

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 nuts and Clifa® studs are used to fasten all different types of appliance components, as spacers pins and bushings for plastics, e.g. circuit boards etc.

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 and SR 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®

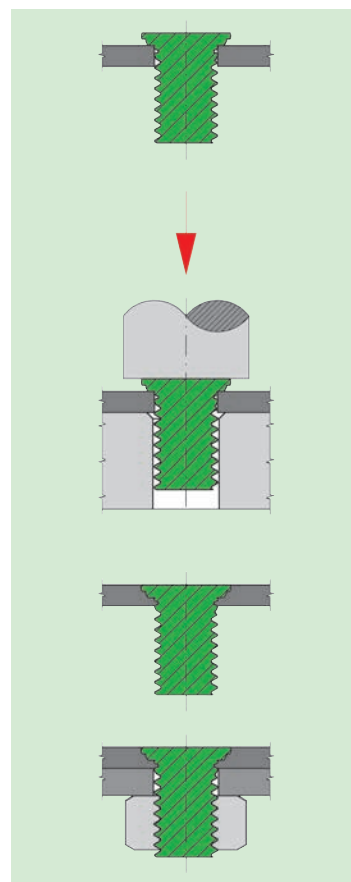


Fig. 6 Press-in stud Clifa®-SP

Fig. 7

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)
- for thin sheet metals 1,0 mm
- threaded press-in stud for high force
- threaded press-in stud for epoxy resin moulding materials
- 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®-SL | (Works Standard 506 7 to 518 7) |
| Clifa®-SAD | (Works Standard 515 9 to 534 9) |





Press-in nut / standoff bushings for plastics

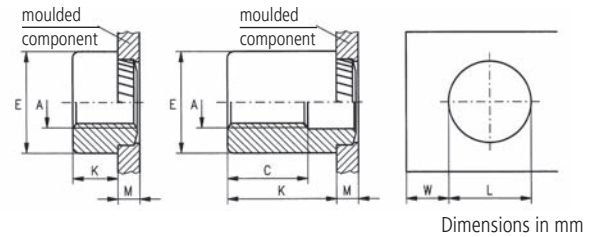
Clifa®-AL
Works Standard
503 6 to 525 6

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 aluminium and magnesium.



Dimensions in mm

Article number	Internal thread A	External diameter E	Workpiece thickness min. M	Hole diameter L +0,1	Minimum spacing 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

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



Press-in stud for plastics

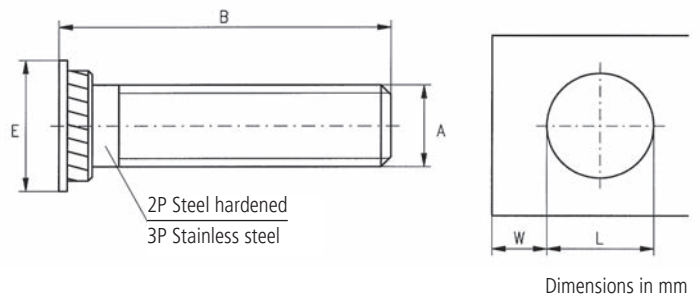
Clifa®-SL
Works Standard
506 7 to 518 7

Application

These Clifa®-SL press-in studs 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 aluminium and magnesium



Dimensions in mm

Article number	Internal thread A	Length B	Head diameter E	Hole diameter L +0,1	Minimum spacing W
5.. 700 030...	M 3	6,0 to 16,0	7,0	4,2	2,4
5.. 700 040...	M 4	6,0 to 16,0	8,0	6,4	3,3
5.. 700 050...	M 5	10,0 to 18,0	9,0	6,8	3,3

Example for finding the article number

Diagonally serrated press-in stud Clifa® SL, M3, length B = 10,0 mm, made of hardened, pre copper plated and tinned steel: Clifa®-SL 510 700 030.100

Stud length from 6,0 mm to 18,0 mm available in graduations of 1,0 mm.

The second and third digit of the article number is used to identify the length B.

Materials

see Works Standard 503 6 Clifa®-AL

Tolerances

ISO 2768-m

Thread

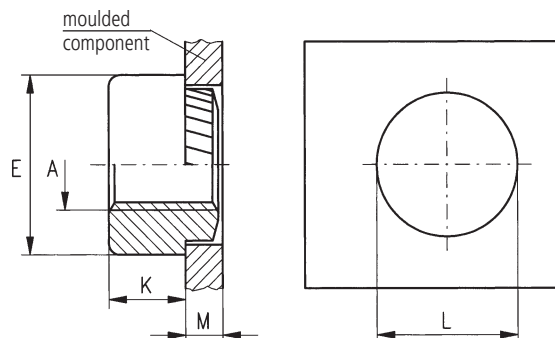
Stud thread A: as per ISO 6g.

Imperial thread available in customary sizes

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 + 0,1
	A	M	E	K	L
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. ... 134A
Article no. ... 134B

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

Colation

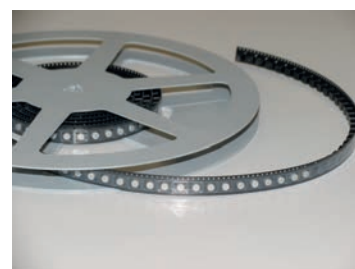
in accordance with DIN EN 60286-3 (type II blister belt)

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

