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HoGent Smartfit 2012 - 2013 Latest update: 13/06/2014

# **M**EASURING

#### MEASURING PER TABLE (F = FEMALE; M = MALE; C = CHILDREN; \*1 PRIMARY MEASUREMENT; \*2 SECUNDARY MEASUREMENT; \*3 TERTIARY MEASUREMENT) ACCORDING TO ISO 8559:1989 + EN 13402-1:2001

Measure	Description	Illustration	In table 'garments for'			
			Full body	Upper body	Lower body	
Body height  ISO 8559 2.2.1  EN 13402-1 3.12	The vertical distance between the crown of the head and the ground, with the subject standing up right without shoes and the feet together.  (standing up right, stadiometer)		F *3 M *3 C *1	F M C	F M C	
Bust girth  ISO 8559 2.1.7 + 2.1.8  EN 13402-1 3.7	The maximum horizontal girth measured over the shoulder blades (scapulae), under the armpits (axillae), and across the nipples (breast points for females wearing bras when necessary) or the greatest projection of the front of the body.  (standing up right, 3D body scanner)		F*1 M*1 C*2	F*1 M*1 C*1		
Waist girth  ISO 8559 2.1.11  EN 13402-1 3.10	The girth of the natural waistline between the top of the hip bones (iliac crests) and the lower ribs.  (standing up right, 3D body scanner)		F M C	F *2 M C *2	F*2 M*1 C*3	

Low hip girth  ISO 8559 n/a  EN 13402-1 n/a	Horizontal girth of the torso, measured in half between the waist line and hip line.  (standing up right, 3D body scanner)	F M C	F M C	F M C
Hip girth  ISO 8559 2.1.12  EN 13402-1 3.11	The horizontal girth measured around the hip level of maximum circumference.  (standing up right, 3D body scanner)	F *2 M *2 C *3	F M C	F *1 M *2 C *1
Waist height  ISO 8559 2.2.3  EN 13402-1 n/a	The vertical distance from the natural waist level to the ground, measured at the side of the body.  (standing up right, 3D body scanner)	F M C	F M C	F *3 M *3 C *2
Cervical to breast point  ISO 8559 2.2.13  EN 13402-1 n/a	The distance from the left nipple, round the base of the neck left, 7 <sup>th</sup> cervical vertebra, round the base of the neck right, to the right nipple.  (standing up right, 3D body scanner)	F	F	

Underbust girth  ISO 8559 2.1.10  EN 13402-1 3.9	The horizontal girth of the body just below the breasts.  (standing up right, 3D body scanner)	F	F	
Bust width  ISO 8559 2.1.9  EN 13402-1 n/a	The horizontal distance between the nipples.  (standing up right, 3D body scanner)	F	F	
Back width  ISO 8559 2.1.6  EN 13402-1 n/a	The horizontal distance across the back measured half-way between the upper and lower scye levels.  (standing up right, 3D body scanner)	F M C	F M C	
Front width  ISO 8559  n/a  EN 13402-1  n/a	The horizontal distance across the front measured half-way between the upper and lower scye levels.  (standing up right, 3D body scanner)	F M C	F M C	

Back waist length (cervical to waist) ISO 8559 2.2.10 EN 13402-1 n/a	The distance from the 7 <sup>th</sup> cervical vertebra, following the contour of the spinal column, to the waist.  (standing up right, 3D body scanner)	F M C	F *3 M *3 C *3	
Neck girth  ISO 8559 2.1.2  EN 13402-1 3.6	The girth of the neck below the Adam's apple and at the level of the 7 <sup>th</sup> cervical vertebra.  (standing up right, 3D body scanner	F M C	F M *2 C	
Neck base girth  ISO 8559 2.1.3  EN 13402-1 n/a	The girth of the base of the neck over the base of the 7 <sup>th</sup> cervical vertebra, the neck shoulder points and the medial superior borders of the left and right clavicles.  (standing up right, 3D body scanner)	F M C	F M C	
Shoulder length  ISO 8559 2.1.4  EN 13402-1 n/a	Distance from the base of the side of the neck (neck point) to the acromion extremity.  (standing up right, 3D body scanner)	F M C	F M C	

Shoulder drop  ISO 8559 n/a  EN 13402-1 n/a	Vertical distance from the base of the side of the neck (neck point) to the acromion extremity.  (standing up right, 3D body scanner)	F M C	F M C	
Arm length  ISO 8559 2.2.22  EN 13402-1 3.15	The distance from the armscye/shoulder line intersection (acromion), over the elbow, to the far end of the prominent wrist bone.  (standing up right, 3D body scanner)	F M C	F M C	
Upper arm girth  ISO 8559 2.1.13  EN 13402-1 n/a	The maximum girth of the upper arm at lowest scye level.  (rechtopstaand, 3D bodyscanner)	F M C	F M C	
Wrist girth  ISO 8559 2.1.15  EN 13402-1 n/a	The girth over the wrist bone.  (standing up right, 3D body scanner)	F M C	F M C	

Inside leg length  ISO 8559 2.2.27  EN 13402-1 3.14	The distance between the crotch and the ground, measured along the inside of the leg*, standing up right, feet slightly apart and body mass equally distributed on both legs.  (standing up right, 3D body scanner)  *Slight deviation from the standards. According to the standards, the inseam is measured vertically, but because the feet are slightly apart when measured with a body scanner, the method of measuring along the leg is a more correct approach.	F M C	F M C
Thigh girth  ISO 8559 2.1.18  EN 13402-1 n/a	The horizontal girth measured, without constriction, at the highest thigh position, standing up right, feet slightly apart and body mass equally distributed on both legs.  (standing up right, 3D body scanner)	F M C	F M C
Knee girth  ISO 8559 2.1.20  EN 13402-1 n/a	The circumference of the knee at the tibial level.  (standing up right, 3D body scanner)	F M C	F M C
Calf girth  ISO 8559 2.1.22  EN 13402-1 n/a	Maximum girth of the calf, standing up right, feet slightly apart and body mass equally distributed on both legs.  (standing up right, 3D body scanner)	F M C	F M C

Ankle girth  ISO 8559 2.1.24  EN 13402-1 n/a	The circumference of the leg measured at the level of the center of the ankle bone.  (standing up right, 3D body scanner)	F M C	F M C
Knee height  ISO 8559 2.2.6  EN 13402-1 n/a	The vertical distance from the knee (tibial) level to the ground.  (standing up right, 3D body scanner)	F M C	F M C
Waist height, sitting ISO 8559 n/a EN 13402-1 n/a	The distance measured along the body from the upper side of the hip bone to the (sitting, measuring tape)	F M C	F M C

