Brake discs with wheel bearing and impulse ring | HELLA

General information

As a result of the extreme variety of axle constructions produced by all the different car manufacturers, wheel bearings and impulse rings of the anti-lock braking system (ABS) are also integrated into the brake discs.

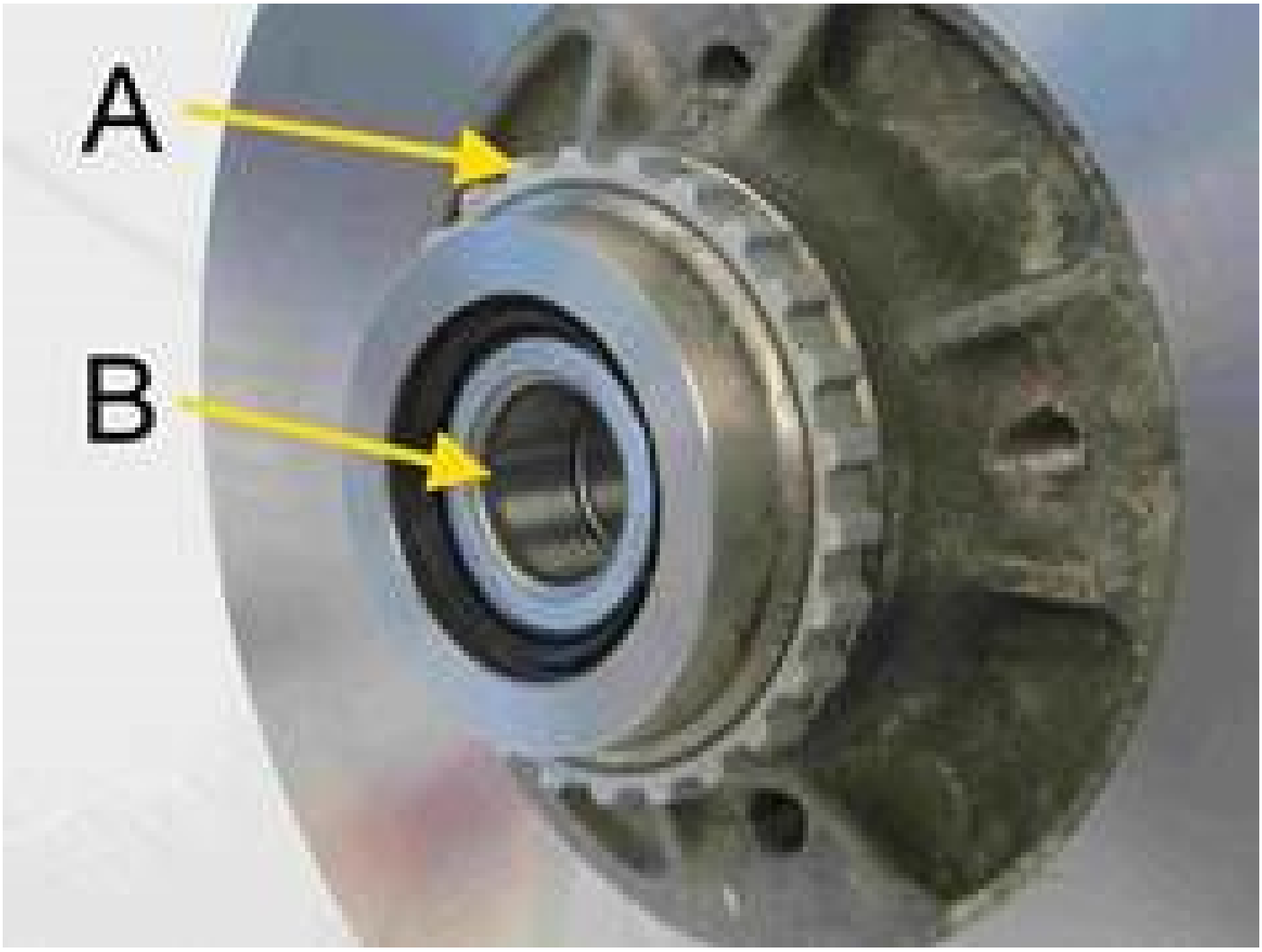
Variations

Depending on the model of the ABS braking system, the design of the brake disc and the type of impulse wheel can vary.



