

# TECHNICAL MANUAL



## **EASyS Modular S Pediatric Wheelchair**

- Models (seating system and chassis)
- Accessories for EASyS Modular S
- Accessories for A chassis Advantage and Q chassis

## EASyS Modular S ...

... is a pediatric wheelchair with short back and multidimensional adjustable headrest for children.

You can find further information about Advantage on the Internet: [www.thomashilfen.com](http://www.thomashilfen.com) or [www.thomashilfen.us](http://www.thomashilfen.us)

<b>Content</b>	<b>page</b>
MODELS	
EASyS Modular S seating system – size 1 and 2	3
A chassis Advantage – size 1 and 2	4
Q chassis.	4
MODELS standard features optional	
Upholstery set	5
Headrest, shell	6
Headrest, neck support	6
Headrest, adjustable	6
Headrest fitting	6
ACCESSORIES for EASyS Modular S seating system	
Foot straps	7
Calf strap	7
Footrest-tube upholstery	7
Abduction block	7
Grip rail	8
Grip rail, strong curved	8
Lateral trunk support with chest belt	8
Lateral trunk support	8
Tray	9
Frame padding	9
2-point pelvic belt with front pull	10
4-point pelvic belt with front pull	10
Crotch strap	10
Seat waistcoat	10
Butterfly/chest harness	11
Butterflychest harness, flexible	11
Seat waistcoat	11
H-belt, padded	11
Sun and rain cover with leg blanket	12
Sun and rain cover	12
Rain shield for sun and rain cover	12
Transparent cover with leg blanket	13
Sleeping bag (padded + woven fur)	13
Umbrella	13
ACCESSORIES for A chassis Advantage	
Vent tray	14
Pneumatic wheels	14
Tip assist	14
Transit tie down system	14
ACCESSORIES for Q chassis	
Adapter	15
Push bar	15



Modular S seating system	size 1	size 2
<b>Item code</b>	<b>6208/1</b>	<b>6408/1</b>
<b>Seat depth</b>	19 - 30 cm 7.5 - 11.8"	27 - 38 cm 10.6 - 15"
<b>Seat width</b>	19 - 26 cm 7.5 - 10.2"	27 - 35 cm 10.8 - 13.8"
<b>Back height</b>	28 - 42 cm 11 - 16.5"	34 - 53 cm 13.4 - 20.9"
<b>Lower leg length</b>	18.5 - 30.5 cm 7.3 - 12"	18.5 - 37 cm 7.3 - 14.6"
<b>Hip angle</b>	90° - 140°	90° - 140°
<b>Knee angle</b>	90° - 180°	90° - 180°
<b>Foot angle</b>	78° - 100°	78° - 100°
<b>Turning range of seat</b>	180°	180°
<b>Seat tilt-in-space</b> in driving direction (on A chassis Advantage)	-10° to +35°	-10° to +35°
<b>Seat tilt-in-space</b> face-to-face (on A chassis Advantage)	0° to +35°	0° to +35°
<b>Size of hip guide</b> (w x h)	23 x 12 cm 9.1 x 4.7"	29 x 11 cm 11.4 x 4.3"
<b>Size of footrest</b> (w x d)	28 x 18 cm 11 x 7.1"	32 x 21 cm 12.6 x 8.3"
<b>Weight</b> (seat)	8.8 kg / 19.8 lb	11 kg / 24.3 lb
<b>Max. user weight</b> (seat)	35 kg / 77.2 lb	40 kg / 88.2 lb
<b>Material</b>	upholstery: PES fabrics, 3-mesh- air-comfort-interlaced yarns (AGW) seat: aluminium tubular frame, plastic assembly units	

## Standard features

physiological pivots for the hip and knee joints; headrest options (selectable); breathable seat and back upholstery as well as side padding (selectable); additional foam pads for more sitting comfort; fire retardant fabrics; lateral body guides; tiltable footrest, height and angle adjustable; brackets for sun and rain cover; continuously adjustable back height, hip angle, seat depth and seat width; easily accessible adjustments without any tools needed

