

# 48mm Omni Wheel

The 48mm omni wheel is an omni multi-directional wheel and it can either roll like a normal wheel or roll laterally using the wheels along its circumference. The omni wheel provides the ability to move in any direction without the need of a traditional swivel mount. Each wheel acts independently to improve control and allows you to rotate and move sideways in confined spaces. Meanwhile, these wheels allow moving forward/backwards and rotation without changing its orientation.

The 48mm omni wheels are available in double plate. The omni wheels have two single plates, and each plate with four rollers.



## Benefits:

- Multidirectional movement
- Low maintenance
- Robust, durable and high impact
- Easier directional control and tracking
- Simple and stable mounting

## Applications:

- Robotics
- Passive wheels
- conveyor systems
- Ball transfer table alternatives
- Conveyor transfers pipe rollers and other inverted application

The omni wheels are ideal for use as a floor wheel and robot wheel that fixing to be connected for Axle Centre of the LEGO mindstorms NXT and servo motor which according to your individual needs.



LEGO NXT



TT Motor



Servo Motor



General Axle

## Usages:

The 48mm omni wheel is a conveyor skate wheel and these wheels make use of other applications, it allow for movement in multiple direction. The lightweight Omni-Wheel is ideal for carton flow storage and display racks.

Omni wheels can be used in power conveyor systems. You can mount them into different parts of your conveyor system, such as the conveyor itself or a transfer table.



## Couplers:



The cross axle is a free accessories that provided for the 48mm omni wheels. Using cross axle, omni wheel is to be connected to LEGO mindstorms NXT and it can be easily joined to LEGO axle.



The axle centre is to be connected to the servo motor and TT motor. The axle centre is a free accessories and the front is to be connected to the servo motor and it is reverse is to be connected to the TT motor. Meanwhile, axle centre to be mounted with screw.

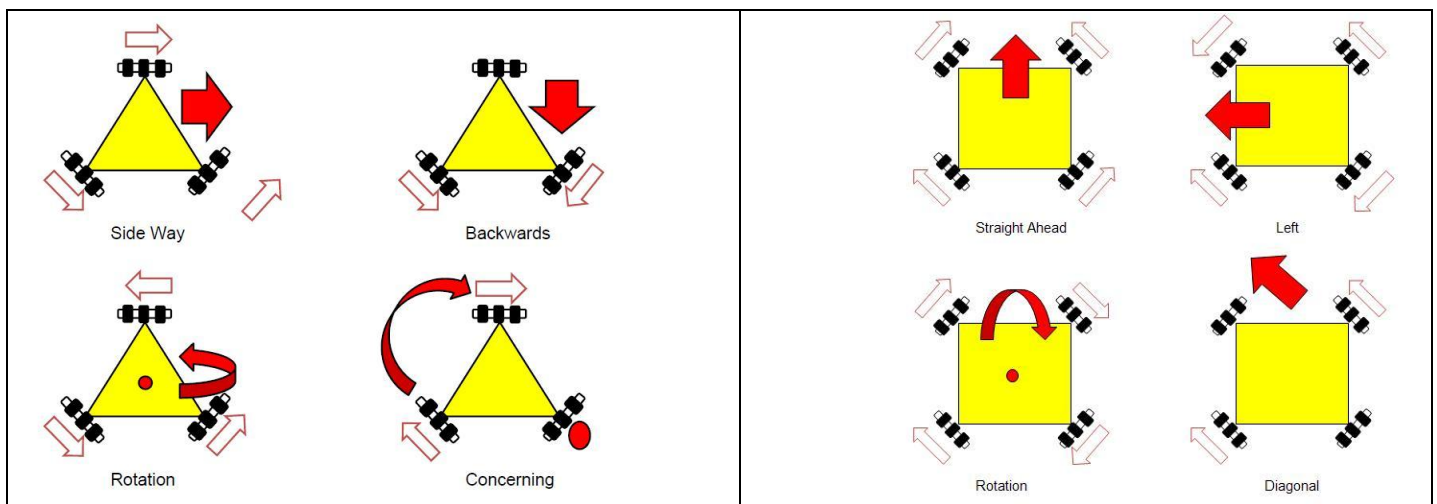


General axle can be attached to omni wheels. For dead (stationary) axle purposes. This general axle is custom designed for each application that will exactly suit for your individual needs. This coupler is available with diameter 3 to 6mm and It is to be mounted with screw.

