

EJOT ALtracs® Plus

The Self-Tapping

Fastener for

Light Alloys

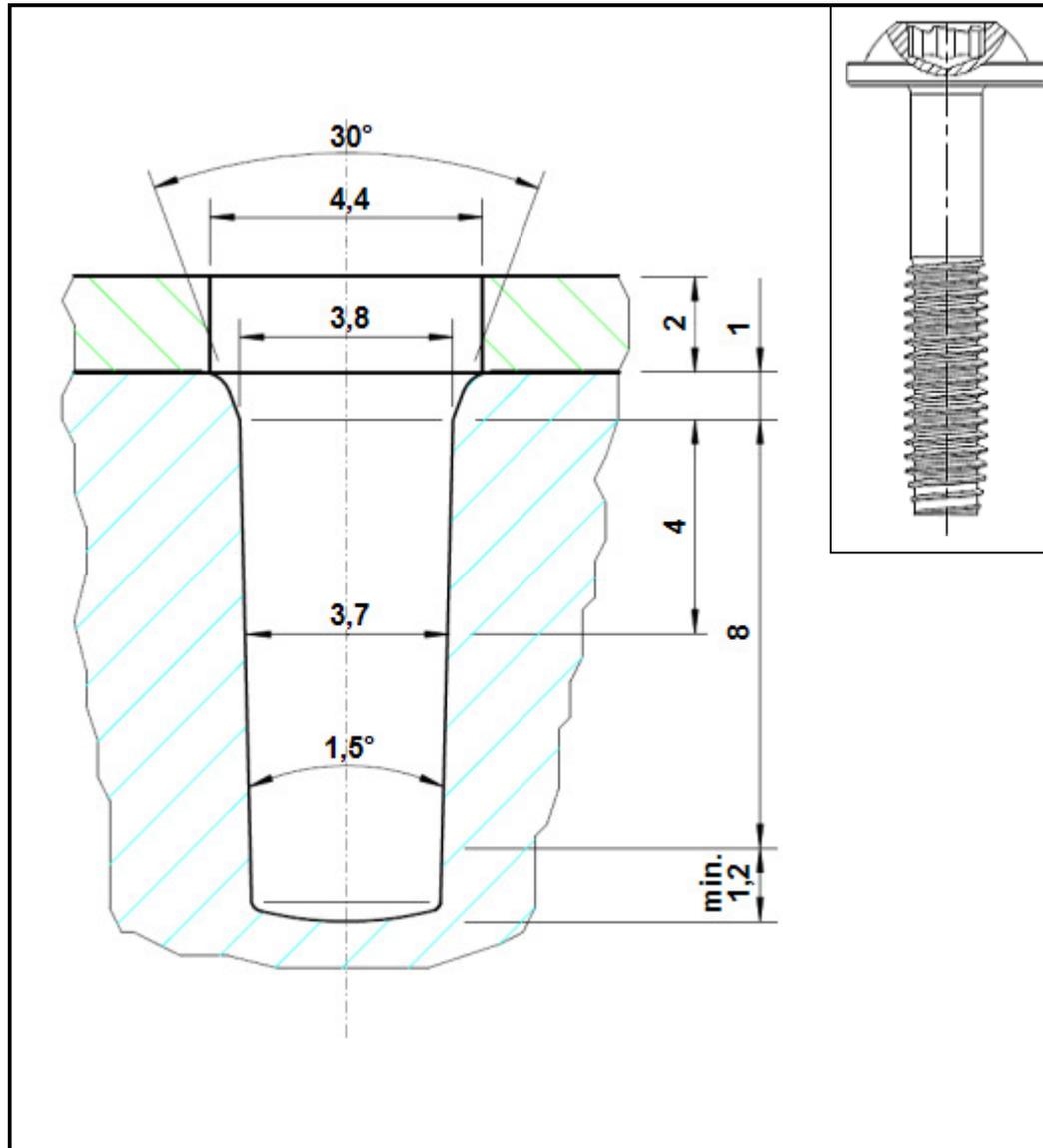
ALtra CALC ^[v1.4]