# CHASSIS



A chassis Advantage	size 1	size 2
<b>Item code</b> (swivel front wheels)	<b>6201/3</b>	<b>6401/3</b>
<b>Item code</b> (fixed front wheels)	<b>6200/3</b>	<b>6400/3</b>
<b>Seat tilt-in-space</b> in driving direction	-10° to +35°	-10° to +35°
<b>Seat tilt-in-space</b> face-to-face	0° to +35°	0° to +35°
<b>Turning range of seat</b>	180°	180° / 18.1"
<b>Seat height</b> with seat unit	47 cm / 18.5"	46 cm / 18.1"
<b>Push bar height</b>	71,5 - 117 cm / 28.1 - 46.1"	71,5 - 117 cm / 28.1 - 46.1"
<b>Turning circle</b>	83 cm / 32.7"	99 cm / 32.7"
<b>Overall dimensions</b> (l x w x h) only A chassis Advantage	99.5 x 59,5 x 96 cm 39.2 x 23.4 x 37.8"	107 x 69 x 108 cm 42.1 x 27.2 x 42.5"
<b>Folded dimensions</b> (l x w x h) only A chassis Advantage	81 x 59,5 x 38 cm 31.9 x 23.4 x 15"	81 x 69 x 38 cm 31.9 x 27.2 x 15"
<b>Overall dimensions</b> (l x w x h) with seat unit EASyS Modular S	99.5 x 59,5 x 114 cm 39.2 x 23.4 x 44.9"	107 x 69 x 120 cm 42.1 x 27.2 x 47.2"
<b>Folded dimensions</b> (l x w x h) with seat unit EASyS Modular S	85 x 59,5 x 60 cm 33.5 x 23.4 x 23.6"	81 x 69 x 69 cm 31.9 x 27.2 x 27.2"
<b>Wheel size swivel wheels</b> (front)	18 cm / 7.1"	18 cm / 7.1"
<b>Wheel size</b> (rear)	25 cm / 9.8"	25 cm / 9.8"
<b>Weight</b> (without seat unit)	9.8 kg / 21.6 lb	10.9 kg / 24 lb
<b>Max. load capacity</b> basket	5 kg / 11 lb	5 kg / 11 lb
<b>Max. load capacity</b> (incl. seat unit)	50 kg / 110.2 lb	55 kg / 121.3 lb
<b>Material</b>	aluminium tubular frame, powder-coated, rim: PP (polypropylene); tires: composition rubber	

## Standard features

**Chassis:** lightweight and stable aluminum chassis, foldable; adjustment of seat angle inclination as well as seat assembling and disassembling by central lever; included spring in rear frame; height adjustable push bar with biocompatible soft grip; foot brake; no-flat EVA-wheels; fixed front wheels or swivel front wheels incl. swivel lock; removable basket

**Seat unit:** see page 3

Q chassis	size 1	size 2
<b>Item code chassis</b>	<b>6666/6</b>	<b>6666/6</b>
<b>Seat tilt-in-space</b>	-7° to +31°	-7° to +31°
<b>Seat height</b> with seat unit	29 - 69 cm / 11.4 - 27.2"	29 - 69 cm / 11.4 - 27.2"
<b>Adapter height</b>	21 - 60 cm / 8.3 - 23.6"	21 - 60 cm / 8.3 - 23.6"
<b>Size of swivel wheels</b> (front)	100 mm / 3.9"	100 mm / 3.9"
<b>Size of swivel wheels</b> (rear with brake)	100 mm / 3.9"	100 mm / 3.9"
<b>Total dimensions</b> (only Q chassis) (l x w x h)	76 x 54 x 25 - 62 cm / 29.9 x 21.3 x 9.8 - 24.4"	76 x 54 x 25 - 62 cm / 29.9 x 21.3 x 9.8 - 24.4"
<b>Weight</b> (without seat unit)	13.5 kg / 29.8 lb	13.5 kg / 29.8 lb
<b>Max. load capacity</b>	50 kg / 110.2 lb	50 kg / 110.2 lb
<b>Material</b>	aluminium tubular frame, powder-coated, PU castors	

