

Trinity series



Features across the range

- Innovative patented design
- Suits a wide range of medical equipment and applications
- Advanced braking system
- Fixed position soft-touch actuation pedal
- Available in 100, 125 and 150 mm wheel diameters
- Made in Australia

Innovative patented design

Trinity castors and Trinity EBC are designed in Australia and made under the following patents:

- USA patent 8205297 (12/663354)
- European patent 2164715
- Australian patent 2008258348
- International patent pending 20150266342

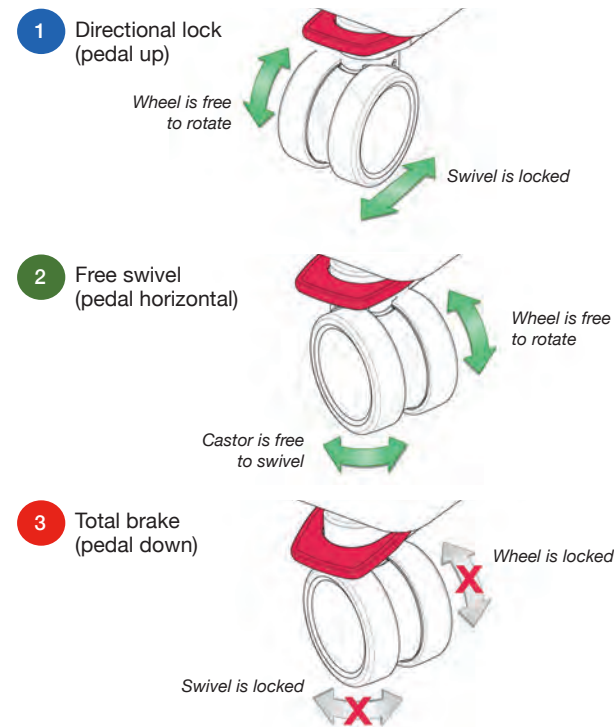
Three-in-one castors

Designed for patient transport, Trinity castors are renowned in the healthcare industry for their innovative three-in-one brake function, fixed brake pedal position and high dynamic load rating.

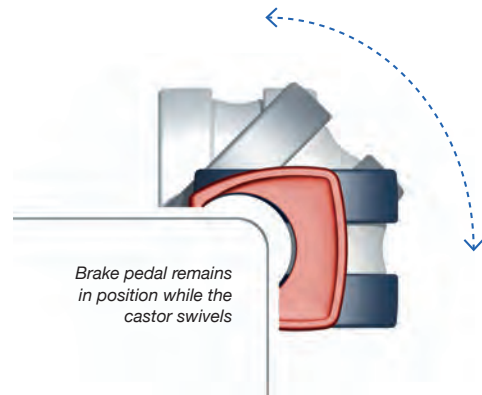
Configuration

Trinity castors are available in three wheel sizes—100, 125 and 150 mm—and four brake configurations:

- Complete brake (CB)—includes all three brake positions
- Total brake (TB)—includes TB and swivel
- Swivel (SW)—free movement castor with no pedal
- Blank castor (BL)—used to achieve bilateral braking. If used at the rear of equipment and combined with CB castors at the front, one activation bar can control all castors to achieve total brake, direction lock or free swivel.



Three-in-one brake pedal function



Fixed brake pedal position

A fixed brake pedal means that you can use the castor no matter where it's facing as the pedal will always be accessible. No more fishing under equipment to try to find the pedal.

Specifications

	Diameter (mm)	Max load (kg)	Height* (mm)	Turning radius (mm)
Swivel Swivel only	100	100	133	85
	125	125	161	110
	150	150	185	135
In-line pedal Pedal in-line with directional lock	100	100	133	85
	125	125	161	110
	150	150	185	135
90 degree pedal Pedal at 90 degree angle to directional lock	100	100	133	85
	125	125	161	110
	150	150	185	135

* Mount heights shown are for castors only. Fittings are additional—5 mm for washer, 14 mm for plate.

