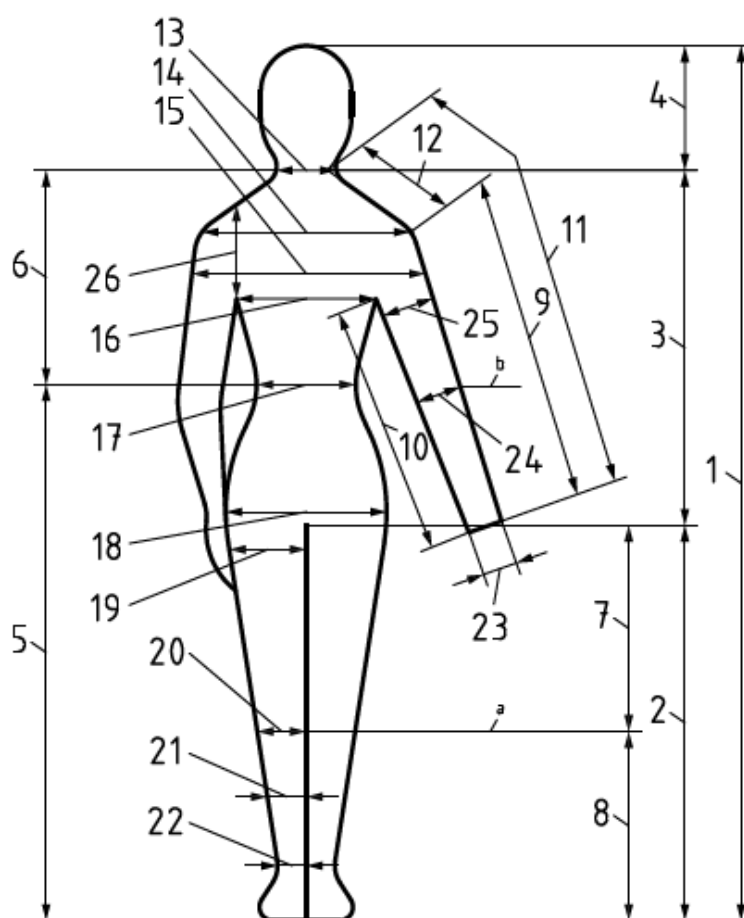


Size requirements/recommendation for Empa manikin

The instrumented manikin matches the dimensions given in ISO 13506 (male form). The key to the numbers referenced in the figure on the second page.

No.	Description of male manikin	Empa manikin mm
1	Stature/total height	1865
2	Inside leg height (crotch height, from heel) (about 7+8)	890
3	Center trunk length (from back of neck to crotch back to front neck)	800
4	Head height, including neck (Top point of head to side of neck point)	240
5	Waist height, from heel	1170
6	Collarbone to back waist (Front neck point to waist)	460
7	Crotch to knee	360
8	Knee height, standing	560
9	Top of shoulder to wrist along arm (shoulder to wrist, elbow bent)	515
10	Under arm length (Arm inseam)	430
11	Back neck point to wrist length, 3-point measurement from between collarbones to wrist 3 (shoulder to elbow, elbow bent) (about 9+12)	760
12	Shoulder length (from side of neck to shoulder point)	245
13	Neck girth (circumference)	450
14	Across back shoulder width (from one shoulder across back to other shoulder through back of neck point)	550
15	Chest girth, (100 mm down from front neck point)	490
16	Chest circumference, at the armpits	1050
17	Waist girth	860
18	Maximum hip girth	1030
19	Thigh girth below the gluteal fold	605
20	Knee girth	405
21	Calf girth (maximum horizontal girth)	415
22	Ankle girth (measured at minimum leg girth)	275
23	Wrist girth	230
24	Elbow girth	300
25	Upper arm girth, at midpoint between shoulder point and elbow point	325
26	Armscye girth	400



- ^a Knee level.
- ^b Elbow level.