## Product Data M1

Overall width¹ 610-800 mm (24"-31.5")  Stowage length 820 mm (32")  Stowage length 610-800 mm (24"-31.5")  Stowage width 610-800 mm (24"-31.5")  Stowage height 620-670 mm (24.5"-26.5")  Weight including batteries (total mass) 143 kg (315 lb.)  Mass of the heaviest part 82 mc (14 kg (315 lb.)  Mass of the heaviest part 82 mc (15 kg (315 lb.)  Static stability forwards 9° (most), 9° (least)  Static stability backwards 9° (most), 9° (least)  Static stability sideways 9° (most), 9° (least)  Static stability sideways 9° (most), 9° (least)  Theoretical continuous driving range² 29 km (18 mi)  Theoretical manoeuvring distance range² 11 km (7 mi)  Dynamic stability backwards on ramp 10°  Dynamic stability forwards on ramp 10°  Dynamic stability sideways while turning suddenly Yes  Dynamic stability sideways while turning suddenly Yes  Dynamic stability backwards traversing step forwards 60 mm (2.4")  Dynamic stability forwards traversing forwards up a step 60 mm (2.4")  Dynamic stability forwards traversing forwards up a step 60 mm (2.4")  Dynamic stability forwards traversing forwards up a step 60 mm (2.4")  Travelling forwards at an oblique angle down a step 60 mm (2.4")  Maximum speed (forwards on horizontal) 8 km/h (5 mph)  Minimum braking distance from maximum speed (normal, reverse, and emergency)  Parking brakes, maximum slope backwards and forwards 15°, 15°  Seat plane angle  Effective seat depth 370-570 mm by 25 mm increments (14"-22" by 1" increments)  Seat to floor height including cushion (seat surface height at front edge) 470-520 mm by 25 mm increments (14"-22" by 1" increments)		
Stowage length  \$20 mm (22") Stowage width  \$20-670 mm (24"-31.5") Stowage height  \$20-670 mm (24"-31.5") Stowage height  \$20-670 mm (24"-31.5") Weight including batteries (total mass)  143 kg (315 lb.) Mass of the heaviest part  Backrest 2.7 kg (6 lb.) Static stability forwards  9° (most), 9° (least) Static stability backwards  \$5 most), 9° (least) Static stability backwards  \$9 (most), 9° (least)  Theoretical continuous driving range?  129 km (18 mi) Theoretical manoeuvring distance range?  11 km (7 mi)  Dynamic stability backwards on ramp  10°  Dynamic stability sideways on ramp  10° Dynamic stability sideways on ramp  10° Dynamic stability sideways while turning suddenly  Yes  Dynamic stability sideways while turning suddenly  Yes  Dynamic stability backwards traversing step forwards  Dynamic stability backwards traversing step forwards  Dynamic stability sideways while turning suddenly  Yes  Dynamic stability sideways while turning suddenly  Yes  Dynamic stability sideways write traversing step forwards  Dynamic stability backwards traversing step forwards  50 mm (2.4")  Dynamic stability forwards traversing forwards down a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  90 mm (2.4")  Dynamic stability forwards traversing forwards down a step  60 mm (2.4")  Dynamic stability forwards traversing forwards down a step  60 mm (2.4")  Dynamic stability forwards traversing forwards down a step  60 mm (2.4")  Maximum obstacle height that can be climbed and desended³  50 mm (2.4")  Maximum speed (forwards on horizontal)  Minimum braking distance from maximum speed (normal, reverse, and emergency)  Parking brakes, maximum slope backwards and forwards  15°, 15°  Seat plane angle  9°-50°  Effective seat depth  30-750 mm by 25 mm increments (14"-22" by 1" increments)  Seat to floor height including cushion (seat surface height at front edge)  Backrest angle  Backrest angle  80°-150° depending on seat depth  455-740 mm by 25 mm increments (18"-29" by 1" increments)  Backrest angle  Backres	Overall length	1090–1280 mm (43"–50.5")
Stowage height  Stowage height  Stowage height  Stowage height  Stowage height  Stowage height  Static stability attenties (total mass)  Static stability forwards  Static stability backwards  Static stability backwards  Static stability sideways  Primost, 9° (least)  Static stability sideways  Promatic stability sideways on ramp  Primostical manoeuvring distance range²  It km (7 mi)  Dynamic stability forwards on ramp  Dynamic stability forwards on ramp  Dynamic stability sideways while turning suddenly  Dynamic stability sideways while turning suddenly  Dynamic stability sideways while turning suddenly  Dynamic stability backwards traversing step