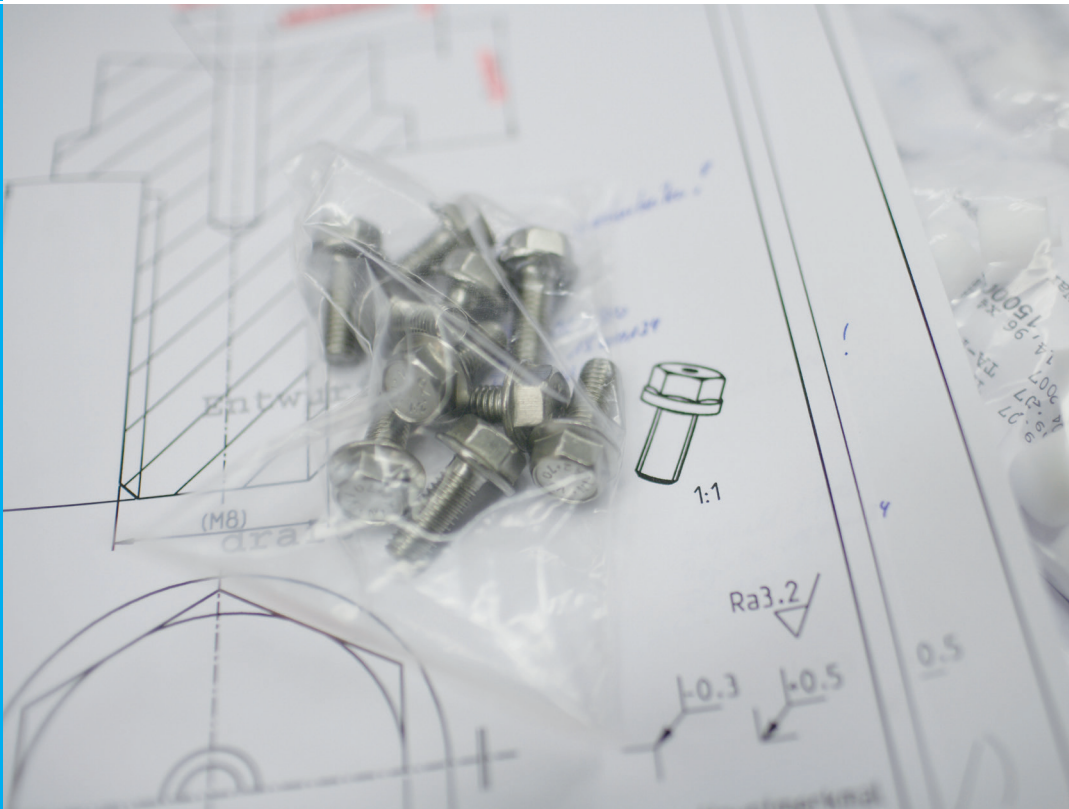


Classification of characteristics in technical design drawings

Information for suppliers

Version 2024



Content

1. Introduction – what are we informing you about?	3
2. Framework conditions	4
2.1 Fundamentals	4
2.2 Risk consideration	4
2.3 Identification categories	4
2.4 Execution and significance of identification	5

1. Introduction – what are we informing you about?

With this brochure, Endress+Hauser would like to explain the classification of certain characteristics in technical design drawings. The intention is to enable the test scope to be derived from the significance of the relevant markings.

**Note:**

Technical design drawings also encompass technical supply conditions (TLBs) and circuit board layouts.



The brochure is used across the whole of the Endress+Hauser SE+Co. KG company group.

2. Framework conditions

2.1 Fundamentals

Characteristics are defined as all information used to technically describe a product, such as material, a product's properties, dimensions and so on.

2.2 Risk consideration

To select the identification, the approval requirements and the empirical values are used as a basis. An analysis is performed of the significance of failure to adhere to a characteristic in terms of function, assembly capability, standards etc. The characteristic must then be identified as appropriate in the design drawing.

