

Pipe and cable fastening with plastic pipe clamps

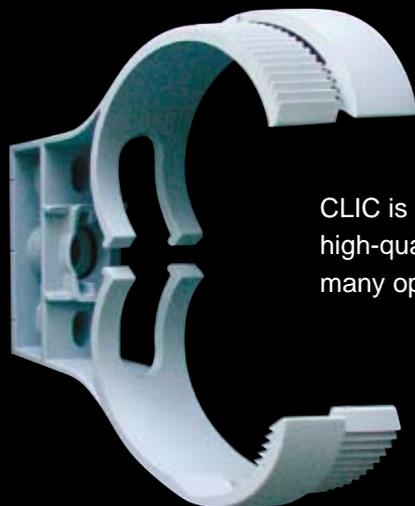


Eglicher, Fischer & Co. Ltd.

Zurich, Switzerland



Gripping possibilities for the world of pipe and cable fastening



CLIC is more than just a plastic clamp: CLIC offers a high-quality system of solutions allowing you to grip many opportunities.

A product of Egli, Fischer & Co. Ltd., www.efco.ch, www.clic-original.com
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clic[®]

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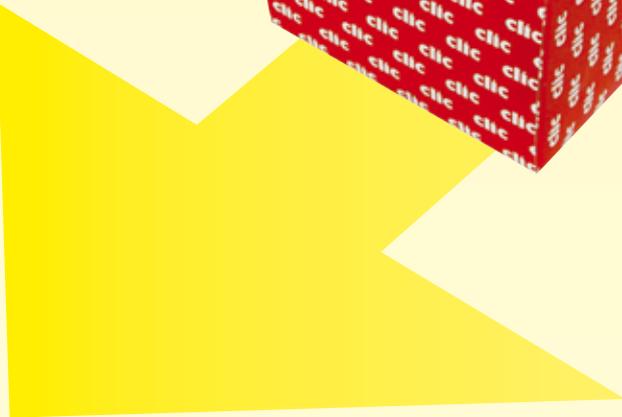
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Pipe and cable fastening

CLIC plastic clamps

The original	4
References	5
CLIC 8 to 64 mm – Technology	6
CLIC 8 to 64 mm – System	7
CLIC 63 to 127 mm – Technology	8
CLIC 63 to 127 mm – System	9
Quality	10
Selection.....	11





Pipe and cable fastening

Since 1975 the self-locking pipe clamp CLIC has proved itself millions of times. Cables and pipes fixed with "Swiss Quality" are fast and securely fixed throughout the world.

Today, system solutions (pipe clamps, screws, plugs and accessories) are required, for instance in telecommunications. Consulting during the phase of planning, becomes more and more important. A long experience in business and our internal development division have allowed many individual solutions in collaboration with our customers engineers. Our production is able to pre-assemble tailor-made CLIC systems even at short notice.



The proven solution for cable conduits

Easy handling and fast mounting predestinates CLIC for fixing cable conduits.

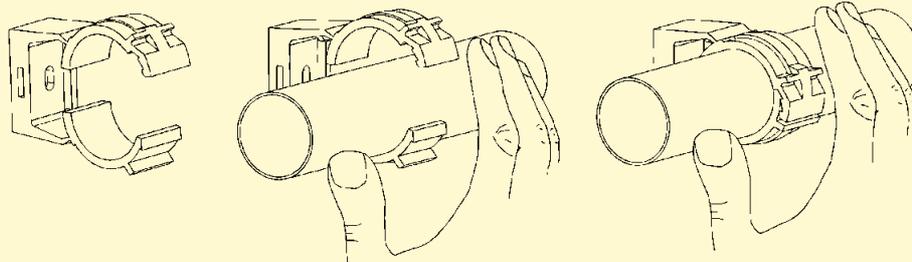
The smart solution for specific tasks

For installations with higher demands, public areas or infrastructural buildings, the qualities of CLIC and CLIC TOP are especially recommended because of the high mechanical capacity, the excellent impact resistance and temperature stability.



The best solution for highest demands

CLIC TOP ideally covers the increasing demands for fixing points in sensitive environments. In many tunnels coaxial cables for radio and mobile telephone systems are openly mounted. The performance may not be impaired by interference from metallic parts. The plastic pipe clamp CLIC TOP is therefore the best solution for the installation.