backwards  So mm (2.4°)  Dynamic stability forwards traversing step backwards  So mm (2.4°)  Dynamic stability forwards traversing step stowards  So mm (2.4°)  Dynamic stability forwards traversing step backwards  So mm (2.4°)  Dynamic stability forwards traversing forwards own a step  So mm (2.4°)  Dynamic stability forwards traversing forwards own a step  So mm (2.4°)  Dynamic stability forwards traversing forwards own a step  So mm (2.4°)  Dynamic stability forwards traversing forwards own a step  So mm (2.4°)  Dynamic stability forwards traversing forwards own a step  So mm (2.4°)  Maximum speed (forwards on horizonta)  Raximum obsaled height that can be climbed and descended <sup>13</sup> Minimum braking distance from maximum speed (normal, reverse, and emergency)  Barking brakes, maximum slope backwards and forwards  15°, 15°  Seat plane angle  Prictive seat depth  370-570 mm by 25 mm increments (14°-22° by 1° increments)  Seat width  Seat of floor height including cushion (seat surface height at front edge)  Backrest angle  Backrest angle  Backrest height  455-740 mm by 25 mm increments (18°-29° by 1° increments)  Backrest height  455	Overall width <sup>1</sup>	610-800 mm (24"-31.5")
Stowage height  620-670 mm (24.5"-26.5")  Weight including batteries (total mass)  143 kg (315 lb.)  Mass of the heaviest part  8ackrest 2.7 kg (6 lb.)  Static stability forwards  9° (most), 9° (least)  Static stability backwards  9° (most), 9° (least)  76 (most), 9° (least)  77 (least)  78 (most), 9° (least)  78 (least)  78 (most), 9° (least)  78 (least)  78 (most), 9° (least)  78 (most), 9° (least)  78 (least)  78 (most), 9° (least)  78 (least)  79 (least)  70 (least)  7	Stowage length	820 mm (32")
Weight including batteries (total mass)  Mass of the heaviest part  Backress 1.7 kg (6 ib.)  Static stability forwards  9° (most), 9° (least)  Static stability packwards  Static stability backwards  Static stability sideways  9° (most), 9° (least)  Theoretical continuous driving range²  29 km (18 mi)  Theoretical manoeuvring distance range²  11 km (7 mi)  Dynamic stability backwards on ramp  10°  Dynamic stability sideways on ramp  10°  Dynamic stability sideways while turning suddenly  Dynamic stability forwards traversing step backwards  60 mm (2.4")  Dynamic stability forwards traversing step backwards  Dynamic stability forwards traversing forwards  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing step forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60 mm (2.4")  Dynamic stability forwards traversing forwards up a step  60	Stowage width	610-800 mm (24"-31.5")
Mass of the heaviest part  Static stability forwards  9° (most), 9° (least)  Static stability backwards  9° (most), 9° (least)  Static stability backwards  9° (most), 9° (least)  Static stability backwards  Static stability sideways  11 km (7 mi)  Dynamic stability forwards on ramp  10°  Dynamic stability sideways on ramp  10°  Dynamic stability sideways on ramp  10°  Dynamic stability sideways while turning suddenly  Dynamic stability sideways while turning suddenly  Dynamic stability backwards traversing step forwards  Dynamic stability backwards traversing step forwards  60 mm (2.4°)  Dynamic stability backwards traversing step backwards  60 mm (2.4°)  Dynamic stability backwards traversing step backwards  60 mm (2.4°)  Dynamic stability forwards traversing forwards up a step  Dynamic stability forwards traversing	Stowage height	620-670 mm (24.5"-26.5")
Mass of the heaviest part  Static stability forwards  9° (most), 9° (least)  Static stability backwards  9° (most), 9° (least)  Static stability backwards  9° (most), 9° (least)  Static stability backwards  Static stability sideways  11 km (7 mi)  Dynamic stability forwards on ramp  10°  Dynamic stability sideways on ramp  10°  Dynamic stability sideways on ramp  10°  Dynamic stability sideways while turning suddenly  Dynamic stability sideways while turning suddenly  Dynamic stability backwards traversing step forwards  Dynamic stability backwards traversing step forwards  60 mm (2.4°)  Dynamic stability backwards traversing step backwards  60 mm (2.4°)  Dynamic stability backwards traversing step backwards  60 mm (2.4°)  Dynamic stability forwards traversing forwards up a step  Dynamic stability forwards traversing	Weight including batteries (total mass)	143 kg (315 lb.)
