Oxygen 99.5%, Gas and Liquid
BB-N-411	Nitrogen, Liquid and Gas

2.1 (Continued):

MIL-STD-889 Metals - Definition of Dissimilar

Federal Standard

Colors

No. 595

2.2 Partially Applicable:

The following specifications, drawings, and publications of the issue in effect on the date of initiation of qualification tests shall form a part of this specification to the extent noted in this document:

AS916 Standard for Oxygen Flow Indicators

AIR1082 Fluid System Component Specification Criteria

A.T.A 100 Specification for Manufacturer's Technical Data

FAR PART 25 Federal Aviation Regulations Covering Airworthiness Standards for Transport

Category Airplanes

MIL-STD-810 Environmental Testing, Aeronautical and Associated Equipment, General

Specification

TSO-C64 Oxygen Mask Assembly, Continuous Flow, Passenger (For Air Carrier Aircraft)

3. GENERAL REQUIREMENTS:

3.1 Product:

The article furnished under this specification shall be capable of meeting the requirements specified herein.

3.2 Deviations:

Where the requirements of this specification differ from requirements of the specifications, drawings, and publications listed, the requirements of this specification shall govern.