Single-hand installation – a matter of course with CLIC, place the pipe, apply slight pressure and the clamp locks itself with a sharp *clac*.

clac

Application areas

Electrical installations

Sanitary installations

Control technique

Chemical industry, difficult environments

Clean rooms

Radiating cables

Fire alarm systems

Swimming pools

Central vacuum cleaners

clac^{top}

Approved under hardest conditions

Egli, Fischer exports to more than 40 countries. The “Swiss Quality” product CLIC convinces wherever special requirements emerge.

Characteristics such as non-corroding material, safety – also in case of fire – and easy installation let the CLIC become the favorite in tunnel construction, as well as for outside areas with chemical and weather ascendancies. Further reference applications are installations in nuclear power plants (electrical pipes) and in waste incineration facilities (waste outfall, heating and heat recovery).

High-speed tunneling

Since 2002 the latest generation of tilting trains *ICE3* are speeding with up to 250 km/h through the 30 tunnels of the Cologne–Rhine/Main railway line. Upon the total length of 47 km, coaxial cables are mounted with about 45,000 CLIC TOP (polyamide 12) clamps. The system for high-quality fixing points includes also various types of screws in stainless steel (A4). CLIC clamps were also used in other railway tunnels as well as in the underground in Hannover, Vienna, Hong Kong, Singapore, Istanbul, London, Los Angeles and other cosmopolitan cities.

Coaxial cables in road tunnels

One of the first CLIC applications has proved itself successfully in the *Schöneich* road tunnel (Switzerland), where radiating coaxial cables for radio and mobile phone communication were openly mounted at a wall distance of 40 mm. At the renovation of the tunnel in 2001, the cables had to be replaced by new ones with better electrical characteristics. The roughly 4000 CLIC clamps could still be opened easily – even after about 20 years of exposure to temperature distinctions, humidity and exhaust gases – and have been replaced by new CLICs.

Corrosion-resistant and fire-proof – ideal for shipping

On the *European Vision*, built by the Alstom Atlantique shipyard in Saint Nazaire (F), CLIC was used for all water and compressed air pipes. Warm, cold, cooling and drinking water flow in copper pipes that are fixed with CLIC. Resistance against seawater and the good characteristics relating to fire were – after Alstom’s own testing – the deciding factors for CLIC TOP. Alstom has used CLIC TOP also for other passenger liners, including the *Queen Mary II*.



Bundled pipes and cables with one CLIC clamp at the underside of the *Ponte Val Calanca* bridge in Switzerland.



CLIC is often used for cable fixing in railway- and underground tunnels.



CLIC has proved itself in numerous road tunnels such as the *Gotthard* tunnel in Switzerland.



Since CLIC TOP is unimpaired by saltwater, it is preferentially used by shipbuilders.



The advantages of the original

Secure, fast, economical, user-friendly – a true fact. The outstanding features of CLIC are self-explanatory. Benefit from the advantages and the safety of the original that has proved itself since 1975.

Compact design

One-piece:
 – space-saving
 – no loss of screws

Smooth surface

Allows pipe expansion/contraction lengthwise.

Slotted hole for accurate fixation

Position adjustments up to 4,5 mm.

Centre mark

Perfect positioning.

Size

The CLIC nominal size is stamped on each clamp.

Two step locking

The lock with two catches combines essential features in a unique manner:

- wide clamping range
- high loading capacity, secure hold
- easy to open

Strong swivel joints

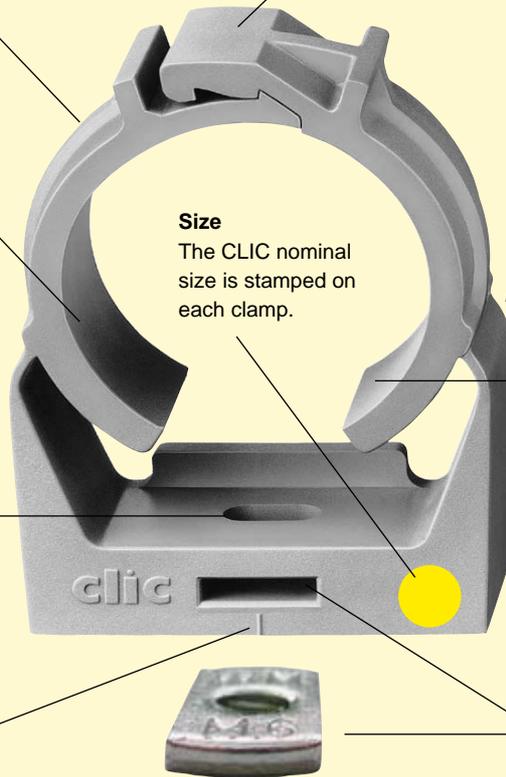
The unique joint mechanism allows with high-quality plastics, installations work at very low temperatures.

Flexible jaws

In conjunction with the flexibility of the material, pipe tolerances can be compensated to a large extent.

Slot for threaded insert

For metric rod and stud mountings. Different flange sizes M 6, M 7 and M 8 available.



Less inventory

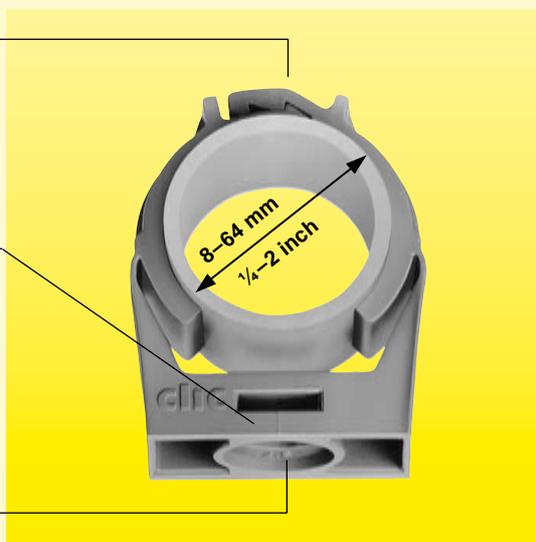
The flexible locking system allows to install 8 to 64 mm diameter pipes with only 15 clamp sizes.

Integrated rotary lock

Easiest mounting on base plates.

Thoothed annulus

Accurate positioning on spacers.



■ **No corrosion**

■ **Electromagnetically neutral**

■ **Noise absorbing**

■ **Internationally certified**

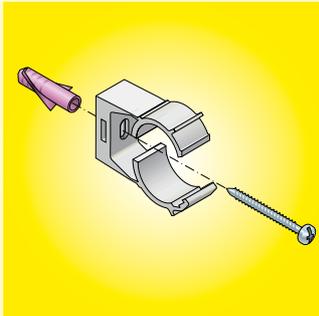
■ **Recyclable plastics**

■ **Halogen-free, CFC-free**

■ **Several colours**

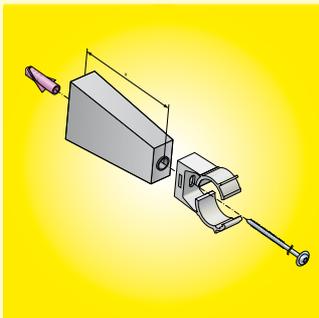
Mounting with system

CLIC is more than just a pipe clamp: CLIC is a comprehensive mounting system with perfectly matching parts that can be used separately or combined into customized pre-assembled sets.



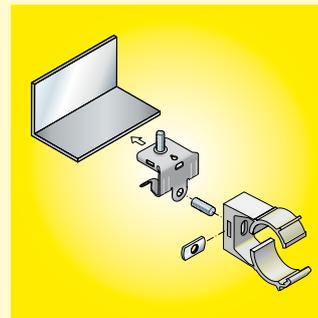
1 Installation with wood screw and DELTA nylon plug.

Surfaces:
Masonry, Concrete



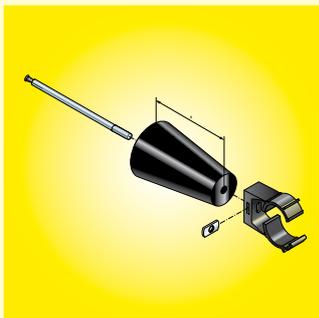
2 Installation with CLIC spacer, round-head wood screw with pressed-on washer and DELTA nylon plug.