Static stability forwards  Static stability backwards  Static stability sideways  Permotical continuous driving range <sup>2</sup> Theoretical continuous driving range <sup>2</sup> Theoretical manoeuvring distance range <sup>2</sup> Dynamic stability backwards on ramp  Dynamic stability backwards on ramp  Dynamic stability sideways on ramp  Dynamic stability sideways on ramp  Dynamic stability sideways while turning suddenly  Dynamic stability sideways while turning suddenly  Dynamic stability backwards traversing step forwards  Dynamic stability backwards traversing step forwards  Dynamic stability forwards traversing step backwards  Dynamic stability forwards traversing forwards down a step  Dynamic stability forwards traversing forwards down a step  Oynamic stability forwards traversing forwards down a step  Maximum stability forwards traversing forwards down a step  Fravelling forwards at an oblique angle down a step  Maximum obstacle height that can be climbed and descended <sup>3</sup> Maximum speed (forwards on horizontal)  Minimum braking distance from maximum speed (normal, reverse, and emergency)  Parking brakes, maximum slope backwards and forwards  Seat plane angle  Ffective seat depth  Seat of loor height including cushion (seat surface height at front edge)  Backrest angle  Backrest angle  Backrest height  455-740 mm by 25 mm increments (14"-22" by 1" increments)  Seat suddh  Seat of loor height including cushion (seat surface height at front edge)  Backrest angle  Backrest height  455-740 mm by 25 mm increments (18"-29" by 1" increments)  Seat suddh  Seat of loor height including cushion (seat surface height at front edge)  Backrest angle  85°-110°  Backrest angle  80°-150° depending on seat depth  Armerst to seat distance  10°-100° mm (8"-11")  Front armrest-to-backrest distance  10°-100° mm (8"-11")  Front armrest-to-backrest distance  1140° mm (33")  Prove width  1140° mm (33")  Required doorway entry depth  1520° mm (60")	Mass of the heaviest part	Backrest 2.7 kg (6 lb.)
Static stability backwards  Static stability sideways  Po (most), 9° (least)  Theoretical continuous driving range²  29 km (18 mi)  Theoretical manoeuvring distance range²  11 km (7 mi)  Dynamic stability forwards on ramp  10°  Dynamic stability sideways on ramp  Dynamic stability sideways while turning suddenly  Dynamic stability sideways while turning suddenly  Dynamic stability backwards traversing step forwards  Dynamic stability backwards traversing step forwards  Dynamic stability backwards traversing step forwards  Dynamic stability backwards traversing forwards up a step  Dynamic stability forwards traversing forwards up a step  Dynamic stability forwards traversing forwards down a step  60 mm (2.4")  Dynamic stability forwards traversing forwards down a step  60 mm (2.4")  Travelling forwards at an oblique angle down a step  60 mm (2.4")  Travelling forwards at an oblique angle down a step  60 mm (2.4")  Maximum obstacle height that can be climbed and descended³  So mm (2")  Minimum braking distance from maximum speed (normal, reverse, and emergency)  Minimum braking distance from maximum speed (normal, reverse, and emergency)  Effective seat depth  Seat plane angle  15°, 15°  Seat plane angle  O'-50°  Effective seat depth  370-570 mm by 25 mm increments (14"-22" by 1" increments)  Seat to floor height including cushion (seat surface height at front edge)  Backrest height  48'-5-70 mm by 25 mm increments (18"-20" by 1" increments)  Backrest height  48'-5-70 mm by 25 mm increments (18"-29" by 1" increments)  Footrest to seat distance  230-455 mm (9"-18")  Leg to seat surface angle  Minimum turning diameter  430-450 mm (8"-11")  Front armrest-to-backrest distance  0  Minimum turning diameter  1340 mm (53")  Front armrest-to-backrest distance  Minimum turning diameter  1340 mm (63")  Front armrest whit user weight  Required dornway entry depth	Static stability forwards	
Static stability sideways Theoretical continuous driving range² 29 km (18 m) Theoretical ananoeuvring distance range² 11 km (7 m) Dynamic stability backwards on ramp 10° Dynamic stability sideways on ramp 10° Dynamic stability sideways on ramp Dynamic stability sideways on ramp Dynamic stability sideways while turning suddenly Ves Dynamic stability sideways while turning suddenly Dynamic stability backwards traversing step forwards 60 mm (2.4") Dynamic stability backwards traversing step forwards 60 mm (2.4") Dynamic stability backwards traversing step sources Dynamic stability forwards traversing step sources 00 mm (2.4") Dynamic stability forwards traversing forwards up a step 00 mm (2.4") Dynamic stability forwards traversing forwards up a step 00 mm (2.4") Dynamic stability forwards traversing forwards down a step 00 mm (2.4") Travelling forwards at an oblique angle down a step 00 mm (2.4") Maximum speed (forwards on horizontal) Maximum speed (forwards on horizontal) Minimum braking distance from maximum speed (normal, reverse, and emergency) Parking brakes, maximum slope backwards and forwards 15°, 15° Seat plane angle 0°-50° Fiffective seat depth 370-570 mm by 25 mm increments (14"-22" by 1" increments) Seat width 355-560 mm by 50 mm increments (14"-22" by 1" increments) Seat width 56at to floor height including cushion (seat surface height at front edge) Backrest angle 85°-110° Backrest angle 85°-110° Backrest angle 85°-110° Backrest angle 85°-110° Backrest angle 875-740 mm by 25 mm increments (18"-29" by 1" increments) Footrast to seat distance 230-455 mm (9"-18") Eeg to seat distance (armrest height) 200-290 mm (8"-11") Front armrest-to-backrest distance 0 Minimum turning diameter 1940 mm (53") Front armrest-to-backrest distance 0 Minimum turning diameter 1940 mm (53") Front armrest-to-backrest distance 1940 mm (53") Front armrest-to-backrest distance 1940 mm (63") Required width of angled corridor 1520 mm (60")	-	
Theoretical continuous driving range <sup>2</sup> 29 km (18 mi) Theoretical manoeuvring distance range <sup>2</sup> 11 km (7 mi) Dynamic stability backwards on ramp 10° Dynamic stability forwards on ramp 10° Dynamic stability sideways on ramp 10° Dynamic stability sideways on ramp 10° Dynamic stability sideways on ramp 10° Dynamic stability backwards traversing step forwards 60 mm (2.4") Dynamic stability backwards traversing step forwards 60 mm (2.4") Dynamic stability backwards traversing step backwards Dynamic stability forwards traversing forwards up a step 00 mm (2.4") Dynamic stability forwards traversing forwards up a step 00 mm (2.4") Dynamic stability forwards traversing forwards down a step 60 mm (2.4") Travelling forwards at an oblique angle down a step 60 mm (2.4") Maximum obstacle height that can be climbed and descended <sup>3</sup> 50 mm (2") Maximum speed (forwards on horizontal) Minimum braking distance from maximum speed (normal, reverse, and emergency) Parking brakes, maximum slope backwards and forwards 15°, 15° Seat plane angle 60°-50° Effective seat depth 370-570 mm by 25 mm increments (14"-22" by 1" increments) Seat width 370-570 mm by 25 mm increments (14"-22" by 1" increments) Seat width 385-560 mm by 50 mm increments (14"-22" by 1" increments) Seat width 455-740 mm by 25 mm increments (18"-20" by 1" increments) Backrest height 455-740 mm by 25 mm increments (18"-20" by 1" increments) Backrest height 455-740 mm by 25 mm increments (18"-20" by 1" increments) Foot test to seat distance (armrest height) 200-290 mm (8"-11") Front armrest-to-backrest distance 0 Minimum traving diameter 1340 mm (53") Ground clearance with user weight 8equired width of angled corridor 1210 mm (48") Required width of angled corridor 1520 mm (60")		9° (most), 9° (least)
Theoretical manoeuvring distance range²		
Dynamic stability backwards on ramp Dynamic stability forwards on ramp Dynamic stability sideways on ramp Dynamic stability sideways while turning suddenly Dynamic stability sideways while turning suddenly Dynamic stability backwards traversing step forwards Dynamic stability backwards traversing step backwards Bynamic stability backwards traversing step backwards Bynamic stability backwards traversing forwards up a step Dynamic stability forwards traversing forwards up a step Dynamic stability forwards traversing forwards down a step Bynamic stability forwards traversing step backwards down a step Bynamic stability forwards traversing step backwards down a step Bynamic stability forwards traversing step bynamic stability forwards down a step Bynamic stability forwards traversing forwards Bynamic stability forwards and forwards Bynamic stability forwards traversing forwards down a step Byn		11 km (7 mi)
Dynamic stability forwards on ramp Dynamic stability sideways on ramp Dynamic stability sideways while turning suddenly Dynamic stability backwards traversing step forwards Opnamic stability backwards traversing step forwards Opnamic stability backwards traversing step backwards Dynamic stability backwards traversing forwards up a step Opnamic stability forwards traversing forwards up a step Opnamic stability forwards traversing forwards up a step Opnamic stability forwards traversing forwards down a step Opnamic stability forwards an oblique angle down a step Opnamic stability forwards an oblique angle down a step Opnamic stability forwards and be climbed and descended³ Opnamic stability forwards and be climbed and step Opnamic stability forwards traversing forwards on mr (2.4")  Maximum obstacle height that can be climbed and descended³ Opnamic stability forwards and be climbed and step Opnamic stability forwards and oblique angle down a step Opnamic stability forwards and oblique angle down a step Opnamic stability forwards (2.4")  Sakminum speed (forwards mr (2.4")  Sakminum speed (forma forwards mr (2.4")  Sakminum speed (forma forwards mr (2.4")  Sakminum speed (forma forma f		10°
