DIN EN ISO 14405-1:2017-07 (E)

Geometrical product specifications (GPS) - Dimensional tolerancing - Part 1: Linear sizes (ISO 14405-1:2016)

Contents

Page

European foreword ... **3**

Foreword ... **4**

Introduction ... **5**

1 Scope ... **6**

2 Normative references ... **7**

3 Terms and definitions ... **7**

4 Specification modifiers and symbols ... **21**

5 Default specification operator for size ... **24**
5.1 General ... 24
5.2 ISO default specification operator for size ... 25
5.3 Drawing-specific default specification operator for size ... 26

6 Drawing indication for special specification operators for size ... **27**
6.1 Basic specification ... 27
6.1.1 General ... 27
6.1.2 Rules to indicate a basic GPS specification ... 27
6.1.3 Rules to indicate basic dimensional specification with modifiers ... 28
6.2 Indication of special specification operators ... 29
6.2.1 One specification operator for both limits (upper and lower) of a size characteristic ... 29
6.2.2 Different specification operator for upper limit of size and lower limit of size ... 32
6.2.3 More than one dimensional specification applied to a linear feature of size ... 34
6.3 Tolerancing of fits on assembly drawings ... 35

7 Indication of the toleranced feature on which the size characteristic is defined ... **36**
7.1 Complete toleranced linear feature of size ... 36
7.2 Specific fixed restricted portion of the feature of size ... 36
7.3 Any restricted portion of the feature of size of a specified length ... 37
7.4 Any cross section or any longitudinal section of a linear feature of size ... 38
7.5 Size characteristic in a specific cross section of a feature of size ... 40
7.6 Requirement applied individually for more than one feature of size ... 42
7.7 Requirement applied for more than one feature considered as one feature of size ... 43
7.8 Flexible/non-rigid parts ... 43

8 Complementary indication ... **44**

Annex A (normative) **Proportions and dimensions of graphical symbols** ... **45**

Annex B (informative) **Overview diagram for linear size** ... **47**

Annex C (informative) **Data handling with rank-order modifiers** ... **48**

Annex D (normative) **Size characteristics** ... **50**

Annex E (normative) **Graphical rules to locate and dimension the dimensional specification elements** ... **55**

Annex F (informative) **Relation to the GPS matrix model** ... **59**

Bibliography ... **60**