



Designation: D 6240 – 98

Standard Tables of Body Measurements for Men Sizes Thirty-Four to Sixty (34 to 60) Regular¹

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1. Scope

1.1 These standard tables cover the body measurements of men from size thirty-four to sixty. Although these are body measurements, they can be used in designing apparel for men in this size range when such factors as fabric type, ease of body movement, styling, and fit are taken into account.

1.2 The values stated in either acceptable metric units or in other units shall be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system must be used independently of the other, without combining values in any way.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

D 123 Terminology Relating to Textiles²

D 5219 Terminology Relating to Body Dimensions and Apparel Sizing³

2.2 ISO Standard:

ISO 3635 Size Designation of Clothes, Definitions, and Body Measurement Procedures Apparel Sizes⁴

3. Terminology

3.1 Definitions:

3.1.1 For definitions relating to body dimensions, refer to Terminology D 5219.

3.1.2 For definitions of other textile terms used in these tables, refer to Terminology D 123.

¹ These tables are under the jurisdiction of ASTM Committee D-13 on Textiles and is the direct responsibility of Subcommittee D13.55 on Body Measurement for Apparel Sizing.

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² *Annual Book of ASTM Standards*, Vol 07.01.

³ *Annual Book of ASTM Standards*, Vol 07.02.

⁴ Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.

4. Significance and Use

4.1 The use of the body measurement information in Tables 1-4 will assist manufacturers in the development of patterns and garments that are consistent with the current anthropometric characteristics of the population of interest. These standard tables in turn should reduce or minimize consumer confusion and dissatisfaction related to apparel sizing. (Also refer to ISO 3635.)

5. Apparatus

5.1 *Tape Measure*, (dimensionally stable and approximately 1.5 cm (1/2 in.) wide and graduated accurately in cm (1/16 in.)).

5.2 *Plastic Goniometer*, to measure the radian (degree) of shoulder slope.

5.3 *Scale*, standard, calibrated, body weight type.

5.4 *Metal Ruler*.

6. Procedure

6.1 General Procedure:

6.1.1 For all vertical and most horizontal measurements, subject is to be standing erect without shoes and with feet approximately 15 cm (6 in.) apart.

6.1.2 Take measurements over basic undergarments normally worn.

6.1.3 Take all measurements except torso circumferences, height, and weight from the same side of the body for consistency.

6.2 Body Measurements:

6.2.1 *Body weight*—Weigh the subject.

6.2.2 *Chest*—Measure the circumference of the body parallel to the floor, under the arms, and over the fullest part of the chest.

6.2.3 *Waist*—Measure horizontally around the body at waist height.

6.2.4 *Seat (hip)*—Measure horizontally around the body at hip height.

6.2.5 *Head circumference*—Measure the circumference of the head above the ears.

