

# Clifa® press-in nut/stud ...

Clifa®-press-in nuts and Clifa® studs are threaded inserts made of steel with a specially formed shank or head.

Clifa®-press-in nuts and Clifa® studs can also be supplied in rust-proof material, and the nuts additionally in light alloy.

Clifa®-threaded inserts are pressed into moulded components with prepunched receiving holes. During this process, the material flows out of the area of the hole wall into the gear ring / the annular grooves of the Clifa® threaded inserts. A permanent connection is formed.

Several Clifa® inserts can be installed in a single work process. The fastening screw is always screwed in from the opposite side.

## Fields of application

Clifa® press-in elements serve as a screw point mainly on moulded parts of steel or light metal. They may also be used as spacers.

## Product features

- Clifa® is torque-proof, capable of withstanding high loads.
- It has minimal outside dimensions for space and weight-saving
- The thread is wear-resistant, clean and true to gauge
- Mounting in drilled, punched or lasered receiving holes
- Do not countersink drill holes in the component
- Can be used in surface-treated, galvanized or unweldable materials
- Clifa® is not pressed out during the screwing process.
- The component material must be softer than the Clifa® element



## Specifications

Works Standard sheets Clifa®  
Pages 11 to 20

High-performance installation equipment for short cycle times in largescale production on request.



# Clifa® installation ...

## Installation

The receiving hole is punched, lasered or drilled **but not deburred or countersunk**.

With punched holes, Clifa® is pressed in from the punching burr side. The press-in process takes place on a plane parallel basis using a customary press with adjustable pressure level, until the surface of the shoulder in the Clifa® pressin nut comes to rest flat against the surface of the sheet metal.

In the case of the Clifa®-SP/SPD/SPS stud, the head must be fully pressed in and come to rest flush with the surface of the sheet metal.

Pressure which is too high or applied only on one side as well as inclined support surfaces must be avoided wherever possible.

## Examples for mounting



Press-in nut Clifa®



Press-in stud Clifa®-SP

Fig. 8



## Special request

|                                                                                       |
|---------------------------------------------------------------------------------------|
| short length                                                                          |
| standoff bushings for metals                                                          |
| standoff bushings for plastics                                                        |
| threaded press-in stud                                                                |
| Flush surface on the press-in side of the nut element ( /- thread closed on one side) |
| Grub screw for thin sheet thicknesses                                                 |
| Grub screw for high load values                                                       |
| threaded press-in stud for lower press-in force                                       |

## We recommend

|                 |                                 |
|-----------------|---------------------------------|
| Clifa®-M        | (Works Standard 500 0 to 503 0) |
| Clifa®-AM       | (Works Standard 503 8 to 525 8) |
| Clifa®-AL       | (Works Standard 503 6 to 525 6) |
| Clifa®-ABO/-ABG | (Works Standard 570 0 to 571 0) |
| Clifa®-SPD      | (Works Standard 5.. 2)          |
| Clifa®-SA       | (Works Standard 515 4 to 534 4) |
| Clifa®-SAD      | (Works Standard 515 9 to 534 9) |



## Press-in nut / standoff bushings for plastics

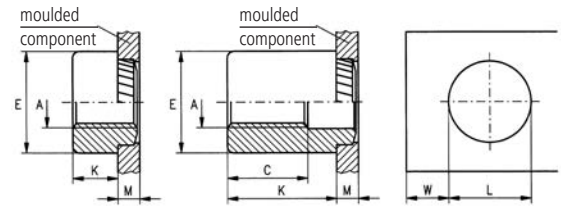
**Clifa®-AL**  
Works Standard  
503 6 to 525 6

### Application

These Clifa®-press-in nuts are particularly suited for creating torque-resistant screw connections capable of withstanding high loads in thin-walled moulded parts from 1,5 mm in thickness.

- Epoxy glass fibre
- Phenolic resin,
- Fibreglass (e.g. printing plates).

Also suitable for non-ferrous metals.