Surfaces:
Masonry, Concrete



5 Installation with CLIC hammer on spring steel clamp, CLIC flange and a threaded stud M 6

Surface:
Steel beam



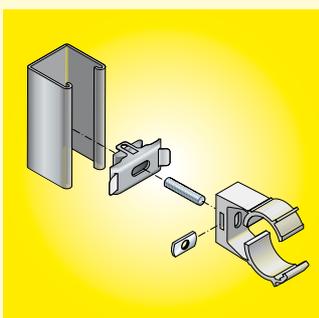
3 Installation with CLIC round spacer, TILCA fire-resisting anchor M 6 and CLIC flange. Stainless steel 1.4529 on demand.

Surface:
Concrete



6 Installation of two CLIC onto base plate fixed with TILCA nail-in plug.

Surfaces:
Masonry, Concrete



4 Installation with CLIC SLICK strut nut M 6, CLIC flange and a threaded stud M 6.

Surface:
Strut 41 x 41 and
41 x 21 mm



7 Installation CLIC to CLIC with threaded stud and two CLIC flanges.



Perfect for large pipes

For large diameters CLIC also offers the perfect solution with high-quality plastic materials. Count on the advantages and quality of the original that proves itself worldwide successfully, even under very hard conditions, for more than 25 years.

Compact design

One-piece:
 – space saving
 – no loss of screws

Smooth surface

Allows pipe expansion/contraction lengthwise.

3 slotted holes for secure and accurate fixation

Position adjustments up to 8 mm.

Centre marks for threads and screws

Perfect positioning.

Size indicated in inches and millimetres

The CLIC nominal size as well as the clamping width is stamped on each clamp

Safety lock

The only pipe clamp with the extra strong double interlocking closing mechanism for absolute secure hold.
 – wide clamping range
 – high loading capacity, secure hold
 – easy to open

Strong swivel joints

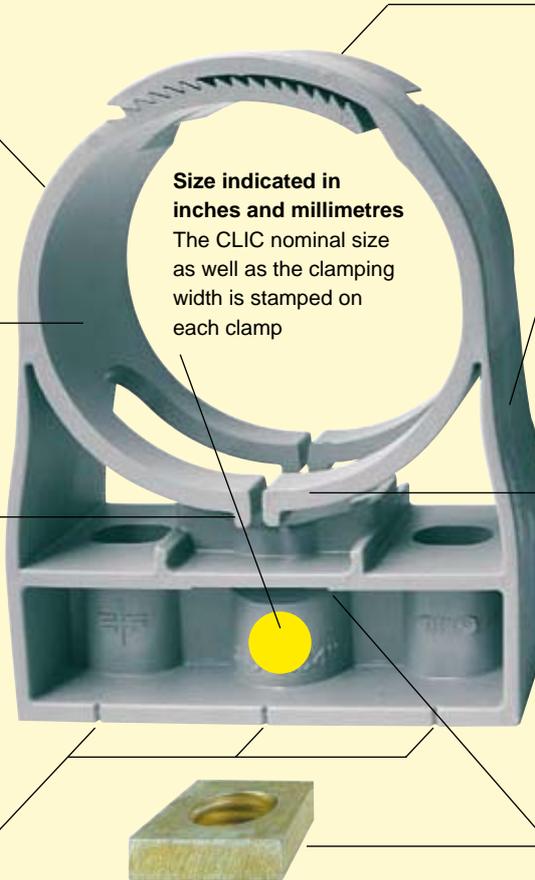
The patented joint mechanism allows together with high-quality plastics installation work also at very low temperatures.

Flexible jaws

In conjunction with the flexibility of the material, pipe tolerances can be compensated to a large extent.

Slot for threaded insert

For metric rod and stud mountings. Different flange sizes M 10 and M 12 available.



