EJOT FDS® M4 High-Strength

Advanced FDS® Screw for
High-Strength Sheet Metal

The EJOT FDS® is a flow-drilling and thread-forming screw for mixed-material joining. This innovative fastening element allows for a fully-automated joint without pre-hole and for those applications requiring one-sided access. It can also be replaced by a metric screw for serviceability/repair of the joint.

Weight optimization and reduction is of key importance to vehicle manufacturers. Mixed-material body designs is an effective way of achieving these lightweight goals. The EJOT FDS®, in the standard M5 version, has been affective in supporting manufacturers in achieving these goals for many years; however, higher steel grades have since been developed and adopted into body-in-whites.

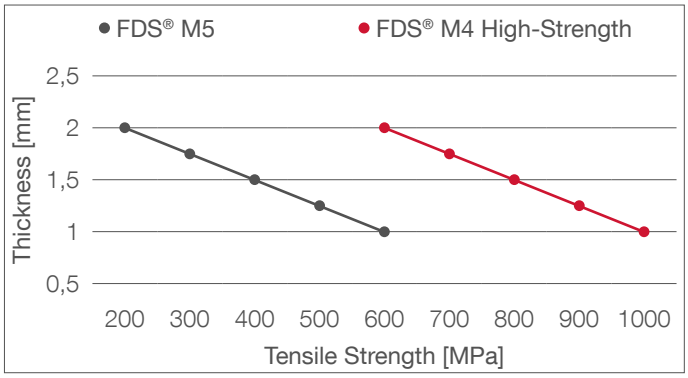
These new lightweight designs have increased usage of high-strength steels whose tensile strengths are >600 MPa. For these types of applications, EJOT has developed the FDS® M4 High-Strength screw that meets the high demands of these types of materials while also directly contributing to weight savings.

FDS® M5
Standard

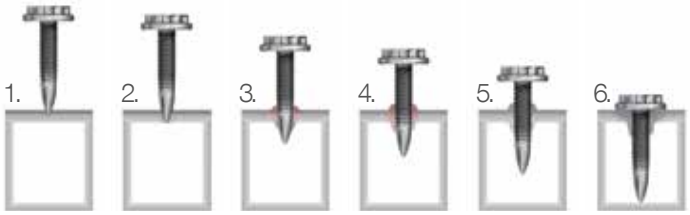
FDS® M4
High-Strength

Comparison FDS® M5 and M4

	FDS® M5 Standard	FDS® M4 High-Strength
Weight	4.5 g	< 3 g
Surface Hardness	520 - 650 HV	500 - 550 HV
Core Hardness	320 - 360 HV	500 - 560 HV
Heat Treatment	Case hardened	Austempered



Assembly Stages



1. Warming up
2. Penetration of the material
3. Forming of the draught
4. Thread forming
5. Full thread engagement
6. Tightening

More information at www.ejot.com/industry or please contact
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