## Standard features

**Chassis:** comfortable indoor chassis, easy height and seat tilting by gas pressure spring (foot pressure release), 4 swivel castors, 2 of them lockable (rear)

**Seat unit:** see page 3

# UPHOLSTERY optional basic configuration



Upholstery set	size 1	size 2
Item code	6242	6442
Color	red	red



Upholstery set	size 1	size 2
Item code	6243	6443
Color	blue	blue



Upholstery set	size 1	size 2
Item code	6244	6444
Color	green	green



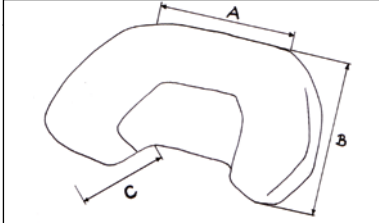
Upholstery set	size 1	size 2
Item code	6241	6441
Color	magenta	magenta



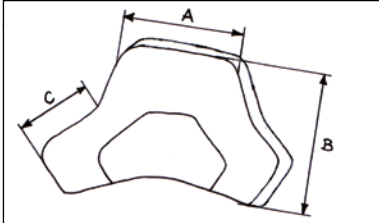
Upholstery set	size 1	size 2
Item code	6240	6440
Color	gray	gray

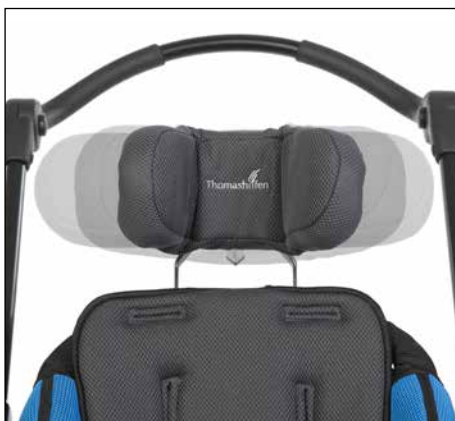
# HEADREST optional basic configuration



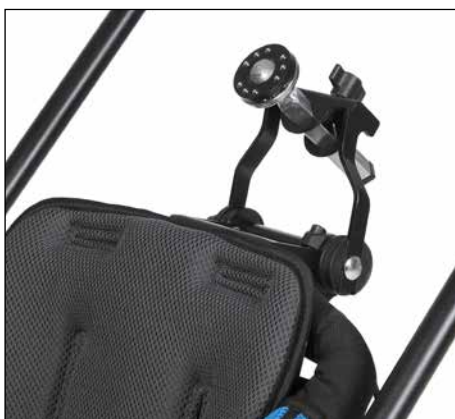
Headrest, shell	size 1	size 2
<b>Item code</b>	<b>6261/1</b>	<b>6261/1</b>
<b>Height headrest</b> (from upper edge of seat unit)	14 - 22 cm 5.5 - 8.7"	14 - 22 cm 5.5 - 8.7"
<b>Depth adjustment</b> (forward / backward)	+ 14 cm / - 4 cm + 5.5" / - 1.6"	+ 14 cm / - 4 cm + 5.5" / - 1.6"
		
<b>A</b>	16 cm / 6.3"	
<b>B</b>	15,5 cm / 6.1"	
<b>C</b>	13,5 cm / 5.3"	



Headrest, neck support	size 1	size 2
<b>Item code</b>	<b>6262/1</b>	<b>6262/1</b>
<b>Height headrest</b> (from upper edge of seat unit)	14 - 31 cm 5.5 - 12.2"	14 - 31 cm 5.5 - 12.2"
<b>Depth adjustment</b> (forward / backward)	+ 14 cm / - 6 cm + 5.5" / - 2.4"	+ 14 cm / - 6 cm + 5.5" / - 2.4"
		
