

Compass™ XE Specifications*

Seat width	4" - 20"
Seat depth	14" - 20"
Overall chair width open	Seat width plus 8.5"
Overall chair depth	25" - 35" (without anti-tips and front riggings)
Overall chair height range	28" - 38"
Back angle adjustment	80° to 110° in 5° increments
Tubing outside diameter	1"
Weight of chair	19 lb.*/36 lb.***
Weight capacity	250 lb.
Limited warranty	Lifetime on frames and crossbraces

* 0° Angle

** 18" x 16", AT902, no rear wheels, no footrests, no anti-tippers, no wheel locks, no arms.

*** 18" x 16", AT902, 24SP, PNEU, 70NTAPER, seat upholstery, back upholstery, wheel locks, no arms.

Seat-to-floor-heights*

	3"	5"	6"	6"	8"
Fork	AT900	AT901	AT902	1259	AT903
A1103	15.25"	16.25"	n/a	n/a	n/a
3" fork	15.75"	16.75"			
	16.50"	17.50"			
	17"	18"			
A1105	16.25"	16.75"	17.25"		
5" fork	16.75"	17.25"	17.75"		
	17.25"	17.75"	18.25"		
	17.50"	18"	18.50"		
	18"	18.25"	18.75"		
	18.50"	18.50"	19"		
		19"	19.50"		
A1108	n/a	n/a	n/a	18"	19"
8" fork				18.50"	19.50"
				19"	20"
				19.25"	20.25"
				19.50"	20.50"
				19.75"	20.75"
				20.25"	21.25"
				20.75"	21.75"

ANSI/RESNA W/C19 sec 6.2 Presale Literature Notification - Compass XE

- A. Minimum turning radius 22.0".
Minimum turn-around width 38.5".
(16" W Medium Frame chair without footrests).
- B. Compass XE wheelchairs 17"D or deeper or longer than 1220 mm, exceeding the ADA definition of a common wheelchair and the minimum length requirements of lifts on public vehicles, and may therefore present particular difficulties accessing some vehicles.
- C. Total wheelchair mass = 40.0 lb (18.1 kg) - including front riggings, wheel locks, TRO brackets, wheelchair-anchored pelvic belt. Does not include seating.
- D. Average lateral dummy displacement = approximately 0.75" (19 mm).
- E. Overall Score = 15.
Overall Rating = B.
- F.
 - i. The Compass XE tested was sized to accommodate a 170 lb. test dummy. (Medium Frame, 16"W X 16"D, 60 degree front rigging, 24" composite wheels, 24" urethane tires, Invacare® Infinity® seat cushion, Invacare Personal Back™ 10 seat system, 6" composite/urethane casters.)
 - ii. The Compass XE tested was tied down using four tie-down brackets - 2 brackets located near the front of the seat frame and 2 brackets located on the rear of base frame.
 - iii. The Compass XE was tested with a 170 lb. test dummy.
 - iv. The Compass XE tested used a wheelchair-anchored pelvic belt and vehicle-anchored shoulder belt.
 - v. The Compass XE tested complies with the performance requirements of ANSI/RESNA W/C19 sec 5.3.
- G. For all types of vehicles, the Compass XE requires four SAE J2249-compliant tie-down strap assemblies for effective securement.
- H. When the TRRO or TRBKTS option is selected, the Compass XE provides a location for anchoring of an Invacare-provided pelvic belt. This belt has been tested in accordance with ANSI/RESNA W/C19.
- I. The wheelchair-anchored pelvic belt is supplied by Invacare.

