

Måttutvärdering					
Utfördad av	Verifierad av	Godkänd av	Datum	Dok. nr.	Utg.
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Object

This instruction aims to clarify the requirements and explain the intended evaluation of Swedrive's drawings.

Scope

This instruction is valid for all drawings produced by Swedrive.

Instruction

Fundamental principles

As measurements and tolerances is stated according to ISO, the whole ISO-system with the rules that is given for tolerances is invoked for the Swedrive's drawings. This means, amongst other things, that:

- For a requirement to be valid, it must be specified on the drawing, directly or as a reference.
- Requirements applies to components in free state, at reference temperature (20°C) and in finished condition.
- Every requirement specified on the drawing shall be fulfilled independently of other requirements unless there is a defined correlation eg. maximum material principle.
- Two-point measurement for all local sizes according to ISO 14405-1 is the default evaluation method for linear measurements.

General tolerances

General tolerances that are specified on the drawing are valid where no other tolerance of the same kind is stated, directly or by reference. Measurements with tolerance (general or specific) that include the symbol E shall be evaluated as an envelope requirement according by Taylor's principle, which means

- Requirement of perfect form at maximum material condition* (normally controlled with a gauge)
- that all local sizes shall be inside the tolerance (normally controlled by two-point measurements)

References

Requirements in instructions that is invoked on the drawing is valid where no other specific requirement is stated directly on the drawing.

Responsibility

The manufacturer is responsible to understand all requirements and to make sure the components are manufactured according to all requirements, general or specific, specified on the drawing. If missing, information shall be acquired.

*Maximum material condition means the upper limit for turned elements (shafts) lower limit for opposite elements (holes)