Dynamic stability sideways on ramp Dynamic stability sideways while turning suddenly Pes Dynamic stability sideways while turning suddenly Pyes Dynamic stability backwards traversing step forwards Dynamic stability backwards traversing step backwards Dynamic stability forwards traversing forwards up a step Dynamic stability forwards traversing forwards down a step Omm (2.4") Dynamic stability forwards traversing forwards down a step Omm (2.4") Maximum obstacle height that can be climbed and descended³ So mm (2") Maximum speed (forwards on horizontal) Minimum braking distance from maximum speed (normal, reverse, and emergency) Parking brakes, maximum slope backwards and forwards 15°, 15° Seat plane angle Ffective seat depth 370-570 mm by 25 mm increments (14"-22" by 1" increments) Seat vidfth 355-560 mm by 50 mm increments (14"-22" by 2" increments) Seat to floor height including cushion (seat surface height at front edge) Backrest angle Backrest angle Backrest height 455-740 mm by 25 mm increments (18"-20" by 1" increments) Footrest to seat distance 230-455 mm (9"-18") Leg to seat surface angle 80°-150° depending on seat depth Armrest to seat distance 450-450 mm by 25 mm increments (18"-29" by 1" increments) Pront armrest-to-backrest distance 90°-50° Backrest theight 200-290 mm (8"-11") Front armrest-to-backrest distance 90°-150° depending on seat depth Armrest to-seat distance (armrest height) 1340 mm (53") Front armrest-to-backrest distance 90°-150° depending on seat depth 90°-15		10°
Dynamic stability sideways while turning suddenly         Yes           Dynamic stability backwards traversing step forwards         60 mm (2.4")           Dynamic stability backwards traversing step backwards         60 mm (2.4")           Dynamic stability forwards traversing forwards up a step         60 mm (2.4")           Dynamic stability forwards traversing forwards down a step         60 mm (2.4")           Travelling forwards at an oblique angle down a step         60 mm (2.4")           Maximum obstacle height that can be climbed and descended³         50 mm (2")           Maximum speed (forwards on horizontal)         8 km/h (5 mph)           Minimum braking distance from maximum speed (normal, reverse, and emergency)         1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)           Parking brakes, maximum slope backwards and forwards         15°, 15°           Seat plane angle         0°-50°           Effective seat depth         370-570 mm by 25 mm increments (14"-22" by 1" increments)           Seat width         355-560 mm by 50 mm increments (14"-22" by 2" increments)           Seat to floor height including cushion (seat surface height at front edge)         470-520 mm by 25 mm increments (18"-29" by 1" increments)           Backrest angle         85°-110°           Backrest height         455-740 mm by 25 mm increments (18"-29" by 1" increments)           Footrest to seat distance         200-290 mm (8"-11")		10°
Dynamic stability backwards traversing step forwards Dynamic stability backwards traversing step backwards Dynamic stability forwards traversing forwards up a step Dynamic stability forwards traversing forwards up a step Dynamic stability forwards traversing forwards down a step 60 mm (2.4") Travelling forwards at an oblique angle down a step 60 mm (2.4") Maximum obstacle height that can be climbed and descended³ 50 mm (2") Maximum speed (forwards on horizontal) Minimum braking distance from maximum speed (normal, reverse, and emergency) Parking brakes, maximum slope backwards and forwards 15°, 15° Seat plane angle Effective seat depth 370-570 mm by 25 mm increments (14"-22" by 1" increments) Seat width 355-560 mm by 50 mm increments (14"-22" by 2" increments) Seat to floor height including cushion (seat surface height at front edge) Backrest angle 85°-110° Backrest height 550-540 mm by 25 mm increments (18"-20" by 1" increments) Backrest height 950-750 mm by 25 mm increments (18"-20" by 1" increments) Backrest angle 85°-110° Backrest angle 85°-110° Backrest height 950-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm increments (18"-29" by 1" increments)  870-750 mm by 25 mm		Yes
Dynamic stability backwards traversing step backwards Dynamic stability forwards traversing forwards up a step Dynamic stability forwards traversing forwards down a step Dynamic stability forwards traversing forwards down a step Front armest to seat distance Maximum obstacle height that can be climbed and descended³ Dome (2.4") Maximum obstacle height that can be climbed and descended³ Dome (2.4") Maximum speed (forwards on horizontal) Minimum braking distance from maximum speed (normal, reverse, and emergency) Parking brakes, maximum slope backwards and forwards Seat plane angle  Ffective seat depth Seat width Seat width Seat width Seat to floor height including cushion (seat surface height at front edge) Backrest angle Backrest height A55-740 mm by 25 mm increments (18"-29" by 1" increments) Footrest to seat distance Seat urface angle Bo2-10° Bo2-290 mm (8"-11") Front armrest-to-backrest distance O Minimum turning diameter  Moximum speed (forwards on horizontal)  Required doorway entry depth  Moximum step backwards and descended³ Dom m (2.4")  Moximum		60 mm (2.4")