Cane Options*

Sportster	10" - 14" or 12" - 16" adjustable	
10" with push handles	14" - 18" adjustable	N/A fixed
Straight with push handles	12" - 16" or 14" - 18" adjustable	18" or 20" fixed

Knee-to-heel*

Folding frames w/ seat rails min	max	
60°	15.25"	19"
60° MFX	11.50"	15.50"
70°	14"	19"
70° MFX	8.25"	14"
70° Tapered	16.25"	20.25"
Elevating	15.75"	21.75"
90°	5.75"	10.25"

* Range adjusts in 1" increments. Measurement taken from top of seat rail to back of footrest

Arm heights*

AT99N*	5" - 10"
AT55D*	5" - 13"
AT55F*	5" - 13"
DESKADJCV, FULLADJCV*	10" - 14"
TAD**	Low Range 6" - 10"
TAF**	High Range 8" - 14"
Cantilever	Non-locking 6" - 9"
	Locking 9" - 12"

* Range adjusts in 1" increments. ** Range adjusts in 0.5" increments.

All measurements from top of seat rail to top of armrest. On AT55D and AT55F, add 1" for upholstered arm pads. For less-seat-rail chairs, add 1.5" to above measurements (top of upper frame rail to top of armrest)



Yes, you can.™

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"Invacare says 'Yes, you can.' and I couldn't have said it better myself."

Arnold Palmer



Invacare®
Compass™
Series
Positioning
Wheelchairs

Invacare®
Compass™
Series
Custom Manual Positioning Wheelchairs



Yes, you can.™

Compass™ - Complex Positioning And Seating Situations

COMPASS SERIES ADULT POSITIONING WHEELCHAIRS



SOLARA

The Invacare® Solara® offers innovative weight-shift tilt-in-space technology for ease of tilt, along with Smart Adjustability, portability and proven reliability.

COMPASS SPT

The Invacare® Compass™ SPT™ combines a traditional tilt-in-space design with self propelling functionality, all in one wheelchair.

COMPASS XE

The Invacare® Compass™ XE is a true positioning extended frame folding wheelchair that integrates Smart Adjustability, lightweight portability and durability.

Invacare's Smart Adjustability incorporates streamlined frame designs that allow ample growability with innovative technologies for quick and easy adjustments. The Invacare® Compass™ Series adult manual wheelchairs provide the optimal solution for complex positioning and seating situations.

Solara® is built to last. The Solara is known for its durability of frame construction and gear tilt mechanism design. The new generation Solara retains this durability, and once again revolutionizes tilt-in-space wheelchair design with incredible simplicity, portability and ease of use and adjustment.



A user's weight may change between fitting and delivery. Solara offers 4" of frame width adjustability, allowing fine tune adjustment in the field.



Solara's proven gear teeth mechanisms and gear rack concept revolutionized the durability of tilt-in-space wheelchairs.



Thick aluminum flush or drop seat pans provide maximum durability. Predrilled for pommel installation.



Redesigned bolt-on wheel locks can be used with any wheel selection and can be switched from a push-to-lock to a pull-to-lock configuration in seconds.



Simply Better

Keep it simple. Too many nuts, bolts and moving parts on a wheelchair can take a great concept and make it too complex. Solara is a noticeable departure from other tilt-in-space designs. It's clean, simple and refined in both design and finish.

Weight Shift Tilt-in-Space

The weight shift design of the Solara eliminates tilting the user around a fixed pivot point. As tilt is initiated, the pivot point on the Solara moves nearly constantly along the gear rack to help maintain the position of the user's center of gravity. By keeping the user's center-of-gravity relatively constant, the falling sensation associated with pivot point tilts is greatly reduced. This diminishes the startle reflex from the falling sensation which can trigger extension, interrupting therapy and other daily activities.

Ease of Tilt

The Solara is easy to tilt – even when there is a small caregiver, customized seating system and larger user. When the caregiver pulls the tilt triggers on the Solara, the seat remains in place until the caregiver is ready to initiate the tilt. Applying a small amount of force to both push handles begins a smooth tilt operation that is both easier for the caregiver and also comfortable for the user.



Quick Set™ washers (left) snap onto the frame – preventing loss of cover washers (right), or anyone’s temper.



Redesigned tilt lock-out stops may be used to limit the tilt range on the low end, high end or both.



Front tie-down brackets are attached to seat frame and clearly marked.



Rear tie-down brackets and locking pins are easily accessible to caregivers.