Fig. 1

Example 2 (Fig.2):

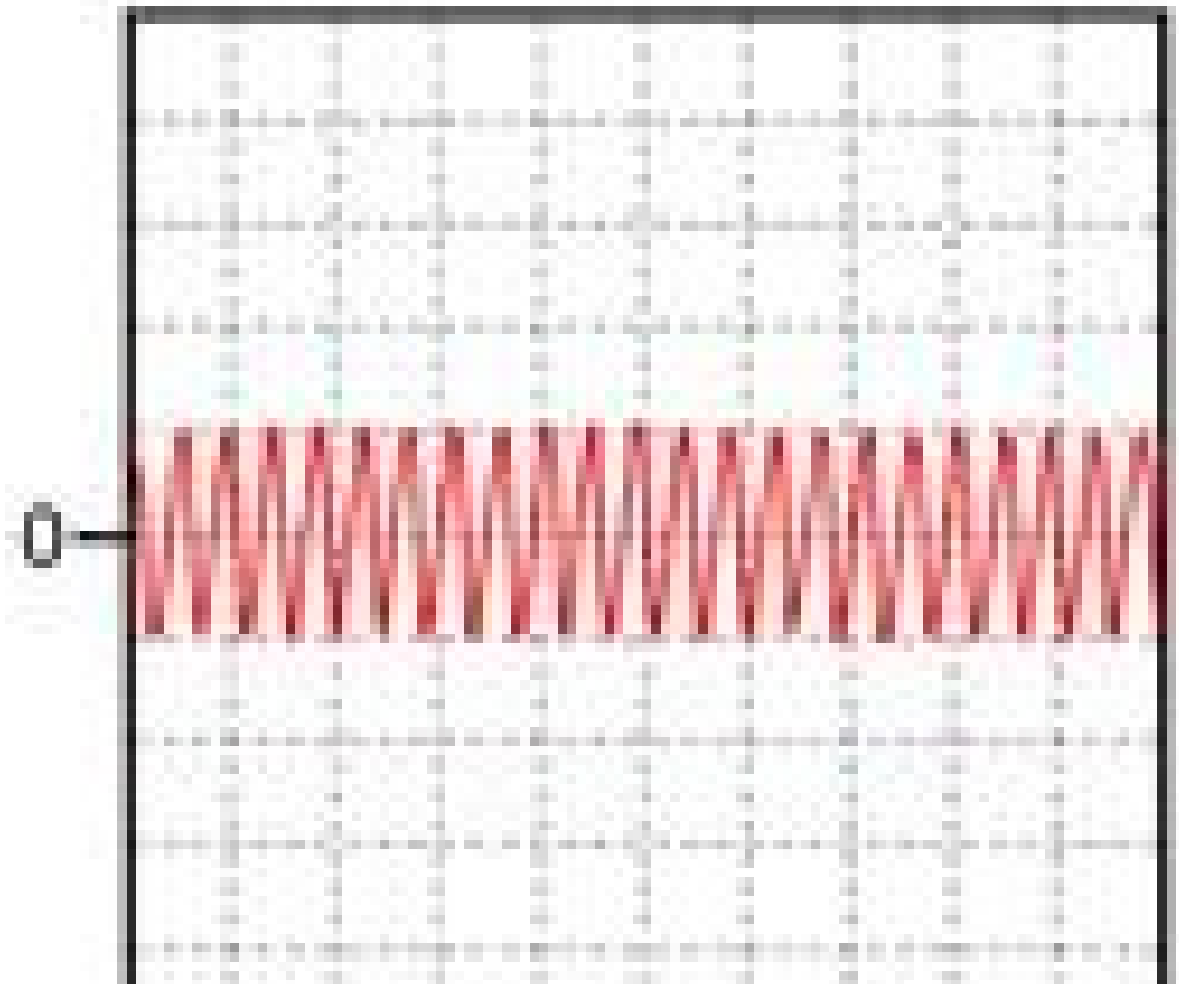


Example 2 (Fig.2):

Purpose of the impulse ring

The impulse ring attached to the brake disc serves as a signalling device for the wheel revolution sensor. These passive sensors illustrated in our example are fixed directly above the impulse wheel (see picture). The rotation of the impulse wheel and the resulting switching from tooth to tooth space brings about a change in the magnetic flow. Such a varying magnetic field is then forwarded to the control unit as a signal via the wheel revolution sensor. This signal's frequency and amplitude are in relation to the wheel's revolutions.




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Purpose of the wheel bearing

The wheel bearing is a constituent part of the chassis. Its function is to guide and support the axles and the shafts. It also simultaneously bears the axial and radial forces exerted upon it.

Important safety note

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