

DIN EN ISO 13385-1:2020-03 (E)

Geometrical product specifications (GPS) - Dimensional measuring equipment - Part 1: Design and metrological characteristics of callipers (ISO 13385-1:2019)

Contents	Page
European foreword.....	3
Foreword.....	4
Introduction.....	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Design characteristics	7
4.1 General design and nomenclature.....	7
4.2 Dimensions.....	7
5 Metrological characteristics	10
5.1 General.....	10
5.2 Rated operating conditions.....	10
5.3 Reference point.....	10
5.4 Test methods.....	10
5.5 Partial surface contact error, E (limited by E_{MPE}).....	10
5.6 Shift error, S (limited by S_{MPE}).....	12
5.6.1 General.....	12
5.6.2 Shift error — Internal measuring faces.....	12
5.6.3 Shift error — Crossed knife-edge internal measuring faces.....	12
5.6.4 Shift error — Depth or step measuring faces.....	13
5.7 MPE values.....	14
5.8 Special cases.....	14
6 Determination of conformity to specifications	14
6.1 General.....	14
6.2 Measurement uncertainty.....	14
6.3 Decision rule.....	15
7 Marking	15
Annex A (informative) Calibration guidelines for metrological characteristics	16
Annex B (normative) Default MPE values for metrological characteristics	17
Annex C (informative) Relation to the GPS matrix model	18
Bibliography	19