Durability

Solara® is built to last! Unlike aluminum gear racks, the Solara’s steel gear rack and teeth won’t wear prematurely. The design uses a steel gear rack and multiple, cable-activated teeth for a secure hold in a tilted position.

The welded aluminum side frames of the Solara provide a solid base designed to withstand the demands of the toughest tilt-in-space wheelchair users.

And you can have confidence knowing that Invacare-designed wheelchairs pass rigorous performance testing and are backed by a lifetime warranty on frames and crossbraces.

Lightweight

The weight of a tilt-in-space wheelchair can make a dramatic impact on the life of the user and caregivers. The Solara is now the lightest weight adult tilt-in-space wheelchair in its class – a full 20 lb. lighter than the original Solara.

Self-propellers have not only a flared front end for foot placement, but also have a tilt-in-space frame that approaches the weight of an ultralightweight wheelchair.

Caregivers will find the Solara easier to maneuver and lift into a van or car than previous models.

Transport Tie Down Options

Transport Ready Option (TRO*) is available as an option on the Solara. In accordance with today’s ANSI/RESNA WC19 standard, Invacare has crash-tested the Solara with its popular Personal Back™ I/O back cushion and Infinity® seat cushion, but offers transport tie-down brackets on the chair for use with other seating systems as another option.**

*Invacare recommends that wheelchair users NOT be transported in vehicles of any kind while in wheelchairs. As of this date, the Department of Transportation has not approved any tie-down systems for transportation of a user while in a wheelchair in a moving vehicle of any type.

**The TRRO Transport Ready Option pick on the Solara order form includes transport brackets, a wheelchair-anchored pelvic belt and transport locking pins. The Personal Back and Infinity cushion must also be purchased with this option at an additional charge. No seating system is included in the base price of the wheelchair.



Recline mechanisms are now mounted on the outside of the back canes to provide room for off-the-shelf back hardware. 170° of recline is available with this option.



Vent tray brackets are able to adjust with the width of the frame.



The Finer Details

- Seat-to-floor heights starting as low as 12.5" accommodate standing pivot transfers and/or foot-propellers
- Exceptional ground clearance achieved even at lowest seat-to-floor heights
- Easy to read tilt angle indicator works even on an unlevel surface
- Flared front end provides more room for the user’s feet
- 350 lb. weight capacity available with heavy-duty option
- Telescoping rigging receivers (medium / large frames) are double-bolted for increased durability
- Hub lock option locks both wheels with one lever – foot operated, cane mounted or seat rail mounted – you choose
- Lift-off front rigging option makes it easier for a single caregiver to remove a foot box during transfers and provides a durable alternative to swingaway front riggings
- Adjustable depth, adjustable angle back canes are standard
- One axle plate accommodates all wheel options
- Adjustable width back rigidizing bar option available
- Contracture platform and bilateral contracture footrests available
- Anti-tippers included with base chair are designed to remain out of way while caregiver pushes the chair
- Stealth headrests and Invacare® Seating Options available from Stealth Products

Solara® Specifications

Frame Style	Tilt
Seat width	14" - 22"
Seat depth	15" - 22"
Back Height	20" and 24"
Overall chair width open	Seat width plus 8.5"
Adjustable Angle Back	0°, 10°, 20°, 30°
Tilt Range	-5° to 50°
Camber Angles	0°
Tubing outside diameter	1" Reg. Seat rail 1"
Weight capacity	250 lb.
Weight of chair	28.5 lb.*/41.5 lb.**
Limited Warranty	Lifetime on frames and Crossbraces

** Base chair weight without accessories

*** 18" x 18", FXDESK, BH20, FLDBACK, AT902, 12COM, A1577, PNEU, 70NTAPER, 1651, TLC, Anti-tippers, Wheel Locks

Knee-to-heel Range*

Front Rigging Type	min	max
60°	13.5"	17.5"
60° MFX	9"	12.5"
70°	13.5"	16.5"
70° MFX	5.75"	11.75"
70° Tapered	12.75"	16.25"
Elevating	14"	20"
90°	4.5"	7.5"

