Do you know the capacity of just a couple of millimeters?

The thickness of an air spring is 4.3 – 4.5 mm.

Inner rubber layer:

› Pressure distribution
› Sealing function
› chemical resistance (from air supply)

Fabric:

› Bearing of the diaphragm forces
› Ensure geometry permanently

Rubber-coating of fabric:

› Bonding of the reinforcing material
› Spacing layer of fabric plies
› Bearing of shearing lateral forces

Outer rubber layer:

› Mechanical protective function (friction)
› Protection from environmental influences
› Energy dissipation (flexing)

Requirements from vehicle manufacturers	Consequences of using replica products
Material	
The use of high-quality OE-specified materials ensures resistance to extreme temperatures (high and low) as well as ozone and sunlight.	Low-quality materials = much lower resistance to weathering › **Cracking in the outer rubber**
Function	
OE spezifications of the bursting pressure by the vehicle manfacturer define the safety range of the air suspension system.	Too low bursting pressure due to weak reinforcement material = load at strength limit › **Product failure** Exceeding of the bursting pressure = dynamic overloading of the reinforcement material › **Product failure**
OE specifications regarding the load-carrying capacity are essential for safe operation of the air spring suspension system.	Deviances in load carrying capacity = Poorer vibration performance and trailer / tractor synchronization › **Brake wear**
Geometry	
OE specifications regarding the installation space are required to ensure the lifetime of the air spring.	Deviation in the bellows diameter (low-quality reinforcement material or fabric) › **Chafing against chassis components**
OE hight specifications are necessary for the height adjustment at loading ramps (trailer) and boarding height (bus).	Bellow is too long › **Overstraining the shock absorber** Bellow is too short › **Overload / failure when adjusting height to loading ramp**
Durability	
ContiTech manufactures air springs for the replacement market in accordance with OE specifications. This means original quality for reliability and cost efficiency.	Counterfeit products, which virtually look like the original product, are not up to the standards of a safety-relevant product. Since the original specifications are unknown, the difference from the original quality product quickly becomes obvious under real operating conditions.

ContiTech, PHOENIX, PRIME-RIDE – 3 strong brands ››› Always best choice

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