Dynamic stability forwards traversing forwards up a step Dynamic stability forwards traversing forwards down a step Fravelling forwards at an oblique angle down a step Maximum obstacle height that can be climbed and descended³ So mm (2.4") Maximum speed (forwards on horizontal) Minimum braking distance from maximum speed (normal, reverse, and emergency) Parking brakes, maximum slope backwards and forwards Seat plane angle Fffective seat depth Seat to floor height including cushion (seat surface height at front edge) Backrest angle Backrest height Footrest to seat distance Backrest angle Backrest oseat distance Backrest angle Backrest oseat distance Backrest oseat distan		
Dynamic stability forwards traversing forwards down a step  Fravelling forwards at an oblique angle down a step  Maximum obstacle height that can be climbed and descended³  So mm (2")  Maximum speed (forwards on horizontal)  Minimum braking distance from maximum speed (normal, reverse, and emergency)  Parking brakes, maximum slope backwards and forwards  Seat plane angle  O"-50°  Effective seat depth  370-570 mm by 25 mm increments (14"-22" by 1" increments)  Seat to floor height including cushion (seat surface height at front edge)  Backrest angle  Backrest height  455-740 mm by 25 mm increments (18"-20" by 1" increments)  Footrest to seat distance  230-455 mm (9"-18")  Leg to seat surface angle  Armrest to seat distance (armrest height)  Pront armrest-to-backrest distance  Minimum turning diameter  Pivot width  1340 mm (53")  Required doorway entry depth  1520 mm (60")		60 mm (2.4")
Travelling forwards at an oblique angle down a step  Maximum obstacle height that can be climbed and descended <sup>3</sup> Maximum speed (forwards on horizontal)  Maximum speed (forwards on horizontal)  Minimum braking distance from maximum speed (normal, reverse, and emergency)  Parking brakes, maximum slope backwards and forwards  Seat plane angle  O°-50°  Effective seat depth  370-570 mm by 25 mm increments (14"-22" by 1" increments)  Seat width  355-560 mm by 50 mm increments (14"-22" by 2" increments)  Seat to floor height including cushion (seat surface height at front edge)  Backrest angle  Backrest angle  Backrest height  Footrest to seat distance  Leg to seat distance (armrest height)  Front armrest to seat distance (armrest height)  Front armrest-to-backrest distance  Minimum turning diameter  Divot width  Ground clearance with user weight  Required width of angled corridor  Required doorway entry depth  60 mm (2.4")  80 mm (3")  Required doorway entry depth  150 mm (60")		
Maximum obstacle height that can be climbed and descended³  Maximum speed (forwards on horizontal)  Minimum braking distance from maximum speed (normal, reverse, and emergency)  Parking brakes, maximum slope backwards and forwards  Seat plane angle  O°-50°  Effective seat depth  370-570 mm by 25 mm increments (14"-22" by 1" increments)  Seat to floor height including cushion (seat surface height at front edge)  Backrest neight  Backrest height  Footrest to seat distance  Leg to seat surface angle  Armrest to seat distance (armrest height)  Front armrest-to-backrest distance  Minimum turning diameter  Pivot width  Required doorway entry depth  Maximum speed (forwards on horizontal)  8 km/h (5 mph)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 fe		60 mm (2.4")
Maximum speed (forwards on horizontal)  Minimum braking distance from maximum speed (normal, reverse, and emergency)  Parking brakes, maximum slope backwards and forwards  Seat plane angle  O°-50°  Effective seat depth  370-570 mm by 25 mm increments (14"-22" by 1" increments)  Seat width  Seat to floor height including cushion (seat surface height at front edge)  Backrest angle  Backrest angle  Backrest height  455-740 mm by 25 mm increments (18"-20" by 1" increments)  Footrest to seat distance  230-455 mm (9"-18")  Leg to seat surface angle  Armrest to seat distance (armrest height)  Armrest to seat distance (armrest height)  Front armrest-to-backrest distance  Minimum turning diameter  Divot width  Ground clearance with user weight  Required width of angled corridor  Required doorway entry depth  Assimptive seat of feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (6 feet)  1.5 m (6 feet)  1.5 m (6		50 mm (2")
Minimum braking distance from maximum speed (normal, reverse, and emergency)  Parking brakes, maximum slope backwards and forwards  Seat plane angle  Effective seat depth  Seat width  Seat of loor height including cushion (seat surface height at front edge)  Backrest angle  Backrest height  Backrest height  Leg to seat surface angle  Armrest to seat distance  Armrest to seat distance (armrest height)  Front armrest-to-backrest distance  Minimum turning diameter  Pivot width  Ground clearance with user weight  Required doorway entry depth  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)  1.5 m (5 feet), 1.5 m (6 feet		8 km/h (5 mph)
