

Hydraulic fluid power — Dimensions and identification code for mounting flanges and shaft ends of displacement pumps and motors —

Part 2: Metric series

ICS 23.100.99

National foreword

This British Standard was published by BSI. It is the UK implementation of ISO 3019-2:2001, incorporating corrigendum December 2006. BS ISO 3019-1:2001 and BS ISO 3019-2:2001 supersede BS 6276:1987 which is withdrawn.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags AC AC. Text altered by ISO corrigendum December 2006 is indicated in the text by AC₁ AC₁.

The UK participation in its preparation was entrusted to Technical Committee MCE/18, Fluid power systems and components.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard, having been prepared under the direction of the Engineering Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 August 2001

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**Hydraulic fluid power — Dimensions and
identification code for mounting flanges
and shaft ends of displacement pumps and
motors —**

**Part 2:
Metric series**

*Transmissions hydrauliques — Dimensions et code d'identification des
flasques de montage et des bouts d'arbres des pompes volumétriques et
moteurs —*

Partie 2: Série métrique



Reference number
ISO 3019-2:2001(E)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 3019 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 3019-2 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 2, *Pumps, motors and integral transmissions*.

This third edition cancels and replaces the second edition (ISO 3019-2:1986) and ISO 3019-3:1988, which have been technically revised.

ISO 3019 consists of the following parts, under the general title *Hydraulic fluid power — Dimensions and identification code for mounting flanges and shaft ends of displacement pumps and motors*:

- *Part 1: Inch series shown in metric units*
- *Part 2: Metric series*

Annex A of this part of ISO 3019 is for information only.

Introduction

In hydraulic fluid power systems, power is transmitted and controlled through a liquid under pressure within an enclosed circuit. Pumps convert mechanical power into hydraulic fluid power, while motors convert hydraulic fluid power into mechanical power.

This part of ISO 3019 provides

- a minimum number of flanges and shaft sizes to cover probable present and future requirements (short and long flange spigot options are included),
- dimensional interchangeability of flange and shaft end mountings,
- flange and spigot dimensions allowing for recommended sealing arrangements when sealing is required between a flange and its mating housing (see annex A), and
- identification codes for flanges and shaft ends that can be used separately or in combination.

Hydraulic fluid power — Dimensions and identification code for mounting flanges and shaft ends of displacement pumps and motors —

Part 2: Metric series

1 Scope

This part of ISO 3019 establishes a metric series of mounting flanges and shaft ends for positive-displacement, rotary hydraulic fluid power pumps and motors. It specifies sizes and dimensions and establishes an identification code for two- and four-bolt, and polygonal (including circular), mounting flanges, as well as for cylindrical keyed shaft ends, conical keyed shaft ends with an external thread and metric involute spline shaft ends.

NOTE Involute spline is in accordance with DIN 5480 [1]...[8].