<b>A</b>	12 cm / 4.7"	
<b>B</b>	14 cm / 5.5"	
<b>C</b>	9 cm / 3.5"	



Headrest, adjustable	size 1	size 2
<b>Item code</b>	<b>6267</b>	<b>6267</b>
<b>Height</b>	11 cm / 4.3"	11 cm / 4.3"
<b>Width</b> (ausgeklappt, gesamt)	37 cm / 14.6"	37 cm / 14.6"
<b>Width</b> (Mittelteil)	13 cm / 5.1"	13 cm / 5.1"
<b>Width</b> (je Seitenteil)	12 cm / 4.7"	12 cm / 4.7"
<b>Note</b>	not approved for use as a seat in motor vehicles	



Headrest fitting	size 1	size 2
<b>Item code</b>	<b>6868</b>	<b>6868</b>
<b>Note</b>	square bar with ball joint (for custom-made solutions)	



Foot straps	size 1	size 2
<b>Item code</b>	<b>6648/2</b>	<b>6648/2</b>
<b>Belt length</b>	87 cm / 34.3"	87 cm / 34.3"
<b>Color</b>	black	black



Calf strap	size 1	size 2
<b>Item code</b>	<b>6635/5</b>	<b>standard feature</b>
<b>Size (w x h)</b>	29 x 10 x 1 cm 11.4 x 3.9 x 0.4"	–
<b>Color</b>	black	black



Footrest-tube upholstery	size 1	size 2
<b>Item code</b>	<b>6230</b>	<b>6230</b>
<b>Size (w x h)</b>	7 x 15 cm / 2.8 x 5.9"	7 x 15 cm / 2.8 x 5.9"
<b>Color</b>	gray	gray



Abduction block	size 1	size 2
<b>Item code</b>	<b>6620/6</b>	<b>6720/6</b>
<b>Size (w x h x l)</b>	6 x 9 x 10 cm 2.4 x 3.5 x 3.9"	7 x 10,5 x 11 cm 2.8 x 4.1 x 4.3"
<b>Color</b>	gray	gray

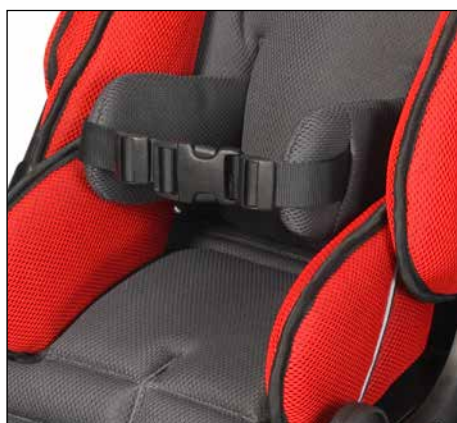
# ACCESSORIES



Grip rail	size 1	size 2
<b>Item code</b>	<b>6621/5</b>	<b>6721/5</b>
<b>Height to seat surface</b>	9 / 11,5 / 14 / 16,5 cm 3.5 / 4.5 / 5.5 / 6.5"	14 / 17 / 19 / 22 cm 5.5 / 6.7 / 7.5 / 8.7"
<b>Width (inside dimension)</b>	34 cm / 13.4"	38 cm / 13.4"
<b>Color</b>	gray	gray



Grip rail, strong curved	size 1
<b>Item code</b>	<b>6621/51</b>
<b>Height to seat surface</b>	10.5 / 13 / 15,5 / 18.5 cm 4.1 / 5.1 / 6.1 / 7.3"
<b>Width (inside dimension)</b>	34 cm / 13.4"
<b>Color</b>	gray



Lateral trunk support, with chest belt	size 1	size 2
<b>Item code</b>	<b>6633/2</b>	<b>6633/2</b>
<b>Supporting surface (h x d)</b>	10 x 20 cm / 3.9 x 7.9"	10 x 20 cm / 3.9 x 7.9"
<b>Color</b>	gray	gray



