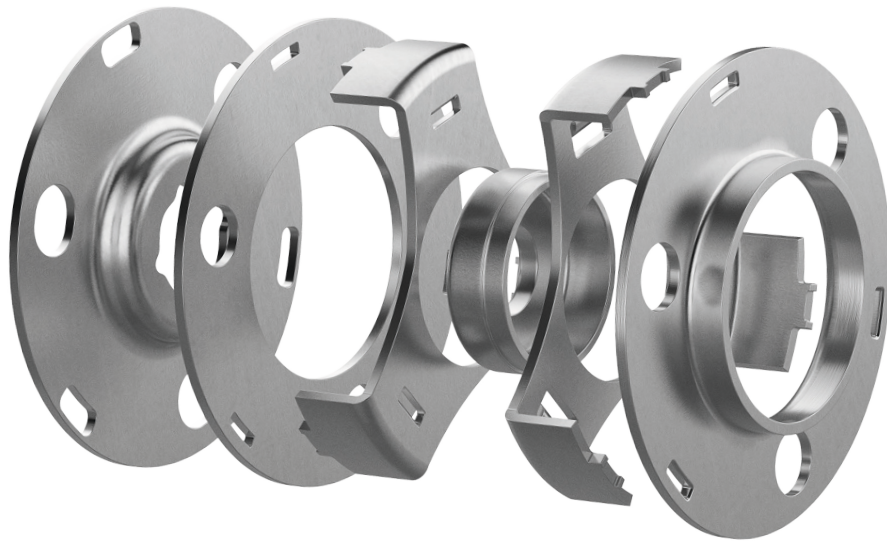


FACT SHEET

# Planetary carrier



**For a longer gearbox life**  
Planetary carriers made by ElringKlinger

**Planetary transmissions offer many different ratio options, alongside the benefit of high torques, even if the installation space is limited.**

The planetary carrier is a functional component that is crucial for planetary transmissions in conventional powertrains and electric powertrains. It carries the planetary gears. As opposed to the conventional manufacturers of planetary carriers that use customary market solutions, ElringKlinger is taking a new

approach in which the cage is designed as a solid, formed sheet-metal part. The technical benefits of this design are its substantial weight saving, possible high torques, and high rotational speeds. The economic benefit is manifested in a considerable cost-saving potential.



## ELRINGKLINGER – YOUR PARTNER FOR PLANETARY CARRIERS

Product Development (Design, Engineering and Simulation) – Process Development – Tool Shop –  
Tool Sampling/Prototyping – Testing – Change-Management – Series Production – Part Measurement

# Technology

## FORMED SHEET-METAL PART

- + High strength and maximum precision

## HIGH TORQUE MECHANICAL CONNECTION (HTMC)

- + Elimination of welding operation with HTMC1, HTMC2 & HTMC3
- + No thermal effects on parts
- + Transmission of high torques
- + Commercial benefit due to elimination of additional machining after welding due to minimal distortion of the parts

# New Concept

- + Central, indirect torque tapping  
→ Reduced displacement of planetary pins
- + Formed metal parts  
→ No casting and therefore less machining necessary
- + Optimization of moment transmission due to innovative connection concept via hub



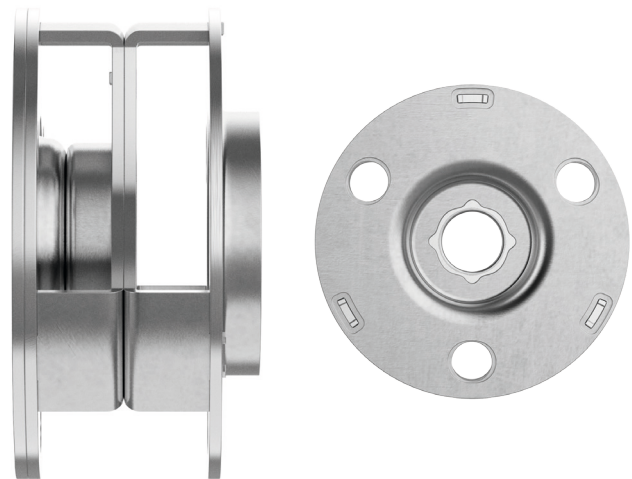
- Hole for planetary gear wheel in bridge plate
- Cut-out in cover-plate to equalize the displacement
- Planetary pin

# Parameters

- + From standard to high wall thicknesses with > 5 mm possible
- + Platine sizes up to > 600 x 600 mm possible
- + Wide material range: S420, S355, DC04, ...

# Benefits

- + Central torque tapping enables high torques
- + Increased gear lifetime due to reduced gear tilt
- + Very low attrition
- + High torque transmission possible
- + Weight reduction up to 50%
- + Commercial benefit compared to casting
- + Less machining



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08/23