

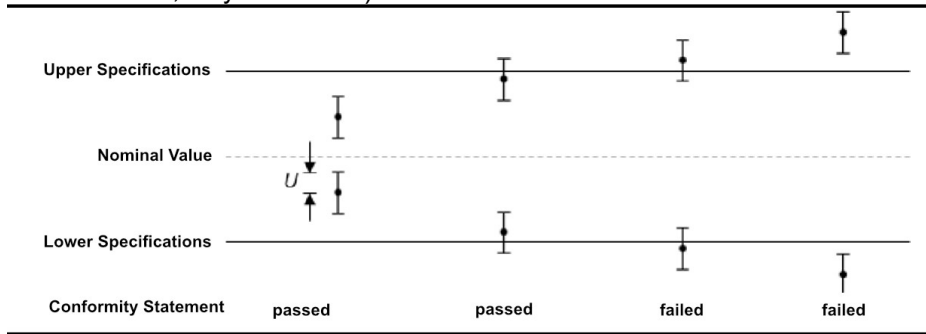
# Conformity assessment option (laboratory option)



Please note that conformity always consists of the following three elements: **decision rule**, **parameters**, and the **tolerance value**.

## a) Decision rule

Conformity statements using simple acceptance (associated measurement uncertainty and confidence interval are not taken into account; only two states) – ILAC-G8:09/2019 4.2.1



U = 95% expanded Measurement Uncertainty  
Figure: graphical representation of a binary statement – simple acceptance (Source: ILAC-G8:09/2019 4.2.1)

## b) Parameters

The term “accuracy” is most commonly used. While this is not technically correct, it can generally be “equated” with these two terms or parameters.

- **rel. exp. measurement uncertainty  $W_{(cub.)}$**  - unnamed calibration certificate (measured values in mV/V, kHz etc.)
- **display deviation  $f_q$**  - named calibration certificate (measured values in N·m, mN·m, etc.)

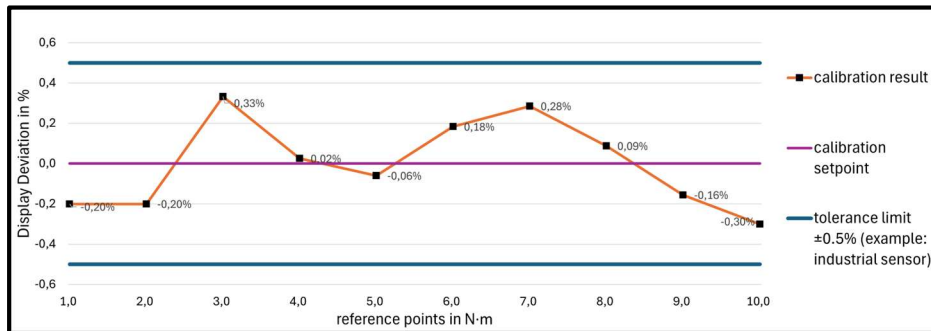


Figure: Graphical representation of a sequence of measured values (example parameter: **display deviation  $f_q$** )

## c) Limit value

Display deviation:  
(named calibration certificate)

Type	Limits
a) Precision sensor (laboratory use)	0.05%
b) Industrial sensor (industrial application)	0.50%
c) Test equipment	1%
d) Indicating instruments (which also fall under ISO 6789)	4% or 6%

Measurement uncertainty:  
(unnamed calibration certificate)

e) Precision sensor (laboratory use)	*0.08%
f) Industrial sensor (industrial application)	0.50%

\*not applicable below 1 N·m

## Alternative selection:

The 3 elements of conformity may also consist of other ILAC decision rules or parameters. In this case, please select from the listed options!

### Decision rule

ILAC G8 4.2.1	<input type="checkbox"/>
ILAC G8 4.2.2	<input type="checkbox"/>
ILAC G8 4.2.3	<input type="checkbox"/>

### Parameter

Measurement uncertainty $W$ ( $W' - f_q$ )	<input type="checkbox"/>
Indicator deviation $f_{q/Y}$	<input type="checkbox"/>
Indicator deviation $f_{q/EW}$ (Case I)	<input type="checkbox"/>
Measurement uncertainty interval $W'$	<input type="checkbox"/>
Comparison precision $b$	<input type="checkbox"/>
Comparison precision $b'$	<input type="checkbox"/>
Reverse span $h$	<input type="checkbox"/>
Regression deviation $f_a$	<input type="checkbox"/>

Limit

Example from the laboratory option