Lateral trunk support	size 1	size 2
<b>Item code</b>	<b>6634/6</b>	<b>6734/6</b>
<b>Size (h x d)</b>	15 x 13 cm / 5.9 x 5.1"	17 x 15 cm / 6.7 x 5.9"
<b>Color</b>	gray	gray





Tray	size 1	size 2
<b>Item code</b>	<b>6628/1</b>	<b>6728/1</b>
<b>Size (w x d)</b>	56 x 33.2 cm 5.9 x 8.7"	60 x 36.2 cm 23.6 x 14.3"
<b>Height to seat surface</b>	15 - 22 cm / 5.9 - 8.7"	15 - 22 cm / 5.9 - 8.7"
<b>Edge height (inside)</b>	2.5 cm / 1"	2.5 cm / 1"
<b>Angle adjustment</b>	approx. 27°	approx. 27°
<b>Depth adjustment range</b>	16 cm / 6.3"	19 cm / 7.5"
<b>Cut-out (w x d)</b>	41 x 14 cm 16.1 x 5.5"	45,5 x 17,5 cm 17.9 x 6.9"
<b>Material thickness</b>	8 mm / 0.3"	8 mm / 0.3"
<b>Color tray plate</b>	transparent / colorless	transparent / colorless



Frame padding	size 1	size 2
<b>Item code</b>	<b>6622/6</b>	<b>6622/6</b>
<b>Outer dimensions (w x h)</b>	(10 - 15) x 45 cm (3.9 - 5.9) x 17.7"	(10 - 15) x 45 cm (3.9 - 5.9) x 17.7"
<b>Color</b>	black	black

# ACCESSORIES



2-point pelvic belt with front pull	size 1	size 2
<b>Item code</b>	<b>8420/1</b>	<b>8470/1</b>
<b>Size of pad (B x H)</b>	15 x 5 cm / 5.9 x 2"	17 x 5 cm / 6.7 x 2"
<b>Belt length</b>	130 cm / 51.2"	130 cm / 51.2"
<b>Color</b>	black	black



4-point pelvic belt with front pull	size 1	size 2
<b>Item code</b>	<b>8421/1</b>	<b>8471/1</b>
<b>Size of pad (B x H)</b>	15 x 8 cm / 5.9 x 3.1"	17 x 8 cm / 6.7 x 3.1"
<b>Rear belt length</b>	120 cm / 47.2"	120 cm / 47.2"
<b>Front belt length</b>	50 cm / 19.7"	50 cm / 19.7"
<b>Color</b>	black	black



Crotch strap	size 1	size 2
<b>Item code</b>	<b>6341/1</b>	<b>6341/1</b>
<b>Belt length</b>	approx. 18 - 33 cm approx. 7.1 - 13"	approx. 18 - 33 cm approx. 7.1 - 13"
<b>Color</b>	black	black
<b>Note</b>	can only be used in combination with pelvic harnesses	



Seat waistcoat	size 1	size 2
<b>Item code</b>	<b>6614/6</b>	<b>6714/6</b>
<b>Rear upholstery width</b>	21 cm / 8.3"	26,5 cm / 8.3"
<b>Belt length</b>	45 cm / 17.7"	45 cm / 17.7"
<b>Color</b>	black	black



Butterfly/chest harness	size S	size M	size L
<b>Item code</b>	<b>6616/6</b>	<b>6617/6</b>	<b>6717/6</b>
<b>A</b>	18.5 cm / 7.3"	25 cm / 9.8"	25.5 cm / 10"
<b>B</b>	30 cm / 11.8"	33.5 cm / 13.2"	45 cm / 17.7"
<b>C</b>	16 cm / 6.3"	18.5 cm / 7.3"	23 cm / 9.1"
<b>D</b>	14 cm / 5.5"	17 cm / 6.7"	22 cm / 8.7"
<b>E</b>	11.5 cm / 4.5"	10.5 cm / 4.1"	11.5 cm / 4.5"
<b>F</b>	18 cm / 7.1"	21.5 cm / 8.5"	25 cm / 9.8"



