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.

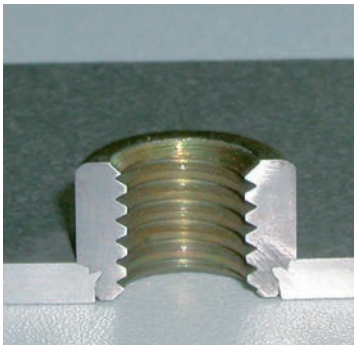
Several Clifa® inserts can be installed in a single work process. The fastening screw is always screwed in from the opposite side.

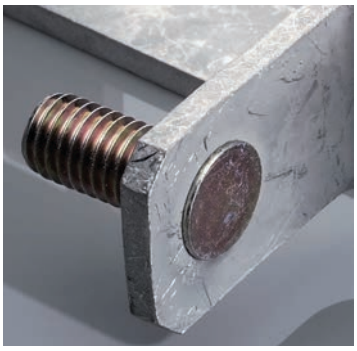
Fields of application

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 equip ment for short cycle times in largescale production on request.

Clifa® installation ...

Installation

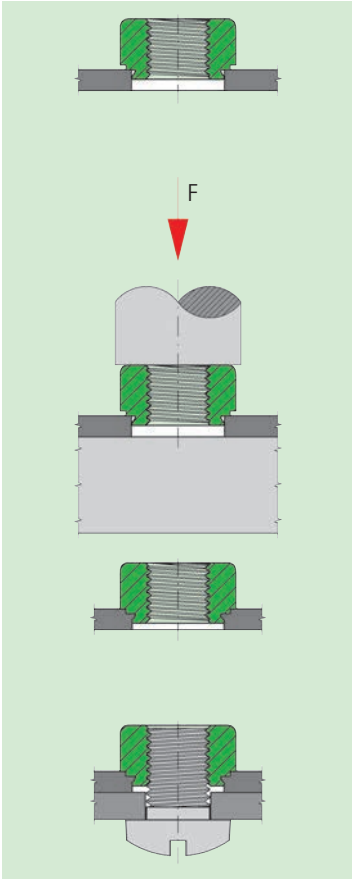
The receiving hole is punched, lasered or drilled **but not deburred or countersunk.**

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.

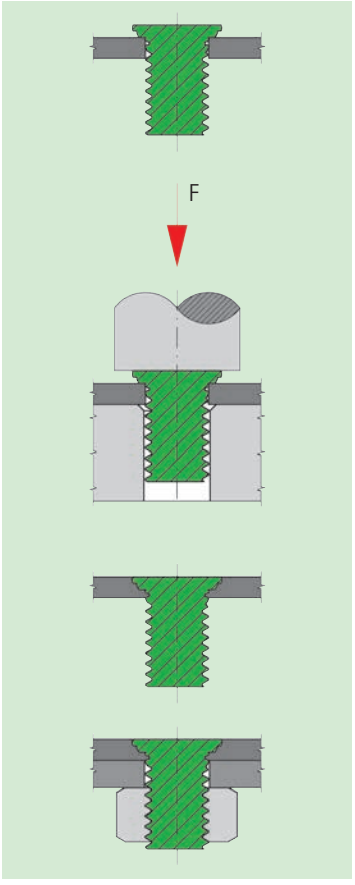
In the case of the Clifa®-SP/SPD/SPS stud, the head must be fully pressed in and come to rest flush with the surface of the sheet metal.

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

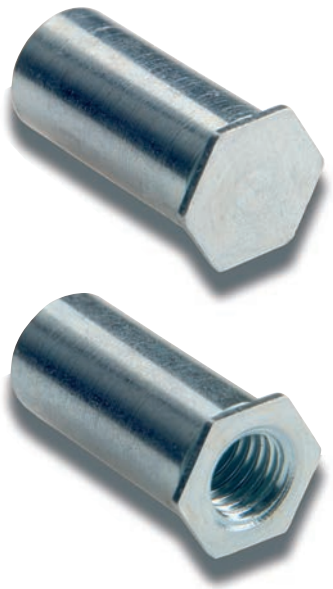
Examples for mounting



Press-in nut Clifa® Fig. 7



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)

Kerb Konus

Press-in nut / standoff bushings
for plastics

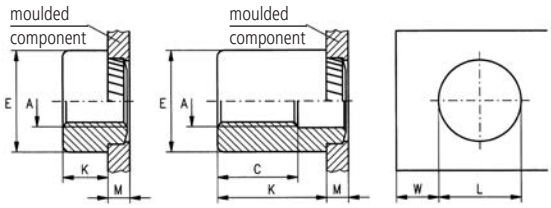
Clifa®-AL
Works Standard
503 6 to 525 6

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	External diameter	Workpiece thickness min.	Hole diameter	Minimum spacing
	A	E	M	L +0,1	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 — Article no. (**fourth** group of digits) … … … 100
Stainless steel 1.4305 — Article no. (**fourth** group of digits) … … … 500

Other versions on request.

Tolerances

ISO 2768-m

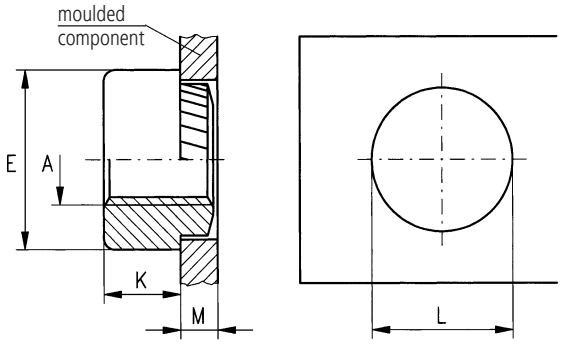
Thread

Internal thread A: as per ISO 6H

Anwendung

These Clifa®-AL soldering nuts Are particulary suited for the Creation of torsion-proof screw unions with high bords.
The nuts are fastened by soldering to the pcb. The nuts are supplied collated on a belt and can be using 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 A	Workpiece thickness min. M	External diameter E	Nut heigth K	Hole diameter 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

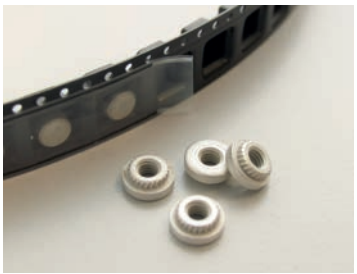
Material
Steel hardened, pre copper plated and tinned — Article no. (**fourth** group of digits) … … … 134A
Steel hardened, pre copper plated and tinned and gluing pad — Article no. (**fourth** group of digits) … … … 134B

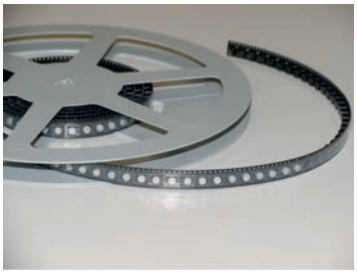
Other finishes or special shapes (e.g. standoff bushings) on request.

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