Clifa® installation ...

Installation

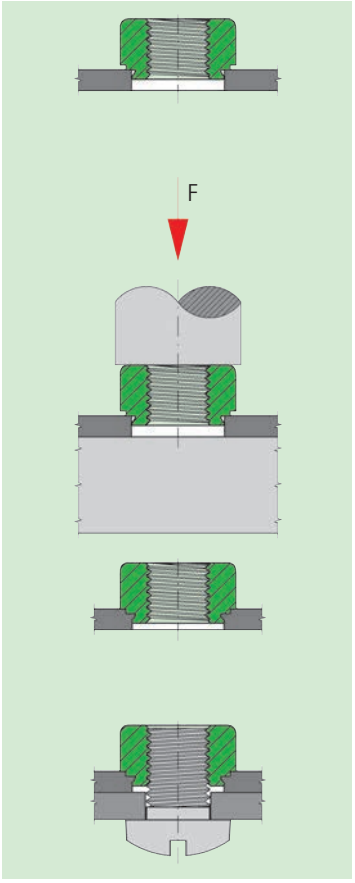
The receiving hole is punched, lasered or drilled **but not deburred or countersunk.**

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.

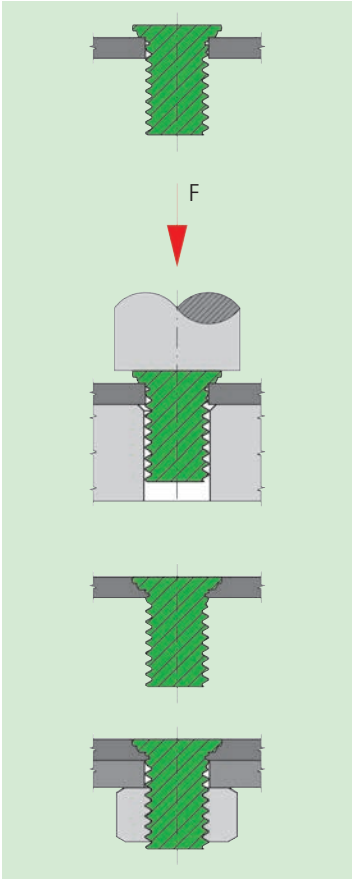
In the case of the Clifa®-SP/SPD/SPS stud, the head must be fully pressed in and come to rest flush with the surface of the sheet metal.

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)

Press-in stud

Press-fit geometrie processed protruding at the head

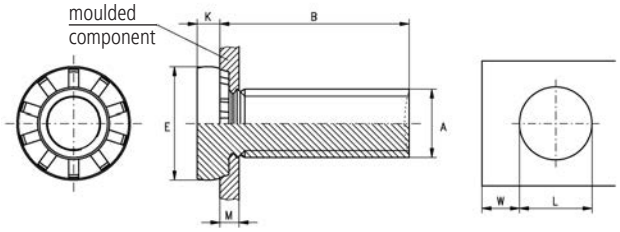
Clifa®-SA
Works Standard
506 4 to 534 4

Application

Clifa®-SA press-in grub screws are processed protruding at the head – see diagram –, and are used to manufacture wear-resistant, highly resilient screw connections in thin-walled moulded parts made of:

- Steel
- Stainless steel
- Brass
- Copper
- Light metal, etc.

Clifa®-SA has a strengthened head shape, making it more resilient to threading than Clifa®-SP.



Dimensions in mm

Article number	Internal thread	Workpiece thickness	External diameter	Head heigth	Hole diameter	Minimum spacing	Tightening torque of the nut (guidline values for sheet metal)
	A	≥ M	E	K ±0,1	L +0,1	≥ W	≤ Nm
5.. 400 030 ...	M 3	1,0	6,0	0,8	3	8,5	1,3
5.. 400 040 ...	M 4	1,0	7,5	1,2	4	9,5	2,9
5.. 400 050 ...	M 5	1,2	8,5	1,5	5	10,5	6,0
5.. 400 060 ...	M 6	1,2	10,0	1,5	6	11,5	10,0
5.. 400 080 ...	M 8	1,5	12,5	1,75	8	12,5	25,0
5.. 400 100 ...	M 10	2,0	15,7	2,2	10	13,5	36,0

Article number first group of digits (selection series)	Length	Available					
	B*) ±0,2	M 3	M 4	M 5	M 6	M 8	M 10
510 400	10,0	X	X	X	X		
512 400	12,0	X	X	X	X	X	
515 400	15,0	X	X	X	X	X	X
520 400	20,0	X	X	X	X	X	X
525 400	25,0	X	X	X	X	X	X
530 400	30,0	X	X	X	X	X	X
534 400	34,0	X	X	X	X	X	X

Example for finding the article number
Press-in stud Clifa®-SA, M5 made of tempered, zinc plated and blue passivated steel, 20 mm long: Clifa®-SA 520 400 050.110

Materials
Steel tempered, zinc plated, blue passivated **
Steel tempered, zinc/nickel plated, transparent passivated **
Stainless steel

Article no. (**fourth** group of digits) 110
Article no. (**fourth** group of digits) 143
Article no. (**fourth** group of digits) 500

Other dimensions on request

Threaded ends
Press-in stud with several dog points on request. See data sheet on page 25.