Parking brakes, maximum slope backwards and forwards  Seat plane angle  O°-50°  Effective seat depth  370-570 mm by 25 mm increments (14"-22" by 1" increments)  Seat width  355-560 mm by 50 mm increments (14"-22" by 2" increments)  Seat to floor height including cushion (seat surface height at front edge)  Backrest angle  85°-110°  Backrest height  455-740 mm by 25 mm increments (18"-29" by 1" increments)  Footrest to seat distance  230-455 mm (9"-18")  Leg to seat surface angle  Armrest to seat distance (armrest height)  Front armrest-to-backrest distance  0  Minimum turning diameter  1340 mm (53")  Fround clearance with user weight  Required width of angled corridor  Required doorway entry depth  1520 mm (60")		1.5 m (5 feet), 1.5 m (5 feet), 1.5 m (5 feet)
Effective seat depth 370–570 mm by 25 mm increments (14"–22" by 1" increments)  Seat width 355–560 mm by 50 mm increments (14"–22" by 2" increments)  Seat to floor height including cushion (seat surface height at front edge) 470–520 mm by 25 mm increments (18"–20" by 1" increments)  Backrest angle 85°–110°  Backrest height 455–740 mm by 25 mm increments (18"–29" by 1" increments)  Footrest to seat distance 230–455 mm (9"–18")  Leg to seat surface angle 80°–150° depending on seat depth  Armrest to seat distance (armrest height) 200–290 mm (8"–11")  Front armrest-to-backrest distance 0  Minimum turning diameter 1340 mm (53")  Pivot width 1340 mm (53")  Ground clearance with user weight 80 mm (3")  Required width of angled corridor 1210 mm (48")  Required doorway entry depth 1520 mm (60")	Parking brakes, maximum slope backwards and forwards	15°, 15°
Seat width  Seat to floor height including cushion (seat surface height at front edge)  Backrest angle  Backrest height  Footrest to seat distance  Leg to seat surface angle  Armrest to seat distance (armrest height)  Front armrest-to-backrest distance  Minimum turning diameter  Divot width  Ground clearance with user weight  Required doorway entry depth  355–560 mm by 50 mm increments (14"–22" by 2" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–29" by 1" increments)  470–520 mm by 25 mm increments (18"–29" by 1" increments)  470–520 mm by 25 mm increments (18"–29" by 1" increments)  470–520 mm by 25 mm increments (18"–29" by 1" increments)  470–520 mm by 25 mm increments (18"–29" by 1" increments)  470–520 mm by 25 mm increments (18"–29" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–520 mm by 25 mm increments (18"–20" by 1" increments)  470–420 mm by 25 mm increments (18"–20" by 1" increments)  470–420 mm by 25 mm increments (18"–20" by 1" increments)  470–420 mm by 25 mm increments (18"–20" by 1" increments)  470–420 mm by 25 mm increments (18"–20" by 1" increments)  470–420 mm by 25 mm increments (18"–20" by 1" increments)  470–420 mm by 25 mm increments (18"–	Seat plane angle	0°-50°
Seat to floor height including cushion (seat surface height at front edge)  Backrest angle  Backrest height  Backrest height  Footrest to seat distance  Leg to seat surface angle  Armrest to seat distance (armrest height)  Front armrest-to-backrest distance  Minimum turning diameter  Pivot width  Ground clearance with user weight  Required doorway entry depth  Arone Sanda Surface height at front edge)  470–520 mm by 25 mm increments (18"–29" by 1" increments)  85°–110°  85°–110°  80°–150° depending on seat depth  200–290 mm (8"–11")  Front armrest-to-backrest distance  0  Minimum (53")  1340 mm (53")  80 mm (3")  Required doorway entry depth	Effective seat depth	370–570 mm by 25 mm increments (14"–22" by 1" increments)
Backrest angle Backrest height 455-740 mm by 25 mm increments (18"-29" by 1" increments) Footrest to seat distance 230-455 mm (9"-18") Leg to seat surface angle 80°-150° depending on seat depth Armrest to seat distance (armrest height) 200-290 mm (8"-11") Front armrest-to-backrest distance 0 Minimum turning diameter 1340 mm (53") Pivot width 1340 mm (53") Ground clearance with user weight 80 mm (3") Required width of angled corridor 1210 mm (48") Required doorway entry depth 1520 mm (60")	Seat width	355–560 mm by 50 mm increments (14"–22" by 2" increments)
Backrest angle Backrest height 455-740 mm by 25 mm increments (18"-29" by 1" increments) Footrest to seat distance 230-455 mm (9"-18") Leg to seat surface angle 80°-150° depending on seat depth Armrest to seat distance (armrest height) 200-290 mm (8"-11") Front armrest-to-backrest distance 0 Minimum turning diameter 1340 mm (53") Pivot width 1340 mm (53") Ground clearance with user weight 80 mm (3") Required width of angled corridor 1210 mm (48") Required doorway entry depth 1520 mm (60")	Seat to floor height including cushion (seat surface height at front edge)	470–520 mm by 25 mm increments (18"–20" by 1" increments)
