

## Anchor<sup>®</sup> serrated rivet bushing ...

The Anchor rivet bushing is a threaded insert made of steel or rustproof material, brass or light alloy with a counterbored and serrated shank.

Anchor is riveted into thin-walled moulded parts with pre-punched receiving holes. During this process, the riveted serrations of the shank cut into the side wall, creating an absolutely secure fastening.

The special shape of the shank and the countersinking at the bottom protect the thread from damage during installation. In almost all application cases, overload testing indicated that Anchor remains firmly seated even if the thread is completely overtorqued.



#### Fields of application

Anchor rivet bushings enjoy universal application, offering a wide variety of design possibilities: for hardwearing screw connections in the automotive industry, for reliable fixture of highly sensitive electronic parts etc.

#### **Product features**

- Anchor is torque-resistant and capable of loads applied from both sides.
- Anchor can be used in surfacetreated, ready-plated parts, so eliminating the need for time-consuming cleaning of internal threads and reworking damage at the surface.
- When turning in the screw, it is impossible for the Anchor to be forced out of the hole. This saves incalculable time losses.
- The Anchor thread is clean, true to gauge and is wear-resistant. It has a precisely fitted centered seat without the need to use templates or other positioning devices.



#### **Specifications**

Works standard sheets 701 to 758, page 7 - 9

#### On request:

Special Anchor-S with screw lock TufLok in the internal thread. The captive plastic support serves as a safeguard against the screw working loose of its own accord.

#### Also available:

Special Anchor-D with sealing agent precote 5 on the contact surface.







| Special request   | We recommend  |   |
|---|---|---|
| Space and<br>weight-saving design   | Mini-Anchor with small outer dimensions<br>(Works Standard 721 to 738)  |   |
| Thread seal   | Tank-type Anchor with blind thread (Works Standard 741 to 758)  |   |
| Distanced fixture   | Anchor in special lengths   |   |
| Support or bearing function   | Anchor without internal thread (special version)  |   |
| Flush finish to the surface of the metal  | Processing using Anchor with tumble or radial rivetting machine, or<br>use Anchor for the next smallest sheet metal thickness                                   |   |
| Extremely high loads<br>(torque / push-out forces)<br>or seal between the Anchor and the<br>sheet metal | Select a smaller receiving hole and fix Anchor with a hollow punch before rivetting. (Or in a single work process using a combined setting and rivetting tool). |   |
| If lower seating strength is sufficient,<br>e.g. in plastic or soft metal panels                        | Simply press in Anchor without rivetting. In the case of circuit boards, for example, the shank can also be soldered.   |   |
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# Anchor<sup>®</sup> installation ...

### Installation

Punch or drill a hole, insert Anchor and rivet the shank with a simple rivetting tool (Fig. 1 + 2):

- manually
- using a pneumatic manual rivetting hammer
- using a simple press
- by inserting Anchor and rivetting using a tumble or radial riveting process
- automatic feed in follow-on tools
- with special high-performance installation devices for large-scale series. Output up to 50 parts per minute
- for high rivetting forces, use a double-acting rivetting tool because of the extreme torque load or thin wall of the moulded part (Fig. 3)



Material of the riveting tool: Steel 115 CrV3 (1.2210) Hardness: 58 to 62 HRc, shank 20 to 25 HRc.

M M

| Rivetting pressure P  | Dimensions of the rivetting tools (Fig. 2):                                |   |  |   |   |  |   |   |   |   |  |
|---|--|---|--|---|---|--|---|---|---|---|--|
| with mechanical rivetting<br>(Anchor made of steel)   |  | Articl<br>for A<br>E1                                   | e no.<br>nchor<br>R1                                 | 401<br>and T<br>R2                            | ank Tyj<br>E2   | be<br>E                                      | Artic<br>for N<br>E1                        | cle no<br>Mini-A<br>R1                      | 421.<br>nchor<br>R2                         | <br>E2  | E                                      |
| M 2 / M 3 appr. 1,5 to 1,7 t   M 4 2,0 to 2,2 t   M 5 2,2 to 2,8 t   M 6 3,0 to 3,3 t   M 8 4,5 to 5,5 t   M 10 6,5 to 7,0 t   M 12 - M16 8,0 to 10,0 t | M 2<br>M 2,5/ M 3<br>M 3,5/ M 4<br>M 5<br>M 6<br>M 8<br>M 10<br>M 12 - M16 | 4,3<br>4,3<br>5,3<br>6,7<br>8,0<br>11,1<br>13,5<br>17,1 | 0,6<br>0,6<br>0,7<br>0,9<br>1,0<br>1,1<br>1,2<br>1,4 | 0,5<br>0,5<br>0,5<br>0,6<br>0,6<br>0,6<br>0,6 | 7,1<br>7,1<br>8,7<br>10,3<br>11,9<br>15,5<br>18,3<br>22,2 | 12<br>12<br>12<br>16<br>16<br>20<br>20<br>25 | 2,4<br>3,2<br>4,3<br>5,3<br>6,5<br>8,5<br>- | 0,6<br>0,6<br>0,6<br>0,6<br>0,6<br>0,6<br>- | 0,5<br>0,5<br>0,5<br>0,5<br>0,6<br>0,5<br>- | 4,8<br>5,5<br>7,1<br>8,7<br>10,3<br>11,5<br>- | 12<br>12<br>12<br>12<br>12<br>12<br>12 |