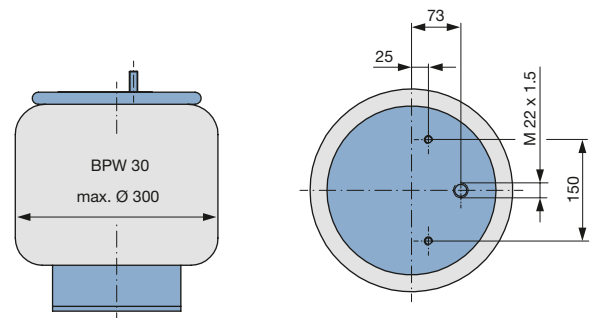
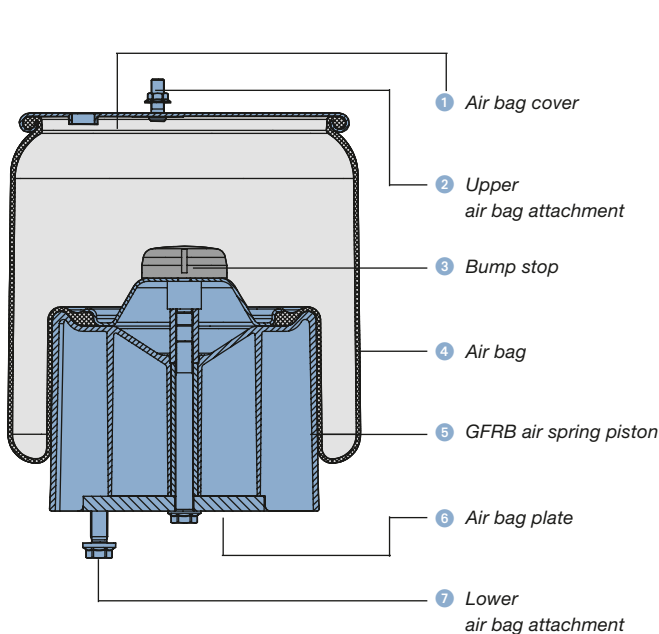


# BPW AIR BAGS. WITHSTAND ANY PRESSURE.

BPW air bags are firmly rolled into the flange of the upper air bag cover ① and vulcanised with the clamping plate at the bottom. The upper air bag cover ① is either directly bolted to the bottom flange of the frame or a plate or mounting bracket is welded to the vehicle frame for fixing – depending on the air bag design.

The air bag cover is fixed to it using two M 12 self-locking nuts. The lower air spring piston ⑤ is bolted to the trailing arm using two M 16 self-locking nuts.



#### Versions a:

BPW 30 For 200 mm stroke at axle centre  
BPW 30 K For 180 mm stroke at axle centre

Diameter Specific Max. 300 mm with approx. 5 bar

Air bag pressure 0.00023 bar/N (with ride height)

Air bag offset V = 0 mm, 20 mm, 60 mm (series)

#### Stop

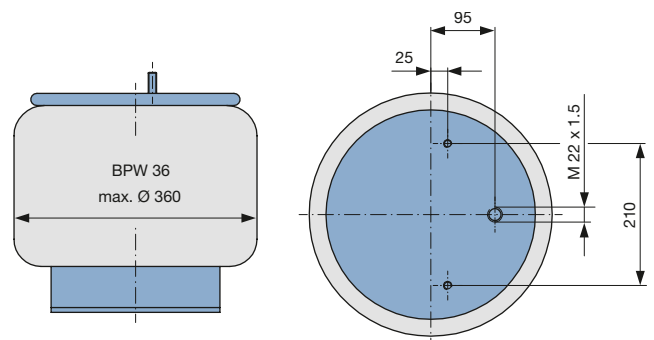
The upward suspension travel is restricted by a bump stop ③ inside the air bag ④. In certain operating conditions the downward travel must be restricted.

#### Air bag type 36 or 36-1

Vehicles with lifting and lowering mechanism and airbags type 36 or 36-1 require a stroke limitation.

#### Air bag type 30 K, 30 or 36 K

When air bags type 30 K, 30 or 36 K are used, stroke limitation is usually not required.



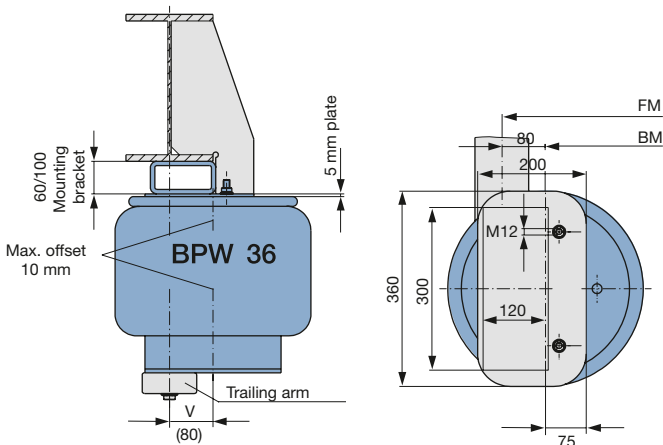
#### Ausführungen b:

BPW 36 For 200 mm stroke at axle centre  
BPW 36-1 For up to 340 mm stroke at axle centre  
BPW 36 K For 180 mm stroke at axle centre

Diameter Specific Max. 360 mm with approx. 5 bar

Air bag pressure 0.000156 bar/N (with ride height)

Air bag offset V = 45 mm, 80 mm (series)



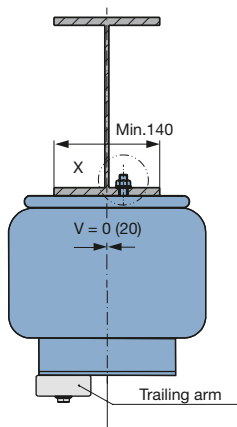
**With bracket**

The maximum lateral offset between the top and bottom attachment must not exceed 10 mm.

The top and bottom air bag attachments must not be installed with any rotational misalignment.

**General**

Air bags with offset generate bending forces which must be absorbed by welded gusset plates on the bottom flange of the frame. To define the construction and air bag offset, it has to be checked whether adequate clearance of the air bag is ensured.



- SP = track on the ground
- FM = spring centre
- BM = air bag centre
- D = air bag diameter  
(Ø 300 for BPW 30, 30 K)  
(Ø 360 for BPW 36, 36-1, 36 K)
- V = air bag offset  
(60 mm or 80 mm, depending on the version)
- B = tyre width (rim width must be considered)

**Note**

The clearance between the air bag and tyres or the brake cylinder with the maximum air bag diameter should be at least 30 mm.