Butterfly/chest harness, flexible	size S	size M
<b>Item code</b>	<b>6385/3</b>	<b>6585/3</b>
<b>A</b>	12 cm / 4.7"	18 cm / 7.1"
<b>B</b>	21 cm / 8.3"	33 cm / 13"
<b>C</b>	11.5 cm / 4.5"	15 cm / 5.9"
<b>D</b>	9.5 cm / 3.7"	18 cm / 7.1"
<b>E</b>	6 cm / 2.4"	10 cm / 3.9"
<b>F</b>	21 cm / 8.3"	27 cm / 10.6"



Seat waistcoat	size S	size M	size L
<b>Item code</b>	<b>6631/6</b>	<b>6632/6</b>	<b>6731/6</b>
<b>Upholstered surface (w x l)</b>	33 x 30 cm 13 x 11.8"	38 x 35 cm 15 x 13.8"	44 x 41 cm 17.3 x 16.1"
<b>Belt length, top</b>	65 cm / 25.6"	65 cm / 25.6"	65 cm / 25.6"
<b>Color</b>	black	black	black



H-belt, padded	size 1	size 2
<b>Item code</b>	<b>6629/7</b>	<b>6629/7</b>
<b>Size Shoulder pads (w x l)</b>	5 x 15 cm / 2 x 5.9"	5 x 15 cm / 2 x 5.9"
<b>Shoulder belt length</b>	60 cm / 23.6"	60 cm / 23.6"
<b>Pelvis belt length</b>	40 cm / 15.7"	40 cm / 15.7"
<b>Color</b>	black	black

# ACCESSORIES



Sun and rain cover with leg blanket	size 1	size 2
<b>Item code</b>	<b>6637/6</b>	<b>6637/6</b>
<b>Hood</b> (w x h, inner dimension)	43 x 51 cm 16.9 x 20.1"	43 x 51 cm 16.9 x 20.1"
<b>Hood pocket</b> (w x h x d)	24 x 28 x 5 cm 9.4 x 11 x 2"	24 x 28 x 5 cm 9.4 x 11 x 2"
<b>Leg blanket</b> (w x l)	43 x 100 cm 16.9 x 39.4"	43 x 100 cm 16.9 x 39.4"
<b>Color</b>	black / light gray	black / light gray
<b>Note</b>	suitable up to max. 71 cm / 28" vertex height	



Sun and rain cover	size 1	size 2
<b>Item code</b>	<b>6637/61</b>	<b>6637/61</b>
<b>Hood</b> (w x h, inner dimension)	43 x 51 cm 16.9 x 20.1"	43 x 51 cm 16.9 x 20.1"
<b>Hood pocket</b> (w x h x d)	24 x 28 x 5 cm 9.4 x 11 x 2"	24 x 28 x 5 cm 9.4 x 11 x 2"
<b>Color</b>	black / light gray	black / light gray
<b>Note</b>	suitable up to max. 71 cm / 28" vertex height	



Rain shield	size 1	size 2
<b>Item code</b>	<b>6739</b>	<b>6739</b>
<b>Hood</b> (w x h, inner dimension)	43 x 51 cm 16.9 x 20.1"	43 x 51 cm 16.9 x 20.1"
<b>Opening</b> (w x h)	33 x 34 cm 13 x 13.4"	33 x 34 cm 13 x 13.4"
<b>Leg blanket</b> (w x l)	60 x 120 cm 23.6 x 47.2"	60 x 120 cm 23.6 x 47.2"
<b>Color</b>	transparent	transparent
<b>Note</b>	can only be used together with sun and rain cover	



