

# Limit plug gauges

## 10 Limit plug gauge

Plain gauge

### What is limit plug gauge

The gauge has two ends with standard maximum and minimum tolerable size of the hole.

#### Instructions for use

##### GO side (can pass through the whole holes smoothly)

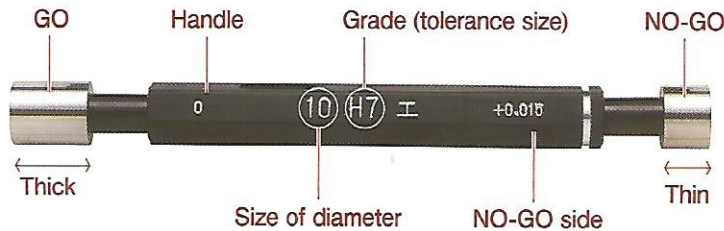
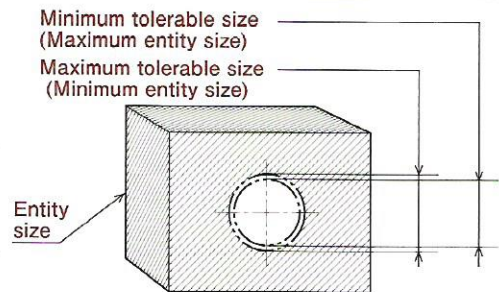
The GO side is used to check if the diameter of the hole which is bigger than the maximum entity size [minimum tolerable size of the hole], the gauge can go through the hole completely.

##### NO-GO side (can not pass through the hole)

The NO-GO side is used to check if the diameter of the hole is smaller than the minimum entity size [maximum tolerable size of the hole], the gauge can not go into the hole.

### What is entity size

The volume of hole is the minimum when the hole is finished with minimum tolerable size. Therefore, the other volume except the hole (this is entity size, the right drawing with slanted portion) is the maximum, that is the maximum entity size. The opposite meaning of above mention is the minimum entity size.



Grade / same with the tolerance of the hole, plug gauge also has H6~H10.  
The smaller the number the more precise it is.

Hardness / HV600~780

※Make sure there is no error on the grade.

**Vickers hardness (HV) :** Press the square pyramid shape diamond indenter against the surface of the material to do indentation hardness test.

● **Plug gauge H7 (Previous JIS Specifications) Specifications tolerance table**  
**B7420 made in 1980**

(Unit : mm)

Nominal sizes	GO	NO-GO	Roundness · Cylindricity
φ3	0 $\begin{matrix} +0.0026 \\ +0.0014 \end{matrix}$	+0.010 $\begin{matrix} +0.0006 \\ -0.0006 \end{matrix}$	Within 0.001
φ4 ~ 6	0 $\begin{matrix} +0.0032 \\ +0.0018 \end{matrix}$	+0.012 $\begin{matrix} +0.0007 \\ -0.0007 \end{matrix}$	Within 0.001
φ7 ~ 10	0 $\begin{matrix} +0.0032 \\ +0.0018 \end{matrix}$	+0.015 $\begin{matrix} +0.0007 \\ -0.0007 \end{matrix}$	Within 0.001
φ11 ~ 18	0 $\begin{matrix} +0.004 \\ +0.002 \end{matrix}$	+0.018 $\begin{matrix} +0.001 \\ -0.001 \end{matrix}$	Within 0.001
φ19 ~ 30	0 $\begin{matrix} +0.0047 \\ +0.0023 \end{matrix}$	+0.021 $\begin{matrix} +0.0012 \\ -0.0012 \end{matrix}$	Within 0.001

※GO side is made bigger in size due to possible abrasion.

■ **Precautions before use**

- Make sure the tip of plug gauge without any burrs.
- Burrs may hurt the hole.

■ **Precaution after use**

- Remove all dust and fingerprints then apply anti-rust oil.
- Keep it at a place with small changes in humidity and temperature.

● **Example for use**

