

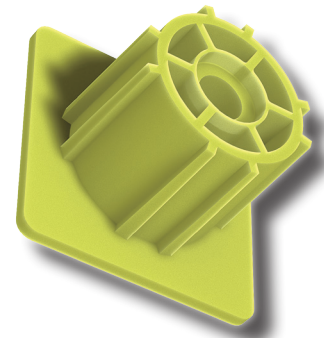
EJOT DELTAsert® P

The alternative insert solution made of plastic

For the realisation of a stable fastening point the material strength of components made of thermo-plastics is often insufficient. Even optimisations such as a larger screw diameter, wall thickness increase or increased installation depth are only partially suited to solve this problem. For these difficult conditions EJOT has developed the innovative plastic insert solution DELTAsert® P which, combined with the EJOT DELTA PT® screw, facilitates process reliable fastening.



DELTAsert® P



Example Boss Design

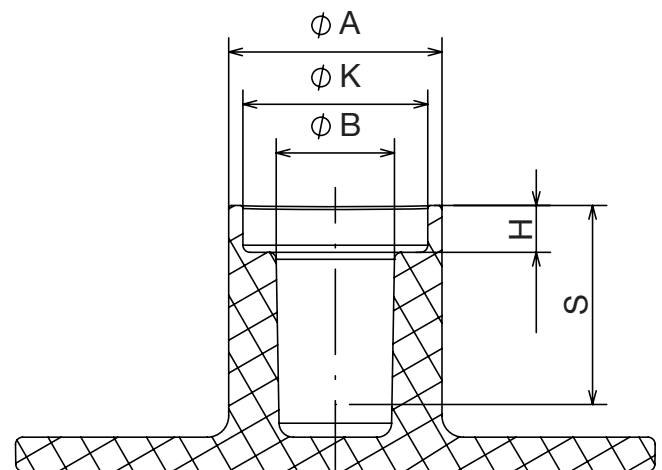
Reinforced fixing points

With a screw boss (see image to the right) a boss profile can be realised, in which the DELTAsert® P can be reliably fastened, even with only minimal installation space. Despite the deficit of a soft base material, use of the recommended DELTA PT® screw ensures a sturdy and durable fastening solution. The EJOT DELTAsert® P, made of the thermoplastic material PPA GF50 with 50% fibre glass content, is mainly used for fastening soft thermoplastics such as PP, PE, PA or ABS.

Advantages DELTAsert® P + DELTA PT® :

- Easy installation
- Weight reduction
- Strengthened fixing point
- Low boss height possible
- No metal inserts required

Boss recommendation:



A = b_o = external boss- \varnothing (1,6 to 1,8 x d_1)
 B = d_p = pre-hole- \varnothing (0,87 to 0,88 x d_1)
 H = collar height = 3 mm
 K = collar- \varnothing = 1,4 x d_1
 S = DELTAsert® P length = 14 mm

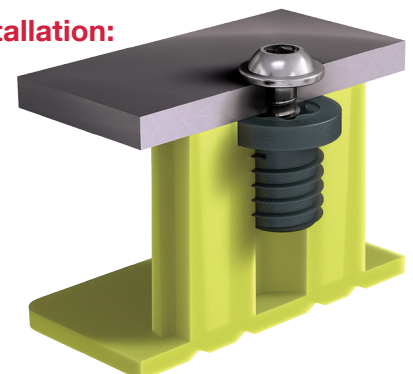
d_1 = Nominal- \varnothing
 DELTAsert® P 45 & 50 = d_1 = 10 mm
 DELTAsert® P 60 = d_1 = 12 mm

Installation specification at 300-500 rpm for PP:

| DELTAsert® P / DELTA PT® size | Hole diameter in the component [mm] | Tightening torque DELTAsert® P | Tightening torque DELTA PT® |
|-------------------------------|-------------------------------------|--------------------------------|-----------------------------|
| 45 | 8.7 - 8.8 | 1.8 Nm | ≈ 2.6 Nm |
| 50 | 8.7 - 8.8 | 1.8 Nm | 3.8 Nm |
| 60* | 10.5 - 10.6 | ≈ 2.2 Nm | ≈ 4.6 Nm |

* in progress

Installation:



10.15/PDF08.23 Subject to technical changes

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