

# **FLOWpoint DELTA PT®**

Self-tapping fastener for carbon fiber reinforced plastics without pilot hole



Carbon fiber reinforced plastic (CFRP) continues to set current and future lightweighting trends in the Aerospace and Automotive Industries.

The FLOWpoint DELTA PT screw is an innovative fastener developed to meet the challenging demands of joining these highly engineered CFRP materials. It combines two proven EJOT technologies into one screw.

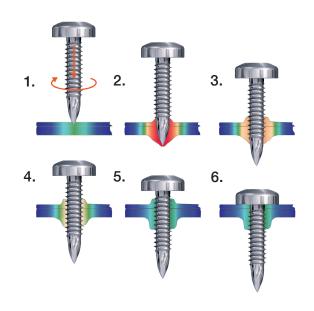
The FLOWpoint DELTA PT is a self-piercing and self-tapping screw that penetrates both the clamped and mating material without a pilot hole. The optimized DELTA PT thread geometry forms a strong female thread in the carbon fiber reinforced plastic.

## Features of the FLOWpoint DELTA PT®

- No pilot hole required, tolerance compensation possible
- High quality threaded joint without part preparation
- 1 Applicable for many varieties of CFRP
- 1 Easy disassembly and reassembly
- Available in A2/A4 Stainless Steel, Steel, Aluminum, Titanium and Ceramics
- Hybrid joining possible (e. g. Aluminum to CFRP)

#### **Assembly stages:**

- 1. Rotation of screw and application of axial end load
- 2. Warming up and penetration of the material
- 3. Screw hole calibration and formation of extrusion
- 4. Thread forming
- 5. Full thread engagement
- 6. Tightening





## The characteristics of the FLOWpoint DELTA PT®

# The recess drive

Available with most common automotive drive systems.

# The head geometry

Available in most common automotive head styles.

# The materials -

- Aluminum
- 1 Through Hardened Steel
- 1 A2/A4 Stainless Steel
- 1 Titanium
- 1 Ceramics

## The thread

The renown DELTA PT\* thread has been further optimized to create a strong, reliable, and removable thread for CFRP materials.

#### The tip

The unique self-piercing forming zone and sharp point allow a pilot hole free, self-tapping screw joint.