report from 09.11.2020

project	
project name	123456789
customer	Customer
contact person	
phone	
e-mail	

contact person	
name	
phone	
e-mail	

Warranty: Our application engineering advice and all information is provided on the basis of today's state of technology. You are receiving information on our products and their methods of application. Certain characteristics or the qualification for certain application purposes cannot be guaranteed. As there may be different fastening criteria between our laboratory tests and your serial application, we recommend to check our indications for your special application. We kindly ask you to understand that our statements are without obligation and that we cannot give a guarantee for correctness.


screw (ALtracs Plus AP 40x11)

screw [material]	ALtracs Plus [AT10]
head style	WN 5151
screw surface	A3K DIN EN ISO 4042 (EJOSEAL 4C)
lubricant	microGleit DF 921
thread diameter [mm]	4
length [mm]	11
head diameter [mm]	10

boss

boss material	Al wrought
trade name / condition	EN AW-6082 / T6
hardness [HB]	105
installation depth [mm]	8
draft angle [°]	1,5
average hole diameter [mm]	3,7
external boss diameter [mm]	7,2
counter-bore depth [mm]	1
counter-bore diameter [mm]	4,38
type of fastening	blind hole

clamping part

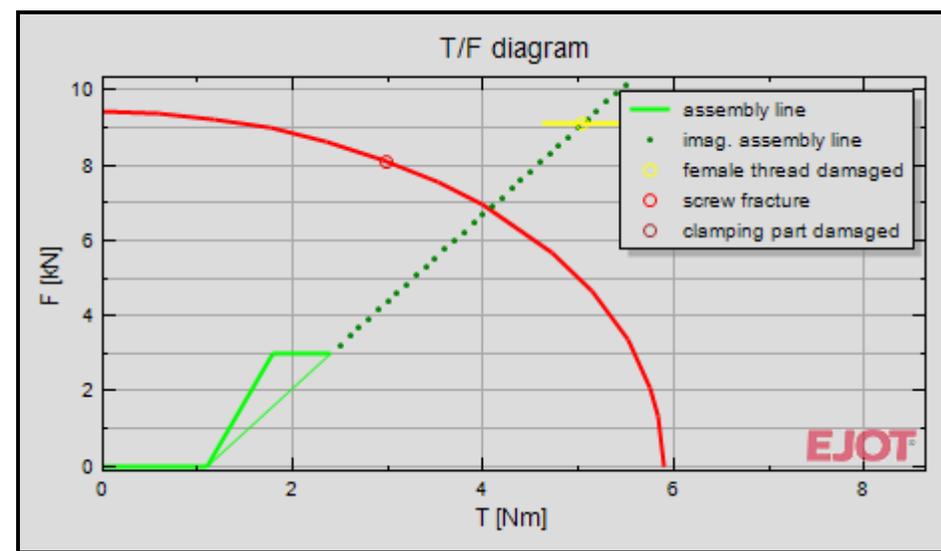
clamping part material	Aluminium
trade name	
clamp thickness [mm]	2
screw elongation length [mm]	3
through hole diameter [mm]	4,4

other inputs

clamp load (Fcl) [kN]	3
axial operating load (Fa) [kN]	0
screwdriver tolerance [%]	10