Tolerances
ISO 2768-m

Thread
Stud thread A: as per ISO 6g

Press-in force
Guideline values for press-in force, see page 24

***) Length B**
available up to 60 mm

****)**
Press-in stud in tempered steel, available in customary strength classes.

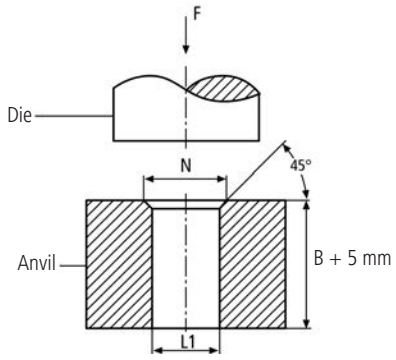
Animation

Kerb-Konus-Vertriebs-GmbH • P.O. Box 1663 • 92206 Amberg • Phone +49 9621 679-0 • Fax +49 9621 679444

Press-in stud
Press-in forces

Clifa®-SP/SPD

Dimensions in mm



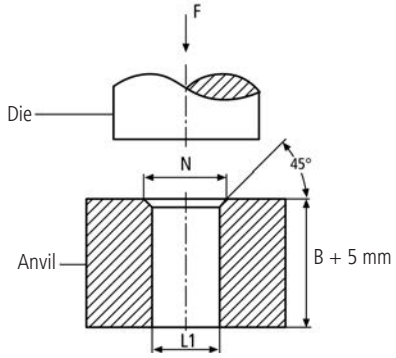
Anvil for: Clifa®	Hole L1 +0,1	Countersink for serrations N +0,1	Press-in force kN
M 2,5	2,6	3,4	8,9 to 12
M 3	3,1	4,0	10,5 to 19
M 4	4,1	5,2	16 to 25
M 5	5,1	6,4	29 to 35
M 6	6,1	7,6	30 to 50
M 8	8,1	10,2	30 to 60

The press-in force F is dependent on the Clifa® dimension, the material and the thickness of the shaped component and also the type of serration at the head. The Clifa® head must be fully embedded and must come to rest flush with the surface of the sheet metal.
Excessive force must be avoided. The hole diameter of the part to be screwed on ≈ A +0,6 mm.

Press-in stud
Press-in forces

Clifa®-SPS

Dimensions in mm



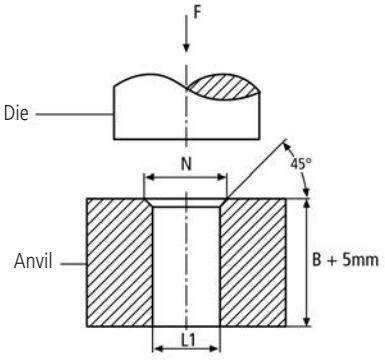
Anvil for: Clifa®	Hole L1 +0,1	Countersink for serrations N +0,1	Press-in force kN
Ø 5,0	5,1	6,4	29 to 35

The press-in force F is dependent on the Clifa® dimension, the material and the thickness of the shaped component and also the type of serration at the head. The Clifa® head must be fully embedded and must come to rest flush with the surface of the sheet metal.
Excessive force must be avoided. The hole diameter of the part to be screwed on ≈ A +0,6 mm.

Press-in stud
Press-in forces

Clifa®-SA/SAD

Dimensions in mm



Anvil for: Clifa®	Hole L1 +0,1	Countersink for serrations N+0,1	Press-in force kN
M 3	3,1	4,0	9,0 to 15,0
M 4	4,1	5,2	14,5 to 38
M 5	5,1	6,4	21 to 42
M 6	6,1	7,6	21 to 50
M 8	8,1	10,2	21 to 60
M 10	10,1	12,2	32 to 84

The press-in force F is dependent on the Clifa® dimension, the material and the thickness of the shaped component and also the type of serration at the head. Excessive force must be avoided. The hole diameter of the part to be screwed on ≈ A +0,6 mm.

Kerb Konus

Threaded ends for press-in grub screws

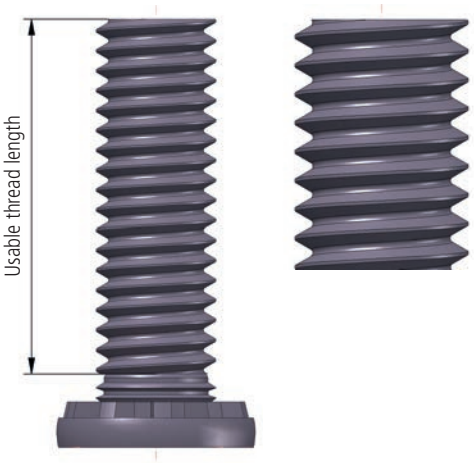
Clifa®-SP/-SPD
Clifa®-SA/-SAD

Application

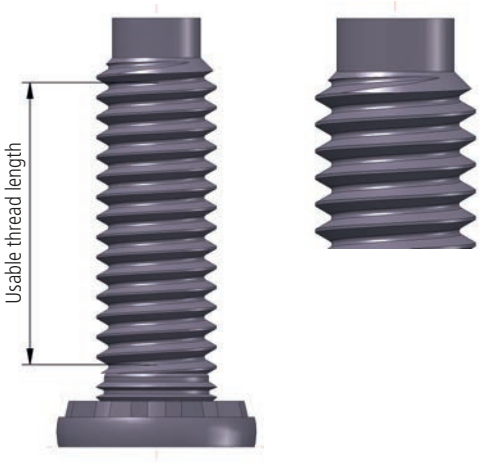
Depending on the demands placed on the Clifa® press-in grub screws, we offer a variety of threaded ends. Further threaded ends on request.

Sub-function	Type of threaded end			
	KKV	KK	PN	KK-MAG
Protection of start of thread	↘	↗	↗	↗
Larger displacement when fastening	↘	→	↗	↗
Prevention of tilting when fastening	↘	→	→	↗
Usable thread length (Version for components of the same length)	↗	→	→	↘

Type of threaded end: **KKV**
DIN EN ISO 4753 (RL)



Type of threaded end: **KK**



Type of threaded end: **PN**

Type of threaded end: **KK-MAG**