BS 2M 51: 1989 ISO 6771: 1987

Classification for

# Pressure and temperature for fluid systems and components

UDC 629.7.063,4:006.72



# Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Aerospace Standards Policy Committee (ACE/-) to subcommittee ACE/-/1, upon which the following bodies were represented:

Civil Aviation Authority (Airworthiness Division) Institution of Production Engineers Ministry of Defence Society of British Aerospace Companies Limited

This British Standard, having been prepared under the direction of the Aerospace Standards Policy Committee, was published under the authority of the Board of BSI and comes into effect on 31 August 1989

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The following BSI references relate to the work on this standard: Committee reference ACE/-Draft for comment 86/74297 DC

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# National foreword

This British Standard has been published under the direction of the Aerospace Standards Policy Committee and supersedes BS M51:1982, which is withdrawn. It is identical with ISO 6771:1987 "Aerospace — Fluid systems and components — Pressure and temperature classifications", published by the International Organization for Standardization (ISO) which was produced as a result of international discussion in which the UK took an active part.

#### **Cross-reference**

The Technical Committee has reviewed the provisions of ISO 2944, to which reference is made in the text, and has decided that they are acceptable for use in conjunction with 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.

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#### Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, page 1 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.

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## 0 Introduction

Aerospace fluid systems and components are generally designed and marked for a specific fluid pressure and temperature type. The operating pressures listed are selected from ISO 2944 as far as practical.

# 1 Scope and field of application

This International Standard establishes the temperature types and pressure classes that are commonly used in aerospace fluid systems.

### 2 Reference

ISO 2944, Fluid power systems and components — Nominal pressures.

# 3 Temperature classification

System operating temperature ranges shall be classified as given in Table 1.

Table 1 — Temperature types

Туре	Temperature range $^{\circ}\mathrm{C}$	
Ι	- 55 to 70	
II	– 55 to 135	
III	- 55 to 200	
IV	- 55 to 320	
V	- 55 to 400	
VI	- 55 to 650	

# 4 Nominal pressure classification

Nominal pressures shall be classified as given in Table 2.

Table 2 — Nominal pressure classes

Class	Nominal pressure	
Class	kPa	(bar)
A	4 000	(40)
В	10 500	(105)
C	16 000	(160)
D	21 000	(210)
E	28 000	(280)
F	40 000	(400)
G	50 000	(500)

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