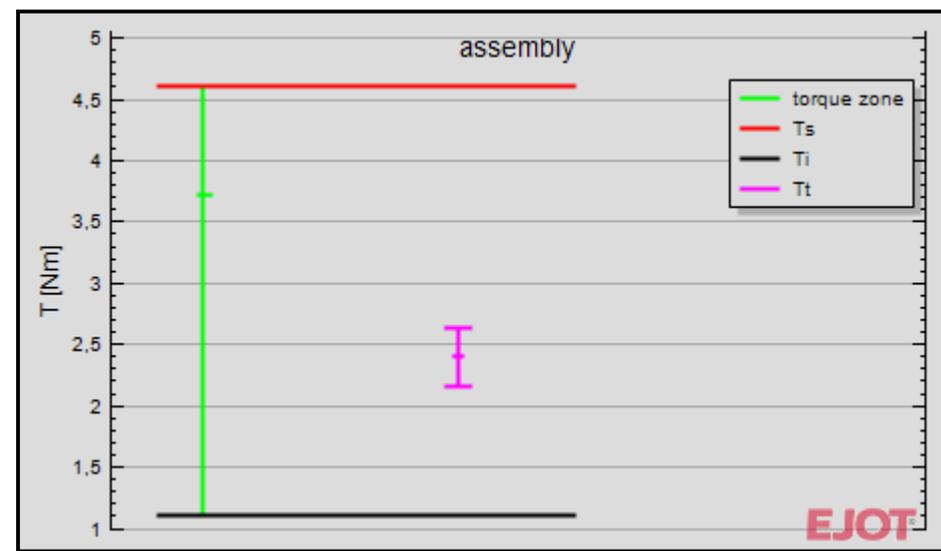
torques / forces (failure)	
installation torque (Ti) [Nm]	1,1
tightening torque (Tt) [Nm]	2,4
stripping torque (Ts) [Nm]	4,6 (SB)
clamp load at failure [kN]	8,1
pull-out load [kN]	9,4 (SB)

failure:
 empty = female thread damaged
 (SB) = screw fracture
 (DK) = clamping part damaged

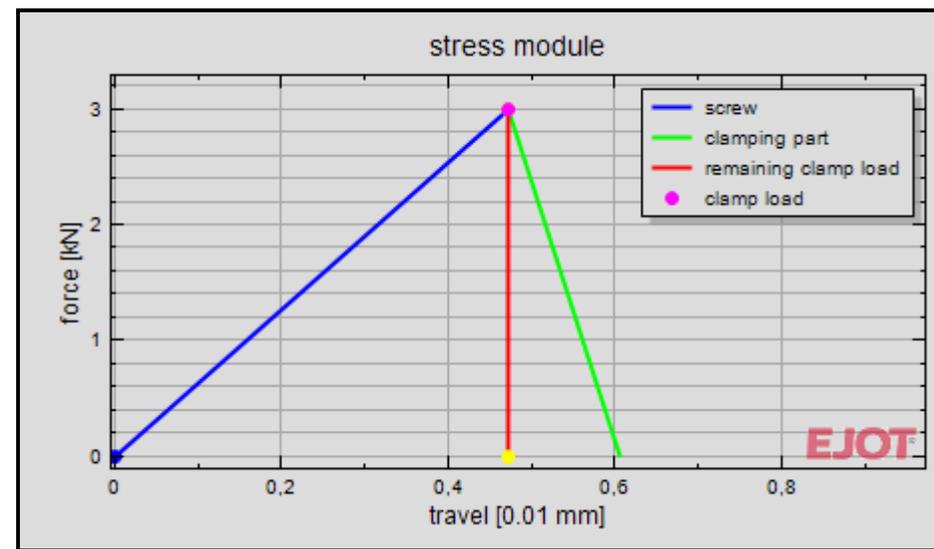


assembly	
average tightening torque (Tt) [Nm]	2,4 (±0,2)
average clamp load (Fv) [kN]	3 (±0,6)
use of torque zone [%]	37

tensions	
tension thread [N/mm ²]	120 (max: 340)
tension head [N/mm ²]	47 (max: 340)
tension counter-bore [N/mm ²]	118 (max: 340)



stress module	
clamp load + operating load component screw [kN]	---
clamp load (F _{cl}) [kN]	3
remaining clamp load [kN]	3



messages (no warnings or errors)