

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

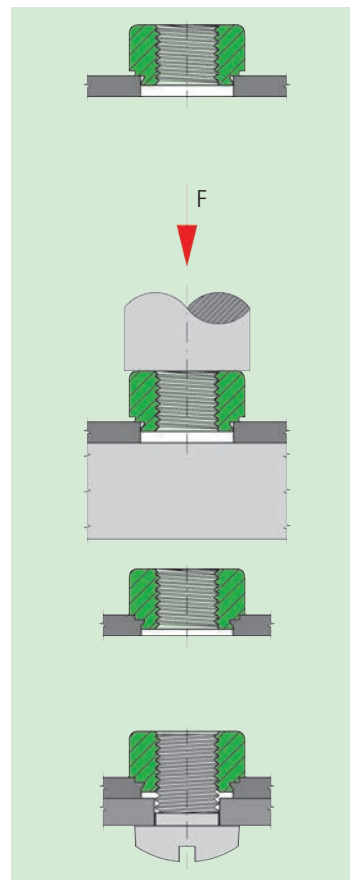
The receiving hole is punched, lasered or drilled **but not deburred or countersunk**.

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.

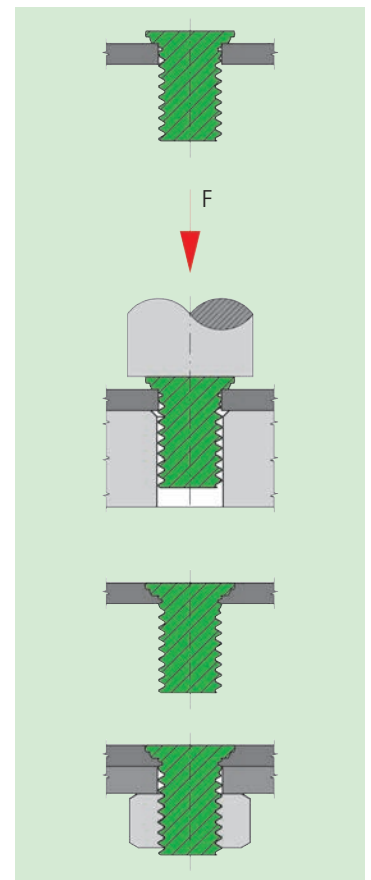
In the case of the Clifa®-SP/SPD/SPS stud, the head must be fully pressed in and come to rest flush with the surface of the sheet metal.

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)



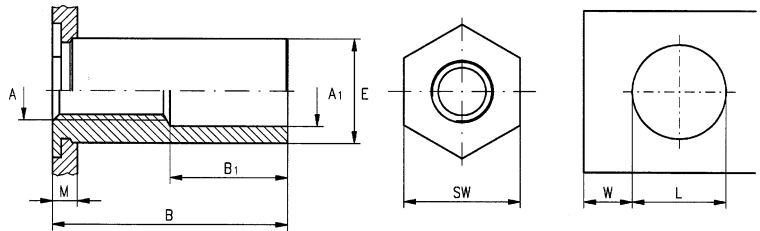
**Press-fit threaded standoff bushings
– thru-hole-thread –
for metal**

Clifa®-ABO
Works Standard
570 0 to 570 1

Application

Clifa®-ABO press-fit threaded bushings are intended for the production of wear-resistant screw-connections in thinwalled moulded parts from thickness 1,0 mm.

The hexagon is pressed flush into round mounting holes.



Dimensions in mm

Article number of the first group of digits	Internal thread	Hexagon	for sheet metal thickness	External diameter	Counter bore diameter	Hole diameter	Minimum spacing
	A	SW	M	E - 0,13	A ₁ ± 0,13	L + 0,08	W
570 0... ..	M 3	4,8	from 1,0	4,19	3,2	4,2	3,9
570 1... ..	M 3	6,4	from 1,0	5,38	3,2	5,4	4,1
570 0... ..	M 4	7,9	from 1,3	7,11	4,8	7,2	4,4
570 0... ..	M 5	7,9	from 1,3	7,11	5,35	7,2	4,4

Article number of the first group of digits	Internal thread	Bushing length			
		B + 0,05/- 0,13			
... .. 030 ...	M 3	3 – 8	9 – 12	16 – 21	22 – 25
... 1.. 030 ...	M 3		9 – 12		
... .. 040 ...	M 4	3 – 8	9 – 15	16 – 21	22 – 25
... .. 050 ...	M 5	3 – 8	9 – 15		
Bore depth B ₁		none	4	8	11

Example for finding the article number

Press-fit threaded bushing Clifa®-ABO with internal thread M4, bushing length 10, made of hardened, zinc plated, blue passivated steel for metal sheet thicknesses from 1,3 mm: Clifa®-ABO 570 010 040. 110

Bushing length B available from 3,0 to 25 mm in intervals of 1,0 mm.

The **fourth** digit of the article number is used to differentiate the across-flats SW measurement for the thread dimension M3, the **fifth** and **sixth** digit to identify the bushing length B (570 003...; 570 004...; 570 005...; 570 ...).

Materials

Steel hardened, zinc plated, blue passivated

Article no. (**fourth** group of digits) 110

Other finishes or special shapes on request.

Tolerances

ISO 2768-m

Thread

Internal thread A: as per ISO 6H

Press-in force as a guideline value for selection of the press

Clifa® ABO	Press-in force
M 3	20 to 25 kN
M 4	30 to 40 kN
M 5	40 to 50 kN

The required press-in force must be determined by trial and error. For different material qualities and surfaces, higher press-in force may be required. The firmest fit is achieved if the recommended hole diameters and tolerances are precisely adhered to.