10 Technical specifications

10.1. Standards and requirements

This product complies with the provisions of the Medical Devices Directive and therefore carries the CE mark.
The wheelchair conforms to the following standards and requirements. This has been verified by independent test institutes.

Standard	Description	Weight of test dummy
NEN-EN 12182 (2012)	Assistive products for persons with disability - General requirements and test methods	160 kg
NEN-EN 12184 (2014) Class B	Electrically powered wheelchairs, scooters and their chargers – Requirements and test methods	160 kg
ISO 7176-19 (2009)	Wheeled mobility devices for use as seats in motor vehicles	102 kg

Standard	Description
EU directive 93/42/EEC	Applicable requirements as stated in Annex 2
ISO 7176-8	Requirements and test methods for static, impact and fatigue strengths
ISO 7176-9	Climatic tests for powered wheelchairs
ISO 7176-14	Power and control systems for electric wheelchairs - Requirements and test methods
ISO 7176-16	Requirements for resistance to ignition of postural support devices

10.2. **Specifications operating force**

	Min.	Max.	Unit
Joystick	2,5	3,5	N
Swinging away the controller	20	50	N
Electronic switches	2,1	3,5	N
Parking brake	34,77	44,27	N
Attaching the charger plug	7,8	13,9	N

10.3. **Specifications product**

Manufacturer	DIETZ-Power B.V. - Vlamovenweg 12 - 5708 JV Helmond

User weight	max. 160 kg
Class	B

Model / type	Sango FWD		Sango RWD		Sango MWD		
Specifications*	min.	max.	min.	max.	min.	max.	Unit
Overall length incl. leg rest	985	1680	980	1680	1070	-	mm
Overall width	615	700	615	700	615	700	mm
Overall height excl. headrest	1010	1340	1010	1340	1010	1340	mm
Transport length incl. leg rest	985		980		1150		mm
Transport width	615		615		615		mm
Transport height	650		650		650		mm
Total mass incl. batteries **	154,5		155		158,5		kg
Mass of the heaviest part	110		110,5		114		kg
Static stability downhill ***	10 / 17,5		10 / 17,5		10 / 17,5		° / %
Static stability uphill ***	10 / 17,5		10 / 17,5		10 / 17,5		° / %
Static stability sideways ***	10 / 17,5		10 / 17,5		10 / 17,5		° / %
Theoretical distance range ****	30		30		30		km
Dynamic stability uphill	6 / 10,5		6 / 10,5		6 / 10,5		° / %
Obstacle climbing *****	50		50		50		mm
Forward speed	6 / 10 / 12,5		6 / 10 / 12,5		6 / 10 / 12,5		km/h
Braking distance at maximum speed	1	2,9	1	2,9	1	2,9	m
Seat plane angle	0 / 4 / 8		0 / 4 / 8		0 / 4 / 8		°
Effective seat depth	420	560	420	560	420	560	mm
Effective seat width	420	540	420	540	420	540	mm
Seat surface height at front	390	480	390	480	390	480	mm
Backrest angle	90	120	90	120	90	120	°
Backrest height	520	570	520	570	520	570	mm
Footrest to seat distance	380	550	380	550	380	550	mm
Leg rest to seat surface angle	10	75	10	75	10	75	°
Armrest to seat distance	220	350	220	350	220	350	mm
Turning radius ******	620		815		420		mm
Safe slope	6/10,5		6/10,5		6/10,5		° / %
Ground clearance *****	60		60		60		mm
Seat cushion weight	1,6	3,4	1,6	3,4	1,6	3,4	kg
Backrest cushion weight	1,5	2,5	1,5	2,5	1,5	2,5	kg
Leg rest weight	2	4,2	2	4,2	2	4,2	kg
Headrest weight	2,5	2,8	2,5	2,8	2,5	2,8	kg
Measured sound level	63,2		63,2		63,2		dB

* Specifications were measured with 9» and 14» wheels, powered legrests and in most extreme positions (for min. most stripped version and max. most extended version)

** Measured with powered legrest, lift/tilt module and powered backrest.

*** Measured with the powered adjustments in the neutral position. With the powered adjustments in the most extreme positions the specifications will be 9° / 15.8%.

**** The following will have a negative impact on the operating range: obstacles, rugged terrain, driving up or down slopes, temperatures below freezing point and frequent use of powered options.

***** Specifications mentioned are measured with the max user weight (160 kg).

****** Measured without legrest. The turning radius for the MWD with central legrest will be 26 cm more.

10.4. **Specifications batteries**

Battery capacity	68 Ah	78 Ah	Unit
Battery dimensions (w x d x h)	258 x 168 x 175	258 x 168 x 210	mm
Battery weight, set	43	48,4	kg
Maximum charging current	8	12	A
Maximum charging voltage	24	24	VDC
Connector type	CONTROLLER		
Insulation	Class 2 double insulated		

10.5. Electrical diagrams

CONTROLLER for the battery diagram
SERVICE for the electrical wiring diagram (see 5).