* Range adjusts in 1" increments. Measurement taken from top of seat rail to back of footrest

Seat-to-floor heights

Fork	5"	6"	6"	8"
	5SOFT, 5ALUM	AT902	1259	AT903, 1228
12"	16", 16.5"	16", 16.5", 17"	16", 16.5", 17.5", 18.5"	17", 17.5"
18"	14.5", 15", 15.5", 16"	16"	18.5", 19"	
20"	15", 15.5"	15.5", 16"	16", 16.5"	17"
22"	16", 16.5"	16", 16.5"	16", 16.5", 17"	17", 17.5"
24"	n/a	17"	17.5", 18"	17", 17.5", 18.5", 19"

Arm heights*

Adjustable-Height-Dual-Point	8.5" - 12.5"
	(conventional only, range adjusts in 1" increments)
T-Arm	10" - 16" (range adjusts in 1" increments)
	8" - 12" (range adjusts in 0.5" increments)

All measurements from top of seat rail to top of armrest.

ANSI/RESNA W/C19 sec 6.2 Presale Literature Notification - Solara

- A. Minimum turning radius 25".
Minimum turn-around width 38.68".
(16" W Medium Frame chair without footrests).
- B. Solara wheelchairs with Long Frame may be longer than 1220 mm, exceeding the ADA definition of a common wheelchair and the minimum length requirements of lifts on public vehicles, and may therefore present particular difficulties accessing some vehicles.
- C. Total wheelchair mass = 42.0 lb. (19.0 kg) - including front riggings, anti-tips and tie-down brackets. Does not include wheel locks, wheelchair-anchored pelvic belt and seating.
- D. Average lateral dummy displacement = approximately 0.51" (13 mm).
- E. Overall Score = 17.
Overall Rating = A.
- F.
 - i. The Solara tested was sized to accommodate a 170 lb. test dummy. (Medium Frame, 18"W x 18"D, 60 degree front rigging, 20" composite wheels, 24" urethane tires, aluminum seat pan cushion, Invacare® Personal Back™ 10 seat system, 6"x2" semi-pneumatic casters.)
 - ii. The Solara tested was tied down using four tie-down brackets - 2 brackets located near the front of the seat frame and 2 brackets located on the rear of base frame.
 - iii. The Solara was tested with a 170 lb. test dummy.
 - iv. The Solara tested used a wheelchair-anchored pelvic belt and vehicle-anchored shoulder belt.
 - v. The Solara tested complies with the performance requirements of ANSI/RESNA W/C19 sec 5.3.
- G. For all types of vehicles, the Solara requires four SAE J2249-compliant tie-down strap assemblies for effective securement.
- H. When the TRRO or TRBKTS option is selected, the Solara provides a location for anchoring of an Invacare-provided pelvic belt. This belt has been tested in accordance with ANSI/RESNA W/C19.
- I. The wheelchair-anchored pelvic belt is supplied by Invacare.

Traditional tilt-in-space wheelchair designs often force a choice between meeting independent mobility or positioning needs. Wheel access is difficult for hand propulsion, and seat-to-floor limitations inhibit foot propulsion. With the Invacare® Compass™ SPT™ Tilt-in-Space wheelchair, you no longer need to sacrifice independent mobility at the expense of providing stability and positioning with tilt-in-space. It's like owning two chairs in one – a self-propelling wheelchair and a tilt-in-space wheelchair.



The Compass SPT shown in front wheel configuration. Use 10-15° of tilt for postural support when self-propelling.



Dual gas cylinders provide controlled tilt that make the consumer feel comfortable and secure.



The Compass SPT offers a full 45° of tilt in front wheel configuration.



Invacare® Compass™ SPT™ – Exceptional Wheel Access and Super Low Seat-to-Floor

The Compass SPT can get super low to the ground with a seat-to-floor height starting at 13.5"* for those who foot propel. The SPT also provides exceptional drive wheel access through its front wheel configuration for hand propulsion, providing the consumer with several options of self-propulsion.