Transparent cover with leg blanket	size 1	size 2
<b>Item code</b>	<b>6638/1</b>	<b>6638/1</b>
<b>Hood</b> (w x h, inner dimension)	43 x 51 cm 16.9 x 20.1"	43 x 51 cm 16.9 x 20.1"
<b>Leg blanket</b> (w x l)	43 x 100 cm 16.9 x 39.4"	43 x 100 cm 16.9 x 39.4"
<b>Color</b>	transparent	transparent
<b>Note</b>	suitable up to max. 71 cm / 28" vertex height	



Umbrella	size 1	size 2
<b>Item code</b>	<b>6594</b>	<b>6594</b>
<b>Diameter Ø</b>	65 cm / 25.6"	65 cm / 25.6"
<b>Height</b>	75 cm / 28.3"	75 cm / 28.3"
<b>Color</b>	gray	gray



Sleeping bag, padded	size 1	size 2
<b>Item code</b>	<b>6619/5</b>	<b>6719/5</b>
<b>Bottom part of leg blanket</b> (w x l)	35 x (68 - 80) cm 13.8 x (26.8 - 31.5)"	40 x (90 - 104) cm 15.7 x (35.4 - 40.9)"
<b>Leg blanket</b> (lower leg length)	31 cm / 12.2"	43 cm / 16.9"
<b>Color</b>	black / light gray	black / light gray

Sleeping bag, woven fur	size 1	size 2
<b>Item code</b>	<b>6618/5</b>	<b>6718/5</b>
<b>Bottom part of leg blanket</b> (w x l)	35 x (68 - 80) cm 13.8 x (26.8 - 31.5)"	40 x (90 - 104) cm 15.7 x (35.4 - 40.9)"
<b>Leg blanket</b> (lower leg length)	31 cm / 12.2"	43 cm / 16.9"
<b>Color</b>	black / light gray	black / light gray

# ACCESSORIES – A chassis Advantage



Vent tray	size 1	size 2
<b>Item code</b>	<b>6294/1</b>	<b>6494/1</b>
<b>Size (w x h x l)</b>	38 x 3 x 39 cm 15 x 1.2 x 15.4"	43 x 3 x 39 cm 16.9 x 1.2 x 15.4"



Pneumatic wheels	
<b>Item code</b>	<b>6647/1</b>
<b>Wheel size swivel wheels (front)</b>	7,5"
<b>Wheel size (rear)</b>	10"



Tip assist	
<b>Item code</b>	<b>6750/2</b>
<b>Tread surface (w x l)</b>	4 x 8 cm / 1.6 x 3.1"
<b>Color</b>	anthracite

Transit tie down system	
<b>Item code</b>	<b>E67839/1</b>
<b>Note</b>	For further information please contact us. +49 4761 886-63 or -68

## ACCESSORIES – Q chassis



Adapter	size 1	size 2
<b>Item code</b>	<b>6295/1</b>	<b>6295/1</b>
<b>Note</b>	always required when using Advantage seat unit	



Push bar	size 1	size 2
<b>Item code</b>	<b>6660</b>	<b>6660</b>
<b>Height</b>	52 - 100 cm (angle approx. 90°)	52 - 100 cm (angle approx. 90°)
<b>Adjustment angle</b>	0 - 110°	0 - 110°
<b>Color</b>	black	black



Member of the International  
Support Association for the  
Rehabilitation of Children and Youths e.V.



**For customers worldwide** (except U.S.):

Thomas Hilfen für Körperbehinderte GmbH & Co. Medico KG  
Walkmühlenstraße 1 · 27432 Bremervörde · Germany  
Phone: +49 (0) 4761 886-63 or -68 · Fax: +49 (0) 4761 886-19  
info@thomashilfen.de · www.thomashilfen.com

**For customers in the U.S.:**

ExoMotion LLC, dba Thomashilfen  
7936 Occidental Ave S · Seattle WA 98108 · USA  
Phone: 866 870 2122 (toll free) · Fax: 866.870.0801 (toll free)  
info@thomashilfen.com · www.thomashilfen.us