



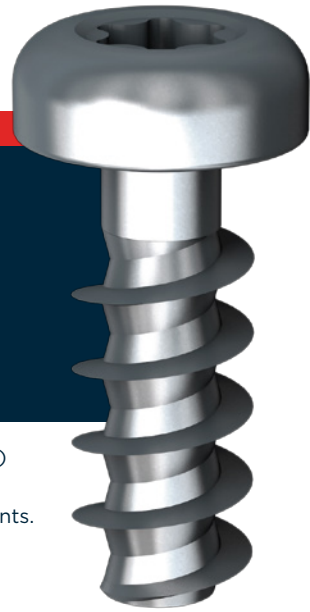
ALUfix

ALUfix screws are the creation of extensive R&D efforts in providing a secure, lightweight range of products. An all-aluminum composition with thermal and corrosion resistance, durability for repeated assembly among other characteristics, brings innovation and the future together. Developed primarily to meet the lightweight trends of the automotive industry, **ALUfix** provides a 65% weight advantage when compared to steel based screws.

BENEFITS & FEATURES

- Lightweight
- Durability
- Flexibility
- Thermal & Corrosion resistant
- Eco-friendly
- Operating safety — vibration resistance
- No design restrictions

Original **ALUfix** screws are produced with EN AW 5052 (AlMg2.5) alloy material. Dependent upon customer requirements and characteristic needs, adjustments can be made to alloy components.



MATERIAL



WEIGHT



FASTENING
PROPERTIES



OPERATING
SAFETY



THERMAL
RESISTANCE



CORROSION
RESISTANCE



SCREW
ASSEMBLY



MULTIPLE
ASSEMBLY



DESIGN
OPTIONS



FEASIBILITY

ALUfix vs 8.8 STEEL SCREW

	ALUfix	8.8 STEEL SCREW
Screw Design	Pan head screw; M 6.0 x 16.0; T30 Drive	Pan head screw; M 6.0 x 18.0; T30 Drive
Screw Material	EN AW 5052 (AlMg2.5)	Standard material; Strength class – 8.8
Screw Weight	2.0 g	6.2 g
Free Minimum Breaking Torque (MB_{min})	6.8 Nm	13 Nm
Minimum Tightening Torque (MA_{min})	Torque, angle-controlled assembly	8 Nm Torque assembly
Minimum Preclamping Force (FV_{min})	5.8 kN	5.6 kN
Component Material	Die cast magnesium AZ91	Die cast magnesium AZ91
Component Strength	~ 110 HB2.5 / 62.5	~ 110 HB2.5 / 62.5

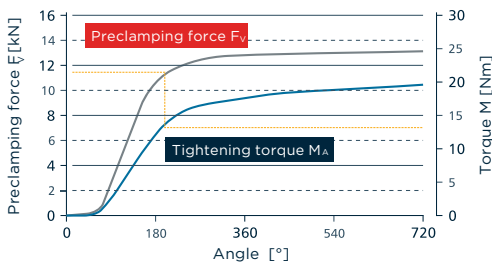


MATERIAL CHARACTERISTICS

EN AW 5052 (AlMg2.5)

Tensile Strength R_m	> 260 MPa
Yield Strength $R_{p0.2}$	> 215 MPa
Elongation A_5	> 11%
Density σ	2.68 g/cm ³
Elasticity Module E	70,000 MPa
Heat Conductivity	140 W/(mK)

TORQUE-CONTROLLED ASSEMBLY



TORQUE-ANGLE CONTROLLED ASSEMBLY