Dimensions in mm

| Article number | Internal thread<br>A | External diameter<br>E | Workpiece thickness min.<br>M | Hole diameter<br>L +0,1 | Minimum spacing<br>W |
|----------------|----------------------|------------------------|-------------------------------|-------------------------|----------------------|
| 5.. 600 020... | M 2                  | 6,0                    | 1,5                           | 3,7                     | 2,2                  |
| 5.. 600 025... | M 2,5                | 6,0                    | 1,5                           | 4,2                     | 2,4                  |
| 5.. 600 030... | M 3                  | 7,0                    | 1,5                           | 4,2                     | 2,4                  |
| 5.. 600 040... | M 4                  | 8,0                    | 1,5                           | 6,4                     | 3,3                  |
| 5.. 600 050... | M 5                  | 9,0                    | 1,5                           | 6,8                     | 4,1                  |

### Example for finding the article number

Diagonally serrated press-in nut Clifa®-AL with internal thread M3, nut height 8,0 mm, made of hardened, pre copper plated and tinned steel: Clifa®-AL 508 600 030.100

### Nut height K available between 3,0 and 25 mm in 1,0 mm graduations

The second and third digit of the article number is used to identify the nut height K.  
With nut heights > 9,0 mm, the usable thread length remains C 9,0 mm.

### Materials

Steel, hardened, pre copper plated and tinned  
Stainless steel 1.4305

Article no. (fourth group of digits) ... 100  
Article no. (fourth group of digits) ... 500

### Other versions on request.

### Tolerances

ISO 2768-m

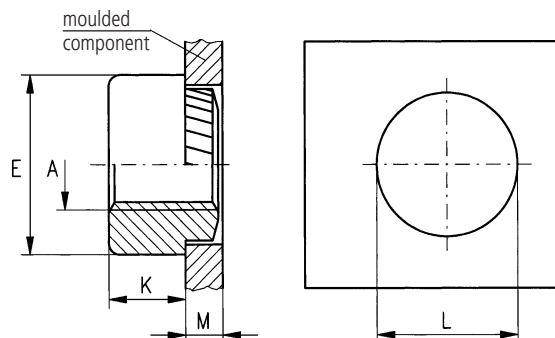
### Thread

Internal thread A: as per ISO 6H

## Anwendung

These Clifa®-AL soldering nuts are particularly suited for the creation of torsion-proof screw unions with high loads. The nuts are fastened by soldering to the PCB. The nuts are supplied collated on a belt and can be used with customary automatic SMD assembly devices.

- Cost saving due to processing with automatic SMD assembly devices
- no damage to PCBs (press-in process is eliminated)
- Process reliable assembly



Dimensions in mm

| Article no.     | Thread | Workpiece thickness min. | External diameter | Nut height | Hole diameter |
|-----------------|--------|--------------------------|-------------------|------------|---------------|
|                 | A      | M                        | E                 | K          | L +0,1        |
| 535 000 020 ... | M 2    | 1,5                      | 5,5               | 1,5        | 4,3           |
| 535 000 025 ... | M 2,5  | 1,5                      | 5,5               | 1,5        | 4,8           |
| 536 100 030 ... | M 3    | 1,5                      | 5,5               | 1,5        | 4,8           |
| 538 100 040 ... | M 4    | 1,5                      | 8,75              | 2,0        | 7,0           |
| 537 000 050 ... | M 5    | 1,5                      | 9,5               | 3,0        | 7,5           |

## Material

Steel hardened, pre copper plated and tinned  
Steel hardened, pre copper plated and tinned and gluing pad

Article no. (fourth group of digits) ... 134A  
Article no. (fourth group of digits) ... 134B

Other finishes or special shapes (e.g. standoff bushings) on request.

## Colation

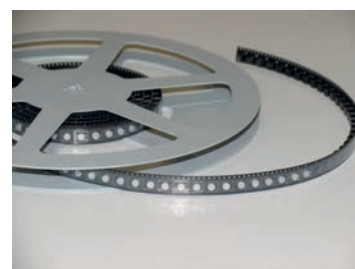
in accordance with DIN EN 60286-3 (type II blister belt)

## Tolerances

ISO 2768-m

## Thread

Internal thread A: as per ISO 6H



## Fasteners for special applications ...

**Press-in stud  
with special part-end**



**Rivet bushing with  
Double riveting contour**



**Press-in nut with  
Three cross-holes**



**Press-in stud  
with segmented head**



**Rivet bushing with fine  
thread on outer diameter**



**Rivet bushing with  
special sealing contour**



**Bolt with t-groove for  
fixing/locking of screw-in  
elements**



**Press-in nut with  
hexagonal head**



**Press-in nut with three  
knurls on outer diameter**