*13.5-inch seat-to-floor height achieved using an 18" drive wheel and 5" caster. Use special number C-030917115944 when ordering.

Invacare® Compass™ SPT™ –Versatility Beyond Belief

The versatility of the Compass SPT is remarkable. In front wheel configuration, the consumer can be tilted 10° to 15° for postural support while self-propelling. The SPT offers a full 45° of tilt at all seat-to-floor heights for postural needs, musculo-skeletal concerns, sitting tolerance/fatigue management, and functional requirements. The back can be adjusted from 90° to 120° in 10° increments to meet needs which may include positioning for kyphotic posture, hip range-of-motion limitations, trunk balance, vision, or even swallowing. For dependent mobility or caregiver needs, the Compass SPT can be converted to a rear wheel configuration tilt-in-space wheelchair without requiring additional parts.



Quick Set™ washer (left) snaps onto the frame – preventing loss of cover washers (right), or anyone's temper.



Newly designed adjustable angle footplate provides a positive lock for dorsi or planar flexion.



Discreet tilt trigger lock-out levers.



Invacare® Compass™ SPT™ – Balanced and Controlled Tilt

Locating the pivot point closer to the consumer's center of gravity provides a well-balanced tilt experience, making it easier for the caregiver and less startling for the consumer. Dual gas cylinders control the tilt, allowing the consumer sitting in the wheelchair to feel more secure and comfortable during the process.

Invacare Compass SPT – Attention To Detail

- Pin and saddle style front riggings offered to be compatible with other self-propelling manual wheelchairs
- Exclusive Quick Set™ washers snap onto frame anywhere frequent adjustments might occur
- Discreet tilt trigger lock-out levers help prevent people from accidentally disengaging the tilt mechanisms
- Fold-down back and quick-release wheel option allow for easier transportability
- Newly designed adjustable angle footplates have a dual attachment point for increased durability and a positive locking mechanism for dorsi and planar flexion adjustment
- Adjustable angle stroller handle option offered for easier dependent propulsion
- Depth adjustable frame –3 different seat rail lengths available with at least 3" of adjustment on each frame
- 250 lb. weight capacity

Compass™ SPT™ Specifications

Frame style	Tilt
Seat width	14" - 22"
Seat depth	15" - 22"
Overall chair width	22.5"-30.5" (Seat width plus 8.50")
Overall chair length	33"-39" (without anti-tippers and front rigging)
Overall chair height range	35.5" - 39.5"
Back angle adjustment	90° to 120° in 10° increments
Tubing outside diameter	1"
Tilt range	0° - 45°
Weight of chair	35 lb.* / 61 lb.**
Weight capacity	250 lb.

Limited warranty Lifetime on frames and crossbraces

*18"x18", AT902, no rear wheels, no footrests, no seat pan, no back upholstery, spreader bar, no anti-tippers, no wheel locks, no arms.
 **18"x18", AT902, 22COM/Urethane, PHW93/AT5543, seat pan, back upholstery, spreader bar, anti-tippers, wheel locks, no arms.

Seat-to-floor heights

Wheel size	5" Casters	6" Casters	6" x 2" Casters	8" Casters
18"	13.5"***			
20"		14.5", 16.5"	16.5"	16.5"
22"		15.5"	15.5", 17.5"	17.5"
24"		16.5"	16.5"	16.5", 18.5"

***13.5" seat-to-floor height only available using specials number C-030917115944

Knee-to-heel*

Range 13.5" - 21.5"

**Footplate height adjusts in 1" increments. Measurement taken from top of seat rail to back of footrests.

Arm heights*** (range adjusts in 1" increments)

Adjustable height dual point 8.5" - 12.5" conventional only

T-Arms Low Range: 8" - 12"
High Range: 10" - 16"

***Measurement taken from top of seat rail to top of armrest

Back cane options

Fixed height 20"

The Invacare® Compass™ XE folding extended frame wheelchair is designed with true positioning in mind, not as an afterthought. Navigating through the toughest positioning needs can often put your business in a tough situation – especially in terms of adjustment and durability. The Compass XE has your solution by offering easy growth adjustability, lightweight portability, and long-term durability to help you navigate your way to providing successful positioning.



