

# Material Data Sheet

## G-AlZn10Si8Mg EN AC-71100 older / VDS : 108

This self-hardening sand casting alloy is distinguished by high mechanical strength, elongation, and hardness with a reduced corrosion resistance, as well as very favorable adjustability. Thus, it is used by our customers predominantly for large housing components, for which a heat treatment is not possible, in the following areas: System manufacturing, mechanical engineering, electromechanical engineering (battery housing), and hydraulics. Also suitable for visible components primarily due to the high ability to be polished.

| Material condition    | Yield strength<br>$R_{p0,2}$ (N/mm <sup>2</sup> )<br>at least | Tensile strength<br>$R_m$ (N/mm <sup>2</sup> )<br>at least | Elongation at break<br>A (%)<br>at least | Brinell hardness<br>HBW<br>at least |
|-----------------------|---|--|--|-------------------------------------|
| T1 / Swapped out cold | 190   | 210  | 1  | 90                                  |

All values determined according to DIN EN 1706 on a separately cast test bar. According to DIN EN 1706, samples from the respective component may vary up to 30% for the yield strength and tensile strength and up to 50% for elongation at break. Desired mechanical properties can be “set” in component areas through certain measures - talk to us about this.