Wide clamping range

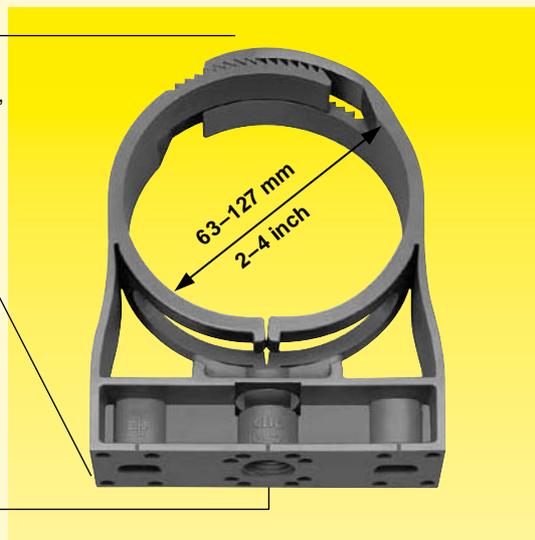
The lock mechanism makes it possible, with only 6 pipe clamp sizes:
 – 63 to 127 mm pipe diameter
 – accurate size adjustment

Large base

For high stability.

Integrated thread

The larger CLIC is provided with an inside thread for mountings with 1/2 inch threads.



■ No corrosion

■ Electromagnetically neutral

■ Noise absorbing

■ Internationally certified

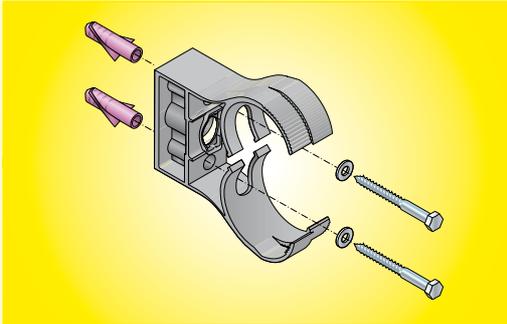
■ Recyclable plastics

■ Halogen-free, CFC-free

■ Diverse colours

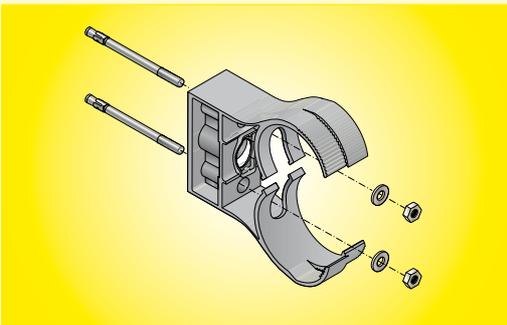
Mounting with system

The vast range of CLIC accessories allow various mounting possibilities. Combine your own assembly or ask our experts. If requested we tailor customer or project specific pre-assembled sets. This guarantees the optimal loading capacity and efficient mounting.



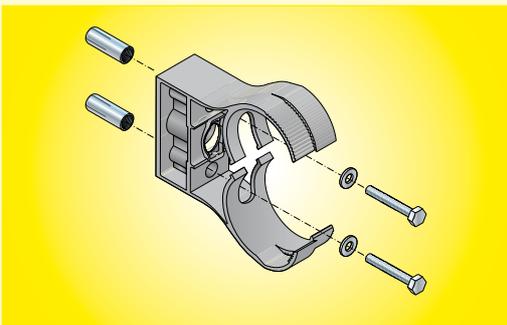
1 Installations with two hex cap wood screws and two DELTA nylon plugs.

Surfaces:
Masonry, Concrete



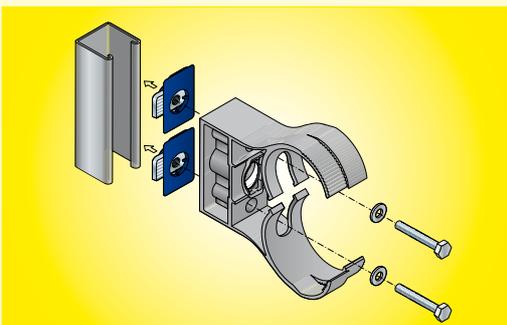
2 Installation with two TILCA anchor bolts M 8. Stainless steel 1.4529 on demand.

