

Empulse R90



Compatibility Check for Rigid & Folding Wheelchairs

The Empulse R90 is compatible with rigid and folding wheelchairs with integrated or removable footrests. To ensure the compatibility of the Empulse R90 to your wheelchair, please follow the compatibility check guidance below. Please consider that there is an extended check for folding wheelchairs needed. ©2024

1 - Back Wheel Size - The R90 is compatible to wheelchairs with a backwheel size of:

- 24"
- 25"
- 26"

Please select your backwheel size on the order form.

2 - Camber - The R90 is compatible to wheelchairs with a camber of:

- 0°
- 1°
- 2°
- 3°

The R90 is compatible only with rigid chairs that have a straight axle. If the axle is not straight and has a "V" shape the R90 is not compatible.

Compatibility Check for Rigid & Folding Wheelchairs

3 - Rear Seat Height - Please check your combination of COG and back seat height in the matrix below and double-proof by measuring the distance from the seat sling to the center of the axle.

RSH (Rear Seat Height)	RSH (Rear Seat Height)	24" Rear Wheel (540 wheel)			25" Rear Wheel (559 wheel)			26" Rear Wheel (590 wheel)		
		Center of Gravity			Center of Gravity			Center of Gravity		
Inches	Millimeters	0-3" / (0-80mm)	3.5" / 92mm	4" / 104mm	0-3" / (0-80mm)	3.5" / 92mm	4" / 104mm	0-3" / (0-80mm)	3.5" / 92mm	4" / 104mm
13 -16	330 - 410	NO GO	NO GO	NO GO	NO GO	NO GO	NO GO	NO GO	NO GO	NO GO
16.5	420	GO	NO GO	NO GO	NO GO	NO GO	NO GO	NO GO	NO GO	NO GO
17	430	GO	GO	NO GO	GO	NO GO	NO GO	NO GO	NO GO	NO GO
17	440	GO	GO	NO GO	GO	NO GO	NO GO	NO GO	NO GO	NO GO
17.5	450	GO	GO	NO GO	GO	GO	NO GO	NO GO	NO GO	NO GO
18	460	GO	GO	GO	GO	GO	NO GO	GO	NO GO	NO GO
18.5	470	GO	GO	GO	GO	GO	GO	GO	GO	NO GO
19	480	GO	GO	GO	GO	GO	GO	GO	GO	NO GO
19.5	490	GO	GO	GO	GO	GO	GO	GO	GO	GO
20	500	GO	GO	GO	GO	GO	GO	GO	GO	GO
20.5	N/A	GO	GO	GO	GO	GO	GO	GO	GO	GO
21	N/A	GO	GO	GO	GO	GO	GO	GO	GO	GO
21.5	N/A	GO	GO	GO	GO	GO	GO	GO	GO	GO
22	N/A	GO	GO	GO	GO	GO	GO	GO	GO	GO

*Disclaimer: Please note that not all wheel sizes will be available in all regions.

To doublecheck you can also measure the distance from the middle of the axle to the seat sling of your wheelchair. The measured distance must be in the range mentioned below.

- FOR COG less or equal than 3"/76 mm 2.75"/70 mm min. center axle to seat sling gap
- FOR COG greater than 3"/76 mm 4.63"/118 mm min. center axle to seat sling gap

4 - General NoGo's - Please check if your wheelchair is equipped with any of the following parts as they create a NoGo

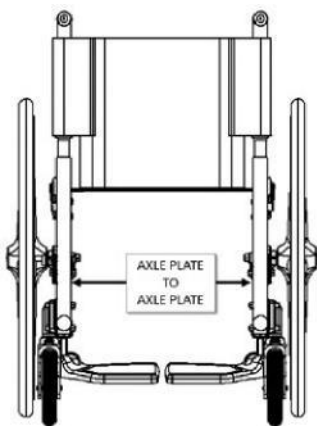
- Rear Suspension
- 4 Link Suspension
- One Arm Drive
- Please ensure enough space on the front frame of the wheelchair to attach the R90 control box mounting bracket (30 mm)

5 - Recommendations - The following items do not cause a Go or a NoGo, but we recommend following the guidance for optimal device performance without limitations.

