# EJOT® EPPsys RSD

Secure fastening solutions for foamed components

The EJOT® EPPsys (EPP System) has been developed to fasten parts to foamed components, especially EPP (expanded polypropylene).

## EJOT® EPPsys RSD

The EJOT® EPPsys RSD (**R**eib**s**chweiß**d**om = friction-welding boss) is an effective fastening element for EPP foams and PP honeycomb elements.

Through the friction welding process the EPPsys RSD is embedded in the EPP foam and securely connects to the molten material.

## EJOT® EPPsys RSD 50

| | |
|---|---|
| Hole diameter | 3,5 mm |
| Screw | dimensioned for EJOT DELTA PT® 50 |
| Tightening torque | 2,5 Nm |

## EJOT® EPPsys RSD 60

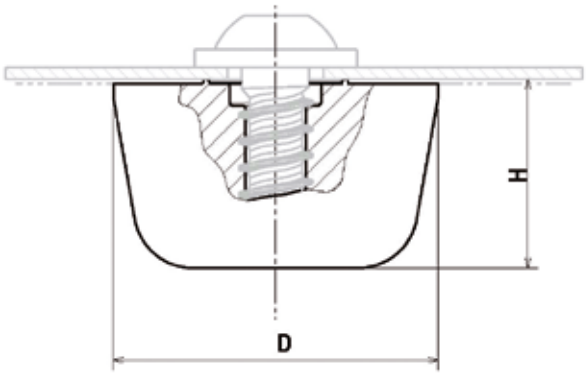
| | |
|---|---|
| Hole diameter | 4,5 mm |
| Screw | dimensioned for EJOT DELTA PT® 60 |
| Tightening torque | 4,0 Nm |

## Advantages of the EJOT® EPPsys RSD

- Special system for EPP foams and honeycomb elements
- Suitable for almost all EPP foam sizes
- High torques
- High transmittable tensile forces
- No pilot hole in the foam necessary
- Easy assembly after the foam expansion
- Assembly independent of any component tolerances
- Clean assembly
- Weight savings

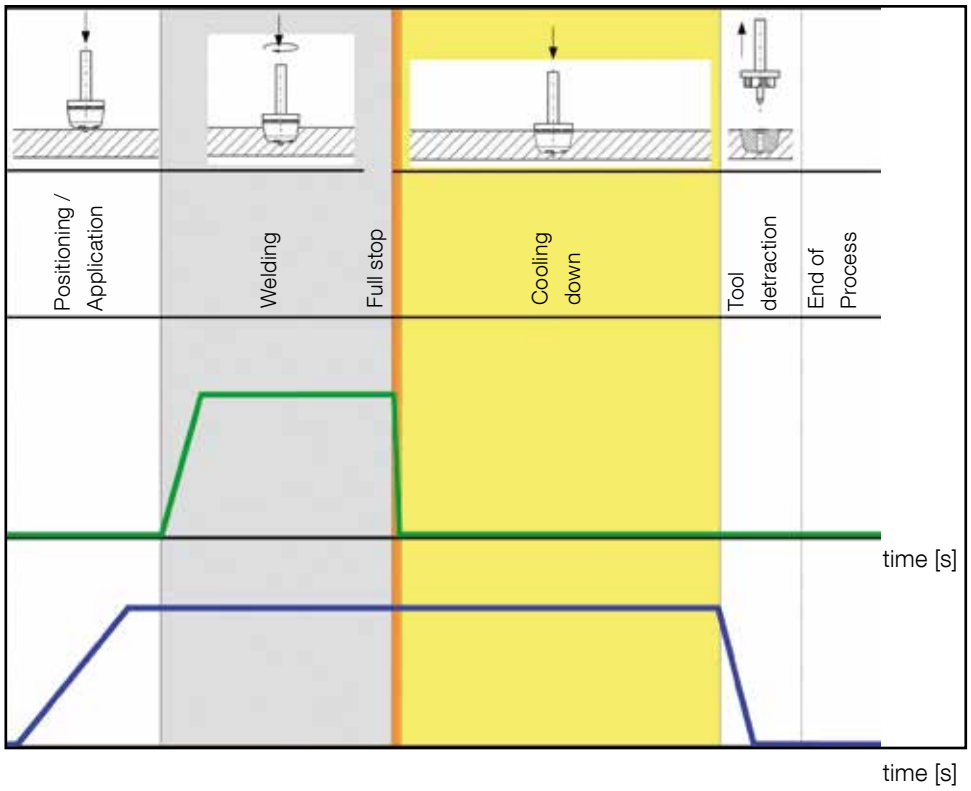
## Technical Data

| | |
|---|---|
| External diameter | 22,0 mm |
| Height | 12,8 mm |
| Material | PP |
| Colour | ecru |




**EJOT. Bringing it together.**

## Friction Welding Process EJOT® EPPsys RSD




## Installation Instruction and Performance Features EJOT® EPPsys RSD

- Manual assembly possible / automated assembly should be preferred
- Min. cooling time 3 sec.

| Material | | assembly speed | axial assembly force | welding time | axial pull-out load | loosening torque |
|---|---|---|---|---|---|---|
| | [g/l] | n [min$^{-1}$] | $F_M$ [N] | $t_W$ [sec] | $F_A$ [N] | $M_L$ [Nm] |
| EPP | 30 | 1500 | 60 | 3 | 200 | 3.5 |
| EPP | 35 | 1500 | 80 | 3 | 250 | 4 |
| EPP | 40 | 1500 | 120 | 3 | 300 | 4.5 |
| EPP | 60 | 2000 | 160 | 3 | 450 | 6 |
| EPP | 80 | 2000 | 300 | 2 | 750 | 9 |
| EPP | 100 | 3000 | 400 | 2 | 850 | 14 |
| EPP | 120 | 3000 | 600 | 2 | 1000 | 20 |
| EPP | 140 | 3000 | 600 | 2 | 1100 | * |
| EPP | 160 | 3000 | 600 | 2 | 1150 | * |
| EPP | 180 | 3000 | 700 | 3 | 1200 | * |
| EPP | 200 | 3000 | 800 | 3 | 1250 | * |
| EPP | 220 | 3000 | 800 | 4 | 1300 | * |

* $T_L$ greater than 25 Nm - Failure of the inner contour of the EPPsys RSD

- With foam densities above 100 g/l a slight flaring at the edge of the EPPsys RSD might occur

For more information please contact Andreas Kind, phone +49 36252 42-325, E-mail akind@ejot.com

10.10/PDF01.23 subject to technical changes.