

AS 1722.2—1992
Reconfirmed 2017

Australian Standard[®]

Pipe threads of Whitworth form

Part 2: Fastening pipe threads

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OF

AS 1722.2—1992

Pipe threads of Whitworth form
Part 2: Fastening pipe threads

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PREFACE

This Standard was prepared by the Standards Australia Committee on Screw Threads to supersede AS 1722.2—1989. This Standard is technically equivalent to ISO 228/1, *Pipe threads where pressure-tight joints are not made on the threads*, Part 1: *Designation, dimensions and tolerances*, and ISO 228/2, *Pipe threads where pressure-tight joints are not made on the threads*, Part 2: *Verification by means of limit gauges*.

The 1989 edition which was based on the ISO 228/1 and 228/2 documents contained certain gauging/tolerance errors and omissions which could result in improper assessment of thread's geometric qualities and was withdrawn.

No changes to basic dimensions in the 1992 edition have been made with regard to the 1975 edition. Components made to the current edition are functionally identical and interchangeable with components made to 1975 edition.

Gauges manufactured to comply with the limits specified in AS 1722.2—1975 were intended to check the same basic dimensions as those listed in AS 1722.2—1992 and may therefore continue to be used until they become worn beyond the permitted limits.

The principal differences between this edition and the 1975 edition are as follows:

- (a) The design features of screw gauges are now explained.
- (b) Modified tables of dimensions for fastening pipe threads.
- (c) Modified tables for screw gauge limits.
- (d) Figures for thread profiles of GO ring gauges and their check plugs, relative positions of pitch diameter tolerance zones for NOT GO ring gauges and their check plugs, are now included.
- (e) GO gauges now have wear allowance.
- (f) Symbols now align with ISO practice.
- (g) Provision for the use of roller type screw calliper gauges which are currently used in Australian practice.
- (h) Setting plugs for GO and NOT GO screw calliper gauges are included.

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STANDARDS AUSTRALIA

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies thread form, thread dimensions, tolerance, and associated gauges and gauging practices for threads used for fastening pipes.

The Standard covers pipe threads for pipe of nominal bore size 4 mm to 150 mm.

NOTES:

- 1 Where these threads are used on pipes for conveying fluids, the sealing is effected by means other than thread interference (e.g. gaskets on flanges or O-rings).
- 2 Pipe threads of Whitworth form where pressure tight joints are made on the threads are specified in AS 1722.1.

1.2 REFERENCED DOCUMENTS The following Standards are referred to in this Standard:

AS

- 1098 Roller-type screw calliper gauges
- 1722 Pipe threads of Whitworth form
- 1722.1 Part 1: Sealing pipe threads
- 3501 Parallel screw threads of Whitworth form (BSW and BSF) and associated gauges and gauging practice
- 3528 Cylindrical screw threads—Vocabulary
- B129 Designs for geometric limit gauges (plain and screwed in inch units)

1.3 DEFINITIONS For the purpose of this Standard, the definitions given in AS 3528 apply.

1.4 SYMBOLS The symbols used in this Standard are listed below.

Symbol	Term
b_3	width of clearance groove at the major and minor diameter, respectively, of the thread profile with truncated flanks
D	basic major diameter of the internal thread ($= d$)
D_1	basic minor diameter of the internal thread ($= D - 1.280\ 654P = d_1$)
$D_{1,max}$	maximum minor diameter of internal thread
$D_{1,min}$	minimum minor diameter of internal thread
D_2	basic pitch diameter of the internal thread ($= D - 0.640\ 327P = d_2$)
d	basic major diameter of the external thread
d_{max}	maximum major diameter of external thread
d_{min}	minimum major diameter of external thread
d_1	basic minor diameter of the external thread ($= d - 1.280\ 654P = D_1$)
d_2	basic pitch diameter of the external thread ($= d - 0.640\ 327P = D_2$)
H	height of the triangle of the thread profile
h	height of the thread profile with rounded crests and roots
m	distance between the middle of the tolerance zone (T_R) of the threaded ring gauge and the middle of the tolerance zone (T_{CP}) of the GO check plug
P	pitch
R	radius of rounded crests and roots
S	tolerance for b_3
s	displacement of the clearance groove with truncated flanks