- 3" & 4" castor wheels should not be combined with the R90
- It is recommended to use anti tips on the wheelchair combined with the Empulse R90

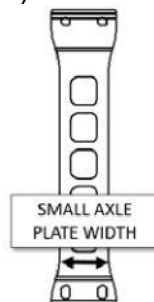
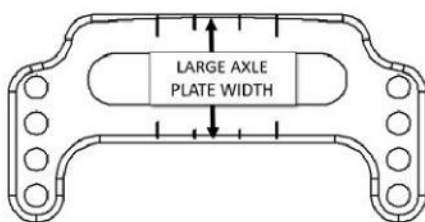
Extended Compatibility Check only for Folding Wheelchairs

6 - Folding Wheelchair width - For Folding Wheelchair frames please measure the distance from inside axle plate to inside axle plate and choose the correct size of folding axle on the order form. If the distance measured does not fit in the min to max measurements mentioned in the table below means that the R90 does not fit this specific wheelchair (NoGo).



AXLE PLATE TO AXLE PLATE WIDTH (in)	AXLE PLATE TO AXLE PLATE WIDTH (mm)	FOLDING AXLE ASY			
		X-SMALL	SMALL	MEDIUM	LARGE
12.0-13.0	300-330	x			
13.1-16.0	330-400		x		
16.1-18.0	400-450			x	
18.1-21.0	450-530				x

6 - Folding Wheelchair axle plate size - For Folding Wheelchair frames please measure the axle plate width as shown on the pictures below and choose the correct bracket size on the order form. If the distance measured does not fit in the min to max measurements mentioned in the table below means that the R90 does not fit this specific wheelchair (NoGo).



AXLE PLATE SIZE (in.)	AXLE PLATE SIZE (mm.)	AXLE PLATE ADAPTER		
		SMALL	MEDIUM	LARGE
1.0-1.5	25-38	x		
1.5-2.0	38-50		x	
2.0-2.25	50-60			x

Recommended Mounting Hardware By Wheelchair Model

Sunrise Medical is not responsible for the compatibility and alignment with competitor chairs and is not obligated to update compatibility information for competitor products. This guide provides recommendations for the required mounting hardware for specific wheelchairs, but it is essential to evaluate the chair's configuration to ensure full compatibility with the R90.

Rigid Wheelchairs								
Camber Tube Clamp Size	0.87" (22mm)	0.98" (25mm)	1.11" (28mm)	1.18" (30mm)	1.26" (32mm)	1.38" (35mm)	1.50" (38mm)	1.77" (45mm)
Sunrise Medical								
Nitrum					x			
5R					x			
Qri					x			
GP	<i>No-Go</i>							
Ti Lite								
CR1					x			
TRA					x			
Aero T					x			
ZR					x			
ZRA					x			
Aero Z					x			
TR					x			
Ki Mobility								
Ethos			x					
Rogue 2			x					
Rogue ALX			x					
Motion Composites								
Apex C					x			
Apex A					x			

Folding Wheelchairs

Axle Plate Adapter	Small Axle Plate (1.0" - 1.5" or 25mm - 38mm)	Medium Axle Plate (1.6" - 2" or 39mm-50mm)	Large Axle Plate (2.1" - 2.25" or 51mm-60mm)	
Sunrise Medical				
Q2 Lite	X			
QX	X			
Lxi	X			
Q2 HP		X		
Xenon		X		
Q2X		X		
LX				<i>No - Go</i>
M6				<i>No - Go</i>
Ti Lite				
2GX	X			
Aero X	X			
Ki Mobility				
Catalyst 5		X		
Catalyst 5Ti		X		
Catalyst 5Vx		X		
Catalyst 4		X		
Motion Composites				
Veloce	X			
Helio C2	X			
Helio A7	X			
Helio A6	X			