TABLE 1 New ASTM Men's Measurement Table

	Small (34-37)			Medium (38-41)				Large (42-45)				X-Large (46-49)			
Weight (Approximate kilograms)	58.06	59.42	62.60	65.77	69.40	74.84	81.65	83.92	88.45	90.72	95.26	97.52	104.33	106.60	111.13
	Girth Measurements (cm)														
Sizes	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Chest	86.36	88.90	91.44	93.98	96.52	99.06	101.60	104.14	106.68	109.22	111.76	114.30	116.84	119.38	121.92
Waist	71.12	73.66	76.20	78.74	81.28	83.82	86.36	88.90	91.44	93.98	96.52	99.06	101.60	104.14	106.68
Seat (hip)	86.36	88.90	91.44	93.98	96.52	99.06	101.60	104.14	106.68	109.22	111.76	114.30	116.84	119.38	121.92
Head circumference	54.93	55.40	55.88	56.36	56.83	57.31	57.79	58.26	58.74	59.21	59.69	60.17	60.64	61.12	61.60
Neck base	35.56	36.20	36.83	37.47	38.10	38.74	39.37	40.01	40.64	41.28	41.91	42.55	43.18	43.82	44.45
Shoulder circumference	101.60	104.14	106.68	109.22	111.76	114.30	116.84	119.38	121.92	124.46	127.00	129.54	132.08	134.62	137.16
Armscye	41.59	42.55	43.18	44.13	45.09	46.04	46.99	47.94	48.90	49.85	50.80	51.75	52.71	53.66	54.61
Upper arm	29.21	29.85	30.48	31.12	32.39	33.02	33.66	34.93	34.29	34.93	35.56	36.20	36.83	37.47	38.10
Elbow	27.62	28.10	28.58	29.05	29.53	30.00	30.48	30.96	31.43	31.91	32.39	32.86	33.34	33.81	34.29
Wrist	17.15	17.46	17.78	18.10	18.42	18.73	19.05	19.37	19.69	20.00	20.32	20.64	20.96	21.27	21.59
Thigh	52.71	54.29	55.88	57.47	59.06	60.64	62.23	63.82	65.41	66.99	68.58	70.17	71.76	73.34	74.93
Knee	36.83	37.47	38.10	38.74	39.37	40.01	40.64	41.28	41.91	42.55	43.18	43.82	44.45	45.09	45.72
Calf	34.29	34.93	35.56	36.20	36.83	37.47	38.10	38.74	39.37	40.01	40.64	41.28	41.91	42.55	43.18
Ankle	21.59	22.23	22.86	23.50	24.13	24.77	25.40	26.04	26.67	27.31	27.94	28.58	29.21	29.85	30.48
Trunk (total trunk, torso)	150.50	153.35	156.21	158.75	161.29	163.83	166.37	168.12	169.86	171.61	173.36	174.94	176.69	178.44	180.02
Total crotch	62.23	63.82	65.41	66.99	68.58	69.85	71.12	72.39	73.66	74.93	76.20	77.47	78.74	80.01	81.28
	Vertical Measurements (cm)														
Sizes	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Stature	172.09	173.04	173.99	175.42	176.21	177.32	178.44	178.91	179.55	180.02	180.66	180.98	181.29	181.61	181.77
Cervicale height	148.27	149.07	149.86	151.13	151.77	152.72	153.67	154.15	154.62	155.10	155.58	155.89	158.21	156.37	156.53
Head height, including neck	23.81	23.97	24.13	24.29	24.45	24.61	24.77	24.77	24.92	24.92	25.08	25.08	25.08	25.24	25.24
Waist height	106.05	106.36	106.68	107.63	107.95	108.59	109.22	109.54	109.86	110.17	110.49	110.81	110.97	110.97	111.13
Armscye depth	12.54	12.70	12.86	13.02	13.49	13.81	13.97	14.29	14.45	14.76	14.92	15.40	15.40	15.56	15.88
Arm inseam	48.26	48.26	48.26	47.94	47.94	47.63	47.63	47.31	47.31	46.99	46.99	46.67	46.67	46.36	48.36
Crotch height (inseam)	81.92	81.92	81.92	82.23	82.23	82.23	82.55	82.55	82.55	82.55	82.55	82.55	82.39	81.76	81.60
Knee height	44.45	44.45	45.09	45.09	45.72	45.72	46.36	46.36	46.36	46.36	46.67	46.67	46.99	46.99	46.99
Ankle height	5.40	5.40	5.72	5.72	6.03	6.03	6.35	6.35	6.35	6.35	6.67	6.67	6.67	6.83	6.83
Waist length (cervicale to waist)	42.23	42.70	43.18	43.50	43.82	44.13	44.45	44.61	44.77	44.93	45.09	45.09	45.24	45.40	45.40
True rise	24.13	24.45	24.77	25.40	25.72	26.35	26.87	26.99	27.31	27.62	27.94	28.26	28.58	29.21	29.53
	Width and Length (cm)														
Sizes	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Across shoulder (point to point)	41.91	42.23	42.55	42.86	43.18	43.82	44.45	45.09	45.72	46.36	46.99	47.63	48.26	48.90	49.53
Across chest 4 in. down	38.10	38.74	39.37	40.01	40.64	41.28	41.91	42.55	43.18	43.82	44.45	45.09	45.72	46.36	46.99
Across back 5 in. down	39.37	40.01	40.64	41.28	41.91	42.55	43.18	43.82	44.45	45.09	45.72	46.36	46.99	47.63	48.26
Shoulder slope (degrees)	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Cervicale to wrist	81.29	81.60	81.92	82.71	83.50	84.30	85.09	85.41	85.88	86.36	86.68	87.15	87.63	87.95	88.58
Hand and foot width	8.26	8.57	8.89	9.21	9.53	9.84	10.16	10.48	10.48	10.48	10.48	10.80	10.80	10.80	10.80
Hand length	18.10	18.10	18.42	18.42	18.42	18.42	19.05	19.05	19.05	19.05	19.69	19.69	19.69	19.69	20.32
Foot length	21.59	22.86	22.86	24.13	25.40	25.40	26.67	26.67	28.67	26.67	27.94	27.94	27.94	27.94	29.21



