

DIN EN ISO 7250-1:2017-12 (E)

Basic human body measurements for technological design - Part 1: Body measurement definitions and landmarks (ISO 7250-1:2017)

Contents		Page
European foreword		4
Foreword		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Measuring conditions and instruments	8
4.1	Conditions	8
4.2	Instruments	9
4.3	Further conditions	9
5	Landmarks	9
5.1	General	9
5.2	Acromion	9
5.3	Cervicale	10
5.4	Crotch level	10
5.5	Ectocanthus	11
5.6	Glabella	11
5.7	Iliospinale anterius — Anterior superior iliac spine	12
5.8	Lowest point of the rib cage	12
5.9	Menton	13
5.10	Mesosternale	13
5.11	Nuchale	14
5.12	Olecranon	14
5.13	Orbitale — Infraorbitale	15
5.14	Opisthocranium	15
5.15	Sellion	16
5.16	Stylian (radial stylian)	16
5.17	Suprapatella, sitting	17
5.18	Thelion	17
5.19	Tibiale	18
5.20	Tragion	18
5.21	Ulnar stylian	19
5.22	Vertex (top of head)	19
6	Basic anthropometric measurements	20
6.1	Measurements taken while the subject stands	20
6.1.1	Body mass (weight)	20
6.1.2	Stature (body height)	20
6.1.3	Eye height	21
6.1.4	Shoulder height	21
6.1.5	Elbow height	22
6.1.6	Iliac spine height, standing	22
6.1.7	Crotch height	23
6.1.8	Tibial height	23
6.1.9	Chest depth, standing	24
6.1.10	Body depth, standing	24
6.1.11	Chest breadth, standing	25
6.1.12	Hip breadth, standing	25

6.2	Measurements taken while the subject sits.....	26
6.2.1	Sitting height (erect).....	26
6.2.2	Eye height, sitting.....	27
6.2.3	Cervicale height, sitting.....	27
6.2.4	Shoulder height, sitting.....	28
6.2.5	Elbow height, sitting.....	28
6.2.6	Shoulder-elbow length.....	29
6.2.7	Shoulder (biacromial) breadth.....	29
6.2.8	Shoulder (bideltoid) breadth.....	30
6.2.9	Elbow-to-elbow breadth.....	30
6.2.10	Hip breadth, sitting.....	31
6.2.11	Popliteal height, sitting.....	31
6.2.12	Thigh clearance.....	32
6.2.13	Knee height, sitting.....	32
6.2.14	Abdominal depth, sitting.....	33
6.2.15	Thorax depth.....	33
6.2.16	Buttock-abdomen depth, sitting.....	34
6.3	Measurements on specific body segments.....	35
6.3.1	Hand length (stylion).....	35
6.3.2	Palm length.....	36
6.3.3	Hand breadth at metacarpals.....	36
6.3.4	Index finger length.....	37
6.3.5	Index finger breadth, proximal.....	37
6.3.6	Index finger breadth, distal.....	38
6.3.7	Foot length.....	39
6.3.8	Foot breadth.....	39
6.3.9	Head length.....	40
6.3.10	Head breadth.....	40
6.3.11	Face length (menton-sellion).....	41
6.3.12	Head circumference.....	41
6.3.13	Sagittal arc.....	42
6.3.14	Bitragion arc.....	42
6.3.15	Thumb length.....	43
6.3.16	Thumb breadth.....	43
6.3.17	Hand thickness.....	44
6.3.18	Hand breadth including thumb.....	44
6.3.19	Arm circumference flexed.....	45
6.3.20	Forearm circumference flexed.....	45
6.4	Functional measurements.....	46
6.4.1	Wall-acromion distance.....	46
6.4.2	Grip reach; forward reach.....	47
6.4.3	Elbow-wrist length.....	47
6.4.4	Elbow-grip length.....	48
6.4.5	Fist (grip axis) height.....	48
6.4.6	Forearm-fingertip length.....	49
6.4.7	Buttock-popliteal length (seat depth).....	49
6.4.8	Buttock-knee length.....	50
6.4.9	Neck circumference.....	50
6.4.10	Chest circumference.....	51
6.4.11	Waist circumference.....	51
6.4.12	Wrist circumference.....	52
6.4.13	Thigh circumference.....	52
6.4.14	Calf circumference.....	53

Annex A (informative) Correspondence between ISO 7250-1 dimension names and numbers and ISO 14738 and ISO 15534 anthropometric dimension codes.....	54
--	-----------

Bibliography.....	56
--------------------------	-----------