



RIFAST® DBM

DBM FOR COMPONENTS
WITH THICKNESSES
> 2.0 MM

HIGH THICKNESS FIT SOLUTIONS – Technical Product Sheet

RIFAST® DBM THICK SHEET METAL NUT

The thick sheet metal nut product line mechanically joined to thick metal components by means of automated insertion technology

› THE RIFAST® SYSTEMS ADVANTAGE

Systems expertise from designing, manufacturing clinch fasteners and automation equipment to consultation and realization in serial production

With over 25 years of expertise as a full system provider RIFAST® is the partner for developing economical solutions for reliable integration of mechanically joined clinch fasteners. The systems approach of clinch fasteners through automation equipment for in-die and off-line operations guarantees the optimal joint connection. The mechanical joining with the RIFAST® staking die designed to the customer component ensures consistent performance values in addition to eliminating thermal influences and distortions observed during welding.

› THE RIFAST® THICK SHEET METAL NUT ADVANTAGE

Compact, universal, secure and weight-optimized

Optimized for thick metal applications, the RIFAST® thick sheet metal nut is the universal solution for sheet metal parts, extruded profiles and castings. Whether this is with steels, aluminum or copper alloys, the thick sheet staking nut performs through its compact and weight-optimized characteristics, delivering on a simplified clinch nut portfolio - one clinch nut per size for various thicknesses. The clinch fasteners offers flat contact surface for attachment of mating parts (no protrusion on component underside after joining process). The RIFAST® DBM is the solution for components with thicknesses > 2.0 mm.



< Application examples
 RIFAST® DBM
 i.e. frames, aluminium
 die-casting parts,
 battery boxes

TECHNICAL DATA

Thread Sizes	M5, M6, M8, M10, M12				
Strength Grade	10 (DIN EN ISO 898-2)				
Surface Coating	OEM-approved coatings				
RIFAST® Standard	WN 20340 (DBM)				
Tensile Strength	150 - 600 N/mm ²				
Component Materials	Steels, aluminum alloys, copper alloys				
Automation Equipment	Press, C-Frame (automatic or manual)				

Thread Size	M5	M6	M8	M10	M12
Application Thickness (mm)	>2.0	>2.0	>2.0	>2.0	>2.0
Push-Out in 5.0 mm (kN) ¹	3.0	3.0	3.0	3.0	3.0
Torque-Out in 5.0 mm (Nm) ¹	12	18	35	50	70

¹ Performance values for reference, derived from destructive testing in a component made out of aluminum AlMg4.5Mn with a thickness of 5.0 mm by RIFAST® Application Engineering

Performance values for push-out and torque-out are dependent on the component material (steel, aluminum alloy, copper alloy), the application thickness and in combination with RIFAST® staking die. Performance values for other component materials and application thickness can be validated through RIFAST® Application Engineering.

MECHANICAL JOINING PROCESS AND CROSS-SECTION