2.3 Identification categories

Overall, a distinction is made between three categories of identification:

- Critical characteristic
- Major characteristic
- Minor characteristic

The individual meanings of the relevant categories are listed in the following.



2.4 Execution and significance of identification

Critical characteristic:

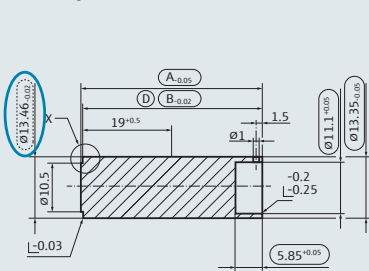
Characteristics with this identification are dimensions or specifications whose **failure** would in all likelihood:

- Lead to hazardous or unsafe situations for persons using, repairing or depending on the affected unit.
- Lead to non-compliance with applicable standards or statutory requirements.
- Result in environmental damage.
- Lead to a system or plant failure.

In the case of critical characteristics, a 100% inspection must be carried out to ensure adherence to requirements.

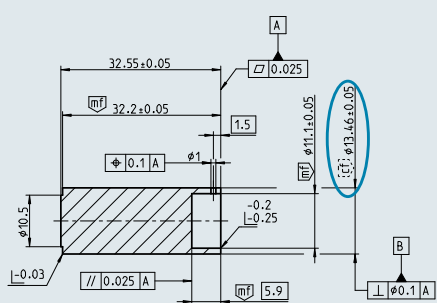
Critical characteristics are identified in design drawings as follows:
In the above example these are circled in blue.

previous identification



○ kritisches Merkmal /critical feature

current identification



⊠ kritisches Merkmal /critical feature

Major characteristic:

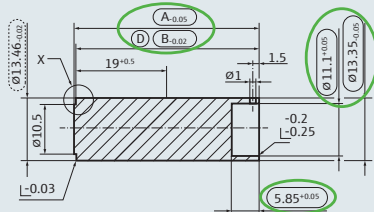
Characteristics with this identification are dimensions or specifications in the design drawing which affect:

- Function
- Assembly capability

Major characteristics must be included in the inspection instructions as characteristics to be tested.

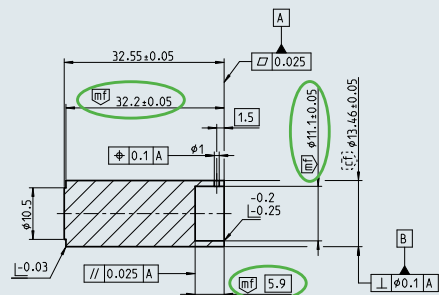
Major characteristics are identified in design drawings as follows:
In the above example these are circled in green.

previous identification



○ Hauptmerkmal /main feature

current identification

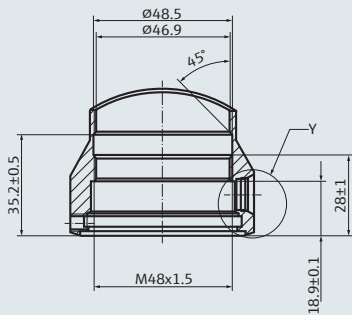


mf Hauptmerkmal /main feature

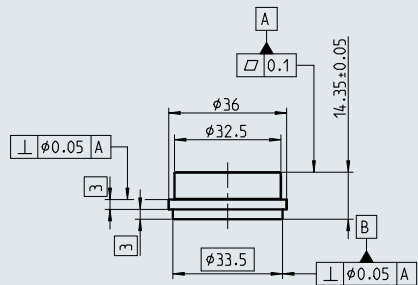
Minor characteristics

Minor characteristics are not identified and are all other dimensions and specifications which are neither major nor critical characteristics.

previous identification



current identification



Endress+Hauser Level+Pressure

Endress+Hauser SE+Co. KG
Hauptstraße 1
79689 Maulburg

Tel +49 7622 28 0
Fax +49 7622 28 1438
info.ehlp@endress.com
www.endress.com

PU01123F/00/EN/02.24