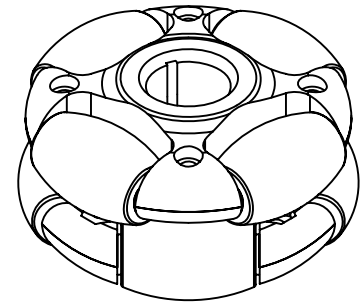
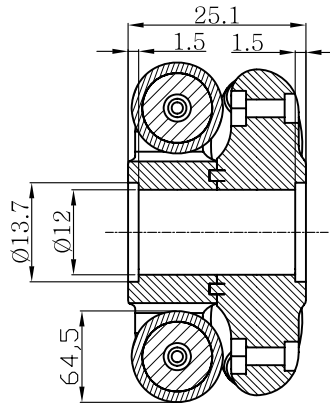
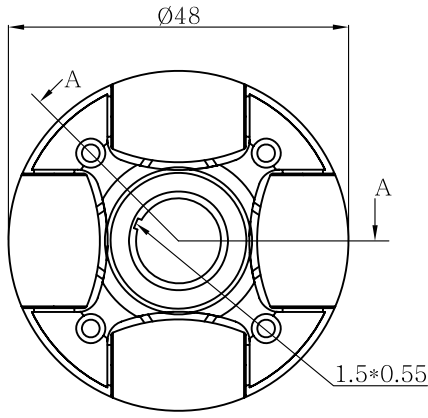
## Specifications:

<b>Product Name</b>	48mm Omn Wheel	<b>Net Weight</b>	40g
<b>Part Number</b>	14113	<b>Load Capacity</b>	2kg
<b>Diameter</b>	48mm	<b>Support Coupler</b>	General, LEGO, servo/TT
<b>Thickness</b>	25.1mm	<b>Optional Coupler</b>	General axle
<b>Body Material</b>	Nylon	<b>General Axle Material</b>	Aluminum
<b>Plates Number</b>	2	<b>Optional General Axle Dia</b>	3 ~ 6mm
<b>Roller Material</b>	TPR	<b>Free Accessories</b>	Axle centre, Cross axle
<b>Rollers Quantity</b>	8	<b>Optional Accessories</b>	General axle
<b>Roller Diameter</b>	13mm		

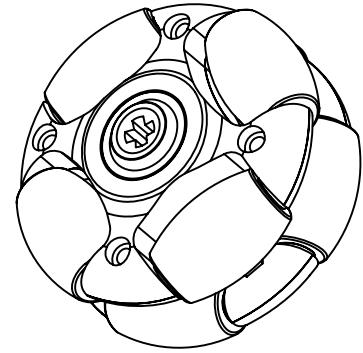
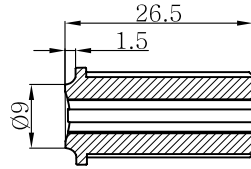
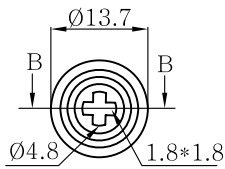
## Co-effect of Omni Wheels:



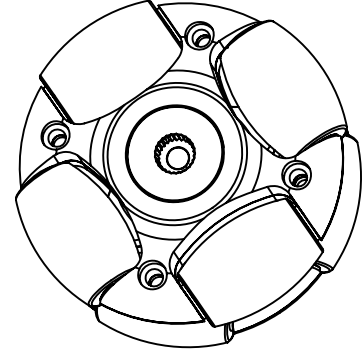
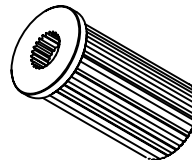
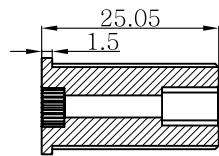
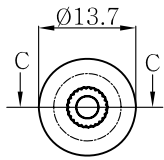
# Lay Out of 48mm Omni Wheel



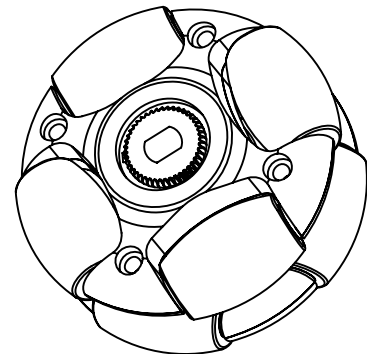
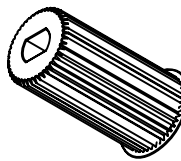
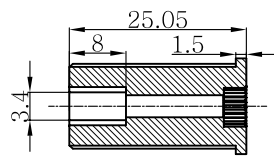
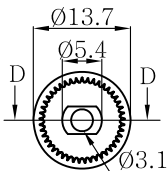
48mm Omni Wheel



Cross Axle for LEGO NXT



Axle Centre for Servo Motor



Axle Centre for TT Motor

TITLE	48mm Omni Wheel
Dimensions are in mm	
www.nexusrobot.com	

# General Purpose Axle For 48mm Omni Wheel