TABLE 2 New ASTM Men's Measurement Table

	XXL - 2XL (50-53)				XXXL - 3XL (54-57)				XXXXL - 4XL (58-60)			
Weight (Approximate kilograms)	113.40	117.94	122.47	127.01	136.08	142.88	145.15	149.69	156.49	158.76	163.30	167.83
Girth Measurements (cm)												
Sizes	49	50	51	52	53	54	55	56	57	58	59	60
Chest	124.46	127.00	129.54	132.08	134.62	137.16	139.70	142.24	144.78	147.32	149.86	152.40
Waist	112.40	115.57	118.75	121.92	125.73	129.54	133.35	137.16	142.24	147.32	152.40	157.48
Seat (hip)	124.46	127.00	129.54	132.08	134.62	137.16	139.70	142.24	144.78	147.32	149.88	152.40
Head circumference	62.07	62.55	63.02	63.50	63.98	64.45	64.93	65.41	65.88	66.36	66.83	67.31
Neck base	45.09	45.72	46.36	46.99	47.63	48.26	48.90	49.53	50.17	50.80	51.44	52.07
Shoulder circumference	139.70	142.24	144.78	147.32	148.59	149.86	152.40	154.94	157.48	160.02	162.56	165.10
Armhole	52.86	53.66	54.45	55.25	56.04	56.83	57.47	58.42	59.21	60.01	60.80	61.60
Upper arm	38.74	39.37	40.01	40.64	41.28	41.91	42.55	43.18	43.82	44.45	45.09	45.72
Elbow	34.77	35.24	35.72	36.20	36.67	37.15	37.62	38.10	38.58	39.05	39.53	40.01
Wrist	21.91	22.23	22.54	22.86	23.18	23.50	23.81	24.13	24.45	24.77	25.08	25.40
Thigh	76.52	78.11	79.69	81.28	82.87	84.46	86.04	87.83	89.22	90.81	92.39	93.98
Knee	46.36	46.99	47.63	48.26	48.90	49.53	50.17	50.80	51.44	52.07	52.71	53.34
Calf	43.82	44.45	45.09	45.72	46.36	46.99	47.63	48.26	48.90	49.53	50.17	50.80
Ankle	31.12	31.75	32.39	33.02	33.66	34.29	34.93	35.56	36.20	36.83	37.47	38.10
Trunk (total trunk, torso)	181.45	182.09	185.26	186.69	188.75	190.82	192.88	194.95	195.74	199.71	202.09	204.47
Total crotch	82.55	83.82	85.09	86.38	87.63	88.90	90.17	91.44	93.03	94.62	86.20	97.79
Vertical Measurements (cm)												
Sizes	49	50	51	52	53	54	55	56	57	58	59	60
Stature	181.93	182.25	182.50	182.88	183.52	183.99	184.47	184.94	185.42	185.90	186.37	186.69
Cervical height	156.69	156.85	157.16	157.48	157.96	158.43	158.75	159.23	159.54	160.02	160.34	160.66
Head height, including neck	25.24	25.40	25.40	25.40	25.56	25.56	25.72	25.72	25.88	25.88	26.04	26.04
Waist height	111.13	111.28	111.44	111.76	112.08	112.40	112.71	113.03	113.35	113.67	113.98	114.14
Armhole depth	16.03	16.35	18.51	16.83	17.15	17.30	17.62	17.78	18.10	18.42	18.57	18.73
Arm inseam	46.04	46.04	46.04	46.04	45.72	45.72	45.72	45.40	45.40	45.40	45.09	45.09
Crotch height (inseam)	80.96	80.80	80.65	80.65	80.65	80.33	80.33	80.01	79.69	79.69	79.38	79.06
Knee height	47.63	47.63	47.63	47.63	48.26	48.26	48.26	48.28	48.90	48.90	48.90	48.90
Ankle height	6.99	6.99	6.99	6.99	7.30	7.30	7.30	7.30	7.62	7.62	7.62	7.62
Waist length (cervical to waist)	45.58	45.58	45.72	45.72	45.88	46.04	46.04	46.20	46.20	46.36	46.36	46.51
True rise	30.16	30.48	30.80	31.12	31.43	32.07	32.39	33.02	33.66	33.97	34.61	34.93
Width and Length (cm)												
Sizes	49	50	51	52	53	54	55	56	57	58	59	60
Across shoulder (point to point)	50.17	50.80	51.44	52.07	52.55	53.02	53.50	53.98	54.45	54.93	55.40	55.88
Across chest 4 in. down	47.83	48.26	48.90	49.53	50.17	50.80	51.44	52.07	52.71	53.34	53.98	54.61
Across back 5 in. down	48.90	49.53	50.17	50.80	51.44	52.07	52.71	53.34	53.98	55.88	57.79	57.15
Shoulder slope degrees	25	25	25	25	25	25	25	25	25	25	25	25
Cervical to wrist	89.22	89.54	90.01	90.49	90.96	91.44	91.92	92.39	92.87	93.35	93.82	94.30
Hand and foot width	11.11	11.11	11.11	11.11	11.43	11.43	12.07	12.07	12.70	12.70	12.70	12.70
Hand length	20.32	20.32	20.32	20.96	20.96	20.96	20.96	21.59	21.59	21.59	21.59	21.59
Foot length	29.21	29.21	29.21	30.48	30.48	30.48	30.48	31.75	31.75	31.75	33.02	33.02