



Air Casters

Air Casters are also often called Air Cushions, Air Skates or even Air Bearings. They can be mounted permanently underneath specific equipment or tools or used as a modular air caster system.

Air casters are pneumatic elements that can be placed underneath an object or frame, allowing almost friction-free movement and positioning in all horizontal directions. Aerofilm Systems produces the A-, B- and NC-type each with their specific advantages that are described below. Also below you will find that water casters are available which use water as their operating medium instead of air.

AIR CASTER: A-TYPE

The A type are the low pressure air casters that have a membrane made out of Polyurethane material. They are mainly used for permanent installation underneath a machine, frame or object as OEM equipment. Wear free because they are vacuum formed out of a single piece of Polyurethane.



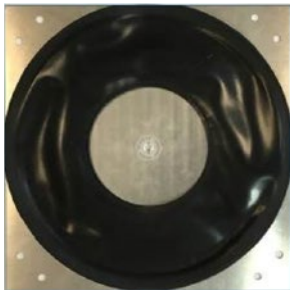
Specific properties:

BUILD HEIGHT	25 mm
AIR CASTER DIAMETER	min. 200 mm / max. 900 mm
LIFT	min. 5 mm / max. 32mm
CAPACITY	min. 50 kg / max. 12.000 kg per piece
AIR PRESSURE	min. 1 bar / max. 2 bar

- Wear free
- Lowest coefficient of friction (COF)0,001 of the weight
- Least air consumption
- Most suitable for 24/7 usage
- Equipped with a cassette system the air caster can be changed without lifting the transporter
- In stock item

AIR CASTER: B-TYPE

The B type are the higher pressure air casters that have a membrane made out of Neoprene. They are mainly used for less frequent movement. They generate a higher lift than the A-type and can therefore both lift and transport the object. Because of the higher pressure they have a higher capacity per diameter.



Specific properties:

BUILD HEIGHT	min. 10 mm / max. 28 mm
AIR CASTER DIAMETER	min. 200 mm / max. 1.250 mm
LIFT	min. 15 mm / max. 80 mm
CAPACITY	min. 250 kg / max. 40.000 kg per piece
AIR PRESSURE	min. 2 bar / max. 4 bar

- Greater capacity per diameter
- Lifts the load before transporting it
- Equipped with a cassette system the air caster can be changed without lifting the transporter
- In stock item

NC-TYPE

The NC-Type, also called Gapmasters, have multiple smaller holes to divide the air outlet over a bigger surface. Because of this principle they can overcome small gaps in your floor.



WATER CASTERS

Both the A- and B-type of air casters can be supplied as water casters where the medium is changed from air into water. The principle remains the same. The medium consumption from water casters is generally 5% of the amount of air you would need.

SPECIALS

Specific coatings and protection layers can be applied on request for harsh environments. Also different types of housings can be delivered to meet specific requirement e.g. the food or pharmaceutical industry.

Lift Cushions

Lift cushions can be used for a wide range of purposes and the advantages are enormous in comparison to cylinders. The lift cushions can be used in horizontally and vertically position to lift, push, spread and fix different objects.

Lift Casters are hermetically sealed cushions made of rubber with an air coupling to connect compressed air.

They have the ability to evenly transfer large amounts of force. This relatively simple technology means that the lift caster is very reliable. There are 2 types, the AS- and HD-type.

Advantages of lift cushions:

- Lift cushions are cost effective
- Lightweight and easy to handle
- They have a low construction profile
- Long lifespan
- Easy to assemble
- Can transfer large amounts of force
- No lubrication needed

LIFT CUSHIONS: AS-TYPE

The AS-type is a lift cushion made from round rubber tubing material. The diameter and length determine the force it can generate. This lift cushion is often permanently fixed in a machine as an OEM part.



Specific properties:

BUILD HEIGHT	min. 14 mm / max. 16 mm
WIDTH	min. 65 mm / max. 245 mm
LIFT	min. 25 mm / max. 140 mm
CAPACITY	min. 50 kg / max. 13.000 kg per meter
AIR PRESSURE	max. 8 bar

Typical applications:

- As actuators in baggage handling systems
- As actuator in different kinds of presses
- To lift heavy loads with little available space underneath
- Integrated into material handling systems to lift, lock or move the objects

LIFT CUSHIONS: HD-TYPE

The HD-Type is a square shaped lift cushion that is mainly used to temporarily lift heavy objects.



Specific properties:

BUILD HEIGHT	min. 22 mm / max. 25 mm
DIMENSIONS	min. 150x150 mm / max. 900x900 mm
LIFT	min. 80 mm / max. 520 mm
CAPACITY	min. 1.000 kg / max. 68.000 kg
AIR PRESSURE	max. 8 bar

Typical applications:

- As actuators in baggage handling systems
- As actuator in different kinds of presses
- To lift heavy loads with little available space underneath
- Integrated into material handling systems to lift, lock or move the objects