

MEASURE EVERYTHING THAT CAN BE MEASURED ...

and everything that cannot be measured, make it measurable

MIKRONTEC is an authorised and certified partner to national and international companies from the **automotive industry, medical technology, the measuring industry, mechanical engineering and machining.**

Each individual company in the corporate group is a unique, strong partner. MIKRONTEC pools these core competences, the flexibility and above all the potential.

MikronTec thread plug gauge

Thread plug gauge GO

Metric standard thread according to DIN13 -ISO 1502
right handed



Diameter	Design	pitch	tolerance	Article number
42	Thread plug gauge – GO	4,50	H6	0042020051
45	Thread plug gauge – GO	4,50	H6	0045020051
48	Thread plug gauge – GO	5,00	H6	0048020051
52	Thread plug gauge – GO	5,00	H6	0052020051
56	Thread plug gauge – GO	5,50	H6	0056020051
60	Thread plug gauge – GO	5,50	H6	0060020051
64	Thread plug gauge – GO	6,00	H6	0064020051
68	Thread plug gauge – GO	6,00	H6	0068020051

BRIEF DESCRIPTION OF GAUGES (in particular limit gauges)

Limit gauges (more rarely **caliber gauges** or **limit snap gauges**) are gauges that physically model the maximum and minimum permissible dimensions of a test object. Limit gauges are used to check whether the actual size of a test item is within a specified target range (tolerance). Limit gauges consist of an go and a no-go side. The go side should slide into the drill hole by hand without applying any force. The no-go side (indicated in red) must not fit in the test item. Ring gauges are used to test a shaft. In this case, you usually have an go ring that fits on the shaft and a no-go ring that doesn't properly fit on the shaft. There are also versions where both are implemented in a single ring.

Example: round fit gauge GLD 20 H7

GLD: limit plug gauge (internal designation)

20: Nominal size of gauge

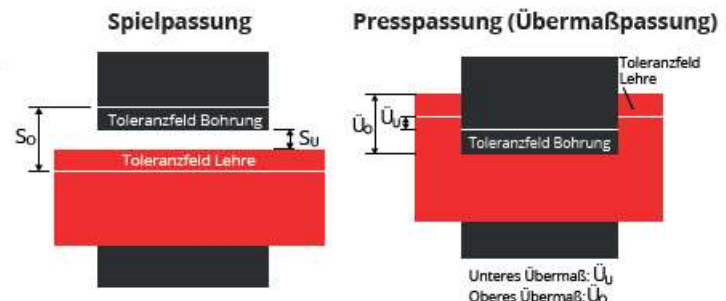
H7: Tolerance range (for round fit gauge first the letter H, followed by the number 7)

The left side (go gauge) represents the lower limit of the tolerance and must slide into the drill hole without excessive force (clearance fit).

The right side (with red ring) is at the uppermost end of the tolerance, and must not fit in the drill hole, max threading (press fit).

Then the inspected drill hole is within tolerances.

Ring gauges work accordingly, except it's not a drill hole that's being inspected, but rather a shaft.



Thread limit gauges

In essence, the same principle is used for thread limit gauges.

Except that they are designed to fit threads or threaded holes.

The thread is defined by 5 parameters, and a gauge must be manufactured to match them:

Outside diameter: the distance between the outermost points of the thread

Core diameter: the distance between the innermost points of the thread

Pitch diameter: the distance between two opposing thread flanks.

Pitch: the distance parallel to the axis between two adjacent, co-aligned thread flanks of the same thread turn.

Flank angle: the angle enclosed by the thread flank.

The most common thread in Europe is the metric thread and is abbreviated with the letter M. If no additional pitch is specified, it is referred to as a standard thread that is properly defined and increases with diameter. For all pitches that deviate from the standard, the pitch is specified directly.

In contrast to round fit gauges, first the number (here: 6) and then the letter (here: H) is given for the tolerance.

E.g:

GLD M 5 6H (standard thread pitch x0.8)

GLD M 20 6H (standard thread pitch x2.5)

GLD M 20x0,5 6H (fine thread pitch x0.5)



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