Trinity series fitting options

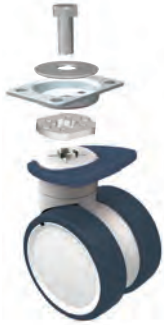
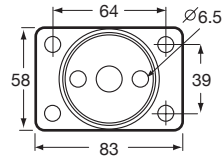


PLATE MOUNT SPFPLATEKIT

- Includes:
- SPM14X40 (bolt)
 - SPWSHFZDRILL (fitting washer)
 - SPFPLATE (top plate)

Only compatible with 100 mm castors at full load rating.



TUBE MOUNT

Add solid pintle adapter:

-AFR28Z(100) Fits 100 mm castors, 28 mm round stem²

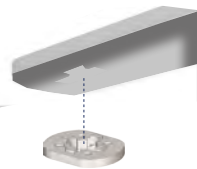
-AFR28Z(125150) Fits 125 mm & 150 mm castors, 28 mm round stem²

-AFR32Z(100) Fits 100 mm castors, 32 mm round stem³

-AFR32Z(125150) Fits 125 mm & 150 mm castors, 32 mm round stem³

WASHER MOUNT

Customer supplied M14 bolt and washer to ensure engagement into the castor of 30–38 mm (100) or 40–50 mm (125 and 150).



Laser cut mount
SPWSHFZLASER



Drill mount
SPWSHFZDRILL

Trinity three-in-one castor order codes

Castor series	Tyre material	Bearing	Size (mm)	Fork	Pedal	Colourway	Brake configuration	Fork design				
F	U Polyurethane	Q	100	F	0 In-line	C Cool grey	CB Complete brake	S Standard				
	A Conductive		125		9 90°	E Eggshell	TB Total brake	A Conductive				
			150				SW Swivel					
							BL Blank					
F	—	Q	—	F	—	—	—	—				

Trinity EBC (single castor) order codes

Castor series	Tyre material*	Bearing	Size (mm)	Fork	Pedal	Colourway	Brake configuration	Fork design*	Steering type ¹	Cable compatibility	Motion-sensing ¹	Water resistance
F	U Polyurethane	Q	100	P	0 In-line	C Cool grey	CB Complete brake	S Standard	I Intuitive	L Linak	M Yes	5 IPX5
	A Conductive		125		9 90°	E Eggshell	TB Total brake	A Conductive	U User specified	D Dewert	N No	6 IPX6
			150				BL Blank			T TiMotion		
F	—	Q	—	P	—	—	—	—	—	—	—	—

* Tyre material and fork design—polyurethane tyre (U) can only be matched with standard fork (S). Conductive tyre (A) can only be matched with conductive fork.

¹ Steering type and motion sensing—intuitive steering (I) can only be matched with motion sensing (M: Yes).

² Cross drill hole: distance from end—19 mm, diameter—8 mm.

³ Cross drill hole: distance from end—7 mm, diameter—6 mm.

Electronic braking castors (EBC)

Built on the innovation of Trinity three-in-one castors, Trinity electronic braking castors (EBC) feature automatic brakes, intuitive steering, and the control of brakes and steering from any castor foot pedal, handset or nurse panel.

Never forget the brakes again

Where medical castors are used for moving patients and specialised equipment frequently, forgetting to apply the brakes presents a higher risk of accidents, especially if the patient tries to alight, or when hospital equipment unexpectedly moves.

Trinity EBC helps prevent these kinds of accidents by automatically applying the brakes when it has been stationary for a programmed time (normally 60 seconds). When you want to unlock the brakes again, the control is always within easy reach—just flick up any of the four castor pedals, or press the button on the handset or nurse control panel.

Steer like you flip your smart-phone

Just like your smart-phone decides whether to flip its display from portrait to landscape based on your pattern of movement, Trinity EBC analyses how you move the bed or equipment, and intelligently decides when and how to engage or disengage the directional lock.