Surface:
Concrete



3 Installation with two TILCA flush anchors M 8, two washers and two hex cap metal screws M 6.

Surface:
Concrete



4 Installation with two CLIC thread supports, two washers and two hex cap metal screws M 6.

Surface:
Strut 41 x 41 and 41 x 21 mm



The widest choice

For most CLIC products you have the option between the two material qualities CLIC and CLIC TOP. Numerous certifications give you the additional assurance of having made the right choice.



clic

The proven solution

High-quality copolymer

UV stabilized

Good chemical resistance

Weatherproof

**Working temperature
-25 up to +90 °C long-term**

**Hinges allow installation
down to -10 °C**



clic^{top}

For highest demands

Pure polyamide

UV resistant

Excellent chemical resistance

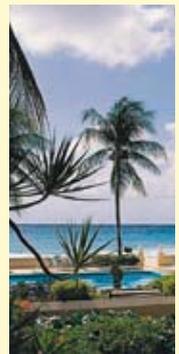
Chloride salt and termite resistant

**Working temperature
-40 up to +110 °C long-term**

**Hinges allow installation
down to -25 °C**

**High low-temperature
impact strength**

**High flexibility at low and
high temperatures**



Certifications

Nearly all sizes of both qualities, CLIC and CLIC TOP, are certified by KIWA®, IAPMO R&T/UPC® and UL®. For details please see table on page 11.



Here you'll find the right CLIC



The most important criteria for selection, such as type and diameter of the pipe as well as existing certifications, are listed together in table form, allowing you to find quickly the right CLIC.

Sizes in function of pipe and cable types

CLIC ¹	Steel		Copper	Cast iron	PE	PVC	Cable ducts	Coaxial cable
	mm	inch	mm	mm	mm	mm	metric measures	inch
8	7,8–9,5						8	
10	9,5–11,8		10				10	
12	11,8–14,3	13,5	12				12	
15	14,3–16,8		15			16	16	1/2
17	16,8–19,5	17,2	18					
20	19,5–21,8	21,3				20	20	5/8
22	21,8–24,8		22					
25	24,8–27,8	26,9				25	25	
28	27,8–31,2		28					7/8
32	31,2–35,5	33,7	35		32	32	32	
36	35,5–39,5							1 1/4
40	39,5–43,5	42,4	42		40		40	
47	46,5–50,5	48,3		48	50	50	50	1 5/8
51	50,5–55,5		54					
59	58,5–64,0	60,3	64			63		
63	63–71				63		63	
71	71–80	76,1	76	78	75	75		
80	80–90	88,9	89					
90	90–101				90			
101	101–113		108	110	110	110		
113	113–127	114,3	114		125	125		

¹Clamp size/Clamping range mm

Certifications/recommended loading capacity

CLIC Clamp Size	KIWA [®]		IAPMO R&T/UPC [®]		UL [®]		Recomm. load ¹ N
	CLIC	CLIC TOP	CLIC	CLIC TOP	CLIC	CLIC TOP	
8	■	■	■	■	■	■	170
10	■	■	■	■	■	■	185
12	■	■	■	■	■	■	200
15	■	■	■	■	■	■	220
17	■	■	■	■	■	■	235
20	■	■	■	■	■	■	250
22	■	■	■	■	■	■	270
25	■	■	■	■	■	■	300
28	■	■	■	■	■	■	320
32	■	■	■	■	■	■	370
36	■	■	■	■	■	■	400
40	■	■	■	■	■	■	440
47	■	■	■	■	■	■	470
51	■	■	■	■	■	■	500
59			■	■	■	■	540
63			■	■	■	■	600
71			■	■	■	■	740
80			■	■	■	■	880
90			■	■	■	■	1000
101			■	■	■	■	1200
113			■	■	■	■	1350

¹Safety factor ≈ 3 included for hanging mounting at 20 °C



Egli, Fischer & Co. Ltd.

Fixing Technology

Business Relations Worldwide



Egli, Fischer & Co. Ltd.

International Sales

Gotthardstrasse 6

P.O. Box

8022 Zurich

Switzerland

Phone +41 44 209 82 32

Fax +41 44 209 84 90

E-mail export@efco.ch

info@clic-original.com

www.efco.ch/export

www.clic-original.com