Footrest to seat distance Leg to seat surface angle Rormrest to seat distance (armrest height) Pront armrest-to-backrest distance Minimum turning diameter Privot width Bround clearance with user weight Required width of angled corridor Required doorway entry depth  230–455 mm (9"–18") 200–290 mm (8"–11") 200–290 mm (8"–11") 200–290 mm (8"–11") 200–290 mm (8"–11") 200–290 mm (8"–10")	Backrest angle	85°-110°
Leg to seat surface angle Armrest to seat distance (armrest height) 200–290 mm (8"–11") Front armrest-to-backrest distance 0 Minimum turning diameter 1340 mm (53") Pivot width 1340 mm (53") Ground clearance with user weight 80 mm (3") Required width of angled corridor 1210 mm (48") Required doorway entry depth 80°–150° depending on seat depth 200–290 mm (8"–11") 80 mm (53") 81 mm (53") 82 mm (60")	Backrest height	455–740 mm by 25 mm increments (18"–29" by 1" increments)
Armrest to seat distance (armrest height)  Front armrest-to-backrest distance  Minimum turning diameter  1340 mm (53")  Pivot width  1340 mm (53")  Ground clearance with user weight  80 mm (3")  Required width of angled corridor  Required doorway entry depth  200–290 mm (8"–11")  1340 mm (53")  1340 mm (53")  1340 mm (43")  1340 mm (60")	Footrest to seat distance	230-455 mm (9"-18")
Front armrest-to-backrest distance 0 Minimum turning diameter 1340 mm (53") Pivot width 1340 mm (53") Ground clearance with user weight 80 mm (3") Required width of angled corridor 1210 mm (48") Required doorway entry depth 1520 mm (60")	Leg to seat surface angle	80°-150° depending on seat depth
Minimum turning diameter 1340 mm (53")  Pivot width 1340 mm (53")  Ground clearance with user weight 80 mm (3")  Required width of angled corridor 1210 mm (48")  Required doorway entry depth 1520 mm (60")	Armrest to seat distance (armrest height)	200–290 mm (8"–11")
Pivot width 1340 mm (53")  Ground clearance with user weight 80 mm (3")  Required width of angled corridor 1210 mm (48")  Required doorway entry depth 1520 mm (60")	Front armrest-to-backrest distance	×
Ground clearance with user weight 80 mm (3")  Required width of angled corridor 1210 mm (48")  Required doorway entry depth 1520 mm (60")	8	1340 mm (53")
Required width of angled corridor 1210 mm (48") Required doorway entry depth 1520 mm (60")		` '
Required doorway entry depth 1520 mm (60")		
Required corridor width for side opening entering the corridor 1050 mm (41")		
	Required corridor width for side opening entering the corridor	1050 mm (41")

- 1. Based on the joystick module being in the forward position.
- 2. Actual driving range will vary based on driving conditions, battery conditions, and terrain.
- 3. The maximum obstacle height that can be climbed and descended is tested with maximum user weight.

The wheelchair conforms to the following standards:

- **a.** requirements and test methods for static, impact and fatigue strengths (ISO 7176-8:1998)
- **b.** power and control systems for electric wheelchairs requirements and test methods (ISO 7176-14:2008)
- **c.** climatic test in accordance with ISO 7176-9:2009
- **d.** requirements for resistance to ignition in accordance with ISO 7176-16:2012
- e. requirements and test methods for electromagnetic compatibility of electrically powered wheelchairs and scooters, and battery chargers (ISO 7176-21:2009)
- **f.** batteries and chargers for powered wheelchairs (7176-25:2013).
  - The above standards comprise both sitting and stand-up position for the wheelchair when applicable.



## Product Data M1

Wheels	
Tyre types for the drive wheels	Air/Solid
Drive wheel tyre dimensions	3.00-8"
Tyre types for the castor wheels	Solid
Castor wheel tyre dimensions	2.50-3" (180 x 65)
Recommended tyre pressure	250 kPa (35 psi)

Batteries	
Battery type and nominal voltage	Sealed lead acid, 2 x 12 V, group 34
Battery cycle life	450 cycles
Battery capacity (C20)	65 Ah

Miscellaneous	
Maximum user weight	136 kg (300 lb.)
Mass of test dummy used in test <sup>1</sup>	136 kg (300 lb.)
Occupant mass group	III
Overall height	980–1500 mm (38.5"–45.5")
Armrest length	260, 330, 355 mm (10", 13", 14")
Seat to floor height without cushion	410–460 mm by 25 mm increments (16"–18" by 1" increments)
Wheelchair class	В
Wheelchair group	Group 3
Drive electronics	R-net PM 120, VR2 70, VR2 90
Storage environmental specification	−40°C to 65°C (−40°F to 149°F), IPX4
Operation environmental specification	−25°C to 50°C (−13°F to 122°F), IPX4
Force necessary to operate joystick and key pad switches	2 N
Maximum obstacle height that can be climbed and descended (approach distance 50 cm [20"]) $^{2}$	75 mm (3")
Ability to climb rated slope	6°

- 1. The mass can vary depending on the test. For specific weight information, see the standard in question.
- 2. The maximum obstacle height that can be climbed and descended is tested with maximum user weight.

The specifications in this product data sheet are for the tested configuration. Please contact Permobil Customer Support for configuration options and details.