Adjustable angle brackets allow for 30° of adjustment.



Quick Set™ washers (left) snap onto frame - preventing loss of cove washers (right), or anyone's temper.



Bolt-on seat rails save time and cost on depth adjustment.



Full range of fine-tune axle adjustment.



Positioning

For adult-sized users who need growth or space to accommodate moderate to complex seating, XE is an ideal choice. It offers a package of positioning features not found on other chairs in its class.

- Adjustable angle back brackets offer 30° of adjustment to meet needs including hip range-of-motion limitations, trunk balance, swallowing, vision and even kyphotic posture.
- Invacare Quick Set™ washers snap onto frame replacing cove washers in key adjustment locations, simplifying and reducing adjustment time – an important provider savings.
- Bolt-on seat rails allow the Compass XE to be used with sling seat without sacrificing depth adjustability. Seat rails and sling upholstery may be unbolted from crossbraces and replaced with longer seat rails – again, reducing time and cost involved in adjusting chair for growth.
- Full range of fine-tune axle adjustment is an important feature of the Compass XE. Over four inches of adjustment starting at the front edge of the back canes allows the axle position to be moved into a position relative to the position of the seating system. The axle position can also be fine-tuned with different positions every 3/8" throughout the adjustment range.
- Up to 170° of recline available when the recliner option is chosen. The recline option may reduce the risk of pressure sores, increase comfort and sitting tolerance, assist with weight shift, aid in transfers and assist with activities of daily living.



Recessed head tube bolts prevent foot-propellers from scraping their legs.



Front transport tie-down brackets are clearly marked.*



Rear tie-down brackets are easily accessible for caregivers.*



Wheelchair-anchored pelvic belt.



Rear tie-down brackets are easily accessible for caregivers.*



Self-Propulsion

The Compass™ XE is different than other types of ultra lightweight wheelchairs for self-propellers.

- Seat-to-floor heights starting at 13" allow consumers to get their feet on the ground and maintain independent mobility. Higher seat-to-floor heights make it an ideal design for taller users.
- Recessed head tube bolts eliminate the nuts and bolts on the inside of the side frames found on other ultra lightweight wheelchair designs. Foot-propellers will avoid scraping their legs on head tube connections.

Portability

The Compass XE has also been designed to meet the needs of growing adolescents who require lightweight portability.

- Ultra lightweight design balances adjustability and weight to accommodate these two very important needs. The chair folds tight for storage in the trunk or back seat of a car or van.
- Transport tie-down options: The Compass XE meets today's ANSI/RESNA W/C19 Vol. I Section 19.5.3 Frontal Impact Test.*

Durability

With your most active wheelchair users, more bolted connections on a wheelchair often equate to more maintenance and long-term durability issues. The Compass XE is designed to minimize these issues.

- One-piece side frames with increased spacing between the top and bottom tubes reduce the number of bolted connections found on multi-piece side frame folders, improving the durability.
- Aluminum-reinforced head tubes lock head tube bolts into place, preventing loosening and costly side frame replacement. The head tubes endured Invacare's stringent product design testing and remained solid and stable throughout the tests.
- Improved cross links have been strengthened to endure many years of folding.

*This wheelchair conforms to the requirements of ANSI/RESNA WC/19 vol. I – section 19.5.3 (Frontal Impact Test), as tested with the Invacare® Personal Back™ 10 back cushion and Infinity® seat cushion. Invacare has not performed testing with any other seating system. Invacare recommends that wheelchair users NOT be transported in vehicles of any kind while in wheelchairs. As of this date, the Department of Transportation has not approved any tie-down system for transportation of a user while in a wheelchair in a moving vehicle of any type. See each product's sell sheet for the ANSI/RESNA WC/19 sec. 6.2 Presale Literature Notification.