# International Standard 6771

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# Aerospace construction — Fluid systems and components — Pressure and temperature classifications

*Constructions aérospatiales — Systèmes hydrauliques et leurs composants — Classification des températures et pressions*

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.



International Standard ISO 6771 was developed by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, and was circulated to the member bodies in November 1979.



It has been approved by the member bodies of the following countries :

| | | |
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| Australia | France | Spain |
| Austria | Germany, F. R. | Sweden |
| Belgium | Italy | United Kingdom |
| Canada | Netherlands | USA |
| China | Romania | |
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The member body of the following country expressed disapproval of the document on technical grounds :

USSR



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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 classifications

System operating temperature ranges shall be classified as follows :

**Table 1 — Temperatures types**

| | |
|---|---|
| Type I | − 55 to 70 °C |
| Type II | − 55 to 135 °C |
| Type III | − 55 to 200 °C |
| Type IV | − 55 to 320 °C |
| Type V | − 55 to 400 °C |
| Type VI | − 55 to 650 °C |

## 4 Nominal pressure classifications

Nominal pressures shall be classified as follows :

**Table 2 — Nominal pressure classes**

| | |
|---|---|
| Class A | 4 000 kPa ( 40 bar) |
| Class B | 10 000 kPa (100 bar) |
| Class C | 16 000 kPa (160 bar) |
| Class D | 20 000 kPa (200 bar) |
| Class E | 28 000 kPa (280 bar) |
| Class F | 40 000 kPa (400 bar) |
| Class G | 50 000 kPa (500 bar) |