

## EJOT FDS®

The flow drill screw for high strength sheet metal joints



The **EJOT FDS®** flow drilling screw enables a high strength screw joint, due to increased thread engagement in the formed draught.

The female thread, which is formed without producing chips, is true to gauge so that a common metric screw can be used in case of future maintenance or repair.

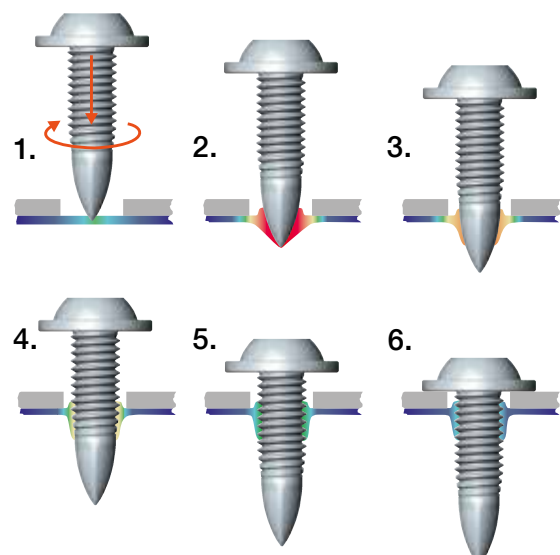
Since there is no need for preparations like punching or drilling, the usual tolerance problems such as overlapping of draught and insertion hole, do not apply. The one-sided accessibility of the part provides for an assembly into hollow profiles (hydro-formed or aluminium extrusion profiles) without any counter support, as might be necessary for other joining methods.

### Characteristics

- Removable and high quality screw joint, without part preparations, such as pre-drilling or punching
- No hole overlap problems
- No material waste while forming the draught / no chips during thread forming
- Use with various sheet surfaces
- Easy removal and recycling


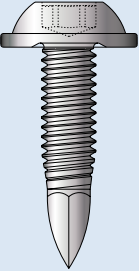
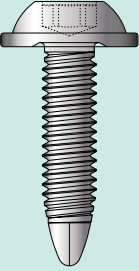
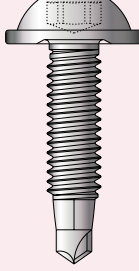
### Assembly stages:

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



**EJOT. Bringing it together.**

## Designs

Type	Standard	PKS	BS
			
<b>Material</b>	Case hardened mild steel Heat-treated steel, inductive hardened	Case hardened mild steel Heat-treated steel, inductive hardened	Case hardened mild steel Heat-treated steel, inductive hardened
<b>Surface coating</b>	Chrome VI-free surfaces zinc plated, blue passivated zinc plated, blue passivated + EJOSEAL (240h resistance to Zn-corrosion) zinc flake coating (with or without black top coats) ZnNi / black passivated Other platings upon request		
<b>Application</b>	Assembly without pilot hole	Assembly with pilot hole	Assembly without pilot hole
<b>Sheet material:</b>	steel 0,3 - 1,8 mm aluminium 0,8 - 5,0 mm magnesium 0,8 - 3,5 mm	steel 0,4 - 2,0 mm aluminium 0,4 - 3,0 mm magnesium 0,8 - 3,5 mm stainless steel 0,4 - 1,5 mm	steel 0,4 - 1,5 mm aluminium 0,4 - 2,0 mm magnesium 0,8 - 2,0 mm
<b>Characteristics</b>	assembly without pilot hole  no hole overlap problems with through-hole possible  especially suited for automated assembly  extremely high strength screw joint  one-sided assembly  the ideal screw for the safe assembly of dynamically loaded screw joints	pre-hole in the sheet metal with approximately half of the nominal screw diameter  a certain tolerance absorption possible through different sized pre and through-holes possible  preferable for manual assembly  low pressure force necessary  one-sided assembly  high process stability and strength of the screw joint despite pre-hole	fastening in unpunched sheet metal  no hole overlap problems with through-hole possible  suitable for manual and automated assembly  low pressure force necessary  one-sided assembly  extremely high strength screw joint