Control system

Trinity EBC is compatible with Dewert, TiMotion and Linak control systems. It is also fully customisable and can interface with customer-specific control systems. Pair an EBC set with the Fallshaw Control System to get the most out of Trinity EBC, or ask our engineers to help you retrofit EBC to your existing hospital bed system. Ask a Fallshaw representative for more information.

No power, no problem

In the unlikely event of a power cut, the castors can still be manually steered and locked through the pedals, just like a normal Trinity castor. This allows you to still use the bed normally.

Trinity EBC set

Trinity EBC can be ordered as a set. An EBC set consists of four castors—one motion sensing and conductive castor, and three standard castors.

Specifications

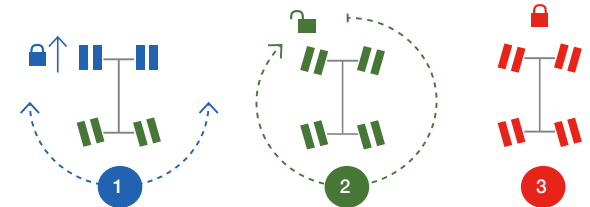
	100 mm wheel	125 mm wheel	150 mm wheel
Max load	100 kg	125 kg	150 kg
Mount height*	133 mm	161 mm	185 mm
Turning radius	85 mm	110 mm	135 mm
Standard fittings	<ul style="list-style-type: none"> • 32 mm pintle or 28 mm ISO pintle • Washer 		
Standard features	<ul style="list-style-type: none"> • IPX5 water resistance rating • Cool grey or eggshell colourway 		
Optional features	<ul style="list-style-type: none"> • Auto brake motion sensor • Intuitive steer motion sensor • Conductive (resistance < 10⁵ ohms) 		

* Add 5 mm for washer mount.



Trinity EBC can be used on a wide range of medical equipment, including hospital beds, mobile rehab robots and specialised surgical equipment.

How automatic braking and intuitive steering works








Purposeful movement in either direction engages the directional lock to the forward wheels, allowing the rear wheels to do the steering.

No movement for one second disengages the directional lock and allows free swivel movement to all four castors.




No movement for 60 seconds engages total brake on all four castors. This can be disengaged from the handset or by using any of the four pedals.



Trinity EBC control system

	EBCCONTROLU (For user-specified handsets) EBCCONTROLI (For Intuitive handset or panel)
EBC Controller	
	EBCCABLESET1.5 (Set of four 1.5 m cables)
Extension cable set	
	EBCCABLEY
Y cable	
	EBCBATTERY1
Battery	
	EBCPOWERAU (Australasian) EBCPOWEREU (European) EBCPOWERUK (UK) EBCPOWERUS (US)
Power supply	

User interface options

	EBCHANDSETU1 (User-specified, 1 button) EBCHANDSETU5 (User-specified, 5 button) EBCHANDSETI1 (Intuitive, 1 button) EBCHANDSETI6 (Intuitive, 6 button)
Handset	
	EBCPANELI1 (Intuitive, 1 button)
Nurse Panel	
	EBCINTERFACE (If using existing control panel)
Interface Box	

Trinity EBC set order codes

Castor Series	Size	Pedal configuration	Colourway	Brake configuration	Steering type	Cable compatibility	Water resistance
EBCSET	100 100 mm	0 In-line	C Cool grey	CB Complete brake	I Intuitive	L Linak	5 IPX5
	125 125 mm	9 90°	E Eggshell	TB Total brake	U User specified	D Dewert	6 IPX6
	150 150 mm					T TiMotion	
EBCSET	—	—	—	—	—	—	—

EBC Sets include one conductive and motion-sensing castor, and three standard castors.

Trinity EBC colour coded feature identification



- Blue—Intuitive steering
- Black—Motion sensing
- White—IPX6 water resistance
- Yellow—Conductive