OMNIWHEEL

Heavy Duty and Lightweight Multi-directional Wheels For Conveyors, Manual and Powered Transfer Systems, and non-Powered and Powered Robot Wheels

Unique Design

The omnidirectional movement of the Omniwheel comes from its unique design. The unique Omniwheels design is based upon the use of a series of free turning barrel-shaped rollers, which are mounted, in a staggered pattern around the periphery of a larger diameter main wheel. The combination of these two rolling elements provides a compact and inexpensive unit for moving heavy loads in any direction along a plane, doing so smoothly and with minimum effort. Unlike competitive transfer devices (ball transfers, swivel casters, etc.)

Applications

The onidirectional 2530 series Omniwheels are well suited for use in heavy-duty manual or powered transfer systems.

The onidirectional 2570 and 2580 series Omniwheels are plastic, corrosion resistant and well suited for application where dirt, dust and moisture may be present.



Omniwheels are designed to work in pairs. The 2530 series bodies are made out of aluminum, while the 2570 and 2580 bodies and barrels are made from plastic.

Omniwheels are uses as omnidirectional robot wheels or powered bidirectional robot wheels.

Ordering Note:

Two Omniwheels must be used together to provide support over 360° of rotation. Please order accordingly.

The 2530 Series Omniwheels

Heavy Duty Multi-directional Wheels

The 2530 Series Omniwheel Model #'s / Series:

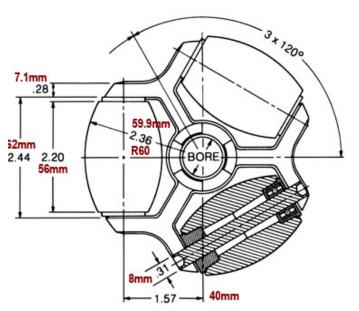
RW8 Omni 2.538 RW12 Omni 2.532

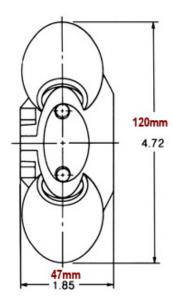
RW16 Omni 2.537 RW27 Omni 2.530

RW28 Omni 2.538

RW32 Omni 2.532

RW37 Omni 2.538





Construction

The series 2530 Omniwheel barrels are made of die cast aluminum for manual systems; with polyurethane and rubber barrels also available for powered applications (to prevent slippage).

Mounting

Series 2530 Omniwheels feature die cast aluminum frame with built in keys for coupling multiple units. This arrangement provides maximum mounting flexibility to suit almost any transfer requirement.

Application

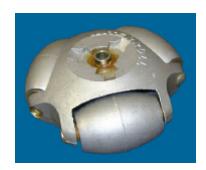
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The 2530 Series Omniwheels



Diameters: 4.72", 120mm O.D. - 0.875", 22.22mm I.D. Hex
Barrel Material - Polyurethane | Barrel Bearing - Ball Bearing
Main Bearing - None
Recommended max load = 220 lbs, 99.79kg per set
Antibackup MODEL 2.538



Diameters: 4.72", 120mm O.D. - 0.315", 8mm I.D.
Barrel Material - Polyurethane | Barral Bearing - Ball Bearing
Main Bearing - Ball Bearing
Recommended max load = 220,99.79kg lbs per set

MODEL 2.532



Diameters: 4.72", 120mm O.D. - 0.875", 22.22mm I.D.
Barrel Material - Aluminum | Barrel Bearing - Ball Bearing
Main Bearing - None
Recommended max load = 220 lbs, 99.79kg per set

MODEL 2.537



Diameters: 4.72", 120mm O.D. - 0.875", 22.22mm I.D. Hex Barrel Material - Polyurethane | Barrel Bearing - Ball Bearing Main Bearing None Recommended max load = 220 lbs, 99.79kg per set MODEL 2.538



Diameters: 4.72", 120mm O.D. - 0.315", 8mm I.D.
Barrel Material - Aluminum | Barrel Bearing - Ball Bearing
Main Bearing - Ball Bearing
Recommended max load = 220 lbs, 99.79kg per set
MODEL 2.530

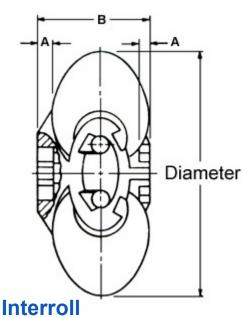


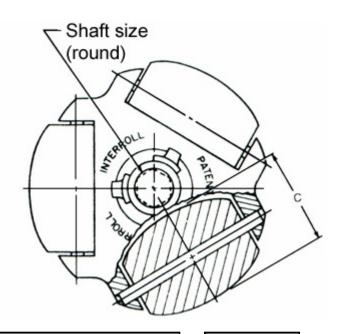
Diameters: 4.72", 120mm O.D. - 0.875", 22.22mm I.D. Hex Barrel Material - Rubber | Barrel Bearing - Ball Bearing Main Bearing - None Recommended max load = 220 lbs, 99.79kg per set MODEL 2.538



Diameters: 4.72", 120mm O.D. - 0.315", 8mm I.D.
Barrel Material - Rubber | Barrel Bearing - Ball Bearing
Main Bearing - Ball Bearing
Recommended max load = 220,lbs, 99.79kg per set
MODEL 2.532

Plastic Omniwheel







RW9

Diameters: 1.90", 48.2mm O.D. - 0.325", 8mm I.D Round

A: Overlap: 0.12", 3mm B: Width: 0.85", 21.6mm C: Diameter: 0.69", 17.5mm

Recommended max load = 25 lbs, 11.36kg per set Model 2.570





Diameters: 3.15", 80mm O.D. - 0.5", 12.7mm I.D Round

A: Overlap: 0.16", 4mm B: Width. 1.34", 34mm C: Diameter: 1.18", 30mm

Recommended max load = 75 lbs, 34.02kg per set Model 2.580



Mounting

Mounting of Omniwheel units is both simple and direct. They may be fitted with axles or spacer bushings and installed in "U" shaped steel or aluminum channels. Alternately, they may be mounted on shafts and installed on conveyors in place of wheels or rollers, providing a convenient transfer station without the expense of designing and building transfer tables.

Application

Omniwheels are corrosion resistant and well suited for applications where dirt, dust and moisture may be present. They require no lubrication or field maintenance.

Ordering Note:

Two Omniwheels must be used together to provide support over 360° of rotation. Please order accordingly.